



Draper Aden Associates

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Data Validation Summary

Fourth Quarter 2020

Semiannual Compliance Groundwater Monitoring Event for HWMU 16 and Corrective Action Semiannual Groundwater Monitoring Event for HWMU 5

Post Closure Care Permit Hazardous Waste Management Units 5 and 16 Radford Army Ammunition Plant, Radford, Virginia EPA ID# VA1210020730

Draper Aden Associates performed data validation of the analytical results for the Fourth Quarter 2020 semiannual groundwater monitoring event at Hazardous Waste Management Units (HWMUs) 5 and 16 located at the Radford Army Ammunition Plant (RFAAP) in Radford, Virginia. Groundwater monitoring activities were conducted in accordance with the *Final Hazardous Waste Management Post-Closure Care Permit* (Permit) for HWMUs 5 and 16 (original effective date October 4, 2002, reissued August 16, 2014, Class 1 Permit Modification dated September 12, 2014 and Class 1 Permit Modification dated December 1, 2016) and using revised detection limits (DLs) and quantitation limits (QLs) for total antimony, total copper, total lead, total silver, and total vanadium as approved by the Virginia Department of Environmental Quality (VDEQ) in electronic correspondence dated March 29, 2019, where applicable. RFAAP submitted a Class 1 permit modification to reflect these approved changes and other similar modifications to the VDEQ on February 12, 2020. In electronic correspondence dated April 23, 2020, the VDEQ requested RFAAP to revise the pending Class 1 permit modification (related to other issues). The requested revision for the pending Class I permit modification is pending.

The Fourth Quarter 2020 event served as the semiannual Corrective Action (CA) groundwater monitoring event for HWMU-5 and semiannual compliance monitoring for HWMU-16 conducted in accordance with the Permit. The following information summarizes the findings of the Fourth Quarter 2020 semiannual activities at each Unit.

Sample Collection/Analytical Services

Draper Aden Associates, of Blacksburg, Virginia, collected groundwater samples during October 19 and October 21 through October 22, 2020.

Samples were submitted for laboratory analysis via courier to Pace Analytical Services (formerly Shealy), of West Columbia, South Carolina; or Eurofins Lancaster Laboratories Environmental, (ELLE), of Lancaster, Pennsylvania. A summary table of the required analyses and identification of the analyzing laboratory is provided below. Each laboratory is accredited under the Virginia Environmental Laboratory Accreditation Program (VELAP) for the analytes, methods, and matrix as listed on each certificate of analysis, except if noted below.

Receipt of Monitoring Event Data

On behalf of BAE Systems, Ordnance Systems, Inc., each laboratory submitted results to Draper Aden Associates in a final certificate of analysis which included analytical results as well as relevant documentation to verify and validate the results as discussed below. The final certificate of analysis for this event was received at Draper Aden Associates on November 24, 2020.

Verification Events

No verification events were required.

Summary of Monitoring Event Data by Analytical Method

Certificates of analysis were received from each laboratory in the following sample delivery groups (SDGs):

Summary of Required Analytical Methods and SDGs

Analytical Method	Hazardous Waste Management Unit (HWMU)	
	HWMU 5 / Laboratory	HWMU 16 / Laboratory
<i>8260C Volatiles</i>	410-17705-1 / ELLE	410-18116-1 / ELLE
<i>8270D Semivolatiles</i>	NA	410-18116-1 / ELLE
<i>6020B Inorganics, total</i>	VJ21014 / PACE	VJ23005 / PACE
<i>7470A Mercury, total</i>	NA	VJ23005 / PACE

NA - Denotes analysis not applicable/analysis not required.

Each final certificate of analysis was complete in its presentation and the data were of acceptable quality. Chains of custody (COC) and permit required target analyte lists are provided in each SDG.

Data Analysis and Validation

Samples were analyzed by *SW-846 Method requirements (Test Methods for Evaluating Solid Wastes - Physical and Chemical Methods, USEPA SW-846, 3rd edition - Final Update I, II/IIA, III and subsequent updates)*. Data, except where noted below, were evaluated in accordance with:

- *Test Methods for Evaluating Solid Wastes - Physical and Chemical Methods, USEPA SW-846, 3rd edition - Final Update I, II/IIA, III and subsequent updates)*
- *USEPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review, January 2017, where applicable.*
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review, January 2017, where applicable.*

Draper Aden Associates, of Blacksburg, Virginia, performed data validation as detailed in the attached data validation reports. For each HWMU, data validation reports and a summary table of data validation results are provided as an attachment.

Reporting of Results

HWMU-5 - results were reported to at or above the permit detection limit for the target analytes (constituents) (i.e., five volatile organics and cobalt, total) listed in Appendix J to Permit Attachment 2 of Module VI-Groundwater Corrective Action & Monitoring Program for Unit-5. Results reported between the detection limit and quantitation limit should be considered estimated concentrations.

HWMU 16 - For this event, point of compliance well and plume well results for HWMU 16 were reported to at or above the permit QL, except where noted.

All wells were analyzed for the constituents listed in the semiannual compliance monitoring lists (Attachment 3 Appendix E rev 12-1-2016 Class 1 Permit Modification) consisting of 12 inorganics, 21 volatile organics and three semivolatile organics. However, the Fourth Quarter 2020 included vinyl chloride in the semiannual compliance monitoring list following detection during Second Quarter 2020. This Class 1 permit modification to revise Attachment 3, Appendix E to include vinyl chloride is pending.

Additionally, a footnote presented in Appendix G of Permit Attachment 3 indicates that verification is required for constituents detected at concentrations less than the QL if their associated GPSs are equal to the QL and are greater than the applicable risk-based concentrations (i.e., ACL or RSL). In these instances, verification must be conducted using an alternate low-level analytical method in order to confirm or refute the observed initial detections if the QL achievable by that method is less than, or equal to, the ACL or RSL for the subject constituent. If a concentration greater than the low-level analytical method QL is observed, then the GPS for that constituent will be updated, if warranted. During Fourth Quarter 2020, no constituents with GPSs equal to their respective QLs and greater than the applicable risk-based concentrations were detected. This applied to 2,4-dinitrotoluene and 2,6-dinitrotoluene.

Summary of Data Validation Results

The data validation results are summarized below and on the attached reports and table. Each final certificate of analysis was complete in its presentation and the data were of acceptable quality. The chain of custody documentation was complete, except where noted below. The laboratory received the samples on ice and in good condition, with custody seals intact. Technical holding time and preservation criteria were met. The data set demonstrated the laboratory's ability to achieve the permit QL or DL, unless noted.

SW-846 Method 8260C/5030C-Volatile Organic Analytes- 25 ml purge volume

Instrument calibration, blank, surrogate, MS/MSD, LCS, internal standards, sample/blind field sample duplicate results, and target analyte identification and quantitation were met, except where noted below. The MS/MSD samples were analyzed on project samples as noted on the chain of custody. A trip blank was analyzed for each day of sample collection. A blind field duplicate was collected and analyzed for the required target analytes. Target analytes detected in the sample/field duplicate sample are noted below. Deviations from specific QA/QC criteria identified during the data review process are summarized below.

HWMU 5

- Sample/Blind Field Sample Duplicate results - 5WC21/5WDUP - Trichloroethene was reported above the QL in both the sample and blind field duplicate (1.7/1.8 µg/l). The relative percent difference (RPD) criteria were met. The laboratory reported that four of the five analytes recovered low from the MS and that all analytes met the QC criteria for the MSD; however, it was an obvious laboratory spike-add error and no data qualification was required.

HWMU 16

- Sample/Blind Field Sample Duplicate results – 16WC1A/16WDUP –chloroethane (1.8/1.9 µg/l), 1,1-dichloroethane (4.3/4.4µg/l) and diethyl ether (20/21 µg/l) were reported above the QL in both the sample and blind field duplicate. The RPD criteria were met.
- Samples 16C1 and 16MW9 were analyzed in dilution in order to obtain a result within the calibrated range for diethyl ether. The dilution analysis was within hold-time and those results were reported as the final results.
- Dimethyl ether (methoxymethane) recovered high in the MSD. This analyte was detected at or above the QL in project sample 16C1 only and that result for dimethyl ether was qualified "J" to note that the reported result is estimated. Sample results below the QL did not require qualification. The remaining MS/MSD criteria were met.
- The permit required QL is 12.5 µg/l for both diethyl ether and dimethyl ether. The laboratory reported the QL as 13 µg/l for diethyl ether and dimethyl ether due to the laboratory rounding policy. Draper Aden Associates revised the QL to 12.5 µg/l and no revision was requested.

SW-846 Method 8270D/3510C- Semivolatile Organic Analytes (HWMU16 only)

Instrument calibration, blank, surrogate, MS/MSD, LCS, internal standards, sample/blind field sample duplicate results, and target analyte identification and quantitation criteria were met, except as noted below. The MS/MSD samples were analyzed on project samples as noted on the chain of custody. A blind field duplicate was collected and analyzed for the required target analytes. No target analytes were detected in the sample/field duplicate sample unless noted below. No deviations from specific QA/QC criteria were identified during the data review process.

HWMU 16

A footnote presented in Appendix G to Attachment 3, Groundwater Corrective Action Annual Monitoring List, of Permit Module V – *Groundwater Compliance Monitoring for Unit 16* indicates that verification is required for constituents detected at concentrations less than the Limit of Quantitation (LOQ)/QL if their associated groundwater protection standard (GPS) is based on the LOQ/QL. This footnote applies to 2,4-dinitrotoluene and 2,6-dinitrotoluene detected below the LOQ/QL only in compliance wells. During Fourth Quarter 2020, results for 2,4-dinitrotoluene and 2,6-dinitrotoluene were evaluated to the MDL (review of instrument quantitation report). These two constituents were not detected at or above the MDL or QL and no additional evaluation was required.

SW-846 Method 6020B/3005A (Unit 5) / 6020B/3005A (Unit 16)–Inorganics-total

Calibration, blank, interference check sample, MS/MSD/DUP, LCS, internal standards, serial dilution, sample/field sample duplicate results, and target analyte quantitation were met, except where noted below or no data qualification was required. MS/MSD analyses were performed on project samples as noted on the chain of custody. Target analytes detected in the sample/field duplicate sample are noted below. Deviations from specific QA/QC criteria that were identified during the data review process are summarized below.

HWMU 5

- Sample/Blind Field Sample Duplicate results – 5WC21/5WDUP – Cobalt was reported above the QL in both the sample and blind field duplicate (17/18 µg/l). The RPD criteria were met.

HWMU 16

- Beryllium recovered low from the MS/MSD (42%/42%). The laboratory performed an analytical spike on an aliquot of sample (16C1A), and the low recovery was confirmed (42%). Although not requested, the laboratory also analyzed an MS/MSD on sample 16C1 and low recovery (45%/45%) was observed. Beryllium was not detected at or above the QL in any project sample and sample results for beryllium were validated and qualified "UJ" to note the QC deficiency.
- Sample/Blind Field Sample Duplicate results – 16WC1A/16WDUP – Barium (390/390 µg/l, cobalt (12/12 µg/l) and nickel (13/13 µg/l) were reported above the QL in both the sample and blind field duplicate. The RPD criteria were met.

Method 7470A– Mercury-total - (HWMU 16 only)

Calibration, blank, MS/MSD, LCS, sample/field sample duplicate results were within control limits. MS/MSD analyses were performed on the project sample noted on the chain of custody (16WC1A). Mercury was not detected in the sample/blind field duplicate sample (16WC1A/16WDUP). No deviations from specific QA/QC criteria were identified during the data review process.

A. QC DELIVERABLES PACKAGE – SAMPLE PAPERWORK:

- | | | |
|----|---|---|
| 1. | Was the chain of custody included in the data deliverable package? | ☒ YES ☐ NO |
| 2. | Was custody transfer between different parties dated and signed? | ☒ YES ☐ NO |
| 3. | Did the chain of custody document sampler signature, sample locations, date and time of sampling and analyses requested? (<i>see comment above</i>) | ☒ YES ☐ NO |
| 4. | Were the sample results included for each sample location? | ☒ YES ☐ NO |
| 5. | Did the laboratory report the required target analytes? | ☒ YES ☐ NO |

For Unit 16, the laboratory noted a discrepancy between the number of containers listed on the COC (6) and the number received at the laboratory (5) for project samples 16C1 and 16MW9. For both trip blank samples, the COC lists three (3) containers and the laboratory received two (2) containers. No action was taken or required since the number of containers was adequate for analysis.

End of page

DATA EVALUATION FOR SW-846 METHOD 8260C (GC/MS) VOLATILE ORGANICS

A. QC DELIVERABLES PACKAGE:

- ☒ VELAP accredited (matrix, method and analyte)

B. TECHNICAL HOLDING TIME AND PRESERVATION REVIEW CRITERIA:

- ☒ 14-day sample holding time, pH <2
- ☒ Samples received at $\leq 6^{\circ}\text{C}$, zero headspace
- ☒ Preparation Method 5030C, 25 ml purge volume

C. GC/MS INSTRUMENT PERFORMANCE CHECK REVIEW CRITERIA:

- ☒ Instrument performance check solution was analyzed at the beginning of each 12-hour period of standard and/or sample analysis

D. INITIAL GC/MS CALIBRATION REVIEW CRITERIA:

- ☒ Target analytes included in the ICAL
- ☒ ICAL consisted of 5 calibration standards (or more, as needed)
- ☒ Lowest concentration calibration standard at or below the associated MCL, regulatory compliance, action limit, or required QL
- ☒ No calibration standards were removed from curve that would negatively impact the data integrity
- ☒ Each target analyte %RSD $\leq 20\%$
- ☒ Correlation coefficient or coefficient of determination >0.99 for target analytes with $\geq 20\%$ RSD
- ☒ Initial calibration verification analytes have % Difference/Drift within $\pm 30.0\%$

E. CALIBRATION VERIFICATION REVIEW CRITERIA:

- ☒ Calibration verification standard analyzed at the beginning of each 12-hour period following the instrument performance check analysis and prior to the method blank and sample analysis
- ☒ % Difference/Drift of target analytes within $\pm 20\%$

F. BLANK REVIEW CRITERIA:

- ☒ Method/extraction blank analyzed on each GC/MS system used for sample analysis
- ☒ Trip Blank-one per day of collection.

G. SURROGATE REVIEW CRITERIA:

- ☒ The following surrogates (or others as allowed) were used and within the specified range
 - dibromofluoromethane (77-114%), 4-bromofluorobenzene (78-110%)
 - toluene- d_8 (77-110%), 1,2-dichloroethane- d_4 (74-113%)

H. MATRIX SPIKE / MATRIX SPIKE DUPLICATE (MS/MSD) / LABORATORY CONTROL SAMPLE (LCS) REVIEW CRITERIA:

- ☒ MS/MSD and LCS analyzed; MS/MSD and LCS within range
- ☒ Project specific analytes -%R 70-130%, RPD ≤ 20
- ☒ Independent source (confirmed via email from B. Weyandt, ELLE to K. Olsen 1/9/2015)

I. INTERNAL STANDARDS REVIEW CRITERIA:

- ☒ The following internal standards (or others as allowed) were used
 - t-butyl alcohol- d_{10} , fluorobenzene, chlorobenzene- d_5 , 1,4-dichlorobenzene- d_4
- ☒ Internal standard areas within $\pm 50\%$ of last calibration verification
- ☒ Internal standard retention times within ± 30 seconds of last calibration verification

J. TARGET ANALYTE IDENTIFICATION REVIEW CRITERIA:

- ☒ Results were consistent with historical data. New detections evaluated as follows:
- ☒ RRTs of the reported analytes within ± 0.06 RRT units of the standard RRT
- ☒ Sample spectra versus laboratory standard spectra criteria were evaluated:
 - Characteristic ions maximized in the same scan or within one scan of each other
 - Characteristic ions present in the standard spectra were present in the sample spectra for analytes detected above the QL
 - Relative intensities of the ions between the standard and sample spectra were within $\pm 30\%$.

DATA EVALUATION FOR SW-846 METHOD 8260C (GC/MS) VOLATILE ORGANICS (Con't.)

K. TARGET ANALYTE QUANTITATION REVIEW CRITERIA:

- ☒ Results are consistent with historical data. New detections evaluated as follows:
 - If analyte %RSD was 20% or less, use average relative response factor for quantitation.
 - If analyte %RSD was greater than 20%, use first or higher order regression fit of five calibration points (6 calibration points for 2nd order)
- ☒ Results that exceed the initial calibration range were reanalyzed at a higher dilution
- ☒ Analyte concentrations recorded on the sample quantitation reports were accurately transferred to the sample summary sheets (laboratory report)

L. REPORTING:

- ☒ Detected analytes or results requiring validation are presented on the attached data validation report
- ☒ Results reported at or above permit QL (HWMU16)
- ☒ Results reported at or above permit DL and QL (HWMU5)
- ☒ Results reported within instrument calibration range
- ☒ Sample/blind field duplicate RPD <20, where applicable

DATA EVALUATION FOR SW-846 METHOD 8270D (GC/MS) SEMIVOLATILE ORGANICS

A. QC DELIVERABLES PACKAGE:

- ☒ VELAP accredited (matrix, method, target analytes)
- ☒ Electronic data file reviewed

B. TECHNICAL HOLDING TIME AND PRESERVATION REVIEW CRITERIA:

- ☒ Holding time: 7-day sample collection to extraction / 40-day extraction to analysis
- ☒ Samples received at $\leq 6^{\circ}\text{C}$
- ☒ Extraction Method 3510C used

C. GC/MS INSTRUMENT PERFORMANCE CHECK REVIEW CRITERIA:

- ☒ Instrument performance check solution analyzed at the beginning of each 12-hour period of standard and/or sample analysis

D. INITIAL GC/MS CALIBRATION REVIEW CRITERIA:

- ☒ Target analytes included in the ICAL
- ☒ ICAL consisted of a minimum of 5 calibration standards (or more, as needed)
- ☒ Lowest concentration calibration standard at or below the associated MCL, regulatory compliance, action limit, or permit QL
- ☒ No calibration standards were dropped to meet calibration criteria
- ☒ Each target analyte RSD $\leq 20\%$
- ☒ Correlation coefficient or coefficient of determination > 0.99 for target analytes with $\geq 20\%$ RSD
- ☒ Initial calibration verification analytes have % Difference/Drift within $\pm 30.0\%$

E. CALIBRATION VERIFICATION REVIEW CRITERIA:

- ☒ Calibration verification standard analyzed at the beginning of each 12-hour period following the instrument performance check analysis and prior to the method blank and sample analysis
- ☒ Analytes have % Difference/Drift within $\pm 20.0\%$

F. BLANK REVIEW CRITERIA:

- ☒ Method/extraction blank analyzed on each GC/MS system used for sample analysis

G. SURROGATE REVIEW CRITERIA:

- ☒ The following surrogates (or others, as allowed) were used and within the specified range
 - phenol - d_6 (10-94%), - 2-fluorophenol (21-100%), - 2,4,6-tribromophenol (10-123%), nitrobenzene - d_5 (43-108%), - 2-fluorobiphenyl (43-116%), - terphenyl - d_{14} (33-141%)
- ☒ Two base/neutral or acid surrogates out of specification or any one base/neutral or acid extractable surrogate have a recovery of less than 10%, if so corrective action needed

H. MATRIX SPIKE / MATRIX SPIKE DUPLICATE (MS/MSD) / LABORATORY CONTROL SAMPLE (LCS) REVIEW CRITERIA:

- ☒ MS/MSD and LCS analyzed with target analytes
- ☒ MS/MSD and LCS recovered at or above 45%, RPD < 40

I. INTERNAL STANDARDS REVIEW CRITERIA:

- ☒ The following internal standards were used (or others as allowed)
 - 1,4-Dichlorobenzene- d_4 , Naphthalene- d_8 , Acenaphthene- d_{10} , Phenanthrene- d_{10} , Pyrene- d_{10} , Perylene- d_{12}
- ☒ Internal standard areas within $\pm 50\%$ of last calibration verification
- ☒ Internal standard retention times within ± 30 seconds of last calibration verification

J. TARGET ANALYTE IDENTIFICATION REVIEW CRITERIA:

- ☒ Results were consistent with historical data. New detections evaluated as follows:
- ☒ RRTs of the reported analytes within ± 0.06 RRT units of the standard RRT
- ☒ Sample spectra versus laboratory standard spectra criteria were evaluated:
Characteristic ions maximized in the same scan or within one scan of each other
 - Characteristic ions present in the standard spectra were present in the sample spectra for analytes detected above the permit QL
 - Relative intensities of the ions between the standard and sample spectra were within $\pm 30\%$.

K. TARGET ANALYTE QUANTITATION REVIEW CRITERIA:

- ☒ Results were consistent with historical data. New detections evaluated as follows:
 - If analyte %RSD was 20% or less, use average relative response factor for quantitation.
 - If analyte %RSD was greater than 20%, use first or higher order regression fit of five calibration points (6 calibration points for 2nd order).
- ☒ Results that exceed the initial calibration range were reanalyzed at a higher dilution.
- ☒ Analyte concentrations recorded on the sample quantitation reports were accurately transferred to the sample summary sheets (laboratory report).

L. REPORTING:

- ☒ Detected analytes or results requiring validation are presented on the attached data validation report
- ☒ Results reported at or above permit QL (HWMU16). 2,4-DNT and 2,6-DNT instrument data reviewed and validated to at or above DL.

DATA EVALUATION FOR INORGANICS BY SW-846 METHODS 6020A/B (ICP/MS)

A. QC DELIVERABLES PACKAGE:

- ☒ Sample results included for sample locations
- ☒ Target analyte QLs reported at permit required QL
- ☒ Sample digestion method: 3005A
- ☒ Electronic data file reviewed
- ☒ VELAP accredited (matrix, method, target analyte)

B. TECHNICAL HOLDING TIMES / PRESERVATION REVIEW CRITERIA:

- ☒ 6 month holding time, pH<2 with Nitric Acid (HNO₃)

C. INSTRUMENT CALIBRATION/TUNE CRITERIA:

- ☒ Target analytes, 1 calibration blank and at least 1 standard or according to instrument manufacturer's procedure
- ☒ Instrument calibrated for every analytical sequence, $r>0.998$
- ☒ Instrument tuned prior to analysis:
 - (%RSD <5%),
 - Resolution < 0.9 amu full width at 10% peak height (or lower)
 - Mass calibration ≤ 0.1 amu difference from true value

D. INSTRUMENT CALIBRATION CRITERIA:

- ☒ Standard analyzed at or below the QL (LLQC), digested, analyzed after MDL determination and as needed
- ☒ QL standard recovery 70-130%
- ☒ 10 sample frequency
- ☒ Use of calibration blank and check standard
- ☒ Recovery within 90-110% (ICV/CCV)
- ☒ LLICV prior to analysis and at a concentration at or below LOQ/QL
- ☒ LLCCV within 70-130% recovery

E. BLANK CRITERIA:

- N/A Trip Blank (check only if analyzed)
- N/A Equipment Blank
- ☒ Method/Other Lab Blanks (check only if analyzed)
- ☒ Interference free
- ☒ CCB 10 sample frequency

F. INTERFERENCE CHECK SAMPLES (ICS) CRITERIA:

- ☒ At beginning of analytical run (80-120%)

G. MATRIX SPIKE DUPLICATE (MSD) CRITERIA:

- ☒ One MSD or sample duplicate per batch of 20 samples
- ☒ $RPD \leq 20$ between MS and MSD results or sample and duplicate results
- ☒ Control limit is $\pm$ QL when sample values are less than 5 times QL (sample duplicate).

H. MATRIX SPIKE (MS) CRITERIA:

- ☒ 75-125% recovery, all analytes
- ☒ All analytes, spiked prior to digestion
- ☒ One matrix spike per analytical batch
- ☒ No more than 20 samples per analytical batch

I. BLIND FIELD SAMPLE DUPLICATE CRITERIA:

- ☒ 20% RPD for concentrations > QL

J. SAMPLE RESULTS CRITERIA:

- ☒ Results reported within instrument linear range

DATA EVALUATION FOR INORGANICS BY SW-846 METHOD 6020B (ICP/MS) (Con't.)

K. LABORATORY CONTROL SAMPLE (LCS) CRITERIA:

- ☒ All target analytes, 1 LCS per 20 samples, (80-120% Recovery)

L. INTERNAL STANDARDS (IS) CRITERIA:

- ☒ IS intensities; 70-125% RI

M. SERIAL DILUTION CRITERIA:

- ☒ Similar matrix
- ☒ If concentration > 10 times QL, %Difference must be within 10%

N. REPORTING:

- ☒ Detected analytes or results requiring validation are presented on the attached data validation report
- ☒ Results reported at or above permit QL (HWMU16)
- ☒ Results reported at or above permit DL and QL (HWMU5)

DATA EVALUATION FOR MERCURY BY SW-846 METHOD 7470A

A. QC DELIVERABLES PACKAGE:

- ☒ Mercury QL reported at permit required QL
- ☒ Electronic data file reviewed
- ☒ VELAP accredited (matrix, method, target analytes)

B. TECHNICAL HOLDING TIME / PRESERVATION REVIEW CRITERIA:

- ☒ 28 day holding time, Adjust pH <2 w/ HNO₃

C. INSTRUMENT CALIBRATION CRITERIA:

- ☒ 1 calibration blank and at least 5 standards
- ☒ ICAL standards within 30% of true value
- ☒ Instrument calibrated for every analytical sequence, $r > 0.995$
- ☒ ICAL standard analyzed at the permit QL
- ☒ QL standard (LLQC) analyzed at or less than the permit required QL (70-130%R)
- ☒ QL standard analyzed at beginning of run, following ICB/ICB

D. INITIAL / CONTINUING CALIBRATION VERIFICATION CRITERIA:

- ☒ 10 sample frequency for CCV; recovery within 85-115%

E. BLANK CRITERIA:

- N/A Trip Blank (check only if analyzed)
- N/A Equipment Blank (check only if analyzed)
- ☒ Method/other laboratory blanks (check only if analyzed), Interference free

F. MATRIX SPIKE DUPLICATE (MSD) CRITERIA:

- ☒ One MSD or sample duplicate per batch of 20 samples
- ☒ $RPD \leq 20$ between MS and MSD results or sample and duplicate results
- ☒ Control limit is $\pm$ QL when sample values are less than 5 times QL.

H. MATRIX SPIKE (MS) CRITERIA:

- ☒ 75-125% recovery
- ☒ MS spiked prior to digestion, One MS per analytical batch of 20 samples

H. FIELD SAMPLE DUPLICATE CRITERIA:

- ☒ Target analyte: mercury, Difference <10RPD

I. LABORATORY CONTROL SAMPLE (LCS) CRITERIA:

- ☒ Recovery within 80-120% range. Independent source from calibration standards.

J. SAMPLE RESULTS CRITERIA:

- ☒ Results reported within instrument calibration range

K. REPORTING:

- ☒ Detected analytes reported to at or above the permit QL. When applicable, results requiring validation are presented on the attached data validation report.

LIMITATIONS:

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This Report has been prepared by:

Cheryl Daniel, Environmental Scientist
2206 South Main Street, Blacksburg, Virginia 24060
540-552-0444, cdaniel@daa.com, www.daa.com

Date:

This Report has been subjected to technical and quality review by:

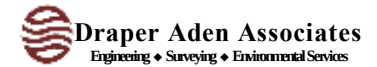
Kathy Olsen, Senior Project Environmental Scientist
2206 South Main Street, Blacksburg, Virginia 24060
540-552-0444, koslen@daa.com, www.daa.com

Date:

Comprehensive Data Validation Report

Radford Army Ammunition Plant (RFAAP), Radford, Virginia

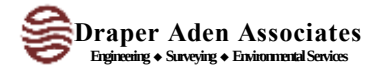
Facility: HWMU-5 Groundwater Monitoring Event: Fourth Quarter 2020



Analyte	Sample ID	Lab Result	Q	Validated Result	Q	Lab QL	Lab DL	Permit QL	Permit DL	Units	Validation Notes
Method: 6020B											
Laboratory: Pace Analytical, West Columbia, SC											
Cobalt	5W8B	5	U	U		5	1.3	5	1	ug/L	Analyte not detected at or above the DL or QL.
	5W5B	5	U	U		5	1.3	5	1	ug/L	Analyte not detected at or above the DL or QL.
	5W7B	5.9		5.9		5	1.3	5	1	ug/L	No action taken.
	5WC21	17		17		5	1.3	5	1	ug/L	No action taken.
	5WC22	4.6	J	4.6	J	5	1.3	5	1	ug/L	Result < QL.
	5WC23	1.3	J	1.3	J	5	1.3	5	1	ug/L	Result < QL.
	5WDUP	18		18		5	1.3	5	1	ug/L	No action taken. Blind field duplicate of 5WC21 (5.7 RPD).
	5W12A	5	U	U		5	1.3	5	1	ug/L	Analyte not detected at or above the DL or QL.

Comprehensive Data Validation Report

Radford Army Ammunition Plant (RFAAP), Radford, Virginia



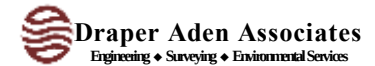
Facility: HWMU-5 Groundwater Monitoring Event: Fourth Quarter 2020

Analyte	Sample ID	Lab Result	Q	Validated Result	Q	Lab QL	Lab DL	Permit QL	Permit DL	Units	Validation Notes
Method: 8260C											
Laboratory: ELLE, Lancaster, PA											
1,1-Dichloroethene	5W8B	0.44	U	U		1	0.44	1	0.44	ug/L	Analyte not detected at or above the DL or QL.
	5W5B	0.44	U	U		1	0.44	1	0.44	ug/L	Analyte not detected at or above the DL or QL.
	5W7B	0.44	U	U		1	0.44	1	0.44	ug/L	Analyte not detected at or above the DL or QL.
	5WC21	0.44	U	U		1	0.44	1	0.44	ug/L	Analyte not detected at or above the DL or QL.
	5WC22	0.44	U	U		1	0.44	1	0.44	ug/L	Analyte not detected at or above the DL or QL.
	5WC23	0.44	U	U		1	0.44	1	0.44	ug/L	Analyte not detected at or above the DL or QL.
	5WDUP	0.44	U	U		1	0.44	1	0.44	ug/L	Analyte not detected at or above the DL or QL. Blind field duplicate of 5WC21.
	5W12A	0.44	U	U		1	0.44	1	0.44	ug/L	Analyte not detected at or above the DL or QL.
cis-1,2-Dichloroethene	Trip Blank 1	0.44	U	U		1	0.44	1	0.44	ug/L	Analyte not detected at or above the DL or QL.
	5W8B	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the DL or QL.
	5W5B	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the DL or QL.
	5W7B	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the DL or QL.
	5WC21	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the DL or QL.
	5WC22	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the DL or QL.
	5WC23	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the DL or QL.
	5WDUP	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the DL or QL. Blind field duplicate 5WC21.
trans-1,2-Dichloroethene	5W12A	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the DL or QL.
	Trip Blank 1	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the DL or QL.
	5W8B	0.8	U	U		1	0.8	1	0.8	ug/L	Analyte not detected at or above the DL or QL.
	5W5B	0.8	U	U		1	0.8	1	0.8	ug/L	Analyte not detected at or above the DL or QL.
	5W7B	0.8	U	U		1	0.8	1	0.8	ug/L	Analyte not detected at or above the DL or QL.
	5WC21	0.8	U	U		1	0.8	1	0.8	ug/L	Analyte not detected at or above the DL or QL.
	5WC22	0.8	U	U		1	0.8	1	0.8	ug/L	Analyte not detected at or above the DL or QL.
	5WC23	0.8	U	U		1	0.8	1	0.8	ug/L	Analyte not detected at or above the DL or QL.
	5WDUP	0.8	U	U		1	0.8	1	0.8	ug/L	Analyte not detected at or above the DL or QL. Blind field duplicate of 5WC21.
	5W12A	0.8	U	U		1	0.8	1	0.8	ug/L	Analyte not detected at or above the DL or QL.

Comprehensive Data Validation Report

Radford Army Ammunition Plant (RFAAP), Radford, Virginia

Facility: HWMU-5 Groundwater Monitoring Event: Fourth Quarter 2020

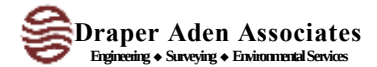


Analyte	Sample ID	Lab Result	Q	Validated Result	Q	Lab QL	Lab DL	Permit QL	Permit DL	Units	Validation Notes
Method: 8260C											
Laboratory: ELLE, Lancaster, PA											
trans-1,2-Dichloroethene	Trip Blank 1	0.8	U	U		1	0.8	1	0.8	ug/L	Analyte not detected at or above the DL or QL.
Trichloroethene	5W8B	0.18	U	U		1	0.18	1	0.177	ug/L	Analyte not detected at or above the DL or QL.
	5W5B	0.18	U	U		1	0.18	1	0.177	ug/L	Analyte not detected at or above the DL or QL.
	5W7B	0.5	J	0.5	J	1	0.18	1	0.177	ug/L	Result < QL.
	5WC21	1.7		1.7		1	0.18	1	0.177	ug/L	No action taken.
	5WC22	1.9		1.9		1	0.18	1	0.177	ug/L	No action taken.
	5WC23	3.7		3.7		1	0.18	1	0.177	ug/L	No action taken.
	5WDUP	1.8		1.8		1	0.18	1	0.177	ug/L	No action taken. Blind field duplicate of 5WC21 (5.7 RPD).
	5W12A	0.18	U	U		1	0.18	1	0.177	ug/L	Analyte not detected at or above the DL or QL.
	Trip Blank 1	0.18	U	U		1	0.18	1	0.177	ug/L	Analyte not detected at or above the DL or QL.
Vinyl chloride	5W8B	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the DL or QL.
	5W5B	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the DL or QL.
	5W7B	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the DL or QL.
	5WC21	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the DL or QL.
	5WC22	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the DL or QL.
	5WC23	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the DL or QL.
	5WDUP	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the DL or QL. Blind field duplicate of 5WC21.
	5W12A	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the DL or QL.
	Trip Blank 1	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the DL or QL.

Comprehensive Data Validation Report

Radford Army Ammunition Plant (RFAAP), Radford, Virginia

Facility: HWMU-5 Groundwater Monitoring Event: Fourth Quarter 2020



Analyte	Sample ID	Lab Result	Q	Validated Result	Q	Lab QL	Lab DL	Permit QL	Permit DL	Units	Validation Notes
Definitions: QL Denotes quantitation limit. DL Denotes detection limit Q Denotes data qualifier. U Denotes analyte not detected at or above Detection Limit (DL) or Quantitation Limit (QL). UA Denotes analyte not detected at or above adjusted sample DL or QL. J Denotes analyte reported at or above the DL and associated result is estimated. When used with "U" (i.e., "UJ"), denotes analyte not detected at or above DL and QL and DL and QL are estimated. When used with "UA" (i.e., "UAJ"), denotes analyte not detected at or above adjusted DL and QL and adjusted DL and QL are estimated. R Denotes result rejected. Laboratory Data Qualifiers, "U" and "<", denote not detected at or above the DL or QL.											

Comprehensive Data Validation Report

Sample/Blind Field Duplicate Results Greater Than the Quantitation Limit

Radford Army Ammunition Plant (RFAAP), Radford, Virginia

Facility: HWMU-5

Monitoring Event: Fourth Quarter 2020

Analyte	Sample ID	Laboratory Result (ug/L) Q	Validated Result (ug/L) Q	QL (ug/L)	Validation Notes
Method: 6020B					
<i>Laboratory: Pace Analytical, West Columbia, SC</i>					
Cobalt	5WC21	17	17	5	No action taken.
	5WDUP	18	18	5	No action taken. Blind field duplicate of 5WC21 (5.7 RPD).
Method: 8260C					
<i>Laboratory: ELLE, Lancaster, PA</i>					
Trichloroethene	5WC21	1.7	1.7	1	No action taken.
	5WDUP	1.8	1.8	1	No action taken. Blind field duplicate of 5WC21 (5.7 RPD).

Definitions:

Data Validation Qualifiers:

QL Denotes permit quantitation limit. **Q** Denotes data qualifier.

J Denotes analyte reported at or above quantitation limit and associated result is estimated.



Report of Analysis

Draper Aden Associates

2206 South Main Street
Blacksburg, VA 24060
Attention: Janet Frazier

Project Name: RAAP HWMU5

Project Number: B03204-20A

Lot Number: **VJ21014**

Date Completed: 11/16/2020

11/16/2020

Approved and released by:
Project Manager II: **Cathy S. Dover**



The electronic signature above is the equivalent of a handwritten signature.

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PACE ANALYTICAL SERVICES, LLC

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

Case Narrative Draper Aden Associates Lot Number: VJ21014

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved The NELAC Institute (TNI) standards, the Pace Analytical Services, LLC ("Pace") Laboratory Quality Manual, standard operating procedures (SOPs), and Pace policies. Any exceptions to the TNI standards, the Laboratory Quality Manual, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Pace Project Manager listed on the cover page.

PACE ANALYTICAL SERVICES, LLC

Sample Summary
Draper Aden Associates
Lot Number: VJ21014
Project Name: RAAP HWMU5
Project Number: B03204-20A

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	5W8B	Aqueous	10/19/2020 0835	10/20/2020
002	5W5B	Aqueous	10/19/2020 1055	10/20/2020
003	5W7B	Aqueous	10/19/2020 1005	10/20/2020
004	5WC21	Aqueous	10/19/2020 1250	10/20/2020
005	5WDUP	Aqueous	10/19/2020 1255	10/20/2020
006	5WC22	Aqueous	10/19/2020 1145	10/20/2020
007	5WC23	Aqueous	10/19/2020 1215	10/20/2020
008	5W12A	Aqueous	10/19/2020 0930	10/20/2020

(8 samples)

PACE ANALYTICAL SERVICES, LLC

Detection Summary
Draper Aden Associates
Lot Number: VJ21014
Project Name: RAAP HWMU5
Project Number: B03204-20A

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
003	5W7B	Aqueous	Cobalt	6020B	5.9		ug/L	7
004	5WC21	Aqueous	Cobalt	6020B	17		ug/L	8
005	5WDUP	Aqueous	Cobalt	6020B	18		ug/L	9
006	5WC22	Aqueous	Cobalt	6020B	4.6	J	ug/L	10
007	5WC23	Aqueous	Cobalt	6020B	1.3	J	ug/L	11

(5 detections)

ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ21014-001			
Description: 5W8B				Matrix: Aqueous			
Date Sampled: 10/19/2020 0835				Project Name: RAAP HWMU5			
Date Received: 10/20/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/26/2020 1607	BNW	10/23/2020 1454	70823

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Cobalt	7440-48-4	6020B	5.0	U	5.0	1.3	ug/L	1

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
U = Not detected at or above the LOQ	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL
H = Out of holding time	W = Reported on wet weight basis		

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ21014-002			
Description: 5W5B				Matrix: Aqueous			
Date Sampled: 10/19/2020 1055				Project Name: RAAP HWMU5			
Date Received: 10/20/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/26/2020 1613	BNW	10/23/2020 1454	70823

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Cobalt	7440-48-4	6020B	5.0	U	5.0	1.3	ug/L	1

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
U = Not detected at or above the LOQ	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL
H = Out of holding time	W = Reported on wet weight basis		

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ21014-003			
Description: 5W7B				Matrix: Aqueous			
Date Sampled: 10/19/2020 1005				Project Name: RAAP HWMU5			
Date Received: 10/20/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/26/2020 1619	BNW	10/23/2020 1454	70823

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Cobalt	7440-48-4	6020B	5.9		5.0	1.3	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit
U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and ≥ DL
H = Out of holding time W = Reported on wet weight basis

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ21014-004			
Description: 5WC21				Matrix: Aqueous			
Date Sampled: 10/19/2020 1250				Project Name: RAAP HWMU5			
Date Received: 10/20/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/26/2020 1648	BNW	10/23/2020 1454	70823

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Cobalt	7440-48-4	6020B	17		5.0	1.3	ug/L	1

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
U = Not detected at or above the LOQ	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL
H = Out of holding time	W = Reported on wet weight basis		

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ21014-005			
Description: 5WDUP				Matrix: Aqueous			
Date Sampled: 10/19/2020 1255				Project Name: RAAP HWMU5			
Date Received: 10/20/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/26/2020 1654	BNW	10/23/2020 1454	70823

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Cobalt	7440-48-4	6020B	18		5.0	1.3	ug/L	1

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
U = Not detected at or above the LOQ	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL
H = Out of holding time	W = Reported on wet weight basis		

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ21014-006			
Description: 5WC22				Matrix: Aqueous			
Date Sampled: 10/19/2020 1145				Project Name: RAAP HWMU5			
Date Received: 10/20/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/26/2020 1700	BNW	10/23/2020 1454	70823

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Cobalt	7440-48-4	6020B	4.6	J	5.0	1.3	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit
U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and ≥ DL
H = Out of holding time W = Reported on wet weight basis

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ21014-007			
Description: 5WC23				Matrix: Aqueous			
Date Sampled: 10/19/2020 1215				Project Name: RAAP HWMU5			
Date Received: 10/20/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/26/2020 1717	BNW	10/23/2020 1454	70823

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Cobalt	7440-48-4	6020B	1.3	J	5.0	1.3	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit
U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and ≥ DL
H = Out of holding time W = Reported on wet weight basis

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ21014-008			
Description: 5W12A				Matrix: Aqueous			
Date Sampled: 10/19/2020 0930				Project Name: RAAP HWMU5			
Date Received: 10/20/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/26/2020 1723	BNW	10/23/2020 1454	70823

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Cobalt	7440-48-4	6020B	5.0	U	5.0	1.3	ug/L	1

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
U = Not detected at or above the LOQ	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL
H = Out of holding time	W = Reported on wet weight basis		

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QC Summary

ICP-MS - MB

Sample ID: VQ70823-001

Matrix: Aqueous

Batch: 70823

Prep Method: 3005A

Analytical Method: 6020B

Prep Date: 10/23/2020 1454

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
Cobalt	5.0	U	1	5.0	1.3	ug/L	10/26/2020 1544

LOQ = Limit of Quantitation

DL = Detection Limit

U = Not detected at or above the LOQ

J = Estimated result < LOQ and $\geq$ DL

* = RSD is out of criteria

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

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QC Data for Lot Number: VJ21014

ICP-MS - LCS

Sample ID: VQ70823-002

Matrix: Aqueous

Batch: 70823

Prep Method: 3005A

Analytical Method: 6020B

Prep Date: 10/23/2020 1454

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Cobalt	100	97		1	97	80-120	10/26/2020 1550

LOQ = Limit of Quantitation

DL = Detection Limit

U = Not detected at or above the LOQ

J = Estimated result < LOQ and $\geq$ DL

* = RSD is out of criteria

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

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QC Data for Lot Number: VJ21014

ICP-MS - MS

Sample ID: VJ21014-003MS

Matrix: Aqueous

Batch: 70823

Prep Method: 3005A

Analytical Method: 6020B

Prep Date: 10/23/2020 1454

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Cobalt	5.9	100	100		1	95	70-130	10/26/2020 1625

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and $\geq$ DL

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

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QC Data for Lot Number: VJ21014

ICP-MS - MSD

Sample ID: VJ21014-003MD

Matrix: Aqueous

Batch: 70823

Prep Method: 3005A

Analytical Method: 6020B

Prep Date: 10/23/2020 1454

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Cobalt	5.9	100	100		1	99	4.2	70-130	20	10/26/2020 1631

LOQ = Limit of Quantitation

DL = Detection Limit

U = Not detected at or above the LOQ

J = Estimated result < LOQ and $\geq$ DL

* = RSD is out of criteria

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

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QC Data for Lot Number: VJ21014

Chain of Custody and Miscellaneous Documents

Laboratory: PACE-Sheely Environmental Services, Inc. - 106 Vantage Point Drive, West Columbia, SC 29172 - (803)791-9700 lab, (919)616-1180 cell -Caryn Dover, PM

page 1 of 1 jcf 9-25-2020 $T = 4.8^{\circ}\text{C}$

PACE ANALYTICAL SERVICES, LLC



Samples Receipt Checklist (SRC) (ME0018C-15)

Issuing Authority: Pace ENV - WCOL

Revised: 9/29/2020

Page 1 of 1

Sample Receipt Checklist (SRC)

Client: DRAPER

Cooler Inspected by/date: KSC / 10/21/2020

Lot #: VJ21014

Means of receipt: ☐ Pace ☐ Client ☒ UPS ☐ FedEx ☐ Other:	
☐ Yes ☒ No	1. Were custody seals present on the cooler?
☐ Yes ☐ No ☒ NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: 20-2295 Chlorine Strip ID: NA Tested by: AHD	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA	
4.8 / 4.8 °C NA / NA °C NA / NA °C NA / NA °C	
Method: ☐ Temperature Blank ☒ Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C	
Method of coolant: ☒ Wet Ice ☐ Ice Packs ☐ Dry Ice ☐ None	
☐ Yes ☐ No ☒ NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
☒ Yes ☐ No ☐ NA	4. Is the commercial courier's packing slip attached to this form?
☒ Yes ☐ No	5. Were proper custody procedures (relinquished/received) followed?
☒ Yes ☐ No	6. Were sample IDs listed on the COC?
☒ Yes ☐ No	7. Were sample IDs listed on all sample containers?
☒ Yes ☐ No	8. Was collection date & time listed on the COC?
☒ Yes ☐ No	9. Was collection date & time listed on all sample containers?
☒ Yes ☐ No	10. Did all container label information (ID, date, time) agree with the COC?
☒ Yes ☐ No	11. Were tests to be performed listed on the COC?
☒ Yes ☐ No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
☒ Yes ☐ No	13. Was adequate sample volume available?
☒ Yes ☐ No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
☐ Yes ☒ No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
☐ Yes ☐ No ☒ NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
☒ Yes ☐ No ☐ NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
☐ Yes ☐ No ☒ NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
☐ Yes ☐ No ☒ NA	19. Were all applicable NH ₃ /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
☐ Yes ☐ No ☒ NA	20. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc...) correctly transcribed from the COC into the comment section in LJMS?
☐ Yes ☒ No	21. Was the quote number listed on the container label? If yes, Quote #
Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: H ₂ SO ₄ , HNO ₃ , HCl, NaOH using SR # NA.	
Time of preservation NA. If more than one preservative is needed, please note in the comments below.	
Sample(s) NA were received with bubbles >6 mm in diameter.	
Samples(s) NA were received with TRC > 0.5 mg/L (If #19 is no) and were adjusted accordingly in sample receiving with sodium thiosulfate (Na ₂ S ₂ O ₃) with Shealy ID: NA.	
SR barcode labels applied by: AJD Date: 10/21/2020	

Comments:

Metals



ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ21014-001			
Description: 5W8B				Matrix: Aqueous			
Date Sampled: 10/19/2020 0835				Project Name: RAAP HWMU5			
Date Received: 10/20/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6020B	1	10/26/2020 1607	BNW	10/23/2020 1454	70823		

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Cobalt	7440-48-4	6020B	5.0	U	5.0	1.3	ug/L	1

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
U = Not detected at or above the LOQ	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL
H = Out of holding time	W = Reported on wet weight basis		

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ21014-002			
Description: 5W5B				Matrix: Aqueous			
Date Sampled: 10/19/2020 1055				Project Name: RAAP HWMU5			
Date Received: 10/20/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/26/2020 1613	BNW	10/23/2020 1454	70823

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Cobalt	7440-48-4	6020B	5.0	U	5.0	1.3	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit
U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and $\geq$ DL
H = Out of holding time W = Reported on wet weight basis

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ21014-003			
Description: 5W7B				Matrix: Aqueous			
Date Sampled: 10/19/2020 1005				Project Name: RAAP HWMU5			
Date Received: 10/20/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6020B	1	10/26/2020 1619	BNW	10/23/2020 1454	70823		

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Cobalt	7440-48-4	6020B	5.9		5.0	1.3	ug/L	1

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
U = Not detected at or above the LOQ	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\geq$ DL
H = Out of holding time	W = Reported on wet weight basis		

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ21014-004			
Description: 5WC21				Matrix: Aqueous			
Date Sampled: 10/19/2020 1250				Project Name: RAAP HWMU5			
Date Received: 10/20/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6020B	1	10/26/2020 1648	BNW	10/23/2020 1454	70823		

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Cobalt	7440-48-4	6020B	17		5.0	1.3	ug/L	1

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
U = Not detected at or above the LOQ	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL
H = Out of holding time	W = Reported on wet weight basis		

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ21014-005			
Description: 5WDUP				Matrix: Aqueous			
Date Sampled: 10/19/2020 1255				Project Name: RAAP HWMU5			
Date Received: 10/20/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6020B	1	10/26/2020 1654	BNW	10/23/2020 1454	70823		

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Cobalt	7440-48-4	6020B	18		5.0	1.3	ug/L	1

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
U = Not detected at or above the LOQ	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\geq$ DL
H = Out of holding time	W = Reported on wet weight basis		

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ21014-006			
Description: 5WC22				Matrix: Aqueous			
Date Sampled: 10/19/2020 1145				Project Name: RAAP HWMU5			
Date Received: 10/20/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6020B	1	10/26/2020 1700	BNW	10/23/2020 1454	70823		

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Cobalt	7440-48-4	6020B	4.6	J	5.0	1.3	ug/L	1

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
U = Not detected at or above the LOQ	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and $\geq$ DL
H = Out of holding time	W = Reported on wet weight basis		

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ21014-007			
Description: 5WC23				Matrix: Aqueous			
Date Sampled: 10/19/2020 1215				Project Name: RAAP HWMU5			
Date Received: 10/20/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6020B	1	10/26/2020 1717	BNW	10/23/2020 1454	70823		

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Cobalt	7440-48-4	6020B	1.3	J	5.0	1.3	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range DL = Detection Limit
 U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% J = Estimated result < LOQ and ≥ DL
 H = Out of holding time W = Reported on wet weight basis

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ21014-008			
Description: 5W12A				Matrix: Aqueous			
Date Sampled: 10/19/2020 0930				Project Name: RAAP HWMU5			
Date Received: 10/20/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6020B	1	10/26/2020 1723	BNW	10/23/2020 1454	70823		

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Cobalt	7440-48-4	6020B	5.0	U	5.0	1.3	ug/L	1

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
U = Not detected at or above the LOQ	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL
H = Out of holding time	W = Reported on wet weight basis		

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QC Summary

ICP-MS - MB

Sample ID: VQ70823-001

Matrix: Aqueous

Batch: 70823

Prep Method: 3005A

Analytical Method: 6020B

Prep Date: 10/23/2020 1454

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
Cobalt	5.0	U	1	5.0	1.3	ug/L	10/26/2020 1544

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and $\geq$ DL

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

ICP-MS - LCS

Sample ID: VQ70823-002

Matrix: Aqueous

Batch: 70823

Prep Method: 3005A

Analytical Method: 6020B

Prep Date: 10/23/2020 1454

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Cobalt	100	97		1	97	80-120	10/26/2020 1550

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and $\geq$ DL

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

QC Data for Lot Number: VJ21014

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ICP-MS - MS

Sample ID: VJ21014-003MS

Matrix: Aqueous

Batch: 70823

Prep Method: 3005A

Analytical Method: 6020B

Prep Date: 10/23/2020 1454

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Cobalt	5.9	100	100		1	95	70-130	10/26/2020 1625

LOQ = Limit of Quantitation

DL = Detection Limit

U = Not detected at or above the LOQ

J = Estimated result < LOQ and $\geq$ DL

* = RSD is out of criteria

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

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QC Data for Lot Number: VJ21014

ICP-MS - MSD

Sample ID: VJ21014-003MD

Matrix: Aqueous

Batch: 70823

Prep Method: 3005A

Analytical Method: 6020B

Prep Date: 10/23/2020 1454

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Cobalt	5.9	100	100		1	99	4.2	70-130	20	10/26/2020 1631

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and $\geq$ DL

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

ICP-MS Metals

- COVER PAGE -
INORGANIC ANALYSIS DATA PACKAGE

Client: Draper Aden Associates

SDG No.: VJ21014 Method Type: ICP-MS SOW No.: _____

Contract: RAAP HWMU5 Lab Code: _____ Case No.: _____ SAS No.: _____

Lab Sample ID	Client Sample ID	QC Description
VJ21014-001	5W8B	
VJ21014-002	5W5B	
VJ21014-003	5W7B	
VJ21014-003S	5W7BS	Matrix Spike
VJ21014-003SD	5W7BSD	Matrix Spike Duplicate
VJ21014-004	5WC21	
VJ21014-005	5WDUP	
VJ21014-006	5WC22	
VJ21014-007	5WC23	
VJ21014-008	5W12A	

Were ICP interelement corrections applied? Yes/No Yes _____

Were ICP background corrections applied? Yes/No Yes _____

If yes - were raw data generated before applications of background corrections? Yes/No No _____

Comments: _____

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: _____

Date: _____ Title: _____

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Draper Aden Associates

SDG No.: VJ21014

Contract: RAAP HWMU5

Lab Code:

Case No.:

SAS No.:

Initial Calibration Source: VHG

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV1	Cobalt	191.77	200.0	96	90.0 - 110.0	MS	10/26/2020	08:51	MS2102620A 6020B 200.8, g
CCV1	Cobalt	281.23	300.0	94	90.0 - 110.0	MS	10/26/2020	09:08	MS2102620A 6020B 200.8, g
CCV2	Cobalt	292.47	300.0	97	90.0 - 110.0	MS	10/26/2020	14:46	MS2102620A 6020B 200.8, g
CCV3	Cobalt	302.30	300.0	101	90.0 - 110.0	MS	10/26/2020	15:56	MS2102620A 6020B 200.8, g
CCV4	Cobalt	292.97	300.0	98	90.0 - 110.0	MS	10/26/2020	17:06	MS2102620A 6020B 200.8, g
CCV5	Cobalt	303.83	300.0	101	90.0 - 110.0	MS	10/26/2020	18:16	MS2102620A 6020B 200.8, g

- 3a -
INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Draper Aden Associates

SDG No.: VJ21014

Contract: RAAP HWMU5

Lab Code:

Case No.:

SAS No.:

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	DL	½LOQ	M	Analysis Date	Analysis Time	Run
ICB1	Cobalt	0.003	+/-2.500	U	1.250	2.500	MS	10/26/2020	08:57	MS2102620A 6
CCB1	Cobalt	0.008	+/-2.500	U	1.250	2.500	MS	10/26/2020	09:14	MS2102620A 6
CCB2	Cobalt	0.005	+/-2.500	U	1.250	2.500	MS	10/26/2020	14:52	MS2102620A 6
CCB3	Cobalt	0.007	+/-2.500	U	1.250	2.500	MS	10/26/2020	16:01	MS2102620A 6
CCB4	Cobalt	0.007	+/-2.500	U	1.250	2.500	MS	10/26/2020	17:11	MS2102620A 6
CCB5	Cobalt	0.013	+/-2.500	U	1.250	2.500	MS	10/26/2020	18:21	MS2102620A 6

INTERFERENCE CHECK SAMPLE

SDG No.: VJ21014

SAS No.: _____

Instrument ID: ICPMS2

SERIAL DILUTION SAMPLE SUMMARY

Client: Draper Aden Associates

SDG No.: VJ21014

Contract: RAAP HWMU5

Lab Code:

Case No.:

SAS No.:

Matrix: WATER

Level:

Client ID: 5W7BL

Sample ID: VJ21014-003

Serial Dilution ID: VJ21014-003L

Batch Number: 70823

Analyte	Initial Result ug/L	C	Serial Result ug/L	C	% Difference	Qual	Acceptance Limits	M
Cobalt	5.95		6.50	U	100.0		10.00 %	MS

METHOD DETECTION LIMITS (MDL) (ANNUALLY)

Lab Name: Pace Analytical Services, LLC Contract: RAAP HWMU5Lab Code: _____ Case No.: _____ Mod. Ref. No.: _____ SDG No.: VJ21014Instrument Type: MS Instrument ID: ICPMS2 _____Preparation Method: 3005AConcentration Units (ug/L, mg/kg, or ug): UG/L

Analyte	Wavelength/Mass	MDL
Cobalt	59.00	1.250

Comments: _____

- 12 -
LINEAR RANGES

Client: Draper Aden Associates **SDG No.:** VJ21014
Contract: RAAP HWMU5 **Lab Code:** **Case No.:** **SAS No.:**
Instrument ID: ICPMS2 **Date:** Analyzed Daily

<u>Analyte</u>	<u>Integration Time (sec)</u>	<u>LDR ug/L</u>
Cobalt	0.10	2000

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU5

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: VJ21014

Instrument ID Number: ICPMS2 Run Number: MS2102620A 6020B 200.8, generate

Start Date: 10/26/2020 End Date: 10/27/2020

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N				
ZZZZZZ	1.00	0740																													
ZZZZZZ	1.00	0746																													
BLANK	1.00	0752									X																				
MW15096	1.00	0758																													
MW15102	1.00	0804																													
CAL1	1.00	0810									X																				
MW15106	1.00	0816									X																				
CAL2	1.00	0822									X																				
CAL3	1.00	0827									X																				
CAL4	1.00	0833									X																				
CAL5	1.00	0839																													
CAL6	1.00	0845																													
ICV1	1.00	0851									X																				
ICB1	1.00	0857									X																				
ICSA	1.00	0903									X																				
CCV1	1.00	0908									X																				
CCB1	1.00	0914									X																				
ZZZZZZ	1.00	0926																													
ZZZZZZ	1.00	0932																													
ZZZZZZ	1.00	0937																													
ZZZZZZ	1.00	0943																													
ZZZZZZ	1.00	0949																													
ZZZZZZ	5.00	0955																													
ZZZZZZ	1.00	1001																													
ZZZZZZ	1.00	1006																													
ZZZZZZ	1.00	1012																													
ZZZZZZ	1.00	1018																													
ZZZZZZ	1.00	1024																													
ZZZZZZ	1.00	1030																													
ZZZZZZ	1.00	1035																													
ZZZZZZ	1.00	1041																													
ZZZZZZ	1.00	1047																													
ZZZZZZ	1.00	1053																													
ZZZZZZ	1.00	1059																													
ZZZZZZ	1.00	1105																													
ZZZZZZ	1.00	1110																													

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU5

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: VJ21014

Instrument ID Number: ICPMS2 Run Number: MS2102620A 6020B 200.8, generate

Start Date: 10/26/2020 End Date: 10/27/2020

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N				
ZZZZZZ	1.00	1116																													
ZZZZZZ	1.00	1122																													
ZZZZZZ	1.00	1128																													
ZZZZZZ	1.00	1134																													
ZZZZZZ	1.00	1139																													
ZZZZZZ	1.00	1145																													
ZZZZZZ	1.00	1151																													
ZZZZZZ	1.00	1157																													
ZZZZZZ	1.00	1203																													
ZZZZZZ	1.00	1209																													
ZZZZZZ	1.00	1214																													
ZZZZZZ	1.00	1220																													
ZZZZZZ	1.00	1226																													
ZZZZZZ	1.00	1232																													
ZZZZZZ	1.00	1238																													
ZZZZZZ	5.00	1244																													
ZZZZZZ	1.00	1249																													
ZZZZZZ	1.00	1255																													
ZZZZZZ	1.00	1301																													
ZZZZZZ	1.00	1307																													
ZZZZZZ	1.00	1313																													
ZZZZZZ	25.00	1318																													
ZZZZZZ	25.00	1324																													
ZZZZZZ	25.00	1330																													
ZZZZZZ	1.00	1336																													
ZZZZZZ	1.00	1342																													
ZZZZZZ	5.00	1348																													
ZZZZZZ	5.00	1353																													
ZZZZZZ	5.00	1359																													
ZZZZZZ	25.00	1405																													
ZZZZZZ	5.00	1411																													
ZZZZZZ	25.00	1417																													
ZZZZZZ	25.00	1422																													
ZZZZZZ	25.00	1428																													
ZZZZZZ	125.00	1434																													
ZZZZZZ	25.00	1440																													

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU5

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: VJ21014

Instrument ID Number: ICPMS2 Run Number: MS2102620A 6020B 200.8, generate

Start Date: 10/26/2020 End Date: 10/27/2020

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S G	A A	N L	T V	Z N	C N					
CCV2	1.00	1446									X																				
CCB2	1.00	1452									X																				
ZZZZZZ	5.00	1457																													
ZZZZZZ	25.00	1503																													
ZZZZZZ	5.00	1509																													
ZZZZZZ	25.00	1515																													
ZZZZZZ	5.00	1521																													
ZZZZZZ	5.00	1526																													
ZZZZZZ	1.00	1532																													
ZZZZZZ	5.00	1538																													
VO70823-001	1.00	1544									X																				
VO70823-002	1.00	1550									X																				
CCV3	1.00	1556									X																				
CCB3	1.00	1601									X																				
VJ21014-001	1.00	1607									X																				
VJ21014-002	1.00	1613									X																				
VJ21014-003	1.00	1619									X																				
VJ21014-003S	1.00	1625									X																				
VJ21014-003SD	1.00	1631									X																				
VJ21014-003L	5.00	1636									X																				
ZZZZZZ	1.00	1642																													
VJ21014-004	1.00	1648									X																				
VJ21014-005	1.00	1654									X																				
VJ21014-006	1.00	1700									X																				
CCV4	1.00	1706									X																				
CCB4	1.00	1711									X																				
VJ21014-007	1.00	1717									X																				
VJ21014-008	1.00	1723									X																				
ZZZZZZ	1.00	1729																													
ZZZZZZ	1.00	1735																													
ZZZZZZ	1.00	1741																													
ZZZZZZ	1.00	1746																													
ZZZZZZ	1.00	1752																													
ZZZZZZ	1.00	1758																													
ZZZZZZ	1.00	1804																													
ZZZZZZ	1.00	1810																													

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU5

Lab Code: Case No.: SAS No.: SDG No.: VJ21014

Instrument ID Number: ICPMS2 Run Number: MS2102620A 6020B 200.8, generate

Start Date: 10/26/2020 End Date: 10/27/2020

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N				
CCV5	1.00	1816									X																				
CCB5	1.00	1821									X																				
ZZZZZZ	1.00	1827																													
ZZZZZZ	1.00	1833																													
ZZZZZZ	1.00	1839																													
ZZZZZZ	1.00	1845																													
ZZZZZZ	1.00	1851																													
ZZZZZZ	1.00	1856																													
ZZZZZZ	1.00	1902																													
ZZZZZZ	1.00	1908																													
ZZZZZZ	1.00	1914																													
ZZZZZZ	1.00	1920																													
ZZZZZZ	1.00	1926																													
ZZZZZZ	1.00	1932																													
ZZZZZZ	1.00	1937																													
ZZZZZZ	1.00	1943																													
ZZZZZZ	1.00	1949																													
ZZZZZZ	1.00	1955																													
ZZZZZZ	1.00	2001																													
ZZZZZZ	5.00	2007																													
ZZZZZZ	1.00	2012																													
ZZZZZZ	1.00	2018																													
ZZZZZZ	1.00	2024																													
ZZZZZZ	1.00	2030																													
ZZZZZZ	1.00	2036																													
ZZZZZZ	1.00	2042																													
ZZZZZZ	1.00	2047																													
ZZZZZZ	1.00	2053																													
ZZZZZZ	1.00	2059																													
ZZZZZZ	1.00	2105																													
ZZZZZZ	1.00	2111																													
ZZZZZZ	1.00	2117																													
ZZZZZZ	1.00	2122																													
ZZZZZZ	1.00	2128																													
ZZZZZZ	1.00	2134																													
ZZZZZZ	5.00	2140																													

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU5

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: VJ21014

Instrument ID Number: ICPMS2 Run Number: MS2102620A 6020B 200.8, generate

Start Date: 10/26/2020 End Date: 10/27/2020

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S G	A G	N A	T L	V	Z N	C N				
ZZZZZZ	1.00	2146																													
ZZZZZZ	1.00	2152																													
ZZZZZZ	1.00	2158																													
ZZZZZZ	1.00	2203																													
ZZZZZZ	1.00	2209																													
ZZZZZZ	1.00	2215																													
ZZZZZZ	1.00	2221																													
ZZZZZZ	1.00	2227																													
ZZZZZZ	1.00	2233																													
ZZZZZZ	1.00	2238																													
ZZZZZZ	1.00	2244																													
ZZZZZZ	1.00	2250																													
ZZZZZZ	1.00	2256																													
ZZZZZZ	1.00	2302																													
ZZZZZZ	1.00	2308																													
ZZZZZZ	1.00	2314																													
ZZZZZZ	1.00	2319																													
ZZZZZZ	1.00	2325																													
ZZZZZZ	1.00	2331																													
ZZZZZZ	1.00	2337																													
ZZZZZZ	5.00	2343																													
ZZZZZZ	1.00	2349																													
ZZZZZZ	1.00	2354																													
ZZZZZZ	1.00	0000																													
ZZZZZZ	1.00	0006																													
ZZZZZZ	1.00	0012																													
ZZZZZZ	1.00	0018																													
ZZZZZZ	5.00	0024																													
ZZZZZZ	5.00	0030																													
ZZZZZZ	5.00	0035																													
ZZZZZZ	5.00	0041																													
ZZZZZZ	5.00	0047																													
ZZZZZZ	5.00	0053																													
ZZZZZZ	1.00	0059																													
ZZZZZZ	1.00	0105																													
ZZZZZZ	1.00	0111																													

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU5

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: VJ21014

Instrument ID Number: ICPMS2 Run Number: MS2102620A 6020B 200.8, generate

Start Date: 10/26/2020 End Date: 10/27/2020

EPA Sample No.	D/F	Time	% R	Analytes																					
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S G	A A	N L	T V	Z N
ZZZZZZ	1.00	0117																							
ZZZZZZ	1.00	0122																							
ZZZZZZ	1.00	0128																							
ZZZZZZ	1.00	0134																							
ZZZZZZ	1.00	0140																							
ZZZZZZ	1.00	0146																							
ZZZZZZ	5.00	0152																							
ZZZZZZ	1.00	0158																							
ZZZZZZ	1.00	0203																							
ZZZZZZ	20.00	0209																							
ZZZZZZ	1.00	0215																							
ZZZZZZ	1.00	0221																							
ZZZZZZ	1.00	0227																							
ZZZZZZ	1.00	0233																							
ZZZZZZ	1.00	0239																							
ZZZZZZ	1.00	0245																							
ZZZZZZ	1.00	0250																							
ZZZZZZ	1.00	0256																							
ZZZZZZ	1.00	0302																							
ZZZZZZ	1.00	0308																							
ZZZZZZ	1.00	0314																							
ZZZZZZ	1.00	0320																							
ZZZZZZ	1.00	0326																							
ZZZZZZ	1.00	0331																							

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical Services, LLC Contract: RAAP HWMU5

Lab Code: _____ Case No.: _____ NRAS No.: _____ SDG NO.: VJ21014

ICP-MS Instrument ID: ICPMS2 Start Date: 10/26/2020 End Date: 10/26/2020

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element 209Bi	Q	Element 115In	Q	Element 6Li	Q	Element 45Sc	Q	Element 159Tb	Q	Element 89Y	Q
RINSE	ZZZZZZ	0740												
TUNE	ZZZZZZ	0746												
BLANK	BLANK IM10195-01	0752	100		100		100		100		100		100	
MW15096	MW15096	0758	101		102		100		103		102		101	
MW15102	MW15102	0804	98		100		101		102		100		100	
CAL1	CAL1 MW-15105	0810	95		98		100		102		99		98	
MW15106	MW15106	0816	101		101		100		102		102		99	
CAL2	CAL2 MW-15107	0822	104		101		100		102		102		98	
CAL3	CAL3 MW-15224	0827	100		99		97		100		100		97	
CAL4	CAL4 MW-15099	0833	100		93		95		94		96		92	
CAL5	CAL5 MW-15234	0839	87		82		82		87		88		84	
CAL6	CAL6 MW-15235	0845	89		84		83		90		91		86	
ICV1	ICV1	0851	94		89		89		95		95		90	
ICB1	ICB1	0857	98		97		97		102		97		98	
ICSA	ICSA	0903	96		86		86		87		94		83	
CCV1	CCV1	0908	100		92		89		94		99		90	
CCB1	CCB1	0914	110		102		101		103		105		101	
VQ70984-001	ZZZZZZ	0926												
VQ70984-002	ZZZZZZ	0932												
VJ15049-001	ZZZZZZ	0937												
VJ15049-001	ZZZZZZ	0943												
VJ15049-001	ZZZZZZ	0949												
VJ15049-001	ZZZZZZ	0955												
VJ15049-001	ZZZZZZ	1001												
CCV	ZZZZZZ	1006												
CCB	ZZZZZZ	1012												
VQ70287-001	ZZZZZZ	1018												
VQ70287-002	ZZZZZZ	1024												
VJ15060-001	ZZZZZZ	1030												
VJ15060-002	ZZZZZZ	1035												
VJ15060-003	ZZZZZZ	1041												
VJ15060-004	ZZZZZZ	1047												
VJ15060-004	ZZZZZZ	1053												
VJ15060-004	ZZZZZZ	1059												
VJ15060-004	ZZZZZZ	1105												
VJ15060-004	ZZZZZZ	1110												
CCV	ZZZZZZ	1116												
CCB	ZZZZZZ	1122												
VJ15060-005	ZZZZZZ	1128												
VJ15060-006	ZZZZZZ	1134												
VJ15060-007	ZZZZZZ	1139												
VJ16059-001	ZZZZZZ	1145												
VJ16059-002	ZZZZZZ	1151												
VJ16059-003	ZZZZZZ	1157												
VJ16059-004	ZZZZZZ	1203												

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical Services, LLC Contract: RAAP HWMU5Lab Code: _____ Case No.: _____ NRAS No.: _____ SDG NO.: VJ21014ICP-MS Instrument ID: ICPMS2 Start Date: 10/26/2020 End Date: 10/26/2020

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element 209Bi	Q	Element 115In	Q	Element 6Li	Q	Element 45Sc	Q	Element 159Tb	Q	Element 89Y	Q
VJ16059-005	ZZZZZZ	1209												
VJ16059-005	ZZZZZZ	1214												
VJ16059-005	ZZZZZZ	1220												
CCV	ZZZZZZ	1226												
CCB	ZZZZZZ	1232												
LR	ZZZZZZ	1238												
VJ16059-005	ZZZZZZ	1244												
VJ16059-001	ZZZZZZ	1249												
VJ16059-006	ZZZZZZ	1255												
VJ16059-007	ZZZZZZ	1301												
VJ16059-008	ZZZZZZ	1307												
VQ70287-001	ZZZZZZ	1313												
VJ15063-001	ZZZZZZ	1318												
VJ15063-002	ZZZZZZ	1324												
VJ15063-003	ZZZZZZ	1330												
CCV	ZZZZZZ	1336												
CCB	ZZZZZZ	1342												
VJ15063-004	ZZZZZZ	1348												
VJ15063-004	ZZZZZZ	1353												
VJ15063-004	ZZZZZZ	1359												
VJ15063-004	ZZZZZZ	1405												
VJ15063-004	ZZZZZZ	1411												
VJ15063-004	ZZZZZZ	1417												
VJ15063-004	ZZZZZZ	1422												
VJ15063-004	ZZZZZZ	1428												
VJ15063-004	ZZZZZZ	1434												
VJ15063-004	ZZZZZZ	1440												
CCV2	CCV2	1446	89		83		86		91		89		85	
CCB2	CCB2	1452	106		95		94		99		98		93	
VJ15063-005	ZZZZZZ	1457												
VJ15063-005	ZZZZZZ	1503												
VJ15063-006	ZZZZZZ	1509												
VJ15063-006	ZZZZZZ	1515												
VJ15063-007	ZZZZZZ	1521												
VJ17033-001	ZZZZZZ	1526												
VJ17033-002	ZZZZZZ	1532												
VJ17033-002	ZZZZZZ	1538												
VQ70823-001	VQ70823-001MB	1544	81		81		92		88		84		82	
VQ70823-002	LCS	1550	73		77		91		86		79		79	
CCV3	CCV3	1556	59		68		79		79		71		73	
CCB3	CCB3	1601	63		75		89		88		75		80	
VJ21014-001	5W8B	1607	73		79		93		88		80		82	
VJ21014-002	5W5B	1613	81		80		92		88		83		82	
VJ21014-003	5W7B	1619	84		81		93		89		85		83	
VJ21014-003	5W7BS	1625	85		82		94		91		87		85	

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical Services, LLC Contract: RAAP HWMU5Lab Code: _____ Case No.: _____ NRAS No.: _____ SDG NO.: VJ21014ICP-MS Instrument ID: ICPMS2 Start Date: 10/26/2020 End Date: 10/26/2020

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element 209Bi	Q	Element 115In	Q	Element 6Li	Q	Element 45Sc	Q	Element 159Tb	Q	Element 89Y	Q
VJ21014-003	5W7BSD	1631	86		84		96		91		88		86	
VJ21014-003	5W7BL	1636	86		84		96		91		88		86	
VJ21014-003	ZZZZZZ	1642												
VJ21014-004	5WC21	1648	83		79		90		85		86		88	
VJ21014-005	5WDUP	1654	83		78		88		82		86		86	
VJ21014-006	5WC22	1700	85		79		92		84		88		88	
CCV4	CCV4	1706	82		77		87		85		84		80	
CCB4	CCB4	1711	88		84		94		92		87		84	
VJ21014-007	5WC23	1717	84		82		97		90		88		86	
VJ21014-008	5W12A	1723	88		83		98		90		89		84	
VJ20041-001	ZZZZZZ	1729												
VJ20041-002	ZZZZZZ	1735												
VJ20041-003	ZZZZZZ	1741												
VJ20041-004	ZZZZZZ	1746												
VJ21054-001	ZZZZZZ	1752												
VJ21054-002	ZZZZZZ	1758												
VJ21054-003	ZZZZZZ	1804												
VJ21054-004	ZZZZZZ	1810												
CCV5	CCV5	1816	79		76		87		89		82		81	
CCB5	CCB5	1821	85		83		94		92		84		85	
VJ21054-005	ZZZZZZ	1827												
VJ21054-006	ZZZZZZ	1833												
VQ70546-001	ZZZZZZ	1839												
VQ70546-002	ZZZZZZ	1845												
VJ16014-001	ZZZZZZ	1851												
VJ16014-003	ZZZZZZ	1856												
VJ16014-004	ZZZZZZ	1902												
VJ16014-005	ZZZZZZ	1908												
VJ16014-006	ZZZZZZ	1914												
VJ16014-007	ZZZZZZ	1920												
CCV	ZZZZZZ	1926												
CCB	ZZZZZZ	1932												
VJ16014-008	ZZZZZZ	1937												
VJ16014-009	ZZZZZZ	1943												
VJ16017-001	ZZZZZZ	1949												
VJ16017-001	ZZZZZZ	1955												
VJ16017-001	ZZZZZZ	2001												
VJ16017-001	ZZZZZZ	2007												
VJ16017-001	ZZZZZZ	2012												
VJ16017-003	ZZZZZZ	2018												
VQ70600-001	ZZZZZZ	2024												
VQ70600-002	ZZZZZZ	2030												
CCV	ZZZZZZ	2036												
CCB	ZZZZZZ	2042												
VJ17016-001	ZZZZZZ	2047												

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical Services, LLC Contract: RAAP HWMU5Lab Code: _____ Case No.: _____ NRAS No.: _____ SDG NO.: VJ21014ICP-MS Instrument ID: ICPMS2 Start Date: 10/26/2020 End Date: 10/26/2020

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element 209Bi	Q	Element 115In	Q	Element 6Li	Q	Element 45Sc	Q	Element 159Tb	Q	Element 89Y	Q
VJ17016-003	ZZZZZZ	2053												
VJ17016-004	ZZZZZZ	2059												
VJ17016-005	ZZZZZZ	2105												
VJ17020-001	ZZZZZZ	2111												
VJ17020-002	ZZZZZZ	2117												
VJ17020-003	ZZZZZZ	2122												
VJ17020-003	ZZZZZZ	2128												
VJ17020-003	ZZZZZZ	2134												
VJ17020-003	ZZZZZZ	2140												
CCV	ZZZZZZ	2146												
CCB	ZZZZZZ	2152												
VJ17020-003	ZZZZZZ	2158												
VJ17020-004	ZZZZZZ	2203												
VJ17020-005	ZZZZZZ	2209												
VJ17020-006	ZZZZZZ	2215												
VJ17020-007	ZZZZZZ	2221												
VJ17020-008	ZZZZZZ	2227												
VJ17020-016	ZZZZZZ	2233												
VQ70986-001	ZZZZZZ	2238												
VQ70986-002	ZZZZZZ	2244												
VJ22062-001	ZZZZZZ	2250												
CCV	ZZZZZZ	2256												
CCB	ZZZZZZ	2302												
VQ70817-001	ZZZZZZ	2308												
VQ70817-002	ZZZZZZ	2314												
VJ21062-001	ZZZZZZ	2319												
VJ21027-001	ZZZZZZ	2325												
VJ21027-001	ZZZZZZ	2331												
VJ21027-001	ZZZZZZ	2337												
VJ21027-001	ZZZZZZ	2343												
VJ21053-001	ZZZZZZ	2349												
VJ21069-001	ZZZZZZ	2354												
VJ21070-001	ZZZZZZ	0000												
CCV	ZZZZZZ	0006												
CCB	ZZZZZZ	0012												
VJ21073-001	ZZZZZZ	0018												
VJ21093-001	ZZZZZZ	0024												
VJ21093-001	ZZZZZZ	0030												
VJ21093-002	ZZZZZZ	0035												
VJ21093-003	ZZZZZZ	0041												
VJ21093-004	ZZZZZZ	0047												
VJ21022-001	ZZZZZZ	0053												
VJ21067-001	ZZZZZZ	0059												
VJ21067-002	ZZZZZZ	0105												
VJ22026-001	ZZZZZZ	0111												

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical Services, LLC Contract: RAAP HWMU5

Lab Code: _____ Case No.: _____ NRAS No.: _____ SDG NO.: VJ21014

ICP-MS Instrument ID: ICPMS2 Start Date: 10/26/2020 End Date: 10/26/2020

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element 209Bi	Q	Element 115In	Q	Element 6Li	Q	Element 45Sc	Q	Element 159Tb	Q	Element 89Y	Q
CCV	ZZZZZZ	0117												
CCB	ZZZZZZ	0122												
VJ22027-001	ZZZZZZ	0128												
VJ22028-001	ZZZZZZ	0134												
VJ22028-001	ZZZZZZ	0140												
VJ22028-001	ZZZZZZ	0146												
VJ22028-001	ZZZZZZ	0152												
VJ22049-001	ZZZZZZ	0158												
VJ22069-001	ZZZZZZ	0203												
VJ22074-001	ZZZZZZ	0209												
VJ22080-001	ZZZZZZ	0215												
VJ22007-001	ZZZZZZ	0221												
CCV	ZZZZZZ	0227												
CCB	ZZZZZZ	0233												
VJ22034-001	ZZZZZZ	0239												
VJ22034-001	ZZZZZZ	0245												
VJ22066-001	ZZZZZZ	0250												
VJ22067-001	ZZZZZZ	0256												
VJ22003-001	ZZZZZZ	0302												
CCV	ZZZZZZ	0308												
CCB	ZZZZZZ	0314												
IS	ZZZZZZ	0320												
SAMPLE	ZZZZZZ	0326												
SAMPLE	ZZZZZZ	0331												

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Pace Analytical Services, LLC Contract: RAAP HWMU5

Lab Code: _____ Case No.: _____ MA No.: _____ SDG No.: VJ21014

Instrument ID: ICPMS2 Start Date: 10/26/2020

Analytical Method: ICP-MS Run Batch: MS2102620A 6020B 200.8, generated 0

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Cobalt	0.00	0	0	1.00	0.99	-1	5.00	4.8	-5

FORM 15-IN

INITIAL CALIBRATION

Lab Name: Pace Analytical Services, LLC Contract: RAAP HWMU5

Lab Code: Case No.: MA No.: SDG No.: VJ21014

Instrument ID: ICPMS2 Start Date: 10/26/2020

Analytical Method: ICP-MS Run Batch: MS2102620A 6020B 200.8, generat

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Cobalt	250	246	-2	500	502	0			

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Pace Analytical Services, LLC Contract: RAAP HWMU5

Lab Code: _____ Case No.: _____ MA No.: _____ SDG No.: VJ21014

Instrument ID: ICPMS2 Start Date: 10/26/2020

Analytical Method: ICP-MS Run Batch: MS2102620A 6020B 200.8, generat

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Cobalt				2.00	2.0	0			

Raw Sample Data

Performance Report

Sample details

Acquired at : 10/26/2020 07:28:21

Report name : Shealy Performance Report ICPMS2 [6/23/2020 16:02:16]

Mass Calibration verification

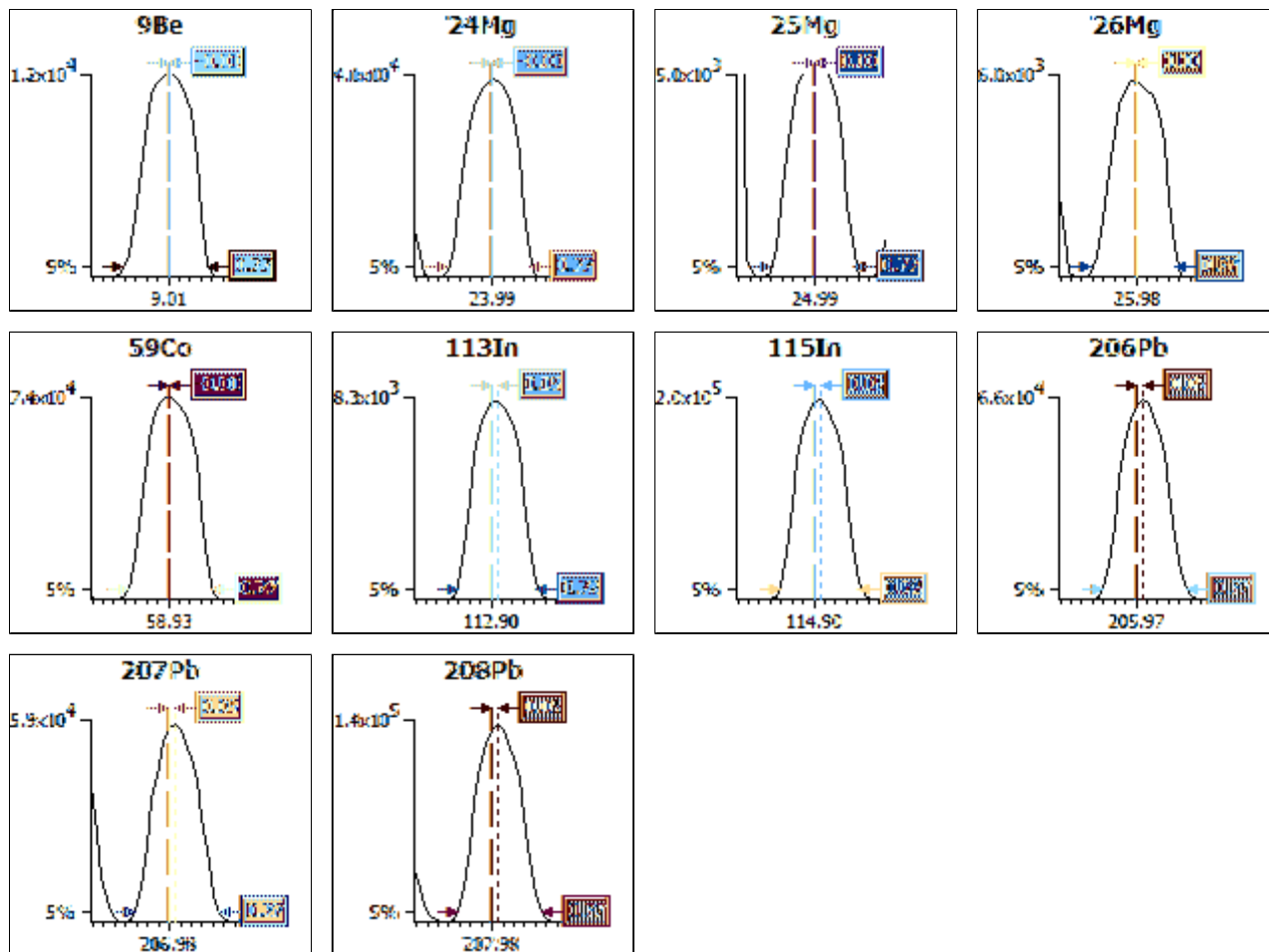
Acquisition parameters

Sweeps : 25

Dwell : 10.0 mSecs

Point spacing : 0.05 amu

Peak width measured at 5% of the peak maximum



Analyte	Limits			Results	
	Max. width	Min. width	Max. error	Peak width	Peak error
9Be	0.85	0.65	0.11	0.77	-0.00
24Mg	0.85	0.65	0.11	0.77	-0.00
25Mg	0.85	0.65	0.11	0.77	0.00
26Mg	0.85	0.65	0.11	0.77	0.00
59Co	0.85	0.65	0.11	0.77	-0.00
113In	0.85	0.65	0.11	0.72	0.05
115In	0.85	0.65	0.11	0.72	0.05
206Pb	0.85	0.65	0.11	0.77	0.05
207Pb	0.85	0.65	0.11	0.77	0.05
208Pb	0.85	0.65	0.11	0.77	0.05

Sample details

Acquired at : 10/26/2020 07:28:21

Report name : Shealy Performance Report ICPMS2 [6/23/2020 16:02:16]

Tune conditions

Major		Minor		Global		Add. Gases
Extraction	-117.6	Lens 3	-189.0	Standard resolution	110	
Lens 1	-1169	Forward power	1404	High resolution	80	
Lens 2	-83.9	Horizontal	79	Analogue Detector	1804	
Focus	18.8	Vertical	646	PC Detector	2853	
D1	-35.3	DA	-51.8			
D2	-130	Cool	12.2			
Pole Bias	-1.0	Auxiliary	1.08			
Hexapole Bias	-2.0	Sampling Depth	110			
Nebuliser	0.85					

Sensitivity and stability results**Acquisition parameters**

Sweeps : 130

Run	Time	5Bkg	9Be	24Mg	25Mg	26Mg	56Ar O	59Co	136Ba + +	101Bkg
Dwell (mSecs)		10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Limits	%RSD	-	5.0%	5.0%	5.0%	5.0%	-	5.0%	-	-
	CountRate	-	>5000	>1000	>1000	>1000	-	>10000	-	-
1	07:29:43	0.000	11623.580	40562.599	5316.939	5745.661	134813.79	75190.437	673.871	0.769
2	07:30:15	0.000	11860.809	41075.664	5255.365	5950.408	134374.28	75281.959	724.644	0.000
3	07:30:47	0.000	11720.628	40732.587	5182.246	5842.646	135472.71	75626.338	646.177	0.000
4	07:31:18	0.769	11789.178	41325.253	5142.993	5956.566	137746.50	75727.948	680.025	0.000
5	07:31:50	0.000	11815.365	40997.621	5233.044	5846.495	137144.42	76246.098	667.717	0.000
x		0.154	11761.912	40938.745	5226.117	5868.355	135910.34	75614.556	678.487	0.154
s		0.34	92.50	298.16	67.06	87.62	1470.36	419.03	28.78	0.34
%RSD		223.607	0.786	0.728	1.283	1.493	1.082	0.554	4.242	223.607

Run	Time	113In	115In	138Ba	140Ce	156Ce O	206Pb	207Pb	208Pb	220Bkg
Dwell (mSecs)		10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Limits	%RSD	5.0%	5.0%	-	-	-	5.0%	5.0%	5.0%	-
	CountRate	>1000	>10000	-	-	-	>10000	>10000	>10000	<2
1	07:29:43	8354.606	195410.94	146527.58	205048.21	2615.761	64679.272	56815.448	138740.68	0.000
2	07:30:15	8301.481	196735.20	146932.50	206306.98	2721.946	65034.097	57669.261	138835.96	0.769
3	07:30:47	8282.233	195431.38	148270.89	206643.74	2747.338	65037.196	56985.740	139298.34	0.769
4	07:31:18	8433.140	196786.29	148354.55	208088.44	2743.491	66107.955	57544.628	139512.35	0.000
5	07:31:50	8371.545	197097.54	148112.96	207440.81	2720.407	65919.672	57231.894	139895.87	0.000
x		8348.601	196292.27	147639.70	206705.64	2709.789	65355.639	57249.394	139256.64	0.308
s		59.86	807.25	847.10	1157.85	53.96	621.77	361.10	479.30	0.42
%RSD		0.717	0.411	0.574	0.560	1.991	0.951	0.631	0.344	136.931

Ratio results

Run	Time	56Ar O / 59Co	136Ba + + / 138Ba	115In / 101Bkg	156Ce O / 140Ce
Ratio limits		-	-	-	-
1	07:29:43	1.793	0.005	254034.22	0.013
2	07:30:15	1.785	0.005	INF	0.013
3	07:30:47	1.791	0.004	INF	0.013
4	07:31:18	1.819	0.005	INF	0.013
5	07:31:50	1.799	0.005	INF	0.013
x		1.7974	0.0046	254034.22	0.0131
s		0.01	0.00	0.00	0.00
%RSD		0.7245	4.5801	0.0000	1.5796

Result : The performance report passed.

FORM 11-IN

ICP-MS INTERNAL STANDARD ASSOCIATION

Lab Name: Pace Analytical Services, LLC Contract: _____

Lab Code: _____ Case No.: _____ MA No.: _____ SDG No.: _____

Instrument ID: ICPMS2Run Batch: MS2102620A 6020B 200.8, gen Date: 10/26/2020

Analyte	Assoc. Internal Standard 1	Assoc. Internal Standard 2
Aluminum	45Sc	
Antimony	115In	
Arsenic	45Sc	
Barium	159Tb	
Beryllium	6Li	45Sc
Boron	6Li	
Cadmium	115In	
Calcium	45Sc	
Chromium	45Sc	
Cobalt	45Sc	
Copper	115In	
Iron	45Sc	
Lead	159Tb	209Bi
Magnesium	6Li	45Sc
Manganese	45Sc	
Molybdenum	89Y	
Nickel	45Sc	
Potassium	89Y	
Selenium	115In	
Silicon	45Sc	
Silver	115In	
Sodium	6Li	
Strontium	89Y	
Thallium	209Bi	
Tin	115In	
Titanium	45Sc	
Vanadium	45Sc	
Zinc	115In	

Experiment Details

Description	PlasmaLab Template BlankExperiment
Template Filename	C:\Program Files\Thermo Fisher\PlasmaLab\data\MS2042320A 6020B 200.8.tee
Created By User	DemoX
Analyte Database	200_8.tea
Creation Timestamp	12/1/2004 11:33:01
Last Edited By	DELL
Last Edit Timestamp	10/27/2020 07:21:45
Instrument Detector	Simultaneous
Database Version	3.51
Acquisition Mode	Unknown

Numerical Results report key (text indicates meaning)

Blue text indicates that cell is a statistic.

Underlining indicates that a data warning flag is set.

Column headings	Result cells	Data warning flags
No flag	Internal Standard	I - Invalid calibration
Semi Quant	Excluded	T - Tripped
Standard Addition	QC Warning	F - Interference correction failed
Multi Element	QC Failure	M - Result over max
	Transient TRA only:	V - Valley integration failed
	Peak Not Found	D - Different method used
	Manually Edited	
	Merged Peak	

Fully Quantitative Concentrations

Id	Label	9Be	10B	11B	23Na	24Mg	25Mg	26Mg	27Al	28Si	39K
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
4	MW15096										
5	MW15102			25.000				50.000			200.000
6	cal1 MW-15105	0.400	50.000	50.000	400.000	400.000	400.000	400.000	40.000	100.000	400.000
7	MW15106	0.800		100.000	800.000	800.000	800.000	800.000	80.000		800.000
8	cal2 MW-15107	2.000			2000.000	2000.000	2000.000	2000.000	200.000		2000.000
9	cal3 MW-15224	250.000	250.000	250.000					250.000	250.000	
10	cal4 MW-15099	500.000	500.000	500.000					500.000	500.000	
11	cal5 MW-15234				50000.000	50000.000	50000.000	50000.000		5000.000	50000.000
12	cal6 MW-15235				100000.000	100000.000	100000.000	100000.000		10000.000	100000.000
Id	Label	43Ca	44Ca	47Ti	51V	52Cr	55Mn	54Fe	56Fe	57Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
4	MW15096										
5	MW15102									20.000	
6	cal1 MW-15105	400.000	400.000	5.000	5.000	5.000	5.000	50.000	50.000	50.000	1.000
7	MW15106	800.000	800.000	10.000	10.000	10.000	10.000			100.000	2.000
8	cal2 MW-15107	2000.000	2000.000	25.000	25.000	25.000	25.000				5.000
9	cal3 MW-15224			250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000
10	cal4 MW-15099			500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000
11	cal5 MW-15234	50000.000	50000.000					50000.000	50000.000	50000.000	
12	cal6 MW-15235	100000.000	100000.000					100000.000	100000.000	100000.000	
Id	Label	60Ni	62Ni	63Cu	65Cu	66Zn	67Zn	68Zn	75As	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
4	MW15096	2.000									
5	MW15102				1.000						
6	cal1 MW-15105	5.000	5.000	5.000	5.000	10.000	10.000	10.000	2.000	5.000	5.000
7	MW15106	10.000			10.000	20.000			4.000		10.000
8	cal2 MW-15107	25.000	25.000	25.000	25.000	50.000	50.000	50.000	10.000	25.000	25.000
9	cal3 MW-15224	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000
10	cal4 MW-15099	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000
11	cal5 MW-15234										
12	cal6 MW-15235										
Id	Label	88Sr	95Mo	97Mo	98Mo	107Ag	109Ag	106Cd	111Cd	114Cd	116Sn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
4	MW15096										
5	MW15102									0.100	
6	cal1 MW-15105	10.000	10.000	10.000	10.000	1.000	1.000	0.100	0.100		20.000
7	MW15106	20.000		20.000	20.000	2.000				0.200	
8	cal2 MW-15107	50.000	50.000	50.000	50.000	5.000	5.000	0.500	0.500	0.500	100.000
9	cal3 MW-15224	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000
10	cal4 MW-15099	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000
11	cal5 MW-15234										
12	cal6 MW-15235										
Id	Label	118Sn	121Sb	123Sb	135Ba	137Ba	203Tl	205Tl	206Pb	207Pb	208Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
4	MW15096										

5	MW15102	5.000	1.000	1.000							
6	cal1 MW-15105	20.000			5.000	5.000	0.500	0.500	1.000	1.000	1.000
7	MW15106	40.000	4.000	4.000	10.000	10.000	1.000	1.000	2.000	2.000	2.000
8	cal2 MW-15107	100.000	10.000	10.000	25.000	25.000	2.500	2.500	5.000	5.000	5.000
9	cal3 MW-15224	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000
10	cal4 MW-15099	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000
11	cal5 MW-15234										
12	cal6 MW-15235										
Id	Label	232Th	238U								
		ppb	ppb								
4	MW15096										
5	MW15102										
6	cal1 MW-15105		50.000								
7	MW15106										
8	cal2 MW-15107		250.000								
9	cal3 MW-15224										
10	cal4 MW-15099		500.000								
11	cal5 MW-15234										
12	cal6 MW-15235										

Sample List

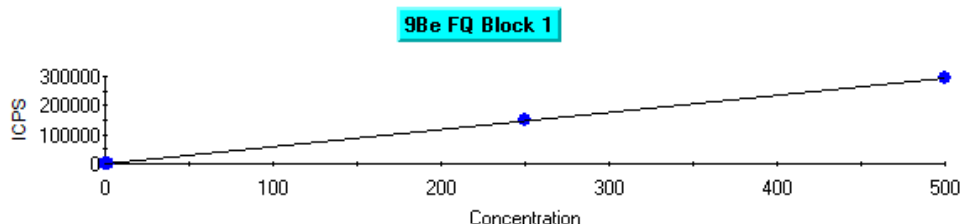
No	Label	Type	Weight	Rack	Row	Col	Height
1	RINSE	Unknown	1.000	0	1	5	144
2	TUNE MW15272	Unknown	1.000	0	1	2	144
3	BLANK IM10195-01	Blank	1.000	0	1	1	144
4	MW15096	Fully Quant Standard	1.000	4	5	1	144
5	MW15102	Fully Quant Standard	1.000	4	5	2	144
6	cal1 MW-15105	Fully Quant Standard	1.000	4	5	3	144
7	MW15106	Fully Quant Standard	1.000	4	5	4	144
8	cal2 MW-15107	Fully Quant Standard	1.000	4	5	5	144
9	cal3 MW-15224	Fully Quant Standard	1.000	4	5	6	144
10	cal4 MW-15099	Fully Quant Standard	1.000	4	5	7	144
11	cal5 MW-15234	Fully Quant Standard	1.000	4	5	8	144
12	cal6 MW-15235	Fully Quant Standard	1.000	4	5	9	144
13	ICV MW15323 PREP 10/26/20	QC Sample	1.000	4	5	11	144
14	ICB IM10195-01	QC Sample	1.000	0	1	1	144
15	ICSA MW15277	QC Sample	1.000	4	5	12	144
16	CCV MW15278	QC Sample	1.000	0	1	8	144
17	CCB IM10195-01	QC Sample	1.000	0	1	1	144
18	VQ70984-001	QC Sample	1.000	1	1	1	144
19	VQ70984-002	QC Sample	1.000	1	1	2	144
20	VJ15049-001	Unknown	1.000	1	1	3	144
21	VJ15049-001S	Unknown	1.000	1	1	4	144
22	VJ15049-001SD	Unknown	1.000	1	1	5	144
23	VJ15049-001L(5)	Unknown	1.000	1	1	6	144
24	VJ15049-001	Unknown	1.000	1	1	7	144
25	CCV MW15278	QC Sample	1.000	0	1	8	144
26	CCB IM10195-01	QC Sample	1.000	0	1	1	144
27	VQ70287-001	QC Sample	1.000	1	2	1	144
28	VQ70287-002	QC Sample	1.000	1	2	2	144
29	VJ15060-001	Unknown	1.000	1	2	3	144
30	VJ15060-002	Unknown	1.000	1	2	4	144
31	VJ15060-003	Unknown	1.000	1	2	5	144
32	VJ15060-004	Unknown	1.000	1	2	6	144
33	VJ15060-004S	Unknown	1.000	1	2	7	144
34	VJ15060-004SD	Unknown	1.000	1	2	8	144
35	VJ15060-004L(5)	Unknown	1.000	1	2	9	144
36	VJ15060-004A	Unknown	1.000	1	2	10	144
37	CCV MW15278	QC Sample	1.000	0	1	8	144
38	CCB IM10195-01	QC Sample	1.000	0	1	1	144
39	VJ15060-005	Unknown	1.000	1	3	1	144
40	VJ15060-006	Unknown	1.000	1	3	2	144
41	VJ15060-007	Unknown	1.000	1	3	3	144
42	VJ16059-001	Unknown	1.000	1	3	4	144
43	VJ16059-002	Unknown	1.000	1	3	5	144
44	VJ16059-003	Unknown	1.000	1	3	6	144
45	VJ16059-004	Unknown	1.000	1	3	7	144
46	VJ16059-005	Unknown	1.000	1	3	8	144
47	VJ16059-005MS	Unknown	1.000	1	3	9	144
48	VJ16059-005MD	Unknown	1.000	1	3	10	144
49	CCV MW15278	QC Sample	1.000	0	1	8	144
50	CCB IM10195-01	QC Sample	1.000	0	1	1	144
51	LR	QC Sample	1.000	4	5	10	144
52	VJ16059-005L(5)	Unknown	1.000	1	4	1	144
53	VJ16059-001A	Unknown	1.000	1	4	2	144
54	VJ16059-006	Unknown	1.000	1	4	3	144
55	VJ16059-007	Unknown	1.000	1	4	4	144
56	VJ16059-008	Unknown	1.000	1	4	5	144
57	VQ70287-001	Unknown	1.000	1	4	6	144
58	VJ15063-001(25)	Unknown	1.000	1	4	7	144
59	VJ15063-002(25)	Unknown	1.000	1	4	8	144

MW15280
BNW
10/27/20

60	VJ15063-003(25)	Unknown	1.000	1	4	9	144
61	CCV MW15278	QC Sample	1.000	0	1	8	144
62	CCB IM10195-01	QC Sample	1.000	0	1	1	144
63	VJ15063-004(5)	Unknown	1.000	1	5	1	144
64	VJ15063-004S(5)	Unknown	1.000	1	5	2	144
65	VJ15063-004SD(5)	Unknown	1.000	1	5	3	144
66	VJ15063-004L(25)	Unknown	1.000	1	5	4	144
67	VJ15063-004A(5)	Unknown	1.000	1	5	5	144
68	VJ15063-004(25)	Unknown	1.000	1	5	6	144
69	VJ15063-004S(25)	Unknown	1.000	1	5	7	144
70	VJ15063-004SD(25)	Unknown	1.000	1	5	8	144
71	VJ15063-004L(125)	Unknown	1.000	1	5	9	144
72	VJ15063-004A(25)	Unknown	1.000	1	5	10	144
73	CCV MW15278	QC Sample	1.000	0	1	8	144
74	CCB IM10195-01	QC Sample	1.000	0	1	1	144
75	VJ15063-005(5)	Unknown	1.000	2	1	1	144
76	VJ15063-005(25)	Unknown	1.000	2	1	2	144
77	VJ15063-006(5)	Unknown	1.000	2	1	3	144
78	VJ15063-006(25)	Unknown	1.000	2	1	4	144
79	VJ15063-007(5)	Unknown	1.000	2	1	5	144
80	VJ17033-001(5)	Unknown	1.000	2	1	6	144
81	VJ17033-002	Unknown	1.000	2	1	7	144
82	VJ17033-002(5)	Unknown	1.000	2	1	8	144
83	VQ70823-001	QC Sample	1.000	2	1	9	144
84	VQ70823-002	QC Sample	1.000	2	1	10	144
85	CCV MW15278	QC Sample	1.000	0	1	8	144
86	CCB IM10195-01	QC Sample	1.000	0	1	1	144
87	VJ21014-001	Unknown	1.000	2	2	1	144
88	VJ21014-002	Unknown	1.000	2	2	2	144
89	VJ21014-003	Unknown	1.000	2	2	3	144
90	VJ21014-003S	Unknown	1.000	2	2	4	144
91	VJ21014-003SD	Unknown	1.000	2	2	5	144
92	VJ21014-003L(5)	Unknown	1.000	2	2	6	144
93	VJ21014-003A	Unknown	1.000	2	2	7	144
94	VJ21014-004	Unknown	1.000	2	2	8	144
95	VJ21014-005	Unknown	1.000	2	2	9	144
96	VJ21014-006	Unknown	1.000	2	2	10	144
97	CCV MW15278	QC Sample	1.000	0	1	8	144
98	CCB IM10195-01	QC Sample	1.000	0	1	1	144
99	VJ21014-007	Unknown	1.000	2	3	1	144
100	VJ21014-008	Unknown	1.000	2	3	2	144
101	VJ20041-001	Unknown	1.000	2	3	3	144
102	VJ20041-002	Unknown	1.000	2	3	4	144
103	VJ20041-003	Unknown	1.000	2	3	5	144
104	VJ20041-004	Unknown	1.000	2	3	6	144
105	VJ21054-001	Unknown	1.000	2	3	7	144
106	VJ21054-002	Unknown	1.000	2	3	8	144
107	VJ21054-003	Unknown	1.000	2	3	9	144
108	VJ21054-004	Unknown	1.000	2	3	10	144
109	CCV MW15278	QC Sample	1.000	0	1	8	144
110	CCB IM10195-01	QC Sample	1.000	0	1	1	144
111	VJ21054-005	Unknown	1.000	2	4	1	144
112	VJ21054-006	Unknown	1.000	2	4	2	144
113	VQ70546-001	QC Sample	1.000	2	4	3	144
114	VQ70546-002	QC Sample	1.000	2	4	4	144
115	VJ16014-001	Unknown	1.000	2	4	5	144
116	VJ16014-003	Unknown	1.000	2	4	6	144
117	VJ16014-004	Unknown	1.000	2	4	7	144
118	VJ16014-005	Unknown	1.000	2	4	8	144
119	VJ16014-006	Unknown	1.000	2	4	9	144
120	VJ16014-007	Unknown	1.000	2	4	10	144
121	CCV MW15278	QC Sample	1.000	0	1	8	144
122	CCB IM10195-01	QC Sample	1.000	0	1	1	144
123	VJ16014-008	Unknown	1.000	2	5	1	144
124	VJ16014-009	Unknown	1.000	2	5	2	144
125	VJ16017-001	Unknown	1.000	2	5	3	144
126	VJ16017-001S	Unknown	1.000	2	5	4	144
127	VJ16017-001SD	Unknown	1.000	2	5	5	144
128	VJ16017-001L(5)	Unknown	1.000	2	5	6	144
129	VJ16017-001A	Unknown	1.000	2	5	7	144
130	VJ16017-003	Unknown	1.000	2	5	8	144
131	VQ70600-001	QC Sample	1.000	2	5	9	144
132	VQ70600-002	QC Sample	1.000	2	5	10	144
133	CCV MW15278	QC Sample	1.000	0	1	8	144
134	CCB IM10195-01	QC Sample	1.000	0	1	1	144
135	VJ17016-001	Unknown	1.000	3	1	1	144
136	VJ17016-003	Unknown	1.000	3	1	2	144
137	VJ17016-004	Unknown	1.000	3	1	3	144
138	VJ17016-005	Unknown	1.000	3	1	4	144
139	VJ17020-001	Unknown	1.000	3	1	5	144
140	VJ17020-002	Unknown	1.000	3	1	6	144
141	VJ17020-003	Unknown	1.000	3	1	7	144
142	VJ17020-003S	Unknown	1.000	3	1	8	144
143	VJ17020-003SD	Unknown	1.000	3	1	9	144

VJ17020-003L(5)	Unknown	1.000	3	1	10	144
145 CCV MW15278	QC Sample	1.000	0	1	8	144
146 CCB IM10195-01	QC Sample	1.000	0	1	1	144
147 VJ17020-003A	Unknown	1.000	3	2	1	144
148 VJ17020-004	Unknown	1.000	3	2	2	144
149 VJ17020-005	Unknown	1.000	3	2	3	144
150 VJ17020-006	Unknown	1.000	3	2	4	144
151 VJ17020-007	Unknown	1.000	3	2	5	144
152 VJ17020-008	Unknown	1.000	3	2	6	144
153 VJ17020-016	Unknown	1.000	3	2	7	144
154 VQ70986-001	QC Sample	1.000	3	2	8	144
155 VQ70986-002	QC Sample	1.000	3	2	9	144
156 VJ22062-001	Unknown	1.000	3	2	10	144
157 CCV MW15278	QC Sample	1.000	0	1	8	144
158 CCB IM10195-01	QC Sample	1.000	0	1	1	144
159 VQ70817-001	QC Sample	1.000	3	3	1	144
160 VQ70817-002	QC Sample	1.000	3	3	2	144
161 VJ21062-001	Unknown	1.000	3	3	3	144
162 VJ21027-001	Unknown	1.000	3	3	4	144
163 VJ21027-001S	Unknown	1.000	3	3	5	144
164 VJ21027-001SD	Unknown	1.000	3	3	6	144
165 VJ21027-001L(5)	Unknown	1.000	3	3	7	144
166 VJ21053-001	Unknown	1.000	3	3	8	144
167 VJ21069-001	Unknown	1.000	3	3	9	144
168 VJ21070-001	Unknown	1.000	3	3	10	144
169 CCV MW15278	QC Sample	1.000	0	1	8	144
170 CCB IM10195-01	QC Sample	1.000	0	1	1	144
171 VJ21073-001	Unknown	1.000	3	4	1	144
172 VJ21093-001(5)	Unknown	1.000	3	4	2	144
173 VJ21093-001S(5)	Unknown	1.000	3	4	3	144
174 VJ21093-002(5)	Unknown	1.000	3	4	4	144
175 VJ21093-003(5)	Unknown	1.000	3	4	5	144
176 VJ21093-004(5)	Unknown	1.000	3	4	6	144
177 VJ21022-001(5)	Unknown	1.000	3	4	7	144
178 VJ21067-001	Unknown	1.000	3	4	8	144
179 VJ21067-002	Unknown	1.000	3	4	9	144
180 VJ22026-001	Unknown	1.000	3	4	10	144
181 CCV MW15278	QC Sample	1.000	0	1	8	144
182 CCB IM10195-01	QC Sample	1.000	0	1	1	144
183 VJ22027-001	Unknown	1.000	3	5	1	144
184 VJ22028-001	Unknown	1.000	3	5	2	144
185 VJ22028-001S	Unknown	1.000	3	5	3	144
186 VJ22028-001SD	Unknown	1.000	3	5	4	144
187 VJ22028-001L(5)	Unknown	1.000	3	5	5	144
188 VJ22049-001	Unknown	1.000	3	5	6	144
189 VJ22069-001	Unknown	1.000	3	5	7	144
190 VJ22074-001(20)	Unknown	1.000	3	5	8	144
191 VJ22080-001	Unknown	1.000	3	5	9	144
192 VJ22007-001 (5)	Unknown	1.000	3	5	10	144
193 CCV MW15278	QC Sample	1.000	0	1	8	144
194 CCB IM10195-01	QC Sample	1.000	0	1	1	144
195 VJ22034-001	Unknown	1.000	4	1	1	144
196 VJ22034-001S	Unknown	1.000	4	1	2	144
197 VJ22066-001	Unknown	1.000	4	1	3	144
198 VJ22067-001	Unknown	1.000	4	1	4	144
199 VJ22003-001	Unknown	1.000	4	1	5	144
200 CCV MW15278	QC Sample	1.000	0	1	8	144
201 CCB IM10195-01	QC Sample	1.000	0	1	1	144
202 IS MW15295	Unknown	1.000	0	1	5	144
203 Sample 180	Unknown	1.000	0	1	6	144
204 Sample 181	Unknown	1.000	0	1	5	144

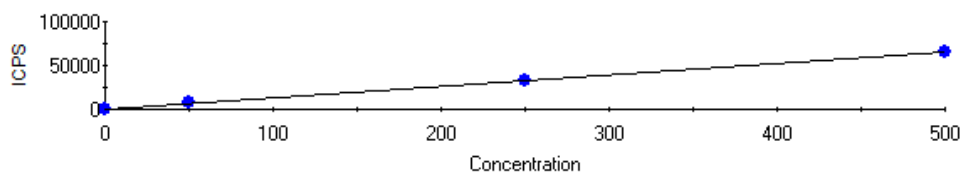
BNW 10/27/20

Fully Quant Calibration

Intercept CPS=18.678320 Intercept Conc=0.031527
Sensitivity=592.451486 Correlation Coeff=0.999959

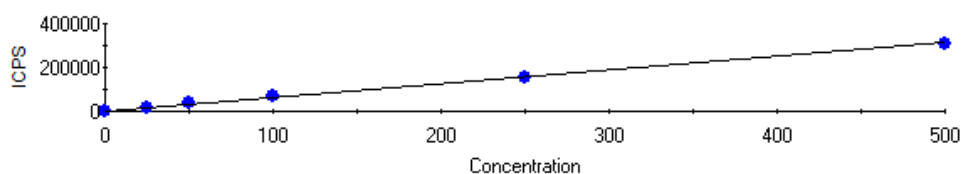
Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	18.68	0.00
cal1 MW-15105	0.400	0.369	0.031	237.20	7.79
MW15106	0.800	0.887	0.087	544.39	10.92
cal2 MW-15107	2.000	1.951	0.049	1174.38	2.46

cal3 MW-15224	250.000	253.890	3.890	150435.98	1.56
cal4 MW-15099	500.000	498.055	1.945	295092.25	0.39

10B FQ Block 1

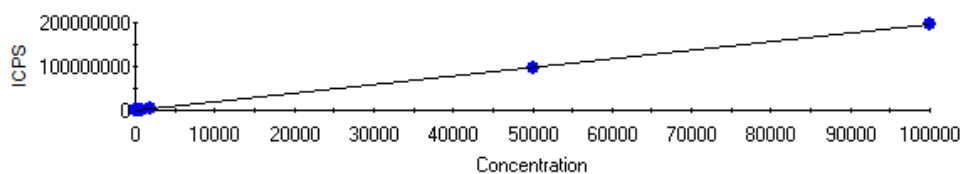
Intercept CPS=81.193099 Intercept Conc=0.616404
Sensitivity=131.720692 Correlation Coeff=0.999792

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	81.19	0.00
cal1 MW-15105	50.000	60.341	10.341	8029.36	20.68
cal3 MW-15224	250.000	250.345	0.345	33056.80	0.14
cal4 MW-15099	500.000	498.793	1.207	65782.61	0.24

11B FQ Block 1

Intercept CPS=326.505551 Intercept Conc=0.522587
Sensitivity=624.787092 Correlation Coeff=0.999606

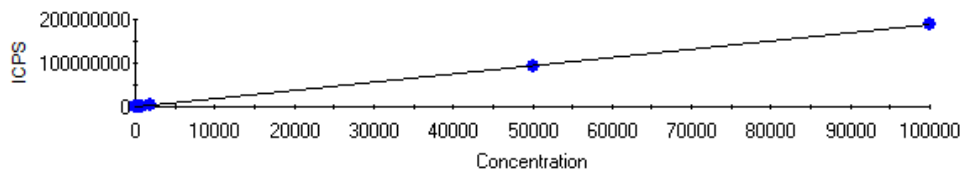
Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	326.51	0.00
MW15102	25.000	25.320	0.320	16145.83	1.28
cal1 MW-15105	50.000	59.223	9.223	37328.02	18.45
MW15106	100.000	110.466	10.466	69344.07	10.47
cal3 MW-15224	250.000	248.636	1.364	155671.30	0.55
cal4 MW-15099	500.000	490.615	9.385	306856.47	1.88

23Na FQ Block 1

Intercept CPS=11946.228704 Intercept Conc=6.144695
Sensitivity=1944.153271 Correlation Coeff=0.999994

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	11946.23	0.00
cal1 MW-15105	400.000	421.503	21.503	831411.93	5.38
MW15106	800.000	826.275	26.275	1618352.23	3.28
cal2 MW-15107	2000.000	2014.502	14.502	3928447.39	0.73
cal5 MW-15234	50000.000	49704.647	295.353	96645398.14	0.59
cal6 MW-15235	100000.000	100147.090	147.090	194713239.32	0.15

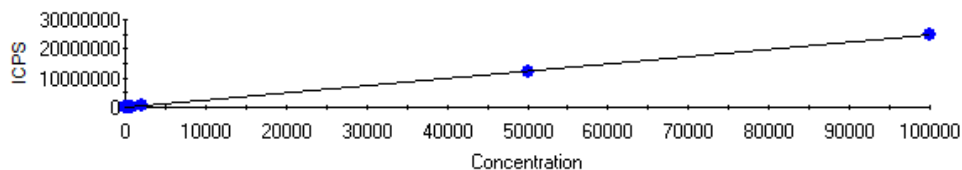
24Mg FQ Block 1



Intercept CPS=595.865909 Intercept Conc=0.315806
Sensitivity=1886.811582 Correlation Coeff=0.999990

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	595.87	0.00
cal1 MW-15105	400.000	417.380	17.380	788112.76	4.34
MW15106	800.000	843.537	43.537	1592190.44	5.44
cal2 MW-15107	2000.000	2063.973	63.973	3894923.63	3.20
cal5 MW-15234	50000.000	49638.711	361.289	93659490.37	0.72
cal6 MW-15235	100000.000	100178.947	178.947	189019393.91	0.18

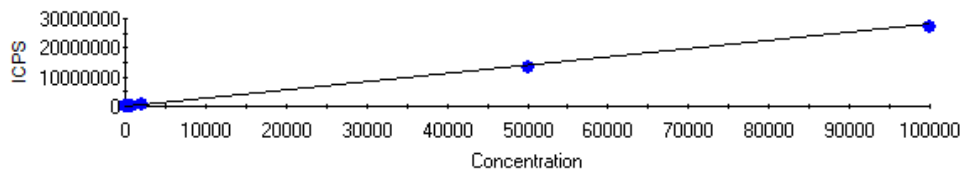
25Mg FQ Block 1



Intercept CPS=79.964279 Intercept Conc=0.321127
Sensitivity=249.011583 Correlation Coeff=0.999987

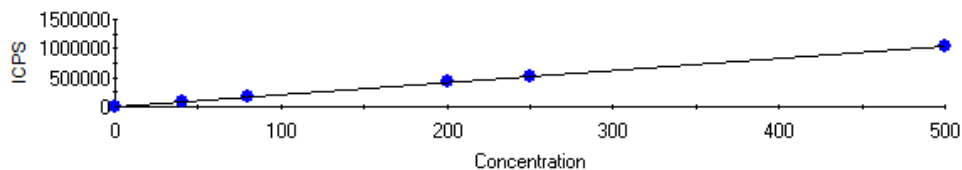
Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	79.96	0.00
cal1 MW-15105	400.000	406.271	6.271	101246.18	1.57
MW15106	800.000	824.339	24.339	205349.85	3.04
cal2 MW-15107	2000.000	2034.712	34.712	506746.78	1.74
cal5 MW-15234	50000.000	49569.277	430.723	12343404.03	0.86
cal6 MW-15235	100000.000	100214.448	214.448	24954638.26	0.21

26Mg FQ Block 1



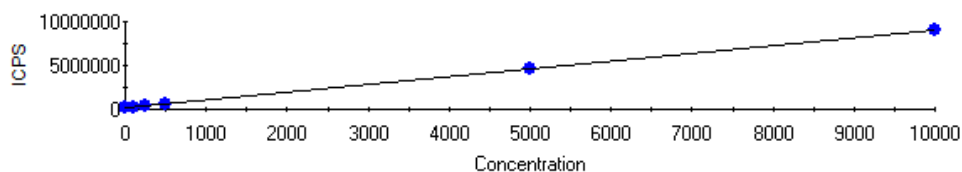
Intercept CPS=109.316750 Intercept Conc=0.390646
Sensitivity=279.835825 Correlation Coeff=0.999992

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	109.32	0.00
MW15102	50.000	52.416	2.416	14777.13	4.83
cal1 MW-15105	400.000	409.124	9.124	114596.90	2.28
MW15106	800.000	815.372	15.372	228279.54	1.92
cal2 MW-15107	2000.000	2045.663	45.663	572559.22	2.28
cal5 MW-15234	50000.000	48406.328	1593.672	13545934.20	3.19
cal6 MW-15235	100000.000	97588.995	2411.005	27309006.43	2.41

27Al FQ Block 1

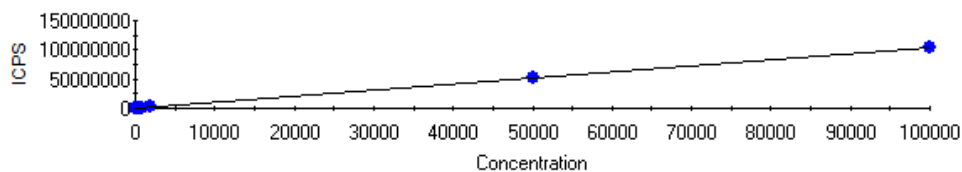
Intercept CPS=218.724634 Intercept Conc=0.104297
Sensitivity=2097.123062 Correlation Coeff=0.999988

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	218.72	0.00
cal1 MW-15105	40.000	40.951	0.951	86099.00	2.38
MW15106	80.000	81.559	1.559	171259.03	1.95
cal2 MW-15107	200.000	199.535	0.465	418668.86	0.23
cal3 MW-15224	250.000	251.448	1.448	527535.29	0.58
cal4 MW-15099	500.000	499.136	0.864	1046969.25	0.17

28Si FQ Block 1

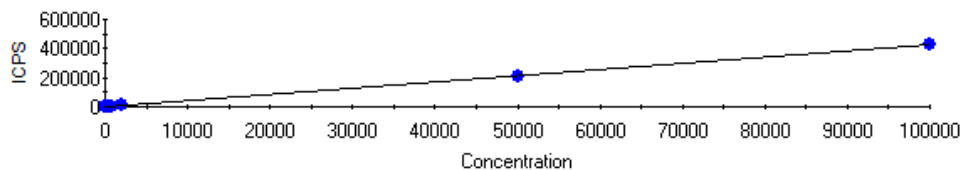
Intercept CPS=134550.865083 Intercept Conc=150.773677
Sensitivity=892.402889 Correlation Coeff=0.999970

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	134550.87	0.00
cal1 MW-15105	100.000	80.536	19.464	206421.80	19.46
cal3 MW-15224	250.000	213.076	36.924	324700.80	14.77
cal4 MW-15099	500.000	506.808	6.808	586828.12	1.36
cal5 MW-15234	5000.000	4949.441	50.559	4551446.56	1.01
cal6 MW-15235	10000.000	10054.309	54.309	9107045.31	0.54

39K FQ Block 1

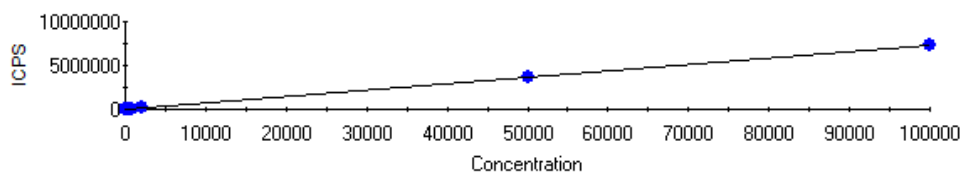
Intercept CPS=68417.539039 Intercept Conc=65.313772
Sensitivity=1047.520862 Correlation Coeff=0.999977

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	68417.54	0.00
MW15102	200.000	204.425	4.425	282556.66	2.21
cal1 MW-15105	400.000	409.173	9.173	497035.25	2.29
MW15106	800.000	826.134	26.134	933809.63	3.27
cal2 MW-15107	2000.000	2075.639	75.639	2242692.98	3.78
cal5 MW-15234	50000.000	49318.814	681.186	51730904.07	1.36
cal6 MW-15235	100000.000	100089.675	89.675	104914440.05	0.09

43Ca FQ Block 1

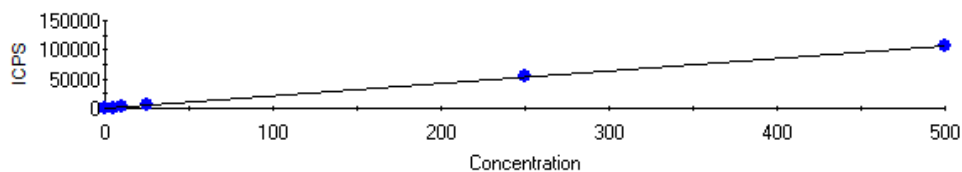
Intercept CPS=5.335940 Intercept Conc=1.262312
Sensitivity=4.227117 Correlation Coeff=0.999988

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	5.34	0.00
cal1 MW-15105	400.000	413.144	13.144	1751.75	3.29
MW15106	800.000	862.433	62.433	3650.94	7.80
cal2 MW-15107	2000.000	2057.786	57.786	8703.84	2.89
cal5 MW-15234	50000.000	49601.545	398.455	209676.88	0.80
cal6 MW-15235	100000.000	100197.520	197.520	423551.99	0.20

44Ca FQ Block 1

Intercept CPS=2864.399670 Intercept Conc=39.510986
Sensitivity=72.496285 Correlation Coeff=0.999999

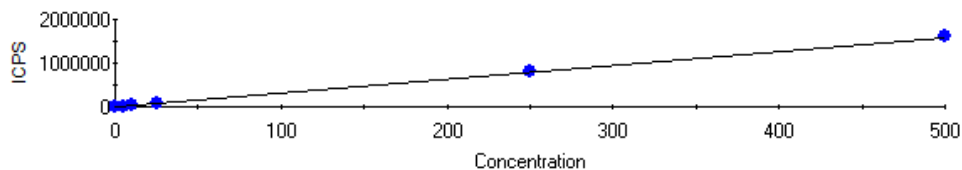
Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	2864.40	0.00
cal1 MW-15105	400.000	395.114	4.886	31508.70	1.22
MW15106	800.000	793.268	6.732	60373.39	0.84
cal2 MW-15107	2000.000	1998.794	1.206	147769.53	0.06
cal5 MW-15234	50000.000	50792.228	792.228	3685112.22	1.58
cal6 MW-15235	100000.000	101940.133	1940.133	7393145.32	1.94

47Ti FQ Block 1

Intercept CPS=12.008833 Intercept Conc=0.056441
Sensitivity=212.766369 Correlation Coeff=0.999995

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	12.01	0.00
cal1 MW-15105	5.000	4.990	0.010	1073.82	0.19
MW15106	10.000	10.090	0.090	2158.89	0.90
cal2 MW-15107	25.000	25.136	0.136	5360.21	0.55
cal3 MW-15224	250.000	251.265	1.265	53472.69	0.51
cal4 MW-15099	500.000	499.291	0.709	106244.25	0.14

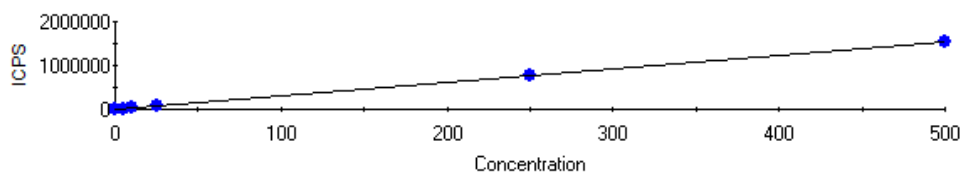
51V FQ Block 1



Intercept CPS=161.991026 Intercept Conc=0.051450
Sensitivity=3148.544201 Correlation Coeff=0.999993

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	161.99	0.00
cal1 MW-15105	5.000	4.977	0.023	15831.75	0.46
MW15106	10.000	9.973	0.027	31563.41	0.27
cal2 MW-15107	25.000	24.510	0.490	77331.45	1.96
cal3 MW-15224	250.000	254.772	4.772	802323.49	1.91
cal4 MW-15099	500.000	513.442	13.442	1616757.92	2.69

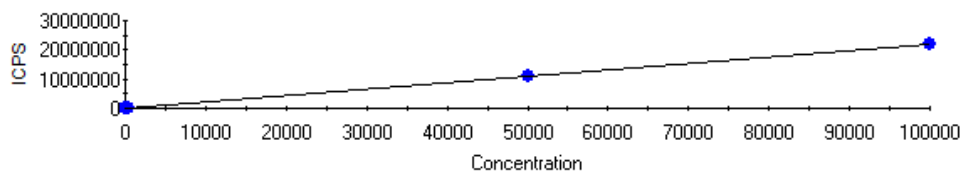
52Cr FQ Block 1



Intercept CPS=537.167976 Intercept Conc=0.174004
Sensitivity=3087.102156 Correlation Coeff=0.999999

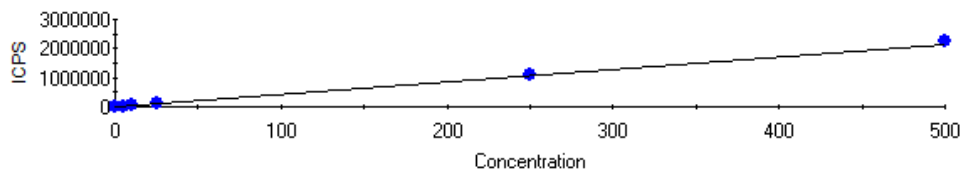
Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	537.17	0.00
cal1 MW-15105	5.000	4.971	0.029	15881.85	0.59
MW15106	10.000	10.022	0.022	31475.38	0.22
cal2 MW-15107	25.000	24.308	0.692	75576.92	2.77
cal3 MW-15224	250.000	249.717	0.283	771439.45	0.11
cal4 MW-15099	500.000	500.176	0.176	1544631.33	0.04

54Fe FQ Block 1



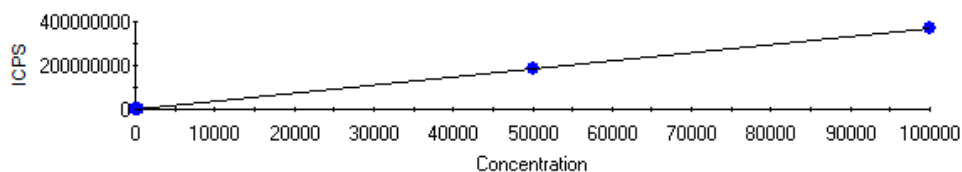
Intercept CPS=3167.359625 Intercept Conc=14.636219
Sensitivity=216.405597 Correlation Coeff=0.999996

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	3167.36	0.00
cal1 MW-15105	50.000	51.543	1.543	14321.45	3.09
cal3 MW-15224	250.000	362.540	112.540	81623.13	45.02
cal4 MW-15099	500.000	731.984	231.984	161572.72	46.40
cal5 MW-15234	50000.000	49881.206	118.794	10797739.52	0.24
cal6 MW-15235	100000.000	100057.955	57.955	21656268.79	0.06

55Mn FQ Block 1

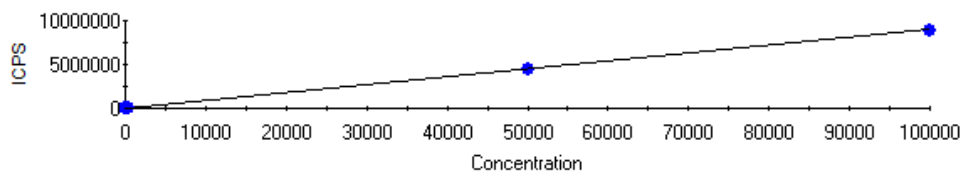
Intercept CPS=89.317654 Intercept Conc=0.020716
Sensitivity=4311.479505 Correlation Coef=0.999906

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	89.32	0.00
cal1 MW-15105	5.000	4.985	0.015	21583.60	0.29
MW15106	10.000	9.983	0.017	43131.44	0.17
cal2 MW-15107	25.000	24.346	0.654	105058.59	2.61
cal3 MW-15224	250.000	251.066	1.066	1082556.52	0.43
cal4 MW-15099	500.000	517.198	17.198	2229978.49	3.44

56Fe FQ Block 1

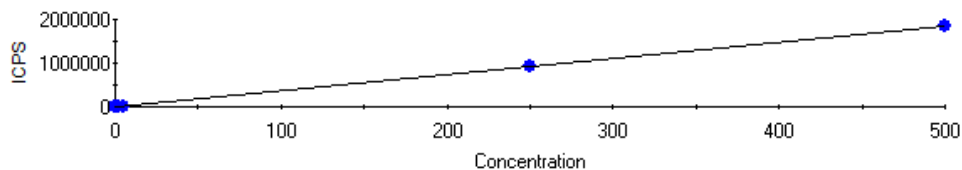
Intercept CPS=134724.068775 Intercept Conc=36.825059
Sensitivity=3658.488921 Correlation Coef=0.999993

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	134724.07	0.00
cal1 MW-15105	50.000	49.897	0.103	317270.62	0.21
cal3 MW-15224	250.000	256.389	6.389	1072719.92	2.56
cal4 MW-15099	500.000	518.973	18.973	2033382.09	3.79
cal5 MW-15234	50000.000	50326.561	326.561	184253889.48	0.65
cal6 MW-15235	100000.000	99836.609	163.391	365385851.13	0.16

57Fe FQ Block 1

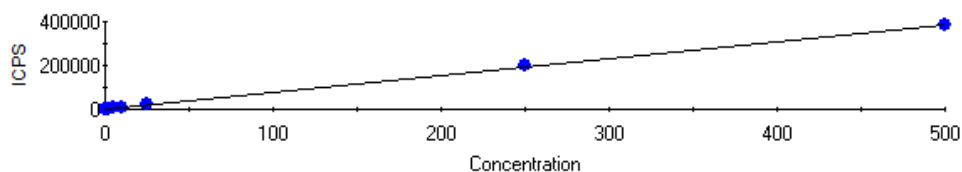
Intercept CPS=2210.993009 Intercept Conc=24.565810
Sensitivity=90.002853 Correlation Coef=1.000000

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	2210.99	0.00
MW15102	20.000	20.194	0.194	4028.55	0.97
cal1 MW-15105	50.000	50.522	0.522	6758.08	1.04
MW15106	100.000	104.052	4.052	11575.99	4.05
cal3 MW-15224	250.000	252.124	2.124	24902.83	0.85
cal4 MW-15099	500.000	499.565	0.435	47173.28	0.09
cal5 MW-15234	50000.000	49248.810	751.190	4434744.45	1.50
cal6 MW-15235	100000.000	98330.543	1669.457	8852240.41	1.67

59Co FQ Block 1

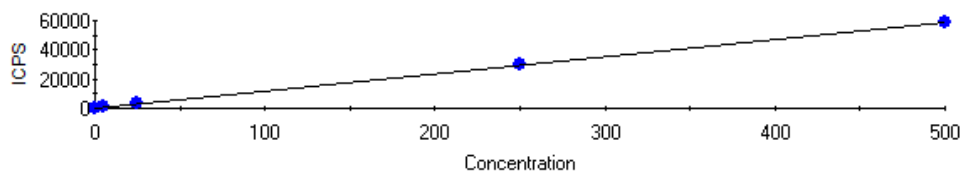
Intercept CPS=33.331840 Intercept Conc=0.009051
Sensitivity=3682.531553 Correlation Coeff=0.999958

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	33.33	0.00
cal1 MW-15105	1.000	0.994	0.006	3694.13	0.59
MW15106	2.000	1.996	0.004	7384.42	0.19
cal2 MW-15107	5.000	4.773	0.227	17609.59	4.54
cal3 MW-15224	250.000	246.067	3.933	906183.64	1.57
cal4 MW-15099	500.000	501.969	1.969	1848548.86	0.39

60Ni FQ Block 1

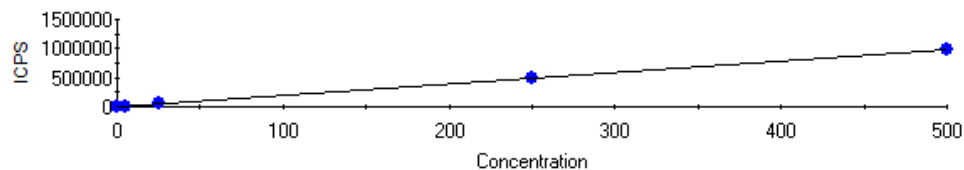
Intercept CPS=35.992048 Intercept Conc=0.046471
Sensitivity=774.505871 Correlation Coeff=0.999909

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	35.99	0.00
MW15096	2.000	1.962	0.038	1555.87	1.88
cal1 MW-15105	5.000	5.055	0.055	3951.35	1.11
MW15106	10.000	9.872	0.128	7681.83	1.28
cal2 MW-15107	25.000	25.380	0.380	19693.24	1.52
cal3 MW-15224	250.000	255.825	5.825	198174.21	2.33
cal4 MW-15099	500.000	497.070	2.930	385020.00	0.59

62Ni FQ Block 1

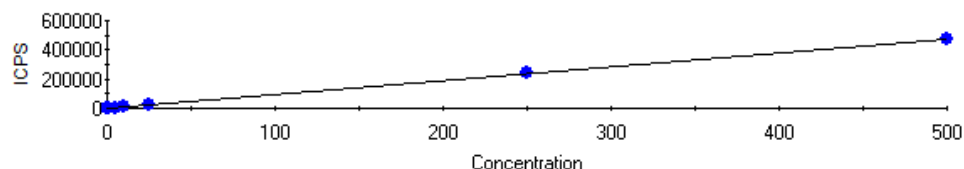
Intercept CPS=219.974482 Intercept Conc=1.872695
Sensitivity=117.464136 Correlation Coeff=0.999956

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	219.97	0.00
cal1 MW-15105	5.000	5.594	0.594	877.08	11.88
cal2 MW-15107	25.000	24.655	0.345	3116.02	1.38
cal3 MW-15224	250.000	254.530	4.530	30118.15	1.81
cal4 MW-15099	500.000	499.620	0.380	58907.35	0.08

63Cu FQ Block 1

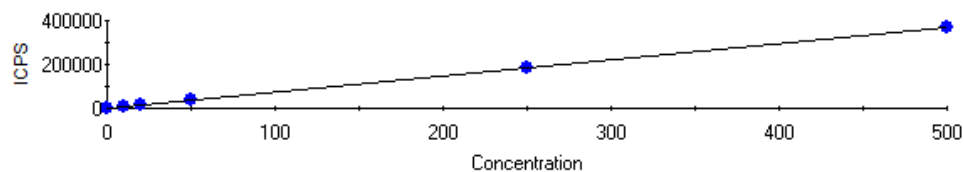
Intercept CPS=226.553201 Intercept Conc=0.114229
Sensitivity=1983.323846 Correlation Coeff=0.999998

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	226.55	0.00
cal1 MW-15105	5.000	4.968	0.032	10080.22	0.63
cal2 MW-15107	25.000	24.405	0.595	48629.60	2.38
cal3 MW-15224	250.000	249.200	0.800	494470.99	0.32
cal4 MW-15099	500.000	500.430	0.430	992741.37	0.09

65Cu FQ Block 1

Intercept CPS=55.815787 Intercept Conc=0.058934
Sensitivity=947.082743 Correlation Coeff=0.999999

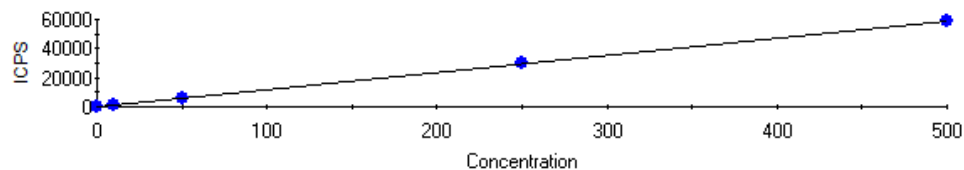
Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	55.82	0.00
MW15102	1.000	0.984	0.016	987.72	1.60
cal1 MW-15105	5.000	5.155	0.155	4938.27	3.11
MW15106	10.000	10.087	0.087	9609.12	0.87
cal2 MW-15107	25.000	24.669	0.331	23419.12	1.33
cal3 MW-15224	250.000	250.570	0.570	237366.57	0.23
cal4 MW-15099	500.000	500.227	0.227	473811.89	0.05

66Zn FQ Block 1

Intercept CPS=332.283266 Intercept Conc=0.450400
Sensitivity=737.751475 Correlation Coeff=0.999993

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	332.28	0.00
cal1 MW-15105	10.000	10.463	0.463	8051.15	4.63
MW15106	20.000	20.047	0.047	15122.04	0.24
cal2 MW-15107	50.000	48.776	1.224	36316.96	2.45
cal3 MW-15224	250.000	248.927	1.073	183978.73	0.43
cal4 MW-15099	500.000	500.648	0.648	369685.80	0.13

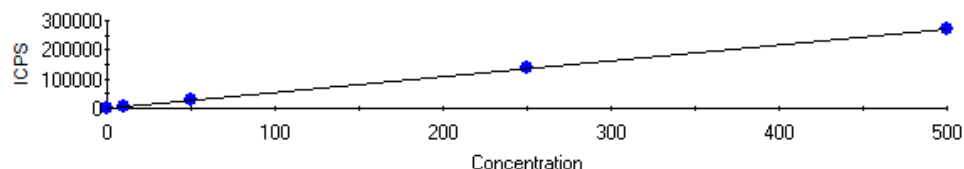
67Zn FQ Block 1



Intercept CPS=53.352139 Intercept Conc=0.450511
Sensitivity=118.425895 Correlation Coeff=0.999927

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	53.35	0.00
cal1 MW-15105	10.000	9.355	0.645	1161.20	6.45
cal2 MW-15107	50.000	48.652	1.348	5814.96	2.70
cal3 MW-15224	250.000	254.509	4.509	30193.86	1.80
cal4 MW-15099	500.000	497.893	2.107	59016.78	0.42

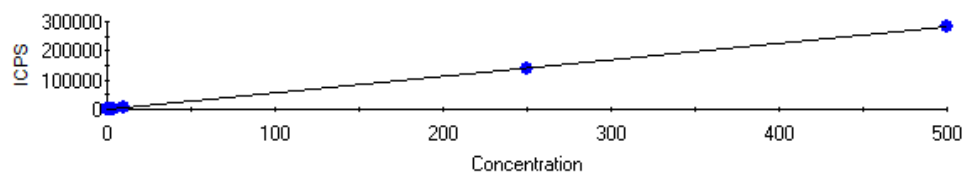
68Zn FQ Block 1



Intercept CPS=241.369364 Intercept Conc=0.442145
Sensitivity=545.905214 Correlation Coeff=0.999993

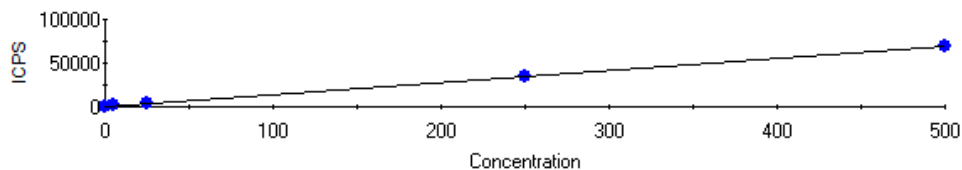
Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	241.37	0.00
cal1 MW-15105	10.000	9.965	0.035	5681.44	0.35
cal2 MW-15107	50.000	48.189	1.811	26548.01	3.62
cal3 MW-15224	250.000	249.937	0.063	136683.39	0.03
cal4 MW-15099	500.000	500.633	0.633	273539.71	0.13

75As FQ Block 1



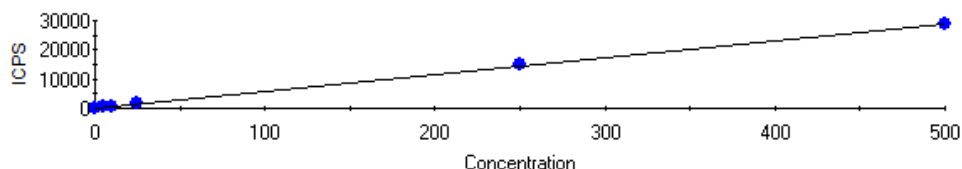
Intercept CPS=133.062155 Intercept Conc=0.235429
Sensitivity=565.190735 Correlation Coeff=0.999998

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	133.06	0.00
cal1 MW-15105	2.000	2.157	0.157	1352.24	7.86
MW15106	4.000	3.962	0.038	2372.14	0.96
cal2 MW-15107	10.000	10.275	0.275	5940.36	2.75
cal3 MW-15224	250.000	249.176	0.824	140964.83	0.33
cal4 MW-15099	500.000	500.406	0.406	282958.10	0.08

78Se FQ Block 1

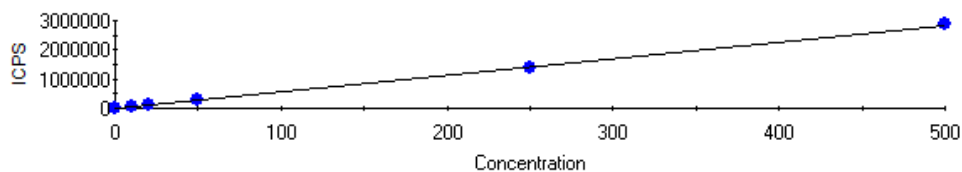
Intercept CPS=305.346762 Intercept Conc=2.237546
Sensitivity=136.464991 Correlation Coeff=0.999998

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	305.35	0.00
cal1 MW-15105	5.000	5.356	0.356	1036.20	7.11
cal2 MW-15107	25.000	25.007	0.007	3717.89	0.03
cal3 MW-15224	250.000	250.701	0.701	34517.20	0.28
cal4 MW-15099	500.000	499.646	0.354	68489.51	0.07

82Se FQ Block 1

Intercept CPS=60.671502 Intercept Conc=1.046538
Sensitivity=57.973536 Correlation Coeff=0.999967

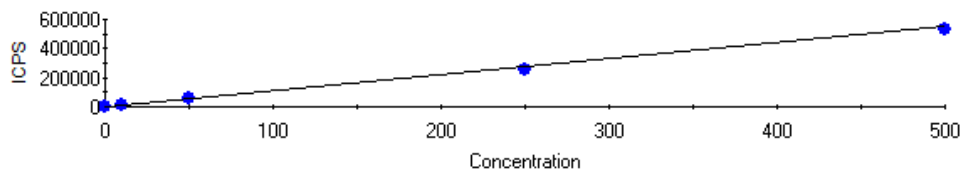
Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	60.67	0.00
cal1 MW-15105	5.000	5.874	0.874	401.22	17.48
MW15106	10.000	9.424	0.576	607.01	5.76
cal2 MW-15107	25.000	25.682	0.682	1549.55	2.73
cal3 MW-15224	250.000	253.338	3.338	14747.57	1.34
cal4 MW-15099	500.000	498.300	1.700	28948.87	0.34

88Sr FQ Block 1

Intercept CPS=12.032003 Intercept Conc=0.002141
Sensitivity=5620.908946 Correlation Coeff=0.999957

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	12.03	0.00
cal1 MW-15105	10.000	9.780	0.220	54987.32	2.20
MW15106	20.000	19.784	0.216	111214.81	1.08
cal2 MW-15107	50.000	49.224	0.776	276694.00	1.55
cal3 MW-15224	250.000	249.192	0.808	1400698.78	0.32
cal4 MW-15099	500.000	508.299	8.299	2857113.30	1.66

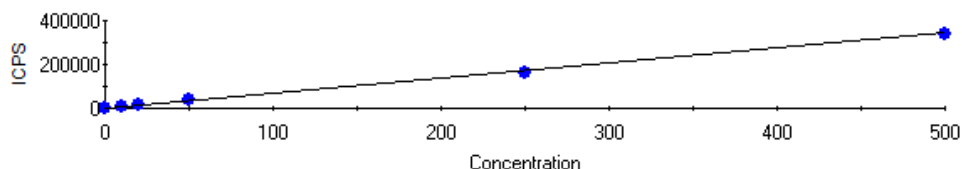
95Mo FQ Block 1



Intercept CPS=29.355652 Intercept Conc=0.026766
Sensitivity=1096.769349 Correlation Coeff=0.999859

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	29.36	0.00
cal1 MW-15105	10.000	10.007	0.007	11004.24	0.07
cal2 MW-15107	50.000	51.259	1.259	56248.95	2.52
cal3 MW-15224	250.000	235.953	14.047	258815.64	5.62
cal4 MW-15099	500.000	486.010	13.990	533070.13	2.80

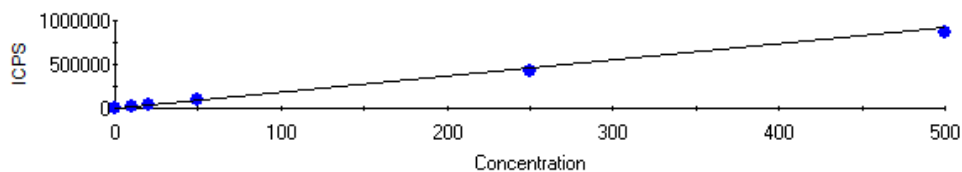
97Mo FQ Block 1



Intercept CPS=25.329667 Intercept Conc=0.036262
Sensitivity=698.523735 Correlation Coeff=0.999938

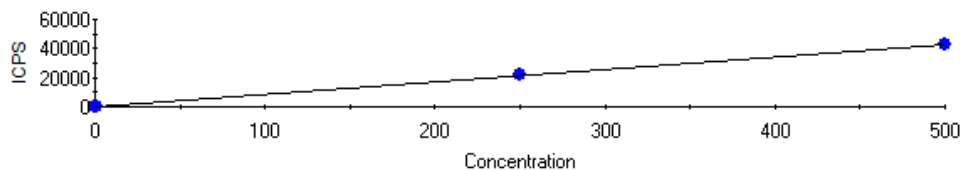
Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	25.33	0.00
cal1 MW-15105	10.000	9.975	0.025	6993.05	0.25
MW15106	20.000	20.164	0.164	14110.33	0.82
cal2 MW-15107	50.000	51.095	1.095	35716.36	2.19
cal3 MW-15224	250.000	236.464	13.536	165201.32	5.41
cal4 MW-15099	500.000	481.074	18.926	336066.62	3.79

98Mo FQ Block 1



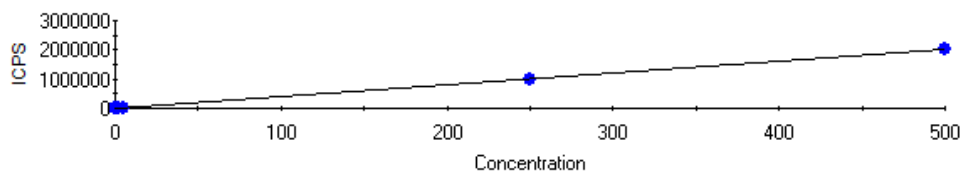
Intercept CPS=61.344753 Intercept Conc=0.033574
Sensitivity=1827.131774 Correlation Coeff=0.999902

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	61.34	0.00
cal1 MW-15105	10.000	9.936	0.064	18216.34	0.64
MW15106	20.000	19.830	0.170	36293.65	0.85
cal2 MW-15107	50.000	50.946	0.946	93146.06	1.89
cal3 MW-15224	250.000	233.743	16.257	427139.95	6.50
cal4 MW-15099	500.000	478.610	21.390	874544.38	4.28

106Cd FQ Block 1

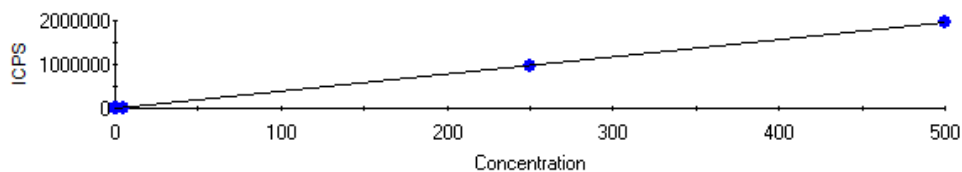
Intercept CPS=262.328249 Intercept Conc=3.070320
Sensitivity=85.440024 Correlation Coeff=0.999997

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	262.33	0.00
cal1 MW-15105	0.100	0.131	0.031	273.55	31.39
cal2 MW-15107	0.500	1.075	0.575	354.15	114.94
cal3 MW-15224	250.000	251.008	1.008	21708.47	0.40
cal4 MW-15099	500.000	499.495	0.505	42939.22	0.10

107Ag FQ Block 1

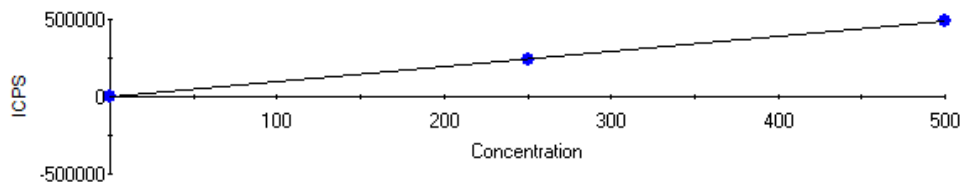
Intercept CPS=5.349188 Intercept Conc=0.001334
Sensitivity=4010.680026 Correlation Coeff=0.999984

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	5.35	0.00
cal1 MW-15105	1.000	1.006	0.006	4040.91	0.62
MW15106	2.000	1.943	0.057	7799.26	2.84
cal2 MW-15107	5.000	4.857	0.143	19485.89	2.86
cal3 MW-15224	250.000	247.565	2.435	992911.06	0.97
cal4 MW-15099	500.000	501.274	1.274	2010454.81	0.25

109Ag FQ Block 1

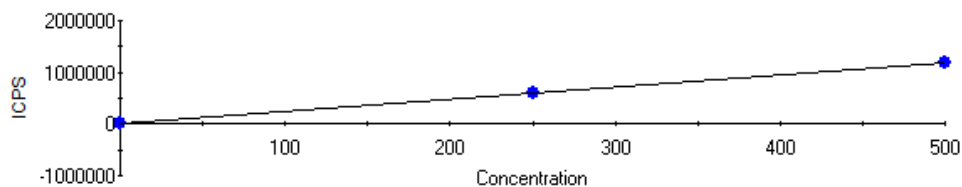
Intercept CPS=5.333467 Intercept Conc=0.001360
Sensitivity=3922.359474 Correlation Coeff=0.999959

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	5.33	0.00
cal1 MW-15105	1.000	0.970	0.030	3810.34	2.99
cal2 MW-15107	5.000	4.865	0.135	19086.38	2.71
cal3 MW-15224	250.000	246.555	3.445	967082.47	1.38
cal4 MW-15099	500.000	502.481	2.481	1970914.82	0.50

111Cd FQ Block 1

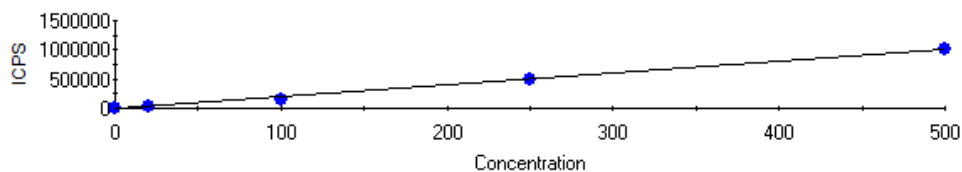
Intercept CPS=1.232313 Intercept Conc=0.001269
Sensitivity=971.163874 Correlation Coeff=0.999983

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	1.23	0.00
cal1 MW-15105	0.100	0.074	0.026	72.87	26.24
cal2 MW-15107	0.500	0.343	0.157	334.56	31.35
cal3 MW-15224	250.000	247.593	2.407	240454.88	0.96
cal4 MW-15099	500.000	501.204	1.204	486751.98	0.24

114Cd FQ Block 1

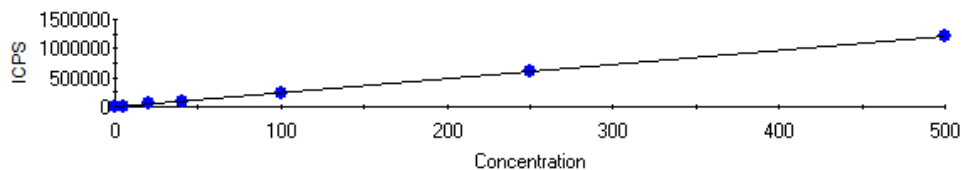
Intercept CPS=-0.175763 Intercept Conc=-0.000075
Sensitivity=2345.396196 Correlation Coeff=0.999969

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	-0.18	0.00
MW15102	0.100	0.100	0.000	233.97	0.17
MW15106	0.200	0.186	0.014	436.44	6.92
cal2 MW-15107	0.500	0.410	0.090	962.45	17.91
cal3 MW-15224	250.000	248.139	1.861	581983.68	0.74
cal4 MW-15099	500.000	504.868	4.868	1184114.39	0.97

116Sn FQ Block 1

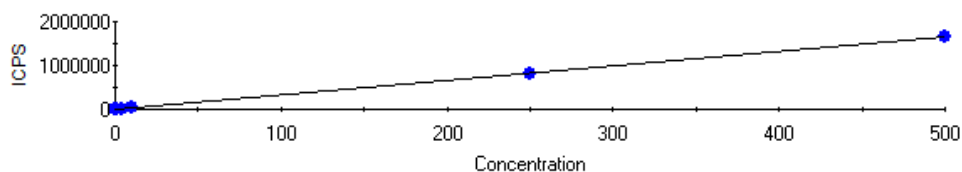
Intercept CPS=25.304699 Intercept Conc=0.012579
Sensitivity=2011.703162 Correlation Coeff=0.998012

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	25.30	0.00
cal1 MW-15105	20.000	13.243	6.757	26665.31	33.79
cal2 MW-15107	100.000	67.802	32.198	136422.25	32.20
cal3 MW-15224	250.000	248.609	1.391	500152.21	0.56
cal4 MW-15099	500.000	507.406	7.406	1020774.76	1.48

118Sn FQ Block 1

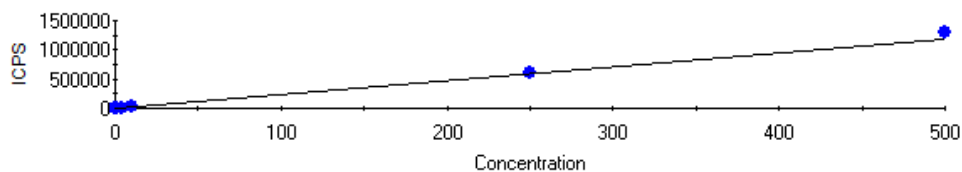
Intercept CPS=57.416402 Intercept Conc=0.023650
Sensitivity=2427.733101 Correlation Coeff=0.999906

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	57.42	0.00
MW15102	5.000	4.746	0.254	11578.64	5.09
cal1 MW-15105	20.000	19.217	0.783	46711.34	3.91
MW15106	40.000	38.941	1.059	94596.77	2.65
cal2 MW-15107	100.000	97.624	2.376	237063.44	2.38
cal3 MW-15224	250.000	244.497	5.503	593631.75	2.20
cal4 MW-15099	500.000	503.345	3.345	1222044.70	0.67

121Sb FQ Block 1

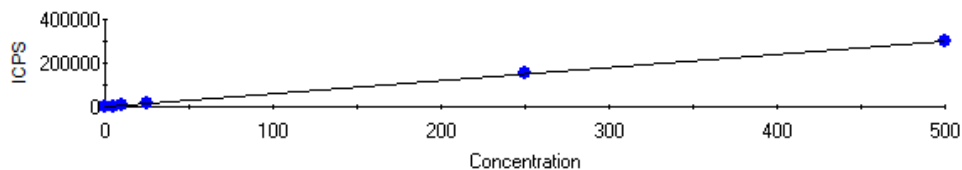
Intercept CPS=57.340546 Intercept Conc=0.017401
Sensitivity=3295.284980 Correlation Coeff=0.999845

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	57.34	0.00
MW15102	1.000	0.920	0.080	3090.58	7.95
MW15106	4.000	3.142	0.858	10411.86	21.44
cal2 MW-15107	10.000	8.799	1.201	29053.12	12.01
cal3 MW-15224	250.000	242.353	7.647	798680.30	3.06
cal4 MW-15099	500.000	503.854	3.854	1660401.25	0.77

123Sb FQ Block 1

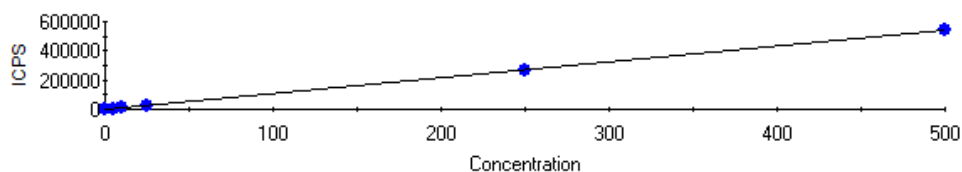
Intercept CPS=55.668926 Intercept Conc=0.023338
Sensitivity=2385.322576 Correlation Coeff=0.999857

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	55.67	0.00
MW15102	1.000	1.005	0.005	2453.80	0.54
MW15106	4.000	3.372	0.628	8099.78	15.69
cal2 MW-15107	10.000	9.302	0.698	22243.71	6.98
cal3 MW-15224	250.000	259.705	9.705	619535.45	3.88
cal4 MW-15099	500.000	539.120	39.120	1286030.72	7.82

135Ba FQ Block 1

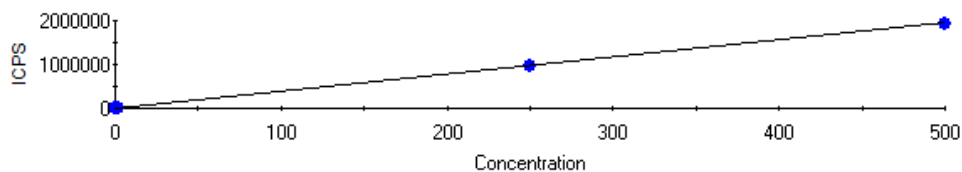
Intercept CPS=5.360906 Intercept Conc=0.008837
Sensitivity=606.609924 Correlation Coeff=0.999938

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	5.36	0.00
cal1 MW-15105	5.000	5.072	0.072	3081.81	1.43
MW15106	10.000	9.914	0.086	6019.07	0.86
cal2 MW-15107	25.000	24.997	0.003	15168.85	0.01
cal3 MW-15224	250.000	249.887	0.113	151589.01	0.05
cal4 MW-15099	500.000	497.865	2.135	302015.11	0.43

137Ba FQ Block 1

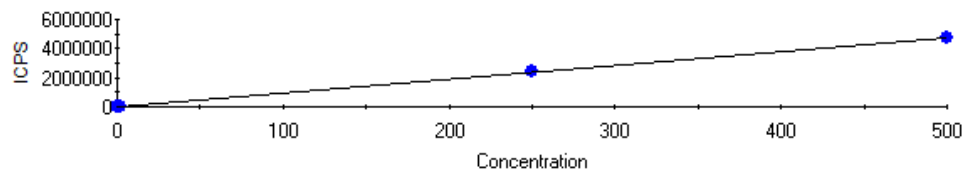
Intercept CPS=11.995939 Intercept Conc=0.011070
Sensitivity=1083.629560 Correlation Coeff=0.999991

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	12.00	0.00
cal1 MW-15105	5.000	4.984	0.016	5412.63	0.32
MW15106	10.000	10.110	0.110	10967.75	1.10
cal2 MW-15107	25.000	24.656	0.344	26730.26	1.37
cal3 MW-15224	250.000	247.956	2.044	268704.34	0.82
cal4 MW-15099	500.000	500.408	0.408	542269.15	0.08

203Tl FQ Block 1

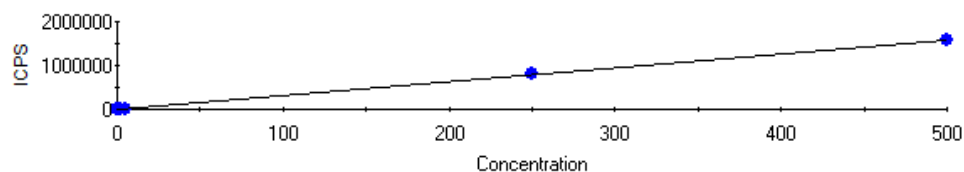
Intercept CPS=2.654302 Intercept Conc=0.000679
Sensitivity=3907.923943 Correlation Coeff=0.999930

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	2.65	0.00
cal1 MW-15105	0.500	0.501	0.001	1960.81	0.21
MW15106	1.000	0.977	0.023	3819.45	2.33
cal2 MW-15107	2.500	2.466	0.034	9640.93	1.35
cal3 MW-15224	250.000	250.248	0.248	977952.30	0.10
cal4 MW-15099	500.000	488.086	11.914	1907406.24	2.38

205Tl FQ Block 1

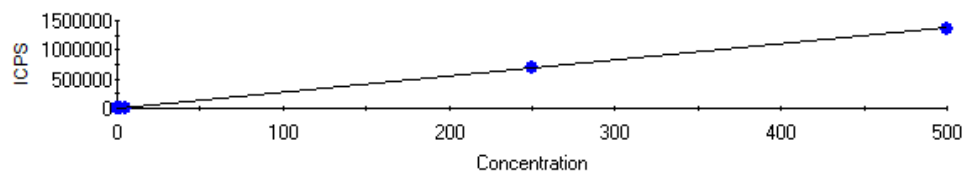
Intercept CPS=3.977173 Intercept Conc=0.000417
Sensitivity=9548.178194 Correlation Coeff=0.999995

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	3.98	0.00
cal1 MW-15105	0.500	0.501	0.001	4783.42	0.11
MW15106	1.000	0.992	0.008	9471.53	0.84
cal2 MW-15107	2.500	2.427	0.073	23181.82	2.90
cal3 MW-15224	250.000	251.346	1.346	2399897.77	0.54
cal4 MW-15099	500.000	499.328	0.672	4767672.07	0.13

206Pb FQ Block 1

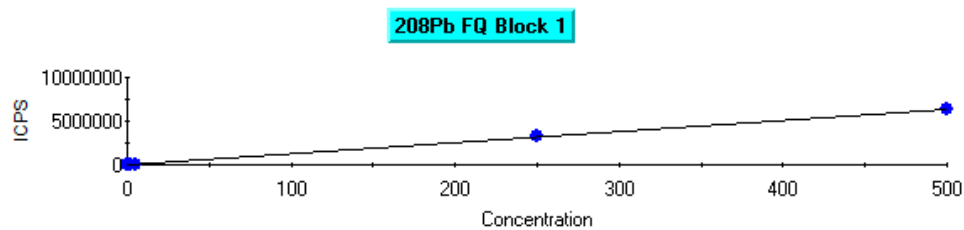
Intercept CPS=8.000492 Intercept Conc=0.002531
Sensitivity=3160.648442 Correlation Coeff=0.999991

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	8.00	0.00
cal1 MW-15105	1.000	1.014	0.014	3212.11	1.38
MW15106	2.000	2.041	0.041	6457.35	2.03
cal2 MW-15107	5.000	5.036	0.036	15926.44	0.73
cal3 MW-15224	250.000	251.865	1.865	796064.16	0.75
cal4 MW-15099	500.000	499.067	0.933	1577383.45	0.19

207Pb FQ Block 1

Intercept CPS=10.670198 Intercept Conc=0.003818
Sensitivity=2795.011366 Correlation Coeff=0.999912

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	10.67	0.00
cal1 MW-15105	1.000	1.021	0.021	2864.38	2.10
MW15106	2.000	1.976	0.024	5532.25	1.22
cal2 MW-15107	5.000	4.874	0.126	13634.13	2.52
cal3 MW-15224	250.000	250.818	0.818	701049.27	0.33
cal4 MW-15099	500.000	487.732	12.268	1363228.54	2.45



Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	33.32	0.00
cal1 MW-15105	1.000	0.993	0.007	12824.46	0.67
MW15106	2.000	1.958	0.042	25240.93	2.12
cal2 MW-15107	5.000	4.937	0.063	63605.39	1.26
cal3 MW-15224	250.000	250.259	0.259	3222603.31	0.10
cal4 MW-15099	500.000	498.636	1.364	6420936.93	0.27

Dilution Corrected Concentrations

RINSE 10/26/2020 07:40:59

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:41:26	99.5%	0.002	1.124	1.151	258.900	2.312	3.118	3.323	2.859	0.631
2	07:41:53	98.5%	0.010	1.203	1.233	267.300	2.615	2.989	3.335	3.120	0.616
3	07:42:20	102.1%	0.002	1.020	1.133	257.300	2.400	2.954	2.795	2.956	0.608
X		100.0%	0.005	1.116	1.173	261.200	2.442	3.021	3.151	2.978	0.618
S		1.9%	0.004	0.092	0.053	5.395	0.156	0.086	0.309	0.132	0.012
%RSD		1.9	96.790	8.258	4.548	2.066	6.387	2.860	9.792	4.434	1.940
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:41:26	64.380	55.770	0.685	11.060	10.890	99.9%	0.038	-0.002	0.027	12.940
2	07:41:53	56.510	55.980	1.169	7.239	14.200	100.2%	-0.019	0.047	0.059	-20.630
3	07:42:20	49.860	59.800	1.386	3.471	10.950	100.0%	-0.000	0.008	0.027	-1.618
X		56.920	57.180	1.080	7.255	12.010	100.0%	0.006	0.018	0.038	-3.104
S		7.265	2.269	0.359	3.792	1.897	0.2%	0.029	0.026	0.018	16.840
%RSD		12.770	3.969	33.220	52.270	15.790	0.2	460.800	146.300	48.980	542.400
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:41:26	3.673	0.042	4.788	6.279	0.030	-0.010	-0.236	0.018	0.035	0.047
2	07:41:53	4.300	0.040	2.783	3.744	0.017	0.015	-0.207	0.035	0.034	0.201
3	07:42:20	4.470	0.052	3.802	3.137	0.021	0.031	-0.340	0.011	0.054	0.120
X		4.147	0.045	3.791	4.387	0.023	0.012	-0.261	0.021	0.041	0.122
S		0.420	0.006	1.002	1.667	0.007	0.021	0.070	0.012	0.011	0.077
%RSD		10.120	13.390	26.440	37.990	29.290	173.000	26.750	56.180	27.970	63.100
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:41:26	-0.047	0.163	0.042	0.498	1.001	2.729	6.056	0.190	9.129	0.016
2	07:41:53	0.258	0.217	0.063	1.191	0.937	2.680	6.106	0.252	6.329	0.013
3	07:42:20	0.127	0.081	0.028	0.392	1.053	2.952	6.160	0.274	4.935	0.015
X		0.113	0.154	0.044	0.693	0.997	2.787	6.107	0.239	6.798	0.015
S		0.153	0.068	0.017	0.434	0.058	0.145	0.052	0.043	2.136	0.002
%RSD		135.900	44.530	39.550	62.600	5.866	5.206	0.849	18.220	31.420	11.720
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:41:26	101.0%	0.110	0.117	0.103	-0.539	0.008	0.008	0.036	0.026	99.3%
2	07:41:53	100.0%	0.134	0.130	0.135	-0.259	0.011	0.018	0.019	0.018	99.9%
3	07:42:20	99.0%	0.132	0.120	0.130	-0.266	0.010	0.005	0.006	0.016	100.8%
X		100.0%	0.125	0.122	0.123	-0.355	0.009	0.010	0.020	0.020	100.0%
S		1.0%	0.013	0.007	0.017	0.160	0.001	0.007	0.015	0.006	0.8%
%RSD		1.0	10.300	5.569	14.070	44.990	15.970	68.180	72.610	28.520	0.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:41:26	0.078	0.081	0.095	0.135	0.038	0.041	99.4%	0.006	0.008	0.022
2	07:41:53	0.081	0.087	0.105	0.101	0.064	0.022	100.2%	0.005	0.010	0.020
3	07:42:20	0.088	0.081	0.106	0.101	0.077	0.073	100.4%	0.008	0.011	0.010
X		0.082	0.083	0.102	0.113	0.059	0.045	100.0%	0.006	0.010	0.017
S		0.005	0.003	0.006	0.020	0.020	0.026	0.5%	0.002	0.001	0.006
%RSD		6.504	4.132	5.846	17.580	33.450	56.920	0.5	26.360	13.910	36.860
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	07:41:26	0.021	0.023	99.2%							
2	07:41:53	0.033	0.025	99.8%							
3	07:42:20	0.017	0.016	101.0%							
X		0.024	0.021	100.0%							
S		0.008	0.005	0.9%							
%RSD		35.430	24.010	0.9							

TUNE MW15272

10/26/2020 07:46:50

User Pre-dilution: 1.000

User Predefinition: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:47:16	99.4%	-0.011	2.287	2.113	263.300	3.099	1.466	1.243	1.334	1.330
2	07:47:43	98.6%	-0.005	2.372	2.375	249.300	3.204	1.333	1.421	1.402	1.311
3	07:48:10	99.3%	0.002	1.953	2.102	260.800	2.923	1.203	1.595	1.628	1.319
X		99.1%	-0.005	2.204	2.197	257.800	3.076	1.334	1.420	1.455	1.320
S		0.4%	0.006	0.222	0.155	7.483	0.142	0.132	0.176	0.154	0.010
%RSD		0.4	142.900	10.060	7.033	2.903	4.610	9.858	12.400	10.570	0.726
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:47:16	27.350	62.210	0.065	13.830	16.720	100.3%	0.112	0.028	0.042	-19.350
2	07:47:43	20.790	61.740	1.507	9.952	17.450	101.3%	-0.001	0.012	0.022	-15.440
3	07:48:10	24.960	64.170	1.924	14.960	14.870	99.2%	0.000	0.005	0.009	-12.080
X		24.360	62.710	1.165	12.920	16.340	100.2%	0.037	0.015	0.024	-15.630
S		3.320	1.289	0.975	2.627	1.331	1.1%	0.065	0.012	0.016	3.640
%RSD		13.630	2.055	83.680	20.340	8.141	1.0	173.900	77.560	68.420	23.300
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:47:16	3.003	0.291	2.966	2.023	0.005	0.113	-0.447	0.071	0.122	0.612
2	07:47:43	2.472	0.260	0.958	1.905	0.006	0.091	-0.124	0.083	0.125	0.666
3	07:48:10	3.748	0.297	2.079	4.931	0.011	0.084	-0.018	0.106	0.075	0.628
X		3.074	0.283	2.001	2.953	0.007	0.096	-0.196	0.087	0.107	0.635
S		0.641	0.020	1.006	1.714	0.003	0.015	0.223	0.017	0.028	0.028
%RSD		20.850	7.145	50.270	58.050	41.850	15.910	113.800	19.940	26.240	4.386
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:47:16	0.251	0.493	0.251	0.334	1.350	3.335	8.589	0.902	4.531	0.014
2	07:47:43	0.654	0.662	0.110	0.411	1.431	2.593	6.934	0.429	6.862	0.014
3	07:48:10	0.359	0.428	-0.022	0.674	1.252	2.729	4.325	-0.221	8.269	0.022
X		0.421	0.528	0.113	0.473	1.344	2.885	6.616	0.370	6.554	0.017
S		0.209	0.121	0.136	0.178	0.090	0.395	2.150	0.564	1.888	0.005
%RSD		49.490	22.880	120.700	37.690	6.669	13.690	32.490	152.500	28.810	28.920
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:47:16	101.8%	0.134	0.054	0.065	-0.389	0.001	0.003	-0.002	0.002	100.5%
2	07:47:43	100.5%	0.140	0.055	0.101	0.268	0.003	0.001	0.006	0.011	101.0%
3	07:48:10	101.2%	0.089	0.071	0.066	-0.524	0.002	-0.000	0.002	0.000	101.1%
X		101.2%	0.121	0.060	0.077	-0.215	0.002	0.001	0.002	0.004	100.9%
S		0.6%	0.028	0.010	0.021	0.424	0.001	0.002	0.004	0.006	0.3%
%RSD		0.6	23.340	16.370	26.820	197.200	60.270	155.000	166.700	128.800	0.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:47:16	0.108	0.163	0.078	0.055	0.121	0.066	101.3%	0.003	0.002	0.017
2	07:47:43	0.094	0.140	0.068	0.070	0.081	0.105	102.7%	0.001	0.004	0.021
3	07:48:10	0.092	0.157	0.066	0.063	0.118	0.126	103.6%	0.002	0.004	0.007
X		0.098	0.153	0.071	0.063	0.107	0.099	102.5%	0.002	0.003	0.015
S		0.009	0.012	0.006	0.007	0.022	0.031	1.1%	0.001	0.001	0.007
%RSD		9.154	8.048	8.897	11.670	21.020	30.940	1.1	44.120	41.820	48.910
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	07:47:16	0.013	0.015	105.1%							
2	07:47:43	0.006	0.014	105.9%							
3	07:48:10	0.006	0.008	106.6%							
X		0.008	0.012	105.9%							
S		0.004	0.004	0.7%							
%RSD		50.380	30.300	0.7							

BLANK IM10195-01

10/26/2020 07:52:38

User Pre-dilution: 1.000

user file location: 1000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:53:05	99.5%	0.015	-0.158	-0.008	-1.875	-0.189	0.032	0.079	-0.034	-0.015
2	07:53:32	98.2%	-0.032	0.033	-0.014	3.171	0.221	-0.010	-0.064	-0.061	0.024
3	07:53:59	102.3%	0.016	0.125	0.022	-1.296	-0.031	-0.022	-0.015	0.095	-0.009
X		100.0%	0.000	-0.000	-0.000	-0.000	0.000	0.000	-0.000	-0.000	0.000
S		2.1%	0.027	0.145	0.019	2.762	0.207	0.029	0.072	0.083	0.021
%RSD		2.1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:53:05	4.062	1.112	-0.848	0.628	3.646	100.1%	-0.019	-0.029	-0.012	16.330
2	07:53:32	0.903	-0.787	0.207	0.634	-0.410	99.8%	0.038	0.007	-0.001	-10.160
3	07:53:59	-4.965	-0.325	0.641	-1.262	-3.236	100.1%	-0.019	0.022	0.014	-6.170
X		0.000	0.000	0.000	-0.000	0.000	100.0%	0.000	0.000	-0.000	-0.000
S		4.581	0.991	0.765	1.093	3.459	0.2%	0.033	0.026	0.013	14.290
%RSD		0.000	0.000	0.000	0.000	0.000	0.2	0.000	0.000	0.000	0.000
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:53:05	-0.289	0.006	0.109	0.561	0.001	-0.005	0.338	0.000	-0.021	0.049
2	07:53:32	0.594	-0.003	0.608	0.647	-0.000	-0.010	-0.200	-0.003	0.000	-0.000
3	07:53:59	-0.304	-0.003	-0.717	-1.209	-0.000	0.015	-0.138	0.003	0.020	-0.048
X		-0.000	-0.000	-0.000	-0.000	0.000	-0.000	-0.000	-0.000	0.000	-0.000
S		0.514	0.005	0.669	1.048	0.001	0.014	0.294	0.003	0.020	0.049
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:53:05	-0.114	-0.033	-0.103	-0.048	0.234	-0.447	-1.570	-0.370	0.451	-0.001
2	07:53:32	-0.078	0.064	0.079	0.170	-0.045	0.239	1.072	0.251	0.203	-0.002
3	07:53:59	0.192	-0.031	0.024	-0.122	-0.189	0.208	0.497	0.119	-0.654	0.004
X		0.000	-0.000	0.000	-0.000	-0.000	-0.000	0.000	0.000	-0.000	-0.000
S		0.167	0.056	0.093	0.152	0.215	0.388	1.389	0.327	0.580	0.003
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:53:05	100.5%	-0.009	-0.002	-0.003	-0.339	0.001	0.001	0.003	-0.001	98.9%
2	07:53:32	99.9%	0.006	0.015	0.004	-0.025	-0.000	-0.001	-0.001	-0.001	100.0%
3	07:53:59	99.6%	0.003	-0.013	-0.001	0.364	-0.000	0.001	-0.001	0.001	101.2%
X		100.0%	-0.000	0.000	0.000	0.000	-0.000	0.000	0.000	0.000	100.0%
S		0.4%	0.008	0.014	0.003	0.352	0.001	0.001	0.002	0.001	1.2%
%RSD		0.4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:53:05	-0.005	0.003	0.001	0.002	0.005	-0.004	98.0%	-0.001	-0.000	0.000
2	07:53:32	0.005	0.003	-0.002	-0.003	-0.002	0.007	100.3%	0.000	0.000	0.000
3	07:53:59	-0.001	-0.006	0.001	0.002	-0.002	-0.004	101.7%	0.000	0.000	-0.000
X		-0.000	0.000	-0.000	0.000	-0.000	-0.000	100.0%	0.000	-0.000	-0.000
S		0.005	0.005	0.001	0.003	0.004	0.006	1.8%	0.001	0.000	0.000
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	1.8	0.000	0.000	0.000
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	07:53:05	-0.001	-0.000	99.2%							
2	07:53:32	0.002	-0.000	99.9%							
3	07:53:59	-0.001	0.000	100.9%							
X		0.000	-0.000	100.0%							
S		0.002	0.000	0.9%							
%RSD		0.000	0.000	0.9							

MW15096 10/26/2020 07:58:30

User Pre-dilution: 1.000

user file location: 12000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:58:58	99.4%	0.208	12.670	13.990	1.021	83.090	21.660	21.570	21.170	16.360
2	07:59:25	101.0%	0.197	13.880	14.440	-10.040	83.470	21.290	21.600	21.770	17.110
3	07:59:52	100.1%	0.171	13.550	14.720	-14.890	84.100	21.960	20.750	20.290	16.730
X		100.2%	0.192	13.370	14.380	-7.973	83.550	21.640	21.300	21.080	16.730
S		0.8%	0.019	0.625	0.369	8.157	0.511	0.337	0.482	0.742	0.375
%RSD		0.8	9.902	4.676	2.565	102.300	0.611	1.556	2.263	3.520	2.243
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:58:58	29.260	-7.293	83.000	114.900	78.640	102.6%	1.922	2.011	0.425	0.027
2	07:59:25	28.230	-6.931	80.800	95.690	75.290	101.5%	2.351	1.986	0.413	1.458
3	07:59:52	19.640	-8.881	81.290	87.140	76.650	103.8%	2.171	1.958	0.392	5.829
X		25.710	-7.702	81.700	99.240	76.860	102.7%	2.148	1.985	0.410	2.438
S		5.283	1.037	1.153	14.220	1.686	1.2%	0.216	0.026	0.017	3.023
%RSD		20.550	13.470	1.411	14.320	2.194	1.1	10.040	1.316	4.130	124.000
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:58:58	9.266	2.017	7.809	5.141	1.998	2.042	1.412	0.423	0.460	4.101
2	07:59:25	8.387	1.965	8.029	10.420	1.899	1.892	1.516	0.502	0.504	4.162
3	07:59:52	7.960	2.006	7.268	7.926	1.936	1.953	2.260	0.438	0.507	4.134
X		8.538	1.996	7.702	7.830	1.944	1.962	1.729	0.454	0.490	4.133
S		0.666	0.027	0.392	2.643	0.050	0.075	0.463	0.042	0.026	0.031
%RSD		7.803	1.353	5.084	33.750	2.585	3.833	26.750	9.322	5.344	0.739
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:58:58	3.672	3.685	0.456	1.039	-0.454	-0.251	3.603	0.831	1.281	0.017
2	07:59:25	3.603	4.244	0.586	0.615	-0.424	-0.550	4.959	1.161	0.084	0.012
3	07:59:52	3.645	3.932	0.380	1.199	-0.173	-0.400	1.275	0.316	-1.302	0.006
X		3.640	3.954	0.474	0.951	-0.350	-0.400	3.279	0.769	0.021	0.012
S		0.035	0.280	0.104	0.301	0.154	0.150	1.863	0.426	1.293	0.005
%RSD		0.948	7.075	22.010	31.710	44.010	37.380	56.820	55.370	6240.000	45.390
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:58:58	100.6%	3.952	3.899	3.877	-0.279	0.401	0.400	0.022	0.035	100.7%
2	07:59:25	101.8%	3.926	4.088	4.037	-0.781	0.377	0.406	0.041	0.057	102.5%
3	07:59:52	100.8%	4.332	4.289	4.327	-0.181	0.387	0.374	0.048	0.064	102.8%
X		101.0%	4.070	4.092	4.080	-0.414	0.388	0.393	0.037	0.052	102.0%
S		0.7%	0.227	0.195	0.228	0.322	0.012	0.017	0.013	0.016	1.2%
%RSD		0.7	5.585	4.773	5.581	77.830	3.079	4.321	36.750	29.830	1.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:58:58	1.413	2.001	0.342	0.378	2.033	2.086	101.4%	0.191	0.170	0.422
2	07:59:25	1.495	2.023	0.325	0.346	2.137	1.935	102.0%	0.197	0.206	0.413
3	07:59:52	1.535	2.118	0.373	0.386	2.123	1.988	103.3%	0.217	0.217	0.386
X		1.481	2.048	0.347	0.370	2.098	2.003	102.2%	0.202	0.198	0.407
S		0.062	0.062	0.024	0.021	0.057	0.077	1.0%	0.014	0.024	0.019
%RSD		4.183	3.042	7.065	5.684	2.706	3.832	0.9	6.821	12.350	4.570
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	07:58:58	0.394	0.411	100.8%							
2	07:59:25	0.435	0.412	102.1%							
3	07:59:52	0.419	0.410	101.2%							
X		0.416	0.411	101.4%							
S		0.021	0.001	0.7%							
%RSD		5.001	0.245	0.7							

MW15102 10/26/2020 08:04:24

User Pre-dilution: 1.000

user file location: 12000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:04:52	100.6%	0.380	25.490	25.870	-4.804	209.400	53.660	56.530	54.800	41.670
2	08:05:18	100.8%	0.344	25.450	24.680	-2.683	208.000	54.850	53.770	51.440	39.690
3	08:05:45	100.5%	0.431	24.570	25.400	-5.736	210.000	52.640	51.860	51.000	39.960
X		100.6%	0.385	25.170	25.320	-4.408	209.100	53.720	54.050	52.420	40.440
S		0.2%	0.043	0.522	0.597	1.564	1.041	1.108	2.348	2.080	1.072
%RSD		0.2	11.270	2.073	2.359	35.490	0.498	2.064	4.344	3.968	2.651
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:04:52	76.640	-10.510	203.800	203.300	193.800	102.3%	5.073	5.108	0.988	-3.478
2	08:05:18	75.080	-15.230	207.500	229.700	190.700	102.0%	5.251	4.960	0.959	22.430
3	08:05:45	69.770	-12.240	202.000	194.500	190.500	101.5%	4.648	5.045	0.970	23.620
X		73.830	-12.660	204.400	209.200	191.700	101.9%	4.991	5.038	0.972	14.190
S		3.603	2.385	2.848	18.340	1.862	0.4%	0.310	0.074	0.015	15.310
%RSD		4.881	18.840	1.393	8.767	0.971	0.4	6.215	1.469	1.514	107.900
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:04:52	18.730	4.961	18.810	20.430	4.999	5.258	5.254	1.030	0.905	9.709
2	08:05:18	19.220	4.955	19.660	20.270	4.853	5.296	5.638	1.037	1.052	10.790
3	08:05:45	20.230	5.162	19.420	19.880	4.964	5.358	5.206	1.021	0.995	10.100
X		19.390	5.026	19.300	20.190	4.939	5.304	5.366	1.029	0.984	10.200
S		0.765	0.118	0.441	0.282	0.076	0.050	0.237	0.008	0.074	0.548
%RSD		3.943	2.344	2.287	1.398	1.543	0.950	4.417	0.785	7.491	5.372
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:04:52	10.800	9.863	1.134	1.606	-0.736	-0.379	4.507	1.114	-1.267	0.006
2	08:05:18	9.773	10.150	1.204	1.625	-0.697	-1.247	3.685	0.910	-1.817	0.010
3	08:05:45	10.060	9.680	1.198	1.460	-0.307	-0.417	3.919	0.933	-0.129	0.008
X		10.210	9.899	1.179	1.564	-0.580	-0.681	4.037	0.986	-1.071	0.008
S		0.530	0.238	0.039	0.091	0.237	0.491	0.424	0.112	0.861	0.002
%RSD		5.195	2.409	3.297	5.788	40.920	72.030	10.500	11.310	80.420	27.700
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:04:52	100.1%	10.320	9.894	9.671	-0.543	1.010	1.031	0.117	0.112	99.9%
2	08:05:18	99.6%	10.620	10.610	9.994	-0.827	0.906	0.974	0.082	0.054	100.5%
3	08:05:45	100.4%	10.110	10.060	10.080	-1.217	0.963	0.999	0.049	0.133	100.7%
X		100.0%	10.350	10.190	9.913	-0.862	0.960	1.002	0.082	0.100	100.4%
S		0.4%	0.259	0.377	0.214	0.339	0.052	0.029	0.034	0.041	0.4%
%RSD		0.4	2.498	3.704	2.157	39.270	5.406	2.861	41.190	40.980	0.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:04:52	3.472	4.739	0.952	0.999	5.022	4.972	97.9%	0.492	0.489	0.970
2	08:05:18	3.432	4.684	0.902	1.015	5.098	5.014	100.9%	0.465	0.484	0.996
3	08:05:45	3.413	4.814	0.907	1.003	5.195	5.219	100.5%	0.494	0.501	0.950
X		3.439	4.746	0.920	1.005	5.105	5.068	99.8%	0.484	0.491	0.972
S		0.030	0.065	0.028	0.009	0.086	0.132	1.6%	0.016	0.009	0.023
%RSD		0.881	1.374	3.005	0.850	1.693	2.606	1.6	3.314	1.810	2.348
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	08:04:52	1.086	1.014	98.0%							
2	08:05:18	0.976	0.972	99.1%							
3	08:05:45	1.058	1.008	98.1%							
X		1.040	0.998	98.4%							
S		0.057	0.023	0.6%							
%RSD		5.470	2.257	0.6							

cal1 MW-15105

10/26/2020 08:10:16

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:10:43	98.1%	0.349	58.540	60.080	1.998	426.300	414.800	413.000	406.100	41.110
2	08:11:10	100.9%	0.360	60.870	57.240	1.860	418.800	423.300	403.200	413.400	40.070
3	08:11:37	101.1%	0.398	61.620	60.350	-7.629	419.400	414.000	402.700	407.900	41.670
X		100.0%	0.369	60.340	59.220	-1.257	421.500	417.400	406.300	409.100	40.950
S		1.7%	0.025	1.608	1.722	5.519	4.187	5.100	5.813	3.828	0.813
%RSD		1.7	6.874	2.665	2.908	439.200	0.993	1.222	1.431	0.936	1.984
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:10:43	86.640	-7.756	402.300	425.600	389.500	101.3%	5.622	4.809	5.021	-33.680
2	08:11:10	75.920	-14.460	409.600	385.400	400.700	102.3%	4.354	4.998	5.028	-7.720
3	08:11:37	79.040	-11.530	415.700	428.400	395.200	102.0%	4.995	5.123	4.862	60.600
X		80.540	-11.250	409.200	413.100	395.100	101.9%	4.990	4.977	4.971	6.398
S		5.514	3.360	6.712	24.110	5.569	0.5%	0.634	0.158	0.094	48.700
%RSD		6.846	29.880	1.640	5.835	1.410	0.5	12.710	3.173	1.891	761.100
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:10:43	50.590	4.996	49.060	52.190	0.956	5.170	5.657	4.916	5.216	10.460
2	08:11:10	51.280	5.061	48.700	51.610	1.015	5.078	5.250	4.881	5.205	10.420
3	08:11:37	52.760	4.900	51.930	47.770	1.012	4.918	5.875	5.108	5.044	10.510
X		51.540	4.985	49.900	50.520	0.994	5.055	5.594	4.968	5.155	10.460
S		1.109	0.081	1.772	2.404	0.033	0.127	0.317	0.122	0.096	0.042
%RSD		2.153	1.620	3.552	4.758	3.314	2.520	5.674	2.454	1.865	0.405
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:10:43	9.132	9.959	1.969	5.361	-0.511	0.148	21.600	5.209	0.820	9.549
2	08:11:10	9.703	9.968	2.012	4.987	-0.320	-0.031	27.840	6.597	1.492	10.010
3	08:11:37	9.230	9.968	2.490	5.719	-0.650	-0.323	24.820	5.816	1.183	9.783
X		9.355	9.965	2.157	5.356	-0.494	-0.069	24.750	5.874	1.165	9.780
S		0.305	0.005	0.289	0.366	0.166	0.238	3.120	0.696	0.337	0.230
%RSD		3.264	0.051	13.410	6.831	33.600	346.800	12.600	11.840	28.900	2.355
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:10:43	98.9%	9.946	9.892	9.635	-0.169	1.033	0.945	0.094	0.106	97.7%
2	08:11:10	97.4%	10.100	10.010	10.240	0.407	1.010	0.967	0.088	0.107	97.8%
3	08:11:37	97.7%	9.979	10.020	9.938	0.156	0.976	0.998	0.038	0.099	99.0%
X		98.0%	10.010	9.975	9.936	0.131	1.006	0.970	0.074	0.104	98.2%
S		0.8%	0.079	0.072	0.300	0.289	0.029	0.026	0.031	0.004	0.7%
%RSD		0.8	0.785	0.721	3.022	219.700	2.849	2.716	41.680	4.162	0.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:10:43	13.170	19.140	1.583	1.468	5.027	5.023	98.9%	0.507	0.520	1.062
2	08:11:10	13.430	19.340	1.520	1.562	5.109	5.088	98.8%	0.481	0.502	1.005
3	08:11:37	13.130	19.170	1.518	1.687	5.079	4.841	98.5%	0.516	0.479	0.974
X		13.240	19.220	1.540	1.573	5.072	4.984	98.7%	0.501	0.501	1.014
S		0.165	0.112	0.037	0.110	0.041	0.128	0.2%	0.018	0.020	0.044
%RSD		1.246	0.580	2.397	6.993	0.815	2.563	0.2	3.643	4.074	4.387
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	08:10:43	1.075	1.028	92.5%							
2	08:11:10	0.965	0.988	95.3%							
3	08:11:37	1.023	0.965	96.7%							
X		1.021	0.993	94.8%							
S		0.055	0.032	2.1%							
%RSD		5.376	3.201	2.2							

MW15106 10/26/2020 08:16:08

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:16:35	99.9%	0.899	115.000	112.000	0.698	794.700	838.600	815.200	814.800	81.560
2	08:17:02	98.3%	0.900	110.200	113.500	-2.817	853.200	835.900	829.700	830.600	82.210
3	08:17:29	102.0%	0.863	110.100	105.800	8.104	830.900	856.200	828.100	800.700	80.910
X		100.1%	0.887	111.800	110.500	1.995	826.300	843.500	824.300	815.400	81.560
S		1.8%	0.021	2.839	4.070	5.575	29.500	11.020	7.933	14.980	0.649
%RSD		1.8	2.340	2.541	3.684	279.500	3.571	1.307	0.962	1.837	0.796
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:16:35	194.100	-8.652	839.300	887.400	803.600	102.8%	10.320	9.850	9.721	103.800
2	08:17:02	188.900	-10.400	824.600	807.800	784.100	101.2%	10.480	9.831	10.110	120.200
3	08:17:29	184.600	-8.762	814.600	892.100	792.100	101.4%	9.475	10.240	10.240	-174.100
X		189.200	-9.273	826.100	862.400	793.300	101.8%	10.090	9.973	10.020	16.660
S		4.783	0.982	12.420	47.370	9.790	0.9%	0.539	0.230	0.269	165.400
%RSD		2.528	10.590	1.503	5.493	1.234	0.8	5.342	2.307	2.685	992.700
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:16:35	105.200	9.768	100.000	101.100	2.016	10.010	10.220	10.070	10.200	20.370
2	08:17:02	107.800	10.240	100.600	111.200	2.050	10.070	9.738	9.960	10.370	19.760
3	08:17:29	107.000	9.940	99.680	99.910	1.923	9.533	9.077	9.707	9.699	20.020
X		106.700	9.983	100.100	104.100	1.996	9.872	9.679	9.912	10.090	20.050
S		1.361	0.239	0.487	6.214	0.065	0.294	0.575	0.185	0.346	0.305
%RSD		1.276	2.397	0.486	5.972	3.277	2.982	5.941	1.869	3.435	1.523
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:16:35	19.050	20.130	4.086	10.690	-0.143	-0.403	45.070	10.520	0.579	20.130
2	08:17:02	18.040	18.970	3.704	10.240	-0.585	0.287	37.080	8.658	-0.635	19.810
3	08:17:29	18.010	19.710	4.095	9.364	-0.201	-0.071	38.540	9.093	1.575	19.420
X		18.370	19.600	3.962	10.100	-0.310	-0.062	40.230	9.424	0.506	19.780
S		0.595	0.585	0.223	0.676	0.240	0.345	4.256	0.975	1.107	0.354
%RSD		3.240	2.983	5.635	6.690	77.520	555.300	10.580	10.340	218.700	1.790
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:16:35	97.9%	20.680	19.920	20.110	0.485	1.987	1.824	0.146	0.216	100.0%
2	08:17:02	99.1%	20.350	20.490	19.910	0.417	1.951	1.925	0.165	0.238	101.0%
3	08:17:29	100.6%	19.770	20.080	19.480	0.257	1.892	1.939	0.150	0.105	100.9%
X		99.2%	20.270	20.160	19.830	0.386	1.943	1.896	0.154	0.186	100.7%
S		1.4%	0.463	0.293	0.323	0.117	0.048	0.063	0.010	0.071	0.5%
%RSD		1.4	2.284	1.452	1.628	30.280	2.462	3.299	6.548	38.360	0.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:16:35	27.430	39.110	3.155	3.407	10.260	10.280	101.0%	1.012	1.016	2.040
2	08:17:02	26.690	38.510	3.111	3.381	9.636	9.946	101.4%	0.966	0.995	2.031
3	08:17:29	27.370	39.200	3.160	3.330	9.843	10.100	101.9%	0.952	0.964	2.051
X		27.160	38.940	3.142	3.372	9.914	10.110	101.5%	0.977	0.992	2.041
S		0.413	0.377	0.027	0.039	0.319	0.167	0.4%	0.032	0.026	0.010
%RSD		1.520	0.968	0.853	1.160	3.222	1.656	0.4	3.255	2.603	0.491
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	08:16:35	1.996	1.987	99.5%							
2	08:17:02	1.918	1.922	101.2%							
3	08:17:29	2.013	1.964	101.8%							
X		1.976	1.958	100.8%							
S		0.051	0.033	1.2%							
%RSD		2.564	1.695	1.2							

cal2 MW-15107

10/26/2020 08:22:00

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:22:27	98.3%	1.953	258.100	261.700	7.499	±2033.000	±2025.000	2030.000	2024.000	197.000
2	08:22:54	100.1%	1.918	264.900	265.300	8.559	±2019.000	±2097.000	2055.000	2093.000	200.000
3	08:23:21	100.1%	1.982	260.500	267.000	3.596	±1992.000	±2070.000	2020.000	2020.000	201.600
X		99.5%	1.951	261.200	264.700	6.551	±2015.000	±2064.000	2035.000	2046.000	199.500
S		1.1%	0.032	3.423	2.721	2.614	±20.360	±36.570	18.040	41.320	2.305
%RSD		1.1	1.631	1.311	1.028	39.900	±1.011	±1.772	0.886	2.020	1.155
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:22:27	537.000	-9.111	±2076.000	2100.000	2013.000	101.7%	25.050	24.400	24.630	165.800
2	08:22:54	548.000	-9.331	±2104.000	2042.000	1998.000	101.6%	24.710	24.880	24.050	336.400
3	08:23:21	547.400	-7.607	±2047.000	2031.000	1985.000	101.6%	25.650	24.250	24.240	265.600
X		544.100	-8.683	±2076.000	2058.000	1999.000	101.6%	25.140	24.510	24.310	255.900
S		6.199	0.938	±28.220	37.030	14.430	0.1%	0.477	0.329	0.294	85.740
%RSD		1.139	10.810	±1.360	1.800	0.722	0.1	1.898	1.343	1.211	33.500
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:22:27	256.100	24.160	252.900	247.300	4.731	24.820	24.310	24.350	25.010	49.850
2	08:22:54	267.500	24.640	259.000	247.700	4.829	26.170	23.810	24.670	24.460	48.160
3	08:23:21	256.700	24.240	253.600	246.200	4.759	25.150	25.850	24.190	24.540	48.320
X		260.100	24.350	255.200	247.100	4.773	25.380	24.650	24.410	24.670	48.780
S		6.425	0.259	3.349	0.794	0.050	0.707	1.064	0.244	0.297	0.930
%RSD		2.470	1.066	1.312	0.322	1.053	2.785	4.317	1.001	1.203	1.907
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:22:27	49.430	48.750	10.650	24.230	0.149	-0.332	111.900	26.100	1.741	49.090
2	08:22:54	48.440	48.020	9.584	25.560	-0.317	0.049	114.700	26.110	-1.725	49.870
3	08:23:21	48.080	47.790	10.590	25.230	-0.440	-0.491	107.700	24.840	-0.341	48.710
X		48.650	48.190	10.270	25.010	-0.202	-0.258	111.400	25.680	-0.109	49.220
S		0.700	0.500	0.599	0.690	0.310	0.278	3.526	0.732	1.745	0.594
%RSD		1.439	1.037	5.826	2.761	153.300	107.500	3.165	2.850	1608.000	1.207
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:22:27	98.1%	50.560	50.670	50.430	1.265	4.859	5.021	0.291	0.447	100.2%
2	08:22:54	97.3%	51.710	50.980	51.270	0.403	4.953	4.780	0.377	0.374	102.0%
3	08:23:21	98.9%	51.510	51.640	51.140	1.556	4.760	4.793	0.362	0.411	102.1%
X		98.1%	51.260	51.090	50.950	1.075	4.857	4.865	0.343	0.410	101.4%
S		0.8%	0.611	0.500	0.453	0.600	0.097	0.136	0.046	0.036	1.1%
%RSD		0.9	1.192	0.978	0.889	55.820	1.990	2.788	13.460	8.876	1.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:22:27	67.390	98.790	8.703	9.205	25.300	24.420	100.6%	2.516	2.414	5.145
2	08:22:54	67.700	96.980	8.759	9.111	25.110	24.860	101.8%	2.452	2.418	5.038
3	08:23:21	68.310	97.100	8.935	9.590	24.580	24.690	103.1%	2.431	2.450	4.926
X		67.800	97.620	8.799	9.302	25.000	24.660	101.8%	2.466	2.427	5.036
S		0.469	1.012	0.121	0.254	0.372	0.220	1.3%	0.045	0.020	0.110
%RSD		0.693	1.037	1.376	2.733	1.488	0.892	1.2	1.805	0.817	2.181
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	08:22:27	4.909	4.974	101.7%							
2	08:22:54	4.801	4.907	104.0%							
3	08:23:21	4.912	4.930	105.1%							
X		4.874	4.937	103.6%							
S		0.063	0.034	1.7%							
%RSD		1.295	0.695	1.7							

cal3 MW-15224

10/26/2020 08:27:52

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:28:20	96.6%	253.600	246.400	249.800	-0.620	265.500	264.000	260.400	259.900	247.100
2	08:28:47	97.1%	259.100	256.200	253.100	8.752	263.200	267.300	261.000	249.100	252.100
3	08:29:13	96.8%	248.900	248.500	243.000	-13.880	261.600	253.600	250.000	258.700	255.200
X		96.8%	253.900	250.300	248.600	-1.916	263.400	261.600	257.100	255.900	251.400
S		0.2%	5.077	5.183	5.127	11.370	1.955	7.141	6.182	5.888	4.096
%RSD		0.2	2.000	2.070	2.062	593.500	0.742	2.729	2.405	2.301	1.629
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:28:20	212.600	-11.310	258.400	460.700	339.200	101.2%	249.600	253.100	250.000	1205.000
2	08:28:47	214.700	-12.570	258.500	492.600	339.700	99.5%	258.100	259.300	251.200	399.900
3	08:29:13	211.900	-15.560	252.600	454.900	345.000	98.5%	246.100	251.900	248.000	975.300
X		213.100	-13.150	256.500	469.400	341.300	99.7%	251.300	254.800	249.700	860.100
S		1.457	2.182	3.381	20.290	3.217	1.4%	6.145	4.008	1.581	414.700
%RSD		0.684	16.590	1.318	4.321	0.943	1.4	2.446	1.573	0.633	48.220
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:28:20	364.800	249.100	251.700	248.500	240.900	253.700	258.400	254.100	259.100	252.100
2	08:28:47	361.900	250.800	256.700	254.700	250.500	257.300	251.000	243.500	247.000	249.200
3	08:29:13	360.900	253.200	260.800	253.200	246.800	256.500	254.100	250.100	245.600	245.500
X		362.500	251.100	256.400	252.100	246.100	255.800	254.500	249.200	250.600	248.900
S		2.016	2.081	4.588	3.253	4.857	1.873	3.722	5.356	7.453	3.327
%RSD		0.556	0.829	1.789	1.290	1.974	0.732	1.462	2.149	2.974	1.337
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:28:20	259.500	249.100	246.100	254.100	-0.352	-0.669	1070.000	253.500	-0.839	248.200
2	08:28:47	253.800	251.300	251.500	247.100	-0.492	-0.650	1099.000	254.800	-0.502	250.000
3	08:29:13	250.200	249.500	249.900	250.900	-0.378	-0.609	1084.000	251.700	-0.791	249.400
X		254.500	249.900	249.200	250.700	-0.407	-0.642	1084.000	253.300	-0.711	249.200
S		4.713	1.182	2.787	3.508	0.074	0.031	14.210	1.577	0.182	0.949
%RSD		1.852	0.473	1.118	1.399	18.200	4.759	1.310	0.623	25.610	0.381
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:28:20	97.2%	233.500	233.300	228.700	255.900	252.200	249.100	248.000	250.800	98.0%
2	08:28:47	96.6%	232.400	233.900	232.700	249.300	245.600	243.600	245.400	246.200	99.3%
3	08:29:13	96.6%	241.900	242.200	239.800	247.800	244.900	246.900	249.300	247.500	99.0%
X		96.8%	236.000	236.500	233.700	251.000	247.600	246.600	247.600	248.100	98.8%
S		0.3%	5.159	4.989	5.657	4.289	4.003	2.772	2.001	2.355	0.7%
%RSD		0.3	2.187	2.110	2.420	1.709	1.617	1.124	0.808	0.949	0.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:28:20	250.600	242.300	241.000	259.000	250.100	250.100	99.4%	250.700	252.400	252.900
2	08:28:47	245.700	244.800	241.100	256.700	251.900	246.100	100.6%	250.800	250.900	252.700
3	08:29:13	249.500	246.400	245.000	263.500	247.600	247.700	100.0%	249.200	250.800	250.000
X		248.600	244.500	242.400	259.700	249.900	248.000	100.0%	250.200	251.300	251.900
S		2.588	2.082	2.268	3.473	2.170	2.003	0.6%	0.933	0.886	1.611
%RSD		1.041	0.851	0.936	1.337	0.869	0.808	0.6	0.373	0.353	0.640
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	08:28:20	252.100	250.700	99.8%							
2	08:28:47	250.100	249.900	100.6%							
3	08:29:13	250.300	250.100	100.6%							
X		250.800	250.300	100.3%							
S		1.074	0.429	0.5%							
%RSD		0.428	0.171	0.5							

cal4 MW-15099

10/26/2020 08:33:46

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:34:13	95.3%	<u>M 504.800</u>	495.300	494.500	-5.142	511.600	523.300	508.400	517.300	<u>M 501.000</u>
2	08:34:39	93.0%	494.200	494.600	485.600	-15.750	512.600	516.300	506.100	511.500	494.900
3	08:35:06	95.4%	495.200	<u>M 506.500</u>	491.800	-10.700	<u>T 492.900</u>	516.900	493.800	521.500	<u>M 501.500</u>
X		94.6%	<u>M 498.100</u>	<u>M 498.800</u>	490.600	-10.530	<u>T 505.700</u>	518.800	502.800	516.800	<u>M 499.100</u>
S		1.4%	<u>M 5.822</u>	<u>M 6.656</u>	4.536	5.307	<u>T 11.080</u>	3.853	7.885	4.999	<u>M 3.687</u>
%RSD		1.4	<u>M 1.169</u>	<u>M 1.334</u>	0.925	50.390	<u>T 2.191</u>	0.743	1.568	0.967	<u>M 0.739</u>
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:34:13	505.000	-12.510	498.500	889.000	688.500	95.6%	495.800	<u>M 502.200</u>	496.900	1246.000
2	08:34:39	510.200	-11.580	506.800	910.100	712.300	93.0%	499.000	<u>M 525.700</u>	<u>M 506.000</u>	-1817.000
3	08:35:06	505.200	-14.450	499.600	905.800	700.200	93.6%	<u>M 503.100</u>	<u>M 512.400</u>	497.600	-1091.000
X		506.800	-12.850	501.600	901.600	700.300	94.0%	<u>M 499.300</u>	<u>M 513.400</u>	<u>M 500.200</u>	-553.800
S		2.960	1.462	4.477	11.120	11.900	1.4%	<u>M 3.668</u>	<u>M 11.770</u>	<u>M 5.097</u>	1601.000
%RSD		0.584	11.380	0.892	1.233	1.699	1.5	<u>M 0.735</u>	<u>M 2.292</u>	<u>M 1.019</u>	289.000
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:34:13	731.300	<u>TM 510.300</u>	528.100	512.400	495.100	484.200	498.200	<u>M 504.700</u>	<u>M 503.200</u>	<u>M 505.800</u>
2	08:34:39	748.900	<u>TM 523.500</u>	527.200	493.200	<u>M 518.500</u>	<u>M 508.600</u>	<u>M 500.900</u>	<u>M 507.100</u>	<u>M 504.000</u>	496.300
3	08:35:06	715.800	<u>TM 517.800</u>	<u>T 501.600</u>	493.100	492.300	498.300	499.700	489.600	493.400	499.900
X		732.000	<u>TM 517.200</u>	<u>T 519.000</u>	499.600	<u>M 502.000</u>	<u>M 497.100</u>	<u>M 499.600</u>	<u>M 500.400</u>	<u>M 500.200</u>	<u>M 500.600</u>
S		16.570	<u>TM 6.635</u>	<u>T 15.060</u>	11.130	<u>M 14.370</u>	<u>M 12.270</u>	<u>M 1.355</u>	<u>M 9.486</u>	<u>M 5.918</u>	<u>M 4.786</u>
%RSD		2.263	<u>TM 1.283</u>	<u>T 2.902</u>	2.228	<u>M 2.864</u>	<u>M 2.468</u>	<u>M 0.271</u>	<u>M 1.895</u>	<u>M 1.183</u>	<u>M 0.956</u>
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:34:13	492.000	496.200	498.600	492.700	-0.371	-0.419	2165.000	<u>M 511.400</u>	0.084	<u>TM 511.600</u>
2	08:34:39	<u>M 503.400</u>	<u>M 506.200</u>	<u>M 504.800</u>	<u>M 503.700</u>	-0.478	-0.470	2115.000	496.000	-0.487	<u>M 505.300</u>
3	08:35:06	498.200	499.400	497.800	<u>M 502.500</u>	-0.170	-0.789	2070.000	487.500	-0.827	<u>TM 508.000</u>
X		<u>M 497.900</u>	<u>M 500.600</u>	<u>M 500.400</u>	<u>M 499.600</u>	-0.340	-0.559	2117.000	<u>M 498.300</u>	-0.410	<u>TM 508.300</u>
S		<u>M 5.700</u>	<u>M 5.114</u>	<u>M 3.823</u>	<u>M 6.057</u>	0.156	0.200	47.850	<u>M 12.140</u>	0.460	<u>TM 3.182</u>
%RSD		<u>M 1.145</u>	<u>M 1.021</u>	<u>M 0.764</u>	<u>M 1.212</u>	46.010	35.800	2.260	<u>M 2.435</u>	112.300	<u>TM 0.626</u>
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:34:13	92.0%	475.600	468.600	463.900	494.700	499.600	<u>M 505.400</u>	<u>M 500.100</u>	<u>M 500.400</u>	93.0%
2	08:34:39	91.5%	483.100	483.600	484.100	499.300	<u>M 500.700</u>	<u>M 501.300</u>	<u>M 502.900</u>	<u>M 504.800</u>	92.8%
3	08:35:06	91.9%	499.400	490.900	487.900	<u>M 504.500</u>	<u>M 503.500</u>	<u>M 500.700</u>	<u>M 500.600</u>	<u>M 509.400</u>	92.8%
X		91.8%	486.000	481.100	478.600	<u>M 499.500</u>	<u>M 501.300</u>	<u>M 502.500</u>	<u>M 501.200</u>	<u>M 504.900</u>	92.9%
S		0.3%	12.140	11.380	12.920	<u>M 4.857</u>	<u>M 2.018</u>	<u>M 2.542</u>	<u>M 1.491</u>	<u>M 4.538</u>	0.1%
%RSD		0.3	2.498	2.366	2.699	<u>M 0.972</u>	<u>M 0.403</u>	<u>M 0.506</u>	<u>M 0.298</u>	<u>M 0.899</u>	0.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:34:13	<u>M 506.300</u>	<u>M 503.600</u>	499.900	<u>M 536.800</u>	496.500	<u>M 502.400</u>	95.8%	455.300	<u>T 457.400</u>	<u>T 483.800</u>
2	08:34:39	<u>M 508.200</u>	<u>M 503.700</u>	<u>M 504.100</u>	<u>M 537.300</u>	496.500	497.500	96.1%	<u>M 501.000</u>	<u>TM 517.300</u>	<u>M 505.400</u>
3	08:35:06	<u>M 507.700</u>	<u>M 502.800</u>	<u>M 507.500</u>	<u>M 543.300</u>	<u>M 500.600</u>	<u>M 501.300</u>	95.0%	<u>M 508.000</u>	<u>TM 523.300</u>	<u>M 508.000</u>
X		<u>M 507.400</u>	<u>M 503.300</u>	<u>M 503.900</u>	<u>M 539.100</u>	<u>M 497.900</u>	<u>M 500.400</u>	95.6%	<u>M 488.100</u>	<u>TM 499.300</u>	<u>TM 499.100</u>
S		<u>M 0.998</u>	<u>M 0.493</u>	<u>M 3.809</u>	<u>M 3.642</u>	<u>M 2.345</u>	<u>M 2.537</u>	0.5%	<u>M 28.640</u>	<u>TM 36.470</u>	<u>TM 13.290</u>
%RSD		<u>M 0.197</u>	<u>M 0.098</u>	<u>M 0.756</u>	<u>M 0.676</u>	<u>M 0.471</u>	<u>M 0.507</u>	0.5	<u>M 5.868</u>	<u>TM 7.304</u>	<u>TM 2.663</u>
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	08:34:13	453.700	<u>T 467.200</u>	<u>T 106.8%</u>							
2	08:34:39	<u>M 503.700</u>	<u>TM 512.500</u>	96.2%							
3	08:35:06	<u>M 505.800</u>	<u>TM 516.200</u>	95.7%							
X		<u>M 487.700</u>	<u>TM 498.600</u>	<u>T 99.6%</u>							
S		<u>M 29.510</u>	<u>TM 27.320</u>	<u>T 6.3%</u>							
%RSD		<u>M 6.051</u>	<u>TM 5.479</u>	<u>T 6.3</u>							

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10/26/2020 08:39:38

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:40:05	81.6%	0.065	1.393	1.211	-15.930	49900.000	48820.000	49300.000	47710.000	1.153
2	08:40:31	81.3%	0.035	1.550	1.171	-2.414	50250.000	50450.000	49640.000	48610.000	1.251
3	08:40:58	84.1%	0.057	1.513	0.939	-8.106	48970.000	49650.000	49770.000	48890.000	1.244
X		82.3%	0.052	1.485	1.107	-8.816	49700.000	49640.000	49570.000	48410.000	1.216
S		1.5%	0.016	0.082	0.147	6.785	661.900	811.600	239.400	617.600	0.055
%RSD		1.9	30.100	5.548	13.280	76.960	1.332	1.635	0.483	1.276	4.520
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:40:05	4895.000	-12.400	48180.000	47950.000	50040.000	88.6%	0.580	0.034	0.207	-17.570
2	08:40:31	4958.000	-13.730	49690.000	50410.000	51320.000	86.1%	0.446	0.015	0.169	-4.728
3	08:40:58	4995.000	-14.660	50090.000	50450.000	51010.000	86.7%	0.572	0.014	0.224	-8.758
X		4949.000	-13.590	49320.000	49600.000	50790.000	87.2%	0.533	0.021	0.200	-10.350
S		50.540	1.132	1009.000	1433.000	670.100	1.3%	0.075	0.011	0.029	6.566
%RSD		1.021	8.326	2.045	2.889	1.319	1.5	14.170	53.950	14.300	63.440
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:40:05	48990.000	0.720	49890.000	48510.000	2.251	1.859	4.352	0.378	0.179	1.258
2	08:40:31	50140.000	0.793	49500.000	49410.000	2.298	1.938	4.651	0.444	0.284	1.089
3	08:40:58	50520.000	0.815	51590.000	49830.000	2.359	2.193	4.018	0.387	0.269	1.185
X		49880.000	0.776	50330.000	49250.000	2.303	1.997	4.340	0.403	0.244	1.178
S		795.400	0.050	1111.000	676.400	0.055	0.174	0.316	0.035	0.057	0.085
%RSD		1.595	6.443	2.208	1.373	2.370	8.741	7.290	8.788	23.350	7.206
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:40:05	0.928	1.038	0.266	0.818	1.013	-1.284	0.500	0.138	0.729	0.407
2	08:40:31	1.367	1.170	0.264	0.895	1.032	-0.890	1.112	0.326	-0.721	0.367
3	08:40:58	1.541	1.098	0.196	0.908	1.286	-0.768	1.571	0.372	1.104	0.453
X		1.279	1.102	0.242	0.874	1.111	-0.981	1.061	0.279	0.371	0.409
S		0.316	0.066	0.040	0.049	0.152	0.270	0.537	0.124	0.964	0.043
%RSD		24.730	6.009	16.440	5.575	13.720	27.490	50.670	44.510	260.000	10.470
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:40:05	83.1%	1.755	1.432	1.555	-0.104	0.033	0.039	-0.002	0.024	81.5%
2	08:40:31	84.8%	1.698	1.847	1.766	0.136	0.022	0.031	0.002	0.024	82.4%
3	08:40:58	83.0%	1.649	1.545	1.531	-0.306	0.017	0.033	0.048	0.017	82.2%
X		83.6%	1.700	1.608	1.617	-0.091	0.024	0.034	0.016	0.022	82.1%
S		1.0%	0.053	0.215	0.129	0.221	0.008	0.004	0.028	0.004	0.5%
%RSD		1.2	3.142	13.370	7.984	242.200	34.590	11.670	173.100	18.060	0.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:40:05	0.613	0.880	1.164	1.307	0.051	0.024	87.8%	0.035	0.029	0.045
2	08:40:31	0.693	0.900	1.224	1.401	0.036	0.023	89.0%	0.025	0.025	0.032
3	08:40:58	0.550	0.870	1.324	1.358	0.051	0.041	88.5%	0.027	0.036	0.042
X		0.619	0.883	1.237	1.356	0.046	0.029	88.4%	0.029	0.030	0.040
S		0.072	0.015	0.081	0.047	0.009	0.010	0.6%	0.005	0.005	0.007
%RSD		11.590	1.729	6.546	3.469	19.410	33.920	0.7	18.580	17.640	17.100
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	08:40:05	0.045	0.044	85.5%							
2	08:40:31	0.040	0.035	88.2%							
3	08:40:58	0.037	0.039	88.2%							
X		0.040	0.040	87.3%							
S		0.004	0.005	1.6%							
%RSD		9.858	11.580	1.8							

cal6 MW-15235

10/26/2020 08:45:30

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:45:57	81.7%	-0.007	0.722	0.849	-2.176	TM 99930.000	TM 100100.000	TM 100800.000	TM 96840.000	1.739
2	08:46:24	82.9%	0.032	0.922	0.806	-4.828	TM 99960.000	TM 100800.000	TM 100900.000	TM 98940.000	1.640
3	08:46:51	83.8%	0.008	0.869	1.051	4.127	TM 100500.000	TM 99690.000	TM 98920.000	TM 96990.000	1.676
X		82.8%	0.011	0.838	0.902	-0.959	TM 100100.000	TM 100200.000	TM 100200.000	TM 97590.000	1.685
S		1.0%	0.020	0.104	0.131	4.600	TM 346.900	TM 555.500	TM 1117.000	TM 1169.000	0.050
%RSD		1.3	178.500	12.420	14.530	479.500	TM 0.346	TM 0.554	TM 1.115	TM 1.198	2.980
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:45:57	TM 10140.000	-9.328	TM 99050.000	98620.000	TM 100300.000	90.0%	0.988	0.048	0.383	-37.250
2	08:46:24	TM 10130.000	-8.023	TM 101200.000	M 103500.000	TM 104400.000	88.6%	1.111	-0.039	0.337	12.620
3	08:46:51	TM 9895.000	-13.760	TM 100100.000	98440.000	TM 101200.000	92.5%	1.000	-0.047	0.345	22.140
X		TM 10050.000	-10.370	TM 100100.000	M 100200.000	TM 101900.000	90.4%	1.033	-0.013	0.355	-0.831
S		TM 137.600	3.007	TM 1056.000	M 2886.000	TM 2135.000	2.0%	0.068	0.053	0.025	31.900
%RSD		TM 1.369	29.000	TM 1.055	M 2.880	TM 2.094	2.2	6.562	411.000	7.029	3837.000
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:45:57	TM 98290.000	1.434	TM 99820.000	TM 98260.000	4.502	4.159	7.395	0.600	0.414	1.991
2	08:46:24	TM 103100.000	1.427	TM 101000.000	TM 100700.000	4.628	4.409	6.932	0.667	0.445	2.116
3	08:46:51	TM 98790.000	1.399	TM 98730.000	TM 96010.000	4.531	3.784	7.331	0.653	0.398	2.023
X		TM 100100.000	1.420	TM 99840.000	TM 98330.000	4.554	4.118	7.220	0.640	0.419	2.043
S		TM 2643.000	0.019	TM 1112.000	TM 2356.000	0.066	0.315	0.251	0.035	0.024	0.065
%RSD		TM 2.641	1.308	TM 1.114	TM 2.396	1.445	7.639	3.478	5.537	5.673	3.196
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:45:57	1.471	1.928	0.797	0.934	2.813	-0.887	3.024	0.827	-1.143	0.818
2	08:46:24	1.883	2.151	0.570	1.137	3.779	-0.825	1.065	0.284	-0.423	0.830
3	08:46:51	2.107	1.927	0.354	0.975	3.348	-0.726	-1.081	-0.209	-0.574	0.823
X		1.820	2.002	0.574	1.015	3.313	-0.813	1.003	0.301	-0.714	0.824
S		0.323	0.129	0.221	0.108	0.484	0.082	2.053	0.518	0.379	0.006
%RSD		17.730	6.438	38.550	10.580	14.600	10.040	204.700	172.400	53.160	0.779
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:45:57	85.9%	0.547	0.451	0.540	-1.070	0.016	0.023	0.002	0.001	82.9%
2	08:46:24	85.2%	0.470	0.589	0.575	0.232	0.029	0.011	0.006	-0.002	84.5%
3	08:46:51	87.3%	0.571	0.522	0.571	-0.174	0.026	0.023	-0.003	0.003	84.8%
X		86.1%	0.529	0.520	0.562	-0.337	0.024	0.019	0.001	0.001	84.1%
S		1.1%	0.053	0.069	0.020	0.666	0.007	0.007	0.005	0.002	1.1%
%RSD		1.2	9.953	13.320	3.471	197.400	30.480	37.520	335.500	316.900	1.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:45:57	0.114	0.157	0.700	0.827	0.081	0.062	88.4%	0.011	0.018	0.039
2	08:46:24	0.126	0.185	0.841	0.965	0.093	0.048	90.7%	0.015	0.023	0.037
3	08:46:51	0.135	0.165	0.833	0.854	0.063	0.047	92.4%	0.006	0.013	0.032
X		0.125	0.169	0.791	0.882	0.079	0.053	90.5%	0.011	0.018	0.036
S		0.010	0.014	0.079	0.073	0.015	0.008	2.0%	0.005	0.005	0.004
%RSD		8.163	8.477	9.985	8.298	19.440	16.070	2.2	42.750	26.420	9.775
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	08:45:57	0.032	0.036	87.5%							
2	08:46:24	0.033	0.029	89.3%							
3	08:46:51	0.040	0.030	90.4%							
X		0.035	0.032	89.0%							
S		0.005	0.004	1.5%							
%RSD		13.000	12.740	1.6							

ICV MW15323 PREP 10/26/20 10/26/2020 08:51:24 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:51:50	89.3%	203.900	204.400	210.500	15.100	40460.000	42980.000	43110.000	40930.000	206.300
2	08:52:17	88.6%	198.800	193.700	204.200	7.855	39030.000	40820.000	40170.000	38520.000	193.300
3	08:52:44	89.8%	206.100	197.400	200.700	18.610	39310.000	41970.000	41530.000	40520.000	197.800
X		89.2%	101.466%	198.500	102.565%	13.850	99.007%	41920.000	41600.000	99.974%	99.565%
S		0.6%	n/a	5.428	n/a	5.483	n/a	1077.000	1471.000	n/a	n/a
%RSD		0.7	1.857	2.735	2.405	39.580	1.918	2.568	3.537	3.233	3.325
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:51:50	2465.000	-1.767	41740.000	41970.000	42150.000	95.3%	215.700	207.700	201.600	1331.000
2	08:52:17	2300.000	-6.092	40090.000	39980.000	40130.000	94.9%	204.000	201.700	195.400	1825.000
3	08:52:44	2374.000	-5.902	40250.000	41160.000	41530.000	93.7%	204.300	202.800	197.300	521.400
X		2380.000	-4.587	101.728%	41040.000	103.179%	94.6%	103.995%	102.045%	99.047%	1226.000
S		82.310	2.444	n/a	998.200	n/a	0.9%	n/a	n/a	n/a	658.300
%RSD		3.459	53.280	2.238	2.432	2.504	0.9	3.213	1.576	1.603	53.700
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:51:50	41460.000	204.200	41760.000	40450.000	198.100	198.900	205.400	200.300	209.000	208.800
2	08:52:17	40030.000	193.100	40000.000	39390.000	186.400	195.500	190.500	193.500	202.300	199.700
3	08:52:44	40600.000	200.200	40740.000	39340.000	190.800	202.800	203.700	194.500	196.700	199.600
X		40700.000	99.577%	102.077%	99.317%	95.895%	99.536%	199.900	196.100	101.334%	101.347%
S		720.200	n/a	n/a	n/a	n/a	n/a	8.170	3.693	n/a	n/a
%RSD		1.770	2.812	2.165	1.584	3.075	1.825	4.088	1.883	3.047	2.593
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:51:50	202.400	198.600	204.500	198.800	1.096	-0.192	864.700	209.300	-1.406	202.000
2	08:52:17	197.600	190.400	197.400	192.300	1.267	0.288	828.300	202.000	-0.115	199.300
3	08:52:44	187.600	189.000	201.600	189.500	0.754	0.286	818.100	195.500	-1.388	197.700
X		195.800	192.700	100.575%	193.500	1.039	0.128	837.100	101.124%	-0.970	99.829%
S		7.560	5.175	n/a	4.775	0.261	0.276	24.520	n/a	0.740	n/a
%RSD		3.861	2.686	1.779	2.467	25.150	216.700	2.929	3.410	76.340	1.080
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:51:50	90.6%	207.300	205.200	206.900	201.600	186.000	187.200	199.900	203.000	89.6%
2	08:52:17	90.2%	208.600	206.000	204.900	196.700	184.600	184.400	194.800	195.400	88.4%
3	08:52:44	90.5%	211.800	209.700	206.900	192.700	181.400	182.800	195.300	193.900	90.3%
X		90.4%	104.625%	103.488%	103.110%	197.000	91.989%	184.800	98.327%	98.712%	89.4%
S		0.2%	n/a	n/a	n/a	4.426	n/a	2.239	n/a	n/a	1.0%
%RSD		0.3	1.113	1.166	0.568	2.247	1.278	1.211	1.435	2.460	1.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:51:50	206.500	207.900	205.400	220.100	201.400	203.500	94.7%	202.200	202.100	206.000
2	08:52:17	200.200	199.800	201.900	217.000	195.800	198.400	94.6%	193.400	192.900	198.100
3	08:52:44	200.300	202.300	200.800	216.900	195.100	197.600	94.9%	198.300	198.100	202.200
X		101.159%	101.665%	202.700	109.007%	98.715%	99.906%	94.8%	198.000	98.848%	202.100
S		n/a	n/a	2.416	n/a	n/a	n/a	0.2%	4.375	n/a	3.981
%RSD		1.779	2.042	1.192	0.815	1.762	1.614	0.2	2.210	2.320	1.970
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	08:51:50	205.500	206.100	92.8%							
2	08:52:17	193.400	194.800	94.8%							
3	08:52:44	202.400	199.600	93.1%							
X		200.500	100.097%	93.5%							
S		6.270	n/a	1.1%							
%RSD		3.128	2.824	1.2							

ICB IM10195-01 10/26/2020 08:57:16 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:57:42	97.8%	0.026	0.098	0.244	9.757	25.300	0.880	1.100	0.704	-0.002
2	08:58:09	96.7%	-0.004	0.106	0.153	-4.118	24.210	0.598	0.722	0.564	0.010
3	08:58:36	97.0%	0.011	-0.303	0.177	5.034	23.410	0.965	0.822	0.645	0.019
X		97.2%	0.011	-0.033	0.191	3.558	24.310	0.814	0.881	0.637	0.009
S		0.5%	0.015	0.234	0.047	7.054	0.949	0.192	0.196	0.071	0.010
%RSD		0.6	135.600	705.300	24.670	198.300	3.905	23.570	22.270	11.070	115.000
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:57:42	-76.580	-6.827	4.279	3.444	-22.770	100.5%	-0.038	0.021	-0.023	-17.860
2	08:58:09	-79.650	-6.885	3.762	3.315	-21.470	103.4%	-0.020	0.012	-0.001	-20.420
3	08:58:36	-76.960	-7.845	5.619	6.147	-19.960	102.2%	-0.001	-0.009	-0.041	2.583
X		-77.730	-7.186	4.553	4.302	-21.400	102.0%	-0.020	0.008	-0.022	-11.900
S		1.675	0.572	0.958	1.599	1.407	1.4%	0.018	0.016	0.020	12.610
%RSD		2.154	7.954	21.050	37.180	6.576	1.4	92.760	191.200	91.890	106.000
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:57:42	0.148	0.002	-3.933	6.073	-0.001	-0.000	2.294	0.140	0.025	-0.094
2	08:58:09	-0.132	0.007	-5.142	7.428	0.004	0.033	2.245	0.123	-0.007	-0.083
3	08:58:36	1.071	0.001	-4.806	7.282	0.008	-0.021	0.994	0.120	0.020	-0.051
X		0.362	0.004	-4.627	6.928	0.003	0.004	1.844	0.127	0.013	-0.076
S		0.629	0.003	0.624	0.744	0.005	0.028	0.737	0.011	0.017	0.022
%RSD		173.600	90.440	13.480	10.730	141.400	687.300	39.950	8.585	135.300	29.370
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:57:42	-0.348	-0.072	-0.064	0.003	0.310	-0.525	-0.586	-0.089	-1.134	0.007
2	08:58:09	-0.250	-0.050	0.028	0.379	-0.513	-0.598	0.814	0.258	-1.495	0.003
3	08:58:36	-0.213	-0.111	-0.006	0.297	-0.500	-0.381	0.306	0.163	-2.899	0.003
X		-0.270	-0.077	-0.014	0.226	-0.234	-0.501	0.178	0.110	-1.843	0.004
S		0.070	0.031	0.046	0.198	0.471	0.110	0.709	0.179	0.932	0.002
%RSD		25.850	39.990	325.400	87.430	201.000	21.930	398.100	162.300	50.570	50.830
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:57:42	97.4%	0.479	0.475	0.470	0.574	-0.000	0.006	-0.003	0.002	95.8%
2	08:58:09	98.6%	0.495	0.562	0.591	-0.101	0.007	-0.000	0.001	-0.000	97.3%
3	08:58:36	97.1%	0.552	0.489	0.575	-0.502	0.006	0.001	0.001	0.002	96.4%
X		97.7%	0.509	0.509	0.545	-0.010	0.004	0.002	-0.001	0.001	96.5%
S		0.8%	0.038	0.047	0.066	0.544	0.004	0.003	0.002	0.001	0.8%
%RSD		0.8	7.533	9.181	12.030	5605.000	93.410	157.500	422.100	91.470	0.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:57:42	0.019	0.018	0.043	0.033	0.025	0.004	96.4%	0.000	0.004	0.001
2	08:58:09	0.049	0.031	0.049	0.034	-0.002	-0.003	96.7%	0.000	0.003	0.000
3	08:58:36	0.022	0.033	0.038	0.045	0.005	0.008	98.8%	0.001	0.003	0.005
X		0.030	0.027	0.043	0.037	0.009	0.003	97.3%	0.001	0.004	0.002
S		0.016	0.008	0.005	0.007	0.014	0.006	1.3%	0.001	0.001	0.003
%RSD		54.840	30.320	12.620	17.930	154.100	199.900	1.4	82.790	19.210	120.600
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	08:57:42	0.005	0.003	97.1%							
2	08:58:09	-0.001	0.001	98.2%							
3	08:58:36	0.005	0.005	99.1%							
X		0.003	0.003	98.1%							
S		0.003	0.002	1.0%							
%RSD		112.800	74.030	1.0							

ICSA MW15277 10/26/2020 09:03:05 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:03:33	85.3%	0.015	0.451	0.205	1005.000	99110.000	97300.000	98340.000	97950.000	96450.000
2	09:04:00	86.2%	0.007	0.053	0.272	961.300	100400.000	95620.000	94840.000	97740.000	96560.000
3	09:04:26	85.2%	-0.002	0.060	0.386	891.000	101100.000	94980.000	93160.000	98630.000	96780.000
X		85.6%	1.#IO%	0.188	1.#IO%	952.400	100.181%	95970.000	95450.000	98.107%	96.599%
S		0.5%	n/a	0.228	n/a	57.460	n/a	1197.000	2642.000	n/a	n/a
%RSD		0.6	120.000	121.100	31.820	6.034	0.988	1.247	2.768	0.470	0.173
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:03:33	-66.970	33950.000	100000.000	101300.000	102200.000	86.5%	2115.000	-0.712	-1.218	962.800
2	09:04:00	-63.860	33610.000	102900.000	100700.000	103100.000	86.9%	2094.000	-0.624	-1.156	888.600
3	09:04:26	-66.990	33960.000	102700.000	100100.000	104500.000	86.6%	2115.000	-0.819	-1.138	1094.000
X		-65.940	33840.000	101.859%	100700.000	103.242%	86.7%	105.403%	-1.#IO%	-1.#IO%	981.800
S		1.800	198.600	n/a	611.900	n/a	0.2%	n/a	n/a	n/a	104.100
%RSD		2.730	0.587	1.567	0.607	1.129	0.2	0.578	13.590	3.563	10.600
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:03:33	97460.000	0.213	98810.000	95800.000	0.230	0.533	7.417	-1.441	-0.075	1.412
2	09:04:00	97900.000	0.253	98160.000	98580.000	0.212	0.774	8.008	-1.450	-0.111	1.388
3	09:04:26	100200.000	0.189	99400.000	95600.000	0.244	0.586	7.170	-1.368	-0.091	1.357
X		98520.000	1.#IO%	98790.000	96.657%	1.#IO%	1.#IO%	7.531	-1.420	-1.#IO%	1.#IO%
S		1476.000	n/a	621.000	n/a	n/a	n/a	0.431	0.045	n/a	n/a
%RSD		1.498	14.700	0.629	1.722	6.993	20.130	5.719	3.164	19.110	1.992
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:03:33	1.064	0.389	0.048	1.223	2.103	0.159	2.961	0.514	7.305	0.974
2	09:04:00	0.625	0.414	-0.164	0.736	2.279	1.008	-1.559	-0.520	5.600	0.879
3	09:04:26	1.101	0.292	0.016	0.378	2.738	0.951	1.205	0.123	5.552	0.913
X		0.930	0.365	-1.#IO%	0.779	2.373	0.706	0.869	1.#IO%	6.153	0.922
S		0.265	0.064	n/a	0.424	0.328	0.474	2.278	n/a	0.999	0.048
%RSD		28.470	17.660	342.600	54.480	13.820	67.200	262.200	1348.000	16.230	5.213
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:03:33	83.0%	2254.000	2218.000	2229.000	-1.132	0.009	0.020	-5.835	-0.154	84.5%
2	09:04:00	82.8%	2256.000	2224.000	2252.000	-1.346	0.019	0.014	-5.728	-0.204	86.4%
3	09:04:26	83.2%	2292.000	2268.000	2256.000	-1.878	0.017	0.018	-5.703	-0.196	86.1%
X		83.0%	2267.000	111.852%	2246.000	-1.452	1.#IO%	0.017	-5.756	-1.#IO%	85.7%
S		0.2%	21.070	n/a	14.570	0.384	n/a	0.003	0.070	n/a	1.1%
%RSD		0.3	0.929	1.220	0.648	26.460	34.800	18.530	1.220	14.650	1.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:03:33	0.700	0.074	0.120	0.132	0.063	0.039	92.3%	0.010	0.012	0.062
2	09:04:00	0.777	0.079	0.149	0.163	0.019	0.034	94.8%	0.006	0.008	0.057
3	09:04:26	0.773	0.053	0.115	0.123	0.026	0.013	95.0%	0.006	0.005	0.058
X		1.#IO%	1.#IO%	0.128	1.#IO%	0.036	1.#IO%	94.0%	0.007	1.#IO%	0.059
S		n/a	n/a	0.018	n/a	0.023	n/a	1.5%	0.003	n/a	0.003
%RSD		5.834	20.320	14.360	15.200	65.440	47.080	1.6	36.440	39.230	5.053
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	09:03:33	0.045	0.052	93.7%							
2	09:04:00	0.041	0.048	96.2%							
3	09:04:26	0.051	0.053	96.7%							
X		0.046	1.#IO%	95.5%							
S		0.005	n/a	1.6%							
%RSD		11.140	5.806	1.6							

CCV MW15278 10/26/2020 09:08:59 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:09:26	90.8%	293.700	295.500	296.400	-21.600	±60330.000	±59330.000	±60090.000	±59600.000	290.400
2	09:09:52	88.4%	298.900	295.300	306.800	-16.940	±61650.000	±60370.000	±61340.000	±59170.000	294.000
3	09:10:19	89.0%	289.700	292.700	296.900	-22.590	±61050.000	±59570.000	±58900.000	±57700.000	291.900
X		89.4%	98.026%	98.160%	100.023%	-20.380	±101.678%	±59750.000	±60110.000	±98.038%	97.358%
S		1.2%	n/a	n/a	n/a	3.017	±n/a	±544.900	±1223.000	±n/a	n/a
%RSD		1.4	1.571	0.537	1.958	14.810	±1.085	±0.912	±2.035	±1.687	0.624
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:09:26	±3250.000	35.830	±61670.000	60810.000	±61510.000	95.2%	300.500	305.400	282.200	1684.000
2	09:09:52	±3315.000	33.370	±60920.000	61630.000	±63220.000	93.1%	292.700	300.600	285.400	2030.000
3	09:10:19	±3314.000	27.470	±62990.000	61780.000	±61630.000	93.7%	300.800	298.400	294.000	-568.900
X		±3293.000	32.220	±103.102%	61400.000	±103.531%	94.0%	99.347%	100.490%	95.738%	1049.000
S		±37.460	4.297	±n/a	523.800	±n/a	1.1%	n/a	n/a	n/a	1411.000
%RSD		±1.137	13.340	±1.695	0.853	±1.542	1.2	1.539	1.183	2.123	134.600
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:09:26	±59400.000	295.800	±60580.000	±59960.000	284.300	287.500	291.600	276.800	284.000	285.700
2	09:09:52	±61060.000	300.200	±61340.000	±59340.000	277.100	293.500	291.300	276.900	279.500	283.800
3	09:10:19	±58870.000	285.300	±59400.000	±56850.000	282.300	286.100	288.000	276.300	281.000	282.800
X		±59780.000	97.924%	±60440.000	±97.857%	93.747%	96.340%	290.300	276.700	93.839%	94.687%
S		±1145.000	n/a	±978.800	±n/a	n/a	n/a	2.015	0.335	n/a	n/a
%RSD		±1.915	2.600	±1.619	±2.798	1.322	1.363	0.694	0.121	0.814	0.521
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:09:26	285.400	281.000	282.400	285.400	3.049	0.260	1215.000	286.900	1.091	300.700
2	09:09:52	286.700	284.200	285.800	279.900	2.839	0.388	1167.000	271.100	-0.079	298.700
3	09:10:19	286.700	280.300	284.300	280.700	3.121	-0.741	1225.000	289.400	-1.027	298.200
X		286.300	281.800	94.733%	282.000	3.003	-0.031	1202.000	94.154%	-0.005	99.727%
S		0.727	2.104	n/a	2.940	0.147	0.618	31.210	n/a	1.061	n/a
%RSD		0.254	0.747	0.594	1.043	4.888	2011.000	2.596	3.505	22720.000	0.454
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:09:26	91.0%	306.700	306.200	306.500	283.300	287.000	279.600	286.200	292.100	92.1%
2	09:09:52	89.8%	310.100	315.300	309.500	290.300	278.700	279.100	286.200	290.800	92.2%
3	09:10:19	89.5%	318.200	315.500	316.400	290.500	285.100	288.500	293.100	298.300	90.6%
X		90.1%	103.874%	104.107%	310.800	288.000	94.545%	282.400	288.500	97.908%	91.6%
S		0.8%	n/a	n/a	5.083	4.089	n/a	5.300	4.010	n/a	0.9%
%RSD		0.9	1.895	1.693	1.636	1.420	1.530	1.877	1.390	1.363	1.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:09:26	299.600	298.600	294.200	317.200	286.200	292.700	99.1%	299.300	302.700	299.400
2	09:09:52	296.400	294.100	297.100	321.200	286.700	295.400	99.4%	299.600	303.200	301.300
3	09:10:19	300.200	305.700	303.400	329.700	284.300	298.300	99.6%	304.600	307.700	302.100
X		99.585%	99.821%	298.200	107.563%	95.235%	98.486%	99.4%	301.200	101.522%	100.313%
S		n/a	n/a	4.676	n/a	n/a	n/a	0.3%	2.998	n/a	n/a
%RSD		0.677	1.950	1.568	1.975	0.448	0.935	0.3	0.995	0.908	0.466
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	09:09:26	302.900	302.200	99.6%							
2	09:09:52	299.700	300.600	99.8%							
3	09:10:19	301.800	302.600	99.7%							
X		100.479%	100.603%	99.7%							
S		n/a	n/a	0.1%							
%RSD		0.532	0.354	0.1							

CCB IM10195-01 10/26/2020 09:14:50 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:15:17	99.6%	0.009	0.085	0.378	-8.510	35.140	2.158	2.169	1.682	0.158
2	09:15:44	100.2%	0.010	0.566	0.429	-13.500	33.390	1.397	1.505	1.515	0.091
3	09:16:11	102.1%	0.016	0.157	0.450	-17.630	30.360	0.968	0.985	1.006	0.078
X		100.6%	0.011	0.269	0.419	-13.210	32.960	1.508	1.553	1.401	0.109
S		1.3%	0.004	0.259	0.037	4.566	2.418	0.603	0.593	0.352	0.043
%RSD		1.3	33.470	96.220	8.878	34.550	7.337	39.990	38.210	25.140	39.240
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:15:17	-91.080	10.930	7.255	4.190	-22.180	104.1%	-0.002	0.001	-0.016	-5.438
2	09:15:44	-90.460	9.843	7.417	-0.342	-23.140	102.8%	-0.020	0.010	0.007	-14.990
3	09:16:11	-90.520	12.530	4.810	-0.338	-23.550	102.4%	0.054	0.002	-0.025	-5.593
X		-90.690	11.100	6.494	1.170	-22.960	103.1%	0.011	0.004	-0.011	-8.674
S		0.342	1.351	1.461	2.615	0.703	0.9%	0.038	0.005	0.017	5.471
%RSD		0.377	12.180	22.490	223.500	3.061	0.9	364.700	126.300	150.300	63.070
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:15:17	1.574	0.008	-5.267	6.041	0.009	0.013	3.098	0.198	0.016	-0.083
2	09:15:44	1.444	0.004	-5.516	7.955	0.007	0.034	2.931	0.174	0.011	-0.144
3	09:16:11	0.464	0.001	-6.167	5.443	0.009	-0.006	3.284	0.100	0.029	-0.096
X		1.160	0.004	-5.650	6.480	0.008	0.014	3.105	0.157	0.018	-0.108
S		0.607	0.003	0.465	1.313	0.001	0.020	0.176	0.051	0.009	0.032
%RSD		52.300	81.850	8.222	20.260	14.530	147.000	5.686	32.670	49.570	29.470
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:15:17	-0.054	-0.119	0.083	-0.358	0.114	0.094	1.001	0.274	-1.862	0.008
2	09:15:44	-0.017	-0.008	0.023	0.385	0.339	-0.482	0.752	0.165	-0.399	0.007
3	09:16:11	0.214	-0.067	-0.020	0.163	0.255	-0.364	0.127	0.045	-0.451	0.001
X		0.048	-0.065	0.029	0.063	0.236	-0.251	0.626	0.161	-0.904	0.006
S		0.145	0.056	0.052	0.381	0.114	0.304	0.450	0.114	0.830	0.004
%RSD		305.700	85.920	180.200	602.800	48.340	121.200	71.900	70.760	91.800	66.570
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:15:17	100.5%	0.954	1.024	0.978	-0.438	0.009	0.014	-0.001	0.014	101.9%
2	09:15:44	99.9%	1.025	0.961	0.986	-0.582	0.013	0.009	0.003	0.016	102.5%
3	09:16:11	101.0%	1.100	0.859	1.007	-0.337	0.001	0.006	-0.001	0.007	101.1%
X		100.5%	1.026	0.948	0.990	-0.452	0.008	0.009	0.001	0.012	101.8%
S		0.6%	0.073	0.083	0.015	0.123	0.006	0.004	0.002	0.005	0.7%
%RSD		0.6	7.124	8.763	1.518	27.180	83.200	43.200	464.900	39.410	0.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:15:17	0.062	0.075	0.483	0.551	0.010	-0.000	105.8%	0.004	0.009	0.012
2	09:15:44	0.061	0.118	0.495	0.458	-0.003	0.014	105.5%	0.004	0.007	0.004
3	09:16:11	0.039	0.084	0.463	0.534	-0.003	0.007	104.9%	0.007	0.008	0.006
X		0.054	0.092	0.480	0.514	0.002	0.007	105.4%	0.005	0.008	0.007
S		0.013	0.023	0.016	0.050	0.007	0.007	0.4%	0.002	0.001	0.004
%RSD		24.480	24.480	3.323	9.675	455.800	105.100	0.4	32.490	9.645	57.930
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	09:15:17	0.011	0.010	110.0%							
2	09:15:44	0.005	0.008	108.7%							
3	09:16:11	0.007	0.005	110.0%							
X		0.008	0.008	109.6%							
S		0.003	0.003	0.8%							
%RSD		35.570	37.090	0.7							

VQ70984-001 10/26/2020 09:26:11 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:26:38	103.4%	0.009	0.265	0.344	-20.350	19.770	1.432	1.514	1.703	1.027
2	09:27:05	102.7%	-0.005	0.064	0.257	-33.250	19.080	1.516	1.432	1.364	0.998
3	09:27:32	101.1%	-0.011	0.315	0.338	-18.140	18.820	1.477	1.473	1.600	1.020
X		102.4%	-0.002	0.214	0.313	-23.920	19.220	1.475	1.473	1.556	1.015
S		1.2%	0.010	0.133	0.049	8.161	0.491	0.042	0.041	0.174	0.015
%RSD		1.1	487.500	61.870	15.590	34.120	2.557	2.864	2.774	11.160	1.512
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:26:38	-95.210	352400.000	92.630	0.704	2.222	96.3%	0.178	-1.226	0.764	8955.000
2	09:27:05	-97.240	337900.000	84.560	8.501	6.324	96.9%	0.234	-0.918	0.655	8295.000
3	09:27:32	-95.670	352600.000	74.800	2.855	6.654	91.9%	0.189	-0.609	0.734	8016.000
X		-96.040	347600.000	84.000	4.020	5.067	95.0%	0.201	-0.918	0.717	8422.000
S		1.062	8458.000	8.930	4.027	2.469	2.7%	0.030	0.309	0.056	481.900
%RSD		1.105	2.433	10.630	100.200	48.730	2.9	14.970	33.630	7.869	5.722
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:26:38	13.140	0.057	-5.197	3.554	0.002	0.345	4.212	0.051	0.078	0.082
2	09:27:05	11.610	0.056	-6.064	2.171	-0.001	0.231	4.346	0.083	0.029	0.087
3	09:27:32	14.510	0.061	-6.365	1.448	-0.001	0.465	3.869	0.048	0.037	0.237
X		13.090	0.058	-5.875	2.391	0.000	0.347	4.143	0.061	0.048	0.135
S		1.448	0.003	0.607	1.070	0.002	0.117	0.246	0.019	0.026	0.088
%RSD		11.070	4.584	10.330	44.750	2285.000	33.760	5.937	31.360	54.110	65.310
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:26:38	0.228	0.124	-0.474	2.609	16.860	18.340	-0.999	-0.394	5.881	0.006
2	09:27:05	0.298	0.254	0.383	1.109	15.590	17.750	0.563	-0.121	9.597	0.003
3	09:27:32	0.470	0.125	0.047	0.961	16.590	17.360	0.986	0.027	6.426	0.008
X		0.332	0.168	-0.014	1.559	16.350	17.820	0.184	-0.163	7.301	0.006
S		0.124	0.075	0.432	0.912	0.666	0.495	1.045	0.213	2.007	0.002
%RSD		37.480	44.740	3014.000	58.480	4.074	2.776	569.400	131.200	27.490	41.160
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:26:38	92.9%	0.413	0.999	0.443	-5.314	0.008	0.014	-0.003	-0.032	95.8%
2	09:27:05	92.7%	0.536	0.841	0.461	-7.325	0.003	0.002	-0.003	0.017	95.9%
3	09:27:32	91.6%	0.435	0.864	0.422	-5.342	0.006	0.004	0.001	0.029	96.2%
X		92.4%	0.461	0.901	0.442	-5.994	0.006	0.006	-0.001	0.005	96.0%
S		0.7%	0.066	0.085	0.019	1.153	0.003	0.006	0.003	0.033	0.2%
%RSD		0.8	14.200	9.465	4.340	19.240	46.840	96.990	172.100	674.300	0.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:26:38	4.228	6.027	0.275	0.278	0.070	0.015	100.7%	0.004	0.002	0.007
2	09:27:05	4.486	6.101	0.261	0.326	0.010	0.011	102.7%	0.002	0.000	0.011
3	09:27:32	4.264	6.226	0.248	0.330	0.030	0.022	103.0%	0.004	0.002	0.007
X		4.326	6.118	0.261	0.312	0.037	0.016	102.2%	0.003	0.001	0.008
S		0.140	0.100	0.014	0.029	0.030	0.006	1.2%	0.001	0.001	0.003
%RSD		3.235	1.641	5.171	9.406	82.750	34.430	1.2	32.440	70.610	31.510
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	09:26:38	0.012	0.010	108.7%							
2	09:27:05	0.012	0.010	109.8%							
3	09:27:32	0.004	0.007	108.8%							
X		0.009	0.009	109.1%							
S		0.005	0.002	0.6%							
%RSD		48.630	18.050	0.5							

VQ70984-002 10/26/2020 09:32:00 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:32:27	101.2%	197.700	215.500	200.600	-17.410	2110.000	2157.000	2128.000	2212.000	214.600
2	09:32:54	99.4%	206.000	201.800	206.200	-22.110	2146.000	2128.000	2164.000	2198.000	217.400
3	09:33:20	98.8%	204.500	211.800	206.700	-18.240	2090.000	2110.000	2116.000	2238.000	215.000
X		99.8%	101.372%	209.700	102.242%	-19.250	105.763%	2132.000	2136.000	110.806%	107.853%
S		1.2%	n/a	7.068	n/a	2.503	n/a	23.460	24.610	n/a	n/a
%RSD		1.2	2.174	3.371	1.640	13.000	1.323	1.101	1.152	0.904	0.702
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:32:27	242.300	393300.000	2304.000	2315.000	2224.000	95.0%	214.600	209.800	202.000	10250.000
2	09:32:54	259.600	397700.000	2294.000	2349.000	2186.000	92.2%	215.300	207.800	202.300	9653.000
3	09:33:20	247.600	401800.000	2211.000	2326.000	2227.000	91.1%	215.400	205.000	204.500	9828.000
X		249.800	397600.000	113.492%	2330.000	110.632%	92.8%	215.100	103.761%	101.467%	9911.000
S		8.898	4231.000	n/a	17.350	n/a	2.0%	0.438	n/a	n/a	307.600
%RSD		3.562	1.064	2.262	0.745	1.031	2.2	0.204	1.162	0.682	3.104
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:32:27	2230.000	207.000	2145.000	2060.000	201.500	206.600	208.600	206.300	206.100	189.600
2	09:32:54	2146.000	205.600	2127.000	2091.000	197.200	203.600	199.300	202.400	196.200	191.000
3	09:33:20	2240.000	203.000	2090.000	2061.000	203.200	206.900	201.500	200.100	194.400	183.900
X		2206.000	102.604%	2121.000	103.540%	100.317%	102.858%	203.100	202.900	99.464%	94.093%
S		51.910	n/a	28.100	n/a	n/a	n/a	4.855	3.169	n/a	n/a
%RSD		2.354	0.993	1.325	0.846	1.548	0.902	2.391	1.561	3.170	2.004
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:32:27	201.200	191.300	199.500	193.200	21.770	26.170	838.100	191.500	8.096	208.600
2	09:32:54	196.000	193.800	201.600	194.100	22.560	26.060	809.100	182.800	9.133	208.600
3	09:33:20	193.900	189.300	204.300	185.000	24.550	25.980	814.200	186.800	8.282	208.300
X		197.000	191.500	100.907%	190.800	22.960	26.070	820.500	93.527%	8.504	208.500
S		3.746	2.251	n/a	4.991	1.433	0.094	15.510	n/a	0.553	0.162
%RSD		1.901	1.175	1.199	2.616	6.243	0.360	1.890	2.312	6.498	0.078
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:32:27	90.4%	228.200	229.300	228.400	207.000	213.100	212.200	210.400	210.300	94.5%
2	09:32:54	90.2%	226.400	222.500	223.900	199.000	208.400	208.900	205.200	205.200	94.9%
3	09:33:20	91.9%	227.600	224.200	222.200	199.700	208.900	210.900	207.300	207.300	94.8%
X		90.8%	227.400	112.675%	224.800	201.900	105.078%	210.600	207.600	103.809%	94.7%
S		0.9%	0.910	n/a	3.224	4.428	n/a	1.644	2.620	n/a	0.2%
%RSD		1.0	0.400	1.572	1.434	2.193	1.236	0.781	1.262	1.231	0.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:32:27	220.700	220.400	207.800	226.800	203.400	208.500	102.1%	205.800	206.300	213.800
2	09:32:54	216.700	219.400	208.400	228.300	201.400	205.500	103.0%	204.100	207.000	213.200
3	09:33:20	217.700	218.300	208.900	226.400	201.500	207.600	103.2%	207.600	205.900	213.600
X		218.400	109.689%	208.400	113.573%	101.039%	207.200	102.8%	205.800	103.201%	213.500
S		2.087	n/a	0.539	n/a	n/a	1.567	0.6%	1.768	n/a	0.298
%RSD		0.956	0.481	0.259	0.452	0.573	0.756	0.5	0.859	0.262	0.139
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	09:32:27	209.700	209.500	108.9%							
2	09:32:54	208.100	209.900	109.1%							
3	09:33:20	210.100	209.400	108.9%							
X		209.300	104.787%	109.0%							
S		1.070	n/a	0.1%							
%RSD		0.511	0.120	0.1							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:38:15	109.1%	0.361	4.535	4.274	-128.400	50.720	1113.000	1110.000	1597.000	TM 29720.000
2	09:38:42	105.6%	0.330	4.184	4.217	-124.600	51.440	1136.000	1129.000	1597.000	TM 30010.000
3	09:39:09	108.9%	0.339	5.182	4.132	-133.000	51.260	1123.000	1131.000	1608.000	TM 29100.000
X		107.9%	0.343	4.633	4.208	-128.700	51.140	1124.000	1123.000	1601.000	TM 29610.000
S		1.9%	0.016	0.506	0.071	4.213	0.372	11.610	11.560	6.040	TM 467.300
%RSD		1.8	4.622	10.920	1.693	3.274	0.727	1.033	1.029	0.377	TM 1.578
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:38:15	1031.000	273600.000	643.200	986.400	915.200	103.8%	673.200	33.370	32.750	10860.000
2	09:38:42	1033.000	280300.000	642.500	968.300	889.400	102.7%	668.600	32.230	31.030	11060.000
3	09:39:09	972.200	278500.000	641.600	974.800	906.100	103.8%	652.900	32.690	31.660	10670.000
X		1012.000	277500.000	642.500	976.500	903.600	103.4%	664.900	32.770	31.810	10860.000
S		34.730	3479.000	0.802	9.197	13.130	0.6%	10.650	0.573	0.869	197.800
%RSD		3.430	1.254	0.125	0.942	1.453	0.6	1.601	1.749	2.732	1.821
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:38:15	12860.000	62.030	12590.000	12610.000	3.807	11.410	12.530	2.352	3.200	29.700
2	09:38:42	12530.000	60.140	12390.000	12390.000	3.688	11.180	11.960	2.203	3.153	29.300
3	09:39:09	12760.000	61.860	12430.000	12220.000	3.534	10.860	12.670	2.354	3.151	28.660
X		12720.000	61.340	12470.000	12410.000	3.676	11.150	12.390	2.303	3.168	29.220
S		170.500	1.047	107.500	192.500	0.137	0.276	0.379	0.087	0.028	0.527
%RSD		1.340	1.707	0.862	1.551	3.718	2.478	3.058	3.772	0.875	1.802
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:38:15	24.720	23.010	2.654	-0.279	9.653	10.440	0.297	0.454	2.718	15.870
2	09:38:42	25.800	22.780	1.476	-0.047	9.341	9.729	-0.285	0.207	3.795	16.240
3	09:39:09	24.620	23.220	3.294	-0.178	8.652	10.140	0.483	0.477	3.688	15.870
X		25.050	23.000	2.475	-0.168	9.215	10.100	0.165	0.379	3.400	15.990
S		0.653	0.220	0.923	0.116	0.512	0.357	0.401	0.149	0.593	0.211
%RSD		2.608	0.956	37.280	69.230	5.559	3.536	242.900	39.400	17.450	1.319
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:38:15	152.0%	0.611	0.687	0.613	0.605	0.027	0.024	0.037	0.034	99.2%
2	09:38:42	151.1%	0.724	0.745	0.643	-0.006	0.023	0.031	0.049	0.050	99.4%
3	09:39:09	152.7%	0.644	0.695	0.671	1.388	0.016	0.024	0.028	-0.002	99.9%
X		152.0%	0.660	0.709	0.642	0.662	0.022	0.027	0.038	0.027	99.5%
S		0.8%	0.058	0.031	0.029	0.699	0.006	0.004	0.011	0.027	0.4%
%RSD		0.6	8.785	4.412	4.552	105.500	26.060	15.630	27.940	97.910	0.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:38:15	4.866	6.269	0.240	0.242	56.490	57.320	108.8%	0.286	0.288	19.090
2	09:38:42	4.884	6.509	0.257	0.250	55.680	57.540	110.2%	0.257	0.263	19.140
3	09:39:09	4.907	6.365	0.242	0.263	54.860	57.380	111.3%	0.240	0.270	19.220
X		4.886	6.381	0.247	0.252	55.670	57.410	110.1%	0.261	0.274	19.150
S		0.021	0.121	0.009	0.011	0.819	0.118	1.3%	0.023	0.013	0.064
%RSD		0.421	1.891	3.754	4.277	1.471	0.205	1.2	8.839	4.695	0.334
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	09:38:15	17.670	18.210	110.6%							
2	09:38:42	17.050	18.030	111.0%							
3	09:39:09	17.530	18.300	111.3%							
X		17.420	18.180	111.0%							
S		0.324	0.141	0.3%							
%RSD		1.860	0.775	0.3							

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10/26/2020 09:43:38

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:44:04	105.7%	89.730	209.100	203.800	-132.000	2587.000	2820.000	2908.000	4309.000	TM 37620.000
2	09:44:31	104.6%	89.540	206.500	207.600	-134.200	2579.000	2747.000	2878.000	4180.000	TM 36570.000
3	09:44:58	108.7%	87.460	194.100	194.700	-136.400	2503.000	2779.000	2911.000	4168.000	TM 37330.000
X		106.3%	88.910	203.200	202.000	-134.200	2556.000	2782.000	2899.000	4219.000	TM 37170.000
S		2.2%	1.257	8.045	6.612	2.186	46.570	36.540	18.110	78.290	TM 544.100
%RSD		2.0	1.413	3.958	3.273	1.629	1.822	1.313	0.625	1.856	TM 1.464
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:44:04	6014.000	296600.000	4325.000	4784.000	4595.000	103.4%	TM 1851.000	239.900	229.600	10940.000
2	09:44:31	5921.000	288200.000	4324.000	4807.000	4474.000	104.6%	M 1626.000	232.600	215.300	12650.000
3	09:44:58	5901.000	287100.000	4289.000	4755.000	4524.000	103.5%	M 1641.000	231.300	217.900	11290.000
X		5945.000	290600.000	4313.000	4782.000	4531.000	103.9%	TM 1706.000	234.600	220.900	11620.000
S		60.380	5211.000	20.570	26.410	60.590	0.7%	TM 125.800	4.647	7.591	902.000
%RSD		1.016	1.793	0.477	0.552	1.337	0.6	TM 7.370	1.981	3.436	7.760
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:44:04	16560.000	355.600	16510.000	16220.000	188.700	201.400	202.600	165.500	201.300	219.900
2	09:44:31	16470.000	355.100	15980.000	15490.000	183.900	196.800	201.200	159.200	198.300	212.300
3	09:44:58	16170.000	346.000	16220.000	15650.000	188.400	198.000	201.500	160.900	198.600	216.600
X		16400.000	352.200	16240.000	15790.000	187.000	198.700	201.800	161.900	199.400	216.300
S		206.000	5.419	267.900	385.100	2.719	2.389	0.775	3.278	1.680	3.836
%RSD		1.256	1.538	1.650	2.440	1.454	1.202	0.384	2.025	0.842	1.774
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:44:04	172.600	172.800	182.700	125.400	12.030	14.550	557.500	189.400	3.734	164.200
2	09:44:31	177.500	173.700	174.300	126.800	12.740	13.390	524.100	176.500	4.359	166.800
3	09:44:58	175.300	172.800	176.000	127.900	13.390	12.440	520.900	177.500	3.733	165.400
X		175.100	173.100	177.700	126.700	12.720	13.460	534.200	181.100	3.942	165.500
S		2.451	0.498	4.425	1.244	0.680	1.056	20.280	7.167	0.361	1.281
%RSD		1.400	0.288	2.491	0.982	5.348	7.845	3.797	3.957	9.152	0.774
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:44:04	148.2%	132.300	134.300	134.800	179.500	200.900	201.100	198.400	200.200	97.0%
2	09:44:31	147.6%	133.700	132.700	133.800	176.200	197.300	200.500	196.600	198.500	97.8%
3	09:44:58	148.1%	131.700	133.900	133.400	184.500	201.700	205.200	198.500	201.300	96.7%
X		148.0%	132.500	133.600	134.000	180.100	200.000	202.300	197.900	200.000	97.2%
S		0.3%	0.999	0.861	0.703	4.160	2.352	2.570	1.087	1.443	0.6%
%RSD		0.2	0.754	0.644	0.525	2.310	1.176	1.270	0.549	0.721	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:44:04	208.100	204.400	178.200	193.400	348.700	359.700	106.3%	194.900	196.200	221.700
2	09:44:31	204.000	203.600	177.500	191.600	347.900	359.700	105.6%	198.800	197.300	222.100
3	09:44:58	208.800	207.600	180.700	196.300	347.400	359.900	107.8%	197.400	194.600	218.900
X		207.000	205.200	178.800	193.800	348.000	359.800	106.6%	197.000	196.000	220.900
S		2.598	2.115	1.646	2.385	0.652	0.102	1.1%	1.946	1.379	1.713
%RSD		1.255	1.031	0.920	1.231	0.188	0.028	1.0	0.988	0.704	0.775
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	09:44:04	220.900	220.500	105.7%							
2	09:44:31	219.300	219.700	106.3%							
3	09:44:58	220.400	218.700	106.1%							
X		220.200	219.600	106.0%							
S		0.806	0.873	0.3%							
%RSD		0.366	0.398	0.3							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:49:53	106.0%	89.320	212.900	204.100	-130.800	2619.000	2842.000	2962.000	4323.000	TM 39450.000
2	09:50:20	106.7%	89.120	207.600	203.800	-133.000	2538.000	2763.000	2838.000	4190.000	TM 38700.000
3	09:50:47	107.4%	87.780	212.000	208.600	-135.900	2543.000	2869.000	2936.000	4375.000	TM 38960.000
X		106.7%	88.740	210.800	205.500	-133.200	2567.000	2825.000	2912.000	4296.000	TM 39040.000
S		0.7%	0.834	2.879	2.692	2.544	45.410	54.850	65.160	95.570	TM 377.900
%RSD		0.6	0.940	1.366	1.310	1.910	1.769	1.942	2.238	2.225	TM 0.968
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:49:53	6560.000	322200.000	4162.000	4598.000	4408.000	103.6%	1695.000	253.000	236.400	13170.000
2	09:50:20	6344.000	313600.000	4286.000	4440.000	4355.000	105.6%	1666.000	244.300	229.900	12410.000
3	09:50:47	6674.000	326200.000	4275.000	4830.000	4394.000	100.7%	1674.000	245.500	231.900	13910.000
X		6526.000	320700.000	4241.000	4623.000	4386.000	103.3%	1679.000	247.600	232.700	13170.000
S		167.500	6447.000	68.840	196.000	27.480	2.4%	14.790	4.736	3.353	748.100
%RSD		2.566	2.010	1.623	4.239	0.627	2.4	0.881	1.913	1.441	5.683
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:49:53	16920.000	339.500	16950.000	16590.000	197.900	219.000	214.000	171.600	207.000	221.900
2	09:50:20	16300.000	333.600	16250.000	16440.000	192.000	204.100	203.900	164.900	209.600	221.900
3	09:50:47	16740.000	345.900	16710.000	16740.000	195.400	217.300	208.800	168.100	204.300	222.600
X		16650.000	339.700	16630.000	16590.000	195.100	213.400	208.900	168.200	207.000	222.200
S		319.600	6.149	353.300	150.600	2.980	8.161	5.049	3.312	2.605	0.392
%RSD		1.919	1.810	2.124	0.908	1.527	3.823	2.417	1.969	1.259	0.176
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:49:53	182.400	176.600	184.200	134.200	19.950	19.550	521.500	178.300	5.186	168.800
2	09:50:20	180.200	177.100	177.700	127.900	19.870	19.400	549.100	186.000	6.775	171.500
3	09:50:47	183.600	180.100	185.300	133.600	18.930	19.890	521.800	175.100	3.432	172.000
X		182.100	177.900	182.400	131.900	19.580	19.610	530.800	179.800	5.131	170.800
S		1.758	1.917	4.122	3.447	0.569	0.252	15.860	5.572	1.672	1.754
%RSD		0.966	1.077	2.260	2.614	2.904	1.286	2.987	3.099	32.590	1.027
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:49:53	147.9%	136.800	135.600	137.100	186.000	204.300	206.000	203.700	202.000	96.2%
2	09:50:20	145.2%	139.100	137.000	137.600	187.400	205.400	207.500	202.400	201.900	96.1%
3	09:50:47	147.0%	138.400	136.200	135.700	179.400	206.000	204.400	199.700	200.800	97.0%
X		146.7%	138.100	136.300	136.800	184.300	205.200	206.000	201.900	201.600	96.5%
S		1.4%	1.177	0.678	1.001	4.292	0.865	1.589	2.034	0.661	0.5%
%RSD		0.9	0.852	0.498	0.732	2.329	0.421	0.771	1.007	0.328	0.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:49:53	210.800	208.900	182.200	196.500	354.800	359.900	102.1%	205.300	204.000	227.900
2	09:50:20	212.400	209.300	184.100	198.200	349.400	355.600	103.7%	204.500	205.100	232.600
3	09:50:47	208.600	207.300	184.100	199.000	357.200	359.100	103.2%	205.100	205.900	230.400
X		210.600	208.500	183.500	197.900	353.800	358.200	103.0%	204.900	205.000	230.300
S		1.878	1.063	1.111	1.242	4.014	2.321	0.8%	0.392	0.931	2.327
%RSD		0.892	0.510	0.605	0.628	1.135	0.648	0.8	0.191	0.454	1.010
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	09:49:53	227.500	227.900	100.9%							
2	09:50:20	225.500	227.300	101.2%							
3	09:50:47	228.500	228.300	102.1%							
X		227.200	227.800	101.4%							
S		1.529	0.502	0.6%							
%RSD		0.673	0.221	0.6							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:55:42	105.6%	0.178	1.367	1.059	-44.490	11.200	300.800	294.100	321.000	TM 6036.000
2	09:56:09	104.2%	0.173	1.308	1.315	-43.980	11.230	295.600	295.200	328.800	TM 6047.000
3	09:56:36	105.2%	0.179	1.029	1.029	-37.630	11.030	306.500	290.800	327.600	TM 6023.000
X		105.0%	0.177	1.234	1.135	-42.030	11.150	301.000	293.400	325.800	TM 6035.000
S		0.8%	0.003	0.181	0.157	3.822	0.106	5.499	2.312	4.196	TM 11.940
%RSD		0.7	1.750	14.640	13.860	9.093	0.954	1.827	0.788	1.288	TM 0.198
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:55:42	113.100	62600.000	174.200	203.100	173.400	107.0%	138.700	6.822	6.686	2884.000
2	09:56:09	129.900	62860.000	178.000	208.600	171.700	104.6%	136.700	7.261	6.857	2829.000
3	09:56:36	147.400	63610.000	177.800	226.700	171.600	105.4%	138.900	6.918	6.799	3061.000
X		130.100	63020.000	176.700	212.800	172.200	105.7%	138.100	7.000	6.780	2925.000
S		17.130	525.200	2.133	12.350	0.982	1.2%	1.215	0.231	0.087	121.400
%RSD		13.170	0.833	1.207	5.804	0.570	1.1	0.880	3.296	1.281	4.151
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:55:42	2647.000	12.770	2639.000	2612.000	0.812	2.523	1.598	0.776	1.000	6.627
2	09:56:09	2650.000	12.820	2680.000	2595.000	0.787	2.502	2.360	0.741	1.015	6.410
3	09:56:36	2615.000	12.670	2596.000	2477.000	0.755	2.281	1.002	0.762	0.796	6.387
X		2638.000	12.760	2638.000	2561.000	0.785	2.435	1.653	0.760	0.937	6.475
S		19.320	0.078	41.650	73.610	0.028	0.134	0.681	0.018	0.122	0.133
%RSD		0.732	0.608	1.579	2.874	3.581	5.506	41.170	2.358	13.060	2.049
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:55:42	5.678	6.402	0.413	-0.004	2.571	2.473	-0.577	0.034	-2.241	4.450
2	09:56:09	6.694	6.112	0.217	-0.027	3.286	2.448	-1.318	-0.212	-0.614	4.639
3	09:56:36	6.452	6.400	0.784	0.456	2.292	2.287	0.547	0.264	-1.137	4.447
X		6.275	6.305	0.471	0.142	2.716	2.403	-0.449	0.029	-1.331	4.512
S		0.531	0.167	0.288	0.273	0.513	0.101	0.939	0.238	0.830	0.110
%RSD		8.456	2.642	61.110	192.700	18.880	4.199	209.000	835.200	62.390	2.441
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:55:42	111.4%	0.258	0.354	0.289	0.148	0.016	0.010	0.022	0.038	98.9%
2	09:56:09	110.2%	0.291	0.343	0.371	-0.575	0.015	0.017	0.014	0.015	98.3%
3	09:56:36	110.0%	0.358	0.313	0.301	-1.040	0.007	0.014	0.010	0.029	100.5%
X		110.5%	0.302	0.337	0.320	-0.489	0.012	0.014	0.015	0.027	99.3%
S		0.8%	0.051	0.022	0.044	0.599	0.005	0.004	0.006	0.012	1.1%
%RSD		0.7	16.830	6.427	13.810	122.400	40.770	26.720	42.230	43.490	1.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:55:42	0.902	1.302	0.066	0.082	11.600	11.840	101.1%	0.221	0.227	3.972
2	09:56:09	0.973	1.280	0.087	0.086	11.460	11.530	102.5%	0.243	0.227	3.786
3	09:56:36	0.960	1.226	0.063	0.070	11.780	11.800	103.1%	0.207	0.200	3.800
X		0.945	1.269	0.072	0.079	11.620	11.720	102.2%	0.224	0.218	3.853
S		0.038	0.039	0.013	0.008	0.162	0.169	1.1%	0.018	0.016	0.103
%RSD		4.043	3.103	18.060	10.290	1.397	1.439	1.0	8.141	7.118	2.686
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	09:55:42	3.514	3.718	103.1%							
2	09:56:09	3.489	3.625	104.8%							
3	09:56:36	3.522	3.604	106.4%							
X		3.508	3.649	104.8%							
S		0.017	0.060	1.6%							
%RSD		0.492	1.657	1.6							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:01:32	105.7%	98.800	201.600	193.900	-118.300	<u>2091.000</u>	<u>2491.000</u>	2552.000	3691.000	<u>TM 28400.000</u>
2	10:01:58	106.3%	98.820	203.700	194.100	-115.600	<u>21995.000</u>	<u>2466.000</u>	2545.000	3703.000	<u>TM 28810.000</u>
3	10:02:25	108.1%	98.700	196.000	191.600	-118.800	<u>21980.000</u>	<u>2481.000</u>	2577.000	3690.000	<u>TM 29210.000</u>
X		106.7%	98.770	200.500	193.200	-117.600	<u>22022.000</u>	<u>2479.000</u>	2558.000	3695.000	<u>TM 28800.000</u>
S		1.2%	0.065	4.002	1.386	1.696	<u>259.870</u>	<u>212.660</u>	16.650	7.415	<u>TM 403.200</u>
%RSD		1.2	0.066	1.996	0.717	1.443	<u>2.961</u>	<u>0.510</u>	0.651	0.201	<u>TM 1.400</u>
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:01:32	<u>23058.000</u>	<u>272800.000</u>	<u>2077.000</u>	3068.000	2900.000	103.9%	<u>M 844.300</u>	236.600	223.200	10260.000
2	10:01:58	<u>23026.000</u>	<u>276000.000</u>	<u>2076.000</u>	3120.000	2951.000	102.1%	<u>M 856.700</u>	230.100	221.800	11080.000
3	10:02:25	<u>23003.000</u>	<u>270800.000</u>	<u>21994.000</u>	3095.000	2978.000	102.4%	<u>M 859.300</u>	230.700	217.700	9905.000
X		<u>23029.000</u>	<u>273200.000</u>	<u>22049.000</u>	3094.000	2943.000	102.8%	<u>M 853.400</u>	232.400	220.900	10410.000
S		<u>27.540</u>	<u>2639.000</u>	<u>247.500</u>	26.350	39.430	1.0%	<u>M 8.048</u>	3.598	2.878	605.200
%RSD		<u>0.909</u>	<u>0.966</u>	<u>2.318</u>	0.852	1.340	0.9	<u>M 0.943</u>	1.548	1.303	5.811
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:01:32	<u>214040.000</u>	249.700	<u>213830.000</u>	13900.000	187.700	201.900	205.400	165.300	203.700	219.400
2	10:01:58	<u>214240.000</u>	250.500	<u>214350.000</u>	13980.000	194.100	201.000	208.200	161.500	198.100	214.700
3	10:02:25	<u>214380.000</u>	248.400	<u>214360.000</u>	14090.000	188.900	202.000	202.500	163.300	199.000	208.200
X		<u>214220.000</u>	249.500	<u>214180.000</u>	13990.000	190.200	201.600	205.400	163.400	200.300	214.100
S		<u>2171.700</u>	1.063	<u>2304.300</u>	94.050	3.420	0.509	2.817	1.900	2.989	5.631
%RSD		<u>2.208</u>	0.426	<u>2.246</u>	0.672	1.798	0.253	1.372	1.163	1.492	2.630
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:01:32	172.000	169.300	189.400	133.500	9.393	10.330	548.100	186.900	1.645	145.100
2	10:01:58	176.600	170.100	187.900	132.500	8.822	8.445	551.500	185.500	3.001	145.800
3	10:02:25	169.400	169.000	190.300	131.000	8.309	8.473	543.900	184.900	3.646	143.900
X		172.700	169.400	189.200	132.300	8.841	9.082	547.800	185.800	2.764	144.900
S		3.650	0.558	1.196	1.289	0.543	1.079	3.786	1.011	1.021	0.961
%RSD		2.114	0.329	0.632	0.974	6.139	11.890	0.691	0.544	36.950	0.663
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:01:32	148.8%	137.800	138.900	137.900	182.000	202.200	204.600	198.000	200.800	97.1%
2	10:01:58	146.8%	140.300	138.100	137.900	181.900	201.400	204.400	200.500	200.100	97.0%
3	10:02:25	150.1%	137.200	138.900	136.800	181.300	199.400	202.500	198.900	198.200	97.7%
X		148.6%	138.400	138.600	137.500	181.700	201.000	203.800	199.100	199.700	97.2%
S		1.7%	1.653	0.440	0.655	0.346	1.404	1.159	1.250	1.338	0.4%
%RSD		1.1	1.194	0.317	0.476	0.191	0.698	0.569	0.628	0.670	0.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:01:32	209.300	208.700	196.400	212.000	249.300	255.300	105.9%	194.800	193.400	214.800
2	10:01:58	211.500	211.800	197.300	213.500	247.500	255.700	106.4%	198.100	196.500	218.400
3	10:02:25	209.500	209.700	198.200	215.000	248.800	254.300	106.6%	196.700	195.500	220.700
X		210.100	210.000	197.300	213.500	248.500	255.100	106.3%	196.600	195.100	218.000
S		1.218	1.571	0.884	1.529	0.948	0.701	0.3%	1.640	1.576	2.974
%RSD		0.580	0.748	0.448	0.716	0.381	0.275	0.3	0.834	0.808	1.365
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	10:01:32	214.100	212.800	110.5%							
2	10:01:58	216.600	215.800	109.7%							
3	10:02:25	216.500	215.900	110.7%							
X		215.800	214.800	110.3%							
S		1.406	1.735	0.5%							
%RSD		0.652	0.808	0.5							

CCV MW15278 10/26/2020 10:06:57 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:07:23	81.3%	300.900	308.300	311.900	-15.000	60670.000	62200.000	61980.000	60030.000	295.300
2	10:07:50	81.5%	304.600	302.700	307.400	0.483	61070.000	62690.000	61770.000	60220.000	297.200
3	10:08:17	81.1%	294.000	303.700	308.900	-10.830	60660.000	59720.000	59320.000	60310.000	298.200
X		81.3%	99.942%	101.631%	103.125%	-8.447	101.326%	61540.000	61020.000	100.309%	98.974%
S		0.2%	n/a	n/a	n/a	8.011	n/a	1592.000	1478.000	n/a	n/a
%RSD		0.2	1.800	0.987	0.742	94.830	0.385	2.588	2.422	0.240	0.496
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:07:23	3384.000	768.800	61810.000	60320.000	62190.000	86.6%	299.600	309.700	293.200	520.900
2	10:07:50	3286.000	744.600	62670.000	60490.000	62420.000	86.3%	299.400	302.200	289.600	1246.000
3	10:08:17	3333.000	737.200	61330.000	61750.000	62560.000	85.7%	296.700	300.400	288.800	1319.000
X		3334.000	750.200	103.228%	60850.000	103.980%	86.2%	99.521%	101.364%	96.840%	1028.000
S		49.110	16.550	n/a	779.900	n/a	0.5%	n/a	n/a	n/a	441.100
%RSD		1.473	2.206	1.102	1.282	0.303	0.6	0.555	1.610	0.810	42.890
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:07:23	60130.000	297.600	61950.000	59780.000	291.000	291.500	294.800	287.000	298.000	297.700
2	10:07:50	61080.000	297.600	61710.000	60490.000	280.900	286.000	289.300	285.900	298.500	293.200
3	10:08:17	60420.000	295.700	60450.000	58730.000	286.500	287.700	285.700	281.900	289.000	289.800
X		60540.000	98.988%	61370.000	99.439%	95.369%	96.136%	289.900	285.000	98.395%	97.855%
S		489.100	n/a	804.900	n/a	n/a	n/a	4.557	2.715	n/a	n/a
%RSD		0.808	0.375	1.312	1.484	1.771	0.982	1.572	0.953	1.808	1.349
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:07:23	285.600	281.600	283.700	281.300	2.035	-0.077	1191.000	288.400	0.452	293.800
2	10:07:50	296.500	288.600	292.500	288.800	1.749	0.590	1228.000	291.300	-2.949	296.500
3	10:08:17	288.600	285.100	283.800	287.300	2.410	0.891	1204.000	287.400	0.586	299.800
X		290.200	285.100	95.555%	285.800	2.065	0.468	1208.000	96.356%	-0.637	98.909%
S		5.601	3.518	n/a	3.979	0.331	0.495	18.790	n/a	2.003	n/a
%RSD		1.930	1.234	1.771	1.392	16.040	105.800	1.556	0.699	314.500	1.013
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:07:23	82.4%	306.500	304.300	302.300	281.500	290.200	289.900	292.100	293.200	81.4%
2	10:07:50	80.5%	315.300	311.600	313.600	294.600	286.800	286.900	294.700	295.700	81.4%
3	10:08:17	80.7%	317.400	321.700	317.200	290.100	292.300	286.200	293.200	294.400	80.9%
X		81.2%	104.353%	104.184%	311.000	288.800	96.579%	287.600	293.300	98.147%	81.2%
S		1.1%	n/a	n/a	7.783	6.628	n/a	1.966	1.298	n/a	0.3%
%RSD		1.3	1.838	2.792	2.502	2.295	0.960	0.684	0.443	0.426	0.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:07:23	302.000	302.000	296.000	319.800	286.700	293.700	88.6%	300.400	300.600	304.400
2	10:07:50	304.300	303.900	298.000	322.900	289.400	296.300	89.0%	306.100	307.800	305.700
3	10:08:17	304.100	307.900	303.600	329.000	285.800	296.800	88.9%	298.300	300.600	298.700
X		101.159%	101.531%	299.200	107.968%	95.765%	98.541%	88.8%	301.600	101.002%	100.972%
S		n/a	n/a	3.939	n/a	n/a	n/a	0.2%	4.074	n/a	n/a
%RSD		0.418	0.987	1.316	1.440	0.648	0.558	0.2	1.351	1.379	1.229
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	10:07:23	302.400	302.100	89.2%							
2	10:07:50	304.500	304.800	89.4%							
3	10:08:17	300.100	299.700	91.3%							
X		100.772%	100.728%	90.0%							
S		n/a	n/a	1.2%							
%RSD		0.729	0.844	1.3							

CCB IM10195-01 10/26/2020 10:12:48 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:13:15	90.8%	0.029	0.554	0.549	0.809	11.950	1.883	2.047	1.753	0.146
2	10:13:42	91.4%	0.041	0.082	0.459	3.552	11.440	1.384	1.732	1.258	0.080
3	10:14:08	90.5%	0.043	0.659	0.405	-5.787	11.010	1.491	1.238	1.750	0.092
X		90.9%	0.038	0.432	0.471	-0.475	11.460	1.586	1.672	1.587	0.106
S		0.5%	0.008	0.308	0.073	4.800	0.473	0.263	0.408	0.285	0.035
%RSD		0.5	21.150	71.260	15.550	1010.000	4.125	16.560	24.400	17.970	33.350
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:13:15	-106.900	479.400	5.233	1.715	-20.640	95.3%	-0.037	0.010	-0.015	8.647
2	10:13:42	-107.800	479.400	3.673	1.714	-22.620	95.4%	0.003	0.035	0.020	1.061
3	10:14:08	-107.000	488.100	1.925	0.762	-18.910	93.5%	0.004	0.036	-0.011	21.340
X		-107.200	482.300	3.610	1.397	-20.730	94.7%	-0.010	0.027	-0.002	10.350
S		0.517	5.053	1.655	0.550	1.855	1.1%	0.023	0.015	0.019	10.240
%RSD		0.482	1.048	45.840	39.360	8.952	1.1	229.900	54.710	1075.000	99.000
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:13:15	1.380	0.021	-3.303	6.157	0.002	0.024	0.378	-0.006	0.016	0.016
2	10:13:42	0.772	0.001	-4.383	3.813	0.009	0.035	-0.123	0.004	-0.032	-0.010
3	10:14:08	0.947	0.007	-3.488	5.864	-0.001	0.031	-0.161	0.016	0.014	-0.012
X		1.033	0.010	-3.725	5.278	0.004	0.030	0.031	0.005	-0.001	-0.002
S		0.313	0.010	0.578	1.277	0.005	0.005	0.300	0.011	0.027	0.016
%RSD		30.330	108.700	15.510	24.200	145.800	18.320	965.400	220.100	4139.000	951.000
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:13:15	-0.048	0.091	-0.007	0.150	0.049	-0.082	1.074	0.271	-0.713	0.009
2	10:13:42	-0.051	-0.072	-0.123	-0.039	-0.283	-0.584	-0.281	-0.052	-0.790	0.006
3	10:14:08	-0.013	-0.071	-0.022	0.112	0.025	-0.445	0.635	0.189	-1.765	0.007
X		-0.038	-0.017	-0.051	0.075	-0.069	-0.370	0.476	0.136	-1.090	0.008
S		0.021	0.093	0.063	0.100	0.185	0.259	0.691	0.168	0.586	0.001
%RSD		56.140	541.800	125.000	133.800	266.500	69.930	145.200	123.700	53.820	17.360
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:13:15	89.4%	0.683	0.655	0.664	-0.739	0.006	0.005	0.005	0.014	90.6%
2	10:13:42	90.9%	0.708	0.682	0.687	-0.520	0.008	0.004	0.001	0.000	92.3%
3	10:14:08	91.9%	0.707	0.724	0.633	-0.133	0.013	0.011	0.005	0.000	92.7%
X		90.7%	0.699	0.687	0.661	-0.464	0.009	0.007	0.004	0.005	91.9%
S		1.3%	0.014	0.034	0.027	0.307	0.003	0.003	0.003	0.008	1.1%
%RSD		1.4	2.020	5.015	4.052	66.180	35.070	51.650	71.430	165.400	1.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:13:15	0.047	0.084	0.591	0.595	0.005	0.013	93.3%	0.010	0.012	0.005
2	10:13:42	0.078	0.096	0.594	0.671	0.005	0.005	94.7%	0.004	0.012	0.011
3	10:14:08	0.060	0.092	0.564	0.599	0.005	0.005	95.4%	0.012	0.015	0.011
X		0.062	0.091	0.583	0.622	0.005	0.007	94.5%	0.009	0.013	0.009
S		0.016	0.006	0.016	0.043	0.000	0.005	1.0%	0.004	0.002	0.004
%RSD		25.420	6.938	2.781	6.881	3.017	64.520	1.1	42.890	16.980	38.400
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	10:13:15	0.012	0.009	98.4%							
2	10:13:42	0.008	0.010	99.6%							
3	10:14:08	0.005	0.008	100.5%							
X		0.008	0.009	99.5%							
S		0.004	0.001	1.0%							
%RSD		45.720	11.280	1.0							

VQ70287-001 10/26/2020 10:18:34 QC Status: FAIL (Initial: UNKNOWN)

User Pre-dilution: 1.000

User File Location: 2000											
Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:19:01	93.8%	0.004	0.550	0.946	19.730	11.170	0.903	1.192	0.847	2.263
2	10:19:28	95.2%	0.005	0.979	1.011	19.960	9.709	1.011	0.637	1.026	2.205
3	10:19:55	95.5%	0.019	1.069	0.885	15.570	8.908	1.094	0.922	1.076	2.110
X		94.8%	0.009	0.866	0.947	18.420	9.928	1.003	0.917	0.983	2.193
S		0.9%	0.008	0.278	0.063	2.472	1.146	0.096	0.277	0.121	0.077
%RSD		1.0	88.670	32.060	6.657	13.420	11.540	9.524	30.250	12.280	3.507
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:19:01	-104.500	62410.000	6.298	4.588	-16.770	97.0%	0.021	-0.190	0.134	1778.000
2	10:19:28	-107.200	61520.000	5.504	4.478	-14.850	98.9%	-0.018	-0.062	0.149	1756.000
3	10:19:55	-105.800	63160.000	5.891	2.623	-15.720	97.4%	0.021	-0.178	0.127	1796.000
X		-105.900	62360.000	5.898	3.896	-15.780	97.8%	0.008	-0.143	0.137	1777.000
S		1.358	821.600	0.397	1.104	0.959	1.0%	0.023	0.071	0.012	20.350
%RSD		1.283	1.317	6.734	28.350	6.075	1.0	291.600	49.310	8.571	1.145
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:19:01	10.090	0.047	-3.426	3.602	0.005	0.039	-0.680	0.000	0.032	8.850
2	10:19:28	9.440	0.014	-4.873	4.914	0.005	0.079	-0.461	0.009	0.054	8.689
3	10:19:55	9.843	0.034	-4.936	1.392	-0.001	0.075	-0.440	-0.011	-0.009	9.394
X		9.792	0.032	-4.412	3.303	0.003	0.064	-0.527	-0.000	0.025	8.978
S		0.329	0.017	0.854	1.780	0.004	0.022	0.133	0.010	0.032	0.370
%RSD		3.364	52.820	19.360	53.900	120.900	34.630	25.200	3408.000	125.500	4.116
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:19:01	8.903	8.724	0.220	-0.512	2.711	3.884	-0.043	-0.011	0.055	0.011
2	10:19:28	8.771	8.349	-0.109	0.038	2.342	2.756	3.356	0.823	-1.205	0.012
3	10:19:55	8.598	9.101	-0.217	-0.201	4.096	3.878	-0.047	0.033	-1.805	0.014
X		8.757	8.724	-0.036	-0.225	3.050	3.506	1.089	0.282	-0.985	0.012
S		0.153	0.376	0.228	0.276	0.924	0.650	1.963	0.469	0.950	0.002
%RSD		1.742	4.310	638.300	122.600	30.310	18.530	180.300	166.500	96.430	13.140
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:19:01	92.3%	0.250	0.224	0.282	-0.500	0.004	0.004	-0.002	0.009	93.2%
2	10:19:28	92.5%	0.230	0.273	0.356	-0.284	0.004	0.005	-0.003	-0.003	93.7%
3	10:19:55	92.3%	0.281	0.342	0.308	-0.652	0.003	0.002	0.002	0.001	93.2%
X		92.4%	0.254	0.280	0.315	-0.478	0.004	0.004	-0.001	0.002	93.4%
S		0.1%	0.026	0.059	0.038	0.185	0.001	0.002	0.003	0.006	0.3%
%RSD		0.1	10.310	21.140	11.940	38.590	16.720	44.360	250.100	261.200	0.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:19:01	0.047	0.052	0.311	0.408	0.025	0.040	96.2%	0.019	0.020	0.006
2	10:19:28	0.057	0.080	0.337	0.361	0.052	0.070	97.7%	0.015	0.017	0.001
3	10:19:55	0.036	0.075	0.354	0.408	0.038	0.031	98.3%	0.013	0.019	0.013
X		0.047	0.069	0.334	0.393	0.038	0.047	97.4%	0.016	0.019	0.007
S		0.010	0.015	0.022	0.027	0.013	0.020	1.1%	0.003	0.001	0.006
%RSD		22.310	21.400	6.485	6.899	34.380	43.250	1.1	20.100	7.121	88.970
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	10:19:01	0.009	0.008	102.7%							
2	10:19:28	0.004	0.005	103.7%							
3	10:19:55	0.007	0.008	104.6%							
X		0.007	0.007	103.7%							
S		0.002	0.002	0.9%							
%RSD		31.740	22.420	0.9							

VQ70287-002 10/26/2020 10:24:21 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:24:48	94.3%	103.700	101.500	107.000	16.350	1067.000	1126.000	1114.000	1098.000	110.700
2	10:25:16	96.0%	102.100	99.620	98.390	13.370	1021.000	1071.000	1093.000	1080.000	104.500
3	10:25:43	95.1%	99.530	103.700	103.600	12.050	1028.000	1043.000	1046.000	1058.000	105.400
X		95.1%	101.772%	101.600	103.000	13.920	103.884%	1080.000	1084.000	107.891%	106.844%
S		0.9%	n/a	2.068	4.343	2.204	n/a	42.180	34.470	n/a	n/a
%RSD		0.9	2.078	2.035	4.216	15.830	2.357	3.906	3.179	1.867	3.120
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:24:48	1055.000	68070.000	1123.000	1144.000	1096.000	95.5%	105.900	104.600	105.400	4171.000
2	10:25:16	1065.000	67160.000	1094.000	1142.000	1035.000	96.0%	103.300	103.600	98.270	4442.000
3	10:25:43	994.400	65540.000	1081.000	1122.000	1043.000	96.8%	102.500	100.700	99.540	4465.000
X		1038.000	66920.000	109.930%	1136.000	105.817%	96.1%	103.931%	102.962%	101.066%	4359.000
S		38.150	1284.000	n/a	12.120	n/a	0.7%	n/a	n/a	n/a	163.800
%RSD		3.675	1.919	1.934	1.067	3.115	0.7	1.715	1.928	3.756	3.756
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:24:48	1139.000	103.700	1081.000	1026.000	101.000	105.500	107.900	104.100	107.800	101.600
2	10:25:16	1086.000	100.300	1056.000	1027.000	99.890	105.200	100.200	102.000	106.400	97.600
3	10:25:43	1075.000	100.500	1039.000	1015.000	98.790	100.200	97.080	98.760	102.500	98.600
X		1100.000	101.506%	1059.000	102.251%	99.890%	103.612%	101.700	101.622%	105.537%	99.278%
S		34.170	n/a	21.130	n/a	n/a	n/a	5.555	n/a	n/a	n/a
%RSD		3.105	1.907	1.997	0.628	1.102	2.884	5.461	2.658	2.587	2.120
Run	Time	67Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:24:48	101.100	96.760	99.650	92.250	3.326	3.226	390.200	91.920	-2.677	101.200
2	10:25:16	98.460	98.330	97.560	94.850	3.085	3.085	398.300	94.590	-1.780	100.200
3	10:25:43	99.410	98.200	96.340	90.980	2.771	3.664	395.800	93.490	-2.440	99.180
X		99.640	97.760	97.851%	92.700	3.061	3.325	394.700	93.333%	-2.299	100.200
S		1.317	0.871	n/a	1.974	0.278	0.302	4.146	n/a	0.465	0.993
%RSD		1.321	0.891	1.714	2.129	9.095	9.086	1.050	1.436	20.220	0.991
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:24:48	90.9%	107.600	110.200	108.200	104.000	104.700	102.000	100.100	101.100	92.3%
2	10:25:16	91.9%	107.800	107.800	107.100	106.900	104.500	102.900	99.960	100.800	92.5%
3	10:25:43	92.9%	106.100	106.500	105.100	106.200	101.600	100.900	99.510	98.610	93.9%
X		91.9%	107.200	108.200	106.800	105.700	103.605%	101.900	99.870	100.194%	92.9%
S		1.0%	0.932	1.911	1.583	1.485	n/a	1.036	0.323	n/a	0.9%
%RSD		1.1	0.869	1.767	1.483	1.405	1.667	1.016	0.323	1.378	1.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:24:48	103.700	103.200	102.800	109.900	99.500	101.300	97.8%	100.400	97.420	101.100
2	10:25:16	104.100	104.000	101.600	111.400	100.600	102.300	98.6%	101.700	100.300	102.400
3	10:25:43	101.600	100.800	100.400	109.400	101.700	102.000	97.4%	100.700	100.200	103.900
X		103.100	102.658%	101.600	110.244%	100.600	101.873%	98.0%	100.900	99.322%	102.500
S		1.307	n/a	1.185	n/a	1.118	n/a	0.6%	0.699	n/a	1.420
%RSD		1.268	1.627	1.166	0.924	1.111	0.470	0.6	0.692	1.658	1.386
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	10:24:48	100.600	99.960	105.4%							
2	10:25:16	102.000	101.700	104.4%							
3	10:25:43	103.000	102.900	104.2%							
X		101.800	101.526%	104.6%							
S		1.213	n/a	0.7%							
%RSD		1.191	1.452	0.6							

VJ15060-001 10/26/2020 10:30:09

User Pre-dilution: 1.000

Run		Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:30:36		96.1%	-0.009	13.230	12.900	-70.030	2984.000	14110.000	14440.000	17670.000	152.800
2	10:31:03		97.0%	-0.005	12.350	12.920	-74.070	2934.000	14110.000	14530.000	18380.000	164.100
3	10:31:30		97.0%	0.004	12.910	12.910	-73.390	2972.000	13900.000	13990.000	17830.000	157.000
X			96.7%	-0.003	12.830	12.910	-72.500	2963.000	14040.000	14320.000	17960.000	158.000
S			0.5%	0.007	0.447	0.011	2.163	25.820	121.300	288.700	371.700	5.682
%RSD			0.5	202.100	3.480	0.082	2.984	0.871	0.864	2.016	2.070	3.597
Run	Time		28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:30:36		3633.000	62300.000	2977.000	42120.000	43370.000	98.4%	0.689	0.427	0.467	3477.000
2	10:31:03		3615.000	62160.000	2940.000	42910.000	43730.000	96.3%	0.880	0.079	0.565	4141.000
3	10:31:30		3534.000	60600.000	2966.000	41690.000	42590.000	98.3%	0.862	0.203	0.501	4171.000
X			3594.000	61690.000	2961.000	42240.000	43230.000	97.7%	0.810	0.237	0.511	3930.000
S			52.690	945.100	18.870	621.500	585.900	1.2%	0.106	0.177	0.050	392.600
%RSD			1.466	1.532	0.637	1.471	1.355	1.2	13.040	74.620	9.754	9.991
Run	Time		54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:30:36		167.500	8.485	174.900	270.200	0.116	0.867	-0.835	0.508	0.599	1.440
2	10:31:03		167.700	8.471	176.000	276.200	0.108	0.731	-0.353	0.510	0.555	1.214
3	10:31:30		160.000	8.274	168.200	259.300	0.097	0.689	-0.591	0.515	0.578	1.474
X			165.100	8.410	173.000	268.600	0.107	0.762	-0.593	0.511	0.577	1.376
S			4.356	0.118	4.238	8.587	0.009	0.093	0.241	0.003	0.022	0.141
%RSD			2.639	1.401	2.450	3.197	8.768	12.180	40.650	0.613	3.850	10.250
Run	Time		67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:30:36		3.291	3.004	-0.181	0.471	10.330	9.902	-1.585	-0.410	1.343	139.700
2	10:31:03		3.659	2.761	0.012	0.078	8.535	8.867	0.015	0.037	-2.065	140.200
3	10:31:30		3.663	2.667	0.200	0.199	9.065	9.280	1.595	0.443	-2.690	141.800
X			3.538	2.811	0.011	0.249	9.310	9.350	0.009	0.023	-1.137	140.600
S			0.214	0.174	0.191	0.201	0.923	0.521	1.590	0.426	2.171	1.108
%RSD			6.036	6.184	1800.000	80.780	9.913	5.574	18640.000	1829.000	190.800	0.788
Run	Time		89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:30:36		91.4%	0.356	0.346	0.388	3.928	0.006	0.006	0.006	0.001	93.0%
2	10:31:03		91.2%	0.377	0.422	0.379	3.754	0.007	0.003	0.002	0.011	93.5%
3	10:31:30		90.9%	0.383	0.373	0.400	3.585	0.005	0.007	0.002	0.005	92.1%
X			91.2%	0.372	0.380	0.389	3.756	0.006	0.006	0.003	0.005	92.9%
S			0.3%	0.014	0.039	0.010	0.172	0.001	0.002	0.003	0.005	0.7%
%RSD			0.3	3.748	10.170	2.667	4.565	16.500	41.550	80.800	92.990	0.7
Run	Time		116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:30:36		0.032	0.090	0.134	0.115	50.890	50.630	97.4%	0.028	0.037	0.160
2	10:31:03		0.053	0.050	0.125	0.118	48.980	51.200	98.0%	0.024	0.028	0.152
3	10:31:30		0.052	0.051	0.131	0.133	50.370	50.580	99.0%	0.026	0.035	0.144
X			0.046	0.064	0.130	0.122	50.080	50.800	98.1%	0.026	0.033	0.152
S			0.012	0.022	0.005	0.010	0.986	0.345	0.8%	0.002	0.005	0.008
%RSD			25.690	35.140	3.891	7.815	1.969	0.678	0.8	6.169	14.960	5.489
Run	Time		207Pb	208Pb	209Bi							
			ppb	ppb	ppb							
1	10:30:36		0.155	0.154	102.0%							
2	10:31:03		0.137	0.140	102.7%							
3	10:31:30		0.155	0.148	102.3%							
X			0.149	0.147	102.3%							
S			0.010	0.007	0.3%							
%RSD			6.775	4.665	0.3							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:36:24	95.6%	0.006	10.700	11.730	-73.220	2885.000	12820.000	12940.000	16020.000	141.600
2	10:36:51	95.3%	0.030	12.730	11.860	-67.110	2944.000	12580.000	12730.000	16150.000	134.500
3	10:37:18	95.7%	0.001	11.480	12.490	-80.370	2946.000	12450.000	12670.000	15970.000	142.100
X		95.5%	0.012	11.640	12.030	-73.570	2925.000	12620.000	12780.000	16050.000	139.400
S		0.2%	0.016	1.026	0.402	6.638	34.610	187.300	141.900	94.000	4.229
%RSD		0.2	130.600	8.815	3.339	9.023	1.183	1.484	1.111	0.586	3.034
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:36:24	3587.000	62130.000	2718.000	37980.000	39250.000	95.3%	0.614	0.270	0.640	5009.000
2	10:36:51	3485.000	60900.000	2794.000	37460.000	37800.000	95.2%	0.536	0.197	0.599	5251.000
3	10:37:18	3493.000	60940.000	2698.000	37120.000	37550.000	94.8%	0.578	0.087	0.593	5504.000
X		3522.000	61320.000	2737.000	37520.000	38200.000	95.1%	0.576	0.185	0.611	5255.000
S		56.630	698.100	50.650	433.400	918.600	0.3%	0.039	0.092	0.025	247.600
%RSD		1.608	1.138	1.851	1.155	2.405	0.3	6.772	49.700	4.144	4.712
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:36:24	237.200	9.962	234.200	318.500	0.117	0.783	-0.586	0.485	0.707	7.032
2	10:36:51	231.400	9.580	232.700	322.800	0.128	0.746	-0.763	0.548	0.609	6.987
3	10:37:18	234.600	10.050	238.200	312.500	0.106	0.787	-0.328	0.555	0.565	6.739
X		234.400	9.865	235.000	317.900	0.117	0.772	-0.559	0.529	0.627	6.919
S		2.925	0.251	2.855	5.202	0.011	0.023	0.219	0.039	0.073	0.158
%RSD		1.248	2.541	1.215	1.636	9.589	2.919	39.110	7.365	11.650	2.278
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:36:24	9.631	8.467	0.486	-0.392	9.744	8.710	0.029	0.040	-1.427	123.600
2	10:36:51	8.596	8.325	0.336	0.360	8.774	9.436	1.114	0.245	-0.677	128.400
3	10:37:18	9.726	7.876	0.401	-0.412	7.604	9.091	5.483	1.209	3.026	123.700
X		9.318	8.223	0.408	-0.148	8.708	9.079	2.209	0.498	0.308	125.300
S		0.627	0.308	0.075	0.440	1.071	0.363	2.887	0.624	2.384	2.702
%RSD		6.727	3.748	18.450	297.200	12.300	4.000	130.700	125.400	775.400	2.157
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:36:24	91.1%	0.205	0.228	0.233	3.400	0.004	-0.000	0.002	0.002	92.0%
2	10:36:51	88.8%	0.277	0.254	0.243	1.674	-0.000	-0.000	0.011	0.002	92.3%
3	10:37:18	90.5%	0.296	0.210	0.257	2.755	0.001	-0.001	-0.002	0.004	92.0%
X		90.1%	0.260	0.231	0.244	2.610	0.002	-0.001	0.004	0.003	92.1%
S		1.2%	0.048	0.022	0.012	0.872	0.002	0.001	0.007	0.001	0.2%
%RSD		1.3	18.350	9.496	4.915	33.410	145.200	102.700	184.300	42.900	0.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:36:24	0.024	0.044	0.098	0.081	45.910	46.360	97.3%	0.014	0.020	0.241
2	10:36:51	0.041	0.039	0.122	0.095	47.170	46.130	98.5%	0.017	0.015	0.264
3	10:37:18	0.061	0.041	0.095	0.097	46.210	46.660	98.7%	0.014	0.011	0.255
X		0.042	0.041	0.105	0.091	46.430	46.380	98.2%	0.015	0.015	0.253
S		0.018	0.003	0.015	0.009	0.661	0.267	0.8%	0.002	0.004	0.012
%RSD		43.630	6.862	14.180	9.654	1.424	0.576	0.8	11.670	27.650	4.603
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	10:36:24	0.246	0.233	102.9%							
2	10:36:51	0.240	0.240	103.0%							
3	10:37:18	0.243	0.243	104.5%							
X		0.243	0.239	103.5%							
S		0.003	0.005	0.9%							
%RSD		1.219	1.976	0.9							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:42:12	94.4%	0.011	10.610	11.910	-46.450	3052.000	9448.000	9572.000	11190.000	270.200
2	10:42:39	94.9%	0.010	11.740	11.290	-53.400	3031.000	9142.000	9535.000	11180.000	266.000
3	10:43:06	95.1%	0.000	12.610	11.100	-51.050	3036.000	9499.000	9577.000	11300.000	263.500
X		94.8%	0.007	11.650	11.430	-50.300	3039.000	9363.000	9561.000	11220.000	266.600
S		0.3%	0.006	1.003	0.425	3.533	11.160	193.300	22.860	65.870	3.383
%RSD		0.4	81.710	8.607	3.718	7.024	0.367	2.065	0.239	0.587	1.269
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:42:12	3078.000	65350.000	2138.000	26850.000	26600.000	94.7%	0.717	-0.459	0.644	6896.000
2	10:42:39	3144.000	65460.000	2118.000	25920.000	27520.000	94.0%	0.564	-0.346	0.667	6690.000
3	10:43:06	3115.000	65730.000	2134.000	26340.000	26910.000	92.8%	0.774	-0.038	0.620	6898.000
X		3112.000	65510.000	2130.000	26370.000	27010.000	93.8%	0.685	-0.281	0.644	6828.000
S		33.210	198.600	10.520	466.300	464.700	1.0%	0.109	0.218	0.024	119.800
%RSD		1.067	0.303	0.494	1.768	1.720	1.0	15.880	77.480	3.658	1.754
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:42:12	380.500	14.380	393.100	444.600	0.108	0.837	-0.040	0.462	0.586	11.700
2	10:42:39	378.000	14.420	390.900	432.400	0.108	0.745	-0.169	0.520	0.641	12.100
3	10:43:06	375.600	14.450	384.700	429.300	0.110	0.844	-0.699	0.553	0.601	12.060
X		378.100	14.420	389.600	435.400	0.109	0.809	-0.302	0.512	0.609	11.950
S		2.452	0.037	4.384	8.063	0.001	0.055	0.349	0.046	0.029	0.222
%RSD		0.648	0.257	1.125	1.852	1.347	6.812	115.400	8.966	4.724	1.858
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:42:12	12.740	12.560	0.421	-0.322	7.575	9.591	1.437	0.355	-1.321	95.130
2	10:42:39	12.480	12.690	0.241	0.460	9.263	9.674	0.141	0.112	-3.890	94.760
3	10:43:06	12.990	12.290	0.023	-0.204	9.480	9.866	-3.410	-0.782	-1.280	97.080
X		12.740	12.520	0.228	-0.022	8.773	9.710	-0.611	-0.105	-2.164	95.660
S		0.253	0.206	0.200	0.422	1.043	0.141	2.509	0.599	1.495	1.247
%RSD		1.983	1.643	87.440	1947.000	11.880	1.450	410.900	569.400	69.100	1.303
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:42:12	88.9%	0.183	0.125	0.176	1.272	-0.000	0.002	-0.002	0.004	91.0%
2	10:42:39	89.0%	0.195	0.118	0.178	3.006	0.002	-0.001	-0.002	0.005	91.0%
3	10:43:06	88.3%	0.221	0.230	0.194	1.579	0.002	-0.001	0.002	0.011	90.8%
X		88.7%	0.199	0.158	0.183	1.952	0.001	-0.000	-0.001	0.007	90.9%
S		0.4%	0.020	0.063	0.010	0.925	0.001	0.002	0.003	0.004	0.1%
%RSD		0.4	9.905	39.700	5.486	47.380	103.400	812.100	505.900	58.630	0.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:42:12	0.029	0.051	0.092	0.085	39.670	41.260	97.9%	0.005	0.009	0.327
2	10:42:39	0.042	0.052	0.124	0.108	39.440	39.960	98.1%	0.013	0.009	0.313
3	10:43:06	0.033	0.047	0.122	0.144	40.230	41.080	97.6%	0.014	0.012	0.290
X		0.035	0.050	0.113	0.112	39.780	40.770	97.8%	0.011	0.010	0.310
S		0.007	0.003	0.018	0.030	0.407	0.705	0.3%	0.005	0.002	0.018
%RSD		19.150	5.372	15.670	26.540	1.023	1.730	0.3	44.600	15.590	5.892
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	10:42:12	0.321	0.309	103.4%							
2	10:42:39	0.264	0.286	103.3%							
3	10:43:06	0.323	0.299	105.0%							
X		0.303	0.298	103.9%							
S		0.033	0.012	1.0%							
%RSD		10.990	3.892	0.9							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:48:01	92.8%	-0.016	12.340	12.740	-53.540	3443.000	9253.000	9030.000	10790.000	202.900
2	10:48:28	93.3%	-0.004	11.650	12.390	-43.980	3466.000	9194.000	9315.000	11050.000	210.800
3	10:48:54	92.5%	0.006	12.090	12.500	-45.180	3527.000	9285.000	9111.000	10610.000	211.500
X		92.9%	-0.004	12.030	12.550	-47.570	3479.000	9244.000	9152.000	10810.000	208.400
S		0.4%	0.011	0.349	0.178	5.207	43.240	46.630	146.600	221.700	4.749
%RSD		0.4	249.300	2.900	1.419	10.950	1.243	0.504	1.602	2.050	2.279
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:48:01	3013.000	64740.000	2124.000	26620.000	26380.000	92.9%	0.672	0.418	0.656	5964.000
2	10:48:28	3082.000	65860.000	2144.000	27640.000	26880.000	89.7%	0.929	-0.166	0.654	6600.000
3	10:48:54	3018.000	64150.000	2122.000	26280.000	26170.000	93.0%	0.590	-0.381	0.622	6558.000
X		3038.000	64910.000	2130.000	26850.000	26470.000	91.9%	0.730	-0.043	0.644	6374.000
S		38.340	867.500	12.110	706.100	364.300	1.9%	0.177	0.414	0.019	355.300
%RSD		1.262	1.336	0.568	2.630	1.376	2.1	24.180	968.200	2.989	5.575
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:48:01	331.100	15.060	329.100	383.600	0.099	0.826	-0.224	0.518	0.623	11.140
2	10:48:28	328.300	15.440	340.800	383.400	0.096	0.650	-0.430	0.535	0.560	10.430
3	10:48:54	328.000	15.220	335.300	379.100	0.107	0.792	-0.336	0.612	0.537	11.590
X		329.200	15.240	335.100	382.000	0.100	0.756	-0.330	0.555	0.573	11.060
S		1.694	0.190	5.857	2.563	0.005	0.093	0.103	0.050	0.045	0.584
%RSD		0.515	1.247	1.748	0.671	5.363	12.340	31.370	9.001	7.810	5.282
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:48:01	11.900	12.010	0.004	-0.114	8.227	10.120	-0.163	-0.000	-2.592	92.350
2	10:48:28	12.420	12.460	-0.458	0.066	8.231	9.434	-0.727	-0.196	-0.219	93.130
3	10:48:54	11.660	11.920	0.161	-0.184	9.130	8.049	0.801	0.140	1.581	93.000
X		12.000	12.130	-0.098	-0.077	8.529	9.202	-0.030	-0.019	-0.410	92.830
S		0.391	0.289	0.322	0.129	0.520	1.056	0.772	0.169	2.093	0.415
%RSD		3.258	2.383	330.000	167.000	6.098	11.480	2612.000	887.200	511.000	0.447
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:48:01	88.7%	0.121	0.215	0.176	2.718	0.002	0.001	0.003	0.003	91.5%
2	10:48:28	87.2%	0.212	0.148	0.174	1.760	0.006	-0.000	-0.002	0.010	90.7%
3	10:48:54	88.9%	0.215	0.221	0.203	2.729	0.003	-0.001	0.007	0.004	90.6%
X		88.3%	0.183	0.195	0.184	2.402	0.004	-0.000	0.003	0.006	91.0%
S		1.0%	0.053	0.041	0.016	0.556	0.002	0.001	0.004	0.003	0.5%
%RSD		1.1	29.160	21.010	8.674	23.150	60.720	459.500	179.200	63.190	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:48:01	0.024	0.057	0.080	0.090	38.490	38.620	96.8%	0.009	0.006	0.318
2	10:48:28	0.047	0.042	0.090	0.121	38.000	39.080	97.4%	0.016	0.009	0.381
3	10:48:54	0.044	0.053	0.110	0.113	38.050	38.870	98.7%	0.006	0.010	0.332
X		0.038	0.051	0.093	0.108	38.180	38.860	97.6%	0.011	0.008	0.344
S		0.012	0.008	0.015	0.016	0.268	0.231	0.9%	0.005	0.002	0.033
%RSD		31.910	15.840	16.230	14.760	0.702	0.595	1.0	48.090	22.920	9.595
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	10:48:01	0.315	0.303	103.4%							
2	10:48:28	0.317	0.333	104.1%							
3	10:48:54	0.294	0.292	104.2%							
X		0.309	0.309	103.9%							
S		0.013	0.021	0.4%							
%RSD		4.270	6.934	0.4							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:48	92.1%	77.410	113.700	114.600	-46.100	4341.000	10010.000	10190.000	11600.000	335.900
2	10:54:15	93.0%	73.340	114.000	112.400	-47.330	4327.000	10000.000	10200.000	12170.000	340.000
3	10:54:42	89.2%	75.030	110.700	115.900	-41.560	4521.000	9838.000	9879.000	11640.000	330.300
X		91.4%	75.260	112.800	114.300	-45.000	4396.000	9949.000	10090.000	11800.000	335.400
S		2.0%	2.045	1.824	1.740	3.039	108.200	96.760	182.500	317.400	4.899
%RSD		2.1	2.718	1.618	1.522	6.753	2.462	0.973	1.808	2.689	1.461
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:48	4085.000	62200.000	3164.000	26940.000	28160.000	90.4%	101.400	100.100	99.100	5319.000
2	10:54:15	4151.000	62590.000	3214.000	27210.000	27270.000	88.7%	103.000	99.700	97.100	5651.000
3	10:54:42	3966.000	60950.000	3179.000	26340.000	26710.000	90.0%	100.600	95.480	95.430	4892.000
X		4067.000	61910.000	3185.000	26830.000	27380.000	89.7%	101.700	98.440	97.210	5287.000
S		93.870	860.300	25.680	443.800	731.400	0.9%	1.247	2.577	1.837	380.900
%RSD		2.308	1.390	0.806	1.654	2.671	1.0	1.227	2.618	1.889	7.203
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:48	1379.000	112.900	1380.000	1387.000	94.270	97.150	93.160	95.370	99.420	108.100
2	10:54:15	1385.000	112.500	1364.000	1376.000	96.430	100.800	94.100	95.320	96.370	105.300
3	10:54:42	1341.000	111.500	1310.000	1306.000	91.610	96.390	92.660	95.980	97.720	108.700
X		1368.000	112.300	1352.000	1356.000	94.100	98.120	93.310	95.560	97.840	107.400
S		23.850	0.693	36.610	44.040	2.413	2.376	0.727	0.370	1.528	1.810
%RSD		1.743	0.617	2.709	3.247	2.565	2.421	0.779	0.387	1.562	1.686
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:48	111.100	106.200	97.400	98.710	10.450	8.486	419.800	98.730	-0.786	190.600
2	10:54:15	112.600	110.200	97.840	100.500	11.120	10.660	425.500	97.120	-3.089	197.400
3	10:54:42	110.400	107.500	95.580	100.100	9.909	9.938	424.900	98.200	-2.078	194.100
X		111.400	108.000	96.940	99.780	10.490	9.696	423.400	98.020	-1.984	194.100
S		1.137	2.038	1.202	0.947	0.605	1.109	3.161	0.819	1.155	3.398
%RSD		1.021	1.888	1.240	0.949	5.769	11.440	0.747	0.835	58.180	1.751
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:48	85.4%	101.700	101.000	101.600	103.500	96.690	99.970	100.500	100.100	86.9%
2	10:54:15	84.4%	106.000	104.900	104.100	101.600	97.600	97.810	99.550	98.970	88.4%
3	10:54:42	84.3%	105.000	103.400	103.500	101.600	98.520	97.600	100.700	99.790	87.5%
X		84.7%	104.200	103.100	103.100	102.200	97.600	98.460	100.200	99.610	87.6%
S		0.6%	2.213	1.956	1.280	1.092	0.913	1.313	0.600	0.575	0.8%
%RSD		0.7	2.123	1.897	1.242	1.068	0.936	1.334	0.599	0.577	0.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:48	100.200	100.200	98.490	107.500	134.600	135.100	93.4%	99.180	98.620	100.800
2	10:54:15	101.000	100.900	97.980	105.600	134.500	135.700	93.9%	100.500	100.300	103.300
3	10:54:42	101.500	100.800	99.700	107.400	136.200	139.100	93.6%	99.050	97.610	101.600
X		100.900	100.600	98.720	106.800	135.100	136.600	93.6%	99.590	98.840	101.900
S		0.657	0.364	0.884	1.100	0.922	2.182	0.2%	0.822	1.350	1.287
%RSD		0.651	0.361	0.895	1.030	0.682	1.597	0.2	0.825	1.365	1.263
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	10:53:48	100.100	99.550	97.6%							
2	10:54:15	102.900	101.700	96.8%							
3	10:54:42	101.200	100.100	98.3%							
X		101.400	100.500	97.6%							
S		1.429	1.146	0.8%							
%RSD		1.409	1.141	0.8							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:59:38	90.5%	76.520	118.600	112.700	-45.820	4513.000	10170.000	10210.000	11880.000	341.100
2	11:00:04	90.8%	77.450	114.100	114.000	-45.340	4448.000	10160.000	10090.000	11970.000	332.400
3	11:00:31	90.6%	74.800	110.700	107.700	-58.160	4405.000	9955.000	10240.000	11940.000	345.600
X		90.6%	76.260	114.500	111.500	-49.770	4455.000	10100.000	10180.000	11930.000	339.700
S		0.1%	1.342	3.944	3.320	7.267	54.360	122.800	76.860	49.040	6.691
%RSD		0.2	1.760	3.445	2.978	14.600	1.220	1.216	0.755	0.411	1.970
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:59:38	4256.000	57890.000	3118.000	27490.000	27940.000	88.9%	100.400	99.820	96.440	4722.000
2	11:00:04	4088.000	56630.000	3154.000	26580.000	26700.000	90.9%	102.100	96.690	94.930	3801.000
3	11:00:31	4113.000	57050.000	3112.000	27670.000	28390.000	89.5%	100.100	102.100	95.370	4408.000
X		4152.000	57190.000	3128.000	27250.000	27670.000	89.8%	100.900	99.520	95.580	4310.000
S		90.720	643.200	22.500	589.300	873.500	1.0%	1.100	2.692	0.777	468.100
%RSD		2.185	1.125	0.720	2.163	3.156	1.1	1.090	2.705	0.813	10.860
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:59:38	1370.000	113.900	1357.000	1400.000	93.010	98.280	92.690	97.010	98.990	109.600
2	11:00:04	1336.000	108.200	1356.000	1350.000	92.080	95.090	94.440	95.610	99.420	109.100
3	11:00:31	1353.000	110.900	1374.000	1367.000	92.200	98.660	93.430	94.020	96.350	109.400
X		1353.000	111.000	1362.000	1372.000	92.430	97.340	93.520	95.540	98.250	109.400
S		16.900	2.854	9.982	25.400	0.502	1.964	0.881	1.497	1.662	0.272
%RSD		1.249	2.572	0.733	1.851	0.543	2.018	0.942	1.566	1.692	0.248
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:59:38	114.800	108.000	95.710	100.100	8.717	8.757	415.400	98.710	0.948	195.000
2	11:00:04	110.300	107.500	96.270	95.150	9.781	9.177	419.000	99.100	1.220	192.000
3	11:00:31	109.200	107.100	98.860	95.460	9.548	7.757	414.100	98.150	-0.764	193.400
X		111.400	107.500	96.950	96.890	9.349	8.564	416.200	98.650	0.468	193.500
S		2.941	0.438	1.679	2.760	0.559	0.730	2.529	0.475	1.076	1.511
%RSD		2.639	0.408	1.732	2.848	5.984	8.521	0.608	0.482	229.800	0.781
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:59:38	84.7%	103.200	101.800	101.000	103.500	97.710	99.240	99.410	99.360	85.2%
2	11:00:04	85.3%	103.800	103.200	102.400	105.200	96.920	98.200	99.230	99.830	86.4%
3	11:00:31	85.1%	105.300	103.300	103.400	99.300	99.810	99.350	100.200	101.600	85.9%
X		85.1%	104.100	102.800	102.300	102.600	98.150	98.930	99.600	100.300	85.8%
S		0.3%	1.063	0.831	1.207	3.022	1.491	0.635	0.493	1.171	0.6%
%RSD		0.4	1.022	0.809	1.180	2.944	1.519	0.642	0.495	1.168	0.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:59:38	101.300	100.300	99.680	107.400	135.300	139.500	91.0%	98.940	98.890	101.800
2	11:00:04	101.300	100.100	99.100	107.300	133.200	138.000	93.4%	97.640	97.790	100.300
3	11:00:31	101.800	100.900	100.800	108.700	134.900	138.600	93.5%	100.500	99.170	101.500
X		101.500	100.400	99.850	107.800	134.500	138.700	92.6%	99.030	98.620	101.200
S		0.338	0.437	0.849	0.809	1.130	0.784	1.4%	1.437	0.730	0.777
%RSD		0.333	0.435	0.850	0.750	0.840	0.565	1.5	1.451	0.740	0.768
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	10:59:38	101.000	100.600	94.8%							
2	11:00:04	101.500	100.500	97.2%							
3	11:00:31	101.000	100.500	97.2%							
X		101.200	100.500	96.4%							
S		0.293	0.068	1.4%							
%RSD		0.289	0.068	1.4							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:05:27	89.8%	0.034	2.902	2.345	-3.393	732.200	2157.000	2171.000	2174.000	42.070
2	11:05:54	91.9%	0.017	2.092	2.507	-18.080	715.300	2141.000	2101.000	2213.000	42.630
3	11:06:21	91.3%	0.024	1.778	2.626	-20.340	716.200	2138.000	2104.000	2211.000	44.320
X		91.0%	0.025	2.258	2.493	-13.940	721.200	2145.000	2125.000	2199.000	43.010
S		1.1%	0.008	0.580	0.141	9.204	9.494	10.460	39.530	22.150	1.173
%RSD		1.2	32.860	25.700	5.649	66.020	1.316	0.488	1.860	1.007	2.727
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:05:27	531.400	13840.000	421.300	4963.000	5171.000	94.0%	0.204	0.323	0.118	976.000
2	11:05:54	534.200	13880.000	423.500	5302.000	5174.000	92.1%	0.086	0.035	0.113	1145.000
3	11:06:21	543.000	13870.000	426.500	5584.000	5264.000	90.4%	0.110	-0.031	0.087	1181.000
X		536.200	13860.000	423.800	5283.000	5203.000	92.2%	0.133	0.109	0.106	1101.000
S		6.095	19.710	2.621	310.600	52.610	1.8%	0.062	0.188	0.017	109.500
%RSD		1.137	0.142	0.618	5.880	1.011	2.0	46.500	173.000	15.800	9.947
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:05:27	65.650	2.926	64.030	79.510	0.020	0.245	-1.112	0.161	0.263	2.350
2	11:05:54	62.680	3.223	64.240	82.510	0.017	0.228	-0.949	0.218	0.180	2.539
3	11:06:21	69.540	3.118	65.920	78.350	0.020	0.251	-1.044	0.229	0.249	2.285
X		65.950	3.089	64.730	80.120	0.019	0.241	-1.035	0.203	0.231	2.391
S		3.439	0.150	1.032	2.147	0.002	0.012	0.082	0.036	0.044	0.132
%RSD		5.215	4.861	1.595	2.679	8.992	4.838	7.915	17.890	19.170	5.523
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:05:27	2.559	2.755	-0.277	-0.205	1.444	1.351	-0.138	-0.055	-0.303	18.830
2	11:05:54	2.695	2.355	0.235	-0.136	1.529	1.472	3.786	0.885	-1.927	18.840
3	11:06:21	2.051	2.619	0.064	-0.184	1.798	1.747	0.557	0.078	0.387	18.900
X		2.435	2.576	0.007	-0.175	1.590	1.523	1.402	0.303	-0.614	18.860
S		0.339	0.203	0.261	0.036	0.185	0.203	2.094	0.509	1.188	0.039
%RSD		13.930	7.888	3579.000	20.370	11.620	13.310	149.400	168.000	193.400	0.206
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:05:27	88.0%	0.272	0.165	0.230	0.177	0.003	0.003	0.002	0.002	91.8%
2	11:05:54	88.3%	0.246	0.249	0.232	0.277	0.001	0.001	-0.002	0.004	91.8%
3	11:06:21	87.9%	0.256	0.296	0.285	0.067	0.005	-0.000	0.002	0.004	92.0%
X		88.1%	0.258	0.237	0.249	0.174	0.003	0.001	0.001	0.003	91.8%
S		0.2%	0.013	0.066	0.031	0.105	0.002	0.002	0.003	0.001	0.1%
%RSD		0.3	5.071	27.940	12.640	60.420	72.010	137.800	338.400	42.100	0.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:05:27	0.031	0.052	0.146	0.150	8.154	8.043	95.8%	0.011	0.012	0.053
2	11:05:54	0.031	0.034	0.179	0.139	7.865	8.153	97.1%	0.011	0.017	0.083
3	11:06:21	0.037	0.030	0.142	0.172	7.548	8.241	98.6%	0.017	0.013	0.080
X		0.033	0.039	0.156	0.154	7.856	8.146	97.2%	0.013	0.014	0.072
S		0.004	0.012	0.021	0.017	0.303	0.099	1.4%	0.003	0.003	0.016
%RSD		11.190	30.050	13.250	10.760	3.858	1.217	1.4	25.110	22.110	22.770
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	11:05:27	0.069	0.071	105.1%							
2	11:05:54	0.060	0.073	105.5%							
3	11:06:21	0.066	0.077	106.7%							
X		0.065	0.074	105.8%							
S		0.004	0.003	0.8%							
%RSD		6.696	4.234	0.7							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:17	89.6%	78.710	119.200	115.200	-42.670	4539.000	9921.000	10150.000	11710.000	307.900
2	11:11:44	90.8%	77.280	116.200	116.800	-48.400	4432.000	9759.000	9726.000	11720.000	311.600
3	11:12:11	90.5%	78.450	116.400	115.300	-44.620	4432.000	10000.000	10070.000	11680.000	318.500
X		90.3%	78.150	117.300	115.800	-45.230	4468.000	9893.000	9979.000	11700.000	312.700
S		0.6%	0.759	1.678	0.899	2.913	61.640	122.700	223.400	20.180	5.415
%RSD		0.7	0.972	1.431	0.776	6.440	1.380	1.240	2.238	0.172	1.732
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:17	4077.000	63650.000	3218.000	26860.000	27300.000	89.8%	105.100	101.600	99.480	4360.000
2	11:11:44	3924.000	62830.000	3155.000	26710.000	26630.000	89.5%	104.400	100.900	99.270	4643.000
3	11:12:11	4115.000	64220.000	3295.000	26890.000	28260.000	87.3%	105.000	101.400	101.800	4098.000
X		4039.000	63570.000	3223.000	26820.000	27400.000	88.9%	104.800	101.300	100.200	4367.000
S		101.200	699.200	69.710	94.940	817.500	1.4%	0.355	0.372	1.424	272.400
%RSD		2.506	1.100	2.163	0.354	2.984	1.5	0.339	0.367	1.422	6.237
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:17	1385.000	115.300	1380.000	1380.000	97.240	99.040	97.920	97.120	99.780	108.200
2	11:11:44	1362.000	114.100	1324.000	1374.000	95.390	100.600	97.100	97.820	96.220	109.600
3	11:12:11	1417.000	116.300	1405.000	1377.000	96.900	101.400	99.130	99.470	93.340	104.200
X		1388.000	115.200	1370.000	1377.000	96.510	100.300	98.050	98.140	96.450	107.300
S		27.880	1.132	41.060	2.927	0.985	1.175	1.021	1.207	3.229	2.779
%RSD		2.008	0.982	2.998	0.213	1.020	1.171	1.041	1.230	3.348	2.589
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:17	108.300	109.200	99.710	98.560	8.211	8.669	437.600	101.400	0.156	192.100
2	11:11:44	109.300	107.700	100.100	99.970	9.871	8.426	418.300	98.140	-1.518	193.200
3	11:12:11	113.700	110.300	101.900	102.500	8.116	9.648	464.800	103.200	-2.383	199.000
X		110.400	109.100	100.600	100.300	8.733	8.914	440.200	100.900	-1.248	194.800
S		2.900	1.310	1.171	1.989	0.987	0.647	23.340	2.563	1.291	3.716
%RSD		2.626	1.201	1.165	1.982	11.300	7.261	5.302	2.540	103.400	1.908
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:17	86.4%	105.100	105.600	105.500	113.900	101.300	100.200	101.900	102.500	89.0%
2	11:11:44	86.9%	106.300	106.900	106.100	112.200	101.600	102.300	104.500	104.000	88.3%
3	11:12:11	83.9%	111.700	111.000	108.800	108.900	99.040	99.340	101.700	102.200	90.2%
X		85.7%	107.700	107.800	106.800	111.700	100.700	100.600	102.700	102.900	89.1%
S		1.6%	3.505	2.801	1.765	2.526	1.416	1.534	1.566	0.988	1.0%
%RSD		1.9	3.254	2.598	1.652	2.262	1.407	1.524	1.524	0.960	1.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:17	104.600	104.000	98.500	107.700	135.100	140.500	97.1%	102.700	102.000	105.200
2	11:11:44	105.500	105.500	100.400	110.000	135.700	139.200	97.4%	103.800	102.400	103.700
3	11:12:11	102.600	102.300	98.390	106.500	135.100	139.100	97.5%	103.300	101.200	104.700
X		104.200	103.900	99.090	108.100	135.300	139.600	97.3%	103.300	101.900	104.500
S		1.489	1.562	1.124	1.822	0.383	0.768	0.2%	0.537	0.568	0.740
%RSD		1.428	1.503	1.134	1.686	0.283	0.550	0.2	0.520	0.558	0.708
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	11:11:17	102.400	103.000	105.7%							
2	11:11:44	104.000	103.000	105.3%							
3	11:12:11	103.200	102.900	105.7%							
X		103.200	103.000	105.6%							
S		0.780	0.079	0.2%							
%RSD		0.756	0.076	0.2							

CCV MW15278 10/26/2020 11:16:42 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:17:09	81.2%	295.400	316.300	308.200	-16.910	±61130.000	±60550.000	±61090.000	±60840.000	299.300
2	11:17:36	81.5%	309.300	297.300	305.400	-8.918	±61170.000	±60220.000	±60860.000	±59870.000	296.500
3	11:18:03	81.5%	302.800	307.900	305.700	-5.407	±61580.000	±60790.000	±60880.000	±60310.000	303.300
X		81.4%	100.827%	102.397%	102.147%	-10.410	±102.151%	±60520.000	±60940.000	±100.566%	99.901%
S		0.2%	n/a	n/a	n/a	5.896	±n/a	±286.600	±129.300	±n/a	n/a
%RSD		0.2	2.309	3.108	0.511	56.630	±0.405	±0.474	±0.212	±0.806	1.147
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:17:09	±3417.000	278.800	±62500.000	61700.000	±62480.000	84.9%	299.300	310.700	302.600	-286.200
2	11:17:36	±3331.000	257.800	±63990.000	61500.000	±63320.000	85.8%	291.200	307.200	293.200	469.600
3	11:18:03	±3325.000	275.900	±62210.000	60850.000	±64040.000	85.1%	304.700	304.600	288.800	2265.000
X		±3358.000	270.900	±104.833%	61350.000	±105.470%	85.3%	99.473%	102.500%	98.285%	816.100
S		±51.350	11.370	±n/a	441.100	±n/a	0.5%	n/a	n/a	n/a	1310.000
%RSD		±1.529	4.197	±1.520	0.719	±1.230	0.6	2.280	0.994	2.379	160.600
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:17:09	±61290.000	294.600	±61760.000	±60890.000	292.000	289.800	286.200	278.500	285.000	289.800
2	11:17:36	±61950.000	296.200	±59800.000	±59200.000	290.900	291.400	286.300	276.200	296.400	294.300
3	11:18:03	±61220.000	296.600	±61440.000	±60640.000	285.200	294.400	288.700	278.600	294.100	296.400
X		±61490.000	98.593%	±61000.000	±100.406%	96.458%	97.280%	287.100	277.800	97.287%	97.829%
S		±404.500	n/a	±1053.000	±n/a	n/a	n/a	1.453	1.356	n/a	n/a
%RSD		±0.658	0.363	±1.727	±1.508	1.263	0.804	0.506	0.488	2.065	1.156
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:17:09	288.800	284.500	286.900	283.700	0.990	-0.290	1180.000	283.000	-4.026	292.600
2	11:17:36	283.000	282.600	278.300	283.500	2.056	-0.797	1213.000	291.800	-2.953	295.200
3	11:18:03	284.100	285.100	286.300	282.900	1.259	-0.155	1251.000	298.000	-0.492	294.200
X		285.300	284.100	94.619%	283.300	1.435	-0.414	1214.000	96.981%	-2.490	97.997%
S		3.077	1.287	n/a	0.426	0.555	0.339	35.410	n/a	1.812	n/a
%RSD		1.078	0.453	1.686	0.150	38.650	81.790	2.916	2.594	72.760	0.452
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:17:09	81.3%	300.200	301.100	296.900	280.200	285.400	284.700	287.600	288.700	81.0%
2	11:17:36	80.7%	309.300	309.200	306.400	290.000	287.700	287.100	295.900	293.400	80.3%
3	11:18:03	81.0%	311.000	315.900	314.800	295.000	283.300	284.300	288.700	290.700	81.3%
X		81.0%	102.270%	102.913%	306.000	288.400	95.152%	285.400	290.700	96.981%	80.9%
S		0.3%	n/a	n/a	8.988	7.546	n/a	1.472	4.542	n/a	0.5%
%RSD		0.4	1.880	2.396	2.937	2.617	0.762	0.516	1.562	0.807	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:17:09	295.500	297.000	295.300	320.200	283.700	290.900	86.9%	298.400	303.200	303.100
2	11:17:36	302.800	300.600	298.300	323.300	287.200	296.400	87.4%	301.600	303.500	303.400
3	11:18:03	300.200	299.800	297.300	322.300	286.500	292.800	87.8%	299.000	298.300	298.500
X		99.842%	99.718%	297.000	107.312%	95.271%	97.799%	87.4%	299.700	100.556%	100.543%
S		n/a	n/a	1.516	n/a	n/a	n/a	0.4%	1.694	n/a	n/a
%RSD		1.232	0.639	0.511	0.495	0.648	0.951	0.5	0.565	0.970	0.914
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	11:17:09	302.500	302.100	87.1%							
2	11:17:36	303.700	302.300	87.9%							
3	11:18:03	303.300	300.100	88.6%							
X		101.050%	100.501%	87.8%							
S		n/a	n/a	0.8%							
%RSD		0.205	0.396	0.9							

CCB IM10195-01 10/26/2020 11:22:34 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:23:01	88.2%	0.044	0.313	0.225	-3.561	9.773	1.693	1.742	1.581	0.010
2	11:23:28	89.0%	0.030	0.339	0.276	2.702	9.445	1.877	1.923	1.596	0.037
3	11:23:55	89.8%	0.006	0.296	0.418	6.993	7.697	1.778	1.849	1.517	0.014
X		89.0%	0.027	0.316	0.306	2.045	8.972	1.783	1.838	1.564	0.020
S		0.8%	0.019	0.021	0.100	5.308	1.116	0.092	0.091	0.042	0.015
%RSD		0.9	70.870	6.779	32.720	259.600	12.440	5.150	4.945	2.662	72.930
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:23:01	-110.100	231.800	4.965	0.793	-27.290	92.1%	0.025	-0.002	0.013	-4.280
2	11:23:28	-110.300	230.000	5.864	-0.219	-25.520	90.7%	0.006	0.003	-0.035	14.650
3	11:23:55	-110.400	235.500	3.385	1.818	-26.580	92.2%	0.005	0.027	0.038	-12.350
X		-110.200	232.400	4.738	0.797	-26.460	91.6%	0.012	0.009	0.005	-0.662
S		0.155	2.837	1.255	1.018	0.892	0.8%	0.012	0.016	0.037	13.860
%RSD		0.141	1.221	26.480	127.700	3.372	0.9	96.850	164.600	710.100	2092.000
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:23:01	1.082	0.012	-3.851	8.690	0.007	0.015	-0.689	0.004	0.014	-0.053
2	11:23:28	1.633	-0.003	-4.109	8.326	0.001	0.056	-0.258	0.015	0.051	-0.053
3	11:23:55	1.071	0.010	-4.274	8.618	0.000	0.015	-0.505	-0.018	0.008	0.019
X		1.262	0.006	-4.078	8.545	0.003	0.029	-0.484	0.000	0.024	-0.029
S		0.321	0.008	0.213	0.193	0.004	0.024	0.217	0.017	0.023	0.041
%RSD		25.460	133.100	5.224	2.258	145.000	81.860	44.720	6272.000	95.360	142.400
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:23:01	0.114	0.032	0.022	-0.022	-0.201	-0.571	0.558	0.194	-1.894	0.004
2	11:23:28	0.046	-0.077	0.025	-0.561	-0.597	-0.293	0.970	0.207	0.151	0.011
3	11:23:55	-0.151	-0.109	-0.027	-0.199	-0.370	-0.665	0.850	0.288	-2.894	0.011
X		0.003	-0.051	0.007	-0.261	-0.389	-0.510	0.793	0.230	-1.546	0.009
S		0.137	0.074	0.029	0.275	0.199	0.193	0.212	0.051	1.552	0.004
%RSD		4614.000	143.600	424.100	105.300	51.110	37.940	26.730	22.320	100.400	43.330
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:23:01	87.6%	0.727	0.585	0.619	-0.392	0.008	0.011	-0.004	0.010	87.3%
2	11:23:28	86.4%	0.670	0.806	0.810	-0.147	0.020	0.003	-0.004	0.002	88.6%
3	11:23:55	88.2%	0.689	0.782	0.733	-0.143	0.010	0.008	0.005	0.011	87.8%
X		87.4%	0.695	0.724	0.721	-0.227	0.013	0.008	-0.001	0.008	87.9%
S		0.9%	0.029	0.121	0.096	0.142	0.007	0.004	0.005	0.005	0.7%
%RSD		1.1	4.204	16.720	13.330	62.630	51.680	54.760	652.900	66.210	0.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:23:01	0.069	0.088	0.546	0.530	0.021	0.001	89.8%	0.011	0.006	0.008
2	11:23:28	0.068	0.107	0.549	0.633	-0.002	0.001	92.7%	0.008	0.011	-0.001
3	11:23:55	0.067	0.121	0.558	0.563	-0.002	-0.011	93.9%	0.005	0.009	0.004
X		0.068	0.105	0.551	0.575	0.006	-0.003	92.1%	0.008	0.009	0.004
S		0.001	0.017	0.006	0.053	0.013	0.007	2.1%	0.003	0.003	0.005
%RSD		2.089	15.800	1.099	9.185	227.300	252.500	2.2	42.910	28.430	129.600
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	11:23:01	0.010	0.009	93.9%							
2	11:23:28	0.013	0.010	96.1%							
3	11:23:55	0.009	0.011	98.2%							
X		0.011	0.010	96.1%							
S		0.002	0.001	2.1%							
%RSD		16.350	10.140	2.2							

VJ15060-005

10/26/2020 11:28:22

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:49	90.3%	-0.011	14.630	14.370	-63.370	5101.000	12070.000	11980.000	14400.000	226.800
2	11:29:16	92.2%	-0.006	12.790	14.150	-63.830	5071.000	12050.000	11850.000	14510.000	233.100
3	11:29:43	92.3%	-0.021	13.470	13.730	-65.430	5076.000	12130.000	12020.000	14200.000	226.600
X		91.6%	-0.013	13.630	14.080	-64.210	5083.000	12080.000	11950.000	14370.000	228.800
S		1.1%	0.008	0.930	0.323	1.078	15.910	41.070	89.290	154.500	3.712
%RSD		1.3	59.300	6.824	2.296	1.679	0.313	0.340	0.747	1.075	1.622
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:49	3325.000	62290.000	2476.000	35170.000	36300.000	92.0%	0.556	0.136	0.600	3220.000
2	11:29:16	3195.000	62140.000	2406.000	34860.000	35810.000	92.3%	0.473	0.245	0.675	3670.000
3	11:29:43	3275.000	62750.000	2402.000	35390.000	35970.000	91.6%	0.457	0.096	0.791	4116.000
X		3265.000	62390.000	2428.000	35140.000	36030.000	92.0%	0.495	0.159	0.689	3669.000
S		65.410	317.700	41.600	269.500	249.800	0.3%	0.053	0.077	0.097	448.000
%RSD		2.003	0.509	1.714	0.767	0.693	0.4	10.790	48.640	14.030	12.210
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:49	266.500	21.560	271.500	350.300	0.192	0.964	-0.097	1.102	1.370	13.040
2	11:29:16	264.100	21.920	270.400	352.100	0.199	0.670	-0.286	1.208	1.241	12.770
3	11:29:43	263.200	21.650	264.200	341.100	0.189	0.732	0.023	1.167	1.288	13.040
X		264.600	21.710	268.700	347.800	0.193	0.788	-0.120	1.159	1.299	12.950
S		1.682	0.188	3.953	5.901	0.005	0.155	0.156	0.053	0.065	0.155
%RSD		0.635	0.864	1.471	1.696	2.795	19.640	129.800	4.608	5.025	1.197
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:49	13.010	13.070	0.323	0.027	9.933	9.626	0.934	0.195	-0.544	112.000
2	11:29:16	13.550	14.390	0.625	-0.424	10.190	10.370	4.485	1.052	-0.930	111.700
3	11:29:43	14.140	13.850	0.009	0.167	10.290	10.150	5.451	1.213	0.683	111.200
X		13.570	13.770	0.319	-0.077	10.140	10.050	3.623	0.820	-0.263	111.700
S		0.563	0.666	0.308	0.309	0.185	0.382	2.379	0.547	0.842	0.423
%RSD		4.151	4.838	96.430	402.700	1.826	3.805	65.650	66.690	319.800	0.379
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:49	86.8%	0.335	0.426	0.385	1.374	0.005	0.004	0.002	0.004	90.4%
2	11:29:16	87.8%	0.401	0.427	0.400	1.270	0.006	0.008	-0.003	0.003	90.0%
3	11:29:43	88.1%	0.383	0.425	0.431	1.688	0.007	0.005	0.011	0.012	91.3%
X		87.6%	0.373	0.426	0.405	1.444	0.006	0.006	0.003	0.007	90.6%
S		0.7%	0.034	0.001	0.023	0.218	0.001	0.002	0.007	0.005	0.6%
%RSD		0.8	9.185	0.190	5.762	15.080	16.710	30.360	210.500	76.700	0.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:49	0.053	0.087	0.328	0.247	49.140	50.950	97.2%	0.007	0.008	0.306
2	11:29:16	0.062	0.075	0.286	0.353	49.790	50.810	98.4%	0.003	0.009	0.347
3	11:29:43	0.057	0.072	0.316	0.313	49.250	51.210	99.3%	0.009	0.008	0.316
X		0.058	0.078	0.310	0.304	49.390	50.990	98.3%	0.006	0.008	0.323
S		0.005	0.008	0.021	0.053	0.350	0.203	1.0%	0.003	0.001	0.021
%RSD		7.963	10.410	6.893	17.520	0.708	0.399	1.1	46.160	7.076	6.626
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	11:28:49	0.310	0.327	106.8%							
2	11:29:16	0.321	0.325	106.9%							
3	11:29:43	0.344	0.317	106.4%							
X		0.325	0.323	106.7%							
S		0.017	0.005	0.2%							
%RSD		5.375	1.627	0.2							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:34:37	93.8%	0.011	14.040	14.460	-82.670	5468.000	13570.000	13670.000	16910.000	51.120
2	11:35:04	93.8%	-0.004	12.920	14.230	-82.210	5452.000	13520.000	13630.000	17580.000	52.880
3	11:35:31	93.5%	-0.013	14.070	13.530	-77.840	5529.000	13500.000	13720.000	17320.000	50.510
X		93.7%	-0.002	13.680	14.070	-80.910	5483.000	13530.000	13670.000	17270.000	51.500
S		0.2%	0.012	0.654	0.484	2.665	40.440	33.160	48.410	336.900	1.233
%RSD		0.2	681.900	4.780	3.443	3.294	0.738	0.245	0.354	1.951	2.393
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:34:37	3356.000	60250.000	2627.000	41820.000	42560.000	93.3%	0.649	0.174	0.615	4471.000
2	11:35:04	3458.000	60370.000	2652.000	41850.000	42790.000	91.0%	0.708	-0.341	0.483	5003.000
3	11:35:31	3361.000	59960.000	2698.000	41070.000	43140.000	91.7%	0.395	-0.131	0.528	5077.000
X		3392.000	60190.000	2659.000	41580.000	42830.000	92.0%	0.584	-0.100	0.542	4850.000
S		57.390	214.100	35.980	440.500	290.600	1.2%	0.166	0.259	0.067	330.600
%RSD		1.692	0.356	1.353	1.059	0.679	1.3	28.490	260.100	12.440	6.817
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:34:37	178.500	17.480	176.800	267.400	0.338	0.778	-0.048	1.115	1.263	19.320
2	11:35:04	180.800	18.020	182.100	271.400	0.344	0.895	-0.040	1.054	1.131	19.010
3	11:35:31	181.400	17.480	176.700	267.800	0.295	0.703	-0.461	1.008	1.056	19.970
X		180.200	17.660	178.600	268.900	0.326	0.792	-0.183	1.059	1.150	19.430
S		1.510	0.314	3.101	2.207	0.026	0.097	0.241	0.054	0.105	0.490
%RSD		0.838	1.779	1.737	0.821	8.127	12.250	131.600	5.082	9.100	2.520
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:34:37	21.620	20.200	0.140	0.188	8.805	7.448	-1.825	-0.386	-2.312	169.400
2	11:35:04	23.040	20.530	0.142	0.316	8.848	8.751	0.489	0.071	0.629	171.700
3	11:35:31	21.920	20.600	0.458	0.325	9.064	8.768	5.570	1.244	-1.866	173.400
X		22.190	20.440	0.247	0.276	8.905	8.322	1.411	0.310	-1.183	171.500
S		0.748	0.213	0.183	0.077	0.139	0.758	3.783	0.841	1.585	1.969
%RSD		3.370	1.042	74.240	27.830	1.556	9.103	268.000	271.400	134.000	1.148
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:34:37	89.8%	0.254	0.327	0.344	4.934	0.005	0.002	0.011	0.011	91.7%
2	11:35:04	89.0%	0.284	0.292	0.335	3.751	0.005	-0.000	0.002	0.007	91.9%
3	11:35:31	87.0%	0.342	0.319	0.357	4.672	0.001	0.002	0.011	0.003	92.4%
X		88.6%	0.293	0.313	0.345	4.453	0.004	0.001	0.008	0.007	92.0%
S		1.5%	0.045	0.019	0.011	0.621	0.003	0.001	0.005	0.004	0.4%
%RSD		1.7	15.370	5.959	3.114	13.950	67.470	104.300	65.300	52.660	0.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:34:37	0.059	0.057	0.170	0.202	55.170	55.310	98.7%	0.005	0.005	0.304
2	11:35:04	0.057	0.053	0.175	0.225	53.180	55.170	99.9%	0.007	0.010	0.306
3	11:35:31	0.039	0.055	0.189	0.234	53.840	55.670	101.0%	0.011	0.007	0.316
X		0.051	0.055	0.178	0.220	54.060	55.380	99.9%	0.008	0.007	0.309
S		0.011	0.002	0.010	0.017	1.014	0.259	1.1%	0.003	0.003	0.007
%RSD		21.160	3.448	5.553	7.642	1.875	0.467	1.1	38.210	39.850	2.135
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	11:34:37	0.297	0.294	107.9%							
2	11:35:04	0.286	0.298	108.1%							
3	11:35:31	0.336	0.304	108.0%							
X		0.306	0.299	108.0%							
S		0.026	0.005	0.1%							
%RSD		8.640	1.574	0.1							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:25	94.9%	0.002	15.090	13.710	-70.990	5320.000	13660.000	13970.000	17190.000	57.890
2	11:40:52	95.3%	0.006	12.920	14.200	-76.870	5334.000	13840.000	13900.000	17670.000	57.910
3	11:41:19	93.0%	0.001	15.020	14.210	-75.630	5461.000	13510.000	13740.000	17250.000	56.060
X		94.4%	0.003	14.350	14.040	-74.500	5372.000	13670.000	13870.000	17370.000	57.290
S		1.2%	0.003	1.233	0.288	3.102	77.570	168.400	117.500	258.000	1.061
%RSD		1.3	87.990	8.595	2.050	4.163	1.444	1.232	0.847	1.485	1.852
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:25	3466.000	57760.000	2654.000	41130.000	42800.000	92.1%	0.433	0.485	0.499	4983.000
2	11:40:52	3406.000	57860.000	2601.000	41200.000	42830.000	91.5%	0.683	0.406	0.515	5148.000
3	11:41:19	3311.000	57950.000	2559.000	41390.000	42460.000	91.8%	0.640	-0.254	0.599	5514.000
X		3394.000	57860.000	2605.000	41240.000	42700.000	91.8%	0.585	0.212	0.537	5215.000
S		78.250	92.620	47.660	135.500	204.700	0.3%	0.134	0.405	0.053	271.700
%RSD		2.305	0.160	1.830	0.329	0.479	0.3	22.810	191.000	9.942	5.210
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:25	184.300	17.640	183.900	283.000	0.332	0.783	-0.210	1.050	1.225	21.090
2	11:40:52	186.800	18.440	191.000	290.000	0.344	0.817	-0.496	1.079	1.220	21.590
3	11:41:19	180.800	17.870	189.200	280.900	0.341	0.859	-0.426	1.185	1.132	21.140
X		184.000	17.990	188.000	284.600	0.339	0.820	-0.377	1.105	1.193	21.270
S		3.019	0.415	3.712	4.741	0.006	0.038	0.149	0.071	0.052	0.276
%RSD		1.641	2.306	1.974	1.666	1.847	4.638	39.580	6.423	4.402	1.298
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:25	22.490	23.150	0.296	0.599	8.435	10.350	2.042	0.499	-2.459	175.500
2	11:40:52	24.250	22.580	0.443	-0.689	8.734	7.819	1.676	0.369	-0.477	172.700
3	11:41:19	21.660	22.620	0.695	0.062	9.122	8.670	2.932	0.719	-1.528	169.500
X		22.800	22.790	0.478	-0.009	8.764	8.948	2.217	0.529	-1.488	172.600
S		1.319	0.317	0.202	0.647	0.344	1.290	0.646	0.177	0.991	3.001
%RSD		5.787	1.390	42.170	7050.000	3.931	14.420	29.160	33.420	66.620	1.739
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:25	85.1%	0.269	0.253	0.238	6.031	0.001	0.002	-0.002	0.012	88.8%
2	11:40:52	85.7%	0.318	0.191	0.262	3.084	0.001	-0.001	0.002	0.013	89.1%
3	11:41:19	86.7%	0.327	0.287	0.310	4.428	0.004	0.004	0.007	0.005	88.3%
X		85.9%	0.304	0.244	0.270	4.514	0.002	0.002	0.002	0.010	88.7%
S		0.8%	0.031	0.049	0.036	1.475	0.002	0.003	0.005	0.004	0.4%
%RSD		0.9	10.240	20.020	13.440	32.680	96.200	169.500	194.300	40.070	0.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:25	0.034	0.043	0.154	0.194	55.410	54.480	93.6%	0.010	0.007	0.287
2	11:40:52	0.052	0.063	0.165	0.159	52.680	54.290	95.0%	0.006	0.006	0.323
3	11:41:19	0.059	0.058	0.172	0.153	53.420	55.200	95.3%	0.002	0.004	0.336
X		0.049	0.055	0.164	0.169	53.840	54.660	94.6%	0.006	0.006	0.315
S		0.013	0.010	0.009	0.022	1.411	0.481	0.9%	0.004	0.001	0.025
%RSD		26.410	19.080	5.603	13.030	2.621	0.879	0.9	61.720	23.000	7.971
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	11:40:25	0.313	0.314	98.6%							
2	11:40:52	0.271	0.298	97.6%							
3	11:41:19	0.322	0.320	98.6%							
X		0.302	0.311	98.3%							
S		0.027	0.012	0.6%							
%RSD		9.075	3.754	0.6							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:46:15	93.9%	0.023	322.000	321.500	-33.550	13130.000	30640.000	31450.000	35450.000	2.348
2	11:46:42	95.1%	-0.007	318.200	320.600	-30.400	13190.000	32470.000	32600.000	36380.000	2.267
3	11:47:10	94.0%	0.022	319.100	316.800	-37.700	13250.000	31870.000	31680.000	35670.000	2.297
X		94.3%	0.013	319.800	319.700	-33.880	13190.000	31660.000	31910.000	35830.000	2.304
S		0.7%	0.017	1.956	2.514	3.660	62.550	930.900	604.800	488.600	0.041
%RSD		0.7	135.700	0.612	0.786	10.800	0.474	2.941	1.895	1.364	1.764
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:46:15	5415.000	60630.000	1641.000	96630.000	98880.000	91.9%	0.414	0.300	0.951	4101.000
2	11:46:42	5435.000	62170.000	1641.000	98910.000	101200.000	90.1%	0.319	-0.040	0.963	4646.000
3	11:47:10	5253.000	61130.000	1665.000	99350.000	100900.000	91.6%	0.334	0.189	0.907	4502.000
X		5367.000	61310.000	1649.000	98300.000	100300.000	91.2%	0.356	0.149	0.940	4416.000
S		99.960	788.500	13.800	1457.000	1240.000	1.0%	0.051	0.173	0.030	282.800
%RSD		1.862	1.286	0.837	1.482	1.236	1.1	14.390	116.100	3.172	6.403
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:46:15	3.450	0.038	7.523	260.100	0.110	1.044	-0.650	0.167	0.405	0.786
2	11:46:42	3.830	0.038	7.674	242.300	0.083	1.123	-0.437	0.182	0.294	0.960
3	11:47:10	4.196	0.039	7.962	239.100	0.080	1.031	-0.423	0.233	0.368	0.834
X		3.825	0.038	7.720	247.200	0.091	1.066	-0.503	0.194	0.356	0.860
S		0.373	0.001	0.223	11.340	0.017	0.050	0.127	0.035	0.056	0.090
%RSD		9.750	1.725	2.884	4.587	18.540	4.683	25.310	17.880	15.850	10.470
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:46:15	7.608	5.778	0.003	0.412	14.100	11.590	0.311	0.066	0.163	194.800
2	11:46:42	6.302	5.666	-0.399	0.692	12.340	14.270	2.001	0.473	-1.153	193.200
3	11:47:10	7.391	5.637	-0.003	0.211	12.750	12.810	0.311	0.067	-0.831	196.300
X		7.101	5.693	-0.133	0.438	13.060	12.890	0.874	0.202	-0.607	194.800
S		0.700	0.074	0.231	0.241	0.924	1.344	0.976	0.235	0.686	1.547
%RSD		9.859	1.307	173.800	55.070	7.076	10.430	111.600	116.000	113.100	0.794
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:46:15	86.0%	1.296	1.249	1.247	6.694	0.001	-0.000	0.004	0.013	87.3%
2	11:46:42	86.1%	1.194	1.188	1.230	4.818	-0.001	-0.001	0.022	0.008	88.4%
3	11:47:10	86.0%	1.308	1.162	1.254	4.348	-0.001	-0.000	0.004	0.011	89.0%
X		86.0%	1.266	1.199	1.244	5.287	-0.001	-0.001	0.010	0.011	88.2%
S		0.0%	0.063	0.045	0.012	1.241	0.001	0.001	0.011	0.003	0.9%
%RSD		0.0	4.979	3.722	0.976	23.480	230.600	113.500	109.800	26.600	1.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:46:15	0.047	0.031	0.097	0.128	181.000	183.400	94.2%	0.008	0.012	0.004
2	11:46:42	0.026	0.019	0.095	0.102	179.900	182.300	96.3%	0.009	0.009	0.005
3	11:47:10	0.025	0.039	0.105	0.131	179.700	183.700	97.5%	0.012	0.007	0.005
X		0.032	0.030	0.099	0.120	180.200	183.200	96.0%	0.010	0.009	0.005
S		0.012	0.010	0.005	0.016	0.707	0.731	1.7%	0.003	0.002	0.001
%RSD		37.510	33.760	5.362	13.490	0.393	0.399	1.8	26.080	25.060	12.810
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	11:46:15	0.001	0.008	97.3%							
2	11:46:42	0.012	0.008	99.9%							
3	11:47:10	0.005	0.006	101.8%							
X		0.006	0.007	99.7%							
S		0.006	0.001	2.3%							
%RSD		100.500	15.060	2.3							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:52:04	94.8%	0.001	3.962	4.210	-103.600	3384.000	10730.000	10810.000	14750.000	2.910
2	11:52:31	93.5%	-0.007	5.033	4.701	-109.000	3436.000	10430.000	10550.000	14210.000	2.929
3	11:52:58	93.0%	-0.015	4.707	5.069	-103.800	3469.000	10580.000	10840.000	14500.000	2.586
X		93.8%	-0.007	4.568	4.660	-105.400	3430.000	10580.000	10740.000	14490.000	2.808
S		1.0%	0.008	0.549	0.431	3.037	43.180	150.800	159.300	270.500	0.193
%RSD		1.0	118.300	12.020	9.251	2.880	1.259	1.425	1.484	1.867	6.862
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:52:04	5923.000	57130.000	2656.000	31350.000	32810.000	91.3%	0.829	0.073	1.681	6395.000
2	11:52:31	5818.000	57370.000	2630.000	31930.000	32710.000	90.7%	0.710	0.100	1.668	6399.000
3	11:52:58	5834.000	57680.000	2626.000	32340.000	32610.000	90.5%	0.463	0.343	1.826	6228.000
X		5858.000	57390.000	2637.000	31870.000	32710.000	90.8%	0.667	0.172	1.725	6341.000
S		56.860	275.300	16.280	496.800	97.100	0.4%	0.187	0.148	0.088	97.260
%RSD		0.971	0.480	0.617	1.559	0.297	0.5	27.960	86.310	5.088	1.534
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:52:04	43.730	0.321	42.060	118.800	0.014	0.225	-0.903	0.025	0.067	1.096
2	11:52:31	42.780	0.351	41.040	110.800	0.020	0.301	-0.709	-0.017	0.116	1.185
3	11:52:58	41.900	0.337	38.200	110.300	0.032	0.285	-1.082	0.010	0.132	1.201
X		42.800	0.336	40.430	113.300	0.022	0.270	-0.898	0.006	0.105	1.161
S		0.914	0.015	1.998	4.781	0.009	0.040	0.187	0.022	0.034	0.057
%RSD		2.136	4.464	4.941	4.219	42.780	14.790	20.790	367.900	32.530	4.904
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:52:04	2.148	1.965	-0.356	0.289	5.214	5.992	-0.674	-0.209	0.524	21.830
2	11:52:31	2.454	1.583	-0.600	-0.021	5.937	5.187	-0.692	-0.196	-0.500	21.590
3	11:52:58	2.663	1.578	0.049	0.189	5.326	5.091	0.909	0.201	-0.897	21.280
X		2.422	1.709	-0.302	0.152	5.492	5.424	-0.152	-0.068	-0.291	21.560
S		0.259	0.222	0.328	0.158	0.389	0.495	0.919	0.233	0.733	0.274
%RSD		10.710	13.000	108.500	103.700	7.086	9.121	603.900	344.600	252.100	1.270
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:52:04	85.7%	0.318	0.278	0.250	0.024	0.014	0.014	-0.002	-0.001	90.5%
2	11:52:31	86.2%	0.278	0.376	0.315	-0.071	0.010	0.014	-0.002	0.001	91.5%
3	11:52:58	87.5%	0.298	0.402	0.312	-0.686	0.007	0.004	0.002	0.000	90.6%
X		86.4%	0.298	0.352	0.292	-0.245	0.010	0.011	-0.001	-0.000	90.9%
S		0.9%	0.020	0.066	0.036	0.386	0.003	0.006	0.003	0.001	0.6%
%RSD		1.1	6.735	18.620	12.470	157.600	32.630	52.930	296.400	638.000	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:52:04	0.025	0.022	0.053	0.053	21.680	22.510	99.0%	0.004	0.007	0.019
2	11:52:31	0.050	0.020	0.055	0.044	21.910	21.920	99.7%	0.006	0.007	0.015
3	11:52:58	0.016	0.033	0.063	0.041	21.050	22.370	100.5%	0.005	0.007	0.015
X		0.030	0.025	0.057	0.046	21.550	22.260	99.7%	0.005	0.007	0.016
S		0.018	0.007	0.006	0.006	0.447	0.308	0.7%	0.001	0.000	0.002
%RSD		59.020	28.430	9.702	12.550	2.074	1.385	0.7	18.620	4.291	13.670
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	11:52:04	0.008	0.014	107.5%							
2	11:52:31	0.009	0.016	108.4%							
3	11:52:58	0.013	0.016	110.1%							
X		0.010	0.015	108.7%							
S		0.003	0.001	1.4%							
%RSD		25.030	8.503	1.2							

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10/26/2020 11:57:25

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:57:52	93.4%	0.003	30.910	30.530	-51.720	6529.000	32740.000	32850.000	37740.000	3.240
2	11:58:19	91.2%	-0.003	29.340	29.660	-44.690	6596.000	32580.000	31630.000	37550.000	3.073
3	11:58:46	93.2%	0.018	29.230	29.350	-62.610	6578.000	31190.000	32000.000	38200.000	3.134
X		92.6%	0.006	29.830	29.840	-53.000	6568.000	32170.000	32160.000	37830.000	3.149
S		1.3%	0.011	0.943	0.615	9.030	34.880	850.000	627.100	332.500	0.084
%RSD		1.4	183.400	3.162	2.060	17.040	0.531	2.642	1.950	0.879	2.675
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:57:52	6368.000	62230.000	1337.000	94650.000	95910.000	90.4%	0.672	-0.168	0.653	5304.000
2	11:58:19	6136.000	60950.000	1341.000	92860.000	96400.000	90.5%	0.525	-0.427	0.632	5508.000
3	11:58:46	6159.000	60370.000	1342.000	95770.000	97270.000	89.0%	0.556	-0.504	0.602	5684.000
X		6221.000	61180.000	1340.000	94430.000	96530.000	89.9%	0.584	-0.366	0.629	5499.000
S		127.700	949.800	2.754	1468.000	690.100	0.9%	0.077	0.176	0.026	190.100
%RSD		2.053	1.552	0.205	1.555	0.715	0.9	13.190	48.080	4.063	3.456
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:57:52	1702.000	260.800	1734.000	1819.000	0.267	1.308	-0.705	0.153	0.402	2.269
2	11:58:19	1621.000	255.500	1727.000	1846.000	0.272	1.352	-0.330	0.126	0.367	2.179
3	11:58:46	1706.000	261.500	1738.000	1886.000	0.271	1.388	-0.495	0.084	0.410	2.141
X		1676.000	259.300	1733.000	1850.000	0.270	1.349	-0.510	0.121	0.393	2.196
S		48.100	3.302	5.332	33.890	0.002	0.040	0.188	0.034	0.023	0.066
%RSD		2.869	1.274	0.308	1.832	0.852	2.956	36.870	28.420	5.790	2.991
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:57:52	10.760	7.920	0.207	0.268	10.710	12.150	0.278	0.024	0.122	91.090
2	11:58:19	11.070	8.256	0.315	0.071	10.760	12.700	-0.046	-0.038	-0.197	90.080
3	11:58:46	10.590	8.181	-0.341	-0.324	11.840	12.330	0.298	0.048	-0.518	92.540
X		10.800	8.119	0.061	0.005	11.100	12.400	0.177	0.012	-0.198	91.240
S		0.245	0.176	0.351	0.301	0.637	0.279	0.193	0.044	0.320	1.232
%RSD		2.269	2.174	580.200	5838.000	5.735	2.253	109.400	384.900	161.700	1.351
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:57:52	86.9%	1.984	2.040	1.960	2.698	-0.001	0.001	0.010	0.003	90.7%
2	11:58:19	86.7%	2.073	1.952	2.093	1.447	-0.000	-0.001	-0.004	0.005	90.1%
3	11:58:46	86.8%	1.924	2.003	2.061	2.474	-0.001	0.001	0.010	0.017	90.0%
X		86.8%	1.994	1.998	2.038	2.207	-0.001	0.000	0.005	0.008	90.3%
S		0.1%	0.075	0.044	0.070	0.667	0.001	0.001	0.008	0.007	0.4%
%RSD		0.1	3.747	2.213	3.412	30.230	66.210	897.100	152.300	91.340	0.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:57:52	0.016	0.027	0.071	0.091	226.100	237.000	99.2%	0.004	0.005	0.010
2	11:58:19	0.029	0.028	0.089	0.101	230.000	237.600	99.5%	0.003	0.002	0.014
3	11:58:46	0.034	0.007	0.046	0.079	228.000	238.000	101.4%	0.002	0.004	0.019
X		0.026	0.021	0.069	0.091	228.000	237.500	100.0%	0.003	0.004	0.014
S		0.009	0.011	0.021	0.011	1.994	0.510	1.2%	0.001	0.002	0.004
%RSD		35.370	55.360	31.080	12.240	0.874	0.215	1.2	30.180	45.780	28.930
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	11:57:52	0.019	0.016	107.8%							
2	11:58:19	0.014	0.011	106.9%							
3	11:58:46	0.024	0.015	107.2%							
X		0.019	0.014	107.3%							
S		0.005	0.003	0.5%							
%RSD		28.140	19.670	0.4							

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10/26/2020 12:03:13

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:03:40	93.7%	-0.026	28.560	28.650	-55.110	6496.000	32430.000	32680.000	37680.000	2.337
2	12:04:07	95.0%	0.002	27.020	28.930	-60.730	6373.000	31820.000	31980.000	38210.000	2.395
3	12:04:34	93.7%	-0.026	28.830	29.080	-59.750	6594.000	32870.000	32290.000	38020.000	2.618
X		94.1%	-0.017	28.130	28.890	-58.530	6488.000	32370.000	32310.000	37970.000	2.450
S		0.7%	0.016	0.979	0.218	3.004	110.800	529.000	348.600	269.600	0.148
%RSD		0.8	98.230	3.478	0.756	5.132	1.708	1.634	1.079	0.710	6.040
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:03:40	5978.000	58420.000	1314.000	90590.000	93560.000	92.4%	0.533	-0.502	0.634	5442.000
2	12:04:07	5959.000	58550.000	1298.000	91540.000	94600.000	91.6%	0.498	0.201	0.670	5323.000
3	12:04:34	6122.000	59790.000	1296.000	94780.000	97630.000	89.3%	0.596	0.208	0.602	5383.000
X		6019.000	58920.000	1303.000	92300.000	95260.000	91.1%	0.542	-0.031	0.635	5382.000
S		89.180	757.300	9.682	2198.000	2112.000	1.6%	0.050	0.408	0.034	59.400
%RSD		1.482	1.285	0.743	2.382	2.217	1.8	9.188	1306.000	5.387	1.104
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:03:40	1665.000	274.100	1716.000	1845.000	0.277	1.345	-0.546	0.122	0.408	2.128
2	12:04:07	1734.000	276.700	1763.000	1805.000	0.296	1.346	-0.683	0.138	0.428	2.048
3	12:04:34	1679.000	282.700	1762.000	1860.000	0.260	1.128	-0.500	0.162	0.305	1.966
X		1693.000	277.800	1747.000	1837.000	0.277	1.273	-0.576	0.141	0.380	2.047
S		36.810	4.415	26.920	28.530	0.018	0.126	0.095	0.020	0.066	0.081
%RSD		2.175	1.589	1.541	1.553	6.491	9.885	16.500	14.450	17.470	3.975
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:03:40	10.450	8.436	0.331	0.048	11.370	10.650	-0.345	-0.128	1.182	90.580
2	12:04:07	10.680	7.790	-0.270	0.206	12.920	11.670	1.632	0.420	-2.169	90.130
3	12:04:34	10.240	8.225	-0.279	-0.118	10.710	12.490	2.321	0.547	-0.834	90.720
X		10.460	8.150	-0.072	0.045	11.660	11.610	1.203	0.280	-0.607	90.480
S		0.223	0.329	0.350	0.162	1.135	0.923	1.383	0.359	1.687	0.312
%RSD		2.128	4.041	482.400	359.600	9.729	7.951	115.000	128.400	278.000	0.345
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:03:40	85.6%	2.184	2.291	2.304	1.676	0.002	0.001	-0.005	0.007	88.5%
2	12:04:07	86.3%	2.044	2.199	2.160	1.559	-0.001	-0.001	0.000	0.009	88.3%
3	12:04:34	86.4%	2.248	1.879	2.259	2.406	-0.000	-0.000	0.005	0.011	88.2%
X		86.1%	2.159	2.123	2.241	1.881	0.000	-0.000	0.000	0.009	88.3%
S		0.4%	0.105	0.217	0.074	0.459	0.002	0.001	0.005	0.002	0.2%
%RSD		0.5	4.844	10.210	3.287	24.410	1013.000	558.300	3488.000	24.480	0.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:03:40	0.030	0.034	0.057	0.069	230.200	237.700	95.4%	0.003	0.003	0.010
2	12:04:07	0.030	0.016	0.095	0.083	232.800	237.600	96.1%	0.005	0.006	0.027
3	12:04:34	0.030	0.019	0.071	0.087	227.400	237.200	97.2%	0.003	0.004	0.019
X		0.030	0.023	0.075	0.080	230.100	237.500	96.3%	0.004	0.004	0.019
S		0.000	0.010	0.019	0.009	2.692	0.299	0.9%	0.001	0.002	0.008
%RSD		0.227	42.620	25.920	11.470	1.170	0.126	1.0	15.760	40.300	44.360
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	12:03:40	0.025	0.019	98.6%							
2	12:04:07	0.021	0.026	98.3%							
3	12:04:34	0.018	0.019	98.1%							
X		0.021	0.022	98.3%							
S		0.004	0.004	0.2%							
%RSD		16.870	18.710	0.2							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:28	94.3%	-0.015	33.920	33.480	-64.810	6800.000	26450.000	26110.000	29870.000	44.520
2	12:09:56	96.0%	-0.005	33.620	32.440	-63.240	6727.000	25260.000	25550.000	30230.000	43.170
3	12:10:22	93.9%	0.006	32.110	33.440	-65.350	6772.000	24540.000	25750.000	30680.000	49.770
X		94.7%	-0.005	33.220	33.120	-64.470	6766.000	25410.000	25800.000	30260.000	45.820
S		1.1%	0.010	0.970	0.593	1.098	36.800	962.400	281.600	403.600	3.483
%RSD		1.2	211.700	2.920	1.791	1.703	0.544	3.787	1.091	1.334	7.602
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:28	5841.000	62100.000	1851.000	62590.000	65060.000	92.5%	1.549	0.305	1.268	5116.000
2	12:09:56	5626.000	61420.000	1911.000	60880.000	63710.000	94.3%	1.578	0.008	1.359	5304.000
3	12:10:22	5881.000	62780.000	1864.000	63080.000	66180.000	91.4%	1.343	0.223	1.274	5284.000
X		5783.000	62100.000	1876.000	62180.000	64980.000	92.7%	1.490	0.179	1.300	5235.000
S		136.900	677.000	31.650	1156.000	1238.000	1.5%	0.129	0.154	0.051	103.200
%RSD		2.368	1.090	1.688	1.859	1.906	1.6	8.622	85.900	3.936	1.971
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:28	118.000	4.273	119.200	260.900	0.100	0.819	-0.437	0.292	0.299	3.292
2	12:09:56	115.200	4.058	112.500	258.300	0.089	0.895	-1.042	0.259	0.470	3.633
3	12:10:22	122.700	4.131	144.400	263.900	0.097	0.875	-0.494	0.299	0.420	3.294
X		118.600	4.154	125.400	261.000	0.095	0.863	-0.658	0.283	0.396	3.406
S		3.782	0.109	16.790	2.765	0.006	0.040	0.334	0.021	0.088	0.196
%RSD		3.189	2.630	13.400	1.059	6.095	4.580	50.840	7.560	22.160	5.752
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:28	8.706	6.120	0.005	-0.390	14.300	15.530	0.549	0.155	-2.226	265.800
2	12:09:56	7.599	6.663	-0.082	0.119	14.240	13.390	0.929	0.250	-3.176	272.500
3	12:10:22	7.471	6.547	0.452	0.126	15.010	14.040	0.928	0.226	-2.522	268.300
X		7.925	6.443	0.125	-0.048	14.520	14.320	0.802	0.210	-2.642	268.900
S		0.679	0.286	0.286	0.296	0.430	1.097	0.220	0.049	0.486	3.418
%RSD		8.569	4.441	229.200	616.600	2.961	7.664	27.370	23.480	18.400	1.271
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:28	87.7%	0.951	0.885	0.866	5.739	-0.001	0.002	0.005	0.009	90.6%
2	12:09:56	86.5%	0.918	0.798	0.855	7.834	-0.001	-0.000	0.009	0.021	90.8%
3	12:10:22	87.0%	0.741	0.899	0.923	5.795	0.005	-0.001	0.018	0.029	91.5%
X		87.0%	0.870	0.861	0.881	6.456	0.001	0.000	0.011	0.020	91.0%
S		0.6%	0.113	0.054	0.037	1.194	0.004	0.002	0.007	0.010	0.5%
%RSD		0.7	13.010	6.329	4.165	18.490	446.300	1224.000	63.140	49.670	0.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:28	0.040	0.025	0.052	0.075	118.700	120.200	97.0%	0.006	0.004	0.110
2	12:09:56	0.029	0.033	0.075	0.078	116.400	121.100	99.1%	0.004	0.006	0.117
3	12:10:22	0.031	0.061	0.087	0.081	116.400	119.800	100.3%	0.002	0.003	0.130
X		0.033	0.040	0.071	0.078	117.200	120.400	98.8%	0.004	0.004	0.119
S		0.006	0.019	0.018	0.003	1.336	0.635	1.7%	0.002	0.002	0.010
%RSD		17.890	47.340	25.450	3.902	1.140	0.527	1.7	48.550	41.970	8.707
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	12:09:28	0.121	0.115	101.5%							
2	12:09:56	0.091	0.110	104.1%							
3	12:10:22	0.102	0.106	106.1%							
X		0.105	0.110	103.9%							
S		0.015	0.004	2.3%							
%RSD		14.190	3.855	2.2							

VJ16059-005MS 10/26/2020 12:14:51

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:15:18	93.5%	76.560	131.600	135.000	-59.450	7897.000	26780.000	27540.000	31760.000	186.100
2	12:15:45	92.4%	75.750	134.600	137.200	-65.920	7897.000	27100.000	26970.000	32830.000	188.400
3	12:16:12	93.4%	77.580	134.800	130.800	-63.160	7853.000	26600.000	27270.000	32160.000	187.200
X		93.1%	76.630	133.700	134.300	-62.850	7882.000	26830.000	27260.000	32250.000	187.300
S		0.6%	0.915	1.799	3.215	3.246	25.360	248.600	289.100	539.900	1.171
%RSD		0.7	1.194	1.346	2.393	5.165	0.322	0.927	1.061	1.674	0.625
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:15:18	6979.000	62270.000	3044.000	65150.000	67180.000	90.6%	102.900	99.270	96.770	5682.000
2	12:15:45	6968.000	62070.000	3039.000	66110.000	67120.000	89.1%	101.000	100.900	96.940	5652.000
3	12:16:12	6973.000	62670.000	3103.000	65290.000	67440.000	89.8%	100.800	98.550	95.860	5940.000
X		6974.000	62340.000	3062.000	65520.000	67240.000	89.8%	101.600	99.580	96.520	5758.000
S		5.837	307.000	35.400	521.100	169.500	0.8%	1.173	1.215	0.581	158.200
%RSD		0.084	0.492	1.156	0.795	0.252	0.9	1.155	1.220	0.602	2.747
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:15:18	1146.000	98.450	1147.000	1225.000	90.250	93.740	90.110	92.380	94.070	96.850
2	12:15:45	1113.000	100.100	1169.000	1223.000	91.360	95.070	94.960	93.120	90.760	96.410
3	12:16:12	1165.000	99.680	1142.000	1266.000	92.620	95.050	94.720	94.960	93.840	97.750
X		1142.000	99.410	1153.000	1238.000	91.410	94.620	93.260	93.490	92.890	97.000
S		26.360	0.859	14.400	24.350	1.182	0.767	2.731	1.331	1.852	0.685
%RSD		2.309	0.864	1.249	1.967	1.293	0.811	2.928	1.424	1.994	0.706
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:15:18	102.500	101.200	98.260	95.370	14.750	14.470	423.900	97.530	2.417	372.400
2	12:15:45	99.670	99.410	98.040	93.520	13.240	13.860	399.000	90.640	-2.184	370.600
3	12:16:12	104.300	101.800	98.380	98.610	12.660	13.820	417.300	93.820	-1.476	376.300
X		102.100	100.800	98.230	95.830	13.550	14.050	413.400	94.000	-0.415	373.100
S		2.322	1.228	0.174	2.577	1.082	0.363	12.910	3.451	2.477	2.921
%RSD		2.274	1.218	0.177	2.690	7.984	2.584	3.121	3.672	597.600	0.783
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:15:18	87.0%	104.600	106.200	105.200	108.800	97.700	98.130	100.900	99.630	90.2%
2	12:15:45	87.1%	106.600	106.700	106.000	107.600	96.020	97.110	100.500	100.400	91.3%
3	12:16:12	85.9%	108.300	109.700	107.500	115.300	96.520	96.300	99.980	99.830	91.3%
X		86.7%	106.500	107.500	106.200	110.600	96.740	97.180	100.500	99.960	90.9%
S		0.6%	1.842	1.901	1.175	4.140	0.861	0.919	0.481	0.412	0.6%
%RSD		0.7	1.730	1.768	1.106	3.744	0.890	0.946	0.479	0.412	0.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:15:18	101.800	101.200	101.300	110.100	211.500	222.200	100.4%	99.430	99.280	102.500
2	12:15:45	103.800	101.300	101.400	110.200	211.100	221.600	101.3%	100.400	100.000	101.500
3	12:16:12	102.800	103.100	101.700	110.300	208.800	221.100	101.8%	101.400	99.680	101.600
X		102.800	101.900	101.500	110.200	210.500	221.600	101.2%	100.400	99.670	101.800
S		0.985	1.085	0.214	0.116	1.456	0.535	0.7%	0.986	0.386	0.527
%RSD		0.958	1.065	0.211	0.105	0.692	0.241	0.7	0.982	0.387	0.518
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	12:15:18	101.300	101.200	107.7%							
2	12:15:45	102.600	101.700	108.2%							
3	12:16:12	101.700	101.000	108.9%							
X		101.900	101.300	108.3%							
S		0.699	0.346	0.6%							
%RSD		0.686	0.342	0.6							

VJ16059-005MD

10/26/2020 12:20:40

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:21:07	93.7%	78.180	135.900	132.500	-56.060	78010.000	727410.000	727680.000	732110.000	190.700
2	12:21:34	93.4%	75.460	135.900	131.100	-67.100	77945.000	726710.000	727370.000	732080.000	185.400
3	12:22:01	93.4%	77.700	136.500	131.500	-53.710	77984.000	727330.000	727270.000	732140.000	185.400
X		93.5%	77.110	136.100	131.700	-58.960	77980.000	727150.000	727440.000	732110.000	187.100
S		0.2%	1.451	0.354	0.725	7.153	732.440	7383.600	7214.200	731.430	3.041
%RSD		0.2	1.882	0.260	0.551	12.130	70.407	71.413	70.781	70.098	1.625
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:21:07	77153.000	760350.000	73186.000	66190.000	767910.000	91.9%	103.500	96.560	93.560	6037.000
2	12:21:34	76963.000	759740.000	73110.000	65360.000	768280.000	91.5%	102.300	96.500	92.910	5499.000
3	12:22:01	76904.000	760050.000	73160.000	66310.000	767870.000	90.4%	102.200	97.950	94.600	4985.000
X		77006.000	760050.000	73152.000	65950.000	768020.000	91.2%	102.600	97.010	93.690	5507.000
S		7130.100	7302.600	738.670	515.000	7222.000	0.8%	0.711	0.822	0.854	526.000
%RSD		71.856	70.504	71.227	0.781	70.326	0.9	0.693	0.847	0.911	9.551
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:21:07	1134.000	100.300	71138.000	1227.000	91.650	93.670	89.560	92.120	93.380	97.050
2	12:21:34	1134.000	97.650	71137.000	1198.000	90.380	89.930	90.970	92.220	92.900	94.360
3	12:22:01	1140.000	97.850	71142.000	1212.000	92.070	92.640	90.270	89.060	89.210	94.860
X		1136.000	98.590	71139.000	1212.000	91.370	92.080	90.270	91.130	91.830	95.420
S		3.258	1.461	72.950	14.670	0.879	1.931	0.708	1.794	2.282	1.431
%RSD		0.287	1.482	70.259	1.210	0.962	2.097	0.784	1.968	2.485	1.500
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:21:07	103.200	102.000	98.570	103.000	14.520	13.770	431.300	98.290	-2.499	385.500
2	12:21:34	99.580	100.600	95.530	98.250	11.530	15.750	391.300	91.200	1.672	373.800
3	12:22:01	102.600	101.200	98.570	95.910	13.790	14.490	411.000	93.160	0.139	377.400
X		101.800	101.300	97.560	99.050	13.280	14.670	411.200	94.220	-0.230	378.900
S		1.954	0.693	1.758	3.602	1.556	1.000	20.000	3.665	2.110	5.967
%RSD		1.920	0.684	1.802	3.636	11.720	6.816	4.864	3.890	919.400	1.575
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:21:07	86.3%	108.000	106.400	109.000	114.000	98.050	99.260	101.800	101.900	90.7%
2	12:21:34	88.0%	107.900	106.100	107.600	118.400	98.860	98.370	103.100	102.700	90.1%
3	12:22:01	86.6%	107.700	107.500	108.700	111.900	98.420	97.550	101.100	100.800	91.2%
X		87.0%	107.900	106.700	108.400	114.800	98.440	98.400	102.000	101.800	90.7%
S		0.9%	0.122	0.719	0.716	3.323	0.409	0.854	0.987	0.929	0.6%
%RSD		1.0	0.113	0.674	0.661	2.896	0.415	0.868	0.968	0.913	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:21:07	105.000	103.300	101.800	110.700	212.000	223.300	101.5%	101.700	101.400	103.700
2	12:21:34	104.900	103.000	102.900	112.300	215.200	225.500	101.8%	101.100	100.500	102.400
3	12:22:01	103.900	102.200	102.900	111.800	213.600	223.600	101.7%	102.800	101.800	104.200
X		104.600	102.900	102.500	111.600	213.600	224.100	101.7%	101.900	101.200	103.400
S		0.608	0.564	0.632	0.855	1.635	1.179	0.1%	0.827	0.645	0.949
%RSD		0.581	0.548	0.617	0.766	0.765	0.526	0.1	0.812	0.637	0.918
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	12:21:07	102.500	101.900	108.6%							
2	12:21:34	101.800	100.800	109.4%							
3	12:22:01	103.100	103.000	107.6%							
X		102.500	101.900	108.5%							
S		0.636	1.124	0.9%							
%RSD		0.621	1.103	0.8							

CCV MW15278 10/26/2020 12:26:31 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:26:58	85.1%	295.400	303.100	298.400	-6.734	±61360.000	±61790.000	±61520.000	±60410.000	296.600
2	12:27:25	82.7%	309.300	317.000	303.500	-5.792	±62910.000	±61740.000	±62330.000	±61890.000	305.300
3	12:27:52	83.2%	298.600	309.300	313.000	-10.530	±63480.000	±61750.000	±62860.000	±61300.000	304.200
X		83.6%	100.374%	103.259%	101.655%	-7.684	±104.312%	±61760.000	±62240.000	±102.002%	100.669%
S		1.3%	n/a	n/a	n/a	2.506	±n/a	±26.080	±677.800	±n/a	n/a
%RSD		1.5	2.422	2.237	2.424	32.610	±1.752	±0.042	±1.089	±1.218	1.562
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:26:58	±3286.000	267.500	±63080.000	60400.000	±63060.000	89.3%	296.400	298.200	284.300	610.700
2	12:27:25	±3481.000	277.800	±62600.000	60630.000	±63120.000	87.7%	306.100	311.000	286.600	774.900
3	12:27:52	±3455.000	266.700	±64020.000	61870.000	±64350.000	86.8%	298.000	305.600	298.500	-1432.000
X		±3407.000	270.700	±105.387%	60970.000	±105.851%	87.9%	100.054%	101.641%	96.593%	-15.450
S		±105.700	6.167	±n/a	787.500	±n/a	1.2%	n/a	n/a	n/a	1230.000
%RSD		±3.103	2.278	±1.141	1.292	±1.152	1.4	1.732	2.103	2.626	7957.000
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:26:58	±58670.000	288.300	±59350.000	±59340.000	285.800	282.800	285.300	277.500	291.500	292.700
2	12:27:25	±60760.000	296.000	±62410.000	±60740.000	284.500	289.200	285.700	268.800	291.600	294.800
3	12:27:52	±61210.000	291.700	±62120.000	±60220.000	283.900	283.900	288.800	273.900	279.900	283.800
X		±60210.000	97.337%	±61290.000	±100.165%	94.923%	95.098%	286.600	273.400	95.896%	96.800%
S		±1356.000	n/a	±1690.000	±n/a	n/a	n/a	1.918	4.365	n/a	n/a
%RSD		±2.252	1.319	±2.757	±1.177	0.341	1.206	0.669	1.596	2.334	2.017
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:26:58	278.400	278.000	273.300	277.400	0.157	-0.320	1164.000	283.400	-0.303	293.000
2	12:27:25	287.400	281.600	281.500	279.100	0.633	-0.103	1204.000	290.300	1.771	294.600
3	12:27:52	288.500	280.500	281.300	296.800	0.725	-0.476	1216.000	287.400	-3.382	294.200
X		284.800	280.000	92.907%	284.400	0.505	-0.300	1194.000	95.665%	-0.638	97.979%
S		5.568	1.813	n/a	10.760	0.305	0.187	27.100	n/a	2.593	n/a
%RSD		1.955	0.647	1.687	3.781	60.430	62.520	2.269	1.205	406.500	0.281
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:26:58	83.1%	303.300	302.600	297.600	291.100	288.400	289.900	294.500	295.400	81.8%
2	12:27:25	83.1%	306.400	305.100	309.300	293.300	288.000	289.600	295.300	294.700	82.4%
3	12:27:52	83.0%	313.000	310.700	309.500	291.600	280.300	285.200	294.800	291.400	83.9%
X		83.1%	102.522%	102.039%	305.500	292.000	95.187%	288.300	294.900	97.947%	82.7%
S		0.0%	n/a	n/a	6.852	1.171	n/a	2.634	0.392	n/a	1.1%
%RSD		0.0	1.612	1.358	2.243	0.401	1.592	0.914	0.133	0.722	1.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:26:58	299.700	304.900	299.500	324.400	287.700	293.700	89.8%	304.700	302.400	303.200
2	12:27:25	303.500	302.300	297.600	322.300	288.200	291.900	90.4%	299.600	300.200	300.700
3	12:27:52	300.600	300.700	297.400	323.700	284.600	291.300	90.9%	297.900	302.300	302.600
X		100.416%	100.881%	298.200	107.820%	95.603%	97.434%	90.4%	300.700	100.547%	100.718%
S		n/a	n/a	1.194	n/a	n/a	n/a	0.6%	3.516	n/a	n/a
%RSD		0.658	0.694	0.400	0.327	0.668	0.413	0.6	1.169	0.413	0.419
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	12:26:58	303.500	301.700	90.7%							
2	12:27:25	300.000	299.600	91.3%							
3	12:27:52	301.700	301.800	91.3%							
X		100.581%	100.352%	91.1%							
S		n/a	n/a	0.3%							
%RSD		0.580	0.422	0.4							

CCB IM10195-01 10/26/2020 12:32:22 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:32:48	92.6%	0.051	0.105	0.327	-17.040	1.394	1.384	1.563	1.280	0.065
2	12:33:16	91.1%	-0.001	0.083	0.363	-1.232	1.550	1.565	1.527	1.513	0.041
3	12:33:42	91.6%	0.014	0.543	0.204	-9.686	1.271	1.587	1.735	1.553	0.065
X		91.8%	0.021	0.244	0.298	-9.321	1.405	1.512	1.608	1.449	0.057
S		0.8%	0.026	0.260	0.083	7.913	0.140	0.111	0.111	0.148	0.014
%RSD		0.8	123.900	106.500	27.950	84.890	9.943	7.360	6.909	10.200	23.850
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:32:48	-109.700	215.900	10.530	4.881	-28.650	92.4%	-0.036	0.033	0.007	-18.890
2	12:33:16	-109.700	218.800	7.249	2.869	-28.550	91.6%	-0.036	0.012	0.006	0.164
3	12:33:42	-112.200	222.400	8.145	-0.249	-27.340	93.4%	-0.036	-0.026	-0.059	10.880
X		-110.500	219.000	8.643	2.500	-28.180	92.5%	-0.036	0.006	-0.015	-2.616
S		1.453	3.227	1.698	2.585	0.728	0.9%	0.000	0.030	0.038	15.080
%RSD		1.314	1.473	19.640	103.400	2.583	1.0	0.541	484.700	242.900	576.400
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:32:48	-0.074	-0.001	-4.771	8.620	0.007	0.054	-0.657	0.001	-0.003	-0.024
2	12:33:16	-0.187	0.006	-4.860	7.943	0.003	0.004	-0.757	-0.032	0.010	-0.084
3	12:33:42	1.201	-0.003	-6.733	7.944	0.000	0.048	-0.523	-0.010	0.019	-0.063
X		0.313	0.001	-5.454	8.169	0.003	0.035	-0.646	-0.014	0.009	-0.057
S		0.771	0.004	1.108	0.390	0.004	0.027	0.117	0.017	0.011	0.030
%RSD		246.200	614.000	20.310	4.779	103.900	76.700	18.180	123.700	125.400	53.300
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:32:48	-0.039	-0.052	0.071	-0.073	-0.049	-0.314	1.491	0.382	-1.930	0.010
2	12:33:16	0.186	0.054	-0.024	-0.107	-0.333	-0.596	0.825	0.239	-3.231	0.008
3	12:33:42	0.034	-0.022	0.085	-0.042	-0.211	-0.592	1.819	0.395	-0.633	0.005
X		0.060	-0.007	0.044	-0.074	-0.197	-0.501	1.378	0.339	-1.932	0.008
S		0.115	0.055	0.059	0.033	0.142	0.161	0.506	0.087	1.299	0.002
%RSD		191.400	818.500	134.800	44.420	72.150	32.240	36.730	25.640	67.260	31.450
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:32:48	88.4%	0.625	0.579	0.635	-0.407	0.012	0.001	-0.004	0.007	90.3%
2	12:33:16	88.7%	0.688	0.628	0.758	-0.598	0.010	0.005	0.000	0.006	91.8%
3	12:33:42	88.2%	0.734	0.587	0.751	-0.443	0.001	-0.000	0.018	0.007	92.3%
X		88.4%	0.683	0.598	0.715	-0.482	0.007	0.002	0.005	0.006	91.5%
S		0.3%	0.055	0.026	0.069	0.101	0.006	0.003	0.012	0.001	1.0%
%RSD		0.3	8.008	4.413	9.652	21.020	78.620	148.000	230.100	10.540	1.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:32:48	0.075	0.122	0.522	0.482	0.033	0.009	94.9%	0.004	0.006	0.007
2	12:33:16	0.065	0.093	0.504	0.589	0.012	0.009	96.6%	0.006	0.006	0.006
3	12:33:42	0.054	0.062	0.520	0.541	0.032	0.008	96.7%	0.008	0.008	0.005
X		0.065	0.092	0.515	0.537	0.026	0.009	96.1%	0.006	0.007	0.006
S		0.011	0.030	0.010	0.054	0.012	0.000	1.0%	0.002	0.001	0.001
%RSD		16.400	32.620	1.891	9.980	47.140	2.490	1.0	29.860	18.560	22.740
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	12:32:48	0.006	0.009	101.9%							
2	12:33:16	0.009	0.007	103.7%							
3	12:33:42	0.006	0.007	105.7%							
X		0.007	0.008	103.7%							
S		0.002	0.001	1.9%							
%RSD		23.700	15.900	1.8							

MW15280 BNW 10/27/20

LR 10/26/2020 12:38:13 QC Status: FAIL (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:40	77.4%	M 960.800	M 1970.000	M 1939.000	-10.530	TM 123500.000	TM 117200.000	TM 117500.000	TM 116000.000	TM 117500.000
2	12:39:06	77.6%	M 971.600	M 1969.000	M 1967.000	-13.060	TM 123700.000	TM 120300.000	TM 121400.000	TM 119800.000	TM 121400.000
3	12:39:33	79.4%	M 962.200	M 1893.000	M 1896.000	-27.470	TM 121600.000	TM 116500.000	TM 118800.000	TM 117100.000	TM 117600.000
X		78.1%	M 96.486%	M 97.203%	M 96.689%	-17.020	TM 102.457%	TM 118000.000	TM 119200.000	TM 98.040%	TM 99.031%
S		1.1%	M n/a	M n/a	M n/a	9.139	TM n/a	TM 2042.000	TM 1969.000	TM n/a	TM n/a
%RSD		1.4	M 0.610	M 2.279	M 1.829	53.690	TM 0.938	TM 1.731	TM 1.652	TM 1.670	TM 1.850
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:40	-104.500	176.800	TM 128200.000	M 122200.000	TM 124900.000	84.2%	M 2000.000	TM 2085.000	TM 1993.000	-8408.000
2	12:39:06	-102.200	183.700	TM 128700.000	M 125900.000	TM 128100.000	82.5%	M 2050.000	TM 2116.000	TM 2036.000	-4923.000
3	12:39:33	-105.000	175.500	TM 128600.000	M 124700.000	TM 127700.000	83.9%	M 2011.000	TM 2094.000	TM 1948.000	349.100
X		-103.900	178.700	TM 107.095%	M 124300.000	TM 105.740%	83.6%	M 101.032%	TM 104.902%	TM 99.620%	-4327.000
S		1.468	4.376	TM n/a	M 1867.000	TM n/a	0.9%	M n/a	TM n/a	TM n/a	4409.000
%RSD		1.413	2.449	TM 0.234	M 1.502	TM 1.392	1.1	M 1.298	TM 0.760	TM 2.204	101.900
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:40	TM 117800.000	TM 2012.000	TM 118800.000	TM 116000.000	TM 1887.000	M 1867.000	M 1805.000	TM 1830.000	M 1900.000	M 1892.000
2	12:39:06	TM 121100.000	TM 2063.000	TM 121300.000	TM 119400.000	TM 2001.000	M 1962.000	M 1915.000	TM 1884.000	M 1866.000	M 1850.000
3	12:39:33	TM 117700.000	TM 1994.000	TM 116900.000	TM 118300.000	TM 1939.000	M 1855.000	M 1832.000	TM 1833.000	M 1833.000	M 1838.000
X		TM 118900.000	TM 101.162%	TM 119000.000	TM 98.219%	TM 97.123%	M 94.727%	M 1851.000	TM 1849.000	M 93.300%	M 92.996%
S		TM 1964.000	TM n/a	TM 2223.000	TM n/a	TM n/a	M n/a	M 57.150	TM 30.220	M n/a	M n/a
%RSD		TM 1.652	TM 1.771	TM 1.867	TM 1.469	TM 2.933	M 3.078	M 3.088	TM 1.635	M 1.801	M 1.512
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:40	M 2116.000	M 2032.000	M 1863.000	M 1812.000	2.861	-0.034	7573.000	M 1806.000	7.637	TM 2071.000
2	12:39:06	M 2117.000	M 2054.000	M 1913.000	M 1812.000	4.988	-0.167	7710.000	M 1798.000	8.346	TM 2057.000
3	12:39:33	M 2091.000	M 2030.000	M 1867.000	M 1744.000	5.207	-0.776	7524.000	M 1784.000	4.570	TM 2050.000
X		M 2108.000	M 2039.000	M 94.048%	M 1789.000	4.352	-0.326	7602.000	M 89.805%	6.851	TM 102.962%
S		M 14.610	M 13.390	M n/a	M 39.370	1.296	0.396	96.270	M n/a	2.007	TM n/a
%RSD		M 0.693	M 0.657	M 1.472	M 2.200	29.790	121.600	1.266	M 0.597	29.290	TM 0.510
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:40	78.7%	M 2239.000	M 2232.000	TM 2243.000	M 1959.000	281.600	284.400	M 1979.000	TM 2033.000	79.1%
2	12:39:06	79.0%	M 2307.000	M 2264.000	TM 2275.000	M 1926.000	282.900	281.000	M 1965.000	TM 2022.000	80.9%
3	12:39:33	80.1%	M 2258.000	M 2213.000	TM 2244.000	M 1943.000	281.700	281.800	M 1953.000	TM 2027.000	80.7%
X		79.3%	M 2268.000	M 111.819%	TM 2254.000	M 1943.000	282.100	282.400	M 1966.000	TM 101.364%	80.2%
S		0.8%	M 34.980	M n/a	TM 18.110	M 16.610	0.716	1.734	M 12.810	TM n/a	1.0%
%RSD		1.0	M 1.542	M 1.135	TM 0.803	M 0.855	0.254	0.614	M 0.652	TM 0.272	1.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:40	TM 2073.000	TM 2086.000	M 1055.000	M 1145.000	TM 10080.000	TM 10560.000	89.8%	TM 881.400	TM 869.300	TM 2135.000
2	12:39:06	TM 2053.000	TM 2056.000	M 1048.000	M 1130.000	TM 10150.000	TM 10540.000	90.0%	M 837.900	TM 868.600	TM 2155.000
3	12:39:33	TM 2075.000	TM 2087.000	M 1050.000	M 1141.000	TM 10090.000	TM 10660.000	91.2%	M 855.200	TM 870.900	TM 2159.000
X		TM 2067.000	TM 103.815%	M 1051.000	M 113.841%	TM 101.065%	TM 10590.000	90.3%	TM 858.200	M 86.959%	TM 2149.000
S		TM 11.770	TM n/a	M 4.028	M n/a	TM n/a	TM 62.750	0.8%	TM 21.890	TM n/a	TM 12.820
%RSD		TM 0.569	TM 0.838	M 0.383	M 0.668	TM 0.357	TM 0.593	0.9	TM 2.551	TM 0.137	TM 0.596
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	12:38:40	TM 2129.000	TM 2122.000	95.4%							
2	12:39:06	TM 2152.000	TM 2141.000	95.9%							
3	12:39:33	TM 2154.000	TM 2151.000	96.4%							
X		TM 2145.000	TM 106.888%	95.9%							
S		TM 14.060	TM n/a	0.5%							
%RSD		TM 0.656	TM 0.698	0.5							

VJ16059-005L(5)

10/26/2020 12:44:04

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:44:31	95.7%	0.057	7.731	9.879	-21.090	1412.000	6086.000	6142.000	6098.000	23.160
2	12:44:58	96.3%	0.083	7.960	9.138	-18.150	1371.000	5998.000	5919.000	6076.000	25.980
3	12:45:25	96.6%	0.088	7.591	9.099	-40.760	1387.000	5809.000	5750.000	6075.000	19.670
X		96.2%	0.076	7.761	9.372	-26.670	1390.000	5964.000	5937.000	6083.000	22.940
S		0.5%	0.016	0.186	0.439	12.300	20.880	141.400	196.300	13.180	3.165
%RSD		0.5	21.600	2.399	4.689	46.120	1.502	2.370	3.307	0.217	13.800
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:44:31	1156.000	13790.000	405.000	12710.000	12510.000	99.4%	0.378	0.077	0.348	724.400
2	12:44:58	1091.000	13560.000	395.600	12460.000	12120.000	100.0%	0.338	0.171	0.354	774.400
3	12:45:25	1108.000	13530.000	398.700	12570.000	12470.000	99.1%	0.608	0.093	0.351	884.800
X		1118.000	13630.000	399.700	12580.000	12370.000	99.5%	0.441	0.114	0.351	794.500
S		33.710	141.200	4.766	125.800	215.900	0.4%	0.145	0.050	0.003	82.100
%RSD		3.015	1.037	1.192	1.000	1.746	0.4	32.900	44.310	0.896	10.330
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:44:31	27.690	0.865	30.720	61.370	0.088	0.239	1.107	0.286	0.163	0.838
2	12:44:58	28.880	0.988	33.020	58.500	0.094	0.279	1.635	0.322	0.180	0.674
3	12:45:25	28.130	0.966	32.660	62.830	0.080	0.334	0.876	0.209	0.186	0.779
X		28.240	0.940	32.130	60.900	0.087	0.284	1.206	0.272	0.176	0.764
S		0.605	0.066	1.238	2.203	0.007	0.048	0.389	0.058	0.012	0.083
%RSD		2.141	7.001	3.853	3.617	8.297	16.760	32.270	21.200	6.593	10.910
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:44:31	1.587	1.398	-0.047	1.111	2.589	1.900	0.835	0.215	-2.152	53.210
2	12:44:58	1.711	1.368	0.264	0.497	2.591	2.671	3.538	0.746	2.366	53.150
3	12:45:25	2.014	1.463	0.085	0.898	2.480	2.657	1.771	0.425	-1.840	53.960
X		1.771	1.409	0.101	0.835	2.553	2.409	2.048	0.462	-0.542	53.440
S		0.220	0.048	0.156	0.312	0.064	0.441	1.373	0.268	2.523	0.449
%RSD		12.400	3.432	155.000	37.310	2.493	18.310	67.050	57.970	465.600	0.841
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:44:31	93.0%	2.781	3.036	3.010	1.833	0.011	0.007	0.052	0.110	96.8%
2	12:44:58	94.0%	3.242	3.005	3.348	-0.024	0.024	0.023	0.089	0.091	97.0%
3	12:45:25	93.0%	3.003	2.927	2.895	1.448	0.013	0.022	0.082	0.099	96.6%
X		93.3%	3.008	2.989	3.084	1.086	0.016	0.017	0.075	0.100	96.8%
S		0.6%	0.231	0.056	0.235	0.980	0.007	0.009	0.020	0.010	0.2%
%RSD		0.6	7.664	1.870	7.636	90.280	44.380	51.200	26.410	9.779	0.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:44:31	1.561	2.233	0.301	0.254	24.710	24.970	102.4%	2.536	2.489	0.098
2	12:44:58	1.651	2.627	0.287	0.257	24.920	25.000	102.7%	2.853	2.710	0.129
3	12:45:25	1.630	2.407	0.288	0.307	23.950	24.970	103.5%	2.566	2.542	0.115
X		1.614	2.422	0.292	0.273	24.530	24.980	102.9%	2.652	2.580	0.114
S		0.047	0.198	0.008	0.030	0.512	0.017	0.6%	0.175	0.115	0.016
%RSD		2.905	8.155	2.744	10.870	2.086	0.070	0.5	6.596	4.469	13.780
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	12:44:31	0.109	0.107	109.2%							
2	12:44:58	0.120	0.124	109.3%							
3	12:45:25	0.113	0.114	108.0%							
X		0.114	0.115	108.8%							
S		0.005	0.008	0.7%							
%RSD		4.616	7.335	0.7							

VJ16059-001A

10/26/2020 12:49:52

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:50:18	92.7%	80.480	138.000	140.500	-43.290	7655.000	27210.000	26470.000	31010.000	153.900
2	12:50:45	93.3%	77.870	144.800	142.600	-59.430	7645.000	26260.000	26610.000	31050.000	179.700
3	12:51:12	92.5%	79.300	138.100	138.000	-54.690	7555.000	26560.000	26960.000	31650.000	157.400
X		92.8%	79.220	140.300	140.300	-52.470	7618.000	26670.000	26680.000	31240.000	163.700
S		0.4%	1.306	3.890	2.315	8.295	55.020	485.900	250.300	359.500	14.010
%RSD		0.4	1.648	2.773	1.649	15.810	0.722	1.822	0.938	1.151	8.561
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:50:18	6986.000	62330.000	2941.000	63880.000	64970.000	91.4%	104.200	100.500	102.300	5220.000
2	12:50:45	7055.000	60980.000	2948.000	62200.000	65450.000	92.1%	106.000	102.900	100.900	5175.000
3	12:51:12	6852.000	60930.000	2948.000	63460.000	66170.000	90.9%	104.000	103.900	100.900	5205.000
X		6964.000	61410.000	2946.000	63180.000	65530.000	91.4%	104.700	102.400	101.400	5200.000
S		103.200	794.000	3.791	875.000	606.300	0.6%	1.104	1.756	0.796	22.540
%RSD		1.482	1.293	0.129	1.385	0.925	0.7	1.054	1.714	0.785	0.433
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:50:18	1210.000	107.100	1206.000	1307.000	95.400	98.410	99.100	97.620	102.300	104.200
2	12:50:45	1158.000	104.800	1228.000	1302.000	98.700	100.200	100.500	97.050	101.100	103.900
3	12:51:12	1191.000	102.800	1220.000	1306.000	97.200	98.400	97.510	95.290	98.480	102.200
X		1186.000	104.900	1218.000	1305.000	97.100	98.980	99.020	96.650	100.600	103.400
S		26.300	2.142	11.180	2.777	1.656	1.010	1.474	1.211	1.966	1.090
%RSD		2.217	2.043	0.918	0.213	1.705	1.020	1.488	1.253	1.954	1.053
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:50:18	107.500	101.800	101.800	102.800	13.540	14.930	446.100	106.200	-1.207	369.900
2	12:50:45	109.000	102.900	102.500	99.530	13.480	13.530	428.300	102.900	-1.238	362.700
3	12:51:12	107.700	104.600	101.500	98.760	13.590	14.510	442.400	103.900	-0.185	361.700
X		108.100	103.100	102.000	100.400	13.540	14.320	438.900	104.300	-0.876	364.800
S		0.868	1.397	0.532	2.143	0.052	0.715	9.355	1.655	0.599	4.499
%RSD		0.803	1.356	0.522	2.135	0.383	4.992	2.131	1.587	68.370	1.233
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:50:18	87.0%	108.000	106.300	108.000	115.300	100.300	101.900	101.800	103.000	87.4%
2	12:50:45	87.5%	107.900	107.900	107.200	112.500	100.300	101.200	104.800	104.600	87.1%
3	12:51:12	86.4%	109.100	108.300	108.400	103.400	99.160	99.510	101.800	102.400	88.0%
X		87.0%	108.300	107.500	107.900	110.400	99.920	100.900	102.800	103.400	87.5%
S		0.5%	0.646	1.088	0.614	6.182	0.661	1.225	1.746	1.129	0.4%
%RSD		0.6	0.596	1.012	0.569	5.599	0.662	1.214	1.698	1.092	0.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:50:18	104.700	104.800	99.700	107.800	219.000	225.600	93.3%	106.100	105.300	106.000
2	12:50:45	106.900	108.200	102.400	109.100	219.800	225.200	93.8%	104.000	103.400	105.300
3	12:51:12	105.900	103.500	100.300	109.400	217.100	220.200	94.4%	103.700	101.700	106.000
X		105.800	105.500	100.800	108.700	218.600	223.700	93.8%	104.600	103.500	105.800
S		1.098	2.401	1.446	0.868	1.358	2.995	0.5%	1.319	1.788	0.367
%RSD		1.037	2.276	1.434	0.798	0.621	1.339	0.6	1.261	1.728	0.347
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	12:50:18	106.700	105.100	94.1%							
2	12:50:45	106.300	104.800	95.6%							
3	12:51:12	104.800	103.900	96.1%							
X		105.900	104.600	95.3%							
S		1.023	0.624	1.1%							
%RSD		0.966	0.597	1.1							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:56:07	96.2%	0.014	33.900	33.280	-43.010	5913.000	22810.000	23520.000	26480.000	4.363
2	12:56:34	95.0%	0.038	32.440	35.040	-52.010	6033.000	22890.000	23470.000	26150.000	4.283
3	12:57:01	97.9%	0.003	33.100	31.980	-37.660	5975.000	23740.000	23180.000	26570.000	4.215
X		96.4%	0.018	33.150	33.430	-44.220	5974.000	23150.000	23390.000	26400.000	4.287
S		1.5%	0.017	0.733	1.532	7.251	60.090	515.600	181.600	220.500	0.074
%RSD		1.5	94.370	2.212	4.584	16.400	1.006	2.227	0.776	0.835	1.733
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:56:07	4581.000	60850.000	2112.000	64280.000	66790.000	95.9%	0.512	0.060	0.564	3858.000
2	12:56:34	4381.000	61030.000	2135.000	62910.000	67530.000	96.3%	0.529	0.293	0.664	3879.000
3	12:57:01	4493.000	62550.000	2137.000	67020.000	68660.000	94.0%	0.443	0.398	0.610	4061.000
X		4485.000	61480.000	2128.000	64740.000	67660.000	95.4%	0.495	0.250	0.613	3933.000
S		100.400	929.800	13.630	2095.000	939.300	1.2%	0.045	0.173	0.050	111.700
%RSD		2.238	1.512	0.640	3.236	1.388	1.3	9.163	69.140	8.131	2.840
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:56:07	7.988	0.334	11.850	162.200	0.138	0.766	-0.311	0.973	1.047	1.997
2	12:56:34	7.192	0.336	11.360	168.400	0.099	0.758	-0.529	0.975	1.069	1.754
3	12:57:01	8.745	0.364	11.510	162.300	0.139	0.750	-0.605	0.938	1.163	1.857
X		7.975	0.345	11.570	164.300	0.125	0.758	-0.482	0.962	1.093	1.869
S		0.776	0.017	0.252	3.566	0.023	0.008	0.153	0.021	0.062	0.122
%RSD		9.734	4.890	2.180	2.170	18.070	1.079	31.690	2.176	5.650	6.537
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:56:07	6.748	4.807	-0.084	0.119	16.430	18.390	2.049	0.508	-1.664	97.280
2	12:56:34	6.097	4.886	-0.234	0.269	17.180	16.650	0.410	0.108	-1.368	97.420
3	12:57:01	6.305	4.844	-0.222	0.113	17.410	18.140	-0.554	-0.102	-2.325	95.380
X		6.383	4.845	-0.180	0.167	17.000	17.730	0.635	0.171	-1.786	96.690
S		0.332	0.040	0.083	0.088	0.509	0.939	1.316	0.310	0.490	1.139
%RSD		5.206	0.817	46.230	52.670	2.992	5.295	207.300	181.300	27.440	1.178
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:56:07	89.2%	1.613	1.742	1.533	2.412	0.003	0.002	-0.002	0.001	91.3%
2	12:56:34	89.7%	1.771	1.561	1.644	2.398	0.004	0.005	-0.003	0.003	92.5%
3	12:57:01	90.1%	1.682	1.719	1.697	1.986	0.003	0.001	0.002	0.005	93.3%
X		89.6%	1.689	1.674	1.625	2.266	0.003	0.003	-0.001	0.003	92.4%
S		0.4%	0.079	0.099	0.084	0.242	0.001	0.002	0.002	0.002	1.0%
%RSD		0.5	4.701	5.900	5.172	10.680	18.490	85.310	213.600	77.200	1.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:56:07	0.342	0.489	0.378	0.522	113.800	115.700	98.5%	0.014	0.024	0.042
2	12:56:34	0.402	0.595	0.458	0.521	113.600	115.500	99.5%	0.025	0.027	0.033
3	12:57:01	0.400	0.575	0.430	0.458	113.600	115.400	100.3%	0.026	0.024	0.042
X		0.381	0.553	0.422	0.500	113.600	115.600	99.4%	0.022	0.025	0.039
S		0.034	0.056	0.041	0.036	0.112	0.158	0.9%	0.007	0.002	0.005
%RSD		8.934	10.150	9.702	7.291	0.099	0.136	0.9	30.660	7.819	13.580
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	12:56:07	0.036	0.038	104.5%							
2	12:56:34	0.020	0.031	107.1%							
3	12:57:01	0.032	0.034	108.2%							
X		0.029	0.034	106.6%							
S		0.008	0.003	1.9%							
%RSD		27.720	10.030	1.8							

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User Pre-dilution: 1.000

User File Location: 12000											
Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:55	96.1%	0.023	22.300	21.490	-57.600	6462.000	23420.000	23330.000	27820.000	9.220
2	13:02:22	98.0%	0.022	21.320	21.700	-58.040	6426.000	23650.000	23280.000	26600.000	8.874
3	13:02:49	94.9%	0.010	20.600	21.020	-65.250	6459.000	21980.000	22770.000	27240.000	8.050
X		96.3%	0.018	21.410	21.400	-60.300	6449.000	23010.000	23130.000	27220.000	8.715
S		1.6%	0.007	0.850	0.345	4.293	19.680	903.500	307.800	606.400	0.601
%RSD		1.6	39.480	3.972	1.611	7.119	0.305	3.926	1.331	2.228	6.900
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:55	5304.000	61940.000	793.500	57230.000	59880.000	93.7%	0.807	-0.067	1.929	4658.000
2	13:02:22	5086.000	61110.000	786.300	56110.000	59280.000	95.6%	0.553	-0.010	1.792	4578.000
3	13:02:49	5130.000	59900.000	798.400	56760.000	59290.000	94.3%	0.601	0.167	1.817	4461.000
X		5173.000	60980.000	792.800	56700.000	59490.000	94.5%	0.654	0.030	1.846	4566.000
S		115.500	1024.000	6.097	564.000	345.000	1.0%	0.135	0.122	0.073	99.220
%RSD		2.233	1.679	0.769	0.995	0.580	1.1	20.600	404.300	3.938	2.173
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:55	19.340	2.618	21.670	154.500	0.093	0.759	-0.491	0.222	0.334	1.921
2	13:02:22	17.430	2.492	17.730	149.900	0.076	0.748	-0.341	0.225	0.390	2.110
3	13:02:49	18.340	2.479	18.780	144.300	0.084	0.726	-0.248	0.197	0.367	2.018
X		18.370	2.530	19.400	149.500	0.084	0.744	-0.360	0.215	0.364	2.016
S		0.957	0.077	2.041	5.110	0.008	0.017	0.123	0.015	0.028	0.094
%RSD		5.212	3.025	10.530	3.417	9.981	2.253	34.080	7.089	7.735	4.687
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:55	4.838	4.120	-0.050	-0.340	17.340	16.510	3.599	0.881	-3.284	99.510
2	13:02:22	4.546	4.009	0.325	-0.043	16.080	16.960	0.660	0.146	-0.173	98.790
3	13:02:49	5.791	3.569	-0.105	0.214	17.560	17.560	-1.509	-0.374	-0.407	100.700
X		5.059	3.899	0.056	-0.057	16.990	17.010	0.917	0.218	-1.288	99.670
S		0.651	0.291	0.234	0.277	0.798	0.525	2.563	0.631	1.733	0.964
%RSD		12.870	7.466	414.600	490.500	4.698	3.089	279.600	289.600	134.500	0.967
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:55	90.3%	1.483	1.498	1.523	2.023	0.008	0.004	0.002	0.020	93.3%
2	13:02:22	91.1%	1.463	1.580	1.392	2.911	0.003	0.007	0.016	0.025	93.0%
3	13:02:49	89.8%	1.492	1.335	1.512	3.719	0.007	0.002	0.033	0.005	94.0%
X		90.4%	1.480	1.471	1.476	2.884	0.006	0.004	0.017	0.017	93.4%
S		0.6%	0.015	0.125	0.072	0.849	0.003	0.003	0.015	0.010	0.5%
%RSD		0.7	1.018	8.471	4.913	29.420	45.790	62.140	90.580	60.760	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:55	0.226	0.305	0.272	0.331	72.270	74.720	102.3%	0.008	0.012	0.058
2	13:02:22	0.269	0.393	0.342	0.343	72.330	75.910	103.2%	0.010	0.013	0.053
3	13:02:49	0.224	0.360	0.312	0.296	72.740	75.400	103.1%	0.004	0.005	0.034
X		0.239	0.353	0.309	0.323	72.450	75.340	102.9%	0.007	0.010	0.048
S		0.026	0.044	0.035	0.024	0.252	0.598	0.5%	0.003	0.004	0.013
%RSD		10.700	12.610	11.400	7.537	0.348	0.794	0.5	40.800	41.880	26.400
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	13:01:55	0.040	0.047	109.3%							
2	13:02:22	0.043	0.045	110.1%							
3	13:02:49	0.054	0.042	112.1%							
X		0.045	0.045	110.5%							
S		0.007	0.003	1.4%							
%RSD		16.410	6.413	1.3							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:07:43	96.7%	0.004	28.920	28.410	-90.120	9540.000	33680.000	34160.000	43020.000	11.690
2	13:08:10	96.2%	-0.005	28.360	26.800	-90.350	9515.000	33120.000	34080.000	43540.000	11.780
3	13:08:37	95.9%	-0.006	27.260	28.050	-88.480	9546.000	32950.000	33180.000	43790.000	12.290
X		96.3%	-0.002	28.180	27.760	-89.650	9533.000	33250.000	33810.000	43450.000	11.920
S		0.4%	0.006	0.845	0.846	1.020	16.190	382.300	544.800	389.700	0.326
%RSD		0.4	229.300	2.999	3.049	1.138	0.170	1.150	1.611	0.897	2.733
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:07:43	7165.000	58180.000	1282.000	113700.000	119900.000	95.4%	0.889	0.085	0.406	4132.000
2	13:08:10	7191.000	57590.000	1280.000	114400.000	118100.000	95.1%	0.695	-0.079	0.378	4408.000
3	13:08:37	7483.000	57650.000	1254.000	113100.000	118100.000	92.0%	0.414	-0.187	0.326	4425.000
X		7280.000	57810.000	1272.000	113700.000	118700.000	94.2%	0.666	-0.060	0.370	4322.000
S		176.800	324.500	15.870	640.700	1017.000	1.9%	0.239	0.137	0.041	164.600
%RSD		2.429	0.561	1.248	0.563	0.857	2.0	35.910	226.600	11.060	3.808
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:07:43	5.534	6.047	10.080	260.700	1.015	2.433	0.233	0.412	0.519	39.890
2	13:08:10	4.999	5.846	7.722	273.800	0.957	2.316	-0.118	0.446	0.605	38.620
3	13:08:37	3.012	6.044	9.986	261.700	0.982	2.312	0.275	0.454	0.558	37.890
X		4.515	5.979	9.263	265.400	0.985	2.354	0.130	0.438	0.560	38.800
S		1.329	0.115	1.336	7.263	0.029	0.069	0.216	0.022	0.043	1.015
%RSD		29.440	1.927	14.420	2.737	2.912	2.913	166.100	5.048	7.647	2.616
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:07:43	39.930	39.140	0.470	0.038	26.120	29.780	2.098	0.474	0.297	TM 843.200
2	13:08:10	37.870	38.290	0.832	-0.342	28.690	28.180	1.485	0.340	-0.313	TM 842.700
3	13:08:37	37.330	39.050	0.123	-0.084	26.560	30.730	2.552	0.606	-1.884	TM 846.000
X		38.380	38.820	0.475	-0.129	27.120	29.560	2.045	0.473	-0.633	TM 844.000
S		1.374	0.467	0.355	0.194	1.371	1.287	0.536	0.133	1.125	TM 1.769
%RSD		3.581	1.202	74.680	150.000	5.056	4.352	26.200	28.110	177.700	TM 0.210
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:07:43	88.6%	13.760	13.540	13.560	26.570	0.003	0.001	-0.026	0.026	90.5%
2	13:08:10	88.0%	13.580	13.830	13.620	26.680	0.001	-0.000	-0.017	0.018	90.3%
3	13:08:37	87.3%	13.260	14.260	13.690	24.710	-0.000	-0.000	-0.026	0.015	90.4%
X		88.0%	13.530	13.880	13.620	25.980	0.001	0.000	-0.023	0.020	90.4%
S		0.6%	0.250	0.363	0.065	1.106	0.002	0.001	0.005	0.006	0.1%
%RSD		0.7	1.848	2.613	0.480	4.258	135.700	452.100	22.810	28.700	0.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:07:43	0.152	0.191	0.505	0.547	68.730	71.030	99.1%	0.063	0.068	0.152
2	13:08:10	0.150	0.276	0.515	0.558	69.140	71.330	98.8%	0.059	0.058	0.194
3	13:08:37	0.198	0.259	0.528	0.577	67.990	70.500	100.8%	0.057	0.051	0.170
X		0.167	0.242	0.516	0.561	68.620	70.950	99.6%	0.060	0.059	0.172
S		0.027	0.045	0.012	0.015	0.579	0.419	1.1%	0.003	0.009	0.021
%RSD		16.360	18.480	2.278	2.709	0.844	0.590	1.1	5.544	14.960	12.080
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	13:07:43	0.152	0.155	105.0%							
2	13:08:10	0.149	0.160	104.8%							
3	13:08:37	0.150	0.160	104.2%							
X		0.150	0.158	104.7%							
S		0.001	0.003	0.4%							
%RSD		0.832	1.635	0.4							

VQ70287-001

10/26/2020 13:13:05

User Pre-dilution: 1.000

User Prediction: 1.000											
Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:32	99.7%	-0.004	0.999	0.974	-6.185	3.345	3.359	3.213	2.842	2.952
2	13:13:59	101.2%	0.017	0.914	0.939	1.863	3.474	3.640	3.462	3.941	2.764
3	13:14:26	100.5%	0.004	0.804	0.841	5.163	3.260	3.638	3.860	3.660	2.985
X		100.4%	0.005	0.905	0.918	0.281	3.360	3.546	3.512	3.481	2.900
S		0.8%	0.010	0.098	0.069	5.837	0.108	0.162	0.326	0.571	0.119
%RSD		0.8	192.700	10.800	7.556	2081.000	3.199	4.558	9.285	16.400	4.101
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:32	-107.700	±62080.000	3.050	9.635	-18.600	95.5%	0.042	-0.244	0.374	7266.000
2	13:13:59	-109.100	±60750.000	2.551	9.575	-16.870	96.0%	0.022	-0.065	0.417	7306.000
3	13:14:26	-108.200	±62720.000	2.691	8.857	-20.100	93.5%	0.004	-0.518	0.438	7956.000
X		-108.300	±61850.000	2.764	9.356	-18.520	95.0%	0.023	-0.276	0.410	7509.000
S		0.724	±1002.000	0.257	0.433	1.613	1.3%	0.019	0.229	0.033	387.500
%RSD		0.668	±1.620	9.308	4.629	8.707	1.4	84.460	82.900	8.009	5.161
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:32	11.400	0.030	5.697	6.286	-0.002	0.024	-1.053	-0.007	0.043	8.663
2	13:13:59	8.522	0.020	3.969	5.192	-0.002	-0.003	-0.490	-0.006	0.061	8.797
3	13:14:26	10.450	0.039	4.343	2.955	-0.004	0.025	-1.181	-0.030	0.089	8.837
X		10.120	0.029	4.670	4.811	-0.003	0.015	-0.908	-0.014	0.065	8.766
S		1.466	0.009	0.909	1.698	0.001	0.016	0.367	0.014	0.023	0.091
%RSD		14.480	32.160	19.460	35.290	42.010	106.300	40.490	94.840	36.070	1.043
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:32	8.672	8.744	-0.156	0.170	3.227	2.975	1.781	0.494	-3.882	0.024
2	13:13:59	7.810	8.609	0.365	0.202	3.748	3.410	1.784	0.430	-1.625	0.037
3	13:14:26	8.184	8.671	-0.489	-0.061	3.370	3.093	-3.398	-0.797	-0.592	0.034
X		8.222	8.675	-0.093	0.104	3.448	3.159	0.056	0.042	-2.033	0.032
S		0.432	0.068	0.431	0.143	0.269	0.225	2.991	0.728	1.683	0.006
%RSD		5.255	0.782	461.300	138.200	7.801	7.113	5359.000	1725.000	82.760	20.090
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:32	88.4%	0.122	0.139	0.127	-0.782	0.001	-0.000	-0.002	0.003	90.9%
2	13:13:59	88.3%	0.163	0.204	0.207	-1.050	0.001	-0.000	0.002	0.005	91.6%
3	13:14:26	87.4%	0.203	0.200	0.206	-1.306	0.001	-0.000	-0.002	0.009	91.1%
X		88.0%	0.163	0.181	0.180	-1.046	0.001	-0.000	-0.001	0.005	91.2%
S		0.5%	0.040	0.036	0.046	0.262	0.000	0.000	0.003	0.003	0.3%
%RSD		0.6	24.890	20.170	25.400	25.050	0.962	1.741	497.700	58.470	0.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:32	0.097	0.237	0.103	0.122	0.068	0.037	94.7%	0.005	0.006	0.006
2	13:13:59	0.139	0.228	0.120	0.129	0.032	0.040	96.2%	0.005	0.006	0.001
3	13:14:26	0.181	0.219	0.115	0.146	0.059	0.036	97.6%	0.012	0.007	0.004
X		0.139	0.228	0.113	0.132	0.053	0.038	96.2%	0.008	0.007	0.004
S		0.042	0.009	0.008	0.012	0.018	0.002	1.4%	0.004	0.001	0.002
%RSD		30.430	4.103	7.328	9.226	34.830	5.868	1.5	52.180	11.810	66.950
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	13:13:32	0.006	0.006	103.2%							
2	13:13:59	0.006	0.006	101.7%							
3	13:14:26	0.007	0.006	103.1%							
X		0.006	0.006	102.7%							
S		0.001	0.000	0.9%							
%RSD		11.890	2.687	0.8							

VJ15063-001(25)

10/26/2020 13:18:53

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:19:20	93.9%	0.173	0.580	0.500	-63.720	8.859	721.600	713.100	809.100	<u>TM 1924.000</u>
2	13:19:47	92.0%	0.132	0.374	0.479	-53.200	9.127	713.000	698.900	778.700	<u>TM 1889.000</u>
3	13:20:14	93.9%	0.185	0.289	0.405	-59.880	8.880	696.900	666.000	786.600	<u>TM 1853.000</u>
X		93.3%	0.163	0.414	0.461	-58.930	8.955	710.500	692.700	791.500	<u>TM 1889.000</u>
S		1.1%	0.028	0.149	0.050	5.321	0.149	12.540	24.140	15.750	<u>TM 35.440</u>
%RSD		1.2	17.110	36.050	10.830	9.029	1.660	1.765	3.485	1.990	<u>TM 1.876</u>
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:19:20	-53.710	<u>13170.000</u>	228.800	2687.000	2625.000	92.1%	9.290	5.102	4.413	539.400
2	13:19:47	-56.940	<u>13050.000</u>	225.800	2581.000	2529.000	94.5%	8.038	4.810	4.328	488.500
3	13:20:14	-55.700	<u>13090.000</u>	224.500	2637.000	2588.000	95.2%	8.077	4.910	4.330	328.500
X		-55.450	<u>13100.000</u>	226.400	2635.000	2581.000	94.0%	8.468	4.940	4.357	452.100
S		1.631	<u>61.370</u>	2.204	52.810	48.550	1.6%	0.712	0.148	0.048	110.100
%RSD		2.942	<u>0.468</u>	0.974	2.004	1.881	1.7	8.407	3.003	1.109	24.350
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:19:20	<u>17420.000</u>	154.800	<u>17710.000</u>	16920.000	2.640	4.657	3.893	4.341	4.609	402.500
2	13:19:47	<u>17500.000</u>	155.200	<u>17420.000</u>	16650.000	2.567	4.630	3.674	3.918	4.362	394.900
3	13:20:14	<u>17070.000</u>	154.200	<u>17380.000</u>	<u>16780.000</u>	2.480	4.390	3.705	3.952	4.445	388.900
X		<u>17330.000</u>	154.700	<u>17500.000</u>	<u>16780.000</u>	2.562	4.559	3.758	4.070	4.472	395.400
S		<u>228.500</u>	0.513	<u>182.900</u>	<u>134.700</u>	0.080	0.147	0.118	0.235	0.126	6.808
%RSD		<u>1.319</u>	0.331	<u>1.045</u>	<u>0.803</u>	3.136	3.226	3.152	5.774	2.806	1.722
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:19:20	370.700	378.600	2.873	0.003	0.057	0.203	-1.491	-0.352	-0.062	5.855
2	13:19:47	368.300	381.700	3.048	-0.109	0.065	-0.555	-0.618	-0.127	-1.129	5.812
3	13:20:14	367.000	380.000	3.418	0.204	0.005	0.122	1.178	0.209	3.410	5.793
X		368.700	380.100	3.113	0.033	0.043	-0.077	-0.310	-0.090	0.740	5.820
S		1.889	1.576	0.278	0.158	0.033	0.417	1.361	0.282	2.373	0.032
%RSD		0.512	0.415	8.935	484.300	77.140	543.300	438.700	313.600	320.700	0.550
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:19:20	89.7%	0.400	0.283	0.416	1.169	0.019	0.026	0.029	0.031	90.3%
2	13:19:47	91.5%	0.380	0.439	0.404	0.189	0.021	0.019	0.006	0.030	93.1%
3	13:20:14	93.1%	0.568	0.419	0.394	0.333	0.029	0.023	0.042	0.030	92.8%
X		91.4%	0.450	0.380	0.405	0.564	0.023	0.023	0.026	0.030	92.1%
S		1.7%	0.103	0.085	0.011	0.529	0.005	0.003	0.018	0.001	1.5%
%RSD		1.9	23.020	22.310	2.669	93.850	23.200	13.860	70.490	1.992	1.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:19:20	4.066	5.783	0.148	0.142	13.920	14.700	96.5%	0.018	0.013	48.790
2	13:19:47	4.007	6.315	0.143	0.128	14.550	14.210	98.8%	0.012	0.018	48.460
3	13:20:14	4.251	6.063	0.125	0.144	14.000	14.150	99.2%	0.013	0.012	48.580
X		4.108	6.053	0.139	0.138	14.160	14.350	98.1%	0.014	0.014	48.610
S		0.127	0.266	0.012	0.009	0.340	0.301	1.5%	0.003	0.003	0.169
%RSD		3.100	4.397	8.623	6.379	2.403	2.099	1.5	23.300	22.180	0.348
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	13:19:20	45.910	46.180	105.7%							
2	13:19:47	44.650	46.020	107.3%							
3	13:20:14	46.350	46.830	108.3%							
X		45.640	46.350	107.1%							
S		0.881	0.429	1.4%							
%RSD		1.931	0.925	1.3							

VJ15063-002(25)

10/26/2020 13:24:44

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:25:11	97.6%	0.091	0.659	0.441	-66.130	8.863	509.900	505.800	568.100	TM 1597.000
2	13:25:39	99.5%	0.119	0.330	0.340	-55.020	9.022	520.700	509.500	563.700	TM 1581.000
3	13:26:05	99.3%	0.150	0.699	0.464	-53.370	8.960	516.300	505.400	574.000	TM 1597.000
X		98.8%	0.120	0.563	0.415	-58.170	8.948	515.600	506.900	568.600	TM 1592.000
S		1.0%	0.030	0.202	0.066	6.940	0.080	5.426	2.269	5.199	TM 9.180
%RSD		1.0	24.600	35.960	15.900	11.930	0.897	1.052	0.448	0.914	TM 0.577
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:25:11	-56.300	13540.000	251.700	439.400	368.200	99.7%	13.640	3.654	3.593	311.000
2	13:25:39	-53.770	13630.000	259.800	396.600	368.500	100.6%	13.340	3.600	3.474	338.800
3	13:26:05	-57.960	13450.000	246.500	399.800	364.700	100.0%	13.440	3.629	3.451	401.500
X		-56.010	13540.000	252.700	411.900	367.100	100.1%	13.470	3.628	3.506	350.400
S		2.107	89.750	6.699	23.830	2.116	0.5%	0.153	0.027	0.076	46.370
%RSD		3.763	0.663	2.651	5.785	0.576	0.5	1.136	0.742	2.167	13.230
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:25:11	9862.000	154.000	9922.000	9274.000	1.945	4.287	2.809	6.322	6.748	M 557.800
2	13:25:39	9548.000	149.000	9906.000	9247.000	1.999	4.225	2.865	6.391	6.506	M 552.100
3	13:26:05	9666.000	148.200	9707.000	9169.000	1.791	4.239	3.199	6.138	6.556	M 534.900
X		9692.000	150.400	9845.000	9230.000	1.911	4.250	2.958	6.283	6.603	M 548.300
S		158.800	3.126	119.800	54.640	0.108	0.033	0.211	0.131	0.128	M 11.910
%RSD		1.638	2.079	1.216	0.592	5.647	0.766	7.130	2.083	1.933	M 2.173
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:25:11	M 500.600	M 522.300	3.441	0.377	-0.034	0.219	3.737	0.896	-0.739	1.645
2	13:25:39	M 512.300	M 530.700	3.155	0.226	-0.071	-0.475	-0.495	-0.095	-1.330	1.733
3	13:26:05	M 511.700	M 520.900	3.256	-0.124	-0.172	-0.033	0.282	0.143	-3.208	1.706
X		M 508.200	M 524.600	3.284	0.160	-0.092	-0.096	1.175	0.315	-1.759	1.695
S		M 6.569	M 5.303	0.145	0.257	0.072	0.351	2.253	0.518	1.289	0.045
%RSD		M 1.293	M 1.011	4.407	161.000	77.600	365.600	191.800	164.600	73.270	2.669
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:25:11	95.4%	0.333	0.456	0.341	0.020	0.034	0.038	0.027	0.024	96.6%
2	13:25:39	95.1%	0.303	0.464	0.370	0.396	0.061	0.055	0.027	0.024	97.2%
3	13:26:05	97.9%	0.427	0.431	0.329	-0.045	0.045	0.047	0.035	0.003	98.6%
X		96.1%	0.354	0.450	0.346	0.124	0.047	0.047	0.030	0.017	97.5%
S		1.6%	0.065	0.017	0.021	0.238	0.014	0.009	0.005	0.012	1.0%
%RSD		1.6	18.330	3.744	6.084	192.400	29.550	18.850	15.340	71.420	1.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:25:11	0.773	1.099	0.215	0.239	10.260	10.350	101.9%	0.017	0.017	59.780
2	13:25:39	0.876	1.084	0.236	0.260	9.901	10.090	104.4%	0.008	0.015	59.880
3	13:26:05	0.773	2.194	0.259	0.271	9.817	10.080	104.3%	0.014	0.014	60.120
X		0.807	1.459	0.237	0.256	9.991	10.170	103.6%	0.013	0.015	59.930
S		0.060	0.637	0.022	0.016	0.233	0.153	1.4%	0.004	0.001	0.176
%RSD		7.385	43.640	9.301	6.297	2.334	1.506	1.4	32.880	9.532	0.293
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	13:25:11	56.420	57.250	112.7%							
2	13:25:39	55.940	56.940	114.3%							
3	13:26:05	56.410	57.150	114.8%							
X		56.260	57.110	113.9%							
S		0.270	0.161	1.1%							
%RSD		0.480	0.282	1.0							

VJ15063-003(25)

10/26/2020 13:30:35

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:31:02	99.1%	0.108	0.303	0.401	-51.040	6.080	588.200	576.100	674.000	TM 1672.000
2	13:31:29	99.0%	0.123	0.304	0.622	-72.390	6.386	592.300	575.000	655.400	TM 1674.000
3	13:31:56	100.3%	0.086	0.383	0.473	-63.520	6.131	TM 600.800	573.400	652.200	TM 1654.000
X		99.5%	0.106	0.330	0.499	-62.320	6.199	TM 593.800	574.800	660.500	TM 1667.000
S		0.7%	0.018	0.046	0.113	10.730	0.164	TM 6.456	1.381	11.720	TM 10.890
%RSD		0.7	17.420	13.940	22.590	17.220	2.646	TM 1.087	0.240	1.775	TM 0.653
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:31:02	-18.790	TM 12570.000	214.200	569.100	513.300	102.4%	9.604	3.502	2.786	352.700
2	13:31:29	-23.320	TM 12230.000	210.400	557.500	512.800	103.0%	9.620	3.598	2.741	333.200
3	13:31:56	-25.390	TM 12190.000	208.700	575.600	520.100	101.2%	9.491	3.413	2.730	425.400
X		-22.500	TM 12330.000	211.100	567.400	515.400	102.2%	9.572	3.504	2.752	370.400
S		3.379	TM 210.100	2.855	9.189	4.074	0.9%	0.071	0.093	0.030	48.620
%RSD		15.020	TM 1.704	1.352	1.619	0.790	0.9	0.737	2.650	1.074	13.130
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:31:02	9191.000	90.980	TM 9268.000	8854.000	2.139	4.656	3.816	8.134	9.072	329.400
2	13:31:29	TM 8998.000	86.570	TM 9049.000	8772.000	2.090	5.100	3.749	8.582	8.412	324.100
3	13:31:56	TM 9029.000	90.420	TM 9129.000	8781.000	2.128	4.806	3.846	7.884	9.090	323.900
X		TM 9073.000	89.320	TM 9149.000	8802.000	2.119	4.854	3.804	8.200	8.858	325.800
S		TM 103.800	2.401	TM 111.200	45.270	0.026	0.226	0.050	0.354	0.387	3.131
%RSD		TM 1.144	2.688	TM 1.215	0.514	1.233	4.646	1.314	4.316	4.364	0.961
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:31:02	295.400	306.900	4.061	0.107	-0.029	-0.466	2.349	0.677	-3.208	1.904
2	13:31:29	302.400	310.500	4.280	0.080	-0.174	-0.355	-0.008	0.034	-1.148	1.812
3	13:31:56	304.200	301.100	4.189	0.137	-0.066	-0.040	-0.910	-0.167	-1.459	1.835
X		300.700	306.200	4.177	0.108	-0.090	-0.287	0.477	0.181	-1.938	1.850
S		4.644	4.741	0.111	0.028	0.075	0.221	1.683	0.441	1.111	0.048
%RSD		1.544	1.548	2.645	26.380	83.550	77.120	352.700	242.900	57.300	2.587
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:31:02	97.6%	0.571	0.445	0.565	0.601	0.065	0.064	0.014	0.012	96.0%
2	13:31:29	97.3%	0.573	0.570	0.504	0.086	0.052	0.058	0.005	0.021	97.6%
3	13:31:56	98.0%	0.573	0.496	0.536	0.667	0.053	0.054	0.014	0.029	97.2%
X		97.6%	0.572	0.503	0.535	0.451	0.057	0.059	0.011	0.021	97.0%
S		0.3%	0.001	0.063	0.031	0.318	0.007	0.005	0.005	0.008	0.8%
%RSD		0.3	0.176	12.500	5.709	70.540	13.010	8.765	44.730	40.880	0.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:31:02	0.649	0.872	0.093	0.123	10.290	10.390	100.0%	0.008	0.015	8.734
2	13:31:29	0.643	0.903	0.108	0.123	10.430	10.230	99.8%	0.017	0.012	8.445
3	13:31:56	0.680	0.951	0.091	0.118	10.090	10.530	100.9%	0.011	0.009	8.282
X		0.657	0.908	0.097	0.121	10.270	10.380	100.2%	0.012	0.012	8.487
S		0.020	0.040	0.009	0.003	0.173	0.151	0.6%	0.004	0.003	0.229
%RSD		3.027	4.373	9.500	2.351	1.683	1.450	0.6	37.260	26.100	2.694
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	13:31:02	7.874	8.127	107.3%							
2	13:31:29	7.915	8.121	107.3%							
3	13:31:56	7.678	7.977	107.1%							
X		7.822	8.075	107.2%							
S		0.127	0.085	0.2%							
%RSD		1.622	1.053	0.1							

CCV MW15278 10/26/2020 13:36:26 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:36:53	85.5%	294.100	305.700	313.900	-5.204	60690.000	61250.000	61040.000	61380.000	300.000
2	13:37:20	84.8%	297.000	306.200	315.000	-10.530	61940.000	61770.000	60440.000	62150.000	297.400
3	13:37:47	86.3%	290.700	303.100	293.300	-11.120	60520.000	60930.000	61030.000	60850.000	296.900
X		85.6%	97.972%	101.668%	102.474%	-8.953	101.751%	61320.000	60840.000	102.429%	99.375%
S		0.8%	n/a	n/a	n/a	3.260	n/a	420.000	342.500	n/a	n/a
%RSD		0.9	1.074	0.549	3.985	36.410	1.263	0.685	0.563	1.065	0.564
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:36:53	3553.000	179.800	63420.000	61640.000	63340.000	90.3%	303.300	305.100	293.900	1439.000
2	13:37:20	3385.000	184.600	63410.000	61170.000	63550.000	89.7%	301.600	305.500	287.900	1969.000
3	13:37:47	3425.000	179.900	62840.000	60650.000	63530.000	90.2%	298.000	298.700	286.700	2369.000
X		3455.000	181.400	105.374%	61150.000	105.785%	90.1%	100.335%	101.031%	96.502%	1925.000
S		87.530	2.739	n/a	496.500	n/a	0.3%	n/a	n/a	n/a	466.400
%RSD		2.534	1.510	0.522	0.812	0.185	0.3	0.900	1.268	1.340	24.230
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:36:53	62860.000	298.500	61890.000	60180.000	287.300	286.300	288.400	283.300	312.400	309.900
2	13:37:20	61120.000	298.100	61800.000	60450.000	288.200	299.300	295.800	273.900	287.200	296.900
3	13:37:47	61660.000	292.100	61680.000	59930.000	285.200	282.100	281.100	273.800	294.700	296.700
X		61880.000	98.753%	61790.000	100.314%	95.641%	96.403%	288.400	277.000	99.362%	100.386%
S		890.400	n/a	105.300	n/a	n/a	n/a	7.327	5.482	n/a	n/a
%RSD		1.439	1.204	0.171	0.432	0.533	3.096	2.540	1.979	4.338	2.523
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:36:53	289.200	282.600	284.900	295.100	0.144	-0.425	1256.000	311.700	-1.711	292.900
2	13:37:20	281.300	280.400	279.300	288.300	0.227	-0.845	1219.000	295.500	-1.039	297.700
3	13:37:47	284.800	283.300	277.300	277.300	0.258	-0.324	1244.000	303.100	-1.751	292.900
X		285.100	282.100	94.030%	286.900	0.210	-0.531	1240.000	101.149%	-1.500	98.174%
S		3.976	1.552	n/a	9.010	0.059	0.276	19.010	n/a	0.400	n/a
%RSD		1.395	0.550	1.005	3.140	28.090	51.960	1.533	2.685	26.640	0.927
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:36:53	83.7%	308.900	305.100	301.700	290.500	289.400	295.500	295.700	298.900	80.9%
2	13:37:20	83.9%	305.800	312.400	306.200	287.400	283.900	289.300	293.600	292.000	83.0%
3	13:37:47	84.5%	316.600	311.000	307.000	285.300	287.200	286.100	291.500	292.300	83.2%
X		84.0%	103.475%	103.159%	305.000	287.700	95.609%	290.300	293.600	98.141%	82.4%
S		0.5%	n/a	n/a	2.858	2.620	n/a	4.756	2.102	n/a	1.2%
%RSD		0.5	1.782	1.257	0.937	0.910	0.956	1.638	0.716	1.326	1.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:36:53	305.400	303.500	300.000	324.100	288.800	298.700	88.4%	300.300	302.400	304.200
2	13:37:20	300.800	301.300	299.100	322.300	286.900	295.500	89.5%	296.700	301.200	303.300
3	13:37:47	304.600	302.600	300.300	324.900	288.900	295.600	90.6%	297.900	302.600	304.300
X		101.198%	100.823%	299.800	107.923%	96.070%	98.862%	89.5%	298.300	100.691%	101.300%
S		n/a	n/a	0.633	n/a	n/a	n/a	1.1%	1.808	n/a	n/a
%RSD		0.823	0.370	0.211	0.409	0.395	0.615	1.2	0.606	0.260	0.176
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	13:36:53	303.500	302.400	87.5%							
2	13:37:20	299.600	301.100	89.7%							
3	13:37:47	297.900	299.400	91.6%							
X		100.117%	100.316%	89.6%							
S		n/a	n/a	2.0%							
%RSD		0.967	0.501	2.3							

CCB IM10195-01 10/26/2020 13:42:17 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

user location: 13000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:42:44	94.2%	0.006	0.770	0.368	-2.984	2.362	1.132	1.196	1.202	0.041
2	13:43:11	94.2%	0.013	0.351	0.314	-10.640	2.491	1.129	0.997	0.980	0.053
3	13:43:38	91.9%	0.042	0.309	0.425	-7.913	1.961	1.128	0.958	1.294	0.052
X		93.4%	0.020	0.477	0.369	-7.180	2.272	1.130	1.051	1.159	0.049
S		1.3%	0.019	0.255	0.056	3.883	0.276	0.002	0.128	0.161	0.007
%RSD		1.4	94.590	53.440	15.130	54.070	12.170	0.201	12.160	13.920	13.570
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:42:44	-110.800	141.500	9.209	1.666	-30.000	96.9%	0.021	0.002	-0.027	-9.521
2	13:43:11	-109.900	137.800	8.467	0.668	-31.180	98.0%	-0.037	-0.003	-0.019	-3.824
3	13:43:38	-110.000	144.600	6.186	-0.267	-31.560	95.0%	0.023	0.004	-0.021	-7.835
X		-110.200	141.300	7.954	0.690	-30.910	96.7%	0.002	0.001	-0.023	-7.060
S		0.495	3.422	1.575	0.967	0.809	1.5%	0.034	0.004	0.004	2.927
%RSD		0.449	2.422	19.810	140.200	2.618	1.6	1560.000	335.100	17.640	41.450
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:42:44	0.336	0.006	-4.754	7.489	0.001	0.001	-0.713	-0.003	0.009	-0.044
2	13:43:11	0.679	0.003	-3.839	5.773	0.002	0.043	-0.031	-0.025	-0.018	-0.073
3	13:43:38	1.219	-0.002	-4.964	6.118	0.002	0.019	-0.619	-0.007	-0.019	-0.043
X		0.745	0.002	-4.519	6.460	0.002	0.021	-0.454	-0.012	-0.009	-0.053
S		0.445	0.004	0.598	0.908	0.001	0.021	0.369	0.012	0.016	0.017
%RSD		59.790	182.000	13.230	14.050	38.460	99.060	81.300	99.510	168.500	32.010
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:42:44	-0.343	-0.067	-0.181	-0.113	-0.249	0.172	-2.197	-0.537	0.444	0.009
2	13:43:11	-0.128	0.002	0.135	0.267	-0.405	0.328	2.873	0.689	-1.429	0.005
3	13:43:38	-0.126	0.044	-0.026	0.160	-0.527	-0.573	-1.278	-0.259	-2.408	0.002
X		-0.199	-0.007	-0.024	0.105	-0.394	-0.024	-0.201	-0.036	-1.131	0.005
S		0.125	0.056	0.158	0.196	0.139	0.482	2.701	0.642	1.449	0.003
%RSD		62.670	771.300	666.500	187.500	35.410	1976.000	1346.000	1798.000	128.200	58.930
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:42:44	91.0%	0.682	0.706	0.630	-0.288	0.008	0.010	0.001	0.001	93.3%
2	13:43:11	90.7%	0.737	0.633	0.741	-0.438	0.004	0.010	0.005	0.004	93.4%
3	13:43:38	92.2%	0.574	0.721	0.664	-0.381	0.007	0.005	0.001	0.003	94.6%
X		91.3%	0.664	0.687	0.678	-0.369	0.006	0.008	0.002	0.003	93.8%
S		0.8%	0.083	0.047	0.057	0.076	0.002	0.003	0.002	0.002	0.7%
%RSD		0.8	12.440	6.902	8.367	20.560	34.190	31.810	112.500	54.660	0.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:42:44	0.068	0.123	0.555	0.535	-0.002	-0.003	97.6%	0.006	0.004	0.011
2	13:43:11	0.109	0.140	0.500	0.569	0.018	0.004	98.9%	0.008	0.007	0.006
3	13:43:38	0.114	0.128	0.526	0.567	-0.002	-0.003	98.4%	0.005	0.005	0.008
X		0.097	0.130	0.527	0.557	0.005	-0.001	98.3%	0.006	0.005	0.008
S		0.025	0.009	0.028	0.019	0.012	0.004	0.7%	0.001	0.001	0.003
%RSD		25.620	6.907	5.276	3.392	253.800	541.100	0.7	22.710	24.280	31.250
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	13:42:44	0.004	0.009	104.2%							
2	13:43:11	0.006	0.010	107.6%							
3	13:43:38	0.007	0.007	108.1%							
X		0.006	0.009	106.6%							
S		0.001	0.001	2.1%							
%RSD		21.190	14.110	2.0							

VJ15063-004(5)

10/26/2020 13:48:06

User Pre-dilution: 1.000

User Prediction: 1.000											
Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:33	97.7%	0.332	3.673	4.144	-160.400	63.060	7053.000	7413.000	11810.000	TM 8798.000
2	13:49:00	99.7%	0.333	3.342	3.541	-155.500	61.260	7134.000	7315.000	11570.000	TM 8542.000
3	13:49:27	100.2%	0.329	3.992	3.582	-157.000	60.750	7051.000	7296.000	11860.000	TM 8637.000
X		99.2%	0.332	3.669	3.755	-157.600	61.690	7079.000	7341.000	11750.000	TM 8659.000
S		1.3%	0.002	0.325	0.337	2.503	1.212	47.000	62.330	157.000	TM 129.300
%RSD		1.3	0.579	8.866	8.965	1.587	1.964	0.664	0.849	1.336	TM 1.493
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:33	131.600	757590.000	1001.000	17320.000	17530.000	100.9%	31.630	14.990	13.600	1523.000
2	13:49:00	128.800	58130.000	1032.000	17610.000	17630.000	101.0%	30.150	14.730	13.530	1252.000
3	13:49:27	128.000	58700.000	999.500	17560.000	17250.000	100.1%	32.100	14.380	13.760	1167.000
X		129.500	58140.000	1011.000	17500.000	17470.000	100.7%	31.300	14.700	13.630	1314.000
S		1.866	550.800	18.490	154.200	194.900	0.5%	1.021	0.303	0.122	186.100
%RSD		1.442	0.947	1.829	0.882	1.115	0.5	3.261	2.061	0.894	14.160
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:33	35290.000	TM 693.800	36360.000	34990.000	9.899	21.120	20.800	17.580	19.560	455.400
2	13:49:00	35650.000	TM 681.400	35630.000	34680.000	10.130	21.170	23.050	17.520	19.790	447.300
3	13:49:27	34900.000	TM 698.800	35920.000	34790.000	10.150	21.130	21.260	16.980	19.620	437.000
X		35280.000	TM 691.300	35970.000	34820.000	10.060	21.140	21.700	17.360	19.660	446.500
S		376.000	TM 8.945	367.800	159.600	0.139	0.028	1.188	0.333	0.119	9.236
%RSD		1.066	TM 1.294	1.023	0.458	1.383	0.130	5.476	1.916	0.606	2.068
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:33	380.500	384.600	8.243	-0.080	2.823	2.524	1.312	0.599	-0.623	32.050
2	13:49:00	371.700	387.700	8.398	-0.051	2.892	1.974	2.594	0.908	0.138	32.910
3	13:49:27	379.400	390.500	7.854	-0.026	3.368	1.845	0.804	0.508	-3.631	31.760
X		377.200	387.600	8.165	-0.052	3.027	2.115	1.570	0.672	-1.372	32.240
S		4.763	2.985	0.281	0.027	0.297	0.361	0.922	0.210	1.993	0.598
%RSD		1.263	0.770	3.437	51.930	9.807	17.060	58.760	31.210	145.300	1.854
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:33	117.3%	0.676	0.867	0.782	2.347	0.013	0.018	0.056	0.099	95.5%
2	13:49:00	117.1%	0.823	0.829	0.762	2.296	0.019	0.009	0.072	0.109	97.0%
3	13:49:27	117.5%	0.845	0.831	0.737	1.151	0.016	0.018	0.105	0.079	97.6%
X		117.3%	0.781	0.842	0.760	1.931	0.016	0.015	0.077	0.096	96.7%
S		0.2%	0.092	0.021	0.022	0.676	0.003	0.005	0.025	0.015	1.1%
%RSD		0.2	11.800	2.508	2.939	35.000	18.380	34.420	32.680	16.160	1.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:33	1.396	1.981	0.360	0.379	94.490	97.400	103.0%	0.735	0.715	24.910
2	13:49:00	1.456	1.975	0.358	0.381	92.200	96.120	105.3%	0.719	0.725	24.700
3	13:49:27	1.369	2.035	0.326	0.363	94.110	96.440	105.4%	0.721	0.701	24.860
X		1.407	1.997	0.348	0.374	93.600	96.650	104.5%	0.725	0.714	24.830
S		0.045	0.033	0.019	0.010	1.228	0.669	1.4%	0.009	0.012	0.111
%RSD		3.185	1.642	5.436	2.594	1.312	0.692	1.3	1.189	1.705	0.445
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	13:48:33	23.020	23.640	115.1%							
2	13:49:00	23.100	23.520	116.1%							
3	13:49:27	23.450	23.720	116.8%							
X		23.190	23.630	116.0%							
S		0.228	0.099	0.9%							
%RSD		0.982	0.421	0.7							

VJ15063-004S(5)

10/26/2020 13:53:54

User Pre-dilution: 1.000

User Population: 1,000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:21	101.8%	14.570	51.350	50.470	-156.600	1627.800	14670.000	14875.000	17539.000	114450.000
2	13:54:48	102.4%	13.810	49.580	48.900	-155.700	1619.600	14704.000	14840.000	17483.000	114280.000
3	13:55:15	100.8%	14.020	48.760	48.670	-154.300	1625.200	14676.000	14773.000	17463.000	114350.000
X		101.6%	14.130	49.900	49.350	-155.500	1624.200	14684.000	14829.000	17495.000	114360.000
S		0.8%	0.390	1.324	0.979	1.130	14174	118.310	152.110	139.000	187.070
%RSD		0.8	2.761	2.654	1.983	0.727	10.669	10.391	11.079	10.520	10.606
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:21	1646.100	162450.000	14155.000	12360.000	12370.000	106.3%	126.700	66.240	56.090	1956.000
2	13:54:48	1617.100	161300.000	14113.000	12380.000	12010.000	106.4%	127.200	65.090	54.560	2025.000
3	13:55:15	1624.400	161890.000	14129.000	12200.000	12060.000	105.6%	128.100	64.710	55.530	2024.000
X		1629.200	161880.000	14133.000	12310.000	12150.000	106.1%	127.400	65.350	55.390	2001.000
S		115.110	1576.900	121.180	102.500	196.400	0.4%	0.671	0.797	0.771	39.720
%RSD		12.401	10.932	10.513	0.833	1.616	0.4	0.527	1.220	1.391	1.985
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:21	147020.000	1511.100	149140.000	146120.000	46.830	61.230	57.370	49.490	55.120	110080.000
2	13:54:48	147130.000	1517.000	147540.000	145920.000	45.820	59.960	61.210	48.990	55.000	110180.000
3	13:55:15	146650.000	1510.000	147790.000	145920.000	47.540	58.400	60.320	47.010	53.550	1109852.000
X		146940.000	1512.700	148160.000	145990.000	46.730	59.860	59.630	48.500	54.560	110040.000
S		1251.000	13.754	1856.100	1112.100	0.865	1.421	2.010	1.313	0.874	1167.600
%RSD		10.535	10.732	11.778	10.244	1.850	2.374	3.371	2.708	1.603	11.670
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:21	18748.000	18761.000	53.260	34.500	3.785	3.746	157.300	42.700	-0.539	75.520
2	13:54:48	18824.000	18652.000	52.220	32.420	3.572	3.031	138.900	38.430	-1.831	74.170
3	13:55:15	18660.000	18592.000	53.430	35.690	3.471	3.107	150.000	40.220	-0.236	74.920
X		18744.000	18668.000	52.970	34.210	3.609	3.295	148.700	40.450	-0.869	74.870
S		181.960	185.360	0.655	1.654	0.160	0.392	9.274	2.147	0.847	0.674
%RSD		10.937	10.985	1.237	4.835	4.440	11.910	6.236	5.308	97.510	0.901
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:21	114.2%	35.830	35.540	35.190	44.350	40.710	40.470	40.370	40.680	99.0%
2	13:54:48	114.8%	35.780	34.680	34.960	46.320	40.910	40.900	40.840	41.620	97.8%
3	13:55:15	113.2%	36.460	36.390	35.240	44.770	40.510	40.530	41.420	40.890	99.4%
X		114.1%	36.030	35.540	35.130	45.140	40.710	40.630	40.880	41.060	98.7%
S		0.8%	0.375	0.856	0.149	1.039	0.197	0.237	0.529	0.493	0.9%
%RSD		0.7	1.041	2.408	0.423	2.301	0.485	0.582	1.295	1.201	0.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:21	41.910	41.350	30.000	32.760	126.600	126.900	104.9%	39.240	38.390	76.900
2	13:54:48	42.140	41.440	30.410	32.890	124.700	128.100	106.5%	39.430	39.160	77.020
3	13:55:15	41.300	41.070	30.520	32.300	124.600	127.200	105.7%	38.970	38.390	76.860
X		41.780	41.290	30.310	32.650	125.300	127.400	105.7%	39.210	38.650	76.930
S		0.433	0.192	0.275	0.311	1.151	0.615	0.8%	0.231	0.446	0.085
%RSD		1.037	0.466	0.908	0.953	0.919	0.482	0.8	0.590	1.155	0.110
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	13:54:21	73.910	74.400	115.4%							
2	13:54:48	75.380	75.380	113.1%							
3	13:55:15	74.860	75.070	113.5%							
X		74.720	74.950	114.0%							
S		0.746	0.498	1.2%							
%RSD		0.998	0.664	1.1							

VJ15063-004SD(5)

10/26/2020 13:59:42

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:00:09	101.7%	15.660	53.020	52.140	-142.000	7621.300	76124.000	76357.000	79775.000	TM 16000.000
2	14:00:36	102.5%	15.950	48.600	49.380	-139.500	7614.800	76271.000	76571.000	79633.000	TM 15830.000
3	14:01:03	103.0%	15.970	47.560	47.770	-146.400	7606.800	76201.000	76403.000	79672.000	TM 15780.000
X		102.4%	15.860	49.720	49.760	-142.600	7614.300	76199.000	76444.000	79693.000	TM 15870.000
S		0.7%	0.176	2.900	2.209	3.494	77.239	773.480	7112.700	773.790	TM 113.600
%RSD		0.7	1.108	5.833	4.439	2.450	71.178	71.185	71.750	70.761	TM 0.716
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:00:09	7745.300	761640.000	73951.000	15640.000	14880.000	104.8%	102.700	75.300	58.180	2857.000
2	14:00:36	7699.200	760550.000	73975.000	14940.000	14810.000	104.4%	98.700	71.880	57.660	2724.000
3	14:01:03	7681.300	761050.000	73836.000	15280.000	14840.000	102.8%	98.950	74.880	58.760	2286.000
X		7708.600	761080.000	73921.000	15290.000	14840.000	104.0%	100.100	74.020	58.200	2623.000
S		7733.000	7543.000	773.970	353.500	32.360	1.1%	2.215	1.861	0.554	298.600
%RSD		74.657	70.889	71.887	2.312	0.218	71.0	72.123	72.514	70.952	71.390
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:00:09	7736510.000	395.900	7736550.000	7736560.000	47.250	56.110	54.550	47.960	52.240	359.100
2	14:00:36	7736570.000	77401.500	7736250.000	7735180.000	44.500	52.410	52.310	47.320	52.150	363.100
3	14:01:03	7735890.000	77409.300	7735900.000	7735040.000	43.750	53.470	55.400	46.280	51.270	356.000
X		7736330.000	77402.200	7736230.000	7735600.000	45.160	54.000	54.090	47.190	51.890	359.400
S		77374.200	776.717	77324.100	77838.700	1.840	1.907	1.595	0.850	0.538	3.558
%RSD		771.030	771.670	770.895	772.356	4.075	3.531	2.949	1.802	1.037	0.990
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:00:09	317.400	319.800	46.310	36.060	3.951	4.080	147.200	39.140	-1.567	55.370
2	14:00:36	313.100	320.400	49.180	33.180	3.543	3.447	167.400	44.670	-0.499	55.050
3	14:01:03	311.600	314.500	48.170	34.120	2.861	3.897	146.100	39.210	0.491	54.250
X		314.000	318.200	47.880	34.450	3.452	3.808	153.600	41.010	-0.525	54.890
S		3.005	3.228	1.455	1.467	0.551	0.326	12.010	3.174	1.029	0.578
%RSD		0.957	1.014	3.039	4.257	15.960	8.554	7.824	7.740	196.100	1.052
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:00:09	107.4%	35.380	35.550	35.930	42.630	39.700	40.290	40.310	40.570	95.9%
2	14:00:36	107.6%	35.630	35.750	35.640	41.820	39.890	39.820	40.000	40.340	95.5%
3	14:01:03	109.5%	36.030	35.640	35.420	42.500	39.370	39.960	39.770	39.590	96.1%
X		108.2%	35.680	35.650	35.660	42.320	39.650	40.020	40.020	40.170	95.8%
S		1.2%	0.326	0.103	0.256	0.431	0.263	0.242	0.271	0.512	0.3%
%RSD		1.1	0.914	0.290	0.717	1.019	0.664	0.604	0.678	1.275	0.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:00:09	41.420	40.760	28.290	30.730	131.000	132.400	99.3%	36.170	35.480	66.930
2	14:00:36	41.340	41.760	28.200	30.910	130.500	131.300	100.4%	35.920	35.480	66.900
3	14:01:03	41.590	40.910	28.910	30.770	132.500	133.000	100.9%	36.200	35.810	66.730
X		41.450	41.150	28.470	30.800	131.300	132.300	100.2%	36.100	35.590	66.850
S		0.127	0.538	0.389	0.097	1.045	0.843	0.8%	0.151	0.193	0.108
%RSD		0.306	1.308	1.368	0.316	0.795	0.637	0.8	0.418	0.541	0.161
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:00:09	63.880	65.110	104.6%							
2	14:00:36	64.590	64.820	104.8%							
3	14:01:03	64.900	65.220	103.9%							
X		64.450	65.050	104.4%							
S		0.523	0.210	0.4%							
%RSD		0.812	0.323	0.4							

VJ15063-004L(25)

10/26/2020 14:05:30

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:57	101.4%	0.174	0.462	0.842	-76.650	10.250	1931.000	1929.000	2229.000	TM 1663.000
2	14:06:24	102.1%	0.091	0.812	0.870	-75.360	9.910	1921.000	1908.000	2263.000	TM 1719.000
3	14:06:51	103.9%	0.171	0.319	0.778	-77.890	10.090	1926.000	1910.000	2283.000	TM 1678.000
X		102.4%	0.145	0.531	0.830	-76.630	10.080	1926.000	1916.000	2258.000	TM 1687.000
S		1.3%	0.047	0.253	0.047	1.267	0.170	4.758	11.810	27.590	TM 28.830
%RSD		1.3	32.500	47.720	5.675	1.654	1.685	0.247	0.617	1.222	TM 1.709
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:57	-64.690	12960.000	230.500	3372.000	3248.000	109.6%	6.271	2.924	2.752	478.700
2	14:06:24	-61.920	13120.000	228.300	3542.000	3300.000	108.1%	6.730	2.958	2.832	492.500
3	14:06:51	-63.510	12980.000	228.600	3490.000	3325.000	108.4%	5.963	2.978	2.849	373.600
X		-63.380	13020.000	229.100	3468.000	3291.000	108.7%	6.321	2.953	2.811	448.200
S		1.390	187.910	1.218	87.130	39.220	0.8%	0.386	0.027	0.052	65.040
%RSD		2.192	0.675	0.531	2.513	1.192	0.8	6.100	0.918	1.843	14.510
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:57	6873.000	125.900	7011.000	6609.000	1.894	4.217	3.252	3.504	3.966	91.070
2	14:06:24	7123.000	129.000	7197.000	6812.000	2.028	4.160	3.422	3.901	3.986	89.650
3	14:06:51	7098.000	129.600	7137.000	6728.000	2.007	4.272	3.469	3.729	3.975	89.530
X		7032.000	128.200	7115.000	6716.000	1.976	4.217	3.381	3.711	3.976	90.080
S		137.800	2.005	194.800	101.900	0.072	0.056	0.114	0.199	0.010	0.859
%RSD		1.960	1.564	1.332	1.518	3.649	1.321	3.380	5.361	0.258	0.953
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:57	78.480	84.620	1.568	0.517	0.229	0.112	1.058	0.371	-3.115	7.556
2	14:06:24	82.220	84.450	1.484	0.427	-0.097	-0.035	-1.223	-0.207	-2.085	7.226
3	14:06:51	80.480	84.040	1.725	0.182	0.242	0.168	2.609	0.679	0.086	7.263
X		80.390	84.370	1.593	0.375	0.125	0.082	0.815	0.281	-1.705	7.349
S		1.873	0.297	0.122	0.173	0.192	0.105	1.927	0.450	1.634	0.180
%RSD		2.330	0.352	7.676	46.180	154.100	127.700	236.600	159.900	95.860	2.455
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:57	104.0%	0.370	0.355	0.331	-0.603	0.007	0.007	0.026	0.013	101.7%
2	14:06:24	106.3%	0.392	0.416	0.362	-0.325	0.006	0.004	0.025	0.015	102.6%
3	14:06:51	106.0%	0.413	0.417	0.408	-0.144	0.004	0.004	0.009	0.013	102.7%
X		105.4%	0.392	0.396	0.367	-0.357	0.006	0.005	0.020	0.014	102.4%
S		1.2%	0.022	0.036	0.039	0.231	0.001	0.002	0.009	0.001	0.6%
%RSD		1.2	5.615	9.067	10.650	64.760	19.720	38.160	47.240	8.352	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:57	0.347	0.560	0.112	0.109	18.560	18.590	104.6%	0.217	0.208	4.806
2	14:06:24	0.408	0.543	0.101	0.102	19.000	18.970	104.7%	0.197	0.184	4.846
3	14:06:51	0.388	0.559	0.097	0.115	19.410	18.250	106.4%	0.194	0.169	5.125
X		0.381	0.554	0.103	0.109	18.990	18.600	105.2%	0.203	0.187	4.926
S		0.031	0.009	0.008	0.007	0.425	0.361	1.0%	0.012	0.020	0.174
%RSD		8.123	1.675	7.841	6.042	2.238	1.939	0.9	6.032	10.540	3.529
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:05:57	4.610	4.687	112.5%							
2	14:06:24	4.687	4.784	114.4%							
3	14:06:51	4.543	4.768	115.0%							
X		4.614	4.746	114.0%							
S		0.072	0.052	1.3%							
%RSD		1.559	1.098	1.1							

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10/26/2020 14:11:18

User Pre-dilution: 1.000

User Predefinition: 1.000											
Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:11:45	100.5%	13.490	44.940	43.550	-153.500	1470.200	17134.000	17356.000	111590.000	TM 8238.000
2	14:12:12	99.0%	13.920	44.550	44.170	-155.400	1475.500	17289.000	17410.000	111820.000	TM 8399.000
3	14:12:39	101.1%	13.690	40.800	42.940	-155.400	1472.500	17278.000	17449.000	111620.000	TM 8192.000
X		100.2%	13.700	43.430	43.550	-154.800	1472.700	17234.000	17405.000	111680.000	TM 8276.000
S		1.1%	0.219	2.286	0.615	1.115	12.634	186.400	146.760	1128.300	TM 109.000
%RSD		1.1	1.602	5.264	1.411	0.720	0.557	1.194	0.631	1.099	TM 1.317
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:11:45	549.700	157100.000	11381.000	17420.000	17330.000	104.5%	68.850	52.500	51.440	1729.000
2	14:12:12	563.800	156800.000	11382.000	17600.000	17660.000	101.8%	69.400	52.640	51.240	1686.000
3	14:12:39	551.700	156460.000	11393.000	17750.000	17630.000	102.5%	72.700	51.670	50.650	1874.000
X		555.100	156790.000	11385.000	17590.000	17540.000	102.9%	70.320	52.270	51.110	1763.000
S		7.625	1319.400	16.828	164.200	180.900	1.4%	2.081	0.527	0.410	98.700
%RSD		1.374	1.0563	0.934	0.934	1.031	1.3	2.960	1.008	0.803	5.599
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:11:45	135250.000	TM 716.800	135820.000	134730.000	47.520	60.520	58.450	52.960	59.890	480.500
2	14:12:12	135570.000	TM 705.200	135090.000	134150.000	47.220	57.770	60.290	52.530	56.770	466.400
3	14:12:39	135650.000	TM 706.200	135570.000	134080.000	45.170	58.690	55.010	52.440	57.900	468.900
X		135490.000	TM 709.400	135490.000	134320.000	46.640	58.990	57.920	52.650	58.190	471.900
S		1210.700	TM 6.444	1367.700	1356.300	1.278	1.402	2.679	0.277	1.578	7.485
%RSD		0.594	TM 0.908	1.036	1.038	2.741	2.377	4.625	0.526	2.712	1.586
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:11:45	395.500	405.500	46.150	33.920	1.856	1.434	136.300	38.710	-0.739	62.950
2	14:12:12	403.900	410.700	47.720	35.130	1.250	1.175	143.100	39.910	-3.142	63.270
3	14:12:39	403.300	401.200	44.360	32.570	2.538	1.195	127.800	35.710	-1.655	63.700
X		400.900	405.800	46.070	33.870	1.882	1.268	135.700	38.110	-1.845	63.310
S		4.705	4.792	1.678	1.283	0.644	0.144	7.658	2.162	1.213	0.374
%RSD		1.174	1.181	3.643	3.788	34.250	11.380	5.642	5.673	65.720	0.591
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:11:45	119.6%	33.320	32.670	33.210	42.050	39.370	39.560	39.980	39.300	98.2%
2	14:12:12	117.7%	33.020	32.000	32.900	43.900	39.510	39.550	40.380	40.080	98.4%
3	14:12:39	117.9%	34.340	33.950	33.770	43.970	39.490	40.310	40.710	40.150	98.4%
X		118.4%	33.560	32.870	33.290	43.310	39.460	39.810	40.360	39.850	98.3%
S		1.0%	0.694	0.995	0.441	1.093	0.073	0.433	0.368	0.472	0.1%
%RSD		0.9	2.067	3.028	1.325	2.524	0.185	1.089	0.912	1.186	0.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:11:45	41.900	41.810	36.600	39.190	129.500	134.200	106.7%	39.470	38.030	63.420
2	14:12:12	41.670	41.740	37.520	39.780	129.200	131.500	106.5%	38.980	38.730	63.340
3	14:12:39	41.910	42.000	37.550	40.900	132.400	135.200	106.4%	39.700	38.730	64.190
X		41.820	41.850	37.220	39.960	130.400	133.600	106.5%	39.390	38.500	63.650
S		0.134	0.133	0.536	0.872	1.761	1.904	0.1%	0.368	0.404	0.471
%RSD		0.320	0.318	1.441	2.181	1.351	1.425	0.1	0.935	1.048	0.740
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:11:45	61.470	61.450	117.1%							
2	14:12:12	61.910	61.920	116.5%							
3	14:12:39	62.630	62.370	117.0%							
X		62.000	61.920	116.9%							
S		0.585	0.462	0.3%							
%RSD		0.943	0.747	0.3							

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10/26/2020 14:17:06

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:34	105.0%	0.149	0.743	0.971	-82.270	8.889	<u>1930.000</u>	1922.000	2298.000	<u>TM 1774.000</u>
2	14:18:00	103.5%	0.159	0.734	1.272	-81.330	9.330	<u>1922.000</u>	1865.000	2210.000	<u>TM 1696.000</u>
3	14:18:28	102.4%	0.122	0.925	1.365	-79.180	9.482	<u>1907.000</u>	1848.000	2257.000	<u>TM 1688.000</u>
X		103.6%	0.143	0.801	1.203	-80.930	9.234	<u>1920.000</u>	1879.000	2255.000	<u>TM 1719.000</u>
S		1.3%	0.019	0.108	0.206	1.582	0.308	<u>11.920</u>	38.840	44.070	<u>TM 47.880</u>
%RSD		1.2	13.300	13.510	17.110	1.954	3.335	<u>0.621</u>	2.068	1.954	<u>TM 2.785</u>
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:34	-59.170	<u>13100.000</u>	225.600	3363.000	3355.000	106.1%	6.235	2.708	2.904	454.300
2	14:18:00	-62.210	<u>12740.000</u>	226.400	3435.000	3338.000	107.5%	6.187	2.873	2.875	413.200
3	14:18:28	-62.460	<u>12570.000</u>	224.300	3327.000	3259.000	107.8%	5.889	2.985	2.881	306.800
X		-61.280	<u>12800.000</u>	225.400	3375.000	3317.000	107.1%	6.103	2.855	2.887	391.400
S		1.832	<u>272.400</u>	1.039	54.660	51.220	0.9%	0.188	0.139	0.015	76.120
%RSD		2.990	<u>2.127</u>	0.461	1.619	1.544	0.9	3.072	4.873	0.521	19.450
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:34	7259.000	130.800	<u>7319.000</u>	7000.000	2.122	4.423	3.006	3.852	4.152	91.360
2	14:18:00	7109.000	129.200	<u>7176.000</u>	6825.000	2.116	4.446	3.354	3.687	4.250	92.220
3	14:18:28	7119.000	128.000	<u>7183.000</u>	6882.000	1.961	4.126	3.938	3.906	3.828	90.740
X		7162.000	129.300	<u>7226.000</u>	6902.000	2.066	4.332	3.433	3.815	4.076	91.440
S		84.090	1.391	<u>80.540</u>	89.090	0.091	0.179	0.471	0.114	0.221	0.747
%RSD		1.174	1.076	<u>1.115</u>	1.291	4.422	4.127	13.720	2.993	5.420	0.817
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:34	84.810	83.450	1.743	0.282	-0.038	-0.213	2.468	0.740	-2.833	7.166
2	14:18:00	81.690	85.350	1.584	0.001	0.065	-0.751	-0.310	0.028	-2.277	7.420
3	14:18:28	81.580	81.980	1.608	0.214	-0.010	-0.157	0.222	0.141	-1.197	7.441
X		82.690	83.590	1.645	0.166	0.006	-0.374	0.793	0.303	-2.102	7.342
S		1.836	1.688	0.086	0.147	0.053	0.328	1.474	0.383	0.832	0.153
%RSD		2.220	2.019	5.206	88.590	944.000	87.790	185.900	126.100	39.550	2.081
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:34	104.2%	0.383	0.238	0.292	0.169	0.008	0.002	0.014	0.016	99.6%
2	14:18:00	103.9%	0.279	0.245	0.346	-0.211	-0.000	0.004	0.026	0.025	100.1%
3	14:18:28	104.4%	0.368	0.309	0.306	-0.174	0.005	0.009	0.030	0.006	99.9%
X		104.2%	0.343	0.264	0.315	-0.072	0.004	0.005	0.024	0.016	99.9%
S		0.3%	0.056	0.039	0.028	0.209	0.004	0.004	0.008	0.009	0.2%
%RSD		0.3	16.400	14.840	8.866	291.200	101.200	77.210	36.100	58.830	0.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:34	0.504	0.463	0.222	0.229	18.780	18.240	102.0%	0.164	0.158	4.827
2	14:18:00	0.289	0.506	0.224	0.240	18.600	19.130	102.4%	0.172	0.156	5.010
3	14:18:28	0.332	0.447	0.217	0.244	19.030	19.320	103.8%	0.189	0.153	4.908
X		0.375	0.472	0.221	0.237	18.800	18.900	102.7%	0.175	0.156	4.915
S		0.114	0.031	0.004	0.007	0.213	0.575	0.9%	0.013	0.002	0.091
%RSD		30.370	6.570	1.661	3.142	1.132	3.044	0.9	7.274	1.433	1.859
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:17:34	4.656	4.677	108.7%							
2	14:18:00	4.640	4.686	108.0%							
3	14:18:28	4.740	4.757	106.4%							
X		4.679	4.707	107.7%							
S		0.054	0.044	1.2%							
%RSD		1.144	0.935	1.1							

VJ15063-004S(25)

10/26/2020 14:22:57

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:23:24	106.0%	5.890	8.982	10.200	-71.990	115.700	<u>1293.000</u>	1252.000	1455.000	<u>TM 2903.000</u>
2	14:23:51	103.9%	5.517	10.310	10.550	-68.950	118.800	<u>1290.000</u>	1272.000	1495.000	<u>TM 2901.000</u>
3	14:24:18	105.1%	5.817	8.922	10.040	-76.100	118.400	<u>1235.000</u>	1233.000	1453.000	<u>TM 2822.000</u>
X		105.0%	5.741	9.406	10.260	-72.350	117.600	<u>1272.000</u>	1252.000	1468.000	<u>TM 2875.000</u>
S		1.0%	0.197	0.787	0.265	3.585	1.705	<u>132.860</u>	19.450	23.830	<u>TM 46.430</u>
%RSD		1.0	3.439	8.370	2.578	4.955	1.450	<u>12.583</u>	1.554	1.623	<u>TM 1.615</u>
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:23:24	38.170	<u>13260.000</u>	858.500	2331.000	2316.000	110.4%	24.940	12.770	11.050	516.300
2	14:23:51	44.120	<u>13640.000</u>	843.900	2415.000	2350.000	107.3%	24.260	13.300	11.260	531.400
3	14:24:18	41.250	<u>13400.000</u>	863.000	2313.000	2293.000	111.0%	25.160	12.430	10.980	601.500
X		41.180	<u>13430.000</u>	855.100	2353.000	2320.000	109.6%	24.790	12.830	11.100	549.800
S		2.975	<u>191.500</u>	9.997	54.320	28.840	1.9%	0.471	0.441	0.143	45.470
%RSD		7.224	<u>1.425</u>	1.169	2.309	1.243	1.8	1.901	3.435	1.293	8.270
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:23:24	<u>19402.000</u>	97.010	<u>19474.000</u>	9061.000	9.323	11.660	11.860	10.200	11.220	<u>M 2178.000</u>
2	14:23:51	<u>19743.000</u>	97.980	<u>19791.000</u>	9240.000	9.455	12.980	10.880	10.250	11.300	<u>M 2164.000</u>
3	14:24:18	<u>19425.000</u>	96.100	<u>19420.000</u>	9045.000	9.283	11.830	10.440	10.490	11.300	<u>M 2084.000</u>
X		<u>19523.000</u>	97.030	<u>19561.000</u>	9115.000	9.354	12.160	11.060	10.310	11.280	<u>M 2142.000</u>
S		<u>190.200</u>	0.939	<u>200.500</u>	108.300	0.090	0.719	0.729	0.155	0.045	<u>M 50.780</u>
%RSD		<u>1.998</u>	0.967	<u>2.097</u>	1.188	0.965	5.910	6.593	1.505	0.401	<u>M 2.371</u>
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:23:24	<u>M 1832.000</u>	<u>M 1912.000</u>	10.110	7.858	0.069	0.005	29.120	7.466	-0.865	16.240
2	14:23:51	<u>M 1878.000</u>	<u>M 1940.000</u>	11.000	7.148	0.127	0.278	31.790	7.944	0.444	16.220
3	14:24:18	<u>M 1840.000</u>	<u>M 1893.000</u>	10.260	6.801	0.189	0.204	33.130	8.202	1.537	16.290
X		<u>M 1850.000</u>	<u>M 1915.000</u>	10.460	7.269	0.128	0.162	31.350	7.871	0.372	16.250
S		<u>M 24.240</u>	<u>M 23.480</u>	0.473	0.539	0.060	0.141	2.045	0.373	1.203	0.035
%RSD		<u>M 1.310</u>	<u>M 1.226</u>	4.527	7.412	46.700	86.780	6.524	4.743	323.500	0.214
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:23:24	102.7%	6.988	7.051	7.269	7.059	8.145	8.005	8.048	7.824	97.3%
2	14:23:51	104.6%	7.692	7.150	6.964	10.210	7.932	7.995	7.977	7.994	100.2%
3	14:24:18	104.1%	7.334	7.326	7.565	8.787	7.944	7.920	8.031	7.958	100.9%
X		103.8%	7.338	7.176	7.266	8.685	8.007	7.973	8.019	7.925	99.5%
S		1.0%	0.352	0.140	0.300	1.577	0.120	0.046	0.037	0.090	1.9%
%RSD		0.9	4.794	1.944	4.134	18.160	1.493	0.581	0.460	1.135	1.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:23:24	8.040	7.826	5.844	6.283	25.270	24.880	100.0%	7.903	7.644	15.600
2	14:23:51	8.112	7.796	5.909	6.390	25.360	25.170	101.5%	7.582	7.562	15.190
3	14:24:18	8.130	8.015	6.008	6.156	24.510	25.160	102.1%	7.729	7.686	15.410
X		8.094	7.879	5.920	6.277	25.050	25.070	101.2%	7.738	7.631	15.400
S		0.048	0.119	0.083	0.117	0.468	0.164	1.1%	0.161	0.063	0.205
%RSD		0.593	1.508	1.397	1.866	1.870	0.652	1.1	2.075	0.825	1.331
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:23:24	15.280	15.060	100.2%							
2	14:23:51	14.990	14.890	104.0%							
3	14:24:18	14.720	14.840	105.2%							
X		15.000	14.930	103.2%							
S		0.282	0.117	2.6%							
%RSD		1.883	0.786	2.5							

VJ15063-004SD(25)

10/26/2020 14:28:45

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:29:12	103.7%	6.149	10.310	10.690	-68.260	122.400	<u>1637.000</u>	1612.000	1840.000	<u>TM 3159.000</u>
2	14:29:39	103.5%	6.233	10.530	9.991	-64.200	119.000	<u>1654.000</u>	1624.000	1850.000	<u>TM 3040.000</u>
3	14:30:06	102.9%	6.253	11.510	10.070	-60.660	124.100	<u>1660.000</u>	1649.000	1841.000	<u>TM 3064.000</u>
X		103.4%	6.212	10.780	10.250	-64.380	121.800	<u>1650.000</u>	1628.000	1844.000	<u>TM 3087.000</u>
S		0.4%	0.055	0.639	0.382	3.803	2.567	<u>11.860</u>	18.820	5.633	<u>TM 63.260</u>
%RSD		0.4	0.885	5.926	3.725	5.907	2.107	<u>0.719</u>	1.156	0.305	<u>TM 2.049</u>
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:29:12	44.680	<u>13690.000</u>	859.900	3010.000	2892.000	112.4%	19.320	14.320	11.520	726.800
2	14:29:39	<u>166.870</u>	<u>13850.000</u>	832.700	3019.000	2866.000	108.3%	19.200	14.710	11.580	870.700
3	14:30:06	<u>1102.900</u>	<u>13960.000</u>	839.300	2865.000	2888.000	109.8%	18.820	14.990	11.870	531.400
X		<u>171.490</u>	<u>13830.000</u>	844.000	2965.000	2882.000	110.2%	19.110	14.670	11.650	709.600
S		<u>129.390</u>	<u>134.500</u>	14.190	86.340	13.730	2.1%	0.257	0.333	0.186	170.300
%RSD		<u>141.110</u>	<u>0.973</u>	1.682	2.912	0.476	1.9	1.345	2.270	1.593	24.000
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:29:12	7213.000	74.710	<u>17132.000</u>	6795.000	9.033	10.880	9.580	10.060	10.610	73.310
2	14:29:39	7171.000	75.320	<u>17172.000</u>	6922.000	9.085	10.720	11.050	9.624	10.230	70.010
3	14:30:06	7223.000	76.470	<u>17225.000</u>	6874.000	8.874	10.940	10.320	10.000	9.779	71.060
X		7202.000	75.500	<u>17176.000</u>	6864.000	8.997	10.840	10.320	9.895	10.200	71.460
S		27.870	0.897	<u>146.370</u>	64.040	0.110	0.112	0.735	0.237	0.414	1.685
%RSD		0.387	1.188	<u>0.646</u>	0.933	1.221	1.029	7.124	2.392	4.055	2.359
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:29:12	67.600	68.770	10.420	7.785	0.226	0.212	38.240	9.454	-1.462	11.990
2	14:29:39	66.590	65.800	10.030	8.684	0.329	-0.231	26.210	6.410	-0.934	11.400
3	14:30:06	64.930	67.060	9.764	7.431	0.051	0.599	33.050	7.976	-1.216	12.010
X		66.370	67.210	10.070	7.967	0.202	0.194	32.500	7.947	-1.204	11.800
S		1.348	1.489	0.328	0.646	0.140	0.415	6.034	1.522	0.264	0.343
%RSD		2.032	2.215	3.262	8.111	69.510	214.400	18.570	19.160	21.950	2.904
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:29:12	103.5%	7.134	7.120	7.228	7.923	7.899	8.198	7.991	8.027	101.4%
2	14:29:39	104.6%	7.283	7.260	7.373	8.015	7.799	7.901	7.812	7.825	102.8%
3	14:30:06	104.6%	7.469	7.595	7.229	6.578	7.977	7.739	7.976	7.682	104.2%
X		104.2%	7.295	7.325	7.276	7.505	7.891	7.946	7.926	7.844	102.8%
S		0.6%	0.168	0.244	0.084	0.804	0.089	0.233	0.100	0.173	1.4%
%RSD		0.6	2.301	3.330	1.149	10.720	1.130	2.933	1.256	2.210	1.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:29:12	8.031	8.187	5.608	6.106	26.140	25.980	105.0%	7.211	7.015	13.610
2	14:29:39	7.722	7.751	5.530	5.963	25.560	25.960	106.8%	7.125	6.824	13.080
3	14:30:06	7.899	7.987	5.649	5.913	25.240	25.610	107.0%	7.193	6.942	13.230
X		7.884	7.975	5.596	5.994	25.650	25.850	106.3%	7.176	6.927	13.310
S		0.155	0.218	0.060	0.100	0.454	0.209	1.1%	0.045	0.097	0.272
%RSD		1.966	2.737	1.081	1.675	1.771	0.809	1.0	0.631	1.394	2.043
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:29:12	13.190	13.180	112.6%							
2	14:29:39	12.890	12.690	114.5%							
3	14:30:06	12.880	12.780	115.9%							
X		12.990	12.880	114.3%							
S		0.178	0.259	1.6%							
%RSD		1.370	2.014	1.4							

VJ15063-004L(125)

10/26/2020 14:34:35

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:01	103.1%	0.015	0.414	0.551	-33.940	0.350	434.300	435.500	445.400	335.100
2	14:35:28	105.3%	0.040	0.451	0.627	-29.010	0.629	440.900	438.100	443.600	334.600
3	14:35:55	103.1%	0.068	0.532	0.608	-37.160	0.320	441.500	435.400	455.100	334.800
X		103.8%	0.041	0.466	0.595	-33.370	0.433	438.900	436.300	448.000	334.800
S		1.3%	0.026	0.061	0.039	4.101	0.170	4.006	1.570	6.156	0.275
%RSD		1.2	63.980	13.010	6.589	12.290	39.330	0.913	0.360	1.374	0.082
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:01	-101.100	2656.000	47.360	704.100	639.900	112.7%	1.128	0.656	0.683	88.670
2	14:35:28	-101.300	2640.000	48.010	682.700	617.200	113.3%	0.989	0.610	0.647	155.900
3	14:35:55	-100.300	2635.000	47.620	701.800	643.000	110.1%	1.326	0.542	0.700	179.400
X		-100.900	2644.000	47.660	696.200	633.400	112.1%	1.148	0.603	0.677	141.300
S		0.510	10.940	0.328	11.710	14.100	1.7%	0.170	0.057	0.027	47.090
%RSD		0.506	0.414	0.688	1.682	2.226	1.5	14.790	9.452	3.988	33.320
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:01	1388.000	25.320	1432.000	1333.000	0.416	0.916	0.000	0.772	0.986	18.510
2	14:35:28	1362.000	25.570	1427.000	1345.000	0.425	0.984	0.231	0.719	0.689	18.240
3	14:35:55	1416.000	26.080	1446.000	1363.000	0.396	1.023	-0.017	0.724	0.925	18.130
X		1389.000	25.660	1435.000	1347.000	0.412	0.974	0.071	0.738	0.867	18.290
S		27.130	0.389	9.569	14.820	0.015	0.054	0.138	0.029	0.157	0.196
%RSD		1.954	1.517	0.667	1.100	3.566	5.561	194.100	3.917	18.070	1.073
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:01	17.070	17.050	0.506	-0.308	-0.668	-0.745	1.566	0.415	-0.677	1.560
2	14:35:28	16.560	17.080	0.440	-0.255	-0.770	-0.147	0.736	0.222	-1.499	1.567
3	14:35:55	17.030	17.020	0.490	0.544	-0.500	-0.653	2.089	0.542	-1.246	1.507
X		16.890	17.050	0.479	-0.006	-0.646	-0.515	1.464	0.393	-1.141	1.545
S		0.285	0.027	0.035	0.477	0.137	0.322	0.683	0.161	0.421	0.033
%RSD		1.689	0.161	7.222	7922.000	21.160	62.480	46.640	40.940	36.900	2.114
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:01	104.3%	0.228	0.128	0.160	-0.505	0.001	0.001	-0.002	0.008	103.8%
2	14:35:28	104.3%	0.211	0.117	0.178	-0.127	0.004	-0.000	0.006	-0.001	104.9%
3	14:35:55	105.2%	0.178	0.111	0.174	-0.273	0.002	0.001	-0.002	0.001	105.1%
X		104.6%	0.206	0.119	0.171	-0.302	0.002	0.000	0.001	0.003	104.6%
S		0.5%	0.026	0.009	0.010	0.190	0.002	0.001	0.005	0.005	0.7%
%RSD		0.5	12.530	7.540	5.837	63.150	76.480	212.900	730.500	181.700	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:01	0.131	0.168	0.069	0.064	3.750	4.068	105.8%	0.056	0.040	1.081
2	14:35:28	0.103	0.215	0.044	0.071	3.808	3.628	107.8%	0.039	0.046	1.040
3	14:35:55	0.127	0.172	0.051	0.079	3.764	3.781	106.8%	0.046	0.037	0.941
X		0.120	0.185	0.054	0.071	3.774	3.826	106.8%	0.047	0.041	1.021
S		0.015	0.026	0.013	0.007	0.030	0.224	1.0%	0.008	0.004	0.072
%RSD		12.650	13.980	23.930	10.480	0.807	5.847	0.9	17.720	10.540	7.079
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:35:01	0.923	0.978	113.8%							
2	14:35:28	0.913	0.983	113.9%							
3	14:35:55	0.896	0.938	116.2%							
X		0.911	0.966	114.6%							
S		0.014	0.025	1.3%							
%RSD		1.492	2.569	1.2							

VJ15063-004A(25)

10/26/2020 14:40:24

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:40:51	104.6%	5.645	8.881	9.302	-79.930	91.680	<u>1954.000</u>	1952.000	2297.000	<u>TM 1686.000</u>
2	14:41:18	102.9%	5.483	9.598	9.619	-74.610	93.190	<u>1985.000</u>	1952.000	2333.000	<u>TM 1676.000</u>
3	14:41:45	102.9%	6.006	8.712	9.918	-83.570	94.460	<u>2006.000</u>	2017.000	2381.000	<u>TM 1711.000</u>
X		103.4%	5.711	9.064	9.613	-79.370	93.110	<u>1982.000</u>	1974.000	2337.000	<u>TM 1691.000</u>
S		1.0%	0.268	0.470	0.308	4.506	1.391	<u>125.960</u>	37.380	42.090	<u>TM 17.780</u>
%RSD		0.9	4.689	5.187	3.207	5.678	1.494	<u>1.310</u>	1.894	1.801	<u>TM 1.051</u>
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:40:51	23.090	<u>12780.000</u>	307.300	3406.000	3345.000	110.4%	14.340	10.770	10.470	576.200
2	14:41:18	<u>137.980</u>	<u>12720.000</u>	306.800	3543.000	3332.000	108.5%	14.690	11.040	10.490	398.500
3	14:41:45	25.820	<u>12820.000</u>	306.200	3422.000	3396.000	109.4%	14.010	11.090	10.530	341.200
X		<u>128.970</u>	<u>12770.000</u>	306.700	3457.000	3358.000	109.4%	14.350	10.970	10.500	438.700
S		<u>17.927</u>	<u>148.570</u>	0.581	74.570	33.800	1.0%	0.343	0.170	0.031	122.500
%RSD		<u>127.370</u>	<u>0.380</u>	0.190	2.157	1.007	0.9	2.392	1.546	0.294	27.930
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:40:51	7015.000	134.100	<u>17092.000</u>	6697.000	9.789	12.450	11.210	11.650	12.370	96.870
2	14:41:18	7178.000	137.500	<u>17272.000</u>	6857.000	9.609	12.830	11.940	11.470	12.160	98.000
3	14:41:45	<u>17269.000</u>	137.400	<u>17118.000</u>	6742.000	9.539	12.240	10.740	11.490	12.140	99.820
X		<u>17154.000</u>	136.300	<u>17161.000</u>	6765.000	9.646	12.510	11.300	11.540	12.230	98.230
S		<u>128.500</u>	1.961	<u>196.940</u>	82.510	0.129	0.297	0.606	0.102	0.124	1.489
%RSD		<u>1.797</u>	1.439	<u>1.354</u>	1.220	1.336	2.375	5.361	0.881	1.017	1.515
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:40:51	84.550	88.360	9.442	8.118	-0.272	0.217	30.590	7.680	-1.828	14.400
2	14:41:18	90.260	90.250	9.415	7.246	0.035	-0.107	32.000	7.962	0.064	14.600
3	14:41:45	88.680	89.540	9.610	8.032	-0.776	-0.347	37.870	9.460	-1.836	14.580
X		87.830	89.380	9.489	7.799	-0.338	-0.079	33.490	8.368	-1.200	14.530
S		2.948	0.953	0.106	0.480	0.410	0.283	3.859	0.957	1.095	0.107
%RSD		3.356	1.066	1.114	6.161	121.300	358.700	11.520	11.440	91.240	0.739
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:40:51	106.3%	7.238	7.212	7.187	8.947	7.925	7.877	7.999	8.040	102.3%
2	14:41:18	106.4%	7.426	6.965	7.362	6.976	7.996	7.948	7.911	7.877	102.4%
3	14:41:45	106.7%	7.366	7.154	7.585	8.172	7.901	8.090	8.067	7.755	102.7%
X		106.5%	7.343	7.110	7.378	8.032	7.941	7.972	7.992	7.891	102.5%
S		0.2%	0.096	0.130	0.199	0.993	0.049	0.108	0.078	0.143	0.2%
%RSD		0.2	1.308	1.822	2.702	12.360	0.622	1.358	0.978	1.812	0.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:40:51	7.934	8.034	6.584	6.893	25.920	26.170	105.6%	7.820	7.483	12.750
2	14:41:18	8.027	8.043	6.569	7.047	25.680	25.950	107.5%	7.833	7.722	12.790
3	14:41:45	8.285	8.350	6.710	7.150	26.530	26.570	107.0%	8.073	7.901	13.230
X		8.082	8.143	6.621	7.030	26.050	26.230	106.7%	7.908	7.702	12.920
S		0.182	0.180	0.078	0.129	0.439	0.312	1.0%	0.143	0.210	0.269
%RSD		2.253	2.210	1.171	1.836	1.685	1.189	0.9	1.803	2.721	2.080
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:40:51	12.490	12.350	113.5%							
2	14:41:18	12.570	12.540	113.0%							
3	14:41:45	12.610	12.620	112.2%							
X		12.560	12.500	112.9%							
S		0.064	0.137	0.6%							
%RSD		0.506	1.095	0.6							

CCV MW15278 10/26/2020 14:46:15 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:42	84.6%	308.400	315.100	327.700	-19.970	62220.000	62750.000	63660.000	62670.000	304.200
2	14:47:09	86.5%	292.200	309.900	309.700	-23.690	60650.000	61780.000	61760.000	61070.000	301.100
3	14:47:36	86.8%	300.700	300.800	310.000	-5.702	60130.000	62770.000	62060.000	63350.000	301.300
X		86.0%	100.145%	102.869%	105.272%	-16.450	101.665%	62440.000	62500.000	103.942%	100.741%
S		1.2%	n/a	n/a	n/a	9.495	n/a	565.400	1022.000	n/a	n/a
%RSD		1.4	2.692	2.336	3.267	57.710	1.787	0.906	1.635	1.879	0.573
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:42	3560.000	132.000	64400.000	61530.000	64460.000	91.0%	305.900	316.000	297.700	1666.000
2	14:47:09	3469.000	121.600	63330.000	60270.000	63330.000	92.3%	300.900	302.600	291.400	1861.000
3	14:47:36	3437.000	126.400	62950.000	60230.000	62670.000	90.1%	306.200	310.700	294.400	194.800
X		3489.000	126.700	105.935%	60680.000	105.805%	91.1%	101.439%	103.258%	98.165%	1240.000
S		63.810	5.201	n/a	738.900	n/a	1.1%	n/a	n/a	n/a	910.800
%RSD		1.829	4.106	1.185	1.218	1.423	1.2	0.978	2.176	1.069	73.420
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:42	61670.000	301.500	63590.000	61550.000	300.400	310.400	290.500	288.600	304.600	296.000
2	14:47:09	60100.000	288.000	61020.000	60080.000	285.700	292.900	287.800	281.600	307.400	302.700
3	14:47:36	62360.000	295.400	61840.000	61010.000	291.300	295.200	288.900	282.900	298.200	300.800
X		61380.000	98.323%	62150.000	101.465%	97.490%	99.833%	289.100	284.300	101.125%	99.951%
S		1160.000	n/a	1315.000	n/a	n/a	n/a	1.364	3.714	n/a	n/a
%RSD		1.890	2.288	2.116	1.220	2.548	3.174	0.472	1.306	1.550	1.146
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:42	288.400	282.700	286.500	290.300	-0.177	-0.439	1222.000	297.200	-0.138	296.800
2	14:47:09	285.300	277.000	277.900	293.800	0.662	-0.670	1219.000	301.900	-0.771	299.600
3	14:47:36	283.900	278.500	287.300	281.900	-0.124	-0.949	1231.000	303.400	-1.091	294.300
X		285.900	279.400	94.630%	288.700	0.121	-0.686	1224.000	100.285%	-0.667	98.961%
S		2.307	2.998	n/a	6.117	0.470	0.255	6.126	n/a	0.485	n/a
%RSD		0.807	1.073	1.847	2.119	389.900	37.240	0.500	1.071	72.710	0.889
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:42	85.7%	304.500	300.600	301.200	295.900	285.300	287.800	287.800	290.300	84.4%
2	14:47:09	84.8%	305.700	305.600	305.900	287.400	288.200	295.200	291.900	295.100	82.4%
3	14:47:36	84.8%	306.900	307.700	307.600	291.900	289.700	289.400	293.500	294.200	82.5%
X		85.1%	101.896%	101.544%	304.900	291.800	95.919%	290.800	291.000	97.737%	83.1%
S		0.5%	n/a	n/a	3.325	4.264	n/a	3.904	2.964	n/a	1.1%
%RSD		0.5	0.389	1.192	1.090	1.461	0.788	1.342	1.018	0.870	1.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:42	299.100	298.300	292.400	314.400	290.600	294.800	88.7%	303.900	305.900	302.400
2	14:47:09	302.800	303.600	297.800	323.500	295.300	297.700	88.6%	301.400	304.400	302.600
3	14:47:36	301.900	304.500	297.400	322.400	286.900	293.300	89.7%	299.000	303.800	302.700
X		100.415%	100.717%	295.800	106.696%	96.979%	98.418%	89.0%	301.400	101.568%	100.861%
S		n/a	n/a	3.022	n/a	n/a	n/a	0.6%	2.403	n/a	n/a
%RSD		0.636	1.110	1.022	1.553	1.451	0.747	0.7	0.797	0.355	0.048
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:46:42	304.600	302.700	88.6%							
2	14:47:09	303.200	302.300	88.6%							
3	14:47:36	303.800	302.400	89.0%							
X		101.287%	100.828%	88.7%							
S		n/a	n/a	0.2%							
%RSD		0.231	0.064	0.2							

CCB IM10195-01 10/26/2020 14:52:06 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:52:33	93.9%	0.021	0.030	0.418	-8.788	2.530	2.061	1.809	1.815	0.032
2	14:53:00	93.5%	-0.009	0.195	0.285	-2.875	2.956	2.492	2.167	2.038	0.068
3	14:53:28	93.7%	0.033	0.259	0.318	-11.870	2.857	2.315	2.171	2.333	0.034
X		93.7%	0.015	0.161	0.340	-7.845	2.781	2.290	2.049	2.062	0.045
S		0.2%	0.022	0.118	0.069	4.573	0.223	0.216	0.208	0.260	0.020
%RSD		0.2	148.500	73.110	20.350	58.290	8.006	9.449	10.130	12.590	44.430
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:52:33	-110.600	120.700	8.963	-0.308	-30.830	99.2%	0.000	0.020	-0.021	-13.540
2	14:53:00	-110.900	117.100	8.578	2.612	-30.250	97.7%	-0.037	0.018	0.005	-6.468
3	14:53:28	-109.500	113.100	6.179	0.645	-30.000	99.2%	-0.019	-0.010	0.002	1.237
X		-110.300	117.000	7.907	0.983	-30.360	98.7%	-0.018	0.009	-0.005	-6.256
S		0.724	3.793	1.509	1.489	0.426	0.9%	0.019	0.017	0.014	7.389
%RSD		0.657	3.243	19.080	151.500	1.402	0.9	102.100	180.500	312.000	118.100
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:52:33	1.156	0.005	-2.883	5.829	0.007	-0.015	-0.568	-0.018	0.004	-0.029
2	14:53:00	2.075	0.002	-2.137	6.921	0.007	0.001	-0.478	-0.002	0.040	-0.041
3	14:53:28	1.557	0.008	-3.389	3.436	0.002	0.016	-0.053	-0.018	-0.006	0.080
X		1.596	0.005	-2.803	5.396	0.005	0.001	-0.366	-0.013	0.013	0.003
S		0.460	0.003	0.630	1.783	0.003	0.016	0.275	0.009	0.024	0.067
%RSD		28.840	58.800	22.480	33.040	56.000	2478.000	74.960	72.710	192.600	1920.000
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:52:33	0.044	-0.058	0.089	-0.084	-0.497	-0.820	1.500	0.409	-2.432	0.009
2	14:53:00	-0.165	0.015	0.012	-0.008	-0.608	-0.542	0.594	0.127	0.070	0.013
3	14:53:28	0.112	0.008	0.034	0.331	-0.314	-0.054	1.440	0.354	-1.548	0.012
X		-0.003	-0.012	0.045	0.080	-0.473	-0.472	1.178	0.296	-1.303	0.011
S		0.144	0.040	0.040	0.221	0.148	0.388	0.506	0.149	1.268	0.002
%RSD		4454.000	341.400	88.960	277.300	31.370	82.090	42.990	50.290	97.320	18.600
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:52:33	92.3%	0.783	0.708	0.723	-0.211	0.009	0.006	0.005	0.007	93.9%
2	14:53:00	92.0%	0.699	0.698	0.759	-0.160	0.009	0.011	0.005	0.007	94.0%
3	14:53:28	93.3%	0.642	0.805	0.724	0.081	0.008	0.007	0.009	0.010	96.1%
X		92.5%	0.708	0.737	0.736	-0.097	0.009	0.008	0.006	0.008	94.7%
S		0.7%	0.071	0.059	0.020	0.156	0.001	0.002	0.002	0.002	1.2%
%RSD		0.7	10.060	7.966	2.773	161.100	8.291	28.620	39.070	24.200	1.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:52:33	0.081	0.108	0.489	0.523	0.005	0.008	96.9%	0.006	0.011	0.008
2	14:53:00	0.133	0.115	0.596	0.612	-0.002	0.000	98.2%	0.014	0.010	0.008
3	14:53:28	0.062	0.110	0.519	0.562	0.025	0.004	98.7%	0.007	0.008	0.014
X		0.092	0.111	0.535	0.566	0.009	0.004	98.0%	0.009	0.010	0.010
S		0.037	0.003	0.055	0.044	0.014	0.004	0.9%	0.004	0.002	0.003
%RSD		40.250	3.130	10.370	7.830	152.700	91.570	0.9	47.500	15.960	31.390
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:52:33	0.014	0.014	104.8%							
2	14:53:00	0.014	0.014	105.3%							
3	14:53:28	0.020	0.015	108.4%							
X		0.016	0.014	106.1%							
S		0.004	0.001	1.9%							
%RSD		22.030	5.670	1.8							

VJ15063-005(5)

10/26/2020 14:57:54

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:21	103.4%	0.234	3.996	4.990	-149.600	28.670	1917.000	1892.000	3025.000	TM 5979.000
2	14:58:48	104.4%	0.174	4.213	4.643	-153.100	27.050	1877.000	1902.000	2918.000	TM 5954.000
3	14:59:14	104.2%	0.213	4.543	4.585	-153.900	26.810	1918.000	1952.000	2937.000	TM 5902.000
X		104.0%	0.207	4.250	4.739	-152.200	27.510	1904.000	1915.000	2960.000	TM 5945.000
S		0.5%	0.030	0.276	0.219	2.270	1.010	23.070	32.240	57.150	TM 39.170
%RSD		0.5	14.560	6.481	4.628	1.491	3.669	1.211	1.683	1.931	TM 0.659
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:21	312.700	56140.000	1882.000	1036.000	928.000	107.3%	72.240	19.410	13.310	1261.000
2	14:58:48	287.600	55620.000	1889.000	977.400	914.100	109.1%	72.130	18.140	12.920	1273.000
3	14:59:14	299.000	56790.000	1857.000	963.700	931.300	108.3%	71.960	18.930	13.290	1339.000
X		299.800	56180.000	1876.000	992.500	924.500	108.2%	72.110	18.830	13.170	1291.000
S		12.590	586.900	16.710	38.550	9.083	0.9%	0.144	0.640	0.219	41.750
%RSD		4.198	1.045	0.891	3.884	0.983	0.8	0.200	3.397	1.664	3.234
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:21	43380.000	456.500	43630.000	42250.000	11.860	12.940	13.270	37.360	40.960	M 962.600
2	14:58:48	42820.000	457.400	42890.000	42310.000	11.930	12.870	13.170	36.810	39.170	M 946.300
3	14:59:14	42590.000	458.700	43280.000	41990.000	11.670	13.130	13.260	36.400	40.630	M 937.800
X		42930.000	457.500	43270.000	42190.000	11.820	12.980	13.230	36.860	40.250	M 948.900
S		405.700	1.099	370.400	170.400	0.135	0.133	0.052	0.483	0.954	M 12.580
%RSD		0.945	0.240	0.856	0.404	1.138	1.024	0.390	1.309	2.370	M 1.326
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:21	M 842.400	M 862.000	7.186	-0.320	2.668	2.504	0.574	0.272	-1.904	5.020
2	14:58:48	M 834.400	M 864.700	7.072	0.721	2.257	2.521	1.094	0.352	-0.592	4.812
3	14:59:14	M 831.400	M 851.400	7.167	-0.132	3.040	1.949	1.817	0.512	0.648	4.887
X		M 836.100	M 859.400	7.141	0.089	2.655	2.325	1.162	0.379	-0.616	4.906
S		M 5.700	M 7.013	0.061	0.555	0.392	0.326	0.624	0.122	1.276	0.105
%RSD		M 0.682	M 0.816	0.850	620.400	14.760	14.000	53.750	32.320	207.200	2.145
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:21	109.0%	0.971	0.994	0.922	0.695	0.053	0.048	0.080	0.065	101.5%
2	14:58:48	108.9%	0.941	0.905	1.049	0.735	0.049	0.038	0.067	0.082	103.1%
3	14:59:14	110.6%	0.930	0.989	0.968	1.075	0.054	0.047	0.146	0.061	103.5%
X		109.5%	0.947	0.963	0.980	0.835	0.052	0.044	0.098	0.069	102.7%
S		0.9%	0.021	0.050	0.064	0.209	0.002	0.005	0.043	0.011	1.1%
%RSD		0.9	2.226	5.208	6.541	25.020	4.716	12.000	43.520	15.750	1.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:21	1.826	2.572	0.272	0.319	32.870	33.520	107.1%	0.050	0.056	17.510
2	14:58:48	1.763	2.476	0.280	0.334	32.710	32.970	107.6%	0.051	0.046	17.500
3	14:59:14	1.902	2.415	0.292	0.315	32.130	33.060	108.6%	0.051	0.053	17.630
X		1.830	2.488	0.282	0.323	32.570	33.190	107.8%	0.050	0.052	17.550
S		0.070	0.079	0.010	0.010	0.389	0.297	0.8%	0.001	0.006	0.072
%RSD		3.819	3.178	3.600	3.231	1.194	0.894	0.7	1.394	10.690	0.412
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:58:21	16.070	16.320	121.8%							
2	14:58:48	16.640	16.660	120.3%							
3	14:59:14	16.240	16.770	119.1%							
X		16.320	16.580	120.4%							
S		0.294	0.233	1.4%							
%RSD		1.802	1.404	1.1							

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10/26/2020 15:03:43

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:04:11	103.1%	0.065	1.387	1.733	-72.670	4.421	564.100	549.900	621.100	TM 1284.000
2	15:04:38	105.0%	0.067	1.639	1.501	-84.510	4.268	560.600	566.300	647.500	TM 1360.000
3	15:05:06	104.6%	0.117	1.620	1.572	-77.770	4.271	562.900	540.800	601.700	TM 1249.000
X		104.2%	0.083	1.549	1.602	-78.310	4.320	562.500	552.300	623.400	TM 1298.000
S		1.0%	0.029	0.140	0.119	5.939	0.088	1.755	12.920	23.000	TM 56.850
%RSD		1.0	35.100	9.036	7.413	7.583	2.025	0.312	2.340	3.689	TM 4.381
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:04:11	-22.100	13340.000	405.200	218.700	172.700	109.7%	14.460	3.994	3.029	343.000
2	15:04:38	-11.870	13570.000	406.800	248.100	181.400	107.8%	16.820	4.342	2.851	318.800
3	15:05:06	-23.430	13050.000	402.100	218.000	165.100	110.9%	15.470	4.117	2.851	318.000
X		-19.130	13320.000	404.700	228.300	173.100	109.5%	15.580	4.151	2.910	326.600
S		6.326	262.000	2.415	17.220	8.126	1.6%	1.183	0.176	0.103	14.160
%RSD		33.060	1.967	0.597	7.543	4.696	1.5	7.592	4.253	3.525	4.336
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:04:11	9346.000	92.060	9433.000	8950.000	2.583	2.872	1.479	8.228	8.828	212.600
2	15:04:38	9665.000	96.190	9785.000	9300.000	2.712	2.940	2.172	8.420	9.094	215.300
3	15:05:06	9044.000	90.000	9261.000	8958.000	2.532	2.761	1.903	7.877	8.478	206.600
X		9352.000	92.750	9493.000	9069.000	2.609	2.858	1.852	8.175	8.800	211.500
S		310.600	3.155	266.900	199.900	0.093	0.090	0.349	0.275	0.309	4.452
%RSD		3.321	3.401	2.812	2.204	3.552	3.156	18.870	3.369	3.512	2.105
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:04:11	186.900	190.100	1.670	0.312	0.033	-0.067	1.664	0.499	-1.706	1.143
2	15:04:38	193.300	193.000	1.546	-0.022	0.137	0.033	-0.298	-0.012	-1.160	1.106
3	15:05:06	183.300	190.200	1.486	-0.132	0.417	-0.363	0.567	0.207	-1.966	1.120
X		187.800	191.100	1.567	0.053	0.196	-0.132	0.644	0.231	-1.611	1.123
S		5.054	1.664	0.094	0.231	0.199	0.206	0.983	0.256	0.411	0.019
%RSD		2.690	0.871	5.975	439.700	101.400	155.400	152.600	110.900	25.540	1.652
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:04:11	103.0%	0.225	0.225	0.234	-0.062	0.010	0.014	0.010	0.012	100.0%
2	15:04:38	103.5%	0.266	0.251	0.267	-0.376	0.012	0.008	0.022	0.007	101.3%
3	15:05:06	102.4%	0.283	0.227	0.296	-0.776	0.010	0.012	0.026	0.019	101.8%
X		103.0%	0.258	0.234	0.266	-0.405	0.011	0.011	0.019	0.013	101.0%
S		0.6%	0.030	0.015	0.031	0.358	0.001	0.003	0.008	0.006	1.0%
%RSD		0.5	11.670	6.333	11.600	88.460	13.360	28.470	42.510	50.580	1.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:04:11	0.429	0.568	0.093	0.086	7.001	6.805	103.1%	0.015	0.016	3.850
2	15:04:38	0.439	0.562	0.112	0.127	7.280	7.030	102.9%	0.015	0.017	3.899
3	15:05:06	0.391	0.586	0.136	0.115	7.270	6.997	104.0%	0.020	0.011	4.006
X		0.420	0.572	0.113	0.109	7.184	6.944	103.3%	0.016	0.015	3.918
S		0.025	0.013	0.022	0.021	0.158	0.121	0.6%	0.003	0.003	0.080
%RSD		5.922	2.242	19.130	19.530	2.202	1.747	0.6	17.600	21.750	2.044
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	15:04:11	3.634	3.682	107.5%							
2	15:04:38	3.834	3.765	107.7%							
3	15:05:06	3.505	3.607	106.4%							
X		3.658	3.685	107.2%							
S		0.166	0.079	0.7%							
%RSD		4.536	2.149	0.7							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:59	98.4%	0.043	3.673	4.520	-177.800	77.120	17120.000	17630.000	131370.000	TM 4768.000
2	15:10:26	97.3%	0.048	3.661	4.297	-181.400	76.590	16410.000	16920.000	129910.000	TM 4700.000
3	15:10:53	97.5%	0.060	3.929	4.204	-178.800	76.180	16450.000	17100.000	129810.000	TM 4666.000
X		97.7%	0.050	3.754	4.340	-179.300	76.630	16660.000	17220.000	130360.000	TM 4711.000
S		0.6%	0.009	0.151	0.163	1.866	0.472	1395.700	1366.300	1874.100	TM 52.080
%RSD		0.6	17.460	4.029	3.745	1.041	0.617	12.375	12.128	12.879	TM 1.105
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:59	51.090	151560.000	1314.000	120600.000	126200.000	95.8%	87.560	24.730	11.730	1211.000
2	15:10:26	43.870	150740.000	1259.000	116700.000	118600.000	97.7%	81.990	23.710	11.060	1121.000
3	15:10:53	42.510	150340.000	1241.000	115900.000	122600.000	96.5%	82.150	22.870	11.370	1218.000
X		45.830	150880.000	1271.000	117800.000	122500.000	96.7%	83.900	23.770	11.390	1184.000
S		4.612	1622.400	137.970	12517.000	13770.000	1.0%	3.168	0.934	0.337	53.920
%RSD		10.060	11.223	12.987	12.138	13.078	1.0	3.776	3.927	2.959	4.556
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:59	18460.000	199.100	17980.000	17960.000	3.709	7.062	5.948	25.890	28.270	83.480
2	15:10:26	17580.000	199.700	17830.000	17260.000	3.635	6.645	5.304	24.780	27.640	79.960
3	15:10:53	17360.000	196.300	17560.000	17200.000	3.557	6.615	4.441	24.370	27.270	80.800
X		17800.000	198.400	17790.000	17470.000	3.634	6.774	5.231	25.010	27.730	81.410
S		1580.600	1.813	1212.200	1419.200	0.076	0.250	0.756	0.785	0.506	1.841
%RSD		13.262	0.914	11.193	12.399	2.105	3.685	14.460	3.139	1.823	2.261
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:59	72.920	73.760	4.935	0.397	1.636	1.736	-0.304	0.072	-1.743	243.200
2	15:10:26	72.810	71.240	5.376	0.075	1.972	0.447	0.832	0.399	-2.650	240.200
3	15:10:53	69.230	70.310	4.845	-0.164	1.785	0.936	-0.064	0.071	1.103	236.000
X		71.650	71.770	5.052	0.103	1.797	1.040	0.155	0.180	-1.097	239.800
S		2.096	1.784	0.284	0.282	0.169	0.651	0.599	0.189	1.959	3.618
%RSD		2.926	2.485	5.623	274.200	9.379	62.580	387.100	104.800	178.600	1.509
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:59	98.6%	0.472	0.475	0.433	7.470	0.012	0.008	0.029	0.024	89.4%
2	15:10:26	99.2%	0.400	0.333	0.396	7.366	0.011	0.008	0.020	0.029	89.7%
3	15:10:53	99.8%	0.463	0.434	0.409	5.832	0.014	0.010	0.034	0.049	89.5%
X		99.2%	0.445	0.414	0.413	6.889	0.012	0.009	0.028	0.034	89.6%
S		0.6%	0.040	0.073	0.018	0.917	0.002	0.001	0.007	0.013	0.2%
%RSD		0.6	8.898	17.620	4.451	13.310	13.840	15.530	25.420	38.240	0.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:59	1.009	1.390	0.120	0.170	17.100	18.140	95.3%	0.052	0.045	20.550
2	15:10:26	1.065	1.275	0.114	0.133	16.950	17.490	97.0%	0.059	0.045	20.850
3	15:10:53	1.014	1.330	0.165	0.177	17.430	17.060	98.0%	0.041	0.032	20.550
X		1.029	1.331	0.133	0.160	17.160	17.560	96.8%	0.051	0.041	20.650
S		0.031	0.058	0.028	0.023	0.243	0.544	1.4%	0.009	0.007	0.176
%RSD		2.996	4.324	21.000	14.660	1.418	3.097	1.4	18.070	17.970	0.851
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	15:09:59	19.240	19.590	100.5%							
2	15:10:26	19.310	19.770	100.9%							
3	15:10:53	19.330	19.700	103.4%							
X		19.300	19.690	101.6%							
S		0.045	0.091	1.6%							
%RSD		0.235	0.462	1.5							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:15:48	101.7%	0.019	1.055	1.542	-115.900	13.420	4630.000	4622.000	6169.000	TM 949.100
2	15:16:14	104.3%	0.034	1.189	1.730	-115.900	13.550	4655.000	4777.000	6191.000	TM 953.100
3	15:16:41	100.3%	0.023	1.140	1.559	-115.100	15.000	4753.000	4758.000	6118.000	TM 946.800
X		102.1%	0.025	1.128	1.610	-115.600	13.990	4679.000	4719.000	6160.000	TM 949.700
S		2.0%	0.007	0.068	0.104	0.459	0.873	65.110	84.400	37.300	TM 3.143
%RSD		2.0	29.480	5.989	6.466	0.397	6.238	1.392	1.788	0.606	TM 0.331
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:15:48	-74.550	11620.000	282.000	23890.000	23380.000	106.8%	16.350	4.999	2.313	242.300
2	15:16:14	-76.790	11830.000	290.800	23970.000	25190.000	106.9%	17.020	4.785	2.378	313.100
3	15:16:41	-77.110	11930.000	294.600	24010.000	24700.000	107.9%	18.060	4.903	2.292	219.700
X		-76.150	11790.000	289.100	23960.000	24420.000	107.2%	17.140	4.896	2.328	258.400
S		1.394	156.200	6.505	57.010	936.700	0.6%	0.865	0.107	0.044	48.750
%RSD		1.831	1.324	2.250	0.238	3.835	0.6	5.047	2.187	1.908	18.870
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:15:48	3519.000	39.790	3643.000	3527.000	0.753	1.578	0.677	5.468	5.729	17.290
2	15:16:14	3566.000	40.230	3685.000	3539.000	0.758	1.364	0.134	5.573	5.616	17.070
3	15:16:41	3628.000	41.350	3655.000	3465.000	0.685	1.452	0.210	5.536	5.880	16.830
X		3571.000	40.460	3661.000	3511.000	0.732	1.465	0.340	5.526	5.742	17.060
S		54.850	0.806	21.850	39.860	0.041	0.108	0.294	0.053	0.132	0.229
%RSD		1.536	1.993	0.597	1.135	5.603	7.337	86.430	0.965	2.303	1.340
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:15:48	15.560	15.730	1.010	0.061	-0.320	0.112	0.687	0.247	-2.162	51.230
2	15:16:14	15.370	15.820	0.897	0.156	-0.173	-0.222	-0.726	-0.116	-2.144	52.590
3	15:16:41	17.270	15.750	1.143	0.086	-0.343	-0.339	-0.397	-0.030	-2.682	53.280
X		16.070	15.770	1.017	0.101	-0.279	-0.149	-0.145	0.033	-2.329	52.370
S		1.045	0.048	0.123	0.049	0.092	0.234	0.740	0.190	0.305	1.047
%RSD		6.502	0.303	12.080	48.960	32.980	156.600	509.200	566.900	13.100	1.999
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:15:48	100.5%	0.086	0.180	0.108	3.191	0.003	0.003	0.019	0.013	99.2%
2	15:16:14	100.0%	0.156	0.095	0.113	0.391	0.004	0.001	0.015	0.012	100.8%
3	15:16:41	98.8%	0.147	0.126	0.119	0.448	-0.000	0.004	0.006	0.017	100.4%
X		99.8%	0.129	0.134	0.114	1.343	0.002	0.002	0.013	0.014	100.2%
S		0.9%	0.038	0.043	0.006	1.600	0.002	0.002	0.006	0.003	0.8%
%RSD		0.9	29.430	32.040	5.029	119.100	104.100	65.650	47.960	21.430	0.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:15:48	0.232	0.284	0.058	0.051	3.635	3.659	102.3%	0.008	0.011	4.198
2	15:16:14	0.206	0.308	0.065	0.025	3.639	3.659	103.2%	0.008	0.009	4.356
3	15:16:41	0.229	0.293	0.074	0.055	3.551	3.932	104.3%	0.011	0.011	4.440
X		0.222	0.295	0.066	0.044	3.608	3.750	103.3%	0.009	0.010	4.331
S		0.014	0.012	0.008	0.016	0.050	0.158	1.0%	0.002	0.001	0.123
%RSD		6.274	4.201	12.030	37.430	1.380	4.208	1.0	23.540	13.540	2.829
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	15:15:48	4.086	4.009	109.9%							
2	15:16:14	3.978	4.134	111.3%							
3	15:16:41	4.148	4.150	111.3%							
X		4.070	4.098	110.8%							
S		0.086	0.077	0.8%							
%RSD		2.114	1.880	0.7							

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10/26/2020 15:21:09

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:21:36	96.3%	0.263	6.066	6.562	-185.700	95.300	12920.000	13190.000	23290.000	TM 8199.000
2	15:22:04	95.2%	0.235	6.589	5.911	-184.600	96.380	12610.000	12890.000	23190.000	TM 8359.000
3	15:22:31	95.8%	0.242	6.515	6.328	-186.700	96.990	12920.000	13490.000	23670.000	TM 8592.000
X		95.8%	0.247	6.390	6.267	-185.700	96.220	12820.000	13190.000	23380.000	TM 8384.000
S		0.6%	0.014	0.283	0.330	1.072	0.857	178.000	299.800	251.600	TM 197.300
%RSD		0.6	5.859	4.434	5.261	0.578	0.890	1.388	2.272	1.076	TM 2.353
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:21:36	361.800	63640.000	1528.000	89910.000	93890.000	97.1%	140.300	23.110	11.390	1404.000
2	15:22:04	380.100	63810.000	1549.000	91230.000	93400.000	96.2%	137.100	22.910	11.930	1234.000
3	15:22:31	374.300	64340.000	1522.000	91920.000	95830.000	93.9%	142.100	23.240	12.040	1191.000
X		372.100	63930.000	1533.000	91020.000	94380.000	95.7%	139.900	23.090	11.780	1277.000
S		9.380	362.500	14.070	1019.000	1285.000	1.7%	2.516	0.170	0.348	112.800
%RSD		2.521	0.567	0.918	1.119	1.361	1.7	1.799	0.735	2.952	8.838
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:21:36	22860.000	TM 1231.000	22990.000	22770.000	12.730	10.160	9.527	11.320	13.190	158.100
2	15:22:04	22610.000	TM 1234.000	22850.000	22290.000	12.960	10.790	9.559	11.710	12.630	157.000
3	15:22:31	23040.000	TM 1257.000	23640.000	22540.000	12.760	10.680	10.030	11.180	13.230	150.000
X		22840.000	TM 1241.000	23160.000	22530.000	12.820	10.540	9.705	11.400	13.020	155.000
S		216.400	TM 14.350	420.100	239.800	0.128	0.338	0.280	0.273	0.335	4.387
%RSD		0.948	TM 1.157	1.814	1.064	1.000	3.210	2.886	2.391	2.573	2.830
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:21:36	139.200	139.500	6.822	0.185	5.790	4.768	0.425	0.344	-2.359	215.500
2	15:22:04	137.200	136.600	7.040	0.043	4.926	4.916	-0.408	0.084	-1.025	214.900
3	15:22:31	136.400	139.300	7.611	0.367	5.791	4.758	2.354	0.833	-2.085	213.200
X		137.600	138.500	7.158	0.198	5.502	4.814	0.790	0.420	-1.823	214.500
S		1.408	1.645	0.407	0.163	0.499	0.089	1.417	0.380	0.705	1.208
%RSD		1.024	1.188	5.692	81.930	9.065	1.842	179.300	90.570	38.650	0.563
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:21:36	108.3%	0.307	0.371	0.320	5.316	0.028	0.014	0.095	0.077	92.2%
2	15:22:04	108.9%	0.275	0.300	0.318	6.277	0.021	0.015	0.105	0.096	92.1%
3	15:22:31	108.8%	0.382	0.290	0.363	6.727	0.020	0.010	0.107	0.099	93.6%
X		108.7%	0.321	0.320	0.333	6.107	0.023	0.013	0.102	0.091	92.6%
S		0.3%	0.055	0.044	0.025	0.721	0.004	0.003	0.006	0.012	0.8%
%RSD		0.3	17.160	13.730	7.623	11.810	18.180	23.320	5.979	13.370	0.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:21:36	1.083	1.495	0.126	0.171	128.700	130.900	100.1%	0.063	0.068	18.570
2	15:22:04	0.989	1.392	0.143	0.168	127.500	131.500	101.4%	0.070	0.059	18.930
3	15:22:31	1.044	1.413	0.125	0.139	127.400	131.400	101.9%	0.072	0.074	18.950
X		1.039	1.433	0.131	0.159	127.800	131.200	101.1%	0.068	0.067	18.820
S		0.047	0.054	0.010	0.017	0.708	0.316	0.9%	0.005	0.008	0.216
%RSD		4.518	3.796	7.620	10.910	0.554	0.241	0.9	6.667	11.230	1.149
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	15:21:36	17.690	17.910	110.9%							
2	15:22:04	18.050	18.020	110.3%							
3	15:22:31	17.890	18.170	110.2%							
X		17.870	18.040	110.5%							
S		0.180	0.130	0.4%							
%RSD		1.009	0.722	0.3							

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10/26/2020 15:26:58

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:25	93.7%	0.096	2.495	2.894	55.880	154.800	727.100	719.600	779.400	TM 2707.000
2	15:27:52	93.8%	0.094	3.076	2.844	49.080	151.700	745.300	716.100	792.300	TM 2795.000
3	15:28:19	93.0%	0.082	2.878	2.487	42.610	150.000	716.400	704.600	771.300	TM 2638.000
X		93.5%	0.090	2.816	2.742	49.190	152.200	729.600	713.400	781.000	TM 2713.000
S		0.4%	0.007	0.295	0.222	6.636	2.463	14.590	7.820	10.550	TM 78.870
%RSD		0.5	8.110	10.490	8.111	13.490	1.619	2.000	1.096	1.351	TM 2.907
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:25	TM 322.000	TM 67940.000	229.000	60250.000	TM 64240.000	96.1%	100.600	6.687	304.600	1131.000
2	15:27:52	297.400	TM 68690.000	232.300	62410.000	TM 65430.000	91.8%	101.300	7.561	317.800	527.700
3	15:28:19	282.200	TM 67230.000	223.500	61440.000	TM 63060.000	92.3%	97.540	5.460	301.700	1816.000
X		TM 300.600	TM 67960.000	228.300	61370.000	TM 64250.000	93.4%	99.800	6.569	308.000	1158.000
S		TM 20.090	TM 732.800	4.465	1081.000	TM 1183.000	2.4%	1.988	1.055	8.588	644.600
%RSD		TM 6.683	TM 1.078	1.956	1.761	TM 1.842	2.5	1.992	16.070	2.788	55.650
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:25	4724.000	279.400	TM 4711.000	4687.000	1.022	3.610	2.771	12.340	12.640	29.930
2	15:27:52	5033.000	290.100	TM 4991.000	4755.000	1.131	3.421	2.506	12.980	13.080	30.020
3	15:28:19	4757.000	279.400	TM 4993.000	4755.000	1.124	3.284	2.593	12.470	12.770	29.820
X		4838.000	283.000	TM 4898.000	4732.000	1.092	3.438	2.623	12.600	12.830	29.920
S		169.300	6.150	TM 162.400	39.400	0.061	0.163	0.135	0.336	0.225	0.096
%RSD		3.500	2.173	TM 3.315	0.833	5.563	4.750	5.146	2.671	1.751	0.322
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:25	31.140	29.490	3.204	-0.410	4.592	4.522	-0.964	-0.168	-2.407	33.090
2	15:27:52	29.230	30.810	3.062	-0.069	4.790	3.740	-1.827	-0.412	-1.680	33.040
3	15:28:19	29.350	30.000	3.126	-0.074	4.736	4.854	-0.229	-0.023	-1.370	32.870
X		29.900	30.100	3.131	-0.184	4.706	4.372	-1.007	-0.201	-1.819	33.000
S		1.070	0.665	0.071	0.195	0.103	0.572	0.800	0.197	0.532	0.116
%RSD		3.578	2.209	2.274	106.100	2.182	13.090	79.490	97.950	29.260	0.352
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:25	92.0%	0.322	0.275	0.352	2.791	0.020	0.017	0.198	0.128	92.6%
2	15:27:52	90.2%	0.305	0.497	0.370	1.428	0.017	0.016	0.183	0.138	93.4%
3	15:28:19	90.3%	0.325	0.338	0.337	2.260	0.029	0.014	0.142	0.144	90.9%
X		90.8%	0.317	0.370	0.353	2.160	0.022	0.016	0.174	0.136	92.3%
S		1.1%	0.011	0.115	0.016	0.687	0.007	0.002	0.029	0.008	1.3%
%RSD		1.2	3.372	30.980	4.612	31.810	29.380	9.522	16.370	6.092	1.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:25	1.970	2.729	0.181	0.263	29.650	29.820	99.1%	0.036	0.023	16.250
2	15:27:52	1.899	2.900	0.213	0.215	29.720	29.720	99.1%	0.024	0.029	16.570
3	15:28:19	2.027	2.959	0.199	0.228	28.690	29.980	99.3%	0.025	0.030	16.420
X		1.965	2.863	0.198	0.235	29.350	29.840	99.2%	0.028	0.027	16.410
S		0.064	0.119	0.016	0.025	0.577	0.133	0.1%	0.007	0.004	0.156
%RSD		3.273	4.171	8.075	10.490	1.965	0.447	0.1	23.470	13.090	0.952
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	15:27:25	14.770	15.390	110.9%							
2	15:27:52	15.550	15.720	109.7%							
3	15:28:19	15.180	15.540	109.2%							
X		15.170	15.550	109.9%							
S		0.387	0.170	0.8%							
%RSD		2.552	1.093	0.8							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:33:15	87.5%	0.250	8.335	8.908	643.200	1371.000	3935.000	3942.000	5022.000	TM 10910.000
2	15:33:42	88.4%	0.345	9.523	8.138	602.200	1298.000	3711.000	3705.000	4958.000	TM 10610.000
3	15:34:09	87.4%	0.282	8.735	8.105	595.500	1282.000	3665.000	3655.000	4698.000	TM 10320.000
X		87.8%	0.292	8.864	8.384	613.600	1317.000	3771.000	3767.000	4892.000	TM 10610.000
S		0.5%	0.048	0.604	0.454	25.780	47.260	144.500	153.000	171.600	TM 295.700
%RSD		0.6	16.480	6.817	5.419	4.202	3.589	3.833	4.062	3.508	TM 2.787
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:33:15	1732.000	305500.000	727.300	M 501200.000	TM 506400.000	82.5%	457.900	52.660	TM 2964.000	-8372.000
2	15:33:42	1738.000	304500.000	720.200	M 489300.000	TM 495200.000	81.2%	447.600	24.700	TM 2830.000	7549.000
3	15:34:09	1688.000	299700.000	695.900	M 477300.000	TM 488300.000	80.7%	440.500	46.990	TM 2821.000	-6479.000
X		1719.000	303200.000	714.500	M 489300.000	TM 496600.000	81.5%	448.700	41.450	TM 2872.000	-2434.000
S		27.420	3132.000	16.490	M 11960.000	TM 9133.000	0.9%	8.745	14.780	TM 79.920	8697.000
%RSD		1.595	1.033	2.307	M 2.445	TM 1.839	1.1	1.949	35.660	TM 2.783	357.300
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:33:15	34280.000	TM 2030.000	33760.000	33770.000	5.046	18.230	15.190	54.580	61.380	167.800
2	15:33:42	33560.000	TM 1975.000	32800.000	33450.000	4.936	17.610	17.910	55.590	58.860	159.600
3	15:34:09	32860.000	TM 1939.000	31550.000	32250.000	4.723	17.700	16.750	52.900	55.140	156.900
X		33570.000	TM 1982.000	32700.000	33160.000	4.902	17.850	16.620	54.350	58.460	161.400
S		708.200	TM 45.970	1111.000	804.500	0.164	0.336	1.368	1.360	3.140	5.699
%RSD		2.110	TM 2.320	3.398	2.427	3.349	1.881	8.236	2.501	5.371	3.531
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:33:15	152.100	152.600	27.160	0.349	27.600	29.210	0.912	0.179	6.283	249.600
2	15:33:42	145.000	150.500	27.770	0.034	25.540	28.390	1.964	0.496	4.079	249.600
3	15:34:09	146.200	145.000	27.370	0.305	25.480	25.200	0.623	0.150	4.394	239.800
X		147.800	149.400	27.430	0.229	26.210	27.600	1.167	0.275	4.919	246.300
S		3.779	3.929	0.308	0.171	1.209	2.116	0.706	0.192	1.192	5.651
%RSD		2.558	2.630	1.123	74.440	4.614	7.667	60.500	69.660	24.230	2.294
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:33:15	89.0%	2.195	1.978	2.113	13.080	0.096	0.068	0.781	0.749	79.7%
2	15:33:42	88.4%	2.285	2.077	1.972	11.070	0.080	0.068	0.759	0.735	79.9%
3	15:34:09	88.6%	2.106	2.019	1.950	9.896	0.083	0.046	0.619	0.664	79.3%
X		88.6%	2.195	2.025	2.012	11.350	0.086	0.061	0.720	0.716	79.6%
S		0.3%	0.090	0.050	0.089	1.611	0.009	0.012	0.088	0.046	0.3%
%RSD		0.4	4.088	2.450	4.409	14.190	10.150	20.480	12.210	6.356	0.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:33:15	14.670	21.190	1.349	1.416	114.200	121.600	90.1%	0.097	0.100	74.450
2	15:33:42	14.830	20.100	1.301	1.473	115.000	116.600	89.1%	0.093	0.085	72.190
3	15:34:09	14.430	20.870	1.356	1.439	109.200	117.900	90.0%	0.115	0.096	72.030
X		14.640	20.720	1.335	1.443	112.800	118.700	89.7%	0.102	0.094	72.890
S		0.203	0.561	0.030	0.029	3.135	2.599	0.6%	0.012	0.008	1.352
%RSD		1.382	2.708	2.228	1.998	2.779	2.189	0.6	11.640	8.687	1.854
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	15:33:15	70.330	70.910	94.0%							
2	15:33:42	69.430	69.840	93.1%							
3	15:34:09	69.640	69.910	92.0%							
X		69.800	70.220	93.0%							
S		0.471	0.601	1.0%							
%RSD		0.675	0.855	1.0							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:03	87.0%	0.095	1.758	2.569	171.400	268.800	953.500	947.000	1010.000	2177.000
2	15:39:30	85.7%	0.099	2.289	2.227	150.800	262.800	920.000	907.600	993.600	2197.000
3	15:39:57	86.3%	0.070	2.092	2.185	165.200	262.700	961.200	893.800	1000.000	2167.000
X		86.3%	0.088	2.046	2.327	162.500	264.700	944.900	916.100	1001.000	2180.000
S		0.6%	0.016	0.269	0.211	10.570	3.471	21.930	27.600	8.142	15.170
%RSD		0.7	18.030	13.130	9.069	6.507	1.311	2.321	3.012	0.813	0.696
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:03	263.600	64800.000	157.200	94370.000	99420.000	85.7%	91.350	11.880	571.100	-2341.000
2	15:39:30	264.300	64260.000	150.800	94160.000	98050.000	83.8%	89.920	4.809	572.600	1963.000
3	15:39:57	252.700	62630.000	152.300	94370.000	98640.000	83.4%	87.410	7.158	562.700	349.100
X		260.200	63890.000	153.400	94300.000	98700.000	84.3%	89.560	7.948	568.800	-9.403
S		6.479	1132.000	3.351	125.100	690.800	1.2%	1.999	3.600	5.362	2174.000
%RSD		2.490	1.771	2.185	0.133	0.700	1.5	2.232	45.300	0.943	23120.000
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:03	6959.000	406.600	6840.000	6747.000	1.047	4.257	2.578	12.530	13.910	37.530
2	15:39:30	6903.000	390.100	6904.000	6611.000	1.033	3.785	3.489	11.960	12.890	35.590
3	15:39:57	6633.000	387.600	6880.000	6761.000	0.944	3.975	2.376	12.190	12.370	35.230
X		6832.000	394.800	6874.000	6706.000	1.008	4.006	2.814	12.230	13.060	36.120
S		174.100	10.330	32.420	83.120	0.056	0.237	0.593	0.288	0.780	1.235
%RSD		2.549	2.616	0.472	1.239	5.561	5.926	21.070	2.352	5.973	3.419
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:03	35.970	36.090	5.993	-0.473	4.480	4.787	-0.126	0.026	-2.310	54.500
2	15:39:30	32.300	35.140	5.847	-0.435	5.226	5.128	-1.533	-0.293	-2.662	52.870
3	15:39:57	34.170	34.970	6.053	-0.268	3.905	4.551	2.077	0.491	-0.145	52.970
X		34.150	35.400	5.964	-0.392	4.537	4.822	0.140	0.075	-1.706	53.440
S		1.836	0.604	0.106	0.109	0.662	0.290	1.820	0.394	1.363	0.913
%RSD		5.376	1.707	1.774	27.860	14.600	6.020	1303.000	528.500	79.920	1.708
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:03	82.2%	0.470	0.430	0.427	1.419	0.014	0.017	0.121	0.132	83.0%
2	15:39:30	82.6%	0.401	0.380	0.404	2.349	0.018	0.005	0.152	0.138	82.3%
3	15:39:57	81.4%	0.341	0.562	0.491	0.558	0.014	0.007	0.132	0.126	82.1%
X		82.1%	0.404	0.457	0.440	1.442	0.016	0.010	0.135	0.132	82.4%
S		0.7%	0.065	0.094	0.045	0.896	0.002	0.006	0.016	0.006	0.5%
%RSD		0.8	15.990	20.600	10.240	62.090	13.610	66.340	11.640	4.493	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:03	2.906	4.231	0.259	0.274	23.360	23.480	89.2%	0.018	0.018	14.530
2	15:39:30	2.751	3.942	0.233	0.301	21.560	22.750	90.2%	0.022	0.018	14.400
3	15:39:57	2.879	4.102	0.267	0.300	22.920	23.440	88.2%	0.016	0.018	14.460
X		2.845	4.092	0.253	0.291	22.610	23.220	89.2%	0.019	0.018	14.460
S		0.082	0.145	0.018	0.015	0.934	0.410	1.0%	0.003	0.000	0.064
%RSD		2.896	3.535	6.965	5.260	4.129	1.764	1.1	14.540	1.721	0.440
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	15:39:03	14.060	13.990	93.7%							
2	15:39:30	13.850	13.970	92.3%							
3	15:39:57	14.400	13.960	91.0%							
X		14.100	13.980	92.3%							
S		0.275	0.015	1.4%							
%RSD		1.948	0.111	1.5							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:44:54	91.5%	-0.009	0.478	0.414	8.470	0.253	1.261	1.416	1.456	1.625
2	15:45:21	93.2%	-0.009	0.231	0.377	13.560	0.378	1.663	1.401	1.227	1.841
3	15:45:48	92.4%	-0.010	0.403	0.469	-3.085	0.582	1.513	1.584	1.126	1.605
X		92.4%	-0.009	0.371	0.420	6.315	0.404	1.479	1.467	1.270	1.690
S		0.8%	0.000	0.127	0.046	8.530	0.166	0.203	0.102	0.169	0.131
%RSD		0.9	5.331	34.250	10.930	135.100	41.020	13.730	6.920	13.290	7.757
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:44:54	-105.400	63250.000	-2.829	3.064	-18.570	87.5%	0.094	0.032	0.309	1767.000
2	15:45:21	-104.700	62590.000	-3.926	11.850	-23.200	86.6%	0.074	0.095	0.291	1799.000
3	15:45:48	-106.000	60660.000	-3.138	8.251	-24.160	89.5%	0.028	-0.117	0.218	1901.000
X		-105.300	62170.000	-3.298	7.723	-21.980	87.9%	0.065	0.003	0.273	1822.000
S		0.642	1347.000	0.566	4.418	2.989	1.5%	0.034	0.109	0.048	69.960
%RSD		0.609	2.166	17.150	57.210	13.600	1.7	52.290	3293.000	17.610	3.840
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:44:54	10.150	0.034	-3.296	8.054	-0.008	0.060	-0.861	-0.036	0.020	0.503
2	15:45:21	9.131	0.028	-2.190	9.113	-0.000	0.037	-0.693	-0.010	0.029	0.275
3	15:45:48	9.384	0.051	-2.860	7.461	-0.005	0.017	-0.693	-0.023	0.030	0.352
X		9.556	0.038	-2.782	8.209	-0.004	0.038	-0.749	-0.023	0.026	0.377
S		0.533	0.012	0.557	0.837	0.004	0.021	0.097	0.013	0.006	0.116
%RSD		5.577	31.830	20.020	10.190	85.670	56.440	12.920	57.310	21.450	30.730
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:44:54	0.231	0.325	-0.081	-0.359	3.029	3.170	-1.503	-0.307	-1.225	0.012
2	15:45:21	0.310	0.393	-0.273	-0.126	2.777	3.752	-1.186	-0.260	-0.232	0.016
3	15:45:48	0.339	0.494	-0.159	0.180	2.763	2.723	-2.591	-0.567	-1.273	0.005
X		0.294	0.404	-0.171	-0.102	2.856	3.215	-1.760	-0.378	-0.910	0.011
S		0.056	0.085	0.097	0.270	0.149	0.516	0.737	0.165	0.588	0.006
%RSD		19.060	21.060	56.610	266.400	5.229	16.040	41.850	43.710	64.610	51.970
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:44:54	81.2%	0.023	0.013	0.007	0.301	0.002	-0.001	-0.001	-0.002	80.2%
2	15:45:21	82.3%	0.075	0.061	0.022	0.023	-0.001	-0.000	-0.001	0.000	81.5%
3	15:45:48	81.9%	0.013	0.020	0.025	-0.813	-0.001	-0.000	0.004	0.002	80.4%
X		81.8%	0.037	0.031	0.018	-0.163	-0.000	-0.001	0.000	0.000	80.7%
S		0.5%	0.033	0.026	0.010	0.580	0.002	0.001	0.003	0.002	0.7%
%RSD		0.7	90.010	83.190	54.440	355.600	2387.000	140.100	1167.000	774.600	0.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:44:54	0.047	0.048	0.034	0.016	0.023	0.003	82.9%	0.004	0.003	0.005
2	15:45:21	0.041	0.045	0.040	0.059	0.007	0.011	84.2%	0.002	0.001	-0.001
3	15:45:48	0.024	0.054	0.041	0.043	0.023	0.016	83.4%	0.001	0.003	0.008
X		0.037	0.049	0.039	0.040	0.018	0.010	83.5%	0.002	0.002	0.004
S		0.012	0.005	0.004	0.022	0.009	0.007	0.6%	0.002	0.001	0.005
%RSD		30.990	9.410	10.550	54.450	52.870	68.980	0.8	84.530	59.700	113.300
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	15:44:54	0.005	0.006	81.9%							
2	15:45:21	0.001	0.007	81.0%							
3	15:45:48	0.005	0.007	80.7%							
X		0.004	0.007	81.2%							
S		0.002	0.001	0.6%							
%RSD		53.050	12.710	0.8							

VQ70823-002 10/26/2020 15:50:17 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:50:44	90.8%	100.800	101.400	103.600	9.128	1003.000	1100.000	1063.000	1081.000	105.600
2	15:51:11	88.9%	99.700	102.900	100.700	2.902	1014.000	1072.000	1030.000	1079.000	103.900
3	15:51:38	91.8%	102.700	106.400	100.900	3.670	997.700	1101.000	1059.000	1075.000	107.200
X		90.5%	101.041%	103.600	101.700	5.233	100.470%	1091.000	1051.000	107.820%	105.566%
S		1.5%	n/a	2.595	1.663	3.394	n/a	16.460	17.950	n/a	n/a
%RSD		1.7	1.480	2.505	1.635	64.860	0.827	1.508	1.709	0.259	1.539
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:50:44	1031.000	55010.000	932.200	1055.000	1028.000	86.8%	101.200	102.500	101.500	3161.000
2	15:51:11	1004.000	53590.000	925.500	1083.000	1009.000	86.6%	99.930	98.940	99.230	3459.000
3	15:51:38	1020.000	53440.000	907.500	1117.000	1031.000	85.1%	101.700	102.700	100.500	3309.000
X		1018.000	54010.000	92.171%	1085.000	102.273%	86.1%	100.949%	101.375%	100.424%	3309.000
S		13.860	865.600	n/a	31.030	n/a	0.9%	n/a	n/a	n/a	148.800
%RSD		1.361	1.603	1.385	2.860	1.203	1.1	0.906	2.085	1.147	4.497
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:50:44	1120.000	104.800	1115.000	1050.000	97.520	100.600	102.900	104.700	112.700	105.900
2	15:51:11	1072.000	100.800	1113.000	1003.000	97.420	101.400	97.040	102.700	111.600	103.400
3	15:51:38	1059.000	103.100	1111.000	1014.000	96.320	102.200	101.600	103.800	109.200	105.500
X		1084.000	102.891%	1113.000	102.237%	97.087%	101.399%	100.500	103.758%	111.149%	104.955%
S		32.160	n/a	1.905	n/a	n/a	n/a	3.087	n/a	n/a	n/a
%RSD		2.968	1.969	0.171	2.418	0.687	0.788	3.070	0.970	1.609	1.314
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:50:44	99.410	97.400	94.300	95.460	3.084	2.702	396.400	97.890	0.692	99.530
2	15:51:11	94.530	93.780	92.060	94.650	2.750	3.762	386.200	96.420	-1.135	98.000
3	15:51:38	101.500	97.820	96.290	93.710	3.401	2.626	404.600	98.780	-1.421	100.500
X		98.460	96.330	94.214%	94.610	3.079	3.030	395.700	97.699%	-0.621	99.330
S		3.561	2.219	n/a	0.875	0.325	0.635	9.248	n/a	1.146	1.239
%RSD		3.616	2.303	2.246	0.924	10.570	20.950	2.337	1.219	184.500	1.247
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:50:44	79.1%	106.200	103.200	105.100	103.200	99.760	100.200	99.770	97.820	77.1%
2	15:51:11	79.6%	103.300	103.600	104.000	97.550	99.120	100.900	98.320	98.820	76.7%
3	15:51:38	78.5%	105.700	103.200	102.100	103.300	98.900	99.740	97.710	97.710	77.3%
X		79.1%	105.100	103.300	103.800	101.400	99.259%	100.300	98.600	98.115%	77.0%
S		0.6%	1.535	0.212	1.497	3.298	n/a	0.601	1.057	n/a	0.3%
%RSD		0.7	1.461	0.205	1.442	3.253	0.452	0.600	1.072	0.621	0.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:50:44	100.900	100.200	99.150	106.900	100.000	100.800	79.1%	97.950	96.700	100.500
2	15:51:11	100.400	100.600	99.330	107.900	102.000	99.650	79.1%	99.790	98.130	103.400
3	15:51:38	101.100	99.730	99.130	107.900	98.160	98.940	80.1%	98.950	99.310	102.400
X		100.800	100.154%	99.200	107.543%	100.100	99.794%	79.4%	98.900	98.047%	102.100
S		0.367	n/a	0.107	n/a	1.939	n/a	0.6%	0.924	n/a	1.482
%RSD		0.365	0.420	0.108	0.533	1.937	0.936	0.7	0.934	1.335	1.451
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	15:50:44	99.890	98.880	73.6%							
2	15:51:11	103.200	101.300	72.5%							
3	15:51:38	101.900	100.800	72.3%							
X		101.700	100.346%	72.8%							
S		1.685	n/a	0.7%							
%RSD		1.657	1.286	1.0							

CCV MW15278 10/26/2020 15:56:10 QC Status: FAIL (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:56:36	77.4%	302.300	314.000	316.600	-7.971	59420.000	62820.000	62460.000	63350.000	304.200
2	15:57:03	80.4%	316.200	299.200	310.300	14.480	56850.000	63410.000	64890.000	65090.000	311.500
3	15:57:30	80.6%	302.200	298.200	305.900	-0.680	57610.000	63350.000	63280.000	63800.000	295.900
X		79.4%	102.292%	101.259%	103.645%	1.942	96.599%	63200.000	63540.000	106.798%	101.283%
S		1.8%	n/a	n/a	n/a	11.450	n/a	325.800	1235.000	n/a	n/a
%RSD		2.3	2.620	2.912	1.727	589.600	2.283	0.516	1.943	1.404	2.572
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:56:36	3699.000	395.400	54360.000	60370.000	64760.000	78.5%	316.400	320.200	310.500	1076.000
2	15:57:03	3729.000	396.300	52660.000	61410.000	65660.000	78.7%	305.300	319.900	316.200	-254.100
3	15:57:30	3568.000	377.600	54510.000	59730.000	64660.000	80.3%	303.600	306.500	299.400	2461.000
X		3666.000	389.800	-89.735%	60500.000	108.381%	79.2%	102.805%	105.181%	102.899%	1094.000
S		85.610	10.570	n/a	846.600	n/a	1.0%	n/a	n/a	n/a	1358.000
%RSD		2.336	2.711	1.906	1.399	0.848	1.3	2.259	2.470	2.766	124.100
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:56:36	65840.000	310.400	65810.000	65180.000	304.800	308.900	296.400	290.800	329.300	323.300
2	15:57:03	67380.000	309.800	66380.000	66520.000	310.300	318.900	317.400	292.000	331.300	322.300
3	15:57:30	62350.000	307.200	64160.000	65380.000	291.800	295.900	299.500	291.000	324.700	322.000
X		65190.000	103.041%	65450.000	109.483%	100.774%	102.625%	304.400	291.300	109.479%	107.519%
S		2575.000	n/a	1152.000	n/a	n/a	n/a	11.330	0.624	n/a	n/a
%RSD		3.950	0.546	1.760	1.102	3.142	3.748	3.722	0.214	1.029	0.213
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:56:36	298.000	289.000	288.400	295.400	0.965	-0.694	1240.000	317.600	-2.207	296.800
2	15:57:03	293.100	286.900	284.200	281.700	1.053	-0.191	1220.000	321.500	-0.396	289.300
3	15:57:30	295.900	283.000	281.500	287.300	1.333	-0.807	1241.000	317.300	0.498	297.200
X		295.700	286.300	94.897%	288.100	1.117	-0.564	1234.000	106.262%	-0.702	98.146%
S		2.476	3.082	n/a	6.888	0.192	0.328	11.830	n/a	1.378	n/a
%RSD		0.838	1.077	1.217	2.390	17.210	58.200	0.959	0.749	196.500	1.520
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:56:36	72.4%	299.200	297.100	297.300	278.900	286.900	286.900	287.900	292.900	68.0%
2	15:57:03	74.6%	305.500	296.100	290.200	285.400	289.500	290.700	287.900	295.000	67.8%
3	15:57:30	72.8%	317.100	312.600	311.200	290.100	289.700	288.900	290.800	292.700	68.6%
X		73.3%	102.419%	100.637%	299.600	284.800	96.225%	288.800	288.900	97.836%	68.1%
S		1.2%	n/a	n/a	10.660	5.589	n/a	1.893	1.631	n/a	0.4%
%RSD		1.6	2.953	3.058	3.559	1.963	0.545	0.655	0.565	0.427	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:56:36	298.600	299.800	292.100	316.800	295.600	296.600	70.6%	302.200	304.000	304.300
2	15:57:03	307.100	303.500	299.400	324.000	293.900	297.400	71.5%	302.400	303.700	307.700
3	15:57:30	303.800	304.400	301.500	327.600	295.000	299.300	71.8%	308.600	310.800	309.300
X		101.053%	100.848%	297.700	107.599%	98.271%	99.247%	71.3%	304.400	102.051%	102.370%
S		n/a	n/a	4.898	n/a	n/a	n/a	0.6%	3.599	n/a	n/a
%RSD		1.419	0.801	1.645	1.710	0.286	0.469	0.9	1.182	1.323	0.838
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	15:56:36	304.700	302.100	59.2%							
2	15:57:03	302.200	302.900	59.5%							
3	15:57:30	307.500	306.700	59.3%							
X		101.612%	101.311%	59.3%							
S		n/a	n/a	0.1%							
%RSD		0.871	0.812	0.2							

CCB IM10195-01 10/26/2020 16:01:59 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:02:26	88.1%	0.046	0.762	0.712	5.496	3.167	2.469	2.070	1.734	0.058
2	16:02:53	89.0%	0.067	0.373	0.679	-1.877	3.495	2.335	2.718	1.976	0.068
3	16:03:20	89.7%	0.007	0.501	0.491	8.995	2.582	2.374	1.972	2.364	0.018
X		88.9%	0.040	0.545	0.627	4.204	3.081	2.393	2.253	2.025	0.048
S		0.8%	0.031	0.198	0.119	5.550	0.462	0.069	0.405	0.318	0.027
%RSD		0.9	75.890	36.360	19.040	132.000	15.000	2.879	17.970	15.680	55.890
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:02:26	-101.400	299.000	-4.634	-0.172	-26.410	86.8%	0.052	-0.006	-0.016	14.710
2	16:02:53	-101.000	300.400	-4.037	0.929	-29.030	86.4%	-0.013	0.019	-0.012	11.210
3	16:03:20	-102.800	306.200	-7.012	4.038	-29.000	89.3%	-0.056	0.017	0.007	5.852
X		-101.800	301.900	-5.228	1.598	-28.150	87.5%	-0.006	0.010	-0.007	10.590
S		0.926	3.808	1.574	2.183	1.505	1.6%	0.055	0.014	0.012	4.463
%RSD		0.910	1.261	30.100	136.600	5.345	1.8	936.400	137.400	183.700	42.140
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:02:26	3.111	0.010	-2.329	10.570	0.011	0.001	-0.970	-0.023	0.020	0.084
2	16:02:53	1.888	0.005	-2.149	11.150	0.002	-0.011	-0.690	-0.018	0.002	-0.028
3	16:03:20	2.492	0.014	-3.705	9.097	0.008	0.023	-0.728	-0.039	-0.009	0.175
X		2.497	0.010	-2.728	10.270	0.007	0.005	-0.796	-0.026	0.005	0.077
S		0.611	0.004	0.851	1.059	0.004	0.017	0.152	0.011	0.014	0.102
%RSD		24.480	44.540	31.210	10.310	62.530	378.100	19.090	41.750	312.800	131.500
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:02:26	-0.085	-0.053	-0.099	-0.184	-0.094	-0.212	-0.723	-0.109	0.288	0.011
2	16:02:53	-0.002	0.045	-0.079	-0.142	-0.402	0.101	-2.878	-0.573	-3.274	0.010
3	16:03:20	-0.131	-0.017	0.039	-0.569	0.281	-0.724	-1.135	-0.251	1.968	0.008
X		-0.073	-0.008	-0.046	-0.298	-0.072	-0.278	-1.578	-0.311	-0.339	0.010
S		0.066	0.050	0.075	0.235	0.342	0.416	1.144	0.238	2.677	0.001
%RSD		90.340	595.900	162.100	78.840	477.900	149.600	72.480	76.540	789.500	14.250
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:02:26	79.7%	0.628	0.503	0.620	-0.197	0.009	0.014	-0.004	0.010	75.0%
2	16:02:53	79.5%	0.812	0.662	0.663	-0.151	0.008	0.013	0.012	0.008	75.7%
3	16:03:20	80.6%	0.689	0.717	0.608	-0.156	0.011	0.011	0.024	0.005	75.4%
X		79.9%	0.710	0.627	0.630	-0.168	0.009	0.013	0.011	0.008	75.4%
S		0.6%	0.094	0.112	0.029	0.025	0.001	0.002	0.014	0.003	0.3%
%RSD		0.7	13.280	17.770	4.587	14.970	14.490	12.430	127.800	37.290	0.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:02:26	0.086	0.082	0.523	0.536	-0.009	0.004	73.2%	0.007	0.012	0.006
2	16:02:53	0.082	0.096	0.572	0.637	0.009	0.004	74.7%	0.009	0.018	0.017
3	16:03:20	0.098	0.125	0.560	0.597	-0.000	-0.001	75.7%	0.007	0.011	0.005
X		0.089	0.101	0.552	0.590	-0.000	0.002	74.5%	0.008	0.014	0.009
S		0.008	0.022	0.026	0.051	0.009	0.003	1.3%	0.001	0.004	0.007
%RSD		9.586	21.790	4.628	8.659	19100.000	140.800	1.7	11.030	29.070	72.300
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	16:02:26	0.008	0.008	62.3%							
2	16:02:53	0.007	0.013	63.3%							
3	16:03:20	0.003	0.008	62.8%							
X		0.006	0.010	62.8%							
S		0.003	0.003	0.5%							
%RSD		43.660	27.440	0.8							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:08:14	93.4%	0.111	9.753	11.890	-52.310	13590.000	1564.000	1516.000	1755.000	106.300
2	16:08:42	93.8%	0.105	11.360	12.530	-53.480	13590.000	1591.000	1545.000	1763.000	107.200
3	16:09:09	92.5%	0.089	12.190	12.750	-50.020	13701.000	1562.000	1533.000	1766.000	107.400
X		93.2%	0.102	11.100	12.390	-51.940	13627.000	1572.000	1531.000	1761.000	107.000
S		0.7%	0.012	1.240	0.448	1.757	164.000	16.210	14.730	5.377	0.580
%RSD		0.7	11.410	11.170	3.614	3.382	1.764	1.031	0.962	0.305	0.542
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:08:14	15552.000	146740.000	1414.000	2107.000	1941.000	87.1%	0.677	-0.478	0.806	7612.000
2	16:08:42	15691.000	148940.000	1385.000	2000.000	1989.000	86.9%	0.635	-0.185	0.794	8028.000
3	16:09:09	15453.000	147540.000	1396.000	1826.000	1861.000	88.9%	0.536	-0.093	0.679	8130.000
X		15565.000	147740.000	1398.000	1978.000	1930.000	87.7%	0.616	-0.252	0.760	7923.000
S		119.400	1116.000	14.650	141.900	64.690	1.1%	0.073	0.202	0.070	274.500
%RSD		2.145	2.338	1.048	7.178	3.351	1.2	11.820	80.020	9.177	3.465
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:08:14	15.820	47.470	7.578	21.660	0.817	1.264	0.707	0.331	0.456	3.226
2	16:08:42	15.010	47.870	6.832	15.920	0.871	1.142	0.007	0.287	0.420	3.341
3	16:09:09	14.850	46.490	6.234	18.380	0.879	0.982	0.540	0.311	0.376	3.166
X		15.230	47.280	6.882	18.660	0.855	1.129	0.418	0.310	0.417	3.244
S		0.521	0.709	0.673	2.880	0.034	0.141	0.366	0.022	0.040	0.089
%RSD		3.420	1.498	9.785	15.440	3.974	12.530	87.420	7.152	9.573	2.745
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:08:14	6.989	5.631	-0.062	0.142	7.848	6.875	0.985	0.254	1.946	9.631
2	16:08:42	5.909	5.022	-0.543	-0.284	6.518	6.722	0.516	0.154	2.467	9.622
3	16:09:09	6.941	5.528	-0.014	0.053	7.433	7.918	4.472	1.180	-2.643	9.614
X		6.613	5.394	-0.206	-0.029	7.267	7.172	1.991	0.529	0.590	9.622
S		0.610	0.326	0.293	0.225	0.681	0.651	2.161	0.566	2.812	0.009
%RSD		9.227	6.043	141.900	763.600	9.366	9.079	108.600	106.800	476.700	0.091
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:08:14	81.1%	0.234	0.183	0.172	0.250	0.003	0.003	0.014	0.021	77.9%
2	16:08:42	83.1%	0.206	0.177	0.196	-0.888	0.008	0.007	0.008	0.017	77.5%
3	16:09:09	81.4%	0.247	0.224	0.238	-0.348	-0.000	0.001	0.013	0.023	80.5%
X		81.9%	0.229	0.195	0.202	-0.329	0.003	0.003	0.012	0.020	78.6%
S		1.1%	0.021	0.026	0.034	0.569	0.004	0.003	0.003	0.003	1.6%
%RSD		1.3	9.110	13.120	16.680	173.100	117.600	81.200	24.580	15.460	2.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:08:14	0.059	0.097	0.207	0.177	85.030	83.790	78.5%	0.022	0.021	0.048
2	16:08:42	0.054	0.095	0.214	0.256	85.680	85.900	79.5%	0.041	0.026	0.058
3	16:09:09	0.069	0.079	0.221	0.250	86.140	84.290	80.6%	0.029	0.038	0.072
X		0.061	0.090	0.214	0.227	85.620	84.660	79.5%	0.031	0.028	0.059
S		0.008	0.010	0.007	0.044	0.557	1.104	1.0%	0.010	0.009	0.012
%RSD		12.480	11.220	3.272	19.270	0.651	1.304	1.3	31.260	30.290	19.990
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	16:08:14	0.058	0.053	71.9%							
2	16:08:42	0.059	0.057	73.2%							
3	16:09:09	0.044	0.058	74.6%							
X		0.053	0.056	73.2%							
S		0.008	0.003	1.3%							
%RSD		15.280	4.801	1.8							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:14:04	92.9%	0.072	6.512	7.069	-10.510	7068.000	12150.000	12400.000	12480.000	16.950
2	16:14:31	91.0%	0.057	6.121	7.292	-9.996	7240.000	12170.000	12440.000	12540.000	16.670
3	16:14:57	91.8%	0.013	7.222	7.100	-13.490	7187.000	12440.000	12100.000	12530.000	16.580
X		91.9%	0.047	6.618	7.153	-11.330	7165.000	12250.000	12310.000	12520.000	16.730
S		0.9%	0.031	0.558	0.121	1.884	88.150	164.100	187.200	34.230	0.195
%RSD		1.0	65.270	8.433	1.686	16.620	1.230	1.339	1.520	0.274	1.163
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:14:04	7110.000	52330.000	2190.000	27310.000	27630.000	89.5%	0.931	-0.105	0.901	6048.000
2	16:14:31	7023.000	51410.000	2219.000	27500.000	27890.000	86.8%	0.723	-0.135	1.027	6687.000
3	16:14:57	6983.000	51330.000	2221.000	27620.000	29640.000	86.1%	0.795	-0.456	1.009	7342.000
X		7039.000	51690.000	2210.000	27480.000	28390.000	87.5%	0.816	-0.232	0.979	6693.000
S		64.610	555.600	17.250	152.800	1094.000	1.8%	0.106	0.195	0.068	647.100
%RSD		0.918	1.075	0.780	0.556	3.856	2.0	12.930	83.830	6.963	9.669
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:14:04	7.220	18.430	3.381	78.130	0.101	0.583	-0.921	1.537	1.896	4.978
2	16:14:31	6.251	18.340	3.251	76.770	0.105	0.655	-0.775	1.455	1.711	5.002
3	16:14:57	8.117	18.090	4.306	77.900	0.091	0.583	-0.370	1.403	1.737	4.570
X		7.196	18.290	3.646	77.600	0.099	0.607	-0.689	1.465	1.781	4.850
S		0.933	0.178	0.576	0.727	0.007	0.042	0.285	0.067	0.100	0.243
%RSD		12.970	0.972	15.790	0.937	7.502	6.900	41.440	4.591	5.622	5.007
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:14:04	5.621	5.236	0.460	0.254	8.039	7.584	4.633	1.307	-2.369	55.380
2	16:14:31	6.278	4.865	-0.078	0.794	6.995	8.026	4.096	1.126	-3.003	56.390
3	16:14:57	5.225	5.090	0.309	0.551	8.789	8.406	4.233	1.127	-3.309	56.440
X		5.708	5.063	0.230	0.533	7.941	8.005	4.321	1.187	-2.894	56.070
S		0.532	0.187	0.277	0.270	0.901	0.411	0.279	0.104	0.479	0.600
%RSD		9.314	3.688	120.400	50.680	11.350	5.135	6.462	8.766	16.560	1.071
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:14:04	83.2%	0.109	0.136	0.119	0.544	0.005	-0.000	0.009	0.017	78.8%
2	16:14:31	82.0%	0.125	0.103	0.097	0.497	0.002	0.002	0.009	0.006	79.7%
3	16:14:57	80.7%	0.149	0.148	0.083	0.956	0.007	-0.001	0.009	0.017	79.9%
X		82.0%	0.128	0.129	0.100	0.666	0.005	0.000	0.009	0.014	79.5%
S		1.3%	0.020	0.023	0.018	0.252	0.002	0.002	0.000	0.006	0.6%
%RSD		1.5	15.970	17.920	17.930	37.910	50.410	555.800	0.153	45.910	0.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:14:04	0.076	0.056	0.149	0.117	25.390	25.580	82.7%	0.003	0.008	0.169
2	16:14:31	0.047	0.059	0.131	0.128	25.020	25.480	83.0%	0.003	0.005	0.164
3	16:14:57	0.050	0.059	0.126	0.157	25.510	24.780	84.5%	0.007	0.006	0.160
X		0.057	0.058	0.135	0.134	25.310	25.280	83.4%	0.004	0.006	0.164
S		0.016	0.002	0.012	0.021	0.253	0.436	1.0%	0.002	0.001	0.004
%RSD		27.410	3.158	9.137	15.390	0.998	1.726	1.2	48.460	22.580	2.662
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	16:14:04	0.179	0.181	79.0%							
2	16:14:31	0.196	0.197	81.1%							
3	16:14:57	0.180	0.162	81.7%							
X		0.185	0.180	80.6%							
S		0.009	0.017	1.4%							
%RSD		5.065	9.562	1.8							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:19:53	91.9%	0.090	7.938	8.225	-113.900	9311.000	4963.000	5006.000	7001.000	TM 1603.000
2	16:20:20	93.7%	0.081	7.158	7.695	-114.600	9149.000	4780.000	4865.000	6705.000	TM 1566.000
3	16:20:47	94.3%	0.157	7.627	7.360	-111.800	9185.000	4887.000	4856.000	6971.000	TM 1635.000
X		93.3%	0.109	7.574	7.760	-113.400	9215.000	4876.000	4909.000	6892.000	TM 1601.000
S		1.2%	0.042	0.392	0.436	1.424	84.970	92.080	84.120	163.000	TM 34.290
%RSD		1.3	38.140	5.180	5.618	1.256	0.922	1.888	1.714	2.365	TM 2.141
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:19:53	TM 22280.000	43680.000	1749.000	12450.000	12470.000	88.0%	1.738	-0.364	2.364	10920.000
2	16:20:20	TM 22350.000	42920.000	1702.000	11990.000	12160.000	89.2%	1.736	-0.279	2.266	10450.000
3	16:20:47	TM 22910.000	44130.000	1746.000	12580.000	12400.000	88.2%	1.457	-0.270	2.263	10620.000
X		TM 22510.000	43570.000	1733.000	12340.000	12340.000	88.5%	1.644	-0.304	2.298	10670.000
S		TM 346.900	612.100	26.480	309.900	161.100	0.6%	0.162	0.052	0.057	234.500
%RSD		TM 1.541	1.405	1.529	2.510	1.305	0.7	9.830	17.000	2.501	2.199
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:19:53	31.430	315.200	23.760	56.680	5.967	6.946	5.288	2.865	3.249	21.620
2	16:20:20	26.790	300.500	22.450	60.140	5.818	6.499	6.796	2.916	3.173	21.650
3	16:20:47	30.930	304.400	20.820	55.140	6.057	6.690	5.271	2.754	3.067	20.620
X		29.720	306.700	22.340	57.320	5.948	6.712	5.785	2.845	3.163	21.300
S		2.546	7.587	1.470	2.561	0.121	0.224	0.876	0.083	0.091	0.589
%RSD		8.565	2.474	6.577	4.468	2.032	3.340	15.140	2.914	2.887	2.766
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:19:53	17.510	20.510	-0.641	-0.204	9.630	11.710	1.956	0.566	-1.628	28.760
2	16:20:20	20.270	20.250	0.843	0.139	11.720	11.860	6.640	1.794	-3.073	28.760
3	16:20:47	20.490	20.440	-0.204	0.150	12.890	10.920	2.318	0.595	-0.578	29.340
X		19.420	20.400	-0.001	0.029	11.410	11.490	3.638	0.985	-1.760	28.950
S		1.661	0.139	0.762	0.201	1.651	0.501	2.606	0.701	1.253	0.332
%RSD		8.549	0.679	109300.000	704.600	14.460	4.362	71.620	71.130	71.180	1.146
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:19:53	82.2%	0.049	0.075	0.017	-0.237	0.001	0.006	0.066	0.057	79.9%
2	16:20:20	83.8%	0.073	0.087	0.066	-0.323	0.001	0.001	0.075	0.055	80.3%
3	16:20:47	82.0%	0.067	0.089	0.076	0.345	0.002	-0.000	0.064	0.071	81.5%
X		82.7%	0.063	0.084	0.053	-0.072	0.002	0.002	0.068	0.061	80.6%
S		1.0%	0.013	0.008	0.031	0.364	0.001	0.003	0.006	0.008	0.8%
%RSD		1.2	20.290	9.020	59.500	506.700	44.090	137.900	8.898	13.840	1.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:19:53	0.047	0.069	0.111	0.090	32.340	32.800	83.7%	0.112	0.114	1.584
2	16:20:20	0.071	0.067	0.093	0.127	32.010	32.490	85.7%	0.137	0.127	1.525
3	16:20:47	0.087	0.077	0.148	0.129	32.920	31.790	85.2%	0.134	0.121	1.494
X		0.069	0.071	0.118	0.115	32.430	32.360	84.9%	0.128	0.121	1.534
S		0.020	0.006	0.028	0.022	0.460	0.518	1.0%	0.013	0.006	0.046
%RSD		29.590	8.027	23.920	19.040	1.418	1.600	1.2	10.510	5.288	2.986
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	16:19:53	1.346	1.429	83.4%							
2	16:20:20	1.383	1.453	84.9%							
3	16:20:47	1.481	1.458	85.0%							
X		1.403	1.447	84.4%							
S		0.070	0.016	0.9%							
%RSD		4.983	1.096	1.1							

VJ21014-003S

10/26/2020 16:25:14

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:25:40	93.6%	51.530	110.900	105.500	-111.800	10140.000	5629.000	5738.000	7659.000	1631.000
2	16:26:07	94.1%	52.860	110.900	111.700	-109.800	10030.000	5450.000	5579.000	7774.000	1631.000
3	16:26:34	94.2%	52.630	107.700	111.600	-101.900	10120.000	5449.000	5594.000	7796.000	1668.000
X		94.0%	52.340	109.800	109.600	-107.800	10100.000	5509.000	5637.000	7743.000	1644.000
S		0.3%	0.711	1.840	3.542	5.256	56.930	103.700	87.940	73.420	21.370
%RSD		0.3	1.358	1.675	3.233	4.875	0.564	1.883	1.560	0.948	1.300
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:25:40	22680.000	44360.000	2624.000	13380.000	12870.000	89.8%	104.700	98.450	99.480	10930.000
2	16:26:07	22490.000	44170.000	2627.000	12810.000	12730.000	91.8%	98.340	97.050	96.390	10710.000
3	16:26:34	22130.000	45080.000	2590.000	13080.000	13160.000	90.8%	101.400	97.460	97.630	10460.000
X		22430.000	44540.000	2613.000	13090.000	12920.000	90.8%	101.500	97.650	97.840	10700.000
S		282.000	482.700	20.200	287.100	220.900	1.0%	3.173	0.723	1.554	235.400
%RSD		1.257	1.084	0.773	2.193	1.710	1.1	3.127	0.741	1.589	2.200
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:25:40	1085.000	400.700	1084.000	1078.000	101.200	106.800	103.200	102.000	109.600	129.300
2	16:26:07	1044.000	390.200	1051.000	1052.000	97.130	102.900	100.800	98.380	106.500	127.500
3	16:26:34	1072.000	398.000	1112.000	1063.000	103.500	105.000	105.200	97.680	102.500	123.800
X		1067.000	396.300	1082.000	1065.000	100.600	104.900	103.100	99.330	106.200	126.900
S		20.930	5.451	30.580	13.140	3.209	1.984	2.220	2.292	3.550	2.795
%RSD		1.962	1.375	2.825	1.234	3.190	1.891	2.154	2.308	3.342	2.203
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:25:40	116.000	117.600	94.990	97.860	9.915	9.614	415.900	103.800	-0.384	121.800
2	16:26:07	116.500	117.800	91.990	93.540	11.740	10.170	420.400	104.600	-1.449	121.600
3	16:26:34	120.700	117.400	92.590	92.350	10.880	9.225	396.500	98.410	-1.848	122.200
X		117.700	117.600	93.190	94.580	10.850	9.669	410.900	102.300	-1.227	121.900
S		2.559	0.218	1.588	2.898	0.914	0.474	12.710	3.379	0.757	0.338
%RSD		2.174	0.185	1.704	3.064	8.423	4.903	3.093	3.304	61.690	0.278
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:25:40	84.3%	98.870	96.500	96.570	96.580	94.790	96.280	97.550	98.130	81.0%
2	16:26:07	85.1%	97.300	96.460	97.330	95.290	96.500	96.080	98.820	99.650	82.1%
3	16:26:34	86.7%	98.130	96.300	96.020	96.950	95.950	95.950	96.390	98.440	83.5%
X		85.3%	98.100	96.420	96.640	96.270	95.750	96.100	97.590	98.740	82.2%
S		1.2%	0.785	0.102	0.659	0.873	0.871	0.170	1.213	0.805	1.3%
%RSD		1.4	0.800	0.105	0.682	0.906	0.910	0.176	1.243	0.815	1.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:25:40	98.870	98.300	98.340	106.500	127.000	128.800	85.3%	98.190	98.260	100.900
2	16:26:07	99.950	97.670	98.860	105.400	127.000	129.200	86.6%	98.470	97.510	101.400
3	16:26:34	98.780	98.070	97.330	104.600	125.400	127.800	88.3%	97.270	97.230	101.100
X		99.200	98.020	98.180	105.500	126.500	128.600	86.7%	97.980	97.670	101.100
S		0.654	0.318	0.779	0.942	0.906	0.740	1.5%	0.627	0.529	0.296
%RSD		0.660	0.324	0.793	0.893	0.716	0.575	1.7	0.640	0.542	0.292
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	16:25:40	100.200	99.850	83.9%							
2	16:26:07	102.500	100.500	85.5%							
3	16:26:34	101.700	100.100	86.8%							
X		101.500	100.200	85.4%							
S		1.192	0.343	1.4%							
%RSD		1.175	0.343	1.7							

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10/26/2020 16:31:04

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:31:31	96.2%	52.360	109.600	111.400	-110.700	9986.000	5588.000	5753.000	7966.000	TM 1703.000
2	16:31:58	95.2%	53.090	111.700	107.300	-107.300	10190.000	5488.000	5742.000	7914.000	TM 1716.000
3	16:32:25	97.2%	53.450	106.200	108.200	-116.600	10130.000	5592.000	5643.000	8007.000	TM 1727.000
X		96.2%	52.970	109.200	109.000	-111.500	10100.000	5556.000	5713.000	7962.000	TM 1715.000
S		1.0%	0.553	2.754	2.135	4.692	105.000	59.150	61.080	46.580	TM 12.260
%RSD		1.0	1.044	2.523	1.959	4.207	1.040	1.065	1.069	0.585	TM 0.715
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:31:31	TM 23480.000	45740.000	2677.000	13080.000	13180.000	91.3%	102.400	100.400	101.100	11600.000
2	16:31:58	TM 22840.000	45480.000	2689.000	13350.000	13470.000	90.9%	104.500	100.200	99.340	10820.000
3	16:32:25	TM 23330.000	45950.000	2680.000	13430.000	13200.000	91.0%	102.300	102.100	102.600	9883.000
X		TM 23220.000	45720.000	2682.000	13290.000	13290.000	91.1%	103.100	100.900	101.000	10770.000
S		TM 334.000	235.800	6.385	184.500	162.900	0.2%	1.215	1.028	1.622	861.800
%RSD		TM 1.439	0.516	0.238	1.389	1.226	0.2	1.178	1.019	1.606	8.003
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:31:31	1119.000	407.300	1099.000	1058.000	103.900	108.200	104.300	103.700	110.100	126.600
2	16:31:58	1091.000	415.000	1127.000	1090.000	105.900	109.900	105.500	102.500	109.300	124.700
3	16:32:25	1114.000	398.600	1092.000	1068.000	104.800	108.100	107.100	101.600	107.800	121.300
X		1108.000	406.900	1106.000	1072.000	104.900	108.700	105.600	102.600	109.100	124.200
S		15.090	8.197	18.400	16.460	0.994	0.990	1.424	1.033	1.185	2.660
%RSD		1.363	2.014	1.664	1.536	0.948	0.911	1.348	1.006	1.087	2.142
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:31:31	120.300	117.100	95.910	95.530	8.419	10.630	408.900	101.100	-2.786	125.100
2	16:31:58	119.800	117.600	96.720	98.240	8.192	10.370	411.200	99.800	-2.443	126.300
3	16:32:25	121.600	115.800	98.560	97.500	9.749	9.965	413.300	101.400	-1.198	126.100
X		120.600	116.800	97.060	97.090	8.787	10.320	411.100	100.800	-2.143	125.900
S		0.947	0.907	1.358	1.404	0.841	0.336	2.181	0.853	0.836	0.629
%RSD		0.785	0.776	1.400	1.446	9.570	3.252	0.530	0.846	39.010	0.500
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:31:31	85.1%	101.600	100.200	98.940	99.530	98.280	99.400	99.660	100.200	82.7%
2	16:31:58	84.9%	101.100	102.400	101.400	101.900	97.720	97.640	99.560	100.100	84.0%
3	16:32:25	86.8%	102.900	99.940	100.600	101.700	96.300	99.500	100.300	101.500	84.6%
X		85.6%	101.900	100.800	100.300	101.000	97.430	98.850	99.840	100.600	83.8%
S		1.1%	0.942	1.339	1.244	1.313	1.021	1.045	0.406	0.778	1.0%
%RSD		1.2	0.925	1.327	1.240	1.300	1.048	1.057	0.407	0.774	1.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:31:31	102.700	101.300	100.100	108.200	130.000	132.300	86.5%	101.800	102.200	106.100
2	16:31:58	100.000	100.100	99.900	108.200	130.100	132.800	88.4%	101.400	99.180	105.000
3	16:32:25	101.100	101.600	99.870	108.500	132.300	129.900	88.5%	101.200	101.600	105.500
X		101.300	101.000	99.970	108.300	130.800	131.700	87.8%	101.500	101.000	105.500
S		1.340	0.808	0.144	0.214	1.311	1.545	1.1%	0.324	1.581	0.561
%RSD		1.323	0.799	0.145	0.198	1.003	1.173	1.2	0.319	1.566	0.532
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	16:31:31	105.300	104.500	84.5%							
2	16:31:58	104.300	103.400	86.4%							
3	16:32:25	105.000	104.800	87.0%							
X		104.900	104.200	86.0%							
S		0.509	0.732	1.3%							
%RSD		0.486	0.702	1.5							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:37:20	94.7%	0.029	1.146	1.802	-41.060	1874.000	1282.000	1271.000	1425.000	321.200
2	16:37:47	97.1%	0.081	1.729	1.746	-34.570	1848.000	1253.000	1225.000	1401.000	320.400
3	16:38:14	94.7%	0.011	1.660	2.039	-46.880	1886.000	1234.000	1223.000	1368.000	315.100
X		95.5%	0.041	1.512	1.862	-40.840	1869.000	1256.000	1240.000	1398.000	318.900
S		1.4%	0.037	0.318	0.156	6.157	19.570	23.880	27.050	28.650	3.301
%RSD		1.4	90.100	21.060	8.354	15.080	1.047	1.901	2.182	2.049	1.035
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:37:20	14465.000	10130.000	339.500	2585.000	2489.000	88.8%	0.261	-0.024	0.512	2644.000
2	16:37:47	14388.000	19880.000	326.700	2477.000	2467.000	91.6%	0.395	-0.086	0.493	2488.000
3	16:38:14	14413.000	19871.000	317.800	2501.000	2430.000	92.4%	0.249	0.079	0.496	2631.000
X		14422.000	19961.000	328.000	2521.000	2462.000	90.9%	0.302	-0.011	0.500	2588.000
S		139.350	1147.700	10.870	56.850	29.600	1.9%	0.081	0.083	0.010	86.930
%RSD		10.890	11.483	3.314	2.255	1.202	2.1	26.860	787.700	1.991	3.360
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:37:20	4.858	64.460	4.500	12.690	1.318	1.600	1.196	0.698	0.824	4.401
2	16:37:47	4.373	61.790	3.332	11.240	1.222	1.481	0.581	0.627	0.814	4.389
3	16:38:14	4.661	60.250	2.763	9.654	1.263	1.296	0.118	0.728	0.715	4.222
X		4.631	62.170	3.532	11.190	1.267	1.459	0.632	0.684	0.785	4.337
S		0.244	2.129	0.886	1.518	0.048	0.153	0.541	0.051	0.060	0.100
%RSD		5.269	3.425	25.080	13.560	3.794	10.520	85.600	7.518	7.660	2.304
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:37:20	4.999	4.216	0.076	-0.304	2.486	2.750	-0.569	-0.100	-0.339	5.923
2	16:37:47	5.114	4.005	0.124	-0.254	2.510	1.098	0.324	0.119	-0.486	5.981
3	16:38:14	4.829	4.441	0.141	0.188	2.463	1.931	0.258	0.113	-0.556	5.872
X		4.981	4.221	0.114	-0.124	2.486	1.927	0.004	0.044	-0.460	5.926
S		0.144	0.218	0.034	0.271	0.023	0.826	0.497	0.125	0.111	0.054
%RSD		2.882	5.161	29.780	218.800	0.940	42.870	11550.000	282.000	24.080	0.919
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:37:20	83.7%	0.156	0.176	0.257	0.149	0.006	-0.000	0.003	0.004	82.3%
2	16:37:47	85.8%	0.199	0.224	0.232	-0.767	0.005	-0.001	0.003	0.016	84.6%
3	16:38:14	86.9%	0.225	0.254	0.180	-0.885	0.002	-0.000	0.017	0.018	85.1%
X		85.5%	0.193	0.218	0.223	-0.501	0.004	-0.001	0.008	0.013	84.0%
S		1.6%	0.035	0.039	0.039	0.566	0.002	0.001	0.008	0.008	1.5%
%RSD		1.9	17.930	18.010	17.440	113.000	44.940	128.700	112.200	62.370	1.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:37:20	0.021	0.070	0.054	0.042	6.877	6.765	86.2%	0.045	0.041	0.347
2	16:37:47	0.037	0.046	0.048	0.082	6.312	6.583	88.2%	0.036	0.036	0.280
3	16:38:14	0.048	0.040	0.055	0.063	6.253	6.443	88.4%	0.049	0.043	0.318
X		0.035	0.052	0.053	0.062	6.481	6.597	87.6%	0.043	0.040	0.315
S		0.014	0.016	0.004	0.020	0.344	0.162	1.2%	0.007	0.004	0.034
%RSD		38.210	30.450	7.146	31.980	5.314	2.454	1.4	15.510	8.757	10.710
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	16:37:20	0.298	0.305	84.7%							
2	16:37:47	0.309	0.286	86.5%							
3	16:38:14	0.289	0.296	86.3%							
X		0.299	0.296	85.8%							
S		0.010	0.010	1.0%							
%RSD		3.203	3.261	1.1							

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10/26/2020 16:42:44

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:43:11	96.9%	54.040	114.300	115.300	-104.300	<u>10010.000</u>	<u>5505.000</u>	<u>5742.000</u>	<u>7910.000</u>	<u>TM 1659.000</u>
2	16:43:38	97.1%	55.030	117.200	114.100	-107.600	<u>10160.000</u>	<u>5423.000</u>	<u>5595.000</u>	<u>7723.000</u>	<u>TM 1619.000</u>
3	16:44:05	97.7%	53.170	109.500	111.500	-104.700	<u>10150.000</u>	<u>5417.000</u>	5519.000	<u>7717.000</u>	<u>TM 1619.000</u>
X		97.2%	54.080	113.700	113.600	-105.500	<u>10110.000</u>	<u>5449.000</u>	<u>5618.000</u>	<u>7783.000</u>	<u>TM 1633.000</u>
S		0.4%	0.931	3.912	1.963	1.811	<u>84.240</u>	<u>49.120</u>	<u>113.400</u>	<u>109.700</u>	<u>TM 23.080</u>
%RSD		0.4	1.722	3.442	1.728	1.716	<u>0.834</u>	<u>0.901</u>	<u>2.018</u>	<u>1.409</u>	<u>TM 1.414</u>
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:43:11	<u>TM 23410.000</u>	<u>142720.000</u>	<u>12695.000</u>	13300.000	13150.000	92.5%	107.100	102.100	102.300	10280.000
2	16:43:38	<u>TM 22820.000</u>	<u>143830.000</u>	<u>12672.000</u>	12790.000	12850.000	93.7%	106.100	102.200	100.200	10230.000
3	16:44:05	<u>TM 22120.000</u>	<u>141870.000</u>	<u>12631.000</u>	13160.000	13000.000	95.5%	104.500	96.980	101.100	10030.000
X		<u>TM 22780.000</u>	<u>142810.000</u>	<u>12666.000</u>	13080.000	13000.000	93.9%	105.900	100.400	101.200	10180.000
S		<u>TM 647.000</u>	<u>1987.400</u>	<u>132.390</u>	264.100	149.200	1.5%	1.323	2.999	1.017	133.300
%RSD		<u>TM 2.840</u>	<u>1.2307</u>	<u>1.1215</u>	2.018	1.148	1.6	1.249	2.986	1.005	1.309
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:43:11	1121.000	413.500	<u>11129.000</u>	1092.000	108.600	110.200	106.500	107.000	112.600	129.800
2	16:43:38	1103.000	408.900	<u>11097.000</u>	1075.000	102.400	108.500	104.200	102.800	109.800	125.300
3	16:44:05	1095.000	396.500	<u>11092.000</u>	1042.000	102.900	104.300	104.200	100.300	107.400	124.600
X		1106.000	406.300	<u>11106.000</u>	1070.000	104.700	107.700	105.000	103.400	110.000	126.500
S		13.160	8.765	<u>20.340</u>	25.620	3.451	3.038	1.337	3.416	2.586	2.834
%RSD		1.189	2.157	<u>1.840</u>	2.394	3.297	2.822	1.274	3.305	2.352	2.239
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:43:11	122.300	119.100	97.980	102.100	10.670	12.220	456.700	113.300	0.804	129.000
2	16:43:38	120.400	118.900	97.540	97.780	11.080	10.810	423.200	102.000	-3.499	127.700
3	16:44:05	119.300	115.100	96.480	97.460	11.570	12.150	427.800	106.300	-0.659	126.400
X		120.700	117.700	97.330	99.130	11.110	11.730	435.900	107.200	-1.118	127.700
S		1.505	2.229	0.768	2.610	0.448	0.797	18.160	5.696	2.188	1.300
%RSD		1.247	1.894	0.789	2.634	4.029	6.793	4.167	5.313	195.700	1.018
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:43:11	86.2%	103.700	102.600	100.200	99.320	99.310	101.100	101.600	101.400	83.4%
2	16:43:38	86.3%	102.100	101.800	101.100	101.600	97.070	98.010	99.130	101.600	86.1%
3	16:44:05	88.4%	101.300	102.300	101.700	104.100	99.760	99.130	102.400	103.000	85.5%
X		87.0%	102.400	102.200	101.000	101.700	98.720	99.400	101.000	102.000	85.0%
S		1.2%	1.241	0.403	0.803	2.409	1.441	1.544	1.707	0.850	1.4%
%RSD		1.4	1.213	0.394	0.795	2.369	1.459	1.554	1.690	0.833	1.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:43:11	103.800	102.300	97.510	104.300	130.900	134.100	88.4%	103.100	102.800	107.000
2	16:43:38	101.500	99.280	96.850	104.900	131.800	131.800	89.8%	102.100	102.100	106.800
3	16:44:05	103.000	103.100	97.490	106.700	133.000	132.700	89.9%	103.700	102.100	106.100
X		102.800	101.600	97.280	105.300	131.900	132.900	89.4%	102.900	102.400	106.600
S		1.124	2.036	0.374	1.224	1.082	1.186	0.8%	0.815	0.363	0.473
%RSD		1.094	2.005	0.385	1.162	0.820	0.893	0.9	0.792	0.355	0.443
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	16:43:11	107.100	106.000	86.8%							
2	16:43:38	106.100	105.000	88.4%							
3	16:44:05	105.200	105.000	89.4%							
X		106.100	105.300	88.2%							
S		0.932	0.563	1.3%							
%RSD		0.878	0.534	1.5							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:00	88.6%	0.145	14.390	15.180	-89.170	18790.000	23380.000	23820.000	31600.000	TM 1910.000
2	16:49:27	89.4%	0.157	16.030	14.970	-89.000	18680.000	23710.000	24050.000	31340.000	TM 1889.000
3	16:49:54	90.8%	0.132	15.400	15.740	-94.050	18350.000	23550.000	23270.000	30460.000	TM 1865.000
X		89.6%	0.145	15.270	15.300	-90.740	18610.000	23550.000	23710.000	31130.000	TM 1888.000
S		1.1%	0.013	0.828	0.398	2.869	231.300	169.400	398.300	598.100	TM 22.700
%RSD		1.2	8.742	5.418	2.603	3.162	1.243	0.720	1.680	1.921	TM 1.202
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:00	19016.000	143390.000	12172.000	88620.000	192440.000	83.8%	2.052	-0.070	2.213	5759.000
2	16:49:27	18683.000	142870.000	12148.000	88060.000	193720.000	84.4%	1.615	-0.398	2.072	5642.000
3	16:49:54	18474.000	141810.000	12183.000	86440.000	191490.000	85.3%	1.311	-0.484	2.125	5606.000
X		18724.000	142690.000	12168.000	87710.000	192550.000	84.5%	1.659	-0.317	2.136	5669.000
S		1273.300	1805.100	118.220	1131.000	1118.000	0.7%	0.373	0.219	0.071	79.880
%RSD		13.133	1.886	10.840	1.290	1.208	0.9	22.460	68.910	3.343	1.409
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:00	120.500	TM 2362.000	120.300	343.300	17.620	10.240	8.854	0.620	1.223	7.587
2	16:49:27	121.100	TM 2321.000	118.900	344.300	17.220	10.570	7.330	0.576	0.947	7.222
3	16:49:54	116.700	TM 2318.000	115.100	337.600	17.530	10.160	7.554	0.613	1.047	6.987
X		119.400	TM 2334.000	118.100	341.800	17.450	10.320	7.912	0.603	1.072	7.265
S		2.354	TM 24.900	2.707	3.600	0.211	0.220	0.823	0.024	0.140	0.302
%RSD		1.971	TM 1.067	2.293	1.053	1.210	2.130	10.400	3.941	13.040	4.157
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:00	7.187	7.051	-0.280	-0.194	10.710	10.600	4.872	1.451	-1.238	72.100
2	16:49:27	6.769	6.277	-0.117	0.122	10.960	10.460	1.286	0.508	-2.185	72.480
3	16:49:54	6.634	6.348	0.095	0.430	10.610	12.570	2.309	0.724	0.142	73.910
X		6.863	6.559	-0.101	0.119	10.760	11.210	2.822	0.894	-1.094	72.830
S		0.288	0.428	0.188	0.312	0.179	1.178	1.847	0.494	1.170	0.957
%RSD		4.196	6.525	187.300	262.100	1.665	10.500	65.460	55.200	107.000	1.313
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:00	88.8%	0.265	0.151	0.260	1.624	0.006	0.005	0.134	0.112	78.7%
2	16:49:27	87.9%	0.243	0.231	0.263	2.743	0.008	0.012	0.133	0.142	78.9%
3	16:49:54	87.4%	0.274	0.298	0.305	2.272	0.002	0.004	0.113	0.141	78.2%
X		88.0%	0.261	0.227	0.276	2.213	0.005	0.007	0.127	0.132	78.6%
S		0.7%	0.016	0.074	0.025	0.562	0.003	0.004	0.012	0.017	0.3%
%RSD		0.8	6.075	32.560	9.107	25.370	48.230	60.410	9.239	12.770	0.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:00	0.086	0.064	0.272	0.290	12.820	13.590	85.8%	0.073	0.072	0.045
2	16:49:27	0.083	0.064	0.355	0.368	12.010	13.400	86.2%	0.069	0.073	0.035
3	16:49:54	0.140	0.090	0.356	0.307	12.650	13.670	86.4%	0.070	0.068	0.049
X		0.103	0.073	0.328	0.322	12.490	13.560	86.1%	0.071	0.071	0.043
S		0.032	0.015	0.048	0.041	0.430	0.140	0.3%	0.002	0.003	0.007
%RSD		31.020	20.530	14.680	12.740	3.441	1.029	0.3	3.483	3.599	16.440
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	16:49:00	0.050	0.046	82.5%							
2	16:49:27	0.039	0.044	83.9%							
3	16:49:54	0.042	0.051	83.6%							
X		0.044	0.047	83.3%							
S		0.006	0.004	0.8%							
%RSD		12.990	7.650	0.9							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:54:51	88.4%	0.078	15.900	15.320	-96.790	18330.000	23480.000	23480.000	31100.000	1664.000
2	16:55:18	88.3%	0.137	14.790	15.660	-87.340	18660.000	23850.000	24220.000	30820.000	1592.000
3	16:55:44	88.2%	0.129	15.390	16.010	-99.390	18470.000	23280.000	23840.000	31530.000	1609.000
X		88.3%	0.115	15.360	15.660	-94.510	18480.000	23540.000	23850.000	31150.000	1622.000
S		0.1%	0.032	0.559	0.341	6.338	165.200	286.200	369.900	355.000	37.870
%RSD		0.1	28.010	3.639	2.177	6.707	0.894	1.216	1.551	1.140	2.335
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:54:51	8841.000	44880.000	2121.000	86640.000	93860.000	81.9%	1.849	0.085	2.038	5714.000
2	16:55:18	8626.000	44940.000	2175.000	87040.000	90570.000	83.3%	1.343	-0.341	1.956	5857.000
3	16:55:44	8691.000	44890.000	2126.000	88500.000	90730.000	81.3%	1.539	-0.208	1.948	5866.000
X		8719.000	44900.000	2141.000	87390.000	91720.000	82.2%	1.577	-0.154	1.981	5812.000
S		110.600	30.850	29.560	983.200	1852.000	1.0%	0.255	0.218	0.050	85.050
%RSD		1.268	0.069	1.381	1.125	2.019	1.2	16.180	141.100	2.524	1.463
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:54:51	90.620	2359.000	89.170	314.700	17.980	10.390	8.689	0.579	1.086	7.541
2	16:55:18	85.800	2340.000	85.660	315.900	17.280	10.060	10.430	0.561	1.084	7.568
3	16:55:44	84.910	2356.000	86.730	308.400	17.610	10.580	8.053	0.570	1.049	6.666
X		87.110	2352.000	87.180	313.000	17.620	10.340	9.058	0.570	1.073	7.258
S		3.073	10.130	1.800	4.060	0.348	0.260	1.232	0.009	0.021	0.513
%RSD		3.527	0.431	2.064	1.297	1.976	2.518	13.600	1.532	1.984	7.067
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:54:51	7.667	5.878	-0.434	-0.018	9.778	10.810	-0.589	-0.004	-1.395	73.490
2	16:55:18	7.219	6.477	0.348	0.308	8.044	8.231	6.528	1.888	-3.782	73.110
3	16:55:44	7.059	6.259	0.158	0.904	8.666	9.865	3.474	1.019	-0.751	73.390
X		7.315	6.205	0.024	0.398	8.829	9.635	3.137	0.968	-1.976	73.330
S		0.316	0.303	0.408	0.468	0.878	1.304	3.570	0.947	1.597	0.198
%RSD		4.314	4.887	1712.000	117.500	9.949	13.530	113.800	97.840	80.820	0.270
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:54:51	85.4%	0.144	0.131	0.127	1.800	-0.000	-0.000	0.127	0.147	76.6%
2	16:55:18	85.9%	0.156	0.144	0.150	2.011	0.004	0.001	0.182	0.118	78.3%
3	16:55:44	86.2%	0.164	0.157	0.138	0.574	0.006	0.001	0.135	0.139	78.1%
X		85.8%	0.155	0.144	0.138	1.462	0.003	0.001	0.148	0.135	77.7%
S		0.4%	0.010	0.013	0.012	0.776	0.003	0.001	0.030	0.015	0.9%
%RSD		0.4	6.434	8.756	8.327	53.100	95.420	89.620	20.090	11.300	1.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:54:51	0.068	0.043	0.114	0.115	13.210	13.370	84.6%	0.052	0.065	0.043
2	16:55:18	0.089	0.052	0.145	0.137	13.100	13.310	86.0%	0.071	0.071	0.026
3	16:55:44	0.074	0.088	0.121	0.144	12.240	13.050	86.4%	0.063	0.072	0.029
X		0.077	0.061	0.127	0.132	12.850	13.240	85.7%	0.062	0.069	0.033
S		0.011	0.024	0.016	0.015	0.531	0.167	1.0%	0.009	0.004	0.009
%RSD		14.180	39.050	12.900	11.740	4.132	1.264	1.1	15.250	5.832	27.930
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	16:54:51	0.041	0.037	82.6%							
2	16:55:18	0.036	0.032	83.5%							
3	16:55:44	0.022	0.024	83.9%							
X		0.033	0.031	83.3%							
S		0.010	0.006	0.7%							
%RSD		30.480	19.740	0.8							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:40	91.0%	0.016	16.000	15.980	-102.300	19840.000	28480.000	28450.000	38720.000	18.580
2	17:01:07	91.1%	0.007	16.460	16.610	-97.700	20040.000	27710.000	28720.000	40140.000	18.820
3	17:01:34	93.2%	0.006	15.520	15.230	-106.200	19850.000	28550.000	28240.000	38680.000	19.020
X		91.8%	0.010	15.990	15.940	-102.100	19910.000	28250.000	28470.000	39180.000	18.810
S		1.2%	0.006	0.468	0.691	4.261	111.100	462.300	239.000	831.400	0.220
%RSD		1.3	58.320	2.926	4.336	4.175	0.558	1.636	0.840	2.122	1.169
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:40	5453.000	45070.000	3153.000	133100.000	138200.000	84.7%	0.388	-0.065	0.308	5081.000
2	17:01:07	5647.000	46390.000	3078.000	136800.000	141400.000	82.9%	0.738	-0.382	0.347	5459.000
3	17:01:34	5433.000	44980.000	3151.000	135100.000	142200.000	84.5%	0.455	0.398	0.327	5069.000
X		5511.000	45480.000	3127.000	135000.000	140600.000	84.0%	0.527	-0.016	0.327	5203.000
S		118.400	791.100	42.980	1853.000	2114.000	1.0%	0.186	0.392	0.020	221.600
%RSD		2.148	1.740	1.374	1.373	1.504	1.2	35.230	2453.000	6.088	4.260
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:40	5.165	3121.000	11.370	385.800	4.615	4.248	2.671	0.125	0.525	1.084
2	17:01:07	6.890	3097.000	12.090	368.100	4.630	4.397	2.154	0.097	0.431	1.104
3	17:01:34	6.695	3056.000	10.560	354.300	4.591	4.349	2.601	0.103	0.428	0.985
X		6.250	3091.000	11.340	369.400	4.612	4.331	2.475	0.109	0.461	1.058
S		0.945	33.320	0.769	15.770	0.020	0.076	0.281	0.014	0.055	0.064
%RSD		15.120	1.078	6.782	4.270	0.425	1.762	11.330	13.340	11.950	6.017
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:40	2.061	1.404	-0.373	0.127	9.739	11.020	0.301	0.265	-2.835	106.000
2	17:01:07	2.141	1.327	-0.175	-0.633	10.600	12.400	0.883	0.363	-0.283	104.500
3	17:01:34	1.703	1.561	0.051	-0.354	11.710	12.010	2.600	0.857	-2.195	105.800
X		1.968	1.430	-0.166	-0.287	10.680	11.810	1.261	0.495	-1.771	105.400
S		0.233	0.119	0.212	0.384	0.990	0.708	1.196	0.317	1.328	0.805
%RSD		11.840	8.347	128.200	133.900	9.268	5.993	94.780	64.080	74.970	0.763
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:40	87.5%	0.186	0.193	0.156	2.386	-0.000	0.003	0.155	0.199	78.8%
2	17:01:07	89.4%	0.189	0.175	0.162	5.472	-0.000	-0.001	0.164	0.177	79.2%
3	17:01:34	88.1%	0.222	0.178	0.149	2.251	-0.000	-0.000	0.149	0.189	78.9%
X		88.3%	0.199	0.182	0.156	3.370	-0.000	0.000	0.156	0.188	79.0%
S		1.0%	0.020	0.009	0.006	1.822	0.000	0.002	0.008	0.011	0.2%
%RSD		1.1	9.933	5.176	4.104	54.070	4.179	541.500	4.895	5.773	0.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:40	0.139	0.068	0.050	0.078	24.730	26.370	86.4%	0.059	0.069	0.008
2	17:01:07	0.083	0.039	0.084	0.089	25.680	26.660	88.1%	0.055	0.056	0.006
3	17:01:34	0.088	0.035	0.107	0.053	25.640	26.810	88.7%	0.060	0.062	0.015
X		0.103	0.047	0.080	0.073	25.350	26.610	87.7%	0.058	0.062	0.010
S		0.031	0.018	0.029	0.018	0.533	0.225	1.2%	0.003	0.007	0.005
%RSD		29.940	38.740	35.970	25.010	2.105	0.843	1.4	4.495	10.510	46.400
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	17:00:40	0.012	0.009	83.5%							
2	17:01:07	0.025	0.012	85.7%							
3	17:01:34	0.009	0.012	87.1%							
X		0.015	0.011	85.4%							
S		0.008	0.002	1.8%							
%RSD		54.240	19.590	2.2							

CCV MW15278 10/26/2020 17:06:04 QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:06:31	84.7%	318.200	302.700	308.600	9.700	59260.000	63720.000	66020.000	63040.000	308.900
2	17:06:58	87.0%	296.900	298.100	303.700	-5.126	57310.000	62860.000	62390.000	61770.000	298.600
3	17:07:25	88.7%	300.300	298.800	307.100	-19.920	56410.000	62240.000	62990.000	64870.000	311.700
X		86.8%	101.712%	99.949%	102.162%	-5.116	96.103%	62940.000	63800.000	105.373%	102.141%
S		2.0%	n/a	n/a	n/a	14.810	n/a	744.400	1945.000	n/a	n/a
%RSD		2.3	3.751	0.831	0.820	289.500	2.530	1.183	3.048	2.464	2.250
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:06:31	3512.000	213.900	54290.000	59970.000	64890.000	84.9%	306.700	310.800	300.300	1648.000
2	17:06:58	3526.000	212.900	54920.000	60350.000	63500.000	85.1%	304.200	311.200	302.800	233.300
3	17:07:25	3568.000	204.400	54210.000	61830.000	66000.000	84.6%	315.800	308.500	305.000	1588.000
X		3535.000	210.400	90.792%	60720.000	107.995%	84.8%	102.970%	103.385%	100.894%	1156.000
S		29.240	5.192	n/a	981.000	n/a	0.2%	n/a	n/a	n/a	800.000
%RSD		0.827	2.468	0.718	1.616	1.930	0.3	1.971	0.480	0.776	69.180
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:06:31	64360.000	306.800	64750.000	61880.000	293.000	300.400	300.900	281.500	306.800	308.000
2	17:06:58	64840.000	302.900	64520.000	62440.000	289.300	303.100	295.900	288.800	303.500	310.300
3	17:07:25	66090.000	306.900	65280.000	63870.000	296.600	296.100	301.100	279.800	312.500	301.400
X		65100.000	101.835%	64850.000	104.551%	97.652%	99.945%	299.300	283.300	102.522%	102.177%
S		894.800	n/a	388.300	n/a	n/a	n/a	2.951	4.795	n/a	n/a
%RSD		1.375	0.736	0.599	1.640	1.249	1.183	0.986	1.692	1.481	1.511
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:06:31	287.100	281.200	278.400	290.600	0.741	-0.297	1277.000	314.300	-0.329	297.500
2	17:06:58	290.700	281.700	282.300	284.100	1.522	0.023	1265.000	316.700	-2.550	295.900
3	17:07:25	283.500	284.500	278.900	287.900	1.717	-0.702	1208.000	300.800	-2.943	291.700
X		287.100	282.500	93.289%	287.500	1.327	-0.325	1250.000	103.537%	-1.941	98.345%
S		3.615	1.813	n/a	3.236	0.516	0.363	36.740	n/a	1.409	n/a
%RSD		1.259	0.642	0.757	1.125	38.930	111.600	2.940	2.763	72.620	1.008
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:06:31	78.5%	304.900	305.800	298.000	292.400	287.800	287.100	292.200	292.900	76.6%
2	17:06:58	79.5%	307.000	306.200	299.800	299.000	296.300	293.300	294.200	299.300	76.1%
3	17:07:25	80.5%	310.400	314.700	305.700	291.900	289.500	290.900	296.200	300.900	77.4%
X		79.5%	102.483%	102.970%	301.200	294.400	97.063%	290.400	294.200	99.241%	76.7%
S		1.0%	n/a	n/a	4.035	3.990	n/a	3.106	2.004	n/a	0.6%
%RSD		1.3	0.896	1.636	1.340	1.355	1.539	1.069	0.681	1.415	0.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:06:31	301.200	299.400	291.700	317.900	286.900	293.900	83.0%	307.300	309.000	307.900
2	17:06:58	304.800	305.600	300.900	326.200	285.500	298.000	84.1%	299.400	300.500	302.600
3	17:07:25	305.800	302.400	297.400	323.300	281.300	294.400	84.9%	306.700	308.400	311.300
X		101.309%	100.818%	296.700	107.502%	94.843%	98.484%	84.0%	304.500	101.984%	102.428%
S		n/a	n/a	4.641	n/a	n/a	n/a	1.0%	4.401	n/a	n/a
%RSD		0.795	1.027	1.564	1.302	1.022	0.756	1.1	1.446	1.542	1.417
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	17:06:31	304.100	305.700	80.6%							
2	17:06:58	299.300	300.700	82.7%							
3	17:07:25	303.800	308.200	81.8%							
X		100.802%	101.628%	81.7%							
S		n/a	n/a	1.0%							
%RSD		0.888	1.255	1.3							

CCB IM10195-01 10/26/2020 17:11:55 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:22	93.2%	0.027	0.687	0.762	1.034	1.575	2.818	2.368	2.159	0.013
2	17:12:49	94.7%	0.005	0.634	0.559	-0.774	1.701	2.760	2.800	3.041	0.025
3	17:13:16	94.3%	0.034	0.671	0.821	3.414	1.613	2.971	2.712	2.499	0.033
X		94.1%	0.022	0.664	0.714	1.225	1.630	2.850	2.627	2.566	0.024
S		0.8%	0.015	0.027	0.138	2.101	0.065	0.109	0.229	0.445	0.010
%RSD		0.9	68.210	4.132	19.300	171.500	3.963	3.825	8.699	17.340	44.230
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:22	-96.710	124.500	-2.262	6.872	-30.440	93.1%	0.045	-0.002	-0.020	10.380
2	17:12:49	-97.910	126.900	-2.005	-0.210	-28.470	90.0%	-0.056	-0.035	0.003	31.170
3	17:13:16	-99.470	132.700	-2.634	1.839	-28.480	91.5%	0.026	-0.000	-0.013	9.423
X		-98.030	128.000	-2.300	2.833	-29.130	91.5%	0.005	-0.012	-0.010	16.990
S		1.386	4.219	0.317	3.644	1.135	1.6%	0.054	0.019	0.012	12.290
%RSD		1.413	3.295	13.760	128.600	3.895	1.7	1164.000	156.600	120.000	72.340
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:22	1.513	0.026	-3.607	11.730	0.015	0.031	-0.775	-0.004	0.012	-0.036
2	17:12:49	1.988	0.024	-3.283	10.460	0.002	0.034	-0.510	-0.036	0.017	-0.048
3	17:13:16	1.018	0.030	-3.670	9.576	0.005	0.021	-0.496	-0.021	0.041	-0.026
X		1.506	0.027	-3.520	10.590	0.007	0.029	-0.594	-0.020	0.023	-0.037
S		0.485	0.003	0.208	1.084	0.007	0.007	0.157	0.016	0.016	0.011
%RSD		32.210	12.010	5.908	10.230	94.900	23.170	26.470	79.300	68.110	30.700
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:22	-0.032	-0.045	0.025	-0.072	-0.547	-0.178	0.711	0.230	-1.103	0.010
2	17:12:49	0.056	-0.027	0.042	-0.479	-0.107	-0.211	0.120	0.117	-3.066	0.010
3	17:13:16	-0.258	-0.107	-0.017	-0.596	0.009	-0.688	-0.601	-0.081	-2.071	0.011
X		-0.078	-0.059	0.016	-0.383	-0.215	-0.359	0.077	0.089	-2.080	0.011
S		0.162	0.042	0.030	0.275	0.293	0.285	0.657	0.157	0.982	0.001
%RSD		208.900	70.560	183.600	71.940	136.300	79.410	855.100	177.400	47.200	7.757
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:22	84.7%	0.499	0.424	0.458	0.438	0.015	0.006	0.002	0.004	83.7%
2	17:12:49	83.5%	0.510	0.519	0.562	0.174	0.005	0.019	0.016	0.027	83.6%
3	17:13:16	84.0%	0.507	0.489	0.540	-0.623	0.015	0.014	0.026	0.013	84.3%
X		84.0%	0.506	0.477	0.520	-0.004	0.012	0.013	0.015	0.015	83.9%
S		0.6%	0.006	0.049	0.055	0.552	0.006	0.007	0.012	0.012	0.4%
%RSD		0.7	1.211	10.240	10.550	15560.000	52.430	51.300	82.440	79.610	0.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:22	0.073	0.124	0.390	0.419	-0.009	0.015	86.2%	0.008	0.013	0.003
2	17:12:49	0.044	0.102	0.457	0.426	-0.001	-0.007	86.4%	0.005	0.009	0.010
3	17:13:16	0.086	0.100	0.408	0.440	-0.001	0.010	87.3%	0.010	0.011	0.023
X		0.068	0.109	0.418	0.428	-0.004	0.006	86.6%	0.007	0.011	0.012
S		0.021	0.013	0.035	0.011	0.004	0.011	0.6%	0.002	0.002	0.010
%RSD		31.540	12.250	8.266	2.514	116.200	183.600	0.7	31.260	18.500	82.690
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	17:12:22	0.009	0.011	87.5%							
2	17:12:49	0.009	0.014	88.8%							
3	17:13:16	0.011	0.015	88.2%							
X		0.010	0.013	88.2%							
S		0.001	0.003	0.6%							
%RSD		9.554	18.820	0.7							

VJ21014-007 10/26/2020 17:17:46

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:18:12	94.7%	-0.016	16.250	16.030	-121.200	28580.000	36160.000	38670.000	55830.000	3.584
2	17:18:39	99.0%	-0.003	14.500	15.950	-122.100	27290.000	36680.000	37880.000	55800.000	3.473
3	17:19:06	96.4%	-0.000	14.790	16.870	-132.500	28670.000	36580.000	37730.000	54440.000	3.597
X		96.7%	-0.006	15.180	16.280	-125.300	28180.000	36470.000	38090.000	55360.000	3.551
S		2.2%	0.008	0.935	0.508	6.270	774.300	275.000	507.400	792.600	0.068
%RSD		2.2	131.000	6.160	3.118	5.004	2.748	0.754	1.332	1.432	1.911
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:18:12	5365.000	43290.000	3392.000	156500.000	163100.000	90.0%	0.654	-0.019	0.465	4288.000
2	17:18:39	5445.000	42730.000	3413.000	154900.000	166000.000	89.9%	0.675	0.083	0.524	4657.000
3	17:19:06	5382.000	43450.000	3405.000	156800.000	162400.000	90.1%	0.570	0.372	0.597	4863.000
X		5397.000	43150.000	3403.000	156100.000	163800.000	90.0%	0.633	0.145	0.528	4602.000
S		42.090	375.800	10.770	977.800	1924.000	0.1%	0.056	0.203	0.066	291.500
%RSD		0.780	0.871	0.317	0.627	1.174	0.1	8.818	139.600	12.490	6.334
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:18:12	5.625	939.100	14.410	434.200	1.308	2.910	0.512	0.107	0.596	0.815
2	17:18:39	5.862	963.100	14.200	433.900	1.306	2.785	0.513	0.108	0.456	0.726
3	17:19:06	6.014	977.200	14.360	447.900	1.360	2.643	0.245	0.099	0.547	0.753
X		5.834	959.800	14.320	438.700	1.325	2.780	0.423	0.105	0.533	0.765
S		0.196	19.300	0.107	7.983	0.031	0.134	0.155	0.005	0.071	0.046
%RSD		3.358	2.010	0.750	1.820	2.318	4.807	36.540	4.606	13.320	5.960
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:18:12	1.898	1.130	-0.078	-0.310	14.560	14.510	0.348	0.182	-1.464	107.000
2	17:18:39	1.464	1.179	-0.472	-0.258	14.800	14.520	-0.034	0.117	-1.838	106.200
3	17:19:06	2.193	1.222	-0.054	-0.154	16.570	14.480	0.646	0.246	-0.502	108.700
X		1.852	1.177	-0.201	-0.241	15.310	14.500	0.320	0.181	-1.268	107.300
S		0.367	0.046	0.235	0.079	1.096	0.024	0.341	0.065	0.689	1.274
%RSD		19.810	3.930	116.700	33.010	7.160	0.164	106.600	35.610	54.350	1.188
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:18:12	85.6%	0.323	0.372	0.294	3.845	0.007	0.005	0.068	0.072	81.8%
2	17:18:39	86.6%	0.390	0.361	0.376	4.163	0.006	-0.000	0.104	0.069	81.1%
3	17:19:06	86.3%	0.332	0.315	0.400	3.933	-0.001	0.001	0.058	0.060	81.5%
X		86.2%	0.348	0.349	0.357	3.980	0.004	0.002	0.076	0.067	81.5%
S		0.5%	0.037	0.030	0.056	0.164	0.005	0.003	0.024	0.006	0.4%
%RSD		0.6	10.520	8.544	15.660	4.123	116.600	131.400	31.640	9.375	0.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:18:12	0.060	0.071	0.165	0.177	19.060	19.540	87.2%	0.068	0.068	0.004
2	17:18:39	0.117	0.076	0.175	0.204	18.920	20.100	88.1%	0.051	0.074	0.012
3	17:19:06	0.087	0.067	0.175	0.191	18.970	18.990	89.4%	0.073	0.058	0.006
X		0.088	0.071	0.172	0.191	18.980	19.550	88.2%	0.064	0.067	0.007
S		0.028	0.004	0.006	0.013	0.072	0.552	1.1%	0.011	0.008	0.005
%RSD		32.280	6.048	3.428	6.978	0.379	2.826	1.2	17.640	11.710	61.710
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	17:18:12	-0.000	0.007	83.6%							
2	17:18:39	0.006	0.008	84.0%							
3	17:19:06	0.006	0.008	85.5%							
X		0.004	0.008	84.4%							
S		0.004	0.001	1.0%							
%RSD		95.170	11.970	1.1							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:24:01	96.9%	0.015	10.670	10.880	-83.040	7312.000	22080.000	22540.000	28750.000	6.320
2	17:24:28	98.8%	0.010	9.984	10.880	-83.010	7299.000	22430.000	22730.000	28380.000	5.974
3	17:24:55	97.2%	0.019	10.350	10.770	-80.610	7331.000	22600.000	22000.000	28880.000	6.170
X		97.6%	0.014	10.330	10.840	-82.220	7314.000	22370.000	22420.000	28670.000	6.154
S		1.0%	0.005	0.341	0.067	1.395	15.670	261.700	381.000	259.600	0.174
%RSD		1.1	32.740	3.300	0.614	1.696	0.214	1.170	1.699	0.906	2.822
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:24:01	5348.000	48140.000	1802.000	63040.000	67630.000	90.3%	0.589	-0.029	1.285	5747.000
2	17:24:28	5260.000	46700.000	1842.000	62270.000	66970.000	90.8%	0.813	0.367	1.388	5674.000
3	17:24:55	5358.000	47550.000	1832.000	63050.000	67940.000	88.8%	0.748	0.023	1.363	6003.000
X		5322.000	47460.000	1825.000	62790.000	67520.000	90.0%	0.717	0.120	1.345	5808.000
S		53.930	723.000	20.700	443.500	496.100	1.1%	0.115	0.215	0.054	172.400
%RSD		1.013	1.523	1.134	0.706	0.735	1.2	16.080	179.400	3.978	2.969
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:24:01	9.854	0.148	12.290	179.700	0.106	0.863	-0.930	0.032	0.192	0.998
2	17:24:28	8.226	0.140	11.080	172.100	0.096	0.858	-0.710	0.032	0.216	0.992
3	17:24:55	9.213	0.127	10.630	178.900	0.090	0.914	-0.760	0.032	0.175	1.398
X		9.098	0.138	11.330	176.900	0.098	0.878	-0.800	0.032	0.195	1.129
S		0.820	0.011	0.858	4.167	0.008	0.031	0.115	0.000	0.021	0.233
%RSD		9.016	7.726	7.567	2.355	8.476	3.510	14.380	0.240	10.550	20.630
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:24:01	3.181	2.051	0.102	-0.466	8.684	8.562	1.753	0.560	-3.443	66.200
2	17:24:28	2.341	2.095	-0.317	-0.384	7.331	8.752	-0.240	0.036	-2.736	66.550
3	17:24:55	3.366	2.319	-0.504	0.018	8.446	8.697	0.843	0.212	0.382	67.660
X		2.963	2.155	-0.240	-0.277	8.153	8.670	0.785	0.270	-1.933	66.800
S		0.546	0.144	0.310	0.259	0.722	0.098	0.998	0.267	2.035	0.762
%RSD		18.430	6.669	129.400	93.390	8.857	1.131	127.100	98.970	105.300	1.141
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:24:01	84.7%	0.107	0.072	0.106	3.358	0.010	0.009	-0.002	0.002	82.4%
2	17:24:28	83.7%	0.130	0.039	0.136	1.259	0.003	0.004	0.003	0.008	82.7%
3	17:24:55	83.1%	0.144	0.129	0.119	1.105	0.005	0.010	-0.002	0.004	82.7%
X		83.9%	0.127	0.080	0.120	1.907	0.006	0.007	-0.000	0.005	82.6%
S		0.8%	0.019	0.046	0.016	1.259	0.003	0.003	0.003	0.003	0.2%
%RSD		1.0	14.970	56.980	12.920	66.010	54.360	44.890	1693.000	70.530	0.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:24:01	0.048	0.062	0.070	0.097	49.000	49.750	88.0%	0.003	0.003	0.013
2	17:24:28	0.050	0.056	0.110	0.115	49.050	49.490	89.5%	0.000	0.007	0.013
3	17:24:55	0.074	0.070	0.093	0.125	48.150	49.690	89.6%	0.010	0.004	0.014
X		0.057	0.063	0.091	0.112	48.730	49.640	89.1%	0.004	0.004	0.014
S		0.015	0.007	0.020	0.014	0.507	0.137	0.9%	0.005	0.002	0.001
%RSD		25.410	11.120	22.080	12.600	1.040	0.276	1.0	109.700	44.020	4.418
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	17:24:01	0.001	0.008	86.9%							
2	17:24:28	0.016	0.014	88.0%							
3	17:24:55	0.009	0.009	89.7%							
X		0.009	0.010	88.2%							
S		0.007	0.003	1.4%							
%RSD		84.860	29.460	1.6							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:50	91.0%	0.039	5.691	5.599	-2.326	5307.000	20480.000	19970.000	20840.000	10.940
2	17:30:18	92.5%	-0.011	5.194	5.887	2.481	5276.000	19610.000	19380.000	21020.000	10.970
3	17:30:45	93.2%	0.016	6.000	5.745	-2.884	5291.000	20270.000	20200.000	22090.000	11.160
X		92.2%	0.015	5.628	5.744	-0.910	5292.000	20120.000	19850.000	21320.000	11.020
S		1.1%	0.025	0.407	0.144	2.950	15.630	453.600	421.300	677.300	0.119
%RSD		1.2	169.200	7.225	2.507	324.200	0.295	2.255	2.123	3.177	1.076
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:50	TM 21500.000	TM 39150.000	TM 1555.000	33660.000	TM 35050.000	89.8%	4.214	0.429	0.240	1743.000
2	17:30:18	TM 20970.000	TM 38830.000	TM 1546.000	33330.000	TM 34950.000	91.1%	3.637	0.807	0.212	1602.000
3	17:30:45	TM 21880.000	TM 39110.000	TM 1570.000	33920.000	TM 36890.000	89.3%	4.090	0.616	0.266	1727.000
X		TM 21450.000	TM 39030.000	TM 1557.000	33640.000	TM 35630.000	90.1%	3.980	0.618	0.239	1691.000
S		TM 456.600	TM 177.500	TM 12.580	298.500	TM 1089.000	0.9%	0.303	0.189	0.027	77.440
%RSD		TM 2.129	TM 0.455	TM 0.808	0.887	TM 3.056	1.0	7.622	30.600	11.240	4.580
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:50	TM 107500.000	TM 6485.000	TM 108200.000	TM 106300.000	101.900	13.440	10.370	1.090	1.275	19.370
2	17:30:18	TM 107000.000	TM 6335.000	TM 106700.000	TM 105000.000	100.200	12.910	10.460	1.042	1.269	19.510
3	17:30:45	TM 110700.000	TM 6436.000	TM 108100.000	TM 108100.000	101.900	13.010	11.280	1.164	1.280	20.760
X		TM 108400.000	TM 6419.000	TM 107700.000	TM 106500.000	101.300	13.120	10.710	1.098	1.275	19.880
S		TM 1992.000	TM 76.470	TM 850.900	TM 1573.000	1.000	0.282	0.500	0.062	0.005	0.766
%RSD		TM 1.837	TM 1.191	TM 0.790	TM 1.478	0.987	2.149	4.667	5.604	0.427	3.852
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:50	19.340	18.370	1.598	-0.343	20.280	21.130	-2.236	-0.491	-1.264	42.580
2	17:30:18	18.520	19.070	2.180	0.048	19.780	20.900	1.192	0.360	-2.015	42.160
3	17:30:45	18.070	18.540	2.087	-0.544	19.000	20.010	-1.940	-0.395	-1.694	42.320
X		18.640	18.660	1.955	-0.280	19.690	20.680	-0.995	-0.175	-1.658	42.350
S		0.642	0.368	0.313	0.301	0.644	0.590	1.900	0.466	0.377	0.212
%RSD		3.441	1.975	16.010	107.500	3.269	2.854	191.000	266.300	22.710	0.501
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:50	81.6%	0.201	0.209	0.231	1.016	0.005	0.005	0.053	0.070	81.5%
2	17:30:18	82.7%	0.203	0.275	0.239	1.096	0.002	0.001	0.078	0.102	82.2%
3	17:30:45	83.4%	0.240	0.273	0.205	-0.476	-0.000	0.005	0.074	0.083	81.2%
X		82.6%	0.215	0.252	0.225	0.545	0.002	0.004	0.068	0.085	81.6%
S		0.9%	0.022	0.037	0.018	0.886	0.002	0.002	0.013	0.016	0.5%
%RSD		1.1	10.260	14.820	7.972	162.500	105.000	59.970	19.240	18.980	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:50	0.087	0.096	0.188	0.164	19.290	18.390	86.0%	0.004	0.007	5.250
2	17:30:18	0.103	0.111	0.167	0.164	18.610	19.040	88.1%	0.007	0.005	5.292
3	17:30:45	0.129	0.084	0.222	0.204	18.800	19.030	88.7%	0.003	0.005	5.420
X		0.107	0.097	0.192	0.177	18.900	18.820	87.6%	0.005	0.006	5.321
S		0.021	0.013	0.028	0.023	0.352	0.374	1.4%	0.002	0.001	0.089
%RSD		19.780	13.860	14.420	12.910	1.863	1.984	1.6	51.770	18.760	1.664
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	17:29:50	4.958	4.921	90.9%							
2	17:30:18	5.081	5.076	90.5%							
3	17:30:45	4.897	5.050	91.8%							
X		4.979	5.016	91.1%							
S		0.094	0.083	0.7%							
%RSD		1.889	1.651	0.7							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:35:41	94.7%	-0.005	413.200	401.800	288.300	<u>31900.000</u>	<u>107100.000</u>	<u>107700.000</u>	<u>117200.000</u>	<u>295.800</u>
2	17:36:08	94.6%	0.008	407.000	396.700	245.900	<u>32570.000</u>	<u>104600.000</u>	<u>106500.000</u>	<u>110500.000</u>	280.300
3	17:36:35	96.7%	0.009	381.000	399.700	277.600	<u>31880.000</u>	<u>104100.000</u>	<u>107200.000</u>	<u>112200.000</u>	<u>303.800</u>
X		95.3%	0.004	400.400	399.400	270.600	<u>32120.000</u>	<u>105300.000</u>	<u>107100.000</u>	<u>113300.000</u>	<u>293.300</u>
S		1.2%	0.008	17.060	2.554	22.020	<u>392.100</u>	<u>1572.000</u>	<u>632.500</u>	<u>3485.000</u>	<u>11.930</u>
%RSD		1.2	194.800	4.260	0.640	8.137	<u>1.221</u>	<u>1.494</u>	<u>0.590</u>	<u>3.077</u>	<u>4.067</u>
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:35:41	<u>18720.000</u>	<u>54880.000</u>	<u>3382.000</u>	<u>193100.000</u>	<u>205700.000</u>	91.4%	30.480	4.583	1.263	2801.000
2	17:36:08	<u>17290.000</u>	<u>52450.000</u>	<u>3294.000</u>	<u>187800.000</u>	<u>198700.000</u>	94.5%	27.630	4.266	1.261	2867.000
3	17:36:35	<u>17760.000</u>	<u>54440.000</u>	<u>3280.000</u>	<u>194300.000</u>	<u>203900.000</u>	92.2%	29.590	4.834	1.358	2963.000
X		<u>17920.000</u>	<u>53920.000</u>	<u>3319.000</u>	<u>191700.000</u>	<u>202800.000</u>	92.7%	29.240	4.561	1.294	2877.000
S		<u>725.900</u>	<u>1295.000</u>	<u>55.510</u>	<u>3491.000</u>	<u>3612.000</u>	1.6%	1.457	0.284	0.055	81.860
%RSD		<u>4.050</u>	<u>2.401</u>	<u>1.672</u>	<u>1.821</u>	<u>1.781</u>	1.7	4.984	6.237	4.262	2.845
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:35:41	3878.000	<u>2742.000</u>	<u>4134.000</u>	4374.000	19.930	78.540	72.190	1.941	2.724	7.922
2	17:36:08	3688.000	<u>2648.000</u>	<u>3895.000</u>	4194.000	19.500	74.600	69.060	1.907	2.329	7.102
3	17:36:35	3878.000	<u>2740.000</u>	<u>4124.000</u>	4259.000	19.440	75.270	70.660	1.856	2.483	7.432
X		3815.000	<u>2710.000</u>	<u>4051.000</u>	4276.000	19.620	76.140	70.640	1.902	2.512	7.485
S		110.000	<u>53.650</u>	<u>135.200</u>	90.810	0.271	2.104	1.568	0.043	0.199	0.412
%RSD		2.883	<u>1.980</u>	<u>3.338</u>	2.124	1.379	2.764	2.219	2.249	7.921	5.508
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:35:41	11.080	10.950	1.483	-0.405	946.200	956.800	9.236	2.429	-1.861	<u>1058.000</u>
2	17:36:08	11.420	10.360	0.523	0.012	919.600	958.300	10.170	2.528	2.385	<u>1049.000</u>
3	17:36:35	11.540	10.510	0.943	-0.167	929.600	942.900	6.740	1.789	-1.599	<u>1032.000</u>
X		11.350	10.610	0.983	-0.187	931.800	952.600	8.714	2.249	-0.358	<u>1046.000</u>
S		0.240	0.307	0.481	0.209	13.400	8.498	1.772	0.401	2.379	<u>13.150</u>
%RSD		2.114	2.892	48.980	111.900	1.438	0.892	20.330	17.840	664.000	<u>1.257</u>
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:35:41	86.9%	0.318	0.300	0.286	30.560	0.014	0.022	0.709	0.684	79.9%
2	17:36:08	86.8%	0.272	0.293	0.300	30.090	0.029	0.020	0.750	0.721	81.0%
3	17:36:35	88.2%	0.316	0.321	0.277	27.050	0.010	0.029	0.707	0.729	80.7%
X		87.3%	0.302	0.305	0.287	29.230	0.018	0.024	0.722	0.712	80.5%
S		0.8%	0.026	0.014	0.012	1.909	0.010	0.005	0.024	0.024	0.5%
%RSD		0.9	8.684	4.653	4.117	6.531	59.120	20.240	3.390	3.350	0.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:35:41	0.673	0.648	0.293	0.333	143.800	150.400	87.5%	0.094	0.068	0.254
2	17:36:08	0.646	0.682	0.286	0.304	146.900	146.500	89.1%	0.076	0.081	0.226
3	17:36:35	0.683	0.695	0.317	0.284	144.700	149.600	88.9%	0.096	0.073	0.217
X		0.667	0.675	0.299	0.307	145.200	148.800	88.5%	0.089	0.074	0.232
S		0.019	0.024	0.016	0.025	1.585	2.058	0.9%	0.011	0.007	0.019
%RSD		2.836	3.573	5.387	8.050	1.092	1.383	1.0	12.400	8.922	8.192
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	17:35:41	0.191	0.203	83.7%							
2	17:36:08	0.189	0.191	86.1%							
3	17:36:35	0.172	0.184	86.2%							
X		0.184	0.193	85.4%							
S		0.010	0.010	1.4%							
%RSD		5.607	5.064	1.7							

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10/26/2020 17:41:04

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:31	91.4%	0.155	3.437	3.673	17.700	4751.000	4959.000	4696.000	5208.000	21.620
2	17:41:58	93.5%	0.148	3.344	3.701	6.336	4732.000	4883.000	4738.000	5053.000	21.790
3	17:42:24	92.1%	0.123	3.408	3.289	11.960	4801.000	4874.000	4767.000	4966.000	22.980
X		92.3%	0.142	3.396	3.554	12.000	4761.000	4905.000	4734.000	5076.000	22.130
S		1.1%	0.017	0.047	0.230	5.682	35.180	46.360	35.850	122.700	0.743
%RSD		1.2	11.720	1.391	6.482	47.360	0.739	0.945	0.757	2.417	3.358
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:31	TM 10030.000	50140.000	1592.000	9095.000	8900.000	85.4%	1.660	0.695	0.484	5829.000
2	17:41:58	TM 10160.000	49710.000	1557.000	8789.000	8691.000	87.2%	1.647	0.878	0.498	5131.000
3	17:42:24	TM 10000.000	50490.000	1574.000	8916.000	8643.000	86.4%	1.597	1.033	0.423	4809.000
X		TM 10070.000	50110.000	1574.000	8933.000	8745.000	86.3%	1.635	0.869	0.468	5256.000
S		TM 85.030	394.200	17.340	153.800	136.900	0.9%	0.033	0.169	0.040	521.400
%RSD		TM 0.845	0.787	1.101	1.721	1.565	1.0	2.043	19.480	8.541	9.920
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:31	9127.000	TM 708.600	9372.000	9057.000	34.390	1.392	-0.198	0.800	1.018	4.048
2	17:41:58	8871.000	TM 687.100	9181.000	8694.000	33.480	1.174	0.237	0.814	0.974	3.719
3	17:42:24	8920.000	TM 674.500	9221.000	8574.000	33.180	1.268	0.255	0.893	0.840	3.904
X		8973.000	TM 690.100	9258.000	8775.000	33.680	1.278	0.098	0.835	0.944	3.891
S		136.100	TM 17.230	100.800	251.700	0.633	0.110	0.257	0.050	0.093	0.165
%RSD		1.517	TM 2.496	1.089	2.868	1.878	8.574	262.500	5.982	9.813	4.240
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:31	6.199	5.256	0.400	-0.279	37.250	40.100	-0.430	-0.055	-1.215	48.460
2	17:41:58	6.415	5.349	0.658	-0.303	35.520	39.430	-1.606	-0.305	-2.051	46.100
3	17:42:24	6.829	5.283	0.996	-0.131	37.080	39.380	0.901	0.286	-2.673	47.110
X		6.481	5.296	0.685	-0.237	36.620	39.630	-0.378	-0.025	-1.980	47.220
S		0.321	0.048	0.299	0.093	0.953	0.401	1.254	0.296	0.732	1.181
%RSD		4.945	0.910	43.670	39.140	2.601	1.012	331.900	1203.000	36.970	2.502
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:31	81.3%	0.238	0.344	0.268	0.664	0.005	0.002	0.152	0.144	80.3%
2	17:41:58	84.1%	0.285	0.325	0.323	0.027	0.008	0.004	0.124	0.107	81.3%
3	17:42:24	82.6%	0.322	0.304	0.306	1.252	0.011	0.001	0.087	0.109	82.6%
X		82.7%	0.282	0.324	0.299	0.647	0.008	0.002	0.121	0.120	81.4%
S		1.4%	0.042	0.020	0.028	0.613	0.003	0.001	0.032	0.021	1.1%
%RSD		1.7	15.000	6.249	9.416	94.670	36.840	52.960	26.640	17.310	1.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:31	0.114	0.075	0.057	0.064	59.200	59.910	86.4%	0.146	0.168	0.063
2	17:41:58	0.110	0.061	0.079	0.070	58.890	60.460	88.5%	0.218	0.171	0.063
3	17:42:24	0.079	0.058	0.050	0.052	59.210	60.020	89.0%	0.181	0.194	0.052
X		0.101	0.065	0.062	0.062	59.100	60.130	87.9%	0.182	0.178	0.059
S		0.019	0.009	0.015	0.009	0.181	0.288	1.4%	0.036	0.015	0.006
%RSD		18.890	13.630	24.250	14.700	0.306	0.478	1.6	19.730	8.254	9.995
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	17:41:31	0.060	0.059	91.8%							
2	17:41:58	0.040	0.054	91.0%							
3	17:42:24	0.063	0.063	92.3%							
X		0.054	0.059	91.7%							
S		0.012	0.004	0.6%							
%RSD		22.770	7.127	0.7							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:47:18	94.8%	0.134	3.611	3.799	-9.307	2950.000	5139.000	5231.000	5455.000	2080.000
2	17:47:45	96.0%	0.121	3.051	3.717	-17.470	2956.000	5211.000	5086.000	5517.000	2124.000
3	17:48:12	95.2%	0.132	2.859	3.276	-18.500	2991.000	5011.000	5032.000	5259.000	2091.000
X		95.4%	0.129	3.174	3.598	-15.100	2966.000	5121.000	5116.000	5410.000	2099.000
S		0.6%	0.007	0.391	0.281	5.039	21.970	101.200	102.800	134.700	23.000
%RSD		0.7	5.443	12.310	7.822	33.380	0.741	1.976	2.009	2.490	1.096
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:47:18	17510.000	46630.000	1361.000	8163.000	7932.000	91.9%	297.700	18.380	6.537	6053.000
2	17:47:45	17570.000	47390.000	1349.000	8333.000	8280.000	89.7%	311.500	18.690	7.020	5879.000
3	17:48:12	16700.000	46080.000	1339.000	8043.000	8180.000	91.3%	305.800	18.290	6.624	5482.000
X		17260.000	46700.000	1349.000	8180.000	8131.000	91.0%	305.000	18.450	6.727	5805.000
S		487.400	653.800	11.000	145.300	179.300	1.2%	6.903	0.210	0.257	293.000
%RSD		2.823	1.400	0.815	1.777	2.206	1.3	2.263	1.138	3.827	5.047
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:47:18	4947.000	74.830	5125.000	4849.000	2.431	2.375	2.165	2.398	2.998	9.243
2	17:47:45	5043.000	76.570	5132.000	4902.000	2.661	2.303	1.962	2.511	2.910	8.922
3	17:48:12	4952.000	75.880	5112.000	4784.000	2.453	2.125	1.707	2.417	2.969	9.187
X		4981.000	75.760	5123.000	4845.000	2.515	2.268	1.945	2.442	2.959	9.118
S		54.060	0.872	10.250	59.180	0.127	0.128	0.229	0.060	0.045	0.171
%RSD		1.085	1.151	0.200	1.221	5.057	5.659	11.780	2.473	1.511	1.880
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:47:18	11.520	8.748	0.027	0.025	18.930	16.660	0.736	0.341	-1.369	43.360
2	17:47:45	10.910	9.500	0.090	-0.791	17.300	16.730	-0.589	0.012	-2.361	43.830
3	17:48:12	10.350	10.030	-0.012	-0.673	17.030	17.960	0.022	0.159	-1.752	44.040
X		10.930	9.428	0.035	-0.480	17.750	17.120	0.056	0.171	-1.828	43.740
S		0.587	0.646	0.051	0.441	1.028	0.736	0.663	0.165	0.500	0.348
%RSD		5.373	6.856	145.600	91.860	5.793	4.302	1180.000	96.490	27.370	0.795
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:47:18	90.3%	0.187	0.135	0.102	1.146	0.011	0.012	0.124	0.067	81.9%
2	17:47:45	91.7%	0.105	0.107	0.124	0.282	0.017	0.011	0.082	0.101	83.2%
3	17:48:12	92.0%	0.120	0.207	0.174	0.908	0.008	0.017	0.102	0.092	83.4%
X		91.3%	0.137	0.150	0.133	0.779	0.012	0.013	0.103	0.087	82.8%
S		0.9%	0.044	0.051	0.037	0.446	0.004	0.003	0.021	0.018	0.8%
%RSD		1.0	32.080	34.240	27.450	57.270	36.160	23.730	20.310	20.170	1.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:47:18	0.455	0.674	0.040	0.034	67.530	68.420	87.5%	0.030	0.029	0.671
2	17:47:45	0.462	0.665	0.025	0.053	67.720	69.310	88.5%	0.025	0.028	0.699
3	17:48:12	0.425	0.591	0.052	0.047	65.650	68.430	89.5%	0.030	0.025	0.659
X		0.448	0.643	0.039	0.045	66.960	68.720	88.5%	0.028	0.028	0.676
S		0.020	0.046	0.014	0.010	1.142	0.513	1.0%	0.003	0.002	0.021
%RSD		4.372	7.132	35.250	21.760	1.705	0.746	1.1	10.570	7.025	3.056
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	17:47:18	0.687	0.652	91.8%							
2	17:47:45	0.628	0.660	92.8%							
3	17:48:12	0.688	0.660	92.9%							
X		0.667	0.657	92.5%							
S		0.034	0.005	0.6%							
%RSD		5.128	0.706	0.7							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:53:08	99.3%	0.359	111.300	111.200	-179.500	26010.000	1354.000	1364.000	2563.000	20500.000
2	17:53:35	99.1%	0.300	113.600	112.100	-178.900	26040.000	1363.000	1370.000	2555.000	20930.000
3	17:54:02	99.2%	0.327	111.700	112.500	-183.600	26420.000	1312.000	1362.000	2477.000	20940.000
X		99.2%	0.329	112.200	111.900	-180.700	26160.000	1343.000	1366.000	2532.000	20790.000
S		0.1%	0.029	1.233	0.684	2.527	231.800	26.980	4.002	47.280	252.700
%RSD		0.1	8.941	1.099	0.611	1.399	0.886	2.008	0.293	1.868	1.216
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:53:08	46610.000	38060.000	6851.000	29950.000	31490.000	96.2%	891.800	29.640	6.606	6762.000
2	17:53:35	44850.000	36940.000	6664.000	30120.000	32040.000	95.9%	896.700	29.570	6.609	6674.000
3	17:54:02	43590.000	37050.000	6722.000	30060.000	31360.000	97.9%	878.400	29.160	6.552	6530.000
X		45020.000	37350.000	6745.000	30040.000	31630.000	96.7%	888.900	29.460	6.589	6655.000
S		1516.000	620.100	95.710	82.100	357.000	1.1%	9.470	0.260	0.032	117.300
%RSD		3.367	1.660	1.419	0.273	1.129	1.1	1.065	0.882	0.489	1.762
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:53:08	9940.000	238.500	9960.000	9638.000	4.159	5.571	7.014	4.235	5.498	58.660
2	17:53:35	10110.000	240.200	10380.000	9662.000	4.146	5.725	6.255	3.975	5.803	56.560
3	17:54:02	10150.000	236.000	10280.000	9396.000	4.156	5.329	7.378	3.984	5.790	56.550
X		10070.000	238.200	10210.000	9565.000	4.154	5.542	6.882	4.065	5.697	57.260
S		111.700	2.113	220.400	147.000	0.007	0.200	0.573	0.148	0.173	1.214
%RSD		1.109	0.887	2.159	1.537	0.169	3.606	8.320	3.636	3.029	2.120
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:53:08	50.630	50.500	0.953	-0.271	6.820	7.391	0.755	0.447	-2.512	105.400
2	17:53:35	50.940	53.010	2.002	-0.752	8.605	6.905	-1.439	-0.234	0.401	104.800
3	17:54:02	53.750	52.270	1.406	-0.228	7.383	6.972	-1.412	-0.226	-0.444	106.100
X		51.770	51.930	1.454	-0.417	7.603	7.089	-0.699	-0.004	-0.852	105.400
S		1.718	1.290	0.526	0.291	0.912	0.263	1.259	0.391	1.499	0.649
%RSD		3.318	2.484	36.210	69.820	12.000	3.714	180.200	9511.000	176.000	0.615
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:53:08	95.1%	2.416	2.107	2.303	2.823	0.031	0.032	0.149	0.140	82.2%
2	17:53:35	97.0%	2.370	2.427	2.278	2.393	0.035	0.043	0.143	0.149	83.0%
3	17:54:02	95.7%	2.351	2.381	2.579	2.771	0.045	0.037	0.105	0.152	84.7%
X		95.9%	2.379	2.305	2.387	2.662	0.037	0.037	0.132	0.147	83.3%
S		0.9%	0.034	0.173	0.167	0.235	0.007	0.005	0.024	0.006	1.3%
%RSD		1.0	1.412	7.495	6.984	8.814	18.520	14.320	18.200	4.325	1.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:53:08	1.220	1.310	1.166	1.220	160.500	163.900	86.9%	0.338	0.329	6.768
2	17:53:35	1.288	1.356	1.118	1.348	157.700	164.000	89.5%	0.328	0.298	6.844
3	17:54:02	1.365	1.324	1.125	1.221	157.700	159.100	90.8%	0.334	0.335	7.005
X		1.291	1.330	1.136	1.263	158.600	162.300	89.1%	0.334	0.321	6.872
S		0.072	0.023	0.026	0.074	1.667	2.836	2.0%	0.005	0.020	0.121
%RSD		5.611	1.750	2.299	5.829	1.051	1.747	2.2	1.485	6.185	1.765
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	17:53:08	6.418	6.904	87.8%							
2	17:53:35	6.272	6.796	90.4%							
3	17:54:02	6.448	6.992	89.3%							
X		6.379	6.897	89.2%							
S		0.094	0.098	1.3%							
%RSD		1.475	1.420	1.5							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:58:59	100.2%	0.140	7.719	8.509	-54.720	2874.000	397.300	392.900	472.100	247.600
2	17:59:26	99.4%	0.243	8.093	8.699	-64.480	2938.000	398.400	398.700	484.900	249.200
3	17:59:52	100.1%	0.161	8.274	8.736	-54.050	2984.000	397.800	391.200	480.500	233.900
X		99.9%	0.182	8.029	8.648	-57.750	2932.000	397.900	394.300	479.200	243.500
S		0.4%	0.055	0.283	0.122	5.837	55.110	0.561	3.915	6.461	8.401
%RSD		0.4	30.020	3.522	1.406	10.110	1.880	0.141	0.993	1.348	3.449
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:58:59	6801.000	47990.000	949.200	952.300	960.100	93.7%	11.160	0.181	0.480	8031.000
2	17:59:26	6961.000	48060.000	953.400	950.600	957.200	92.3%	11.900	0.343	0.561	7827.000
3	17:59:52	6671.000	46790.000	941.200	928.200	943.500	93.2%	10.500	-0.084	0.497	7877.000
X		6811.000	47610.000	947.900	943.700	953.600	93.0%	11.190	0.146	0.512	7912.000
S		145.300	717.400	6.241	13.420	8.855	0.7%	0.704	0.215	0.043	106.200
%RSD		2.133	1.507	0.658	1.422	0.929	0.8	6.290	146.900	8.351	1.343
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:58:59	142.700	4.324	135.000	133.100	0.211	0.334	-0.891	0.271	0.319	3.089
2	17:59:26	145.900	4.370	134.800	133.800	0.205	0.217	-0.802	0.303	0.342	3.303
3	17:59:52	134.900	4.373	135.400	128.300	0.189	0.270	-0.594	0.262	0.353	3.158
X		141.200	4.356	135.000	131.700	0.202	0.273	-0.762	0.279	0.338	3.183
S		5.635	0.027	0.299	2.959	0.011	0.059	0.153	0.022	0.017	0.109
%RSD		3.992	0.627	0.222	2.246	5.651	21.490	20.060	7.808	5.103	3.436
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:58:59	4.135	3.636	-0.101	-0.318	8.041	9.683	-0.662	-0.098	-1.458	5.595
2	17:59:26	3.902	3.259	-0.077	0.062	8.117	8.372	0.026	0.064	-2.117	5.643
3	17:59:52	3.921	3.310	0.199	-0.347	9.264	8.478	1.371	0.402	-2.790	5.719
X		3.986	3.402	0.007	-0.201	8.474	8.844	0.245	0.122	-2.121	5.652
S		0.129	0.205	0.167	0.228	0.685	0.729	1.034	0.255	0.666	0.062
%RSD		3.239	6.016	2430.000	113.700	8.086	8.238	422.000	208.400	31.400	1.104
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:58:59	85.0%	0.102	0.031	0.012	-1.316	-0.000	0.002	0.043	0.022	84.3%
2	17:59:26	84.9%	0.059	0.038	0.066	-0.796	-0.001	0.001	0.027	0.024	85.7%
3	17:59:52	84.9%	0.063	0.072	0.051	-0.937	0.001	0.001	0.027	0.022	85.7%
X		85.0%	0.075	0.047	0.043	-1.016	-0.000	0.001	0.032	0.023	85.2%
S		0.0%	0.024	0.022	0.028	0.269	0.001	0.001	0.009	0.001	0.8%
%RSD		0.0	31.540	46.290	64.350	26.460	714.000	50.200	27.320	4.290	1.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:58:59	0.044	0.055	0.040	0.044	11.020	10.470	88.0%	0.038	0.026	0.134
2	17:59:26	0.048	0.057	0.050	0.020	10.450	10.740	89.7%	0.027	0.026	0.112
3	17:59:52	0.055	0.051	0.056	0.026	10.470	10.500	90.0%	0.032	0.031	0.113
X		0.049	0.054	0.049	0.030	10.650	10.570	89.2%	0.032	0.028	0.120
S		0.005	0.003	0.008	0.013	0.326	0.147	1.1%	0.005	0.003	0.012
%RSD		11.090	5.321	16.590	42.990	3.066	1.389	1.2	16.140	9.806	10.340
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	17:58:59	0.127	0.125	91.2%							
2	17:59:26	0.088	0.114	92.1%							
3	17:59:52	0.118	0.121	93.1%							
X		0.111	0.120	92.1%							
S		0.020	0.006	1.0%							
%RSD		18.300	4.702	1.1							

VJ21054-003

10/26/2020 18:04:21

User Pre-dilution: 1.000

User Predefinition: 1.000											
Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:49	100.1%	0.327	3.540	3.648	-129.100	6391.000	1152.000	1121.000	1762.000	5328.000
2	18:05:16	100.6%	0.376	3.459	3.774	-133.300	6448.000	1105.000	1119.000	1721.000	5336.000
3	18:05:43	98.8%	0.415	3.287	3.670	-135.500	6612.000	1146.000	1135.000	1712.000	5371.000
X		99.8%	0.373	3.429	3.698	-132.600	6483.000	1134.000	1125.000	1732.000	5345.000
S		0.9%	0.044	0.129	0.067	3.238	114.700	25.820	8.809	26.760	22.830
%RSD		0.9	11.900	3.770	1.810	2.442	1.769	2.276	0.783	1.545	0.427
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:49	25290.000	42140.000	3299.000	5199.000	5370.000	95.4%	394.600	8.106	5.190	8286.000
2	18:05:16	24190.000	42200.000	3255.000	5144.000	5303.000	95.6%	381.900	8.147	5.261	8022.000
3	18:05:43	23790.000	41080.000	3272.000	5323.000	5315.000	95.2%	369.200	7.806	5.134	8037.000
X		24420.000	41810.000	3276.000	5222.000	5330.000	95.4%	381.900	8.020	5.195	8115.000
S		781.700	633.100	22.290	91.830	35.820	0.2%	12.710	0.187	0.063	148.000
%RSD		3.201	1.514	0.680	1.759	0.672	0.2	3.327	2.325	1.221	1.824
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:49	4777.000	380.400	5057.000	4671.000	1.643	1.232	1.377	2.339	2.972	19.070
2	18:05:16	4682.000	374.700	4882.000	4495.000	1.463	1.418	0.871	2.319	3.073	18.080
3	18:05:43	4819.000	374.000	5023.000	4537.000	1.613	1.250	1.060	2.458	2.763	17.660
X		4759.000	376.300	4988.000	4568.000	1.573	1.300	1.102	2.372	2.936	18.270
S		70.000	3.519	92.850	91.590	0.096	0.103	0.256	0.076	0.158	0.722
%RSD		1.471	0.935	1.862	2.005	6.120	7.902	23.180	3.184	5.379	3.953
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:49	18.960	17.390	-0.290	-0.185	6.002	7.318	0.489	0.221	-1.299	75.100
2	18:05:16	18.740	17.820	0.066	-0.524	5.227	6.608	-0.526	-0.010	-2.619	74.250
3	18:05:43	18.350	17.270	-0.075	-0.687	6.175	5.893	1.402	0.423	-1.028	75.020
X		18.680	17.490	-0.099	-0.465	5.802	6.606	0.455	0.211	-1.649	74.790
S		0.312	0.288	0.179	0.256	0.505	0.713	0.964	0.217	0.851	0.472
%RSD		1.668	1.646	180.700	55.040	8.698	10.790	211.900	102.400	51.640	0.631
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:49	88.3%	1.208	1.241	1.134	1.046	0.002	0.007	0.043	0.036	84.3%
2	18:05:16	89.1%	1.221	1.294	1.214	0.885	0.004	0.008	0.023	0.031	85.7%
3	18:05:43	89.4%	1.292	1.258	1.235	-0.475	0.002	0.005	0.032	0.030	86.3%
X		88.9%	1.240	1.264	1.195	0.485	0.003	0.007	0.033	0.032	85.5%
S		0.6%	0.045	0.027	0.053	0.836	0.001	0.002	0.010	0.003	1.0%
%RSD		0.6	3.621	2.106	4.460	172.200	45.310	28.110	30.990	10.220	1.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:49	0.470	0.514	0.059	0.064	55.920	57.260	87.6%	0.143	0.160	3.024
2	18:05:16	0.567	0.509	0.056	0.067	55.880	55.840	89.5%	0.182	0.161	3.321
3	18:05:43	0.549	0.557	0.066	0.072	55.960	57.460	90.4%	0.152	0.161	3.144
X		0.529	0.526	0.060	0.068	55.920	56.850	89.1%	0.159	0.161	3.163
S		0.051	0.026	0.006	0.004	0.040	0.881	1.4%	0.020	0.001	0.149
%RSD		9.678	4.998	9.182	5.797	0.071	1.550	1.6	12.600	0.448	4.720
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	18:04:49	2.828	3.004	90.7%							
2	18:05:16	2.766	3.093	90.5%							
3	18:05:43	2.832	3.057	91.8%							
X		2.809	3.051	91.0%							
S		0.037	0.045	0.7%							
%RSD		1.323	1.465	0.8							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:10:40	100.9%	0.528	5.495	5.413	-156.300	3023.000	1443.000	1468.000	2513.000	9289.000
2	18:11:08	99.4%	0.568	4.211	5.237	-160.500	3097.000	1460.000	1421.000	2465.000	9048.000
3	18:11:35	101.8%	0.569	5.407	5.149	-159.600	3053.000	1468.000	1507.000	2440.000	9180.000
X		100.7%	0.555	5.038	5.266	-158.800	3058.000	1457.000	1465.000	2473.000	9173.000
S		1.2%	0.023	0.717	0.134	2.220	36.860	12.490	42.790	36.860	120.800
%RSD		1.2	4.218	14.240	2.549	1.398	1.206	0.857	2.920	1.491	1.317
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:10:40	18700.000	32980.000	3307.000	1923.000	1992.000	95.5%	701.300	11.930	4.248	6111.000
2	18:11:08	18410.000	32830.000	3338.000	1903.000	1987.000	95.6%	685.200	12.140	4.372	5887.000
3	18:11:35	18490.000	32880.000	3228.000	1882.000	2056.000	93.4%	688.100	12.320	4.185	5803.000
X		18530.000	32900.000	3291.000	1902.000	2012.000	94.8%	691.500	12.130	4.268	5934.000
S		147.900	76.050	56.770	20.400	38.260	1.2%	8.562	0.195	0.095	159.200
%RSD		0.798	0.231	1.725	1.072	1.902	1.3	1.238	1.607	2.231	2.682
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:10:40	6900.000	242.400	7013.000	6596.000	2.326	2.274	2.905	0.582	1.272	30.780
2	18:11:08	6681.000	241.600	7042.000	6532.000	2.133	2.433	2.437	0.606	1.277	31.330
3	18:11:35	6893.000	247.300	7200.000	6603.000	2.197	2.254	3.122	0.596	1.105	30.440
X		6825.000	243.800	7085.000	6577.000	2.219	2.320	2.821	0.595	1.218	30.850
S		124.700	3.096	100.700	38.770	0.098	0.098	0.350	0.012	0.098	0.449
%RSD		1.827	1.270	1.421	0.590	4.418	4.237	12.410	2.079	8.045	1.455
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:10:40	28.690	27.690	0.605	-0.246	3.471	3.308	0.071	0.340	-2.489	29.260
2	18:11:08	28.800	28.180	0.004	-0.795	4.600	3.786	0.635	0.416	-0.810	29.720
3	18:11:35	28.550	27.090	0.431	-0.626	4.122	3.512	4.837	1.666	-0.845	28.990
X		28.680	27.650	0.347	-0.556	4.064	3.535	1.848	0.807	-1.381	29.320
S		0.125	0.547	0.309	0.281	0.567	0.240	2.604	0.745	0.960	0.370
%RSD		0.437	1.977	89.120	50.620	13.940	6.790	141.000	92.280	69.490	1.262
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:10:40	103.7%	0.068	0.074	0.082	0.375	0.003	0.013	0.033	0.030	83.1%
2	18:11:08	103.8%	0.110	0.102	0.120	-0.471	0.009	0.012	0.022	0.026	85.3%
3	18:11:35	105.1%	0.150	0.078	0.100	-0.343	0.013	0.006	0.057	0.042	84.2%
X		104.2%	0.110	0.085	0.101	-0.147	0.009	0.010	0.037	0.033	84.2%
S		0.7%	0.041	0.015	0.019	0.456	0.005	0.004	0.018	0.008	1.1%
%RSD		0.7	37.490	17.540	18.800	310.900	55.740	37.950	47.560	25.960	1.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:10:40	0.762	0.885	0.028	0.021	117.100	118.100	87.6%	0.368	0.370	4.025
2	18:11:08	0.641	0.901	0.045	0.024	114.500	116.100	89.3%	0.373	0.359	4.041
3	18:11:35	0.707	0.928	0.044	0.032	117.100	119.900	90.7%	0.386	0.328	4.013
X		0.703	0.905	0.039	0.026	116.200	118.000	89.2%	0.376	0.352	4.026
S		0.060	0.022	0.010	0.006	1.479	1.917	1.6%	0.009	0.022	0.014
%RSD		8.580	2.404	25.060	23.030	1.272	1.624	1.8	2.494	6.190	0.350
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	18:10:40	3.422	3.647	89.0%							
2	18:11:08	3.646	3.698	91.6%							
3	18:11:35	3.542	3.691	91.4%							
X		3.537	3.678	90.7%							
S		0.112	0.028	1.5%							
%RSD		3.175	0.749	1.6							

CCV MW15278 10/26/2020 18:16:06 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:32	86.0%	298.200	314.200	324.700	9.823	±57700.000	±63560.000	±63630.000	±62700.000	309.000
2	18:16:59	87.2%	302.400	305.000	322.200	7.870	±57810.000	±63860.000	±65300.000	±64320.000	310.400
3	18:17:26	86.6%	300.500	311.000	321.600	16.920	±57740.000	±63990.000	±63620.000	±62550.000	306.900
X		86.6%	100.119%	103.347%	107.609%	11.540	±96.254%	±63800.000	±64180.000	±105.314%	102.920%
S		0.6%	n/a	n/a	n/a	4.761	±n/a	±223.700	±965.800	±n/a	n/a
%RSD		0.7	0.701	1.516	0.520	41.270	±0.096	±0.351	±1.505	±1.555	0.568
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:32	±3665.000	186.100	±51930.000	59120.000	±62410.000	89.9%	308.200	328.700	305.600	1160.000
2	18:16:59	±3597.000	182.400	±51060.000	60730.000	±63220.000	88.7%	308.700	320.000	309.000	2014.000
3	18:17:26	±3663.000	183.600	±51560.000	61600.000	±63790.000	87.8%	314.100	319.000	308.900	2171.000
X		±3642.000	184.000	±85.862%	60480.000	±105.234%	88.8%	103.450%	107.517%	102.620%	1782.000
S		±38.440	1.901	±n/a	1256.000	±n/a	1.1%	n/a	n/a	n/a	544.400
%RSD		±1.056	1.033	±0.844	2.077	±1.101	1.2	1.059	1.647	0.631	30.560
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:32	±64730.000	308.800	±65730.000	±64290.000	302.600	313.400	305.600	294.300	336.100	323.600
2	18:16:59	±63500.000	304.000	±65300.000	±63900.000	301.200	303.800	309.400	292.800	330.700	310.000
3	18:17:26	±65930.000	309.100	±64650.000	±65110.000	307.700	318.200	303.600	292.000	326.700	317.100
X		±64720.000	102.431%	±65230.000	±107.389%	101.279%	103.933%	306.200	293.000	110.390%	105.623%
S		±1214.000	n/a	±546.600	±n/a	n/a	n/a	2.957	1.185	n/a	n/a
%RSD		±1.877	0.932	±0.838	±0.963	1.123	2.353	0.966	0.404	1.437	2.145
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:32	296.600	283.100	279.900	291.800	1.152	-0.255	1241.000	317.700	-1.561	296.200
2	18:16:59	289.300	284.700	283.700	292.700	0.920	-0.444	1228.000	313.000	-3.343	294.700
3	18:17:26	285.000	280.300	281.100	291.800	1.595	0.609	1231.000	314.300	-0.857	292.800
X		290.300	282.700	93.858%	292.100	1.223	-0.030	1233.000	104.998%	-1.920	98.183%
S		5.852	2.252	n/a	0.512	0.343	0.561	6.740	n/a	1.281	n/a
%RSD		2.016	0.797	0.683	0.175	28.060	1871.000	0.546	0.776	66.720	0.587
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:32	80.6%	305.000	300.600	299.200	291.500	294.700	294.500	295.400	294.300	76.0%
2	18:16:59	81.5%	307.700	303.800	298.100	283.900	292.500	289.700	295.100	292.200	76.9%
3	18:17:26	80.9%	317.200	308.200	310.700	294.300	299.000	293.100	296.200	296.900	76.1%
X		81.0%	103.314%	101.393%	302.700	289.900	98.465%	292.400	295.500	98.166%	76.3%
S		0.4%	n/a	n/a	7.017	5.391	n/a	2.494	0.558	n/a	0.5%
%RSD		0.5	2.062	1.253	2.319	1.860	1.126	0.853	0.189	0.800	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:32	302.400	304.000	291.400	314.400	292.600	293.500	81.2%	302.200	306.100	301.200
2	18:16:59	300.000	302.100	290.900	313.600	293.700	296.100	81.5%	302.000	305.600	303.300
3	18:17:26	305.800	304.600	298.500	322.900	288.900	297.700	82.8%	301.800	303.900	301.300
X		100.914%	101.190%	293.600	105.667%	97.239%	98.589%	81.8%	302.000	101.735%	100.638%
S		n/a	n/a	4.246	n/a	n/a	n/a	0.9%	0.221	n/a	n/a
%RSD		0.970	0.430	1.446	1.621	0.861	0.730	1.0	0.073	0.380	0.385
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	18:16:32	302.700	299.700	78.4%							
2	18:16:59	305.100	303.500	79.0%							
3	18:17:26	300.200	301.200	80.0%							
X		100.899%	100.497%	79.1%							
S		n/a	n/a	0.8%							
%RSD		0.809	0.632	1.1							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:23	94.1%	0.050	0.609	0.593	25.320	1.151	2.542	1.970	2.513	0.058
2	18:22:49	92.6%	0.028	0.630	0.673	18.500	1.153	2.808	2.563	2.191	0.056
3	18:23:16	94.1%	0.012	0.481	0.696	4.781	1.329	3.247	3.793	2.895	0.059
X		93.6%	0.030	0.574	0.654	16.200	1.211	2.865	2.775	2.533	0.058
S		0.9%	0.019	0.080	0.054	10.460	0.102	0.356	0.930	0.352	0.002
%RSD		0.9	62.890	14.030	8.298	64.570	8.444	12.420	33.500	13.900	3.215
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:23	-94.290	102.800	-8.937	2.872	-30.350	91.6%	-0.036	0.032	0.018	-5.388
2	18:22:49	-94.500	99.720	-10.870	9.034	-28.520	91.9%	0.025	0.041	0.026	-9.861
3	18:23:16	-95.200	105.900	-10.530	0.789	-29.100	92.2%	-0.016	-0.004	0.016	3.053
X		-94.660	102.800	-10.110	4.232	-29.330	91.9%	-0.009	0.023	0.020	-4.065
S		0.475	3.080	1.031	4.287	0.934	0.3%	0.031	0.024	0.005	6.558
%RSD		0.502	2.996	10.190	101.300	3.183	0.4	357.600	104.600	27.140	161.300
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:23	1.700	0.021	0.578	12.530	0.016	0.033	-0.459	-0.042	0.054	0.092
2	18:22:49	2.282	0.018	-0.667	9.243	0.004	0.021	-0.798	-0.014	0.047	0.024
3	18:23:16	3.102	0.013	-0.670	12.110	0.020	0.038	-0.728	-0.001	0.036	0.051
X		2.361	0.017	-0.253	11.290	0.013	0.030	-0.662	-0.019	0.046	0.055
S		0.704	0.004	0.720	1.787	0.008	0.008	0.179	0.020	0.009	0.034
%RSD		29.830	21.280	284.800	15.830	63.370	27.980	27.030	107.500	20.020	61.980
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:23	-0.106	-0.126	-0.102	0.237	0.581	-0.299	-1.320	-0.247	-1.104	0.008
2	18:22:49	0.202	-0.017	0.110	-0.162	-0.123	-0.328	2.781	0.722	-0.741	0.008
3	18:23:16	0.387	-0.202	-0.070	-0.420	0.070	-0.522	-1.010	-0.180	-1.472	0.020
X		0.161	-0.115	-0.021	-0.115	0.176	-0.383	0.150	0.098	-1.106	0.012
S		0.249	0.093	0.114	0.331	0.364	0.121	2.283	0.541	0.366	0.007
%RSD		154.300	81.320	552.300	288.000	206.900	31.650	1518.000	551.700	33.070	59.200
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:23	84.9%	0.403	0.625	0.464	0.259	0.013	0.004	0.012	0.003	82.0%
2	18:22:49	84.4%	0.548	0.595	0.584	-0.109	0.007	0.007	0.006	0.011	83.5%
3	18:23:16	85.5%	0.613	0.627	0.561	-0.529	0.014	0.017	0.006	0.009	84.4%
X		84.9%	0.521	0.616	0.536	-0.127	0.011	0.009	0.008	0.008	83.3%
S		0.6%	0.108	0.018	0.064	0.394	0.004	0.007	0.003	0.004	1.2%
%RSD		0.7	20.660	2.889	11.860	311.600	33.580	74.000	39.360	56.680	1.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:23	0.084	0.099	0.436	0.402	0.007	0.007	83.0%	0.009	0.009	0.022
2	18:22:49	0.078	0.089	0.446	0.437	0.022	0.011	84.6%	0.010	0.010	0.008
3	18:23:16	0.082	0.088	0.469	0.497	-0.009	-0.007	85.7%	0.011	0.014	0.015
X		0.081	0.092	0.450	0.445	0.007	0.004	84.4%	0.010	0.011	0.015
S		0.003	0.006	0.017	0.048	0.016	0.009	1.4%	0.001	0.003	0.007
%RSD		4.026	6.760	3.768	10.830	227.500	251.800	1.6	9.860	25.330	46.970
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	18:22:23	0.005	0.014	83.0%							
2	18:22:49	0.011	0.017	85.4%							
3	18:23:16	0.008	0.018	86.3%							
X		0.008	0.016	84.9%							
S		0.003	0.002	1.7%							
%RSD		40.650	15.250	2.0							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:28:13	94.4%	0.531	3.180	3.697	-77.010	3560.000	1037.000	1046.000	1342.000	2212.000
2	18:28:40	96.5%	0.560	3.286	3.021	-77.700	3502.000	1058.000	1037.000	1346.000	2124.000
3	18:29:07	99.3%	0.571	3.574	3.437	-79.020	3486.000	1044.000	1038.000	1282.000	2137.000
X		96.7%	0.554	3.347	3.385	-77.910	3516.000	1046.000	1040.000	1323.000	2158.000
S		2.5%	0.021	0.203	0.341	1.021	39.270	10.250	4.710	35.720	47.150
%RSD		2.5	3.706	6.080	10.080	1.311	1.117	0.979	0.453	2.699	2.185
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:28:13	14410.000	40590.000	1714.000	2649.000	2741.000	91.8%	143.000	5.054	1.988	7949.000
2	18:28:40	14310.000	40340.000	1728.000	2630.000	2778.000	93.0%	148.100	4.089	2.150	8600.000
3	18:29:07	14160.000	40260.000	1739.000	2785.000	2650.000	94.5%	145.000	4.730	2.025	8032.000
X		14290.000	40400.000	1727.000	2688.000	2723.000	93.1%	145.400	4.624	2.054	8194.000
S		127.800	172.200	12.220	84.480	65.750	1.4%	2.587	0.491	0.085	354.500
%RSD		0.894	0.426	0.708	3.143	2.414	1.5	1.780	10.620	4.137	4.326
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:28:13	1685.000	107.600	1785.000	1613.000	0.898	1.012	0.094	1.292	1.480	9.827
2	18:28:40	1681.000	106.400	1708.000	1632.000	0.935	1.053	0.471	1.285	1.519	10.220
3	18:29:07	1656.000	105.000	1706.000	1534.000	0.825	1.003	0.434	1.158	1.344	9.218
X		1674.000	106.300	1733.000	1593.000	0.886	1.023	0.333	1.245	1.448	9.754
S		15.840	1.273	44.900	52.180	0.056	0.027	0.208	0.075	0.092	0.504
%RSD		0.946	1.197	2.591	3.276	6.344	2.625	62.320	6.051	6.344	5.165
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:28:13	12.670	11.120	-0.165	-0.294	5.312	4.291	-0.537	0.041	-2.314	44.580
2	18:28:40	12.370	10.500	-0.067	-0.459	4.870	4.260	0.003	0.070	1.356	44.560
3	18:29:07	12.670	11.040	-0.428	-0.003	4.236	5.580	-1.867	-0.359	-1.417	44.310
X		12.570	10.890	-0.220	-0.252	4.806	4.710	-0.800	-0.083	-0.792	44.480
S		0.174	0.338	0.187	0.231	0.541	0.753	0.962	0.239	1.913	0.155
%RSD		1.381	3.101	84.820	91.520	11.260	15.980	120.300	289.000	241.600	0.348
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:28:13	90.1%	0.204	0.161	0.158	0.197	0.010	0.010	0.003	0.016	81.2%
2	18:28:40	92.0%	0.148	0.150	0.184	-0.354	0.013	0.007	0.013	0.027	84.0%
3	18:29:07	91.0%	0.214	0.197	0.207	1.144	0.013	0.017	0.017	0.028	85.2%
X		91.0%	0.189	0.169	0.183	0.329	0.012	0.011	0.011	0.023	83.4%
S		1.0%	0.036	0.024	0.024	0.758	0.002	0.005	0.007	0.007	2.1%
%RSD		1.1	18.950	14.320	13.270	230.100	15.170	43.280	65.890	29.210	2.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:28:13	0.384	0.510	0.158	0.204	91.360	90.830	85.1%	0.103	0.096	2.778
2	18:28:40	0.335	0.433	0.188	0.174	88.900	90.680	87.3%	0.115	0.092	2.795
3	18:29:07	0.326	0.441	0.200	0.223	91.440	89.230	87.2%	0.095	0.105	2.788
X		0.348	0.462	0.182	0.200	90.570	90.250	86.5%	0.105	0.098	2.787
S		0.031	0.042	0.022	0.024	1.448	0.886	1.2%	0.010	0.006	0.008
%RSD		8.957	9.192	11.910	12.150	1.599	0.982	1.4	9.397	6.635	0.301
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	18:28:13	2.344	2.601	87.8%							
2	18:28:40	2.448	2.558	88.8%							
3	18:29:07	2.442	2.543	90.0%							
X		2.411	2.567	88.9%							
S		0.058	0.030	1.1%							
%RSD		2.410	1.167	1.2							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:34:04	100.7%	0.612	2.820	3.043	-92.210	3488.000	1198.000	1225.000	1672.000	3044.000
2	18:34:30	102.4%	0.498	3.327	3.091	-97.910	3511.000	1206.000	1194.000	1590.000	3031.000
3	18:34:57	100.0%	0.573	2.754	3.715	-102.500	3586.000	1210.000	1183.000	1645.000	3023.000
X		101.1%	0.561	2.967	3.283	-97.530	3528.000	1204.000	1200.000	1636.000	3033.000
S		1.2%	0.058	0.314	0.375	5.144	51.110	6.377	21.720	41.660	10.350
%RSD		1.2	10.300	10.570	11.420	5.274	1.449	0.529	1.810	2.547	0.341
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:34:04	15840.000	44180.000	1971.000	2668.000	2684.000	95.7%	242.400	5.700	2.571	8733.000
2	18:34:30	15530.000	43900.000	2006.000	2644.000	2685.000	96.9%	231.200	5.909	2.552	8100.000
3	18:34:57	15990.000	44090.000	2034.000	2641.000	2690.000	95.8%	227.800	5.900	2.561	8217.000
X		15790.000	44060.000	2004.000	2651.000	2686.000	96.1%	233.800	5.836	2.561	8350.000
S		230.600	144.200	31.870	15.210	3.416	0.7%	7.641	0.118	0.010	336.800
%RSD		1.461	0.327	1.590	0.574	0.127	0.7	3.268	0.206	0.375	4.033
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:34:04	2651.000	131.600	2700.000	2508.000	1.017	1.211	1.081	1.705	2.002	11.750
2	18:34:30	2511.000	126.600	2687.000	2448.000	0.974	1.110	0.586	1.651	1.863	11.580
3	18:34:57	2523.000	131.300	2635.000	2547.000	1.018	1.135	1.328	1.720	2.040	11.810
X		2561.000	129.800	2674.000	2501.000	1.003	1.152	0.998	1.692	1.968	11.720
S		77.580	2.793	34.490	49.900	0.025	0.053	0.378	0.036	0.094	0.121
%RSD		3.029	2.152	1.290	1.995	2.517	4.591	37.830	2.126	4.753	1.032
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:34:04	15.760	12.570	0.079	-0.450	7.070	7.734	-0.987	-0.070	-2.429	45.640
2	18:34:30	13.150	12.270	0.429	-0.074	7.225	7.742	0.267	0.239	-2.424	45.810
3	18:34:57	13.460	12.130	-0.033	-0.269	7.538	6.485	-1.315	-0.187	-1.522	44.990
X		14.120	12.320	0.158	-0.264	7.277	7.320	-0.678	-0.006	-2.125	45.480
S		1.425	0.225	0.241	0.188	0.238	0.723	0.835	0.220	0.522	0.434
%RSD		10.090	1.828	152.300	71.080	3.274	9.879	123.100	3624.000	24.590	0.953
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:34:04	92.7%	0.107	0.093	0.101	0.427	0.006	0.008	0.013	0.013	83.3%
2	18:34:30	92.4%	0.123	0.113	0.123	2.492	0.014	0.005	0.018	0.028	84.7%
3	18:34:57	93.2%	0.149	0.179	0.127	0.715	0.006	0.008	0.018	0.010	84.2%
X		92.8%	0.127	0.128	0.117	1.211	0.009	0.007	0.016	0.017	84.0%
S		0.4%	0.021	0.045	0.014	1.118	0.005	0.002	0.003	0.010	0.7%
%RSD		0.4	16.920	34.970	12.040	92.270	55.180	30.130	16.440	57.320	0.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:34:04	0.341	0.497	0.101	0.081	80.520	83.620	87.4%	0.159	0.145	3.010
2	18:34:30	0.304	0.437	0.101	0.133	83.720	82.220	87.4%	0.139	0.144	2.848
3	18:34:57	0.374	0.452	0.113	0.120	84.180	83.840	89.3%	0.137	0.143	2.980
X		0.340	0.462	0.105	0.111	82.800	83.220	88.0%	0.145	0.144	2.946
S		0.035	0.031	0.007	0.027	1.989	0.878	1.1%	0.012	0.001	0.086
%RSD		10.350	6.713	6.384	24.240	2.403	1.055	1.2	8.429	0.655	2.916
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	18:34:04	2.779	2.752	88.3%							
2	18:34:30	2.603	2.681	89.5%							
3	18:34:57	2.548	2.663	92.3%							
X		2.643	2.699	90.1%							
S		0.121	0.047	2.0%							
%RSD		4.562	1.747	2.3							

VQ70546-001 10/26/2020 18:39:26 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:39:53	99.0%	-0.003	0.120	0.505	43.040	9.974	3.124	3.266	3.193	2.567
2	18:40:20	100.1%	-0.004	0.748	0.654	41.160	9.770	3.101	2.951	2.941	2.636
3	18:40:47	100.8%	-0.004	0.649	0.564	35.970	9.889	3.093	3.013	2.975	2.667
X		100.0%	-0.004	0.506	0.574	40.060	9.877	3.106	3.076	3.036	2.623
S		0.9%	0.000	0.338	0.075	3.664	0.103	0.016	0.167	0.137	0.052
%RSD		0.9	8.935	66.860	13.030	9.147	1.039	0.527	5.414	4.496	1.964
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:39:53	-90.190	46810.000	-16.920	7.783	-22.220	94.2%	0.063	-0.198	0.337	6614.000
2	18:40:20	-91.090	44840.000	-16.400	8.717	-24.150	94.8%	0.082	-0.292	0.364	6803.000
3	18:40:47	-91.290	44750.000	-17.220	11.000	-23.540	92.6%	0.086	-0.047	0.302	6610.000
X		-90.860	45460.000	-16.850	9.167	-23.300	93.9%	0.077	-0.179	0.334	6676.000
S		0.585	1162.000	0.415	1.656	0.985	1.1%	0.012	0.124	0.031	110.200
%RSD		0.644	2.556	2.463	18.060	4.227	1.2	15.610	69.070	9.386	1.650
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:39:53	24.020	0.312	13.170	11.170	-0.003	0.058	-0.824	0.063	0.154	0.868
2	18:40:20	23.920	0.305	9.647	13.690	-0.002	0.024	-1.047	0.088	0.131	0.873
3	18:40:47	26.090	0.333	13.140	12.110	-0.007	0.054	-0.806	0.060	0.069	0.923
X		24.670	0.317	11.990	12.320	-0.004	0.045	-0.892	0.070	0.118	0.888
S		1.224	0.014	2.027	1.269	0.002	0.018	0.134	0.015	0.044	0.030
%RSD		4.962	4.569	16.910	10.300	58.200	40.340	15.030	21.590	37.050	3.421
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:39:53	1.492	0.637	-0.316	-0.453	3.586	2.792	-2.072	-0.427	-1.227	0.022
2	18:40:20	1.202	0.905	0.015	0.069	3.480	2.503	0.312	0.130	-0.826	0.030
3	18:40:47	1.814	0.804	-0.449	-0.372	3.581	3.557	-0.390	-0.049	-0.867	0.025
X		1.503	0.782	-0.250	-0.252	3.549	2.951	-0.717	-0.115	-0.973	0.026
S		0.306	0.135	0.239	0.281	0.060	0.544	1.225	0.285	0.221	0.004
%RSD		20.380	17.290	95.460	111.600	1.680	18.440	170.900	246.800	22.670	15.570
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:39:53	87.0%	0.061	0.036	0.070	-0.803	-0.001	0.004	-0.002	0.000	83.5%
2	18:40:20	85.5%	0.101	0.091	0.069	-0.420	0.003	0.002	-0.002	0.004	84.4%
3	18:40:47	86.6%	0.104	0.070	0.088	-1.169	0.001	-0.000	0.003	-0.001	85.7%
X		86.4%	0.089	0.066	0.075	-0.797	0.001	0.002	-0.000	0.001	84.5%
S		0.8%	0.024	0.028	0.011	0.375	0.002	0.002	0.003	0.002	1.1%
%RSD		0.9	26.850	42.130	14.240	47.000	232.200	100.200	4266.000	206.500	1.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:39:53	0.052	0.049	0.065	0.099	0.113	0.119	86.8%	0.000	0.001	0.020
2	18:40:20	0.053	0.060	0.097	0.106	0.127	0.118	87.7%	0.002	0.000	0.018
3	18:40:47	0.043	0.074	0.108	0.124	0.066	0.099	88.4%	0.002	0.001	0.017
X		0.049	0.061	0.090	0.110	0.102	0.112	87.6%	0.001	0.001	0.018
S		0.005	0.013	0.022	0.013	0.032	0.011	0.8%	0.001	0.000	0.001
%RSD		11.140	20.480	24.850	11.460	31.300	9.872	0.9	53.810	48.310	8.082
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	18:39:53	0.015	0.015	91.0%							
2	18:40:20	0.020	0.018	91.6%							
3	18:40:47	0.012	0.017	91.7%							
X		0.016	0.017	91.4%							
S		0.004	0.001	0.4%							
%RSD		25.420	8.379	0.4							

VQ70546-002 10/26/2020 18:45:17 QC Status: FAIL (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:45:44	99.5%	101.800	101.400	107.400	54.400	940.700	1121.000	1116.000	1096.000	109.400
2	18:46:11	99.5%	100.600	101.700	105.300	37.760	935.000	1134.000	1086.000	1126.000	109.500
3	18:46:38	98.4%	99.990	106.600	104.600	33.010	975.600	1099.000	1085.000	1096.000	108.800
X		99.1%	100.795%	103.200	105.766%	41.720	95.041%	1118.000	1096.000	110.605%	109.219%
S		0.7%	n/a	2.964	n/a	11.230	n/a	17.800	17.660	n/a	n/a
%RSD		0.7	0.896	2.871	1.373	26.920	2.312	1.592	1.611	1.574	0.364
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:45:44	1081.000	46240.000	801.800	1140.000	1065.000	94.0%	106.600	103.800	106.600	7048.000
2	18:46:11	1067.000	45460.000	814.100	1126.000	1034.000	92.7%	108.200	109.500	107.100	5904.000
3	18:46:38	1127.000	45500.000	818.200	1129.000	1039.000	93.0%	105.700	107.800	106.300	5768.000
X		109.153%	45730.000	81.136%	1132.000	104.597%	93.2%	106.838%	107.042%	106.657%	6240.000
S		n/a	435.200	n/a	7.221	n/a	0.7%	n/a	n/a	n/a	703.400
%RSD		2.850	0.952	1.047	0.638	1.610	0.7	1.212	2.724	0.398	11.270
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:45:44	1163.000	107.400	1174.000	1073.000	107.900	107.500	104.900	106.100	120.600	105.400
2	18:46:11	1149.000	108.200	1132.000	1086.000	105.100	109.500	110.200	111.300	112.900	104.800
3	18:46:38	1167.000	108.400	1162.000	1062.000	102.900	104.000	98.940	105.200	114.400	102.500
X		1160.000	108.011%	1156.000	107.355%	105.306%	107.003%	104.700	107.600	115.961%	104.220%
S		9.511	n/a	21.500	n/a	n/a	n/a	5.641	3.318	n/a	n/a
%RSD		0.820	0.503	1.860	1.113	2.356	2.586	5.389	3.085	3.545	1.454
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:45:44	102.100	97.460	95.820	94.920	3.083	2.829	406.200	101.500	0.123	99.190
2	18:46:11	99.460	96.190	96.290	95.860	3.134	3.343	392.300	96.220	-3.139	101.100
3	18:46:38	100.000	97.720	96.080	94.930	3.567	3.165	398.100	95.530	0.891	101.000
X		100.500	97.120	96.065%	95.240	3.262	3.112	398.900	97.739%	-0.708	100.400
S		1.383	0.817	n/a	0.544	0.266	0.261	6.972	n/a	2.139	1.081
%RSD		1.376	0.841	0.243	0.571	8.149	8.387	1.748	3.321	302.000	1.076
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:45:44	86.4%	105.000	105.900	104.300	97.940	102.200	103.100	100.000	98.160	83.2%
2	18:46:11	85.4%	107.100	106.800	105.300	96.500	103.800	103.600	99.500	99.180	83.8%
3	18:46:38	85.0%	108.800	107.200	106.800	97.110	101.500	100.800	98.030	98.960	85.2%
X		85.6%	106.900	106.641%	105.500	97.180	102.480%	102.500	99.180	98.765%	84.0%
S		0.7%	1.907	n/a	1.224	0.721	n/a	1.489	1.034	n/a	1.0%
%RSD		0.8	1.783	0.664	1.161	0.742	1.140	1.453	1.042	0.546	1.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:45:44	101.400	102.800	98.440	106.800	99.240	101.500	86.6%	98.690	97.870	102.800
2	18:46:11	102.600	101.700	99.140	107.300	97.760	100.800	88.2%	99.990	100.300	101.900
3	18:46:38	102.100	102.600	98.010	106.700	100.700	99.990	89.0%	101.100	100.700	102.900
X		102.000	102.367%	98.530	106.947%	99.224%	100.800	87.9%	99.920	99.617%	102.500
S		0.594	n/a	0.570	n/a	n/a	0.776	1.2%	1.203	n/a	0.543
%RSD		0.582	0.558	0.579	0.322	1.472	0.770	1.4	1.204	1.536	0.529
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	18:45:44	101.600	101.000	90.0%							
2	18:46:11	102.300	101.100	90.3%							
3	18:46:38	102.400	101.600	89.7%							
X		102.100	101.220%	90.0%							
S		0.421	n/a	0.3%							
%RSD		0.412	0.295	0.3							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:51:35	88.0%	0.009	M 545.500	M 599.200	-21.580	T 19890.000	T 9137.000	T 9248.000	T 10720.000	8.523
2	18:52:02	89.5%	0.009	M 555.600	M 600.100	-27.760	T 19700.000	T 9099.000	T 9016.000	T 10840.000	8.364
3	18:52:29	88.2%	0.004	M 572.300	M 589.200	-34.850	T 20460.000	T 9213.000	T 9257.000	T 11200.000	7.767
X		88.6%	0.007	M 557.800	M 596.200	-28.060	T 20020.000	T 9149.000	T 9174.000	T 10920.000	8.218
S		0.8%	0.003	M 13.510	M 6.017	6.637	T 395.600	T 57.890	T 136.700	T 249.000	0.399
%RSD		0.9	43.690	M 2.422	M 1.009	23.650	T 1.976	T 0.633	T 1.491	T 2.281	4.856
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:51:35	TM 17270.000	T 43960.000	1248.000	M 166200.000	TM 172400.000	84.2%	3.048	-0.195	0.266	2470.000
2	18:52:02	TM 17040.000	T 44520.000	1257.000	M 167400.000	TM 175500.000	84.0%	3.120	-0.168	0.316	2539.000
3	18:52:29	TM 16820.000	T 43490.000	1297.000	M 169000.000	TM 175400.000	84.3%	2.665	-0.064	0.281	2593.000
X		TM 17040.000	T 43990.000	1267.000	M 167500.000	TM 174400.000	84.2%	2.945	-0.142	0.288	2534.000
S		TM 229.000	T 512.900	25.840	M 1414.000	TM 1766.000	0.1%	0.245	0.069	0.026	61.720
%RSD		TM 1.344	T 1.166	2.039	M 0.844	TM 1.012	0.1	8.311	48.740	8.897	2.436
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:51:35	4020.000	189.900	T 4217.000	4346.000	0.101	1.402	-0.902	0.052	0.209	0.960
2	18:52:02	4001.000	188.300	T 4090.000	4413.000	0.128	1.379	-0.535	0.050	0.282	1.049
3	18:52:29	3959.000	187.400	T 4060.000	4252.000	0.104	1.204	-0.903	0.098	0.200	1.083
X		3993.000	188.500	T 4122.000	4337.000	0.111	1.328	-0.780	0.067	0.231	1.031
S		31.400	1.254	T 83.350	81.090	0.015	0.108	0.212	0.027	0.045	0.064
%RSD		0.786	0.665	T 2.022	1.870	13.350	8.164	27.150	40.840	19.480	6.187
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:51:35	3.520	3.131	1.246	-0.059	610.700	601.100	0.221	0.030	-0.544	331.700
2	18:52:02	4.524	2.949	0.900	-0.740	592.900	609.100	0.948	0.201	-0.939	334.300
3	18:52:29	3.826	2.909	0.870	-0.238	585.200	627.200	0.622	0.086	0.232	338.700
X		3.957	2.996	1.005	-0.346	596.300	612.500	0.597	0.106	-0.417	334.900
S		0.515	0.118	0.209	0.353	13.080	13.370	0.364	0.087	0.596	3.564
%RSD		13.010	3.937	20.780	102.200	2.194	2.183	61.050	82.310	142.800	1.064
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:51:35	76.2%	0.127	0.144	0.119	8.711	0.008	0.003	0.004	0.004	75.0%
2	18:52:02	76.6%	0.173	0.106	0.152	6.812	0.005	-0.001	0.009	0.001	76.3%
3	18:52:29	75.7%	0.127	0.077	0.183	9.880	0.004	0.003	-0.002	0.006	76.0%
X		76.2%	0.142	0.109	0.151	8.468	0.006	0.001	0.003	0.004	75.8%
S		0.4%	0.027	0.034	0.032	1.548	0.002	0.002	0.005	0.002	0.7%
%RSD		0.5	18.840	30.840	21.280	18.280	36.440	174.400	155.900	58.650	0.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:51:35	0.056	0.073	0.047	0.055	76.240	78.970	80.5%	0.011	0.014	0.019
2	18:52:02	0.060	0.091	0.069	0.054	77.170	79.200	82.5%	0.015	0.016	0.016
3	18:52:29	0.037	0.089	0.062	0.072	78.840	78.330	82.9%	0.005	0.010	0.011
X		0.051	0.084	0.059	0.060	77.410	78.830	82.0%	0.011	0.013	0.016
S		0.012	0.010	0.011	0.010	1.316	0.454	1.3%	0.005	0.003	0.004
%RSD		24.280	11.620	19.300	16.630	1.700	0.575	1.6	47.420	21.940	26.840
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	18:51:35	0.009	0.014	80.7%							
2	18:52:02	0.010	0.012	82.3%							
3	18:52:29	0.012	0.013	83.3%							
X		0.010	0.013	82.1%							
S		0.002	0.001	1.3%							
%RSD		15.060	5.708	1.6							

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10/26/2020 18:56:59

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:57:25	88.9%	0.006	97.750	103.200	129.300	8460.000	4331.000	4348.000	4518.000	86.690
2	18:57:52	90.0%	-0.000	101.000	107.800	145.200	8507.000	4483.000	4397.000	4391.000	83.670
3	18:58:19	90.0%	-0.002	101.300	103.300	130.900	8583.000	4475.000	4168.000	4483.000	83.100
X		89.6%	0.001	100.000	104.800	135.100	8517.000	4430.000	4305.000	4464.000	84.490
S		0.6%	0.004	1.965	2.659	8.750	62.120	85.330	120.500	65.650	1.932
%RSD		0.7	376.400	1.965	2.538	6.475	0.729	1.926	2.799	1.471	2.287
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:57:25	3774.000	46560.000	2102.000	14900.000	14790.000	84.2%	1.283	0.376	1.962	1390.000
2	18:57:52	3559.000	46900.000	2077.000	14990.000	15050.000	85.4%	1.154	0.230	1.901	1445.000
3	18:58:19	3622.000	45810.000	2132.000	15190.000	15050.000	85.5%	1.350	0.167	2.019	1413.000
X		3652.000	46420.000	2104.000	15030.000	14960.000	85.1%	1.262	0.258	1.961	1416.000
S		110.400	557.400	27.770	149.100	149.400	0.7%	0.100	0.108	0.059	27.650
%RSD		3.023	1.201	1.320	0.993	0.999	0.9	7.889	41.700	3.009	1.953
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:57:25	55790.000	178.800	56630.000	53800.000	0.857	2.615	2.292	0.127	0.214	44.790
2	18:57:52	54760.000	178.000	54520.000	52570.000	0.927	2.584	1.237	0.079	0.213	43.860
3	18:58:19	54000.000	180.300	53750.000	54260.000	0.856	2.532	1.830	0.141	0.201	43.600
X		54850.000	179.100	54970.000	53540.000	0.880	2.577	1.786	0.116	0.209	44.080
S		899.600	1.163	1490.000	875.500	0.041	0.042	0.529	0.033	0.008	0.624
%RSD		1.640	0.650	2.712	1.635	4.654	1.635	29.600	28.240	3.594	1.416
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:57:25	41.110	42.020	22.060	-0.347	63.700	64.170	-0.598	-0.041	-2.832	88.420
2	18:57:52	40.010	41.070	20.950	-0.361	61.940	61.910	0.357	0.158	-1.142	86.500
3	18:58:19	38.710	41.160	21.130	-0.010	64.710	61.530	0.431	0.134	-0.348	88.990
X		39.940	41.420	21.380	-0.239	63.450	62.530	0.063	0.084	-1.441	87.970
S		1.201	0.524	0.598	0.199	1.404	1.426	0.574	0.109	1.268	1.300
%RSD		3.007	1.264	2.795	83.040	2.212	2.280	906.700	130.100	88.040	1.478
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:57:25	77.5%	1.493	1.634	1.470	2.328	-0.001	-0.001	0.451	0.541	75.6%
2	18:57:52	79.9%	1.689	1.576	1.528	2.014	0.003	-0.001	0.573	0.559	77.4%
3	18:58:19	78.7%	1.749	1.595	1.639	1.320	-0.000	0.004	0.522	0.509	77.8%
X		78.7%	1.644	1.601	1.545	1.887	0.000	0.000	0.515	0.536	76.9%
S		1.2%	0.134	0.030	0.086	0.516	0.002	0.003	0.061	0.025	1.2%
%RSD		1.6	8.133	1.857	5.573	27.340	515.100	781.200	11.900	4.683	1.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:57:25	0.190	0.048	1.187	1.386	51.610	53.160	80.5%	0.069	0.078	0.077
2	18:57:52	0.254	0.064	1.283	1.327	53.720	54.300	80.9%	0.085	0.079	0.070
3	18:58:19	0.212	0.072	1.162	1.395	52.230	53.460	82.7%	0.083	0.082	0.058
X		0.219	0.061	1.211	1.369	52.520	53.640	81.4%	0.079	0.080	0.068
S		0.033	0.012	0.064	0.037	1.082	0.595	1.2%	0.009	0.002	0.010
%RSD		15.030	19.370	5.309	2.686	2.061	1.109	1.5	11.080	2.271	14.120
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	18:57:25	0.074	0.072	84.6%							
2	18:57:52	0.062	0.065	84.5%							
3	18:58:19	0.046	0.058	86.1%							
X		0.061	0.065	85.1%							
S		0.014	0.007	0.9%							
%RSD		23.090	10.650	1.0							

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User Pre-dilution: 1.000

user file location: 12000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:15	87.7%	-0.025	34.240	37.690	-20.970	11920.000	2887.000	2877.000	3215.000	5.566
2	19:03:42	85.8%	0.014	34.310	38.330	-21.040	12580.000	3012.000	2869.000	3228.000	6.780
3	19:04:09	88.2%	-0.013	34.090	35.740	-22.310	12390.000	2978.000	2945.000	3407.000	5.705
X		87.2%	-0.008	34.210	37.250	-21.440	12300.000	2959.000	2897.000	3283.000	6.017
S		1.2%	0.020	0.110	1.347	0.752	340.000	64.960	41.710	107.100	0.665
%RSD		1.4	249.000	0.321	3.615	3.507	2.765	2.196	1.440	3.263	11.050
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:15	9255.000	42140.000	667.100	68630.000	73490.000	85.5%	0.889	-0.253	0.237	2892.000
2	19:03:42	9320.000	43440.000	680.600	69750.000	73870.000	84.6%	1.165	-0.247	0.191	3191.000
3	19:04:09	9820.000	42110.000	680.000	72300.000	77270.000	83.3%	1.094	-0.170	0.241	3456.000
X		9465.000	42570.000	675.900	70230.000	74880.000	84.5%	1.049	-0.223	0.223	3180.000
S		309.500	758.800	7.661	1881.000	2083.000	1.1%	0.143	0.046	0.028	282.400
%RSD		3.269	1.783	1.133	2.679	2.781	1.3	13.680	20.800	12.640	8.881
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:15	845.400	88.610	908.500	1061.000	0.051	0.521	-1.236	0.050	0.149	0.887
2	19:03:42	855.800	87.490	901.700	1046.000	0.064	0.619	-0.625	0.050	0.172	0.894
3	19:04:09	885.700	89.140	900.500	1020.000	0.050	0.573	-0.851	0.031	0.198	0.783
X		862.300	88.410	903.600	1042.000	0.055	0.571	-0.904	0.044	0.173	0.855
S		20.920	0.843	4.316	20.590	0.008	0.049	0.309	0.011	0.025	0.062
%RSD		2.427	0.954	0.478	1.975	14.760	8.542	34.120	25.030	14.320	7.310
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:15	1.471	1.420	0.589	-0.041	151.500	153.300	2.788	0.821	-4.288	209.100
2	19:03:42	1.892	1.349	-0.047	-0.492	152.700	160.600	0.527	0.195	-2.455	209.500
3	19:04:09	2.104	1.169	0.253	-0.575	163.600	158.100	1.959	0.521	-1.389	208.700
X		1.822	1.313	0.265	-0.370	155.900	157.300	1.758	0.512	-2.711	209.100
S		0.323	0.130	0.318	0.288	6.628	3.698	1.144	0.313	1.466	0.398
%RSD		17.700	9.879	120.100	77.870	4.251	2.351	65.060	61.110	54.080	0.190
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:15	76.7%	0.301	0.330	0.255	4.215	0.004	0.000	0.009	-0.001	75.0%
2	19:03:42	77.2%	0.266	0.312	0.352	5.351	-0.000	-0.000	-0.003	0.001	76.6%
3	19:04:09	78.1%	0.286	0.257	0.291	6.290	-0.000	-0.000	0.003	0.012	76.9%
X		77.3%	0.284	0.300	0.299	5.285	0.001	-0.000	0.003	0.004	76.2%
S		0.7%	0.018	0.038	0.049	1.039	0.002	0.000	0.006	0.007	1.0%
%RSD		0.9	6.212	12.670	16.410	19.660	177.800	88.550	190.600	179.100	1.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:15	0.099	0.099	0.037	0.026	21.880	21.230	80.0%	0.003	0.001	0.007
2	19:03:42	0.063	0.108	0.022	0.045	21.530	21.480	81.4%	0.002	0.002	0.016
3	19:04:09	0.055	0.088	0.044	0.062	21.560	21.540	82.8%	0.001	0.002	0.006
X		0.072	0.098	0.034	0.044	21.660	21.420	81.4%	0.002	0.001	0.010
S		0.023	0.010	0.011	0.018	0.196	0.164	1.4%	0.001	0.000	0.005
%RSD		32.670	10.160	32.510	40.680	0.905	0.766	1.8	70.920	18.280	54.670
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	19:03:15	0.007	0.010	80.7%							
2	19:03:42	0.012	0.013	82.3%							
3	19:04:09	0.011	0.012	84.2%							
X		0.010	0.012	82.4%							
S		0.003	0.002	1.8%							
%RSD		27.840	15.440	2.1							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:06	89.7%	-0.012	66.610	69.370	-7.649	12400.000	3546.000	3495.000	3943.000	3.471
2	19:09:33	89.7%	0.001	70.290	73.090	0.055	12510.000	3583.000	3503.000	3915.000	3.399
3	19:10:00	88.2%	0.001	66.730	67.870	-12.700	12770.000	3635.000	3531.000	3937.000	3.431
X		89.2%	-0.004	67.880	70.110	-6.766	12560.000	3588.000	3509.000	3932.000	3.434
S		0.9%	0.008	2.093	2.686	6.424	190.500	44.840	18.760	14.680	0.036
%RSD		1.0	217.500	3.083	3.831	94.960	1.517	1.250	0.534	0.373	1.055
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:06	TM 10380.000	142920.000	697.000	54420.000	156990.000	85.1%	1.468	-0.079	0.359	3881.000
2	19:09:33	TM 10190.000	142560.000	683.600	54660.000	157000.000	85.5%	1.308	0.190	0.305	3648.000
3	19:10:00	TM 10270.000	141870.000	702.300	54570.000	158310.000	84.8%	1.318	-0.196	0.253	3765.000
X		TM 10280.000	142450.000	694.300	54550.000	157430.000	85.1%	1.364	-0.028	0.305	3765.000
S		TM 94.300	1535.300	9.672	124.500	1762.700	0.3%	0.089	0.198	0.053	116.800
%RSD		TM 0.917	1.261	1.393	0.228	1.328	0.4	6.558	702.100	17.400	3.102
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:06	1718.000	46.130	1802.000	1831.000	0.051	0.475	-1.233	0.055	0.214	1.436
2	19:09:33	1683.000	46.920	1766.000	1853.000	0.053	0.449	-0.797	0.043	0.121	1.433
3	19:10:00	1697.000	46.050	1744.000	1822.000	0.054	0.532	-0.628	0.078	0.145	1.390
X		1699.000	46.370	1770.000	1835.000	0.053	0.485	-0.886	0.058	0.160	1.420
S		17.840	0.480	129.260	15.730	0.001	0.042	0.312	0.018	0.048	0.026
%RSD		1.050	1.034	1.653	0.857	2.833	8.745	35.240	30.380	30.190	1.834
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:06	3.187	2.476	0.344	0.032	117.900	117.200	2.778	0.737	-1.336	117.100
2	19:09:33	3.331	2.541	-0.123	-1.002	117.100	118.200	0.040	0.102	-2.538	115.700
3	19:10:00	2.859	2.536	0.042	-0.561	120.100	122.300	-0.571	-0.121	-0.223	119.000
X		3.126	2.518	0.088	-0.510	118.400	119.200	0.749	0.239	-1.366	117.300
S		0.242	0.036	0.237	0.519	1.561	2.704	1.783	0.445	1.158	1.654
%RSD		7.737	1.439	270.400	101.600	1.319	2.268	238.200	186.400	84.770	1.410
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:06	76.9%	0.040	0.075	0.074	3.756	-0.000	-0.001	-0.002	0.005	75.6%
2	19:09:33	79.1%	0.075	0.101	0.060	1.545	0.001	-0.000	-0.002	0.001	77.1%
3	19:10:00	76.9%	0.068	0.075	0.078	0.905	0.003	-0.001	0.004	0.002	76.3%
X		77.6%	0.061	0.084	0.071	2.069	0.001	-0.001	0.000	0.003	76.4%
S		1.3%	0.019	0.015	0.009	1.496	0.001	0.001	0.003	0.002	0.8%
%RSD		1.7	30.590	17.670	12.770	72.310	102.000	83.050	2049.000	76.310	1.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:06	0.090	0.120	0.032	0.032	47.340	47.520	80.5%	-0.001	0.001	0.002
2	19:09:33	0.101	0.111	0.033	0.029	47.670	47.320	82.2%	0.001	0.003	0.014
3	19:10:00	0.094	0.140	0.035	0.051	47.640	49.170	82.3%	0.003	0.002	0.016
X		0.095	0.124	0.033	0.037	47.550	48.000	81.7%	0.001	0.002	0.011
S		0.005	0.015	0.001	0.012	0.185	1.013	1.0%	0.002	0.001	0.007
%RSD		5.754	12.180	4.143	32.510	0.389	2.111	1.3	195.500	65.710	70.030
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	19:09:06	0.005	0.006	82.7%							
2	19:09:33	0.012	0.013	82.9%							
3	19:10:00	0.012	0.013	84.1%							
X		0.009	0.011	83.3%							
S		0.004	0.004	0.8%							
%RSD		41.810	37.090	0.9							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:14:55	72.7%	7.073	106.500	108.200	-31.460	<u>TM 1182000.000</u>	<u>TM 133900.000</u>	<u>TM 136200.000</u>	<u>TM 176500.000</u>	<u>TM 45870.000</u>
2	19:15:22	72.0%	6.954	102.400	108.400	-36.120	<u>TM 1196000.000</u>	<u>TM 129300.000</u>	<u>TM 132400.000</u>	<u>TM 170000.000</u>	<u>TM 46600.000</u>
3	19:15:49	73.2%	7.169	102.900	107.100	-36.150	<u>TM 1178000.000</u>	<u>TM 128200.000</u>	<u>TM 134000.000</u>	<u>TM 172000.000</u>	<u>TM 46520.000</u>
X		72.6%	7.065	103.900	107.900	-34.580	<u>TM 1185000.000</u>	<u>TM 130500.000</u>	<u>TM 134200.000</u>	<u>TM 172800.000</u>	<u>TM 46330.000</u>
S		0.6%	0.108	2.232	0.704	2.698	<u>TM 9619.000</u>	<u>TM 3012.000</u>	<u>TM 1912.000</u>	<u>TM 3364.000</u>	<u>TM 398.400</u>
%RSD		0.8	1.522	2.148	0.652	7.804	<u>TM 0.812</u>	<u>TM 2.309</u>	<u>TM 1.425</u>	<u>TM 1.946</u>	<u>TM 0.860</u>
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:14:55	<u>TM 8215.000</u>	<u>TM 110800.000</u>	<u>TM 72.660</u>	85380.000	<u>TM 90850.000</u>	74.0%	1.772	41.680	4.571	2392.000
2	19:15:22	<u>TM 7965.000</u>	<u>TM 111400.000</u>	<u>TM 72.390</u>	87080.000	<u>TM 90370.000</u>	74.1%	1.746	43.250	4.690	2197.000
3	19:15:49	<u>TM 8157.000</u>	<u>TM 112800.000</u>	<u>TM 70.900</u>	85690.000	<u>TM 89990.000</u>	73.9%	2.158	42.190	4.623	2269.000
X		<u>TM 8112.000</u>	<u>TM 111700.000</u>	<u>TM 71.980</u>	86050.000	<u>TM 90400.000</u>	74.0%	1.892	42.370	4.628	2286.000
S		<u>TM 131.000</u>	<u>TM 1025.000</u>	<u>TM 0.950</u>	902.600	<u>TM 432.000</u>	0.1%	0.231	0.802	0.059	98.550
%RSD		<u>TM 1.615</u>	<u>TM 0.918</u>	<u>TM 1.320</u>	1.049	<u>TM 0.478</u>	0.2	12.220	1.893	1.285	4.310
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:14:55	<u>TM 205700.000</u>	326.400	<u>TM 204000.000</u>	<u>TM 201700.000</u>	13.530	28.140	283.900	14.170	0.841	52.180
2	19:15:22	<u>TM 208400.000</u>	320.600	<u>TM 202100.000</u>	<u>TM 196200.000</u>	13.830	27.250	326.000	16.060	0.825	51.070
3	19:15:49	<u>TM 206200.000</u>	319.600	<u>TM 206400.000</u>	<u>TM 198500.000</u>	13.560	27.990	368.700	18.060	0.929	51.340
X		<u>TM 206800.000</u>	322.200	<u>TM 204100.000</u>	<u>TM 198800.000</u>	13.640	27.790	326.200	16.090	0.865	51.530
S		<u>TM 1411.000</u>	3.659	<u>TM 2146.000</u>	<u>TM 2793.000</u>	0.166	0.476	42.430	1.945	0.056	0.580
%RSD		<u>TM 0.683</u>	1.136	<u>TM 1.051</u>	<u>TM 1.405</u>	1.217	1.714	13.010	12.080	6.445	1.125
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:14:55	26.510	23.690	5.845	0.032	2252.000	1870.000	25.090	42.370	6.971	<u>TM 34.140</u>
2	19:15:22	26.050	22.740	5.180	0.030	2255.000	1889.000	22.860	38.140	7.383	<u>TM 33.990</u>
3	19:15:49	25.930	23.740	4.724	-0.009	2273.000	1905.000	21.750	36.020	8.926	<u>TM 33.920</u>
X		26.160	23.390	5.250	0.018	2260.000	1888.000	23.240	38.840	7.760	<u>TM 34.020</u>
S		0.307	0.563	0.564	0.023	11.460	17.420	1.703	3.233	1.031	<u>TM 0.112</u>
%RSD		1.173	2.408	10.740	129.900	0.507	0.922	7.330	8.323	13.290	<u>TM 0.329</u>
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:14:55	<u>TM 2904.5%</u>	-0.024	-0.030	-0.032	95.260	0.034	0.000	0.058	0.056	62.3%
2	19:15:22	<u>TM 2925.1%</u>	-0.021	-0.028	-0.032	87.030	0.018	0.000	0.050	0.044	63.4%
3	19:15:49	<u>TM 2971.0%</u>	-0.022	-0.027	-0.032	84.010	0.033	-0.001	0.050	0.035	63.6%
X		<u>TM 2933.5%</u>	-0.023	-0.028	-0.032	88.770	0.028	-0.000	0.053	0.045	63.1%
S		<u>TM 34.0%</u>	0.002	0.002	0.000	5.821	0.009	0.001	0.004	0.011	0.7%
%RSD		<u>TM 1.2</u>	6.660	5.773	0.434	6.558	32.760	336.500	8.270	23.880	1.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:14:55	0.098	0.146	0.053	0.081	125.700	193.300	131.4%	0.031	0.024	0.551
2	19:15:22	0.102	0.166	0.095	0.069	125.600	191.400	133.3%	0.022	0.027	0.548
3	19:15:49	0.111	0.194	0.082	0.097	125.600	192.900	134.0%	0.025	0.033	0.546
X		0.104	0.169	0.076	0.082	125.600	192.500	132.9%	0.026	0.028	0.548
S		0.007	0.024	0.021	0.014	0.085	1.020	1.4%	0.004	0.004	0.002
%RSD		6.506	14.410	27.740	16.920	0.067	0.530	1.0	16.950	15.680	0.399
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	19:14:55	0.504	0.563	67.7%							
2	19:15:22	0.590	0.570	67.8%							
3	19:15:49	0.588	0.573	68.0%							
X		0.561	0.569	67.8%							
S		0.049	0.005	0.1%							
%RSD		8.796	0.873	0.2							

VJ16014-007 10/26/2020 19:20:18

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:20:44	71.1%	6.898	106.700	112.900	-30.290	TM 1190000.000	TM 130600.000	TM 137100.000	TM 178600.000	TM 47760.000
2	19:21:11	70.9%	7.131	103.500	110.300	-48.700	TM 1206000.000	TM 130100.000	TM 134100.000	TM 174700.000	TM 46390.000
3	19:21:38	70.4%	7.214	107.300	112.000	-38.640	TM 1208000.000	TM 131200.000	TM 133100.000	TM 170500.000	TM 45610.000
X		70.8%	7.081	105.900	111.700	-39.210	TM 1201000.000	TM 130700.000	TM 134800.000	TM 174600.000	TM 46580.000
S		0.3%	0.164	2.029	1.326	9.218	TM 9964.000	TM 553.500	TM 2060.000	TM 4016.000	TM 1091.000
%RSD		0.5	2.315	1.917	1.187	23.510	TM 0.829	TM 0.424	TM 1.528	TM 2.300	TM 2.342
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:20:44	TM 8166.000	TM 112300.000	TM 69.270	85710.000	TM 90990.000	74.4%	2.294	43.810	4.776	2272.000
2	19:21:11	TM 8210.000	TM 112500.000	TM 69.450	84120.000	TM 90770.000	75.2%	2.192	43.260	4.524	2251.000
3	19:21:38	TM 8117.000	TM 112600.000	TM 69.340	84810.000	TM 91710.000	75.2%	1.868	42.470	4.599	2172.000
X		TM 8164.000	TM 112500.000	TM 69.350	84880.000	TM 91160.000	75.0%	2.118	43.180	4.633	2231.000
S		TM 46.420	TM 165.100	TM 0.089	801.800	TM 490.800	0.5%	0.223	0.675	0.130	52.900
%RSD		TM 0.569	TM 0.147	TM 0.128	0.945	TM 0.538	0.7	10.520	1.564	2.796	2.371
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:20:44	TM 213600.000	324.700	TM 210800.000	TM 204600.000	14.260	30.150	362.800	18.270	0.808	54.190
2	19:21:11	TM 210300.000	326.700	TM 211800.000	TM 203700.000	14.160	30.040	409.600	19.930	0.983	53.640
3	19:21:38	TM 209600.000	323.200	TM 204500.000	TM 206600.000	14.150	28.720	455.900	21.000	0.722	52.900
X		TM 211100.000	324.900	TM 209100.000	TM 204900.000	14.190	29.640	409.400	19.730	0.838	53.580
S		TM 2131.000	1.772	TM 3981.000	TM 1516.000	0.064	0.797	46.550	1.374	0.133	0.647
%RSD		TM 1.009	0.545	TM 1.904	TM 0.740	0.453	2.690	11.370	6.962	15.880	1.207
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:20:44	27.640	24.060	5.556	-0.160	2355.000	1975.000	24.220	40.840	9.034	TM 34.410
2	19:21:11	25.590	23.500	4.851	-0.184	2342.000	1951.000	21.660	36.920	10.620	TM 34.090
3	19:21:38	24.870	24.270	5.527	-0.132	2321.000	1950.000	24.700	41.310	10.180	TM 34.290
X		26.030	23.940	5.311	-0.159	2339.000	1959.000	23.520	39.690	9.944	TM 34.260
S		1.436	0.395	0.399	0.026	17.190	14.040	1.637	2.407	0.818	TM 0.162
%RSD		5.516	1.651	7.505	16.280	0.735	0.717	6.958	6.065	8.221	TM 0.473
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:20:44	TM 2948.1%	-0.022	-0.030	-0.032	97.480	0.023	0.004	0.032	0.032	62.2%
2	19:21:11	TM 2974.9%	-0.022	-0.030	-0.032	90.560	0.027	0.002	0.051	0.036	62.3%
3	19:21:38	TM 2997.4%	-0.024	-0.028	-0.032	89.960	0.033	-0.001	0.044	0.041	63.2%
X		TM 2973.5%	-0.023	-0.029	-0.032	92.670	0.028	0.001	0.042	0.036	62.6%
S		TM 24.7%	0.001	0.001	0.000	4.182	0.005	0.003	0.010	0.004	0.5%
%RSD		TM 0.8	4.678	3.828	0.903	4.513	19.250	182.700	23.550	12.200	0.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:20:44	0.130	0.125	0.051	0.076	127.200	196.500	130.5%	0.034	0.025	0.526
2	19:21:11	0.126	0.180	0.075	0.048	126.400	197.700	133.0%	0.038	0.029	0.506
3	19:21:38	0.121	0.182	0.066	0.083	125.400	194.800	133.6%	0.028	0.036	0.486
X		0.126	0.162	0.064	0.069	126.400	196.300	132.4%	0.033	0.030	0.506
S		0.004	0.033	0.012	0.018	0.900	1.466	1.7%	0.005	0.005	0.020
%RSD		3.318	20.150	18.410	26.680	0.712	0.747	1.3	15.050	18.130	3.883
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	19:20:44	0.503	0.502	67.0%							
2	19:21:11	0.495	0.506	66.9%							
3	19:21:38	0.498	0.510	66.8%							
X		0.499	0.506	66.9%							
S		0.004	0.004	0.1%							
%RSD		0.827	0.777	0.2							

CCV MW15278 10/26/2020 19:26:09 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:26:36	83.3%	303.300	313.600	328.700	24.980	±56500.000	±64600.000	±66450.000	±64640.000	312.400
2	19:27:02	80.6%	299.400	319.300	337.400	26.640	±58560.000	±64540.000	±65960.000	±62570.000	302.000
3	19:27:29	82.2%	303.800	320.800	326.100	33.130	±56990.000	±64880.000	±65130.000	±65990.000	305.500
X		82.0%	100.715%	105.969%	110.247%	28.250	±95.586%	±64670.000	±65840.000	±107.336%	102.216%
S		1.3%	n/a	n/a	n/a	4.308	±n/a	±183.700	±665.200	±n/a	n/a
%RSD		1.6	0.797	1.184	1.788	15.250	±1.881	±0.284	±1.010	±2.672	1.725
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:26:36	±3734.000	383.300	±47780.000	59870.000	±62560.000	85.7%	303.900	324.300	314.900	2322.000
2	19:27:02	±3682.000	387.400	±47790.000	59250.000	±62650.000	86.5%	299.600	318.700	309.200	5395.000
3	19:27:29	±3684.000	375.100	±48800.000	59950.000	±63080.000	85.4%	302.800	317.800	308.800	2172.000
X		±3700.000	381.900	±80.207%	59690.000	±104.601%	85.8%	100.701%	106.750%	103.648%	3297.000
S		±29.420	6.241	±n/a	382.900	±n/a	0.6%	n/a	n/a	n/a	1819.000
%RSD		±0.795	1.634	±1.207	0.641	±0.442	0.7	0.744	1.092	1.095	55.180
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:26:36	±68120.000	318.600	±68260.000	±66360.000	325.700	323.100	348.300	307.500	341.300	318.000
2	19:27:02	±66280.000	313.100	±67430.000	±65150.000	309.000	317.700	335.200	307.100	331.000	315.000
3	19:27:29	±65930.000	312.300	±67240.000	±65290.000	316.200	316.200	340.400	310.900	333.500	321.600
X		±66770.000	104.897%	±67640.000	±109.332%	105.651%	106.331%	341.300	308.500	111.760%	106.064%
S		±1178.000	n/a	±541.100	±n/a	n/a	n/a	6.610	2.089	n/a	n/a
%RSD		±1.764	1.085	±0.800	±1.011	2.631	1.131	1.937	0.677	1.607	1.029
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:26:36	300.600	288.200	291.000	292.700	39.250	41.640	1221.000	309.700	-2.185	294.500
2	19:27:02	299.300	292.700	286.100	291.500	38.350	42.740	1251.000	316.600	-0.723	293.900
3	19:27:29	289.400	287.900	285.600	293.800	38.460	36.330	1242.000	313.800	1.140	296.400
X		296.400	289.600	95.853%	292.700	38.690	40.240	1238.000	104.457%	-0.589	98.316%
S		6.107	2.701	n/a	1.141	0.490	3.431	15.380	n/a	1.667	n/a
%RSD		2.060	0.933	1.031	0.390	1.266	8.527	1.242	1.112	282.800	0.426
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:26:36	79.3%	303.100	299.200	298.500	291.300	290.800	288.500	288.100	289.200	75.1%
2	19:27:02	78.8%	311.500	306.500	303.800	290.700	289.300	290.200	288.400	289.000	74.9%
3	19:27:29	78.2%	320.100	311.600	311.500	288.500	296.200	297.200	291.800	293.700	74.4%
X		78.7%	103.860%	101.922%	304.600	290.200	97.363%	292.000	289.400	96.875%	74.8%
S		0.6%	n/a	n/a	6.541	1.492	n/a	4.616	2.080	n/a	0.4%
%RSD		0.7	2.731	2.051	2.147	0.514	1.240	1.581	0.719	0.919	0.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:26:36	296.300	298.300	289.200	313.200	291.300	295.100	79.4%	302.100	304.500	304.700
2	19:27:02	299.600	302.800	291.300	316.700	293.700	294.600	80.0%	303.700	306.800	300.100
3	19:27:29	302.300	302.400	295.900	320.800	290.700	294.700	80.5%	301.700	304.300	301.400
X		99.804%	100.384%	292.100	105.632%	97.303%	98.257%	80.0%	302.500	101.745%	100.682%
S		n/a	n/a	3.451	n/a	n/a	n/a	0.5%	1.091	n/a	n/a
%RSD		1.003	0.833	1.181	1.199	0.551	0.095	0.6	0.361	0.459	0.785
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	19:26:36	305.700	304.700	76.8%							
2	19:27:02	306.500	302.200	78.0%							
3	19:27:29	304.100	302.100	78.6%							
X		101.804%	101.004%	77.8%							
S		n/a	n/a	0.9%							
%RSD		0.408	0.492	1.2							

CCB IM10195-01 10/26/2020 19:32:01 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

user file location: 2000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:32:28	89.6%	-0.017	1.044	0.877	30.420	38.450	3.515	3.268	3.421	0.104
2	19:32:55	90.7%	-0.002	0.824	1.024	22.800	34.260	3.375	3.425	3.215	0.126
3	19:33:22	90.7%	0.021	0.287	0.818	28.120	32.740	3.204	3.332	2.826	0.107
X		90.3%	0.001	0.718	0.906	27.110	35.150	3.365	3.342	3.154	0.112
S		0.6%	0.019	0.389	0.106	3.905	2.960	0.156	0.079	0.302	0.012
%RSD		0.7	2019.000	54.180	11.690	14.400	8.421	4.636	2.365	9.580	10.580
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:32:28	-91.070	194.500	-16.470	2.909	-30.330	90.8%	0.047	0.038	0.041	0.694
2	19:32:55	-92.640	210.800	-15.230	4.911	-29.790	92.0%	0.066	0.042	0.026	-12.510
3	19:33:22	-95.010	202.300	-17.020	1.765	-29.980	93.8%	0.044	0.029	0.022	1.099
X		-92.910	202.500	-16.240	3.195	-30.030	92.2%	0.052	0.037	0.030	-3.571
S		1.984	8.172	0.918	1.592	0.273	1.5%	0.012	0.007	0.010	7.741
%RSD		2.136	4.035	5.653	49.830	0.909	1.6	23.060	17.930	34.380	216.700
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:32:28	3.291	0.016	1.539	11.880	0.007	-0.018	9.197	0.506	0.052	-0.023
2	19:32:55	3.514	0.007	1.236	12.550	0.012	0.043	8.272	0.419	0.039	-0.066
3	19:33:22	3.661	0.007	0.992	9.899	0.007	0.053	7.316	0.441	0.022	0.020
X		3.489	0.010	1.256	11.440	0.009	0.026	8.262	0.456	0.038	-0.023
S		0.187	0.005	0.274	1.378	0.003	0.038	0.941	0.045	0.015	0.043
%RSD		5.350	54.680	21.850	12.040	36.130	147.700	11.390	9.918	39.010	187.000
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:32:28	-0.026	-0.065	-0.099	0.353	17.380	17.110	-0.960	-0.135	-1.415	0.012
2	19:32:55	-0.374	-0.092	0.105	-0.335	18.740	18.990	2.425	0.695	-1.762	0.011
3	19:33:22	-0.338	-0.107	-0.009	0.263	15.300	18.460	1.289	0.432	-2.172	0.016
X		-0.246	-0.088	-0.001	0.094	17.140	18.190	0.918	0.331	-1.783	0.013
S		0.191	0.021	0.102	0.374	1.737	0.969	1.723	0.424	0.379	0.003
%RSD		77.800	24.280	9558.000	399.400	10.130	5.328	187.600	128.300	21.240	19.070
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:32:28	84.5%	0.642	0.479	0.474	-0.715	0.010	0.011	-0.003	0.011	80.0%
2	19:32:55	84.6%	0.560	0.675	0.505	-0.469	0.022	0.011	0.022	0.023	81.9%
3	19:33:22	86.1%	0.528	0.476	0.521	-0.228	0.006	0.015	0.002	0.011	82.9%
X		85.1%	0.577	0.543	0.500	-0.471	0.013	0.012	0.007	0.015	81.6%
S		0.9%	0.059	0.114	0.024	0.244	0.008	0.002	0.013	0.007	1.5%
%RSD		1.1	10.210	21.010	4.734	51.730	66.150	15.840	196.200	45.610	1.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:32:28	0.077	0.102	0.446	0.497	-0.001	0.007	81.7%	0.013	0.012	0.016
2	19:32:55	0.089	0.125	0.482	0.571	0.031	-0.007	83.4%	0.016	0.017	0.018
3	19:33:22	0.076	0.103	0.494	0.547	0.030	0.007	84.3%	0.009	0.008	0.014
X		0.081	0.110	0.474	0.538	0.020	0.002	83.1%	0.013	0.013	0.016
S		0.007	0.013	0.025	0.038	0.018	0.008	1.3%	0.004	0.005	0.002
%RSD		9.230	11.810	5.318	7.030	89.930	325.800	1.5	28.950	35.540	14.490
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	19:32:28	0.017	0.017	82.5%							
2	19:32:55	0.015	0.018	84.4%							
3	19:33:22	0.013	0.011	85.1%							
X		0.015	0.015	84.0%							
S		0.002	0.004	1.3%							
%RSD		13.400	25.090	1.6							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:19	91.8%	2.150	96.680	105.500	18.910	53920.000	10460.000	10920.000	11260.000	TM 940.500
2	19:38:46	92.6%	2.136	96.630	103.300	5.045	52950.000	10390.000	10450.000	11180.000	M 915.300
3	19:39:12	93.3%	2.124	96.080	106.300	20.520	53930.000	10520.000	10470.000	11220.000	TM 911.500
X		92.6%	2.137	96.470	105.100	14.820	53600.000	10460.000	10610.000	11220.000	TM 922.500
S		0.7%	0.013	0.334	1.547	8.506	561.900	64.730	263.700	38.830	TM 15.770
%RSD		0.8	0.604	0.346	1.472	57.390	1.048	0.619	2.484	0.346	TM 1.709
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:19	5100.000	50030.000	830.800	4728.000	4528.000	94.0%	0.763	0.483	0.492	2958.000
2	19:38:46	5011.000	48710.000	827.700	4779.000	4604.000	93.6%	0.707	0.225	0.483	3379.000
3	19:39:12	4887.000	47490.000	842.900	4769.000	4524.000	94.9%	0.914	-0.113	0.465	3637.000
X		4999.000	48740.000	833.800	4759.000	4552.000	94.2%	0.795	0.199	0.480	3325.000
S		106.800	1270.000	8.045	26.900	45.150	0.7%	0.107	0.299	0.014	342.500
%RSD		2.135	2.605	0.965	0.565	0.992	0.7	13.460	150.600	2.864	10.300
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:19	11850.000	40.130	12210.000	10960.000	2.835	2.222	7.869	0.520	0.250	4.068
2	19:38:46	11500.000	39.490	11850.000	10830.000	2.871	2.117	8.462	0.495	0.347	3.637
3	19:39:12	11220.000	39.490	11450.000	10780.000	2.737	2.184	8.099	0.474	0.310	4.048
X		11520.000	39.700	11840.000	10860.000	2.814	2.174	8.143	0.496	0.302	3.918
S		316.200	0.368	380.400	91.380	0.069	0.053	0.299	0.023	0.049	0.243
%RSD		2.744	0.928	3.214	0.842	2.466	2.446	3.668	4.615	16.190	6.211
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:19	20.300	15.030	0.536	-0.526	235.100	243.200	1.185	0.581	-1.447	107.500
2	19:38:46	19.500	15.150	0.938	-0.229	240.900	239.100	-0.016	0.238	-1.753	106.800
3	19:39:12	19.560	14.690	1.088	-0.171	234.000	246.100	2.059	0.729	0.884	108.700
X		19.790	14.960	0.854	-0.309	236.700	242.800	1.076	0.516	-0.772	107.700
S		0.444	0.238	0.285	0.190	3.746	3.520	1.042	0.251	1.443	0.978
%RSD		2.245	1.588	33.390	61.570	1.583	1.450	96.810	48.740	186.900	0.908
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:19	98.8%	0.147	0.242	0.134	1.743	0.007	0.004	0.003	-0.001	80.5%
2	19:38:46	99.3%	0.153	0.171	0.142	1.513	0.002	0.004	-0.002	0.006	81.1%
3	19:39:12	98.9%	0.176	0.224	0.170	3.073	0.001	0.002	0.008	0.002	82.3%
X		99.0%	0.159	0.212	0.149	2.110	0.004	0.003	0.003	0.002	81.3%
S		0.2%	0.015	0.037	0.018	0.842	0.003	0.001	0.005	0.003	0.9%
%RSD		0.2	9.718	17.250	12.430	39.920	91.880	23.740	166.300	146.000	1.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:19	0.061	0.083	0.179	0.203	410.900	410.300	82.6%	0.053	0.051	0.047
2	19:38:46	0.036	0.064	0.196	0.237	408.100	413.500	84.3%	0.042	0.062	0.032
3	19:39:12	0.060	0.066	0.222	0.229	408.500	406.500	85.4%	0.081	0.061	0.036
X		0.053	0.071	0.199	0.223	409.200	410.100	84.1%	0.058	0.058	0.038
S		0.014	0.010	0.021	0.018	1.532	3.539	1.4%	0.020	0.006	0.008
%RSD		26.620	14.510	10.730	7.929	0.374	0.863	1.7	34.870	10.470	20.310
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	19:38:19	0.038	0.035	84.9%							
2	19:38:46	0.037	0.034	84.6%							
3	19:39:12	0.036	0.032	86.4%							
X		0.037	0.034	85.3%							
S		0.001	0.001	1.0%							
%RSD		3.323	3.697	1.2							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:44:08	96.4%	-0.004	1.525	1.715	27.620	40.670	2.536	2.306	2.176	3.227
2	19:44:35	97.4%	-0.003	0.880	1.515	23.500	39.480	2.529	2.749	2.249	3.571
3	19:45:02	99.3%	-0.002	1.280	1.360	42.180	38.540	2.479	2.486	2.418	3.618
X		97.7%	-0.003	1.228	1.530	31.100	39.560	2.514	2.514	2.281	3.472
S		1.4%	0.001	0.326	0.178	9.814	1.066	0.031	0.222	0.124	0.213
%RSD		1.5	26.610	26.520	11.620	31.560	2.695	1.229	8.844	5.424	6.146
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:44:08	-89.210	<u>44790.000</u>	-15.640	3.649	-23.360	96.3%	0.022	-0.238	0.489	6966.000
2	19:44:35	-87.310	<u>45280.000</u>	-17.460	10.720	-21.400	94.8%	0.023	-0.438	0.413	6934.000
3	19:45:02	-88.730	<u>43990.000</u>	-17.920	8.679	-20.550	95.2%	0.003	-0.382	0.406	6703.000
X		-88.410	<u>44680.000</u>	-17.010	7.683	-21.770	95.4%	0.016	-0.353	0.436	6868.000
S		0.985	<u>650.600</u>	1.208	3.640	1.438	0.8%	0.011	0.103	0.046	143.400
%RSD		1.114	<u>1.456</u>	7.104	47.370	6.605	0.9	71.290	29.260	10.610	2.088
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:44:08	3.941	0.060	0.102	3.165	-0.002	0.141	3.147	0.230	0.062	1.220
2	19:44:35	5.557	0.077	0.093	2.499	-0.006	0.161	2.835	0.309	0.057	1.085
3	19:45:02	4.379	0.072	-0.998	4.013	-0.001	0.181	3.029	0.182	0.041	1.090
X		4.626	0.070	-0.268	3.226	-0.003	0.161	3.004	0.240	0.053	1.132
S		0.836	0.009	0.632	0.759	0.002	0.020	0.158	0.064	0.011	0.077
%RSD		18.070	12.480	236.400	23.520	78.810	12.500	5.243	26.610	21.000	6.762
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:44:08	1.698	0.718	0.039	-0.422	18.350	21.560	1.898	0.524	0.092	0.021
2	19:44:35	2.447	1.035	-0.065	-0.165	19.480	16.330	1.530	0.437	0.053	0.021
3	19:45:02	2.068	0.790	-0.010	0.224	18.550	18.320	-0.452	-0.057	-0.285	0.009
X		2.071	0.848	-0.012	-0.121	18.790	18.740	0.992	0.301	-0.047	0.017
S		0.375	0.167	0.052	0.325	0.606	2.636	1.264	0.313	0.207	0.007
%RSD		18.090	19.650	424.000	268.100	3.226	14.070	127.400	103.900	443.800	39.330
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:44:08	86.6%	0.070	0.056	0.088	-0.749	0.002	-0.000	-0.002	-0.002	83.7%
2	19:44:35	87.4%	0.103	0.082	0.134	0.054	-0.001	-0.000	-0.002	0.004	84.0%
3	19:45:02	87.5%	0.094	0.101	0.105	-1.517	0.005	-0.001	-0.002	-0.000	84.8%
X		87.2%	0.089	0.080	0.109	-0.737	0.002	-0.001	-0.002	0.001	84.2%
S		0.5%	0.017	0.022	0.023	0.786	0.003	0.001	0.000	0.003	0.6%
%RSD		0.6	18.920	28.160	21.320	106.600	163.000	127.800	4.894	430.600	0.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:44:08	0.049	0.049	0.083	0.119	0.046	0.011	83.8%	-0.001	0.000	0.002
2	19:44:35	0.028	0.053	0.110	0.112	0.046	0.033	84.8%	-0.001	0.003	0.003
3	19:45:02	0.058	0.054	0.118	0.085	0.052	0.036	86.1%	0.004	0.001	0.003
X		0.045	0.052	0.103	0.106	0.048	0.027	84.9%	0.001	0.001	0.003
S		0.016	0.003	0.019	0.018	0.004	0.014	1.2%	0.003	0.002	0.001
%RSD		34.570	4.899	17.970	16.810	7.804	51.510	1.4	305.900	130.100	29.140
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	19:44:08	0.008	0.003	86.7%							
2	19:44:35	0.004	0.002	87.5%							
3	19:45:02	0.006	0.005	87.3%							
X		0.006	0.003	87.2%							
S		0.002	0.002	0.4%							
%RSD		27.940	46.920	0.5							

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User Pre-dilution: 1.000

Run		Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:59		63.4%	0.691	M 721.700	M 795.000	48.240	TM 2100000.000	TM 252100.000	TM 259900.000	TM 280700.000	M 556.300
2	19:50:26		64.1%	0.732	M 710.700	M 769.300	62.830	TM 2119000.000	TM 253000.000	TM 264900.000	TM 277400.000	M 551.600
3	19:50:53		64.4%	0.568	M 714.900	M 779.900	49.750	TM 2106000.000	TM 254400.000	TM 262300.000	TM 274900.000	M 556.400
X			64.0%	0.663	M 715.700	M 781.400	53.610	TM 2108000.000	TM 253200.000	TM 262400.000	TM 277700.000	M 554.800
S			0.5%	0.085	M 5.537	M 12.900	8.025	TM 9931.000	TM 1149.000	TM 2496.000	TM 2871.000	M 2.763
%RSD			0.8	12.860	M 0.774	M 1.651	14.970	TM 0.471	TM 0.454	TM 0.951	TM 1.034	M 0.498
Run	Time		28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:59		T 4967.000	T 167800.000	T 14280.000	M 123300.000	TM 131100.000	65.9%	2.768	1.351	1.363	2868.000
2	19:50:26		T 4896.000	T 172900.000	T 14250.000	M 124600.000	TM 132300.000	66.0%	2.479	1.480	1.271	2872.000
3	19:50:53		T 4914.000	T 170900.000	T 14340.000	M 122400.000	TM 133000.000	66.5%	3.506	1.306	1.305	2850.000
X			T 4925.000	T 170500.000	T 14290.000	M 123500.000	TM 132100.000	66.1%	2.918	1.379	1.313	2863.000
S			T 36.950	T 2551.000	T 43.030	M 1098.000	TM 974.500	0.3%	0.530	0.090	0.047	11.620
%RSD			T 0.750	T 1.496	T 0.301	M 0.889	TM 0.738	0.5	18.150	6.555	3.558	0.406
Run	Time		54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:59		T 82730.000	311.200	T 84000.000	T 81840.000	2.234	5.002	M 766.200	58.250	1.650	11.280
2	19:50:26		T 82650.000	308.700	T 83620.000	T 81960.000	2.311	4.563	M 927.800	67.800	1.552	11.060
3	19:50:53		T 82500.000	306.900	T 82120.000	T 82050.000	2.346	5.104	M 991.200	72.760	1.842	11.350
X			T 82630.000	308.900	T 83250.000	T 81950.000	2.297	4.890	M 895.100	66.270	1.681	11.230
S			T 115.300	2.139	T 992.900	T 103.700	0.057	0.287	M 116.000	7.377	0.147	0.149
%RSD			T 0.140	0.692	T 1.193	T 0.127	2.496	5.872	M 12.960	11.130	8.776	1.326
Run	Time		67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:59		6.115	6.468	10.110	2.657	6522.000	6180.000	38.130	22.310	50.380	T 491.900
2	19:50:26		6.886	6.081	9.927	2.672	6463.000	6182.000	33.410	19.340	45.950	T 494.800
3	19:50:53		6.587	6.378	10.410	2.656	6535.000	6176.000	34.840	20.120	49.420	T 491.500
X			6.529	6.309	10.150	2.662	6507.000	6179.000	35.460	20.590	48.580	T 492.700
S			0.389	0.203	0.243	0.009	38.480	2.973	2.423	1.540	2.334	T 1.827
%RSD			5.954	3.215	2.390	0.349	0.591	0.048	6.832	7.479	4.805	T 0.371
Run	Time		89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:59		224.5%	0.137	0.280	0.028	25.000	0.007	0.008	0.012	0.057	56.5%
2	19:50:26		226.6%	0.117	0.254	0.052	21.150	0.006	0.004	0.062	0.032	57.1%
3	19:50:53		230.4%	0.128	0.294	0.063	20.110	0.004	0.000	0.047	0.043	57.7%
X			227.2%	0.127	0.276	0.048	22.090	0.006	0.004	0.041	0.044	57.1%
S			3.0%	0.010	0.020	0.018	2.572	0.002	0.004	0.026	0.013	0.6%
%RSD			1.3	8.215	7.329	37.100	11.650	32.080	90.150	62.980	28.410	1.0
Run	Time		116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:59		0.117	0.102	0.148	0.133	55.940	59.520	67.9%	0.060	0.060	0.232
2	19:50:26		0.143	0.118	0.151	0.202	56.100	58.620	69.4%	0.058	0.041	0.259
3	19:50:53		0.087	0.131	0.159	0.220	54.190	59.500	70.7%	0.056	0.060	0.234
X			0.116	0.117	0.153	0.185	55.410	59.210	69.3%	0.058	0.054	0.242
S			0.028	0.014	0.006	0.046	1.062	0.512	1.4%	0.002	0.011	0.015
%RSD			24.430	12.420	3.677	24.730	1.917	0.864	2.0	3.847	20.140	6.060
Run	Time		207Pb	208Pb	209Bi							
			ppb	ppb	ppb							
1	19:49:59		0.229	0.216	59.9%							
2	19:50:26		0.240	0.250	60.0%							
3	19:50:53		0.183	0.225	60.9%							
X			0.218	0.230	60.3%							
S			0.030	0.018	0.5%							
%RSD			13.930	7.642	0.9							

VJ16017-001S

10/26/2020 19:55:23

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:55:49	63.1%	82.990	<u>M 843.200</u>	<u>M 885.000</u>	54.580	<u>TM 2127000.000</u>	<u>TM 257400.000</u>	<u>TM 261400.000</u>	<u>TM 285700.000</u>	<u>M 671.700</u>
2	19:56:16	64.7%	80.650	<u>M 820.900</u>	<u>M 869.400</u>	55.390	<u>TM 2094000.000</u>	<u>TM 261000.000</u>	<u>TM 260000.000</u>	<u>TM 282300.000</u>	<u>M 674.400</u>
3	19:56:43	63.7%	83.620	<u>M 842.100</u>	<u>M 878.100</u>	48.440	<u>TM 2138000.000</u>	<u>TM 261500.000</u>	<u>TM 265800.000</u>	<u>TM 280700.000</u>	<u>M 662.400</u>
X		63.8%	82.420	<u>M 835.400</u>	<u>M 877.500</u>	52.800	<u>TM 2120000.000</u>	<u>TM 260000.000</u>	<u>TM 262400.000</u>	<u>TM 282900.000</u>	<u>M 669.500</u>
S		0.8%	1.566	<u>M 12.570</u>	<u>M 7.782</u>	3.798	<u>TM 23140.000</u>	<u>TM 2194.000</u>	<u>TM 3029.000</u>	<u>TM 2560.000</u>	<u>M 6.324</u>
%RSD		1.3	1.900	<u>M 1.504</u>	<u>M 0.887</u>	7.193	<u>TM 1.092</u>	<u>TM 0.844</u>	<u>TM 1.154</u>	<u>TM 0.905</u>	<u>M 0.945</u>
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:55:49	<u>T 6190.000</u>	<u>T 173300.000</u>	<u>T 14450.000</u>	<u>M 123300.000</u>	<u>TM 133000.000</u>	67.3%	110.100	110.700	101.700	3696.000
2	19:56:16	<u>T 6281.000</u>	<u>T 175500.000</u>	<u>T 14620.000</u>	<u>M 124800.000</u>	<u>TM 133700.000</u>	67.2%	111.100	106.200	101.900	3508.000
3	19:56:43	<u>T 6222.000</u>	<u>T 176400.000</u>	<u>T 14590.000</u>	<u>M 126100.000</u>	<u>TM 134600.000</u>	67.6%	110.200	109.000	101.800	3251.000
X		<u>T 6231.000</u>	<u>T 175100.000</u>	<u>T 14550.000</u>	<u>M 124800.000</u>	<u>TM 133700.000</u>	67.4%	110.400	108.600	101.800	3485.000
S		<u>T 46.350</u>	<u>T 1599.000</u>	<u>T 90.860</u>	<u>M 1391.000</u>	<u>TM 806.100</u>	0.2%	0.580	2.231	0.091	223.500
%RSD		<u>T 0.744</u>	<u>T 0.913</u>	<u>T 0.624</u>	<u>M 1.115</u>	<u>TM 0.603</u>	0.3	0.525	2.054	0.090	6.414
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:55:49	<u>T 85110.000</u>	418.700	<u>T 85530.000</u>	<u>T 84350.000</u>	98.360	103.200	<u>M 1154.000</u>	137.300	104.200	105.900
2	19:56:16	<u>T 83880.000</u>	413.800	<u>T 85460.000</u>	<u>T 83470.000</u>	95.960	99.130	<u>M 1241.000</u>	142.700	100.500	104.100
3	19:56:43	<u>T 84290.000</u>	411.000	<u>T 85420.000</u>	<u>T 83510.000</u>	95.660	98.690	<u>M 1271.000</u>	144.000	98.680	102.900
X		<u>T 84420.000</u>	414.500	<u>T 85470.000</u>	<u>T 83780.000</u>	96.660	100.300	<u>M 1222.000</u>	141.400	101.100	104.300
S		<u>T 625.800</u>	3.934	<u>T 56.030</u>	<u>T 500.100</u>	1.483	2.486	<u>M 61.020</u>	3.577	2.813	1.511
%RSD		<u>T 0.741</u>	0.949	<u>T 0.066</u>	<u>T 0.597</u>	1.535	2.477	<u>M 4.994</u>	2.531	2.782	1.448
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:55:49	59.750	54.480	98.280	40.130	6403.000	6074.000	168.200	110.200	60.840	<u>TM 527.800</u>
2	19:56:16	58.410	55.450	98.360	41.260	6347.000	5999.000	171.800	112.200	65.920	<u>TM 526.600</u>
3	19:56:43	57.200	55.540	100.700	41.820	6385.000	6087.000	176.200	114.400	64.380	<u>TM 528.900</u>
X		58.460	55.160	99.120	41.070	6378.000	6053.000	172.100	112.300	63.720	<u>TM 527.800</u>
S		1.274	0.587	1.385	0.861	28.600	47.700	4.005	2.120	2.604	<u>TM 1.118</u>
%RSD		2.179	1.064	1.398	2.096	0.448	0.788	2.328	1.888	4.087	<u>TM 0.212</u>
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:55:49	230.4%	28.020	27.830	27.500	92.010	89.360	90.220	90.170	91.700	57.9%
2	19:56:16	232.4%	27.970	28.330	27.460	98.330	88.640	89.730	93.030	91.570	58.2%
3	19:56:43	234.6%	28.790	28.750	27.830	89.520	88.330	89.730	90.790	91.410	59.1%
X		232.5%	28.260	28.300	27.600	93.290	88.780	89.890	91.330	91.560	58.4%
S		2.1%	0.462	0.460	0.203	4.543	0.527	0.281	1.507	0.148	0.6%
%RSD		0.9	1.635	1.625	0.737	4.870	0.593	0.313	1.650	0.162	1.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:55:49	99.320	101.200	97.860	105.900	146.600	159.500	69.0%	101.800	102.900	104.900
2	19:56:16	99.970	102.700	100.700	109.400	145.100	157.300	70.3%	102.100	103.100	105.000
3	19:56:43	100.000	102.000	99.500	108.700	143.800	156.300	71.8%	102.300	103.000	104.600
X		99.770	102.000	99.350	108.000	145.200	157.700	70.4%	102.100	103.000	104.800
S		0.389	0.774	1.414	1.868	1.401	1.635	1.4%	0.249	0.110	0.201
%RSD		0.390	0.759	1.423	1.730	0.965	1.037	2.0	0.244	0.107	0.192
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	19:55:49	105.000	104.200	59.5%							
2	19:56:16	104.800	104.300	60.9%							
3	19:56:43	105.800	104.000	61.6%							
X		105.200	104.200	60.7%							
S		0.528	0.138	1.1%							
%RSD		0.502	0.132	1.7							

VJ16017-001SD

10/26/2020 20:01:12

User Pre-dilution: 1.000

User Predefinition: 1.000											
Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:01:39	62.1%	78.260	<u>M 839.100</u>	<u>M 895.900</u>	59.740	<u>TM 2122000.000</u>	<u>TM 254000.000</u>	<u>TM 257000.000</u>	<u>TM 277200.000</u>	<u>M 662.200</u>
2	20:02:06	62.5%	82.370	<u>M 844.600</u>	<u>M 886.500</u>	70.460	<u>TM 2143000.000</u>	<u>TM 260800.000</u>	<u>TM 258800.000</u>	<u>TM 282200.000</u>	<u>M 672.300</u>
3	20:02:33	64.0%	82.320	<u>M 819.300</u>	<u>M 857.100</u>	47.140	<u>TM 2115000.000</u>	<u>TM 259300.000</u>	<u>TM 261400.000</u>	<u>TM 278800.000</u>	<u>M 677.000</u>
X		62.9%	80.980	<u>M 834.300</u>	<u>M 879.800</u>	59.110	<u>TM 2127000.000</u>	<u>TM 258000.000</u>	<u>TM 259100.000</u>	<u>TM 279400.000</u>	<u>M 670.500</u>
S		1.0%	2.357	<u>M 13.340</u>	<u>M 20.260</u>	11.670	<u>TM 14700.000</u>	<u>TM 3578.000</u>	<u>TM 2227.000</u>	<u>TM 2532.000</u>	<u>M 7.560</u>
%RSD		1.6	2.911	<u>M 1.598</u>	<u>M 2.303</u>	19.750	<u>TM 0.691</u>	<u>TM 1.387</u>	<u>TM 0.860</u>	<u>TM 0.906</u>	<u>M 1.128</u>
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:01:39	<u>T 6052.000</u>	<u>T 170300.000</u>	<u>T 14600.000</u>	<u>M 122600.000</u>	<u>TM 131500.000</u>	67.9%	104.600	104.700	98.840	3574.000
2	20:02:06	<u>T 6144.000</u>	<u>T 176000.000</u>	<u>T 14910.000</u>	<u>M 123200.000</u>	<u>TM 133100.000</u>	67.3%	112.100	105.900	100.500	3752.000
3	20:02:33	<u>T 6164.000</u>	<u>T 176600.000</u>	<u>T 14560.000</u>	<u>M 125700.000</u>	<u>TM 133500.000</u>	67.2%	106.100	107.400	101.400	3357.000
X		<u>T 6120.000</u>	<u>T 174300.000</u>	<u>T 14690.000</u>	<u>M 123800.000</u>	<u>TM 132700.000</u>	67.5%	107.600	106.000	100.300	3561.000
S		<u>T 59.540</u>	<u>T 3451.000</u>	<u>T 190.200</u>	<u>M 1611.000</u>	<u>TM 1082.000</u>	0.4%	3.970	1.350	1.302	197.600
%RSD		<u>T 0.973</u>	<u>T 1.980</u>	<u>T 1.295</u>	<u>M 1.301</u>	<u>TM 0.816</u>	0.6	3.691	1.273	1.299	5.549
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:01:39	<u>T 84280.000</u>	411.200	<u>T 81900.000</u>	<u>T 81670.000</u>	93.360	97.280	<u>M 1159.000</u>	136.300	102.200	103.400
2	20:02:06	<u>T 84670.000</u>	413.000	<u>T 84520.000</u>	<u>T 84040.000</u>	94.650	95.720	<u>M 1270.000</u>	143.300	101.700	101.800
3	20:02:33	<u>T 84600.000</u>	413.700	<u>T 85050.000</u>	<u>T 83380.000</u>	95.100	97.690	<u>M 1283.000</u>	147.800	102.500	101.400
X		<u>T 84520.000</u>	412.600	<u>T 83820.000</u>	<u>T 83030.000</u>	94.370	96.890	<u>M 1237.000</u>	142.500	102.100	102.200
S		<u>T 211.800</u>	1.303	<u>T 1687.000</u>	<u>T 1223.000</u>	0.902	1.040	<u>M 67.830</u>	5.759	0.400	1.080
%RSD		<u>T 0.251</u>	0.316	<u>T 2.012</u>	<u>T 1.474</u>	0.956	1.073	<u>M 5.481</u>	4.043	0.392	1.057
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:01:39	57.590	53.690	97.000	40.480	6342.000	6003.000	170.900	112.400	69.920	<u>TM 529.400</u>
2	20:02:06	57.010	55.290	97.640	41.120	6420.000	6111.000	166.200	106.500	70.190	<u>TM 535.700</u>
3	20:02:33	58.450	54.640	96.880	41.450	6403.000	6115.000	166.300	106.500	75.860	<u>TM 532.700</u>
X		57.680	54.540	97.170	41.010	6388.000	6076.000	167.800	108.500	71.990	<u>TM 532.600</u>
S		0.726	0.806	0.407	0.492	41.060	63.920	2.700	3.442	3.353	<u>TM 3.161</u>
%RSD		1.258	1.478	0.418	1.200	0.643	1.052	1.609	3.173	4.657	<u>TM 0.594</u>
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:01:39	229.5%	27.940	27.710	27.210	94.710	87.680	88.880	90.910	89.370	57.5%
2	20:02:06	228.6%	28.490	28.450	27.990	89.320	87.640	88.940	88.340	88.680	58.5%
3	20:02:33	233.2%	28.300	28.480	27.760	94.480	87.380	86.940	90.120	89.160	59.0%
X		230.4%	28.250	28.210	27.650	92.840	87.570	88.250	89.790	89.070	58.3%
S		2.4%	0.279	0.438	0.402	3.052	0.160	1.137	1.316	0.352	0.8%
%RSD		1.1	0.988	1.551	1.454	3.287	0.183	1.288	1.465	0.396	1.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:01:39	97.740	100.100	97.770	107.100	143.000	154.900	69.0%	99.860	100.500	102.600
2	20:02:06	96.680	98.990	96.520	107.600	144.700	155.300	71.0%	100.500	101.000	103.100
3	20:02:33	98.590	100.600	97.600	106.400	141.500	155.000	71.9%	101.800	102.600	104.200
X		97.670	99.910	97.300	107.000	143.100	155.100	70.6%	100.700	101.300	103.300
S		0.956	0.836	0.681	0.609	1.567	0.217	1.5%	1.000	1.096	0.815
%RSD		0.979	0.837	0.700	0.569	1.095	0.140	2.1	0.993	1.081	0.789
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	20:01:39	102.500	101.500	60.2%							
2	20:02:06	102.500	102.100	61.1%							
3	20:02:33	104.600	103.200	61.6%							
X		103.200	102.300	61.0%							
S		1.234	0.867	0.7%							
%RSD		1.195	0.848	1.2							

VJ16017-001L(5)

10/26/2020 20:07:03

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:07:30	76.0%	0.133	171.600	185.700	53.140	TM 472400.000	T 60590.000	T 61240.000	T 60230.000	121.300
2	20:07:57	77.7%	0.105	163.300	180.700	55.470	TM 467000.000	T 60750.000	T 59280.000	T 58960.000	117.000
3	20:08:24	77.8%	0.188	168.400	183.300	48.850	TM 468800.000	T 58490.000	T 59960.000	T 57050.000	117.400
X		77.2%	0.142	167.700	183.200	52.490	TM 469400.000	T 59940.000	T 60160.000	T 58750.000	118.600
S		1.1%	0.042	4.191	2.530	3.359	TM 2762.000	T 1257.000	T 992.800	T 1599.000	2.356
%RSD		1.4	29.530	2.498	1.380	6.399	TM 0.588	T 2.097	T 1.650	T 2.721	1.987
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:07:30	1000.000	T 37490.000	T 6858.000	25110.000	25050.000	79.9%	0.555	0.237	0.328	969.800
2	20:07:57	957.000	T 36010.000	T 6954.000	24280.000	24840.000	82.0%	0.516	0.378	0.328	782.300
3	20:08:24	920.500	T 36320.000	T 6870.000	24580.000	24580.000	83.2%	0.531	0.248	0.275	834.200
X		959.300	T 36600.000	T 6894.000	24660.000	24820.000	81.7%	0.534	0.288	0.310	862.100
S		39.980	T 780.200	T 52.410	421.800	235.300	1.7%	0.020	0.078	0.030	96.810
%RSD		4.168	T 2.131	T 0.760	1.711	0.948	2.1	3.677	27.150	9.795	11.230
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:07:30	T 18700.000	67.370	T 19080.000	17580.000	0.558	1.279	198.000	11.770	0.436	2.747
2	20:07:57	T 18090.000	66.260	T 18260.000	17100.000	0.514	1.169	216.000	11.740	0.590	2.712
3	20:08:24	T 17840.000	64.740	T 18170.000	16670.000	0.527	1.114	206.500	12.040	0.452	2.445
X		T 18210.000	66.120	T 18500.000	17120.000	0.533	1.187	206.800	11.850	0.493	2.635
S		T 444.200	1.320	T 499.700	452.100	0.022	0.084	9.012	0.169	0.085	0.165
%RSD		T 2.439	1.996	T 2.700	2.641	4.221	7.074	4.357	1.423	17.200	6.277
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:07:30	1.684	2.007	3.085	1.007	2168.000	2152.000	18.460	6.754	4.590	222.500
2	20:07:57	2.061	1.802	2.895	1.370	2136.000	2131.000	17.080	6.175	7.286	220.100
3	20:08:24	1.901	1.888	2.118	0.860	2117.000	2149.000	11.760	4.212	5.708	220.700
X		1.882	1.899	2.699	1.079	2140.000	2144.000	15.770	5.714	5.861	221.100
S		0.189	0.103	0.512	0.262	25.780	11.580	3.535	1.332	1.354	1.210
%RSD		10.040	5.422	18.980	24.310	1.205	0.540	22.420	23.320	23.110	0.547
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:07:30	116.9%	0.123	0.150	0.128	7.468	0.001	0.010	0.027	0.012	70.7%
2	20:07:57	118.2%	0.214	0.182	0.159	8.785	0.007	0.001	0.015	0.020	71.5%
3	20:08:24	118.1%	0.192	0.221	0.166	9.052	0.004	0.001	0.003	0.017	72.7%
X		117.7%	0.176	0.184	0.151	8.435	0.004	0.004	0.015	0.016	71.6%
S		0.7%	0.048	0.035	0.020	0.848	0.003	0.005	0.012	0.004	1.0%
%RSD		0.6	26.960	19.260	13.150	10.050	65.660	115.000	78.830	23.220	1.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:07:30	0.024	0.056	0.022	0.031	11.980	12.440	76.2%	0.140	0.141	0.048
2	20:07:57	0.054	0.034	0.043	0.040	12.320	12.530	78.2%	0.117	0.113	0.059
3	20:08:24	0.045	0.031	0.047	0.016	11.840	12.620	78.7%	0.110	0.100	0.053
X		0.041	0.040	0.037	0.029	12.050	12.530	77.7%	0.122	0.118	0.053
S		0.015	0.013	0.014	0.012	0.250	0.089	1.3%	0.016	0.020	0.006
%RSD		37.720	33.650	36.580	41.750	2.076	0.711	1.7	12.920	17.350	10.480
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	20:07:30	0.053	0.047	72.5%							
2	20:07:57	0.035	0.049	73.6%							
3	20:08:24	0.053	0.060	74.8%							
X		0.047	0.052	73.6%							
S		0.011	0.007	1.1%							
%RSD		22.520	12.950	1.5							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:13:19	63.4%	85.810	M 811.000	M 873.100	68.200	TM 2087000.000	TM 263400.000	TM 267600.000	TM 277400.000	TM 698.700
2	20:13:46	62.7%	87.400	M 855.500	M 911.000	68.820	TM 2143000.000	TM 264300.000	TM 269600.000	TM 274500.000	M 650.600
3	20:14:13	62.4%	82.760	M 820.400	M 892.800	55.940	TM 2172000.000	TM 255800.000	TM 262600.000	TM 280300.000	M 654.700
X		62.8%	85.330	M 829.000	M 892.300	64.320	TM 2134000.000	TM 261100.000	TM 266600.000	TM 277400.000	TM 668.000
S		0.5%	2.360	M 23.470	M 18.930	7.263	TM 43160.000	TM 4673.000	TM 3611.000	TM 2904.000	TM 26.690
%RSD		0.9	2.766	M 2.831	M 2.122	11.290	TM 2.023	TM 1.790	TM 1.355	TM 1.047	TM 3.995
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:13:19	TM 6290.000	TM 180300.000	TM 14710.000	M 121400.000	TM 131700.000	68.1%	112.800	110.800	105.400	3485.000
2	20:13:46	TM 6123.000	TM 182100.000	TM 14570.000	M 121500.000	TM 131300.000	68.3%	112.200	110.600	102.900	3921.000
3	20:14:13	TM 6227.000	TM 179800.000	TM 14710.000	M 123900.000	TM 133000.000	67.5%	111.300	113.200	104.500	3339.000
X		TM 6214.000	TM 180700.000	TM 14670.000	M 122300.000	TM 132000.000	68.0%	112.100	111.500	104.300	3582.000
S		TM 84.270	TM 1188.000	TM 81.820	M 1433.000	TM 886.000	0.4%	0.771	1.452	1.285	302.800
%RSD		TM 1.356	TM 0.657	TM 0.558	M 1.172	TM 0.671	0.6	0.688	1.302	1.232	8.454
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:13:19	TM 85780.000	410.900	TM 84950.000	TM 82560.000	101.500	104.300	M 1251.000	148.200	107.900	104.700
2	20:13:46	TM 85160.000	409.800	TM 85960.000	TM 83310.000	99.850	102.400	M 1338.000	151.500	107.200	108.500
3	20:14:13	TM 83890.000	408.900	TM 86430.000	TM 83900.000	101.700	106.500	M 1379.000	157.100	104.800	104.900
X		TM 84940.000	409.900	TM 85780.000	TM 83260.000	101.000	104.400	M 1323.000	152.200	106.600	106.100
S		TM 963.400	0.974	TM 754.400	TM 671.000	1.020	2.050	M 65.130	4.498	1.649	2.145
%RSD		TM 1.134	0.237	TM 0.879	TM 0.806	1.010	1.964	M 4.924	2.955	1.546	2.023
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:13:19	60.560	57.220	106.000	40.970	6476.000	6130.000	185.400	119.700	85.690	TM 528.600
2	20:13:46	60.890	56.090	102.200	42.980	6425.000	6103.000	174.800	112.300	92.740	TM 527.000
3	20:14:13	61.770	57.930	104.600	41.220	6477.000	6171.000	171.300	108.200	90.480	TM 531.300
X		61.070	57.080	104.300	41.720	6459.000	6135.000	177.200	113.400	89.640	TM 529.000
S		0.623	0.925	1.940	1.095	29.690	33.890	7.305	5.839	3.603	TM 2.186
%RSD		1.019	1.620	1.860	2.625	0.460	0.552	4.123	5.150	4.019	TM 0.413
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:13:19	229.2%	28.960	28.560	28.590	93.860	89.520	90.990	94.830	91.640	58.2%
2	20:13:46	233.2%	29.250	28.820	28.960	100.300	89.580	90.990	92.330	91.850	58.7%
3	20:14:13	234.0%	29.350	29.730	28.720	94.910	90.250	90.650	93.410	92.090	59.6%
X		232.1%	29.190	29.040	28.760	96.340	89.780	90.880	93.520	91.860	58.9%
S		2.6%	0.201	0.615	0.191	3.428	0.409	0.193	1.257	0.229	0.7%
%RSD		1.1	0.689	2.117	0.664	3.558	0.456	0.213	1.344	0.249	1.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:13:19	100.400	103.200	95.830	105.000	146.200	158.500	69.8%	104.300	104.200	105.900
2	20:13:46	100.300	104.000	97.200	107.000	147.700	161.000	70.8%	104.800	106.100	106.000
3	20:14:13	102.200	103.900	97.630	107.300	143.000	159.000	72.6%	104.200	105.500	106.800
X		101.000	103.700	96.890	106.500	145.600	159.500	71.1%	104.400	105.300	106.300
S		1.040	0.447	0.940	1.238	2.384	1.355	1.4%	0.358	0.975	0.471
%RSD		1.030	0.431	0.970	1.163	1.637	0.850	2.0	0.343	0.926	0.444
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	20:13:19	105.300	105.100	61.5%							
2	20:13:46	107.200	105.600	62.1%							
3	20:14:13	106.800	105.900	63.0%							
X		106.400	105.500	62.2%							
S		1.024	0.401	0.7%							
%RSD		0.962	0.380	1.2							

VJ16017-003

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:08	58.1%	0.110	<u>M 1492.000</u>	<u>M 1591.000</u>	355.000	<u>TM 3343000.000</u>	<u>TM 527600.000</u>	<u>TM 535800.000</u>	<u>TM 553000.000</u>	<u>M 595.300</u>
2	20:19:35	57.8%	0.151	<u>M 1503.000</u>	<u>M 1616.000</u>	359.200	<u>TM 3374000.000</u>	<u>TM 543600.000</u>	<u>TM 560000.000</u>	<u>TM 546600.000</u>	<u>M 596.500</u>
3	20:20:02	58.6%	0.154	<u>M 1545.000</u>	<u>M 1582.000</u>	358.700	<u>TM 3335000.000</u>	<u>TM 532300.000</u>	<u>TM 538300.000</u>	<u>TM 543100.000</u>	<u>M 591.800</u>
X		58.2%	0.139	<u>M 1513.000</u>	<u>M 1596.000</u>	357.600	<u>TM 3351000.000</u>	<u>TM 534500.000</u>	<u>TM 544700.000</u>	<u>TM 547600.000</u>	<u>M 594.500</u>
S		0.4%	0.025	<u>M 27.890</u>	<u>M 17.520</u>	2.278	<u>TM 20430.000</u>	<u>TM 8234.000</u>	<u>TM 13270.000</u>	<u>TM 5021.000</u>	<u>M 2.432</u>
%RSD		0.7	17.790	<u>M 1.843</u>	<u>M 1.098</u>	0.637	<u>TM 0.610</u>	<u>TM 1.541</u>	<u>TM 2.436</u>	<u>TM 0.917</u>	<u>M 0.409</u>
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:08	<u>T 6941.000</u>	<u>T 293500.000</u>	<u>TM 120400.000</u>	<u>M 169300.000</u>	<u>TM 185900.000</u>	64.3%	9.768	13.910	4.023	7573.000
2	20:19:35	<u>T 6989.000</u>	<u>T 301500.000</u>	<u>TM 120000.000</u>	<u>M 168900.000</u>	<u>TM 187000.000</u>	65.4%	10.320	13.180	3.850	8470.000
3	20:20:02	<u>T 6872.000</u>	<u>T 299100.000</u>	<u>TM 121900.000</u>	<u>M 172900.000</u>	<u>TM 187000.000</u>	65.6%	10.510	13.960	3.959	8506.000
X		<u>T 6934.000</u>	<u>T 298000.000</u>	<u>TM 120800.000</u>	<u>M 170400.000</u>	<u>TM 186600.000</u>	65.1%	10.200	13.680	3.944	8183.000
S		<u>T 58.500</u>	<u>T 4129.000</u>	<u>TM 996.300</u>	<u>M 2211.000</u>	<u>TM 640.200</u>	0.7%	0.388	0.435	0.088	528.300
%RSD		<u>T 0.844</u>	<u>T 1.386</u>	<u>TM 0.825</u>	<u>M 1.298</u>	<u>TM 0.343</u>	1.1	3.805	3.180	2.220	6.457
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:08	<u>T 68420.000</u>	110.400	<u>T 68720.000</u>	<u>T 68110.000</u>	0.988	4.002	<u>M 2671.000</u>	355.500	4.584	4.194
2	20:19:35	<u>T 69090.000</u>	108.000	<u>T 68680.000</u>	<u>T 67410.000</u>	0.940	4.022	<u>M 2729.000</u>	358.400	4.418	4.748
3	20:20:02	<u>T 67820.000</u>	107.800	<u>T 68870.000</u>	<u>T 68030.000</u>	0.915	4.086	<u>M 2736.000</u>	360.300	4.621	4.732
X		<u>T 68440.000</u>	108.700	<u>T 68760.000</u>	<u>T 67850.000</u>	0.947	4.037	<u>M 2712.000</u>	358.100	4.541	4.558
S		<u>T 635.000</u>	1.430	<u>T 100.700</u>	<u>T 381.100</u>	0.037	0.044	<u>M 35.400</u>	2.426	0.108	0.316
%RSD		<u>T 0.928</u>	1.315	<u>T 0.146</u>	<u>T 0.562</u>	3.922	1.079	<u>M 1.305</u>	0.678	2.378	6.926
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:08	6.130	4.280	17.960	31.460	26990.000	27810.000	177.100	22.860	802.500	<u>TM 3139.000</u>
2	20:19:35	7.454	4.534	18.880	33.080	26540.000	27310.000	181.100	24.970	775.300	<u>TM 3111.000</u>
3	20:20:02	7.968	4.836	16.960	32.210	26670.000	27640.000	173.700	23.770	752.800	<u>TM 3139.000</u>
X		7.184	4.550	17.930	32.250	26730.000	27590.000	177.300	23.860	776.800	<u>TM 3130.000</u>
S		0.949	0.278	0.960	0.810	232.600	257.100	3.720	1.056	24.850	<u>TM 16.040</u>
%RSD		13.200	6.119	5.356	2.513	0.870	0.932	2.098	4.424	3.199	<u>TM 0.513</u>
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:08	63.0%	1.304	4.162	0.785	9.556	0.010	-0.001	0.010	0.001	54.4%
2	20:19:35	64.5%	1.324	4.250	0.796	16.230	0.009	0.010	0.025	0.004	55.3%
3	20:20:02	65.2%	1.277	4.410	0.968	12.800	0.010	0.002	0.017	0.019	55.1%
X		64.2%	1.302	4.274	0.850	12.860	0.010	0.004	0.017	0.008	54.9%
S		1.1%	0.023	0.126	0.103	3.336	0.000	0.006	0.007	0.010	0.5%
%RSD		1.7	1.802	2.941	12.090	25.940	0.973	158.200	41.810	114.500	0.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:08	0.130	0.140	0.479	0.580	67.050	70.610	63.4%	0.060	0.047	0.708
2	20:19:35	0.109	0.140	0.534	0.633	66.170	70.320	64.5%	0.040	0.059	0.603
3	20:20:02	0.110	0.159	0.501	0.590	66.250	71.850	65.9%	0.032	0.051	0.592
X		0.116	0.146	0.505	0.601	66.490	70.930	64.6%	0.044	0.053	0.634
S		0.012	0.011	0.027	0.028	0.485	0.809	1.2%	0.015	0.006	0.064
%RSD		9.963	7.326	5.436	4.692	0.730	1.140	1.9	33.050	11.650	10.090
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	20:19:08	0.612	0.603	56.2%							
2	20:19:35	0.583	0.593	57.5%							
3	20:20:02	0.588	0.560	58.3%							
X		0.594	0.585	57.4%							
S		0.015	0.023	1.0%							
%RSD		2.582	3.876	1.8							

VQ70600-001 10/26/2020 20:24:31 QC Status: FAIL (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:24:58	90.2%	-0.001	3.390	4.142	40.180	342.700	15.390	15.370	15.120	1.194
2	20:25:26	89.4%	-0.009	3.833	4.025	43.980	325.100	15.510	16.600	15.130	1.430
3	20:25:52	89.1%	-0.016	3.711	4.018	44.820	309.600	14.800	14.770	14.580	1.187
X		89.6%	-0.009	3.645	4.061	42.990	325.800	15.230	15.580	14.940	1.270
S		0.6%	0.008	0.229	0.070	2.474	16.570	0.378	0.935	0.315	0.138
%RSD		0.6	87.190	6.269	1.715	5.754	5.085	2.481	5.999	2.107	10.890
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:24:58	-90.250	55720.000	2.714	5.962	-17.610	91.7%	0.292	-0.234	0.445	5000.000
2	20:25:26	-89.860	54780.000	3.529	8.084	-14.080	91.1%	0.171	-0.784	0.393	5443.000
3	20:25:52	-89.340	54980.000	1.956	2.845	-15.020	92.2%	0.209	0.090	0.350	5071.000
X		-89.820	55160.000	2.733	5.630	-15.570	91.7%	0.224	-0.309	0.396	5171.000
S		0.454	494.000	0.787	2.635	1.826	0.5%	0.062	0.442	0.047	238.000
%RSD		0.506	0.896	28.780	46.800	11.730	0.6	27.790	142.800	11.940	4.603
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:24:58	15.030	0.032	6.569	8.738	-0.008	0.286	185.000	10.050	0.126	0.573
2	20:25:26	14.990	0.030	8.142	10.600	-0.007	0.311	158.900	8.443	0.212	0.475
3	20:25:52	15.400	0.040	5.954	11.170	-0.004	0.273	149.000	7.678	0.152	0.594
X		15.140	0.034	6.888	10.170	-0.006	0.290	164.300	8.723	0.163	0.547
S		0.226	0.005	1.128	1.274	0.002	0.019	18.590	1.210	0.044	0.064
%RSD		1.495	14.920	16.380	12.530	28.530	6.599	11.310	13.870	26.960	11.650
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:24:58	1.027	0.323	-0.080	2.260	113.000	117.200	0.603	0.014	7.684	0.058
2	20:25:26	0.657	0.421	-0.059	2.472	111.200	115.100	0.324	-0.059	7.160	0.081
3	20:25:52	1.252	0.438	0.064	1.899	109.100	108.200	2.943	0.490	10.680	0.080
X		0.979	0.394	-0.025	2.210	111.100	113.500	1.290	0.148	8.508	0.073
S		0.300	0.062	0.078	0.290	1.981	4.745	1.438	0.298	1.900	0.013
%RSD		30.700	15.720	309.000	13.120	1.783	4.181	111.500	201.200	22.330	18.000
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:24:58	86.8%	0.108	0.142	0.067	-0.338	0.001	-0.000	-0.002	0.005	82.1%
2	20:25:26	85.9%	0.143	0.231	0.102	-0.503	-0.000	-0.000	-0.002	-0.001	82.6%
3	20:25:52	86.5%	0.146	0.175	0.146	-1.638	-0.001	-0.000	-0.002	0.001	84.1%
X		86.4%	0.132	0.183	0.105	-0.826	-0.000	-0.000	-0.002	0.001	83.0%
S		0.5%	0.021	0.045	0.040	0.708	0.001	0.000	0.000	0.003	1.0%
%RSD		0.6	16.140	24.500	37.830	85.670	997.600	11.670	7.895	227.100	1.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:24:58	0.012	0.020	0.127	0.109	0.014	0.006	86.1%	0.021	0.017	0.002
2	20:25:26	0.026	0.028	0.142	0.102	-0.001	-0.007	86.4%	0.012	0.019	0.002
3	20:25:52	0.028	0.027	0.154	0.142	-0.001	-0.007	86.9%	0.021	0.024	0.004
X		0.022	0.025	0.141	0.118	0.004	-0.002	86.5%	0.018	0.020	0.003
S		0.009	0.004	0.014	0.021	0.009	0.008	0.4%	0.005	0.003	0.002
%RSD		40.430	16.600	9.632	17.960	227.800	329.500	0.5	29.360	17.100	59.760
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	20:24:58	0.004	0.002	89.3%							
2	20:25:26	0.003	0.002	90.5%							
3	20:25:52	0.001	0.001	91.7%							
X		0.003	0.002	90.5%							
S		0.002	0.000	1.2%							
%RSD		65.690	22.360	1.3							

VQ70600-002 10/26/2020 20:30:22 QC Status: FAIL (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:50	87.5%	96.450	103.700	107.500	39.190	1092.000	1089.000	1080.000	1051.000	103.500
2	20:31:17	88.9%	96.680	106.600	111.000	48.380	1084.000	1133.000	1080.000	1059.000	105.700
3	20:31:44	88.1%	95.960	101.400	107.500	40.170	1103.000	1128.000	1067.000	1064.000	101.700
X		88.2%	96.362%	103.900	108.682%	42.580	109.309%	1117.000	1076.000	105.789%	103.644%
S		0.7%	n/a	2.620	n/a	5.047	n/a	24.000	7.457	n/a	n/a
%RSD		0.8	0.385	2.522	1.879	11.850	0.859	2.149	0.693	0.609	1.940
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:50	1040.000	49910.000	767.200	1101.000	962.800	91.2%	105.200	105.300	107.000	7179.000
2	20:31:17	1074.000	51570.000	760.300	1033.000	1004.000	90.1%	106.200	108.300	107.100	6430.000
3	20:31:44	1044.000	51000.000	767.500	1093.000	1016.000	90.9%	105.200	107.600	106.400	6782.000
X		105.283%	50820.000	76.499%	1076.000	99.429%	90.7%	105.562%	107.083%	106.857%	6797.000
S		n/a	842.900	n/a	37.120	n/a	0.5%	n/a	n/a	n/a	375.000
%RSD		1.749	1.658	0.532	3.450	2.810	0.6	0.553	1.451	0.340	5.517
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:50	1191.000	105.400	1187.000	1065.000	107.500	111.600	217.800	115.800	121.000	104.600
2	20:31:17	1165.000	106.800	1201.000	1102.000	111.600	110.400	215.800	112.200	114.800	105.300
3	20:31:44	1141.000	105.100	1172.000	1074.000	105.200	111.100	211.600	115.100	115.700	104.700
X		1166.000	105.774%	1187.000	108.050%	108.099%	111.030%	215.100	114.400	117.196%	104.883%
S		25.130	n/a	14.830	n/a	n/a	n/a	3.181	1.943	n/a	n/a
%RSD		2.155	0.867	1.250	1.765	2.995	0.579	1.479	1.699	2.852	0.349
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:50	100.500	97.830	95.080	96.580	62.550	62.150	414.200	102.700	7.068	96.110
2	20:31:17	101.400	96.520	97.270	97.070	63.060	68.360	372.500	91.850	5.361	96.730
3	20:31:44	98.980	97.330	95.020	97.450	64.520	66.760	405.600	99.310	3.621	96.710
X		100.300	97.230	95.793%	97.030	63.380	65.760	397.400	97.965%	5.350	96.520
S		1.243	0.661	n/a	0.435	1.022	3.225	22.000	n/a	1.723	0.354
%RSD		1.239	0.679	1.339	0.448	1.612	4.904	5.536	5.682	32.210	0.367
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:50	84.1%	100.500	99.290	99.610	96.600	97.310	98.360	94.370	94.530	81.3%
2	20:31:17	84.3%	102.900	100.900	100.600	89.500	96.390	98.470	94.780	94.460	81.9%
3	20:31:44	84.7%	102.500	101.400	100.000	96.530	97.050	98.510	93.870	93.620	82.9%
X		84.4%	102.000	100.547%	100.100	94.210	96.915%	98.450	94.340	94.206%	82.1%
S		0.3%	1.269	n/a	0.508	4.077	n/a	0.078	0.458	n/a	0.8%
%RSD		0.4	1.245	1.118	0.508	4.328	0.490	0.079	0.486	0.540	1.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:50	96.120	95.540	91.970	100.600	97.570	96.520	84.7%	96.580	94.910	98.430
2	20:31:17	95.560	97.430	93.840	101.500	94.910	97.450	85.9%	96.680	94.540	97.590
3	20:31:44	96.900	95.840	93.790	101.500	95.470	95.360	86.1%	96.520	95.450	96.820
X		96.190	96.268%	93.200	101.216%	95.981%	96.440	85.6%	96.590	94.964%	97.610
S		0.672	n/a	1.067	n/a	n/a	1.045	0.8%	0.078	n/a	0.802
%RSD		0.699	1.056	1.145	0.503	1.463	1.083	0.9	0.081	0.482	0.822
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	20:30:50	97.390	96.660	88.5%							
2	20:31:17	97.210	96.500	90.0%							
3	20:31:44	96.890	95.830	90.9%							
X		97.160	96.329%	89.8%							
S		0.254	n/a	1.2%							
%RSD		0.261	0.454	1.3							

CCV MW15278 10/26/2020 20:36:14 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:36:41	76.3%	300.400	320.700	332.300	39.420	±58620.000	±67700.000	±68620.000	±66950.000	311.800
2	20:37:08	77.1%	289.900	315.700	330.100	26.230	±59170.000	±67590.000	±67500.000	±67240.000	307.700
3	20:37:35	76.5%	287.700	336.200	327.000	18.480	±59460.000	±66960.000	±65780.000	±65340.000	309.800
X		76.6%	97.549%	108.063%	109.932%	28.040	±98.468%	±67420.000	±67300.000	±110.848%	103.263%
S		0.4%	n/a	n/a	n/a	10.590	±n/a	±399.100	±1431.000	±n/a	n/a
%RSD		0.6	2.318	3.286	0.796	37.750	±0.725	±0.592	±2.126	±1.542	0.669
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:36:41	±3970.000	382.500	±49720.000	60730.000	±65740.000	83.3%	320.000	334.100	322.100	3797.000
2	20:37:08	±3854.000	388.900	±49530.000	59730.000	±65140.000	84.1%	319.000	331.500	315.400	3636.000
3	20:37:35	±3807.000	379.600	±50100.000	59390.000	±65510.000	84.6%	314.100	327.700	317.400	2943.000
X		±3877.000	383.700	±82.970%	59950.000	±109.103%	84.0%	105.905%	110.364%	106.109%	3459.000
S		±83.920	4.741	±n/a	696.600	±n/a	0.7%	n/a	n/a	n/a	453.700
%RSD		±2.165	1.236	±0.577	1.162	±0.458	0.8	0.991	0.972	1.085	13.120
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:36:41	±71320.000	324.200	±71490.000	±69380.000	336.500	340.300	426.800	327.900	349.400	328.500
2	20:37:08	±71450.000	325.400	±71770.000	±69010.000	315.800	330.000	417.600	318.500	348.800	326.100
3	20:37:35	±70150.000	327.000	±69470.000	±68400.000	318.700	335.500	414.600	315.700	326.500	323.000
X		±70970.000	108.515%	±70910.000	±114.880%	107.889%	±111.758%	419.700	320.700	±113.858%	108.622%
S		±717.500	n/a	±1255.000	±n/a	n/a	n/a	6.342	6.406	n/a	n/a
%RSD		±1.011	0.434	±1.770	±0.718	3.456	1.533	1.511	1.998	3.824	0.840
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:36:41	306.100	294.000	300.700	304.800	31.440	27.020	1324.000	333.500	0.095	297.100
2	20:37:08	302.900	295.200	291.500	302.600	34.270	29.390	1296.000	330.200	1.814	294.500
3	20:37:35	299.600	292.700	292.500	294.500	36.150	29.870	1251.000	314.100	0.369	297.600
X		302.900	294.000	98.299%	300.600	33.950	28.760	1290.000	108.639%	0.759	98.802%
S		3.241	1.223	n/a	5.434	2.370	1.523	36.760	n/a	0.923	n/a
%RSD		1.070	0.416	1.712	1.808	6.981	5.295	2.848	3.182	121.600	0.567
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:36:41	77.8%	308.500	299.800	300.800	289.000	290.000	289.900	284.600	288.200	74.0%
2	20:37:08	79.0%	312.200	304.600	305.600	287.300	292.800	295.300	292.500	290.700	74.3%
3	20:37:35	78.9%	317.000	311.900	313.000	286.500	290.200	290.900	288.300	290.500	75.4%
X		78.5%	104.188%	101.804%	306.500	287.600	97.002%	292.000	288.500	96.596%	74.6%
S		0.7%	n/a	n/a	6.134	1.250	n/a	2.887	3.957	n/a	0.7%
%RSD		0.8	1.358	1.994	2.002	0.435	0.544	0.989	1.372	0.484	0.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:36:41	297.100	295.400	287.100	311.200	292.500	299.600	79.4%	298.300	300.600	304.500
2	20:37:08	303.300	299.300	292.400	316.300	293.400	300.900	80.0%	302.400	299.600	300.100
3	20:37:35	298.200	299.700	290.000	314.300	291.900	298.600	81.2%	299.600	304.300	300.100
X		99.840%	99.385%	289.800	104.649%	97.534%	99.906%	80.2%	300.100	100.498%	100.519%
S		n/a	n/a	2.674	n/a	n/a	n/a	0.9%	2.113	n/a	n/a
%RSD		1.101	0.796	0.923	0.826	0.260	0.391	1.1	0.704	0.811	0.844
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	20:36:41	302.700	302.500	79.1%							
2	20:37:08	300.200	299.800	80.2%							
3	20:37:35	299.200	299.500	80.9%							
X		100.229%	100.199%	80.1%							
S		n/a	n/a	0.9%							
%RSD		0.610	0.548	1.1							

CCB IM10195-01 10/26/2020 20:42:05 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:42:31	85.7%	0.023	1.367	1.628	39.240	94.110	3.194	2.775	3.583	0.025
2	20:42:58	85.8%	0.039	1.330	1.679	32.520	92.600	4.124	4.551	4.057	0.051
3	20:43:25	87.6%	0.023	1.845	1.707	42.080	90.190	4.471	4.313	3.993	0.058
X		86.4%	0.028	1.514	1.671	37.940	92.300	3.930	3.879	3.877	0.045
S		1.1%	0.009	0.287	0.040	4.911	1.979	0.660	0.964	0.257	0.018
%RSD		1.2	32.480	18.970	2.384	12.940	2.144	16.800	24.850	6.630	39.600
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:42:31	-92.870	238.400	-8.278	4.831	-26.070	93.2%	0.044	0.051	0.009	-1.224
2	20:42:58	-96.560	245.000	-11.050	1.701	-25.690	95.8%	0.002	0.028	0.028	12.140
3	20:43:25	-95.530	255.000	-8.537	2.672	-25.400	96.2%	0.198	-0.004	0.009	31.370
X		-94.990	246.200	-9.288	3.068	-25.720	95.1%	0.081	0.025	0.015	14.090
S		1.904	8.347	1.530	1.602	0.334	1.6%	0.103	0.028	0.011	16.380
%RSD		2.004	3.391	16.470	52.210	1.300	1.7	126.000	109.700	69.200	116.200
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:42:31	3.837	0.015	3.563	18.750	0.003	0.064	66.430	3.255	0.094	-0.077
2	20:42:58	4.897	0.015	3.645	17.290	0.019	0.018	60.260	3.232	0.101	0.057
3	20:43:25	5.061	0.018	2.995	20.210	0.010	0.002	57.860	3.034	0.104	-0.083
X		4.598	0.016	3.401	18.750	0.011	0.028	61.520	3.174	0.100	-0.034
S		0.665	0.002	0.354	1.456	0.008	0.032	4.418	0.121	0.005	0.079
%RSD		14.460	9.835	10.400	7.767	78.250	115.200	7.182	3.823	5.075	230.800
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:42:31	-0.111	0.033	0.092	0.563	21.370	19.700	0.618	0.243	-1.186	0.017
2	20:42:58	-0.121	-0.068	0.076	0.482	22.100	22.280	0.129	0.102	-0.050	0.022
3	20:43:25	-0.230	0.053	-0.107	0.466	22.340	20.060	-2.113	-0.460	-0.648	0.011
X		-0.154	0.006	0.020	0.504	21.940	20.680	-0.456	-0.038	-0.628	0.016
S		0.066	0.065	0.110	0.052	0.505	1.400	1.456	0.372	0.569	0.006
%RSD		42.850	1101.000	539.400	10.340	2.301	6.770	319.600	971.900	90.540	33.640
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:42:31	86.3%	0.645	0.561	0.522	0.713	0.026	0.016	0.012	0.021	82.8%
2	20:42:58	88.9%	0.757	0.498	0.559	-1.009	0.015	0.030	0.011	0.008	84.4%
3	20:43:25	88.1%	0.636	0.510	0.553	0.557	0.020	0.018	0.011	0.012	85.5%
X		87.8%	0.679	0.523	0.545	0.087	0.020	0.021	0.011	0.014	84.2%
S		1.3%	0.067	0.033	0.020	0.952	0.006	0.008	0.000	0.007	1.4%
%RSD		1.5	9.895	6.386	3.708	1093.000	27.560	36.270	2.676	50.530	1.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:42:31	0.076	0.102	0.469	0.603	0.015	0.007	84.7%	0.015	0.015	0.026
2	20:42:58	0.136	0.129	0.570	0.561	-0.001	0.024	85.6%	0.023	0.022	0.015
3	20:43:25	0.108	0.125	0.523	0.596	0.006	0.015	86.5%	0.019	0.021	0.021
X		0.107	0.118	0.521	0.587	0.007	0.015	85.6%	0.019	0.020	0.021
S		0.030	0.014	0.050	0.023	0.008	0.009	0.9%	0.004	0.004	0.006
%RSD		27.880	12.250	9.612	3.873	118.600	57.100	1.1	21.700	21.040	28.000
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	20:42:31	0.011	0.019	87.9%							
2	20:42:58	0.021	0.023	88.2%							
3	20:43:25	0.014	0.018	90.0%							
X		0.015	0.020	88.7%							
S		0.005	0.003	1.2%							
%RSD		33.130	13.700	1.3							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:48:20	73.0%	0.049	303.200	329.400	151.300	TM 500300.000	T 54690.000	T 55150.000	T 54040.000	TM 1120.000
2	20:48:47	73.1%	0.013	303.500	315.900	148.600	TM 508000.000	T 54380.000	T 54010.000	T 53430.000	TM 1094.000
3	20:49:14	74.6%	0.030	301.100	326.800	147.400	TM 505300.000	T 54050.000	T 53820.000	T 53520.000	TM 1098.000
X		73.6%	0.031	302.600	324.000	149.100	TM 504500.000	T 54370.000	T 54330.000	T 53660.000	TM 1104.000
S		0.9%	0.018	1.292	7.183	1.994	TM 3912.000	T 318.700	T 722.900	T 329.500	TM 14.090
%RSD		1.3	60.000	0.427	2.217	1.338	TM 0.775	T 0.586	T 1.331	T 0.614	TM 1.276
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:48:20	T 6080.000	T 79530.000	T 11520.000	M 143400.000	TM 155300.000	77.9%	8.345	2.595	1.262	1949.000
2	20:48:47	T 5825.000	T 76540.000	T 11360.000	M 140800.000	TM 152500.000	79.9%	8.937	2.734	1.302	1851.000
3	20:49:14	T 5758.000	T 76680.000	T 11460.000	M 142300.000	TM 154400.000	80.2%	8.711	2.454	1.266	1907.000
X		T 5887.000	T 77580.000	T 11450.000	M 142200.000	TM 154000.000	79.3%	8.664	2.594	1.277	1902.000
S		T 170.300	T 1690.000	T 76.900	M 1284.000	TM 1430.000	1.3%	0.298	0.140	0.022	49.000
%RSD		T 2.893	T 2.179	T 0.672	M 0.903	TM 0.928	1.6	3.445	5.401	1.706	2.576
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:48:20	T 15020.000	196.100	T 14860.000	14440.000	1.681	2.971	186.500	13.180	1.693	4.287
2	20:48:47	T 14240.000	192.300	T 14600.000	13910.000	1.679	2.987	192.100	13.830	1.808	4.555
3	20:49:14	T 14630.000	190.400	T 14580.000	13870.000	1.696	2.851	201.400	14.090	1.692	3.868
X		T 14630.000	192.900	T 14680.000	14070.000	1.685	2.937	193.300	13.700	1.731	4.237
S		T 391.800	2.933	T 154.900	321.300	0.010	0.074	7.522	0.468	0.067	0.346
%RSD		T 2.678	1.520	T 1.055	2.283	0.566	2.525	3.891	3.419	3.847	8.177
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:48:20	9.164	8.202	3.094	3.474	2786.000	2845.000	24.590	5.698	15.880	M 597.400
2	20:48:47	9.148	7.616	3.256	2.832	2748.000	2813.000	23.160	5.103	22.580	TM 650.400
3	20:49:14	8.405	7.678	3.262	2.732	2754.000	2806.000	21.650	4.581	28.240	TM 638.400
X		8.906	7.832	3.204	3.013	2763.000	2821.000	23.130	5.127	22.230	TM 628.700
S		0.434	0.322	0.095	0.403	20.650	20.980	1.471	0.559	6.189	TM 27.780
%RSD		4.873	4.112	2.965	13.360	0.747	0.744	6.358	10.900	27.840	TM 4.418
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:48:20	74.0%	1.777	1.922	1.707	16.850	0.007	0.006	0.101	0.063	68.2%
2	20:48:47	74.5%	1.791	1.894	1.812	15.530	0.012	0.012	0.063	0.080	69.4%
3	20:49:14	75.6%	1.764	1.760	1.821	14.860	0.006	0.004	0.074	0.069	70.2%
X		74.7%	1.777	1.859	1.780	15.750	0.008	0.007	0.079	0.070	69.3%
S		0.8%	0.013	0.087	0.064	1.011	0.003	0.004	0.019	0.009	1.0%
%RSD		1.1	0.745	4.660	3.574	6.423	36.270	51.980	24.630	12.630	1.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:48:20	0.113	0.109	1.731	1.944	156.400	164.800	74.8%	0.085	0.083	0.403
2	20:48:47	0.150	0.145	1.853	2.152	154.200	161.500	76.9%	0.072	0.067	0.419
3	20:49:14	0.106	0.091	1.840	1.972	155.400	162.500	78.2%	0.077	0.076	0.435
X		0.123	0.115	1.808	2.022	155.300	162.900	76.7%	0.078	0.076	0.419
S		0.024	0.027	0.067	0.113	1.124	1.680	1.7%	0.007	0.008	0.016
%RSD		19.410	23.640	3.713	5.590	0.723	1.031	2.3	8.457	10.720	3.746
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	20:48:20	0.398	0.405	75.5%							
2	20:48:47	0.433	0.417	76.3%							
3	20:49:14	0.433	0.430	76.3%							
X		0.421	0.417	76.0%							
S		0.020	0.013	0.4%							
%RSD		4.794	3.065	0.6							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:54:11	53.2%	0.050	M 1871.000	M 1915.000	269.100	TM 3725000.000	TM 937100.000	TM 978500.000	TM 962500.000	120.000
2	20:54:38	53.6%	0.004	M 1837.000	M 1941.000	279.700	TM 3700000.000	TM 957700.000	TM 1005000.000	TM 950500.000	118.300
3	20:55:05	53.2%	0.016	M 1869.000	M 1896.000	257.400	TM 3731000.000	TM 949000.000	TM 989900.000	TM 958200.000	T 129.000
X		53.3%	0.023	M 1859.000	M 1917.000	268.700	TM 3719000.000	TM 947900.000	TM 991000.000	TM 957100.000	T 122.400
S		0.2%	0.024	M 19.100	M 22.300	11.120	TM 16570.000	TM 10330.000	TM 13120.000	TM 6088.000	T 5.771
%RSD		0.4	102.500	M 1.028	M 1.163	4.138	TM 0.446	TM 1.090	TM 1.323	TM 0.636	T 4.713
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:54:11	2393.000	T 482700.000	TM 182400.000	M 303600.000	TM 335900.000	61.3%	11.600	3.285	2.391	12670.000
2	20:54:38	2324.000	T 483400.000	TM 181500.000	M 304900.000	TM 337600.000	62.7%	12.530	3.530	2.367	12860.000
3	20:55:05	2300.000	T 483000.000	TM 186000.000	M 303800.000	TM 338500.000	63.5%	12.240	3.114	2.388	14020.000
X		2339.000	T 483000.000	TM 183300.000	M 304100.000	TM 337300.000	62.5%	12.120	3.310	2.382	13180.000
S		48.140	T 374.100	TM 2371.000	M 737.900	TM 1295.000	1.1%	0.479	0.209	0.013	730.300
%RSD		2.059	T 0.077	TM 1.293	M 0.243	TM 0.384	1.8	3.949	6.318	0.549	5.539
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:54:11	TM 105500.000	243.500	TM 104800.000	TM 104900.000	0.531	5.926	M 4676.000	M 859.500	9.402	1.935
2	20:54:38	TM 104600.000	240.600	TM 104500.000	TM 102400.000	0.523	5.973	M 4456.000	M 816.500	8.876	1.827
3	20:55:05	TM 104600.000	240.300	TM 104100.000	TM 102300.000	0.499	5.519	M 4407.000	M 782.900	8.793	2.089
X		TM 104900.000	241.500	TM 104500.000	TM 103200.000	0.518	5.806	M 4513.000	M 819.600	9.024	1.950
S		TM 527.000	1.757	TM 346.000	TM 1441.000	0.017	0.250	M 143.400	M 38.410	0.331	0.132
%RSD		TM 0.502	0.728	TM 0.331	TM 1.396	3.206	4.297	M 3.179	M 4.686	3.662	6.752
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:54:11	5.320	2.615	4.384	62.500	T 48560.000	T 50170.000	291.600	12.940	2214.000	TM 5166.000
2	20:54:38	4.942	2.824	3.252	61.560	T 47740.000	T 49090.000	270.100	6.891	2209.000	TM 5088.000
3	20:55:05	5.518	2.605	3.517	60.390	T 48710.000	T 50410.000	271.000	8.964	2142.000	TM 5220.000
X		5.260	2.681	3.718	61.480	T 48340.000	T 49890.000	277.600	9.598	2189.000	TM 5158.000
S		0.292	0.124	0.592	1.058	T 521.300	T 701.900	12.200	3.074	40.430	TM 66.580
%RSD		5.562	4.612	15.930	1.720	T 1.078	T 1.407	4.394	32.020	1.848	TM 1.291
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:54:11	62.8%	1.396	8.137	0.532	-30.640	0.009	0.011	0.013	0.002	50.2%
2	20:54:38	65.1%	1.290	8.992	0.658	-26.420	0.008	0.005	0.012	0.018	51.7%
3	20:55:05	64.4%	1.354	9.138	0.688	-34.470	0.008	0.003	0.019	0.002	51.7%
X		64.1%	1.347	8.756	0.626	-30.510	0.008	0.006	0.015	0.007	51.2%
S		1.2%	0.054	0.541	0.083	4.027	0.000	0.004	0.004	0.009	0.8%
%RSD		1.9	3.979	6.175	13.240	13.200	1.905	71.770	29.410	125.600	1.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:54:11	0.102	0.127	0.233	0.335	128.600	140.800	61.3%	0.016	0.013	0.068
2	20:54:38	0.118	0.161	0.333	0.367	124.100	137.400	63.2%	0.005	0.007	0.073
3	20:55:05	0.095	0.148	0.371	0.380	127.200	138.600	64.3%	0.010	0.014	0.061
X		0.105	0.146	0.312	0.361	126.600	139.000	62.9%	0.011	0.011	0.068
S		0.012	0.017	0.072	0.023	2.316	1.730	1.5%	0.006	0.004	0.006
%RSD		11.270	11.810	22.960	6.447	1.828	1.245	2.4	54.950	36.470	9.171
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	20:54:11	0.066	0.066	53.1%							
2	20:54:38	0.056	0.058	54.5%							
3	20:55:05	0.076	0.071	55.2%							
X		0.066	0.065	54.3%							
S		0.010	0.007	1.1%							
%RSD		15.020	10.690	2.0							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:00:02	66.7%	1.373	M 623.400	M 666.800	98.620	TM 1256000.000	TM 131900.000	TM 134300.000	TM 146600.000	TM 10460.000
2	21:00:29	66.6%	1.262	M 646.100	M 660.800	91.290	TM 1295000.000	TM 129800.000	TM 131200.000	TM 148100.000	TM 10340.000
3	21:00:56	67.4%	1.220	M 618.800	M 678.300	77.980	TM 1298000.000	TM 128800.000	TM 131900.000	TM 145700.000	TM 10350.000
X		66.9%	1.285	M 629.400	M 668.600	89.300	TM 1283000.000	TM 130200.000	TM 132500.000	TM 146800.000	TM 10380.000
S		0.4%	0.079	M 14.580	M 8.938	10.470	TM 23320.000	TM 1598.000	TM 1639.000	TM 1210.000	TM 65.920
%RSD		0.6	6.153	M 2.317	M 1.337	11.720	TM 1.817	TM 1.228	TM 1.237	TM 0.824	TM 0.635
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:00:02	T 7495.000	T 120200.000	T 6895.000	44700.000	T 48800.000	75.5%	5.649	7.966	4.301	5367.000
2	21:00:29	T 7350.000	T 119400.000	T 6808.000	44400.000	T 48370.000	76.9%	5.789	8.838	4.247	5018.000
3	21:00:56	T 7177.000	T 118100.000	T 6748.000	43930.000	T 48700.000	77.6%	6.053	8.240	4.014	5012.000
X		T 7341.000	T 119200.000	T 6817.000	44340.000	T 48620.000	76.6%	5.830	8.348	4.187	5132.000
S		T 159.300	T 1065.000	T 73.720	390.300	T 222.900	1.1%	0.205	0.446	0.152	203.300
%RSD		T 2.170	T 0.894	T 1.081	0.880	T 0.458	1.4	3.519	5.342	3.639	3.961
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:00:02	T 32350.000	193.000	T 33310.000	30320.000	2.119	4.683	M 887.200	47.190	1.796	18.030
2	21:00:29	T 32080.000	194.400	T 32220.000	30130.000	2.091	4.596	M 1009.000	51.150	1.823	17.550
3	21:00:56	T 31740.000	189.000	T 32220.000	29990.000	2.087	4.489	M 1047.000	54.790	1.854	16.360
X		T 32060.000	192.100	T 32580.000	30140.000	2.099	4.590	M 981.300	51.040	1.824	17.310
S		T 304.500	2.845	T 629.000	169.300	0.017	0.097	M 83.690	3.801	0.029	0.862
%RSD		T 0.950	1.481	T 1.930	0.562	0.830	2.117	M 8.529	7.447	1.580	4.978
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:00:02	11.470	11.050	5.176	2.580	2782.000	2599.000	17.390	13.350	31.530	T 158.400
2	21:00:29	12.040	9.741	4.427	2.968	2786.000	2579.000	19.970	15.320	33.540	T 159.300
3	21:00:56	11.480	9.598	5.062	3.100	2765.000	2554.000	16.520	12.900	26.800	T 159.100
X		11.660	10.130	4.888	2.883	2778.000	2577.000	17.960	13.850	30.620	T 158.900
S		0.328	0.801	0.404	0.270	10.830	22.320	1.797	1.287	3.460	T 0.493
%RSD		2.809	7.908	8.258	9.365	0.390	0.866	10.010	9.287	11.300	T 0.310
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:00:02	373.9%	0.027	0.097	-0.003	16.550	0.020	0.014	0.264	0.255	65.0%
2	21:00:29	380.5%	0.021	0.134	0.000	17.450	0.017	0.008	0.191	0.250	66.3%
3	21:00:56	384.9%	0.037	0.102	0.002	15.720	0.003	0.008	0.309	0.254	67.6%
X		379.8%	0.028	0.111	-0.000	16.580	0.013	0.010	0.255	0.253	66.3%
S		5.5%	0.008	0.020	0.002	0.866	0.009	0.004	0.060	0.003	1.3%
%RSD		1.5	27.860	17.970	1489.000	5.224	67.750	38.000	23.400	1.186	2.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:00:02	0.128	0.060	0.149	0.235	130.000	147.900	84.8%	0.066	0.048	4.705
2	21:00:29	0.146	0.078	0.206	0.246	131.300	149.700	86.6%	0.059	0.046	4.619
3	21:00:56	0.128	0.088	0.165	0.182	130.500	146.800	88.3%	0.042	0.058	4.721
X		0.134	0.076	0.173	0.221	130.600	148.100	86.6%	0.056	0.051	4.682
S		0.010	0.014	0.029	0.034	0.637	1.433	1.8%	0.012	0.007	0.055
%RSD		7.764	19.020	16.950	15.540	0.487	0.967	2.1	21.580	12.980	1.170
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	21:00:02	4.215	4.351	72.5%							
2	21:00:29	4.359	4.465	72.8%							
3	21:00:56	4.279	4.481	74.5%							
X		4.284	4.432	73.3%							
S		0.072	0.071	1.1%							
%RSD		1.689	1.604	1.5							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:05:53	69.3%	1.218	M 585.700	M 629.100	82.680	TM 1205000.000	TM 127500.000	TM 129800.000	TM 139900.000	TM 10070.000
2	21:06:20	68.1%	1.359	M 600.800	M 639.300	99.740	TM 1256000.000	TM 128600.000	TM 128400.000	TM 141100.000	TM 10030.000
3	21:06:47	69.8%	1.472	M 602.400	M 640.000	74.860	TM 1247000.000	TM 126600.000	TM 129300.000	TM 141300.000	TM 10080.000
X		69.1%	1.349	M 596.300	M 636.100	85.760	TM 1236000.000	TM 127600.000	TM 129100.000	TM 140800.000	TM 10060.000
S		0.9%	0.127	M 9.214	M 6.115	12.720	TM 27140.000	TM 1005.000	TM 720.300	TM 754.600	TM 28.180
%RSD		1.2	9.419	M 1.545	M 0.961	14.840	TM 2.196	TM 0.788	TM 0.558	TM 0.536	TM 0.280
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:05:53	T 7165.000	T 119500.000	T 6877.000	42710.000	T 47270.000	77.4%	5.943	8.278	4.108	4677.000
2	21:06:20	T 6998.000	T 117400.000	T 6919.000	42410.000	T 46530.000	79.1%	6.029	8.083	4.090	4358.000
3	21:06:47	T 7082.000	T 120400.000	T 6944.000	42630.000	T 47230.000	78.5%	5.880	7.817	3.822	4529.000
X		T 7082.000	T 119100.000	T 6913.000	42580.000	T 47010.000	78.3%	5.951	8.059	4.007	4522.000
S		T 83.700	T 1554.000	T 33.440	154.400	T 416.100	0.9%	0.075	0.232	0.160	159.700
%RSD		T 1.182	T 1.305	T 0.484	0.362	T 0.885	1.1	1.263	2.875	3.993	3.531
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:05:53	T 32000.000	189.000	T 32270.000	29300.000	2.166	4.305	M 1240.000	63.050	1.913	16.900
2	21:06:20	T 30620.000	184.700	T 30580.000	28570.000	2.067	4.388	M 1229.000	64.750	2.073	16.690
3	21:06:47	T 31260.000	187.700	T 31610.000	28970.000	2.163	4.188	M 1320.000	67.180	1.912	16.190
X		T 31290.000	187.100	T 31480.000	28950.000	2.132	4.294	M 1263.000	64.990	1.966	16.600
S		T 689.800	2.215	T 849.600	365.200	0.056	0.100	M 49.820	2.078	0.093	0.363
%RSD		T 2.205	1.184	T 2.699	1.262	2.635	2.337	M 3.944	3.198	4.722	2.187
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:05:53	11.680	9.932	3.951	3.898	2797.000	2589.000	18.050	13.450	34.620	T 158.600
2	21:06:20	10.350	9.654	3.775	4.252	2749.000	2544.000	16.530	11.700	40.970	T 158.800
3	21:06:47	11.220	9.787	4.417	4.046	2790.000	2583.000	17.980	12.980	39.150	T 158.100
X		11.080	9.791	4.047	4.065	2779.000	2572.000	17.520	12.710	38.250	T 158.500
S		0.675	0.139	0.332	0.178	26.270	24.720	0.857	0.906	3.265	T 0.365
%RSD		6.095	1.421	8.193	4.374	0.946	0.961	4.890	7.132	8.538	T 0.230
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:05:53	372.1%	0.023	0.102	0.002	15.140	0.018	0.008	0.203	0.295	66.5%
2	21:06:20	377.5%	0.031	0.111	0.001	14.240	0.024	0.012	0.230	0.242	67.4%
3	21:06:47	380.7%	0.032	0.153	0.003	12.900	0.019	0.003	0.332	0.226	67.8%
X		376.8%	0.029	0.122	0.002	14.090	0.020	0.008	0.255	0.254	67.2%
S		4.3%	0.005	0.027	0.001	1.127	0.003	0.005	0.068	0.036	0.7%
%RSD		1.1	16.560	22.360	48.010	7.994	14.660	58.720	26.780	14.080	1.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:05:53	0.115	0.093	0.161	0.155	128.600	146.200	85.8%	0.060	0.047	4.512
2	21:06:20	0.140	0.089	0.157	0.133	127.700	146.400	88.1%	0.034	0.042	4.639
3	21:06:47	0.203	0.088	0.173	0.180	129.300	149.000	89.5%	0.055	0.053	4.684
X		0.153	0.090	0.164	0.156	128.500	147.200	87.8%	0.050	0.047	4.612
S		0.045	0.003	0.008	0.024	0.798	1.544	1.9%	0.014	0.005	0.089
%RSD		29.660	2.840	5.089	15.110	0.621	1.049	2.1	27.200	11.370	1.932
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	21:05:53	4.224	4.376	74.7%							
2	21:06:20	4.240	4.425	74.5%							
3	21:06:47	4.195	4.434	74.4%							
X		4.220	4.412	74.5%							
S		0.023	0.031	0.1%							
%RSD		0.539	0.706	0.2							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:11:45	86.6%	0.045	12.180	11.760	64.520	<u>1408.000</u>	145.200	141.500	134.400	89.410
2	21:12:12	87.0%	0.021	11.670	11.050	54.170	<u>1422.000</u>	143.900	140.900	143.700	88.430
3	21:12:39	88.1%	0.055	9.721	11.760	44.390	<u>1415.000</u>	143.300	140.200	141.200	90.340
X		87.3%	0.041	11.190	11.520	54.360	<u>1415.000</u>	144.100	140.900	139.800	89.390
S		0.8%	0.018	1.298	0.411	10.060	<u>7.382</u>	0.964	0.646	4.836	0.952
%RSD		0.9	43.490	11.600	3.567	18.520	<u>0.522</u>	0.669	0.459	3.460	1.064
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:11:45	978.300	<u>56610.000</u>	256.700	451.800	416.200	94.4%	0.860	1.008	1.369	7416.000
2	21:12:12	997.500	<u>56650.000</u>	259.800	440.500	422.200	94.1%	0.983	0.702	1.378	8026.000
3	21:12:39	1010.000	<u>54040.000</u>	257.100	458.900	427.100	93.8%	0.665	1.117	1.446	8235.000
X		995.200	<u>55770.000</u>	257.800	450.400	421.900	94.1%	0.836	0.943	1.398	7892.000
S		15.890	<u>1498.000</u>	1.674	9.313	5.465	0.3%	0.160	0.215	0.042	425.200
%RSD		1.597	<u>2.687</u>	0.649	2.068	1.296	0.3	19.160	22.810	3.024	5.388
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:11:45	1262.000	4.210	<u>1387.000</u>	1231.000	0.225	1.983	185.400	9.803	0.716	4.646
2	21:12:12	1260.000	4.269	<u>1375.000</u>	1245.000	0.242	1.793	186.300	9.403	0.541	4.346
3	21:12:39	1254.000	4.017	<u>1372.000</u>	1228.000	0.208	1.810	179.700	8.986	0.517	4.486
X		1259.000	4.165	<u>1378.000</u>	1235.000	0.225	1.862	183.800	9.397	0.591	4.492
S		3.942	0.132	<u>7.535</u>	9.187	0.017	0.105	3.556	0.409	0.109	0.150
%RSD		0.313	3.173	<u>0.547</u>	0.744	7.573	5.649	1.935	4.349	18.420	3.342
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:11:45	5.995	4.572	1.378	1.751	97.740	99.810	-0.149	-0.304	12.300	1.791
2	21:12:12	5.341	4.455	2.065	1.758	92.770	98.760	1.165	0.003	12.970	1.955
3	21:12:39	5.338	4.830	1.982	2.042	92.330	98.990	1.147	-0.045	14.200	1.842
X		5.558	4.619	1.809	1.850	94.280	99.190	0.721	-0.116	13.150	1.863
S		0.378	0.192	0.375	0.166	3.006	0.550	0.753	0.165	0.965	0.084
%RSD		6.806	4.154	20.730	8.987	3.188	0.554	104.500	142.600	7.339	4.509
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:11:45	88.2%	0.217	0.314	0.158	-1.476	0.006	0.001	0.013	0.006	84.9%
2	21:12:12	88.1%	0.255	0.172	0.230	-2.211	0.002	-0.001	-0.002	0.014	85.1%
3	21:12:39	88.4%	0.237	0.236	0.221	-1.108	-0.001	-0.000	0.003	0.002	86.5%
X		88.2%	0.236	0.241	0.203	-1.598	0.002	-0.000	0.004	0.008	85.5%
S		0.2%	0.019	0.071	0.039	0.562	0.004	0.001	0.008	0.006	0.8%
%RSD		0.2	7.930	29.710	19.130	35.130	161.100	723.700	175.800	79.480	1.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:11:45	0.048	0.048	0.072	0.077	11.190	11.580	88.9%	0.006	0.004	30.120
2	21:12:12	0.048	0.040	0.079	0.099	11.230	11.080	90.3%	0.005	0.008	30.550
3	21:12:39	0.043	0.030	0.098	0.085	11.200	11.300	92.2%	0.005	0.007	30.740
X		0.046	0.039	0.083	0.087	11.210	11.320	90.5%	0.005	0.006	30.470
S		0.003	0.009	0.014	0.011	0.021	0.248	1.7%	0.001	0.002	0.318
%RSD		7.001	23.490	16.290	12.420	0.187	2.192	1.8	14.120	31.750	1.042
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	21:11:45	29.470	29.220	96.0%							
2	21:12:12	29.510	29.550	98.3%							
3	21:12:39	29.030	29.370	98.7%							
X		29.330	29.380	97.7%							
S		0.265	0.168	1.5%							
%RSD		0.904	0.571	1.5							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:17:35	82.7%	-0.016	26.120	25.830	89.810	<u>1734.000</u>	589.500	562.000	558.900	180.700
2	21:18:02	83.0%	-0.023	25.000	26.360	103.300	<u>1752.000</u>	593.200	605.500	552.600	179.000
3	21:18:29	82.7%	0.010	24.160	25.430	92.110	<u>1761.000</u>	585.900	573.100	541.000	172.800
X		82.8%	-0.010	25.090	25.880	95.060	<u>1749.000</u>	589.500	580.200	550.800	177.500
S		0.2%	0.017	0.981	0.465	7.203	<u>14.080</u>	3.645	22.630	9.095	4.157
%RSD		0.2	177.700	3.910	1.798	7.577	<u>0.805</u>	0.618	3.900	1.651	2.342
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:17:35	<u>2481.000</u>	<u>52590.000</u>	611.800	17580.000	17440.000	90.7%	2.764	5.072	3.220	1674.000
2	21:18:02	<u>2448.000</u>	<u>51510.000</u>	611.300	17870.000	17400.000	92.6%	3.597	5.100	3.181	1568.000
3	21:18:29	<u>2456.000</u>	<u>50440.000</u>	612.400	17610.000	17750.000	92.8%	3.306	5.000	3.107	1588.000
X		<u>2462.000</u>	<u>51510.000</u>	611.800	17690.000	17530.000	92.0%	3.222	5.057	3.170	1610.000
S		<u>17.150</u>	<u>1075.000</u>	0.542	160.400	195.300	1.2%	0.423	0.052	0.057	56.640
%RSD		<u>0.697</u>	<u>2.086</u>	0.089	0.907	1.114	1.3	13.130	1.020	1.812	3.518
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:17:35	<u>11640.000</u>	11.520	<u>11690.000</u>	11030.000	0.160	0.654	164.400	8.970	0.741	12.440
2	21:18:02	<u>11470.000</u>	11.770	<u>11650.000</u>	10700.000	0.154	0.584	151.300	8.052	0.682	12.530
3	21:18:29	<u>11420.000</u>	11.720	<u>11560.000</u>	10590.000	0.143	0.549	160.500	7.949	0.756	12.480
X		<u>11510.000</u>	11.670	<u>11630.000</u>	10780.000	0.152	0.596	158.800	8.324	0.726	12.480
S		<u>114.900</u>	0.132	<u>67.270</u>	228.800	0.009	0.054	6.735	0.562	0.039	0.044
%RSD		<u>0.998</u>	1.132	<u>0.578</u>	2.124	5.595	9.010	4.243	6.752	5.403	0.354
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:17:35	10.860	12.040	1.466	1.085	71.170	75.420	-1.280	-0.684	16.250	85.090
2	21:18:02	11.850	11.890	1.191	1.663	75.870	75.050	-2.669	-0.882	10.340	84.760
3	21:18:29	10.420	11.330	1.641	1.081	74.990	77.730	0.985	-0.139	16.440	83.240
X		11.050	11.750	1.433	1.277	74.010	76.070	-0.988	-0.569	14.340	84.360
S		0.734	0.370	0.227	0.335	2.501	1.453	1.845	0.385	3.464	0.988
%RSD		6.645	3.150	15.850	26.230	3.380	1.910	186.700	67.740	24.150	1.171
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:17:35	84.0%	1.254	1.232	1.116	2.394	0.001	-0.000	-0.005	0.006	81.6%
2	21:18:02	84.5%	1.276	1.210	1.173	0.780	0.006	0.001	-0.001	0.003	83.5%
3	21:18:29	85.8%	1.330	1.212	1.245	1.361	0.005	0.002	0.014	0.006	84.2%
X		84.8%	1.287	1.218	1.178	1.512	0.004	0.001	0.002	0.005	83.1%
S		0.9%	0.039	0.012	0.065	0.817	0.002	0.001	0.010	0.002	1.3%
%RSD		1.1	3.013	0.982	5.498	54.050	63.690	110.200	401.600	41.810	1.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:17:35	0.014	0.035	0.089	0.108	7.368	7.505	86.6%	0.000	0.002	1.614
2	21:18:02	0.023	0.004	0.104	0.085	7.905	7.837	88.8%	0.005	0.003	1.663
3	21:18:29	0.023	0.017	0.116	0.116	7.507	7.585	89.6%	0.007	0.005	1.693
X		0.020	0.019	0.103	0.103	7.593	7.642	88.4%	0.004	0.003	1.657
S		0.005	0.016	0.013	0.016	0.279	0.174	1.5%	0.003	0.002	0.040
%RSD		25.280	82.610	13.050	15.600	3.668	2.273	1.7	82.190	50.580	2.418
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	21:17:35	1.588	1.598	96.2%							
2	21:18:02	1.582	1.590	96.2%							
3	21:18:29	1.644	1.635	97.1%							
X		1.605	1.608	96.5%							
S		0.034	0.024	0.5%							
%RSD		2.143	1.477	0.5							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:23:25	87.7%	-0.016	24.820	26.380	60.770	<u>6044.000</u>	566.300	552.900	525.100	35.650
2	21:23:53	86.7%	0.037	25.780	26.590	40.190	<u>6265.000</u>	550.900	564.300	527.000	36.010
3	21:24:20	88.2%	-0.001	24.020	26.830	32.980	<u>6223.000</u>	562.800	545.400	518.500	36.500
X		87.5%	0.007	24.870	26.600	44.650	<u>6177.000</u>	560.000	554.200	523.500	36.050
S		0.8%	0.027	0.881	0.226	14.420	<u>117.600</u>	8.071	9.504	4.482	0.428
%RSD		0.9	416.700	3.542	0.849	32.290	<u>1.904</u>	1.441	1.715	0.856	1.187
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:23:25	1635.000	<u>48960.000</u>	388.900	20990.000	20830.000	97.2%	1.278	0.399	0.712	3046.000
2	21:23:53	<u>1690.000</u>	<u>47130.000</u>	383.000	21540.000	21240.000	95.8%	0.885	0.082	0.756	3911.000
3	21:24:20	<u>1701.000</u>	<u>48660.000</u>	392.800	21410.000	21210.000	96.4%	1.290	0.102	0.894	4354.000
X		<u>1676.000</u>	<u>48250.000</u>	388.200	21310.000	21100.000	96.5%	1.151	0.195	0.787	3770.000
S		<u>35.130</u>	<u>983.400</u>	4.921	289.900	228.800	0.7%	0.230	0.178	0.095	664.800
%RSD		<u>2.097</u>	<u>2.038</u>	1.268	1.360	1.085	0.7	19.980	91.320	12.020	17.630
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:23:25	74.210	7.262	68.600	134.600	0.143	1.165	102.300	6.598	2.084	86.970
2	21:23:53	70.750	7.010	70.440	131.300	0.155	1.221	96.900	6.389	2.073	86.650
3	21:24:20	69.970	7.172	68.750	128.500	0.185	1.042	91.430	6.023	1.830	85.010
X		71.650	7.148	69.260	131.500	0.161	1.142	96.890	6.337	1.996	86.210
S		2.257	0.128	1.024	3.071	0.022	0.092	5.452	0.291	0.144	1.050
%RSD		3.150	1.787	1.478	2.336	13.370	8.020	5.627	4.590	7.209	1.218
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:23:25	80.430	78.960	0.425	1.064	48.560	50.270	-0.187	-0.166	6.384	44.470
2	21:23:53	75.670	78.140	0.506	1.243	47.700	52.530	1.781	0.248	8.682	44.120
3	21:24:20	78.870	77.780	0.187	0.163	50.010	52.590	4.035	0.738	9.613	45.430
X		78.320	78.290	0.373	0.823	48.760	51.800	1.876	0.274	8.226	44.670
S		2.427	0.607	0.166	0.579	1.167	1.322	2.112	0.452	1.662	0.674
%RSD		3.098	0.775	44.540	70.320	2.394	2.552	112.600	165.300	20.200	1.509
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:23:25	88.5%	1.176	1.122	1.071	-0.095	-0.000	0.002	0.009	0.004	86.3%
2	21:23:53	88.4%	1.216	1.013	1.076	-0.411	-0.000	-0.000	0.009	0.002	86.9%
3	21:24:20	88.5%	1.172	1.154	1.156	0.816	0.002	-0.000	-0.005	0.015	89.0%
X		88.5%	1.188	1.096	1.101	0.103	0.001	0.001	0.004	0.007	87.4%
S		0.1%	0.024	0.074	0.047	0.637	0.001	0.001	0.008	0.007	1.4%
%RSD		0.1	2.016	6.710	4.289	617.200	230.100	231.500	201.700	102.700	1.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:23:25	0.017	0.030	0.112	0.111	3.832	3.744	88.9%	0.008	0.012	0.174
2	21:23:53	0.013	0.026	0.149	0.154	3.757	3.692	91.4%	0.019	0.008	0.152
3	21:24:20	0.030	0.034	0.114	0.139	3.693	3.769	93.0%	0.014	0.010	0.173
X		0.020	0.030	0.125	0.135	3.761	3.735	91.1%	0.013	0.010	0.166
S		0.009	0.004	0.021	0.022	0.070	0.039	2.0%	0.005	0.002	0.012
%RSD		44.820	13.690	16.770	16.330	1.853	1.045	2.2	39.640	17.430	7.498
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	21:23:25	0.155	0.147	96.0%							
2	21:23:53	0.165	0.152	96.2%							
3	21:24:20	0.135	0.154	99.0%							
X		0.152	0.151	97.1%							
S		0.015	0.003	1.7%							
%RSD		9.867	2.159	1.8							

VJ17020-003S

10/26/2020 21:28:49

User Pre-dilution: 1.000

User Predefined: 1.000											
Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:16	84.7%	100.500	133.200	134.800	45.410	7014.000	1729.000	1664.000	1591.000	154.600
2	21:29:42	84.3%	104.400	126.500	136.700	39.370	6959.000	1731.000	1641.000	1560.000	154.500
3	21:30:10	83.5%	102.600	129.800	137.900	41.430	7124.000	1748.000	1692.000	1590.000	157.500
X		84.1%	102.500	129.800	136.500	42.070	7032.000	1736.000	1666.000	1581.000	155.500
S		0.6%	1.929	3.379	1.557	3.070	84.220	10.080	25.910	17.920	1.675
%RSD		0.7	1.882	2.602	1.141	7.296	1.198	0.581	1.555	1.134	1.077
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:16	2829.000	49980.000	1297.000	22270.000	23830.000	91.7%	108.100	107.100	105.400	6400.000
2	21:29:42	2778.000	50790.000	1284.000	22420.000	22100.000	90.5%	100.400	106.700	105.500	6910.000
3	21:30:10	2849.000	49370.000	1254.000	22450.000	22770.000	87.8%	104.600	103.800	106.900	6149.000
X		2819.000	50050.000	1278.000	22380.000	22900.000	90.0%	104.400	105.900	105.900	6486.000
S		36.330	712.500	21.780	94.010	874.200	2.0%	3.869	1.831	0.826	388.000
%RSD		1.289	1.424	1.704	0.420	3.817	2.2	3.707	1.729	0.779	5.982
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:16	1203.000	113.800	1245.000	1218.000	104.500	107.100	177.700	110.600	117.700	194.400
2	21:29:42	1218.000	113.000	1256.000	1183.000	105.100	106.300	177.000	106.400	111.700	191.600
3	21:30:10	1228.000	114.900	1283.000	1187.000	105.000	107.000	175.400	107.100	114.700	190.900
X		1216.000	113.900	1262.000	1196.000	104.900	106.800	176.700	108.000	114.700	192.300
S		12.760	0.932	19.520	18.820	0.319	0.452	1.175	2.232	2.986	1.856
%RSD		1.049	0.818	1.547	1.574	0.303	0.423	0.665	2.066	2.603	0.965
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:16	186.000	178.900	96.840	102.500	39.560	42.220	408.400	98.900	6.533	145.000
2	21:29:42	176.900	179.800	96.520	101.400	40.530	46.700	413.900	100.100	9.948	142.900
3	21:30:10	181.100	174.700	98.560	98.380	41.900	43.680	412.200	101.500	6.104	140.300
X		181.300	177.800	97.300	100.800	40.660	44.200	411.500	100.200	7.528	142.700
S		4.538	2.700	1.096	2.121	1.173	2.285	2.790	1.277	2.107	2.324
%RSD		2.502	1.519	1.126	2.105	2.886	5.169	0.678	1.275	27.980	1.628
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:16	82.9%	103.100	102.700	102.300	97.600	97.540	98.100	99.500	98.110	82.4%
2	21:29:42	83.1%	103.500	103.500	103.100	101.000	97.910	97.710	98.240	99.240	82.4%
3	21:30:10	84.1%	102.400	105.300	101.400	98.810	99.140	100.200	99.450	99.170	81.6%
X		83.4%	103.000	103.800	102.200	99.140	98.190	98.660	99.070	98.840	82.1%
S		0.6%	0.567	1.290	0.850	1.722	0.840	1.329	0.716	0.637	0.5%
%RSD		0.8	0.551	1.243	0.831	1.736	0.856	1.347	0.723	0.644	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:16	98.750	98.730	96.120	103.800	98.530	102.400	87.1%	97.820	97.200	99.750
2	21:29:42	100.100	97.390	96.910	103.500	100.800	102.500	87.8%	99.130	99.490	101.300
3	21:30:10	99.740	99.020	98.250	106.900	98.430	100.800	88.1%	99.990	98.250	102.000
X		99.550	98.380	97.100	104.700	99.260	101.900	87.7%	98.980	98.320	101.000
S		0.719	0.871	1.076	1.884	1.346	0.942	0.5%	1.094	1.148	1.162
%RSD		0.722	0.886	1.109	1.799	1.356	0.924	0.6	1.105	1.167	1.150
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	21:29:16	99.550	98.290	94.3%							
2	21:29:42	101.100	100.300	93.8%							
3	21:30:10	100.800	99.730	94.4%							
X		100.500	99.440	94.2%							
S		0.805	1.042	0.3%							
%RSD		0.801	1.048	0.4							

VJ17020-003SD

10/26/2020 21:34:38

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:35:06	80.7%	101.700	133.600	135.600	59.170	7034.000	1742.000	1642.000	1574.000	158.300
2	21:35:32	80.7%	99.210	133.900	134.800	43.480	7045.000	1728.000	1636.000	1577.000	160.400
3	21:35:59	81.8%	102.900	130.500	136.700	41.220	6965.000	1764.000	1637.000	1595.000	155.000
X		81.1%	101.300	132.700	135.700	47.960	7015.000	1745.000	1638.000	1582.000	157.900
S		0.7%	1.896	1.871	0.926	9.775	43.170	17.850	3.471	11.260	2.702
%RSD		0.8	1.872	1.411	0.683	20.380	0.615	1.023	0.212	0.712	1.711
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:35:06	2845.000	49520.000	1212.000	22260.000	22030.000	87.6%	103.400	106.500	107.700	5757.000
2	21:35:32	2903.000	51300.000	1211.000	22490.000	22580.000	85.3%	104.800	110.700	110.000	5336.000
3	21:35:59	2840.000	49900.000	1198.000	22140.000	21970.000	86.6%	103.000	110.000	107.200	4574.000
X		2863.000	50240.000	1207.000	22300.000	22190.000	86.5%	103.700	109.100	108.300	5222.000
S		35.080	939.200	8.063	179.400	338.300	1.1%	0.948	2.268	1.493	599.800
%RSD		1.225	1.869	0.668	0.805	1.524	1.3	0.914	2.079	1.379	11.490
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:35:06	1211.000	114.100	1269.000	1244.000	104.000	108.500	163.600	108.700	112.600	192.200
2	21:35:32	1188.000	115.400	1262.000	1249.000	107.000	109.800	167.000	108.300	111.200	189.100
3	21:35:59	1218.000	115.300	1227.000	1204.000	101.600	107.400	161.600	109.100	109.500	189.400
X		1206.000	114.900	1252.000	1232.000	104.200	108.600	164.100	108.700	111.100	190.300
S		16.010	0.724	22.460	24.610	2.713	1.202	2.705	0.416	1.586	1.694
%RSD		1.328	0.630	1.794	1.997	2.604	1.107	1.648	0.383	1.428	0.890
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:35:06	179.700	181.000	97.970	104.300	35.310	41.290	420.800	101.800	5.126	143.800
2	21:35:32	185.200	186.700	99.410	105.000	39.240	39.070	423.400	100.100	8.190	147.000
3	21:35:59	176.100	177.100	97.790	99.990	38.830	39.710	431.500	104.900	5.159	146.200
X		180.300	181.600	98.390	103.100	37.790	40.020	425.200	102.300	6.158	145.700
S		4.548	4.804	0.888	2.711	2.163	1.142	5.547	2.442	1.759	1.691
%RSD		2.522	2.645	0.902	2.630	5.723	2.854	1.304	2.388	28.570	1.161
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:35:06	80.9%	103.800	104.900	101.900	103.900	97.570	97.650	97.440	96.930	80.3%
2	21:35:32	79.6%	105.300	103.900	103.700	100.200	97.040	97.220	97.280	97.840	80.6%
3	21:35:59	80.8%	105.900	104.900	103.400	98.080	99.430	99.650	99.150	99.330	79.6%
X		80.4%	105.000	104.600	103.000	100.700	98.010	98.170	97.960	98.030	80.1%
S		0.7%	1.080	0.594	0.989	2.963	1.255	1.297	1.039	1.211	0.5%
%RSD		0.9	1.028	0.568	0.960	2.942	1.281	1.321	1.061	1.235	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:35:06	98.520	98.870	96.110	103.800	100.500	102.000	85.3%	98.990	97.650	100.800
2	21:35:32	98.520	99.540	97.370	105.800	99.460	100.600	86.9%	98.050	97.210	100.500
3	21:35:59	100.000	100.900	98.390	106.700	98.040	102.100	86.6%	98.190	97.650	101.400
X		99.020	99.760	97.290	105.400	99.320	101.600	86.2%	98.410	97.500	100.900
S		0.861	1.012	1.142	1.523	1.221	0.836	0.8%	0.505	0.255	0.453
%RSD		0.869	1.014	1.173	1.444	1.229	0.823	1.0	0.513	0.261	0.449
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	21:35:06	100.900	99.600	92.1%							
2	21:35:32	99.520	99.170	94.0%							
3	21:35:59	100.600	99.660	94.2%							
X		100.400	99.480	93.4%							
S		0.742	0.269	1.1%							
%RSD		0.739	0.270	1.2							

VJ17020-003L(5)

10/26/2020 21:40:29

User Pre-dilution: 1.000

user Prediction: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:56	83.1%	0.008	5.014	6.138	18.560	<u>1269.000</u>	111.900	111.400	108.800	8.026
2	21:41:23	84.8%	0.001	5.504	6.096	19.770	<u>1264.000</u>	113.600	116.200	106.300	7.670
3	21:41:50	85.6%	-0.007	5.092	6.124	30.070	<u>1260.000</u>	117.600	115.300	108.500	8.274
X		84.5%	0.001	5.203	6.119	22.800	<u>1264.000</u>	114.400	114.300	107.900	7.990
S		1.3%	0.008	0.264	0.021	6.327	<u>4.756</u>	2.941	2.525	1.355	0.304
%RSD		1.6	748.700	5.064	0.345	27.750	<u>0.376</u>	2.571	2.210	1.255	3.802
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:56	249.700	<u>9640.000</u>	66.260	4174.000	4210.000	91.6%	0.067	-0.428	0.235	2582.000
2	21:41:23	243.000	<u>9767.000</u>	66.090	4229.000	4095.000	92.5%	0.289	-0.165	0.208	2385.000
3	21:41:50	260.100	<u>10180.000</u>	67.540	4309.000	4248.000	91.2%	0.253	0.093	0.206	2296.000
X		250.900	<u>9864.000</u>	66.630	4237.000	4184.000	91.8%	0.203	-0.167	0.217	2421.000
S		8.628	<u>284.600</u>	0.792	68.010	79.720	0.7%	0.119	0.260	0.016	146.300
%RSD		3.439	<u>2.885</u>	1.189	1.605	1.905	0.7	58.820	156.300	7.310	6.044
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:56	13.520	1.415	14.990	39.690	0.019	0.354	54.690	2.679	0.451	17.810
2	21:41:23	15.140	1.422	14.890	35.280	0.027	0.244	53.600	2.802	0.524	17.860
3	21:41:50	14.440	1.477	14.770	35.840	0.037	0.310	50.610	2.564	0.450	17.870
X		14.370	1.438	14.890	36.940	0.028	0.303	52.970	2.681	0.475	17.850
S		0.809	0.034	0.111	2.402	0.009	0.055	2.113	0.119	0.042	0.032
%RSD		5.630	2.372	0.746	6.503	32.140	18.290	3.989	4.436	8.915	0.181
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:56	16.170	16.390	0.133	0.488	20.360	18.390	0.404	0.141	-0.399	8.895
2	21:41:23	16.460	15.200	0.035	0.133	20.620	19.030	0.288	0.092	0.798	8.821
3	21:41:50	15.270	16.790	0.197	0.029	20.280	19.490	2.047	0.525	-0.449	8.941
X		15.960	16.130	0.122	0.217	20.420	18.970	0.913	0.253	-0.017	8.885
S		0.620	0.826	0.082	0.241	0.175	0.550	0.984	0.237	0.706	0.061
%RSD		3.886	5.121	66.980	111.100	0.856	2.899	107.700	93.920	4227.000	0.684
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:56	84.3%	0.371	0.276	0.418	0.785	0.005	0.001	0.002	0.003	82.9%
2	21:41:23	86.3%	0.505	0.368	0.453	0.613	0.005	0.001	0.002	0.013	84.1%
3	21:41:50	85.2%	0.457	0.407	0.442	0.057	0.001	0.007	0.002	0.010	84.6%
X		85.3%	0.445	0.350	0.438	0.485	0.003	0.003	0.002	0.008	83.9%
S		1.0%	0.068	0.067	0.018	0.381	0.002	0.003	0.000	0.005	0.9%
%RSD		1.2	15.300	19.200	4.143	78.460	60.790	112.300	5.890	61.070	1.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:56	0.038	0.022	0.084	0.139	0.858	0.839	87.4%	0.014	0.009	0.047
2	21:41:23	0.032	0.027	0.086	0.106	0.778	0.805	88.9%	0.014	0.014	0.034
3	21:41:50	0.048	0.043	0.141	0.112	0.811	0.800	88.5%	0.018	0.015	0.036
X		0.040	0.031	0.104	0.119	0.816	0.815	88.3%	0.015	0.012	0.039
S		0.008	0.011	0.032	0.017	0.041	0.021	0.7%	0.002	0.003	0.007
%RSD		20.830	34.760	31.090	14.560	4.972	2.622	0.8	15.030	25.300	17.970
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	21:40:56	0.029	0.035	91.8%							
2	21:41:23	0.052	0.039	93.3%							
3	21:41:50	0.022	0.033	95.5%							
X		0.034	0.035	93.5%							
S		0.016	0.003	1.9%							
%RSD		45.600	9.360	2.0							

CCV MW15278 10/26/2020 21:46:20 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:47	73.7%	303.100	317.200	346.000	35.310	61960.000	67620.000	69360.000	64970.000	309.400
2	21:47:14	75.1%	294.300	315.100	321.700	13.490	60660.000	69480.000	69200.000	66470.000	307.200
3	21:47:42	75.4%	298.500	321.800	336.200	23.750	62940.000	67940.000	69240.000	64420.000	301.500
X		74.7%	99.551%	106.009%	111.541%	24.180	103.083%	68350.000	69270.000	108.815%	102.015%
S		0.9%	n/a	n/a	n/a	10.920	n/a	991.300	84.310	n/a	n/a
%RSD		1.2	1.479	1.076	3.660	45.150	1.849	1.450	0.122	1.625	1.338
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:47	3778.000	218.200	51640.000	60280.000	66450.000	83.5%	308.000	326.900	314.400	2848.000
2	21:47:14	3822.000	216.700	52030.000	60690.000	65990.000	83.2%	311.300	322.400	319.100	2849.000
3	21:47:42	3664.000	232.800	52340.000	61270.000	65850.000	85.8%	307.400	325.800	313.700	2651.000
X		3755.000	222.600	86.675%	60750.000	110.161%	84.2%	102.962%	108.351%	105.237%	2783.000
S		81.790	8.918	n/a	498.300	n/a	1.4%	n/a	n/a	n/a	114.000
%RSD		2.178	4.007	0.820	0.476	1.6	0.673	0.720	0.930	4.097	
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:47	69580.000	323.300	71490.000	69370.000	314.200	322.600	379.800	301.600	322.700	314.600
2	21:47:14	69950.000	322.500	71550.000	70830.000	314.600	324.600	387.800	309.700	316.500	317.400
3	21:47:42	68700.000	321.700	70450.000	68810.000	309.300	313.700	376.900	300.900	319.200	315.800
X		69410.000	107.504%	71160.000	116.113%	104.238%	106.771%	381.500	304.100	106.494%	105.312%
S		640.200	n/a	614.500	n/a	n/a	n/a	5.618	4.862	n/a	n/a
%RSD		0.922	0.234	0.863	1.496	0.935	1.808	1.473	1.599	0.984	0.439
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:47	289.300	295.900	288.000	291.800	16.580	14.940	1248.000	308.400	-0.294	295.300
2	21:47:14	293.900	293.900	289.100	302.600	19.270	16.060	1215.000	299.600	-1.063	299.300
3	21:47:42	298.700	295.400	289.300	292.100	19.120	14.370	1240.000	303.000	2.525	302.400
X		294.000	295.100	96.267%	295.500	18.320	15.120	1234.000	101.228%	0.389	99.669%
S		4.710	1.007	n/a	6.156	1.512	0.861	16.860	n/a	1.889	n/a
%RSD		1.602	0.341	0.256	2.084	8.252	5.694	1.366	1.465	485.000	1.182
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:47	78.1%	304.300	301.900	297.700	290.800	281.400	281.300	284.400	289.800	75.7%
2	21:47:14	78.8%	307.900	303.700	307.400	282.000	288.700	287.100	289.400	290.900	76.5%
3	21:47:42	78.9%	315.400	309.900	313.500	287.400	285.300	285.600	288.100	289.700	77.6%
X		78.6%	103.068%	101.721%	306.200	286.700	95.040%	284.600	287.300	96.712%	76.6%
S		0.4%	n/a	n/a	7.959	4.449	n/a	3.022	2.616	n/a	0.9%
%RSD		0.5	1.833	1.364	2.599	1.551	1.292	1.062	0.910	0.221	1.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:47	296.700	297.700	284.900	309.300	286.800	293.900	81.4%	300.800	300.700	301.700
2	21:47:14	300.200	296.300	288.600	310.100	282.500	290.100	83.0%	301.300	303.000	301.400
3	21:47:42	300.500	302.000	292.900	316.300	283.800	294.600	84.5%	303.200	305.800	303.600
X		99.714%	99.550%	288.800	103.966%	94.797%	97.622%	83.0%	301.800	101.052%	100.749%
S		n/a	n/a	4.048	n/a	n/a	n/a	1.6%	1.269	n/a	n/a
%RSD		0.722	0.999	1.401	1.234	0.770	0.818	1.9	0.421	0.832	0.401
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	21:46:47	298.700	301.000	84.7%							
2	21:47:14	300.500	299.400	86.4%							
3	21:47:42	302.500	301.000	87.4%							
X		100.198%	100.160%	86.2%							
S		n/a	n/a	1.3%							
%RSD		0.632	0.314	1.6							

CCB IM10195-01 10/26/2020 21:52:13 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run		Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:52:41		85.6%	0.025	1.157	1.503	25.200	61.890	4.105	4.425	3.905	0.057
2	21:53:08		86.8%	0.057	1.308	1.580	22.060	60.350	4.194	3.729	3.504	0.050
3	21:53:35		88.1%	0.016	1.212	1.361	22.840	56.850	4.024	4.425	3.579	0.079
X			86.8%	0.033	1.225	1.481	23.370	59.690	4.108	4.193	3.663	0.062
S			1.2%	0.021	0.077	0.111	1.632	2.581	0.085	0.402	0.213	0.016
%RSD			1.4	65.970	6.263	7.511	6.985	4.323	2.071	9.580	5.819	25.210
Run	Time		28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:52:41		-97.350	161.300	-10.020	1.731	-28.220	94.8%	0.062	0.029	0.003	-8.123
2	21:53:08		-95.600	156.800	-8.345	0.721	-29.330	95.4%	0.101	0.013	0.021	13.620
3	21:53:35		-97.580	153.600	-11.690	4.556	-29.390	97.6%	0.059	0.006	0.012	7.193
X			-96.850	157.300	-10.020	2.336	-28.980	96.0%	0.074	0.016	0.012	4.231
S			1.083	3.851	1.671	1.988	0.657	1.4%	0.023	0.012	0.009	11.170
%RSD			1.118	2.449	16.680	85.100	2.269	1.5	31.440	74.760	73.320	264.000
Run	Time		54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:52:41		4.623	0.020	2.300	18.740	0.020	0.046	42.700	2.079	0.071	-0.010
2	21:53:08		4.931	0.012	3.171	16.470	0.017	0.035	44.070	1.820	0.017	-0.064
3	21:53:35		4.044	0.014	0.984	14.240	0.022	0.059	42.040	1.806	0.063	-0.076
X			4.533	0.015	2.152	16.490	0.020	0.047	42.930	1.902	0.051	-0.050
S			0.450	0.004	1.101	2.249	0.002	0.012	1.034	0.154	0.029	0.035
%RSD			9.937	28.160	51.180	13.640	12.720	26.420	2.409	8.102	57.400	70.610
Run	Time		67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:52:41		-0.303	-0.011	-0.023	0.840	13.020	11.870	0.127	0.081	-0.693	0.012
2	21:53:08		-0.160	0.063	0.048	0.161	12.990	14.410	1.012	0.318	-1.401	0.014
3	21:53:35		-0.131	-0.064	-0.007	-0.082	12.970	13.750	-1.930	-0.419	-0.584	0.016
X			-0.198	-0.004	0.006	0.306	12.990	13.340	-0.264	-0.007	-0.893	0.014
S			0.093	0.064	0.037	0.478	0.027	1.317	1.509	0.376	0.444	0.002
%RSD			46.770	1658.000	632.100	156.000	0.204	9.871	572.500	5620.000	49.680	14.220
Run	Time		89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:52:41		89.1%	0.653	0.638	0.620	-0.303	0.020	0.007	0.006	0.015	87.4%
2	21:53:08		90.5%	0.743	0.869	0.622	0.031	0.009	0.016	0.006	0.026	88.4%
3	21:53:35		92.6%	0.651	0.539	0.692	0.075	0.018	0.013	0.010	0.011	89.8%
X			90.7%	0.682	0.682	0.645	-0.066	0.016	0.012	0.007	0.017	88.5%
S			1.8%	0.053	0.169	0.041	0.207	0.006	0.005	0.002	0.008	1.2%
%RSD			1.9	7.746	24.820	6.371	314.700	38.590	39.140	33.410	45.120	1.4
Run	Time		116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:52:41		0.092	0.135	0.484	0.550	0.006	0.006	89.3%	0.013	0.011	0.022
2	21:53:08		0.102	0.154	0.494	0.529	-0.002	0.005	91.4%	0.021	0.017	0.012
3	21:53:35		0.091	0.127	0.572	0.535	0.020	-0.003	92.4%	0.015	0.013	0.026
X			0.095	0.138	0.517	0.538	0.008	0.003	91.1%	0.016	0.014	0.020
S			0.006	0.014	0.048	0.011	0.011	0.005	1.6%	0.004	0.003	0.007
%RSD			6.320	9.938	9.338	2.065	135.100	182.600	1.7	22.810	22.760	36.270
Run	Time		207Pb	208Pb	209Bi							
			ppb	ppb	ppb							
1	21:52:41		0.025	0.020	94.5%							
2	21:53:08		0.018	0.015	96.8%							
3	21:53:35		0.028	0.023	98.2%							
X			0.024	0.020	96.5%							
S			0.005	0.004	1.9%							
%RSD			21.110	21.440	1.9							

VJ17020-003A

10/26/2020 21:58:04

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:58:31	82.3%	101.700	136.300	139.300	45.640	16826.000	1762.000	1672.000	1645.000	144.200
2	21:58:58	80.8%	98.690	143.200	146.800	22.490	16988.000	1693.000	1641.000	1640.000	144.600
3	21:59:26	83.8%	104.000	132.600	132.000	29.410	16811.000	1730.000	1656.000	1598.000	140.700
X		82.3%	101.400	137.300	139.400	32.510	16875.000	1728.000	1656.000	1627.000	143.100
S		1.5%	2.651	5.378	7.385	11.880	197.930	134.870	15.400	25.930	2.155
%RSD		1.9	2.613	3.916	5.299	36.550	1.425	2.018	0.930	1.593	1.506
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:58:31	12871.000	147610.000	11341.000	21690.000	22200.000	88.4%	107.600	113.300	111.700	3881.000
2	21:58:58	12842.000	148430.000	11363.000	21990.000	22530.000	87.6%	106.200	113.600	113.400	3821.000
3	21:59:26	12721.000	147880.000	11358.000	22100.000	22200.000	88.5%	107.500	108.800	108.200	5325.000
X		12811.000	147970.000	11354.000	21930.000	22310.000	88.1%	107.100	111.900	111.100	4342.000
S		179.330	1415.200	111.300	213.700	192.600	0.5%	0.756	2.677	2.670	851.900
%RSD		1.822	0.866	0.834	0.975	0.863	0.6	0.706	2.392	2.403	19.620
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:58:31	1236.000	119.000	1307.000	1290.000	107.800	114.400	153.100	111.800	121.400	200.700
2	21:58:58	1253.000	120.700	1293.000	1300.000	109.500	114.300	154.300	113.300	113.700	192.700
3	21:59:26	1258.000	117.600	1306.000	1215.000	107.700	106.400	148.200	112.500	116.500	197.500
X		1249.000	119.100	1302.000	1268.000	108.300	111.700	151.900	112.500	117.200	197.000
S		11.390	1.567	7.757	46.610	1.039	4.613	3.223	0.752	3.884	4.058
%RSD		0.912	1.316	0.596	3.675	0.959	4.130	2.122	0.668	3.314	2.060
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:58:31	183.900	183.000	103.600	105.600	26.760	29.650	444.400	109.300	1.813	146.000
2	21:58:58	177.000	183.300	102.700	106.500	24.700	27.360	444.800	106.000	7.778	147.000
3	21:59:26	183.700	180.300	101.500	102.900	25.210	28.250	462.900	111.100	5.333	147.700
X		181.500	182.200	102.600	105.000	25.560	28.420	450.700	108.800	4.975	146.900
S		3.929	1.649	1.055	1.879	1.074	1.157	10.580	2.578	2.998	0.816
%RSD		2.165	0.905	1.028	1.790	4.202	4.070	2.347	2.370	60.280	0.555
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:58:31	82.5%	108.800	106.700	107.400	104.900	102.200	104.500	103.100	102.800	80.4%
2	21:58:58	82.0%	111.200	107.400	108.200	107.000	100.100	100.900	100.700	102.700	82.3%
3	21:59:26	82.0%	108.300	108.600	105.900	105.900	101.300	100.500	103.200	103.400	81.9%
X		82.1%	109.400	107.600	107.200	105.900	101.200	102.000	102.300	103.000	81.5%
S		0.3%	1.551	0.958	1.155	1.072	1.048	2.221	1.397	0.350	1.0%
%RSD		0.4	1.417	0.890	1.078	1.012	1.036	2.177	1.365	0.340	1.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:58:31	105.100	104.100	96.920	106.000	102.500	106.100	86.6%	103.500	101.400	104.300
2	21:58:58	104.600	102.900	97.190	104.300	102.600	105.500	87.4%	102.800	102.200	105.500
3	21:59:26	104.400	103.600	98.280	106.300	103.200	105.700	88.1%	103.800	102.000	105.000
X		104.700	103.500	97.460	105.500	102.800	105.800	87.4%	103.400	101.800	104.900
S		0.331	0.610	0.720	1.102	0.370	0.318	0.7%	0.505	0.414	0.593
%RSD		0.316	0.590	0.738	1.045	0.359	0.301	0.8	0.488	0.406	0.565
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	21:58:31	103.900	102.700	94.1%							
2	21:58:58	105.300	103.800	95.2%							
3	21:59:26	104.200	103.200	95.4%							
X		104.500	103.300	94.9%							
S		0.705	0.528	0.7%							
%RSD		0.674	0.512	0.7							

VJ17020-004

10/26/2020 22:03:56

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:04:23	82.1%	-0.015	15.350	15.700	87.790	1765.000	951.100	952.400	898.200	34.870
2	22:04:50	85.3%	0.017	14.400	15.580	77.070	1736.000	978.100	917.700	908.700	37.890
3	22:05:17	86.0%	-0.007	13.940	15.090	76.610	1737.000	962.400	944.500	891.900	34.270
X		84.5%	-0.002	14.570	15.460	80.490	1746.000	963.900	938.200	899.600	35.680
S		2.0%	0.016	0.722	0.326	6.323	16.290	13.550	18.150	8.471	1.942
%RSD		2.4	1053.000	4.958	2.112	7.856	0.933	1.406	1.935	0.942	5.444
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:04:23	2294.000	54350.000	826.400	9430.000	8995.000	89.7%	0.887	1.107	2.387	1413.000
2	22:04:50	2288.000	52560.000	794.000	9132.000	9094.000	91.0%	0.750	1.039	2.273	1386.000
3	22:05:17	2308.000	52430.000	804.300	9106.000	9047.000	92.0%	0.843	1.266	2.387	1181.000
X		2297.000	53110.000	808.200	9223.000	9045.000	90.9%	0.826	1.137	2.349	1327.000
S		10.470	1074.000	16.590	180.000	49.610	1.2%	0.070	0.116	0.066	127.100
%RSD		0.456	2.022	2.053	1.952	0.548	1.3	8.496	10.210	2.803	9.578
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:04:23	42540.000	32.620	43420.000	41410.000	3.495	0.558	33.800	2.037	0.661	8.787
2	22:04:50	41970.000	32.520	42310.000	42280.000	3.370	0.782	29.390	1.801	0.706	9.262
3	22:05:17	42570.000	31.610	42640.000	41880.000	3.275	0.750	27.890	1.824	0.662	9.078
X		42360.000	32.250	42790.000	41860.000	3.380	0.697	30.360	1.887	0.676	9.042
S		337.400	0.557	571.000	439.800	0.110	0.121	3.074	0.131	0.025	0.239
%RSD		0.796	1.728	1.334	1.051	3.265	17.380	10.130	6.916	3.749	2.649
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:04:23	8.683	7.814	12.170	0.398	28.050	29.800	1.538	0.356	2.104	54.020
2	22:04:50	9.429	8.217	11.990	0.781	29.420	32.810	2.981	0.670	4.462	53.150
3	22:05:17	9.045	8.348	12.140	0.678	30.360	34.960	0.308	-0.038	6.126	53.960
X		9.053	8.127	12.100	0.619	29.280	32.520	1.609	0.330	4.231	53.710
S		0.373	0.278	0.097	0.198	1.160	2.589	1.338	0.355	2.021	0.485
%RSD		4.121	3.425	0.799	32.030	3.963	7.961	83.150	107.600	47.770	0.904
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:04:23	82.9%	1.666	1.711	1.521	2.494	0.005	0.001	0.089	0.086	81.4%
2	22:04:50	86.3%	1.648	1.657	1.601	1.332	0.013	0.008	0.131	0.103	83.4%
3	22:05:17	86.0%	1.711	1.907	1.580	1.530	0.011	0.005	0.096	0.094	83.7%
X		85.1%	1.675	1.758	1.567	1.785	0.009	0.005	0.105	0.095	82.8%
S		1.9%	0.033	0.132	0.041	0.622	0.004	0.004	0.022	0.008	1.2%
%RSD		2.2	1.949	7.499	2.637	34.820	44.670	76.370	21.270	8.537	1.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:04:23	0.090	0.071	0.567	0.639	13.180	13.300	86.4%	0.011	0.008	11.270
2	22:04:50	0.121	0.075	0.630	0.652	12.560	12.980	88.4%	0.011	0.008	11.600
3	22:05:17	0.094	0.059	0.622	0.641	12.690	12.960	89.5%	0.009	0.006	11.410
X		0.102	0.069	0.606	0.644	12.810	13.080	88.1%	0.010	0.007	11.430
S		0.017	0.008	0.034	0.007	0.326	0.189	1.6%	0.001	0.001	0.164
%RSD		16.520	12.350	5.674	1.105	2.549	1.446	1.8	12.200	14.170	1.439
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	22:04:23	10.600	10.760	100.7%							
2	22:04:50	11.070	11.110	100.0%							
3	22:05:17	11.100	11.080	100.5%							
X		10.920	10.980	100.4%							
S		0.283	0.197	0.3%							
%RSD		2.592	1.793	0.3							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:10:14	88.1%	-0.015	13.900	15.550	90.340	1718.000	988.600	942.900	909.200	37.010
2	22:10:41	85.5%	0.007	14.650	16.010	81.060	1805.000	949.000	898.200	886.000	37.310
3	22:11:08	87.4%	-0.008	13.630	14.710	81.440	1763.000	954.300	927.400	899.000	34.880
X		87.0%	-0.006	14.060	15.420	84.280	1762.000	964.000	922.800	898.100	36.400
S		1.3%	0.011	0.527	0.660	5.254	43.430	21.510	22.740	11.610	1.323
%RSD		1.5	206.800	3.747	4.282	6.234	2.465	2.231	2.464	1.293	3.634
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:10:14	2291.000	52600.000	821.600	9276.000	9055.000	94.1%	0.882	0.803	2.359	1606.000
2	22:10:41	2274.000	52870.000	839.000	9122.000	9052.000	95.6%	0.573	0.858	2.319	1588.000
3	22:11:08	2208.000	51590.000	829.800	9184.000	8941.000	96.6%	0.781	1.310	2.389	1400.000
X		2258.000	52350.000	830.100	9194.000	9016.000	95.4%	0.745	0.990	2.356	1531.000
S		44.130	678.700	8.671	77.600	65.220	1.2%	0.158	0.278	0.035	114.200
%RSD		1.955	1.296	1.045	0.844	0.723	1.3	21.150	28.100	1.494	7.456
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:10:14	43010.000	32.630	42380.000	41380.000	3.229	1.012	27.650	1.907	1.109	9.543
2	22:10:41	41200.000	32.210	40760.000	40670.000	3.219	0.991	25.920	1.870	0.784	9.197
3	22:11:08	41650.000	31.830	41640.000	41160.000	3.196	1.120	26.060	1.890	1.120	8.829
X		41950.000	32.220	41590.000	41070.000	3.215	1.041	26.540	1.889	1.004	9.190
S		943.300	0.398	815.300	366.100	0.017	0.069	0.959	0.018	0.191	0.357
%RSD		2.248	1.234	1.960	0.891	0.535	6.625	3.614	0.974	19.000	3.884
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:10:14	7.209	8.466	12.410	0.696	29.120	31.300	0.809	0.211	1.595	52.890
2	22:10:41	9.347	8.710	12.520	0.469	31.520	33.300	1.800	0.359	5.170	52.670
3	22:11:08	9.126	8.139	12.310	0.581	31.550	33.930	1.109	0.223	3.494	54.000
X		8.561	8.438	12.420	0.582	30.730	32.850	1.240	0.265	3.420	53.190
S		1.176	0.286	0.107	0.113	1.392	1.372	0.508	0.082	1.789	0.712
%RSD		13.730	3.392	0.859	19.480	4.531	4.178	41.000	31.110	52.300	1.338
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:10:14	88.6%	1.435	1.341	1.340	2.724	0.003	0.003	0.110	0.089	85.3%
2	22:10:41	88.1%	1.501	1.510	1.395	2.686	0.006	0.002	0.104	0.071	85.6%
3	22:11:08	88.6%	1.508	1.515	1.319	0.631	0.004	-0.000	0.070	0.060	86.6%
X		88.4%	1.481	1.455	1.352	2.014	0.004	0.002	0.094	0.073	85.9%
S		0.3%	0.040	0.099	0.039	1.198	0.001	0.002	0.021	0.015	0.7%
%RSD		0.3	2.732	6.826	2.901	59.480	25.870	100.900	22.750	20.450	0.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:10:14	0.071	0.036	0.332	0.356	11.920	13.120	88.5%	0.006	0.005	11.490
2	22:10:41	0.052	0.055	0.283	0.331	12.540	12.880	91.2%	0.002	0.006	11.320
3	22:11:08	0.056	0.064	0.321	0.381	12.500	13.000	91.8%	0.007	0.007	11.370
X		0.060	0.052	0.312	0.356	12.320	13.000	90.5%	0.005	0.006	11.390
S		0.010	0.014	0.025	0.025	0.344	0.123	1.8%	0.002	0.001	0.089
%RSD		16.660	27.310	8.162	7.073	2.792	0.942	1.9	45.040	10.340	0.784
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	22:10:14	10.550	10.800	99.5%							
2	22:10:41	10.810	10.840	102.0%							
3	22:11:08	11.240	10.900	100.8%							
X		10.870	10.840	100.8%							
S		0.350	0.051	1.3%							
%RSD		3.220	0.468	1.3							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:16:03	81.4%	-0.014	20.690	21.960	60.450	<u>1559.000</u>	740.100	722.700	699.900	59.170
2	22:16:30	84.1%	0.008	19.070	20.020	14.270	<u>1535.000</u>	700.200	684.200	677.800	56.160
3	22:16:57	84.6%	-0.032	19.300	19.970	38.680	<u>1538.000</u>	715.200	705.100	678.800	57.000
X		83.4%	-0.012	19.690	20.650	37.800	<u>1544.000</u>	718.500	704.000	685.500	57.440
S		1.7%	0.020	0.879	1.135	23.100	<u>12.970</u>	20.180	19.300	12.450	1.553
%RSD		2.1	160.400	4.468	5.497	61.110	<u>0.840</u>	2.809	2.742	1.816	2.704
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:16:03	1361.000	<u>55510.000</u>	511.400	21250.000	21340.000	88.4%	1.071	1.109	0.919	1600.000
2	22:16:30	1301.000	<u>53820.000</u>	513.500	21250.000	21270.000	89.9%	1.073	1.186	0.909	1855.000
3	22:16:57	1332.000	<u>54380.000</u>	506.200	21340.000	21730.000	88.6%	0.623	0.694	0.913	2548.000
X		1331.000	<u>54570.000</u>	510.400	21280.000	21450.000	88.9%	0.922	0.996	0.914	2001.000
S		30.280	<u>860.300</u>	3.772	55.330	248.800	0.8%	0.260	0.265	0.005	490.700
%RSD		2.275	<u>1.577</u>	0.739	0.260	1.160	0.9	28.150	26.560	0.530	24.520
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:16:03	250.600	2.848	241.800	302.500	0.208	0.620	27.300	2.716	1.677	2.019
2	22:16:30	249.200	2.920	243.200	308.500	0.195	0.649	25.980	2.672	1.639	2.022
3	22:16:57	249.800	2.862	240.600	298.400	0.171	0.630	26.340	2.695	1.644	1.815
X		249.900	2.877	241.900	303.100	0.192	0.633	26.540	2.694	1.653	1.952
S		0.715	0.038	1.327	5.059	0.019	0.015	0.684	0.022	0.020	0.118
%RSD		0.286	1.325	0.549	1.669	9.887	2.338	2.577	0.822	1.230	6.069
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:16:03	2.252	1.968	-0.021	-0.339	20.830	23.060	1.277	0.241	3.608	46.370
2	22:16:30	2.272	1.719	0.319	0.181	22.410	23.230	1.268	0.187	5.336	47.540
3	22:16:57	2.423	1.807	0.431	-0.086	20.200	24.550	1.188	0.262	1.753	46.900
X		2.316	1.831	0.243	-0.081	21.150	23.610	1.244	0.230	3.566	46.940
S		0.093	0.126	0.235	0.260	1.142	0.815	0.049	0.039	1.792	0.589
%RSD		4.037	6.880	96.780	319.400	5.401	3.452	3.917	16.920	50.250	1.255
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:16:03	81.8%	0.704	0.789	0.808	0.771	0.001	0.001	0.021	0.010	81.2%
2	22:16:30	81.7%	0.857	0.769	0.933	1.037	0.007	0.002	0.010	0.014	82.0%
3	22:16:57	83.2%	0.837	0.879	0.777	0.944	0.008	-0.000	0.011	0.008	82.6%
X		82.2%	0.799	0.813	0.839	0.917	0.006	0.001	0.014	0.011	82.0%
S		0.8%	0.083	0.059	0.083	0.135	0.004	0.001	0.006	0.003	0.7%
%RSD		1.0	10.390	7.214	9.871	14.730	69.860	110.200	43.080	29.990	0.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:16:03	0.034	0.039	0.134	0.152	1.756	1.750	86.7%	0.006	0.007	1.376
2	22:16:30	0.031	0.037	0.141	0.195	1.880	1.819	88.0%	0.011	0.012	1.373
3	22:16:57	0.033	0.048	0.185	0.143	1.574	1.862	89.1%	0.011	0.010	1.332
X		0.033	0.041	0.153	0.164	1.737	1.810	87.9%	0.009	0.010	1.360
S		0.001	0.006	0.028	0.028	0.154	0.057	1.2%	0.003	0.002	0.024
%RSD		4.560	14.700	18.090	16.990	8.842	3.142	1.4	32.940	23.960	1.798
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	22:16:03	1.338	1.313	96.1%							
2	22:16:30	1.251	1.288	96.7%							
3	22:16:57	1.301	1.298	96.0%							
X		1.297	1.299	96.3%							
S		0.044	0.012	0.3%							
%RSD		3.367	0.961	0.4							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:21:53	83.5%	-0.015	68.520	74.430	39.250	18930.000	1782.000	1723.000	1636.000	72.270
2	22:22:20	84.3%	0.018	65.890	72.760	33.710	19040.000	1762.000	1692.000	1633.000	71.180
3	22:22:47	83.7%	-0.006	66.550	72.340	39.400	19670.000	1842.000	1729.000	1657.000	82.270
X		83.8%	-0.001	66.990	73.170	37.450	19210.000	1796.000	1715.000	1642.000	75.240
S		0.4%	0.017	1.370	1.107	3.244	398.600	41.580	19.890	13.480	6.113
%RSD		0.5	1706.000	2.046	1.513	8.661	2.075	2.315	1.160	0.821	8.125
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:21:53	852.800	54210.000	606.500	6768.000	6681.000	88.3%	1.477	1.494	0.581	4401.000
2	22:22:20	836.500	52600.000	607.800	6711.000	6701.000	87.7%	1.079	1.360	0.597	4857.000
3	22:22:47	827.700	53210.000	600.500	6629.000	6755.000	86.4%	1.488	1.775	0.586	4969.000
X		839.000	53340.000	604.900	6703.000	6713.000	87.5%	1.348	1.543	0.588	4742.000
S		12.730	811.200	3.895	70.220	38.190	0.9%	0.233	0.212	0.008	300.700
%RSD		1.517	1.521	0.644	1.048	0.569	1.1	17.280	13.720	1.442	6.342
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:21:53	151.300	0.818	154.300	169.200	0.027	0.515	26.760	3.030	2.541	1.782
2	22:22:20	156.200	0.884	148.100	171.800	0.033	0.566	26.770	3.176	2.414	1.666
3	22:22:47	157.600	0.799	151.000	167.900	0.040	0.509	25.870	3.097	2.532	1.961
X		155.000	0.834	151.100	169.600	0.033	0.530	26.470	3.101	2.495	1.803
S		3.322	0.045	3.072	1.975	0.007	0.031	0.520	0.073	0.071	0.148
%RSD		2.143	5.357	2.033	1.165	20.050	5.845	1.964	2.352	2.837	8.226
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:21:53	1.619	1.414	0.000	0.089	20.890	22.590	1.769	0.477	0.610	26.020
2	22:22:20	1.544	1.553	0.380	-0.288	20.670	24.550	2.784	0.642	3.636	26.180
3	22:22:47	3.156	1.820	0.608	-0.330	23.970	23.860	1.721	0.333	5.577	25.580
X		2.106	1.596	0.329	-0.176	21.850	23.670	2.091	0.484	3.274	25.930
S		0.910	0.206	0.307	0.231	1.842	0.995	0.600	0.155	2.503	0.311
%RSD		43.200	12.930	93.170	131.000	8.431	4.203	28.710	31.910	76.450	1.201
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:21:53	84.8%	5.120	4.520	4.876	-0.144	0.001	-0.001	-0.015	0.009	81.4%
2	22:22:20	85.0%	5.126	4.800	4.835	0.074	0.001	0.001	0.001	0.009	82.0%
3	22:22:47	85.9%	4.866	4.991	5.030	-0.282	0.006	-0.000	0.010	0.002	82.3%
X		85.3%	5.037	4.771	4.914	-0.117	0.003	-0.000	-0.001	0.007	81.9%
S		0.6%	0.149	0.237	0.103	0.179	0.003	0.001	0.012	0.004	0.5%
%RSD		0.7	2.951	4.964	2.098	152.800	102.600	1061.000	956.900	59.100	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:21:53	0.039	0.059	0.110	0.137	2.069	2.116	85.7%	0.016	0.018	0.134
2	22:22:20	0.038	0.047	0.144	0.116	1.995	2.174	87.9%	0.020	0.011	0.130
3	22:22:47	0.043	0.066	0.099	0.142	1.990	1.972	88.4%	0.012	0.015	0.129
X		0.040	0.058	0.118	0.132	2.018	2.088	87.3%	0.016	0.015	0.131
S		0.003	0.010	0.023	0.014	0.044	0.104	1.4%	0.004	0.003	0.002
%RSD		6.401	17.380	19.750	10.520	2.170	4.976	1.6	23.620	23.740	1.849
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	22:21:53	0.115	0.115	93.4%							
2	22:22:20	0.129	0.122	94.9%							
3	22:22:47	0.130	0.125	94.6%							
X		0.125	0.121	94.3%							
S		0.009	0.005	0.8%							
%RSD		6.907	3.923	0.8							

VJ17020-008

10/26/2020 22:27:17

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:27:44	80.2%	0.010	28.250	28.420	57.890	<u>1871.000</u>	1081.000	1047.000	1050.000	<u>TM 995.300</u>
2	22:28:11	81.5%	0.051	27.470	27.500	44.010	<u>1873.000</u>	<u>1088.000</u>	1074.000	1046.000	<u>TM 1026.000</u>
3	22:28:38	81.1%	0.018	27.610	27.230	46.850	<u>1875.000</u>	1081.000	1049.000	1075.000	<u>TM 1014.000</u>
X		81.0%	0.026	27.780	27.720	49.580	<u>1873.000</u>	<u>1083.000</u>	1057.000	1057.000	<u>TM 1012.000</u>
S		0.7%	0.021	0.417	0.623	7.332	<u>1.205</u>	<u>1.4531</u>	15.240	15.410	<u>TM 15.450</u>
%RSD		0.9	82.030	1.501	2.247	14.790	<u>0.118</u>	<u>0.418</u>	1.442	1.458	<u>TM 1.527</u>
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:27:44	<u>13077.000</u>	<u>153980.000</u>	<u>11348.000</u>	32940.000	<u>136040.000</u>	85.5%	18.280	3.851	3.419	2220.000
2	22:28:11	<u>13087.000</u>	<u>153640.000</u>	<u>11325.000</u>	33060.000	<u>135320.000</u>	86.4%	18.960	3.996	3.291	1917.000
3	22:28:38	<u>13057.000</u>	<u>153380.000</u>	<u>11336.000</u>	32960.000	<u>136160.000</u>	84.1%	19.460	4.206	3.422	1717.000
X		<u>13074.000</u>	<u>153670.000</u>	<u>11336.000</u>	32990.000	<u>135840.000</u>	85.4%	18.900	4.018	3.377	1952.000
S		<u>115.130</u>	<u>1299.900</u>	<u>11.780</u>	66.570	<u>1454.400</u>	1.2%	0.594	0.178	0.075	253.300
%RSD		<u>0.492</u>	<u>0.559</u>	<u>0.881</u>	0.202	<u>1.268</u>	1.4	3.144	4.442	2.211	12.980
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:27:44	4951.000	46.590	<u>15318.000</u>	4923.000	0.286	1.397	26.520	2.522	1.608	10.080
2	22:28:11	4933.000	46.050	<u>15246.000</u>	4963.000	0.330	1.346	27.250	2.363	1.679	10.000
3	22:28:38	4857.000	46.320	<u>15246.000</u>	5086.000	0.301	1.477	29.390	2.438	1.577	9.204
X		4914.000	46.320	<u>15270.000</u>	4991.000	0.306	1.406	27.720	2.441	1.621	9.762
S		49.860	0.268	<u>141.330</u>	85.190	0.023	0.066	1.492	0.080	0.052	0.484
%RSD		1.015	0.579	<u>0.784</u>	1.707	7.441	4.676	5.383	3.273	3.218	4.960
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:27:44	9.397	9.796	12.860	-0.002	21.130	24.370	0.354	0.058	2.421	181.300
2	22:28:11	9.356	9.554	12.760	-0.281	23.490	24.890	-0.076	-0.125	5.466	180.400
3	22:28:38	9.217	9.270	13.080	0.198	21.350	25.940	-1.782	-0.473	2.122	183.600
X		9.323	9.540	12.900	-0.028	21.990	25.070	-0.501	-0.180	3.336	181.800
S		0.094	0.264	0.163	0.241	1.306	0.798	1.130	0.270	1.850	1.680
%RSD		1.010	2.762	1.262	845.800	5.938	3.184	225.300	149.900	55.470	0.924
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:27:44	80.0%	0.365	0.408	0.366	3.722	0.014	0.014	0.045	0.026	78.5%
2	22:28:11	81.2%	0.472	0.585	0.398	3.690	0.016	0.014	0.018	0.036	79.8%
3	22:28:38	79.5%	0.432	0.468	0.401	5.192	0.011	0.015	0.049	0.020	80.2%
X		80.2%	0.423	0.487	0.388	4.202	0.014	0.014	0.037	0.027	79.5%
S		0.8%	0.054	0.090	0.019	0.858	0.003	0.001	0.017	0.008	0.9%
%RSD		1.0	12.730	18.500	4.949	20.420	18.420	4.398	45.240	29.970	1.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:27:44	0.116	0.136	0.342	0.383	10.880	11.030	85.4%	0.011	0.006	15.950
2	22:28:11	0.164	0.156	0.299	0.426	11.330	10.910	86.1%	0.006	0.012	16.420
3	22:28:38	0.153	0.198	0.299	0.321	10.430	10.840	87.2%	0.011	0.008	16.420
X		0.145	0.163	0.313	0.377	10.880	10.930	86.3%	0.009	0.009	16.260
S		0.025	0.032	0.025	0.053	0.446	0.097	0.9%	0.003	0.003	0.272
%RSD		17.250	19.500	8.019	13.980	4.101	0.886	1.0	33.080	33.840	1.671
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	22:27:44	14.870	15.240	95.5%							
2	22:28:11	15.890	15.680	95.5%							
3	22:28:38	15.270	15.660	95.8%							
X		15.340	15.530	95.6%							
S		0.516	0.246	0.2%							
%RSD		3.363	1.584	0.2							

VJ17020-016

10/26/2020 22:33:07

User Pre-dilution: 1.000

user file location: 12000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:33:35	84.0%	0.001	1.010	0.872	17.620	45.480	2.786	2.566	2.869	2.338
2	22:34:02	84.0%	0.028	0.685	0.826	15.080	48.290	2.721	2.503	2.696	2.251
3	22:34:29	85.0%	-0.007	0.491	0.901	3.389	47.860	3.097	2.866	3.394	2.151
X		84.3%	0.007	0.729	0.866	12.030	47.210	2.868	2.645	2.986	2.247
S		0.6%	0.018	0.262	0.038	7.589	1.515	0.201	0.194	0.363	0.094
%RSD		0.7	247.000	35.980	4.369	63.090	3.210	7.003	7.323	12.170	4.170
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:33:35	-94.000	58820.000	-12.080	10.790	-21.500	86.4%	0.074	-0.278	0.382	3516.000
2	22:34:02	-93.300	59460.000	-12.710	5.258	-21.700	87.1%	0.116	0.101	0.286	3335.000
3	22:34:29	-92.240	58720.000	-11.420	8.540	-22.170	86.9%	0.073	-0.164	0.343	3411.000
X		-93.180	59000.000	-12.070	8.195	-21.790	86.8%	0.088	-0.114	0.337	3421.000
S		0.887	401.200	0.641	2.780	0.345	0.4%	0.025	0.194	0.049	90.930
%RSD		0.952	0.680	5.314	33.930	1.582	0.4	27.920	171.000	14.430	2.658
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:33:35	7.041	0.086	-0.971	7.641	-0.004	0.133	20.240	1.295	0.281	0.509
2	22:34:02	6.171	0.073	-0.491	7.185	-0.007	0.155	21.590	1.268	0.308	0.352
3	22:34:29	6.452	0.084	-2.421	6.898	-0.004	0.185	21.690	1.204	0.372	0.458
X		6.555	0.081	-1.294	7.241	-0.005	0.158	21.170	1.256	0.320	0.440
S		0.444	0.007	1.005	0.375	0.001	0.026	0.809	0.047	0.047	0.080
%RSD		6.780	8.433	77.630	5.177	29.840	16.700	3.819	3.716	14.580	18.270
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:33:35	0.710	0.514	0.012	-0.234	11.250	14.010	0.209	-0.049	5.308	0.045
2	22:34:02	0.306	0.510	0.152	0.179	12.330	14.680	0.193	0.014	2.163	0.043
3	22:34:29	0.789	0.513	-0.722	0.647	12.910	12.720	-0.835	-0.253	2.549	0.047
X		0.602	0.512	-0.186	0.197	12.160	13.800	-0.145	-0.096	3.340	0.045
S		0.259	0.002	0.469	0.441	0.842	0.997	0.598	0.140	1.715	0.002
%RSD		43.020	0.465	252.200	223.400	6.920	7.221	413.800	145.500	51.350	5.075
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:33:35	82.4%	0.013	0.012	0.046	-0.826	-0.000	0.002	0.009	0.002	80.8%
2	22:34:02	82.6%	0.039	0.040	0.033	-1.245	-0.000	-0.000	-0.002	0.002	81.8%
3	22:34:29	82.2%	0.071	0.054	0.043	-1.041	-0.001	0.001	0.003	-0.000	82.4%
X		82.4%	0.041	0.036	0.041	-1.037	-0.001	0.001	0.004	0.001	81.6%
S		0.2%	0.029	0.021	0.007	0.209	0.001	0.001	0.005	0.001	0.8%
%RSD		0.2	70.370	59.970	17.240	20.200	137.400	111.100	143.700	101.500	1.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:33:35	0.049	0.052	0.057	0.049	0.106	0.140	86.1%	0.001	0.002	0.001
2	22:34:02	0.034	0.071	0.053	0.048	0.126	0.115	87.9%	0.000	0.000	0.011
3	22:34:29	0.040	0.064	0.061	0.042	0.111	0.124	87.8%	0.004	0.003	0.007
X		0.041	0.062	0.057	0.047	0.115	0.126	87.2%	0.002	0.002	0.006
S		0.008	0.010	0.004	0.004	0.010	0.012	1.0%	0.002	0.001	0.005
%RSD		18.740	15.650	7.278	8.828	9.107	9.768	1.2	88.700	73.390	73.720
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	22:33:35	0.005	0.004	95.2%							
2	22:34:02	0.004	0.007	95.9%							
3	22:34:29	0.005	0.006	97.0%							
X		0.005	0.006	96.0%							
S		0.001	0.002	0.9%							
%RSD		18.480	34.070	0.9							

VQ70986-001 10/26/2020 22:38:58 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

User File Location: 12000											
Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:25	84.6%	0.001	1.357	1.641	12.590	39.410	1.957	2.180	1.751	1.630
2	22:39:52	85.6%	-0.023	1.797	1.356	23.400	40.150	1.943	1.904	1.632	1.747
3	22:40:19	84.1%	-0.007	0.863	1.387	19.510	39.840	1.960	1.779	1.836	1.782
X		84.8%	-0.010	1.339	1.461	18.500	39.800	1.953	1.954	1.739	1.720
S		0.7%	0.012	0.467	0.156	5.475	0.368	0.009	0.205	0.102	0.080
%RSD		0.9	128.000	34.880	10.700	29.600	0.924	0.465	10.480	5.872	4.635
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:25	-95.600	54940.000	-13.640	4.067	-28.570	88.8%	0.092	0.165	0.293	3292.000
2	22:39:52	-97.110	54090.000	-13.290	4.010	-26.350	89.7%	0.048	0.135	0.250	3133.000
3	22:40:19	-96.070	54720.000	-15.420	-0.194	-24.570	88.6%	0.050	-0.262	0.218	3260.000
X		-96.260	54580.000	-14.120	2.627	-26.500	89.0%	0.063	0.013	0.254	3228.000
S		0.772	440.000	1.140	2.444	2.007	0.6%	0.025	0.238	0.038	84.300
%RSD		0.802	0.806	8.075	93.020	7.576	0.7	39.100	1888.000	14.840	2.611
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:25	14.620	0.026	1.357	9.728	-0.005	0.192	21.640	0.829	0.081	0.476
2	22:39:52	14.390	0.036	1.023	7.528	-0.004	0.178	21.200	0.796	0.093	0.475
3	22:40:19	15.660	0.026	0.982	9.545	-0.008	0.163	19.340	0.850	0.049	0.558
X		14.890	0.030	1.120	8.933	-0.006	0.178	20.730	0.825	0.074	0.503
S		0.676	0.006	0.206	1.220	0.002	0.014	1.220	0.027	0.023	0.048
%RSD		4.540	19.080	18.350	13.660	31.770	8.064	5.884	3.296	30.860	9.520
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:25	0.581	0.481	0.162	-0.234	10.960	13.760	0.578	0.105	2.222	0.007
2	22:39:52	0.775	0.632	-0.136	0.115	12.160	11.670	0.226	-0.020	2.920	0.009
3	22:40:19	0.180	0.517	-0.038	-0.325	10.990	13.510	-2.615	-0.688	3.147	0.009
X		0.512	0.543	-0.004	-0.148	11.370	12.980	-0.604	-0.201	2.763	0.009
S		0.303	0.079	0.152	0.232	0.684	1.143	1.751	0.426	0.482	0.001
%RSD		59.220	14.510	3786.000	157.200	6.014	8.806	290.100	212.000	17.440	11.310
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:25	81.7%	0.063	0.027	0.020	-0.830	-0.000	-0.000	-0.001	0.001	81.4%
2	22:39:52	81.6%	0.040	0.020	0.066	-0.634	-0.001	-0.001	-0.002	0.003	83.2%
3	22:40:19	83.0%	0.101	0.047	0.061	-0.822	0.002	-0.000	0.003	-0.002	82.2%
X		82.1%	0.068	0.031	0.049	-0.762	0.000	-0.001	0.000	0.001	82.3%
S		0.8%	0.031	0.014	0.025	0.111	0.002	0.001	0.003	0.002	0.9%
%RSD		0.9	45.060	44.530	51.340	14.550	643.600	136.200	2657.000	345.400	1.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:25	0.041	0.017	0.060	0.057	0.006	-0.011	86.3%	0.000	0.001	0.008
2	22:39:52	0.014	0.030	0.052	0.067	-0.001	-0.002	87.9%	0.003	0.002	0.007
3	22:40:19	0.026	0.046	0.075	0.089	-0.009	0.006	88.5%	0.000	0.000	0.003
X		0.027	0.031	0.062	0.071	-0.001	-0.002	87.6%	0.001	0.001	0.006
S		0.014	0.015	0.012	0.016	0.008	0.009	1.1%	0.001	0.001	0.003
%RSD		51.000	47.830	18.520	22.810	614.200	358.000	1.3	112.800	77.640	46.670
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	22:39:25	0.008	0.004	99.0%							
2	22:39:52	0.006	0.004	97.7%							
3	22:40:19	-0.002	0.002	97.3%							
X		0.004	0.003	98.0%							
S		0.006	0.001	0.9%							
%RSD		138.400	34.240	0.9							

VQ70986-002 10/26/2020 22:44:49 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:45:16	83.3%	100.200	107.200	111.100	38.800	1062.000	1161.000	1112.000	1104.000	108.200
2	22:45:43	84.7%	104.100	111.100	107.600	33.990	1037.000	1117.000	1124.000	1059.000	108.800
3	22:46:10	83.4%	102.800	107.100	107.400	21.340	1055.000	1145.000	1065.000	1084.000	102.600
X		83.8%	102.368%	108.500	108.700	31.370	105.131%	1141.000	1100.000	108.231%	106.532%
S		0.8%	n/a	2.284	2.100	9.018	n/a	21.960	31.310	n/a	n/a
%RSD		1.0	1.949	2.106	1.931	28.740	1.261	1.924	2.846	2.084	3.175
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:45:16	1079.000	55910.000	868.100	1203.000	1064.000	85.0%	108.300	109.700	111.200	5322.000
2	22:45:43	1049.000	55110.000	855.700	1086.000	1039.000	85.8%	102.900	106.100	107.900	4512.000
3	22:46:10	1014.000	53440.000	862.800	1142.000	1030.000	85.9%	104.100	108.100	105.900	5463.000
X		1047.000	54820.000	86.217%	1144.000	104.422%	85.6%	105.091%	107.963%	108.316%	5099.000
S		32.870	1264.000	n/a	58.650	n/a	0.5%	n/a	n/a	n/a	513.300
%RSD		3.139	2.305	0.722	5.129	1.715	0.6	2.697	1.648	2.480	10.070
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:45:16	1218.000	110.000	1244.000	1119.000	108.400	111.400	132.400	110.700	112.100	104.100
2	22:45:43	1172.000	109.100	1217.000	1096.000	106.600	105.600	121.200	101.800	107.900	101.500
3	22:46:10	1163.000	110.400	1189.000	1114.000	105.600	108.500	119.600	106.200	109.900	103.600
X		1185.000	109.820%	1217.000	110.970%	106.856%	108.497%	124.400	106.259%	109.972%	103.065%
S		29.640	n/a	27.770	n/a	n/a	n/a	6.975	n/a	n/a	n/a
%RSD		2.502	0.625	2.282	1.071	1.298	2.696	5.606	4.196	1.935	1.335
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:45:16	102.400	99.910	98.370	96.510	12.210	15.150	397.600	94.320	2.031	101.100
2	22:45:43	103.900	98.120	97.700	93.880	14.170	13.860	404.800	96.530	3.411	99.930
3	22:46:10	100.900	98.860	96.500	97.400	12.260	13.620	414.800	99.470	2.432	101.900
X		102.400	98.960	97.523%	95.930	12.880	14.210	405.800	96.772%	2.625	101.000
S		1.510	0.902	n/a	1.828	1.118	0.823	8.616	n/a	0.710	0.980
%RSD		1.475	0.911	0.972	1.905	8.681	5.794	2.123	2.667	27.050	0.970
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:45:16	80.4%	106.600	106.200	106.100	102.100	100.900	101.100	98.370	98.230	81.1%
2	22:45:43	80.7%	107.100	107.000	103.900	105.500	101.000	100.500	99.330	99.360	81.0%
3	22:46:10	79.8%	110.700	107.600	107.000	100.900	102.600	103.000	101.700	100.800	79.8%
X		80.3%	108.100	106.900	105.700	102.800	101.509%	101.500	99.790	99.452%	80.6%
S		0.5%	2.233	0.715	1.614	2.420	n/a	1.340	1.700	n/a	0.7%
%RSD		0.6	2.066	0.669	1.527	2.353	0.963	1.320	1.703	1.280	0.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:45:16	101.300	100.800	97.170	104.900	97.150	100.500	86.9%	98.340	97.890	100.900
2	22:45:43	102.000	101.800	97.950	106.500	96.640	100.800	88.3%	99.160	98.230	101.700
3	22:46:10	103.100	103.100	100.200	109.300	96.680	100.700	88.0%	101.100	100.000	102.900
X		102.100	101.917%	98.450	106.894%	96.830	100.669%	87.7%	99.550	98.721%	101.800
S		0.903	n/a	1.595	n/a	0.284	n/a	0.8%	1.445	n/a	1.025
%RSD		0.884	1.128	1.620	2.118	0.293	0.164	0.9	1.452	1.165	1.007
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	22:45:16	100.300	99.430	96.9%							
2	22:45:43	102.200	100.900	96.6%							
3	22:46:10	102.700	100.900	97.3%							
X		101.700	100.418%	97.0%							
S		1.244	n/a	0.3%							
%RSD		1.223	0.853	0.3							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:51:05	79.8%	0.013	28.470	29.150	1.911	67280.000	3133.000	3053.000	3212.000	179.500
2	22:51:32	81.7%	-0.009	28.490	28.040	-8.578	68010.000	3171.000	3107.000	3200.000	179.100
3	22:51:59	81.8%	0.022	28.970	29.660	-8.098	67930.000	3258.000	3074.000	3164.000	176.200
X		81.1%	0.009	28.640	28.950	-4.922	67740.000	3187.000	3078.000	3192.000	178.300
S		1.2%	0.016	0.283	0.827	5.922	398.500	64.250	27.000	25.220	1.819
%RSD		1.4	186.100	0.988	2.856	120.300	0.588	2.016	0.877	0.790	1.020
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:51:05	8674.000	51960.000	3749.000	14580.000	14590.000	85.6%	6.402	0.133	2.441	10750.000
2	22:51:32	8455.000	52550.000	3697.000	14960.000	14670.000	84.9%	5.389	0.580	2.612	11800.000
3	22:51:59	8616.000	52170.000	3727.000	14870.000	14710.000	86.4%	5.533	0.309	2.564	12390.000
X		8582.000	52230.000	3724.000	14810.000	14660.000	85.7%	5.775	0.341	2.539	11650.000
S		113.400	297.800	26.130	199.800	61.660	0.8%	0.548	0.225	0.088	828.500
%RSD		1.321	0.570	0.702	1.349	0.421	0.9	9.496	66.070	3.466	7.114
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:51:05	231.200	14.490	221.900	271.800	0.109	1.698	24.110	10.510	10.510	31.370
2	22:51:32	223.900	14.740	253.700	269.600	0.118	1.686	22.910	10.380	10.510	31.800
3	22:51:59	216.500	14.410	231.500	256.100	0.130	1.555	22.000	10.460	10.400	32.430
X		223.900	14.550	235.700	265.800	0.119	1.646	23.010	10.450	10.470	31.870
S		7.384	0.173	16.300	8.473	0.011	0.079	1.059	0.065	0.061	0.531
%RSD		3.298	1.187	6.914	3.187	9.069	4.828	4.605	0.624	0.580	1.665
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:51:05	30.770	29.040	0.244	-0.122	37.670	40.170	2.247	0.494	3.258	71.330
2	22:51:32	31.820	30.880	-0.033	-0.510	37.560	41.420	-1.098	-0.300	2.747	70.840
3	22:51:59	30.740	30.100	-0.253	-0.211	39.190	42.380	-1.788	-0.448	1.752	72.120
X		31.110	30.000	-0.014	-0.281	38.140	41.320	-0.213	-0.085	2.586	71.430
S		0.616	0.921	0.249	0.203	0.912	1.107	2.158	0.507	0.766	0.646
%RSD		1.979	3.070	1807.000	72.370	2.392	2.678	1013.000	598.000	29.620	0.905
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:51:05	78.8%	1.089	1.083	0.992	1.083	0.018	0.013	0.011	0.025	77.7%
2	22:51:32	80.4%	1.094	0.968	0.887	1.672	0.022	0.006	0.038	0.008	78.0%
3	22:51:59	79.3%	1.058	0.996	1.026	1.001	0.014	0.007	0.027	0.011	77.7%
X		79.5%	1.081	1.016	0.968	1.252	0.018	0.009	0.025	0.015	77.8%
S		0.8%	0.020	0.060	0.073	0.366	0.004	0.004	0.013	0.009	0.2%
%RSD		1.0	1.805	5.915	7.510	29.240	21.280	43.720	53.500	62.340	0.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:51:05	0.368	0.500	0.425	0.415	31.720	31.830	84.0%	0.021	0.016	0.727
2	22:51:32	0.397	0.568	0.372	0.381	30.770	32.010	85.7%	0.035	0.029	0.679
3	22:51:59	0.375	0.545	0.367	0.421	30.640	32.850	87.2%	0.025	0.023	0.764
X		0.380	0.538	0.388	0.406	31.040	32.230	85.6%	0.027	0.023	0.723
S		0.015	0.034	0.032	0.022	0.592	0.547	1.6%	0.007	0.006	0.043
%RSD		3.947	6.382	8.281	5.390	1.908	1.698	1.9	24.820	27.490	5.901
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	22:51:05	0.724	0.713	88.3%							
2	22:51:32	0.726	0.705	90.8%							
3	22:51:59	0.638	0.712	91.6%							
X		0.696	0.710	90.2%							
S		0.050	0.004	1.7%							
%RSD		7.225	0.590	1.9							

CCV MW15278 10/26/2020 22:56:29 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:56	77.8%	293.500	308.900	322.800	15.630	61230.000	65320.000	66610.000	64010.000	309.100
2	22:57:23	76.7%	295.500	302.300	328.000	5.338	62000.000	64850.000	66010.000	62970.000	304.800
3	22:57:50	77.1%	307.400	314.100	321.000	19.280	61670.000	66670.000	68400.000	62840.000	298.700
X		77.2%	99.598%	102.810%	107.977%	13.420	102.724%	65610.000	67010.000	105.457%	101.399%
S		0.5%	n/a	n/a	n/a	7.229	n/a	943.300	1241.000	n/a	n/a
%RSD		0.7	2.513	1.919	1.133	53.880	0.630	1.438	1.852	1.012	1.716
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:56	3672.000	239.200	53350.000	61080.000	65460.000	84.7%	309.400	316.200	310.500	2785.000
2	22:57:23	3499.000	232.300	53470.000	60560.000	63910.000	85.1%	309.400	322.100	307.800	464.900
3	22:57:50	3536.000	244.500	54400.000	61200.000	65520.000	83.8%	307.700	321.500	311.300	2036.000
X		3569.000	238.600	89.563%	60950.000	108.276%	84.5%	102.940%	106.647%	103.292%	1762.000
S		90.910	6.100	n/a	341.200	n/a	0.7%	n/a	n/a	n/a	1184.000
%RSD		2.547	2.556	1.066	0.560	1.403	0.8	0.302	1.006	0.605	67.200
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:56	68980.000	315.600	69270.000	66550.000	309.500	303.700	327.600	291.500	327.200	316.400
2	22:57:23	67000.000	309.600	66070.000	64540.000	290.000	297.300	325.200	281.100	310.600	304.600
3	22:57:50	66940.000	318.400	70320.000	67610.000	308.800	305.200	327.800	290.300	305.300	310.800
X		67640.000	104.849%	68550.000	110.394%	100.922%	100.691%	326.900	287.600	104.784%	103.537%
S		1164.000	n/a	2211.000	n/a	n/a	n/a	1.464	5.699	n/a	n/a
%RSD		1.721	1.420	3.225	2.356	3.662	1.388	0.448	1.982	3.632	1.903
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:56	303.000	286.400	285.000	296.600	7.369	6.029	1251.000	312.500	-0.730	295.900
2	22:57:23	292.800	288.600	275.800	296.900	7.104	6.451	1208.000	296.700	-0.295	302.700
3	22:57:50	295.500	290.500	288.600	297.200	7.464	4.970	1255.000	306.400	-0.671	295.900
X		297.100	288.500	94.380%	296.900	7.313	5.816	1238.000	101.734%	-0.566	99.382%
S		5.292	2.083	n/a	0.319	0.187	0.763	25.890	n/a	0.236	n/a
%RSD		1.781	0.722	2.323	0.107	2.552	13.120	2.091	2.614	41.720	1.310
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:56	79.1%	304.800	304.400	297.000	293.500	283.400	285.000	290.600	290.400	75.9%
2	22:57:23	77.9%	312.000	310.000	308.300	291.100	287.600	287.400	292.700	291.200	76.3%
3	22:57:50	78.3%	315.500	314.500	309.400	287.200	282.200	282.400	293.300	294.400	76.9%
X		78.4%	103.583%	103.206%	304.900	290.600	94.795%	284.900	292.200	97.346%	76.4%
S		0.6%	n/a	n/a	6.863	3.163	n/a	2.523	1.388	n/a	0.5%
%RSD		0.8	1.760	1.647	2.251	1.088	0.991	0.885	0.475	0.726	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:56	300.100	302.000	293.800	318.100	282.500	296.700	83.8%	301.600	302.600	302.300
2	22:57:23	301.200	299.500	292.300	319.600	285.400	298.500	84.6%	298.500	297.300	297.300
3	22:57:50	299.600	302.300	291.400	319.900	282.900	294.700	85.8%	300.100	301.100	301.100
X		100.101%	100.425%	292.500	106.407%	94.528%	98.878%	84.7%	300.100	100.118%	100.076%
S		n/a	n/a	1.221	n/a	n/a	n/a	1.0%	1.524	n/a	n/a
%RSD		0.281	0.505	0.417	0.309	0.547	0.641	1.2	0.508	0.901	0.866
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	22:56:56	300.900	301.600	86.9%							
2	22:57:23	298.700	298.600	88.6%							
3	22:57:50	301.900	299.600	89.2%							
X		100.178%	99.976%	88.2%							
S		n/a	n/a	1.2%							
%RSD		0.550	0.501	1.4							

CCB IM10195-01 10/26/2020 23:02:20 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:02:47	88.6%	0.071	0.652	0.974	29.430	33.160	3.893	4.047	3.283	0.054
2	23:03:14	88.8%	-0.001	0.513	0.574	18.880	33.890	4.337	4.133	3.855	0.046
3	23:03:41	91.1%	0.006	0.683	0.728	9.574	32.680	4.163	4.209	3.964	0.047
X		89.5%	0.025	0.616	0.758	19.290	33.240	4.131	4.130	3.701	0.049
S		1.4%	0.039	0.091	0.202	9.934	0.611	0.224	0.081	0.366	0.004
%RSD		1.6	156.000	14.750	26.590	51.490	1.839	5.426	1.973	9.883	8.568
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:02:47	-101.000	134.500	-6.388	2.567	-30.690	98.8%	0.001	0.014	0.033	4.559
2	23:03:14	-98.650	152.800	-6.544	4.552	-30.470	97.6%	-0.018	0.022	0.018	3.195
3	23:03:41	-99.930	149.300	-7.327	2.646	-28.800	96.8%	0.079	0.033	0.008	0.702
X		-99.840	145.600	-6.753	3.255	-29.990	97.8%	0.021	0.023	0.020	2.819
S		1.155	9.709	0.503	1.124	1.034	1.0%	0.052	0.010	0.013	1.956
%RSD		1.157	6.671	7.453	34.520	3.449	1.0	249.600	41.030	64.170	69.390
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:02:47	3.041	0.011	0.248	12.850	0.010	0.006	22.490	0.858	0.046	0.071
2	23:03:14	5.586	0.010	1.005	15.400	0.009	0.033	20.690	0.896	0.151	0.020
3	23:03:41	4.035	0.010	1.477	14.540	0.011	0.023	21.800	0.892	0.081	-0.032
X		4.221	0.010	0.910	14.270	0.010	0.021	21.660	0.882	0.092	0.020
S		1.283	0.001	0.620	1.298	0.001	0.014	0.906	0.021	0.053	0.051
%RSD		30.390	7.876	68.150	9.095	12.290	66.790	4.181	2.364	57.610	259.700
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:02:47	0.090	0.020	-0.013	0.138	5.580	5.315	-0.224	0.013	-1.675	0.015
2	23:03:14	-0.018	-0.106	0.227	0.216	5.449	3.855	2.916	0.758	-0.457	0.014
3	23:03:41	-0.090	0.011	0.112	-0.270	5.338	5.351	1.604	0.429	-1.119	0.017
X		-0.006	-0.025	0.109	0.028	5.456	4.840	1.432	0.400	-1.084	0.016
S		0.091	0.070	0.120	0.261	0.121	0.854	1.577	0.373	0.610	0.002
%RSD		1464.000	285.800	110.600	936.300	2.220	17.640	110.100	93.340	56.300	9.658
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:02:47	89.1%	0.661	0.626	0.633	-0.272	0.021	0.019	0.010	0.015	88.5%
2	23:03:14	90.2%	0.729	0.744	0.670	-0.131	0.019	0.020	0.010	0.020	88.7%
3	23:03:41	91.0%	0.679	0.612	0.643	0.020	0.016	0.018	0.014	0.011	90.7%
X		90.1%	0.690	0.661	0.648	-0.128	0.019	0.019	0.012	0.015	89.3%
S		1.0%	0.035	0.073	0.019	0.146	0.002	0.001	0.002	0.005	1.2%
%RSD		1.1	5.111	11.000	2.993	114.000	13.170	7.151	21.230	29.810	1.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:02:47	0.088	0.118	0.550	0.564	-0.009	0.001	90.6%	0.021	0.016	0.012
2	23:03:14	0.106	0.149	0.547	0.646	0.005	0.021	92.8%	0.024	0.016	0.027
3	23:03:41	0.069	0.120	0.554	0.593	-0.002	0.005	93.8%	0.017	0.017	0.025
X		0.088	0.129	0.551	0.601	-0.002	0.009	92.4%	0.021	0.016	0.021
S		0.019	0.018	0.004	0.042	0.007	0.011	1.6%	0.003	0.001	0.008
%RSD		21.480	13.570	0.643	6.921	405.000	116.400	1.8	15.760	3.932	38.190
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	23:02:47	0.014	0.012	95.7%							
2	23:03:14	0.027	0.023	97.7%							
3	23:03:41	0.020	0.018	98.2%							
X		0.020	0.018	97.2%							
S		0.006	0.005	1.3%							
%RSD		31.880	28.970	1.4							

VQ70817-001 10/26/2020 23:08:11 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:08:38	87.5%	0.024	0.391	1.059	5.933	36.610	1.995	1.692	1.628	1.533
2	23:09:05	87.2%	0.015	1.195	0.946	9.058	36.650	2.403	2.243	2.120	1.673
3	23:09:32	84.2%	-0.000	0.791	0.885	9.066	37.410	2.293	2.444	2.240	1.681
X		86.3%	0.013	0.792	0.963	8.019	36.890	2.230	2.127	1.996	1.629
S		1.8%	0.012	0.402	0.088	1.807	0.453	0.211	0.389	0.324	0.083
%RSD		2.1	94.140	50.780	9.157	22.530	1.227	9.476	18.310	16.250	5.122
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:08:38	-96.360	54130.000	-4.561	4.905	-30.400	92.1%	0.086	-0.095	0.138	1984.000
2	23:09:05	-96.480	52980.000	-9.710	2.892	-29.460	91.1%	0.005	0.209	0.157	1815.000
3	23:09:32	-95.320	54550.000	-8.359	1.903	-28.870	89.7%	-0.015	-0.200	0.161	2087.000
X		-96.050	53890.000	-7.543	3.233	-29.570	90.9%	0.026	-0.029	0.152	1962.000
S		0.638	808.100	2.670	1.529	0.774	1.2%	0.053	0.212	0.012	137.400
%RSD		0.664	1.500	35.390	47.300	2.618	1.3	207.200	742.700	8.047	7.003
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:08:38	10.710	0.032	-3.292	7.686	-0.008	0.116	17.470	0.830	0.087	0.582
2	23:09:05	11.140	0.049	-4.314	5.146	-0.004	0.056	17.120	0.796	0.096	0.403
3	23:09:32	11.160	0.041	-5.712	6.067	-0.005	0.144	17.080	0.731	0.032	0.505
X		11.000	0.041	-4.440	6.300	-0.006	0.105	17.220	0.786	0.071	0.496
S		0.254	0.008	1.215	1.285	0.002	0.045	0.218	0.050	0.035	0.090
%RSD		2.308	20.860	27.370	20.410	31.320	42.850	1.266	6.350	48.790	18.080
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:08:38	0.663	0.501	-0.271	-0.500	10.580	8.666	-2.659	-0.638	0.618	0.008
2	23:09:05	0.696	0.438	-0.226	-0.386	9.146	9.766	-2.694	-0.705	3.177	0.017
3	23:09:32	0.516	0.406	-0.191	-0.844	9.496	8.773	-1.657	-0.465	3.594	0.005
X		0.625	0.448	-0.229	-0.577	9.741	9.068	-2.337	-0.603	2.463	0.010
S		0.096	0.048	0.040	0.238	0.748	0.606	0.589	0.124	1.611	0.006
%RSD		15.330	10.800	17.570	41.340	7.681	6.684	25.210	20.560	65.430	59.940
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:08:38	84.2%	0.263	0.222	0.268	-1.409	0.008	0.002	-0.002	0.003	84.1%
2	23:09:05	85.8%	0.326	0.291	0.308	-0.260	0.006	0.003	-0.003	0.002	84.5%
3	23:09:32	85.2%	0.260	0.253	0.262	-0.805	0.005	0.003	-0.002	0.003	84.0%
X		85.1%	0.283	0.255	0.279	-0.825	0.006	0.003	-0.002	0.003	84.2%
S		0.8%	0.037	0.034	0.025	0.575	0.002	0.001	0.000	0.000	0.3%
%RSD		1.0	13.100	13.450	9.102	69.670	29.440	22.510	4.017	10.520	0.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:08:38	0.068	0.092	0.267	0.274	0.006	0.002	88.3%	0.004	0.002	0.006
2	23:09:05	0.084	0.109	0.305	0.288	0.021	0.006	88.8%	0.002	0.005	0.001
3	23:09:32	0.082	0.092	0.323	0.322	-0.002	-0.003	90.7%	0.003	0.003	-0.000
X		0.078	0.098	0.298	0.294	0.008	0.002	89.3%	0.003	0.003	0.003
S		0.009	0.010	0.029	0.025	0.011	0.004	1.3%	0.001	0.001	0.003
%RSD		11.260	9.980	9.654	8.401	134.700	249.600	1.4	30.410	37.940	133.400
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	23:08:38	-0.004	0.003	101.0%							
2	23:09:05	0.003	0.004	101.9%							
3	23:09:32	0.006	0.003	100.9%							
X		0.002	0.003	101.3%							
S		0.005	0.000	0.6%							
%RSD		275.600	14.230	0.6							

VQ70817-002 10/26/2020 23:14:02 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:14:28	85.5%	98.060	104.700	110.600	15.970	1051.000	1151.000	1106.000	1070.000	108.600
2	23:14:55	86.7%	98.370	102.200	111.100	4.823	1042.000	1092.000	1057.000	1027.000	106.300
3	23:15:22	86.0%	104.800	105.400	112.100	23.700	1072.000	1133.000	1120.000	1065.000	106.800
X		86.1%	100.400%	104.100	111.300	14.830	105.515%	1125.000	1094.000	105.387%	107.253%
S		0.6%	n/a	1.683	0.739	9.492	1 n/a	30.180	33.290	n/a	n/a
%RSD		0.7	3.776	1.617	0.664	63.990	1.476	2.682	3.043	2.205	1.141
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:14:28	1042.000	53130.000	886.700	1122.000	1034.000	91.1%	100.200	105.800	104.500	5349.000
2	23:14:55	1001.000	52640.000	868.900	1140.000	999.500	91.6%	106.100	103.700	101.700	4956.000
3	23:15:22	1011.000	54040.000	878.200	1129.000	1032.000	89.4%	102.800	104.600	105.700	5269.000
X		1018.000	53270.000	87.794%	1130.000	102.163%	90.7%	103.054%	104.694%	103.963%	5192.000
S		21.130	715.300	n/a	9.469	n/a	1.2%	n/a	n/a	n/a	207.500
%RSD		2.076	1.343	1.015	0.838	1.878	1.3	2.876	0.973	1.988	3.996
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:14:28	1149.000	108.200	1192.000	1076.000	104.500	105.000	117.400	103.000	113.200	104.100
2	23:14:55	1168.000	107.300	1159.000	1062.000	102.000	103.600	119.900	100.200	110.800	98.940
3	23:15:22	1137.000	106.400	1159.000	1100.000	103.400	103.200	123.300	99.430	110.500	101.700
X		1152.000	107.309%	1170.000	107.910%	103.314%	103.954%	120.200	100.870%	111.517%	101.601%
S		15.510	n/a	19.130	n/a	n/a	n/a	2.971	n/a	n/a	n/a
%RSD		1.347	0.869	1.635	1.777	1.212	0.925	2.472	1.874	1.296	2.562
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:14:28	101.200	96.370	95.360	94.290	7.659	10.090	402.700	96.470	3.769	99.580
2	23:14:55	100.900	96.400	94.000	92.210	8.284	10.210	399.800	95.380	0.624	101.600
3	23:15:22	98.930	97.130	95.680	95.130	9.686	9.366	413.300	99.550	2.070	100.400
X		100.300	96.630	95.012%	93.880	8.543	9.888	405.300	97.137%	2.154	100.500
S		1.209	0.430	n/a	1.501	1.038	0.456	7.106	n/a	1.574	1.004
%RSD		1.205	0.445	0.940	1.599	12.150	4.608	1.753	2.227	73.080	0.999
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:14:28	83.2%	107.400	104.400	105.000	102.900	98.900	99.810	96.530	97.800	83.5%
2	23:14:55	84.2%	105.900	105.000	103.700	94.700	99.150	96.980	97.240	97.250	84.8%
3	23:15:22	83.4%	105.700	104.700	104.100	99.370	101.300	101.100	99.420	98.870	83.0%
X		83.6%	106.300	104.700	104.300	98.970	99.771%	99.310	97.730	97.972%	83.8%
S		0.5%	0.922	0.306	0.678	4.093	n/a	2.120	1.504	n/a	0.9%
%RSD		0.6	0.867	0.292	0.650	4.136	1.302	2.135	1.539	0.842	1.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:14:28	100.600	101.200	98.370	104.100	97.470	98.630	88.6%	96.050	95.590	99.530
2	23:14:55	100.100	99.550	98.040	105.900	95.100	97.930	90.1%	97.240	96.630	100.600
3	23:15:22	101.400	102.500	99.860	109.200	96.070	98.770	90.6%	97.850	96.530	99.970
X		100.700	101.080%	98.760	106.417%	96.210	98.445%	89.8%	97.040	96.250%	100.000
S		0.633	n/a	0.974	n/a	1.195	n/a	1.0%	0.914	n/a	0.537
%RSD		0.629	1.465	0.986	2.442	1.242	0.456	1.1	0.942	0.598	0.537
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	23:14:28	99.560	98.060	99.2%							
2	23:14:55	99.100	99.170	99.9%							
3	23:15:22	100.000	99.020	100.0%							
X		99.560	98.750%	99.7%							
S		0.456	n/a	0.4%							
%RSD		0.458	0.606	0.4							

VJ21062-001 10/26/2020 23:19:53

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:19	80.4%	-0.014	32.370	34.960	-49.250	<u>45370.000</u>	379.900	379.900	439.800	149.800
2	23:20:46	81.1%	-0.014	32.580	33.250	-63.250	<u>45570.000</u>	366.300	378.100	438.100	149.500
3	23:21:13	82.0%	-0.020	31.280	34.310	-57.510	<u>45290.000</u>	379.000	367.300	443.900	146.100
X		81.1%	-0.016	32.080	34.170	-56.670	<u>45410.000</u>	375.100	375.100	440.600	148.500
S		0.8%	0.004	0.695	0.867	7.036	<u>141.500</u>	7.624	6.839	2.982	2.049
%RSD		1.0	23.170	2.166	2.536	12.420	<u>0.312</u>	2.033	1.823	0.677	1.380
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:19	850.100	<u>50100.000</u>	<u>3662.000</u>	9079.000	9008.000	85.7%	0.273	0.090	0.317	1647.000
2	23:20:46	835.900	<u>49280.000</u>	<u>3613.000</u>	9205.000	8994.000	85.3%	0.362	-0.044	0.274	1642.000
3	23:21:13	863.500	<u>47560.000</u>	<u>3671.000</u>	9209.000	9189.000	85.6%	0.185	0.169	0.218	1690.000
X		849.800	<u>48980.000</u>	<u>3649.000</u>	9164.000	9064.000	85.6%	0.273	0.072	0.269	1660.000
S		13.780	<u>1298.000</u>	<u>31.190</u>	74.390	108.900	0.2%	0.089	0.107	0.050	26.600
%RSD		1.622	<u>2.650</u>	<u>0.855</u>	0.812	1.202	0.3	32.410	150.000	18.440	1.602
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:19	1414.000	66.120	<u>1526.000</u>	1426.000	0.732	6.135	22.990	25.290	26.200	155.800
2	23:20:46	1416.000	64.900	<u>1518.000</u>	1416.000	0.770	6.202	24.430	24.120	24.820	150.100
3	23:21:13	1424.000	65.360	<u>1552.000</u>	1409.000	0.803	5.849	24.580	25.330	25.080	151.300
X		1418.000	65.460	<u>1532.000</u>	1417.000	0.768	6.062	24.000	24.910	25.370	152.400
S		5.088	0.616	<u>17.790</u>	8.312	0.035	0.188	0.877	0.684	0.734	3.007
%RSD		0.359	0.940	<u>1.161</u>	0.587	4.616	3.097	3.654	2.745	2.892	1.973
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:19	145.700	145.100	-0.220	-0.382	104.400	112.500	1.502	0.333	1.433	49.110
2	23:20:46	136.500	141.100	-0.168	-0.199	103.000	109.900	-2.193	-0.578	2.337	47.770
3	23:21:13	143.400	143.400	-0.510	0.433	110.200	112.000	-0.721	-0.257	3.503	48.200
X		141.900	143.200	-0.299	-0.049	105.900	111.500	-0.470	-0.168	2.424	48.360
S		4.760	2.009	0.184	0.428	3.785	1.358	1.860	0.462	1.038	0.685
%RSD		3.356	1.403	61.580	866.700	3.574	1.218	395.400	275.800	42.800	1.416
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:19	79.0%	0.324	0.283	0.269	1.576	0.080	0.107	0.092	0.097	78.7%
2	23:20:46	80.9%	0.253	0.311	0.245	1.356	0.093	0.106	0.075	0.084	80.2%
3	23:21:13	79.9%	0.325	0.215	0.270	-0.228	0.095	0.079	0.085	0.076	79.9%
X		79.9%	0.301	0.269	0.261	0.901	0.089	0.097	0.084	0.085	79.6%
S		1.0%	0.042	0.049	0.014	0.984	0.008	0.016	0.009	0.011	0.8%
%RSD		1.2	13.810	18.300	5.390	109.200	9.274	16.280	10.230	12.420	1.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:19	0.108	0.089	0.265	0.345	8.037	8.255	85.1%	0.035	0.027	1.680
2	23:20:46	0.096	0.112	0.282	0.324	8.044	8.311	87.2%	0.016	0.022	1.658
3	23:21:13	0.124	0.102	0.350	0.321	8.013	8.193	87.6%	0.015	0.021	1.722
X		0.110	0.101	0.299	0.330	8.032	8.253	86.7%	0.022	0.023	1.687
S		0.014	0.011	0.045	0.013	0.016	0.059	1.4%	0.012	0.003	0.033
%RSD		12.670	11.220	15.120	4.019	0.201	0.718	1.6	52.800	13.040	1.941
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	23:20:19	1.496	1.561	92.0%							
2	23:20:46	1.527	1.582	94.1%							
3	23:21:13	1.561	1.623	94.1%							
X		1.528	1.589	93.4%							
S		0.032		1.2%							
%RSD		2.118	1.993	1.3							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:11	73.4%	-0.015	89.830	98.780	909.600	<u>TM 456800.000</u>	<u>T 10500.000</u>	<u>T 10730.000</u>	<u>T 15250.000</u>	55.780
2	23:26:38	73.6%	-0.015	94.200	98.210	895.100	<u>TM 459600.000</u>	<u>T 10610.000</u>	<u>T 10840.000</u>	<u>T 15800.000</u>	55.590
3	23:27:05	75.0%	-0.020	90.740	97.550	863.000	<u>TM 463400.000</u>	<u>T 10740.000</u>	<u>T 11030.000</u>	<u>T 15280.000</u>	55.350
X		74.0%	-0.017	91.590	98.180	889.200	<u>TM 459900.000</u>	<u>T 10610.000</u>	<u>T 10870.000</u>	<u>T 15440.000</u>	55.570
S		0.8%	0.003	2.307	0.615	23.870	<u>TM 3285.000</u>	<u>T 119.600</u>	<u>T 148.400</u>	<u>T 310.700</u>	0.216
%RSD		1.1	15.260	2.518	0.626	2.684	<u>TM 0.714</u>	<u>T 1.127</u>	<u>T 1.365</u>	<u>T 2.012</u>	0.389
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:11	<u>T 7740.000</u>	<u>T 50220.000</u>	<u>TM 111200.000</u>	14970.000	14960.000	78.8%	10.900	0.999	3.464	1509.000
2	23:26:38	<u>T 7884.000</u>	<u>T 49710.000</u>	<u>TM 112500.000</u>	15330.000	15370.000	78.5%	12.040	0.961	3.388	1713.000
3	23:27:05	<u>T 7645.000</u>	<u>T 48930.000</u>	<u>TM 112400.000</u>	15150.000	15190.000	80.2%	11.300	1.112	3.306	1881.000
X		<u>T 7757.000</u>	<u>T 49620.000</u>	<u>TM 112000.000</u>	15150.000	15170.000	79.1%	11.410	1.024	3.386	1701.000
S		<u>T 120.400</u>	<u>T 650.100</u>	<u>TM 751.100</u>	178.800	202.300	0.9%	0.577	0.079	0.079	186.300
%RSD		<u>T 1.552</u>	<u>T 1.310</u>	<u>TM 0.670</u>	1.180	1.333	1.1	5.052	7.672	2.337	10.950
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:11	354.400	48.720	343.800	379.000	0.205	2.623	78.020	7.110	2.785	53.810
2	23:26:38	334.300	49.940	331.400	371.900	0.183	2.776	80.700	7.118	2.669	52.540
3	23:27:05	347.200	48.720	342.800	363.400	0.174	2.718	79.600	6.671	2.948	52.780
X		345.300	49.130	339.300	371.400	0.187	2.705	79.440	6.966	2.801	53.040
S		10.170	0.701	6.888	7.831	0.016	0.077	1.345	0.256	0.140	0.675
%RSD		2.946	1.427	2.030	2.108	8.444	2.854	1.694	3.675	5.001	1.273
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:11	45.580	48.070	0.730	2.173	174.800	179.800	2.429	0.379	10.240	95.770
2	23:26:38	47.720	47.460	0.833	3.276	177.400	186.600	-0.326	-0.278	8.278	97.090
3	23:27:05	46.460	48.620	0.129	3.415	182.000	184.600	-0.823	-0.460	10.980	94.040
X		46.590	48.050	0.564	2.955	178.100	183.600	0.427	-0.120	9.830	95.630
S		1.076	0.578	0.380	0.680	3.617	3.498	1.752	0.441	1.393	1.525
%RSD		2.309	1.202	67.480	23.020	2.032	1.905	410.400	369.400	14.180	1.595
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:11	73.1%	2.419	2.636	2.424	-0.639	0.007	0.000	0.077	0.086	70.5%
2	23:26:38	73.2%	2.351	2.445	2.440	-2.094	0.001	0.006	0.104	0.088	72.4%
3	23:27:05	75.0%	2.351	2.598	2.204	-1.063	0.007	0.010	0.114	0.105	73.5%
X		73.8%	2.374	2.559	2.356	-1.265	0.005	0.005	0.098	0.093	72.1%
S		1.1%	0.039	0.101	0.132	0.748	0.003	0.005	0.019	0.010	1.5%
%RSD		1.5	1.636	3.947	5.598	59.130	62.670	93.730	19.190	11.020	2.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:11	21.320	32.190	111.700	121.200	16.270	18.090	80.3%	0.004	0.008	0.375
2	23:26:38	21.950	31.010	110.600	120.500	17.660	17.750	82.1%	0.011	0.008	0.373
3	23:27:05	21.500	31.340	111.900	121.300	17.400	17.650	83.9%	0.008	0.010	0.389
X		21.590	31.510	111.400	121.000	17.110	17.830	82.1%	0.008	0.009	0.379
S		0.326	0.608	0.718	0.457	0.744	0.232	1.8%	0.004	0.001	0.009
%RSD		1.508	1.929	0.644	0.377	4.348	1.303	2.2	46.240	12.000	2.284
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	23:26:11	0.359	0.344	83.3%							
2	23:26:38	0.331	0.352	84.4%							
3	23:27:05	0.379	0.356	85.4%							
X		0.356	0.351	84.4%							
S		0.024	0.006	1.1%							
%RSD		6.739	1.833	1.3							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:32:04	75.4%	42.980	205.400	200.000	909.300	<u>TM 466800.000</u>	<u>11460.000</u>	<u>11810.000</u>	<u>16490.000</u>	155.600
2	23:32:30	76.9%	42.770	198.400	197.600	895.000	<u>TM 460400.000</u>	<u>11190.000</u>	<u>11560.000</u>	<u>16470.000</u>	149.400
3	23:32:57	75.3%	43.940	194.100	210.000	879.400	<u>TM 477200.000</u>	<u>11160.000</u>	<u>11640.000</u>	<u>16170.000</u>	155.300
X		75.9%	43.230	199.300	202.500	894.600	<u>TM 468100.000</u>	<u>11270.000</u>	<u>11670.000</u>	<u>16380.000</u>	153.400
S		0.9%	0.620	5.734	6.576	14.930	<u>TM 8513.000</u>	<u>166.000</u>	<u>127.500</u>	<u>177.600</u>	3.495
%RSD		1.2	1.434	2.877	3.247	1.669	<u>TM 1.819</u>	<u>1.473</u>	<u>1.093</u>	<u>1.084</u>	2.278
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:32:04	<u>8791.000</u>	<u>149930.000</u>	<u>TM 116500.000</u>	16160.000	16070.000	81.5%	116.300	106.400	106.200	2278.000
2	23:32:30	<u>8614.000</u>	<u>148240.000</u>	<u>TM 116400.000</u>	15760.000	16400.000	83.1%	115.700	100.400	104.000	2530.000
3	23:32:57	<u>8586.000</u>	<u>149660.000</u>	<u>TM 117900.000</u>	16280.000	16280.000	82.6%	115.200	103.800	101.100	3882.000
X		<u>8663.000</u>	<u>149280.000</u>	<u>TM 116900.000</u>	16070.000	16250.000	82.4%	115.800	103.600	103.800	2897.000
S		<u>1111.500</u>	<u>1907.800</u>	<u>TM 808.300</u>	274.800	166.600	0.8%	0.529	3.014	2.521	862.400
%RSD		<u>1.286</u>	<u>1.842</u>	<u>TM 0.691</u>	1.710	1.025	1.0	0.457	2.910	2.430	29.770
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:32:04	1411.000	155.000	<u>1468.000</u>	1397.000	99.610	97.230	205.400	100.900	103.600	151.200
2	23:32:30	1418.000	148.800	<u>1456.000</u>	1370.000	93.090	97.030	224.600	103.200	104.300	154.400
3	23:32:57	1436.000	152.500	<u>1471.000</u>	1346.000	96.580	97.820	232.600	100.700	100.500	148.100
X		1421.000	152.100	<u>1465.000</u>	1371.000	96.430	97.360	220.900	101.600	102.800	151.200
S		12.790	3.146	<u>17.739</u>	25.490	3.264	0.412	13.960	1.404	2.035	3.161
%RSD		0.900	2.068	<u>1.0528</u>	1.859	3.385	0.423	6.318	1.382	1.979	2.090
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:32:04	142.100	140.100	100.800	100.400	206.800	199.700	424.700	104.100	8.454	197.800
2	23:32:30	142.600	136.100	97.640	100.000	216.400	204.700	403.300	99.670	9.960	196.700
3	23:32:57	143.700	139.400	96.100	101.600	215.800	205.200	411.000	99.570	14.830	198.100
X		142.800	138.500	98.180	100.700	213.000	203.200	413.000	101.100	11.080	197.500
S		0.841	2.116	2.392	0.847	5.353	3.069	10.880	2.575	3.334	0.721
%RSD		0.589	1.527	2.436	0.841	2.513	1.510	2.634	2.547	30.090	0.365
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:32:04	76.2%	109.700	109.400	106.300	98.240	92.930	93.020	97.470	98.360	74.4%
2	23:32:30	76.0%	111.400	110.500	109.900	100.600	93.790	93.570	97.850	99.290	73.8%
3	23:32:57	76.0%	111.300	112.000	108.600	89.760	92.020	93.060	98.760	99.050	75.1%
X		76.1%	110.800	110.600	108.300	96.200	92.910	93.220	98.030	98.900	74.4%
S		0.1%	0.952	1.316	1.827	5.699	0.884	0.307	0.666	0.480	0.7%
%RSD		0.2	0.860	1.189	1.688	5.924	0.952	0.329	0.680	0.485	0.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:32:04	122.200	131.500	217.100	235.000	109.100	116.600	85.0%	100.000	99.240	101.300
2	23:32:30	123.400	132.200	220.000	241.900	111.200	119.200	85.8%	101.900	100.600	104.400
3	23:32:57	123.300	132.000	218.800	238.400	113.000	118.800	85.0%	101.900	101.200	105.000
X		123.000	131.900	218.600	238.500	111.100	118.200	85.3%	101.300	100.300	103.600
S		0.633	0.381	1.418	3.435	1.965	1.413	0.5%	1.072	1.002	2.010
%RSD		0.515	0.289	0.648	1.440	1.768	1.195	0.6	1.059	0.999	1.942
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	23:32:04	102.200	100.300	87.6%							
2	23:32:30	103.200	103.000	87.2%							
3	23:32:57	105.300	104.100	88.1%							
X		103.600	102.500	87.6%							
S		1.598	1.986	0.4%							
%RSD		1.543	1.938	0.5							

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Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:55	75.9%	43.030	199.500	199.500	908.500	<u>TM 454900.000</u>	<u>11200.000</u>	<u>11360.000</u>	<u>16250.000</u>	153.100
2	23:38:22	76.3%	43.760	189.900	194.200	899.300	<u>TM 460400.000</u>	<u>11060.000</u>	<u>11710.000</u>	<u>16020.000</u>	149.400
3	23:38:49	76.0%	44.580	193.900	200.600	882.200	<u>TM 464100.000</u>	<u>10960.000</u>	<u>11420.000</u>	<u>15940.000</u>	150.400
X		76.1%	43.790	194.400	198.100	896.700	<u>TM 459800.000</u>	<u>11070.000</u>	<u>11500.000</u>	<u>16070.000</u>	151.000
S		0.2%	0.777	4.823	3.438	13.370	<u>TM 4602.000</u>	<u>1117.300</u>	<u>188.000</u>	<u>159.300</u>	1.888
%RSD		0.2	1.774	2.480	1.735	1.491	<u>TM 1.001</u>	<u>1.059</u>	<u>1.635</u>	<u>1.0991</u>	1.250
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:55	<u>18715.000</u>	<u>151720.000</u>	<u>TM 113900.000</u>	16500.000	15910.000	82.6%	111.500	106.900	103.700	3001.000
2	23:38:22	<u>18367.000</u>	<u>150900.000</u>	<u>TM 112100.000</u>	15530.000	15780.000	84.0%	112.200	103.600	100.600	3008.000
3	23:38:49	<u>18472.000</u>	<u>150510.000</u>	<u>TM 113000.000</u>	16020.000	15760.000	83.4%	113.500	98.430	98.440	3821.000
X		<u>18518.000</u>	<u>151040.000</u>	<u>TM 113000.000</u>	16010.000	15820.000	83.4%	112.400	103.000	100.900	3277.000
S		<u>1178.500</u>	<u>1617.900</u>	<u>TM 918.700</u>	482.400	82.450	0.7%	1.025	4.267	2.643	471.700
%RSD		<u>1.2096</u>	<u>1.211</u>	<u>TM 0.813</u>	3.012	0.521	0.9	0.912	4.143	2.619	14.390
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:55	1404.000	153.300	<u>1447.000</u>	1379.000	93.150	97.270	221.700	102.200	101.200	152.100
2	23:38:22	1397.000	147.200	<u>1411.000</u>	1325.000	91.440	93.410	230.800	98.460	99.780	147.600
3	23:38:49	1348.000	145.600	<u>1424.000</u>	1337.000	91.900	91.750	247.700	99.050	99.130	148.900
X		1383.000	148.700	<u>1427.000</u>	1347.000	92.160	94.140	233.400	99.900	100.100	149.500
S		30.670	4.090	<u>18.360</u>	28.200	0.884	2.831	13.190	2.006	1.083	2.318
%RSD		2.217	2.751	<u>1.286</u>	2.094	0.960	3.007	5.651	2.008	1.082	1.550
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:55	136.900	138.900	96.610	99.790	208.100	204.900	414.500	103.000	15.890	191.800
2	23:38:22	139.500	135.900	93.330	98.440	206.100	198.200	396.500	97.540	14.770	191.400
3	23:38:49	134.200	135.800	93.830	100.400	208.200	201.100	399.400	97.920	17.000	191.400
X		136.800	136.900	94.590	99.560	207.500	201.400	403.500	99.480	15.890	191.500
S		2.649	1.769	1.765	1.018	1.173	3.357	9.662	3.035	1.116	0.248
%RSD		1.936	1.293	1.866	1.023	0.565	1.667	2.395	3.051	7.023	0.129
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:55	77.7%	106.400	105.700	106.100	98.290	91.120	92.310	95.390	95.960	74.7%
2	23:38:22	77.6%	107.600	107.800	104.800	90.520	91.320	91.060	96.160	96.500	75.5%
3	23:38:49	77.6%	107.800	108.200	105.400	94.910	90.430	91.270	95.190	96.540	75.6%
X		77.7%	107.200	107.200	105.400	94.580	90.960	91.550	95.580	96.330	75.3%
S		0.1%	0.729	1.308	0.635	3.895	0.468	0.673	0.513	0.322	0.5%
%RSD		0.1	0.680	1.219	0.603	4.118	0.515	0.735	0.536	0.334	0.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:55	120.800	129.100	212.200	232.200	109.600	114.600	86.2%	97.510	97.180	100.700
2	23:38:22	118.000	128.200	210.100	229.300	108.100	116.700	86.8%	98.830	98.770	101.000
3	23:38:49	119.600	128.900	213.700	233.700	107.700	115.800	88.5%	99.340	98.510	101.200
X		119.500	128.700	212.000	231.700	108.500	115.700	87.2%	98.560	98.160	101.000
S		1.367	0.479	1.842	2.275	0.979	1.057	1.2%	0.944	0.852	0.268
%RSD		1.145	0.373	0.869	0.982	0.903	0.913	1.4	0.958	0.868	0.266
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	23:37:55	101.400	99.680	88.0%							
2	23:38:22	101.100	100.200	88.6%							
3	23:38:49	101.000	100.700	89.7%							
X		101.200	100.200	88.8%							
S		0.208	0.494	0.9%							
%RSD		0.206	0.493	1.0							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:43:45	86.0%	-0.013	20.370	20.370	288.200	93920.000	2895.000	2747.000	3065.000	12.300
2	23:44:12	88.1%	0.018	18.310	21.060	259.700	94530.000	2836.000	2743.000	3020.000	12.030
3	23:44:39	86.8%	-0.007	21.360	22.210	277.200	95140.000	2858.000	2709.000	2992.000	11.980
X		86.9%	-0.000	20.010	21.220	275.000	94530.000	2863.000	2733.000	3026.000	12.100
S		1.1%	0.017	1.555	0.931	14.390	614.000	29.660	21.210	36.890	0.173
%RSD		1.2	3491.000	7.769	4.390	5.234	0.649	1.036	0.776	1.219	1.429
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:43:45	1466.000	11070.000	23300.000	2972.000	2956.000	95.3%	2.391	0.120	0.793	2602.000
2	23:44:12	1418.000	11080.000	23020.000	3016.000	2926.000	96.4%	2.518	0.132	0.704	2652.000
3	23:44:39	1416.000	11090.000	23180.000	3012.000	2955.000	95.9%	1.982	-0.003	0.866	2775.000
X		1433.000	11080.000	23170.000	3000.000	2946.000	95.8%	2.297	0.083	0.788	2676.000
S		28.600	9.902	135.700	24.360	16.770	0.6%	0.280	0.075	0.081	89.130
%RSD		1.995	0.089	0.586	0.812	0.569	0.6	12.180	90.470	10.290	3.330
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:43:45	67.540	10.130	68.860	80.040	0.040	0.723	45.260	2.765	0.795	12.210
2	23:44:12	67.520	9.876	70.650	77.610	0.041	0.725	42.440	2.714	0.945	11.700
3	23:44:39	68.020	10.140	69.130	76.330	0.034	0.584	42.030	2.434	0.861	11.310
X		67.690	10.050	69.540	77.990	0.038	0.677	43.240	2.637	0.867	11.740
S		0.282	0.150	0.964	1.885	0.004	0.081	1.757	0.178	0.075	0.447
%RSD		0.417	1.492	1.386	2.417	9.505	11.990	4.062	6.747	8.690	3.807
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:43:45	10.090	10.510	0.070	1.349	38.140	37.580	-1.096	-0.244	0.386	18.970
2	23:44:12	10.950	11.340	-0.015	1.030	39.750	35.440	-1.488	-0.292	-1.971	18.870
3	23:44:39	10.060	10.570	0.068	1.229	36.810	37.170	0.458	0.129	0.599	19.070
X		10.370	10.810	0.041	1.203	38.240	36.730	-0.709	-0.136	-0.329	18.970
S		0.505	0.465	0.049	0.161	1.471	1.138	1.029	0.231	1.426	0.100
%RSD		4.873	4.304	118.900	13.390	3.848	3.098	145.200	169.900	433.900	0.528
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:43:45	87.2%	0.655	0.693	0.531	0.552	0.006	0.001	0.030	0.029	85.4%
2	23:44:12	88.8%	0.675	0.628	0.627	0.243	0.009	0.006	0.006	-0.007	88.2%
3	23:44:39	88.8%	0.655	0.834	0.615	-0.040	0.008	0.007	0.044	0.032	87.1%
X		88.3%	0.662	0.718	0.591	0.252	0.007	0.004	0.027	0.018	86.9%
S		0.9%	0.012	0.106	0.052	0.296	0.002	0.003	0.019	0.022	1.4%
%RSD		1.1	1.776	14.710	8.814	117.800	21.750	68.200	72.470	122.900	1.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:43:45	4.222	6.018	21.570	23.110	3.747	3.744	93.1%	0.021	0.021	0.088
2	23:44:12	4.248	6.075	21.580	23.490	3.653	3.477	95.4%	0.011	0.018	0.096
3	23:44:39	4.331	6.156	22.340	23.720	3.590	3.717	96.4%	0.011	0.018	0.080
X		4.267	6.083	21.830	23.440	3.664	3.646	95.0%	0.014	0.019	0.088
S		0.057	0.069	0.443	0.309	0.079	0.147	1.7%	0.006	0.002	0.008
%RSD		1.335	1.139	2.027	1.319	2.157	4.040	1.8	40.760	10.790	8.800
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	23:43:45	0.073	0.081	96.4%							
2	23:44:12	0.091	0.087	98.3%							
3	23:44:39	0.079	0.083	99.8%							
X		0.081	0.084	98.2%							
S		0.009	0.003	1.7%							
%RSD		10.940	3.680	1.7							

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User Pre-dilution: 1.000

Run		Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:49:36		85.0%	-0.008	308.300	305.600	27.540	60330.000	10670.000	10710.000	12110.000	362.200
2	23:50:03		85.7%	0.026	288.000	301.400	23.160	60780.000	11020.000	11320.000	12210.000	353.900
3	23:50:30		83.8%	-0.008	307.100	311.800	14.730	62000.000	10720.000	10580.000	12210.000	363.100
X			84.8%	0.004	301.100	306.300	21.810	61040.000	10800.000	10870.000	12170.000	359.800
S			1.0%	0.020	11.400	5.253	6.512	862.100	188.200	396.200	58.870	5.052
%RSD			1.1	532.800	3.785	1.715	29.860	1.412	1.742	3.645	0.483	1.404
Run	Time		28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:49:36		1451.000	59300.000	9578.000	130800.000	144700.000	94.1%	74.760	36.650	39.400	5946.000
2	23:50:03		1408.000	60270.000	9530.000	131800.000	142300.000	92.2%	75.990	37.470	39.850	5765.000
3	23:50:30		1377.000	58900.000	9578.000	133700.000	143900.000	91.9%	74.450	36.950	39.930	6413.000
X			1412.000	59490.000	9562.000	132100.000	143700.000	92.7%	75.070	37.030	39.730	6041.000
S			36.870	709.300	28.190	1504.000	1209.000	1.2%	0.817	0.416	0.286	334.600
%RSD			2.611	1.192	0.295	1.138	0.842	1.3	1.088	1.124	0.719	5.539
Run	Time		54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:49:36		602.800	4.776	648.000	954.700	14.280	24.400	55.890	1.990	0.724	25.730
2	23:50:03		615.500	5.014	615.200	913.800	13.700	23.300	54.820	1.840	0.685	24.940
3	23:50:30		609.300	4.908	657.700	946.600	14.040	23.290	55.340	1.881	0.662	24.930
X			609.200	4.899	640.300	938.400	14.010	23.660	55.350	1.904	0.691	25.200
S			6.358	0.119	22.280	21.650	0.292	0.638	0.536	0.078	0.031	0.456
%RSD			1.044	2.435	3.479	2.307	2.085	2.696	0.969	4.097	4.507	1.810
Run	Time		67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:49:36		25.460	23.350	0.378	0.864	622.900	626.200	5.420	1.157	3.905	287.400
2	23:50:03		25.460	23.190	0.204	0.488	605.100	643.400	6.542	1.451	2.647	290.000
3	23:50:30		24.520	23.290	-0.131	0.977	610.400	638.700	3.164	0.620	2.339	296.300
X			25.140	23.280	0.150	0.776	612.800	636.100	5.042	1.076	2.964	291.200
S			0.544	0.081	0.259	0.256	9.150	8.897	1.721	0.421	0.830	4.575
%RSD			2.163	0.349	172.000	32.960	1.493	1.399	34.130	39.150	27.990	1.571
Run	Time		89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:49:36		84.8%	753.100	740.900	757.800	9.940	0.007	0.029	-1.589	0.129	84.8%
2	23:50:03		84.1%	770.800	767.300	772.600	7.982	0.001	0.028	-1.687	0.268	84.1%
3	23:50:30		83.9%	791.000	777.600	786.800	7.068	0.001	0.027	-1.504	0.216	85.1%
X			84.3%	771.600	761.900	772.400	8.330	0.003	0.028	-1.593	0.204	84.7%
S			0.5%	18.940	18.930	14.510	1.467	0.003	0.001	0.091	0.070	0.5%
%RSD			0.6	2.454	2.485	1.878	17.620	113.800	2.469	5.741	34.490	0.6
Run	Time		116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:49:36		2.495	3.184	1.111	1.193	12.920	14.070	92.8%	0.095	0.069	0.295
2	23:50:03		2.607	3.168	1.116	1.053	13.420	13.810	94.2%	0.073	0.068	0.243
3	23:50:30		2.484	3.215	1.051	1.131	13.330	13.580	93.8%	0.081	0.077	0.249
X			2.529	3.189	1.093	1.126	13.230	13.820	93.6%	0.083	0.072	0.262
S			0.068	0.024	0.036	0.070	0.264	0.243	0.7%	0.011	0.005	0.029
%RSD			2.700	0.752	3.285	6.243	1.996	1.762	0.8	13.350	6.915	11.000
Run	Time		207Pb	208Pb	209Bi							
			ppb	ppb	ppb							
1	23:49:36		0.225	0.262	99.8%							
2	23:50:03		0.271	0.242	99.9%							
3	23:50:30		0.241	0.245	99.7%							
X			0.245	0.250	99.8%							
S			0.023	0.010	0.1%							
%RSD			9.445	4.189	0.1							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:55:26	67.4%	-0.008	324.600	316.000	283.100	<u>TM 1586000.000</u>	666.600	658.300	713.300	<u>M 754.400</u>
2	23:55:52	69.5%	0.027	319.300	312.700	302.000	<u>TM 1565000.000</u>	682.900	677.800	707.600	<u>M 755.700</u>
3	23:56:19	69.9%	-0.023	303.200	304.500	286.700	<u>TM 1585000.000</u>	670.700	650.900	700.200	<u>M 741.400</u>
X		68.9%	-0.001	315.700	311.100	290.600	<u>TM 1579000.000</u>	673.400	662.400	707.100	<u>M 750.500</u>
S		1.4%	0.026	11.150	5.921	10.020	<u>TM 11440.000</u>	8.456	13.890	6.582	<u>M 7.920</u>
%RSD		2.0	1773.000	3.532	1.904	3.450	<u>TM 0.724</u>	1.256	2.097	0.931	<u>M 1.055</u>
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:55:26	<u>T 3454.000</u>	<u>T 109900.000</u>	<u>T 5817.000</u>	18520.000	18690.000	75.8%	3.019	0.184	1.047	4747.000
2	23:55:52	<u>T 3343.000</u>	<u>T 113400.000</u>	<u>T 5919.000</u>	18680.000	18450.000	77.0%	3.117	-0.124	1.063	5078.000
3	23:56:19	<u>T 3240.000</u>	<u>T 111000.000</u>	<u>T 5935.000</u>	18430.000	18510.000	77.5%	2.733	0.102	1.014	4936.000
X		<u>T 3346.000</u>	<u>T 111400.000</u>	<u>T 5890.000</u>	18540.000	18550.000	76.8%	2.957	0.054	1.041	4920.000
S		<u>T 107.100</u>	<u>T 1792.000</u>	<u>T 63.950</u>	130.600	124.000	0.9%	0.200	0.159	0.025	166.200
%RSD		<u>T 3.200</u>	<u>T 1.609</u>	<u>T 1.086</u>	0.704	0.669	1.1	6.747	296.900	2.413	3.377
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:55:26	14.830	1.205	4.824	67.820	0.417	3.115	467.600	42.520	8.743	10.630
2	23:55:52	15.130	1.107	3.573	64.450	0.452	2.858	442.900	40.350	7.917	10.090
3	23:56:19	12.250	1.143	3.926	60.560	0.462	2.933	424.700	39.900	8.248	9.846
X		14.070	1.152	4.108	64.280	0.444	2.969	445.100	40.920	8.303	10.190
S		1.585	0.049	0.645	3.630	0.024	0.133	21.530	1.404	0.415	0.403
%RSD		11.260	4.290	15.710	5.647	5.378	4.468	4.838	3.431	5.004	3.959
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:55:26	9.494	9.017	0.490	3.484	527.100	559.000	4.343	-0.439	60.200	26.800
2	23:55:52	10.690	9.180	0.467	3.212	513.200	556.300	4.308	-0.737	71.260	26.580
3	23:56:19	8.858	8.941	0.220	4.613	535.300	557.800	6.383	-0.143	67.920	26.230
X		9.682	9.046	0.393	3.770	525.200	557.700	5.011	-0.440	66.460	26.530
S		0.933	0.122	0.149	0.743	11.160	1.322	1.188	0.297	5.674	0.286
%RSD		9.634	1.350	38.090	19.700	2.125	0.237	23.700	67.470	8.538	1.080
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:55:26	70.5%	5.182	4.686	4.866	-2.436	-0.001	0.006	0.023	0.038	67.2%
2	23:55:52	70.6%	5.686	5.052	5.099	-3.681	0.003	-0.001	0.010	0.035	69.5%
3	23:56:19	70.2%	5.004	4.916	4.906	-3.136	0.006	0.006	0.011	0.045	68.9%
X		70.4%	5.290	4.885	4.957	-3.084	0.003	0.004	0.015	0.040	68.5%
S		0.2%	0.354	0.185	0.124	0.624	0.004	0.004	0.008	0.005	1.2%
%RSD		0.3	6.683	3.787	2.509	20.230	144.800	119.000	51.980	12.680	1.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:55:26	0.088	0.114	0.709	0.910	2.732	3.028	78.4%	0.052	0.056	0.112
2	23:55:52	0.053	0.074	0.778	0.785	2.514	2.841	81.0%	0.056	0.059	0.093
3	23:56:19	0.079	0.096	0.788	0.841	2.961	2.883	81.7%	0.063	0.051	0.109
X		0.073	0.094	0.758	0.845	2.736	2.917	80.4%	0.057	0.055	0.105
S		0.018	0.020	0.043	0.062	0.224	0.098	1.7%	0.005	0.004	0.010
%RSD		24.650	21.240	5.696	7.367	8.182	3.359	2.1	9.676	7.066	9.883
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	23:55:26	0.102	0.109	78.2%							
2	23:55:52	0.106	0.107	79.4%							
3	23:56:19	0.103	0.106	79.0%							
X		0.104	0.108	78.9%							
S		0.002	0.001	0.6%							
%RSD		1.993	1.292	0.7							

VJ21070-001 10/27/2020 00:00:50

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:01:16	82.9%	-0.010	42.070	42.220	123.300	TM 165000.000	TM 13890.000	TM 13690.000	TM 14550.000	107.800
2	00:01:43	82.2%	0.006	38.790	42.230	141.700	TM 169300.000	TM 14120.000	TM 14460.000	TM 14290.000	110.000
3	00:02:10	82.5%	0.018	41.780	41.450	124.800	TM 169300.000	TM 14010.000	TM 13910.000	TM 14570.000	108.900
X		82.5%	0.004	40.880	41.970	129.900	TM 167900.000	TM 14010.000	TM 14020.000	TM 14470.000	108.900
S		0.3%	0.014	1.813	0.448	10.240	TM 2501.000	TM 116.100	TM 395.500	TM 153.700	1.114
%RSD		0.4	323.800	4.435	1.068	7.883	TM 1.490	TM 0.829	TM 2.821	TM 1.062	1.023
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:01:16	TM 4407.000	TM 68520.000	TM 18460.000	TM 157000.000	TM 170900.000	91.0%	8.207	-0.135	1.501	4994.000
2	00:01:43	TM 4415.000	TM 70460.000	TM 18350.000	TM 160100.000	TM 172200.000	89.8%	9.113	0.237	1.439	5029.000
3	00:02:10	TM 4258.000	TM 69020.000	TM 18410.000	TM 159600.000	TM 171000.000	90.8%	7.793	-0.511	1.504	5519.000
X		TM 4360.000	TM 69330.000	TM 18410.000	TM 158900.000	TM 171400.000	90.5%	8.371	-0.137	1.481	5181.000
S		TM 88.540	TM 1007.000	TM 56.350	TM 1674.000	TM 760.100	0.6%	0.675	0.374	0.037	293.300
%RSD		TM 2.031	TM 1.453	TM 0.306	TM 1.054	TM 0.444	0.7	8.064	274.200	2.490	5.662
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:01:16	365.500	16.620	379.500	761.000	0.296	5.385	65.160	10.600	8.479	56.580
2	00:01:43	368.900	16.470	394.000	744.300	0.313	5.084	67.090	10.110	8.314	55.630
3	00:02:10	359.900	16.710	379.800	771.100	0.303	5.377	62.750	10.740	8.809	54.610
X		364.800	16.600	384.400	758.800	0.304	5.282	65.000	10.480	8.534	55.600
S		4.500	0.121	8.257	13.520	0.008	0.172	2.174	0.332	0.252	0.986
%RSD		1.234	0.728	2.148	1.782	2.673	3.246	3.344	3.169	2.956	1.773
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:01:16	53.910	52.860	0.048	1.106	75.320	76.670	-1.598	-0.574	8.555	308.800
2	00:01:43	53.170	53.660	-0.731	1.120	76.110	75.070	2.910	0.344	15.800	306.200
3	00:02:10	54.670	51.900	-0.084	0.602	73.890	78.050	0.150	-0.146	8.283	314.200
X		53.920	52.810	-0.256	0.942	75.110	76.600	0.487	-0.125	10.880	309.700
S		0.751	0.880	0.416	0.295	1.127	1.493	2.272	0.459	4.263	4.087
%RSD		1.393	1.667	162.800	31.340	1.501	1.949	466.200	366.000	39.180	1.320
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:01:16	83.2%	0.850	0.851	0.835	5.192	0.088	0.080	0.097	0.079	81.5%
2	00:01:43	83.1%	0.873	1.053	0.824	7.324	0.083	0.073	0.071	0.069	81.8%
3	00:02:10	82.8%	1.035	1.029	0.880	8.104	0.089	0.083	0.066	0.081	81.8%
X		83.0%	0.919	0.978	0.846	6.873	0.087	0.079	0.078	0.076	81.7%
S		0.2%	0.101	0.110	0.030	1.507	0.003	0.005	0.016	0.007	0.2%
%RSD		0.3	10.970	11.250	3.545	21.920	3.796	6.410	21.090	8.641	0.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:01:16	0.219	0.306	0.132	0.125	103.300	105.100	91.1%	0.016	0.024	0.339
2	00:01:43	0.184	0.270	0.136	0.104	102.300	106.900	92.1%	0.019	0.018	0.297
3	00:02:10	0.254	0.266	0.155	0.169	101.700	105.700	92.2%	0.019	0.017	0.315
X		0.219	0.281	0.141	0.133	102.400	105.900	91.8%	0.018	0.020	0.317
S		0.035	0.022	0.012	0.033	0.834	0.886	0.6%	0.002	0.004	0.021
%RSD		16.060	7.731	8.624	25.250	0.814	0.836	0.6	10.210	19.710	6.568
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	00:01:16	0.319	0.322	94.7%							
2	00:01:43	0.274	0.285	95.5%							
3	00:02:10	0.344	0.312	95.0%							
X		0.312	0.307	95.1%							
S		0.036	0.019	0.4%							
%RSD		11.470	6.241	0.4							

CCV MW15278 10/27/2020 00:06:42 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:09	80.7%	293.000	309.700	315.700	-0.928	63480.000	65370.000	67480.000	60700.000	298.000
2	00:07:36	78.5%	290.300	315.100	328.700	-6.351	65370.000	63810.000	64790.000	61700.000	298.700
3	00:08:03	77.8%	302.000	317.700	328.800	-3.936	66290.000	67350.000	64680.000	61790.000	291.700
X		79.0%	98.368%	104.726%	108.137%	-3.739	108.409%	65510.000	65650.000	102.332%	98.703%
S		1.5%	n/a	n/a	n/a	2.717	n/a	1779.000	1583.000	n/a	n/a
%RSD		1.9	2.073	1.307	2.317	72.670	2.200	2.715	2.411	0.985	1.304
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:09	3469.000	281.200	55130.000	60370.000	64820.000	90.5%	303.100	314.200	304.200	1695.000
2	00:07:36	3546.000	283.100	55860.000	60240.000	64460.000	91.2%	298.600	312.000	300.800	1701.000
3	00:08:03	3510.000	294.700	55950.000	60600.000	66860.000	90.0%	302.500	308.800	304.600	842.600
X		3509.000	286.300	92.744%	60400.000	108.967%	90.6%	100.472%	103.883%	101.063%	1413.000
S		38.480	7.319	n/a	178.600	n/a	0.6%	n/a	n/a	n/a	493.700
%RSD		1.097	2.556	0.801	0.296	1.976	0.7	0.803	0.874	0.692	34.950
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:09	67050.000	311.400	66430.000	65410.000	293.100	290.400	336.300	276.600	296.000	306.100
2	00:07:36	65810.000	303.500	64380.000	64280.000	288.600	294.600	331.100	281.100	297.500	301.600
3	00:08:03	67030.000	314.500	65590.000	65760.000	294.700	298.700	341.300	277.600	287.200	302.000
X		66630.000	103.269%	65470.000	108.584%	97.378%	98.192%	336.200	278.400	97.863%	101.080%
S		708.700	n/a	1030.000	n/a	n/a	n/a	5.126	2.337	n/a	n/a
%RSD		1.064	1.819	1.573	1.186	1.075	1.406	1.524	0.839	1.904	0.806
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:09	291.800	281.700	277.100	287.300	7.964	4.683	1215.000	300.900	0.627	295.700
2	00:07:36	283.000	284.200	278.300	287.500	7.353	5.161	1208.000	293.500	-0.736	299.200
3	00:08:03	289.900	286.400	276.400	289.000	8.153	5.157	1147.000	278.000	-1.079	298.400
X		288.200	284.100	92.431%	287.900	7.823	5.000	1190.000	96.936%	-0.396	99.265%
S		4.657	2.324	n/a	0.964	0.418	0.275	37.770	n/a	0.903	n/a
%RSD		1.616	0.818	0.346	0.335	5.346	5.497	3.173	4.011	227.900	0.615
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:09	84.3%	299.500	295.700	293.500	294.800	286.200	286.400	294.700	295.100	81.7%
2	00:07:36	84.4%	309.600	308.400	305.400	286.600	280.700	281.200	288.500	291.300	83.4%
3	00:08:03	84.6%	312.600	311.200	309.500	287.600	285.700	283.400	288.700	294.900	83.6%
X		84.4%	102.415%	101.703%	302.800	289.700	94.738%	283.700	290.600	97.927%	82.9%
S		0.2%	n/a	n/a	8.284	4.439	n/a	2.601	3.539	n/a	1.1%
%RSD		0.2	2.221	2.700	2.736	1.532	1.068	0.917	1.218	0.721	1.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:09	300.800	302.200	291.800	317.100	279.600	294.500	91.5%	299.400	302.200	302.100
2	00:07:36	298.000	298.300	292.100	316.300	279.900	291.100	93.1%	299.300	299.200	299.300
3	00:08:03	302.800	302.200	294.300	319.900	279.000	292.600	93.2%	298.400	301.900	302.200
X		100.184%	100.302%	292.700	105.927%	93.174%	97.577%	92.6%	299.000	100.376%	100.396%
S		n/a	n/a	1.352	n/a	n/a	n/a	0.9%	0.558	n/a	n/a
%RSD		0.803	0.758	0.462	0.599	0.176	0.583	1.0	0.187	0.548	0.546
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	00:07:09	299.400	300.100	95.7%							
2	00:07:36	300.500	298.400	98.2%							
3	00:08:03	303.400	302.700	98.0%							
X		100.370%	100.129%	97.3%							
S		n/a	n/a	1.4%							
%RSD		0.684	0.724	1.4							

CCB IM10195-01 10/27/2020 00:12:35 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:13:02	85.9%	0.064	1.116	0.968	11.580	53.400	4.732	4.986	4.648	0.075
2	00:13:29	88.4%	0.030	1.068	0.977	-6.697	50.650	5.609	5.266	5.066	0.040
3	00:13:56	89.0%	0.008	0.851	1.075	5.830	49.630	5.561	5.816	5.591	0.103
X		87.7%	0.034	1.012	1.007	3.572	51.230	5.300	5.356	5.102	0.073
S		1.6%	0.029	0.141	0.059	9.347	1.953	0.493	0.422	0.472	0.032
%RSD		1.9	83.960	13.950	5.864	261.700	3.813	9.306	7.879	9.254	43.450
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:13:02	-94.540	150.000	-0.698	4.590	-28.710	97.0%	0.040	0.022	0.013	4.595
2	00:13:29	-95.650	156.700	-2.082	1.643	-28.560	97.7%	0.117	0.022	0.025	9.364
3	00:13:56	-96.380	168.000	-1.219	1.707	-28.140	95.6%	0.121	0.025	0.005	1.766
X		-95.530	158.200	-1.333	2.647	-28.470	96.8%	0.093	0.023	0.014	5.242
S		0.925	9.054	0.699	1.683	0.292	1.1%	0.045	0.002	0.010	3.840
%RSD		0.968	5.722	52.460	63.590	1.027	1.1	48.810	7.259	71.350	73.260
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:13:02	4.934	0.010	-0.816	16.620	0.010	0.039	35.760	1.537	0.059	0.002
2	00:13:29	5.515	0.033	-0.620	10.960	0.013	0.065	34.560	1.410	0.085	0.021
3	00:13:56	5.456	0.028	1.023	14.400	0.022	0.018	34.360	1.626	0.092	-0.033
X		5.302	0.024	-0.138	13.990	0.015	0.041	34.890	1.524	0.079	-0.003
S		0.320	0.012	1.010	2.851	0.006	0.023	0.759	0.109	0.018	0.027
%RSD		6.040	51.850	733.100	20.370	40.290	57.100	2.174	7.115	22.540	941.900
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:13:02	-0.305	-0.087	-0.054	0.460	4.395	3.599	-1.193	-0.333	2.452	0.024
2	00:13:29	-0.058	-0.063	0.178	-0.196	4.302	3.480	1.847	0.549	-3.034	0.034
3	00:13:56	-0.053	-0.065	-0.076	0.302	3.972	3.699	-2.514	-0.568	-1.125	0.029
X		-0.139	-0.072	0.016	0.189	4.223	3.592	-0.620	-0.117	-0.569	0.029
S		0.144	0.014	0.141	0.343	0.222	0.110	2.236	0.589	2.785	0.005
%RSD		103.900	18.920	877.000	181.600	5.257	3.054	360.800	501.700	489.700	17.380
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:13:02	89.5%	0.748	0.744	0.808	0.062	0.024	0.020	0.005	0.016	89.8%
2	00:13:29	92.0%	0.802	0.754	0.828	0.874	0.020	0.026	0.014	0.033	90.8%
3	00:13:56	91.3%	0.864	0.710	0.700	-0.283	0.017	0.032	0.001	0.018	92.1%
X		90.9%	0.805	0.736	0.779	0.218	0.020	0.026	0.006	0.022	90.9%
S		1.3%	0.058	0.023	0.069	0.594	0.004	0.006	0.007	0.009	1.2%
%RSD		1.4	7.256	3.145	8.885	272.800	17.900	22.470	104.400	40.360	1.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:13:02	0.089	0.131	0.558	0.649	0.005	0.017	95.1%	0.017	0.016	0.022
2	00:13:29	0.090	0.136	0.562	0.597	0.005	0.024	96.9%	0.020	0.021	0.029
3	00:13:56	0.067	0.116	0.602	0.621	0.011	0.020	97.6%	0.024	0.020	0.025
X		0.082	0.128	0.574	0.622	0.007	0.020	96.5%	0.021	0.019	0.026
S		0.013	0.010	0.024	0.026	0.004	0.004	1.3%	0.003	0.003	0.003
%RSD		15.840	8.207	4.266	4.153	53.390	18.310	1.3	15.930	14.710	13.610
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	00:13:02	0.019	0.022	102.5%							
2	00:13:29	0.020	0.029	104.0%							
3	00:13:56	0.017	0.025	104.7%							
X		0.018	0.025	103.8%							
S		0.001	0.003	1.1%							
%RSD		8.005	12.900	1.1							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:18:52	82.5%	0.009	482.900	493.900	59.000	59600.000	4926.000	4865.000	5252.000	653.800
2	00:19:19	82.1%	-0.002	488.800	502.100	81.290	61310.000	5254.000	5228.000	5320.000	653.900
3	00:19:45	80.5%	0.024	492.000	486.000	51.820	61290.000	5179.000	4898.000	5247.000	630.900
X		81.7%	0.010	487.900	494.000	64.040	60730.000	5120.000	4997.000	5273.000	646.200
S		1.0%	0.013	4.613	8.056	15.370	982.900	172.100	200.400	40.570	13.240
%RSD		1.3	130.100	0.945	1.631	24.000	1.618	3.361	4.010	0.769	2.049
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:18:52	1580.000	59910.000	9427.000	135900.000	143800.000	89.2%	44.020	53.670	69.910	2483.000
2	00:19:19	1544.000	60300.000	9404.000	132300.000	144400.000	89.3%	43.820	52.490	68.510	3561.000
3	00:19:45	1485.000	59550.000	9749.000	134400.000	147200.000	88.2%	44.650	54.120	67.870	3321.000
X		1536.000	59920.000	9527.000	134200.000	145200.000	88.9%	44.160	53.430	68.760	3122.000
S		48.170	379.400	193.100	1795.000	1782.000	0.6%	0.436	0.845	1.042	565.900
%RSD		3.136	0.633	2.027	1.338	1.228	0.7	0.987	1.582	1.515	18.130
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:18:52	1243.000	7.617	1309.000	1554.000	25.310	93.930	129.000	2.788	1.586	27.990
2	00:19:19	1217.000	7.325	1305.000	1534.000	25.010	93.840	119.000	2.404	1.453	27.480
3	00:19:45	1232.000	7.386	1275.000	1531.000	24.500	92.870	122.400	2.536	1.519	27.540
X		1230.000	7.443	1296.000	1540.000	24.940	93.550	123.500	2.576	1.519	27.670
S		13.280	0.154	18.810	12.880	0.408	0.589	5.080	0.195	0.066	0.279
%RSD		1.079	2.067	1.451	0.837	1.637	0.629	4.114	7.575	4.369	1.007
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:18:52	28.780	26.210	-0.718	0.593	121.300	126.800	2.533	0.564	3.077	232.500
2	00:19:19	26.400	25.690	0.301	0.393	129.100	128.500	2.108	0.379	7.021	230.700
3	00:19:45	27.210	25.570	-0.154	0.361	123.600	133.700	0.215	-0.064	4.634	234.600
X		27.470	25.820	-0.190	0.449	124.700	129.600	1.619	0.293	4.911	232.600
S		1.211	0.342	0.510	0.125	4.023	3.602	1.234	0.322	1.987	1.982
%RSD		4.408	1.323	268.100	27.940	3.227	2.778	76.230	110.000	40.450	0.852
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:18:52	83.6%	825.300	815.200	821.700	10.010	0.006	0.042	-1.752	0.186	81.9%
2	00:19:19	84.7%	832.000	825.300	833.600	7.560	0.008	0.036	-1.756	0.272	81.8%
3	00:19:45	82.0%	864.000	858.000	877.500	6.055	0.004	0.063	-1.919	0.252	82.2%
X		83.4%	840.400	832.800	844.300	7.874	0.006	0.047	-1.809	0.237	82.0%
S		1.3%	20.710	22.400	29.380	1.994	0.002	0.014	0.095	0.045	0.2%
%RSD		1.6	2.464	2.689	3.480	25.320	41.000	30.180	5.271	18.990	0.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:18:52	1.807	1.874	0.966	1.068	11.630	12.560	90.7%	0.059	0.045	0.199
2	00:19:19	1.813	1.926	1.012	1.087	11.990	12.520	90.7%	0.053	0.039	0.198
3	00:19:45	1.834	1.909	1.064	1.093	11.630	12.930	91.9%	0.061	0.050	0.195
X		1.818	1.903	1.014	1.083	11.750	12.670	91.1%	0.058	0.045	0.197
S		0.014	0.027	0.050	0.013	0.207	0.227	0.7%	0.004	0.006	0.002
%RSD		0.786	1.396	4.882	1.202	1.765	1.787	0.7	7.163	12.890	0.963
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	00:18:52	0.175	0.182	98.7%							
2	00:19:19	0.169	0.183	98.3%							
3	00:19:45	0.197	0.189	99.2%							
X		0.180	0.185	98.8%							
S		0.015	0.004	0.4%							
%RSD		8.414	2.182	0.4							

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10/27/2020 00:24:17

User Pre-dilution: 1.000

User Predefinition: 1.000											
Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:24:44	84.4%	-0.001	7.122	8.889	231.600	<u>10410.000</u>	95.410	94.770	93.390	156.900
2	00:25:11	83.5%	-0.024	7.674	8.962	219.100	<u>10610.000</u>	94.720	97.740	93.800	161.400
3	00:25:37	81.9%	-0.009	9.622	8.145	210.100	<u>10820.000</u>	96.350	96.950	102.300	154.300
X		83.3%	-0.011	8.139	8.665	220.300	<u>10610.000</u>	95.490	96.490	96.500	157.500
S		1.3%	0.012	1.314	0.452	10.800	<u>1204.200</u>	0.818	1.542	5.036	3.560
%RSD		1.5	102.100	16.140	5.218	4.901	<u>1.924</u>	0.857	1.598	5.219	2.260
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:24:44	<u>1042.000</u>	<u>19882.000</u>	153.100	457.900	453.100	90.3%	7.295	0.034	5.786	2352.000
2	00:25:11	1017.000	<u>10020.000</u>	151.600	523.900	456.600	88.3%	10.060	0.099	5.779	2695.000
3	00:25:37	1022.000	<u>19852.000</u>	151.500	507.900	465.400	87.2%	6.652	0.087	5.738	2885.000
X		<u>1027.000</u>	<u>19917.000</u>	152.100	496.600	458.300	88.6%	8.002	0.073	5.767	2644.000
S		<u>113.020</u>	<u>187.040</u>	0.879	34.450	6.343	1.6%	1.810	0.034	0.026	270.000
%RSD		<u>1.268</u>	<u>10.878</u>	0.578	6.937	1.384	1.8	22.620	46.680	0.452	10.210
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:24:44	423.400	4.825	435.200	420.200	0.280	10.840	35.330	11.680	11.190	84.700
2	00:25:11	427.300	4.716	440.200	425.800	0.289	11.060	34.930	11.470	10.880	83.790
3	00:25:37	431.400	5.087	443.700	438.900	0.305	11.450	37.090	11.320	10.390	83.740
X		427.400	4.876	439.700	428.300	0.291	11.120	35.780	11.490	10.820	84.080
S		4.009	0.191	4.272	9.592	0.013	0.308	1.148	0.183	0.405	0.543
%RSD		0.938	3.911	0.972	2.239	4.401	2.769	3.210	1.595	3.745	0.646
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:24:44	79.980	78.550	-0.235	-0.325	5.431	6.654	-0.613	-0.172	1.630	5.693
2	00:25:11	79.520	79.030	0.232	0.195	5.702	6.214	-1.291	-0.285	-0.393	5.654
3	00:25:37	78.020	79.380	0.136	0.412	5.698	5.665	1.903	0.401	1.431	5.735
X		79.170	78.990	0.044	0.094	5.610	6.178	-0.001	-0.018	0.889	5.694
S		1.022	0.420	0.246	0.379	0.156	0.496	1.683	0.368	1.115	0.040
%RSD		1.291	0.532	554.400	403.800	2.772	8.020	234200.000	1990.000	125.400	0.709
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:24:44	84.5%	2.582	2.622	2.502	-0.087	0.254	0.333	0.068	0.067	84.3%
2	00:25:11	84.7%	2.670	2.473	2.736	-0.909	0.268	0.299	0.067	0.047	84.1%
3	00:25:37	83.1%	2.633	2.693	2.427	-0.184	0.302	0.302	0.039	0.059	84.8%
X		84.1%	2.628	2.596	2.555	-0.393	0.275	0.311	0.058	0.058	84.4%
S		0.9%	0.044	0.112	0.161	0.449	0.025	0.019	0.017	0.010	0.4%
%RSD		1.0	1.674	4.326	6.297	114.200	8.984	5.947	28.730	17.720	0.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:24:44	0.550	0.764	0.352	0.333	7.798	7.078	90.3%	0.005	0.003	3.922
2	00:25:11	0.549	0.762	0.305	0.419	7.751	7.657	92.1%	0.003	0.002	3.892
3	00:25:37	0.479	0.730	0.367	0.394	7.210	7.454	93.2%	0.005	0.004	3.955
X		0.526	0.752	0.342	0.382	7.586	7.396	91.9%	0.005	0.003	3.923
S		0.041	0.019	0.032	0.045	0.327	0.294	1.5%	0.001	0.001	0.032
%RSD		7.774	2.516	9.511	11.650	4.312	3.970	1.6	24.570	26.210	0.809
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	00:24:44	3.673	3.759	103.3%							
2	00:25:11	3.795	3.800	103.5%							
3	00:25:37	3.769	3.786	105.0%							
X		3.746	3.782	103.9%							
S		0.064	0.021	1.0%							
%RSD		1.714	0.551	0.9							

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10/27/2020 00:30:08

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:34	81.3%	17.450	28.650	29.290	248.300	10760.000	304.200	295.300	308.100	179.000
2	00:31:01	80.9%	19.210	28.200	30.810	243.800	10710.000	306.200	300.900	302.400	176.800
3	00:31:28	81.8%	18.750	28.710	28.940	244.000	10580.000	298.700	301.200	307.100	180.500
X		81.3%	18.470	28.520	29.680	245.400	10680.000	303.000	299.100	305.900	178.800
S		0.4%	0.908	0.280	0.993	2.559	93.460	3.881	3.331	3.022	1.849
%RSD		0.5	4.916	0.981	3.344	1.043	0.875	1.281	1.113	0.988	1.034
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:34	1246.000	10470.000	331.000	668.800	678.400	86.9%	28.200	20.700	25.800	3834.000
2	00:31:01	1224.000	10750.000	332.500	659.300	649.400	86.4%	27.920	20.630	26.370	3734.000
3	00:31:28	1233.000	10620.000	335.300	673.600	651.000	86.7%	26.310	20.420	26.060	3846.000
X		1234.000	10620.000	332.900	667.200	659.600	86.6%	27.470	20.590	26.080	3805.000
S		10.840	137.600	2.159	7.251	16.300	0.2%	1.020	0.147	0.285	61.790
%RSD		0.878	1.296	0.649	1.087	2.472	0.3	3.712	0.717	1.094	1.624
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:34	631.800	25.980	651.400	624.600	20.190	32.990	56.400	31.140	32.280	106.900
2	00:31:01	626.700	25.810	674.200	632.300	20.170	31.100	52.620	31.520	32.150	103.300
3	00:31:28	630.100	25.880	685.000	621.200	20.050	31.800	54.130	31.100	31.330	103.500
X		629.500	25.890	670.200	626.000	20.130	31.960	54.390	31.250	31.920	104.600
S		2.592	0.084	17.150	5.685	0.075	0.953	1.903	0.232	0.514	2.035
%RSD		0.412	0.325	2.559	0.908	0.375	2.983	3.500	0.743	1.612	1.946
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:34	99.600	100.600	20.290	20.170	4.583	4.883	94.360	22.900	1.490	25.150
2	00:31:01	93.570	100.900	20.030	20.900	4.804	5.373	86.330	20.380	0.153	25.700
3	00:31:28	96.990	100.600	20.650	19.560	5.722	5.132	87.020	20.430	-0.502	26.010
X		96.720	100.700	20.320	20.210	5.036	5.129	89.240	21.230	0.381	25.620
S		3.022	0.156	0.312	0.675	0.604	0.245	4.453	1.441	1.015	0.439
%RSD		3.125	0.155	1.533	3.339	11.990	4.774	4.990	6.786	266.800	1.715
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:34	82.4%	20.430	20.290	20.210	20.120	20.210	20.190	20.010	20.550	81.2%
2	00:31:01	81.7%	20.720	20.440	20.450	21.420	19.520	19.810	19.910	20.580	82.8%
3	00:31:28	81.0%	21.400	20.930	20.960	22.320	19.730	19.900	21.150	20.340	82.7%
X		81.7%	20.850	20.550	20.540	21.290	19.820	19.970	20.360	20.490	82.2%
S		0.7%	0.496	0.331	0.382	1.107	0.353	0.196	0.685	0.132	0.9%
%RSD		0.9	2.377	1.609	1.861	5.200	1.783	0.983	3.365	0.642	1.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:34	20.620	21.270	20.640	22.330	25.670	26.890	89.8%	20.130	19.530	24.300
2	00:31:01	21.030	20.580	20.120	21.690	25.170	26.820	91.5%	19.390	19.220	23.800
3	00:31:28	20.960	20.830	20.590	22.430	25.890	26.310	92.3%	19.770	19.530	23.990
X		20.870	20.890	20.450	22.150	25.580	26.670	91.2%	19.760	19.430	24.030
S		0.219	0.351	0.287	0.404	0.370	0.315	1.3%	0.367	0.180	0.255
%RSD		1.050	1.682	1.404	1.822	1.445	1.180	1.4	1.858	0.925	1.060
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	00:30:34	23.710	23.610	99.9%							
2	00:31:01	24.000	23.680	102.2%							
3	00:31:28	24.060	23.690	101.6%							
X		23.920	23.660	101.2%							
S		0.189	0.045	1.2%							
%RSD		0.792	0.190	1.2							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:36:24	77.8%	-0.005	145.200	145.700	82.380	<u>77710.000</u>	155.700	161.100	152.900	29.140
2	00:36:51	78.5%	0.003	147.600	139.800	69.810	<u>78220.000</u>	158.700	158.000	153.500	29.450
3	00:37:18	79.0%	0.003	142.300	140.300	62.810	<u>78520.000</u>	156.900	161.300	150.600	28.750
X		78.4%	0.000	145.000	141.900	71.670	<u>78150.000</u>	157.100	160.100	152.400	29.120
S		0.6%	0.004	2.664	3.292	9.914	<u>409.800</u>	1.538	1.834	1.542	0.353
%RSD		0.8	3178.000	1.837	2.319	13.830	<u>0.524</u>	0.979	1.145	1.012	1.212
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:36:24	789.900	<u>13540.000</u>	803.300	603.000	556.300	85.8%	5.091	-0.030	5.452	3521.000
2	00:36:51	784.400	<u>13510.000</u>	795.200	551.900	577.400	85.5%	5.593	-0.290	5.132	3898.000
3	00:37:18	795.200	<u>13510.000</u>	813.400	606.800	567.100	86.1%	4.793	-0.002	5.415	3793.000
X		789.900	<u>13520.000</u>	804.000	587.200	567.000	85.8%	5.159	-0.107	5.333	3737.000
S		5.419	<u>12.680</u>	9.099	30.630	10.560	0.3%	0.404	0.159	0.175	194.500
%RSD		0.686	<u>0.094</u>	1.132	5.215	1.862	0.3	7.832	148.100	3.279	5.205
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:36:24	171.500	3.506	163.500	172.200	1.215	2.698	29.400	21.110	21.590	14.030
2	00:36:51	168.700	3.498	163.000	164.400	1.247	2.562	27.190	20.940	20.640	13.670
3	00:37:18	162.800	3.251	161.300	172.800	1.186	2.600	30.930	20.710	20.750	13.720
X		167.700	3.418	162.600	169.800	1.216	2.620	29.170	20.920	20.990	13.810
S		4.417	0.145	1.176	4.703	0.030	0.070	1.879	0.199	0.523	0.196
%RSD		2.635	4.241	0.723	2.770	2.501	2.667	6.441	0.953	2.492	1.422
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:36:24	12.900	12.650	0.289	-0.254	60.830	61.920	1.800	0.335	4.215	3.715
2	00:36:51	13.530	12.840	0.290	0.888	57.280	60.730	2.123	0.563	-1.521	3.697
3	00:37:18	13.090	12.690	0.173	0.502	60.040	64.250	-0.003	-0.011	-0.071	3.767
X		13.170	12.730	0.251	0.379	59.380	62.300	1.307	0.296	0.874	3.726
S		0.323	0.102	0.068	0.581	1.865	1.788	1.146	0.289	2.983	0.037
%RSD		2.451	0.803	26.970	153.200	3.141	2.869	87.690	97.720	341.100	0.982
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:36:24	79.8%	0.425	0.265	0.301	-0.497	0.004	0.011	0.039	0.033	79.9%
2	00:36:51	80.4%	0.418	0.448	0.394	-0.730	0.012	0.004	0.038	0.012	79.8%
3	00:37:18	79.8%	0.357	0.430	0.370	-0.758	0.006	0.004	0.043	0.025	81.3%
X		80.0%	0.400	0.381	0.355	-0.662	0.007	0.006	0.040	0.023	80.4%
S		0.3%	0.038	0.101	0.048	0.143	0.005	0.004	0.002	0.011	0.9%
%RSD		0.4	9.390	26.490	13.600	21.610	61.510	70.880	6.169	45.720	1.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:36:24	0.059	0.084	26.890	29.000	1.518	1.865	88.1%	0.009	0.003	0.383
2	00:36:51	0.067	0.078	26.810	29.460	1.793	1.867	89.0%	0.001	0.006	0.398
3	00:37:18	0.039	0.072	26.400	28.770	1.691	1.751	89.6%	0.005	0.008	0.350
X		0.055	0.078	26.700	29.080	1.667	1.828	88.9%	0.005	0.006	0.377
S		0.015	0.006	0.259	0.349	0.139	0.067	0.8%	0.004	0.002	0.025
%RSD		26.650	7.723	0.970	1.200	8.315	3.647	0.9	75.780	42.220	6.553
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	00:36:24	0.375	0.377	93.2%							
2	00:36:51	0.307	0.367	95.2%							
3	00:37:18	0.405	0.376	95.6%							
X		0.362	0.373	94.7%							
S		0.050	0.006	1.3%							
%RSD		13.840	1.556	1.3							

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10/27/2020 00:41:48

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:42:15	80.0%	-0.007	7.696	7.841	839.200	2064.000	162.400	154.500	155.400	54.400
2	00:42:42	81.9%	-0.006	7.500	7.417	830.100	2017.000	159.900	160.100	154.300	45.410
3	00:43:09	79.2%	0.003	6.972	7.930	843.200	2113.000	159.500	156.800	151.800	44.280
X		80.4%	-0.003	7.389	7.729	837.500	2065.000	160.600	157.100	153.800	48.030
S		1.4%	0.005	0.374	0.274	6.693	47.960	1.545	2.859	1.826	5.543
%RSD		1.7	163.000	5.067	3.550	0.799	2.323	0.962	1.819	1.187	11.540
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:42:15	1818.000	10260.000	218.700	2419.000	2469.000	87.1%	1.239	0.127	0.415	3186.000
2	00:42:42	1795.000	10680.000	222.300	2483.000	2520.000	85.6%	6.816	0.405	0.606	3166.000
3	00:43:09	1901.000	9363.000	219.800	2528.000	2449.000	86.2%	2.343	0.275	0.530	3276.000
X		1838.000	10100.000	220.300	2477.000	2479.000	86.3%	3.466	0.269	0.517	3209.000
S		55.630	673.500	1.827	54.570	36.660	0.7%	2.954	0.139	0.096	59.000
%RSD		3.026	6.667	0.829	2.203	1.479	0.9	85.210	51.640	18.560	1.838
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:42:15	52.020	1.930	49.070	60.980	0.048	0.523	21.900	3.713	3.167	141.200
2	00:42:42	50.900	2.063	50.310	62.460	0.068	0.653	22.070	3.823	3.040	139.800
3	00:43:09	50.610	2.056	48.540	62.940	0.057	0.589	21.920	3.690	2.993	137.600
X		51.180	2.016	49.310	62.130	0.058	0.588	21.960	3.742	3.067	139.500
S		0.743	0.075	0.913	1.019	0.010	0.065	0.094	0.071	0.090	1.833
%RSD		1.452	3.697	1.851	1.641	17.440	11.090	0.429	1.893	2.937	1.314
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:42:15	130.800	130.800	-0.302	-0.211	34.190	33.830	-0.866	-0.195	-0.274	6.041
2	00:42:42	128.600	134.300	0.018	-0.021	34.590	34.340	-0.842	-0.196	-0.590	6.272
3	00:43:09	134.100	132.700	-0.007	0.490	33.380	34.910	-0.099	-0.039	-0.189	6.387
X		131.200	132.600	-0.097	0.086	34.060	34.360	-0.602	-0.143	-0.351	6.234
S		2.755	1.750	0.178	0.363	0.617	0.541	0.436	0.091	0.211	0.176
%RSD		2.100	1.320	183.900	421.600	1.812	1.576	72.370	63.270	60.180	2.826
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:42:15	82.9%	0.537	0.551	0.564	-0.874	0.001	0.001	0.002	0.013	83.0%
2	00:42:42	82.6%	0.459	0.588	0.613	-0.841	0.001	0.001	-0.004	0.018	84.0%
3	00:43:09	81.6%	0.536	0.602	0.615	-0.205	0.007	0.002	0.006	0.008	83.8%
X		82.4%	0.511	0.580	0.597	-0.640	0.003	0.001	0.001	0.013	83.6%
S		0.6%	0.045	0.026	0.029	0.377	0.003	0.001	0.005	0.005	0.5%
%RSD		0.8	8.741	4.526	4.896	58.860	113.000	46.900	341.800	40.750	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:42:15	0.880	1.066	7.643	8.284	3.300	3.060	89.7%	0.000	0.002	0.089
2	00:42:42	0.819	1.058	7.467	8.407	3.159	3.326	91.8%	0.002	0.001	0.140
3	00:43:09	0.783	1.152	7.643	8.049	2.976	3.342	92.8%	0.001	0.002	0.129
X		0.827	1.092	7.584	8.247	3.145	3.243	91.4%	0.001	0.002	0.119
S		0.049	0.052	0.102	0.182	0.163	0.159	1.6%	0.001	0.001	0.027
%RSD		5.918	4.768	1.339	2.207	5.170	4.895	1.7	74.100	43.720	22.350
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	00:42:15	0.149	0.117	99.8%							
2	00:42:42	0.159	0.147	101.6%							
3	00:43:09	0.167	0.145	102.0%							
X		0.158	0.136	101.1%							
S		0.009	0.017	1.2%							
%RSD		5.602	12.150	1.2							

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10/27/2020 00:47:40

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:07	82.5%	-0.014	3.101	2.822	-105.400	±2562.000	63.210	66.720	94.600	12.490
2	00:48:34	83.0%	-0.028	1.688	2.948	-106.700	±2587.000	63.480	66.620	91.390	12.660
3	00:49:01	81.8%	-0.010	2.578	2.500	-110.300	±2600.000	62.400	63.410	90.620	12.230
X		82.4%	-0.017	2.456	2.757	-107.400	±2583.000	63.030	65.580	92.210	12.460
S		0.6%	0.010	0.714	0.231	2.560	±19.110	0.563	1.885	2.110	0.217
%RSD		0.8	55.420	29.100	8.374	2.382	±0.740	0.893	2.875	2.289	1.745
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:07	933.900	8339.000	637.100	352.500	342.000	86.7%	0.876	-0.361	0.280	3559.000
2	00:48:34	898.000	±9097.000	630.300	381.700	334.400	87.2%	1.129	-0.078	0.345	3328.000
3	00:49:01	852.700	±8874.000	626.200	368.700	334.400	88.0%	0.520	0.078	0.314	3289.000
X		894.900	±8770.000	631.200	367.600	336.900	87.3%	0.842	-0.120	0.313	3392.000
S		40.710	±389.500	5.515	14.590	4.405	0.7%	0.306	0.222	0.033	146.100
%RSD		4.549	±4.441	0.874	3.969	1.307	0.8	36.310	184.600	10.410	4.306
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:07	48.220	2.512	47.230	54.080	0.247	0.526	18.990	8.281	7.622	14.790
2	00:48:34	48.690	2.518	43.800	53.560	0.261	0.463	19.790	8.283	7.645	14.760
3	00:49:01	46.570	2.504	43.700	45.300	0.263	0.535	20.300	7.813	7.573	15.170
X		47.830	2.511	44.910	50.980	0.257	0.508	19.700	8.126	7.613	14.900
S		1.114	0.007	2.011	4.921	0.009	0.039	0.660	0.271	0.037	0.227
%RSD		2.328	0.290	4.477	9.654	3.426	7.722	3.351	3.331	0.485	1.525
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:07	15.280	14.370	-0.252	-0.267	285.900	292.600	1.270	0.264	-0.230	2.495
2	00:48:34	13.380	13.680	-0.218	-0.297	287.300	294.300	1.512	0.304	1.039	2.398
3	00:49:01	13.280	13.900	0.178	-0.433	280.800	292.300	3.261	0.789	-1.681	2.366
X		13.980	13.980	-0.098	-0.332	284.700	293.100	2.015	0.452	-0.290	2.420
S		1.126	0.351	0.239	0.088	3.427	1.058	1.086	0.292	1.361	0.067
%RSD		8.051	2.509	244.700	26.600	1.204	0.361	53.920	64.560	468.800	2.769
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:07	82.2%	0.239	0.242	0.182	-0.216	0.006	-0.000	0.003	0.015	83.6%
2	00:48:34	83.7%	0.226	0.169	0.170	-0.846	0.002	0.001	0.027	0.010	84.2%
3	00:49:01	83.3%	0.232	0.191	0.182	-0.550	0.003	0.005	0.013	0.008	83.8%
X		83.1%	0.232	0.201	0.178	-0.538	0.004	0.002	0.014	0.011	83.8%
S		0.8%	0.007	0.038	0.007	0.315	0.002	0.003	0.012	0.003	0.3%
%RSD		0.9	2.927	18.810	3.701	58.650	47.950	134.600	85.920	29.380	0.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:48:07	0.049	0.034	3.248	3.428	1.560	1.804	89.5%	0.000	0.002	0.185
2	00:48:34	0.025	0.049	3.293	3.530	1.528	1.716	91.8%	0.001	0.004	0.196
3	00:49:01	0.035	0.041	3.272	3.502	1.723	1.723	92.5%	0.001	0.004	0.167
X		0.036	0.041	3.271	3.487	1.604	1.748	91.3%	0.001	0.003	0.182
S		0.012	0.008	0.023	0.053	0.105	0.049	1.6%	0.001	0.001	0.015
%RSD		33.240	18.540	0.699	1.511	6.526	2.778	1.7	56.210	29.380	8.091
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	00:48:07	0.173	0.180	99.4%							
2	00:48:34	0.194	0.186	100.8%							
3	00:49:01	0.173	0.178	100.9%							
X		0.180	0.181	100.4%							
S		0.012	0.004	0.8%							
%RSD		6.942	2.479	0.8							

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10/27/2020 00:53:32

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:53:59	80.1%	0.008	<u>M</u> 560.700	<u>M</u> 576.700	92.180	<u>T</u> 81290.000	<u>T</u> 2282.000	2282.000	2539.000	41.670
2	00:54:26	78.7%	-0.006	<u>M</u> 567.100	<u>M</u> 583.700	79.870	<u>T</u> 82920.000	<u>T</u> 2340.000	2231.000	2602.000	40.930
3	00:54:53	77.9%	0.001	<u>M</u> 614.500	<u>M</u> 594.500	88.550	<u>T</u> 83680.000	<u>T</u> 2340.000	2232.000	2558.000	40.940
X		78.9%	0.001	<u>M</u> 580.800	<u>M</u> 584.900	86.870	<u>T</u> 82630.000	<u>T</u> 2321.000	2248.000	2566.000	41.180
S		1.1%	0.007	<u>M</u> 29.380	<u>M</u> 8.990	6.327	<u>T</u> 1221.000	<u>T</u> 33.720	29.200	32.180	0.427
%RSD		1.4	753.600	<u>M</u> 5.059	<u>M</u> 1.537	7.283	<u>T</u> 1.478	<u>T</u> 1.453	1.299	1.254	1.036
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:53:59	944.400	<u>T</u> 12230.000	<u>T</u> 21210.000	4101.000	4129.000	85.7%	15.100	4.144	12.730	3062.000
2	00:54:26	952.800	<u>T</u> 12040.000	<u>T</u> 20780.000	4233.000	4269.000	84.4%	15.690	3.617	12.660	3491.000
3	00:54:53	956.600	<u>T</u> 12210.000	<u>T</u> 20760.000	4289.000	4199.000	85.6%	15.590	3.369	12.520	3537.000
X		951.300	<u>T</u> 12160.000	<u>T</u> 20920.000	4207.000	4199.000	85.2%	15.460	3.710	12.640	3363.000
S		6.244	<u>T</u> 105.200	<u>T</u> 254.000	96.610	69.870	0.7%	0.313	0.396	0.109	262.300
%RSD		0.656	<u>T</u> 0.865	<u>T</u> 1.214	2.296	1.664	0.8	2.022	10.680	0.860	7.798
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:53:59	73.550	45.360	66.910	87.240	1.838	22.010	40.770	1.846	0.892	4.522
2	00:54:26	75.770	45.370	62.610	79.810	1.869	22.820	44.480	1.770	0.894	4.477
3	00:54:53	74.230	44.710	64.030	85.700	1.813	21.580	45.060	1.786	0.875	4.162
X		74.510	45.150	64.520	84.250	1.840	22.140	43.440	1.801	0.887	4.387
S		1.140	0.376	2.193	3.924	0.028	0.633	2.326	0.040	0.010	0.196
%RSD		1.529	0.834	3.400	4.658	1.507	2.859	5.355	2.227	1.181	4.470
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:53:59	5.476	4.168	5.117	0.037	2139.000	2206.000	13.340	3.008	-0.779	36.360
2	00:54:26	5.161	4.370	5.385	0.751	2153.000	2167.000	13.720	3.049	2.976	35.910
3	00:54:53	4.856	4.371	5.507	0.183	2137.000	2201.000	15.890	3.636	0.541	36.690
X		5.164	4.303	5.336	0.324	2143.000	2191.000	14.320	3.231	0.913	36.320
S		0.310	0.117	0.200	0.377	9.099	20.910	1.377	0.352	1.905	0.391
%RSD		6.003	2.718	3.741	116.500	0.425	0.954	9.617	10.880	208.700	1.075
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:53:59	79.8%	0.668	0.789	0.639	2.833	0.014	0.006	0.012	-0.035	79.1%
2	00:54:26	81.7%	0.571	0.664	0.595	1.861	0.012	0.005	0.012	0.001	79.8%
3	00:54:53	81.3%	0.749	0.562	0.662	1.260	0.015	0.004	0.007	0.024	79.6%
X		80.9%	0.663	0.672	0.632	1.985	0.014	0.005	0.010	-0.004	79.5%
S		1.0%	0.089	0.114	0.034	0.794	0.001	0.001	0.003	0.030	0.4%
%RSD		1.3	13.450	16.900	5.381	40.020	9.268	25.840	30.680	840.000	0.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:53:59	2.557	3.827	1.554	1.601	13.760	13.970	87.7%	-0.001	0.001	0.266
2	00:54:26	2.640	3.800	1.509	1.755	13.850	14.430	89.3%	0.001	0.001	0.280
3	00:54:53	2.617	3.683	1.592	1.635	14.210	14.410	90.0%	-0.001	0.002	0.273
X		2.605	3.770	1.552	1.664	13.940	14.270	89.0%	0.000	0.001	0.273
S		0.043	0.076	0.042	0.081	0.237	0.259	1.2%	0.001	0.000	0.007
%RSD		1.643	2.025	2.679	4.839	1.697	1.816	1.3	4088.000	15.910	2.623
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	00:53:59	0.269	0.270	95.3%							
2	00:54:26	0.255	0.259	97.2%							
3	00:54:53	0.262	0.259	97.8%							
X		0.262	0.263	96.8%							
S		0.007	0.006	1.3%							
%RSD		2.725	2.387	1.4							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:59:50	80.2%	0.562	52.100	52.650	-14.880	5831.000	1225.000	1179.000	1223.000	51.340
2	01:00:17	78.2%	0.695	52.380	54.090	-28.660	6026.000	1237.000	1172.000	1211.000	47.040
3	01:00:44	78.4%	0.831	53.890	53.120	-13.390	6028.000	1253.000	1200.000	1200.000	45.670
X		78.9%	0.696	52.790	53.290	-18.980	5962.000	1238.000	1184.000	1211.000	48.020
S		1.1%	0.134	0.963	0.739	8.420	112.900	14.200	14.700	11.400	2.959
%RSD		1.4	19.280	1.824	1.386	44.370	1.893	1.147	1.242	0.941	6.162
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:59:50	3349.000	55370.000	2359.000	6499.000	6441.000	82.4%	0.514	-0.806	0.497	11150.000
2	01:00:17	3330.000	55870.000	2392.000	6480.000	6283.000	83.3%	0.304	-0.217	0.547	10960.000
3	01:00:44	3365.000	56810.000	2354.000	6656.000	6309.000	83.1%	0.418	-0.823	0.552	11260.000
X		3348.000	56010.000	2368.000	6545.000	6344.000	83.0%	0.412	-0.616	0.532	11120.000
S		17.830	730.700	20.380	96.940	84.420	0.5%	0.105	0.345	0.031	149.900
%RSD		0.532	1.304	0.861	1.481	1.331	0.6	25.420	56.040	5.744	1.348
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:59:50	236.900	28.670	238.200	254.800	3.337	8.303	28.710	1.095	0.425	33.010
2	01:00:17	233.300	28.440	228.600	243.900	3.158	7.790	25.680	1.103	0.428	32.300
3	01:00:44	234.400	29.010	225.800	239.100	3.168	7.349	24.550	1.043	0.442	31.790
X		234.900	28.710	230.900	245.900	3.221	7.814	26.310	1.080	0.432	32.360
S		1.831	0.283	6.491	8.012	0.101	0.478	2.150	0.033	0.009	0.615
%RSD		0.779	0.984	2.812	3.258	3.119	6.112	8.170	3.023	2.073	1.899
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:59:50	38.150	35.070	0.495	-0.021	19.260	21.840	-0.995	-0.275	1.155	151.000
2	01:00:17	37.050	33.210	-0.252	-0.276	17.670	22.280	0.127	-0.012	1.183	153.800
3	01:00:44	33.900	33.890	0.303	-0.486	16.680	17.570	0.046	-0.092	4.306	150.700
X		36.370	34.060	0.182	-0.261	17.870	20.560	-0.274	-0.127	2.215	151.800
S		2.204	0.944	0.388	0.233	1.304	2.599	0.626	0.135	1.811	1.709
%RSD		6.060	2.771	213.300	89.090	7.296	12.640	228.500	106.700	81.770	1.126
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:59:50	78.4%	0.210	0.183	0.184	2.056	0.001	-0.000	-0.002	0.002	80.2%
2	01:00:17	77.9%	0.170	0.243	0.179	3.982	-0.000	0.002	0.003	-0.000	79.8%
3	01:00:44	79.4%	0.175	0.195	0.187	2.428	0.002	0.004	-0.002	-0.000	80.1%
X		78.6%	0.185	0.207	0.183	2.822	0.001	0.002	-0.000	0.000	80.0%
S		0.8%	0.022	0.032	0.004	1.021	0.001	0.002	0.003	0.001	0.2%
%RSD		1.0	11.930	15.420	2.073	36.190	107.400	95.480	970.500	313.900	0.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:59:50	0.059	0.061	0.520	0.585	117.700	121.300	87.8%	0.016	0.013	0.096
2	01:00:17	0.052	0.071	0.509	0.523	116.700	121.900	88.7%	0.016	0.016	0.119
3	01:00:44	0.059	0.067	0.518	0.613	117.000	120.900	89.1%	0.012	0.009	0.094
X		0.057	0.066	0.516	0.574	117.100	121.400	88.6%	0.014	0.013	0.103
S		0.004	0.005	0.006	0.046	0.514	0.487	0.7%	0.002	0.004	0.014
%RSD		7.270	8.157	1.068	8.068	0.439	0.401	0.8	16.760	28.710	13.460
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	00:59:50	0.083	0.084	100.7%							
2	01:00:17	0.071	0.086	101.6%							
3	01:00:44	0.076	0.086	101.6%							
X		0.077	0.085	101.3%							
S		0.006	0.001	0.5%							
%RSD		8.040	1.022	0.5							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:05:42	81.1%	0.046	17.770	21.220	28.040	15570.000	1584.000	1524.000	1552.000	180.700
2	01:06:09	79.1%	0.028	21.000	21.010	13.570	15757.000	1572.000	1507.000	1515.000	166.200
3	01:06:36	79.4%	0.011	20.880	21.430	11.060	15895.000	1598.000	1538.000	1501.000	166.900
X		79.9%	0.029	19.880	21.220	17.560	15741.000	1585.000	1523.000	1523.000	171.300
S		1.1%	0.018	1.835	0.213	9.168	162.800	12.970	15.460	26.610	8.221
%RSD		1.4	60.970	9.226	1.004	52.220	2.835	0.818	1.015	1.747	4.800
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:05:42	1782.000	60500.000	1823.000	5358.000	5317.000	80.8%	1.060	0.744	0.488	1829.000
2	01:06:09	1730.000	59710.000	1830.000	5180.000	5147.000	82.4%	1.336	0.343	0.504	1786.000
3	01:06:36	1643.000	59600.000	1819.000	5196.000	5022.000	83.6%	1.023	0.651	0.419	1449.000
X		1718.000	59940.000	1824.000	5244.000	5162.000	82.3%	1.140	0.579	0.470	1688.000
S		70.420	492.900	5.715	98.420	148.400	1.4%	0.171	0.210	0.045	208.100
%RSD		4.098	0.822	0.313	1.877	2.876	1.7	14.980	36.290	9.654	12.330
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:05:42	29030.000	29.950	28770.000	27330.000	0.179	3.263	20.370	5.219	4.911	23.100
2	01:06:09	27650.000	28.550	28070.000	27210.000	0.206	3.095	18.920	4.915	5.130	22.730
3	01:06:36	27590.000	29.520	28260.000	27420.000	0.173	3.372	18.420	4.846	4.886	23.180
X		28090.000	29.340	28370.000	27320.000	0.186	3.243	19.240	4.993	4.976	23.000
S		813.400	0.718	360.700	104.300	0.018	0.139	1.011	0.198	0.134	0.242
%RSD		2.896	2.446	1.272	0.382	9.426	4.300	5.255	3.973	2.693	1.054
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:05:42	21.280	21.450	14.680	0.632	29.740	31.150	4.607	1.596	2.202	13.660
2	01:06:09	21.210	20.660	14.060	0.157	30.100	33.440	5.555	1.812	3.424	13.750
3	01:06:36	20.920	19.620	13.280	0.219	29.310	32.080	3.568	1.185	5.159	13.780
X		21.130	20.580	14.010	0.336	29.720	32.220	4.577	1.531	3.595	13.730
S		0.190	0.919	0.702	0.258	0.395	1.149	0.994	0.318	1.486	0.062
%RSD		0.900	4.468	5.014	76.800	1.328	3.566	21.710	20.790	41.340	0.454
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:05:42	104.0%	1.120	1.192	1.139	0.033	0.001	-0.001	0.004	0.013	78.4%
2	01:06:09	102.6%	1.135	1.130	1.179	-0.643	0.004	0.001	-0.002	0.013	78.8%
3	01:06:36	105.5%	1.179	1.098	1.186	-0.675	0.002	0.001	0.008	0.008	80.2%
X		104.0%	1.145	1.140	1.168	-0.428	0.002	0.000	0.003	0.011	79.1%
S		1.4%	0.031	0.048	0.025	0.400	0.001	0.001	0.005	0.003	0.9%
%RSD		1.4	2.680	4.204	2.156	93.380	51.560	422.400	145.800	25.560	1.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:05:42	0.094	0.105	0.139	0.116	31.620	33.350	86.0%	0.013	0.006	0.994
2	01:06:09	0.078	0.102	0.151	0.098	31.530	33.570	87.0%	0.005	0.008	1.003
3	01:06:36	0.096	0.118	0.172	0.134	32.070	32.750	89.1%	0.006	0.005	1.033
X		0.089	0.108	0.154	0.116	31.740	33.220	87.4%	0.008	0.006	1.010
S		0.010	0.009	0.017	0.018	0.289	0.420	1.6%	0.004	0.002	0.021
%RSD		11.020	8.084	11.030	15.420	0.909	1.265	1.8	47.160	27.520	2.035
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	01:05:42	0.917	0.978	103.1%							
2	01:06:09	1.056	1.022	102.3%							
3	01:06:36	0.939	0.978	102.6%							
X		0.971	0.992	102.7%							
S		0.075	0.026	0.4%							
%RSD		7.689	2.609	0.4							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:11:35	76.4%	0.029	<u>612.800</u>	<u>612.200</u>	400.900	<u>172800.000</u>	<u>17480.000</u>	<u>17550.000</u>	<u>20040.000</u>	<u>228.000</u>
2	01:12:03	74.2%	-0.005	<u>617.000</u>	<u>612.500</u>	389.400	<u>182300.000</u>	<u>17370.000</u>	<u>17130.000</u>	<u>19920.000</u>	209.000
3	01:12:30	75.7%	0.009	<u>592.400</u>	<u>628.700</u>	380.300	<u>180300.000</u>	<u>16980.000</u>	<u>17570.000</u>	<u>19670.000</u>	213.200
X		75.4%	0.011	<u>607.400</u>	<u>617.800</u>	390.200	<u>178500.000</u>	<u>17280.000</u>	<u>17420.000</u>	<u>19870.000</u>	<u>216.700</u>
S		1.1%	0.017	<u>13.120</u>	<u>9.419</u>	10.300	<u>5024.000</u>	<u>262.100</u>	<u>248.900</u>	<u>188.600</u>	<u>9.977</u>
%RSD		1.5	151.700	<u>2.160</u>	<u>1.525</u>	2.639	<u>2.815</u>	<u>1.517</u>	<u>1.429</u>	<u>0.949</u>	<u>4.604</u>
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:11:35	<u>6423.000</u>	<u>57750.000</u>	<u>36570.000</u>	40370.000	<u>43230.000</u>	80.9%	10.860	10.980	10.140	2077.000
2	01:12:03	<u>6342.000</u>	<u>57480.000</u>	<u>36660.000</u>	39660.000	<u>43680.000</u>	80.8%	10.880	9.999	9.749	2424.000
3	01:12:30	<u>6332.000</u>	<u>58480.000</u>	<u>36840.000</u>	40690.000	<u>43600.000</u>	80.6%	10.510	10.390	9.973	2366.000
X		<u>6365.000</u>	<u>57900.000</u>	<u>36690.000</u>	40240.000	<u>43500.000</u>	80.8%	10.750	10.460	9.955	2289.000
S		<u>49.760</u>	<u>515.700</u>	<u>138.500</u>	524.000	<u>240.200</u>	0.2%	0.209	0.495	0.198	185.700
%RSD		<u>0.782</u>	<u>0.891</u>	<u>0.378</u>	1.302	<u>0.552</u>	0.2	1.942	4.735	1.990	8.112
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:11:35	4457.000	373.100	<u>4587.000</u>	4359.000	5.966	20.820	84.140	6.461	3.658	29.080
2	01:12:03	4359.000	374.300	<u>4547.000</u>	4326.000	5.689	20.610	83.250	6.832	3.614	28.730
3	01:12:30	4339.000	367.000	<u>4787.000</u>	4345.000	6.153	19.800	85.450	6.745	3.111	28.950
X		4385.000	371.400	<u>4640.000</u>	4343.000	5.936	20.410	84.280	6.679	3.461	28.920
S		63.440	3.922	<u>128.500</u>	16.400	0.233	0.536	1.107	0.194	0.304	0.177
%RSD		1.447	1.056	<u>2.770</u>	0.378	3.931	2.628	1.313	2.907	8.782	0.614
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:11:35	27.870	28.800	7.038	1.675	2289.000	2343.000	16.180	3.620	5.128	208.400
2	01:12:03	28.690	28.230	6.430	1.890	2295.000	2374.000	15.940	3.414	6.717	209.900
3	01:12:30	29.510	28.250	6.157	2.428	2279.000	2338.000	16.520	3.723	2.106	207.600
X		28.690	28.420	6.542	1.998	2288.000	2352.000	16.210	3.586	4.650	208.600
S		0.825	0.322	0.451	0.388	8.172	19.320	0.289	0.158	2.342	1.150
%RSD		2.874	1.132	6.897	19.430	0.357	0.822	1.785	4.393	50.360	0.551
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:11:35	76.0%	1.442	1.222	1.254	5.034	0.038	0.030	0.083	0.049	73.8%
2	01:12:03	75.4%	1.356	1.475	1.246	3.808	0.015	0.016	0.065	0.066	75.0%
3	01:12:30	76.2%	1.409	1.511	1.428	5.169	0.044	0.018	0.065	0.045	74.8%
X		75.9%	1.402	1.403	1.309	4.671	0.032	0.021	0.071	0.053	74.6%
S		0.4%	0.043	0.158	0.103	0.750	0.015	0.008	0.010	0.011	0.7%
%RSD		0.5	3.075	11.230	7.851	16.050	48.180	36.170	14.630	20.020	0.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:11:35	0.750	0.976	0.968	1.087	77.750	82.470	84.9%	0.015	0.012	1.106
2	01:12:03	0.688	1.008	0.940	1.029	78.980	83.120	84.7%	0.012	0.016	1.137
3	01:12:30	0.735	1.002	1.017	1.043	79.210	83.310	85.7%	0.017	0.013	1.111
X		0.724	0.996	0.975	1.053	78.650	82.970	85.1%	0.015	0.014	1.118
S		0.032	0.017	0.039	0.030	0.787	0.438	0.5%	0.003	0.002	0.016
%RSD		4.483	1.709	4.022	2.886	1.001	0.527	0.6	18.850	18.080	1.461
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	01:11:35	1.094	1.086	91.3%							
2	01:12:03	1.065	1.057	92.5%							
3	01:12:30	1.027	1.077	93.3%							
X		1.062	1.073	92.4%							
S		0.033	0.015	1.0%							
%RSD		3.141	1.399	1.1							

CCV MW15278 10/27/2020 01:17:01 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:28	79.9%	301.200	314.100	319.300	8.750	62560.000	65950.000	65590.000	62700.000	297.200
2	01:17:55	79.9%	295.700	316.100	315.700	4.718	63950.000	64700.000	64670.000	61390.000	298.700
3	01:18:22	78.5%	306.500	316.500	319.700	10.010	64600.000	63880.000	65330.000	60920.000	295.100
X		79.4%	100.369%	105.196%	106.086%	7.826	106.175%	64850.000	65190.000	102.783%	99.000%
S		0.8%	n/a	n/a	n/a	2.765	n/a	1042.000	474.000	n/a	n/a
%RSD		1.0	1.796	0.402	0.688	35.330	1.641	1.608	0.727	1.498	0.601
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:28	3512.000	203.900	58210.000	61210.000	65120.000	88.0%	304.300	304.400	302.700	2466.000
2	01:17:55	3435.000	209.300	56890.000	59540.000	63960.000	89.9%	296.100	304.900	295.000	655.600
3	01:18:22	3412.000	210.000	57950.000	60980.000	64930.000	88.5%	305.300	308.200	299.600	1265.000
X		3453.000	207.700	96.143%	60580.000	107.786%	88.8%	100.639%	101.937%	99.703%	1462.000
S		52.660	3.322	n/a	909.000	n/a	1.0%	n/a	n/a	n/a	920.900
%RSD		1.525	1.599	1.212	1.501	0.959	1.1	1.679	0.674	1.306	62.990
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:28	65580.000	309.800	67160.000	65250.000	294.900	290.700	309.400	279.100	297.500	303.500
2	01:17:55	63840.000	305.000	65310.000	62910.000	283.300	277.000	301.900	275.300	284.500	295.900
3	01:18:22	64910.000	309.300	66330.000	64680.000	291.200	287.600	304.500	275.900	289.200	290.600
X		64770.000	102.685%	66270.000	107.135%	96.601%	95.042%	305.300	276.700	96.790%	98.888%
S		878.200	n/a	927.500	n/a	n/a	n/a	3.786	2.062	n/a	n/a
%RSD		1.356	0.852	1.400	1.906	2.040	2.518	1.240	0.745	2.258	2.195
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:28	295.300	283.000	276.600	288.000	12.490	11.810	1222.000	298.200	-0.894	295.100
2	01:17:55	286.400	276.900	266.500	282.100	12.010	10.900	1134.000	275.700	2.063	293.300
3	01:18:22	288.900	283.300	281.900	281.500	12.940	8.857	1204.000	289.700	0.080	296.500
X		290.200	281.100	91.667%	283.900	12.480	10.520	1187.000	95.956%	0.416	98.319%
S		4.593	3.586	n/a	3.569	0.463	1.514	46.200	n/a	1.507	n/a
%RSD		1.582	1.276	2.843	1.257	3.714	14.380	3.893	3.952	362.100	0.539
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:28	81.5%	304.000	302.000	295.400	297.300	284.200	285.300	294.600	297.400	80.2%
2	01:17:55	83.4%	300.500	301.900	303.400	285.000	279.300	280.500	286.500	288.800	82.4%
3	01:18:22	82.5%	310.600	313.300	308.900	293.900	282.600	283.500	293.600	292.900	82.2%
X		82.5%	101.668%	101.914%	302.600	292.100	94.006%	283.100	291.600	97.673%	81.6%
S		1.0%	n/a	n/a	6.794	6.336	n/a	2.419	4.451	n/a	1.2%
%RSD		1.2	1.682	2.147	2.245	2.169	0.894	0.854	1.526	1.464	1.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:28	300.000	301.100	291.000	316.400	278.200	294.700	89.3%	299.500	300.300	301.100
2	01:17:55	295.700	300.500	288.700	314.200	277.500	290.400	91.0%	298.500	302.300	301.400
3	01:18:22	300.000	304.100	293.800	318.200	276.200	289.300	92.6%	297.900	299.200	298.200
X		99.516%	100.645%	291.100	105.421%	92.435%	97.147%	90.9%	298.600	100.200%	100.085%
S		n/a	n/a	2.529	n/a	n/a	n/a	1.6%	0.794	n/a	n/a
%RSD		0.825	0.641	0.869	0.630	0.381	0.972	1.8	0.266	0.529	0.588
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	01:17:28	298.100	298.900	95.1%							
2	01:17:55	301.700	300.000	96.2%							
3	01:18:22	299.600	298.500	98.6%							
X		99.945%	99.715%	96.6%							
S		n/a	n/a	1.8%							
%RSD		0.601	0.262	1.9							

CCB IM10195-01 10/27/2020 01:22:53 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

user file location: 12000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:23:20	88.0%	0.041	0.937	1.304	7.388	30.750	4.928	4.523	4.530	0.049
2	01:23:48	87.0%	0.069	0.780	1.259	-1.797	28.920	5.161	4.886	4.780	0.086
3	01:24:15	88.1%	0.017	1.004	1.157	-0.466	28.740	4.826	4.956	4.861	0.057
X		87.7%	0.043	0.907	1.240	1.708	29.470	4.972	4.788	4.724	0.064
S		0.6%	0.026	0.115	0.075	4.963	1.108	0.172	0.232	0.172	0.019
%RSD		0.7	61.140	12.670	6.086	290.500	3.759	3.463	4.847	3.643	30.550
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:23:20	-98.670	98.280	0.785	2.686	-28.750	95.9%	-0.017	0.044	0.010	-7.215
2	01:23:48	-98.070	111.100	-1.633	1.749	-30.210	94.3%	0.063	0.025	0.000	-7.304
3	01:24:15	-101.700	115.700	-1.596	2.632	-30.260	97.2%	0.098	0.014	-0.006	3.592
X		-99.480	108.400	-0.815	2.356	-29.740	95.8%	0.048	0.028	0.001	-3.642
S		1.939	9.041	1.385	0.526	0.857	1.5%	0.059	0.015	0.008	6.265
%RSD		1.949	8.342	170.000	22.350	2.882	1.5	123.100	54.130	597.200	172.000
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:23:20	4.573	0.021	-1.010	16.240	0.029	0.024	17.850	0.694	0.018	-0.036
2	01:23:48	6.012	0.015	-0.438	13.720	0.015	0.041	17.130	0.707	0.022	-0.078
3	01:24:15	2.960	0.013	-1.551	16.330	0.013	0.017	16.100	0.696	0.091	-0.010
X		4.515	0.016	-1.000	15.430	0.019	0.027	17.030	0.699	0.044	-0.041
S		1.527	0.004	0.557	1.482	0.009	0.012	0.875	0.007	0.041	0.034
%RSD		33.820	26.550	55.720	9.607	45.860	45.260	5.138	0.977	94.180	82.230
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:23:20	-0.008	-0.033	-0.077	0.281	5.549	4.436	-1.447	-0.253	-3.219	0.020
2	01:23:48	-0.193	-0.091	-0.099	0.279	5.727	5.445	-2.151	-0.457	-1.679	0.022
3	01:24:15	-0.052	0.015	0.090	0.333	3.765	5.082	1.701	0.448	-1.361	0.028
X		-0.084	-0.036	-0.028	0.298	5.014	4.988	-0.632	-0.087	-2.086	0.023
S		0.097	0.053	0.103	0.031	1.085	0.511	2.051	0.475	0.994	0.004
%RSD		114.900	145.800	366.000	10.410	21.640	10.240	324.600	544.600	47.630	18.910
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:23:20	87.7%	0.564	0.773	0.643	-0.188	0.031	0.011	0.010	0.013	87.7%
2	01:23:48	89.8%	0.729	0.742	0.708	-0.654	0.020	0.017	0.019	0.027	88.8%
3	01:24:15	89.4%	0.716	0.726	0.647	0.112	0.021	0.010	0.005	0.019	90.0%
X		89.0%	0.669	0.747	0.666	-0.243	0.024	0.013	0.012	0.020	88.8%
S		1.1%	0.092	0.024	0.036	0.386	0.006	0.004	0.007	0.007	1.1%
%RSD		1.2	13.730	3.204	5.449	158.600	24.560	29.000	59.610	35.100	1.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:23:20	0.112	0.125	0.603	0.690	0.012	0.013	93.3%	0.015	0.022	0.025
2	01:23:48	0.086	0.101	0.579	0.581	0.012	0.041	94.8%	0.017	0.011	0.025
3	01:24:15	0.096	0.106	0.598	0.663	0.005	0.009	95.9%	0.023	0.013	0.019
X		0.098	0.111	0.594	0.644	0.010	0.021	94.6%	0.018	0.016	0.023
S		0.013	0.013	0.013	0.057	0.004	0.018	1.3%	0.004	0.006	0.003
%RSD		13.530	11.400	2.170	8.797	43.060	82.910	1.4	23.520	37.420	13.720
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	01:23:20	0.023	0.025	101.8%							
2	01:23:48	0.020	0.022	103.4%							
3	01:24:15	0.025	0.026	104.9%							
X		0.023	0.024	103.4%							
S		0.003	0.002	1.5%							
%RSD		11.530	9.345	1.5							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:29:12	78.8%	0.031	130.900	133.200	25.770	12040.000	510.500	514.300	519.800	28.690
2	01:29:39	78.5%	0.008	133.200	135.300	21.580	12170.000	508.700	500.500	529.400	27.910
3	01:30:06	78.6%	-0.008	130.000	133.300	23.210	12220.000	507.600	494.000	533.000	27.500
X		78.6%	0.010	131.400	133.900	23.520	12140.000	508.900	503.000	527.400	28.030
S		0.1%	0.020	1.651	1.201	2.115	94.220	1.463	10.390	6.801	0.602
%RSD		0.2	190.000	1.257	0.896	8.991	0.776	0.287	2.066	1.290	2.148
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:29:12	8414.000	57360.000	41350.000	3374.000	3493.000	85.0%	3.041	0.023	1.115	10740.000
2	01:29:39	7846.000	56240.000	40730.000	3486.000	3498.000	85.4%	2.983	-0.924	1.086	11760.000
3	01:30:06	7765.000	56050.000	41340.000	3488.000	3517.000	84.5%	3.369	-0.189	1.138	11920.000
X		8008.000	56550.000	41140.000	3449.000	3503.000	84.9%	3.131	-0.363	1.113	11470.000
S		353.800	709.200	356.100	64.770	12.700	0.4%	0.208	0.497	0.026	639.700
%RSD		4.418	1.254	0.866	1.878	0.363	0.5	6.647	136.800	2.339	5.576
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:29:12	561.200	39.730	598.700	560.300	1.690	7.797	22.140	114.400	118.400	6.610
2	01:29:39	543.800	38.990	592.600	543.200	1.627	7.864	24.180	112.400	114.800	6.579
3	01:30:06	554.300	40.190	596.100	559.000	1.755	7.343	23.390	113.000	116.800	6.359
X		553.100	39.640	595.800	554.200	1.691	7.668	23.240	113.200	116.700	6.516
S		8.747	0.609	3.070	9.497	0.064	0.283	1.032	1.044	1.797	0.137
%RSD		1.581	1.536	0.515	1.714	3.788	3.695	4.439	0.922	1.540	2.102
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:29:12	6.376	6.923	1.281	0.947	27.250	24.540	-1.021	-0.243	0.025	15.050
2	01:29:39	6.827	6.546	1.323	0.525	23.420	27.820	0.039	0.033	-1.100	15.440
3	01:30:06	8.240	6.444	1.133	0.742	23.450	23.610	-1.369	-0.427	4.061	15.300
X		7.148	6.638	1.246	0.738	24.710	25.320	-0.784	-0.212	0.995	15.260
S		0.972	0.252	0.100	0.211	2.203	2.211	0.734	0.232	2.714	0.196
%RSD		13.600	3.798	7.998	28.600	8.918	8.732	93.560	109.300	272.600	1.282
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:29:12	78.6%	6.047	5.504	5.577	-1.083	0.036	0.044	0.062	0.057	79.5%
2	01:29:39	79.2%	5.839	5.606	5.720	-0.389	0.048	0.062	0.025	0.048	80.2%
3	01:30:06	78.2%	5.828	5.823	5.706	-0.941	0.051	0.046	0.061	0.047	79.8%
X		78.6%	5.904	5.644	5.668	-0.804	0.045	0.051	0.049	0.051	79.8%
S		0.5%	0.123	0.163	0.079	0.367	0.008	0.010	0.021	0.005	0.4%
%RSD		0.6	2.089	2.888	1.392	45.600	17.440	20.080	43.260	10.170	0.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:29:12	0.736	1.114	1.846	1.981	6.233	6.318	86.7%	0.013	0.019	0.282
2	01:29:39	0.781	1.075	1.950	2.184	6.296	7.003	88.0%	0.024	0.019	0.266
3	01:30:06	0.840	1.131	2.038	2.232	6.521	6.698	88.8%	0.009	0.018	0.309
X		0.786	1.107	1.945	2.132	6.350	6.673	87.8%	0.015	0.019	0.285
S		0.052	0.029	0.096	0.133	0.152	0.343	1.0%	0.008	0.001	0.022
%RSD		6.621	2.577	4.957	6.247	2.386	5.142	1.2	52.290	3.364	7.605
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	01:29:12	0.284	0.271	98.3%							
2	01:29:39	0.292	0.277	99.3%							
3	01:30:06	0.274	0.293	98.2%							
X		0.283	0.280	98.6%							
S		0.009	0.011	0.6%							
%RSD		3.083	4.057	0.6							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:35:04	74.4%	-0.023	300.200	298.900	90.990	<u>TM 403300.000</u>	<u>T 2795.000</u>	2770.000	4376.000	<u>TM 2052.000</u>
2	01:35:31	77.3%	-0.014	273.600	282.300	91.160	<u>TM 396200.000</u>	<u>T 2744.000</u>	2793.000	4419.000	<u>TM 2091.000</u>
3	01:35:58	76.6%	-0.020	298.900	298.000	85.190	<u>TM 405100.000</u>	<u>T 2839.000</u>	2846.000	4389.000	<u>TM 2089.000</u>
X		76.1%	-0.019	290.900	293.100	89.110	<u>TM 401500.000</u>	<u>T 2793.000</u>	2803.000	4395.000	<u>TM 2078.000</u>
S		1.5%	0.004	15.020	9.320	3.401	<u>TM 4701.000</u>	<u>T 47.290</u>	38.950	22.350	<u>TM 21.930</u>
%RSD		2.0	23.200	5.162	3.180	3.816	<u>TM 1.171</u>	<u>T 1.693</u>	1.389	0.508	<u>TM 1.056</u>
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:35:04	1009.000	<u>T 62570.000</u>	<u>T 17060.000</u>	94850.000	<u>TM 101800.000</u>	83.7%	2.258	0.388	2.061	1840.000
2	01:35:31	1021.000	<u>T 63330.000</u>	<u>T 17160.000</u>	95590.000	<u>TM 103700.000</u>	82.9%	2.030	0.683	2.149	1755.000
3	01:35:58	992.400	<u>T 63760.000</u>	<u>T 16940.000</u>	97910.000	<u>TM 105300.000</u>	81.8%	2.472	0.415	2.236	1949.000
X		1007.000	<u>T 63220.000</u>	<u>T 17050.000</u>	96120.000	<u>TM 103600.000</u>	82.8%	2.253	0.495	2.148	1848.000
S		14.220	<u>T 601.500</u>	<u>T 107.000</u>	1592.000	<u>TM 1727.000</u>	0.9%	0.221	0.163	0.087	97.070
%RSD		1.412	<u>T 0.951</u>	<u>T 0.628</u>	1.656	<u>TM 1.667</u>	1.1	9.813	32.870	4.070	5.252
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:35:04	1099.000	203.100	<u>T 1190.000</u>	1344.000	4.294	43.020	148.200	12.250	7.114	19.470
2	01:35:31	1103.000	202.700	<u>T 1236.000</u>	1365.000	4.410	42.880	162.500	13.140	6.811	19.210
3	01:35:58	1138.000	200.500	<u>T 1206.000</u>	1350.000	4.300	42.020	176.000	13.540	6.564	19.120
X		1113.000	202.100	<u>T 1211.000</u>	1353.000	4.335	42.640	162.300	12.980	6.830	19.270
S		21.310	1.365	<u>T 23.180</u>	10.730	0.065	0.545	13.950	0.661	0.275	0.182
%RSD		1.915	0.676	<u>T 1.915</u>	0.793	1.507	1.277	8.597	5.099	4.031	0.946
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:35:04	23.040	21.570	0.224	0.973	164.800	178.000	1.760	0.116	14.100	255.000
2	01:35:31	24.550	22.190	0.553	1.017	171.600	174.300	2.903	0.415	12.250	258.100
3	01:35:58	22.160	22.420	0.544	1.459	169.000	176.200	1.356	0.032	12.890	256.700
X		23.250	22.060	0.440	1.150	168.500	176.200	2.007	0.188	13.080	256.600
S		1.206	0.436	0.187	0.269	3.397	1.850	0.802	0.202	0.943	1.534
%RSD		5.188	1.974	42.530	23.380	2.017	1.050	39.990	107.300	7.209	0.598
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:35:04	75.8%	2.418	2.359	2.321	3.014	0.068	0.057	0.080	0.083	73.4%
2	01:35:31	75.8%	2.177	2.344	2.413	6.868	0.065	0.078	0.127	0.121	74.9%
3	01:35:58	76.4%	2.202	2.481	2.212	4.033	0.064	0.063	0.129	0.107	74.6%
X		76.0%	2.266	2.395	2.315	4.638	0.066	0.066	0.112	0.103	74.3%
S		0.4%	0.133	0.075	0.101	1.997	0.002	0.011	0.028	0.019	0.8%
%RSD		0.5	5.861	3.137	4.349	43.050	2.993	16.130	24.820	18.480	1.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:35:04	1.598	2.184	2.442	2.745	178.900	188.700	83.6%	0.007	0.006	11.370
2	01:35:31	1.547	2.107	2.550	2.790	179.200	188.500	85.3%	0.003	0.006	11.720
3	01:35:58	1.675	2.234	2.627	2.766	179.600	189.900	86.2%	0.007	0.006	11.620
X		1.607	2.175	2.539	2.767	179.200	189.000	85.0%	0.006	0.006	11.570
S		0.064	0.064	0.093	0.023	0.341	0.757	1.3%	0.003	0.000	0.180
%RSD		3.994	2.946	3.662	0.818	0.190	0.401	1.6	45.230	5.204	1.552
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	01:35:04	11.370	11.120	89.7%							
2	01:35:31	11.670	11.500	89.3%							
3	01:35:58	11.190	11.300	90.4%							
X		11.410	11.310	89.8%							
S		0.243	0.190	0.6%							
%RSD		2.132	1.678	0.6							

VJ22028-001S

10/27/2020 01:40:30

User Pre-dilution: 1.000

Run		Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:40:56		76.4%	33.380	381.900	382.000	103.000	TM 387100.000	T 3402.000	3293.000	5285.000	TM 2107.000
2	01:41:23		75.9%	33.200	389.100	384.900	119.400	TM 392700.000	T 3314.000	3393.000	5369.000	TM 2167.000
3	01:41:50		75.9%	33.140	380.600	389.600	95.600	TM 392200.000	T 3420.000	3390.000	5425.000	TM 2210.000
X			76.1%	33.240	383.900	385.500	106.000	TM 390700.000	T 3379.000	3359.000	5359.000	TM 2162.000
S			0.3%	0.126	4.592	3.795	12.160	TM 3085.000	T 56.390	57.320	70.710	TM 51.570
%RSD			0.4	0.379	1.196	0.984	11.470	TM 0.790	T 1.669	1.707	1.319	TM 2.386
Run	Time		28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:40:56		T 2029.000	T 58120.000	T 18010.000	92210.000	TM 100900.000	82.8%	100.600	102.200	96.810	2551.000
2	01:41:23		2070.000	T 59550.000	T 17860.000	94150.000	TM 101800.000	82.6%	103.600	102.300	96.740	1994.000
3	01:41:50		2087.000	T 58970.000	T 17540.000	96560.000	TM 105800.000	80.4%	106.100	100.600	96.640	2956.000
X			T 2062.000	T 58880.000	T 17810.000	94310.000	TM 102800.000	81.9%	103.400	101.700	96.730	2500.000
S			T 29.590	T 717.600	T 238.400	2179.000	TM 2591.000	1.3%	2.723	0.959	0.088	482.700
%RSD			T 1.435	T 1.219	T 1.339	2.311	TM 2.520	1.6	2.632	0.943	0.091	19.300
Run	Time		54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:40:56		2149.000	298.000	T 2214.000	2284.000	94.500	140.500	262.500	104.000	101.100	114.000
2	01:41:23		2128.000	295.700	T 2242.000	2325.000	95.130	133.400	293.500	103.000	99.650	112.600
3	01:41:50		2184.000	305.100	T 2276.000	2351.000	96.060	134.300	315.100	105.300	97.490	112.600
X			2154.000	299.600	T 2244.000	2320.000	95.230	136.100	290.400	104.100	99.410	113.100
S			28.470	4.929	T 30.870	33.910	0.788	3.861	26.410	1.170	1.810	0.803
%RSD			1.322	1.645	T 1.376	1.462	0.828	2.838	9.097	1.124	1.821	0.711
Run	Time		67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:40:56		118.400	111.500	92.010	77.550	179.100	178.900	342.200	82.850	13.180	355.400
2	01:41:23		113.600	110.700	94.550	77.830	177.100	179.500	311.900	75.560	14.630	357.500
3	01:41:50		117.000	108.800	93.500	72.820	178.900	183.800	309.200	75.210	19.080	348.000
X			116.300	110.300	93.350	76.070	178.400	180.800	321.100	77.870	15.630	353.700
S			2.482	1.390	1.279	2.818	1.130	2.678	18.330	4.315	3.076	4.985
%RSD			2.134	1.260	1.370	3.704	0.633	1.482	5.708	5.541	19.680	1.409
Run	Time		89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:40:56		75.0%	103.600	105.300	102.800	102.200	89.380	90.760	93.130	95.650	74.3%
2	01:41:23		75.3%	105.700	104.700	106.400	98.430	91.020	90.350	95.470	96.210	74.4%
3	01:41:50		77.2%	104.900	104.900	104.300	98.090	90.000	91.320	96.810	95.430	75.3%
X			75.8%	104.700	105.000	104.500	99.570	90.130	90.810	95.140	95.760	74.7%
S			1.2%	1.085	0.314	1.803	2.274	0.831	0.483	1.861	0.404	0.5%
%RSD			1.6	1.036	0.299	1.725	2.284	0.922	0.532	1.956	0.422	0.7
Run	Time		116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
			ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:40:56		99.720	101.100	101.400	111.600	268.900	278.900	84.6%	96.600	96.560	108.000
2	01:41:23		100.500	101.400	103.300	114.100	265.700	283.300	85.8%	98.140	97.300	110.100
3	01:41:50		100.300	101.800	102.400	113.100	267.700	282.500	86.0%	98.640	97.750	111.600
X			100.200	101.500	102.400	112.900	267.400	281.600	85.5%	97.800	97.200	109.900
S			0.406	0.333	0.953	1.275	1.611	2.325	0.8%	1.062	0.599	1.801
%RSD			0.405	0.329	0.931	1.129	0.602	0.826	0.9	1.086	0.617	1.639
Run	Time		207Pb	208Pb	209Bi							
			ppb	ppb	ppb							
1	01:40:56		107.500	106.800	89.9%							
2	01:41:23		109.400	108.600	90.0%							
3	01:41:50		111.100	109.500	91.1%							
X			109.300	108.300	90.3%							
S			1.793	1.376	0.7%							
%RSD			1.640	1.271	0.8							

VJ22028-001SD

10/27/2020 01:46:22

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:46:48	76.1%	33.610	391.900	399.600	153.400	TM 416500.000	TM 3649.000	3531.000	5703.000	TM 2323.000
2	01:47:15	76.1%	32.750	398.900	414.800	143.400	TM 421900.000	TM 3587.000	3601.000	5765.000	TM 2413.000
3	01:47:42	75.7%	33.360	404.000	419.500	147.300	TM 423000.000	TM 3607.000	3587.000	5750.000	TM 2365.000
X		75.9%	33.240	398.300	411.300	148.000	TM 420500.000	TM 3614.000	3573.000	5739.000	TM 2367.000
S		0.2%	0.444	6.079	10.410	5.028	TM 3484.000	TM 32.060	37.320	32.490	TM 45.270
%RSD		0.3	1.335	1.526	2.531	3.397	TM 0.829	TM 0.887	1.044	0.566	TM 1.913
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:46:48	2158.000	TM 64380.000	TM 18890.000	M 101500.000	TM 107900.000	81.5%	108.200	108.100	104.800	2309.000
2	01:47:15	TM 2264.000	TM 65560.000	TM 19020.000	M 105200.000	TM 110700.000	80.1%	108.600	108.300	103.300	2616.000
3	01:47:42	2208.000	TM 64200.000	TM 18890.000	M 101000.000	TM 108800.000	81.8%	110.300	104.400	101.900	2308.000
X		TM 2210.000	TM 64710.000	TM 18930.000	M 102600.000	TM 109100.000	81.1%	109.100	106.900	103.300	2411.000
S		TM 52.910	TM 740.000	TM 73.250	M 2319.000	TM 1416.000	0.9%	1.088	2.181	1.415	177.600
%RSD		TM 2.394	TM 1.143	TM 0.387	M 2.261	TM 1.297	1.1	0.997	2.040	1.369	7.367
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:46:48	2257.000	323.400	TM 2345.000	2457.000	100.300	145.400	310.100	113.100	108.700	122.700
2	01:47:15	2308.000	321.300	TM 2368.000	2394.000	101.200	143.300	333.600	113.000	107.000	123.500
3	01:47:42	2207.000	314.700	TM 2308.000	2356.000	96.930	136.500	340.000	112.000	108.100	120.500
X		2257.000	319.800	TM 2340.000	2402.000	99.500	141.700	327.900	112.700	107.900	122.300
S		50.370	4.570	TM 30.140	51.210	2.274	4.674	15.770	0.631	0.850	1.565
%RSD		2.231	1.429	TM 1.288	2.131	2.285	3.297	4.808	0.560	0.788	1.280
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:46:48	120.500	119.200	97.110	79.400	184.300	186.500	339.800	83.460	14.930	368.200
2	01:47:15	123.200	118.100	99.050	77.420	188.000	196.700	350.500	85.160	16.180	368.500
3	01:47:42	116.900	117.400	97.490	81.590	187.300	199.600	350.200	84.700	14.480	371.100
X		120.200	118.200	97.890	79.470	186.600	194.300	346.800	84.440	15.200	369.300
S		3.164	0.877	1.024	2.087	1.960	6.876	6.114	0.881	0.880	1.585
%RSD		2.633	0.742	1.047	2.626	1.051	3.539	1.763	1.044	5.788	0.429
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:46:48	75.7%	110.400	107.800	108.700	107.000	95.700	95.450	98.780	101.100	73.7%
2	01:47:15	75.5%	111.700	111.300	109.800	108.300	93.940	97.040	98.100	99.970	74.0%
3	01:47:42	76.0%	112.400	111.800	110.800	109.300	95.070	96.030	99.040	99.830	75.1%
X		75.7%	111.500	110.300	109.800	108.200	94.900	96.170	98.640	100.300	74.3%
S		0.3%	1.045	2.170	1.045	1.149	0.893	0.802	0.486	0.688	0.7%
%RSD		0.4	0.937	1.967	0.952	1.062	0.941	0.834	0.493	0.686	1.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:46:48	105.200	105.000	107.300	116.300	274.200	297.000	85.5%	101.300	99.450	114.100
2	01:47:15	105.700	107.000	109.100	119.700	282.400	301.600	86.0%	102.300	101.300	115.700
3	01:47:42	105.600	107.000	108.400	118.700	279.700	297.900	86.9%	103.300	102.400	117.600
X		105.500	106.400	108.300	118.200	278.800	298.800	86.1%	102.300	101.000	115.800
S		0.254	1.159	0.878	1.718	4.148	2.426	0.7%	1.007	1.475	1.768
%RSD		0.240	1.090	0.811	1.453	1.488	0.812	0.8	0.984	1.460	1.527
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	01:46:48	114.200	113.000	90.0%							
2	01:47:15	115.500	114.400	90.0%							
3	01:47:42	116.800	115.700	90.7%							
X		115.500	114.400	90.2%							
S		1.270	1.353	0.4%							
%RSD		1.099	1.182	0.5							

VJ22028-001L(5) 10/27/2020 01:52:13

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:52:40	86.8%	-0.015	61.930	63.060	23.180	83740.000	774.400	745.900	906.400	402.800
2	01:53:08	87.6%	-0.015	61.180	61.750	22.860	84350.000	803.700	786.700	913.300	413.300
3	01:53:35	87.4%	0.001	60.790	63.740	17.950	85720.000	795.000	781.600	887.200	417.100
X		87.2%	-0.010	61.300	62.850	21.330	84600.000	791.000	771.400	902.300	411.100
S		0.4%	0.009	0.578	1.012	2.928	1017.000	15.070	22.230	13.500	7.415
%RSD		0.5	97.260	0.943	1.611	13.730	1.202	1.905	2.881	1.496	1.804
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:52:40	123.300	13850.000	3627.000	19460.000	19510.000	96.2%	0.432	0.065	0.501	659.500
2	01:53:08	123.300	14090.000	3466.000	19970.000	19630.000	94.2%	0.622	-0.014	0.450	737.700
3	01:53:35	121.400	14290.000	3496.000	19540.000	19660.000	94.9%	0.260	0.092	0.473	697.400
X		122.700	14080.000	3530.000	19660.000	19600.000	95.1%	0.438	0.047	0.475	698.200
S		1.120	217.500	85.280	275.600	81.690	1.0%	0.181	0.055	0.026	39.130
%RSD		0.913	1.545	2.416	1.402	0.417	1.1	41.290	116.600	5.447	5.604
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:52:40	230.100	42.650	233.800	274.400	0.843	9.531	43.540	2.968	1.591	4.033
2	01:53:08	234.200	42.780	239.600	277.400	0.916	9.727	43.540	3.044	1.580	4.011
3	01:53:35	231.400	41.920	239.100	279.200	0.896	8.960	42.730	2.796	1.688	4.302
X		231.900	42.450	237.500	277.000	0.885	9.406	43.270	2.936	1.619	4.115
S		2.120	0.462	3.195	2.410	0.038	0.398	0.469	0.127	0.059	0.162
%RSD		0.914	1.088	1.345	0.870	4.246	4.234	1.085	4.325	3.658	3.946
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:52:40	4.398	4.660	-0.113	0.102	37.150	37.440	-0.096	0.035	-1.231	51.540
2	01:53:08	4.629	5.189	0.301	0.771	36.310	36.130	0.504	0.081	1.947	50.740
3	01:53:35	4.142	4.467	0.320	0.321	37.580	36.840	2.711	0.668	1.227	51.020
X		4.389	4.772	0.169	0.398	37.020	36.800	1.039	0.261	0.648	51.100
S		0.243	0.374	0.245	0.341	0.647	0.655	1.478	0.353	1.666	0.406
%RSD		5.545	7.828	144.700	85.770	1.747	1.780	142.200	135.200	257.200	0.794
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:52:40	86.8%	0.633	0.749	0.685	1.165	0.020	0.019	0.015	0.023	85.8%
2	01:53:08	88.2%	0.664	0.723	0.649	1.722	0.022	0.017	0.015	0.031	88.4%
3	01:53:35	89.1%	0.669	0.626	0.659	1.898	0.017	0.013	0.034	0.026	87.1%
X		88.0%	0.655	0.699	0.664	1.595	0.020	0.016	0.021	0.027	87.1%
S		1.2%	0.019	0.065	0.019	0.383	0.003	0.003	0.011	0.004	1.3%
%RSD		1.3	2.960	9.311	2.794	23.990	13.660	19.570	50.910	15.660	1.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:52:40	0.383	0.443	0.485	0.558	37.610	38.070	94.9%	0.017	0.015	2.442
2	01:53:08	0.356	0.461	0.533	0.525	37.300	37.640	95.5%	0.016	0.023	2.362
3	01:53:35	0.336	0.406	0.502	0.618	36.710	38.280	96.1%	0.016	0.019	2.432
X		0.358	0.437	0.507	0.567	37.210	37.990	95.5%	0.016	0.019	2.412
S		0.024	0.028	0.024	0.047	0.461	0.329	0.6%	0.001	0.004	0.043
%RSD		6.577	6.439	4.792	8.334	1.240	0.865	0.6	4.827	19.930	1.800
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	01:52:40	2.389	2.336	98.8%							
2	01:53:08	2.279	2.273	100.9%							
3	01:53:35	2.296	2.340	100.5%							
X		2.321	2.316	100.1%							
S		0.059	0.038	1.2%							
%RSD		2.551	1.630	1.2							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:58:33	78.8%	0.007	109.400	116.000	-98.500	TM 196500.000	TM 1291.000	1254.000	1774.000	121.800
2	01:59:01	79.5%	0.010	107.300	108.200	-104.300	TM 193800.000	TM 1278.000	1258.000	1798.000	122.200
3	01:59:28	81.3%	0.006	110.800	109.600	-105.500	TM 190900.000	TM 1261.000	1238.000	1837.000	120.700
X		79.8%	0.008	109.200	111.300	-102.800	TM 193700.000	TM 1276.000	1250.000	1803.000	121.600
S		1.3%	0.002	1.752	4.181	3.749	TM 2791.000	TM 14.870	10.320	31.720	0.754
%RSD		1.6	24.920	1.605	3.757	3.648	TM 1.441	TM 1.165	0.825	1.759	0.620
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:58:33	TM 7628.000	TM 44800.000	TM 8968.000	18270.000	18340.000	83.3%	3.780	5.570	1.471	9832.000
2	01:59:01	TM 7782.000	TM 44900.000	TM 8957.000	18380.000	18540.000	83.0%	3.455	5.250	1.454	11050.000
3	01:59:28	TM 7831.000	TM 44830.000	TM 8988.000	18330.000	18630.000	82.5%	3.430	4.684	1.631	11970.000
X		TM 7747.000	TM 44840.000	TM 8971.000	18330.000	18500.000	82.9%	3.555	5.168	1.519	10950.000
S		TM 106.100	TM 54.260	TM 16.020	57.680	150.600	0.4%	0.195	0.449	0.097	1071.000
%RSD		TM 1.369	TM 0.121	TM 0.179	0.315	0.814	0.5	5.481	8.681	6.414	9.780
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:58:33	168.500	10.900	161.800	209.500	4.209	4.492	34.510	7.121	5.652	31.130
2	01:59:01	166.000	11.150	163.900	209.200	4.134	4.547	37.980	6.978	5.477	30.390
3	01:59:28	167.200	10.650	160.400	206.700	4.239	4.155	39.620	7.167	5.778	30.540
X		167.200	10.900	162.000	208.500	4.194	4.398	37.370	7.089	5.635	30.690
S		1.278	0.252	1.796	1.562	0.054	0.212	2.610	0.099	0.151	0.393
%RSD		0.764	2.310	1.109	0.749	1.291	4.825	6.985	1.392	2.680	1.280
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:58:33	29.740	28.890	0.399	1.342	119.800	125.700	3.424	0.723	4.077	38.650
2	01:59:01	29.010	28.920	0.330	1.208	124.900	126.300	2.261	0.363	7.612	37.700
3	01:59:28	28.510	28.510	0.387	0.631	126.100	127.400	3.017	0.697	1.484	38.670
X		29.090	28.770	0.372	1.060	123.600	126.500	2.901	0.594	4.391	38.340
S		0.617	0.226	0.037	0.378	3.333	0.841	0.590	0.200	3.076	0.554
%RSD		2.122	0.786	9.883	35.610	2.697	0.665	20.340	33.720	70.060	1.446
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:58:33	78.2%	11.570	11.230	11.050	0.549	0.014	0.012	0.022	0.037	78.1%
2	01:59:01	79.0%	11.890	11.060	10.600	0.499	0.011	0.006	0.002	0.013	78.4%
3	01:59:28	78.8%	11.050	10.710	11.190	-0.406	0.014	0.016	-0.015	0.027	78.1%
X		78.7%	11.510	11.000	10.950	0.214	0.013	0.011	0.003	0.026	78.2%
S		0.4%	0.424	0.265	0.309	0.537	0.002	0.005	0.019	0.012	0.2%
%RSD		0.5	3.686	2.413	2.825	251.400	11.480	40.920	603.000	46.700	0.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:58:33	0.259	0.329	34.000	36.490	9.970	10.360	87.3%	0.010	0.008	0.704
2	01:59:01	0.276	0.338	33.780	37.290	10.010	10.470	88.6%	0.009	0.010	0.729
3	01:59:28	0.295	0.295	34.190	37.510	9.924	10.560	89.0%	0.009	0.007	0.622
X		0.277	0.321	33.990	37.100	9.966	10.470	88.3%	0.009	0.008	0.685
S		0.018	0.023	0.202	0.536	0.041	0.100	0.9%	0.001	0.002	0.056
%RSD		6.424	7.025	0.595	1.444	0.409	0.953	1.0	6.784	19.770	8.188
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	01:58:33	0.669	0.676	95.0%							
2	01:59:01	0.602	0.660	95.5%							
3	01:59:28	0.650	0.636	94.6%							
X		0.640	0.657	95.0%							
S		0.034	0.020	0.4%							
%RSD		5.345	3.023	0.4							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:04:24	78.7%	-0.000	60.660	64.740	109.700	TM 425800.000	T 3210.000	3097.000	3263.000	459.400
2	02:04:51	77.8%	0.007	65.040	64.210	108.500	TM 437000.000	T 3203.000	3050.000	3213.000	448.100
3	02:05:18	76.2%	-0.016	66.390	63.650	99.050	TM 448400.000	T 3245.000	3112.000	3245.000	459.300
X		77.5%	-0.003	64.030	64.200	105.800	TM 437100.000	T 3219.000	3086.000	3241.000	455.600
S		1.3%	0.012	2.996	0.547	5.834	TM 11290.000	T 22.380	32.670	25.380	6.484
%RSD		1.6	389.700	4.680	0.853	5.517	TM 2.583	T 0.695	1.059	0.783	1.423
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:04:24	T 2367.000	T 72880.000	T 6082.000	7661.000	7580.000	83.0%	0.487	0.667	3.928	8536.000
2	02:04:51	2413.000	T 73660.000	T 6124.000	7543.000	7515.000	83.7%	0.483	0.250	4.271	8820.000
3	02:05:18	2305.000	T 73610.000	T 6072.000	7833.000	7645.000	83.1%	0.328	0.551	4.166	8791.000
X		T 2362.000	T 73380.000	T 6093.000	7679.000	7580.000	83.3%	0.433	0.489	4.122	8716.000
S		T 54.000	T 439.000	T 27.480	146.000	65.400	0.4%	0.091	0.216	0.176	156.500
%RSD		T 2.286	T 0.598	T 0.451	1.901	0.863	0.5	20.920	44.050	4.263	1.796
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:04:24	39.410	0.441	31.240	54.830	0.093	0.893	47.630	9.153	6.816	33.540
2	02:04:51	38.460	0.491	31.440	59.630	0.064	0.891	49.000	8.962	7.111	34.100
3	02:05:18	38.590	0.400	31.160	54.900	0.088	0.849	55.040	9.327	7.202	34.370
X		38.820	0.444	31.280	56.460	0.081	0.878	50.560	9.147	7.043	34.000
S		0.515	0.046	0.146	2.749	0.016	0.025	3.941	0.183	0.202	0.423
%RSD		1.326	10.270	0.467	4.869	19.240	2.876	7.795	1.996	2.865	1.245
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:04:24	29.920	31.620	0.783	0.615	169.300	172.900	2.833	0.636	2.786	57.370
2	02:04:51	29.780	31.080	-0.078	0.341	171.000	175.700	0.559	-0.261	16.450	57.670
3	02:05:18	30.060	31.180	-0.461	1.073	166.200	175.700	2.755	0.378	11.900	57.680
X		29.920	31.290	0.081	0.676	168.800	174.800	2.049	0.251	10.380	57.570
S		0.138	0.287	0.637	0.370	2.462	1.641	1.291	0.462	6.958	0.177
%RSD		0.460	0.917	782.300	54.700	1.458	0.939	63.000	184.100	67.050	0.308
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:04:24	76.6%	1.369	1.302	1.358	-0.213	0.003	0.001	-0.006	-0.007	75.3%
2	02:04:51	76.8%	1.445	1.492	1.401	-0.515	0.001	-0.001	0.004	-0.004	76.1%
3	02:05:18	77.5%	1.395	1.420	1.330	-0.572	0.003	0.001	0.005	-0.016	76.8%
X		77.0%	1.403	1.405	1.363	-0.433	0.002	0.000	0.001	-0.009	76.1%
S		0.5%	0.039	0.096	0.035	0.193	0.001	0.002	0.006	0.006	0.7%
%RSD		0.6	2.752	6.806	2.603	44.560	35.110	361.900	721.000	72.320	1.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:04:24	2.275	3.096	0.371	0.415	10.940	11.070	85.4%	0.026	0.019	0.307
2	02:04:51	2.207	3.194	0.410	0.497	10.810	11.020	87.8%	0.024	0.022	0.387
3	02:05:18	2.158	2.961	0.373	0.516	10.520	11.380	89.3%	0.023	0.026	0.353
X		2.213	3.084	0.385	0.476	10.760	11.160	87.5%	0.025	0.022	0.349
S		0.059	0.117	0.022	0.053	0.214	0.191	2.0%	0.002	0.004	0.040
%RSD		2.660	3.783	5.688	11.240	1.987	1.713	2.3	7.229	15.730	11.530
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	02:04:24	0.349	0.334	91.1%							
2	02:04:51	0.353	0.340	91.5%							
3	02:05:18	0.313	0.331	90.8%							
X		0.339	0.335	91.1%							
S		0.022	0.005	0.3%							
%RSD		6.512	1.472	0.4							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:10:16	79.2%	-0.018	131.400	135.300	-137.500	<u>TM 157300.000</u>	<u>TM 1397.000</u>	1410.000	2056.000	10.990
2	02:10:43	78.1%	-0.017	130.000	128.600	-145.800	<u>TM 160900.000</u>	<u>TM 1436.000</u>	1416.000	2067.000	10.790
3	02:11:10	76.6%	-0.025	136.700	136.600	-141.700	<u>TM 165200.000</u>	<u>TM 1446.000</u>	1395.000	2089.000	10.430
X		78.0%	-0.020	132.700	133.500	-141.700	<u>TM 161100.000</u>	<u>TM 1426.000</u>	1407.000	2070.000	10.730
S		1.3%	0.004	3.526	4.315	4.177	<u>TM 3955.000</u>	<u>TM 25.740</u>	10.510	16.870	0.288
%RSD		1.6	20.980	2.658	3.233	2.948	<u>TM 2.455</u>	<u>TM 1.805</u>	0.747	0.815	2.679
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:10:16	-77.980	7284.000	<u>TM 3138.000</u>	59400.000	<u>TM 64340.000</u>	84.2%	0.301	13.590	0.169	855.900
2	02:10:43	-79.760	<u>TM 8100.000</u>	<u>TM 3166.000</u>	59140.000	<u>TM 64210.000</u>	84.0%	0.391	12.790	0.193	759.800
3	02:11:10	-77.760	7285.000	<u>TM 3140.000</u>	59260.000	<u>TM 64090.000</u>	83.5%	0.281	13.250	0.170	680.900
X		-78.500	<u>TM 7556.000</u>	<u>TM 3148.000</u>	59270.000	<u>TM 64210.000</u>	83.9%	0.324	13.210	0.177	765.500
S		1.097	<u>TM 470.900</u>	<u>TM 15.770</u>	134.100	<u>TM 124.200</u>	0.3%	0.059	0.401	0.013	87.650
%RSD		1.398	<u>TM 6.232</u>	<u>TM 0.501</u>	0.226	<u>TM 0.193</u>	0.4	18.050	3.035	7.516	11.450
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:10:16	30.970	4.187	35.710	188.100	0.058	1.230	61.490	3.201	0.435	0.321
2	02:10:43	30.210	4.218	33.760	193.400	0.059	1.287	78.230	4.095	0.474	0.350
3	02:11:10	30.570	4.135	31.770	186.000	0.046	1.370	89.130	4.389	0.547	0.432
X		30.580	4.180	33.750	189.200	0.054	1.295	76.290	3.895	0.485	0.368
S		0.378	0.042	1.971	3.810	0.008	0.070	13.920	0.618	0.057	0.057
%RSD		1.237	1.001	5.841	2.014	14.060	5.433	18.250	15.880	11.740	15.620
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:10:16	1.177	0.229	9.082	1.453	9.890	9.987	6.014	1.332	3.362	68.000
2	02:10:43	0.754	0.262	9.054	1.424	10.210	11.470	4.090	1.076	-3.965	66.180
3	02:11:10	0.966	0.400	9.383	2.386	9.913	9.988	6.301	1.504	0.752	68.220
X		0.966	0.297	9.173	1.754	10.000	10.480	5.469	1.304	0.049	67.460
S		0.211	0.091	0.183	0.547	0.176	0.855	1.203	0.215	3.714	1.120
%RSD		21.900	30.570	1.991	31.200	1.757	8.159	21.990	16.500	7507.000	1.661
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:10:16	78.0%	<u>TM 6884.000</u>	<u>TM 7688.000</u>	<u>TM 7022.000</u>	-2.225	0.006	-0.000	-14.630	1.571	79.4%
2	02:10:43	78.8%	<u>TM 6723.000</u>	<u>TM 7553.000</u>	<u>TM 6929.000</u>	0.793	-0.000	0.001	-15.740	0.997	79.2%
3	02:11:10	78.7%	<u>TM 6896.000</u>	<u>TM 7555.000</u>	<u>TM 6934.000</u>	1.403	0.001	0.006	-16.030	1.177	78.7%
X		78.5%	<u>TM 6834.000</u>	<u>TM 7598.000</u>	<u>TM 6962.000</u>	-0.010	0.002	0.003	-15.470	1.248	79.1%
S		0.5%	<u>TM 96.560</u>	<u>TM 77.380</u>	<u>TM 52.330</u>	1.942	0.003	0.003	0.741	0.294	0.4%
%RSD		0.6	<u>TM 1.413</u>	<u>TM 1.018</u>	<u>TM 0.752</u>	19990.000	135.800	136.500	4.788	23.520	0.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:10:16	3.165	0.024	0.032	0.055	0.816	0.798	87.9%	0.577	0.565	0.015
2	02:10:43	3.222	0.045	0.037	0.063	0.858	0.888	89.8%	0.601	0.574	0.001
3	02:11:10	3.189	0.033	0.066	0.057	0.907	0.772	90.0%	0.595	0.527	0.007
X		3.192	0.034	0.045	0.058	0.861	0.819	89.2%	0.591	0.555	0.008
S		0.028	0.011	0.018	0.004	0.046	0.061	1.1%	0.013	0.025	0.007
%RSD		0.885	30.900	40.510	7.617	5.312	7.425	1.3	2.115	4.494	88.060
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	02:10:16	-0.001	0.005	95.4%							
2	02:10:43	0.008	0.004	95.6%							
3	02:11:10	-0.002	0.003	96.8%							
X		0.002	0.004	95.9%							
S		0.006	0.001	0.8%							
%RSD		337.900	33.830	0.8							

VJ22080-001 10/27/2020 02:15:41

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:16:07	76.7%	-0.030	54.230	53.090	30.240	TM 216500.000	TM 841.400	851.500	1530.000	137.400
2	02:16:35	76.2%	-0.025	56.830	53.420	26.180	TM 220700.000	TM 855.100	841.600	1553.000	136.800
3	02:17:02	77.9%	-0.025	51.110	51.990	23.690	TM 215900.000	TM 859.400	857.700	1568.000	138.900
X		76.9%	-0.026	54.050	52.830	26.700	TM 217700.000	TM 852.000	850.300	1551.000	137.700
S		0.9%	0.003	2.865	0.751	3.308	TM 2628.000	TM 9.403	8.142	19.090	1.105
%RSD		1.1	11.080	5.301	1.421	12.390	TM 1.207	TM 1.104	0.958	1.231	0.803
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:16:07	TM 4335.000	TM 46480.000	TM 3495.000	15580.000	14710.000	81.3%	1.909	-0.693	54.600	5729.000
2	02:16:35	TM 4379.000	TM 46060.000	TM 3582.000	15370.000	14660.000	82.1%	2.050	-1.559	51.790	6373.000
3	02:17:02	TM 4459.000	TM 46570.000	TM 3543.000	15330.000	14940.000	82.2%	2.093	0.378	53.640	5394.000
X		TM 4391.000	TM 46370.000	TM 3540.000	15420.000	14770.000	81.9%	2.017	-0.624	53.340	5832.000
S		TM 62.920	TM 272.900	TM 43.880	133.400	146.300	0.5%	0.096	0.971	1.430	497.300
%RSD		TM 1.433	TM 0.589	TM 1.240	0.865	0.991	0.6	4.765	155.400	2.680	8.527
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:16:07	607.300	31.360	592.900	604.200	0.150	3.282	36.250	2.693	1.016	11.500
2	02:16:35	581.400	30.020	555.200	581.600	0.098	3.319	37.450	2.802	1.208	11.360
3	02:17:02	591.700	31.180	568.300	592.000	0.130	3.188	37.680	2.442	1.130	11.290
X		593.400	30.850	572.200	592.600	0.126	3.263	37.130	2.645	1.118	11.380
S		13.070	0.728	19.130	11.340	0.026	0.068	0.771	0.185	0.097	0.102
%RSD		2.202	2.358	3.344	1.913	20.740	2.069	2.076	6.983	8.636	0.900
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:16:07	10.720	10.590	0.036	0.430	40.680	42.730	0.665	0.003	6.310	TM 1678.000
2	02:16:35	11.330	10.820	-0.116	0.605	41.720	46.260	-1.636	-0.539	6.250	TM 1674.000
3	02:17:02	11.760	10.910	0.179	0.618	42.160	42.520	1.331	0.191	5.755	TM 1706.000
X		11.270	10.780	0.033	0.551	41.520	43.830	0.120	-0.115	6.105	TM 1686.000
S		0.524	0.167	0.148	0.105	0.759	2.103	1.557	0.379	0.304	TM 17.700
%RSD		4.649	1.552	446.400	19.020	1.829	4.797	1295.000	329.800	4.988	TM 1.050
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:16:07	75.5%	8.101	8.311	8.175	38.990	0.004	0.001	0.481	0.486	76.5%
2	02:16:35	75.9%	9.502	8.904	9.031	42.620	0.003	-0.000	0.488	0.571	76.6%
3	02:17:02	76.7%	8.662	8.236	8.224	39.770	-0.000	0.001	0.539	0.505	76.6%
X		76.0%	8.755	8.484	8.476	40.460	0.002	0.001	0.503	0.521	76.6%
S		0.6%	0.705	0.366	0.481	1.911	0.002	0.001	0.032	0.045	0.1%
%RSD		0.8	8.053	4.312	5.671	4.724	93.040	89.420	6.272	8.554	0.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:16:07	0.495	0.429	0.465	0.461	19.430	21.060	87.0%	0.008	0.008	0.055
2	02:16:35	0.454	0.465	0.475	0.519	19.090	20.300	87.4%	0.008	0.007	0.068
3	02:17:02	0.541	0.529	0.509	0.515	19.510	20.210	87.6%	0.006	0.008	0.087
X		0.497	0.474	0.483	0.498	19.340	20.530	87.3%	0.007	0.008	0.070
S		0.044	0.051	0.023	0.033	0.221	0.467	0.3%	0.001	0.001	0.016
%RSD		8.837	10.730	4.794	6.549	1.141	2.273	0.3	18.050	6.632	23.250
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	02:16:07	0.081	0.067	93.3%							
2	02:16:35	0.063	0.072	94.1%							
3	02:17:02	0.082	0.078	95.2%							
X		0.075	0.073	94.2%							
S		0.011	0.005	1.0%							
%RSD		13.920	7.119	1.1							

(5) BNW 10/27/20

VJ22007-001

10/27/2020 02:21:33

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:22:00	81.7%	0.167	18.420	19.370	635.300	6626.000	7030.000	6956.000	6857.000	TM 5854.000
2	02:22:27	82.9%	0.186	16.450	19.020	614.200	6648.000	6992.000	6880.000	7186.000	TM 5839.000
3	02:22:54	80.7%	0.211	20.850	19.760	623.600	6715.000	7131.000	6952.000	6952.000	TM 6018.000
X		81.8%	0.188	18.570	19.380	624.400	6663.000	7051.000	6929.000	6999.000	TM 5904.000
S		1.1%	0.022	2.204	0.372	10.520	46.040	71.840	43.060	169.200	TM 99.410
%RSD		1.4	11.740	11.870	1.921	1.685	0.691	1.019	0.622	2.418	TM 1.684
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:22:00	2822.000	9856.000	2570.000	42180.000	45390.000	90.5%	27.380	4.779	8.205	1194.000
2	02:22:27	2876.000	10920.000	2512.000	42600.000	46590.000	90.0%	39.320	5.043	8.118	923.700
3	02:22:54	2930.000	9886.000	2477.000	43810.000	45820.000	87.5%	29.410	5.235	8.524	760.500
X		2876.000	10220.000	2520.000	42860.000	45930.000	89.3%	32.040	5.019	8.282	959.500
S		54.310	606.000	47.150	848.200	611.200	1.6%	6.388	0.229	0.214	219.100
%RSD		1.888	5.929	1.871	1.979	1.331	1.8	19.940	4.571	2.582	22.840
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:22:00	3022.000	55.500	3222.000	2997.000	0.668	6.513	32.610	168.200	181.500	M 610.900
2	02:22:27	3108.000	55.780	3210.000	2991.000	0.661	6.589	31.770	164.600	175.900	M 617.000
3	02:22:54	3008.000	56.640	3244.000	3033.000	0.693	6.968	33.360	162.700	176.800	M 606.700
X		3046.000	55.970	3225.000	3007.000	0.674	6.690	32.580	165.200	178.100	M 611.500
S		54.390	0.594	17.340	22.980	0.017	0.244	0.794	2.783	2.982	M 5.200
%RSD		1.786	1.062	0.538	0.764	2.460	3.645	2.436	1.685	1.674	M 0.850
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:22:00	M 558.700	M 563.900	1.671	0.177	19.890	19.470	2.409	0.648	0.276	53.810
2	02:22:27	M 551.200	M 561.500	1.824	-0.004	18.710	21.480	2.336	0.595	1.799	53.570
3	02:22:54	M 567.400	M 569.600	1.353	0.990	18.730	18.990	-1.498	-0.360	1.830	54.080
X		M 559.100	M 565.000	1.616	0.388	19.110	19.980	1.082	0.294	1.302	53.820
S		M 8.122	M 4.154	0.240	0.529	0.675	1.322	2.235	0.567	0.888	0.258
%RSD		M 1.453	M 0.735	14.870	136.600	3.533	6.617	206.500	192.700	68.230	0.478
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:22:00	89.6%	1.723	1.587	1.626	2.047	0.237	0.195	0.731	0.723	85.4%
2	02:22:27	90.7%	1.911	1.813	1.885	3.292	0.211	0.205	0.681	0.759	86.0%
3	02:22:54	90.7%	1.834	1.712	1.841	2.919	0.193	0.213	0.771	0.659	85.1%
X		90.4%	1.823	1.704	1.784	2.753	0.214	0.204	0.728	0.714	85.5%
S		0.7%	0.094	0.113	0.139	0.639	0.022	0.009	0.045	0.051	0.5%
%RSD		0.7	5.160	6.637	7.780	23.200	10.280	4.597	6.217	7.079	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:22:00	1.552	2.240	0.070	0.128	114.900	119.200	92.9%	0.041	0.036	8.649
2	02:22:27	1.713	2.007	0.110	0.082	114.700	117.400	93.6%	0.053	0.037	8.895
3	02:22:54	1.709	2.191	0.095	0.081	116.100	119.600	94.4%	0.040	0.030	8.544
X		1.658	2.146	0.092	0.097	115.200	118.700	93.6%	0.045	0.034	8.696
S		0.092	0.123	0.020	0.027	0.746	1.169	0.7%	0.007	0.003	0.180
%RSD		5.544	5.736	22.030	27.600	0.648	0.985	0.8	16.230	9.889	2.075
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	02:22:00	8.229	8.213	148.4%							
2	02:22:27	8.296	8.323	148.1%							
3	02:22:54	8.255	8.177	151.1%							
X		8.260	8.238	149.2%							
S		0.034	0.076	1.6%							
%RSD		0.408	0.924	1.1							

CCV MW15278 10/27/2020 02:27:26 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:52	77.8%	291.600	300.300	314.700	4.520	63980.000	65380.000	64660.000	61610.000	291.300
2	02:28:19	77.4%	303.700	306.400	329.800	10.770	64680.000	66830.000	67250.000	62410.000	295.400
3	02:28:46	78.9%	304.300	297.800	321.800	4.538	64030.000	67030.000	66880.000	62090.000	296.200
X		78.0%	99.957%	100.514%	107.363%	6.610	107.046%	66410.000	66260.000	103.395%	98.112%
S		0.8%	n/a	n/a	n/a	3.604	n/a	897.600	1401.000	n/a	n/a
%RSD		1.0	2.390	1.466	2.344	54.530	0.610	1.351	2.115	0.651	0.892
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:52	3414.000	146.900	57900.000	60180.000	65650.000	86.8%	306.100	308.400	299.400	233.900
2	02:28:19	3403.000	157.200	57880.000	61500.000	66160.000	85.8%	304.900	301.000	294.400	3309.000
3	02:28:46	3452.000	161.000	57140.000	60950.000	65730.000	86.9%	309.700	307.000	294.200	2217.000
X		3423.000	155.000	96.065%	60880.000	109.743%	86.5%	102.302%	101.820%	98.659%	1920.000
S		25.680	7.317	n/a	663.400	n/a	0.6%	n/a	n/a	n/a	1559.000
%RSD		0.750	4.720	0.757	1.090	0.416	0.7	0.815	1.295	0.992	81.200
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:52	66230.000	312.100	65630.000	63590.000	278.000	279.500	315.800	282.200	284.600	297.200
2	02:28:19	67670.000	314.400	66800.000	63550.000	291.900	280.700	320.200	271.000	288.600	297.200
3	02:28:46	66510.000	307.400	65530.000	64260.000	286.000	282.500	315.500	272.800	280.000	296.100
X		66800.000	103.762%	65990.000	106.330%	95.093%	93.635%	317.100	275.400	94.810%	98.943%
S		765.400	n/a	707.700	n/a	n/a	n/a	2.621	6.023	n/a	n/a
%RSD		1.146	1.144	1.072	0.623	2.450	0.530	0.827	2.187	1.513	0.210
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:52	289.800	280.900	270.000	285.600	7.245	1.759	1246.000	297.600	-1.844	297.300
2	02:28:19	287.800	279.900	277.000	285.700	6.735	2.507	1205.000	290.100	-1.913	294.400
3	02:28:46	291.000	284.600	273.000	293.900	9.374	3.091	1220.000	291.200	1.940	297.100
X		289.600	281.800	91.116%	288.400	7.785	2.452	1224.000	97.666%	-0.606	98.759%
S		1.593	2.485	n/a	4.751	1.400	0.668	20.710	n/a	2.205	n/a
%RSD		0.550	0.882	1.285	1.648	17.990	27.230	1.692	1.387	363.900	0.537
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:52	79.5%	305.400	303.400	306.700	285.600	283.000	286.000	290.200	294.100	80.1%
2	02:28:19	81.1%	304.600	308.600	304.500	290.200	280.100	283.200	290.100	294.400	80.7%
3	02:28:46	81.2%	312.900	318.500	312.600	294.300	281.700	280.800	294.500	295.000	81.5%
X		80.6%	102.544%	103.385%	307.900	290.000	93.864%	283.300	291.600	98.163%	80.8%
S		1.0%	n/a	n/a	4.182	4.357	n/a	2.633	2.537	n/a	0.7%
%RSD		1.2	1.483	2.482	1.358	1.502	0.528	0.929	0.870	0.153	0.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:52	300.500	300.800	292.700	319.700	280.200	292.100	89.5%	299.600	298.300	297.900
2	02:28:19	304.400	303.500	295.400	319.500	279.200	292.800	90.7%	295.100	295.500	298.400
3	02:28:46	305.900	301.500	296.400	323.500	279.000	292.000	91.1%	295.900	294.500	298.600
X		101.201%	100.653%	294.800	106.967%	93.158%	97.436%	90.5%	296.900	98.695%	99.433%
S		n/a	n/a	1.936	n/a	n/a	n/a	0.8%	2.444	n/a	n/a
%RSD		0.919	0.464	0.656	0.709	0.236	0.160	0.9	0.823	0.671	0.129
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	02:27:52	297.400	297.100	96.4%							
2	02:28:19	296.600	297.100	98.4%							
3	02:28:46	297.500	297.100	100.1%							
X		99.054%	99.025%	98.3%							
S		n/a	n/a	1.9%							
%RSD		0.161	0.001	1.9							

CCB IM10195-01 10/27/2020 02:33:18 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:33:44	85.2%	0.016	0.845	0.943	-10.440	34.550	5.260	5.188	5.296	0.069
2	02:34:11	85.1%	0.040	0.811	0.794	-19.100	34.760	5.043	5.118	4.637	0.092
3	02:34:38	85.0%	0.050	1.064	1.053	-7.573	34.180	4.688	4.627	3.806	0.094
X		85.1%	0.035	0.907	0.930	-12.370	34.500	4.997	4.978	4.580	0.085
S		0.1%	0.017	0.137	0.130	6.003	0.293	0.289	0.306	0.747	0.014
%RSD		0.1	48.390	15.110	13.950	48.520	0.849	5.781	6.147	16.300	16.620
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:33:44	-103.100	85.080	-0.510	1.765	-28.980	93.8%	-0.016	0.042	0.015	-15.770
2	02:34:11	-102.300	88.820	-3.854	0.767	-29.330	93.3%	0.024	0.007	-0.021	8.057
3	02:34:38	-102.800	99.510	-3.318	1.780	-28.870	93.3%	-0.036	-0.017	0.002	8.206
X		-102.700	91.140	-2.561	1.437	-29.060	93.4%	-0.009	0.011	-0.001	0.166
S		0.408	7.488	1.796	0.581	0.244	0.3%	0.031	0.030	0.019	13.800
%RSD		0.397	8.216	70.130	40.390	0.839	0.3	325.100	275.900	1516.000	8321.000
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:33:44	6.601	0.013	-0.148	13.360	0.011	0.009	21.850	0.865	0.058	-0.023
2	02:34:11	6.596	0.022	-0.473	13.990	0.008	-0.002	21.970	0.845	0.022	-0.040
3	02:34:38	5.273	0.015	-1.656	15.350	0.015	0.025	21.740	0.866	0.046	-0.072
X		6.156	0.017	-0.759	14.230	0.011	0.011	21.850	0.858	0.042	-0.045
S		0.765	0.005	0.794	1.015	0.004	0.014	0.118	0.012	0.018	0.025
%RSD		12.430	28.630	104.600	7.131	31.010	130.900	0.541	1.364	43.870	54.910
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:33:44	-0.001	-0.092	-0.031	-0.120	2.082	1.235	-1.079	-0.224	-0.570	0.021
2	02:34:11	-0.078	0.068	0.021	-0.104	2.054	1.911	1.177	0.332	-1.921	0.021
3	02:34:38	-0.040	0.004	-0.057	0.362	2.184	1.685	-0.121	-0.007	-0.934	0.023
X		-0.040	-0.007	-0.022	0.046	2.107	1.610	-0.008	0.034	-1.142	0.022
S		0.038	0.081	0.040	0.274	0.068	0.344	1.132	0.280	0.699	0.001
%RSD		96.120	1196.000	177.300	595.500	3.231	21.380	14480.000	825.500	61.190	5.378
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:33:44	87.0%	0.833	0.800	0.852	-0.582	0.022	0.031	0.015	0.013	86.3%
2	02:34:11	88.0%	1.146	1.115	0.887	-0.157	0.017	0.011	0.005	0.027	88.6%
3	02:34:38	87.8%	1.025	0.943	0.992	-0.319	0.021	0.016	-0.000	0.020	88.9%
X		87.6%	1.001	0.952	0.910	-0.352	0.020	0.019	0.006	0.020	87.9%
S		0.5%	0.158	0.158	0.073	0.215	0.003	0.010	0.008	0.007	1.4%
%RSD		0.6	15.780	16.590	7.989	60.930	13.940	52.260	118.700	35.890	1.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:33:44	0.070	0.146	0.627	0.631	0.012	0.026	93.2%	0.017	0.015	0.025
2	02:34:11	0.117	0.174	0.586	0.687	0.019	0.021	93.3%	0.015	0.013	0.014
3	02:34:38	0.106	0.154	0.641	0.617	0.012	0.013	94.4%	0.013	0.017	0.032
X		0.098	0.158	0.618	0.645	0.015	0.020	93.6%	0.015	0.015	0.023
S		0.025	0.014	0.029	0.037	0.004	0.007	0.7%	0.002	0.002	0.009
%RSD		25.180	8.879	4.679	5.747	28.280	32.350	0.7	10.950	14.510	39.580
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	02:33:44	0.015	0.026	101.9%							
2	02:34:11	0.017	0.019	103.2%							
3	02:34:38	0.013	0.021	103.5%							
X		0.015	0.022	102.9%							
S		0.002	0.003	0.9%							
%RSD		14.410	14.820	0.8							

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10/27/2020 02:39:09

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:39:35	80.3%	-0.023	55.400	57.190	-89.890	30080.000	2188.000	2191.000	3490.000	94.740
2	02:40:02	77.8%	-0.021	57.790	57.790	-86.790	31430.000	2151.000	2121.000	3502.000	90.760
3	02:40:29	80.9%	-0.029	53.990	58.420	-88.880	30380.000	2221.000	2212.000	3530.000	96.500
X		79.7%	-0.024	55.730	57.800	-88.520	30630.000	2187.000	2174.000	3507.000	94.000
S		1.7%	0.004	1.921	0.613	1.579	706.100	34.940	47.740	20.590	2.940
%RSD		2.1	16.970	3.447	1.061	1.783	2.305	1.598	2.196	0.587	3.128
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:39:35	2207.000	45000.000	15000.000	29450.000	31050.000	84.6%	0.943	3.872	3.918	3160.000
2	02:40:02	2169.000	45020.000	15490.000	29350.000	29900.000	84.7%	0.920	3.391	3.783	3890.000
3	02:40:29	2267.000	45600.000	15440.000	30010.000	30260.000	82.1%	0.951	4.004	3.973	4056.000
X		2215.000	45210.000	15310.000	29600.000	30400.000	83.8%	0.938	3.756	3.891	3702.000
S		49.450	343.300	272.000	355.300	588.200	1.5%	0.016	0.323	0.098	476.800
%RSD		2.233	0.759	1.777	1.200	1.935	1.8	1.707	8.599	2.514	12.880
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:39:35	396.500	85.380	407.000	484.600	8.086	2.926	21.150	1.203	0.631	6.942
2	02:40:02	392.900	83.080	405.400	459.200	7.932	2.961	19.610	1.248	0.586	6.984
3	02:40:29	410.600	82.430	406.500	473.200	8.187	2.766	22.400	1.108	0.520	7.350
X		400.000	83.630	406.300	472.400	8.068	2.884	21.050	1.186	0.579	7.092
S		9.394	1.552	0.816	12.700	0.129	0.104	1.400	0.072	0.056	0.225
%RSD		2.349	1.856	0.201	2.689	1.592	3.592	6.652	6.031	9.589	3.166
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:39:35	6.433	6.849	1.613	0.035	3910.000	4065.000	25.350	5.535	1.846	115.900
2	02:40:02	6.911	6.718	2.616	0.046	3967.000	4065.000	22.930	4.957	4.078	114.000
3	02:40:29	7.053	6.791	2.050	0.613	3934.000	4007.000	25.570	5.560	-0.292	114.500
X		6.799	6.786	2.093	0.231	3937.000	4046.000	24.610	5.351	1.877	114.800
S		0.325	0.065	0.503	0.330	28.860	33.370	1.463	0.341	2.185	0.977
%RSD		4.779	0.964	24.020	142.800	0.733	0.825	5.945	6.368	116.400	0.851
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:39:35	78.5%	42.960	43.580	43.770	0.909	0.005	0.009	-0.079	0.036	78.9%
2	02:40:02	78.0%	43.320	42.930	43.020	2.227	0.005	0.009	-0.092	0.026	77.8%
3	02:40:29	78.3%	42.620	43.410	43.390	1.526	0.002	0.009	-0.076	0.027	79.4%
X		78.3%	42.970	43.310	43.390	1.554	0.004	0.009	-0.082	0.030	78.7%
S		0.2%	0.351	0.341	0.373	0.660	0.001	0.000	0.008	0.005	0.8%
%RSD		0.3	0.817	0.787	0.860	42.450	35.980	1.182	10.210	18.150	1.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:39:35	0.080	0.102	23.050	25.340	9.741	10.870	86.5%	0.007	0.003	0.084
2	02:40:02	0.110	0.116	23.510	25.480	10.220	10.690	88.0%	0.005	0.005	0.082
3	02:40:29	0.097	0.103	22.910	24.950	10.390	10.660	88.3%	0.005	0.006	0.089
X		0.096	0.107	23.150	25.260	10.120	10.740	87.6%	0.005	0.005	0.085
S		0.015	0.008	0.313	0.274	0.337	0.112	0.9%	0.001	0.001	0.004
%RSD		15.340	7.488	1.352	1.086	3.333	1.044	1.1	23.310	23.940	4.291
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	02:39:35	0.084	0.076	97.8%							
2	02:40:02	0.084	0.080	98.4%							
3	02:40:29	0.080	0.082	97.7%							
X		0.083	0.079	98.0%							
S		0.002	0.003	0.4%							
%RSD		2.919	3.670	0.4							

VJ22034-001S

10/27/2020 02:45:01

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:45:28	77.5%	30.920	154.600	162.500	-85.180	31640.000	2697.000	2735.000	4406.000	196.200
2	02:45:54	77.0%	32.340	158.500	161.800	-86.970	31890.000	2750.000	2752.000	4539.000	194.800
3	02:46:22	76.6%	34.090	161.400	162.600	-87.930	32180.000	2794.000	2815.000	4541.000	197.100
X		77.1%	32.450	158.200	162.300	-86.700	31910.000	2747.000	2767.000	4495.000	196.100
S		0.5%	1.586	3.381	0.436	1.393	270.000	48.720	41.930	77.660	1.157
%RSD		0.6	4.886	2.138	0.268	1.606	0.846	1.773	1.515	1.728	0.590
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:45:28	2517.000	43350.000	16440.000	30390.000	30500.000	83.3%	99.800	103.400	101.500	4292.000
2	02:45:54	2535.000	42360.000	16030.000	30500.000	31720.000	80.6%	105.900	105.700	103.800	4513.000
3	02:46:22	2474.000	42870.000	15920.000	30490.000	32340.000	80.1%	101.600	105.900	104.000	3919.000
X		2509.000	42860.000	16130.000	30460.000	31520.000	81.3%	102.400	105.000	103.100	4241.000
S		31.300	498.700	276.000	62.570	932.600	1.7%	3.122	1.399	1.393	300.200
%RSD		1.248	1.163	1.711	0.205	2.959	2.1	3.048	1.332	1.351	7.079
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:45:28	1481.000	185.800	1525.000	1440.000	104.600	97.250	113.100	94.550	100.500	107.700
2	02:45:54	1492.000	187.300	1551.000	1451.000	104.800	100.400	111.700	97.320	99.900	109.000
3	02:46:22	1482.000	188.100	1522.000	1468.000	102.500	98.430	109.900	94.330	98.180	108.000
X		1485.000	187.100	1532.000	1453.000	104.000	98.680	111.500	95.400	99.540	108.300
S		6.309	1.148	15.810	13.710	1.258	1.569	1.591	1.667	1.220	0.657
%RSD		0.425	0.614	1.031	0.943	1.210	1.590	1.426	1.748	1.226	0.607
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:45:28	106.500	104.200	96.730	97.010	3875.000	4062.000	443.100	105.600	-3.133	212.700
2	02:45:54	105.500	104.500	101.100	100.400	3922.000	3999.000	467.200	111.300	1.364	212.500
3	02:46:22	103.400	101.200	96.810	98.740	3899.000	3943.000	425.600	101.400	5.014	211.500
X		105.100	103.300	98.210	98.720	3898.000	4001.000	445.300	106.100	1.082	212.200
S		1.560	1.822	2.499	1.699	23.420	59.770	20.900	4.943	4.081	0.652
%RSD		1.484	1.763	2.545	1.721	0.601	1.494	4.694	4.658	377.300	0.307
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:45:28	75.7%	147.700	146.400	147.200	106.400	95.890	96.350	100.900	100.100	76.2%
2	02:45:54	76.1%	148.600	145.100	145.600	103.900	97.060	97.020	101.500	101.500	76.2%
3	02:46:22	77.0%	146.300	148.200	145.300	99.440	95.820	96.610	100.300	100.900	76.7%
X		76.3%	147.500	146.500	146.000	103.300	96.260	96.660	100.900	100.800	76.3%
S		0.7%	1.188	1.559	0.996	3.524	0.698	0.335	0.584	0.687	0.3%
%RSD		0.9	0.805	1.064	0.682	3.413	0.725	0.347	0.579	0.681	0.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:45:28	100.600	100.900	125.900	137.600	103.600	107.600	85.0%	99.260	97.160	101.600
2	02:45:54	101.300	101.700	126.200	137.800	103.400	108.800	86.0%	99.650	98.360	102.800
3	02:46:22	101.800	100.600	125.700	137.200	103.300	109.300	86.9%	99.390	97.200	102.300
X		101.200	101.100	126.000	137.500	103.400	108.600	85.9%	99.430	97.580	102.200
S		0.570	0.564	0.238	0.318	0.125	0.866	0.9%	0.202	0.683	0.572
%RSD		0.563	0.558	0.189	0.231	0.121	0.798	1.1	0.203	0.699	0.560
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	02:45:28	100.700	100.000	95.7%							
2	02:45:54	102.000	101.700	95.3%							
3	02:46:22	101.000	100.500	96.7%							
X		101.200	100.700	95.9%							
S		0.665	0.863	0.8%							
%RSD		0.658	0.857	0.8							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:51:20	76.4%	0.019	67.950	70.590	285.000	38080.000	3324.000	3279.000	3396.000	446.600
2	02:51:47	76.6%	0.045	66.080	69.850	282.900	38610.000	3338.000	3285.000	3401.000	438.900
3	02:52:14	77.9%	0.011	66.540	68.500	274.200	38430.000	3384.000	3295.000	3359.000	444.500
X		76.9%	0.025	66.860	69.640	280.700	38370.000	3349.000	3286.000	3386.000	443.300
S		0.8%	0.018	0.974	1.059	5.749	269.000	31.560	8.028	22.770	3.968
%RSD		1.1	70.170	1.457	1.521	2.048	0.701	0.942	0.244	0.673	0.895
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:51:20	5151.000	55910.000	18770.000	26100.000	26890.000	77.9%	19.810	0.272	2.697	6559.000
2	02:51:47	5100.000	54940.000	18790.000	26810.000	28430.000	77.8%	23.290	-0.236	2.567	6973.000
3	02:52:14	5007.000	55800.000	18940.000	27270.000	27220.000	76.6%	19.840	0.301	2.608	7080.000
X		5086.000	55550.000	18840.000	26730.000	27510.000	77.5%	20.980	0.113	2.624	6871.000
S		72.970	532.700	92.400	587.900	807.400	0.7%	1.999	0.302	0.067	275.400
%RSD		1.435	0.959	0.491	2.200	2.935	0.9	9.528	268.300	2.540	4.008
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:51:20	751.700	31.550	821.600	822.700	0.489	4.442	19.550	16.030	16.780	119.000
2	02:51:47	749.000	32.120	778.600	818.500	0.447	4.195	18.780	16.220	16.000	119.100
3	02:52:14	754.700	32.370	814.400	797.600	0.469	4.172	17.550	15.630	14.980	118.200
X		751.800	32.010	804.900	812.900	0.468	4.270	18.630	15.960	15.920	118.700
S		2.874	0.422	23.030	13.470	0.021	0.150	1.011	0.301	0.905	0.494
%RSD		0.382	1.319	2.861	1.657	4.413	3.506	5.425	1.888	5.683	0.416
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:51:20	115.500	116.200	-0.056	0.178	45.660	44.550	-0.387	-0.150	2.319	52.210
2	02:51:47	114.800	111.500	0.795	0.108	43.420	45.340	3.137	0.669	1.580	53.380
3	02:52:14	119.800	112.700	0.198	0.065	41.120	42.230	0.779	0.080	4.240	51.950
X		116.700	113.500	0.312	0.117	43.400	44.040	1.176	0.200	2.713	52.510
S		2.732	2.445	0.437	0.057	2.269	1.617	1.795	0.422	1.373	0.761
%RSD		2.341	2.154	139.700	48.450	5.229	3.671	152.600	211.200	50.600	1.449
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:51:20	74.4%	1.169	1.280	1.146	0.390	0.052	0.063	0.099	0.134	74.9%
2	02:51:47	74.1%	1.288	1.463	1.346	-0.391	0.089	0.062	0.075	0.106	76.2%
3	02:52:14	74.6%	1.274	1.154	1.118	-0.024	0.069	0.071	0.088	0.119	74.9%
X		74.4%	1.244	1.299	1.203	-0.008	0.070	0.065	0.087	0.119	75.4%
S		0.3%	0.065	0.156	0.124	0.391	0.019	0.005	0.012	0.014	0.7%
%RSD		0.3	5.200	11.990	10.320	4648.000	26.500	7.752	13.730	11.630	1.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:51:20	0.289	0.416	0.187	0.201	22.020	22.840	83.3%	0.061	0.064	1.051
2	02:51:47	0.261	0.353	0.190	0.184	22.030	22.800	85.3%	0.066	0.058	1.048
3	02:52:14	0.220	0.368	0.166	0.223	22.250	24.210	85.3%	0.059	0.057	1.079
X		0.257	0.379	0.181	0.202	22.100	23.280	84.7%	0.062	0.060	1.059
S		0.035	0.033	0.013	0.020	0.130	0.802	1.2%	0.003	0.004	0.017
%RSD		13.510	8.760	7.286	9.726	0.587	3.445	1.4	5.319	6.181	1.594
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	02:51:20	0.920	0.970	94.9%							
2	02:51:47	0.995	1.004	95.7%							
3	02:52:14	0.991	1.009	95.3%							
X		0.969	0.994	95.3%							
S		0.042	0.021	0.4%							
%RSD		4.324	2.124	0.4							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:57:12	64.7%	-0.006	265.100	260.400	353.100	<u>TM 1783000.000</u>	459.000	450.600	496.300	<u>M 685.400</u>
2	02:57:38	66.1%	-0.023	267.400	256.600	341.900	<u>TM 1780000.000</u>	457.800	468.100	484.100	<u>M 693.200</u>
3	02:58:05	67.1%	0.010	261.800	272.800	313.800	<u>TM 1774000.000</u>	452.900	455.200	496.900	<u>M 694.100</u>
X		66.0%	-0.006	264.800	263.200	336.300	<u>TM 1779000.000</u>	456.600	458.000	492.400	<u>M 690.900</u>
S		1.2%	0.016	2.820	8.491	20.200	<u>TM 4439.000</u>	3.257	9.077	7.249	<u>M 4.815</u>
%RSD		1.8	257.400	1.065	3.226	6.009	<u>TM 0.250</u>	0.713	1.982	1.472	<u>M 0.697</u>
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:57:12	<u>T 4238.000</u>	<u>T 125100.000</u>	<u>T 5593.000</u>	16300.000	16120.000	71.5%	2.126	0.267	0.808	4150.000
2	02:57:38	<u>T 4112.000</u>	<u>T 124700.000</u>	<u>T 5596.000</u>	15980.000	15900.000	73.0%	2.311	-0.006	0.831	4335.000
3	02:58:05	<u>T 4195.000</u>	<u>T 124700.000</u>	<u>T 5590.000</u>	16140.000	16190.000	73.2%	3.076	0.356	0.805	4251.000
X		<u>T 4182.000</u>	<u>T 124900.000</u>	<u>T 5593.000</u>	16140.000	16070.000	72.6%	2.504	0.206	0.815	4245.000
S		<u>T 64.210</u>	<u>T 246.600</u>	<u>T 3.165</u>	162.100	149.800	0.9%	0.504	0.189	0.014	92.720
%RSD		<u>T 1.535</u>	<u>T 0.198</u>	<u>T 0.057</u>	1.004	0.932	1.3	20.120	91.660	1.766	2.184
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:57:12	11.190	0.784	2.404	53.640	0.460	2.770	<u>M 1122.000</u>	92.200	8.976	8.305
2	02:57:38	12.850	0.757	1.772	49.260	0.442	3.128	<u>M 1142.000</u>	95.190	8.804	8.346
3	02:58:05	12.480	0.787	2.533	54.610	0.467	2.726	<u>M 1132.000</u>	95.100	9.443	8.363
X		12.180	0.776	2.236	52.500	0.456	2.875	<u>M 1132.000</u>	94.160	9.074	8.338
S		0.872	0.017	0.407	2.853	0.013	0.221	<u>M 10.200</u>	1.700	0.331	0.030
%RSD		7.163	2.128	18.210	5.435	2.911	7.675	<u>M 0.901</u>	1.805	3.644	0.359
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	83Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:57:12	8.178	8.015	0.407	4.403	542.900	576.700	4.564	-0.999	84.340	21.910
2	02:57:38	7.538	8.158	-0.109	5.667	546.300	592.300	3.549	-1.591	98.220	21.820
3	02:58:05	5.862	8.007	-0.527	5.956	535.400	564.700	2.545	-1.780	95.820	21.720
X		7.193	8.060	-0.076	5.342	541.500	577.900	3.552	-1.457	92.790	21.820
S		1.196	0.085	0.468	0.826	5.590	13.830	1.009	0.408	7.418	0.091
%RSD		16.630	1.055	613.900	15.450	1.032	2.393	28.410	27.980	7.994	0.419
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:57:12	65.7%	3.608	3.692	3.772	-3.050	0.000	0.002	0.030	0.029	64.0%
2	02:57:38	66.8%	3.732	3.875	3.532	-3.274	0.003	0.002	0.017	0.012	65.7%
3	02:58:05	68.2%	3.491	4.077	3.717	-2.145	0.006	0.003	0.004	0.024	66.5%
X		66.9%	3.610	3.882	3.673	-2.823	0.003	0.002	0.017	0.022	65.4%
S		1.3%	0.121	0.192	0.126	0.598	0.003	0.001	0.013	0.009	1.2%
%RSD		1.9	3.339	4.954	3.416	21.190	92.800	37.160	77.960	39.320	1.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:57:12	0.111	0.097	0.651	0.702	2.347	2.409	75.0%	0.090	0.069	0.101
2	02:57:38	0.090	0.107	0.676	0.729	2.125	2.307	77.2%	0.070	0.074	0.100
3	02:58:05	0.104	0.123	0.689	0.756	2.350	2.429	78.6%	0.078	0.069	0.098
X		0.102	0.109	0.672	0.729	2.274	2.382	76.9%	0.079	0.070	0.100
S		0.011	0.013	0.019	0.027	0.129	0.065	1.8%	0.010	0.003	0.001
%RSD		10.610	11.780	2.840	3.735	5.666	2.747	2.3	12.450	4.121	1.275
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	02:57:12	0.096	0.091	77.2%							
2	02:57:38	0.071	0.092	78.2%							
3	02:58:05	0.085	0.093	79.0%							
X		0.084	0.092	78.1%							
S		0.013	0.001	0.9%							
%RSD		14.960	0.947	1.2							

VJ22003-001 10/27/2020 03:02:37

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:03:04	60.9%	-0.023	177.900	181.600	-73.780	TM 2837000.000	TM 1615.000	1543.000	2272.000	TM 2351.000
2	03:03:31	60.4%	-0.007	179.200	171.400	-81.200	TM 2876000.000	TM 1611.000	1516.000	2298.000	TM 2231.000
3	03:03:58	59.3%	-0.003	182.400	175.600	-86.510	TM 2933000.000	TM 1625.000	1532.000	2305.000	TM 2316.000
X		60.2%	-0.011	179.800	176.200	-80.500	TM 2882000.000	TM 1617.000	1531.000	2292.000	TM 2299.000
S		0.8%	0.011	2.299	5.167	6.392	TM 48230.000	TM 6.972	13.410	17.580	TM 62.060
%RSD		1.3	95.360	1.279	2.932	7.941	TM 1.673	TM 0.431	0.876	0.767	TM 2.699
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:03:04	TM 1937.000	TM 48410.000	TM 7476.000	37920.000	37950.000	70.8%	10.280	86.870	5.961	1285.000
2	03:03:31	1847.000	TM 48330.000	TM 7570.000	38020.000	38140.000	71.6%	9.293	86.970	5.782	1185.000
3	03:03:58	1859.000	TM 49380.000	TM 7599.000	38820.000	38400.000	71.1%	9.354	87.760	5.881	1261.000
X		TM 1881.000	TM 48710.000	TM 7548.000	38260.000	38160.000	71.2%	9.641	87.200	5.875	1244.000
S		TM 49.140	TM 585.400	TM 64.020	491.500	225.700	0.4%	0.551	0.487	0.090	52.070
%RSD		TM 2.613	TM 1.202	TM 0.848	1.285	0.591	0.6	5.712	0.558	1.524	4.187
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:03:04	7834.000	TM 1622.000	TM 8488.000	7652.000	2.829	176.300	TM 2005.000	246.200	75.680	TM 703.500
2	03:03:31	7659.000	TM 1609.000	TM 8318.000	7553.000	2.653	175.000	TM 2034.000	243.100	73.290	TM 680.400
3	03:03:58	7716.000	TM 1599.000	TM 8241.000	7650.000	2.594	175.800	TM 2018.000	243.600	73.700	TM 681.600
X		7737.000	TM 1610.000	TM 8349.000	7618.000	2.692	175.700	TM 2019.000	244.300	74.220	TM 688.500
S		89.490	TM 11.170	TM 126.300	56.990	0.122	0.630	TM 14.750	1.637	1.279	TM 13.030
%RSD		1.157	TM 0.694	TM 1.512	0.748	4.545	0.358	TM 0.730	0.670	1.724	TM 1.892
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:03:04	TM 612.100	TM 628.400	9.052	10.800	62.810	81.090	16.450	1.909	87.320	70.450
2	03:03:31	TM 603.400	TM 613.400	9.051	11.470	65.220	87.410	24.970	4.108	79.660	71.240
3	03:03:58	TM 611.800	TM 626.800	9.640	12.830	63.670	86.340	23.720	3.237	103.200	71.070
X		TM 609.100	TM 622.900	9.248	11.700	63.900	84.950	21.710	3.085	90.060	70.920
S		TM 4.980	TM 8.215	0.340	1.035	1.222	3.381	4.605	1.107	12.000	0.418
%RSD		TM 0.818	TM 1.319	3.678	8.840	1.913	3.980	21.210	35.890	13.330	0.589
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:03:04	65.5%	362.000	364.500	366.400	-1.239	0.000	0.003	-0.821	0.309	64.0%
2	03:03:31	66.0%	367.400	368.200	366.900	-1.415	0.006	0.003	-0.725	0.077	65.6%
3	03:03:58	67.1%	371.400	370.000	372.600	-0.928	0.002	0.002	-0.815	0.294	66.4%
X		66.2%	366.900	367.600	368.600	-1.194	0.003	0.003	-0.787	0.227	65.3%
S		0.8%	4.703	2.809	3.452	0.247	0.003	0.001	0.054	0.130	1.2%
%RSD		1.2	1.282	0.764	0.937	20.650	115.900	33.920	6.837	57.280	1.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:03:04	26.610	38.000	1.274	1.356	2.664	2.633	78.2%	0.027	0.019	0.060
2	03:03:31	26.440	37.590	1.270	1.403	2.444	2.696	80.1%	0.026	0.026	0.055
3	03:03:58	26.570	38.220	1.349	1.369	2.427	2.691	82.0%	0.025	0.021	0.076
X		26.540	37.940	1.298	1.376	2.512	2.673	80.1%	0.026	0.022	0.064
S		0.090	0.321	0.045	0.024	0.132	0.035	1.9%	0.001	0.003	0.011
%RSD		0.341	0.845	3.441	1.780	5.263	1.322	2.4	4.158	15.010	17.320
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	03:03:04	0.062	0.056	78.4%							
2	03:03:31	0.045	0.054	79.6%							
3	03:03:58	0.055	0.063	80.5%							
X		0.054	0.058	79.5%							
S		0.009	0.005	1.1%							
%RSD		16.070	8.334	1.3							

CCV MW15278 10/27/2020 03:08:29 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:08:57	72.9%	304.400	313.400	327.300	-3.871	70450.000	65640.000	66900.000	59710.000	278.800
2	03:09:25	74.2%	297.800	309.500	309.000	4.865	69470.000	66040.000	64960.000	60310.000	283.600
3	03:09:52	74.8%	301.800	312.300	313.500	-11.530	69160.000	65650.000	67670.000	61260.000	287.300
X		74.0%	100.446%	103.904%	105.532%	-3.511	116.158%	65780.000	66510.000	100.717%	94.422%
S		1.0%	n/a	n/a	n/a	8.202	n/a	225.800	1398.000	n/a	n/a
%RSD		1.4	1.098	0.650	3.001	233.600	0.970	0.343	2.101	1.294	1.510
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:08:57	3329.000	243.300	57630.000	61190.000	66490.000	87.8%	294.600	298.000	290.000	1513.000
2	03:09:25	3321.000	246.700	58670.000	60500.000	66190.000	88.0%	302.600	300.900	289.200	641.300
3	03:09:52	3285.000	244.400	58650.000	62080.000	66360.000	88.3%	300.900	300.600	284.500	1271.000
X		3312.000	244.800	97.197%	61260.000	110.579%	88.0%	99.796%	99.952%	95.970%	1142.000
S		23.310	1.764	n/a	790.600	n/a	0.2%	n/a	n/a	n/a	450.000
%RSD		0.704	0.720	1.015	1.291	0.227	0.3	1.412	0.541	1.021	39.410
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:08:57	66090.000	302.800	63180.000	63000.000	280.900	274.600	466.100	270.500	277.400	289.500
2	03:09:25	64190.000	301.100	63830.000	63830.000	269.400	275.900	445.200	269.500	265.100	286.800
3	03:09:52	63530.000	300.400	64500.000	61920.000	273.700	269.800	436.900	268.100	267.200	278.700
X		64610.000	100.482%	63840.000	104.865%	91.557%	91.148%	449.400	269.400	89.962%	95.011%
S		1330.000	n/a	660.100	n/a	n/a	n/a	15.020	1.180	n/a	n/a
%RSD		2.058	0.406	1.034	1.520	2.126	1.170	3.342	0.438	2.450	1.976
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:08:57	280.700	273.100	270.200	285.800	14.540	4.513	1148.000	277.000	0.080	294.600
2	03:09:25	283.300	281.700	273.800	291.700	16.090	5.190	1200.000	283.100	-0.232	298.600
3	03:09:52	281.800	275.900	268.500	282.700	16.550	5.653	1207.000	280.300	0.114	297.700
X		281.900	276.900	90.275%	286.700	15.730	5.119	1185.000	93.379%	-0.012	98.980%
S		1.291	4.404	n/a	4.543	1.054	0.573	32.000	n/a	0.191	n/a
%RSD		0.458	1.590	0.999	1.584	6.703	11.200	2.701	1.078	1540.000	0.704
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:08:57	82.6%	303.400	296.800	299.900	294.600	280.700	282.900	296.000	296.100	82.0%
2	03:09:25	82.1%	312.300	309.200	309.600	292.900	278.600	279.400	294.900	297.500	83.4%
3	03:09:52	82.1%	312.500	316.000	312.900	293.900	276.600	277.500	294.900	294.100	84.7%
X		82.3%	103.138%	102.451%	307.500	293.800	92.878%	279.900	295.300	98.625%	83.4%
S		0.3%	n/a	n/a	6.791	0.876	n/a	2.759	0.619	n/a	1.4%
%RSD		0.4	1.671	3.172	2.209	0.298	0.734	0.986	0.210	0.575	1.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:08:57	305.200	305.500	294.200	321.100	273.200	294.300	94.8%	300.100	301.700	302.100
2	03:09:25	304.000	302.400	296.700	323.700	275.300	293.800	95.8%	301.900	300.700	301.500
3	03:09:52	302.800	303.400	296.300	321.900	273.300	291.000	96.2%	299.800	300.700	303.600
X		101.339%	101.262%	295.700	107.414%	91.316%	97.685%	95.6%	300.600	100.343%	100.796%
S		n/a	n/a	1.355	n/a	n/a	n/a	0.7%	1.119	n/a	n/a
%RSD		0.395	0.510	0.458	0.404	0.429	0.602	0.8	0.372	0.202	0.356
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	03:08:57	301.700	300.400	101.8%							
2	03:09:25	302.100	301.400	102.3%							
3	03:09:52	301.300	301.400	104.5%							
X		100.569%	100.350%	102.9%							
S		n/a	n/a	1.4%							
%RSD		0.132	0.200	1.4							

CCB IM10195-01 10/27/2020 03:14:23 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:14:50	82.0%	0.036	0.716	1.062	7.836	148.000	5.017	4.504	4.352	0.051
2	03:15:17	81.6%	0.055	1.096	0.851	-1.203	152.700	5.654	5.410	4.963	0.109
3	03:15:44	84.5%	-0.008	0.677	0.788	-13.820	142.400	5.287	4.776	4.917	0.060
X		82.7%	0.028	0.830	0.900	-2.396	147.700	5.319	4.897	4.744	0.073
S		1.6%	0.032	0.231	0.143	10.880	5.177	0.320	0.465	0.341	0.032
%RSD		1.9	114.900	27.890	15.920	454.000	3.505	6.012	9.489	7.177	43.070
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:14:50	-98.000	132.900	8.797	3.737	-27.090	94.6%	0.162	0.033	0.024	-10.050
2	03:15:17	-98.060	145.200	6.073	6.815	-25.790	93.7%	0.184	0.033	-0.001	-1.591
3	03:15:44	-98.520	147.900	4.741	4.761	-27.860	94.3%	0.123	-0.002	0.033	11.570
X		-98.200	142.000	6.537	5.104	-26.920	94.2%	0.157	0.021	0.019	-0.023
S		0.284	7.990	2.067	1.568	1.046	0.5%	0.031	0.020	0.018	10.900
%RSD		0.289	5.626	31.620	30.710	3.885	0.5	19.800	95.260	96.340	46890.000
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:14:50	4.194	0.020	-0.462	8.684	0.023	0.068	92.120	4.506	0.163	0.023
2	03:15:17	5.583	0.023	0.805	11.620	0.011	0.025	99.230	4.333	0.120	0.081
3	03:15:44	5.076	0.028	0.119	11.560	0.021	0.096	101.900	4.269	0.163	-0.012
X		4.951	0.024	0.154	10.620	0.018	0.063	97.740	4.369	0.148	0.031
S		0.703	0.004	0.634	1.678	0.007	0.036	5.046	0.123	0.025	0.047
%RSD		14.200	15.210	412.000	15.800	36.450	56.550	5.162	2.804	16.860	151.100
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:14:50	-0.005	-0.055	0.088	2.263	5.739	3.669	1.847	0.475	-1.909	0.019
2	03:15:17	-0.154	-0.039	0.113	0.764	6.934	3.694	1.138	0.282	-0.657	0.034
3	03:15:44	-0.192	-0.050	-0.065	1.139	6.932	3.385	-1.807	-0.459	0.918	0.020
X		-0.117	-0.048	0.045	1.389	6.535	3.582	0.393	0.099	-0.549	0.024
S		0.099	0.008	0.096	0.780	0.689	0.171	1.938	0.493	1.417	0.008
%RSD		84.540	16.340	214.300	56.150	10.550	4.785	493.400	495.700	257.900	34.130
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:14:50	87.6%	0.873	0.735	0.881	-0.650	0.019	0.018	0.023	0.020	89.3%
2	03:15:17	88.6%	0.916	1.192	1.064	-0.714	0.018	0.017	0.009	0.033	89.8%
3	03:15:44	89.0%	0.899	0.993	0.918	-0.486	0.011	0.022	0.022	0.020	91.4%
X		88.4%	0.896	0.973	0.954	-0.617	0.016	0.019	0.018	0.024	90.2%
S		0.8%	0.022	0.229	0.096	0.117	0.004	0.003	0.008	0.008	1.1%
%RSD		0.9	2.419	23.510	10.110	19.030	27.900	14.470	45.390	31.200	1.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:14:50	0.094	0.146	0.591	0.619	0.025	0.009	96.2%	0.024	0.018	0.020
2	03:15:17	0.111	0.149	0.698	0.752	0.025	0.028	98.1%	0.022	0.021	0.027
3	03:15:44	0.094	0.130	0.618	0.744	0.005	0.016	98.6%	0.015	0.015	0.030
X		0.100	0.141	0.635	0.705	0.018	0.018	97.6%	0.020	0.018	0.026
S		0.010	0.010	0.055	0.074	0.012	0.010	1.3%	0.005	0.003	0.005
%RSD		9.953	7.375	8.713	10.540	65.110	55.270	1.3	23.950	17.920	20.160
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	03:14:50	0.008	0.020	106.5%							
2	03:15:17	0.023	0.026	108.8%							
3	03:15:44	0.025	0.027	108.0%							
X		0.019	0.024	107.8%							
S		0.009	0.004	1.2%							
%RSD		48.810	17.010	1.1							

IS MW15295

10/27/2020 03:20:14

User Pre-dilution: 1.000

user file location: 1000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:20:41	84.8%	0.010	1.210	1.554	3.086	107.700	3.164	3.358	2.983	0.641
2	03:21:07	84.3%	0.026	1.616	1.611	11.990	107.400	3.487	3.821	2.927	0.502
3	03:21:34	85.6%	0.002	1.547	1.743	6.112	107.500	3.293	3.633	3.039	0.601
X		84.9%	0.013	1.458	1.636	7.062	107.600	3.315	3.604	2.983	0.582
S		0.7%	0.012	0.217	0.097	4.526	0.169	0.163	0.233	0.056	0.072
%RSD		0.8	96.940	14.900	5.928	64.090	0.157	4.912	6.462	1.892	12.320
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:20:41	-101.400	107.100	-0.157	9.561	-27.690	96.2%	0.061	0.057	0.040	-13.760
2	03:21:07	-101.300	109.600	0.236	6.477	-27.890	97.8%	0.097	0.024	0.010	-0.099
3	03:21:34	-101.300	116.900	-2.334	10.430	-26.780	97.1%	0.215	-0.013	0.003	19.350
X		-101.300	111.200	-0.752	8.823	-27.460	97.0%	0.124	0.022	0.018	1.830
S		0.088	5.117	1.385	2.078	0.591	0.8%	0.080	0.035	0.020	16.640
%RSD		0.087	4.601	184.200	23.560	2.153	0.9	64.660	156.200	110.700	909.000
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:20:41	4.145	0.027	-0.056	12.550	0.021	0.045	80.460	3.518	0.146	0.189
2	03:21:07	2.959	0.044	-1.231	11.200	0.012	0.043	72.310	3.610	0.128	0.269
3	03:21:34	3.242	0.027	-0.513	9.447	0.013	0.017	74.650	3.442	0.100	0.021
X		3.449	0.032	-0.600	11.060	0.016	0.035	75.810	3.523	0.124	0.160
S		0.620	0.010	0.592	1.555	0.005	0.015	4.195	0.084	0.023	0.126
%RSD		17.960	30.200	98.770	14.060	32.670	43.900	5.534	2.389	18.670	79.150
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:20:41	0.131	0.048	-0.121	0.040	4.308	3.198	-1.842	-0.454	0.844	0.022
2	03:21:07	0.344	-0.002	-0.120	0.518	4.106	3.044	-1.199	-0.224	-2.325	0.012
3	03:21:34	0.020	0.069	0.057	0.006	3.514	3.545	1.681	0.412	-2.011	0.017
X		0.165	0.038	-0.062	0.188	3.976	3.262	-0.453	-0.088	-1.164	0.017
S		0.165	0.037	0.102	0.286	0.412	0.257	1.876	0.449	1.746	0.005
%RSD		99.640	96.360	166.100	152.100	10.380	7.879	413.900	507.300	150.000	29.880
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:20:41	89.9%	0.351	0.442	0.388	-1.207	0.014	0.011	0.020	0.026	90.8%
2	03:21:07	89.5%	0.356	0.386	0.460	-1.045	0.015	0.009	0.020	0.029	90.5%
3	03:21:34	89.7%	0.380	0.462	0.452	-1.135	0.014	0.008	0.024	0.007	93.1%
X		89.7%	0.362	0.430	0.433	-1.129	0.014	0.009	0.021	0.021	91.5%
S		0.2%	0.015	0.039	0.040	0.081	0.001	0.001	0.002	0.012	1.4%
%RSD		0.2	4.271	9.140	9.149	7.207	5.608	14.510	10.310	57.010	1.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:20:41	0.123	0.129	0.256	0.298	0.101	0.013	96.5%	0.009	0.010	0.023
2	03:21:07	0.099	0.164	0.280	0.270	0.052	0.028	98.0%	0.018	0.011	0.027
3	03:21:34	0.120	0.114	0.298	0.324	0.038	0.035	98.1%	0.019	0.016	0.024
X		0.114	0.136	0.278	0.297	0.063	0.025	97.5%	0.015	0.012	0.025
S		0.013	0.025	0.021	0.027	0.033	0.012	0.9%	0.005	0.003	0.002
%RSD		11.250	18.790	7.687	9.204	51.660	45.740	1.0	35.660	25.700	8.950
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	03:20:41	0.027	0.024	106.6%							
2	03:21:07	0.015	0.024	108.2%							
3	03:21:34	0.008	0.022	109.8%							
X		0.017	0.024	108.2%							
S		0.010	0.001	1.6%							
%RSD		58.530	5.252	1.5							

Sample 180 10/27/2020 03:26:03

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:26:30	84.8%	0.009	2.321	2.491	12.720	77.390	1.084	0.818	0.933	1.040
2	03:26:58	84.0%	-0.007	2.130	2.388	13.440	78.240	1.004	1.157	0.619	1.088
3	03:27:25	84.9%	-0.015	1.816	2.411	12.340	78.120	1.064	0.805	0.910	0.951
X		84.6%	-0.004	2.089	2.430	12.840	77.920	1.051	0.927	0.820	1.026
S		0.5%	0.012	0.255	0.054	0.557	0.457	0.042	0.200	0.175	0.070
%RSD		0.6	278.000	12.220	2.230	4.340	0.587	3.975	21.560	21.350	6.808
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:26:30	-100.600	89.470	-4.288	7.497	-27.990	97.2%	-0.018	0.002	-0.014	0.264
2	03:26:58	-99.780	95.390	-1.983	4.548	-25.400	97.7%	0.117	0.005	0.005	-1.417
3	03:27:25	-102.100	99.140	-3.123	2.523	-29.190	100.0%	0.075	-0.013	-0.013	14.250
X		-100.800	94.660	-3.131	4.856	-27.530	98.3%	0.058	-0.002	-0.008	4.366
S		1.154	4.876	1.152	2.501	1.941	1.5%	0.069	0.010	0.011	8.601
%RSD		1.145	5.150	36.800	51.510	7.051	1.5	118.600	524.100	141.600	197.000
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:26:30	2.268	0.084	-1.221	10.640	-0.005	0.039	58.780	2.495	0.143	0.258
2	03:26:58	1.709	0.096	-2.174	7.183	-0.006	0.049	54.560	2.460	0.090	0.280
3	03:27:25	2.243	0.102	-3.263	7.572	-0.005	0.062	52.530	2.350	0.128	0.276
X		2.073	0.094	-2.219	8.464	-0.005	0.050	55.290	2.435	0.121	0.271
S		0.316	0.009	1.022	1.892	0.001	0.012	3.187	0.075	0.027	0.012
%RSD		15.240	9.495	46.050	22.360	12.440	23.670	5.764	3.092	22.690	4.300
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:26:30	0.306	0.348	-0.021	0.624	3.473	2.028	-0.918	-0.153	-2.677	0.009
2	03:26:58	0.228	0.210	0.033	0.723	3.311	3.196	0.612	0.203	-1.155	0.020
3	03:27:25	0.256	0.203	0.114	0.051	3.679	2.040	1.854	0.495	-2.096	0.010
X		0.263	0.254	0.042	0.466	3.488	2.421	0.516	0.182	-1.976	0.013
S		0.039	0.082	0.068	0.362	0.185	0.671	1.388	0.325	0.768	0.006
%RSD		14.890	32.240	161.000	77.780	5.292	27.710	269.000	178.700	38.870	47.580
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:26:30	90.6%	0.207	0.172	0.254	-0.561	0.004	-0.000	-0.002	0.001	91.8%
2	03:26:58	91.6%	0.355	0.251	0.277	-1.062	0.003	0.002	0.002	0.005	90.5%
3	03:27:25	91.5%	0.244	0.277	0.297	-0.684	0.002	0.002	0.006	0.002	92.6%
X		91.3%	0.269	0.233	0.276	-0.769	0.003	0.001	0.002	0.003	91.7%
S		0.5%	0.077	0.054	0.021	0.261	0.001	0.001	0.004	0.002	1.0%
%RSD		0.6	28.780	23.340	7.760	33.950	36.420	104.100	207.100	70.000	1.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:26:30	0.126	0.133	0.119	0.132	0.039	0.028	96.5%	0.004	0.004	0.017
2	03:26:58	0.110	0.155	0.130	0.136	0.045	0.056	98.0%	0.006	0.004	0.013
3	03:27:25	0.108	0.190	0.171	0.123	0.058	0.024	98.4%	0.011	0.004	0.006
X		0.115	0.159	0.140	0.130	0.047	0.036	97.6%	0.007	0.004	0.012
S		0.010	0.029	0.027	0.006	0.010	0.017	1.0%	0.003	0.000	0.006
%RSD		8.650	18.200	19.590	4.942	20.720	48.190	1.0	47.580	2.020	48.210
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	03:26:30	0.014	0.011	106.8%							
2	03:26:58	0.004	0.009	108.2%							
3	03:27:25	0.008	0.006	110.7%							
X		0.009	0.009	108.5%							
S		0.005	0.003	2.0%							
%RSD		56.030	30.560	1.8							

Sample 181 10/27/2020 03:31:55

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:32:22	86.5%	0.023	1.314	1.468	2.419	61.140	3.257	2.986	2.937	0.635
2	03:32:49	88.9%	-0.024	1.433	1.422	-5.299	60.780	3.467	2.936	2.466	0.649
3	03:33:16	87.9%	0.031	1.284	1.641	-0.037	58.190	3.403	3.441	2.898	0.618
X		87.8%	0.010	1.344	1.510	-0.972	60.040	3.376	3.121	2.767	0.634
S		1.2%	0.029	0.079	0.116	3.943	1.607	0.107	0.278	0.261	0.015
%RSD		1.4	289.500	5.849	7.676	405.500	2.677	3.177	8.919	9.433	2.425
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:32:22	-101.300	68.040	-2.311	4.483	-27.510	98.8%	0.096	0.024	0.009	-0.229
2	03:32:49	-101.000	62.670	-4.470	3.514	-27.930	99.1%	0.000	0.005	-0.009	6.240
3	03:33:16	-101.800	70.900	-4.603	5.571	-28.580	96.9%	0.118	0.015	0.002	14.530
X		-101.400	67.200	-3.795	4.523	-28.000	98.3%	0.071	0.015	0.001	6.847
S		0.423	4.178	1.286	1.029	0.542	1.2%	0.062	0.010	0.009	7.399
%RSD		0.417	6.217	33.900	22.760	1.937	1.2	87.420	64.050	1168.000	108.100
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:32:22	4.316	0.033	2.023	10.030	0.006	0.032	42.730	1.856	0.055	0.164
2	03:32:49	3.298	0.037	1.529	9.176	0.010	0.068	45.300	1.755	0.092	0.131
3	03:33:16	4.227	0.040	1.231	11.840	0.014	0.017	41.380	1.823	0.133	0.048
X		3.947	0.037	1.594	10.350	0.010	0.039	43.140	1.811	0.093	0.114
S		0.564	0.003	0.400	1.363	0.004	0.026	1.991	0.051	0.039	0.060
%RSD		14.280	9.449	25.110	13.170	40.440	66.700	4.615	2.838	41.800	52.260
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:32:22	0.118	0.121	0.155	0.495	2.874	2.462	1.857	0.463	-0.852	0.021
2	03:32:49	-0.098	-0.051	-0.122	0.189	2.564	2.180	-2.561	-0.628	1.245	0.017
3	03:33:16	-0.058	0.031	-0.007	-0.043	2.786	2.781	-0.984	-0.167	-2.425	0.019
X		-0.013	0.034	0.009	0.213	2.741	2.474	-0.562	-0.111	-0.677	0.019
S		0.115	0.086	0.139	0.270	0.160	0.301	2.239	0.548	1.841	0.002
%RSD		907.200	257.700	1621.000	126.500	5.826	12.170	398.100	495.300	271.900	10.940
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:32:22	91.6%	0.236	0.176	0.201	-0.438	0.011	0.001	0.020	0.020	92.7%
2	03:32:49	92.7%	0.327	0.186	0.245	-0.335	0.012	0.010	0.025	0.016	92.3%
3	03:33:16	92.4%	0.246	0.267	0.225	-1.252	0.015	0.010	0.020	0.015	92.5%
X		92.3%	0.270	0.210	0.223	-0.675	0.012	0.007	0.022	0.017	92.5%
S		0.6%	0.050	0.050	0.022	0.502	0.002	0.005	0.003	0.003	0.2%
%RSD		0.6	18.610	23.830	9.959	74.370	18.270	75.800	11.820	16.380	0.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:32:22	0.086	0.113	0.162	0.145	0.012	0.040	96.5%	0.010	0.010	0.020
2	03:32:49	0.054	0.128	0.174	0.206	0.045	0.036	97.9%	0.012	0.013	0.023
3	03:33:16	0.075	0.110	0.146	0.194	0.064	0.024	99.0%	0.006	0.009	0.020
X		0.072	0.117	0.161	0.182	0.040	0.033	97.8%	0.009	0.011	0.021
S		0.016	0.010	0.014	0.032	0.027	0.008	1.3%	0.003	0.002	0.002
%RSD		22.590	8.272	8.707	17.790	66.100	25.210	1.3	32.140	19.610	9.336
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	03:32:22	0.027	0.023	106.5%							
2	03:32:49	0.015	0.017	108.8%							
3	03:33:16	0.016	0.018	109.6%							
X		0.019	0.019	108.3%							
S		0.007	0.003	1.6%							
%RSD		35.990	16.690	1.5							

Performance Report

Raw Supportive Data

Analyst: WCM

Level 2 Analyst: BNW

Printed: 11/10/20 0816

Status: Level 2 review released

Prep Batch: 70823

Matrix: Aqueous

3005A - Total Recoverable Acid Digestion (ICP-MS) Linked: 6020A,6020B and

Start Date: 10/23/2020 1454

End Date: 10/23/2020 1954

Digestion Cup ID: 20-2336

Ext Solvent: 1:1 HNO3/1:1 HCl

Reagents Vol. (mL): 1, 0.5

Chem ID: IM 10167-01, IM 10136-01

Hot Block ID: Hot Block # 10

Thermometer ID: 1172

Start Temperature (°C): 94

End Temperature (°C): 95

Sample ID	QC Code	Client Sample ID	Run	Analysis Method	Initial Vol. (mL)	Spike ID	Spike Vol. (mL)	Final Vol. (mL)	Holding Time Expires	Analytical Due Date	Comments
VQ70823-001	MB	PBW	1	6020B	50		0.0	50			PIPET ID 388
VQ70823-002	LCS	LCS	1	6020B	50	20-1757 (8/5/21)	0.5	50			
VJ21014-001	Sample	5W8B	1	6020B	50		0.0	50	04/17/2021 2359	10/30/2020	
VJ21014-002	Sample	5W5B	1	6020B	50		0.0	50	04/17/2021 2359	10/30/2020	
VJ21014-003	Sample	5W7B	1	6020B	50		0.0	50	04/17/2021 2359	10/30/2020	
VJ21014-003MS MS		5W7BS	1	6020B	50	20-1757 (8/5/21)	0.5	50			
VJ21014-003MD MSD		5W7BSD	1	6020B	50	20-1757 (8/5/21)	0.5	50			
VJ21014-004	Sample	5WC21	1	6020B	50		0.0	50	04/17/2021 2359	10/30/2020	
VJ21014-005	Sample	5WDUP	1	6020B	50		0.0	50	04/17/2021 2359	10/30/2020	
VJ21014-006	Sample	5WC22	1	6020B	50		0.0	50	04/17/2021 2359	10/30/2020	
VJ21014-007	Sample	5WC23	1	6020B	50		0.0	50	04/17/2021 2359	10/30/2020	
VJ21014-008	Sample	5W12A	1	6020B	50		0.0	50	04/17/2021 2359	10/30/2020	
VJ20041-001	Sample	MW-1	1	6020B	50		0.0	50	04/17/2021 2359	11/02/2020	
VJ20041-002	Sample	MW-2	1	6020B	50		0.0	50	04/17/2021 2359	11/02/2020	
VJ20041-003	Sample	MW-4	1	6020B	50		0.0	50	04/17/2021 2359	11/02/2020	
VJ20041-004	Sample	MW-5	1	6020B	50		0.0	50	04/17/2021 2359	11/02/2020	
VJ21054-001	Sample	PZ-52D	1	6020B	50		0.0	50	04/18/2021 2359	11/02/2020	
VJ21054-002	Sample	PZ-52S	1	6020B	50		0.0	50	04/18/2021 2359	11/02/2020	
VJ21054-003	Sample	MW-17	1	6020B	50		0.0	50	04/18/2021 2359	11/02/2020	
VJ21054-004	Sample	MW-18	1	6020B	50		0.0	50	04/18/2021 2359	11/02/2020	
VJ21054-005	Sample	MW-19	1	6020B	50		0.0	50	04/18/2021 2359	11/02/2020	
VJ21054-006	Sample	MW-19 DUP	1	6020B	50		0.0	50	04/18/2021 2359	11/02/2020	

(end of report)

Total Samples: 18

ANALYTICAL REPORT

Job Number: 410-17705-1

Job Description: RFAAP, Radford VA HWMU5

For:

Draper Aden Associates, Inc.
2206 South Main Street
Blacksburg, VA 24060
Attention: Janet Frazier



Approved for release.
Barbara A Weyandt
Project Manager
10/27/2020 11:39 AM

Barbara A Weyandt, Project Manager
2425 New Holland Pike, Lancaster, PA, 17601
(717)556-7264
barbaraweyandt@eurofinsus.com
10/27/2020

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Job Number: 410-17705-1

Job Description: RFAAP, Radford VA HWMU5

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- * QC recoveries that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result.

- * Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.

- * Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

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Definitions/Glossary

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford VA HWMU5

Job ID: 410-17705-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
410-17705-1

Receipt

The samples were received on 10/20/2020 9:43 AM; the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.4°C

GC/MS VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford VA HWMU5

Job ID: 410-17705-1

Client Sample ID: 5W8B

Lab Sample ID: 410-17705-1

No Detections.

Client Sample ID: 5W5B

Lab Sample ID: 410-17705-2

No Detections.

Client Sample ID: 5W7B

Lab Sample ID: 410-17705-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Trichloroethene	0.50	J F2 F1	1.0	0.18	ug/L	1			8260C LL	Total/NA

Client Sample ID: 5WC21

Lab Sample ID: 410-17705-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Trichloroethene	1.7		1.0	0.18	ug/L	1			8260C LL	Total/NA

Client Sample ID: 5WDUP

Lab Sample ID: 410-17705-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Trichloroethene	1.8		1.0	0.18	ug/L	1			8260C LL	Total/NA

Client Sample ID: 5WC22

Lab Sample ID: 410-17705-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Trichloroethene	1.9		1.0	0.18	ug/L	1			8260C LL	Total/NA

Client Sample ID: 5WC23

Lab Sample ID: 410-17705-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Trichloroethene	3.7		1.0	0.18	ug/L	1			8260C LL	Total/NA

Client Sample ID: 5W12A

Lab Sample ID: 410-17705-8

No Detections.

Client Sample ID: Trip Blank 1

Lab Sample ID: 410-17705-9

No Detections.

Client Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford VA HWMU5

Job ID: 410-17705-1

Client Sample ID: 5W8B

Date Collected: 10/19/20 08:35

Date Received: 10/20/20 09:43

Lab Sample ID: 410-17705-1

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.10	ug/L			10/22/20 15:48	1
trans-1,2-Dichloroethene	ND		1.0	0.80	ug/L			10/22/20 15:48	1
1,1-Dichloroethene	ND		1.0	0.44	ug/L			10/22/20 15:48	1
Trichloroethene	ND		1.0	0.18	ug/L			10/22/20 15:48	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			10/22/20 15:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		80 - 120		10/22/20 15:48	1
Dibromofluoromethane (Surr)	105		80 - 120		10/22/20 15:48	1
4-Bromofluorobenzene (Surr)	95		80 - 120		10/22/20 15:48	1
Toluene-d8 (Surr)	97		80 - 120		10/22/20 15:48	1

Client Sample ID: 5W5B

Date Collected: 10/19/20 10:55

Date Received: 10/20/20 09:43

Lab Sample ID: 410-17705-2

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.10	ug/L			10/22/20 16:10	1
trans-1,2-Dichloroethene	ND		1.0	0.80	ug/L			10/22/20 16:10	1
1,1-Dichloroethene	ND		1.0	0.44	ug/L			10/22/20 16:10	1
Trichloroethene	ND		1.0	0.18	ug/L			10/22/20 16:10	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			10/22/20 16:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		80 - 120		10/22/20 16:10	1
Dibromofluoromethane (Surr)	108		80 - 120		10/22/20 16:10	1
4-Bromofluorobenzene (Surr)	95		80 - 120		10/22/20 16:10	1
Toluene-d8 (Surr)	98		80 - 120		10/22/20 16:10	1

Client Sample ID: 5W7B

Date Collected: 10/19/20 10:05

Date Received: 10/20/20 09:43

Lab Sample ID: 410-17705-3

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.10	ug/L			10/22/20 16:33	1
trans-1,2-Dichloroethene	ND	F2 F1	1.0	0.80	ug/L			10/22/20 16:33	1
1,1-Dichloroethene	ND	F2 F1	1.0	0.44	ug/L			10/22/20 16:33	1
Trichloroethene	0.50	J F2 F1	1.0	0.18	ug/L			10/22/20 16:33	1
cis-1,2-Dichloroethene	ND	F2 F1	1.0	0.10	ug/L			10/22/20 16:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		80 - 120		10/22/20 16:33	1
Dibromofluoromethane (Surr)	106		80 - 120		10/22/20 16:33	1
4-Bromofluorobenzene (Surr)	96		80 - 120		10/22/20 16:33	1
Toluene-d8 (Surr)	97		80 - 120		10/22/20 16:33	1

Client Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford VA HWMU5

Job ID: 410-17705-1

Client Sample ID: 5WC21

Date Collected: 10/19/20 12:50

Date Received: 10/20/20 09:43

Lab Sample ID: 410-17705-4

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.10	ug/L			10/22/20 17:39	1
trans-1,2-Dichloroethene	ND		1.0	0.80	ug/L			10/22/20 17:39	1
1,1-Dichloroethene	ND		1.0	0.44	ug/L			10/22/20 17:39	1
Trichloroethene	1.7		1.0	0.18	ug/L			10/22/20 17:39	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			10/22/20 17:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		80 - 120		10/22/20 17:39	1
Dibromofluoromethane (Surr)	105		80 - 120		10/22/20 17:39	1
4-Bromofluorobenzene (Surr)	94		80 - 120		10/22/20 17:39	1
Toluene-d8 (Surr)	98		80 - 120		10/22/20 17:39	1

Client Sample ID: 5WDUP

Date Collected: 10/19/20 12:55

Date Received: 10/20/20 09:43

Lab Sample ID: 410-17705-5

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.10	ug/L			10/22/20 18:00	1
trans-1,2-Dichloroethene	ND		1.0	0.80	ug/L			10/22/20 18:00	1
1,1-Dichloroethene	ND		1.0	0.44	ug/L			10/22/20 18:00	1
Trichloroethene	1.8		1.0	0.18	ug/L			10/22/20 18:00	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			10/22/20 18:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		80 - 120		10/22/20 18:00	1
Dibromofluoromethane (Surr)	105		80 - 120		10/22/20 18:00	1
4-Bromofluorobenzene (Surr)	94		80 - 120		10/22/20 18:00	1
Toluene-d8 (Surr)	97		80 - 120		10/22/20 18:00	1

Client Sample ID: 5WC22

Date Collected: 10/19/20 11:45

Date Received: 10/20/20 09:43

Lab Sample ID: 410-17705-6

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.10	ug/L			10/22/20 18:23	1
trans-1,2-Dichloroethene	ND		1.0	0.80	ug/L			10/22/20 18:23	1
1,1-Dichloroethene	ND		1.0	0.44	ug/L			10/22/20 18:23	1
Trichloroethene	1.9		1.0	0.18	ug/L			10/22/20 18:23	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			10/22/20 18:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		80 - 120		10/22/20 18:23	1
Dibromofluoromethane (Surr)	106		80 - 120		10/22/20 18:23	1
4-Bromofluorobenzene (Surr)	94		80 - 120		10/22/20 18:23	1
Toluene-d8 (Surr)	98		80 - 120		10/22/20 18:23	1

Client Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford VA HWMU5

Job ID: 410-17705-1

Client Sample ID: 5WC23

Date Collected: 10/19/20 12:15

Date Received: 10/20/20 09:43

Lab Sample ID: 410-17705-7

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.10	ug/L			10/22/20 18:45	1
trans-1,2-Dichloroethene	ND		1.0	0.80	ug/L			10/22/20 18:45	1
1,1-Dichloroethene	ND		1.0	0.44	ug/L			10/22/20 18:45	1
Trichloroethene	3.7		1.0	0.18	ug/L			10/22/20 18:45	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			10/22/20 18:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		80 - 120		10/22/20 18:45	1
Dibromofluoromethane (Surr)	106		80 - 120		10/22/20 18:45	1
4-Bromofluorobenzene (Surr)	95		80 - 120		10/22/20 18:45	1
Toluene-d8 (Surr)	98		80 - 120		10/22/20 18:45	1

Client Sample ID: 5W12A

Date Collected: 10/19/20 09:30

Date Received: 10/20/20 09:43

Lab Sample ID: 410-17705-8

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.10	ug/L			10/22/20 19:08	1
trans-1,2-Dichloroethene	ND		1.0	0.80	ug/L			10/22/20 19:08	1
1,1-Dichloroethene	ND		1.0	0.44	ug/L			10/22/20 19:08	1
Trichloroethene	ND		1.0	0.18	ug/L			10/22/20 19:08	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			10/22/20 19:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		80 - 120		10/22/20 19:08	1
Dibromofluoromethane (Surr)	105		80 - 120		10/22/20 19:08	1
4-Bromofluorobenzene (Surr)	95		80 - 120		10/22/20 19:08	1
Toluene-d8 (Surr)	97		80 - 120		10/22/20 19:08	1

Client Sample ID: Trip Blank 1

Date Collected: 10/19/20 00:00

Date Received: 10/20/20 09:43

Lab Sample ID: 410-17705-9

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.10	ug/L			10/22/20 11:44	1
trans-1,2-Dichloroethene	ND		1.0	0.80	ug/L			10/22/20 11:44	1
1,1-Dichloroethene	ND		1.0	0.44	ug/L			10/22/20 11:44	1
Trichloroethene	ND		1.0	0.18	ug/L			10/22/20 11:44	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			10/22/20 11:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		80 - 120		10/22/20 11:44	1
Dibromofluoromethane (Surr)	106		80 - 120		10/22/20 11:44	1
4-Bromofluorobenzene (Surr)	94		80 - 120		10/22/20 11:44	1
Toluene-d8 (Surr)	97		80 - 120		10/22/20 11:44	1

Default Detection Limits

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford VA HWMU5

Job ID: 410-17705-1

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	RL	MDL	Units
1,1-Dichloroethene	1.0	0.44	ug/L
cis-1,2-Dichloroethene	1.0	0.10	ug/L
trans-1,2-Dichloroethene	1.0	0.80	ug/L
Trichloroethene	1.0	0.18	ug/L
Vinyl chloride	1.0	0.10	ug/L

Surrogate Summary

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford VA HWMU5

Job ID: 410-17705-1

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Matrix: Ground Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-120)	DBFM (80-120)	BFB (80-120)	TOL (80-120)
410-17705-1	5W8B	112	105	95	97
410-17705-2	5W5B	111	108	95	98
410-17705-3	5W7B	109	106	96	97
410-17705-3 MS	5W7B	108	104	99	100
410-17705-3 MSD	5W7B	107	104	100	99
410-17705-4	5WC21	109	105	94	98
410-17705-5	5WDUP	112	105	94	97
410-17705-6	5WC22	110	106	94	98
410-17705-7	5WC23	111	106	95	98
410-17705-8	5W12A	110	105	95	97

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-120)	DBFM (80-120)	BFB (80-120)	TOL (80-120)
410-17705-9	Trip Blank 1	114	106	94	97
LCS 410-57283/4	Lab Control Sample	107	103	99	99
MB 410-57283/6	Method Blank	113	105	95	98

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford VA HWMU5

Job ID: 410-17705-1

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-57283/6

Matrix: Water

Analysis Batch: 57283

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.10	ug/L			10/22/20 10:28	1
trans-1,2-Dichloroethene	ND		1.0	0.80	ug/L			10/22/20 10:28	1
1,1-Dichloroethene	ND		1.0	0.44	ug/L			10/22/20 10:28	1
Trichloroethene	ND		1.0	0.18	ug/L			10/22/20 10:28	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			10/22/20 10:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		80 - 120		10/22/20 10:28	1
Dibromofluoromethane (Surr)	105		80 - 120		10/22/20 10:28	1
4-Bromofluorobenzene (Surr)	95		80 - 120		10/22/20 10:28	1
Toluene-d8 (Surr)	98		80 - 120		10/22/20 10:28	1

Lab Sample ID: LCS 410-57283/4

Matrix: Water

Analysis Batch: 57283

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	5.00	5.00		ug/L		100	60 - 125
trans-1,2-Dichloroethene	5.00	4.80		ug/L		96	80 - 122
1,1-Dichloroethene	5.00	4.72		ug/L		94	80 - 131
Trichloroethene	5.00	4.88		ug/L		98	80 - 120
cis-1,2-Dichloroethene	5.00	5.00		ug/L		100	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107		80 - 120
Dibromofluoromethane (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: 410-17705-3 MS

Matrix: Ground Water

Analysis Batch: 57283

Client Sample ID: 5W7B

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	ND		5.38	5.52		ug/L		103	60 - 125
trans-1,2-Dichloroethene	ND	F2 F1	5.38	2.50	F1	ug/L		47	80 - 122
1,1-Dichloroethene	ND	F2 F1	5.38	2.53	F1	ug/L		47	80 - 131
Trichloroethene	0.50	J F2 F1	5.38	2.98	F1	ug/L		46	80 - 120
cis-1,2-Dichloroethene	ND	F2 F1	5.38	2.58	F1	ug/L		48	80 - 122

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		80 - 120
Dibromofluoromethane (Surr)	104		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Toluene-d8 (Surr)	100		80 - 120

QC Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford VA HWMU5

Job ID: 410-17705-1

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 410-17705-3 MSD

Matrix: Ground Water

Analysis Batch: 57283

Client Sample ID: 5W7B

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride	ND		5.38	5.71		ug/L		106	60 - 125	3	30
trans-1,2-Dichloroethene	ND	F2 F1	5.38	5.52	F2	ug/L		103	80 - 122	75	30
1,1-Dichloroethene	ND	F2 F1	5.38	5.50	F2	ug/L		102	80 - 131	74	30
Trichloroethene	0.50	J F2 F1	5.38	6.17	F2	ug/L		105	80 - 120	70	30
cis-1,2-Dichloroethene	ND	F2 F1	5.38	5.83	F2	ug/L		108	80 - 122	77	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107		80 - 120
Dibromofluoromethane (Surr)	104		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Toluene-d8 (Surr)	99		80 - 120

QC Association Summary

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford VA HWMU5

Job ID: 410-17705-1

GC/MS VOA

Analysis Batch: 57283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-17705-1	5W8B	Total/NA	Ground Water	8260C LL	
410-17705-2	5W5B	Total/NA	Ground Water	8260C LL	
410-17705-3	5W7B	Total/NA	Ground Water	8260C LL	
410-17705-4	5WC21	Total/NA	Ground Water	8260C LL	
410-17705-5	5WDUP	Total/NA	Ground Water	8260C LL	
410-17705-6	5WC22	Total/NA	Ground Water	8260C LL	
410-17705-7	5WC23	Total/NA	Ground Water	8260C LL	
410-17705-8	5W12A	Total/NA	Ground Water	8260C LL	
410-17705-9	Trip Blank 1	Total/NA	Water	8260C LL	
MB 410-57283/6	Method Blank	Total/NA	Water	8260C LL	
LCS 410-57283/4	Lab Control Sample	Total/NA	Water	8260C LL	
410-17705-3 MS	5W7B	Total/NA	Ground Water	8260C LL	
410-17705-3 MSD	5W7B	Total/NA	Ground Water	8260C LL	

Lab Chronicle

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford VA HWMU5

Job ID: 410-17705-1

Client Sample ID: 5W8B

Date Collected: 10/19/20 08:35

Date Received: 10/20/20 09:43

Lab Sample ID: 410-17705-1

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	57283	10/22/20 15:48	R64Z	ELLE

Client Sample ID: 5W5B

Date Collected: 10/19/20 10:55

Date Received: 10/20/20 09:43

Lab Sample ID: 410-17705-2

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	57283	10/22/20 16:10	R64Z	ELLE

Client Sample ID: 5W7B

Date Collected: 10/19/20 10:05

Date Received: 10/20/20 09:43

Lab Sample ID: 410-17705-3

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	57283	10/22/20 16:33	R64Z	ELLE

Client Sample ID: 5WC21

Date Collected: 10/19/20 12:50

Date Received: 10/20/20 09:43

Lab Sample ID: 410-17705-4

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	57283	10/22/20 17:39	R64Z	ELLE

Client Sample ID: 5WDUP

Date Collected: 10/19/20 12:55

Date Received: 10/20/20 09:43

Lab Sample ID: 410-17705-5

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	57283	10/22/20 18:00	R64Z	ELLE

Client Sample ID: 5WC22

Date Collected: 10/19/20 11:45

Date Received: 10/20/20 09:43

Lab Sample ID: 410-17705-6

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	57283	10/22/20 18:23	R64Z	ELLE

Client Sample ID: 5WC23

Date Collected: 10/19/20 12:15

Date Received: 10/20/20 09:43

Lab Sample ID: 410-17705-7

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	57283	10/22/20 18:45	R64Z	ELLE

Lab Chronicle

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford VA HWMU5

Job ID: 410-17705-1

Client Sample ID: 5W12A

Date Collected: 10/19/20 09:30

Date Received: 10/20/20 09:43

Lab Sample ID: 410-17705-8

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	57283	10/22/20 19:08	R64Z	ELLE

Client Sample ID: Trip Blank 1

Date Collected: 10/19/20 00:00

Date Received: 10/20/20 09:43

Lab Sample ID: 410-17705-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	57283	10/22/20 11:44	R64Z	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford VA HWMU5

Job ID: 410-17705-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Virginia	NELAP	10561	06-14-21

Method Summary

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford VA HWMU5

Job ID: 410-17705-1

Method	Method Description	Protocol	Laboratory
8260C LL	Volatile Organic Compounds by GC/MS	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford VA HWMU5

Job ID: 410-17705-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-17705-1	5W8B	Ground Water	10/19/20 08:35	10/20/20 09:43	
410-17705-2	5W5B	Ground Water	10/19/20 10:55	10/20/20 09:43	
410-17705-3	5W7B	Ground Water	10/19/20 10:05	10/20/20 09:43	
410-17705-4	5WC21	Ground Water	10/19/20 12:50	10/20/20 09:43	
410-17705-5	5WDUP	Ground Water	10/19/20 12:55	10/20/20 09:43	
410-17705-6	5WC22	Ground Water	10/19/20 11:45	10/20/20 09:43	
410-17705-7	5WC23	Ground Water	10/19/20 12:15	10/20/20 09:43	
410-17705-8	5W12A	Ground Water	10/19/20 09:30	10/20/20 09:43	
410-17705-9	Trip Blank 1	Water	10/19/20 00:00	10/20/20 09:43	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-17705-1

SDG No.: _____

Instrument ID: 10193 Analysis Batch Number: 39724Lab Sample ID: IC 410-39724/3 Client Sample ID: _____Date Analyzed: 09/01/20 13:35 Lab File ID: CS01I01.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.86	Baseline	campbellm e	09/01/20 16:54
Propionitrile	6.05	Incomplete Integration	campbellm e	09/01/20 16:54
1,4-Dioxane	8.49	Incomplete Integration	campbellm e	09/01/20 16:55

Lab Sample ID: ICIS 410-39724/4 Client Sample ID: _____Date Analyzed: 09/01/20 13:57 Lab File ID: CS01I02.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.92	Incomplete Integration	campbellm e	09/01/20 16:56
Methyl acetate	3.87	Baseline	campbellm e	09/01/20 16:56
n-Butanol	7.98	Incomplete Integration	campbellm e	09/01/20 17:14
1,4-Dioxane	8.51	Incomplete Integration	campbellm e	09/01/20 16:57

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-17705-1

SDG No.: _____

Instrument ID: 10193 Analysis Batch Number: 39724Lab Sample ID: IC 410-39724/5 Client Sample ID: _____Date Analyzed: 09/01/20 14:19 Lab File ID: CS01I03.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.91	Incomplete Integration	campbellm e	09/01/20 16:58
Propionitrile	6.04	Incomplete Integration	campbellm e	09/01/20 16:58
n-Butanol	7.98	Incomplete Integration	campbellm e	09/01/20 17:15
1,4-Dioxane	8.50	Incomplete Integration	campbellm e	09/01/20 16:59

Lab Sample ID: IC 410-39724/6 Client Sample ID: _____Date Analyzed: 09/01/20 14:42 Lab File ID: CS01I04.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.91	Incomplete Integration	campbellm e	09/01/20 17:00
Propionitrile	6.05	Incomplete Integration	campbellm e	09/01/20 17:00
n-Butanol	7.98	Incomplete Integration	campbellm e	09/01/20 17:15
1,4-Dioxane	8.51	Incomplete Integration	campbellm e	09/01/20 17:00

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-17705-1

SDG No.: _____

Instrument ID: 10193 Analysis Batch Number: 39724Lab Sample ID: IC 410-39724/7 Client Sample ID: _____Date Analyzed: 09/01/20 15:04 Lab File ID: CS01I05.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.91	Incomplete Integration	campbellm e	09/01/20 17:01
Chloromethane	2.09	Baseline	campbellm e	09/01/20 17:01
Acrylonitrile	4.41	Incomplete Integration	campbellm e	09/01/20 17:02
Ethyl t-butyl ether	5.73	Incomplete Integration	campbellm e	09/01/20 17:02
Propionitrile	6.04	Incomplete Integration	campbellm e	09/01/20 17:03
Methacrylonitrile	6.26	Incomplete Integration	campbellm e	09/01/20 17:02
n-Butanol	7.98	Incomplete Integration	campbellm e	09/01/20 17:16
1,4-Dioxane	8.51	Incomplete Integration	campbellm e	09/01/20 17:03

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-17705-1

SDG No.: _____

Instrument ID: 10193 Analysis Batch Number: 39724Lab Sample ID: IC 410-39724/8 Client Sample ID: _____Date Analyzed: 09/01/20 15:26 Lab File ID: CS01I06.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Butadiene	2.21	Baseline	campbellm e	09/01/20 17:04
Acetone	3.48	Baseline	campbellm e	09/01/20 17:04
Methyl acetate	3.89	Incomplete Integration	campbellm e	09/01/20 17:04
Methylene Chloride	4.08	Incomplete Integration	campbellm e	09/01/20 17:04
Propionitrile	6.05	Incomplete Integration	campbellm e	09/01/20 17:05
n-Butanol	7.98	Incomplete Integration	campbellm e	09/01/20 17:16
1,4-Dioxane	8.56	Incomplete Integration	campbellm e	09/01/20 17:05

Lab Sample ID: IC 410-39724/9 Client Sample ID: _____Date Analyzed: 09/01/20 15:48 Lab File ID: CS01I07.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Butadiene	2.20	Baseline	campbellm e	09/01/20 17:06
Isobutyl alcohol	7.09	Incomplete Integration	campbellm e	09/01/20 17:06
n-Butanol	8.00	Incomplete Integration	campbellm e	09/01/20 17:17
1,4-Dioxane	8.51	Incomplete Integration	campbellm e	09/01/20 17:06

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-17705-1

SDG No.: _____

Instrument ID: 10193 Analysis Batch Number: 39724Lab Sample ID: ICV 410-39724/10 Client Sample ID: _____Date Analyzed: 09/01/20 16:10 Lab File ID: CS01V01.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.92	Incomplete Integration	campbellm e	09/01/20 17:26
1,3-Butadiene	2.21	Baseline	campbellm e	09/01/20 17:30
Freon 113	3.46	Incomplete Integration	campbellm e	09/01/20 17:31
t-Butyl alcohol-d10 (IS)	4.11	Incomplete Integration	campbellm e	09/01/20 17:26
Propionitrile	6.05	Incomplete Integration	campbellm e	09/01/20 17:27
n-Butanol	7.98	Incomplete Integration	campbellm e	09/01/20 17:28
1,4-Dioxane	8.51	Incomplete Integration	campbellm e	09/01/20 17:26

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-17705-1

SDG No.: _____

Instrument ID: 10193 Analysis Batch Number: 57283Lab Sample ID: CCVIS 410-57283/3 Client Sample ID: _____Date Analyzed: 10/22/20 09:20 Lab File ID: CC21C31.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Butadiene	2.20	Other	howej	10/22/20 10:02
Methyl acetate	3.84	Other	howej	10/22/20 10:03
t-Butyl alcohol-d10 (IS)	4.08	Other	howej	10/22/20 10:03
1,4-Dioxane	8.46	Other	howej	10/22/20 10:04

Lab Sample ID: 410-17705-4 Client Sample ID: 5WC21Date Analyzed: 10/22/20 17:39 Lab File ID: CC22S19.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	8.03	Incomplete Integration	johnsons	10/22/20 21:37

Lab Sample ID: 410-17705-8 Client Sample ID: 5W12ADate Analyzed: 10/22/20 19:08 Lab File ID: CC22S23.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	8.02	Missed Peak	johnsons	10/22/20 21:38

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MSV_25_826ISS_00001	03/03/21	08/31/20	Methanol, Lot DX212	10 mL	MSV_8260_SS_00189	1 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
					MSV_Cus826_IS_00118	1 mL	1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5 (IS)	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
.MSV_8260_SS_00189	03/31/22		Restek, Lot A0146938		(Purchased Reagent)		t-Butyl alcohol-d10 (IS)	1250 ug/mL
							1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
.MSV_Cus826_IS_00118	05/31/21		Restek, Lot A0138205		(Purchased Reagent)		Toluene-d8 (Surr)	2500 ug/mL
							1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_HP25_ISSS_00016	04/20/21	10/20/20	Methanol, Lot DX212	10 mL	MSV_Cus826_IS_00138	1 mL	1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5 (IS)	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							t-Butyl alcohol-d10 (IS)	1250 ug/mL
.MSV_Cus826_IS_00138	05/31/21		Restek, Lot A0138205		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_HP25_ISSS_00016	04/20/21	10/20/20	Methanol, Lot DX212	10 mL	MSV_8260_SS_00227	1 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
.MSV_8260_SS_00227	03/31/22		Restek, Lot A0146938		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
MSV_Q_QVOA1_00044	10/01/20	09/01/20	Methanol, Lot DX212	25 mL	MSV_Q#1B_00053	1 mL	1,1-Dichloroethene	40 mg/L
							cis-1,2-Dichloroethene	40 mg/L
							trans-1,2-Dichloroethene	40 mg/L
							Trichloroethene	40 mg/L
.MSV_Q#1B_00053	04/30/22		Restek, Lot A0148625		(Purchased Reagent)		1,1-Dichloroethene	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							Trichloroethene	1000 ug/mL
MSV_Q_QVOA1_00051	11/18/20	10/19/20	Methanol, Lot DX212	25 mL	MSV_Q#1B_00064	1 mL	1,1-Dichloroethene	40 mg/L
							cis-1,2-Dichloroethene	40 mg/L
							trans-1,2-Dichloroethene	40 mg/L
							Trichloroethene	40 mg/L
.MSV_Q#1B_00064	04/30/22		Restek, Lot A0148625		(Purchased Reagent)		1,1-Dichloroethene	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,2-Dichloroethene	1000 ug/mL
							Trichloroethene	1000 ug/mL
MSV_QGAS 826_00069	09/08/20	09/01/20	Methanol, Lot DX212	1 mL	MSV_502QGas_00091	20 uL	Vinyl chloride	40 ug/mL
.MSV_502QGas_00091	09/08/20		Restek, Lot A0155823		(Purchased Reagent)		Vinyl chloride	2000 ug/mL
MSV_QGAS 826_00082	10/23/20	10/19/20	Methanol, Lot DX212	1 mL	MSV_502QGas_00108	20 uL	Vinyl chloride	40 ug/mL
.MSV_502QGas_00108	10/26/20		Restek, Lot A0155823		(Purchased Reagent)		Vinyl chloride	2000 ug/mL
MSV_RV1_826_00022	09/19/20	09/01/20	Methanol, Lot DX212	1 mL	MSV_V#1B_00101	10 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1-Chlorohexane	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
					MSV_V#2B_00121	10 uL	1,4-Dioxane	2500 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	5000 ug/mL
							Propionitrile	1000 ug/mL
							trans-1,4-Dichloro-2-butene	500 ug/mL
					MSV_V#4C_00082	10 uL	1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,2-Dichloro-1,1,2-trifluoroethane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							Benzyl chloride	50 ug/mL
							Butadiene	50 ug/mL
							Carbon disulfide	50 ug/mL
							Cyclohexane	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isopropyl ether	50 ug/mL
							Methyl methacrylate	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							n-Heptane	50 ug/mL
							Tert-amyl methyl ether	50 ug/mL
							Tert-butyl ethyl ether	50 ug/mL
					MSV_V_VOA2_00047	150 uL	1,4-Dioxane	2500 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	5000 ug/mL
							Propionitrile	1000 ug/mL
					MSV_V_VOA3_00043	100 uL	trans-1,4-Dichloro-2-butene	500 ug/mL
							2-Butanone (MEK)	500 ug/mL
							2-Hexanone	500 ug/mL
							2-Nitropropane	500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MSV_V#1B_00101	10/01/20		Restek, Lot A0158586		(Purchased Reagent)		4-Methyl-2-pentanone (MIBK)	500 ug/mL
							Acetone	500 ug/mL
							Acrylonitrile	250 ug/mL
							Tetrahydrofuran	500 ug/mL
							Acrolein	2499.91 ug/mL
							1,1,1,2-Tetrachloroethane	5000 ug/mL
							1,1,1-Trichloroethane	5000 ug/mL
							1,1,2,2-Tetrachloroethane	5000 ug/mL
							1,1,2-Trichloroethane	5000 ug/mL
							1,1-Dichloroethane	5000 ug/mL
							1,1-Dichloroethene	5000 ug/mL
							1,1-Dichloropropene	5000 ug/mL
							1,2,3-Trichlorobenzene	5000 ug/mL
							1,2,3-Trichloropropane	5000 ug/mL
							1,2,4-Trichlorobenzene	5000 ug/mL
							1,2,4-Trimethylbenzene	5000 ug/mL
							1,2-Dibromo-3-Chloropropane	5000 ug/mL
							1,2-Dichlorobenzene	5000 ug/mL
							1,2-Dichloroethane	5000 ug/mL
							1,2-Dichloropropene	5000 ug/mL
							1,3,5-Trichlorobenzene	5000 ug/mL
							1,3,5-Trimethylbenzene	5000 ug/mL
							1,3-Dichlorobenzene	5000 ug/mL
							1,3-Dichloropropane	5000 ug/mL
							1,4-Dichlorobenzene	5000 ug/mL
							1-Chlorohexane	5000 ug/mL
							2,2-Dichloropropane	5000 ug/mL
							2-Chlorotoluene	5000 ug/mL
							4-Chlorotoluene	5000 ug/mL
							4-Isopropyltoluene	5000 ug/mL
							Benzene	5000 ug/mL
							Bromobenzene	5000 ug/mL
							Bromoform	5000 ug/mL
							Carbon tetrachloride	5000 ug/mL
							Chlorobenzene	5000 ug/mL
							Chlorodibromomethane	5000 ug/mL
							Chloroform	5000 ug/mL
							cis-1,2-Dichloroethene	5000 ug/mL
							cis-1,3-Dichloropropene	5000 ug/mL
							Dibromomethane	5000 ug/mL
							Dichlorobromomethane	5000 ug/mL
							Ethylbenzene	5000 ug/mL
							Ethylene Dibromide	5000 ug/mL
							Hexachlorobutadiene	5000 ug/mL
							Isopropylbenzene	5000 ug/mL
							m-Xylene & p-Xylene	10000 ug/mL
							Methylene Chloride	5000 ug/mL
							n-Butylbenzene	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Propylbenzene	5000 ug/mL
							Naphthalene	5000 ug/mL
							o-Xylene	5000 ug/mL
							sec-Butylbenzene	5000 ug/mL
							Styrene	5000 ug/mL
							tert-Butylbenzene	5000 ug/mL
							Tetrachloroethene	5000 ug/mL
							Toluene	5000 ug/mL
							trans-1,2-Dichloroethene	5000 ug/mL
							trans-1,3-Dichloropropene	5000 ug/mL
							Trichloroethene	5000 ug/mL
.MSV_V#2B_00121	10/01/20		Restek, Lot A0159694		(Purchased Reagent)		1,4-Dioxane	62500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Methacrylonitrile	12500 ug/mL
							n-Butanol	125000 ug/mL
							Propionitrile	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
.MSV_V#4C_00082	10/01/20		Restek, Lot A0158660		(Purchased Reagent)		1,1,2-Trichloro-1,2,2-trifluoroethane	5000 ug/mL
							1,2-Dichloro-1,1,2-trifluoroethane	5000 ug/mL
							2-Chloro-1,3-butadiene	5000 ug/mL
							Benzyl chloride	5000 ug/mL
							Butadiene	5000 ug/mL
							Carbon disulfide	5000 ug/mL
							Cyclohexane	5000 ug/mL
							Ethyl methacrylate	5000 ug/mL
							Hexane	5000 ug/mL
							Iodomethane	5000 ug/mL
							Isopropyl ether	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
							n-Heptane	5000 ug/mL
							Tert-amyl methyl ether	5000 ug/mL
							Tert-butyl ethyl ether	5000 ug/mL
.MSV_V_VOA2_00047	10/01/20	09/01/20	Methanol, Lot DX212	5 mL	MSV_V#2B_00121	1 mL	1,4-Dioxane	12500 ug/mL
							2-Methyl-2-propanol	5000 ug/mL
							Isobutyl alcohol	12500 ug/mL
							Methacrylonitrile	2500 ug/mL
							n-Butanol	25000 ug/mL
							Propionitrile	5000 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
..MSV_V#2B_00121	10/01/20		Restek, Lot A0159694		(Purchased Reagent)		1,4-Dioxane	62500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Methacrylonitrile	12500 ug/mL
							n-Butanol	125000 ug/mL

REAGENT TRACEABILITY SUMMARY

 Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Propionitrile	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
.MSV_V_VOA3_00043	09/19/20	09/01/20	Methanol, Lot DX212	5 mL	MSV_V#3B_00050	1 mL	2-Butanone (MEK)	5000 ug/mL
							2-Hexanone	5000 ug/mL
							2-Nitropropane	5000 ug/mL
							4-Methyl-2-pentanone (MIBK)	5000 ug/mL
							Acetone	5000 ug/mL
							Acrylonitrile	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Acrolein	24999.1 ug/mL
..MSV_V#3B_00050	10/01/20		Restek, Lot A0158677		(Purchased Reagent)		2-Butanone (MEK)	25000 ug/mL
							2-Hexanone	25000 ug/mL
							2-Nitropropane	25000 ug/mL
							4-Methyl-2-pentanone (MIBK)	25000 ug/mL
							Acetone	25000 ug/mL
							Acrylonitrile	12500 ug/mL
							Tetrahydrofuran	25000 ug/mL
							Acrolein	124995 ug/mL
..MSV_VACR_00010	09/19/20	07/21/20	Methanol, Lot DX212	10 mL	MSV_VACR_STK_00009	9.149 mL	Acrolein	124995 ug/mL
...MSV_VACR_STK_00009	09/19/20	07/21/20	Methanol, Lot DX212	10 mL	MSV_ACROLEIN_00006	1.4488 g	Acrolein	136622 ug/mL
...MSV_ACROLEIN_00006	12/31/20		Chem Service, Lot 9717000		(Purchased Reagent)		Acrolein	0.943 g/g
MSV_RV1_826_00026	11/08/20	10/12/20	Methanol, Lot DX212	1 mL	MSV_V#1B_00114	10 uL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.MSV_V#1B_00114	11/11/20		Restek, Lot A0158586		(Purchased Reagent)		1,1-Dichloroethene	5000 ug/mL
							cis-1,2-Dichloroethene	5000 ug/mL
							trans-1,2-Dichloroethene	5000 ug/mL
							Trichloroethene	5000 ug/mL
MSV_RV4_826_00024	09/25/20	09/01/20	Methanol, Lot DX212	1 mL	MSV_BCE_00015	25 uL	1-Bromo-2-chloroethane	50 ug/mL
					MSV_V_EE_00003	50 uL	Ethyl ether	49.9925 ug/mL
					MSV_V_ETBR_00005	50 uL	Ethyl bromide	50.0256 ug/mL
					MSV_V_VOA6_00050	50 uL	1,2,3-Trimethylbenzene	50 ug/mL
							3-Chloro-1-propene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Methyl acetate	50 ug/mL
							Methylcyclohexane	50 ug/mL
.MSV_BCE_00015	09/25/20		Restek, Lot A0149919		(Purchased Reagent)		Pentachloroethane	50 ug/mL
							1-Bromo-2-chloroethane	2000 ug/mL
							Ethyl ether	999.85 ug/mL
							Ethyl ether	48560 ug/mL
							Ethyl ether	1 g/g
							Ethyl bromide	1000.51 ug/mL
							Ethyl bromide	17370 ug/mL
							Ethyl bromide	1 g/g
..MSV_V_EE_00003	10/28/20	04/28/20	Methanol, Lot DX212	100 mL	MSV_EE_MISCSK_00004	2.059 mL	Ethyl ether	999.85 ug/mL
..MSV_EE_MISCSK_00004	10/28/20	04/28/20	Methanol, Lot DX212	10 mL	MSV_EE_Neat_00002	0.4856 g	Ethyl ether	48560 ug/mL
...MSV_EE_Neat_00002	11/30/21		Chem Service, Lot 7967000		(Purchased Reagent)		Ethyl ether	1 g/g
..MSV_V_ETBR_00005	10/22/20	04/22/20	Methanol, Lot DX212	10 mL	MSV_VETBR_STK_00005	0.576 mL	Ethyl bromide	1000.51 ug/mL
..MSV_VETBR_STK_00005	10/22/20	04/22/20	Methanol, Lot DX212	10 mL	MSV_EtBr_Neat_00001	0.1737 g	Ethyl bromide	17370 ug/mL
...MSV_EtBr_Neat_00001	12/31/20		Chem Service, Lot 7832000		(Purchased Reagent)		Ethyl bromide	1 g/g
.MSV_V_VOA6_00050	09/25/20	08/26/20	Methanol, Lot DX212	5 mL	MSV_V#6_00032	1 mL	1,2,3-Trimethylbenzene	1000 ug/mL
							3-Chloro-1-propene	1000 ug/mL
							Chlorobromomethane	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..MSV_V#6_00032	09/25/20		Restek, Lot A0158625		(Purchased Reagent)		Methyl acetate	1000 ug/mL
							Methylcyclohexane	1000 ug/mL
							Pentachloroethane	1000 ug/mL
							1,2,3-Trimethylbenzene	5000 ug/mL
							3-Chloro-1-propene	5000 ug/mL
							Chlorobromomethane	5000 ug/mL
							Methyl acetate	5000 ug/mL
							Methylcyclohexane	5000 ug/mL
MSV_RV4GAS826_00072	09/08/20	09/01/20	Methanol, Lot DX212	1 mL	MSV_DCFM_00019	25 uL	Dichlorofluoromethane	50 ug/mL
					MSV_V_Gas_00136	25 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_DCFM_00019	09/12/20		AccuStandard, Lot 219051360		(Purchased Reagent)		Dichlorofluoromethane	2000 ug/mL
.MSV_V_Gas_00136	09/08/20		Restek, Lot A0159812		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_RV4GAS826_00087	10/29/20	10/22/20	Methanol, Lot DX212	1 mL	MSV_V_Gas_00160	25 uL	Vinyl chloride	50 ug/mL
.MSV_V_Gas_00160	10/29/20		Restek, Lot A0159812		(Purchased Reagent)		Vinyl chloride	2000 ug/mL
MSV_V_BFB_00003							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Xylenes, Total	
.MSV_VBFB_STK_00004	01/22/21	07/22/20	Methanol, Lot DX212	10 mL	MSV_VBFB_STK_00004	0.117 mL	BFB	50.0245 ug/mL
.MSV_4BFB_NEAT_00002	01/31/21		Chem Service, Lot 8601300		MSV_4BFB_NEAT_00002	1.0689 g	BFB	106890 ug/mL
					(Purchased Reagent)		BFB	1 g/g

Reagent

MSV_4BFB_NEAT_00002



660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

4-Bromofluorobenzene

CATALOG NUMBER	N-10809-1G ✓✓
LOT NUMBER	8601300 ✓✓
DATE CERTIFIED	01/06/16 ✓✓
EXPIRATION DATE	01/31/21 ✓✓
CAS NUMBER	460-00-4
MOLECULAR FORMULA	C ₆ H ₄ BrF
MOLECULAR WEIGHT	175.00
STORAGE	Store in a cool dry place.
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.
ISO GUIDE 34 CERTIFIED	[]

Analytical Test	Value
FT-IR SPECTROSCOPY	CONFORMS TO STRUCTURE
PHYSICAL APPEARANCE	COLORLESS LIQUID ✓✓
% PURITY (GC/FID)	99.5 ✓✓

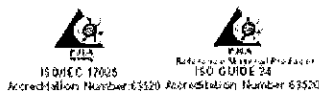
Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

Chem Service, Inc. is accredited to ISO Guide 34:2009, ISO/IEC 17025:2005 and certified to ISO 9001:2008



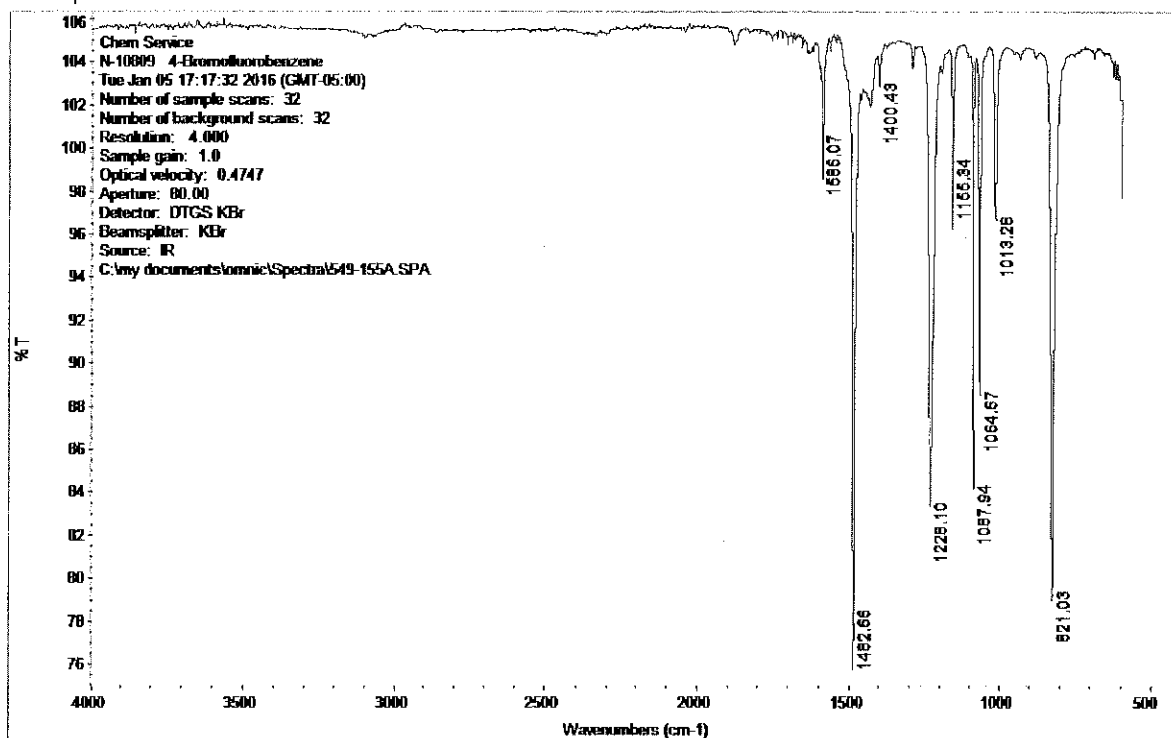
COA Form
Revision 3 (3/2015)

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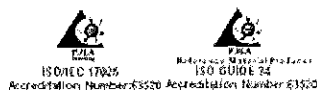
CERTIFICATE OF ANALYSIS

Analysis Method: FTIR- Spectroscopy

Catalog Number: N-10809-1G
Description: 4-Bromofluorobenzene
Lot Number: 8601300
Expiration Date: 01/31/21



Chem Service, Inc. is accredited to ISO Guide 34:2009, ISO/IEC 17025:2005 and certified to ISO 9001:2008





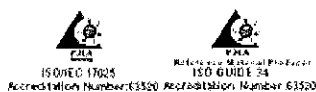
660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-10809-1G
Description:	4-Bromofluorobenzene
Lot Number:	8601300
Expiration Date:	01/31/21

Chem Service, Inc. is accredited to ISO Guide 34:2009, ISO/IEC 17025:2005 and certified to ISO 9001:2009

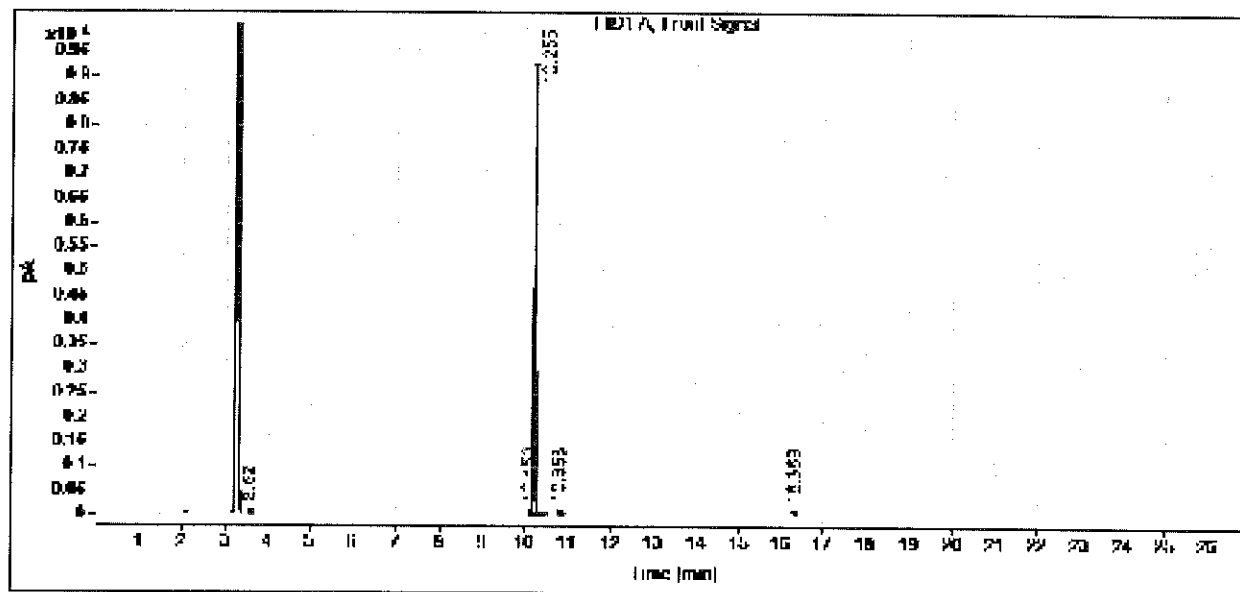


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 1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

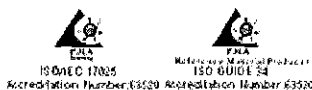
Data file: C:\CHEM3211\DATA\1215\SIG1007347.D
Sample name: N-10809/CH2CL2
Instrument: GC 1 **Sample type:** Sample
Injection date: 1/5/2016 4:20:37 PM **Location:** Vial 6
Acq. method: MIX1.M **Injection volume:** 1.0uL
Column name: DB-824 (30m x 0.53mm x 3.0um)



Signal: FID1 A, Front Signal

RT [min]	Type	Width [min]	Area	Height	Area%
3.820	BB	0.0403	3.8748	1.1723	0.0145
10.155	BV	0.0195	0.7424	0.4888	0.0028
10.255	VB S	0.0437	26687.8328	9172.4229	99.7795
10.853	BB	0.0583	54.3345	12.3602	0.2031
16.389	BB	0.0034	0.0123	0.0605	0.0000
Sum			26748.5988		

Chem Service, Inc. is accredited to ISO Guide 34:2009, ISO/IEC 17025:2005 and certified to ISO 9001:2008



Reagent

MSV_502QGas_00091



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 55669.SEC Lot No.: A0155823

Description : Custom 502.2 "Q" Gas Mix

Custom 502.2 "Q" Gas Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : January 31, 2027 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)
1	Dichlorodifluoromethane (CFC-12) CAS # 75-71-8.SEC (Lot 26165) Purity 99%	2,016.5 µg/mL	+/- 19.3550 µg/mL Gravimetric +/- 114.1077 µg/mL Unstressed +/- 116.7296 µg/mL Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3.SEC (Lot 18343) Purity 99%	2,005.6 µg/mL	+/- 18.7428 µg/mL Gravimetric +/- 113.4037 µg/mL Unstressed +/- 116.0133 µg/mL Stressed
3	Vinyl chloride CAS # 75-01-4.SEC (Lot MKBK6872V) Purity 99%	2,004.4 µg/mL	+/- 15.4000 µg/mL Gravimetric +/- 112.8325 µg/mL Unstressed +/- 115.4519 µg/mL Stressed
4	Bromomethane (methyl bromide) CAS # 74-83-9.SEC (Lot Q119-46) Purity 99%	2,022.0 µg/mL	+/- 18.0735 µg/mL Gravimetric +/- 114.2018 µg/mL Unstressed +/- 116.8358 µg/mL Stressed
5	Chloroethane (ethyl chloride) CAS # 75-00-3.SEC (Lot 00004202) Purity 99%	2,013.1 µg/mL	+/- 20.5181 µg/mL Gravimetric +/- 114.1209 µg/mL Unstressed +/- 116.7336 µg/mL Stressed
6	Trichlorofluoromethane (CFC-11) CAS # 75-69-4.SEC (Lot 253600) Purity 99%	2,001.1 µg/mL	+/- 17.4531 µg/mL Gravimetric +/- 112.9531 µg/mL Unstressed +/- 115.5613 µg/mL Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

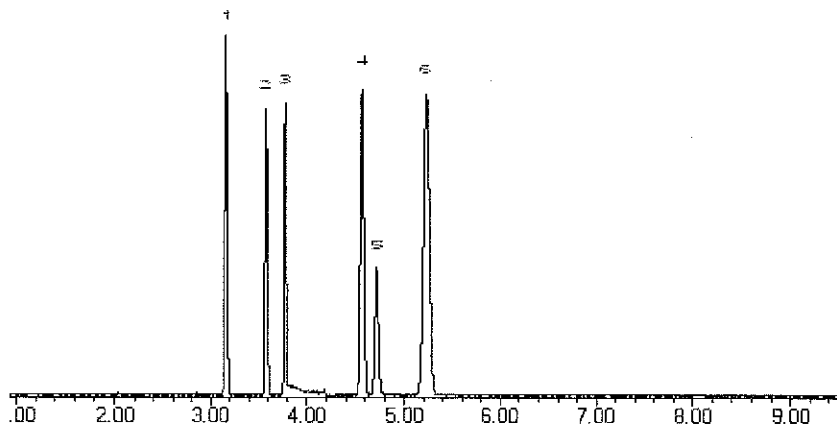
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

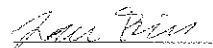
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Lane Kibe - Mix Technician

Date Mixed: 16-Dec-2019 Balance: 1127510105


Amanda Miller - Operations Tech-ARM QC

Date Passed: 27-Dec-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_502QGas_00108



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 55669.SEC **Lot No.:** A0155823

Description : Custom 502.2 "Q" Gas Mix

Custom 502.2 "Q" Gas Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2027 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)			
1	Dichlorodifluoromethane (CFC-12)	2,016.5 µg/mL	+/-	19.3550	µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 26165)		+/-	114.1077	µg/mL	Unstressed
	Purity 99%		+/-	116.7296	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,005.6 µg/mL	+/-	18.7428	µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/-	113.4037	µg/mL	Unstressed
	Purity 99%		+/-	116.0133	µg/mL	Stressed
3	Vinyl chloride	2,004.4 µg/mL	+/-	15.4000	µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/-	112.8325	µg/mL	Unstressed
	Purity 99%		+/-	115.4519	µg/mL	Stressed
4	Bromomethane (methyl bromide)	2,022.0 µg/mL	+/-	18.0735	µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot Q119-46)		+/-	114.2018	µg/mL	Unstressed
	Purity 99%		+/-	116.8358	µg/mL	Stressed
5	Chloroethane (ethyl chloride)	2,013.1 µg/mL	+/-	20.5181	µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/-	114.1209	µg/mL	Unstressed
	Purity 99%		+/-	116.7336	µg/mL	Stressed
6	Trichlorofluoromethane (CFC-11)	2,001.1 µg/mL	+/-	17.4531	µg/mL	Gravimetric
	CAS # 75-69-4.SEC (Lot 253600)		+/-	112.9531	µg/mL	Unstressed
	Purity 99%		+/-	115.5613	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

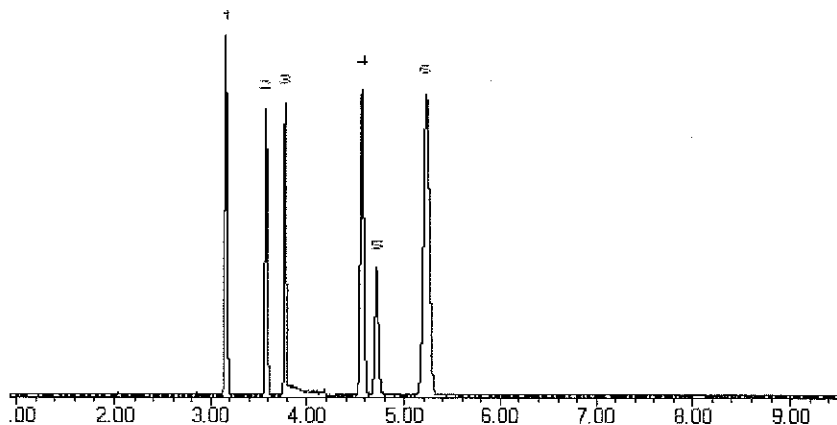
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

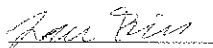
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Lane Kibe - Mix Technician

Date Mixed: 16-Dec-2019 **Balance:** 1127510105


Amanda Miller - Operations Tech-ARM QC

Date Passed: 27-Dec-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_8260_SS_00189



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 55671 Lot No.: A0146938
Description: 8260A Surrogate Mix
8260A Surrogate Mix 2,500µg/mL, P&T Methanol, 1mL/ampul
Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: March 31, 2022 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Dibromofluoromethane CAS # 1868-53-7 (Lot 0012016) Purity 99%	2,505.2 µg/mL	+/- 14.5653 µg/mL Gravimetric +/- 140.4622 µg/mL Unstressed +/- 143.7488 µg/mL Stressed
2	1,2-Dichloroethane-d4 CAS # 17060-07-0 (Lot PR-26748) Purity 99%	2,517.2 µg/mL	+/- 14.6350 µg/mL Gravimetric +/- 141.1350 µg/mL Unstressed +/- 144.4374 µg/mL Stressed
3	Toluene-d8 CAS # 2037-26-5 (Lot PR-27311) Purity 99%	2,507.7 µg/mL	+/- 14.5798 µg/mL Gravimetric +/- 140.6024 µg/mL Unstressed +/- 143.8923 µg/mL Stressed
4	1-Bromo-4-fluorobenzene (BFB) CAS # 460-00-4 (Lot 20401KO) Purity 99%	2,507.7 µg/mL	+/- 14.5798 µg/mL Gravimetric +/- 140.6024 µg/mL Unstressed +/- 143.8923 µg/mL Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:

105m x 0.53mm x 3.0µm
Rtx-S02.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

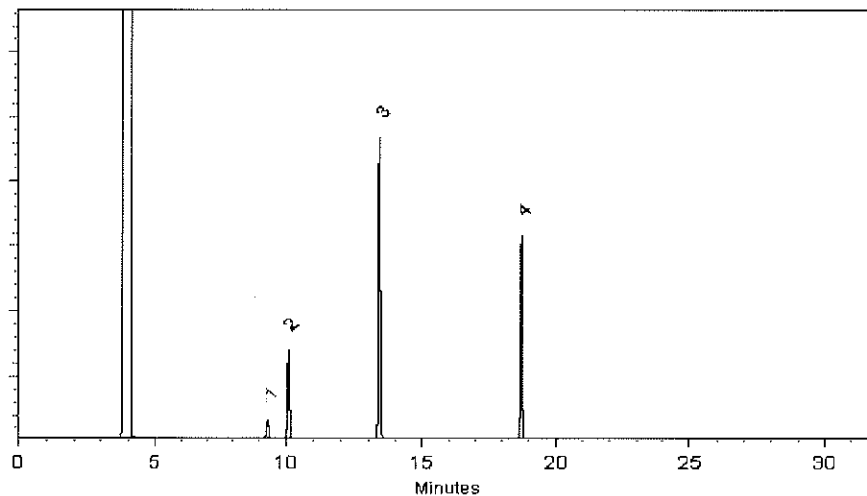
200°C

Det. Temp:

250°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Maggie Wang

Maggie Wang - Operations Technician I

Date Mixed: 12-Mar-2019

Balance: 1128342314

Jennifer L Pollino

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 15-Mar-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_8260_SS_00227



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 55671 Lot No.: A0146938
Description: 8260A Surrogate Mix
8260A Surrogate Mix 2,500µg/mL, P&T Methanol, 1mL/ampul
Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: March 31, 2022 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Dibromofluoromethane CAS # 1868-53-7 (Lot 0012016) Purity 99%	2,505.2 µg/mL	+/- 14.5653 µg/mL Gravimetric +/- 140.4622 µg/mL Unstressed +/- 143.7488 µg/mL Stressed
2	1,2-Dichloroethane-d4 CAS # 17060-07-0 (Lot PR-26748) Purity 99%	2,517.2 µg/mL	+/- 14.6350 µg/mL Gravimetric +/- 141.1350 µg/mL Unstressed +/- 144.4374 µg/mL Stressed
3	Toluene-d8 CAS # 2037-26-5 (Lot PR-27311) Purity 99%	2,507.7 µg/mL	+/- 14.5798 µg/mL Gravimetric +/- 140.6024 µg/mL Unstressed +/- 143.8923 µg/mL Stressed
4	1-Bromo-4-fluorobenzene (BFB) CAS # 460-00-4 (Lot 20401KO) Purity 99%	2,507.7 µg/mL	+/- 14.5798 µg/mL Gravimetric +/- 140.6024 µg/mL Unstressed +/- 143.8923 µg/mL Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:

105m x 0.53mm x 3.0µm
Rtx-S02.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

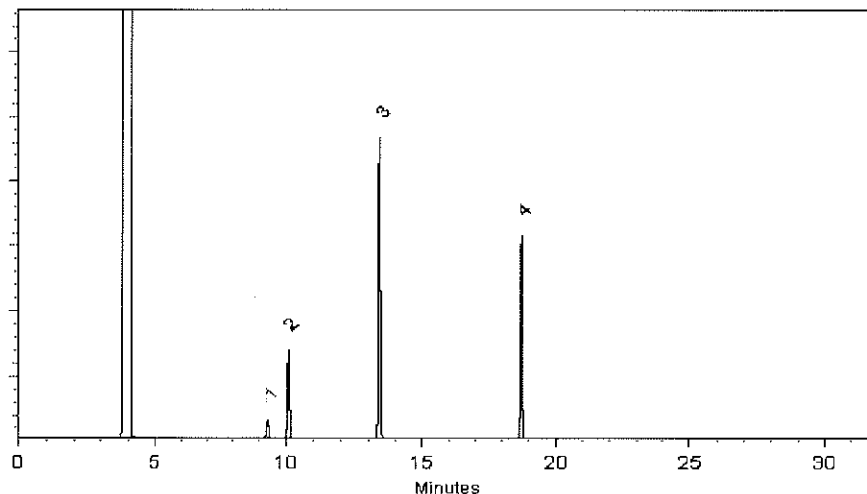
200°C

Det. Temp:

250°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Maggie Wang

Maggie Wang - Operations Technician I

Date Mixed: 12-Mar-2019

Balance: 1128342314

Jennifer L Pollino

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 15-Mar-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
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0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_ACROLEIN_00006



660 Tower Lane • P O Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com



410-83906

CERTIFICATE OF ANALYSIS

Acrolein

CATALOG NUMBER	RPN-11030-1G
LOT NUMBER	9717000
DATE CERTIFIED	12/06/19
EXPIRATION DATE	12/31/20
CAS NUMBER	107-02-8
MOLECULAR FORMULA	C ₃ H ₄ O
MOLECULAR WEIGHT	56.06
STORAGE	Store under refrigeration
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.
NOTES	Contains water and hydroquinone as an inhibitor.

Analytical Test	Value
% PURITY (GC/TCD)	94.3
% WATER (KARL FISCHER)	1.9

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

Chem Service is ISO 9001:2015, ISO 14001:2015 and certified to ISO 9001:2015



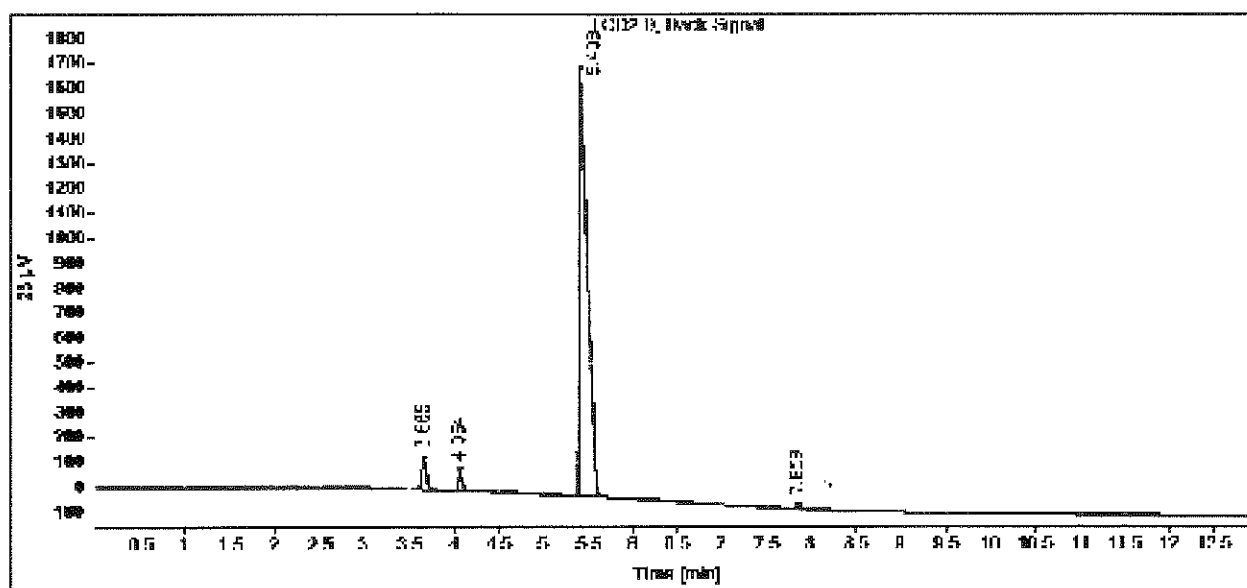
COA Form
Revision 3 (3/2015)

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info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Gas Chromatography / Thermal Conductivity Detector (GC/TCD)

Data file:	C:\CHEM32\1\DATA\2019 DATA\1219\SIG2022667.D		
Sample name:	Acrolein		
Instrument:	GC 1	Sample type:	Sample
Injection date:	12/6/2019 10:34:12 AM	Location:	Vial 11
Acq. method:	GASBOMB_TCD.M	Injection volume:	1.0uL
Column name:	DB-624 (30m x 0.53mm x 3.0um)		



Signal: TCD2 B, Back Signal

Retention [min]	Type	Width [min]	Area	Height	Area%
3.665	BB	0.0554	405.7875	114.3327	3.5675
4.084	BB	0.0475	217.2767	71.5037	1.9102
5.408	BV	0.0795	10720.3574	1725.8987	94.2472
7.859	BB	0.1249	31.2959	3.7885	0.2751
Sum			11374.7176		

Chem Service is accredited to ISO 17034:2016, ISO 17025:2017 and certified to ISO 9001:2015





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CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	RPN-11030-1G
Description:	Acrolein
Lot Number:	9717000
Expiration Date:	12/31/20

Chem Service is certified to ISO 17024:2015, ISO/IEC 17025:2017 and aligned to ISO 9001:2015





410-83907

CERTIFICATE OF ANALYSIS

Acrolcin

CATALOG NUMBER	RPN-11030-1G
LOT NUMBER	9717000
DATE CERTIFIED	12/06/19
EXPIRATION DATE	12/31/20
CAS NUMBER	107-02-8
MOLECULAR FORMULA	C ₃ H ₄ O
MOLECULAR WEIGHT	56.06
STORAGE	Store under refrigeration.
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.
NOTES	Contains water and hydroquinone as an inhibitor

Analytical Test	Value
% PURITY (GC/TCD)	94.3
% WATER (KARL FISCHER)	1.9

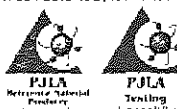
Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

Chem Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015



COA Form
Revision 3 (3/2015)

CERTIFICATE OF ANALYSIS

Gas Chromatography / Thermal Conductivity Detector (GC/TCD)

Data file: C:\CHEM32\1\DATA\2019 DATA\1219\SIG2022887.D

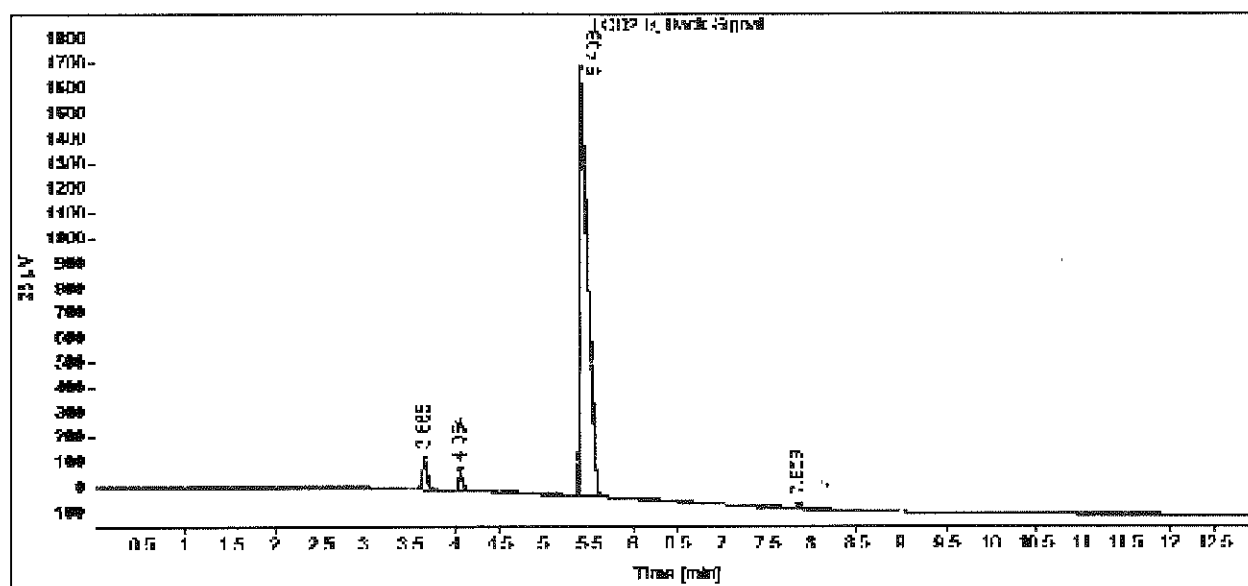
Sample name: Acrolein

Instrument: GC 1 Sample type: Sample

Injection date: 12/6/2019 10:34:12 AM Location: Vial 11

Acq. method: GASBOMB_TCD.M Injection volume: 1.0uL

Column name: DB-624 (30m x 0.53mm x 3.0um)



Signal: TCD2 B, Back Signal

RT (min)	Type	Area	Height	Area%
3.685	BB	405.7875	114.3327	3.5875
4.084	BB	217.2787	71.5037	1.9102
5.408	BV	10720.3574	1725.8987	94.2472
7.858	BB	31.2859	3.7685	0.2751
Sum		11374.7176		



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info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number	RPN-11030-1G
Description	Acrolein
Lot Number	9717000
Expiration Date:	12/31/20

Chem Service is accredited to ISO 17031:2015 ISO/IEC 17025:2017 and certified to ISO 9001:2015



Reagent

MSV_BCE_00015



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30469 Lot No.: A0149919
Description : 1-Bromo-2-chloroethane Standard
1-Bromo-2-Chloroethane Std, 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : June 30, 2024 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1-Bromo-2-chloroethane CAS # 107-04-0 (Lot BCBQ8054V) Purity 99%	2,006.0 µg/mL	+/- 11.7723 µg/mL Gravimetric +/- 112.4858 µg/mL Unstressed +/- 115.1173 µg/mL Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:

105m x 0.53mm x 3.0µm
Rtx-S02.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

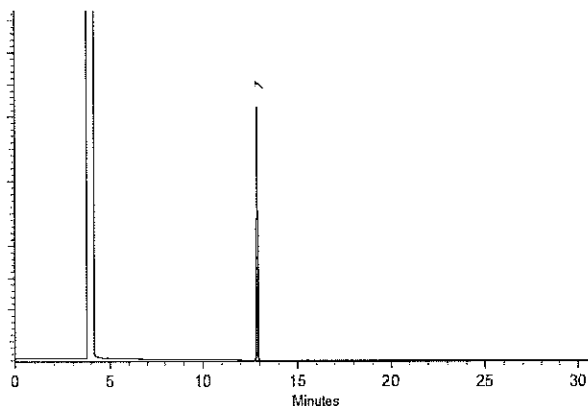
200°C

Det. Temp:

250°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Jessica McClenahan - Operations Technician I

Date Mixed: 07-Jun-2019

Balance: B251644995

Justine Albertain - Operations Tech-ARM QG

Date Passed: 10-Jun-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_Cus826_IS_00118



110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 558267 Lot No.: A0138205

Description : Custom 8260A IS Mix

Custom 8260A IS Mix 2,500-12,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : May 31, 2021 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	tert-Butyl Alcohol-d10 CAS # 53001-22-2 (Lot PR-29485) Purity 98%	12,613.8 µg/mL	+/- 73.3376 µg/mL Gravimetric +/- 270.0624 µg/mL Unstressed +/- 277.9136 µg/mL Stressed
2	Fluorobenzene CAS # 462-06-6 (Lot BCBK8171V) Purity 99%	2,517.8 µg/mL	+/- 14.6387 µg/mL Gravimetric +/- 53.9064 µg/mL Unstressed +/- 55.4736 µg/mL Stressed
3	Chlorobenzene-d5 CAS # 3114-55-4 (Lot PR-22736) Purity 99%	2,518.8 µg/mL	+/- 14.6445 µg/mL Gravimetric +/- 53.9278 µg/mL Unstressed +/- 55.4956 µg/mL Stressed
4	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 (Lot PR-18488) Purity 99%	2,511.0 µg/mL	+/- 14.5992 µg/mL Gravimetric +/- 53.7608 µg/mL Unstressed +/- 55.3237 µg/mL Stressed
Solvent:	P&T Methanol CAS # 67-56-1 Purity 99%		

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

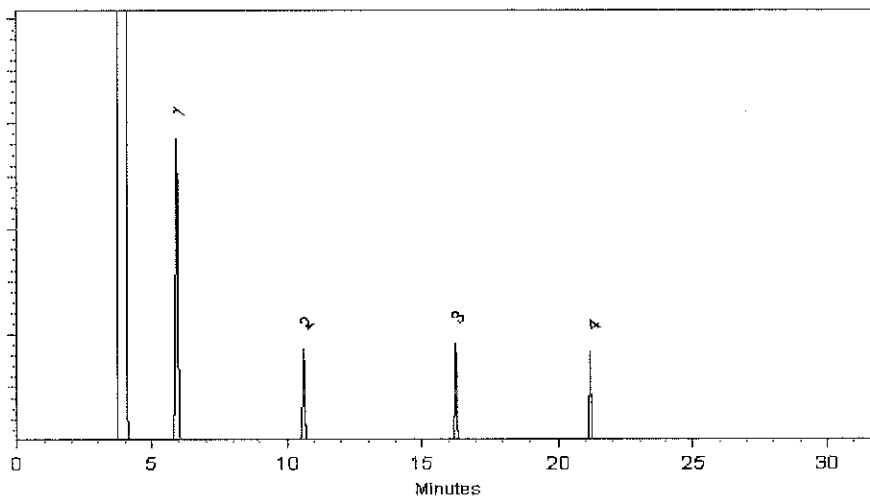
200°C

Det. Temp:

250°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 21-May-2018

Balance: 1128342314

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 23-May-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_Cus826_IS_00138



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 Bellefonte, PA 16823-8812
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 Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 558267 Lot No.: A0138205

Description : Custom 8260A IS Mix

Custom 8260A IS Mix 2,500-12,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : May 31, 2021 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	tert-Butyl Alcohol-d10 CAS # 53001-22-2 (Lot PR-29485) Purity 98%	12,613.8 µg/mL	+/- 73.3376 µg/mL Gravimetric +/- 270.0624 µg/mL Unstressed +/- 277.9136 µg/mL Stressed
2	Fluorobenzene CAS # 462-06-6 (Lot BCBK8171V) Purity 99%	2,517.8 µg/mL	+/- 14.6387 µg/mL Gravimetric +/- 53.9064 µg/mL Unstressed +/- 55.4736 µg/mL Stressed
3	Chlorobenzene-d5 CAS # 3114-55-4 (Lot PR-22736) Purity 99%	2,518.8 µg/mL	+/- 14.6445 µg/mL Gravimetric +/- 53.9278 µg/mL Unstressed +/- 55.4956 µg/mL Stressed
4	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 (Lot PR-18488) Purity 99%	2,511.0 µg/mL	+/- 14.5992 µg/mL Gravimetric +/- 53.7608 µg/mL Unstressed +/- 55.3237 µg/mL Stressed
Solvent:	P&T Methanol CAS # 67-56-1 Purity 99%		

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

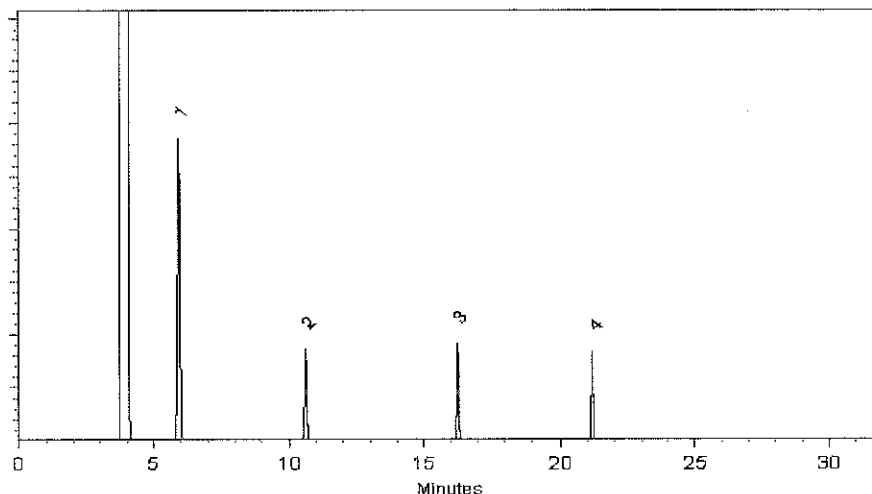
200°C

Det. Temp:

250°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 21-May-2018

Balance: 1128342314

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 23-May-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_DCFM_00019

CERTIFICATE OF ANALYSIS

Catalog No: M-502-61-10X
Description: Dichlorofluoromethane
Lot: 219051360
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: May 13, 2019
Expiration: May 13, 2029
Sample Size: 1 mL
Components: 1
Storage Condition: Refriger (0-5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity %	Prepared Concentration ²	Certified Analyte Concentration ¹
		(GC/FID)	(µg/mL)	(µg/mL)
Dichlorofluoromethane	75-43-4	98.0	2000	1960

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

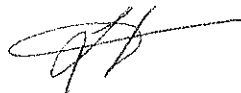
¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Certified By:


Larry Decker, Organic QC Manager

1. Quality Standards:

ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

ISO 9001:2015 – Quality Management System – Requirements
Eagle Registrations Certificate Number 3774

- 2. Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.
- 3. Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this Standard.
- 4. Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.
- 5. Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label
- 6. Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(V))^2 + (u(m))^2 + (u(V))^2 + (u(RO))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.
- 7. Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

Reagent

MSV_EtBr_Neat_00001



660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Ethyl bromide

CATALOG NUMBER	N-11888-1G
LOT NUMBER	7832000
DATE CERTIFIED	12/01/17
EXPIRATION DATE	12/31/20
CAS NUMBER	74-96-4
MOLECULAR FORMULA	C ₂ H ₅ Br
MOLECULAR WEIGHT	108.97
STORAGE	Store in a cool dry place.
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.

Analytical Test	Value
% PURITY (GC/FID)	99.5

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

Chem Service, Inc. is accredited to ISO Guide 34:2009, ISO/IEC 17025:2005 and certified to ISO 9001:2008



ISO/IEC 17025
Accreditation Number 03320



ISO GUIDE 34
Registration Number 03320

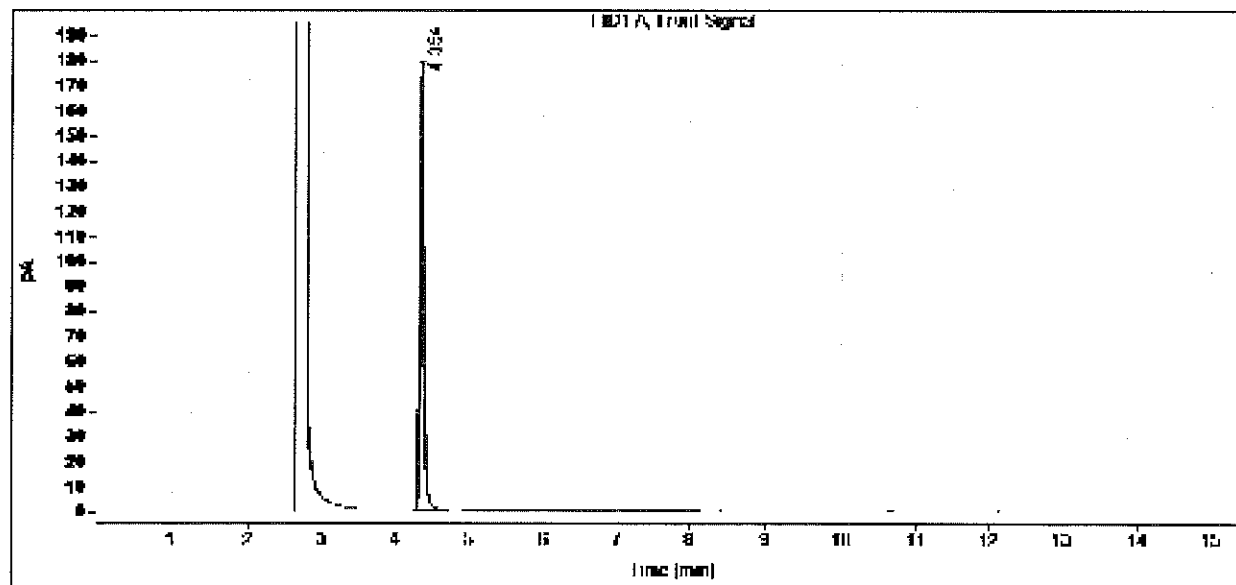
COA Form
Revision 3 (3/2015)

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
 1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

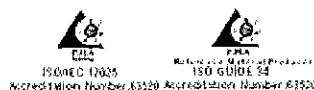
Data file:	C:\CHEM32\1\DATA\2017 DATA\1117\SIG1009528.D		
Sample name:	Bromoethane		
Instrument:	GC 1	Sample type:	Sample
Injection date:	12/1/2017 9:30:43 AM	Location:	Vial 21
Acq. method:	MIX1.M	Injection volume:	1.0uL
Column name:	DB-624 (30m x 0.53mm x 3.0um)		



Signal: FID1 A, Front Signal

RT [min]	Type	Width [min]	Area	Height	Area%
4.354	BB	0.0547	648.4102	178.9945	100.0000
Sum			648.4102		

Chem Service, Inc. is accredited to ISO Guide 34:2009, ISO/IEC 17025:2005 and certified to ISO 9001:2008



Reagent

MSV_Q#1B_00053



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569936-1.sec **Lot No.:** A0148625

Description : Custom Revised Q #1B Standard

Custom Revised Q #1B Standard 1,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1,1-Dichloroethene CAS # 75-35-4.SEC (Lot 5111300) Purity 99%	1,005.5 µg/mL	+/- 7.1750 µg/mL Gravimetric +/- 56.5279 µg/mL Unstressed +/- 57.8435 µg/mL Stressed
2	Methylene chloride (dichloromethane) CAS # 75-09-2.SEC (Lot FGM02) Purity 99%	1,004.5 µg/mL	+/- 7.1682 µg/mL Gravimetric +/- 56.4745 µg/mL Unstressed +/- 57.7888 µg/mL Stressed
3	trans-1,2-Dichloroethene CAS # 156-60-5.SEC (Lot TS5UB) Purity 97%	1,002.8 µg/mL	+/- 7.1558 µg/mL Gravimetric +/- 56.3767 µg/mL Unstressed +/- 57.6888 µg/mL Stressed
4	1,1-Dichloroethane CAS # 75-34-3.SEC (Lot 5379000) Purity 99%	1,006.8 µg/mL	+/- 7.1846 µg/mL Gravimetric +/- 56.6038 µg/mL Unstressed +/- 57.9211 µg/mL Stressed
5	2,2-Dichloropropane CAS # 594-20-7.SEC (Lot I7E8E) Purity 98%	1,003.2 µg/mL	+/- 7.7659 µg/mL Gravimetric +/- 56.4820 µg/mL Unstressed +/- 57.7928 µg/mL Stressed
6	cis-1,2-Dichloroethene CAS # 156-59-2.SEC (Lot HGC01-BLKT) Purity 98%	1,001.2 µg/mL	+/- 7.7507 µg/mL Gravimetric +/- 56.3716 µg/mL Unstressed +/- 57.6799 µg/mL Stressed
7	Chloroform CAS # 67-66-3.SEC (Lot 1297547) Purity 99%	1,004.5 µg/mL	+/- 7.1684 µg/mL Gravimetric +/- 56.4759 µg/mL Unstressed +/- 57.7903 µg/mL Stressed

8	1,1,1-trichloroethane CAS # 71-55-6 * Purity 99%	(Lot B15W12061)	1,000.9 µg/mL	+/- 7.1427 +/- 56.2735 +/- 57.5832	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,1-Dichloropropene CAS # 563-58-6.SEC Purity 96%	(Lot 4672600)	1,005.1 µg/mL	+/- 7.7804 +/- 56.5876 +/- 57.9008	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Carbon tetrachloride CAS # 56-23-5.SEC Purity 99%	(Lot 11466)	1,006.6 µg/mL	+/- 7.1828 +/- 56.5897 +/- 57.9068	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	1,2-Dichloroethane CAS # 107-06-2.SEC Purity 99%	(Lot FO6PK)	1,003.3 µg/mL	+/- 7.1598 +/- 56.4084 +/- 57.7212	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Benzene CAS # 71-43-2.SEC Purity 99%	(Lot B28Y008)	1,003.5 µg/mL	+/- 7.7683 +/- 56.4996 +/- 57.8109	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Trichloroethene CAS # 79-01-6.SEC Purity 99%	(Lot H04X050)	1,005.6 µg/mL	+/- 7.1760 +/- 56.5363 +/- 57.8521	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,2-Dichloropropane CAS # 78-87-5.SEC Purity 99%	(Lot OGG01)	1,004.3 µg/mL	+/- 7.1666 +/- 56.4618 +/- 57.7759	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Bromodichloromethane CAS # 75-27-4.SEC Purity 99%	(Lot 10171168)	1,006.2 µg/mL	+/- 7.1801 +/- 56.5686 +/- 57.8852	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Dibromomethane CAS # 74-95-3.SEC Purity 99%	(Lot FGI01-OICH)	1,006.1 µg/mL	+/- 7.7881 +/- 56.6438 +/- 57.9584	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	cis-1,3-Dichloropropene CAS # 10061-01-5.SEC Purity 99%	(Lot 4870A)	1,001.9 µg/mL	+/- 7.1498 +/- 56.3297 +/- 57.6407	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Toluene CAS # 108-88-3.SEC Purity 99%	(Lot YND2B-BD)	1,004.8 µg/mL	+/- 7.7782 +/- 56.5717 +/- 57.8846	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	trans-1,3-Dichloropropene CAS # 10061-02-6.SEC Purity 99%	(Lot ZDMSL)	1,002.6 µg/mL	+/- 7.1548 +/- 56.3691 +/- 57.6810	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	1,1,2-Trichloroethane CAS # 79-00-5.SEC Purity 98%	(Lot 3440900)	1,007.8 µg/mL	+/- 7.1920 +/- 56.6618 +/- 57.9805	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,3-Dichloropropane CAS # 142-28-9.SEC Purity 99%	(Lot AGN01-EFPC)	1,003.8 µg/mL	+/- 7.7708 +/- 56.5177 +/- 57.8293	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Tetrachloroethene CAS # 127-18-4.SEC Purity 99%	(Lot F09W014)	1,004.1 µg/mL	+/- 7.1652 +/- 56.4506 +/- 57.7644	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	Dibromochloromethane CAS # 124-48-1.SEC Purity 97%	(Lot 10181507)	1,009.5 µg/mL	+/- 7.2035 +/- 56.7530 +/- 58.0739	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	1,2-Dibromoethane (EDB) CAS # 106-93-4.SEC Purity 99%	(Lot 3505900)	1,007.8 µg/mL	+/- 7.8017 +/- 56.7429 +/- 58.0598	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1-Chlorohexane CAS # 544-10-5.SEC Purity 99%	(Lot 8171700)	1,001.0 µg/mL	+/- 5.8744 +/- 56.1308 +/- 57.4439	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Chlorobenzene CAS # 108-90-7.SEC Purity 99%	(Lot 1161936)	1,004.8 µg/mL	+/- 7.1703 +/- 56.4913 +/- 57.8061	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	1,1,1,2-Tetrachloroethane CAS # 630-20-6.SEC Purity 99%	(Lot GC01)	1,003.4 µg/mL	+/- 7.7677 +/- 56.4951 +/- 57.8063	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethylbenzene CAS # 100-41-4.SEC Purity 99%	(Lot PI4SE)	1,003.4 µg/mL	+/- 7.7677 +/- 56.4951 +/- 57.8063	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	m-Xylene CAS # 108-38-3.SEC Purity 99%	(Lot OUKMG-GB)	1,005.9 µg/mL	+/- 7.7869 +/- 56.6348 +/- 57.9491	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	p-Xylene CAS # 106-42-3.SEC Purity 99%	(Lot GM01)	1,008.3 µg/mL	+/- 7.8054 +/- 56.7699 +/- 58.0874	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	o-Xylene CAS # 95-47-6.SEC Purity 99%	(Lot FGL01)	1,005.8 µg/mL	+/- 7.7862 +/- 56.6303 +/- 57.9445	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Styrene CAS # 100-42-5.SEC Purity 99%	(Lot QGQ7F)	1,001.1 µg/mL	+/- 7.7497 +/- 56.3645 +/- 57.6726	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Isopropylbenzene (cumene) CAS # 98-82-8.SEC Purity 99%	(Lot WVREC)	1,004.3 µg/mL	+/- 7.7745 +/- 56.5447 +/- 57.8570	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Bromoform CAS # 75-25-2.SEC Purity 98%	(Lot 5197400)	1,005.7 µg/mL	+/- 7.1764 +/- 56.5392 +/- 57.8551	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,1,2,2-Tetrachloroethane CAS # 79-34-5.SEC Purity 99%	(Lot CFA4D-AQ)	1,006.8 µg/mL	+/- 7.1848 +/- 56.6052 +/- 57.9226	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,2,3-Trichloropropane CAS # 96-18-4.SEC Purity 98%	(Lot OGI01)	1,002.4 µg/mL	+/- 7.7598 +/- 56.4378 +/- 57.7477	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	n-Propylbenzene CAS # 103-65-1.SEC Purity 99%	(Lot T2HFC)	1,007.8 µg/mL	+/- 7.8011 +/- 56.7384 +/- 58.0551	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	Bromobenzene CAS # 108-86-1.SEC Purity 99%	(Lot 2FUHG-EM)	1,004.8 µg/mL	+/- 7.7782 +/- 56.5717 +/- 57.8846	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	1,3,5-Trichlorobenzene CAS # 108-70-3.SEC Purity 99%	(Lot I28U021)	1,002.0 µg/mL	+/- 5.8803 +/- 56.1868 +/- 57.5013	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	2-Chlorotoluene CAS # 95-49-8.SEC Purity 99%	(Lot SW8QG-AO)	1,008.1	µg/mL	+/- +/- +/-	7.8036 56.7564 58.0736	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	4-Chlorotoluene CAS # 106-43-4.SEC Purity 99%	(Lot P4XHJ-AO)	1,002.1	µg/mL	+/- +/- +/-	7.7571 56.4186 57.7279	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	tert-Butylbenzene CAS # 98-06-6.SEC Purity 99%	(Lot D6OHC)	1,004.2	µg/mL	+/- +/- +/-	7.7732 56.5357 57.8478	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	1,2,4-Trimethylbenzene CAS # 95-63-6.SEC Purity 99%	(Lot SC7LO-QA)	1,009.5	µg/mL	+/- +/- +/-	7.8147 56.8374 58.1565	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	sec-Butylbenzene CAS # 135-98-8.SEC Purity 99%	(Lot O4HRF)	1,006.9	µg/mL	+/- +/- +/-	7.7943 56.6888 58.0044	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	4-Isopropyltoluene (p-cymene) CAS # 99-87-6.SEC Purity 96%	(Lot 1195000)	1,000.0	µg/mL	+/- +/- +/-	7.7410 56.3015 57.6081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,3-Dichlorobenzene CAS # 541-73-1.SEC Purity 99%	(Lot FMDFD)	1,003.3	µg/mL	+/- +/- +/-	7.1593 56.4042 57.7169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	1,4-Dichlorobenzene CAS # 106-46-7.SEC Purity 99%	(Lot 4Y5DC)	1,008.5	µg/mL	+/- +/- +/-	7.1967 56.6994 58.0189	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	n-Butylbenzene CAS # 104-51-8.SEC Purity 99%	(Lot MMPGA)	1,005.4	µg/mL	+/- +/- +/-	7.7825 56.6032 57.9169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	1,2-Dichlorobenzene CAS # 95-50-1.SEC Purity 99%	(Lot 4NRGF-OT)	1,006.8	µg/mL	+/- +/- +/-	7.1842 56.6010 57.9183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	1,2-Dibromo-3-chloropropane CAS # 96-12-8.SEC Purity 98%	(Lot LC00408V)	1,002.7	µg/mL	+/- +/- +/-	7.7616 56.4511 57.7612	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	1,3,5-Trimethylbenzene CAS # 108-67-8.SEC Purity 99%	(Lot FGH02-CMLN)	1,002.2	µg/mL	+/- +/- +/-	7.7584 56.4276 57.7371	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,2,4-Trichlorobenzene CAS # 120-82-1.SEC Purity 99%	(Lot 3LYYC)	1,007.2	µg/mL	+/- +/- +/-	7.7968 56.7068 58.0229	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	Hexachlorobutadiene CAS # 87-68-3.SEC Purity 97%	(Lot 5526800)	1,005.8	µg/mL	+/- +/- +/-	7.7857 56.6265 57.9407	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	Naphthalene CAS # 91-20-3.SEC Purity 99%	(Lot SKZ5N)	1,001.8	µg/mL	+/- +/- +/-	7.7553 56.4050 57.7141	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	1,2,3-Trichlorobenzene CAS # 87-61-6.SEC Purity 98%	(Lot A0043055)	1,005.9	µg/mL	+/- +/- +/-	7.7865 56.6321 57.9464	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.# 10910)

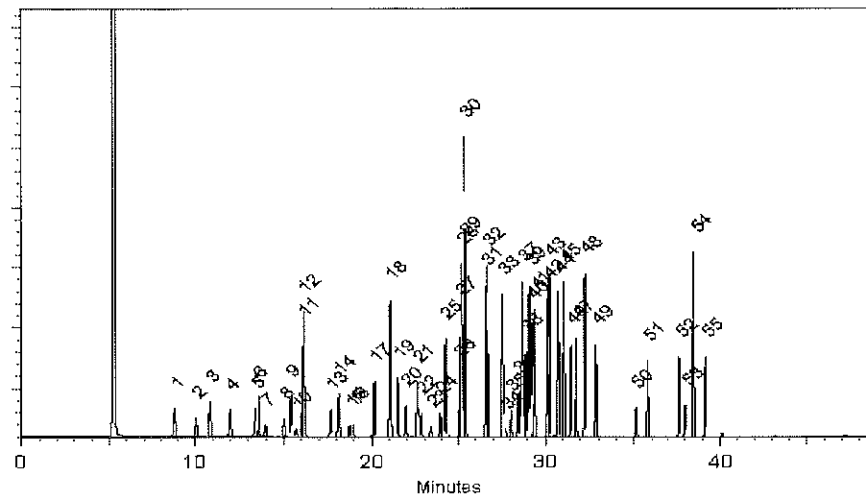
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael Mage

Date Mixed: 26-Apr-2019 **Balance:** 1127510105

Jennifer I. Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 30-Apr-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_Q#1B_00064



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569936-1.sec **Lot No.:** A0148625

Description : Custom Revised Q #1B Standard

Custom Revised Q #1B Standard 1,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1,1-Dichloroethene CAS # 75-35-4.SEC (Lot 5111300) Purity 99%	1,005.5 µg/mL	+/- 7.1750 µg/mL Gravimetric +/- 56.5279 µg/mL Unstressed +/- 57.8435 µg/mL Stressed
2	Methylene chloride (dichloromethane) CAS # 75-09-2.SEC (Lot FGM02) Purity 99%	1,004.5 µg/mL	+/- 7.1682 µg/mL Gravimetric +/- 56.4745 µg/mL Unstressed +/- 57.7888 µg/mL Stressed
3	trans-1,2-Dichloroethene CAS # 156-60-5.SEC (Lot TS5UB) Purity 97%	1,002.8 µg/mL	+/- 7.1558 µg/mL Gravimetric +/- 56.3767 µg/mL Unstressed +/- 57.6888 µg/mL Stressed
4	1,1-Dichloroethane CAS # 75-34-3.SEC (Lot 5379000) Purity 99%	1,006.8 µg/mL	+/- 7.1846 µg/mL Gravimetric +/- 56.6038 µg/mL Unstressed +/- 57.9211 µg/mL Stressed
5	2,2-Dichloropropane CAS # 594-20-7.SEC (Lot I7E8E) Purity 98%	1,003.2 µg/mL	+/- 7.7659 µg/mL Gravimetric +/- 56.4820 µg/mL Unstressed +/- 57.7928 µg/mL Stressed
6	cis-1,2-Dichloroethene CAS # 156-59-2.SEC (Lot HGC01-BLKT) Purity 98%	1,001.2 µg/mL	+/- 7.7507 µg/mL Gravimetric +/- 56.3716 µg/mL Unstressed +/- 57.6799 µg/mL Stressed
7	Chloroform CAS # 67-66-3.SEC (Lot 1297547) Purity 99%	1,004.5 µg/mL	+/- 7.1684 µg/mL Gravimetric +/- 56.4759 µg/mL Unstressed +/- 57.7903 µg/mL Stressed

8	1,1,1-trichloroethane CAS # 71-55-6 * Purity 99%	(Lot B15W12061)	1,000.9 µg/mL	+/- 7.1427 +/- 56.2735 +/- 57.5832	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,1-Dichloropropene CAS # 563-58-6.SEC Purity 96%	(Lot 4672600)	1,005.1 µg/mL	+/- 7.7804 +/- 56.5876 +/- 57.9008	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Carbon tetrachloride CAS # 56-23-5.SEC Purity 99%	(Lot 11466)	1,006.6 µg/mL	+/- 7.1828 +/- 56.5897 +/- 57.9068	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	1,2-Dichloroethane CAS # 107-06-2.SEC Purity 99%	(Lot FO6PK)	1,003.3 µg/mL	+/- 7.1598 +/- 56.4084 +/- 57.7212	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Benzene CAS # 71-43-2.SEC Purity 99%	(Lot B28Y008)	1,003.5 µg/mL	+/- 7.7683 +/- 56.4996 +/- 57.8109	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Trichloroethene CAS # 79-01-6.SEC Purity 99%	(Lot H04X050)	1,005.6 µg/mL	+/- 7.1760 +/- 56.5363 +/- 57.8521	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,2-Dichloropropane CAS # 78-87-5.SEC Purity 99%	(Lot OGG01)	1,004.3 µg/mL	+/- 7.1666 +/- 56.4618 +/- 57.7759	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Bromodichloromethane CAS # 75-27-4.SEC Purity 99%	(Lot 10171168)	1,006.2 µg/mL	+/- 7.1801 +/- 56.5686 +/- 57.8852	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Dibromomethane CAS # 74-95-3.SEC Purity 99%	(Lot FGI01-OICH)	1,006.1 µg/mL	+/- 7.7881 +/- 56.6438 +/- 57.9584	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	cis-1,3-Dichloropropene CAS # 10061-01-5.SEC Purity 99%	(Lot 4870A)	1,001.9 µg/mL	+/- 7.1498 +/- 56.3297 +/- 57.6407	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Toluene CAS # 108-88-3.SEC Purity 99%	(Lot YND2B-BD)	1,004.8 µg/mL	+/- 7.7782 +/- 56.5717 +/- 57.8846	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	trans-1,3-Dichloropropene CAS # 10061-02-6.SEC Purity 99%	(Lot ZDMSL)	1,002.6 µg/mL	+/- 7.1548 +/- 56.3691 +/- 57.6810	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	1,1,2-Trichloroethane CAS # 79-00-5.SEC Purity 98%	(Lot 3440900)	1,007.8 µg/mL	+/- 7.1920 +/- 56.6618 +/- 57.9805	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,3-Dichloropropane CAS # 142-28-9.SEC Purity 99%	(Lot AGN01-EFPC)	1,003.8 µg/mL	+/- 7.7708 +/- 56.5177 +/- 57.8293	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Tetrachloroethene CAS # 127-18-4.SEC Purity 99%	(Lot F09W014)	1,004.1 µg/mL	+/- 7.1652 +/- 56.4506 +/- 57.7644	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	Dibromochloromethane CAS # 124-48-1.SEC Purity 97%	(Lot 10181507)	1,009.5 µg/mL	+/- 7.2035 +/- 56.7530 +/- 58.0739	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	1,2-Dibromoethane (EDB) CAS # 106-93-4.SEC Purity 99%	(Lot 3505900)	1,007.8 µg/mL	+/- 7.8017 +/- 56.7429 +/- 58.0598	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1-Chlorohexane CAS # 544-10-5.SEC Purity 99%	(Lot 8171700)	1,001.0 µg/mL	+/- 5.8744 +/- 56.1308 +/- 57.4439	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Chlorobenzene CAS # 108-90-7.SEC Purity 99%	(Lot 1161936)	1,004.8 µg/mL	+/- 7.1703 +/- 56.4913 +/- 57.8061	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	1,1,1,2-Tetrachloroethane CAS # 630-20-6.SEC Purity 99%	(Lot GC01)	1,003.4 µg/mL	+/- 7.7677 +/- 56.4951 +/- 57.8063	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethylbenzene CAS # 100-41-4.SEC Purity 99%	(Lot PI4SE)	1,003.4 µg/mL	+/- 7.7677 +/- 56.4951 +/- 57.8063	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	m-Xylene CAS # 108-38-3.SEC Purity 99%	(Lot OUKMG-GB)	1,005.9 µg/mL	+/- 7.7869 +/- 56.6348 +/- 57.9491	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	p-Xylene CAS # 106-42-3.SEC Purity 99%	(Lot GM01)	1,008.3 µg/mL	+/- 7.8054 +/- 56.7699 +/- 58.0874	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	o-Xylene CAS # 95-47-6.SEC Purity 99%	(Lot FGL01)	1,005.8 µg/mL	+/- 7.7862 +/- 56.6303 +/- 57.9445	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Styrene CAS # 100-42-5.SEC Purity 99%	(Lot QGQ7F)	1,001.1 µg/mL	+/- 7.7497 +/- 56.3645 +/- 57.6726	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Isopropylbenzene (cumene) CAS # 98-82-8.SEC Purity 99%	(Lot WVREC)	1,004.3 µg/mL	+/- 7.7745 +/- 56.5447 +/- 57.8570	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Bromoform CAS # 75-25-2.SEC Purity 98%	(Lot 5197400)	1,005.7 µg/mL	+/- 7.1764 +/- 56.5392 +/- 57.8551	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,1,2,2-Tetrachloroethane CAS # 79-34-5.SEC Purity 99%	(Lot CFA4D-AQ)	1,006.8 µg/mL	+/- 7.1848 +/- 56.6052 +/- 57.9226	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,2,3-Trichloropropane CAS # 96-18-4.SEC Purity 98%	(Lot OGI01)	1,002.4 µg/mL	+/- 7.7598 +/- 56.4378 +/- 57.7477	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	n-Propylbenzene CAS # 103-65-1.SEC Purity 99%	(Lot T2HFC)	1,007.8 µg/mL	+/- 7.8011 +/- 56.7384 +/- 58.0551	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	Bromobenzene CAS # 108-86-1.SEC Purity 99%	(Lot 2FUHG-EM)	1,004.8 µg/mL	+/- 7.7782 +/- 56.5717 +/- 57.8846	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	1,3,5-Trichlorobenzene CAS # 108-70-3.SEC Purity 99%	(Lot I28U021)	1,002.0 µg/mL	+/- 5.8803 +/- 56.1868 +/- 57.5013	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	2-Chlorotoluene CAS # 95-49-8.SEC Purity 99%	(Lot SW8QG-AO)	1,008.1	µg/mL	+/- +/- +/-	7.8036 56.7564 58.0736	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	4-Chlorotoluene CAS # 106-43-4.SEC Purity 99%	(Lot P4XHJ-AO)	1,002.1	µg/mL	+/- +/- +/-	7.7571 56.4186 57.7279	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	tert-Butylbenzene CAS # 98-06-6.SEC Purity 99%	(Lot D6OHC)	1,004.2	µg/mL	+/- +/- +/-	7.7732 56.5357 57.8478	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	1,2,4-Trimethylbenzene CAS # 95-63-6.SEC Purity 99%	(Lot SC7LO-QA)	1,009.5	µg/mL	+/- +/- +/-	7.8147 56.8374 58.1565	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	sec-Butylbenzene CAS # 135-98-8.SEC Purity 99%	(Lot O4HRF)	1,006.9	µg/mL	+/- +/- +/-	7.7943 56.6888 58.0044	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	4-Isopropyltoluene (p-cymene) CAS # 99-87-6.SEC Purity 96%	(Lot 1195000)	1,000.0	µg/mL	+/- +/- +/-	7.7410 56.3015 57.6081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,3-Dichlorobenzene CAS # 541-73-1.SEC Purity 99%	(Lot FMDFD)	1,003.3	µg/mL	+/- +/- +/-	7.1593 56.4042 57.7169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	1,4-Dichlorobenzene CAS # 106-46-7.SEC Purity 99%	(Lot 4Y5DC)	1,008.5	µg/mL	+/- +/- +/-	7.1967 56.6994 58.0189	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	n-Butylbenzene CAS # 104-51-8.SEC Purity 99%	(Lot MMPGA)	1,005.4	µg/mL	+/- +/- +/-	7.7825 56.6032 57.9169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	1,2-Dichlorobenzene CAS # 95-50-1.SEC Purity 99%	(Lot 4NRGF-OT)	1,006.8	µg/mL	+/- +/- +/-	7.1842 56.6010 57.9183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	1,2-Dibromo-3-chloropropane CAS # 96-12-8.SEC Purity 98%	(Lot LC00408V)	1,002.7	µg/mL	+/- +/- +/-	7.7616 56.4511 57.7612	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	1,3,5-Trimethylbenzene CAS # 108-67-8.SEC Purity 99%	(Lot FGH02-CMLN)	1,002.2	µg/mL	+/- +/- +/-	7.7584 56.4276 57.7371	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,2,4-Trichlorobenzene CAS # 120-82-1.SEC Purity 99%	(Lot 3LYYC)	1,007.2	µg/mL	+/- +/- +/-	7.7968 56.7068 58.0229	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	Hexachlorobutadiene CAS # 87-68-3.SEC Purity 97%	(Lot 5526800)	1,005.8	µg/mL	+/- +/- +/-	7.7857 56.6265 57.9407	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	Naphthalene CAS # 91-20-3.SEC Purity 99%	(Lot SKZ5N)	1,001.8	µg/mL	+/- +/- +/-	7.7553 56.4050 57.7141	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	1,2,3-Trichlorobenzene CAS # 87-61-6.SEC Purity 98%	(Lot A0043055)	1,005.9	µg/mL	+/- +/- +/-	7.7865 56.6321 57.9464	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.# 10910)

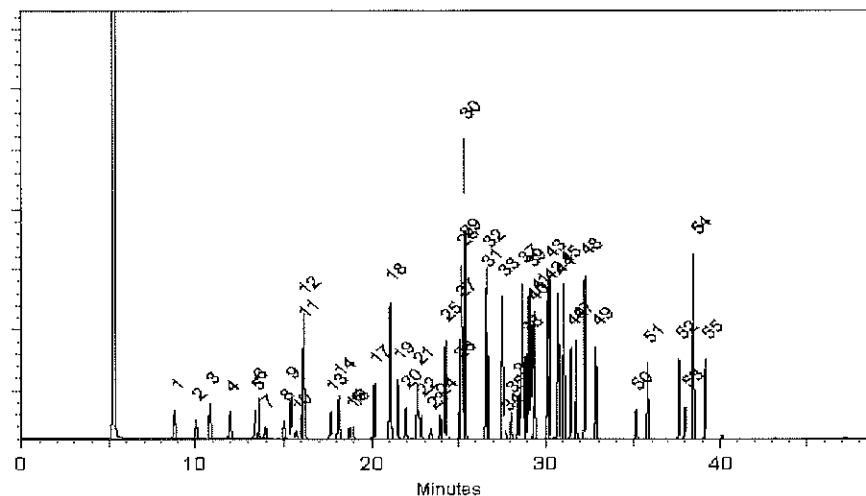
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael Mage

Date Mixed: 26-Apr-2019 **Balance:** 1127510105

Jennifer I. Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 30-Apr-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V#1B_00101



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 569936-1 **Lot No.:** A0158586

Description: Custom Revised V #1B Standard

Custom Revised V #1B Standard 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: March 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1,1-dichloroethene	5,011.4 µg/mL	+/-	31.9644	µg/mL	Gravimetric
	CAS # 75-35-4 (Lot SHBK2437)		+/-	281.2901	µg/mL	Unstressed
	Purity 99%		+/-	287.8577	µg/mL	Stressed
2	Methylene chloride (dichloromethane)	5,004.6 µg/mL	+/-	31.9213	µg/mL	Gravimetric
	CAS # 75-09-2 (Lot SHBL3107)		+/-	280.9112	µg/mL	Unstressed
	Purity 99%		+/-	287.4700	µg/mL	Stressed
3	trans-1,2-Dichloroethene	5,017.5 µg/mL	+/-	32.0035	µg/mL	Gravimetric
	CAS # 156-60-5 (Lot MKBH9850V)		+/-	281.6339	µg/mL	Unstressed
	Purity 99%		+/-	288.2096	µg/mL	Stressed
4	1,1-Dichloroethane	5,020.4 µg/mL	+/-	32.0218	µg/mL	Gravimetric
	CAS # 75-34-3 (Lot 580900)		+/-	281.7953	µg/mL	Unstressed
	Purity 99%		+/-	288.3747	µg/mL	Stressed
5	2,2-Dichloropropane	5,050.0 µg/mL	+/-	32.0202	µg/mL	Gravimetric
	CAS # 594-20-7 (Lot BCBT5124)		+/-	283.4366	µg/mL	Unstressed
	Purity 99%		+/-	290.0553	µg/mL	Stressed
6	cis-1,2-Dichloroethene	5,046.5 µg/mL	+/-	31.9980	µg/mL	Gravimetric
	CAS # 156-59-2 (Lot MKBX5945V)		+/-	283.2401	µg/mL	Unstressed
	Purity 99%		+/-	289.8543	µg/mL	Stressed
7	chloroform	5,034.3 µg/mL	+/-	32.1103	µg/mL	Gravimetric
	CAS # 67-66-3 (Lot SHBJ9076)		+/-	282.5741	µg/mL	Unstressed
	Purity 99%		+/-	289.1717	µg/mL	Stressed

8	1,1,1-trichloroethane CAS # 71-55-6 Purity 98%	(Lot 190123CG)	5,001.3	µg/mL	+/-	31.9002	µg/mL	Gravimetric
					+/-	280.7250	µg/mL	Unstressed
					+/-	287.2795	µg/mL	Stressed
9	1,1-Dichloropropene CAS # 563-58-6 Purity 99%	(Lot 170301JLM)	5,048.9	µg/mL	+/-	32.0131	µg/mL	Gravimetric
					+/-	283.3734	µg/mL	Unstressed
					+/-	289.9907	µg/mL	Stressed
10	carbon tetrachloride CAS # 56-23-5 Purity 99%	(Lot SHBG8938V)	5,022.9	µg/mL	+/-	32.0378	µg/mL	Gravimetric
					+/-	281.9356	µg/mL	Unstressed
					+/-	288.5183	µg/mL	Stressed
11	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	(Lot MKCH9948)	5,007.9	µg/mL	+/-	31.9421	µg/mL	Gravimetric
					+/-	281.0937	µg/mL	Unstressed
					+/-	287.6567	µg/mL	Stressed
12	Benzene CAS # 71-43-2 Purity 99%	(Lot SHBG7317V)	5,042.9	µg/mL	+/-	31.9750	µg/mL	Gravimetric
					+/-	283.0367	µg/mL	Unstressed
					+/-	289.6461	µg/mL	Stressed
13	Trichloroethene CAS # 79-01-6 Purity 99%	(Lot SHBJ4611)	5,012.9	µg/mL	+/-	31.9740	µg/mL	Gravimetric
					+/-	281.3743	µg/mL	Unstressed
					+/-	287.9439	µg/mL	Stressed
14	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	(Lot BCBR0882V)	5,012.6	µg/mL	+/-	31.9724	µg/mL	Gravimetric
					+/-	281.3603	µg/mL	Unstressed
					+/-	287.9295	µg/mL	Stressed
15	bromodichloromethane CAS # 75-27-4 Purity 99%	(Lot MKCJ0238)	5,039.1	µg/mL	+/-	32.1414	µg/mL	Gravimetric
					+/-	282.8477	µg/mL	Unstressed
					+/-	289.4517	µg/mL	Stressed
16	Dibromomethane CAS # 74-95-3 Purity 99%	(Lot 10201030)	5,047.3	µg/mL	+/-	32.0027	µg/mL	Gravimetric
					+/-	283.2822	µg/mL	Unstressed
					+/-	289.8973	µg/mL	Stressed
17	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	(Lot 200107JLM)	5,015.1	µg/mL	+/-	31.9883	µg/mL	Gravimetric
					+/-	281.5006	µg/mL	Unstressed
					+/-	288.0731	µg/mL	Stressed
18	Toluene CAS # 108-88-3 Purity 99%	(Lot SHBH9895)	5,031.9	µg/mL	+/-	31.9053	µg/mL	Gravimetric
					+/-	282.4193	µg/mL	Unstressed
					+/-	289.0143	µg/mL	Stressed
19	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 99%	(Lot 19420164-D1219)	5,003.8	µg/mL	+/-	31.9158	µg/mL	Gravimetric
					+/-	280.8621	µg/mL	Unstressed
					+/-	287.4198	µg/mL	Stressed
20	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	(Lot FGB01)	5,015.4	µg/mL	+/-	31.9899	µg/mL	Gravimetric
					+/-	281.5146	µg/mL	Unstressed
					+/-	288.0875	µg/mL	Stressed
21	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	(Lot BCBG2162V)	5,042.4	µg/mL	+/-	31.9718	µg/mL	Gravimetric
					+/-	283.0086	µg/mL	Unstressed
					+/-	289.6173	µg/mL	Stressed
22	Tetrachloroethene CAS # 127-18-4 Purity 99%	(Lot SHBJ7422)	5,014.3	µg/mL	+/-	31.9827	µg/mL	Gravimetric
					+/-	281.4515	µg/mL	Unstressed
					+/-	288.0229	µg/mL	Stressed
23	dibromochloromethane CAS # 124-48-1 Purity 99%	(Lot MKCK6472)	5,016.1	µg/mL	+/-	31.9947	µg/mL	Gravimetric
					+/-	281.5567	µg/mL	Unstressed
					+/-	288.1306	µg/mL	Stressed

24	1,2-Dibromoethane (EDB) CAS # 106-93-4 Purity 99%	(Lot BCBP2268V)	5,037.4 µg/mL	+/- 31.9401 +/- 282.7280 +/- 289.3302	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1-Chlorohexane CAS # 544-10-5 Purity 98%	(Lot BCBS3368V)	5,010.7 µg/mL	+/- 29.3390 +/- 280.9687 +/- 287.5420	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Chlorobenzene CAS # 108-90-7 Purity 99%	(Lot SHBJ0839)	5,009.0 µg/mL	+/- 31.9493 +/- 281.1568 +/- 287.7213	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	1,1,1,2-Tetrachloroethane CAS # 630-20-6 Purity 99%	(Lot MKBS3769V)	5,038.6 µg/mL	+/- 31.9481 +/- 282.7981 +/- 289.4020	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethylbenzene CAS # 100-41-4 Purity 99%	(Lot SHBJ3183)	5,029.3 µg/mL	+/- 31.8886 +/- 282.2719 +/- 288.8635	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	m-Xylene CAS # 108-38-3 Purity 99%	(Lot SHBH8323)	5,038.4 µg/mL	+/- 31.9465 +/- 282.7841 +/- 289.3876	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	p-Xylene CAS # 106-42-3 Purity 99%	(Lot SHBJ0052)	5,038.0 µg/mL	+/- 31.9441 +/- 282.7630 +/- 289.3661	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	o-Xylene CAS # 95-47-6 Purity 99%	(Lot SHBH3432V)	5,046.4 µg/mL	+/- 31.9972 +/- 283.2331 +/- 289.8471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Styrene CAS # 100-42-5 Purity 99%	(Lot MKBV4061V)	5,047.0 µg/mL	+/- 32.0012 +/- 283.2682 +/- 289.8830	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Isopropylbenzene (cumene) CAS # 98-82-8 Purity 99%	(Lot 10185056)	5,035.3 µg/mL	+/- 31.9267 +/- 282.6087 +/- 289.2081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	bromoform CAS # 75-25-2 Purity 99%	(Lot SHBJ4835)	5,013.0 µg/mL	+/- 31.9748 +/- 281.3813 +/- 287.9511	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,1,2,2-Tetrachloroethane CAS # 79-34-5 Purity 99%	(Lot CFA4D)	5,016.0 µg/mL	+/- 31.9939 +/- 281.5497 +/- 288.1234	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,2,3-Trichloropropane CAS # 96-18-4 Purity 99%	(Lot BCBH8722V)	5,033.4 µg/mL	+/- 31.9148 +/- 282.5035 +/- 289.1004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	n-Propylbenzene CAS # 103-65-1 Purity 99%	(Lot MKBJ0332V)	5,032.4 µg/mL	+/- 31.9084 +/- 282.4473 +/- 289.0430	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot WXBC5147V)	5,035.5 µg/mL	+/- 31.9282 +/- 282.6227 +/- 289.2225	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBS7648V)	5,029.8 µg/mL	+/- 31.8918 +/- 282.3000 +/- 288.8922	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBW5554V)	5,037.5 µg/mL	+/-	31.9409 µg/mL	Gravimetric
				+/-	282.7350 µg/mL	Unstressed
				+/-	289.3373 µg/mL	Stressed
41	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBL7753V)	5,039.1 µg/mL	+/-	31.9512 µg/mL	Gravimetric
				+/-	282.8262 µg/mL	Unstressed
				+/-	289.4307 µg/mL	Stressed
42	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot STBD6954V)	5,049.8 µg/mL	+/-	32.0186 µg/mL	Gravimetric
				+/-	283.4225 µg/mL	Unstressed
				+/-	290.0409 µg/mL	Stressed
43	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 98%	(Lot MKBJ6229V)	5,046.8 µg/mL	+/-	31.9996 µg/mL	Gravimetric
				+/-	283.2544 µg/mL	Unstressed
				+/-	289.8689 µg/mL	Stressed
44	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBR9260V)	5,042.8 µg/mL	+/-	31.9742 µg/mL	Gravimetric
				+/-	283.0296 µg/mL	Unstressed
				+/-	289.6389 µg/mL	Stressed
45	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBV3556V)	5,038.4 µg/mL	+/-	31.9465 µg/mL	Gravimetric
				+/-	282.7841 µg/mL	Unstressed
				+/-	289.3876 µg/mL	Stressed
46	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBQ7100V)	5,017.6 µg/mL	+/-	32.0043 µg/mL	Gravimetric
				+/-	281.6409 µg/mL	Unstressed
				+/-	288.2167 µg/mL	Stressed
47	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBS4401V)	5,023.8 µg/mL	+/-	32.0433 µg/mL	Gravimetric
				+/-	281.9847 µg/mL	Unstressed
				+/-	288.5686 µg/mL	Stressed
48	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09804AE)	5,024.8 µg/mL	+/-	31.8601 µg/mL	Gravimetric
				+/-	282.0194 µg/mL	Unstressed
				+/-	288.6050 µg/mL	Stressed
49	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot SHBG3111V)	5,024.5 µg/mL	+/-	32.0481 µg/mL	Gravimetric
				+/-	282.0268 µg/mL	Unstressed
				+/-	288.6117 µg/mL	Stressed
50	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01)	5,036.4 µg/mL	+/-	31.9338 µg/mL	Gravimetric
				+/-	282.6718 µg/mL	Unstressed
				+/-	289.2727 µg/mL	Stressed
51	1,3,5-Trichlorobenzene CAS # 108-70-3 Purity 99%	(Lot 11319AS)	5,034.0 µg/mL	+/-	29.4752 µg/mL	Gravimetric
				+/-	282.2729 µg/mL	Unstressed
				+/-	288.8768 µg/mL	Stressed
52	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot SHBJ0905)	5,036.5 µg/mL	+/-	31.9346 µg/mL	Gravimetric
				+/-	282.6789 µg/mL	Unstressed
				+/-	289.2799 µg/mL	Stressed
53	Hexachlorobutadiene CAS # 87-68-3 Purity 99%	(Lot J31X013)	5,033.6 µg/mL	+/-	31.9164 µg/mL	Gravimetric
				+/-	282.5175 µg/mL	Unstressed
				+/-	289.1148 µg/mL	Stressed
54	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBW2603V)	5,033.6 µg/mL	+/-	31.9164 µg/mL	Gravimetric
				+/-	282.5175 µg/mL	Unstressed
				+/-	289.1148 µg/mL	Stressed
55	1,2,3-Trichlorobenzene CAS # 87-61-6 Purity 99%	(Lot MKBS4859V)	5,016.0 µg/mL	+/-	31.8046 µg/mL	Gravimetric
				+/-	281.5283 µg/mL	Unstressed
				+/-	288.1024 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.# 10910)

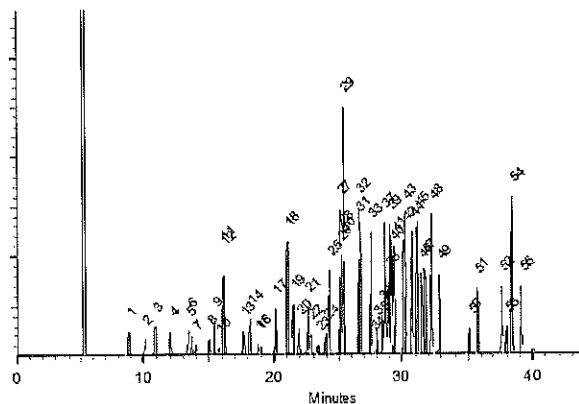
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cyndee L. Crust
Cyndee L. Crust - Mix Technician

Date Mixed: 09-Mar-2020

Balance: B251644995

Feng-Yan Lo
Feng-Yan Lo - GC Analyst

Date Passed: 11-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V#1B_00114



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 569936-1 **Lot No.:** A0158586

Description: Custom Revised V #1B Standard

Custom Revised V #1B Standard 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: March 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1,1-dichloroethene	5,011.4 µg/mL	+/-	31.9644	µg/mL	Gravimetric
	CAS # 75-35-4 (Lot SHBK2437)		+/-	281.2901	µg/mL	Unstressed
	Purity 99%		+/-	287.8577	µg/mL	Stressed
2	Methylene chloride (dichloromethane)	5,004.6 µg/mL	+/-	31.9213	µg/mL	Gravimetric
	CAS # 75-09-2 (Lot SHBL3107)		+/-	280.9112	µg/mL	Unstressed
	Purity 99%		+/-	287.4700	µg/mL	Stressed
3	trans-1,2-Dichloroethene	5,017.5 µg/mL	+/-	32.0035	µg/mL	Gravimetric
	CAS # 156-60-5 (Lot MKBH9850V)		+/-	281.6339	µg/mL	Unstressed
	Purity 99%		+/-	288.2096	µg/mL	Stressed
4	1,1-Dichloroethane	5,020.4 µg/mL	+/-	32.0218	µg/mL	Gravimetric
	CAS # 75-34-3 (Lot 580900)		+/-	281.7953	µg/mL	Unstressed
	Purity 99%		+/-	288.3747	µg/mL	Stressed
5	2,2-Dichloropropane	5,050.0 µg/mL	+/-	32.0202	µg/mL	Gravimetric
	CAS # 594-20-7 (Lot BCBT5124)		+/-	283.4366	µg/mL	Unstressed
	Purity 99%		+/-	290.0553	µg/mL	Stressed
6	cis-1,2-Dichloroethene	5,046.5 µg/mL	+/-	31.9980	µg/mL	Gravimetric
	CAS # 156-59-2 (Lot MKBX5945V)		+/-	283.2401	µg/mL	Unstressed
	Purity 99%		+/-	289.8543	µg/mL	Stressed
7	chloroform	5,034.3 µg/mL	+/-	32.1103	µg/mL	Gravimetric
	CAS # 67-66-3 (Lot SHBJ9076)		+/-	282.5741	µg/mL	Unstressed
	Purity 99%		+/-	289.1717	µg/mL	Stressed

8	1,1,1-trichloroethane CAS # 71-55-6 Purity 98%	(Lot 190123CG)	5,001.3	µg/mL	+/-	31.9002	µg/mL	Gravimetric
					+/-	280.7250	µg/mL	Unstressed
					+/-	287.2795	µg/mL	Stressed
9	1,1-Dichloropropene CAS # 563-58-6 Purity 99%	(Lot 170301JLM)	5,048.9	µg/mL	+/-	32.0131	µg/mL	Gravimetric
					+/-	283.3734	µg/mL	Unstressed
					+/-	289.9907	µg/mL	Stressed
10	carbon tetrachloride CAS # 56-23-5 Purity 99%	(Lot SHBG8938V)	5,022.9	µg/mL	+/-	32.0378	µg/mL	Gravimetric
					+/-	281.9356	µg/mL	Unstressed
					+/-	288.5183	µg/mL	Stressed
11	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	(Lot MKCH9948)	5,007.9	µg/mL	+/-	31.9421	µg/mL	Gravimetric
					+/-	281.0937	µg/mL	Unstressed
					+/-	287.6567	µg/mL	Stressed
12	Benzene CAS # 71-43-2 Purity 99%	(Lot SHBG7317V)	5,042.9	µg/mL	+/-	31.9750	µg/mL	Gravimetric
					+/-	283.0367	µg/mL	Unstressed
					+/-	289.6461	µg/mL	Stressed
13	Trichloroethene CAS # 79-01-6 Purity 99%	(Lot SHBJ4611)	5,012.9	µg/mL	+/-	31.9740	µg/mL	Gravimetric
					+/-	281.3743	µg/mL	Unstressed
					+/-	287.9439	µg/mL	Stressed
14	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	(Lot BCBR0882V)	5,012.6	µg/mL	+/-	31.9724	µg/mL	Gravimetric
					+/-	281.3603	µg/mL	Unstressed
					+/-	287.9295	µg/mL	Stressed
15	bromodichloromethane CAS # 75-27-4 Purity 99%	(Lot MKCJ0238)	5,039.1	µg/mL	+/-	32.1414	µg/mL	Gravimetric
					+/-	282.8477	µg/mL	Unstressed
					+/-	289.4517	µg/mL	Stressed
16	Dibromomethane CAS # 74-95-3 Purity 99%	(Lot 10201030)	5,047.3	µg/mL	+/-	32.0027	µg/mL	Gravimetric
					+/-	283.2822	µg/mL	Unstressed
					+/-	289.8973	µg/mL	Stressed
17	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	(Lot 200107JLM)	5,015.1	µg/mL	+/-	31.9883	µg/mL	Gravimetric
					+/-	281.5006	µg/mL	Unstressed
					+/-	288.0731	µg/mL	Stressed
18	Toluene CAS # 108-88-3 Purity 99%	(Lot SHBH9895)	5,031.9	µg/mL	+/-	31.9053	µg/mL	Gravimetric
					+/-	282.4193	µg/mL	Unstressed
					+/-	289.0143	µg/mL	Stressed
19	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 99%	(Lot 19420164-D1219)	5,003.8	µg/mL	+/-	31.9158	µg/mL	Gravimetric
					+/-	280.8621	µg/mL	Unstressed
					+/-	287.4198	µg/mL	Stressed
20	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	(Lot FGB01)	5,015.4	µg/mL	+/-	31.9899	µg/mL	Gravimetric
					+/-	281.5146	µg/mL	Unstressed
					+/-	288.0875	µg/mL	Stressed
21	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	(Lot BCBG2162V)	5,042.4	µg/mL	+/-	31.9718	µg/mL	Gravimetric
					+/-	283.0086	µg/mL	Unstressed
					+/-	289.6173	µg/mL	Stressed
22	Tetrachloroethene CAS # 127-18-4 Purity 99%	(Lot SHBJ7422)	5,014.3	µg/mL	+/-	31.9827	µg/mL	Gravimetric
					+/-	281.4515	µg/mL	Unstressed
					+/-	288.0229	µg/mL	Stressed
23	dibromochloromethane CAS # 124-48-1 Purity 99%	(Lot MKCK6472)	5,016.1	µg/mL	+/-	31.9947	µg/mL	Gravimetric
					+/-	281.5567	µg/mL	Unstressed
					+/-	288.1306	µg/mL	Stressed

24	1,2-Dibromoethane (EDB) CAS # 106-93-4 Purity 99%	(Lot BCBP2268V)	5,037.4 µg/mL	+/- +/- +/-	31.9401 282.7280 289.3302	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1-Chlorohexane CAS # 544-10-5 Purity 98%	(Lot BCBS3368V)	5,010.7 µg/mL	+/- +/- +/-	29.3390 280.9687 287.5420	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Chlorobenzene CAS # 108-90-7 Purity 99%	(Lot SHBJ0839)	5,009.0 µg/mL	+/- +/- +/-	31.9493 281.1568 287.7213	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	1,1,1,2-Tetrachloroethane CAS # 630-20-6 Purity 99%	(Lot MKBS3769V)	5,038.6 µg/mL	+/- +/- +/-	31.9481 282.7981 289.4020	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethylbenzene CAS # 100-41-4 Purity 99%	(Lot SHBJ3183)	5,029.3 µg/mL	+/- +/- +/-	31.8886 282.2719 288.8635	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	m-Xylene CAS # 108-38-3 Purity 99%	(Lot SHBH8323)	5,038.4 µg/mL	+/- +/- +/-	31.9465 282.7841 289.3876	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	p-Xylene CAS # 106-42-3 Purity 99%	(Lot SHBJ0052)	5,038.0 µg/mL	+/- +/- +/-	31.9441 282.7630 289.3661	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	o-Xylene CAS # 95-47-6 Purity 99%	(Lot SHBH3432V)	5,046.4 µg/mL	+/- +/- +/-	31.9972 283.2331 289.8471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Styrene CAS # 100-42-5 Purity 99%	(Lot MKBV4061V)	5,047.0 µg/mL	+/- +/- +/-	32.0012 283.2682 289.8830	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Isopropylbenzene (cumene) CAS # 98-82-8 Purity 99%	(Lot 10185056)	5,035.3 µg/mL	+/- +/- +/-	31.9267 282.6087 289.2081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	bromoform CAS # 75-25-2 Purity 99%	(Lot SHBJ4835)	5,013.0 µg/mL	+/- +/- +/-	31.9748 281.3813 287.9511	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,1,2,2-Tetrachloroethane CAS # 79-34-5 Purity 99%	(Lot CFA4D)	5,016.0 µg/mL	+/- +/- +/-	31.9939 281.5497 288.1234	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,2,3-Trichloropropane CAS # 96-18-4 Purity 99%	(Lot BCBH8722V)	5,033.4 µg/mL	+/- +/- +/-	31.9148 282.5035 289.1004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	n-Propylbenzene CAS # 103-65-1 Purity 99%	(Lot MKBJ0332V)	5,032.4 µg/mL	+/- +/- +/-	31.9084 282.4473 289.0430	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot WXBC5147V)	5,035.5 µg/mL	+/- +/- +/-	31.9282 282.6227 289.2225	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBS7648V)	5,029.8 µg/mL	+/- +/- +/-	31.8918 282.3000 288.8922	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBW5554V)	5,037.5 µg/mL	+/- +/- +/-	31.9409 282.7350 289.3373	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBL7753V)	5,039.1 µg/mL	+/- +/- +/-	31.9512 282.8262 289.4307	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot STBD6954V)	5,049.8 µg/mL	+/- +/- +/-	32.0186 283.4225 290.0409	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 98%	(Lot MKBJ6229V)	5,046.8 µg/mL	+/- +/- +/-	31.9996 283.2544 289.8689	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBR9260V)	5,042.8 µg/mL	+/- +/- +/-	31.9742 283.0296 289.6389	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBV3556V)	5,038.4 µg/mL	+/- +/- +/-	31.9465 282.7841 289.3876	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBQ7100V)	5,017.6 µg/mL	+/- +/- +/-	32.0043 281.6409 288.2167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBS4401V)	5,023.8 µg/mL	+/- +/- +/-	32.0433 281.9847 288.5686	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09804AE)	5,024.8 µg/mL	+/- +/- +/-	31.8601 282.0194 288.6050	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot SHBG3111V)	5,024.5 µg/mL	+/- +/- +/-	32.0481 282.0268 288.6117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01)	5,036.4 µg/mL	+/- +/- +/-	31.9338 282.6718 289.2727	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	1,3,5-Trichlorobenzene CAS # 108-70-3 Purity 99%	(Lot 11319AS)	5,034.0 µg/mL	+/- +/- +/-	29.4752 282.2729 288.8768	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot SHBJ0905)	5,036.5 µg/mL	+/- +/- +/-	31.9346 282.6789 289.2799	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	Hexachlorobutadiene CAS # 87-68-3 Purity 99%	(Lot J31X013)	5,033.6 µg/mL	+/- +/- +/-	31.9164 282.5175 289.1148	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBW2603V)	5,033.6 µg/mL	+/- +/- +/-	31.9164 282.5175 289.1148	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	1,2,3-Trichlorobenzene CAS # 87-61-6 Purity 99%	(Lot MKBS4859V)	5,016.0 µg/mL	+/- +/- +/-	31.8046 281.5283 288.1024	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.# 10910)

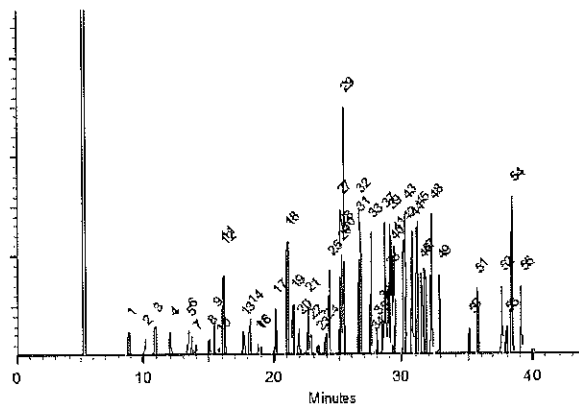
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cyndee L. Crust
Cyndee L. Crust - Mix Technician

Date Mixed: 09-Mar-2020

Balance: B251644995

Feng-Yan Lo
Feng-Yan Lo - GC Analyst

Date Passed: 11-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V#2B_00121



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 56734 **Lot No.:** A0159694

Description : Custom V # 2B Standard

Custom V #2B Standard 12,500-125,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2022 **Storage:** 0°C or colder

Elution Order	Compound	CAS #	Percent Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2-Propanol (isopropanol)	67-63-0	99%	25,019.2 µg/mL	+/- 146.4929 µg/mL
2	tert-Butanol (TBA)	75-65-0	99%	25,022.4 µg/mL	+/- 146.5117 µg/mL
3	Propionitrile	107-12-0	99%	25,020.0 µg/mL	+/- 146.4976 µg/mL
4	Methacrylonitrile	126-98-7	99%	12,533.6 µg/mL	+/- 73.3870 µg/mL
5	Isobutanol (2-Methyl-1-propanol)	78-83-1	99%	62,702.0 µg/mL	+/- 367.1151 µg/mL
6	1-Butanol	71-36-3	99%	125,150.0 µg/mL	+/- 732.7430 µg/mL
7	1,4-Dioxane	123-91-1	99%	62,550.0 µg/mL	+/- 366.2251 µg/mL
8	trans-1,4-dichloro-2-butene	110-57-6	95%	12,549.5 µg/mL	+/- 73.4801 µg/mL
Solvent:	P&T Methanol	67-56-1	99%		

Specific Reference Material Notes:

This RM (Reference Material) is not a CRM (Certified Reference Material) due to the 1-butanol concentration exceeding the maximum concentration on Restek's ISO Guide 34 scope of accreditation.

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

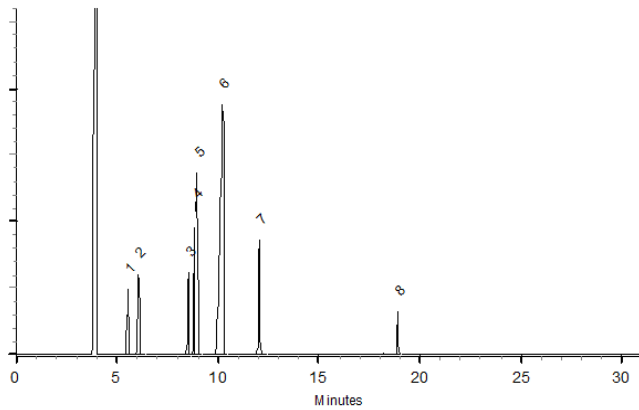
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Clara Windle - Operations Technician I

Date Mixed: 07-Apr-2020 Balance: B251644995


Fang-Yun Lo - QC Analyst

Date Passed: 10-Apr-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the RM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Uncertainty Value Notes:

- Uncertainties are determined using data from balances and glassware, raw material purity, and, when significant, equipment tolerances or calibration results.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V#3B_00050



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 56736 Lot No.: A0158677

Description: Custom V # 3B Standard

Custom V #3B Standard 12,500-25,000µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size: 2 mL Pkg Amt: > 1 mL

Expiration Date: March 31, 2023 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Acetone CAS # 67-64-1 (Lot MKCK2598) Purity 99%	25,001.0 µg/mL	+/- 146.3864 µg/mL Gravimetric +/- 1,236.8670 µg/mL Unstressed +/- 1,267.6168 µg/mL Stressed
2	Acrylonitrile CAS # 107-13-1 (Lot A0387097) Purity 99%	12,511.0 µg/mL	+/- 73.2547 µg/mL Gravimetric +/- 618.9529 µg/mL Unstressed +/- 634.3408 µg/mL Stressed
3	2-Butanone (MEK) CAS # 78-93-3 (Lot SHBK9603) Purity 99%	25,007.0 µg/mL	+/- 146.4215 µg/mL Gravimetric +/- 1,237.1638 µg/mL Unstressed +/- 1,267.9210 µg/mL Stressed
4	Tetrahydrofuran CAS # 109-99-9 (Lot SHBK8926) Purity 99%	25,049.0 µg/mL	+/- 146.6674 µg/mL Gravimetric +/- 1,239.2417 µg/mL Unstressed +/- 1,270.0505 µg/mL Stressed
5	2-Nitropropane CAS # 79-46-9 (Lot BCCB9352) Purity 97%	24,758.3 µg/mL	+/- 144.9652 µg/mL Gravimetric +/- 1,224.8589 µg/mL Unstressed +/- 1,255.3102 µg/mL Stressed
6	4-Methyl-2-pentanone (MIBK) CAS # 108-10-1 (Lot SHBL5515) Purity 99%	25,014.0 µg/mL	+/- 146.4625 µg/mL Gravimetric +/- 1,237.5101 µg/mL Unstressed +/- 1,268.2759 µg/mL Stressed
7	2-Hexanone CAS # 591-78-6 (Lot MKCL1599) Purity 99%	25,016.0 µg/mL	+/- 146.4742 µg/mL Gravimetric +/- 1,237.6091 µg/mL Unstressed +/- 1,268.3773 µg/mL Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

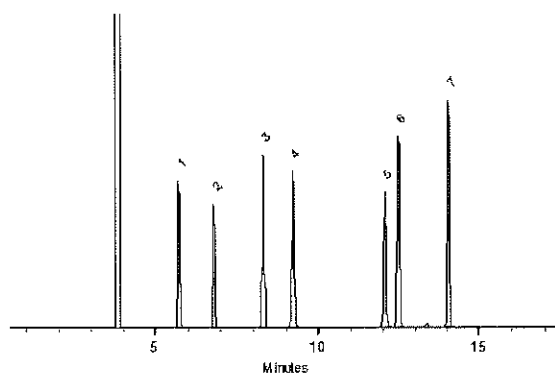
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

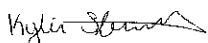
Inj. Temp:
200°C

Det. Temp:
250°C

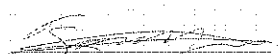
Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Kyle Struble - Operations Technician I

Date Mixed: 10-Mar-2020 **Balance:** B251644995


Fang-Yun Lo - QC Analyst

Date Passed: 12-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V#4C_00082



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 572312 Lot No.: A0158660
Description : Custom V #4C (Rev 3) Standard
Custom V #4C (Rev 3) Standard 5,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : March 31, 2021 Storage: 0°C or colder
Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1,3-Butadiene CAS # 106-99-0 (Lot SHBK2299) Purity 99%	5,002.1 µg/mL	+/- 39.8717 µg/mL Gravimetric +/- 303.0271 µg/mL Unstressed +/- 303.7407 µg/mL Stressed
2	1,2-Dichloro-1,1,2-trifluoroethane (CFC-123a) CAS # 354-23-4 (Lot Q9B-64) Purity 99%	5,001.4 µg/mL	+/- 47.3932 µg/mL Gravimetric +/- 304.0702 µg/mL Unstressed +/- 304.7812 µg/mL Stressed
3	n-Pentane (C5) CAS # 109-66-0 (Lot SHBL0400) Purity 99%	5,025.0 µg/mL	+/- 29.4225 µg/mL Gravimetric +/- 303.2005 µg/mL Unstressed +/- 303.9203 µg/mL Stressed
4	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1 (Lot 00016133) Purity 99%	5,024.0 µg/mL	+/- 29.4166 µg/mL Gravimetric +/- 303.1402 µg/mL Unstressed +/- 303.8598 µg/mL Stressed
5	Iodomethane (methyl iodide) CAS # 74-88-4 (Lot D4406-0122JM) Purity 99%	5,035.0 µg/mL	+/- 29.4810 µg/mL Gravimetric +/- 303.8039 µg/mL Unstressed +/- 304.5251 µg/mL Stressed
6	Carbon disulfide CAS # 75-15-0 (Lot U22D706) Purity 99%	5,046.0 µg/mL	+/- 29.5454 µg/mL Gravimetric +/- 304.4676 µg/mL Unstressed +/- 305.1904 µg/mL Stressed
7	Methyl-tert-butyl ether (MTBE) CAS # 1634-04-4 (Lot SHBK4806) Purity 99%	5,025.0 µg/mL	+/- 29.4225 µg/mL Gravimetric +/- 303.2005 µg/mL Unstressed +/- 303.9203 µg/mL Stressed

8	n-Hexane (C6) CAS # 110-54-3 Purity 99%	(Lot SHBL0924)	5,025.5	µg/mL	+/-	29.4254	µg/mL	Gravimetric
					+/-	303.2307	µg/mL	Unstressed
					+/-	303.9505	µg/mL	Stressed
9	Diisopropyl ether (DIPE) CAS # 108-20-3 Purity 99%	(Lot SHBH1927V)	5,015.0	µg/mL	+/-	29.3639	µg/mL	Gravimetric
					+/-	302.5971	µg/mL	Unstressed
					+/-	303.3154	µg/mL	Stressed
10	Chloroprene (2-chloro-1,3-butadiene) CAS # 126-99-8 Purity 99%	(Lot 191204JLM)	5,046.5	µg/mL	+/-	29.5484	µg/mL	Gravimetric
					+/-	304.4978	µg/mL	Unstressed
					+/-	305.2206	µg/mL	Stressed
11	Ethyl-tert-butyl ether (ETBE) CAS # 637-92-3 Purity 99%	(Lot MKCJ3589)	5,026.5	µg/mL	+/-	29.4313	µg/mL	Gravimetric
					+/-	303.2910	µg/mL	Unstressed
					+/-	304.0110	µg/mL	Stressed
12	Cyclohexane CAS # 110-82-7 Purity 99%	(Lot MKCF5831)	5,028.5	µg/mL	+/-	29.4430	µg/mL	Gravimetric
					+/-	303.4117	µg/mL	Unstressed
					+/-	304.1319	µg/mL	Stressed
13	tert-Amyl methyl ether (TAME) CAS # 994-05-8 Purity 99%	(Lot HMBG6382V)	5,021.0	µg/mL	+/-	29.3991	µg/mL	Gravimetric
					+/-	302.9592	µg/mL	Unstressed
					+/-	303.6783	µg/mL	Stressed
14	n-Heptane (C7) CAS # 142-82-5 Purity 98%	(Lot SHBK8626)	5,044.1	µg/mL	+/-	29.5341	µg/mL	Gravimetric
					+/-	304.3506	µg/mL	Unstressed
					+/-	305.0730	µg/mL	Stressed
15	tert-Amyl ethyl ether (TAEE) CAS # 919-94-8 Purity 99%	(Lot IKVYB)	5,018.5	µg/mL	+/-	29.3844	µg/mL	Gravimetric
					+/-	302.8083	µg/mL	Unstressed
					+/-	303.5271	µg/mL	Stressed
16	Methyl methacrylate CAS # 80-62-6 Purity 99%	(Lot MKCG6589)	5,028.0	µg/mL	+/-	29.4400	µg/mL	Gravimetric
					+/-	303.3815	µg/mL	Unstressed
					+/-	304.1017	µg/mL	Stressed
17	Ethyl methacrylate CAS # 97-63-2 Purity 99%	(Lot SHBF9649V)	5,043.0	µg/mL	+/-	29.5279	µg/mL	Gravimetric
					+/-	304.2866	µg/mL	Unstressed
					+/-	305.0089	µg/mL	Stressed
18	Benzyl chloride CAS # 100-44-7 Purity 99%	(Lot SHBH2102V)	5,019.5	µg/mL	+/-	29.3903	µg/mL	Gravimetric
					+/-	302.8686	µg/mL	Unstressed
					+/-	303.5876	µg/mL	Stressed
Solvent: P&T Methanol								
CAS # 67-56-1								
Purity 99%								

Tech Tips:

Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

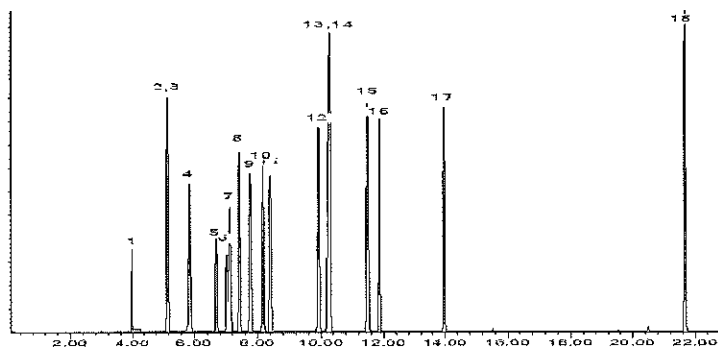
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

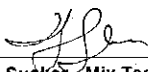
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Tom Suckar - Mix Technician

Date Mixed: 10-Mar-2020

Balance: B707717271


Fang-Yun Lu - QC Analyst

Date Passed: 25-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V#6_00032



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 558268 Lot No.: A0158625
Description : Custom CS#6 Standard
Custom CS#6 Standard 5,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : September 30, 2021 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Methyl acetate CAS # 79-20-9 (Lot SHBK5436) Purity 99%	5,039.0 µg/mL	+/- 29.5717 µg/mL Gravimetric +/- 304.0518 µg/mL Unstressed +/- 304.7735 µg/mL Stressed
2	Allyl chloride (3-chloropropene) CAS # 107-05-1 (Lot 191118KJ) Purity 99%	5,046.0 µg/mL	+/- 29.6128 µg/mL Gravimetric +/- 304.4742 µg/mL Unstressed +/- 305.1969 µg/mL Stressed
3	Bromochloromethane CAS # 74-97-5 (Lot 00008541) Purity 98%	5,040.1 µg/mL	+/- 29.5784 µg/mL Gravimetric +/- 304.1206 µg/mL Unstressed +/- 304.8425 µg/mL Stressed
4	Methylcyclohexane CAS # 108-87-2 (Lot SHBJ0457) Purity 99%	5,041.0 µg/mL	+/- 29.5834 µg/mL Gravimetric +/- 304.1725 µg/mL Unstressed +/- 304.8945 µg/mL Stressed
5	Pentachloroethane CAS # 76-01-7 (Lot 8866000) Purity 99%	5,035.0 µg/mL	+/- 29.5482 µg/mL Gravimetric +/- 303.8104 µg/mL Unstressed +/- 304.5316 µg/mL Stressed
6	1,2,3-Trimethylbenzene CAS # 526-73-8 (Lot 8766.05-14) Purity 99%	5,012.0 µg/mL	+/- 29.4132 µg/mL Gravimetric +/- 302.4226 µg/mL Unstressed +/- 303.1405 µg/mL Stressed
7	1,3-Diethylbenzene CAS # 141-93-5 (Lot BCBT8967) Purity 98%	5,041.1 µg/mL	+/- 29.5841 µg/mL Gravimetric +/- 304.1797 µg/mL Unstressed +/- 304.9017 µg/mL Stressed

8	1,4-Diethylbenzene CAS # 105-05-5 Purity 98%	(Lot RLHJK)	5,035.2 µg/mL	+/- 29.5496 +/- 303.8249 +/- 304.5461	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,2-Diethylbenzene CAS # 135-01-3 Purity 99%	(Lot ECH2970181)	5,011.0 µg/mL	+/- 29.4074 +/- 302.3623 +/- 303.0800	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	2-Methylnaphthalene CAS # 91-57-6 Purity 96%	(Lot STBG8884)	5,023.7 µg/mL	+/- 29.4818 +/- 303.1274 +/- 303.8469	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
Solvent: P&T Methanol CAS # 67-56-1 Purity 99%						

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

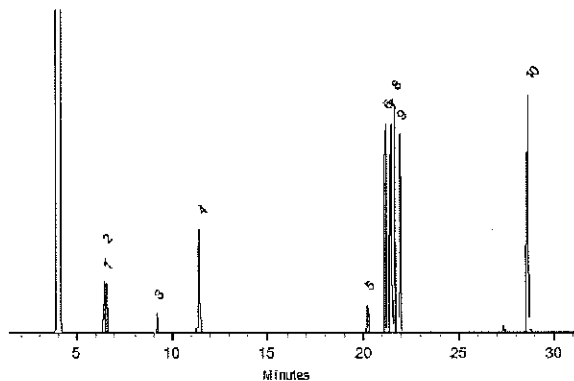
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

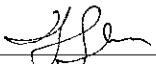
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

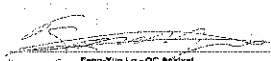


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Tom Suckar - Mix Technician

Date Mixed: 09-Mar-2020

Balance: B707717271


Feng-Yin Lin - QC Analyst

Date Passed: 12-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V_Gas_00136



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 55669 **Lot No.:** A0159812

Description : Custom 502.2 "V" Gas Mix
Custom 502.2 "V" Gas Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2027 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12) CAS # 75-71-8 (Lot 00012554) Purity 99%	2,005.1 µg/mL	+/- 16.8576 µg/mL Gravimetric +/- 113.0809 µg/mL Unstressed +/- 115.6966 µg/mL Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3 (Lot SHBK6571) Purity 99%	2,003.5 µg/mL	+/- 19.3327 µg/mL Gravimetric +/- 113.3884 µg/mL Unstressed +/- 115.9929 µg/mL Stressed
3	Vinyl chloride CAS # 75-01-4 (Lot 00015559) Purity 99%	2,001.1 µg/mL	+/- 18.1213 µg/mL Gravimetric +/- 113.0560 µg/mL Unstressed +/- 115.6619 µg/mL Stressed
4	Bromomethane (methyl bromide) CAS # 74-83-9 (Lot 101604) Purity 99%	1,998.8 µg/mL	+/- 17.7535 µg/mL Gravimetric +/- 112.8737 µg/mL Unstressed +/- 115.4779 µg/mL Stressed
5	Chloroethane (ethyl chloride) CAS # 75-00-3 (Lot 107-401039114-1) Purity 99%	2,002.3 µg/mL	+/- 17.1357 µg/mL Gravimetric +/- 112.9711 µg/mL Unstressed +/- 115.5821 µg/mL Stressed
6	Trichlorofluoromethane (CFC-11) CAS # 75-69-4 (Lot 25931) Purity 99%	2,020.0 µg/mL	+/- 11.7716 µg/mL Gravimetric +/- 113.2622 µg/mL Unstressed +/- 115.9123 µg/mL Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

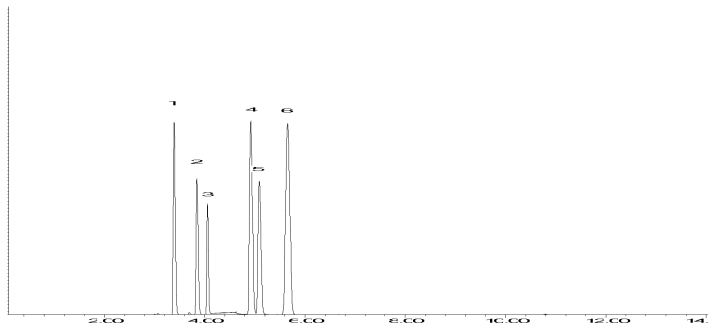
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

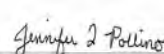


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Tom Suckar - Mix Technician

Date Mixed: 10-Apr-2020

Balance: B707717271


Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 06-May-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V_Gas_00160



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 55669 **Lot No.:** A0159812

Description : Custom 502.2 "V" Gas Mix
Custom 502.2 "V" Gas Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2027 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12) CAS # 75-71-8 (Lot 00012554) Purity 99%	2,005.1 µg/mL	+/- 16.8576 µg/mL Gravimetric +/- 113.0809 µg/mL Unstressed +/- 115.6966 µg/mL Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3 (Lot SHBK6571) Purity 99%	2,003.5 µg/mL	+/- 19.3327 µg/mL Gravimetric +/- 113.3884 µg/mL Unstressed +/- 115.9929 µg/mL Stressed
3	Vinyl chloride CAS # 75-01-4 (Lot 00015559) Purity 99%	2,001.1 µg/mL	+/- 18.1213 µg/mL Gravimetric +/- 113.0560 µg/mL Unstressed +/- 115.6619 µg/mL Stressed
4	Bromomethane (methyl bromide) CAS # 74-83-9 (Lot 101604) Purity 99%	1,998.8 µg/mL	+/- 17.7535 µg/mL Gravimetric +/- 112.8737 µg/mL Unstressed +/- 115.4779 µg/mL Stressed
5	Chloroethane (ethyl chloride) CAS # 75-00-3 (Lot 107-401039114-1) Purity 99%	2,002.3 µg/mL	+/- 17.1357 µg/mL Gravimetric +/- 112.9711 µg/mL Unstressed +/- 115.5821 µg/mL Stressed
6	Trichlorofluoromethane (CFC-11) CAS # 75-69-4 (Lot 25931) Purity 99%	2,020.0 µg/mL	+/- 11.7716 µg/mL Gravimetric +/- 113.2622 µg/mL Unstressed +/- 115.9123 µg/mL Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

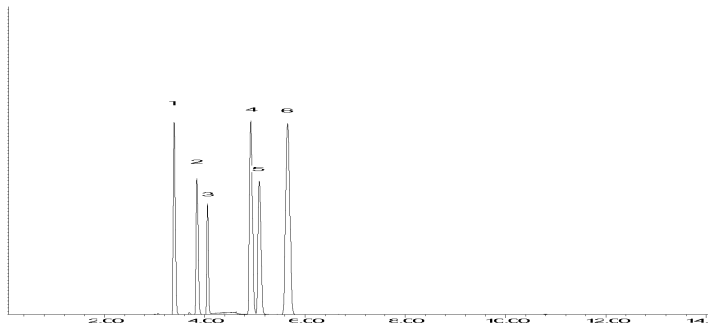
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

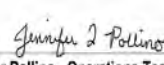


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Tom Suckar - Mix Technician

Date Mixed: 10-Apr-2020

Balance: B707717271


Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 06-May-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Method 8260C Low Level

Volatile Organic Compounds (GC/MS)
by Method 8260C Low Level

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-17705-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): R-624SilMS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
5W8B	410-17705-1	105	112	97	95
5W5B	410-17705-2	108	111	98	95
5W7B	410-17705-3	106	109	97	96
5WC21	410-17705-4	105	109	98	94
5WDUP	410-17705-5	105	112	97	94
5WC22	410-17705-6	106	110	98	94
5WC23	410-17705-7	106	111	98	95
5W12A	410-17705-8	105	110	97	95
Trip Blank 1	410-17705-9	106	114	97	94
	MB 410-57283/6	105	113	98	95
	LCS 410-57283/4	103	107	99	99
5W7B MS	410-17705-3 MS	104	108	100	99
5W7B MSD	410-17705-3 MSD	104	107	99	100

	<u>QC LIMITS</u>
DBFM = Dibromofluoromethane (Surr)	80-120
DCA = 1,2-Dichloroethane-d4 (Surr)	80-120
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	80-120

Column to be used to flag recovery values

FORM II 8260C LL

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-17705-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: CC21L31.D

Lab ID: LCS 410-57283/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Vinyl chloride	5.00	5.00	100	60-125	
trans-1,2-Dichloroethene	5.00	4.80	96	80-122	
1,1-Dichloroethene	5.00	4.72	94	80-131	
Trichloroethene	5.00	4.88	98	80-120	
cis-1,2-Dichloroethene	5.00	5.00	100	80-122	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-17705-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: CC22S17.D
 Lab ID: 410-17705-3 MS Client ID: 5W7B MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Vinyl chloride	5.38	ND	5.52	103	60-125	
trans-1,2-Dichloroethene	5.38	ND	2.50	47	80-122	F1
1,1-Dichloroethene	5.38	ND	2.53	47	80-131	F1
Trichloroethene	5.38	0.50 J	2.98	46	80-120	F1
cis-1,2-Dichloroethene	5.38	ND	2.58	48	80-122	F1

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-17705-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: CC22S18.D
 Lab ID: 410-17705-3 MSD Client ID: 5W7B MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Vinyl chloride	5.38	5.71	106	3	30	60-125	
trans-1,2-Dichloroethene	5.38	5.52	103	75	30	80-122	F2
1,1-Dichloroethene	5.38	5.50	102	74	30	80-131	F2
Trichloroethene	5.38	6.17	105	70	30	80-120	F2
cis-1,2-Dichloroethene	5.38	5.83	108	77	30	80-122	F2

Column to be used to flag recovery and RPD values

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-17705-1
 SDG No.: _____
 Lab File ID: CC21B31.D Lab Sample ID: MB 410-57283/6
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: 10193 Date Analyzed: 10/22/2020 10:28
 GC Column: R-624SilMS 30m ID: 0.25 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 410-57283/4	CC21L31.D	10/22/2020 09:43
Trip Blank 1	410-17705-9	CC22S03.D	10/22/2020 11:44
5W8B	410-17705-1	CC22S14.D	10/22/2020 15:48
5W5B	410-17705-2	CC22S15.D	10/22/2020 16:10
5W7B	410-17705-3	CC22S16.D	10/22/2020 16:33
5W7B MS	410-17705-3 MS	CC22S17.D	10/22/2020 16:55
5W7B MSD	410-17705-3 MSD	CC22S18.D	10/22/2020 17:17
5WC21	410-17705-4	CC22S19.D	10/22/2020 17:39
5WDUP	410-17705-5	CC22S20.D	10/22/2020 18:00
5WC22	410-17705-6	CC22S21.D	10/22/2020 18:23
5WC23	410-17705-7	CC22S22.D	10/22/2020 18:45
5W12A	410-17705-8	CC22S23.D	10/22/2020 19:08

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-17705-1

SDG No.: _____

Lab File ID: CS01T01.D BFB Injection Date: 09/01/2020

Instrument ID: 10193 BFB Injection Time: 12:45

Analysis Batch No.: 39724

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	20.4
75	30.0 - 60.0 % of mass 95	49.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.5
173	Less than 2.0 % of mass 174	1.3 (1.5) 1
174	Greater than 50% of mass 95	82.8
175	5.0 - 9.0 % of mass 174	6.2 (7.5) 1
176	95.0 - 101.0 % of mass 174	82.5 (99.6) 1
177	5.0 - 9.0 % of mass 176	5.3 (6.4) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 410-39724/3	CS01I01.D	09/01/2020	13:35
	ICIS 410-39724/4	CS01I02.D	09/01/2020	13:57
	IC 410-39724/5	CS01I03.D	09/01/2020	14:19
	IC 410-39724/6	CS01I04.D	09/01/2020	14:42
	IC 410-39724/7	CS01I05.D	09/01/2020	15:04
	IC 410-39724/8	CS01I06.D	09/01/2020	15:26
	IC 410-39724/9	CS01I07.D	09/01/2020	15:48
	ICV 410-39724/10	CS01V01.D	09/01/2020	16:10

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-17705-1

SDG No.: _____

Lab File ID: CC22T01.D

BFB Injection Date: 10/22/2020

Instrument ID: 10193

BFB Injection Time: 08:42

Analysis Batch No.: 57283

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	19.1
75	30.0 - 60.0 % of mass 95	49.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.4
173	Less than 2.0 % of mass 174	0.8 (0.9) 1
174	Greater than 50% of mass 95	94.2
175	5.0 - 9.0 % of mass 174	7.6 (8.1) 1
176	95.0 - 101.0 % of mass 174	90.2 (95.8) 1
177	5.0 - 9.0 % of mass 176	5.9 (6.5) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-57283/3	CC21C31.D	10/22/2020	9:20
	LCS 410-57283/4	CC21L31.D	10/22/2020	9:43
	MB 410-57283/6	CC21B31.D	10/22/2020	10:28
Trip Blank 1	410-17705-9	CC22S03.D	10/22/2020	11:44
5W8B	410-17705-1	CC22S14.D	10/22/2020	15:48
5W5B	410-17705-2	CC22S15.D	10/22/2020	16:10
5W7B	410-17705-3	CC22S16.D	10/22/2020	16:33
5W7B MS	410-17705-3 MS	CC22S17.D	10/22/2020	16:55
5W7B MSD	410-17705-3 MSD	CC22S18.D	10/22/2020	17:17
5WC21	410-17705-4	CC22S19.D	10/22/2020	17:39
5WDUP	410-17705-5	CC22S20.D	10/22/2020	18:00
5WC22	410-17705-6	CC22S21.D	10/22/2020	18:23
5WC23	410-17705-7	CC22S22.D	10/22/2020	18:45
5W12A	410-17705-8	CC22S23.D	10/22/2020	19:08

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-17705-1
 SDG No.: _____
 Sample No.: ICIS 410-39724/4 Date Analyzed: 09/01/2020 13:57
 Instrument ID: 10193 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): CS01I02.D Heated Purge: (Y/N) N
 Calibration ID: 10281

	TBAd10		FB		CBZd5	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	148289	4.11	2062892	7.57	1569631	11.10
UPPER LIMIT	296578	4.61	4125784	8.07	3139262	11.60
LOWER LIMIT	74145	3.61	1031446	7.07	784816	10.60
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 410-39724/10		148288	4.11	1991070	7.57	1511072
CCVIS 410-57283/3		190322	4.08	1840577	7.54	1432804

TBAd10 = t-Butyl alcohol-d10 (IS)

FB = Fluorobenzene (IS)

CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 50%-200% of internal standard area

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-17705-1
SDG No.: _____
Sample No.: ICIS 410-39724/4 Date Analyzed: 09/01/2020 13:57
Instrument ID: 10193 GC Column: R-624SilMS 30m ID: 0.25 (mm)
Lab File ID (Standard): CS01I02.D Heated Purge: (Y/N) N
Calibration ID: 10281

	DCBd4					
	AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT	920484	13.00				
UPPER LIMIT	1840968	13.50				
LOWER LIMIT	460242	12.50				
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 410-39724/10		880960	13.00			
CCVIS 410-57283/3		856952	12.98			

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-17705-1
 SDG No.: _____
 Sample No.: CCVIS 410-57283/3 Date Analyzed: 10/22/2020 09:20
 Instrument ID: 10193 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): CC21C31.D Heated Purge: (Y/N) N
 Calibration ID: 10281

	TBAd10		FB		CBZd5	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	190322	4.08	1840577	7.54	1432804	11.08
UPPER LIMIT	380644	4.58	3681154	8.04	2865608	11.58
LOWER LIMIT	95161	3.58	920289	7.04	716402	10.58
LAB SAMPLE ID	CLIENT SAMPLE ID					
LCS 410-57283/4		190264	4.10	1881540	7.54	1434739
MB 410-57283/6		199412	4.10	1792566	7.54	1380825
410-17705-9	Trip Blank 1	194800	4.11	1765713	7.54	1374530
410-17705-1	5W8B	189590	4.06	1869371	7.54	1446210
410-17705-2	5W5B	186124	4.11	1789191	7.54	1384859
410-17705-3	5W7B	177574	4.09	1769276	7.54	1366859
410-17705-3 MS	5W7B MS	195267	4.06	1808074	7.54	1396775
410-17705-3 MSD	5W7B MSD	179576	4.10	1820863	7.54	1401101
410-17705-4	5WC21	184608	4.07	1835847	7.54	1408823
410-17705-5	5WDUP	186802	4.08	1816792	7.54	1408953
410-17705-6	5WC22	169562	4.07	1778024	7.54	1386774
410-17705-7	5WC23	185980	4.10	1790567	7.54	1388987
410-17705-8	5W12A	182761	4.09	1766318	7.54	1374689

TBAd10 = t-Butyl alcohol-d10 (IS)

FB = Fluorobenzene (IS)

CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 50%-200% of internal standard area

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-17705-1
 SDG No.: _____
 Sample No.: CCVIS 410-57283/3 Date Analyzed: 10/22/2020 09:20
 Instrument ID: 10193 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): CC21C31.D Heated Purge: (Y/N) N
 Calibration ID: 10281

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		856952	12.98				
UPPER LIMIT		1713904	13.48				
LOWER LIMIT		428476	12.48				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-57283/4		856042	12.98				
MB 410-57283/6		773857	12.98				
410-17705-9	Trip Blank 1	773370	12.98				
410-17705-1	5W8B	813558	12.98				
410-17705-2	5W5B	795713	12.98				
410-17705-3	5W7B	773750	12.98				
410-17705-3 MS	5W7B MS	823951	12.98				
410-17705-3 MSD	5W7B MSD	832446	12.98				
410-17705-4	5WC21	804826	12.98				
410-17705-5	5WDUP	788673	12.98				
410-17705-6	5WC22	778564	12.98				
410-17705-7	5WC23	788119	12.98				
410-17705-8	5W12A	773151	12.98				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
 RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-17705-1
 SDG No.: _____
 Client Sample ID: 5W8B Lab Sample ID: 410-17705-1
 Matrix: Ground Water Lab File ID: CC22S14.D
 Analysis Method: 8260C LL Date Collected: 10/19/2020 08:35
 Sample wt/vol: 25 (mL) Date Analyzed: 10/22/2020 15:48
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 57283 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.80
75-35-4	1,1-Dichloroethene	ND		1.0	0.44
79-01-6	Trichloroethene	ND		1.0	0.18
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S14.D
 Lims ID: 410-17705-A-1
 Client ID: 5W8B
 Sample Type: Client
 Inject. Date: 22-Oct-2020 15:48:30 ALS Bottle#: 19 Worklist Smp#: 20
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-020
 Misc. Info.: 410-17705-A-1
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 21:41:19 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: johnsons

Date: 22-Oct-2020 21:22:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Vinyl chloride	62		2.203				ND	7
14 1,1-Dichloroethene	96		3.410				ND	7
* 25 t-Butyl alcohol-d10 (IS)	65	4.062	4.080	-0.018	0	189590	50.0	
29 trans-1,2-Dichloroethene	96		4.440				ND	
37 cis-1,2-Dichloroethene	96		5.946				ND	
\$ 47 Dibromofluoromethane (Surr)	113	6.641	6.647	-0.006	94	464716	10.5	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.098	7.110	-0.012	0	100989	11.2	
* 57 Fluorobenzene (IS)	96	7.537	7.543	-0.006	99	1869371	10.0	
60 Trichloroethene	95		8.025				ND	
\$ 74 Toluene-d8 (Surr)	98	9.585	9.585	0.000	95	1832876	9.70	
* 85 Chlorobenzene-d5 (IS)	117	11.073	11.079	-0.006	87	1446210	10.0	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.091	12.091	0.000	95	676599	9.53	
* 113 1,4-Dichlorobenzene-d4	152	12.981	12.981	0.000	95	813558	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_HP25_ISSS_00016

Amount Added: 1.00

Units: uL

Run Reagent

Report Date: 22-Oct-2020 21:42:19

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Euofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S14.D

Injection Date: 22-Oct-2020 15:48:30

Instrument ID: 10193

Operator ID: jkh09052

Lims ID: 410-17705-A-1

Lab Sample ID: 410-17705-1

Worklist Smp#: 20

Client ID: 5W8B

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

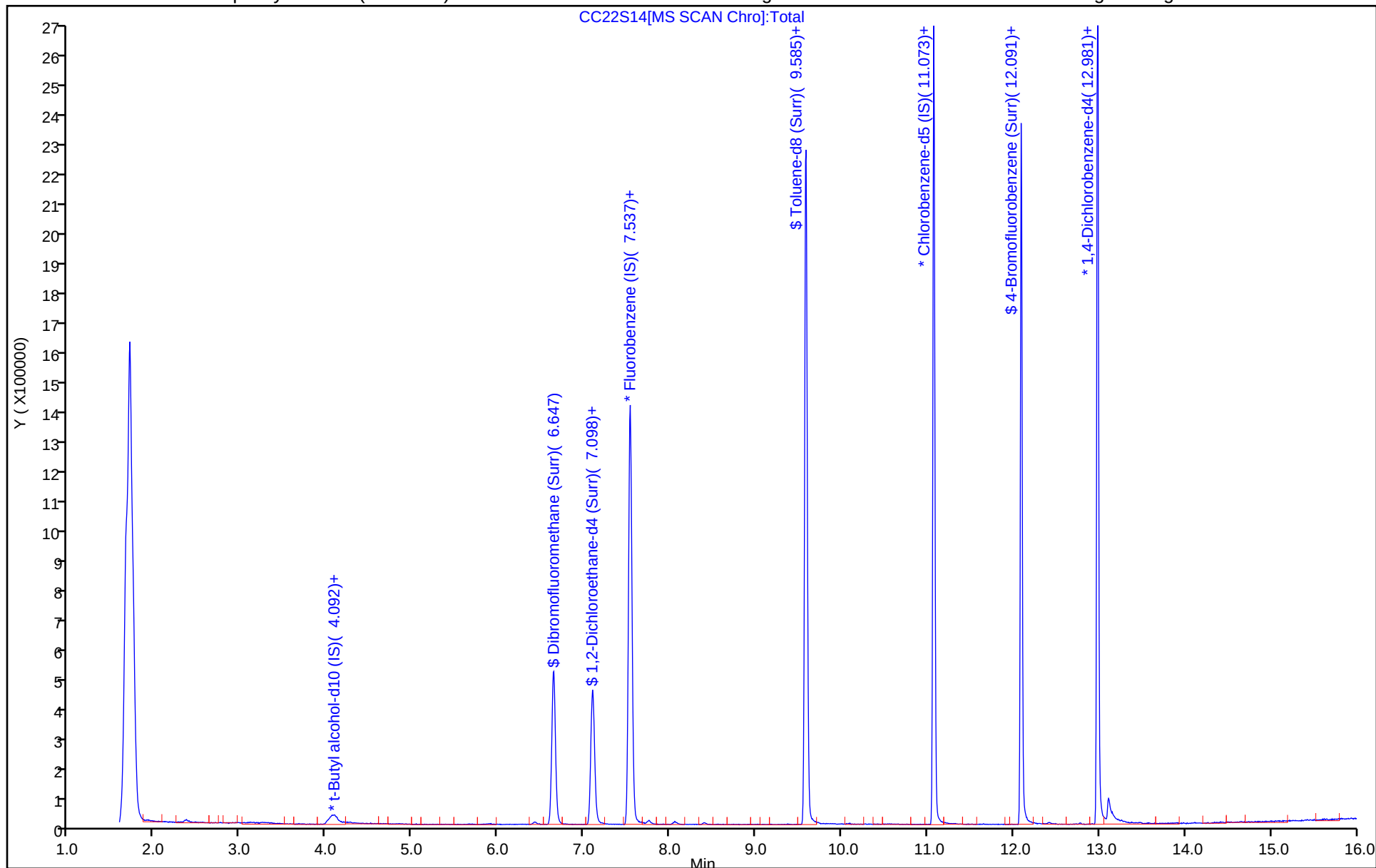
ALS Bottle#: 19

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S14.D
 Lims ID: 410-17705-A-1
 Client ID: 5W8B
 Sample Type: Client
 Inject. Date: 22-Oct-2020 15:48:30 ALS Bottle#: 19 Worklist Smp#: 20
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-020
 Misc. Info.: 410-17705-A-1
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 21:41:19 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: johnsons

Date: 22-Oct-2020 21:22:55

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	10.5	104.62
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	11.2	111.60
\$ 74 Toluene-d8 (Surr)	10.0	9.70	97.04
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.53	95.30

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-17705-1
 SDG No.: _____
 Client Sample ID: 5W5B Lab Sample ID: 410-17705-2
 Matrix: Ground Water Lab File ID: CC22S15.D
 Analysis Method: 8260C LL Date Collected: 10/19/2020 10:55
 Sample wt/vol: 25 (mL) Date Analyzed: 10/22/2020 16:10
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 57283 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.80
75-35-4	1,1-Dichloroethene	ND		1.0	0.44
79-01-6	Trichloroethene	ND		1.0	0.18
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		80-120
1868-53-7	Dibromofluoromethane (Surr)	108		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S15.D
 Lims ID: 410-17705-A-2
 Client ID: 5W5B
 Sample Type: Client
 Inject. Date: 22-Oct-2020 16:10:30 ALS Bottle#: 20 Worklist Smp#: 21
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-021
 Misc. Info.: 410-17705-A-1
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 21:41:19 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: johnsons

Date: 22-Oct-2020 21:23:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Vinyl chloride	62		2.203				ND	
14 1,1-Dichloroethene	96		3.410				ND	
* 25 t-Butyl alcohol-d10 (IS)	65	4.111	4.080	0.031	0	186124	50.0	
29 trans-1,2-Dichloroethene	96		4.440				ND	
37 cis-1,2-Dichloroethene	96		5.946				ND	
\$ 47 Dibromofluoromethane (Surr)	113	6.647	6.647	0.000	94	458352	10.8	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.098	7.110	-0.012	0	96113	11.1	
* 57 Fluorobenzene (IS)	96	7.543	7.543	0.000	99	1789191	10.0	
60 Trichloroethene	95		8.025				ND	
\$ 74 Toluene-d8 (Surr)	98	9.585	9.585	0.000	95	1764896	9.76	
* 85 Chlorobenzene-d5 (IS)	117	11.073	11.079	-0.006	87	1384859	10.0	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.091	12.091	0.000	95	645960	9.50	
* 113 1,4-Dichlorobenzene-d4	152	12.981	12.981	0.000	95	795713	10.0	

QC Flag Legend

Processing Flags

Reagents:

MSV_HP25_ISSS_00016

Amount Added: 1.00

Units: uL

Run Reagent

Report Date: 22-Oct-2020 21:42:20

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S15.D

Injection Date: 22-Oct-2020 16:10:30

Instrument ID: 10193

Operator ID: jkh09052

Lims ID: 410-17705-A-2

Lab Sample ID: 410-17705-2

Worklist Smp#: 21

Client ID: 5W5B

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

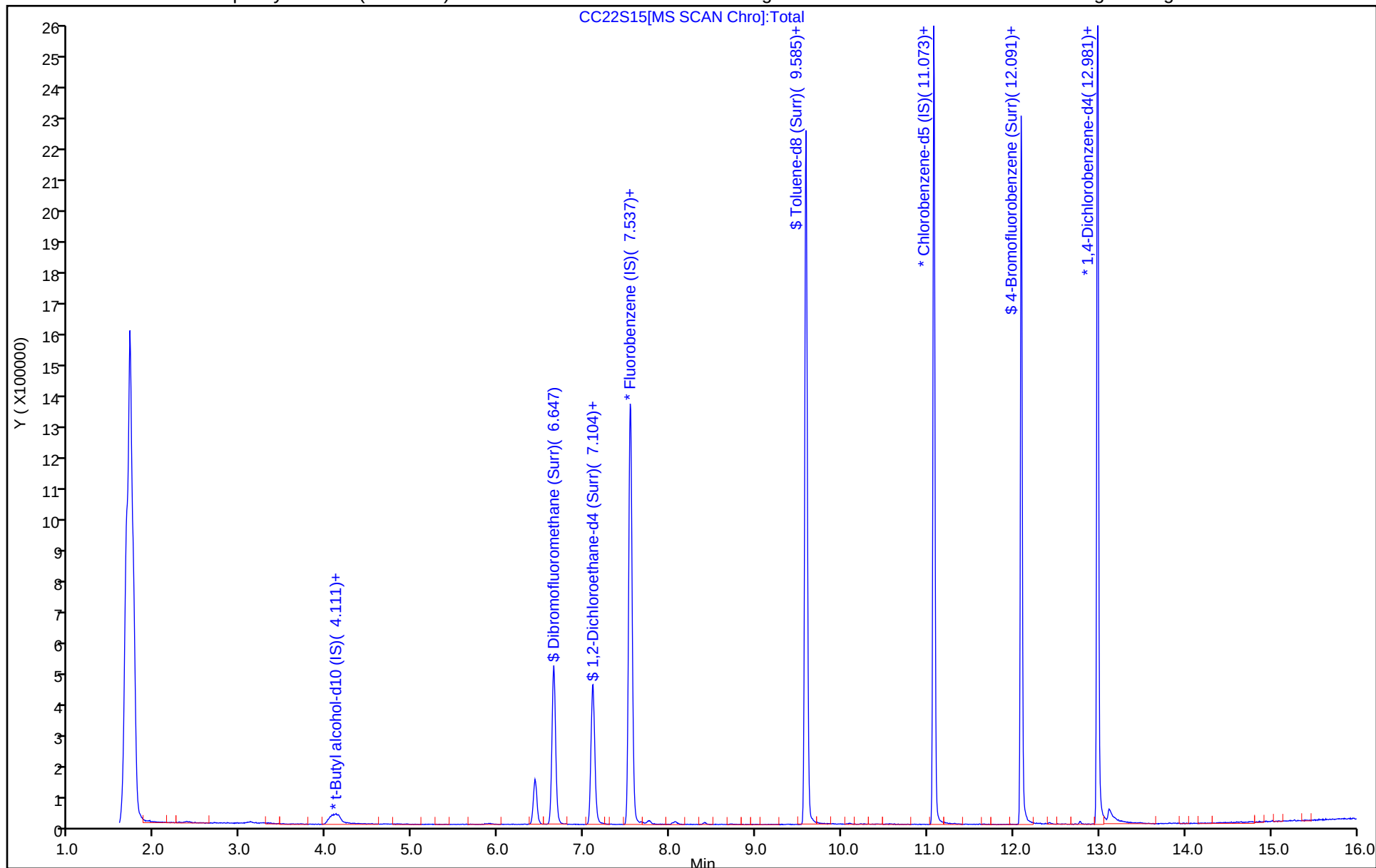
ALS Bottle#: 20

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S15.D
 Lims ID: 410-17705-A-2
 Client ID: 5W5B
 Sample Type: Client
 Inject. Date: 22-Oct-2020 16:10:30 ALS Bottle#: 20 Worklist Smp#: 21
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-021
 Misc. Info.: 410-17705-A-1
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 21:41:19 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: johnsons

Date: 22-Oct-2020 21:23:20

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	10.8	107.81
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	11.1	110.97
\$ 74 Toluene-d8 (Surr)	10.0	9.76	97.58
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.50	95.02

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-17705-1
 SDG No.: _____
 Client Sample ID: 5W7B Lab Sample ID: 410-17705-3
 Matrix: Ground Water Lab File ID: CC22S16.D
 Analysis Method: 8260C LL Date Collected: 10/19/2020 10:05
 Sample wt/vol: 25 (mL) Date Analyzed: 10/22/2020 16:33
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 57283 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	ND	F2 F1	1.0	0.80
75-35-4	1,1-Dichloroethene	ND	F2 F1	1.0	0.44
79-01-6	Trichloroethene	0.50	J F2 F1	1.0	0.18
156-59-2	cis-1,2-Dichloroethene	ND	F2 F1	1.0	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		80-120
1868-53-7	Dibromofluoromethane (Surr)	106		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S16.D
 Lims ID: 410-17705-A-3
 Client ID: 5W7B
 Sample Type: Client
 Inject. Date: 22-Oct-2020 16:33:30 ALS Bottle#: 21 Worklist Smp#: 22
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-022
 Misc. Info.: 410-17705-A-3
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 21:41:19 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: johnsons

Date: 22-Oct-2020 21:26:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.892	1.898	-0.006	1	1515	0.0265	
1 Chlorodifluoromethane	51		1.928				ND	U
140 Dimethyl ether	45		1.993				ND	7
3 Chloromethane	50		2.093				ND	7
4 Butadiene	39		2.203				ND	7
5 Vinyl chloride	62		2.203				ND	
6 Bromomethane	94		2.514				ND	7
7 Chloroethane	64		2.599				ND	7
8 Dichlorofluoromethane	67		2.824				ND	
9 Trichlorofluoromethane	101		2.879				ND	
11 Ethyl ether	59	3.123	3.111	0.012	94	24679	0.6018	M
T 219 Ethanol TIC	45		3.123				ND	7
12 1,2-Dichloro-1,1,2-trifluoroethane	67		3.202				ND	7
13 Acrolein	56		3.282				ND	7
14 1,1-Dichloroethene	96		3.410				ND	
16 Acetone	43		3.446				ND	U
15 112TCTFE	101		3.452				ND	
17 Iodomethane	142		3.599				ND	
18 Isopropyl alcohol	45		3.617				ND	U
19 Ethyl bromide	108		3.623				ND	
20 Carbon disulfide	76		3.690				ND	7
21 Acetonitrile	41		3.836				ND	7
22 Methyl acetate	43		3.843				ND	
23 3-Chloro-1-propene	41		3.867				ND	
24 Methylene Chloride	84	4.044	4.044	0.000	36	3714	0.0816	
* 25 t-Butyl alcohol-d10 (IS)	65	4.086	4.080	0.006	0	177574	50.0	
26 2-Methyl-2-propanol	59		4.196				ND	
27 Acrylonitrile	53		4.385				ND	
28 Methyl tert-butyl ether	73		4.434				ND	7
29 trans-1,2-Dichloroethene	96		4.440				ND	
30 Hexane	57		4.861				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
32 1,1-Dichloroethane	63		5.111				ND	
31 Vinyl acetate	43		5.135				ND	
33 Isopropyl ether	45		5.172				ND	
34 2-Chloro-1,3-butadiene	53		5.214				ND	
35 Tert-butyl ethyl ether	59		5.702				ND	
36 2-Butanone (MEK)	43		5.915				ND	
37 cis-1,2-Dichloroethene	96		5.946				ND	7
38 2,2-Dichloropropane	77		5.958				ND	
40 Propionitrile	54		6.007				ND	
39 Ethyl acetate	43		6.013				ND	
41 Methyl acrylate	55		6.074				ND	
S 42 1,2-Dichloroethene, Total	100		6.155				ND	7
43 Methacrylonitrile	67		6.226				ND	
44 Chlorobromomethane	128		6.275				ND	
45 Tetrahydrofuran	71		6.287				ND	
46 Chloroform	83	6.434	6.433	0.001	94	386234	4.43	
\$ 47 Dibromofluoromethane (Surr)	113	6.647	6.647	0.000	94	445564	10.6	
48 1,1,1-Trichloroethane	97		6.659				ND	
49 Cyclohexane	56		6.744				ND	
145 1-Chlorobutane	56		6.842				ND	
50 Carbon tetrachloride	117		6.860				ND	
51 1,1-Dichloropropene	75		6.866				ND	
52 Isobutyl alcohol	41		7.043				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.104	7.110	-0.006	0	93194	10.9	
54 Benzene	78		7.135				ND	7
55 1,2-Dichloroethane	62		7.208				ND	
152 Isopropyl acetate	43		7.257				ND	
56 Tert-amyl methyl ether	73		7.330				ND	
* 57 Fluorobenzene (IS)	96	7.543	7.543	0.000	98	1769276	10.0	
58 n-Heptane	43		7.549				ND	7
59 n-Butanol	56		7.939				ND	
60 Trichloroethene	95	8.025	8.025	0.000	97	26097	0.4982	
61 Methylcyclohexane	83		8.323				ND	
62 1,2-Dichloropropane	63		8.360				ND	
63 2-ethoxy-2-methyl butane	87		8.372				ND	
64 Methyl methacrylate	69		8.451				ND	
65 1,4-Dioxane	88		8.457				ND	
66 Dibromomethane	93		8.470				ND	
160 n-Propyl acetate	61		8.561				ND	
67 Dichlorobromomethane	83	8.714	8.714	0.000	93	4235	0.0672	
68 2-Nitropropane	41		8.994				ND	7
71 1-Bromo-2-chloroethane	63		9.104				ND	
69 2-Chloroethyl vinyl ether	63		9.116				ND	
70 Chloroacetonitrile	75		9.116				ND	
72 cis-1,3-Dichloropropene	75		9.274				ND	
73 4-Methyl-2-pentanone (MIBK)	43		9.457				ND	
\$ 74 Toluene-d8 (Surr)	98	9.585	9.585	0.000	95	1738730	9.74	
75 Toluene	92		9.665				ND	7
76 trans-1,3-Dichloropropene	75		9.933				ND	
78 Ethyl methacrylate	69		10.000				ND	
T 207 2,3-Dibromo-1-propanol TIC	57		10.000				ND	
T 217 2,3-Dibromopropene TIC	119	10.744	10.000	0.744	1	181	0.001023	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
T 215 2-Bromo-3-chloropropene TIC	75	9.585	10.000	-0.415	2	449	0.002538	7
T 214 Epichlorohydrin TIC	57		10.000				ND	
T 213 Vinyl bromide TIC	106	9.402	10.000	-0.598	1	158	0.000893	
T 216 Ethylene oxide TIC	44	9.841	10.000	-0.159	53	443	0.002504	7
T 211 Epibromohydrin TIC	57	9.622	10.000	-0.378	1	118	0.000667	
T 210 2-Chloroethanol TIC	44		10.000				ND	
T 212 Chloroacetaldehyde TIC	50		10.000				ND	
T 209 Monochloroacetic acid TIC	50	9.841	10.000	-0.159	1	134	0.000757	
T 208 2-Bromoethanol TIC	45	9.646	10.000	-0.354	1	139	0.000786	
T 218 3-Chloro-1,2-propanediol TIC	44		10.000				ND	
S 77 1,3-Dichloropropene, Total	100		10.060				ND	7
79 1,1,2-Trichloroethane	97		10.146				ND	
80 Tetrachloroethene	166		10.225				ND	
81 1,3-Dichloropropane	76		10.311				ND	
82 2-Hexanone	43		10.372				ND	7
161 n-Butyl acetate	43		10.512				ND	
83 Chlorodibromomethane	129		10.524				ND	
84 Ethylene Dibromide	107		10.634				ND	
* 85 Chlorobenzene-d5 (IS)	117	11.073	11.079	-0.006	87	1366859	10.0	
86 1-Chlorohexane	91		11.085				ND	7
87 Chlorobenzene	112		11.103				ND	
89 1,1,1,2-Tetrachloroethane	131		11.189				ND	
90 Ethylbenzene	91		11.189				ND	7
S 88 Xylenes, Total	106		11.245				ND	7
91 m-Xylene & p-Xylene	106		11.311				ND	7
92 o-Xylene	106		11.640				ND	7
93 Styrene	104		11.658				ND	
94 Bromoform	173		11.817				ND	
95 Isopropylbenzene	105		11.945				ND	
96 cis-1,4-Dichloro-2-butene	88		12.018				ND	U
97 Cyclohexanone	55		12.048				ND	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.091	12.091	0.000	95	642048	9.57	
99 1,1,2,2-Tetrachloroethane	83		12.201				ND	
100 Bromobenzene	156		12.207				ND	
101 trans-1,4-Dichloro-2-butene	53		12.225				ND	
102 1,2,3-Trichloropropane	110		12.243				ND	
103 N-Propylbenzene	91		12.280				ND	
104 2-Chlorotoluene	126		12.359				ND	
105 1,3,5-Trimethylbenzene	105		12.420				ND	
106 4-Chlorotoluene	126		12.451				ND	
107 tert-Butylbenzene	134		12.664				ND	
108 Pentachloroethane	167		12.694				ND	
109 1,2,4-Trimethylbenzene	105		12.707				ND	7
110 sec-Butylbenzene	105		12.829				ND	
111 1,3-Dichlorobenzene	146		12.926				ND	7
112 4-Isopropyltoluene	119		12.938				ND	
* 113 1,4-Dichlorobenzene-d4	152	12.981	12.981	0.000	95	773750	10.0	
114 1,4-Dichlorobenzene	146		12.999				ND	7
115 1,2,3-Trimethylbenzene	120		13.011				ND	7
116 Benzyl chloride	126		13.079				ND	7
119 n-Butylbenzene	92		13.231				ND	
120 1,2-Dichlorobenzene	146		13.261				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
118 p-Diethylbenzene	119		13.286				ND	
122 Hexachloroethane	117		13.475				ND	
123 1,2-Dibromo-3-Chloropropane	155		13.816				ND	
124 1,3,5-Trichlorobenzene	180		13.938				ND	
125 1,2,4-Trichlorobenzene	180		14.365				ND	
126 Hexachlorobutadiene	225		14.450				ND	
127 Naphthalene	128		14.548				ND	7
128 1,2,3-Trichlorobenzene	180		14.694				ND	
129 2-Methylnaphthalene	142		15.316				ND	
130 Dodecane	57		0.000				ND	
159 tert-Butyl Formate	1		0.000				ND	
131 2-Bromo-1-chloropropane	1		0.000				ND	
133 1-Chloropropane	1		0.000				ND	
136 Methylal	1		0.000				ND	
138 n-Decane	57		0.000				ND	
142 1-Bromo-3-Chloropropane	1		0.000				ND	
155 2-Chloro-1,1,1-Trifluoroethane	1		0.000				ND	
149 Chlorotrifluoroethene	1		0.000				ND	
151 Propene oxide	1		0.000				ND	
157 t-Amyl alcohol	1		0.000				ND	
158 1,1-Dichloro-1-fluoroethane	1		0.000				ND	
162 Ethanol	45		0.000				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV_HP25_ISSS_00016

Amount Added: 1.00

Units: uL

Run Reagent

Report Date: 22-Oct-2020 21:42:21

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Euofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S16.D

Injection Date: 22-Oct-2020 16:33:30

Instrument ID: 10193

Operator ID: jkh09052

Lims ID: 410-17705-A-3

Lab Sample ID: 410-17705-3

Worklist Smp#: 22

Client ID: 5W7B

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

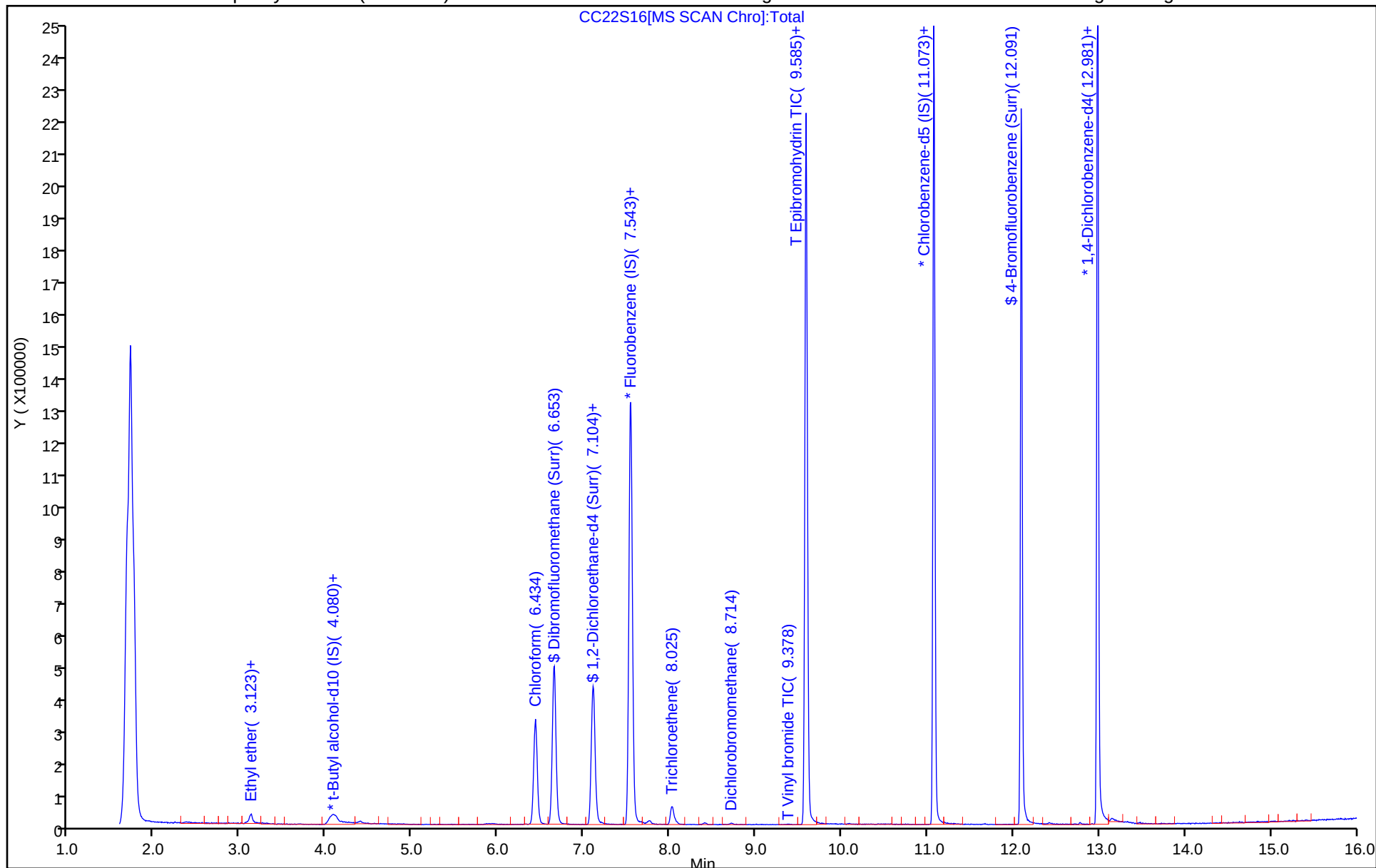
ALS Bottle#: 21

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S16.D
 Lims ID: 410-17705-A-3
 Client ID: 5W7B
 Sample Type: Client
 Inject. Date: 22-Oct-2020 16:33:30 ALS Bottle#: 21 Worklist Smp#: 22
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-022
 Misc. Info.: 410-17705-A-3
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 21:41:19 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: johnsons

Date: 22-Oct-2020 21:26:21

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	10.6	105.98
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.9	108.81
\$ 74 Toluene-d8 (Surr)	10.0	9.74	97.40
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.57	95.69

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S16.D

Injection Date: 22-Oct-2020 16:33:30

Instrument ID: 10193

Lims ID: 410-17705-A-3

Lab Sample ID: 410-17705-3

Client ID: 5W7B

Operator ID: jkh09052

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 25.000 mL

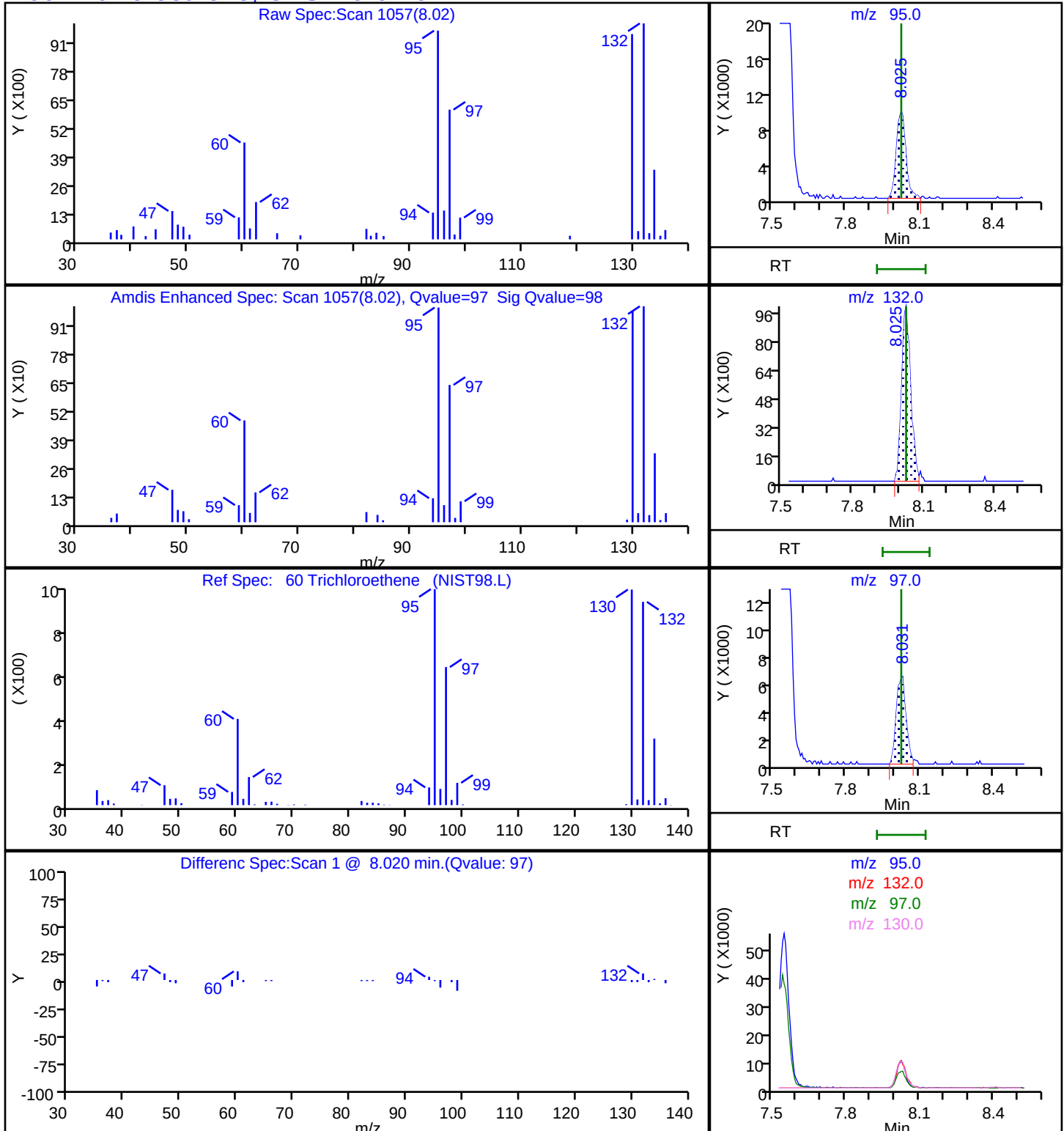
Dil. Factor: 1.0000

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

60 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-17705-1
 SDG No.: _____
 Client Sample ID: 5WC21 Lab Sample ID: 410-17705-4
 Matrix: Ground Water Lab File ID: CC22S19.D
 Analysis Method: 8260C LL Date Collected: 10/19/2020 12:50
 Sample wt/vol: 25 (mL) Date Analyzed: 10/22/2020 17:39
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 57283 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.80
75-35-4	1,1-Dichloroethene	ND		1.0	0.44
79-01-6	Trichloroethene	1.7		1.0	0.18
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S19.D
 Lims ID: 410-17705-A-4
 Client ID: 5WC21
 Sample Type: Client
 Inject. Date: 22-Oct-2020 17:39:30 ALS Bottle#: 24 Worklist Smp#: 25
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-025
 Misc. Info.: 410-17705-A-4
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 21:41:19 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: johnsons

Date: 22-Oct-2020 21:37:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Vinyl chloride	62		2.203				ND	
14 1,1-Dichloroethene	96		3.410				ND	
* 25 t-Butyl alcohol-d10 (IS)	65	4.068	4.080	-0.012	0	184608	50.0	
29 trans-1,2-Dichloroethene	96		4.440				ND	
37 cis-1,2-Dichloroethene	96		5.946				ND	
\$ 47 Dibromofluoromethane (Surr)	113	6.647	6.647	0.000	94	457331	10.5	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.098	7.110	-0.012	0	97228	10.9	
* 57 Fluorobenzene (IS)	96	7.537	7.543	-0.006	98	1835847	10.0	
60 Trichloroethene	95	8.025	8.025	0.000	95	93177	1.71	M
\$ 74 Toluene-d8 (Surr)	98	9.585	9.585	0.000	95	1811713	9.85	
* 85 Chlorobenzene-d5 (IS)	117	11.073	11.079	-0.006	87	1408823	10.0	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.091	12.091	0.000	96	651489	9.42	
* 113 1,4-Dichlorobenzene-d4	152	12.981	12.981	0.000	94	804826	10.0	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_HP25_ISSS_00016

Amount Added: 1.00

Units: uL

Run Reagent

Report Date: 22-Oct-2020 21:42:32

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Euofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S19.D

Injection Date: 22-Oct-2020 17:39:30

Instrument ID: 10193

Operator ID: jkh09052

Lims ID: 410-17705-A-4

Lab Sample ID: 410-17705-4

Worklist Smp#: 25

Client ID: 5WC21

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

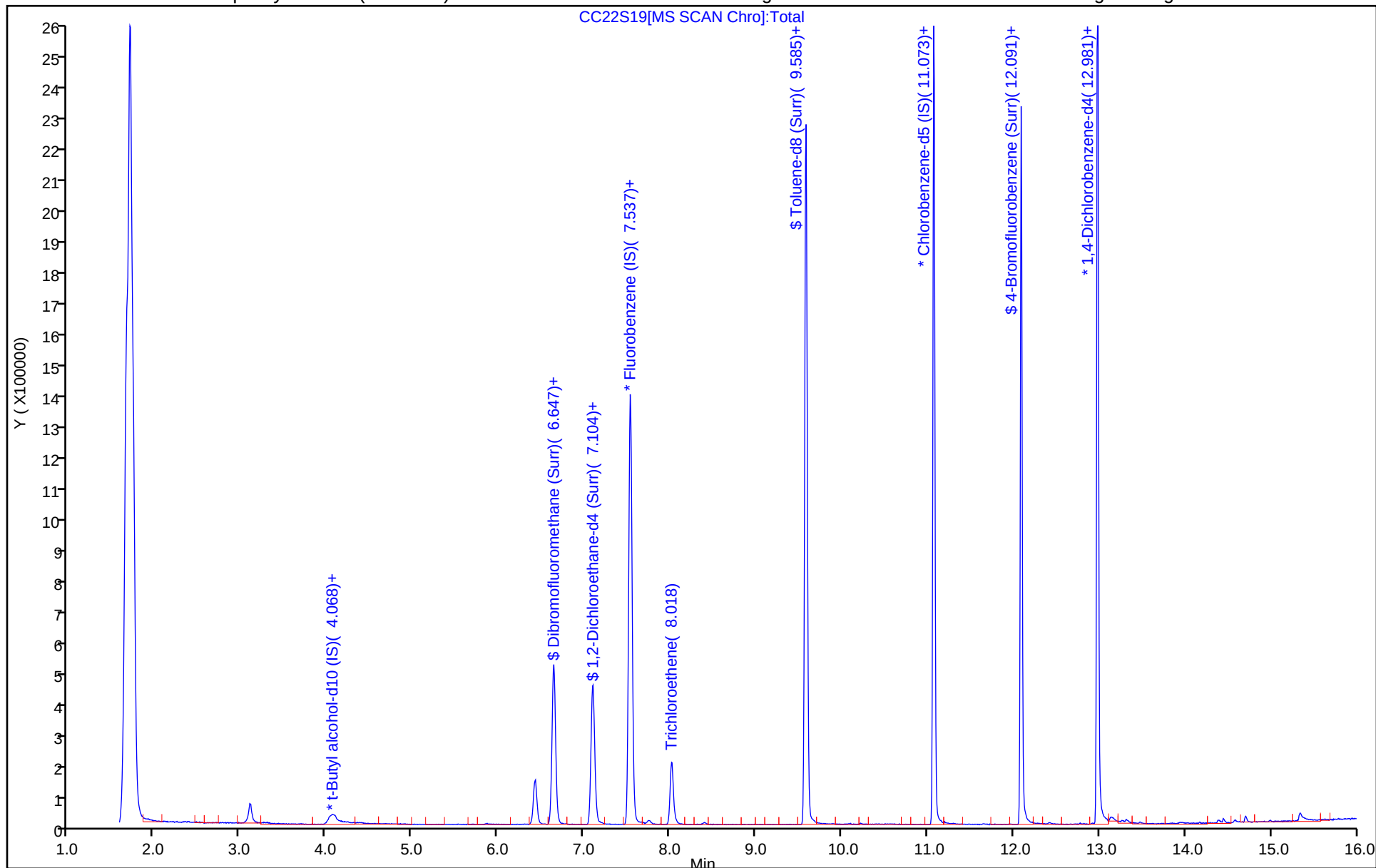
ALS Bottle#: 24

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S19.D
 Lims ID: 410-17705-A-4
 Client ID: 5WC21
 Sample Type: Client
 Inject. Date: 22-Oct-2020 17:39:30 ALS Bottle#: 24 Worklist Smp#: 25
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-025
 Misc. Info.: 410-17705-A-4
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 21:41:19 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: johnsons

Date: 22-Oct-2020 21:37:41

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	10.5	104.84
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.9	109.40
\$ 74 Toluene-d8 (Surr)	10.0	9.85	98.46
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.42	94.20

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S19.D

Injection Date: 22-Oct-2020 17:39:30

Instrument ID: 10193

Lims ID: 410-17705-A-4

Lab Sample ID: 410-17705-4

Client ID: 5WC21

Operator ID: jkh09052

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 25.000 mL

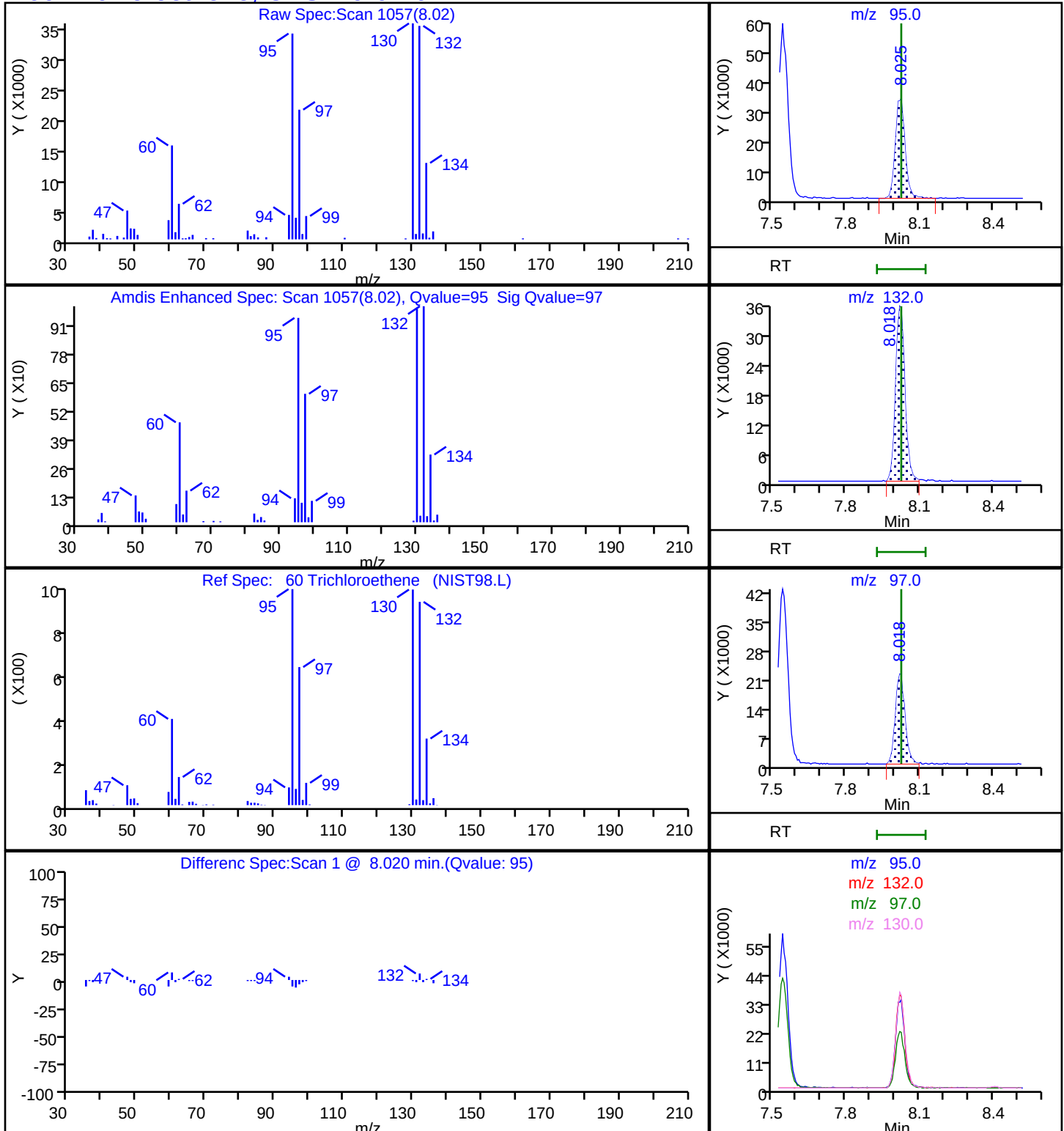
Dil. Factor: 1.0000

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

60 Trichloroethene, CAS: 79-01-6

Eurofins Lancaster Laboratories Env, LLC

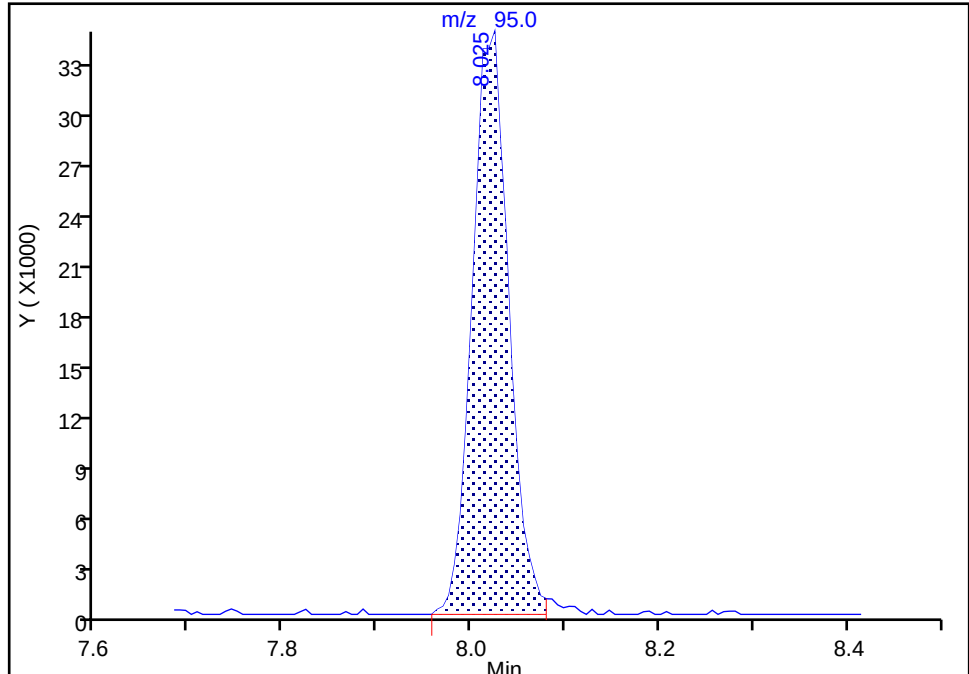
Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S19.D
Injection Date: 22-Oct-2020 17:39:30 Instrument ID: 10193
Lims ID: 410-17705-A-4 Lab Sample ID: 410-17705-4
Client ID: 5WC21
Operator ID: jkh09052 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

60 Trichloroethene, CAS: 79-01-6

Signal: 1

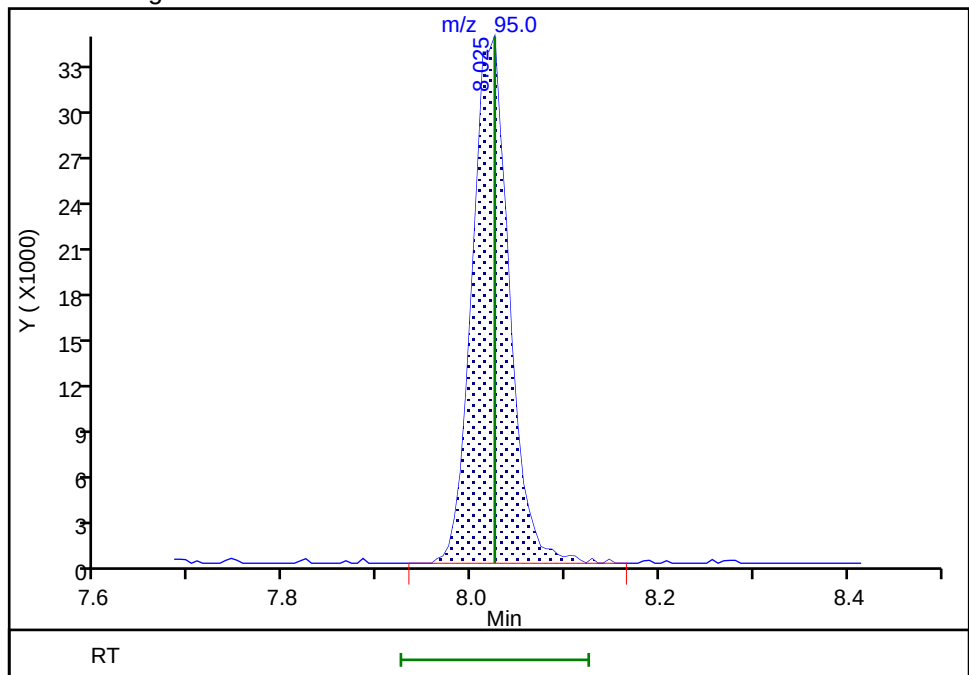
RT: 8.02
Area: 91893
Amount: 1.690744
Amount Units: ug/l

Processing Integration Results



RT: 8.02
Area: 93177
Amount: 1.714369
Amount Units: ug/l

Manual Integration Results



Reviewer: johnsons, 22-Oct-2020 21:37:37
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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10/27/2020

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-17705-1

SDG No.: _____

Client Sample ID: 5WDUP Lab Sample ID: 410-17705-5

Matrix: Ground Water Lab File ID: CC22S20.D

Analysis Method: 8260C LL Date Collected: 10/19/2020 12:55

Sample wt/vol: 25 (mL) Date Analyzed: 10/22/2020 18:00

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 57283 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.80
75-35-4	1,1-Dichloroethene	ND		1.0	0.44
79-01-6	Trichloroethene	1.8		1.0	0.18
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S20.D
 Lims ID: 410-17705-A-5
 Client ID: 5WDUP
 Sample Type: Client
 Inject. Date: 22-Oct-2020 18:00:30 ALS Bottle#: 25 Worklist Smp#: 26
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-026
 Misc. Info.: 410-17705-A-5
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 21:41:19 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: johnsons

Date: 22-Oct-2020 21:37:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Vinyl chloride	62		2.203				ND	
14 1,1-Dichloroethene	96		3.410				ND	
* 25 t-Butyl alcohol-d10 (IS)	65	4.080	4.080	0.000	0	186802	50.0	
29 trans-1,2-Dichloroethene	96		4.440				ND	
37 cis-1,2-Dichloroethene	96		5.946				ND	
\$ 47 Dibromofluoromethane (Surr)	113	6.641	6.647	-0.006	94	452545	10.5	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.104	7.110	-0.006	0	98498	11.2	
* 57 Fluorobenzene (IS)	96	7.537	7.543	-0.006	98	1816792	10.0	
60 Trichloroethene	95	8.019	8.025	-0.006	98	99485	1.85	
\$ 74 Toluene-d8 (Surr)	98	9.585	9.585	0.000	95	1788475	9.72	
* 85 Chlorobenzene-d5 (IS)	117	11.073	11.079	-0.006	87	1408953	10.0	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.091	12.091	0.000	96	652464	9.43	
* 113 1,4-Dichlorobenzene-d4	152	12.981	12.981	0.000	95	788673	10.0	

QC Flag Legend

Processing Flags

Reagents:

MSV_HP25_ISSS_00016

Amount Added: 1.00

Units: uL

Run Reagent

Report Date: 22-Oct-2020 21:42:33

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S20.D

Injection Date: 22-Oct-2020 18:00:30

Instrument ID: 10193

Operator ID: jkh09052

Lims ID: 410-17705-A-5

Lab Sample ID: 410-17705-5

Worklist Smp#: 26

Client ID: 5WDUP

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

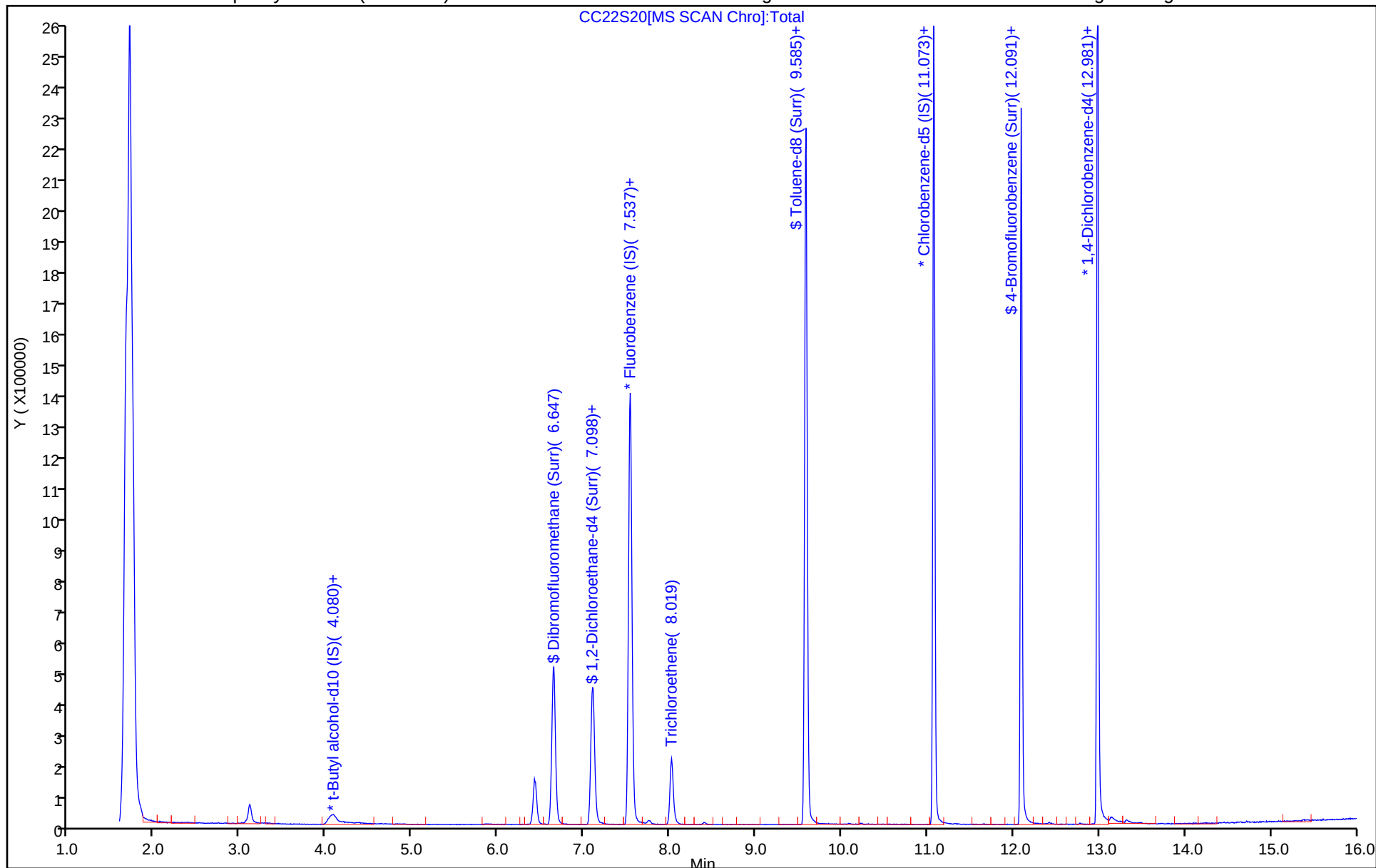
ALS Bottle#: 25

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S20.D
 Lims ID: 410-17705-A-5
 Client ID: 5WDUP
 Sample Type: Client
 Inject. Date: 22-Oct-2020 18:00:30 ALS Bottle#: 25 Worklist Smp#: 26
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-026
 Misc. Info.: 410-17705-A-5
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 21:41:19 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: johnsons

Date: 22-Oct-2020 21:37:53

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	10.5	104.83
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	11.2	112.00
\$ 74 Toluene-d8 (Surr)	10.0	9.72	97.19
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.43	94.33

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S20.D

Injection Date: 22-Oct-2020 18:00:30

Instrument ID: 10193

Lims ID: 410-17705-A-5

Lab Sample ID: 410-17705-5

Client ID: 5WDUP

Operator ID: jkh09052

ALS Bottle#: 25

Worklist Smp#: 26

Purge Vol: 25.000 mL

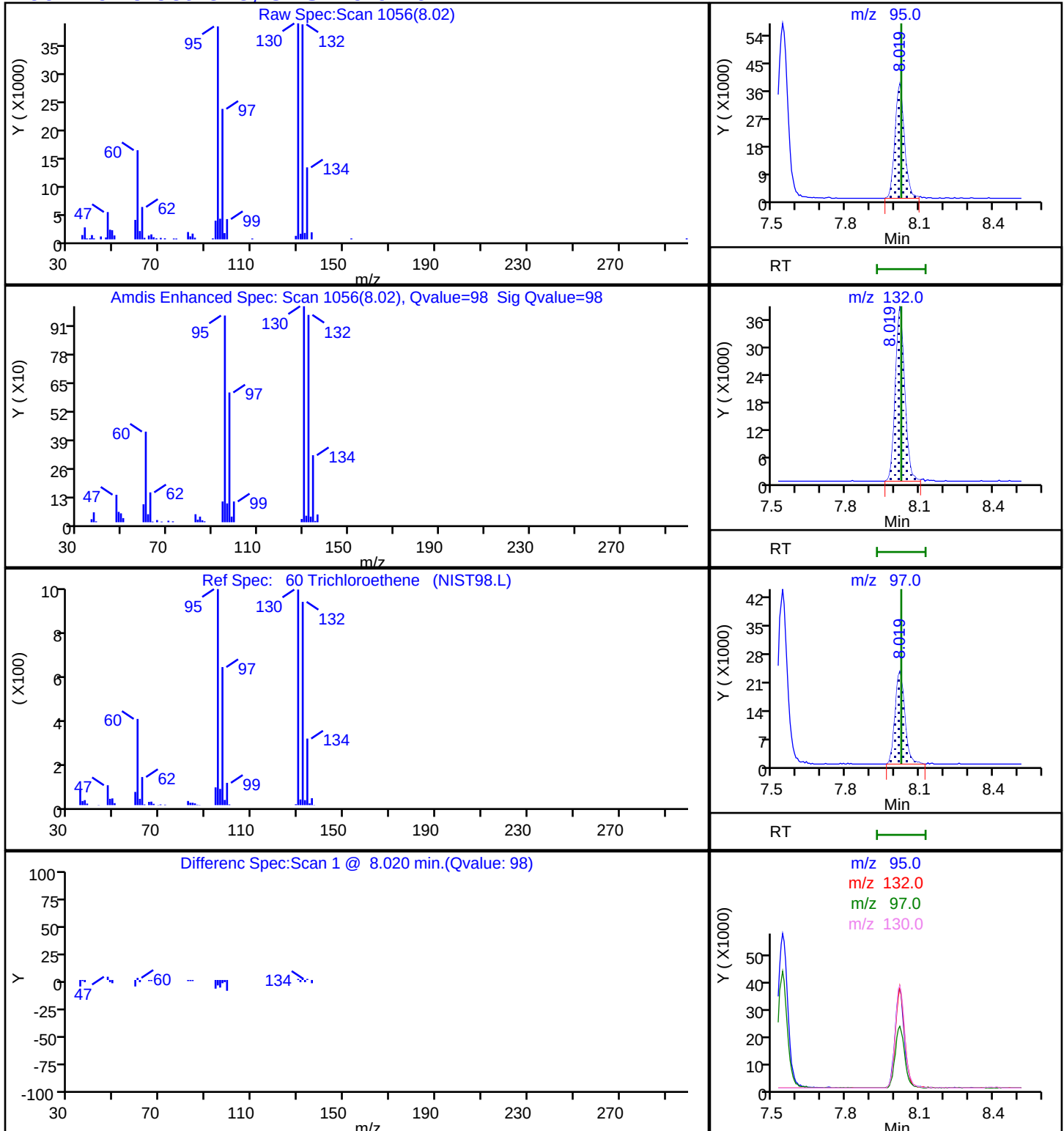
Dil. Factor: 1.0000

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

60 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-17705-1
 SDG No.: _____
 Client Sample ID: 5WC22 Lab Sample ID: 410-17705-6
 Matrix: Ground Water Lab File ID: CC22S21.D
 Analysis Method: 8260C LL Date Collected: 10/19/2020 11:45
 Sample wt/vol: 25 (mL) Date Analyzed: 10/22/2020 18:23
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 57283 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.80
75-35-4	1,1-Dichloroethene	ND		1.0	0.44
79-01-6	Trichloroethene	1.9		1.0	0.18
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		80-120
1868-53-7	Dibromofluoromethane (Surr)	106		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S21.D
 Lims ID: 410-17705-A-6
 Client ID: 5WC22
 Sample Type: Client
 Inject. Date: 22-Oct-2020 18:23:30 ALS Bottle#: 26 Worklist Smp#: 27
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-027
 Misc. Info.: 410-17705-A-6
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 21:41:19 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: johnsons

Date: 22-Oct-2020 21:38:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Vinyl chloride	62		2.203				ND	
14 1,1-Dichloroethene	96		3.410				ND	
* 25 t-Butyl alcohol-d10 (IS)	65	4.074	4.080	-0.006	0	169562	50.0	
29 trans-1,2-Dichloroethene	96		4.440				ND	
37 cis-1,2-Dichloroethene	96		5.946				ND	
\$ 47 Dibromofluoromethane (Surr)	113	6.647	6.647	0.000	94	446931	10.6	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.104	7.110	-0.006	0	95002	11.0	
* 57 Fluorobenzene (IS)	96	7.543	7.543	0.000	98	1778024	10.0	
60 Trichloroethene	95	8.019	8.025	-0.006	96	98123	1.86	
\$ 74 Toluene-d8 (Surr)	98	9.585	9.585	0.000	94	1768584	9.76	
* 85 Chlorobenzene-d5 (IS)	117	11.073	11.079	-0.006	87	1386774	10.0	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.091	12.091	0.000	95	642831	9.44	
* 113 1,4-Dichlorobenzene-d4	152	12.981	12.981	0.000	95	778564	10.0	

QC Flag Legend

Processing Flags

Reagents:

MSV_HP25_ISSS_00016

Amount Added: 1.00

Units: uL

Run Reagent

Report Date: 22-Oct-2020 21:42:34

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S21.D

Injection Date: 22-Oct-2020 18:23:30

Instrument ID: 10193

Operator ID: jkh09052

Lims ID: 410-17705-A-6

Lab Sample ID: 410-17705-6

Worklist Smp#: 27

Client ID: 5WC22

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

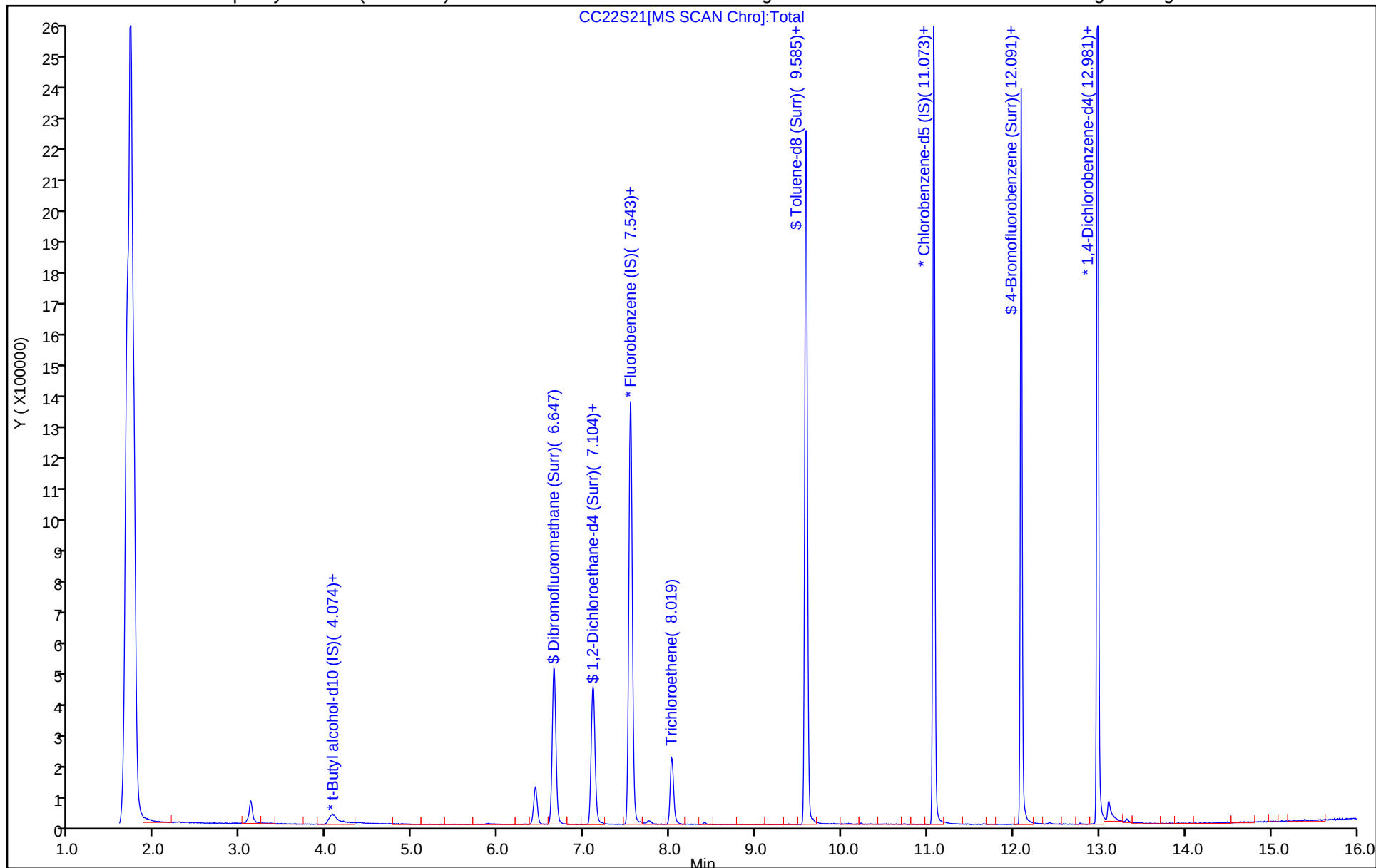
ALS Bottle#: 26

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S21.D
 Lims ID: 410-17705-A-6
 Client ID: 5WC22
 Sample Type: Client
 Inject. Date: 22-Oct-2020 18:23:30 ALS Bottle#: 26 Worklist Smp#: 27
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-027
 Misc. Info.: 410-17705-A-6
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 21:41:19 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: johnsons

Date: 22-Oct-2020 21:38:07

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	10.6	105.78
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	11.0	110.38
\$ 74 Toluene-d8 (Surr)	10.0	9.76	97.65
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.44	94.43

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S21.D

Injection Date: 22-Oct-2020 18:23:30

Instrument ID: 10193

Lims ID: 410-17705-A-6

Lab Sample ID: 410-17705-6

Client ID: 5WC22

Operator ID: jkh09052

ALS Bottle#: 26

Worklist Smp#: 27

Purge Vol: 25.000 mL

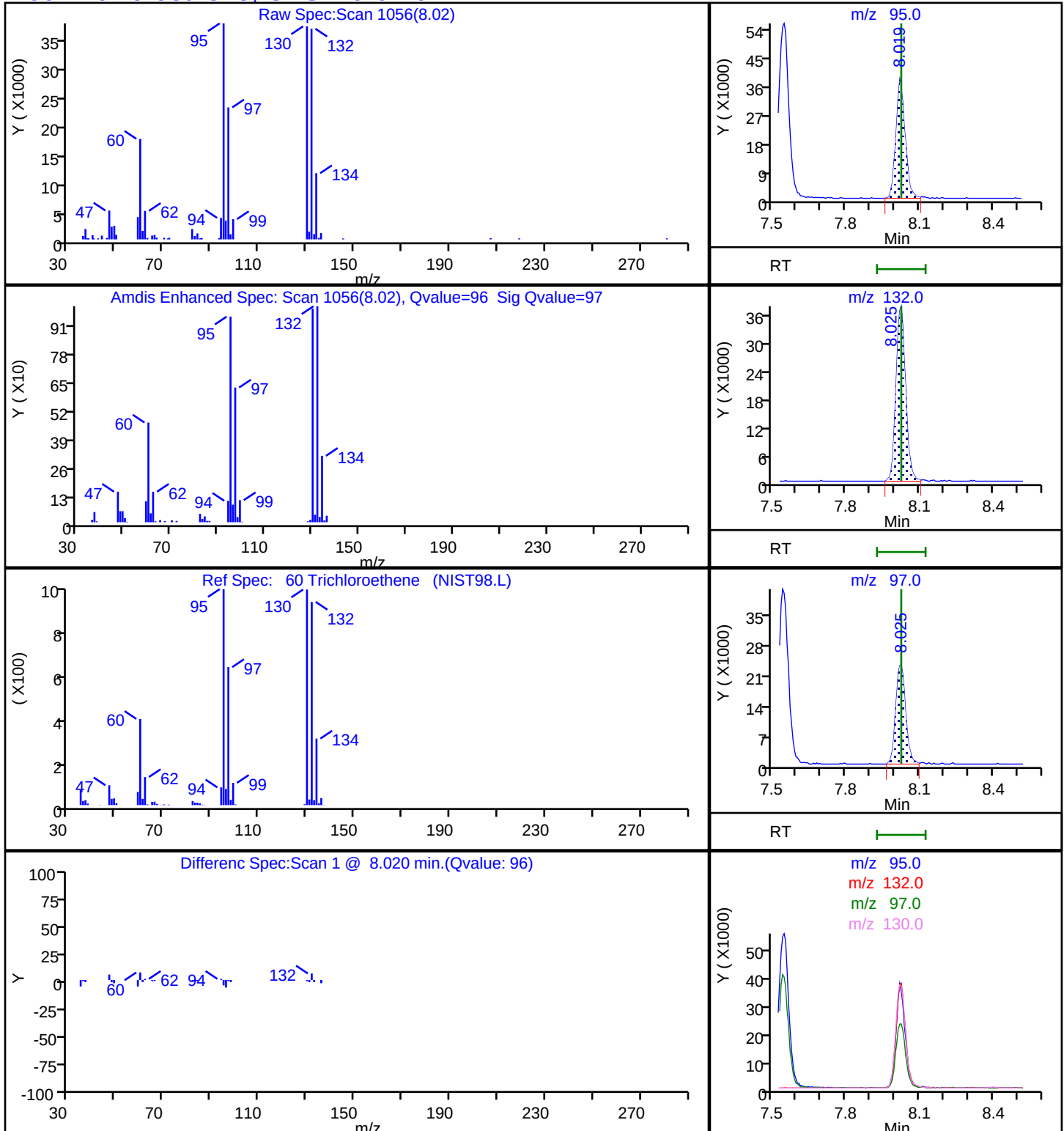
Dil. Factor: 1.0000

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

60 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-17705-1

SDG No.: _____

Client Sample ID: 5WC23 Lab Sample ID: 410-17705-7

Matrix: Ground Water Lab File ID: CC22S22.D

Analysis Method: 8260C LL Date Collected: 10/19/2020 12:15

Sample wt/vol: 25 (mL) Date Analyzed: 10/22/2020 18:45

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 57283 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.80
75-35-4	1,1-Dichloroethene	ND		1.0	0.44
79-01-6	Trichloroethene	3.7		1.0	0.18
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		80-120
1868-53-7	Dibromofluoromethane (Surr)	106		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S22.D
 Lims ID: 410-17705-A-7
 Client ID: 5WC23
 Sample Type: Client
 Inject. Date: 22-Oct-2020 18:45:30 ALS Bottle#: 27 Worklist Smp#: 28
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-028
 Misc. Info.: 410-17705-A-7
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 21:41:19 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: johnsons

Date: 22-Oct-2020 21:38:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Vinyl chloride	62		2.203				ND	
14 1,1-Dichloroethene	96		3.410				ND	
* 25 t-Butyl alcohol-d10 (IS)	65	4.099	4.080	0.019	0	185980	50.0	
29 trans-1,2-Dichloroethene	96		4.440				ND	
37 cis-1,2-Dichloroethene	96		5.946				ND	
\$ 47 Dibromofluoromethane (Surr)	113	6.647	6.647	0.000	94	451231	10.6	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.104	7.110	-0.006	0	96313	11.1	
* 57 Fluorobenzene (IS)	96	7.543	7.543	0.000	98	1790567	10.0	
60 Trichloroethene	95	8.019	8.025	-0.006	97	194500	3.67	
\$ 74 Toluene-d8 (Surr)	98	9.585	9.585	0.000	95	1774785	9.78	
* 85 Chlorobenzene-d5 (IS)	117	11.073	11.079	-0.006	87	1388987	10.0	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.091	12.091	0.000	96	649027	9.52	
* 113 1,4-Dichlorobenzene-d4	152	12.981	12.981	0.000	95	788119	10.0	

QC Flag Legend

Processing Flags

Reagents:

MSV_HP25_ISSS_00016

Amount Added: 1.00

Units: uL

Run Reagent

Report Date: 22-Oct-2020 21:42:35

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Euofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S22.D

Injection Date: 22-Oct-2020 18:45:30

Instrument ID: 10193

Operator ID: jkh09052

Lims ID: 410-17705-A-7

Lab Sample ID: 410-17705-7

Worklist Smp#: 28

Client ID: 5WC23

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

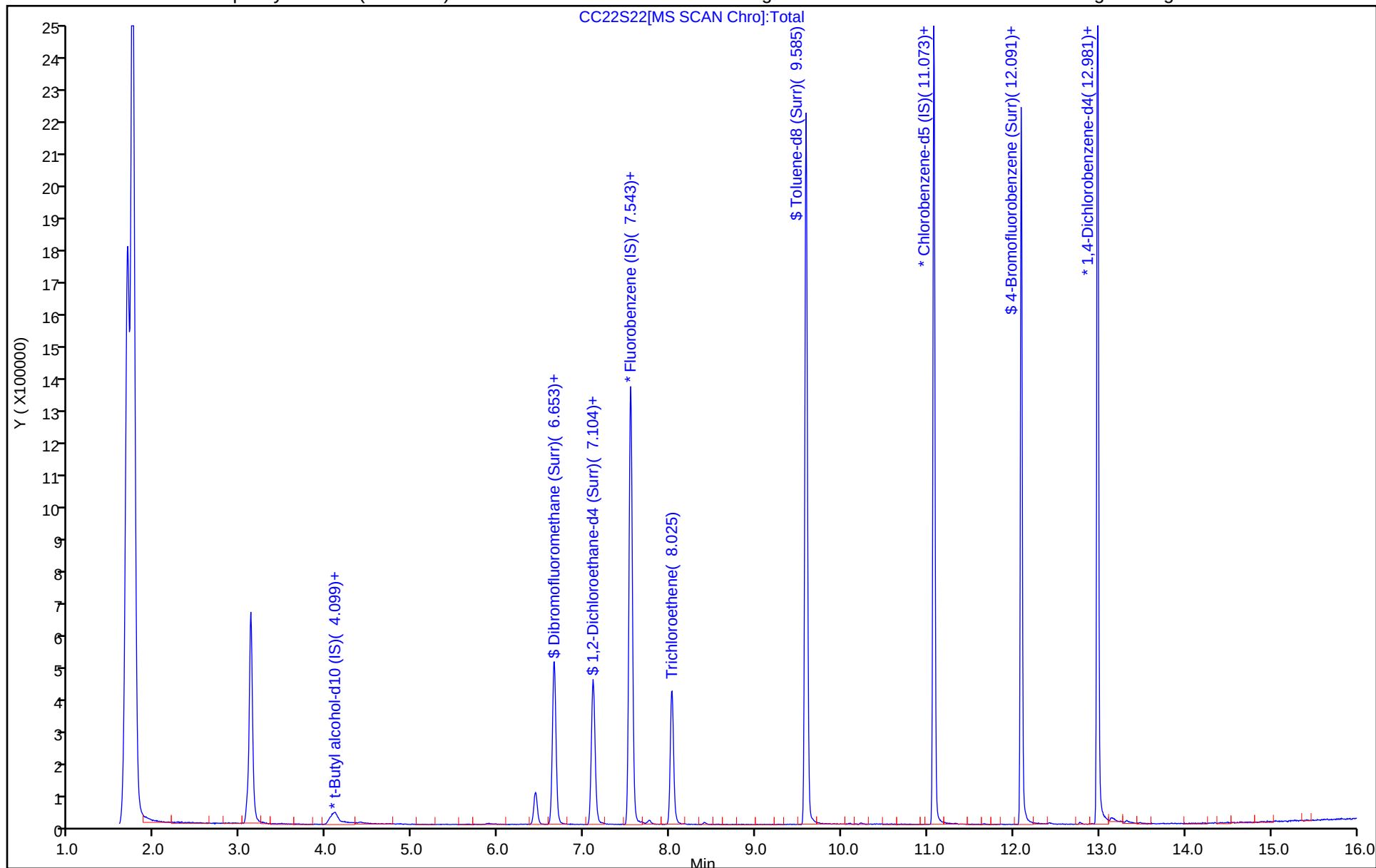
ALS Bottle#: 27

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S22.D
Lims ID: 410-17705-A-7
Client ID: 5WC23
Sample Type: Client
Inject. Date: 22-Oct-2020 18:45:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0013561-028
Misc. Info.: 410-17705-A-7
Operator ID: jkh09052 Instrument ID: 10193
Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 22-Oct-2020 21:41:19 Calib Date: 01-Sep-2020 19:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1002

First Level Reviewer: johnsons

Date: 22-Oct-2020 21:38:18

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	10.6	106.05
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	11.1	111.12
\$ 74 Toluene-d8 (Surr)	10.0	9.78	97.83
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.52	95.19

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S22.D

Injection Date: 22-Oct-2020 18:45:30

Instrument ID: 10193

Lims ID: 410-17705-A-7

Lab Sample ID: 410-17705-7

Client ID: 5WC23

Operator ID: jkh09052

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 25.000 mL

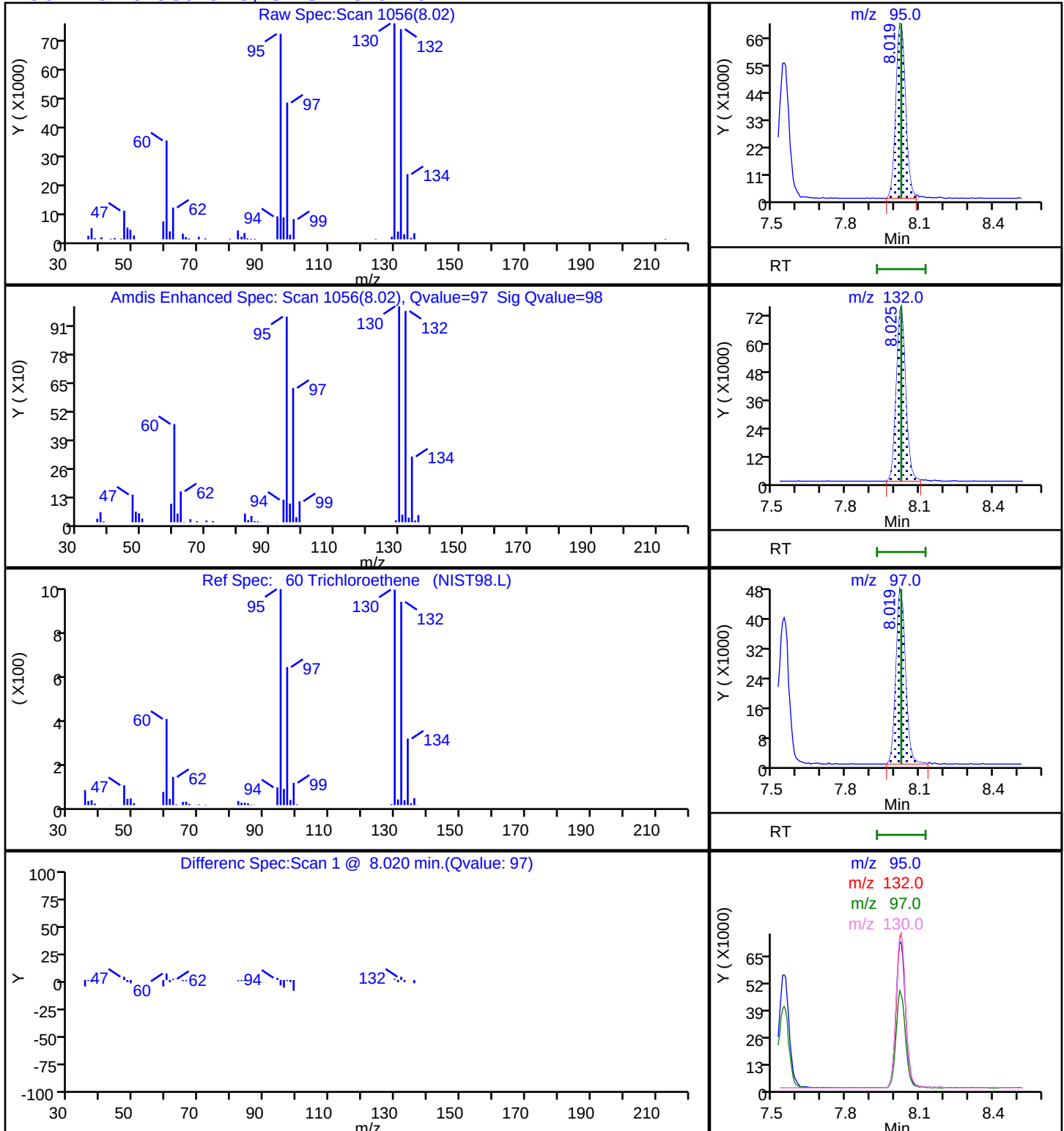
Dil. Factor: 1.0000

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

60 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-17705-1
 SDG No.: _____
 Client Sample ID: 5W12A Lab Sample ID: 410-17705-8
 Matrix: Ground Water Lab File ID: CC22S23.D
 Analysis Method: 8260C LL Date Collected: 10/19/2020 09:30
 Sample wt/vol: 25 (mL) Date Analyzed: 10/22/2020 19:08
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 57283 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.80
75-35-4	1,1-Dichloroethene	ND		1.0	0.44
79-01-6	Trichloroethene	ND		1.0	0.18
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S23.D
 Lims ID: 410-17705-A-8
 Client ID: 5W12A
 Sample Type: Client
 Inject. Date: 22-Oct-2020 19:08:30 ALS Bottle#: 28 Worklist Smp#: 29
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-029
 Misc. Info.: 410-17705-A-8
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 21:41:19 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: johnsons

Date: 22-Oct-2020 21:38:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Vinyl chloride	62		2.203				ND	
14 1,1-Dichloroethene	96		3.410				ND	
* 25 t-Butyl alcohol-d10 (IS)	65	4.086	4.080	0.006	0	182761	50.0	
29 trans-1,2-Dichloroethene	96		4.440				ND	
37 cis-1,2-Dichloroethene	96		5.946				ND	
\$ 47 Dibromofluoromethane (Surr)	113	6.647	6.647	0.000	94	442593	10.5	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.104	7.110	-0.006	0	94263	11.0	
* 57 Fluorobenzene (IS)	96	7.543	7.543	0.000	98	1766318	10.0	
60 Trichloroethene	95	8.019	8.025	-0.006	79	7236	0.1384	M
\$ 74 Toluene-d8 (Surr)	98	9.585	9.585	0.000	94	1746728	9.73	
* 85 Chlorobenzene-d5 (IS)	117	11.073	11.079	-0.006	87	1374689	10.0	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.091	12.091	0.000	95	642125	9.52	
* 113 1,4-Dichlorobenzene-d4	152	12.981	12.981	0.000	95	773151	10.0	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_HP25_ISSS_00016

Amount Added: 1.00

Units: uL

Run Reagent

Report Date: 22-Oct-2020 21:42:36

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S23.D

Injection Date: 22-Oct-2020 19:08:30

Instrument ID: 10193

Operator ID: jkh09052

Lims ID: 410-17705-A-8

Lab Sample ID: 410-17705-8

Worklist Smp#: 29

Client ID: 5W12A

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

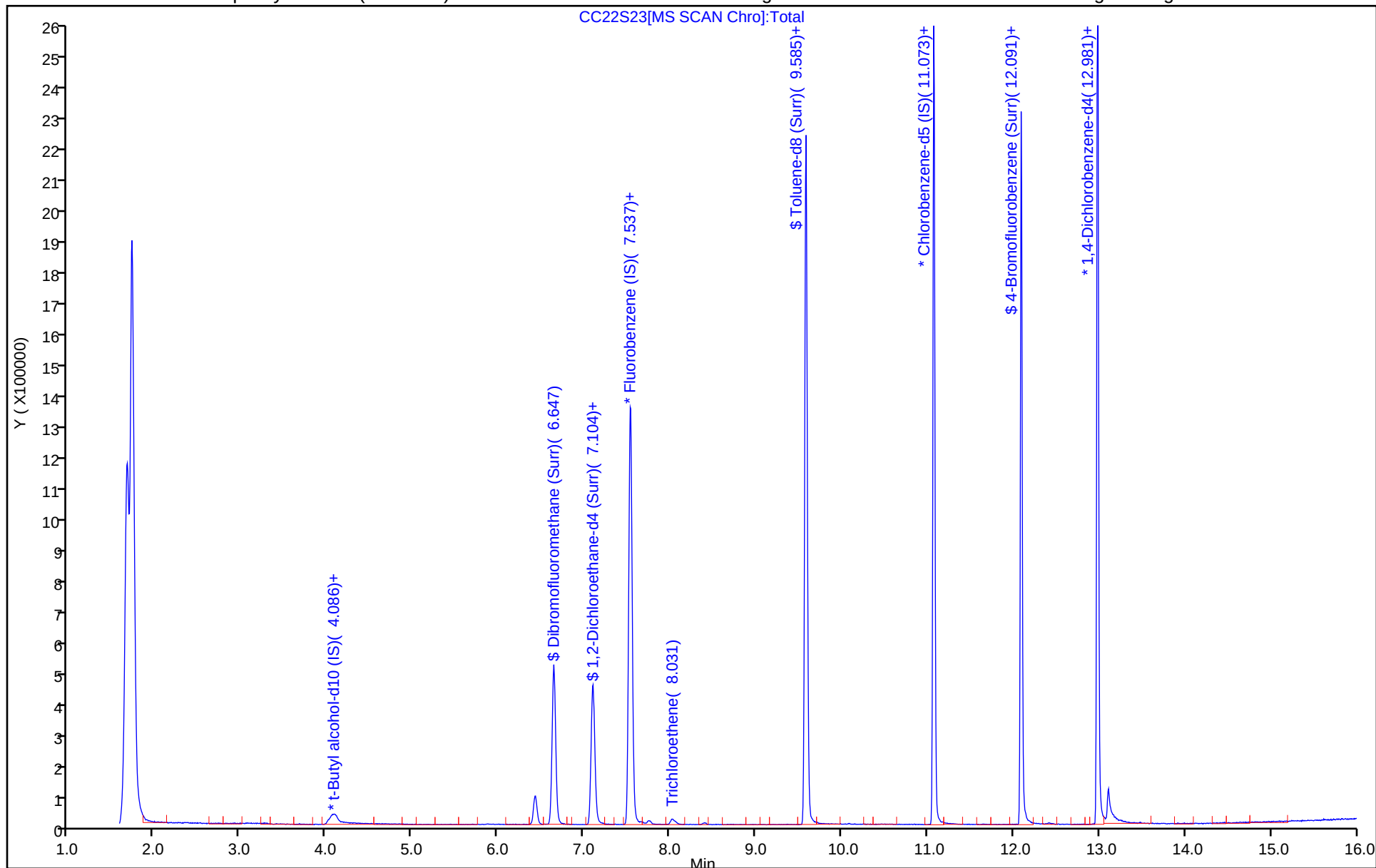
ALS Bottle#: 28

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S23.D
 Lims ID: 410-17705-A-8
 Client ID: 5W12A
 Sample Type: Client
 Inject. Date: 22-Oct-2020 19:08:30 ALS Bottle#: 28 Worklist Smp#: 29
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-029
 Misc. Info.: 410-17705-A-8
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 21:41:19 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: johnsons

Date: 22-Oct-2020 21:38:40

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	10.5	105.45
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	11.0	110.24
\$ 74 Toluene-d8 (Surr)	10.0	9.73	97.29
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.52	95.15

Eurofins Lancaster Laboratories Env, LLC

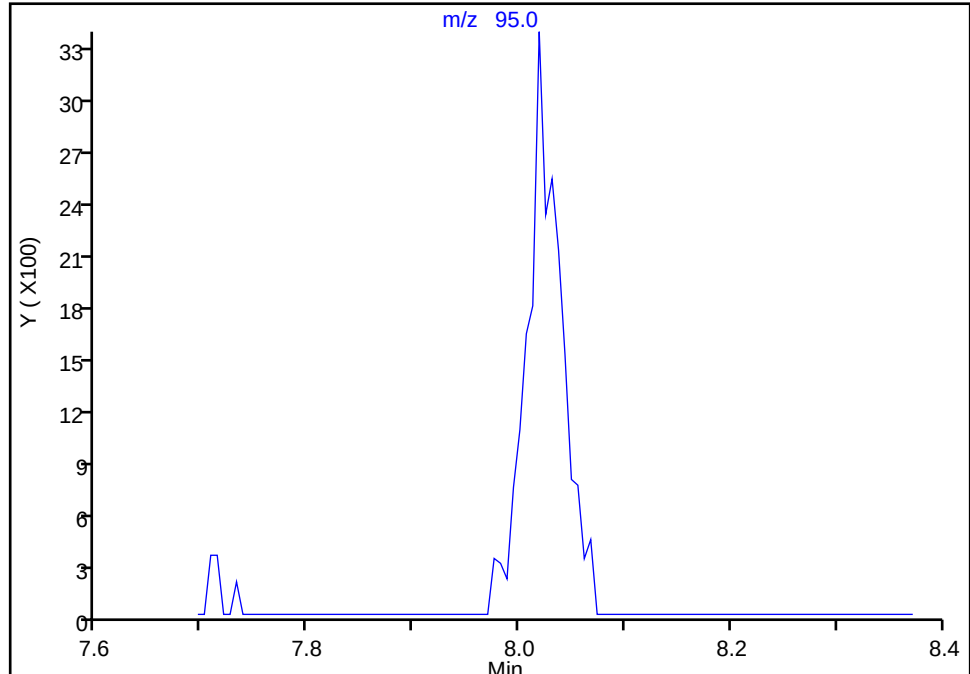
Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S23.D
Injection Date: 22-Oct-2020 19:08:30 Instrument ID: 10193
Lims ID: 410-17705-A-8 Lab Sample ID: 410-17705-8
Client ID: 5W12A
Operator ID: jkh09052 ALS Bottle#: 28 Worklist Smp#: 29
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

60 Trichloroethene, CAS: 79-01-6

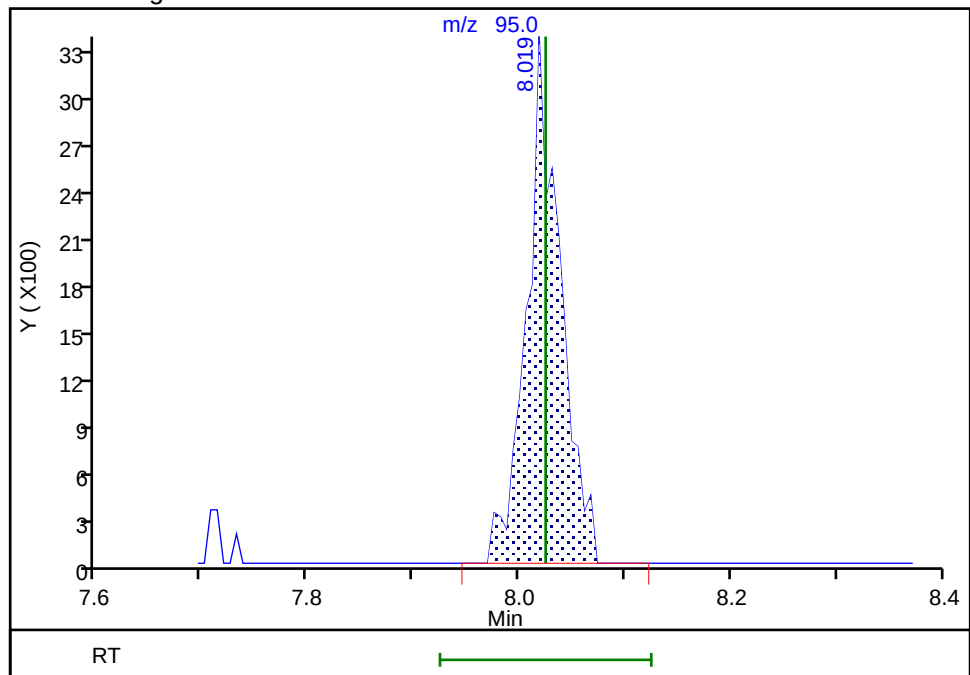
Signal: 1

Not Detected
Expected RT: 8.02

Processing Integration Results



Manual Integration Results



RT: 8.02
Area: 7236
Amount: 0.138376
Amount Units: ug/l

Reviewer: johnsons, 22-Oct-2020 21:38:35
Audit Action: Manually Integrated

Audit Reason: Missed Peak
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10/27/2020

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-17705-1
 SDG No.: _____
 Client Sample ID: Trip Blank 1 Lab Sample ID: 410-17705-9
 Matrix: Water Lab File ID: CC22S03.D
 Analysis Method: 8260C LL Date Collected: 10/19/2020 00:00
 Sample wt/vol: 25 (mL) Date Analyzed: 10/22/2020 11:44
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 57283 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.80
75-35-4	1,1-Dichloroethene	ND		1.0	0.44
79-01-6	Trichloroethene	ND		1.0	0.18
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		80-120
1868-53-7	Dibromofluoromethane (Surr)	106		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S03.D
 Lims ID: 410-17705-A-9
 Client ID: Trip Blank 1
 Sample Type: Client
 Inject. Date: 22-Oct-2020 11:44:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-009
 Misc. Info.: 410-17705-A-9
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 14:01:42 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1011

First Level Reviewer: howej

Date: 22-Oct-2020 13:59:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Vinyl chloride	62		2.203				ND	
14 1,1-Dichloroethene	96		3.410				ND	7
* 25 t-Butyl alcohol-d10 (IS)	65	4.105	4.080	0.025	0	194800	50.0	
29 trans-1,2-Dichloroethene	96		4.440				ND	
37 cis-1,2-Dichloroethene	96		5.946				ND	
\$ 47 Dibromofluoromethane (Surr)	113	6.641	6.647	-0.006	94	443875	10.6	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.098	7.110	-0.012	0	97025	11.4	
* 57 Fluorobenzene (IS)	96	7.537	7.543	-0.006	98	1765713	10.0	
60 Trichloroethene	95		8.025				ND	
\$ 74 Toluene-d8 (Surr)	98	9.585	9.585	0.000	94	1743013	9.71	
* 85 Chlorobenzene-d5 (IS)	117	11.073	11.079	-0.006	87	1374530	10.0	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.091	12.091	0.000	96	635960	9.43	
* 113 1,4-Dichlorobenzene-d4	152	12.981	12.981	0.000	95	773370	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_HP25_ISSS_00016

Amount Added: 1.00

Units: uL

Run Reagent

Report Date: 22-Oct-2020 14:03:08

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Euofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S03.D

Injection Date: 22-Oct-2020 11:44:30

Instrument ID: 10193

Operator ID: jkh09052

Lims ID: 410-17705-A-9

Lab Sample ID: 410-17705-9

Worklist Smp#: 9

Client ID: Trip Blank 1

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

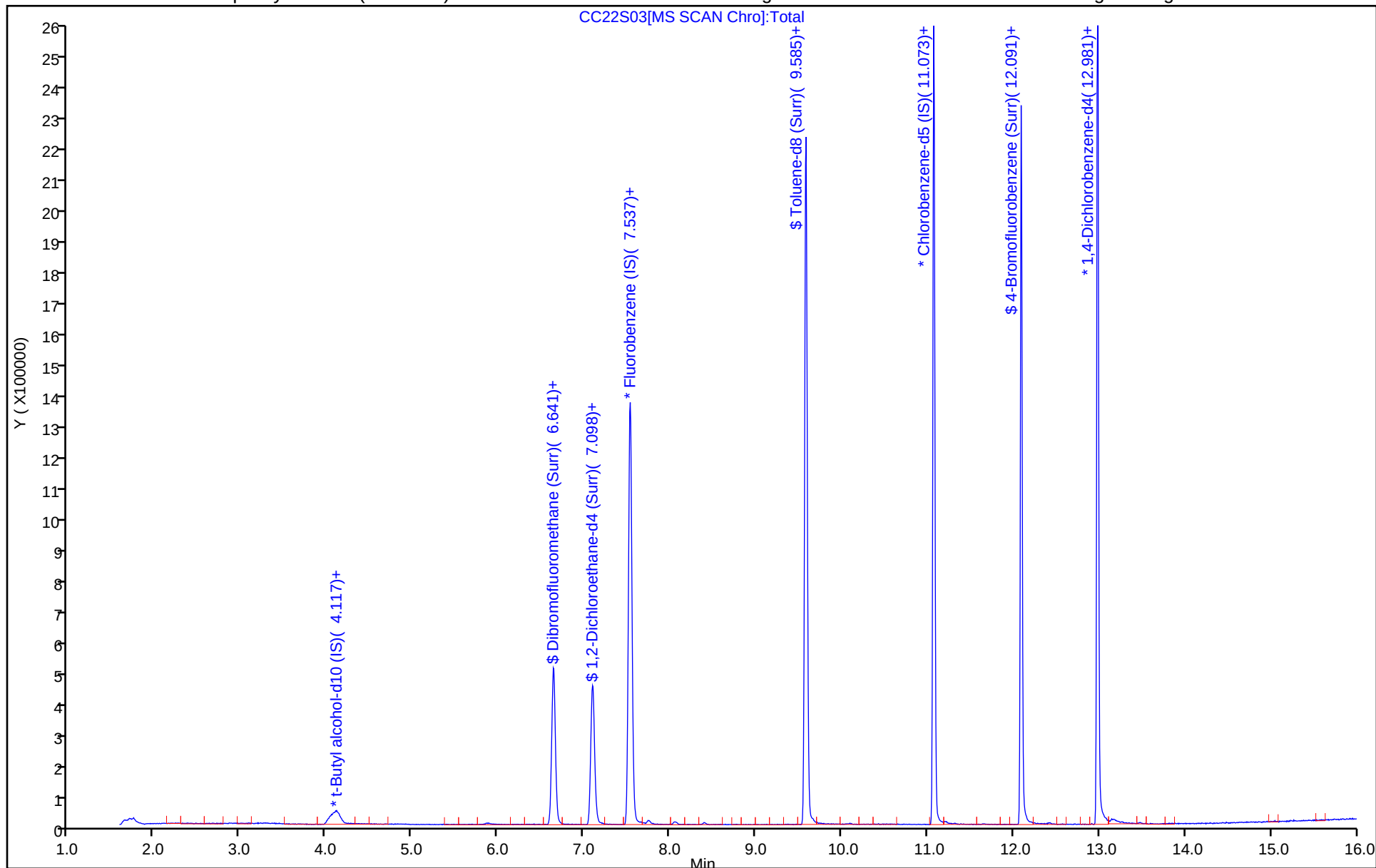
ALS Bottle#: 8

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S03.D
 Lims ID: 410-17705-A-9
 Client ID: Trip Blank 1
 Sample Type: Client
 Inject. Date: 22-Oct-2020 11:44:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-009
 Misc. Info.: 410-17705-A-9
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 14:01:42 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1011

First Level Reviewer: howej

Date: 22-Oct-2020 13:59:10

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	10.6	105.79
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	11.4	113.51
\$ 74 Toluene-d8 (Surr)	10.0	9.71	97.09
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.43	94.25

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1 Analy Batch No.: 39724

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 13:35 Calibration End Date: 09/01/2020 15:48 Calibration ID: 10281

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-39724/9	CS01I07.D
Level 2	IC 410-39724/8	CS01I06.D
Level 3	IC 410-39724/7	CS01I05.D
Level 4	IC 410-39724/6	CS01I04.D
Level 5	IC 410-39724/5	CS01I03.D
Level 6	ICIS 410-39724/4	CS01I02.D
Level 7	IC 410-39724/3	CS01I01.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2918 0.3266	0.3522 0.3000	0.3356	0.3227	0.3298	Ave		0.3227			0.1000	6.4		20.0			
Chloromethane	0.4118 0.3640	0.4166 0.3415	0.3845	0.3763	0.3682	Ave		0.3804			0.1000	7.0		20.0			
1,3-Butadiene	0.3706 0.3470	0.3831 0.3209	0.3964	0.3503	0.3364	Ave		0.3578				7.5		20.0			
Vinyl chloride	0.3710 0.3447	0.3769 0.3205	0.3532	0.3491	0.3465	Ave		0.3517			0.1000	5.3		20.0			
Bromomethane	0.2621 0.2463	0.2522 0.2334	0.2537	0.2470	0.2428	Ave		0.2482			0.1000	3.6		20.0			
Chloroethane	0.2420 0.2076	0.2296 0.1957	0.2204	0.2152	0.2103	Ave		0.2173			0.1000	7.0		20.0			
Dichlorofluoromethane	0.5002 0.4568	0.4862 0.4354	0.4850	0.4761	0.4597	Ave		0.4713			0.1000	4.7		20.0			
Trichlorofluoromethane	0.4605 0.4468	0.4890 0.4345	0.4635	0.4578	0.4502	Ave		0.4575			0.1000	3.7		20.0			
Ethyl ether	0.2424 0.2280	0.2388 0.2201	0.2351	0.2329	0.2252	Ave		0.2318				3.4		20.0			
Freon 123a	0.4017 0.3216	0.3602 0.3077	0.3604	0.3197	0.3068	Ave		0.3397				10.4		20.0			
Acrolein	2.0142 1.8940	1.9637 2.1651	2.0559	2.0043	1.9065	Ave		2.0005				4.6		20.0			
1,1-Dichloroethene	0.2418 0.2306	0.2426 0.2200	0.2361	0.2292	0.2178	Ave		0.2312			0.1000	4.2		20.0			
Freon 113	0.2203 0.2427	0.2333 0.2316	0.2529	0.2353	0.2301	Ave		0.2352			0.1000	4.4		20.0			
Acetone	2.4480 1.8275	2.3023 2.0458	1.9178	2.1806	2.1538	Ave		2.1251			0.1000	10.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1 Analy Batch No.: 39724

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 13:35 Calibration End Date: 09/01/2020 15:48 Calibration ID: 10281

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methyl iodide	0.4822 0.4629	0.4687 0.4378	0.4677	0.4453	0.4325	Ave		0.4567				4.0		20.0			
Ethyl bromide	0.1903 0.1935	0.1972 0.1891	0.1896	0.1927	0.1915	Ave		0.1920				1.5		20.0			
Carbon disulfide	0.8640 0.8277	0.8170 0.7933	0.8306	0.8071	0.7771	Ave		0.8167			0.1000	3.4		20.0			
Methyl acetate	9.4619 9.1956	7.3296 8.4904	6.2276	8.6421	9.1035	Ave		8.3501			0.1000	14.0		20.0			
Allyl chloride	0.4284 0.3952	0.4116 0.3911	0.4125	0.4004	0.3924	Ave		0.4045				3.4		20.0			
Methylene Chloride	0.2673 0.2596	0.2690 0.2450	0.2624	0.2530	0.2446	Ave		0.2573			0.1000	3.9		20.0			
t-Butyl alcohol	1.0786 0.9343	1.0895 0.9573	1.0217	0.9595	0.9311	Ave		0.9960				6.7		20.0			
Acrylonitrile	3.6060 3.1435	3.1763 3.4734	3.6610	3.3562	3.2079	Ave		3.3749				6.2		20.0			
Methyl tertiary butyl ether	0.8080 0.7372	0.7726 0.6995	0.7701	0.7370	0.7146	Ave		0.7484			0.1000	5.0		20.0			
trans-1,2-Dichloroethene	0.2811 0.2736	0.2778 0.2609	0.2771	0.2631	0.2584	Ave		0.2703			0.1000	3.4		20.0			
n-Hexane	0.3770 0.3916	0.3611 0.3799	0.4016	0.3797	0.3767	Ave		0.3811				3.3		20.0			
1,1-Dichloroethane	0.5317 0.5021	0.5027 0.4713	0.5160	0.4888	0.4701	Ave		0.4975			0.2000	4.6		20.0			
di-Isopropyl ether	1.0024 0.9422	0.9815 0.8947	0.9734	0.9396	0.9047	Ave		0.9484				4.2		20.0			
2-Chloro-1,3-butadiene	0.5154 0.4645	0.4858 0.4485	0.4683	0.4604	0.4388	Ave		0.4688				5.4		20.0			
Ethyl t-butyl ether	0.9545 0.8964	0.9353 0.8421	0.9367	0.9013	0.8760	Ave		0.9061				4.3		20.0			
2-Butanone	5.4466 4.7533	5.2332 4.9507	4.9134	4.9045	4.6863	Ave		4.9840			0.1000	5.4		20.0			
cis-1,2-Dichloroethene	0.3274 0.3030	0.3121 0.2918	0.3173	0.3033	0.2901	Ave		0.3064			0.1000	4.4		20.0			
2,2-Dichloropropane	0.4489 0.4318	0.4355 0.4139	0.4390	0.4295	0.4067	Ave		0.4293				3.4		20.0			
Propionitrile	1.1218 1.2317	1.3475 1.3330	1.3300	1.3001	1.1903	Ave		1.2649				6.8		20.0			
Methacrylonitrile	4.7767 4.8580	4.6120 5.3811	5.2269	4.8310	4.6272	Ave		4.9019				6.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1 Analy Batch No.: 39724

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 13:35 Calibration End Date: 09/01/2020 15:48 Calibration ID: 10281

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Bromochloromethane	0.1358 0.1353	0.1313 0.1355	0.1358	0.1372	0.1333	Ave		0.1349				1.4		20.0			
Tetrahydrofuran	1.3990 1.4024	1.4454 1.4410	1.4710	1.4167	1.2917	Ave		1.4096				4.1		20.0			
Chloroform	0.5202 0.4930	0.4959 0.4791	0.5003	0.4910	0.4717	Ave		0.4930			0.2000	3.2		20.0			
1,1,1-Trichloroethane	0.4505 0.4529	0.4491 0.4340	0.4484	0.4481	0.4266	Ave		0.4442			0.1000	2.2		20.0			
Cyclohexane	0.4761 0.4708	0.4666 0.4592	0.4977	0.4651	0.4526	Ave		0.4697			0.1000	3.1		20.0			
Carbon tetrachloride	0.3736 0.3825	0.3626 0.3735	0.3807	0.3709	0.3612	Ave		0.3722			0.1000	2.2		20.0			
1,1-Dichloropropene	0.4216 0.3987	0.4040 0.3841	0.4090	0.3942	0.3800	Ave		0.3988				3.6		20.0			
Isobutyl alcohol	0.3751 0.3074	0.3279 0.3354	0.3075	0.2990	0.3080	Ave		0.3229				8.2		20.0			
Benzene	1.2000 1.1470	1.1667 1.1118	1.1704	1.1462	1.0973	Ave		1.1485			0.5000	3.1		20.0			
1,2-Dichloroethane	0.4157 0.3201	0.3720 0.3103	0.3512	0.3372	0.3171	Ave		0.3462			0.1000	10.8		20.0			
t-Amyl methyl ether	0.8796 0.8203	0.8294 0.7843	0.8425	0.8248	0.7964	Ave		0.8253				3.8		20.0			
n-Heptane	0.4363 0.4299	0.3892 0.4305	0.4413	0.4327	0.4098	Ave		0.4242				4.3		20.0			
n-Butanol	0.2653 0.2713	0.2533 0.3015	0.2601	0.2624	0.2592	Ave		0.2676				6.0		20.0			
Trichloroethene	0.3060 0.2974	0.2973 0.2896	0.3050	0.2951	0.2821	Ave		0.2961			0.2000	2.8		20.0			
Methylcyclohexane	0.3921 0.4589	0.4558 0.4681	0.4649	0.4659	0.4686	Ave		0.4535			0.1000	6.1		20.0			
1,2-Dichloropropane	0.3163 0.2907	0.2966 0.2887	0.3017	0.2907	0.2801	Ave		0.2950			0.1000	3.9		20.0			
Methyl methacrylate	10.694 10.216	9.9010 11.465	10.664	10.304	9.9075	Ave		10.450				5.3		20.0			
Dibromomethane	0.1573 0.1425	0.1458 0.1389	0.1476	0.1402	0.1380	Ave		0.1443				4.7		20.0			
1,4-Dioxane	0.0383 0.0539	0.0522 0.0636	0.0577	0.0553	0.0521	Ave		0.0533			0.0050	14.4		20.0			
Bromodichloromethane	0.3687 0.3625	0.3552 0.3560	0.3573	0.3500	0.3429	Ave		0.3561			0.2000	2.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1 Analy Batch No.: 39724

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 13:35 Calibration End Date: 09/01/2020 15:48 Calibration ID: 10281

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Nitropropane	3.1499 3.3581	2.9287 3.7715	3.2325	3.1838	3.0651	Ave		3.2414				8.3		20.0			
1-Bromo-2-chloroethane	0.3076 0.3019	0.3095 0.2997	0.3085	0.3109	0.2974	Ave		0.3051				1.7		20.0			
cis-1,3-Dichloropropene	0.4505 0.4574	0.4308 0.4504	0.4399	0.4366	0.4322	Ave		0.4426			0.2000	2.3		20.0			
4-Methyl-2-pentanone	14.016 14.367	13.957 16.290	14.759	14.207	13.754	Ave		14.478			0.1000	6.0		20.0			
Toluene	1.0004 0.9956	1.0051 0.9649	1.0017	0.9778	0.9307	Ave		0.9823			0.4000	2.8		20.0			
trans-1,3-Dichloropropene	0.4859 0.5150	0.4729 0.5037	0.4892	0.4888	0.4880	Ave		0.4919			0.1000	2.8		20.0			
Ethyl methacrylate	0.3832 0.4288	0.4119 0.4219	0.4250	0.4203	0.4148	Ave		0.4151				3.7		20.0			
1,1,2-Trichloroethane	0.2788 0.2711	0.2787 0.2614	0.2793	0.2703	0.2599	Ave		0.2713			0.1000	3.0		20.0			
Tetrachloroethene	0.4614 0.4409	0.4386 0.4283	0.4502	0.4359	0.4167	Ave		0.4389			0.2000	3.3		20.0			
1,3-Dichloropropane	0.5020 0.4753	0.4992 0.4587	0.4896	0.4663	0.4567	Ave		0.4783				3.9		20.0			
2-Hexanone	9.3232 10.451	9.3321 11.730	10.440	10.418	9.9066	Ave		10.229			0.1000	8.1		20.0			
Dibromochloromethane	0.2734 0.3437	0.3001 0.3401	0.3060	0.3197	0.3203	Ave		0.3148				7.7		20.0			
1,2-Dibromoethane	0.2705 0.2751	0.2685 0.2647	0.2692	0.2658	0.2615	Ave		0.2679			0.1000	1.6		20.0			
1-Chlorohexane	0.6434 0.5456	0.5804 0.5365	0.5728	0.5308	0.5171	Ave		0.5609				7.6		20.0			
Chlorobenzene	1.1591 1.1088	1.1274 1.0823	1.1325	1.0960	1.0596	Ave		1.1094			0.5000	3.0		20.0			
1,1,1,2-Tetrachloroethane	0.3624 0.3937	0.3754 0.3864	0.3803	0.3722	0.3711	Ave		0.3774				2.8		20.0			
Ethylbenzene	2.0322 1.9609	1.9521 1.9374	1.9666	1.9197	1.8587	Ave		1.9468			0.1000	2.7		20.0			
m&p-Xylene	0.7470 0.7821	0.7660 0.7722	0.7743	0.7524	0.7314	Ave		0.7608			0.1000	2.4		20.0			
o-Xylene	0.7543 0.7626	0.7377 0.7544	0.7513	0.7404	0.7161	Ave		0.7453			0.3000	2.1		20.0			
Styrene	1.2097 1.3027	1.2218 1.3129	1.2422	1.2428	1.2248	Ave		1.2510			0.3000	3.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1 Analy Batch No.: 39724

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 13:35 Calibration End Date: 09/01/2020 15:48 Calibration ID: 10281

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Bromoform	0.1392 0.2053	0.1476 0.2084	0.1657	0.1718	0.1858	Ave		0.1748			0.1000	15.3		20.0			
Isopropylbenzene	1.9458 2.0263	1.9681 2.0001	2.0184	1.9483	1.8930	Ave		1.9714			0.1000	2.4		20.0			
1,1,2,2-Tetrachloroethane	0.6444 0.6192	0.6459 0.5895	0.6379	0.6292	0.6052	Ave		0.6245			0.3000	3.4		20.0			
Bromobenzene	0.9259 0.8543	0.8582 0.8201	0.8786	0.8448	0.8202	Ave		0.8574				4.3		20.0			
trans-1,4-Dichloro-2-butene	0.1540 0.1855	0.1591 0.1839	0.1758	0.1743	0.1775	Ave		0.1729				6.9		20.0			
1,2,3-Trichloropropane	0.1803 0.1668	0.1805 0.1560	0.1726	0.1710	0.1625	Ave		0.1700				5.3		20.0			
N-Propylbenzene	4.1100 4.0800	4.0761 3.8615	4.1430	4.0328	3.8780	Ave		4.0259				2.8		20.0			
2-Chlorotoluene	0.8972 0.8148	0.8244 0.7752	0.8538	0.8098	0.7883	Ave		0.8233				5.0		20.0			
1,3,5-Trimethylbenzene	3.0659 3.0010	2.9965 2.8926	3.0966	2.9616	2.8629	Ave		2.9824				2.8		20.0			
4-Chlorotoluene	0.9181 0.8554	0.8621 0.8224	0.8670	0.8507	0.8152	Ave		0.8558				3.9		20.0			
tert-Butylbenzene	0.7365 0.6340	0.6164 0.6142	0.6484	0.6819	0.6078	Ave		0.6485				7.2		20.0			
Pentachloroethane	0.4131 0.5184	0.4535 0.5288	0.4768	0.4964	0.5026	Ave		0.4842				8.3		20.0			
1,2,4-Trimethylbenzene	2.9755 3.1351	3.1226 3.0397	3.1427	3.0238	2.9789	Ave		3.0598				2.4		20.0			
sec-Butylbenzene	3.9078 3.8805	3.8823 3.7594	3.9147	3.8335	3.7199	Ave		3.8426				2.0		20.0			
1,3-Dichlorobenzene	1.7283 1.7190	1.7498 1.6706	1.7559	1.7171	1.6487	Ave		1.7128			0.6000	2.3		20.0			
p-Isopropyltoluene	3.3272 3.4552	3.3258 3.3657	3.3764	3.3527	3.2540	Ave		3.3510				1.8		20.0			
1,4-Dichlorobenzene	1.8673 1.7552	1.8222 1.7031	1.7458	1.7522	1.6928	Ave		1.7627			0.5000	3.5		20.0			
1,2,3-Trimethylbenzene	1.3613 1.3406	1.3459 1.3335	1.3290	1.3729	1.3170	Ave		1.3429				1.4		20.0			
Benzyl chloride	0.2108 0.2769	0.2242 0.2729	0.2409	0.2506	0.2623	Ave		0.2484				9.9		20.0			
n-Butylbenzene	1.6207 1.7769	1.6365 1.7347	1.7004	1.7288	1.6881	Ave		1.6980				3.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1 Analy Batch No.: 39724

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 13:35 Calibration End Date: 09/01/2020 15:48 Calibration ID: 10281

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.6515 1.6333	1.6237 1.5733	1.6481	1.6158	1.5674	Ave		1.6162			0.4000	2.1		20.0			
1,2-Dibromo-3-Chloropropane	0.0711 0.0942	0.0819 0.0878	0.0879	0.0890	0.0877	Ave		0.0856			0.0500	8.6		20.0			
1,3,5-Trichlorobenzene	1.4074 1.4110	1.4061 1.3656	1.4295	1.4062	1.3555	Ave		1.3973				1.9		20.0			
1,2,4-Trichlorobenzene	1.2990 1.2622	1.2785 1.2137	1.2629	1.2451	1.2149	Ave		1.2538			0.2000	2.5		20.0			
Hexachlorobutadiene	0.6553 0.6171	0.6168 0.5892	0.6150	0.6075	0.5846	Ave		0.6122				3.8		20.0			
Naphthalene	2.2291 2.2731	2.2713 2.0879	2.3270	2.2619	2.2049	Ave		2.2365				3.4		20.0			
1,2,3-Trichlorobenzene	1.1382 1.1080	1.1563 1.0364	1.1417	1.1153	1.0727	Ave		1.1098				3.8		20.0			
Dibromofluoromethane (Surr)	0.2372 0.2368	0.2372 0.2376	0.2382	0.2372	0.2391	Ave		0.2376				0.3		20.0			
1,2-Dichloroethane-d4 (Surr)	0.0480 0.0484	0.0476 0.0484	0.0485	0.0490	0.0490	Ave		0.0484				1.0		20.0			
Toluene-d8 (Surr)	1.3120 1.3054	1.3060 1.2984	1.3067	1.3058	1.3081	Ave		1.3061				0.3		20.0			
4-Bromofluorobenzene (Surr)	0.4846 0.4929	0.4884 0.4967	0.4890	0.4914	0.4931	Ave		0.4909				0.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1

Analy Batch No.: 39724

SDG No.: _____

Instrument ID: 10193

GC Column: R-624SilMS ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 13:35

Calibration End Date: 09/01/2020 15:48

Calibration ID: 10281

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-39724/9	CS01I07.D
Level 2	IC 410-39724/8	CS01I06.D
Level 3	IC 410-39724/7	CS01I05.D
Level 4	IC 410-39724/6	CS01I04.D
Level 5	IC 410-39724/5	CS01I03.D
Level 6	ICIS 410-39724/4	CS01I02.D
Level 7	IC 410-39724/3	CS01I01.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	11305 673806	34165 1551921	65583	129325	335623	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloromethane	FB	Ave	15951 750884	40412 1766636	75132	150814	374739	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Butadiene	FB	Ave	14355 715813	37166 1660055	77445	140385	342407	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Vinyl chloride	FB	Ave	14371 711167	36562 1657758	69005	139896	352685	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromomethane	FB	Ave	10152 508157	24464 1207360	49576	98967	247103	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloroethane	FB	Ave	9373 428295	22270 1012488	43065	86238	214069	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dichlorofluoromethane	FB	Ave	19377 942431	47161 2252587	94758	190803	467823	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Trichlorofluoromethane	FB	Ave	17838 921738	47434 2247593	90570	183481	458162	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl ether	FB	Ave	9388 470167	23165 1138572	45936	93303	229113	0.200 10.0	0.500 25.0	1.000	2.00	5.00
Freon 123a	FB	Ave	15559 663506	34942 1591534	70413	128139	312190	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acrolein	TBAd 10	Ave	57475 2808556	142874 7052881	288468	575443	1427897	10.00 500	25.0 1250	50.0	100.0	250
1,1-Dichloroethene	FB	Ave	9367 475627	23536 1138101	46141	91871	221612	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Freon 113	FB	Ave	8535 500744	22631 1197984	49416	94307	234166	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acetone	TBAd 10	Ave	13971 541999	33503 1332893	53819	125222	322634	2.00 100	5.00 250	10.0	20.0	50.0
Methyl iodide	FB	Ave	18680 954840	45466 2264828	91381	178469	440171	0.200 10.0	0.500 25.0	1.00	2.00	5.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1

Analy Batch No.: 39724

SDG No.: _____

Instrument ID: 10193

GC Column: R-624SilMS ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 13:35

Calibration End Date: 09/01/2020 15:48

Calibration ID: 10281

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Ethyl bromide	FB	Ave	7374 399370	19138 978776	37062	77273	194973	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon disulfide	FB	Ave	33471 1707453	79256 4103979	162292	323433	790900	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl acetate	TBAd 10	Ave	5400 272722	10666 553177	17477	49627	136367	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Allyl chloride	FB	Ave	16597 815256	39926 2023275	80597	160482	399375	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylene Chloride	FB	Ave	10355 535609	26091 1267299	51267	101409	248970	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Butyl alcohol	TBAd 10	Ave	12311 554170	31710 1247393	57344	110192	278959	4.00 200	10.0 500	20.0	40.0	100
Acrylonitrile	TBAd 10	Ave	10290 466148	23111 1131501	51371	96365	240268	1.00 50.0	2.50 125	5.00	10.0	25.0
Methyl tertiary butyl ether	FB	Ave	31299 1520759	74946 3618649	150474	295369	727225	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,2-Dichloroethene	FB	Ave	10888 564465	26945 1349657	54149	105433	262964	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Hexane	FB	Ave	14606 807784	35026 1965108	78465	152150	383350	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloroethane	FB	Ave	20597 1035693	48762 2437799	100821	195904	478397	0.200 10.0	0.500 25.0	1.00	2.00	5.00
di-Isopropyl ether	FB	Ave	38832 1943658	95205 4628483	190197	376556	920754	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chloro-1,3-butadiene	FB	Ave	19967 958306	47125 2319881	91500	184491	446582	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl t-butyl ether	FB	Ave	36977 1849075	90729 4356436	183026	361189	891552	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Butanone	TBAd 10	Ave	31084 1409728	76154 3225526	137888	281636	701991	2.00 100	5.00 250	10.0	20.0	50.0
cis-1,2-Dichloroethene	FB	Ave	12683 625147	30278 1509697	62000	121548	295208	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2,2-Dichloropropane	FB	Ave	17391 890664	42244 2141366	85777	172113	413880	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Propionitrile	TBAd 10	Ave	12804 730594	39217 1736921	74651	149313	356593	4.00 200	10.0 500	20.0	40.0	100
Methacrylonitrile	TBAd 10	Ave	27261 1440762	67114 3505951	146687	277418	693145	2.00 100	5.00 250	10.0	20.0	50.0
Bromochloromethane	FB	Ave	5261 279022	12738 700885	26529	54981	135663	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrahydrofuran	TBAd 10	Ave	7984 415910	21034 938881	41281	81352	193486	2.00 100	5.00 250	10.0	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1

Analy Batch No.: 39724

SDG No.: _____

Instrument ID: 10193

GC Column: R-624SilMS ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 13:35

Calibration End Date: 09/01/2020 15:48

Calibration ID: 10281

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chloroform	FB	Ave	20153 1017069	48103 2478178	97764	196768	480095	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1-Trichloroethane	FB	Ave	17452 934233	43566 2245085	87622	179578	434162	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Cyclohexane	FB	Ave	18443 971248	45257 2375325	97244	186390	460601	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon tetrachloride	FB	Ave	14471 789037	35175 1932273	74393	148659	367580	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloropropene	FB	Ave	16330 822564	39192 1986821	79910	157992	386758	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isobutyl alcohol	TBAd 10	Ave	10703 455897	23860 1092722	43145	85837	230672	10.0 500	25.0 1250	50.0	100	250
Benzene	FB	Ave	46486 2366224	113177 5751371	228700	459354	1116708	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloroethane	FB	Ave	16105 660414	36081 1605051	68618	135129	322763	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Amyl methyl ether	FB	Ave	34074 1692208	80450 4057198	164628	330560	810520	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Heptane	FB	Ave	16903 886773	37755 2226987	86227	173398	417078	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Butanol	TBAd 10	Ave	15142 804563	36853 1964301	73005	150691	388291	20.0 1000	50.0 2500	100	200	500
Trichloroethene	FB	Ave	11853 613428	28843 1497905	59588	118251	287079	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylcyclohexane	FB	Ave	15190 946727	44211 2421507	90839	186709	476901	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloropropane	FB	Ave	12253 599777	28771 1493537	58951	116517	285051	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl methacrylate	TBAd 10	Ave	6103 302973	14408 746981	29926	59171	148411	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dibromomethane	FB	Ave	6094 293984	14141 718764	28840	56166	140420	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dioxane	TBAd 10	Ave	1094 79862	3795 207069	8095	15868	39014	10.0 500	25.0 1250	50.0	100	250
Bromodichloromethane	FB	Ave	14281 747888	34459 1841851	69815	140278	348987	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Nitropropane	TBAd 10	Ave	17977 995940	42618 2457254	90715	182830	459149	2.00 100	5.00 250	10.0	20.0	50.0
1-Bromo-2-chloroethane	FB	Ave	11914 622797	30027 1550438	60281	124609	302656	0.200 10.0	0.500 25.0	1.00	2.00	5.00
cis-1,3-Dichloropropene	FB	Ave	17450 943666	41792 2329714	85955	174979	439884	0.200 10.0	0.500 25.0	1.00	2.00	5.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1

Analy Batch No.: 39724

SDG No.: _____

Instrument ID: 10193

GC Column: R-624SilMS ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 13:35

Calibration End Date: 09/01/2020 15:48

Calibration ID: 10281

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
4-Methyl-2-pentanone	TBA 10	Ave	79991 4260875	203096 10613666	414178	815838	2060281	2.00 100	5.00 250	10.0	20.0	50.0
Toluene	CBZ 5	Ave	29375 1562669	73639 3853589	148821	297381	721183	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,3-Dichloropropene	CBZ 5	Ave	14266 808366	34646 2011642	72683	148652	378157	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl methacrylate	CBZ 5	Ave	11251 673046	30177 1684778	63147	127842	321458	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,2-Trichloroethane	CBZ 5	Ave	8186 425508	20416 1044114	41496	82201	201374	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrachloroethene	CBZ 5	Ave	13549 692046	32134 1710454	66888	132588	322909	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichloropropane	CBZ 5	Ave	14740 746124	36571 1831923	72739	141833	353883	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Hexanone	TBA 10	Ave	53208 3099544	135801 7642331	292991	598268	1483984	2.00 100	5.00 250	10.0	20.0	50.0
Dibromochloromethane	CBZ 5	Ave	8028 539411	21989 1358246	45464	97240	248177	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromoethane	CBZ 5	Ave	7944 431839	19670 1057340	40000	80851	202633	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1-Chlorohexane	CBZ 5	Ave	18891 856372	42522 2142701	85108	161444	400674	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chlorobenzene	CBZ 5	Ave	34035 1740350	82597 4322456	168260	333345	821070	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1,2-Tetrachloroethane	CBZ 5	Ave	10641 617994	27504 1543073	56505	113207	287568	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethylbenzene	CBZ 5	Ave	59671 3077887	143018 7737357	292186	583876	1440317	0.200 10.0	0.500 25.0	1.00	2.00	5.00
m&p-Xylene	CBZ 5	Ave	43867 2455146	112244 6167767	230072	457654	1133528	0.400 20.0	1.00 50.0	2.00	4.00	10.0
o-Xylene	CBZ 5	Ave	22149 1197012	54046 3012741	111628	225199	554888	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Styrene	CBZ 5	Ave	35521 2044773	89517 5243447	184556	377982	949081	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromoform	CBZ 5	Ave	4087 322179	10815 832204	24617	52263	143999	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isopropylbenzene	CBZ 5	Ave	57134 3180524	144191 7987853	299877	592584	1466907	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,2,2-Tetrachloroethane	DCB 4	Ave	10523 569960	26594 1416700	53769	109660	269440	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromobenzene	DCB 4	Ave	15119 786388	35338 1970860	74061	147229	365172	0.200 10.0	0.500 25.0	1.00	2.00	5.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1

Analy Batch No.: 39724

SDG No.: _____

Instrument ID: 10193

GC Column: R-624SilMS ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 13:35

Calibration End Date: 09/01/2020 15:48

Calibration ID: 10281

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	25153 1707722	65511 4418631	148178	303768	790342	2.00 100	5.00 250	10.0	20.0	50.0
1,2,3-Trichloropropane	DCBd 4	Ave	2945 153575	7433 374830	14553	29794	72364	0.200 10.0	0.500 25.0	1.00	2.00	5.00
N-Propylbenzene	DCBd 4	Ave	67115 3755554	167830 9279542	349239	702814	1726631	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chlorotoluene	DCBd 4	Ave	14651 750019	33943 1862946	71969	141124	350978	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trimethylbenzene	DCBd 4	Ave	50066 2762343	123379 6951334	261031	516140	1274650	0.200 10.0	0.500 25.0	1.00	2.00	5.00
4-Chlorotoluene	DCBd 4	Ave	14993 787376	35497 1976218	73083	148252	362949	0.200 10.0	0.500 25.0	1.00	2.00	5.00
tert-Butylbenzene	DCBd 4	Ave	12027 583616	25380 1475973	54654	118830	270627	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Pentachloroethane	DCBd 4	Ave	6746 477219	18671 1270655	40193	86508	223759	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,4-Trimethylbenzene	DCBd 4	Ave	48590 2885821	128573 7304755	264914	526977	1326302	0.200 10.0	0.500 25.0	1.00	2.00	5.00
sec-Butylbenzene	DCBd 4	Ave	63813 3571893	159853 9034349	329993	668081	1656218	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichlorobenzene	DCBd 4	Ave	28222 1582324	72046 4014697	148017	299249	734044	0.200 10.0	0.500 25.0	1.00	2.00	5.00
p-Isopropyltoluene	DCBd 4	Ave	54332 3180481	136940 8088100	284614	584284	1448806	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dichlorobenzene	DCBd 4	Ave	30493 1615615	75027 4092757	147165	305373	753707	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trimethylbenzene	DCBd 4	Ave	22229 1234014	55416 3204589	112026	239261	586354	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Benzyl chloride	DCBd 4	Ave	3443 254856	9231 655880	20304	43679	116794	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Butylbenzene	DCBd 4	Ave	26466 1635579	67384 4168646	143333	301292	751620	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichlorobenzene	DCBd 4	Ave	26969 1503472	66856 3780882	138925	281587	697848	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1161 86753	3372 210885	7406	15503	39048	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trichlorobenzene	DCBd 4	Ave	22982 1298817	57894 3281646	120502	245063	603506	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,4-Trichlorobenzene	DCBd 4	Ave	21212 1161828	52641 2916702	106458	216994	540926	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Hexachlorobutadiene	DCBd 4	Ave	10701 568070	25396 1415792	51838	105865	260304	0.200 10.0	0.500 25.0	1.00	2.00	5.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1 Analy Batch No.: 39724

SDG No.: _____

Instrument ID: 10193 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 13:35 Calibration End Date: 09/01/2020 15:48 Calibration ID: 10281

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Naphthalene	DCBd 4	Ave	36400 2092386	93520 5017456	196158	394190	981719	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trichlorobenzene	DCBd 4	Ave	18586 1019899	47610 2490582	96242	194367	477586	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dibromofluoromethane (Surr)	FB	Ave	459388 488556	460223 491718	465395	475332	486623	10.0 10.0	10.0 10.0	10.0	10.0	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	92975 99744	92350 100134	94841	98150	99716	10.0 10.0	10.0 10.0	10.0	10.0	10.0
Toluene-d8 (Surr)	CBZd 5	Ave	1926152 2048995	1913735 2074244	1941329	1985750	2027327	10.0 10.0	10.0 10.0	10.0	10.0	10.0
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	711441 773730	715715 793546	726539	747277	764276	10.0 10.0	10.0 10.0	10.0	10.0	10.0

Curve Type Legend:

Ave = Average ISTD

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I01.D
 Lims ID: IC STD7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 01-Sep-2020 13:35:30 ALS Bottle#: 2 Worklist Smp#: 3
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: IC STD7
 Misc. Info.: 410-0009503-003
 Operator ID: dvv10203 Instrument ID: 10193
 Sublist: chrom-MSV_10193_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Sep-2020 20:10:09 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1059

First Level Reviewer: virayd

Date: 01-Sep-2020 15:49:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.910	1.910	0.000	99	1551921	25.0	23.2	
3 Chloromethane	50	2.099	2.099	0.000	99	1766636	25.0	22.4	
4 Butadiene	39	2.203	2.209	-0.006	95	1660055	25.0	22.4	
5 Vinyl chloride	62	2.209	2.215	-0.006	98	1657758	25.0	22.8	
6 Bromomethane	94	2.507	2.520	-0.013	91	1207360	25.0	23.5	
7 Chloroethane	64	2.599	2.605	-0.006	100	1012488	25.0	22.5	
8 Dichlorofluoromethane	67	2.831	2.837	-0.006	97	2252587	25.0	23.1	
9 Trichlorofluoromethane	101	2.892	2.898	-0.006	97	2247593	25.0	23.7	
11 Ethyl ether	59	3.129	3.135	-0.006	92	1138572	25.0	23.7	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.215	3.208	0.007	97	1591534	25.0	22.6	
13 Acrolein	56	3.300	3.306	-0.006	99	7052881	1250.0	1352.8	
14 1,1-Dichloroethene	96	3.422	3.428	-0.006	97	1138101	25.0	23.8	
15 112TCTFE	101	3.458	3.464	-0.006	92	1197984	25.0	24.6	
16 Acetone	43	3.458	3.471	-0.013	100	1332893	250.0	240.7	
17 Iodomethane	142	3.611	3.617	-0.006	99	2264828	25.0	24.0	
19 Ethyl bromide	108	3.641	3.641	0.000	99	978776	25.0	24.6	
18 Isopropyl alcohol	45	3.635	3.647	-0.012	41	563815	500.0	508.3	
20 Carbon disulfide	76	3.708	3.708	0.000	100	4103979	25.0	24.3	
22 Methyl acetate	43	3.855	3.867	-0.012	98	553177	25.0	25.4	M
23 3-Chloro-1-propene	41	3.885	3.891	-0.006	89	2023275	25.0	24.2	
24 Methylene Chloride	84	4.068	4.074	-0.006	94	1267299	25.0	23.8	
* 25 t-Butyl alcohol-d10 (IS)	65	4.092	4.117	-0.025	99	130306	50.0	50.0	
26 2-Methyl-2-propanol	59	4.214	4.227	-0.012	99	1247393	500.0	480.6	
27 Acrylonitrile	53	4.403	4.409	-0.006	98	1131501	125.0	128.6	
28 Methyl tert-butyl ether	73	4.452	4.464	-0.012	96	3618649	25.0	23.4	
29 trans-1,2-Dichloroethene	96	4.464	4.470	-0.006	97	1349657	25.0	24.1	
30 Hexane	57	4.885	4.897	-0.012	95	1965108	25.0	24.9	
32 1,1-Dichloroethane	63	5.129	5.135	-0.006	96	2437799	25.0	23.7	
33 Isopropyl ether	45	5.190	5.196	-0.006	93	4628483	25.0	23.6	
34 2-Chloro-1,3-butadiene	53	5.239	5.251	-0.012	93	2319881	25.0	23.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Tert-butyl ethyl ether	59	5.732	5.732	0.000	98	4356436	25.0	23.2	
36 2-Butanone (MEK)	43	5.940	5.946	-0.006	100	3225526	250.0	248.3	
37 cis-1,2-Dichloroethene	96	5.970	5.970	0.000	83	1509697	25.0	23.8	
38 2,2-Dichloropropane	77	5.988	5.988	0.000	89	2141366	25.0	24.1	
40 Propionitrile	54	6.049	6.049	0.000	99	1736921	500.0	526.9	M
S 42 1,2-Dichloroethene, Total	100				0			47.9	
43 Methacrylonitrile	67	6.251	6.251	0.001	93	3505951	250.0	274.4	
44 Chlorobromomethane	128	6.305	6.305	0.000	96	700885	25.0	25.1	
45 Tetrahydrofuran	71	6.312	6.305	0.007	89	938881	250.0	255.6	
46 Chloroform	83	6.458	6.464	-0.006	94	2478178	25.0	24.3	
\$ 47 Dibromofluoromethane (Surr)	113	6.677	6.683	-0.006	94	491718	10.0	10.0	
48 1,1,1-Trichloroethane	97	6.677	6.683	-0.006	99	2245085	25.0	24.4	
49 Cyclohexane	56	6.769	6.775	-0.006	93	2375325	25.0	24.4	
50 Carbon tetrachloride	117	6.891	6.891	0.000	96	1932273	25.0	25.1	
51 1,1-Dichloropropene	75	6.897	6.897	0.000	96	1986821	25.0	24.1	
52 Isobutyl alcohol	41	7.086	7.086	0.000	94	1092722	1250.0	1298.5	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.135	7.134	0.001	0	100134	10.0	10.0	
54 Benzene	78	7.165	7.159	0.006	97	5751371	25.0	24.2	
55 1,2-Dichloroethane	62	7.238	7.238	0.000	98	1605051	25.0	22.4	
56 Tert-amyl methyl ether	73	7.354	7.360	-0.006	98	4057198	25.0	23.8	
* 57 Fluorobenzene (IS)	96	7.574	7.567	0.007	99	2069205	10.0	10.0	
58 n-Heptane	43	7.580	7.580	0.000	92	2226987	25.0	25.4	
59 n-Butanol	56	7.970	7.976	-0.006	90	1964301	2500.0	2816.7	
60 Trichloroethene	95	8.049	8.049	0.000	98	1497905	25.0	24.5	
61 Methylcyclohexane	83	8.354	8.354	0.000	93	2421507	25.0	25.8	
62 1,2-Dichloropropane	63	8.390	8.390	0.000	94	1493537	25.0	24.5	
63 2-ethoxy-2-methyl butane	87	8.403	8.396	0.007	92	2353267	25.0	24.8	
64 Methyl methacrylate	69	8.482	8.482	0.000	91	746981	25.0	27.4	
66 Dibromomethane	93	8.500	8.494	0.006	94	718764	25.0	24.1	
65 1,4-Dioxane	88	8.494	8.506	-0.012	66	207069	1250.0	1491.3	M
67 Dichlorobromomethane	83	8.744	8.738	0.006	99	1841851	25.0	25.0	
68 2-Nitropropane	41	9.024	9.024	0.000	99	2457254	250.0	290.9	
71 1-Bromo-2-chloroethane	63	9.134	9.134	0.000	99	1550438	25.0	24.6	
72 cis-1,3-Dichloropropene	75	9.299	9.299	0.000	94	2329714	25.0	25.4	
73 4-Methyl-2-pentanone (MIBK)	43	9.488	9.488	0.000	98	10613666	250.0	281.3	
\$ 74 Toluene-d8 (Surr)	98	9.610	9.610	0.000	94	2074244	10.0	9.94	
75 Toluene	92	9.689	9.689	0.000	98	3853589	25.0	24.6	
76 trans-1,3-Dichloropropene	75	9.963	9.957	0.006	96	2011642	25.0	25.6	
78 Ethyl methacrylate	69	10.024	10.024	0.000	90	1684778	25.0	25.4	
S 77 1,3-Dichloropropene, Total	100				0			51.0	
79 1,1,2-Trichloroethane	97	10.171	10.164	0.007	91	1044114	25.0	24.1	
80 Tetrachloroethene	166	10.250	10.250	0.000	97	1710454	25.0	24.4	
81 1,3-Dichloropropane	76	10.335	10.329	0.006	93	1831923	25.0	24.0	
82 2-Hexanone	43	10.390	10.396	-0.006	97	7642331	250.0	286.7	
83 Chlorodibromomethane	129	10.549	10.548	0.001	90	1358246	25.0	27.0	
84 Ethylene Dibromide	107	10.658	10.658	0.000	98	1057340	25.0	24.7	
* 85 Chlorobenzene-d5 (IS)	117	11.097	11.097	0.000	87	1597498	10.0	10.0	
86 1-Chlorohexane	91	11.109	11.109	0.000	98	2142701	25.0	23.9	
87 Chlorobenzene	112	11.122	11.122	0.000	98	4322456	25.0	24.4	
89 1,1,1,2-Tetrachloroethane	131	11.207	11.207	0.000	95	1543073	25.0	25.6	
90 Ethylbenzene	91	11.213	11.213	0.000	98	7737357	25.0	24.9	
S 88 Xylenes, Total	106				0			76.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
91 m-Xylene & p-Xylene	106	11.329	11.329	0.000	0	6167767	50.0	50.8	
92 o-Xylene	106	11.664	11.664	0.000	95	3012741	25.0	25.3	
93 Styrene	104	11.676	11.676	0.000	95	5243447	25.0	26.2	
94 Bromoform	173	11.835	11.835	0.000	97	832204	25.0	29.8	
95 Isopropylbenzene	105	11.969	11.969	0.000	96	7987853	25.0	25.4	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.109	12.109	0.000	91	793546	10.0	10.1	
99 1,1,2,2-Tetrachloroethane	83	12.219	12.219	0.000	93	1416700	25.0	23.6	
100 Bromobenzene	156	12.231	12.231	0.000	94	1970860	25.0	23.9	
101 trans-1,4-Dichloro-2-butene	53	12.243	12.243	0.000	96	4418631	250.0	265.9	
102 1,2,3-Trichloropropane	110	12.268	12.268	0.000	83	374830	25.0	22.9	
103 N-Propylbenzene	91	12.298	12.298	0.000	99	9279542	25.0	24.0	
104 2-Chlorotoluene	126	12.377	12.377	0.000	96	1862946	25.0	23.5	
105 1,3,5-Trimethylbenzene	105	12.438	12.438	0.000	94	6951334	25.0	24.2	
106 4-Chlorotoluene	126	12.469	12.469	0.000	98	1976218	25.0	24.0	
107 tert-Butylbenzene	134	12.682	12.682	0.000	94	1475973	25.0	23.7	
108 Pentachloroethane	167	12.713	12.713	0.000	93	1270655	25.0	27.3	
109 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	7304755	25.0	24.8	
110 sec-Butylbenzene	105	12.847	12.847	0.000	94	9034349	25.0	24.5	
111 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	4014697	25.0	24.4	
112 4-Isopropyltoluene	119	12.957	12.957	0.000	97	8088100	25.0	25.1	
* 113 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	961243	10.0	10.0	
114 1,4-Dichlorobenzene	146	13.018	13.017	0.001	95	4092757	25.0	24.2	
115 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	99	3204589	25.0	24.8	
116 Benzyl chloride	126	13.097	13.103	-0.006	99	655880	25.0	27.5	
119 n-Butylbenzene	92	13.249	13.249	0.000	96	4168646	25.0	25.5	
120 1,2-Dichlorobenzene	146	13.280	13.286	-0.006	98	3780882	25.0	24.3	
118 p-Diethylbenzene	119	13.304	13.304	0.000	0	4145941	25.0	25.4	
123 1,2-Dibromo-3-Chloropropane	155	13.834	13.834	0.000	87	210885	25.0	25.6	
124 1,3,5-Trichlorobenzene	180	13.956	13.956	0.000	98	3281646	25.0	24.4	
125 1,2,4-Trichlorobenzene	180	14.383	14.383	0.000	94	2916702	25.0	24.2	
126 Hexachlorobutadiene	225	14.469	14.468	0.001	97	1415792	25.0	24.1	
127 Naphthalene	128	14.566	14.566	0.000	97	5017456	25.0	23.3	
128 1,2,3-Trichlorobenzene	180	14.712	14.712	0.000	96	2490582	25.0	23.3	
129 2-Methylnaphthalene	142	15.334	15.340	-0.006	0	3387149	25.0	23.3	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00022

Amount Added: 25.00

Units: uL

MSV_RV4_826_00024

Amount Added: 25.00

Units: uL

MSV_RV4GAS826_00072

Amount Added: 25.00

Units: uL

MSV_25_826ISS_00001

Amount Added: 1.00

Units: uL

Run Reagent

Report Date: 01-Sep-2020 20:10:10

Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I01.D

Injection Date: 01-Sep-2020 13:35:30

Instrument ID: 10193

Operator ID: dwv10203

Lims ID: IC STD7

Worklist Smp#: 3

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

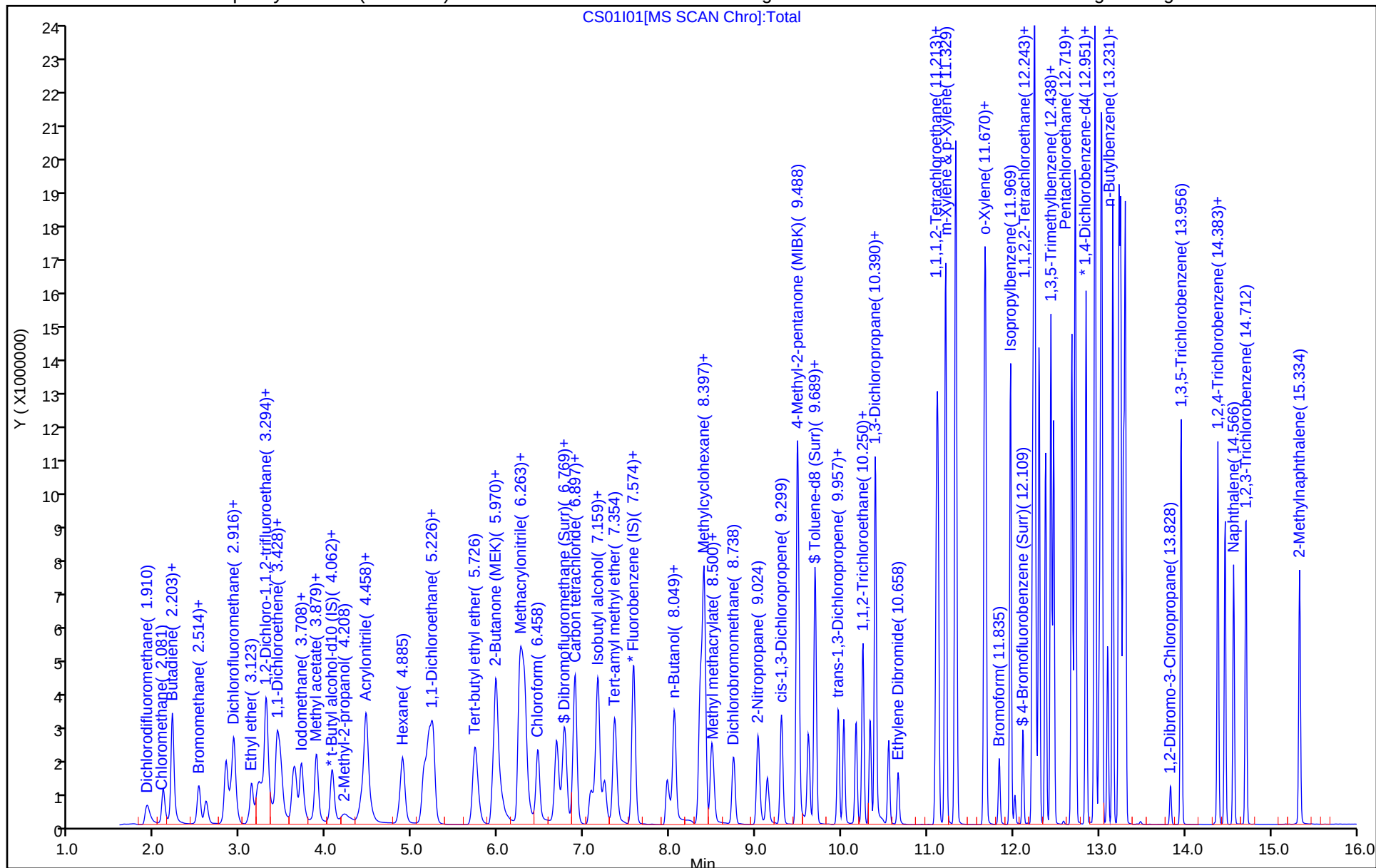
ALS Bottle#: 2

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

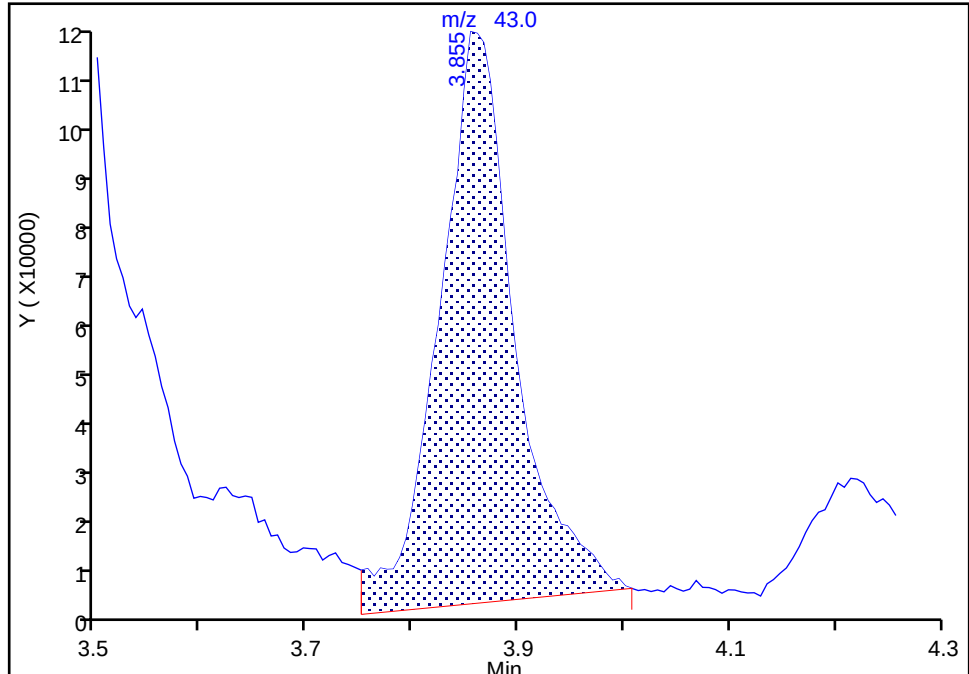
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Injection Date: 01-Sep-2020 13:35:30 Instrument ID: 10193
Lims ID: IC STD7
Client ID:
Operator ID: dvv10203 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

22 Methyl acetate, CAS: 79-20-9

Signal: 1

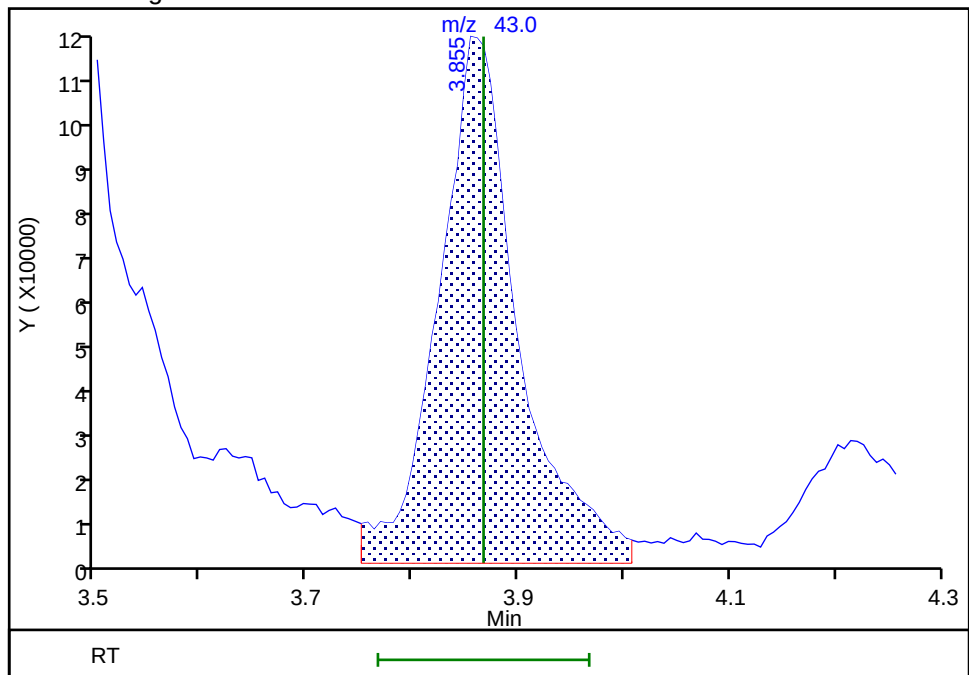
RT: 3.85
Area: 517473
Amount: 24.896311
Amount Units: ug/l

Processing Integration Results



RT: 3.85
Area: 553177
Amount: 25.420101
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 16:54:24

Audit Action: Assigned New Baseline

Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC

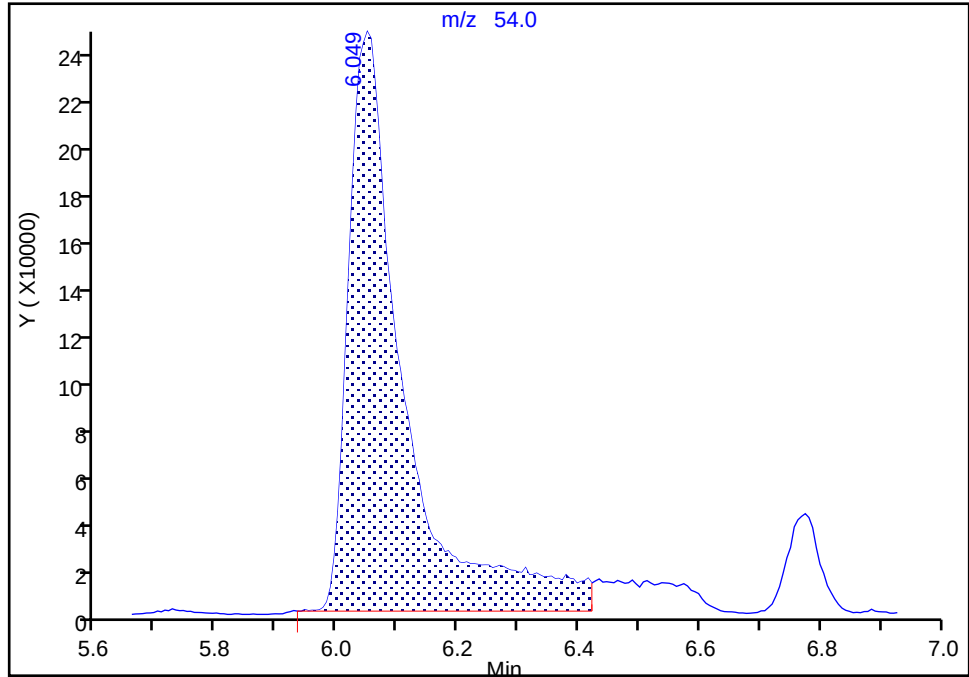
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Injection Date: 01-Sep-2020 13:35:30 Instrument ID: 10193
Lims ID: IC STD7
Client ID:
Operator ID: dvv10203 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

40 Propionitrile, CAS: 107-12-0

Signal: 1

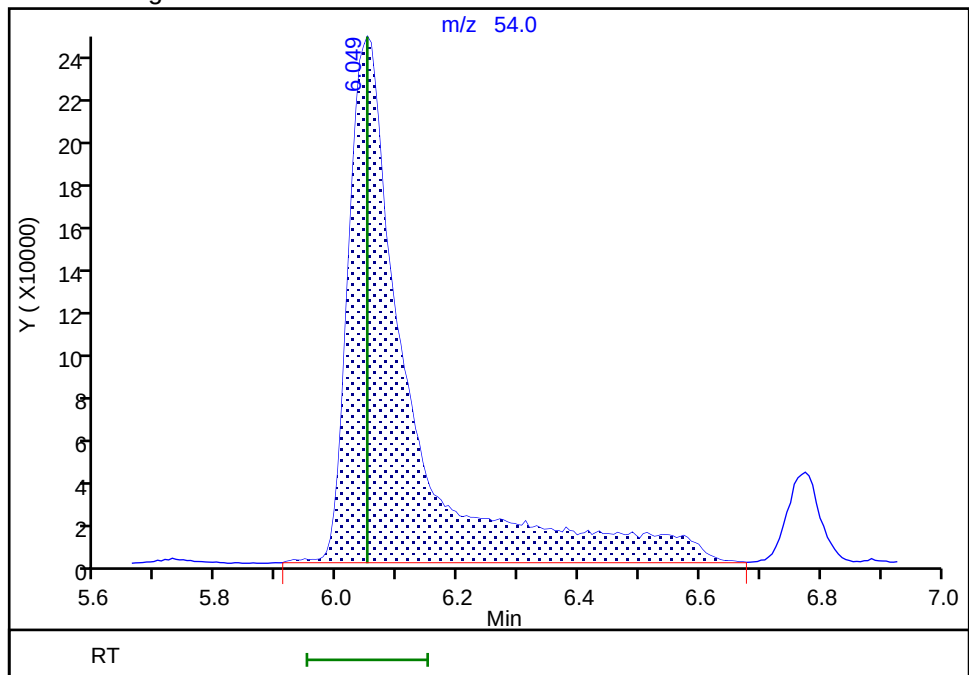
RT: 6.05
Area: 1559949
Amount: 516.6274
Amount Units: ug/l

Processing Integration Results



RT: 6.05
Area: 1736921
Amount: 526.9031
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 16:54:59
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration
Page 223 of 349

10/27/2020

Eurofins Lancaster Laboratories Env, LLC

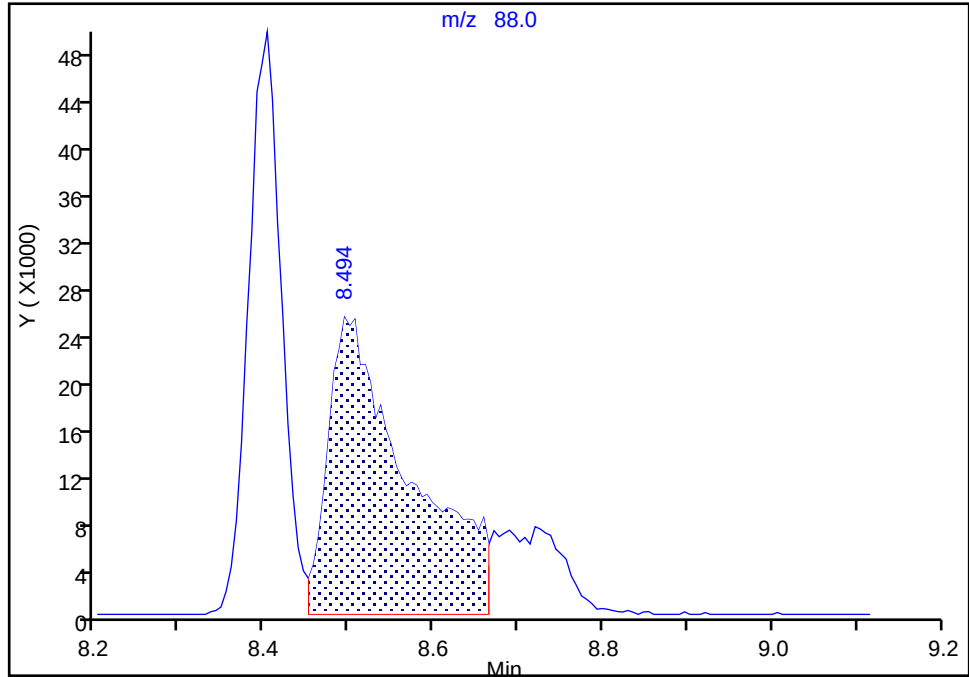
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Injection Date: 01-Sep-2020 13:35:30 Instrument ID: 10193
Lims ID: IC STD7
Client ID:
Operator ID: dvv10203 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

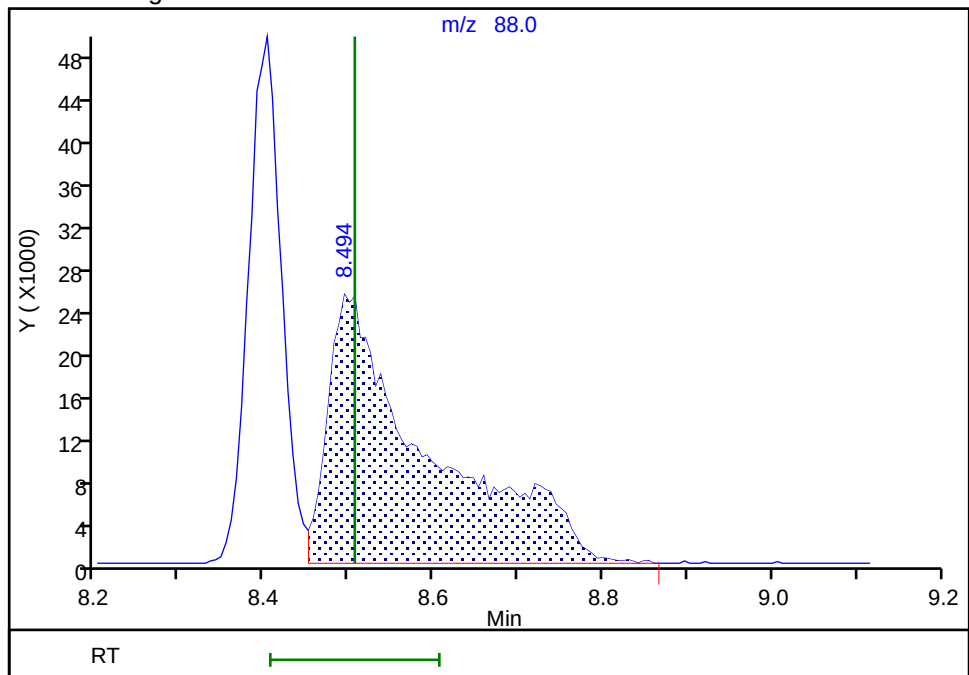
RT: 8.49
Area: 167365
Amount: 1747.3259
Amount Units: ug/l

Processing Integration Results



RT: 8.49
Area: 207069
Amount: 1491.2668
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 16:55:25

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I02.D
 Lims ID: ICIS
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 01-Sep-2020 13:57:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: ICIS
 Misc. Info.: 410-0009503-004
 Operator ID: dvv10203 Instrument ID: 10193
 Sublist: chrom-MSV_10193_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Sep-2020 20:10:18 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1059

First Level Reviewer: virayd

Date: 01-Sep-2020 15:34:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.916	1.916	0.000	99	673806	10.0	10.1	M
3 Chloromethane	50	2.105	2.105	0.000	89	750884	10.0	9.57	
4 Butadiene	39	2.215	2.215	0.000	93	715813	10.0	9.70	
5 Vinyl chloride	62	2.221	2.221	0.000	79	711167	10.0	9.80	
6 Bromomethane	94	2.526	2.526	0.000	91	508157	10.0	9.92	
7 Chloroethane	64	2.611	2.611	0.000	95	428295	10.0	9.56	
8 Dichlorofluoromethane	67	2.836	2.836	0.000	83	942431	10.0	9.69	
9 Trichlorofluoromethane	101	2.897	2.897	0.000	88	921738	10.0	9.77	
11 Ethyl ether	59	3.141	3.141	0.000	92	470167	10.0	9.83	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.227	3.227	0.000	85	663506	10.0	9.47	
13 Acrolein	56	3.306	3.306	0.000	99	2808556	500.0	473.4	
14 1,1-Dichloroethene	96	3.434	3.434	0.000	88	475627	10.0	9.97	
15 1,1,2,2-Tetrafluoroethane	101	3.470	3.470	0.000	84	500744	10.0	10.3	
16 Acetone	43	3.470	3.470	0.000	98	541999	100.0	86.0	
17 Iodomethane	142	3.623	3.623	0.000	98	954840	10.0	10.1	
19 Ethyl bromide	108	3.653	3.653	0.000	98	399370	10.0	10.1	
18 Isopropyl alcohol	45	3.641	3.641	0.000	38	228137	200.0	184.1	
20 Carbon disulfide	76	3.714	3.714	0.000	100	1707453	10.0	10.1	
22 Methyl acetate	43	3.873	3.873	0.000	98	272722	10.0	11.0	M
23 3-Chloro-1-propene	41	3.891	3.891	0.000	88	815256	10.0	9.77	
24 Methylene Chloride	84	4.080	4.080	0.000	89	535609	10.0	10.1	
* 25 t-Butyl alcohol-d10 (IS)	65	4.111	4.111	0.000	98	148289	50.0	50.0	
26 2-Methyl-2-propanol	59	4.226	4.226	0.000	98	554170	200.0	187.6	
27 Acrylonitrile	53	4.422	4.422	0.000	79	466148	50.0	46.6	
28 Methyl tert-butyl ether	73	4.464	4.464	0.000	96	1520759	10.0	9.85	
29 trans-1,2-Dichloroethene	96	4.476	4.476	0.000	93	564465	10.0	10.1	
30 Hexane	57	4.897	4.897	0.000	95	807784	10.0	10.3	
32 1,1-Dichloroethane	63	5.141	5.141	0.000	85	1035693	10.0	10.1	
33 Isopropyl ether	45	5.202	5.202	0.000	93	1943658	10.0	9.93	
34 2-Chloro-1,3-butadiene	53	5.251	5.251	0.000	90	958306	10.0	9.91	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Tert-butyl ethyl ether	59	5.738	5.738	0.000	98	1849075	10.0	9.89	
36 2-Butanone (MEK)	43	5.952	5.952	0.000	99	1409728	100.0	95.4	
37 cis-1,2-Dichloroethene	96	5.976	5.976	0.000	71	625147	10.0	9.89	
38 2,2-Dichloropropane	77	5.988	5.988	0.000	69	890664	10.0	10.1	
40 Propionitrile	54	6.055	6.055	0.000	98	730594	200.0	194.8	
43 Methacrylonitrile	67	6.263	6.263	0.000	92	1440762	100.0	99.1	
44 Chlorobromomethane	128	6.311	6.311	0.000	69	279022	10.0	10.0	
45 Tetrahydrofuran	71	6.317	6.317	0.000	72	415910	100.0	99.5	
46 Chloroform	83	6.464	6.464	0.000	83	1017069	10.0	10.0	
\$ 47 Dibromofluoromethane (Surr)	113	6.683	6.683	0.000	70	488556	10.0	9.97	
48 1,1,1-Trichloroethane	97	6.689	6.689	0.000	92	934233	10.0	10.2	
49 Cyclohexane	56	6.775	6.775	0.000	92	971248	10.0	10.0	
50 Carbon tetrachloride	117	6.891	6.891	0.000	83	789037	10.0	10.3	
51 1,1-Dichloropropene	75	6.903	6.903	0.000	92	822564	10.0	10.0	
52 Isobutyl alcohol	41	7.086	7.086	0.000	92	455897	500.0	476.1	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.141	7.141	0.000	0	99744	10.0	9.99	
54 Benzene	78	7.165	7.165	0.000	97	2366224	10.0	9.99	
55 1,2-Dichloroethane	62	7.238	7.238	0.000	91	660414	10.0	9.25	
56 Tert-amyl methyl ether	73	7.360	7.360	0.000	97	1692208	10.0	9.94	
* 57 Fluorobenzene (IS)	96	7.573	7.573	0.000	94	2062892	10.0	10.0	
58 n-Heptane	43	7.579	7.579	0.000	66	886773	10.0	10.1	
59 n-Butanol	56	7.976	7.976	0.000	89	804563	1000.0	1013.8	M
60 Trichloroethene	95	8.055	8.055	0.000	94	613428	10.0	10.0	
61 Methylcyclohexane	83	8.360	8.360	0.000	92	946727	10.0	10.1	
62 1,2-Dichloropropane	63	8.390	8.390	0.000	71	599777	10.0	9.86	
63 2-ethoxy-2-methyl butane	87	8.402	8.402	0.000	91	965317	10.0	10.2	
64 Methyl methacrylate	69	8.482	8.482	0.000	91	302973	10.0	9.78	
66 Dibromomethane	93	8.500	8.500	0.000	95	293984	10.0	9.87	
65 1,4-Dioxane	88	8.506	8.506	0.000	31	79862	500.0	505.4	M
67 Dichlorobromomethane	83	8.738	8.738	0.000	93	747888	10.0	10.2	
68 2-Nitropropane	41	9.024	9.024	0.000	99	995940	100.0	103.6	
71 1-Bromo-2-chloroethane	63	9.134	9.134	0.000	95	622797	10.0	9.90	
72 cis-1,3-Dichloropropene	75	9.299	9.299	0.000	92	943666	10.0	10.3	
73 4-Methyl-2-pentanone (MIBK)	43	9.488	9.488	0.000	98	4260875	100.0	99.2	
\$ 74 Toluene-d8 (Surr)	98	9.616	9.616	0.000	94	2048995	10.0	10.0	
75 Toluene	92	9.689	9.689	0.000	97	1562669	10.0	10.1	
76 trans-1,3-Dichloropropene	75	9.957	9.957	0.000	92	808366	10.0	10.5	
78 Ethyl methacrylate	69	10.024	10.024	0.000	90	673046	10.0	10.3	
79 1,1,2-Trichloroethane	97	10.170	10.170	0.000	87	425508	10.0	10.0	
80 Tetrachloroethene	166	10.250	10.250	0.000	93	692046	10.0	10.0	
81 1,3-Dichloropropane	76	10.329	10.329	0.000	94	746124	10.0	9.94	
82 2-Hexanone	43	10.390	10.390	0.000	97	3099544	100.0	102.2	
83 Chlorodibromomethane	129	10.548	10.548	0.000	88	539411	10.0	10.9	
84 Ethylene Dibromide	107	10.658	10.658	0.000	99	431839	10.0	10.3	
* 85 Chlorobenzene-d5 (IS)	117	11.097	11.097	0.000	85	1569631	10.0	10.0	
86 1-Chlorohexane	91	11.109	11.109	0.000	96	856372	10.0	9.73	
87 Chlorobenzene	112	11.121	11.121	0.000	93	1740350	10.0	10.0	
89 1,1,1,2-Tetrachloroethane	131	11.207	11.207	0.000	41	617994	10.0	10.4	
90 Ethylbenzene	91	11.213	11.213	0.000	98	3077887	10.0	10.1	
91 m-Xylene & p-Xylene	106	11.329	11.329	0.000	0	2455146	20.0	20.6	
92 o-Xylene	106	11.664	11.664	0.000	95	1197012	10.0	10.2	
93 Styrene	104	11.676	11.676	0.000	93	2044773	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
94 Bromoform	173	11.835	11.835	0.000	96	322179	10.0	11.7	
95 Isopropylbenzene	105	11.969	11.969	0.000	96	3180524	10.0	10.3	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.109	12.109	0.000	89	773730	10.0	10.0	
99 1,1,2,2-Tetrachloroethane	83	12.219	12.219	0.000	72	569960	10.0	9.92	
100 Bromobenzene	156	12.231	12.231	0.000	92	786388	10.0	9.96	
101 trans-1,4-Dichloro-2-butene	53	12.243	12.243	0.000	93	1707722	100.0	107.3	
102 1,2,3-Trichloropropane	110	12.261	12.261	0.000	79	153575	10.0	9.82	
103 N-Propylbenzene	91	12.298	12.298	0.000	99	3755554	10.0	10.1	
104 2-Chlorotoluene	126	12.377	12.377	0.000	97	750019	10.0	9.90	
105 1,3,5-Trimethylbenzene	105	12.438	12.438	0.000	94	2762343	10.0	10.1	
106 4-Chlorotoluene	126	12.469	12.469	0.000	98	787376	10.0	10.0	
107 tert-Butylbenzene	134	12.682	12.682	0.000	88	583616	10.0	9.78	
108 Pentachloroethane	167	12.713	12.713	0.000	58	477219	10.0	10.7	
109 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	2885821	10.0	10.2	
110 sec-Butylbenzene	105	12.847	12.847	0.000	94	3571893	10.0	10.1	
111 1,3-Dichlorobenzene	146	12.944	12.944	0.000	97	1582324	10.0	10.0	
112 4-Isopropyltoluene	119	12.956	12.956	0.000	95	3180481	10.0	10.3	
* 113 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	920484	10.0	10.0	
114 1,4-Dichlorobenzene	146	13.017	13.017	0.000	92	1615615	10.0	9.96	
115 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	99	1234014	10.0	9.98	
116 Benzyl chloride	126	13.097	13.097	0.000	99	254856	10.0	11.1	
119 n-Butylbenzene	92	13.249	13.249	0.000	97	1635579	10.0	10.5	
120 1,2-Dichlorobenzene	146	13.280	13.280	0.000	96	1503472	10.0	10.1	
118 p-Diethylbenzene	119	13.304	13.304	0.000	0	1569936	10.0	10.0	
123 1,2-Dibromo-3-Chloropropane	155	13.834	13.834	0.000	86	86753	10.0	11.0	
124 1,3,5-Trichlorobenzene	180	13.956	13.956	0.000	94	1298817	10.0	10.1	
125 1,2,4-Trichlorobenzene	180	14.383	14.383	0.000	90	1161828	10.0	10.1	
126 Hexachlorobutadiene	225	14.468	14.468	0.000	94	568070	10.0	10.1	
127 Naphthalene	128	14.566	14.566	0.000	97	2092386	10.0	10.2	
128 1,2,3-Trichlorobenzene	180	14.712	14.712	0.000	94	1019899	10.0	9.98	
129 2-Methylnaphthalene	142	15.334	15.334	0.000	0	1458971	10.0	10.5	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00022	Amount Added: 10.00	Units: uL	
MSV_RV4_826_00024	Amount Added: 10.00	Units: uL	
MSV_RV4GAS826_00072	Amount Added: 10.00	Units: uL	
MSV_25_826ISS_00001	Amount Added: 1.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I02.D

Injection Date: 01-Sep-2020 13:57:30

Instrument ID: 10193

Operator ID: dwv10203

Lims ID: ICIS

Worklist Smp#: 4

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

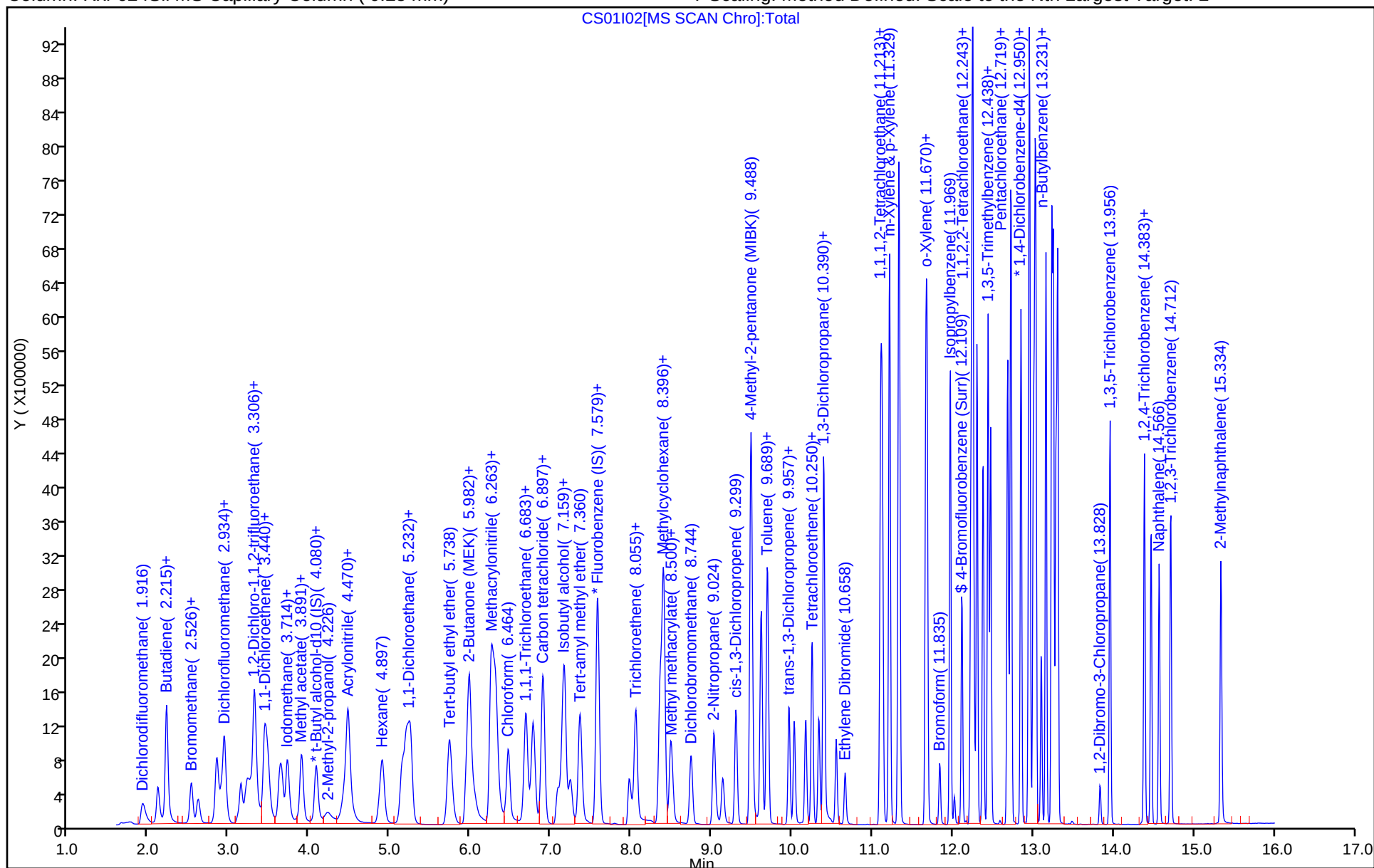
ALS Bottle#: 3

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

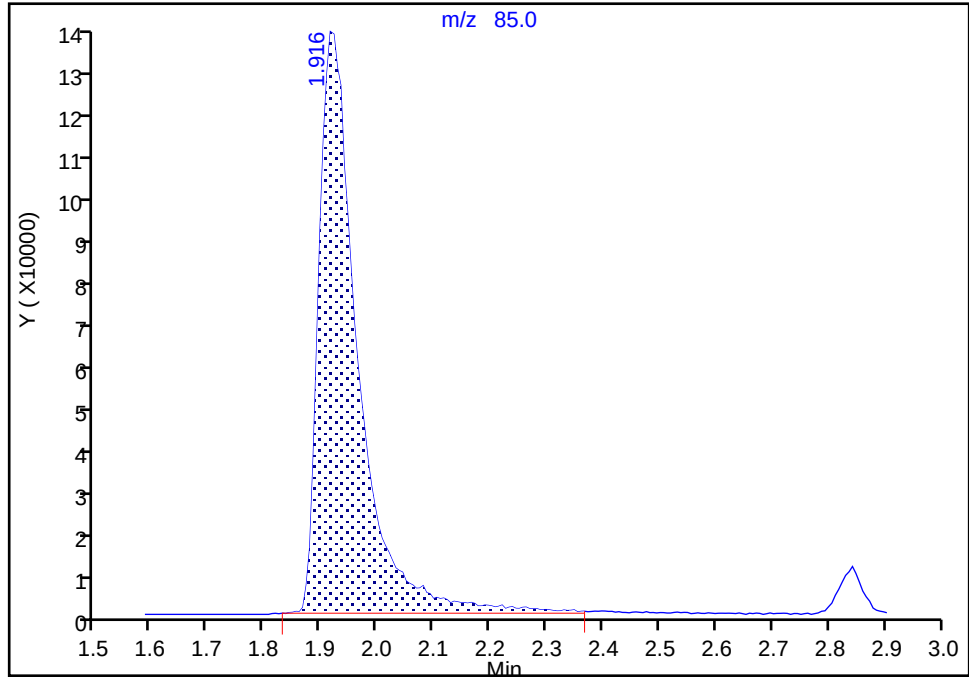
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Injection Date: 01-Sep-2020 13:57:30 Instrument ID: 10193
Lims ID: ICIS
Client ID:
Operator ID: dvv10203 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

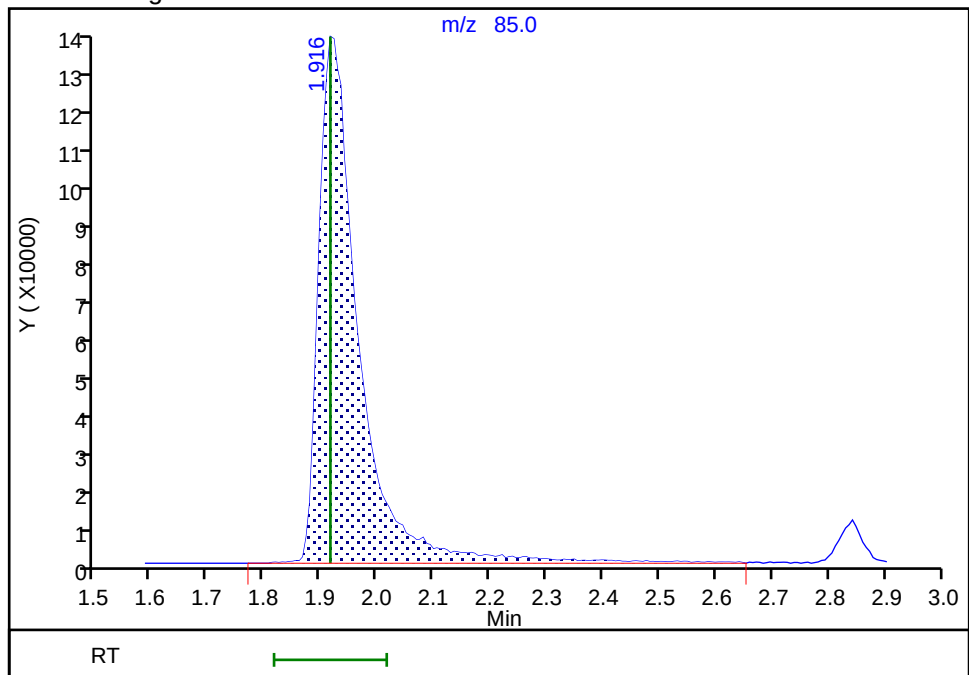
RT: 1.92
Area: 657253
Amount: 9.998399
Amount Units: ug/l

Processing Integration Results



RT: 1.92
Area: 673806
Amount: 10.122260
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 16:56:25

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

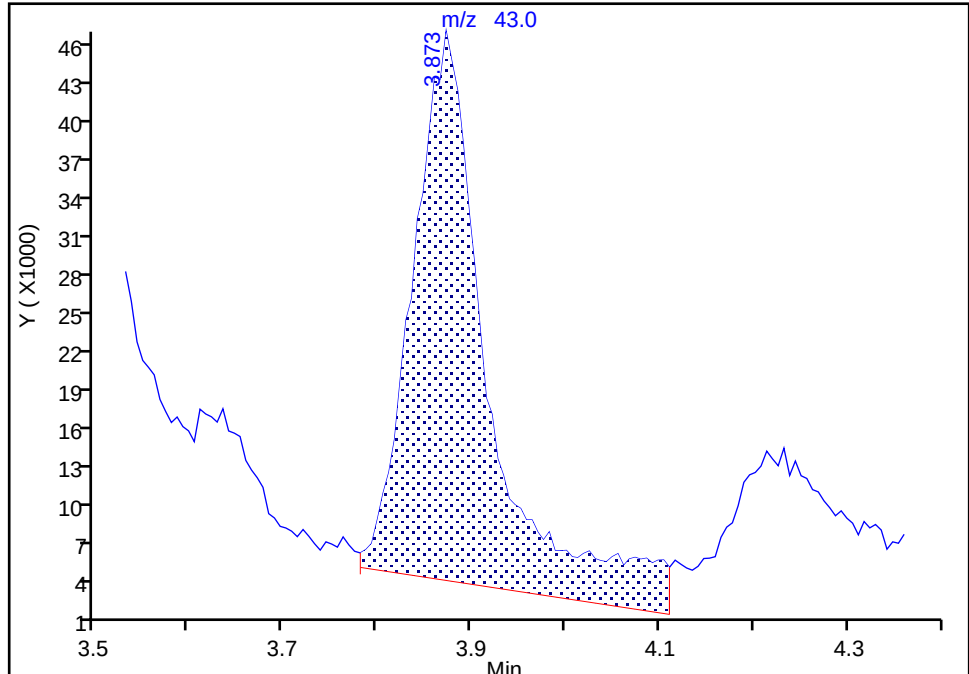
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Injection Date: 01-Sep-2020 13:57:30 Instrument ID: 10193
Lims ID: ICIS
Client ID:
Operator ID: dvv10203 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

22 Methyl acetate, CAS: 79-20-9

Signal: 1

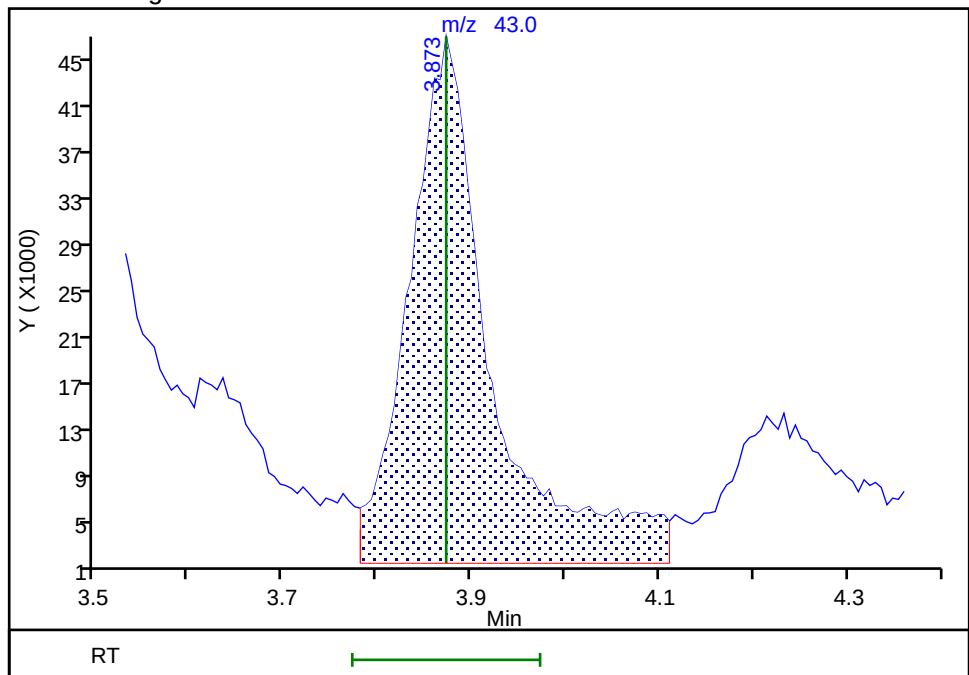
RT: 3.87
Area: 237365
Amount: 9.508028
Amount Units: ug/l

Processing Integration Results



RT: 3.87
Area: 272722
Amount: 11.012573
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 16:56:51

Audit Action: Assigned New Baseline

Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC

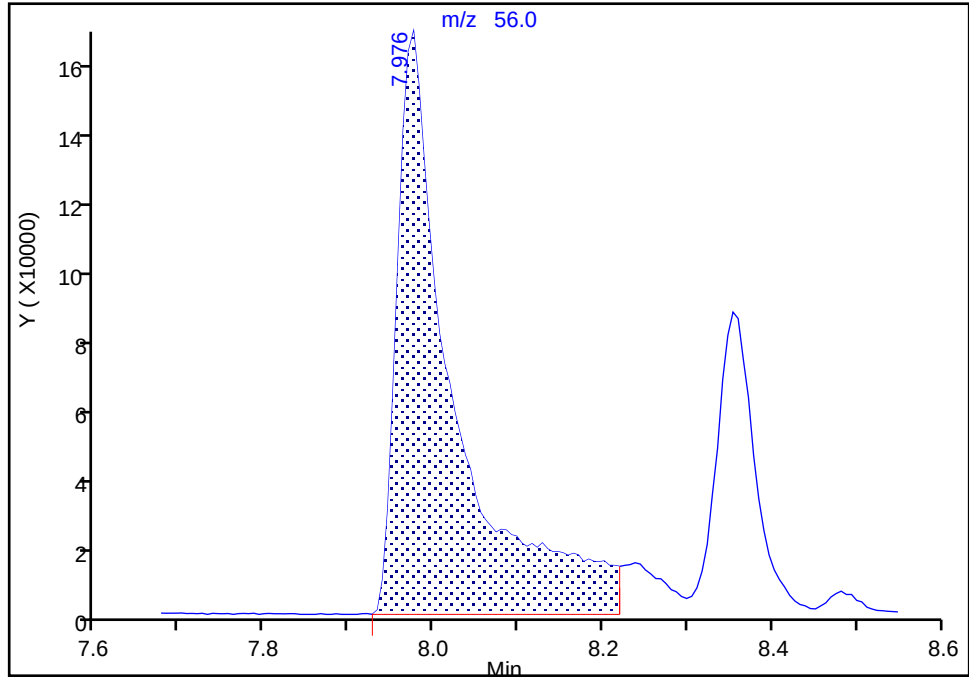
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Injection Date: 01-Sep-2020 13:57:30 Instrument ID: 10193
Lims ID: ICIS
Client ID:
Operator ID: dvv10203 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

59 n-Butanol, CAS: 71-36-3

Signal: 1

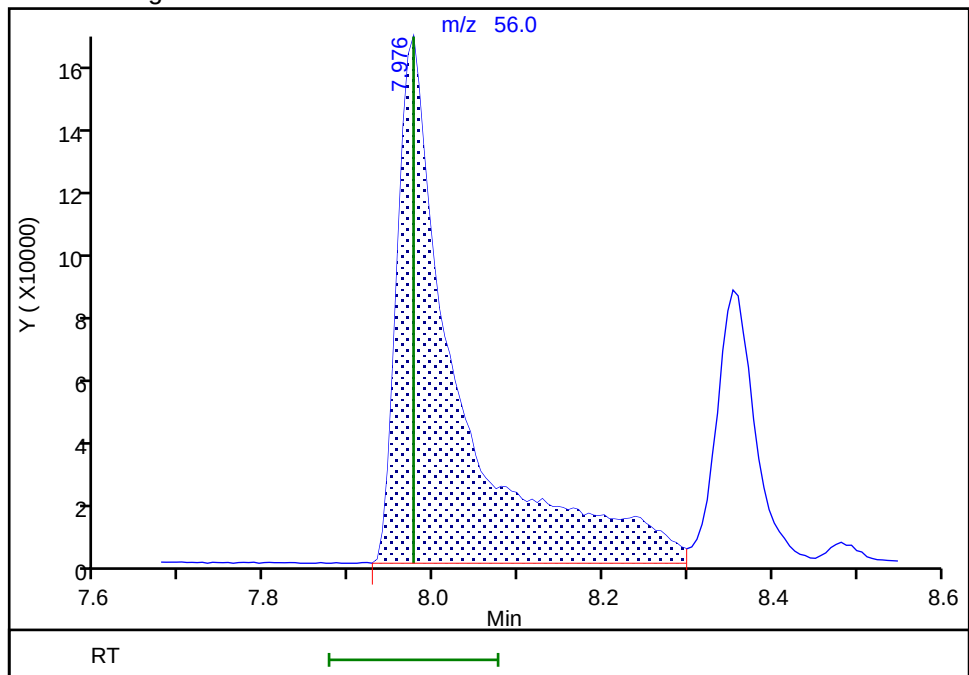
RT: 7.98
Area: 757439
Amount: 899.3216
Amount Units: ug/l

Processing Integration Results



RT: 7.98
Area: 804563
Amount: 1013.8075
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:14:33

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

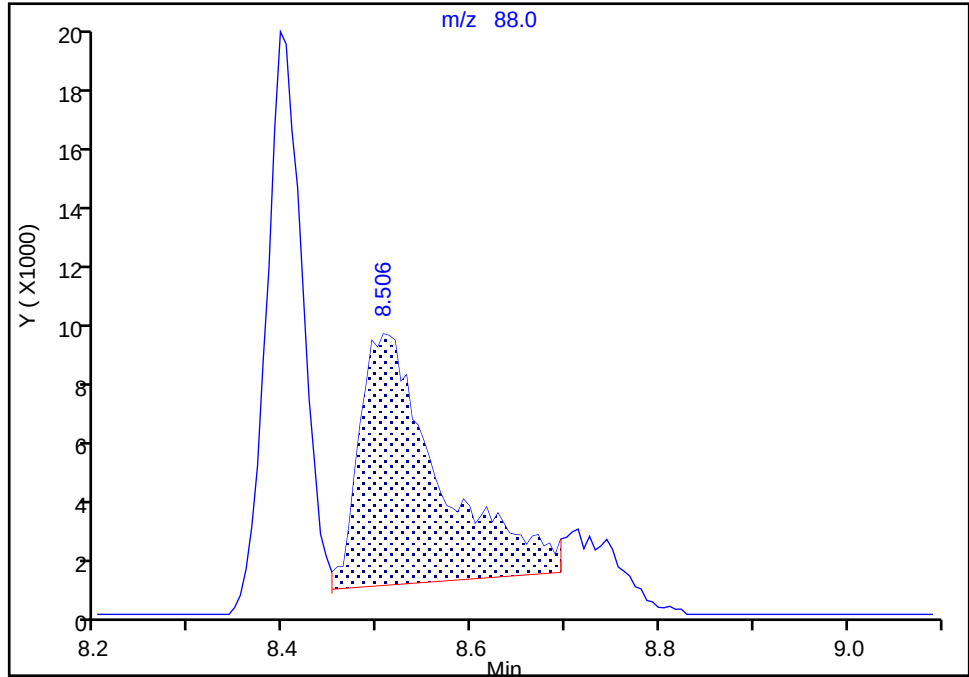
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Injection Date: 01-Sep-2020 13:57:30 Instrument ID: 10193
Lims ID: ICIS
Client ID:
Operator ID: dvv10203 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

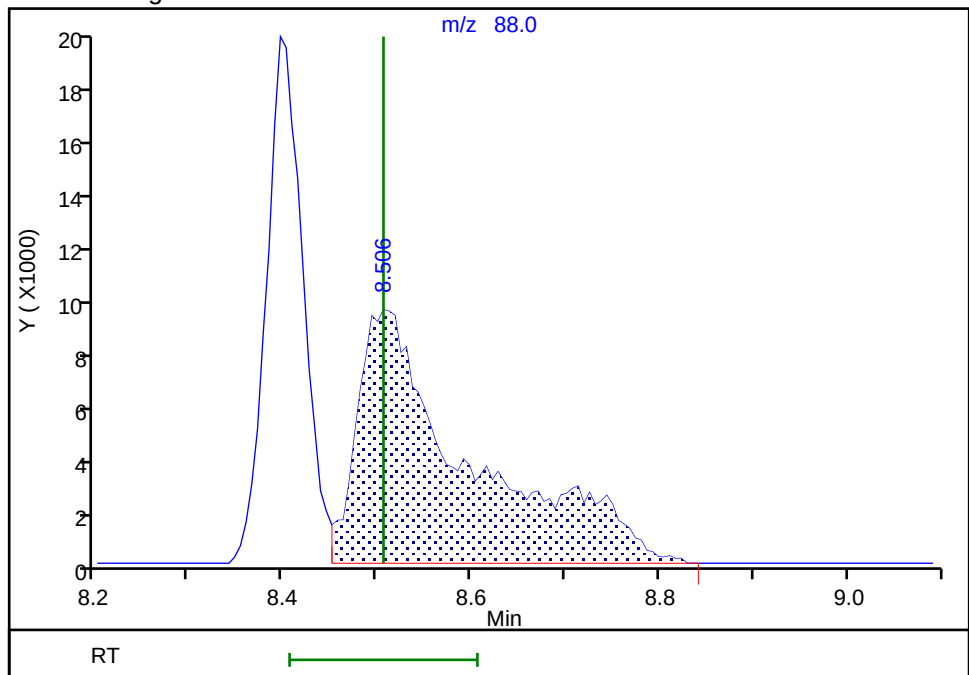
RT: 8.51
Area: 51295
Amount: 445.9401
Amount Units: ug/l

Processing Integration Results



RT: 8.51
Area: 79862
Amount: 505.4008
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 16:57:29

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I03.D
 Lims ID: IC STD5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 01-Sep-2020 14:19:30 ALS Bottle#: 4 Worklist Smp#: 5
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: IC STD5
 Misc. Info.: 410-0009503-005
 Operator ID: dvv10203 Instrument ID: 10193
 Sublist: chrom-MSV_10193_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Sep-2020 20:10:27 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1059

First Level Reviewer: campbellme

Date: 01-Sep-2020 16:59:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.910	1.916	-0.006	99	335623	5.00	5.11	M
3 Chloromethane	50	2.099	2.105	-0.006	99	374739	5.00	4.84	
4 Butadiene	39	2.203	2.215	-0.012	94	342407	5.00	4.70	
5 Vinyl chloride	62	2.215	2.221	-0.006	98	352685	5.00	4.93	
6 Bromomethane	94	2.513	2.526	-0.013	91	247103	5.00	4.89	
7 Chloroethane	64	2.605	2.611	-0.006	100	214069	5.00	4.84	
8 Dichlorofluoromethane	67	2.830	2.836	-0.006	97	467823	5.00	4.88	
9 Trichlorofluoromethane	101	2.898	2.897	0.001	97	458162	5.00	4.92	
11 Ethyl ether	59	3.135	3.141	-0.006	92	229113	5.00	4.86	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.215	3.227	-0.012	92	312190	5.00	4.51	
13 Acrolein	56	3.300	3.306	-0.006	99	1427897	250.0	238.2	
14 1,1-Dichloroethene	96	3.428	3.434	-0.006	96	221612	5.00	4.71	
15 1,1,2,2-Tetrachloroethane	101	3.458	3.470	-0.012	92	234166	5.00	4.89	
16 Acetone	43	3.464	3.470	-0.006	98	322634	50.0	50.7	
17 Iodomethane	142	3.617	3.623	-0.006	99	440171	5.00	4.73	
18 Isopropyl alcohol	45	3.635	3.641	-0.006	40	106675	100.0	88.1	
19 Ethyl bromide	108	3.641	3.653	-0.012	98	194973	5.00	4.99	
20 Carbon disulfide	76	3.714	3.714	0.000	100	790900	5.00	4.76	
22 Methyl acetate	43	3.867	3.873	-0.006	97	136367	5.00	5.45	
23 3-Chloro-1-propene	41	3.885	3.891	-0.006	89	399375	5.00	4.85	
24 Methylene Chloride	84	4.068	4.080	-0.012	94	248970	5.00	4.75	
* 25 t-Butyl alcohol-d10 (IS)	65	4.111	4.111	0.000	98	149797	50.0	50.0	
26 2-Methyl-2-propanol	59	4.208	4.226	-0.018	99	278959	100.0	93.5	
27 Acrylonitrile	53	4.409	4.422	-0.013	99	240268	25.0	23.8	
28 Methyl tert-butyl ether	73	4.458	4.464	-0.006	91	727225	5.00	4.77	
29 trans-1,2-Dichloroethene	96	4.470	4.476	-0.006	97	262964	5.00	4.78	
30 Hexane	57	4.897	4.897	0.000	95	383350	5.00	4.94	
32 1,1-Dichloroethane	63	5.135	5.141	-0.006	96	478397	5.00	4.72	
33 Isopropyl ether	45	5.196	5.202	-0.006	93	920754	5.00	4.77	
34 2-Chloro-1,3-butadiene	53	5.245	5.251	-0.006	93	446582	5.00	4.68	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Tert-butyl ethyl ether	59	5.726	5.738	-0.012	98	891552	5.00	4.83	
36 2-Butanone (MEK)	43	5.940	5.952	-0.012	100	701991	50.0	47.0	
37 cis-1,2-Dichloroethene	96	5.970	5.976	-0.006	83	295208	5.00	4.73	
38 2,2-Dichloropropane	77	5.988	5.988	0.000	88	413880	5.00	4.74	
40 Propionitrile	54	6.043	6.055	-0.012	99	356593	100.0	94.1	M
S 42 1,2-Dichloroethene, Total	100				0			9.51	
43 Methacrylonitrile	67	6.251	6.263	-0.013	93	693145	50.0	47.2	
44 Chlorobromomethane	128	6.311	6.311	0.000	78	135663	5.00	4.94	
45 Tetrahydrofuran	71	6.311	6.317	-0.006	86	193486	50.0	45.8	
46 Chloroform	83	6.464	6.464	0.000	95	480095	5.00	4.78	
\$ 47 Dibromofluoromethane (Surr)	113	6.683	6.683	0.000	93	486623	10.0	10.1	
48 1,1,1-Trichloroethane	97	6.677	6.689	-0.012	98	434162	5.00	4.80	
49 Cyclohexane	56	6.769	6.775	-0.006	93	460601	5.00	4.82	
50 Carbon tetrachloride	117	6.891	6.891	0.000	96	367580	5.00	4.85	
51 1,1-Dichloropropene	75	6.897	6.903	-0.006	94	386758	5.00	4.76	
52 Isobutyl alcohol	41	7.080	7.086	-0.006	94	230672	250.0	238.4	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.134	7.141	-0.006	0	99716	10.0	10.1	
54 Benzene	78	7.159	7.165	-0.006	97	1116708	5.00	4.78	
55 1,2-Dichloroethane	62	7.238	7.238	0.000	98	322763	5.00	4.58	
56 Tert-amyl methyl ether	73	7.354	7.360	-0.006	97	810520	5.00	4.82	
* 57 Fluorobenzene (IS)	96	7.573	7.573	0.000	99	2035412	10.0	10.0	
58 n-Heptane	43	7.573	7.579	-0.006	90	417078	5.00	4.83	
59 n-Butanol	56	7.976	7.976	0.000	90	388291	500.0	484.3	M
60 Trichloroethene	95	8.049	8.055	-0.006	98	287079	5.00	4.76	
61 Methylcyclohexane	83	8.354	8.360	-0.006	92	476901	5.00	5.17	
62 1,2-Dichloropropane	63	8.390	8.390	0.000	86	285051	5.00	4.75	
63 2-ethoxy-2-methyl butane	87	8.396	8.402	-0.006	91	452593	5.00	4.84	
64 Methyl methacrylate	69	8.482	8.482	0.000	91	148411	5.00	4.74	
66 Dibromomethane	93	8.494	8.500	-0.006	96	140420	5.00	4.78	
65 1,4-Dioxane	88	8.500	8.506	-0.006	32	39014	250.0	244.4	M
67 Dichlorobromomethane	83	8.738	8.738	0.000	98	348987	5.00	4.81	
68 2-Nitropropane	41	9.024	9.024	0.000	99	459149	50.0	47.3	
71 1-Bromo-2-chloroethane	63	9.134	9.134	0.000	99	302656	5.00	4.87	
72 cis-1,3-Dichloropropene	75	9.299	9.299	0.000	94	439884	5.00	4.88	
73 4-Methyl-2-pentanone (MIBK)	43	9.482	9.488	-0.006	98	2060281	50.0	47.5	
\$ 74 Toluene-d8 (Surr)	98	9.610	9.616	-0.006	94	2027327	10.0	10.0	
75 Toluene	92	9.689	9.689	0.000	98	721183	5.00	4.74	
76 trans-1,3-Dichloropropene	75	9.957	9.957	0.000	96	378157	5.00	4.96	
78 Ethyl methacrylate	69	10.024	10.024	0.000	89	321458	5.00	5.00	
S 77 1,3-Dichloropropene, Total	100				0			9.84	
79 1,1,2-Trichloroethane	97	10.164	10.170	-0.006	91	201374	5.00	4.79	
80 Tetrachloroethene	166	10.244	10.250	-0.006	97	322909	5.00	4.75	
81 1,3-Dichloropropane	76	10.329	10.329	0.000	94	353883	5.00	4.77	
82 2-Hexanone	43	10.390	10.390	0.000	97	1483984	50.0	48.4	
83 Chlorodibromomethane	129	10.548	10.548	0.000	90	248177	5.00	5.09	
84 Ethylene Dibromide	107	10.658	10.658	0.000	98	202633	5.00	4.88	
* 85 Chlorobenzene-d5 (IS)	117	11.097	11.097	0.000	87	1549814	10.0	10.0	
86 1-Chlorohexane	91	11.109	11.109	0.000	98	400674	5.00	4.61	
87 Chlorobenzene	112	11.122	11.121	0.001	94	821070	5.00	4.78	
89 1,1,1,2-Tetrachloroethane	131	11.207	11.207	0.000	94	287568	5.00	4.92	
90 Ethylbenzene	91	11.213	11.213	0.000	98	1440317	5.00	4.77	
S 88 Xylenes, Total	106				0			14.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
91 m-Xylene & p-Xylene	106	11.329	11.329	0.000	0	1133528	10.0	9.61	
92 o-Xylene	106	11.664	11.664	0.000	97	554888	5.00	4.80	
93 Styrene	104	11.676	11.676	0.000	95	949081	5.00	4.90	
94 Bromoform	173	11.835	11.835	0.000	97	143999	5.00	5.31	
95 Isopropylbenzene	105	11.969	11.969	0.000	96	1466907	5.00	4.80	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.109	12.109	0.000	91	764276	10.0	10.0	
99 1,1,2,2-Tetrachloroethane	83	12.219	12.219	0.000	93	269440	5.00	4.85	
100 Bromobenzene	156	12.231	12.231	0.000	94	365172	5.00	4.78	
101 trans-1,4-Dichloro-2-butene	53	12.243	12.243	0.000	93	790342	50.0	51.3	
102 1,2,3-Trichloropropane	110	12.268	12.261	0.007	83	72364	5.00	4.78	
103 N-Propylbenzene	91	12.298	12.298	0.000	99	1726631	5.00	4.82	
104 2-Chlorotoluene	126	12.377	12.377	0.000	97	350978	5.00	4.79	
105 1,3,5-Trimethylbenzene	105	12.438	12.438	0.000	94	1274650	5.00	4.80	
106 4-Chlorotoluene	126	12.469	12.469	0.000	98	362949	5.00	4.76	
107 tert-Butylbenzene	134	12.682	12.682	0.000	93	270627	5.00	4.69	
108 Pentachloroethane	167	12.713	12.713	0.000	92	223759	5.00	5.19	
109 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	1326302	5.00	4.87	
110 sec-Butylbenzene	105	12.847	12.847	0.000	94	1656218	5.00	4.84	
111 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	734044	5.00	4.81	
112 4-Isopropyltoluene	119	12.957	12.956	0.001	97	1448806	5.00	4.86	
* 113 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	890471	10.0	10.0	
114 1,4-Dichlorobenzene	146	13.017	13.017	0.000	94	753707	5.00	4.80	
115 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	98	586354	5.00	4.90	
116 Benzyl chloride	126	13.103	13.097	0.006	99	116794	5.00	5.28	
119 n-Butylbenzene	92	13.249	13.249	0.000	97	751620	5.00	4.97	
120 1,2-Dichlorobenzene	146	13.280	13.280	0.000	98	697848	5.00	4.85	
118 p-Diethylbenzene	119	13.304	13.304	0.000	0	755567	5.00	4.99	
123 1,2-Dibromo-3-Chloropropane	155	13.834	13.834	0.000	84	39048	5.00	5.12	
124 1,3,5-Trichlorobenzene	180	13.956	13.956	0.000	98	603506	5.00	4.85	
125 1,2,4-Trichlorobenzene	180	14.383	14.383	0.000	94	540926	5.00	4.85	
126 Hexachlorobutadiene	225	14.468	14.468	0.000	97	260304	5.00	4.77	
127 Naphthalene	128	14.566	14.566	0.000	97	981719	5.00	4.93	
128 1,2,3-Trichlorobenzene	180	14.712	14.712	0.000	95	477586	5.00	4.83	
129 2-Methylnaphthalene	142	15.334	15.334	0.000	0	699145	5.00	5.19	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00022

Amount Added: 5.00

Units: uL

MSV_RV4_826_00024

Amount Added: 5.00

Units: uL

MSV_RV4GAS826_00072

Amount Added: 5.00

Units: uL

MSV_25_826ISS_00001

Amount Added: 1.00

Units: uL

Run Reagent

Report Date: 01-Sep-2020 20:10:29

Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I03.D

Injection Date: 01-Sep-2020 14:19:30

Instrument ID: 10193

Operator ID: dwv10203

Lims ID: IC STD5

Worklist Smp#: 5

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

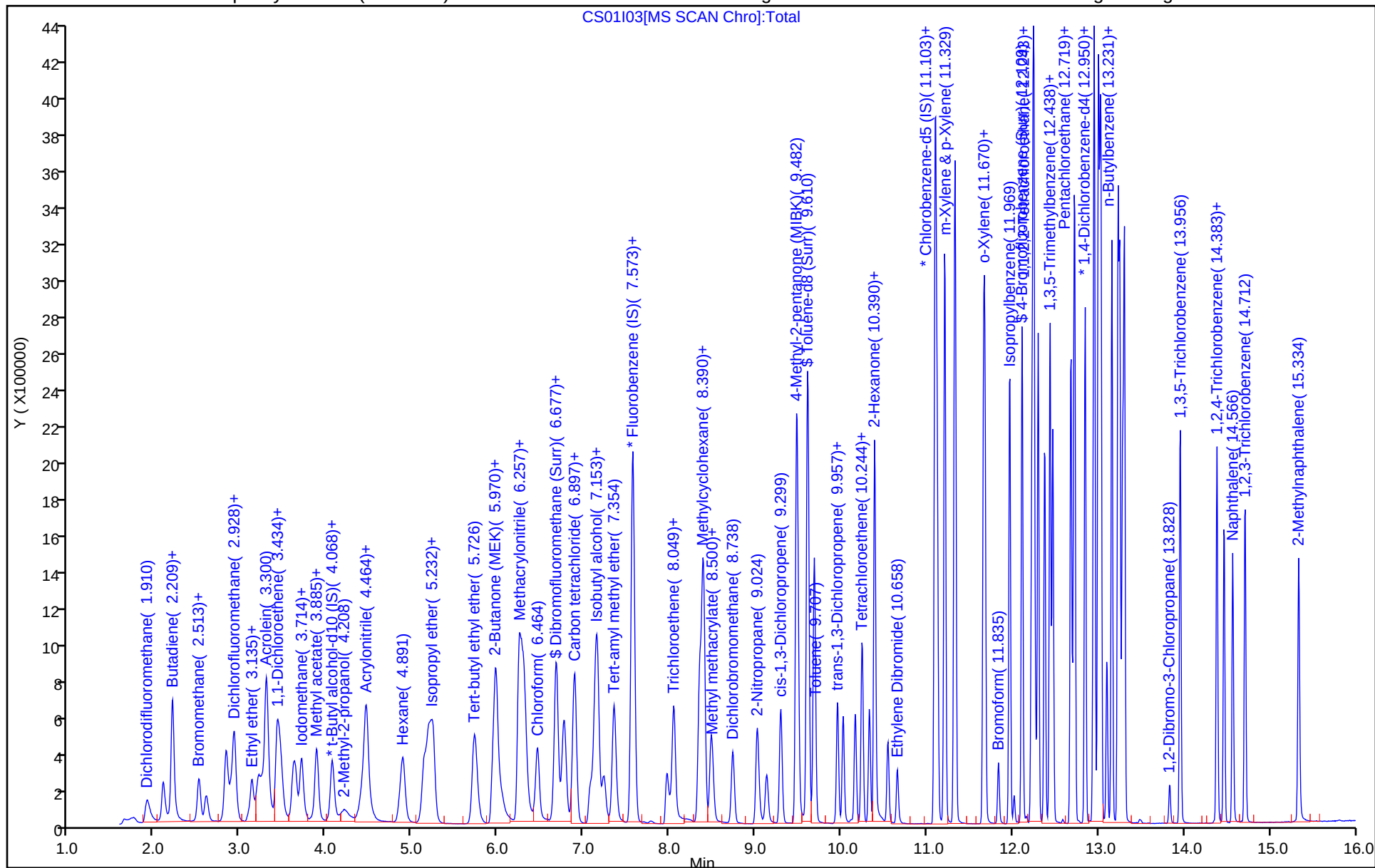
ALS Bottle#: 4

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

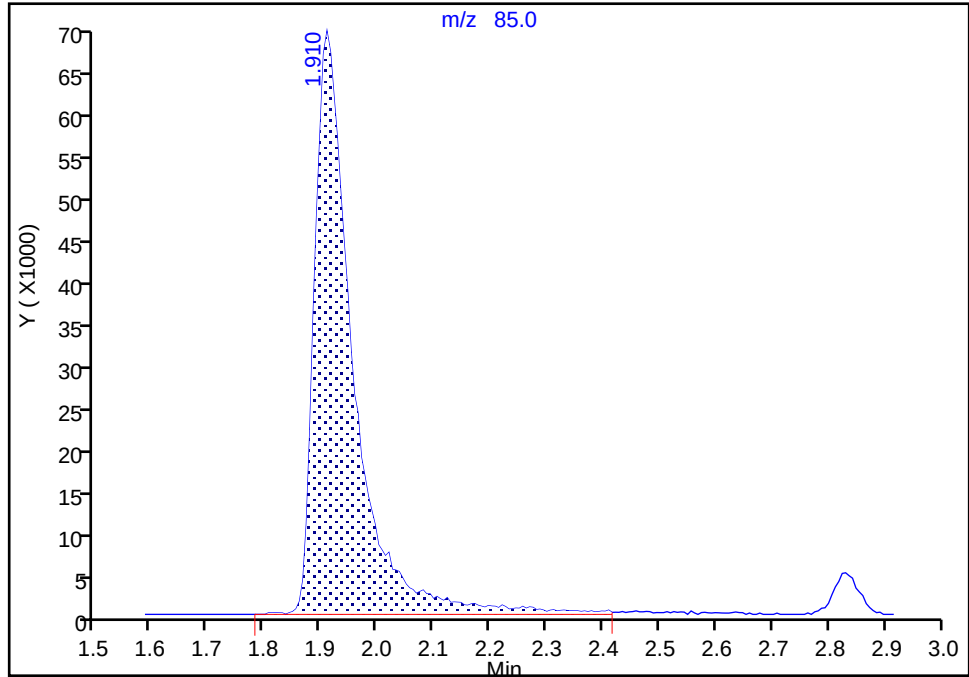
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Injection Date: 01-Sep-2020 14:19:30 Instrument ID: 10193
Lims ID: IC STD5
Client ID:
Operator ID: dvv10203 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

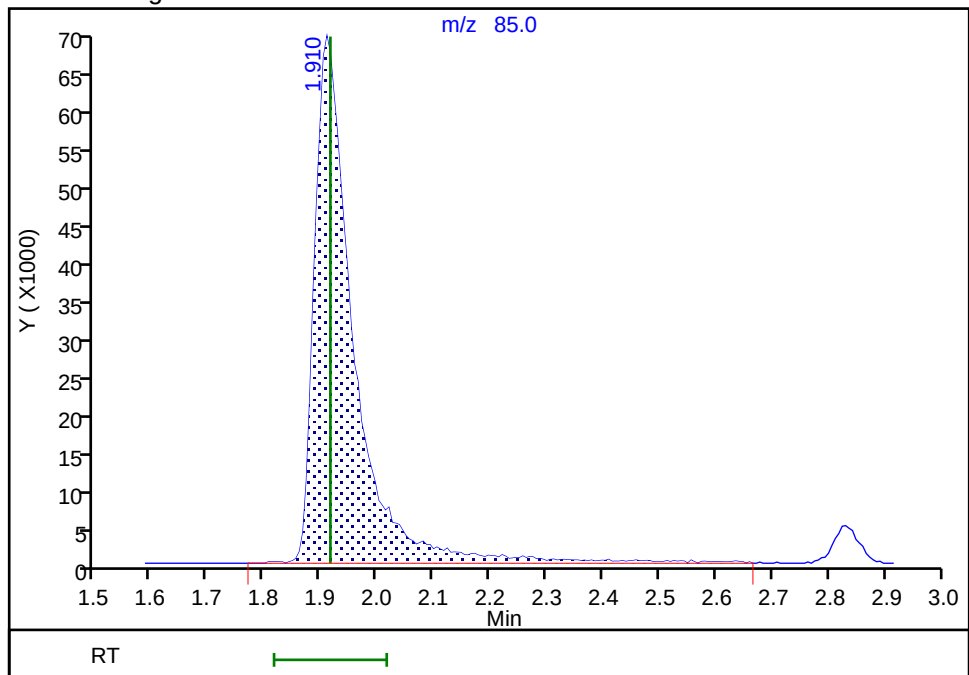
RT: 1.91
Area: 332253
Amount: 5.104245
Amount Units: ug/l

Processing Integration Results



RT: 1.91
Area: 335623
Amount: 5.109972
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 16:58:04

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

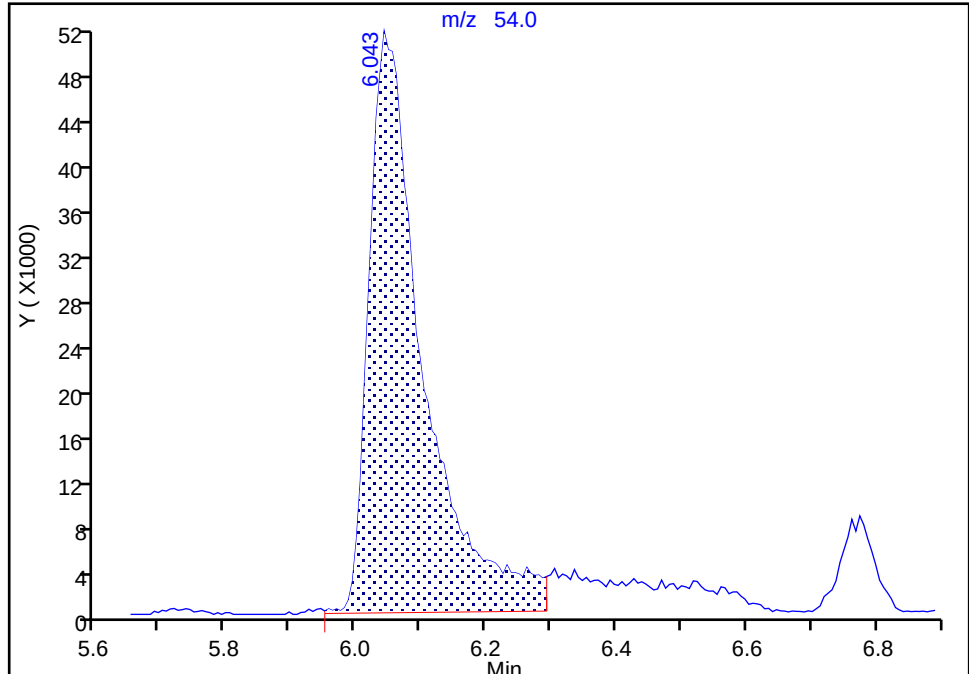
Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I03.D
Injection Date: 01-Sep-2020 14:19:30 Instrument ID: 10193
Lims ID: IC STD5
Client ID:
Operator ID: dvv10203 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm i.d.) Detector: MS Quad

40 Propionitrile, CAS: 107-12-0

Signal: 1

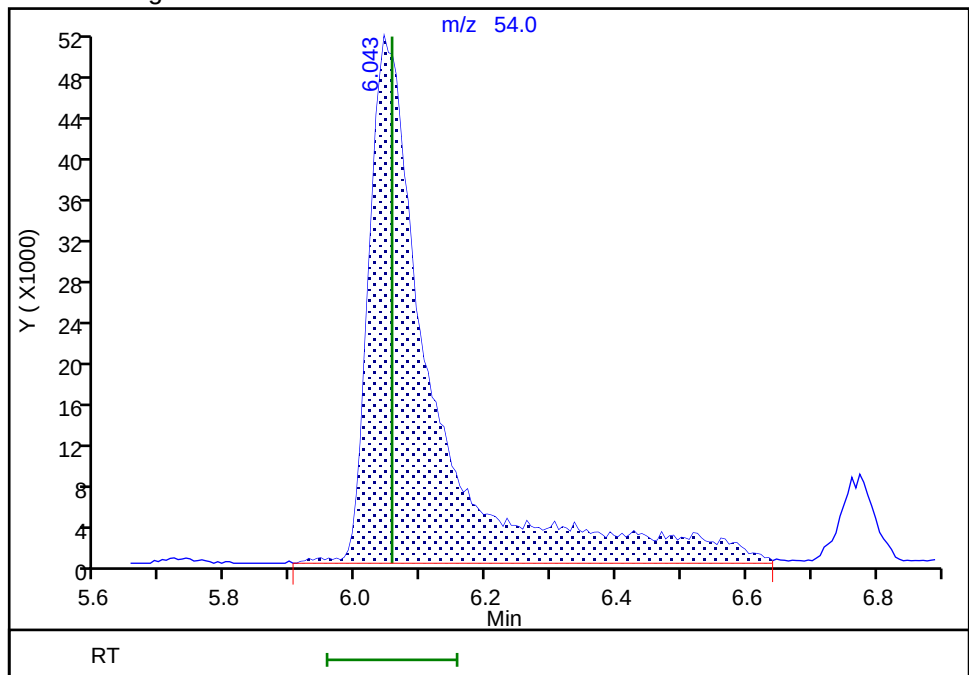
RT: 6.04
Area: 300992
Amount: 85.284659
Amount Units: ug/l

Processing Integration Results



RT: 6.04
Area: 356593
Amount: 94.098949
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 16:58:42

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

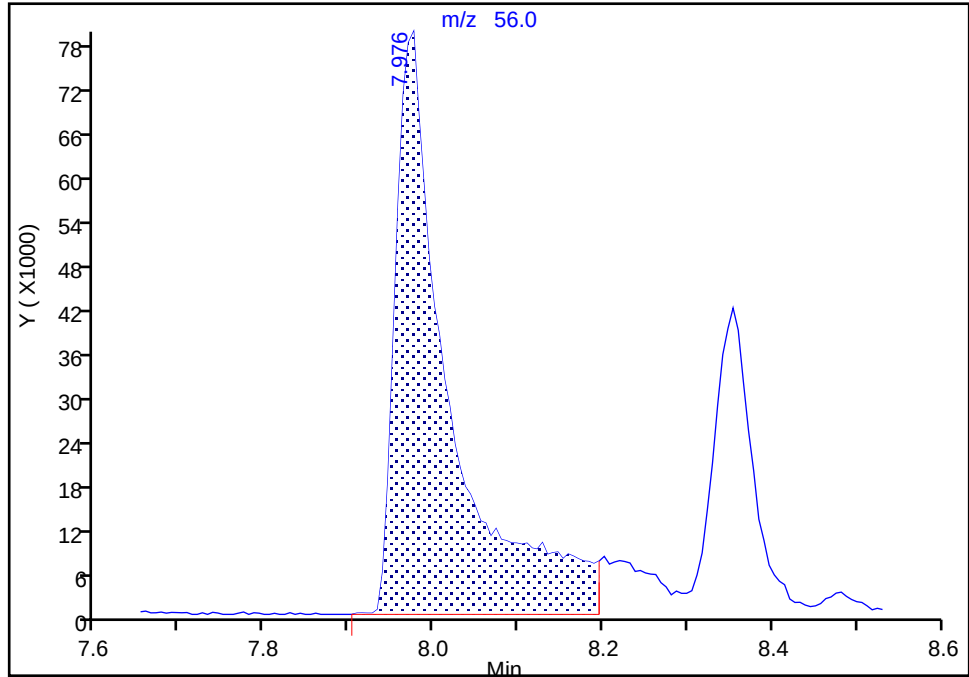
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Injection Date: 01-Sep-2020 14:19:30 Instrument ID: 10193
Lims ID: IC STD5
Client ID:
Operator ID: dvv10203 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

59 n-Butanol, CAS: 71-36-3

Signal: 1

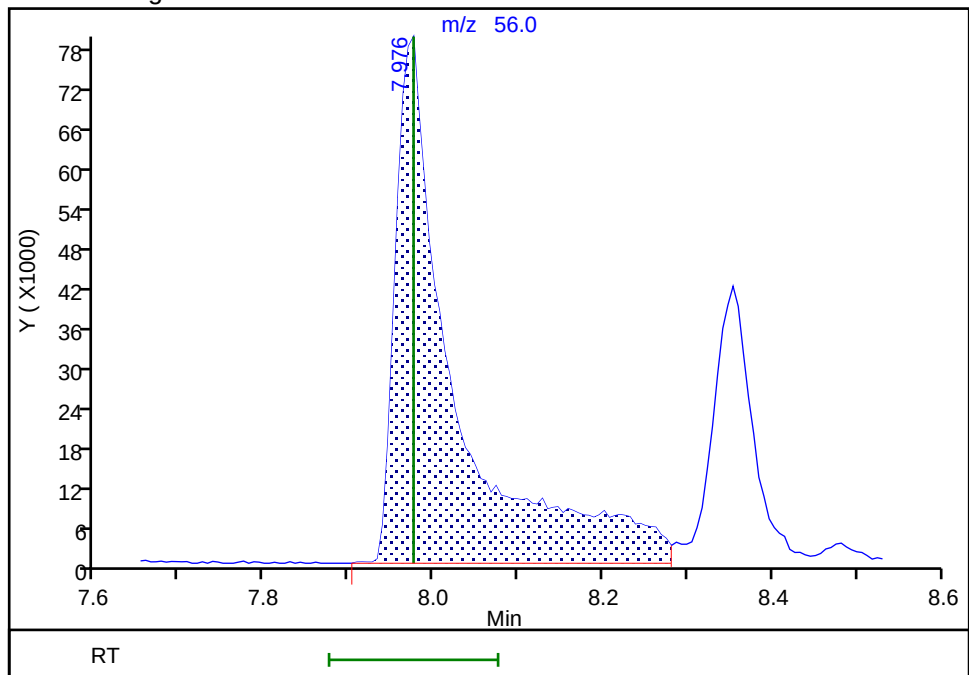
RT: 7.98
Area: 357938
Amount: 442.7101
Amount Units: ug/l

Processing Integration Results



RT: 7.98
Area: 388291
Amount: 484.3492
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:15:09

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

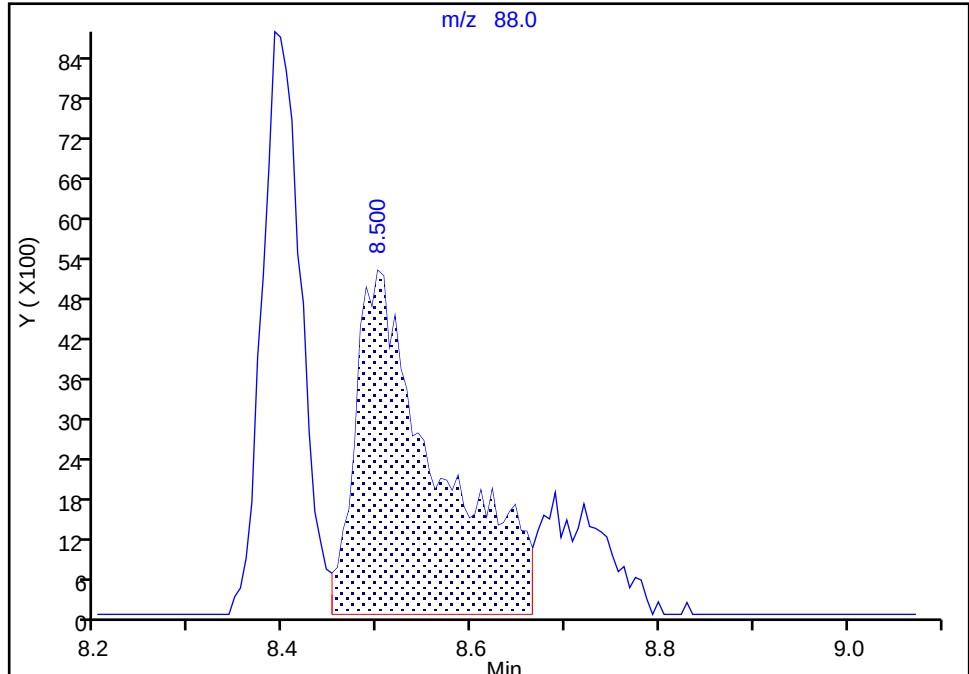
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Injection Date: 01-Sep-2020 14:19:30 Instrument ID: 10193
Lims ID: IC STD5
Client ID:
Operator ID: dvv10203 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

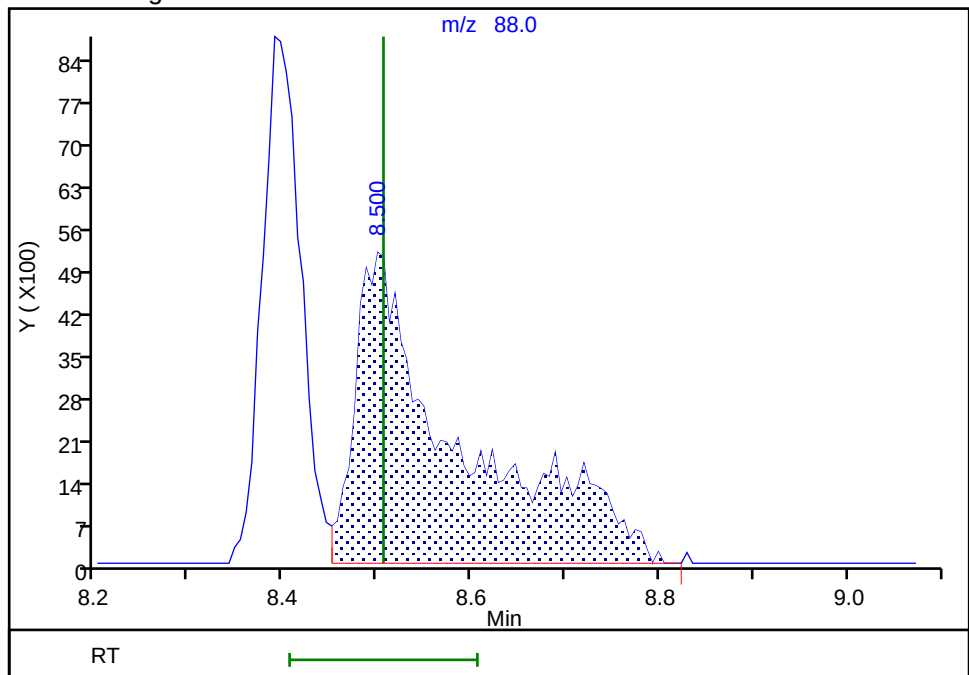
RT: 8.50
Area: 31084
Amount: 247.0601
Amount Units: ug/l

Processing Integration Results



RT: 8.50
Area: 39014
Amount: 244.4117
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 16:59:05

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I04.D
 Lims ID: IC STD4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 01-Sep-2020 14:42:30 ALS Bottle#: 5 Worklist Smp#: 6
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: IC STD4
 Misc. Info.: 410-0009503-006
 Operator ID: dvv10203 Instrument ID: 10193
 Sublist: chrom-MSV_10193_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Sep-2020 20:10:37 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1059

First Level Reviewer: campbellme

Date: 01-Sep-2020 17:01:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.910	1.910	0.000	99	129325	2.00	2.00	M
3 Chloromethane	50	2.099	2.099	0.000	99	150814	2.00	1.98	
4 Butadiene	39	2.209	2.209	0.000	93	140385	2.00	1.96	
5 Vinyl chloride	62	2.215	2.215	0.000	98	139896	2.00	1.99	
6 Bromomethane	94	2.520	2.520	0.000	92	98967	2.00	1.99	
7 Chloroethane	64	2.605	2.605	0.000	99	86238	2.00	1.98	
8 Dichlorofluoromethane	67	2.837	2.837	0.000	98	190803	2.00	2.02	
9 Trichlorofluoromethane	101	2.898	2.898	0.000	97	183481	2.00	2.00	
11 Ethyl ether	59	3.135	3.135	0.000	92	93303	2.00	2.01	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.208	3.208	0.000	93	128139	2.00	1.88	
13 Acrolein	56	3.306	3.306	0.000	99	575443	100.0	100.2	
14 1,1-Dichloroethene	96	3.428	3.428	0.000	97	91871	2.00	1.98	
15 1,1,2,2-Tetrafluoroethane	101	3.464	3.464	0.000	92	94307	2.00	2.00	
16 Acetone	43	3.471	3.471	0.000	98	125222	20.0	20.5	
17 Iodomethane	142	3.617	3.617	0.000	99	178469	2.00	1.95	
18 Isopropyl alcohol	45	3.647	3.647	0.000	41	45049	40.0	41.8	
19 Ethyl bromide	108	3.641	3.641	0.000	99	77273	2.00	2.01	
20 Carbon disulfide	76	3.708	3.708	0.000	100	323433	2.00	1.98	
22 Methyl acetate	43	3.867	3.867	0.000	96	49627	2.00	2.07	
23 3-Chloro-1-propene	41	3.891	3.891	0.000	89	160482	2.00	1.98	
24 Methylene Chloride	84	4.074	4.074	0.000	94	101409	2.00	1.97	
* 25 t-Butyl alcohol-d10 (IS)	65	4.111	4.111	0.000	98	143561	50.0	50.0	
26 2-Methyl-2-propanol	59	4.227	4.227	0.000	98	110192	40.0	38.5	
27 Acrylonitrile	53	4.409	4.409	0.000	99	96365	10.0	9.94	
28 Methyl tert-butyl ether	73	4.464	4.464	0.000	94	295369	2.00	1.97	
29 trans-1,2-Dichloroethene	96	4.470	4.470	0.000	97	105433	2.00	1.95	
30 Hexane	57	4.897	4.897	0.000	95	152150	2.00	1.99	
32 1,1-Dichloroethane	63	5.135	5.135	0.000	96	195904	2.00	1.97	
33 Isopropyl ether	45	5.196	5.196	0.000	94	376556	2.00	1.98	
34 2-Chloro-1,3-butadiene	53	5.251	5.251	0.000	93	184491	2.00	1.96	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Tert-butyl ethyl ether	59	5.732	5.732	0.000	98	361189	2.00	1.99	
36 2-Butanone (MEK)	43	5.946	5.946	0.000	100	281636	20.0	19.7	
37 cis-1,2-Dichloroethene	96	5.970	5.970	0.000	83	121548	2.00	1.98	
38 2,2-Dichloropropane	77	5.988	5.988	0.000	77	172113	2.00	2.00	
40 Propionitrile	54	6.049	6.049	0.000	99	149313	40.0	41.1	M
S 42 1,2-Dichloroethene, Total	100				0			3.93	
43 Methacrylonitrile	67	6.251	6.251	0.000	92	277418	20.0	19.7	
44 Chlorobromomethane	128	6.305	6.305	0.000	76	54981	2.00	2.03	
45 Tetrahydrofuran	71	6.305	6.305	0.000	80	81352	20.0	20.1	
46 Chloroform	83	6.464	6.464	0.000	95	196768	2.00	1.99	
\$ 47 Dibromofluoromethane (Surr)	113	6.683	6.683	0.000	93	475332	10.0	9.98	
48 1,1,1-Trichloroethane	97	6.683	6.683	0.000	54	179578	2.00	2.02	
49 Cyclohexane	56	6.775	6.775	0.000	93	186390	2.00	1.98	
50 Carbon tetrachloride	117	6.891	6.891	0.000	95	148659	2.00	1.99	
51 1,1-Dichloropropene	75	6.897	6.897	0.000	95	157992	2.00	1.98	
52 Isobutyl alcohol	41	7.086	7.086	0.000	92	85837	100.0	92.6	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.134	7.134	0.000	0	98150	10.0	10.1	
54 Benzene	78	7.159	7.159	0.000	96	459354	2.00	2.00	
55 1,2-Dichloroethane	62	7.238	7.238	0.000	98	135129	2.00	1.95	
56 Tert-amyl methyl ether	73	7.360	7.360	0.000	98	330560	2.00	2.00	
* 57 Fluorobenzene (IS)	96	7.573	7.573	0.000	98	2003773	10.0	10.0	
58 n-Heptane	43	7.580	7.580	0.000	76	173398	2.00	2.04	
59 n-Butanol	56	7.976	7.976	0.000	89	150691	200.0	196.1	M
60 Trichloroethene	95	8.049	8.049	0.000	98	118251	2.00	1.99	
61 Methylcyclohexane	83	8.354	8.354	0.000	93	186709	2.00	2.05	
62 1,2-Dichloropropane	63	8.390	8.390	0.000	92	116517	2.00	1.97	
63 2-ethoxy-2-methyl butane	87	8.396	8.396	0.000	91	182044	2.00	1.98	
64 Methyl methacrylate	69	8.482	8.482	0.000	92	59171	2.00	1.97	
66 Dibromomethane	93	8.494	8.494	0.000	94	56166	2.00	1.94	
65 1,4-Dioxane	88	8.506	8.506	0.000	31	15868	100.0	103.7	M
67 Dichlorobromomethane	83	8.738	8.738	0.000	98	140278	2.00	1.97	
68 2-Nitropropane	41	9.024	9.024	0.000	99	182830	20.0	19.6	
71 1-Bromo-2-chloroethane	63	9.134	9.134	0.000	99	124609	2.00	2.04	
72 cis-1,3-Dichloropropene	75	9.299	9.299	0.000	94	174979	2.00	1.97	
73 4-Methyl-2-pentanone (MIBK)	43	9.488	9.488	0.000	98	815838	20.0	19.6	
\$ 74 Toluene-d8 (Surr)	98	9.610	9.610	0.000	94	1985750	10.0	10.0	
75 Toluene	92	9.689	9.689	0.000	98	297381	2.00	1.99	
76 trans-1,3-Dichloropropene	75	9.957	9.957	0.000	96	148652	2.00	1.99	
78 Ethyl methacrylate	69	10.024	10.024	0.000	90	127842	2.00	2.03	
S 77 1,3-Dichloropropene, Total	100				0			3.96	
79 1,1,2-Trichloroethane	97	10.164	10.164	0.000	92	82201	2.00	1.99	
80 Tetrachloroethene	166	10.250	10.250	0.000	97	132588	2.00	1.99	
81 1,3-Dichloropropane	76	10.329	10.329	0.000	94	141833	2.00	1.95	
82 2-Hexanone	43	10.396	10.396	0.000	97	598268	20.0	20.4	
83 Chlorodibromomethane	129	10.548	10.548	0.000	90	97240	2.00	2.03	
84 Ethylene Dibromide	107	10.658	10.658	0.000	99	80851	2.00	1.98	
* 85 Chlorobenzene-d5 (IS)	117	11.097	11.097	0.000	87	1520735	10.0	10.0	
86 1-Chlorohexane	91	11.109	11.109	0.000	98	161444	2.00	1.89	
87 Chlorobenzene	112	11.122	11.122	0.000	95	333345	2.00	1.98	
89 1,1,1,2-Tetrachloroethane	131	11.207	11.207	0.000	91	113207	2.00	1.97	
90 Ethylbenzene	91	11.213	11.213	0.000	99	583876	2.00	1.97	
S 88 Xylenes, Total	106				0			5.94	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
91 m-Xylene & p-Xylene	106	11.329	11.329	0.000	0	457654	4.00	3.96	
92 o-Xylene	106	11.664	11.664	0.000	97	225199	2.00	1.99	
93 Styrene	104	11.676	11.676	0.000	95	377982	2.00	1.99	
94 Bromoform	173	11.835	11.835	0.000	96	52263	2.00	1.97	
95 Isopropylbenzene	105	11.969	11.969	0.000	96	592584	2.00	1.98	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.109	12.109	0.000	91	747277	10.0	10.0	
99 1,1,2,2-Tetrachloroethane	83	12.219	12.219	0.000	93	109660	2.00	2.02	
100 Bromobenzene	156	12.231	12.231	0.000	91	147229	2.00	1.97	
101 trans-1,4-Dichloro-2-butene	53	12.243	12.243	0.000	96	303768	20.0	20.2	
102 1,2,3-Trichloropropane	110	12.268	12.268	0.000	84	29794	2.00	2.01	
103 N-Propylbenzene	91	12.298	12.298	0.000	99	702814	2.00	2.00	
104 2-Chlorotoluene	126	12.377	12.377	0.000	96	141124	2.00	1.97	
105 1,3,5-Trimethylbenzene	105	12.438	12.438	0.000	94	516140	2.00	1.99	
106 4-Chlorotoluene	126	12.469	12.469	0.000	98	148252	2.00	1.99	
107 tert-Butylbenzene	134	12.682	12.682	0.000	93	118830	2.00	2.10	
108 Pentachloroethane	167	12.713	12.713	0.000	91	86508	2.00	2.05	
109 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	526977	2.00	1.98	
110 sec-Butylbenzene	105	12.847	12.847	0.000	94	668081	2.00	2.00	
111 1,3-Dichlorobenzene	146	12.944	12.944	0.000	99	299249	2.00	2.01	
112 4-Isopropyltoluene	119	12.957	12.957	0.000	97	584284	2.00	2.00	
* 113 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	871376	10.0	10.0	
114 1,4-Dichlorobenzene	146	13.017	13.017	0.000	95	305373	2.00	1.99	
115 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	99	239261	2.00	2.04	
116 Benzyl chloride	126	13.103	13.103	0.000	99	43679	2.00	2.02	
119 n-Butylbenzene	92	13.249	13.249	0.000	98	301292	2.00	2.04	
120 1,2-Dichlorobenzene	146	13.286	13.286	0.000	98	281587	2.00	2.00	
118 p-Diethylbenzene	119	13.304	13.304	0.000	0	299228	2.00	2.02	
123 1,2-Dibromo-3-Chloropropane	155	13.834	13.834	0.000	84	15503	2.00	2.08	
124 1,3,5-Trichlorobenzene	180	13.956	13.956	0.000	97	245063	2.00	2.01	
125 1,2,4-Trichlorobenzene	180	14.383	14.383	0.000	94	216994	2.00	1.99	
126 Hexachlorobutadiene	225	14.468	14.468	0.000	97	105865	2.00	1.98	
127 Naphthalene	128	14.566	14.566	0.000	97	394190	2.00	2.02	
128 1,2,3-Trichlorobenzene	180	14.712	14.712	0.000	96	194367	2.00	2.01	
129 2-Methylnaphthalene	142	15.340	15.340	0.000	0	282956	2.00	2.15	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00022

Amount Added: 2.00

Units: uL

MSV_RV4_826_00024

Amount Added: 2.00

Units: uL

MSV_RV4GAS826_00072

Amount Added: 2.00

Units: uL

MSV_25_826ISS_00001

Amount Added: 1.00

Units: uL

Run Reagent

Report Date: 01-Sep-2020 20:10:39

Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I04.D

Injection Date: 01-Sep-2020 14:42:30

Instrument ID: 10193

Operator ID: dwv10203

Lims ID: IC STD4

Worklist Smp#: 6

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

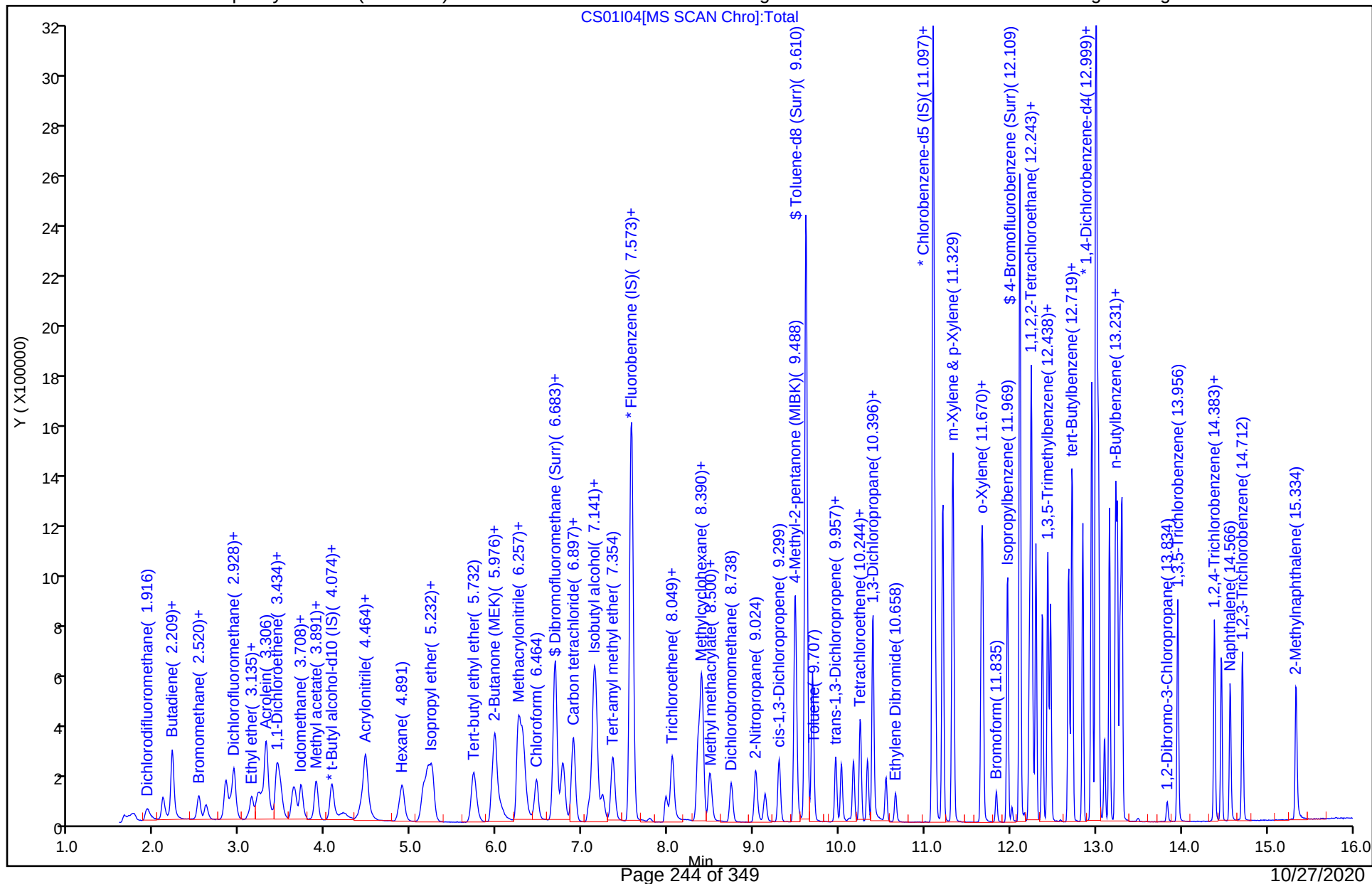
ALS Bottle#: 5

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

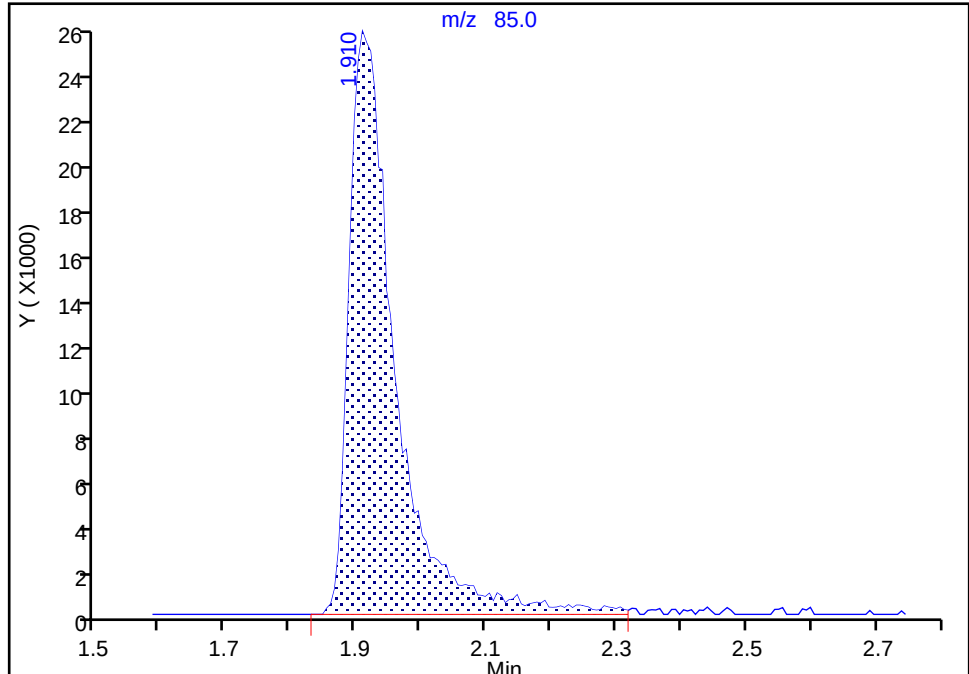
Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I04.D
Injection Date: 01-Sep-2020 14:42:30 Instrument ID: 10193
Lims ID: IC STD4
Client ID:
Operator ID: dvv10203 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

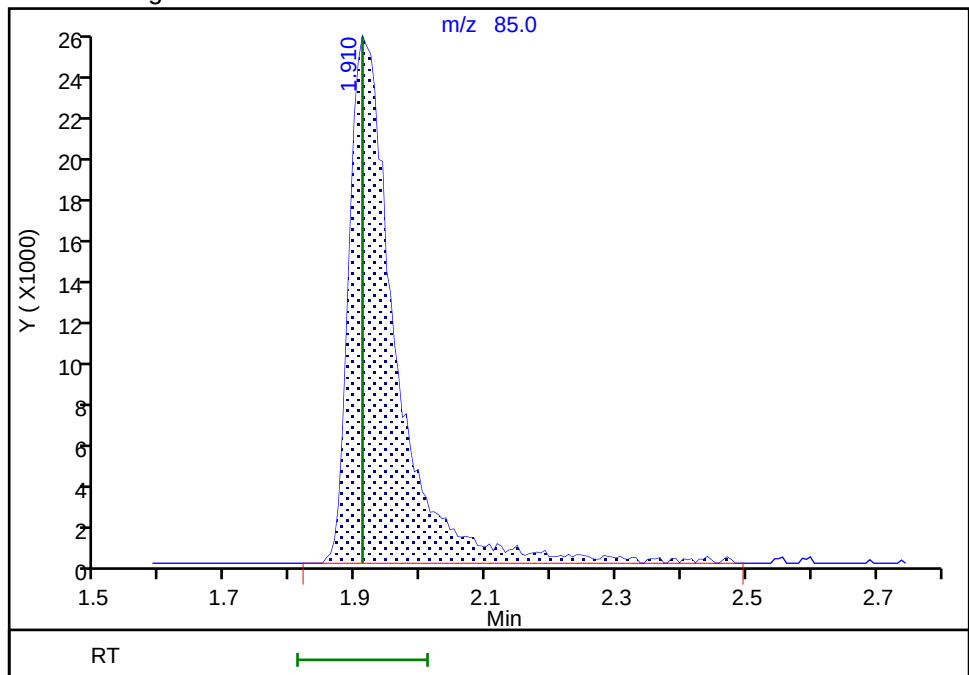
RT: 1.91
Area: 127911
Amount: 1.993115
Amount Units: ug/l

Processing Integration Results



RT: 1.91
Area: 129325
Amount: 2.000106
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:00:09

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

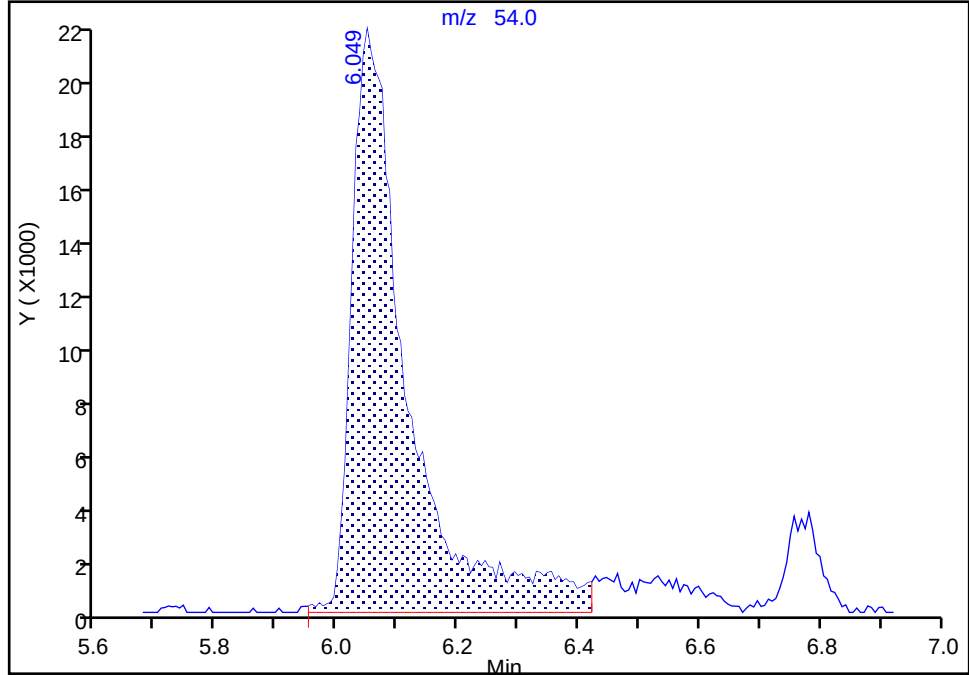
Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I04.D
Injection Date: 01-Sep-2020 14:42:30 Instrument ID: 10193
Lims ID: IC STD4
Client ID:
Operator ID: dvv10203 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

40 Propionitrile, CAS: 107-12-0

Signal: 1

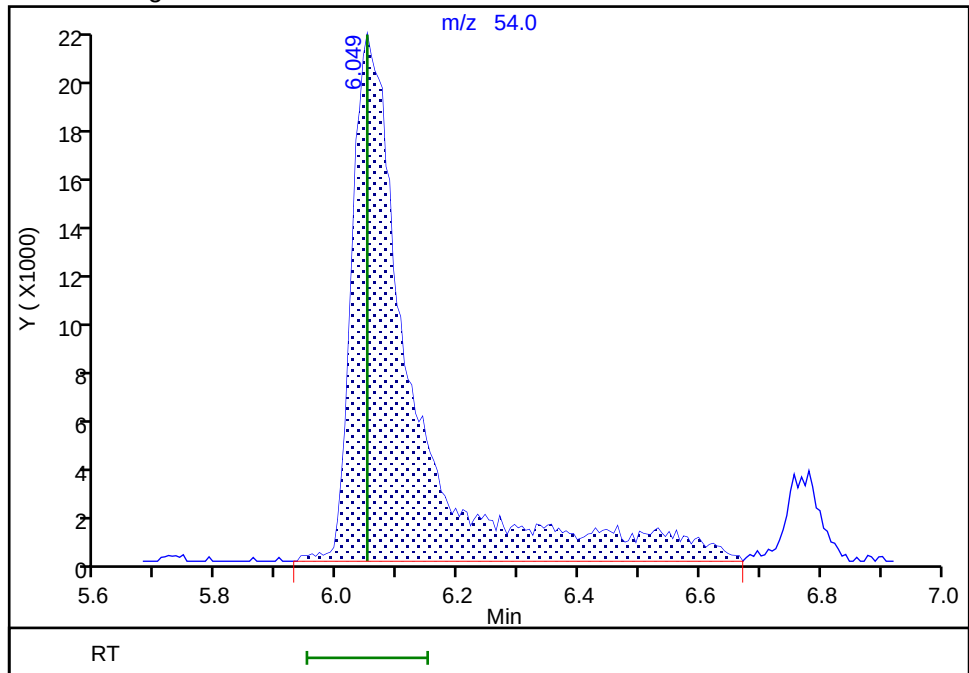
RT: 6.05
Area: 136096
Amount: 39.351569
Amount Units: ug/l

Processing Integration Results



RT: 6.05
Area: 149313
Amount: 41.112721
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:00:32

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

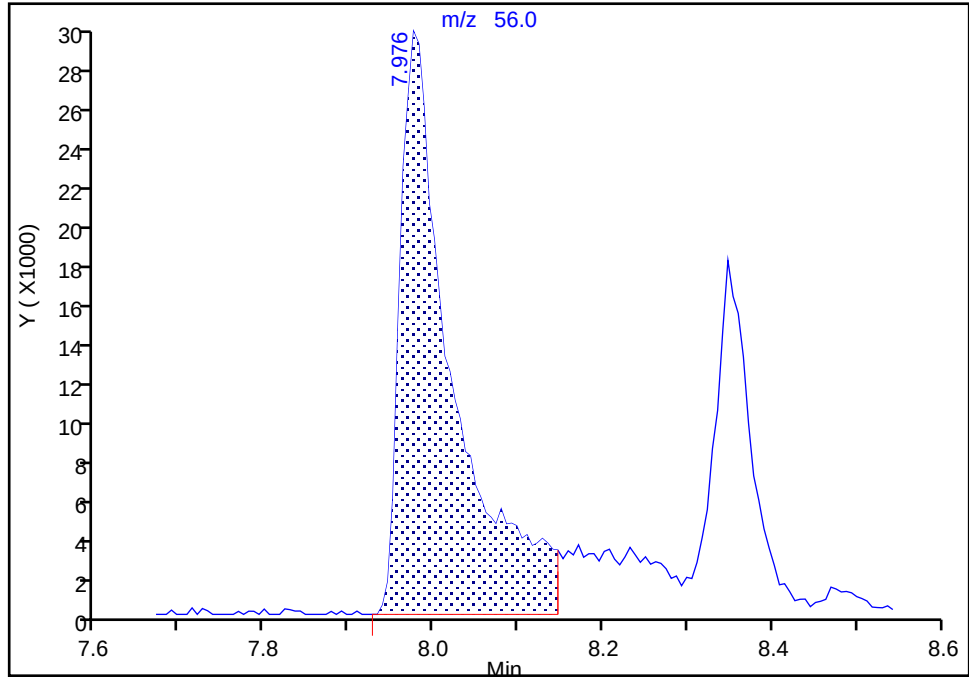
Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I04.D
Injection Date: 01-Sep-2020 14:42:30 Instrument ID: 10193
Lims ID: IC STD4
Client ID:
Operator ID: dvv10203 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

59 n-Butanol, CAS: 71-36-3

Signal: 1

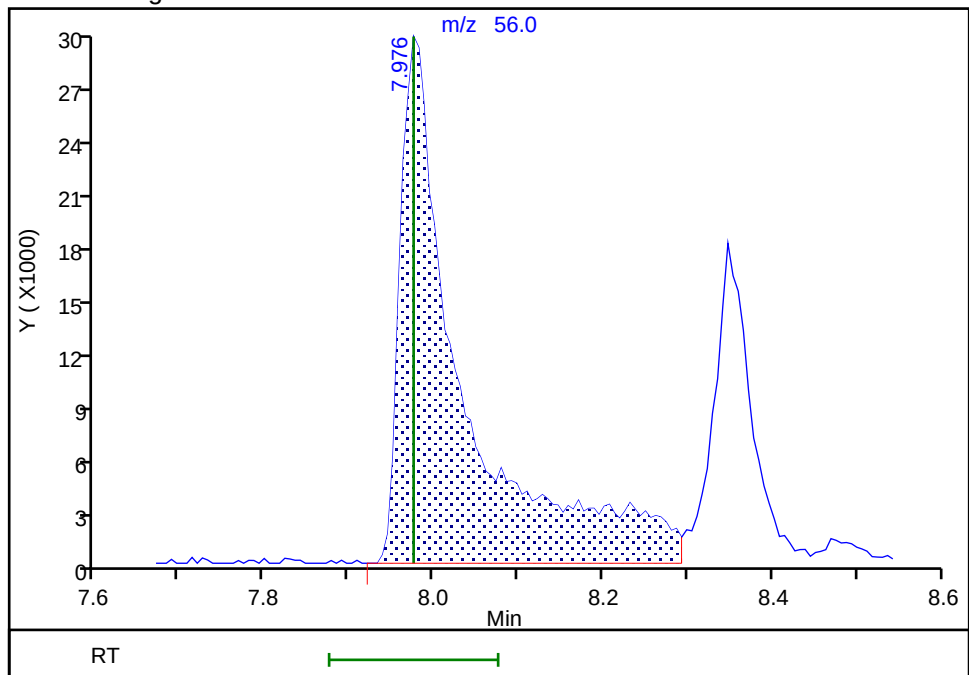
RT: 7.98
Area: 126658
Amount: 189.1626
Amount Units: ug/l

Processing Integration Results



RT: 7.98
Area: 150691
Amount: 196.1351
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:15:38

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

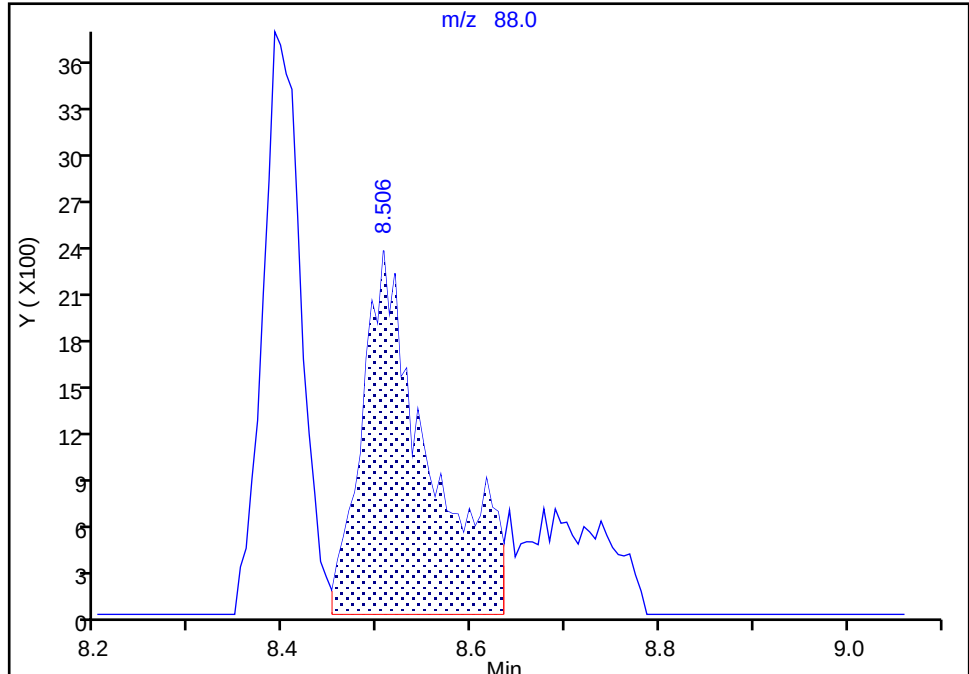
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Injection Date: 01-Sep-2020 14:42:30 Instrument ID: 10193
Lims ID: IC STD4
Client ID:
Operator ID: dvv10203 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

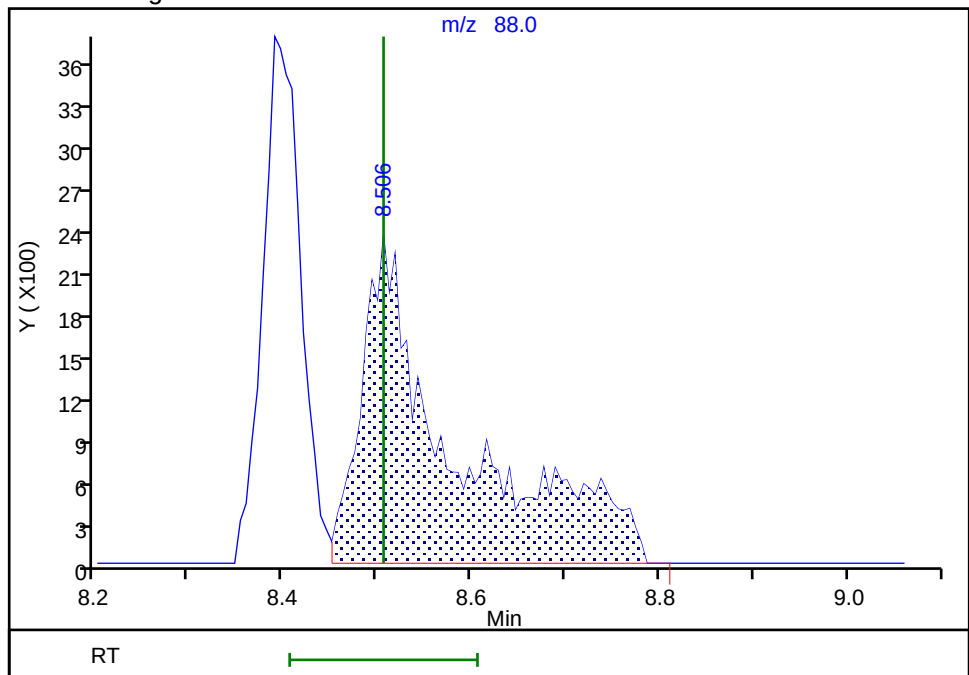
RT: 8.51
Area: 11620
Amount: 92.483167
Amount Units: ug/l

Processing Integration Results



RT: 8.51
Area: 15868
Amount: 103.7267
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:00:52

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I05.D
 Lims ID: IC STD3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 01-Sep-2020 15:04:30 ALS Bottle#: 6 Worklist Smp#: 7
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: IC STD3
 Misc. Info.: 410-0009503-007
 Operator ID: dvv10203 Instrument ID: 10193
 Sublist: chrom-MSV_10193_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Sep-2020 20:10:47 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1059

First Level Reviewer: campbellme

Date: 01-Sep-2020 17:03:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.910	1.910	0.000	99	65583	1.00	1.04	M
3 Chloromethane	50	2.093	2.099	-0.006	99	75132	1.00	1.01	M
4 Butadiene	39	2.203	2.209	-0.006	96	77445	1.00	1.11	
5 Vinyl chloride	62	2.209	2.215	-0.006	80	69005	1.00	1.00	
6 Bromomethane	94	2.507	2.520	-0.013	90	49576	1.00	1.02	
7 Chloroethane	64	2.599	2.605	-0.006	99	43065	1.00	1.01	
8 Dichlorofluoromethane	67	2.824	2.837	-0.013	97	94758	1.00	1.03	
9 Trichlorofluoromethane	101	2.891	2.898	-0.007	96	90570	1.00	1.01	
11 Ethyl ether	59	3.135	3.135	0.000	93	45936	1.00	1.01	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.208	3.208	0.000	94	70413	1.00	1.06	
13 Acrolein	56	3.300	3.306	-0.006	99	288468	50.0	51.4	
14 1,1-Dichloroethene	96	3.422	3.428	-0.006	97	46141	1.00	1.02	
15 1,1,2,2-Tetrafluoroethane	101	3.464	3.464	0.000	91	49416	1.00	1.08	
16 Acetone	43	3.471	3.471	0.000	99	53819	10.0	9.02	
17 Iodomethane	142	3.611	3.617	-0.006	99	91381	1.00	1.02	
19 Ethyl bromide	108	3.641	3.641	0.000	97	37062	1.00	0.9880	
18 Isopropyl alcohol	45	3.641	3.647	-0.006	49	20062	20.0	21.9	
20 Carbon disulfide	76	3.702	3.708	-0.006	100	162292	1.00	1.02	
22 Methyl acetate	43	3.867	3.867	0.000	97	17477	1.00	0.7458	
23 3-Chloro-1-propene	41	3.879	3.891	-0.012	89	80597	1.00	1.02	
24 Methylene Chloride	84	4.074	4.074	0.000	97	51267	1.00	1.02	
* 25 t-Butyl alcohol-d10 (IS)	65	4.099	4.111	-0.012	96	140318	50.0	50.0	
26 2-Methyl-2-propanol	59	4.214	4.227	-0.012	99	57344	20.0	20.5	
27 Acrylonitrile	53	4.409	4.409	0.000	100	51371	5.00	5.42	M
28 Methyl tert-butyl ether	73	4.452	4.464	-0.012	96	150474	1.00	1.03	
29 trans-1,2-Dichloroethene	96	4.464	4.470	-0.006	98	54149	1.00	1.03	
30 Hexane	57	4.885	4.897	-0.012	94	78465	1.00	1.05	
32 1,1-Dichloroethane	63	5.129	5.135	-0.006	97	100821	1.00	1.04	
33 Isopropyl ether	45	5.190	5.196	-0.006	94	190197	1.00	1.03	
34 2-Chloro-1,3-butadiene	53	5.245	5.251	-0.006	93	91500	1.00	1.00	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Tert-butyl ethyl ether	59	5.732	5.732	0.000	98	183026	1.00	1.03	M
36 2-Butanone (MEK)	43	5.946	5.946	0.000	100	137888	10.0	9.86	
37 cis-1,2-Dichloroethene	96	5.970	5.970	0.000	82	62000	1.00	1.04	
38 2,2-Dichloropropane	77	5.982	5.988	-0.006	70	85777	1.00	1.02	
40 Propionitrile	54	6.043	6.049	-0.006	98	74651	20.0	21.0	M
S 42 1,2-Dichloroethene, Total	100				0			2.06	
43 Methacrylonitrile	67	6.263	6.251	0.013	93	146687	10.0	10.7	M
44 Chlorobromomethane	128	6.299	6.305	-0.006	93	26529	1.00	1.01	
45 Tetrahydrofuran	71	6.305	6.305	0.000	93	41281	10.0	10.4	
46 Chloroform	83	6.458	6.464	-0.006	94	97764	1.00	1.01	
\$ 47 Dibromofluoromethane (Surr)	113	6.677	6.683	-0.006	94	465395	10.0	10.0	
48 1,1,1-Trichloroethane	97	6.683	6.683	0.000	46	87622	1.00	1.01	
49 Cyclohexane	56	6.769	6.775	-0.006	93	97244	1.00	1.06	
50 Carbon tetrachloride	117	6.885	6.891	-0.006	83	74393	1.00	1.02	
51 1,1-Dichloropropene	75	6.891	6.897	-0.006	92	79910	1.00	1.03	
52 Isobutyl alcohol	41	7.080	7.086	-0.006	89	43145	50.0	47.6	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.128	7.134	-0.006	0	94841	10.0	10.0	
54 Benzene	78	7.153	7.159	-0.006	96	228700	1.00	1.02	
55 1,2-Dichloroethane	62	7.232	7.238	-0.006	97	68618	1.00	1.01	
56 Tert-amyl methyl ether	73	7.354	7.360	-0.006	97	164628	1.00	1.02	
* 57 Fluorobenzene (IS)	96	7.567	7.573	-0.006	98	1953950	10.0	10.0	
58 n-Heptane	43	7.580	7.580	0.000	82	86227	1.00	1.04	
59 n-Butanol	56	7.976	7.976	0.000	91	73005	100.0	97.2	M
60 Trichloroethene	95	8.049	8.049	0.000	98	59588	1.00	1.03	
61 Methylcyclohexane	83	8.348	8.354	-0.006	92	90839	1.00	1.03	
62 1,2-Dichloropropane	63	8.384	8.390	-0.006	72	58951	1.00	1.02	
63 2-ethoxy-2-methyl butane	87	8.396	8.396	0.000	93	92481	1.00	1.03	
64 Methyl methacrylate	69	8.482	8.482	0.000	91	29926	1.00	1.02	
66 Dibromomethane	93	8.494	8.494	0.000	96	28840	1.00	1.02	
65 1,4-Dioxane	88	8.512	8.506	0.006	31	8095	50.0	54.1	M
67 Dichlorobromomethane	83	8.732	8.738	-0.006	98	69815	1.00	1.00	
68 2-Nitropropane	41	9.024	9.024	0.000	99	90715	10.0	9.97	
71 1-Bromo-2-chloroethane	63	9.128	9.134	-0.006	98	60281	1.00	1.01	
72 cis-1,3-Dichloropropene	75	9.299	9.299	0.000	93	85955	1.00	0.99	
73 4-Methyl-2-pentanone (MIBK)	43	9.488	9.488	0.000	97	414178	10.0	10.2	
\$ 74 Toluene-d8 (Surr)	98	9.610	9.610	0.000	94	1941329	10.0	10.0	
75 Toluene	92	9.689	9.689	0.000	98	148821	1.00	1.02	
76 trans-1,3-Dichloropropene	75	9.957	9.957	0.000	96	72683	1.00	0.99	
78 Ethyl methacrylate	69	10.024	10.024	0.000	91	63147	1.00	1.02	
S 77 1,3-Dichloropropene, Total	100				0			1.99	
79 1,1,2-Trichloroethane	97	10.164	10.164	0.000	92	41496	1.00	1.03	
80 Tetrachloroethene	166	10.244	10.250	-0.006	97	66888	1.00	1.03	
81 1,3-Dichloropropane	76	10.329	10.329	0.000	94	72739	1.00	1.02	
82 2-Hexanone	43	10.390	10.396	-0.006	97	292991	10.0	10.2	
83 Chlorodibromomethane	129	10.542	10.548	-0.006	92	45464	1.00	0.9722	
84 Ethylene Dibromide	107	10.658	10.658	0.000	100	40000	1.00	1.00	
* 85 Chlorobenzene-d5 (IS)	117	11.097	11.097	0.000	87	1485716	10.0	10.0	
86 1-Chlorohexane	91	11.109	11.109	0.000	97	85108	1.00	1.02	
87 Chlorobenzene	112	11.122	11.122	0.000	95	168260	1.00	1.02	
89 1,1,1,2-Tetrachloroethane	131	11.207	11.207	0.000	92	56505	1.00	1.01	
90 Ethylbenzene	91	11.213	11.213	0.000	98	292186	1.00	1.01	
S 88 Xylenes, Total	106				0			3.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
91 m-Xylene & p-Xylene	106	11.329	11.329	0.000	0	230072	2.00	2.04	
92 o-Xylene	106	11.664	11.664	0.000	97	111628	1.00	1.01	
93 Styrene	104	11.676	11.676	0.000	95	184556	1.00	0.99	
94 Bromoform	173	11.835	11.835	0.000	95	24617	1.00	0.9477	
95 Isopropylbenzene	105	11.963	11.969	-0.006	96	299877	1.00	1.02	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.109	12.109	0.000	91	726539	10.0	9.96	
99 1,1,2,2-Tetrachloroethane	83	12.219	12.219	0.000	94	53769	1.00	1.02	
100 Bromobenzene	156	12.225	12.231	-0.006	95	74061	1.00	1.02	
101 trans-1,4-Dichloro-2-butene	53	12.243	12.243	0.000	95	148178	10.0	10.2	
102 1,2,3-Trichloropropane	110	12.262	12.268	-0.006	81	14553	1.00	1.02	
103 N-Propylbenzene	91	12.298	12.298	0.000	99	349239	1.00	1.03	
104 2-Chlorotoluene	126	12.377	12.377	0.000	96	71969	1.00	1.04	
105 1,3,5-Trimethylbenzene	105	12.438	12.438	0.000	94	261031	1.00	1.04	
106 4-Chlorotoluene	126	12.469	12.469	0.000	98	73083	1.00	1.01	
107 tert-Butylbenzene	134	12.682	12.682	0.000	94	54654	1.00	1.00	
108 Pentachloroethane	167	12.713	12.713	0.000	91	40193	1.00	0.9847	
109 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	264914	1.00	1.03	
110 sec-Butylbenzene	105	12.847	12.847	0.000	94	329993	1.00	1.02	
111 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	148017	1.00	1.03	
112 4-Isopropyltoluene	119	12.957	12.957	0.000	97	284614	1.00	1.01	
* 113 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	842960	10.0	10.0	
114 1,4-Dichlorobenzene	146	13.018	13.017	0.001	95	147165	1.00	0.99	
115 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	99	112026	1.00	0.9896	
116 Benzyl chloride	126	13.097	13.103	-0.006	99	20304	1.00	0.9698	
119 n-Butylbenzene	92	13.249	13.249	0.000	97	143333	1.00	1.00	
120 1,2-Dichlorobenzene	146	13.280	13.286	-0.006	98	138925	1.00	1.02	
118 p-Diethylbenzene	119	13.304	13.304	0.000	0	141827	1.00	0.9889	
123 1,2-Dibromo-3-Chloropropane	155	13.834	13.834	0.000	81	7406	1.00	1.03	
124 1,3,5-Trichlorobenzene	180	13.956	13.956	0.000	97	120502	1.00	1.02	
125 1,2,4-Trichlorobenzene	180	14.383	14.383	0.000	94	106458	1.00	1.01	
126 Hexachlorobutadiene	225	14.468	14.468	0.000	97	51838	1.00	1.00	
127 Naphthalene	128	14.572	14.566	0.006	97	196158	1.00	1.04	
128 1,2,3-Trichlorobenzene	180	14.712	14.712	0.000	95	96242	1.00	1.03	
129 2-Methylnaphthalene	142	15.340	15.340	0.000	0	125807	1.00	0.9870	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00022

Amount Added: 2.00

Units: uL

MSV_RV4_826_00024

Amount Added: 2.00

Units: uL

MSV_RV4GAS826_00072

Amount Added: 2.00

Units: uL

MSV_25_826ISS_00001

Amount Added: 1.00

Units: uL

Run Reagent

Report Date: 01-Sep-2020 20:10:49

Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I05.D

Injection Date: 01-Sep-2020 15:04:30

Instrument ID: 10193

Operator ID: dwv10203

Lims ID: IC STD3

Worklist Smp#: 7

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

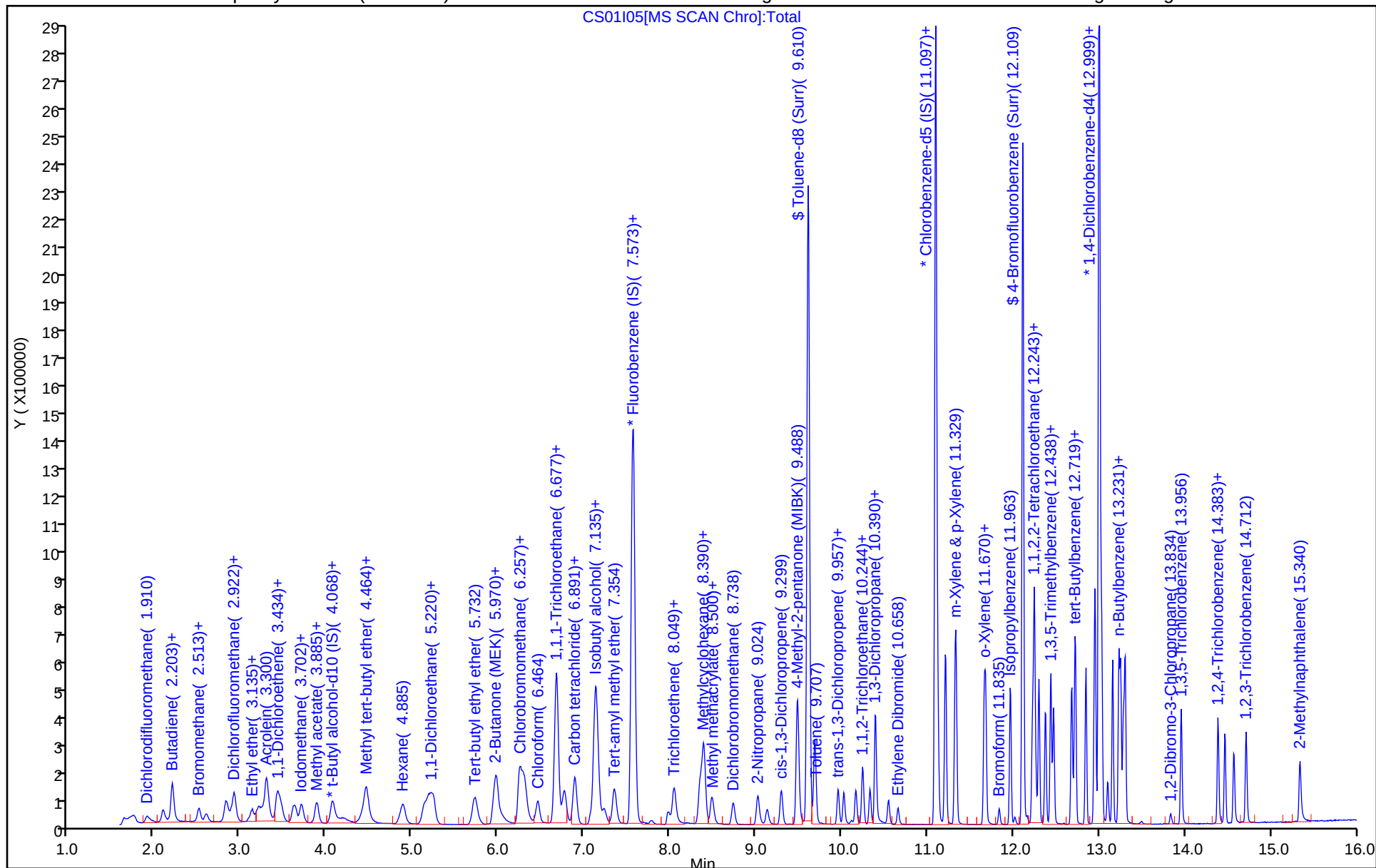
ALS Bottle#: 6

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

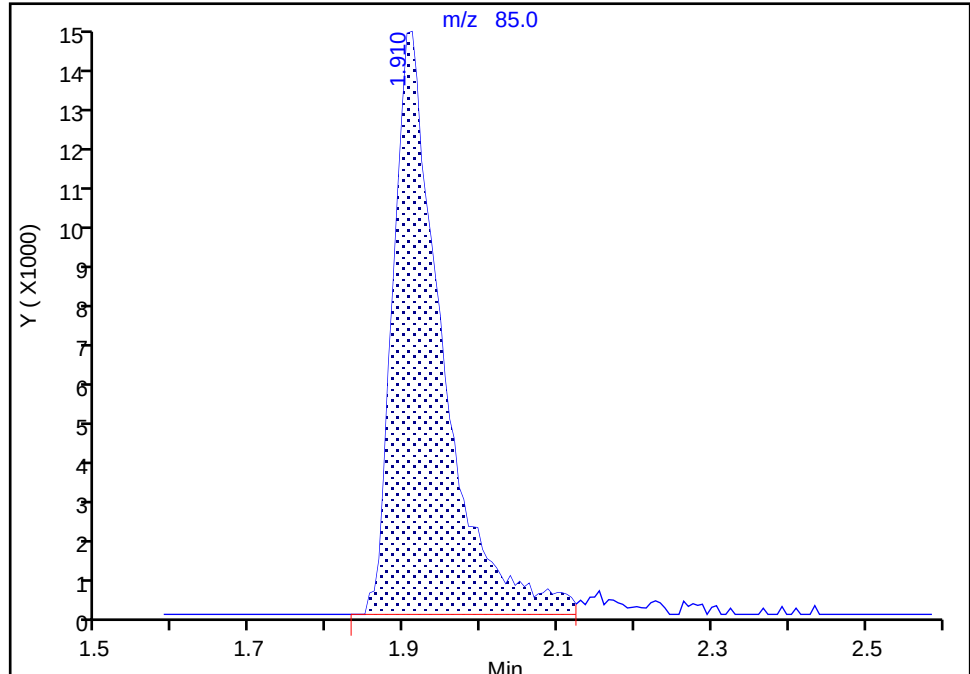
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Injection Date: 01-Sep-2020 15:04:30 Instrument ID: 10193
Lims ID: IC STD3
Client ID:
Operator ID: dvv10203 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

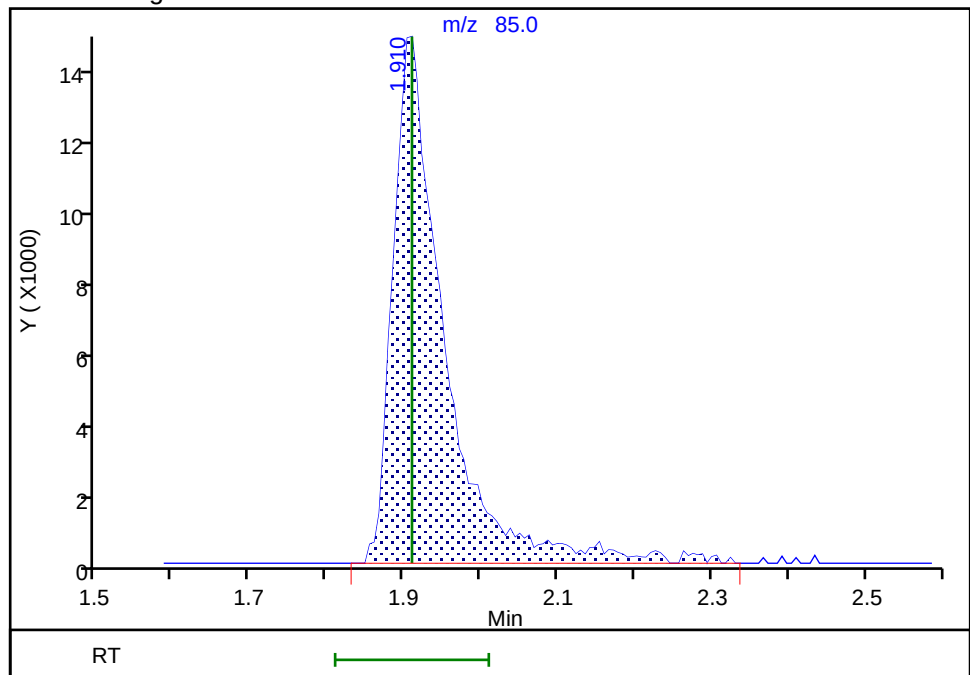
RT: 1.91
Area: 62978
Amount: 1.004767
Amount Units: ug/l

Processing Integration Results



RT: 1.91
Area: 65583
Amount: 1.040152
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:01:28

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

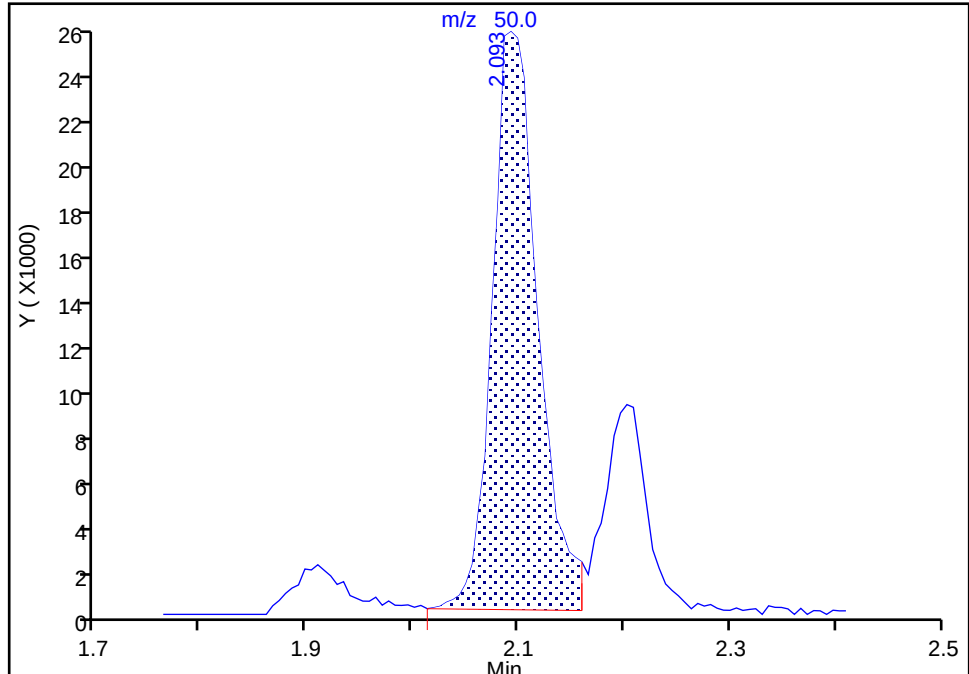
Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I05.D
Injection Date: 01-Sep-2020 15:04:30 Instrument ID: 10193
Lims ID: IC STD3
Client ID:
Operator ID: dvv10203 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

3 Chloromethane, CAS: 74-87-3

Signal: 1

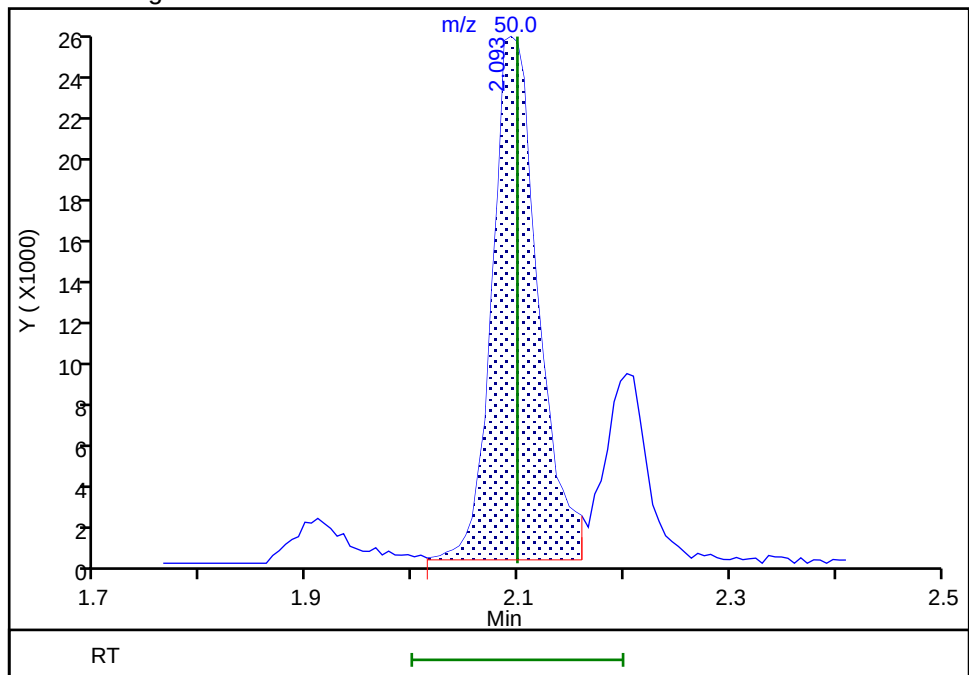
RT: 2.09
Area: 74730
Amount: 1.006130
Amount Units: ug/l

Processing Integration Results



RT: 2.09
Area: 75132
Amount: 1.010761
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:01:41

Audit Action: Assigned New Baseline

Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC

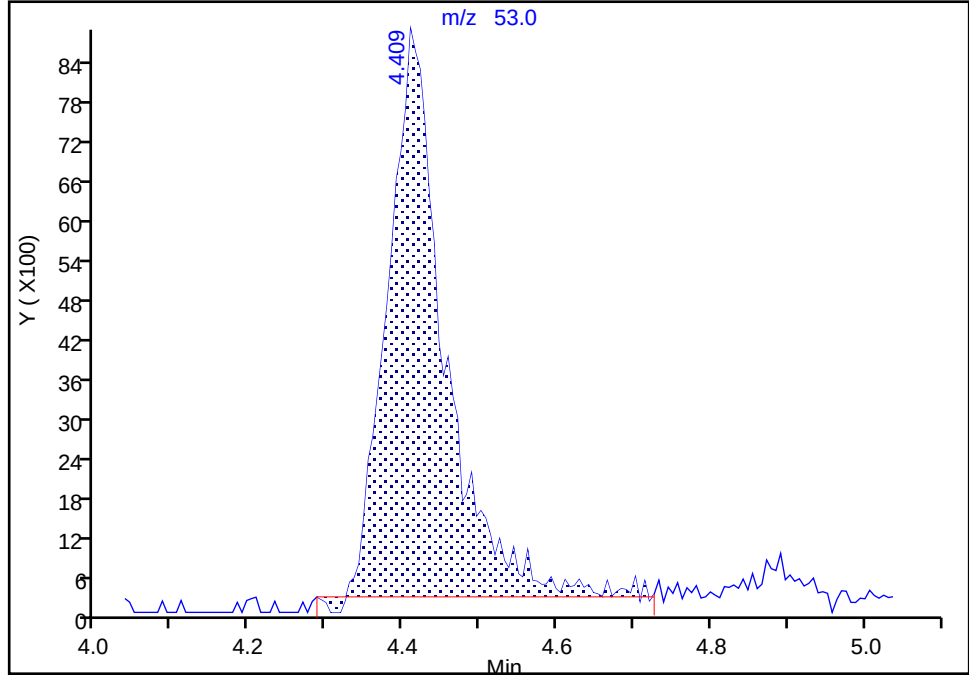
Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I05.D
Injection Date: 01-Sep-2020 15:04:30 Instrument ID: 10193
Lims ID: IC STD3
Client ID:
Operator ID: dvv10203 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

27 Acrylonitrile, CAS: 107-13-1

Signal: 1

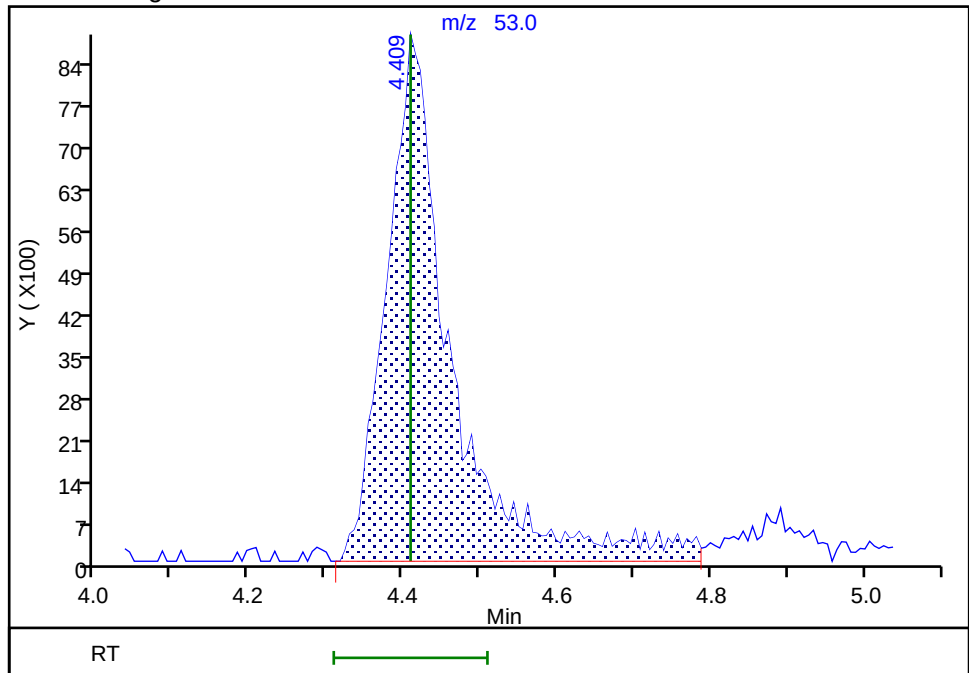
RT: 4.41
Area: 44113
Amount: 4.761831
Amount Units: ug/l

Processing Integration Results



RT: 4.41
Area: 51371
Amount: 5.423891
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:02:09

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

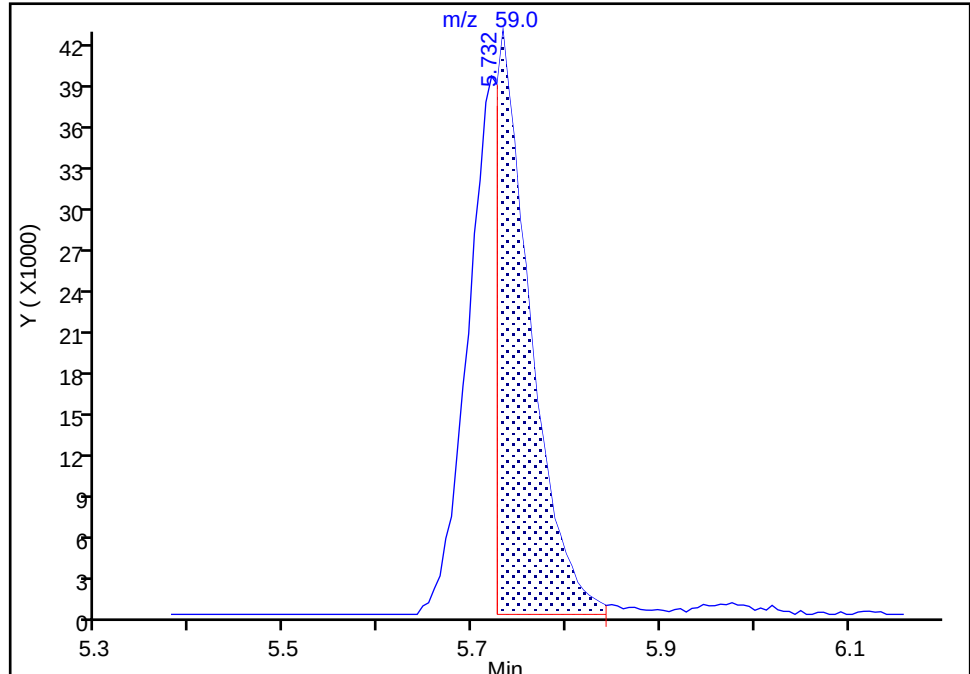
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Injection Date: 01-Sep-2020 15:04:30 Instrument ID: 10193
Lims ID: IC STD3
Client ID:
Operator ID: dvv10203 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

35 Tert-butyl ethyl ether, CAS: 637-92-3

Signal: 1

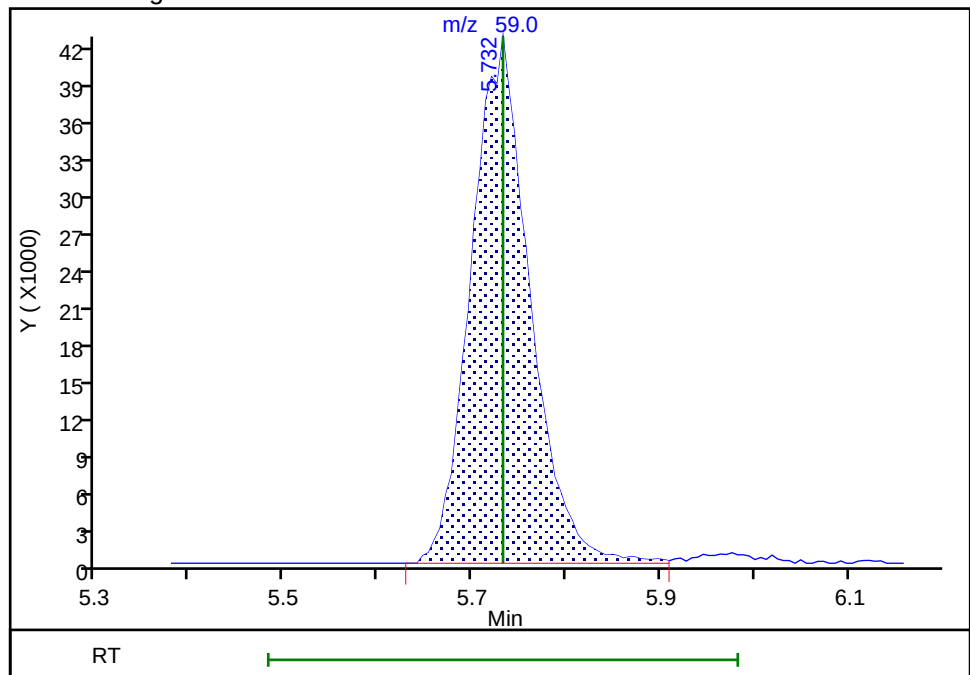
RT: 5.73
Area: 107376
Amount: 0.583894
Amount Units: ug/l

Processing Integration Results



RT: 5.73
Area: 183026
Amount: 1.033821
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:02:27

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

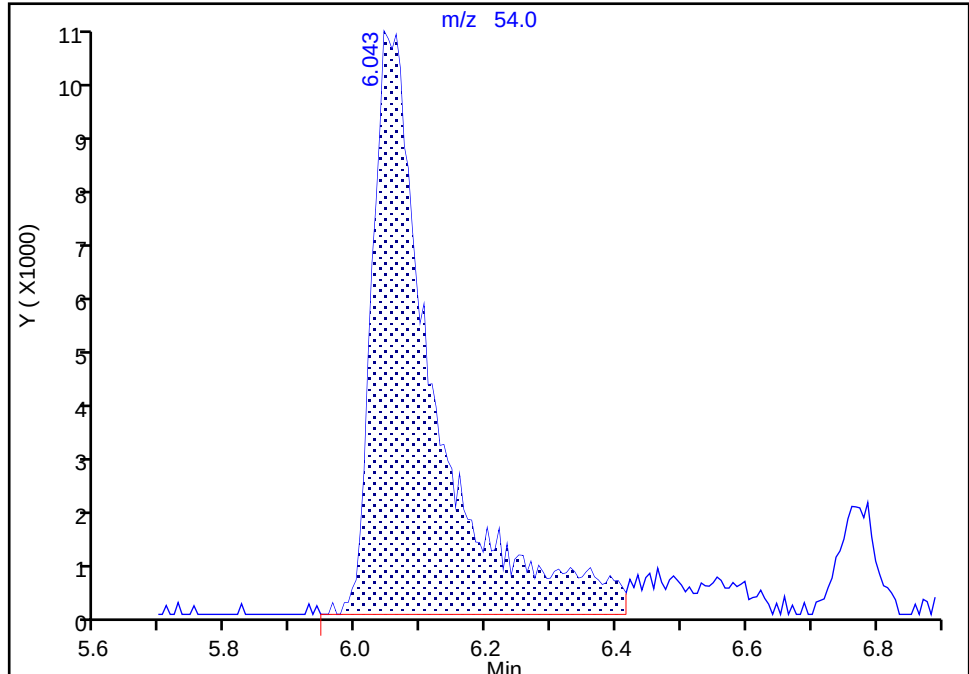
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Injection Date: 01-Sep-2020 15:04:30 Instrument ID: 10193
Lims ID: IC STD3
Client ID:
Operator ID: dvv10203 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

40 Propionitrile, CAS: 107-12-0

Signal: 1

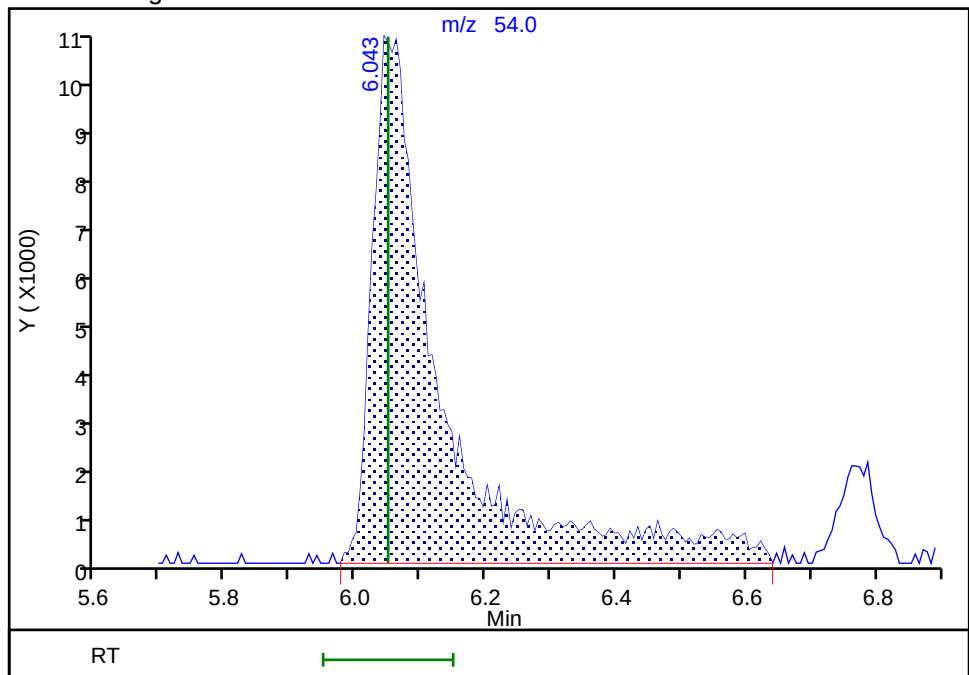
RT: 6.04
Area: 68101
Amount: 19.874939
Amount Units: ug/l

Processing Integration Results



RT: 6.04
Area: 74651
Amount: 21.029905
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:03:38

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

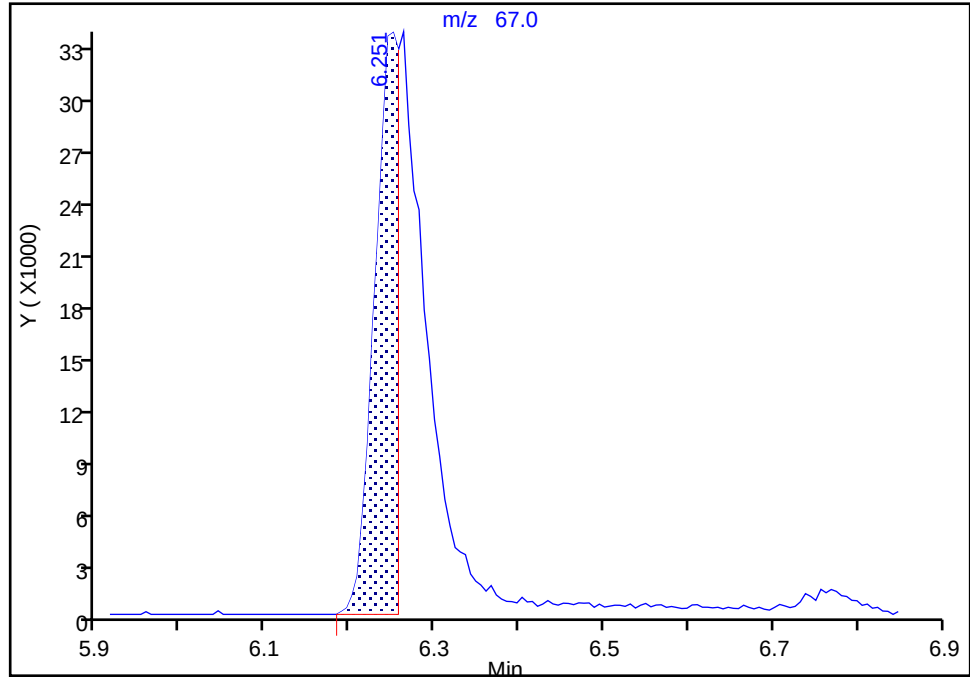
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Injection Date: 01-Sep-2020 15:04:30 Instrument ID: 10193
Lims ID: IC STD3
Client ID:
Operator ID: dvv10203 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

43 Methacrylonitrile, CAS: 126-98-7

Signal: 1

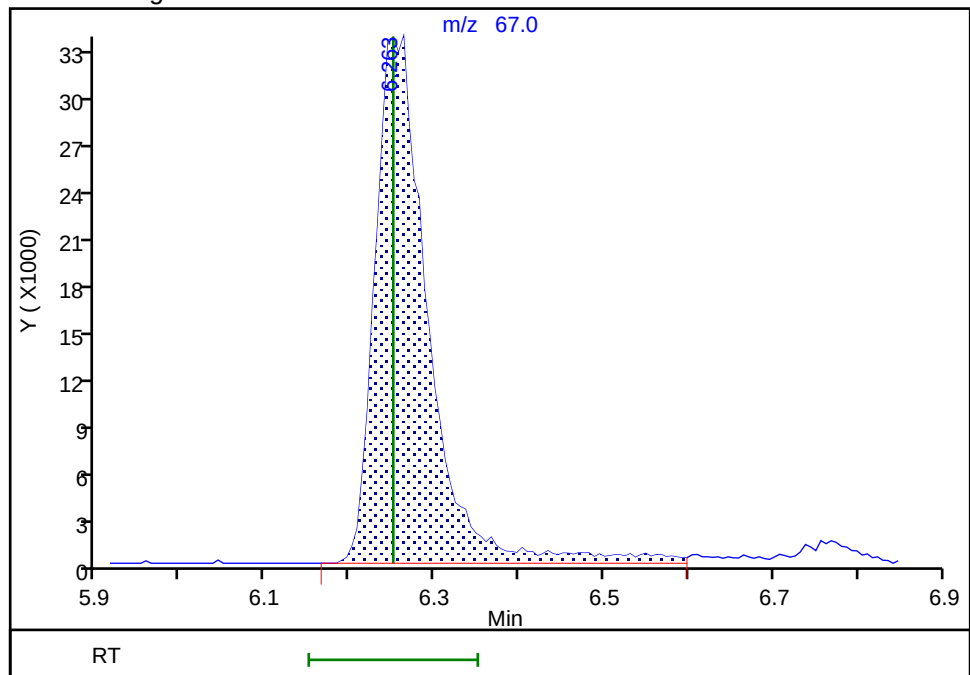
RT: 6.25
Area: 67704
Amount: 8.258310
Amount Units: ug/l

Processing Integration Results



RT: 6.26
Area: 146687
Amount: 10.663214
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:02:56

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

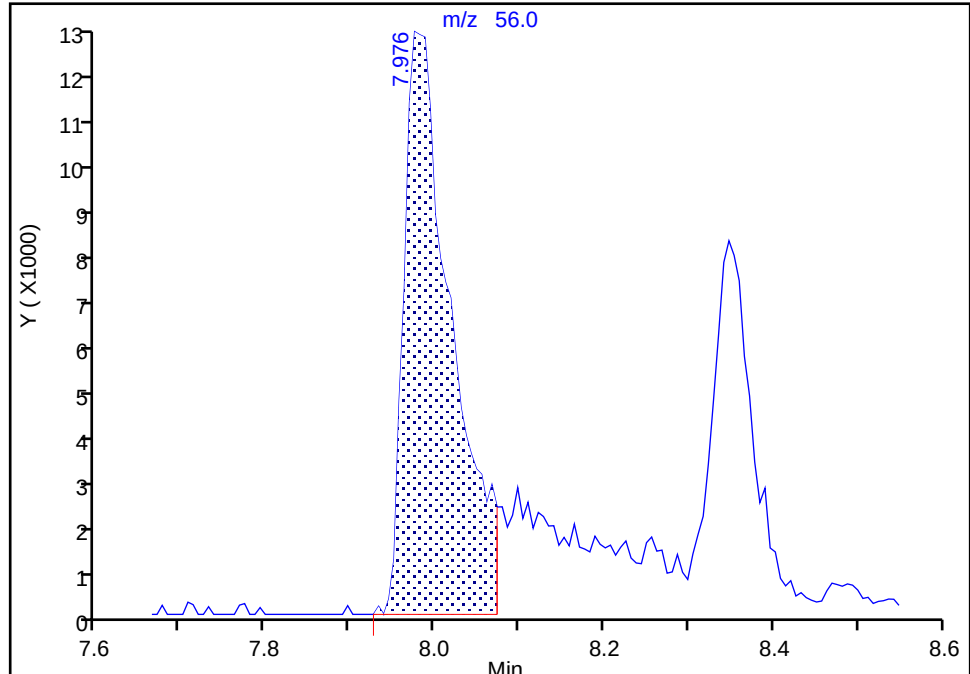
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Injection Date: 01-Sep-2020 15:04:30 Instrument ID: 10193
Lims ID: IC STD3
Client ID:
Operator ID: dvv10203 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

59 n-Butanol, CAS: 71-36-3

Signal: 1

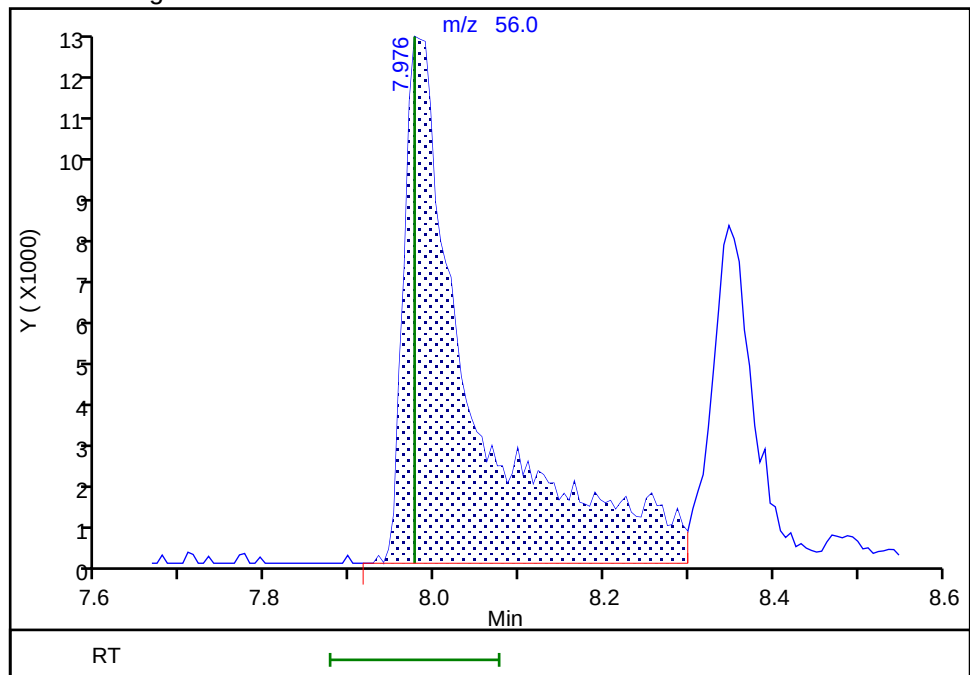
RT: 7.98
Area: 50726
Amount: 98.042226
Amount Units: ug/l

Processing Integration Results



RT: 7.98
Area: 73005
Amount: 97.217312
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:16:24

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

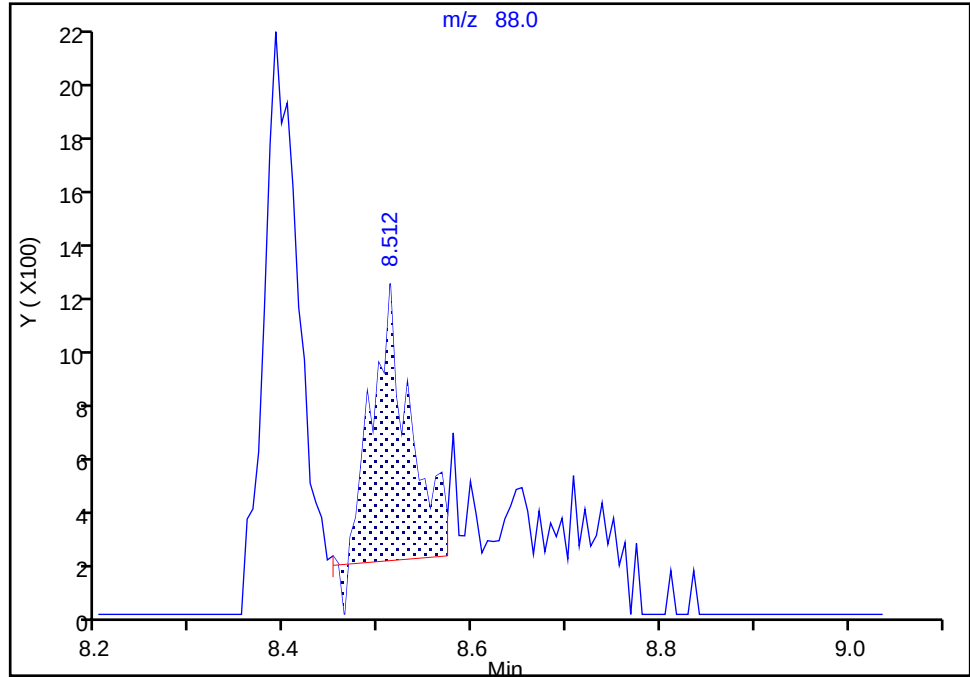
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Injection Date: 01-Sep-2020 15:04:30 Instrument ID: 10193
Lims ID: IC STD3
Client ID:
Operator ID: dvv10203 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

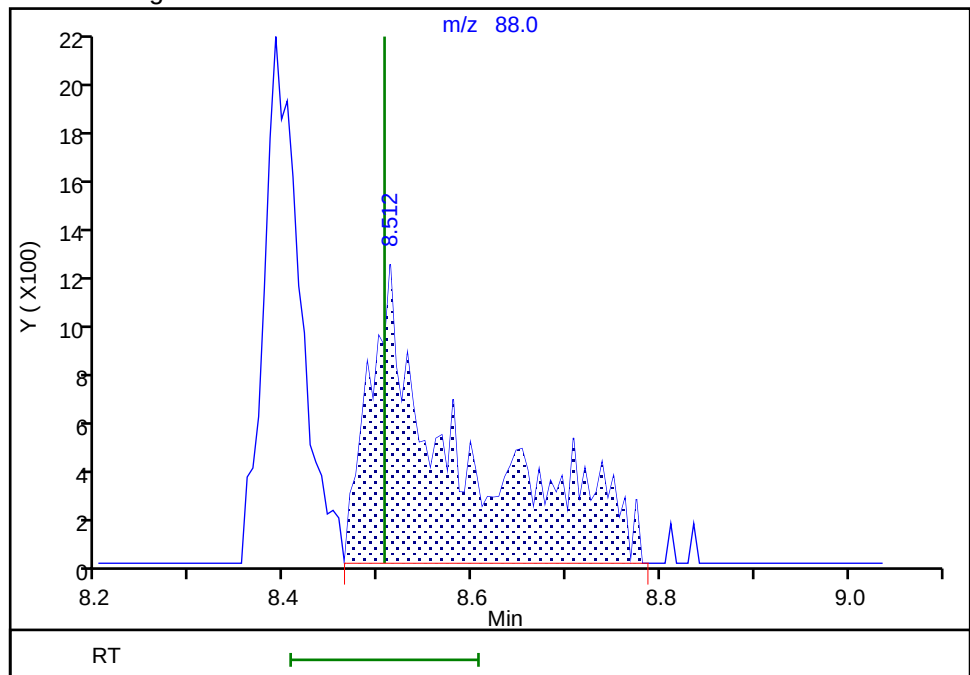
RT: 8.51
Area: 2819
Amount: 21.730370
Amount Units: ug/l

Processing Integration Results



RT: 8.51
Area: 8095
Amount: 54.138741
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:03:11
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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10/27/2020

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I06.D
 Lims ID: IC STD2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 01-Sep-2020 15:26:30 ALS Bottle#: 7 Worklist Smp#: 8
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: IC STD2
 Misc. Info.: 410-0009503-008
 Operator ID: dvv10203 Instrument ID: 10193
 Sublist: chrom-MSV_10193_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Sep-2020 20:10:57 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1059

First Level Reviewer: campbellme

Date: 01-Sep-2020 17:05:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.916	1.910	0.006	99	34165	0.5000	0.5457	
3 Chloromethane	50	2.105	2.099	0.006	99	40412	0.5000	0.5476	
4 Butadiene	39	2.209	2.209	0.000	94	37166	0.5000	0.5354	M
5 Vinyl chloride	62	2.221	2.215	0.006	81	36562	0.5000	0.5359	
6 Bromomethane	94	2.520	2.520	0.000	92	24464	0.5000	0.5080	
7 Chloroethane	64	2.611	2.605	0.006	99	22270	0.5000	0.5284	
8 Dichlorofluoromethane	67	2.843	2.837	0.006	97	47161	0.5000	0.5157	
9 Trichlorofluoromethane	101	2.898	2.898	0.000	96	47434	0.5000	0.5344	
11 Ethyl ether	59	3.135	3.135	0.000	92	23165	0.4999	0.5152	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.215	3.208	0.007	96	34942	0.5000	0.5302	
13 Acrolein	56	3.312	3.306	0.006	98	142874	25.0	24.5	
14 1,1-Dichloroethene	96	3.434	3.428	0.006	98	23536	0.5000	0.5248	
15 112TCTFE	101	3.477	3.464	0.013	91	22631	0.5000	0.4960	
16 Acetone	43	3.477	3.471	0.006	99	33503	5.00	5.42	M
17 Iodomethane	142	3.617	3.617	0.000	97	45466	0.5000	0.5131	
19 Ethyl bromide	108	3.654	3.641	0.013	99	19138	0.5003	0.5138	
18 Isopropyl alcohol	45	3.654	3.647	0.007	45	16590	10.0	18.5	
20 Carbon disulfide	76	3.715	3.708	0.007	100	79256	0.5000	0.5002	
22 Methyl acetate	43	3.885	3.867	0.018	25	10666	0.5000	0.4389	M
23 3-Chloro-1-propene	41	3.897	3.891	0.006	90	39926	0.5000	0.5087	
24 Methylene Chloride	84	4.080	4.074	0.006	96	26091	0.5000	0.5227	M
* 25 t-Butyl alcohol-d10 (IS)	65	4.105	4.111	-0.006	95	145520	50.0	50.0	
26 2-Methyl-2-propanol	59	4.221	4.227	-0.005	96	31710	10.0	10.9	
27 Acrylonitrile	53	4.428	4.409	0.019	98	23111	2.50	2.35	
28 Methyl tert-butyl ether	73	4.471	4.464	0.007	95	74946	0.5000	0.5162	
29 trans-1,2-Dichloroethene	96	4.483	4.470	0.013	98	26945	0.5000	0.5139	
30 Hexane	57	4.897	4.897	0.000	94	35026	0.5000	0.4738	
32 1,1-Dichloroethane	63	5.147	5.135	0.012	96	48762	0.5000	0.5052	
33 Isopropyl ether	45	5.196	5.196	0.000	95	95205	0.5000	0.5174	
34 2-Chloro-1,3-butadiene	53	5.251	5.251	0.000	94	47125	0.5000	0.5181	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Tert-butyl ethyl ether	59	5.732	5.732	0.000	98	90729	0.5000	0.5162	
36 2-Butanone (MEK)	43	5.964	5.946	0.018	100	76154	5.00	5.25	
37 cis-1,2-Dichloroethene	96	5.982	5.970	0.012	87	30278	0.5000	0.5093	
38 2,2-Dichloropropane	77	5.989	5.988	0.000	77	42244	0.5000	0.5072	
40 Propionitrile	54	6.049	6.049	0.000	97	39217	10.0	10.7	M
S 42 1,2-Dichloroethene, Total	100				0			1.02	
43 Methacrylonitrile	67	6.257	6.251	0.007	93	67114	5.00	4.70	
44 Chlorobromomethane	128	6.306	6.305	0.001	94	12738	0.5000	0.4868	
45 Tetrahydrofuran	71	6.324	6.305	0.019	89	21034	5.00	5.13	
46 Chloroform	83	6.464	6.464	0.000	94	48103	0.5000	0.5029	
\$ 47 Dibromofluoromethane (Surr)	113	6.684	6.683	0.001	93	460223	10.0	9.98	
48 1,1,1-Trichloroethane	97	6.677	6.683	-0.006	40	43566	0.5000	0.5055	
49 Cyclohexane	56	6.781	6.775	0.006	94	45257	0.5000	0.4966	
50 Carbon tetrachloride	117	6.891	6.891	0.000	95	35175	0.5000	0.4872	
51 1,1-Dichloropropene	75	6.897	6.897	0.000	92	39192	0.5000	0.5065	
52 Isobutyl alcohol	41	7.086	7.086	0.000	89	23860	25.0	25.4	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.135	7.134	0.001	0	92350	10.0	9.83	
54 Benzene	78	7.165	7.159	0.006	96	113177	0.5000	0.5079	
55 1,2-Dichloroethane	62	7.244	7.238	0.006	97	36081	0.5000	0.5371	
56 Tert-amyl methyl ether	73	7.354	7.360	-0.006	97	80450	0.5000	0.5024	
* 57 Fluorobenzene (IS)	96	7.574	7.573	0.001	98	1940063	10.0	10.0	
58 n-Heptane	43	7.580	7.580	0.000	38	37755	0.5000	0.4587	
59 n-Butanol	56	7.976	7.976	0.000	90	36853	50.0	47.3	M
60 Trichloroethene	95	8.055	8.049	0.006	98	28843	0.5000	0.5022	
61 Methylcyclohexane	83	8.354	8.354	0.000	91	44211	0.5000	0.5025	
62 1,2-Dichloropropane	63	8.390	8.390	0.000	73	28771	0.5000	0.5027	
63 2-ethoxy-2-methyl butane	87	8.397	8.396	0.001	91	44592	0.5000	0.5008	
64 Methyl methacrylate	69	8.482	8.482	0.000	89	14408	0.5000	0.4737	
66 Dibromomethane	93	8.500	8.494	0.006	94	14141	0.5000	0.5050	
65 1,4-Dioxane	88	8.555	8.506	0.049	30	3795	25.0	24.5	M
67 Dichlorobromomethane	83	8.744	8.738	0.006	98	34459	0.5000	0.4988	
68 2-Nitropropane	41	9.031	9.024	0.007	98	42618	5.00	4.52	
71 1-Bromo-2-chloroethane	63	9.140	9.134	0.006	99	30027	0.5000	0.5073	
72 cis-1,3-Dichloropropene	75	9.299	9.299	0.000	93	41792	0.5000	0.4868	
73 4-Methyl-2-pentanone (MIBK)	43	9.488	9.488	0.000	98	203096	5.00	4.82	
\$ 74 Toluene-d8 (Surr)	98	9.610	9.610	0.000	95	1913735	10.0	10.0	
75 Toluene	92	9.689	9.689	0.000	98	73639	0.5000	0.5116	
76 trans-1,3-Dichloropropene	75	9.963	9.957	0.006	97	34646	0.5000	0.4807	
78 Ethyl methacrylate	69	10.030	10.024	0.006	89	30177	0.5000	0.4961	
S 77 1,3-Dichloropropene, Total	100				0			0.9674	
79 1,1,2-Trichloroethane	97	10.165	10.164	0.001	91	20416	0.5000	0.5135	
80 Tetrachloroethene	166	10.244	10.250	-0.006	95	32134	0.5000	0.4997	
81 1,3-Dichloropropane	76	10.329	10.329	0.000	94	36571	0.5000	0.5219	
82 2-Hexanone	43	10.396	10.396	0.000	98	135801	5.00	4.56	
83 Chlorodibromomethane	129	10.549	10.548	0.001	89	21989	0.5000	0.4768	
84 Ethylene Dibromide	107	10.658	10.658	0.000	100	19670	0.5000	0.5010	
* 85 Chlorobenzene-d5 (IS)	117	11.097	11.097	0.000	87	1465303	10.0	10.0	
86 1-Chlorohexane	91	11.109	11.109	0.000	94	42522	0.5000	0.5173	
87 Chlorobenzene	112	11.122	11.122	0.000	95	82597	0.5000	0.5081	
89 1,1,1,2-Tetrachloroethane	131	11.207	11.207	0.000	94	27504	0.5000	0.4974	
90 Ethylbenzene	91	11.213	11.213	0.000	99	143018	0.5000	0.5014	
S 88 Xylenes, Total	106				0			1.50	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
91 m-Xylene & p-Xylene	106	11.329	11.329	0.000	0	112244	1.00	1.01	
92 o-Xylene	106	11.664	11.664	0.000	97	54046	0.5000	0.4949	
93 Styrene	104	11.683	11.676	0.007	94	89517	0.5000	0.4883	
94 Bromoform	173	11.835	11.835	0.000	94	10815	0.5000	0.4222	
95 Isopropylbenzene	105	11.969	11.969	0.000	96	144191	0.5000	0.4991	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.109	12.109	0.000	91	715715	10.0	9.95	
99 1,1,2,2-Tetrachloroethane	83	12.219	12.219	0.000	93	26594	0.5000	0.5171	
100 Bromobenzene	156	12.231	12.231	0.000	91	35338	0.5000	0.5005	
101 trans-1,4-Dichloro-2-butene	53	12.243	12.243	0.000	95	65511	5.00	4.60	
102 1,2,3-Trichloropropane	110	12.262	12.268	-0.006	81	7433	0.5000	0.5310	
103 N-Propylbenzene	91	12.298	12.298	0.000	99	167830	0.5000	0.5062	
104 2-Chlorotoluene	126	12.378	12.377	0.001	96	33943	0.5000	0.5006	
105 1,3,5-Trimethylbenzene	105	12.438	12.438	0.000	94	123379	0.5000	0.5024	
106 4-Chlorotoluene	126	12.469	12.469	0.000	98	35497	0.5000	0.5037	
107 tert-Butylbenzene	134	12.682	12.682	0.000	93	25380	0.5000	0.4753	
108 Pentachloroethane	167	12.713	12.713	0.000	77	18671	0.5000	0.4682	
109 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	98	128573	0.5000	0.5103	
110 sec-Butylbenzene	105	12.847	12.847	0.000	94	159853	0.5000	0.5052	
111 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	72046	0.5000	0.5108	
112 4-Isopropyltoluene	119	12.957	12.957	0.000	97	136940	0.5000	0.4962	
* 113 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	96	823493	10.0	10.0	
114 1,4-Dichlorobenzene	146	13.018	13.017	0.001	94	75027	0.5000	0.5169	
115 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	99	55416	0.5000	0.5011	
116 Benzyl chloride	126	13.103	13.103	0.000	99	9231	0.5000	0.4513	
119 n-Butylbenzene	92	13.249	13.249	0.000	98	67384	0.5000	0.4819	
120 1,2-Dichlorobenzene	146	13.280	13.286	-0.006	97	66856	0.5000	0.5023	
118 p-Diethylbenzene	119	13.304	13.304	0.000	0	67208	0.5000	0.4797	
123 1,2-Dibromo-3-Chloropropane	155	13.835	13.834	0.001	83	3372	0.5000	0.4781	
124 1,3,5-Trichlorobenzene	180	13.956	13.956	0.000	98	57894	0.5000	0.5031	
125 1,2,4-Trichlorobenzene	180	14.389	14.383	0.006	93	52641	0.5000	0.5099	
126 Hexachlorobutadiene	225	14.469	14.468	0.001	97	25396	0.5000	0.5037	
127 Naphthalene	128	14.572	14.566	0.006	97	93520	0.5000	0.5078	
128 1,2,3-Trichlorobenzene	180	14.712	14.712	0.000	96	47610	0.5000	0.5210	
129 2-Methylnaphthalene	142	15.346	15.340	0.006	0	61192	0.5000	0.4914	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00022

Amount Added: 2.00

Units: uL

MSV_RV4_826_00024

Amount Added: 2.00

Units: uL

MSV_RV4GAS826_00072

Amount Added: 2.00

Units: uL

MSV_25_826ISS_00001

Amount Added: 1.00

Units: uL

Run Reagent

Report Date: 01-Sep-2020 20:10:58

Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I06.D

Injection Date: 01-Sep-2020 15:26:30

Instrument ID: 10193

Operator ID: dwv10203

Lims ID: IC STD2

Worklist Smp#: 8

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

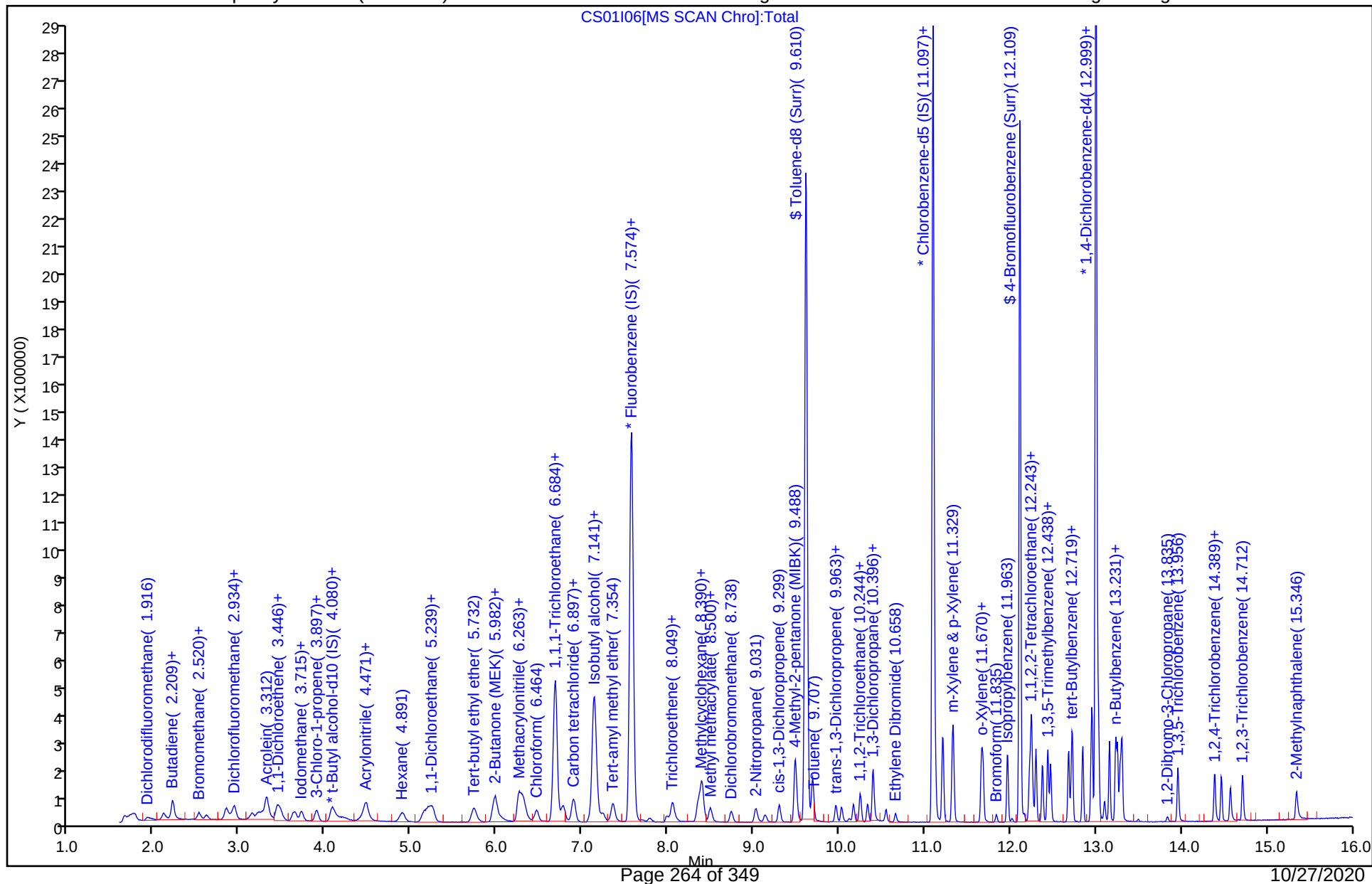
ALS Bottle#: 7

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

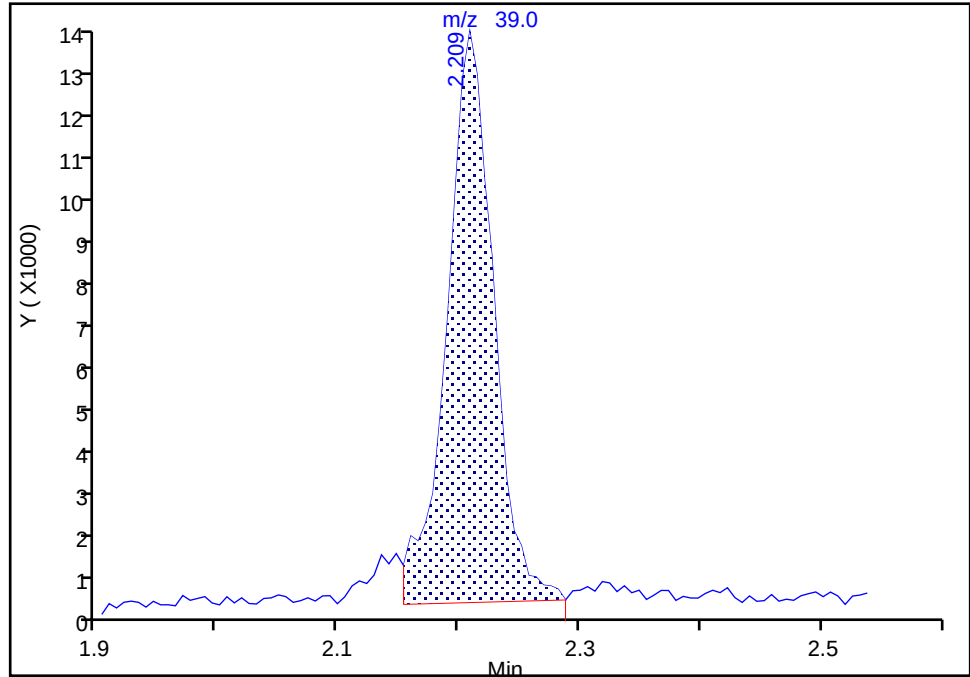
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Injection Date: 01-Sep-2020 15:26:30 Instrument ID: 10193
Lims ID: IC STD2
Client ID:
Operator ID: dvv10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

4 Butadiene, CAS: 106-99-0

Signal: 1

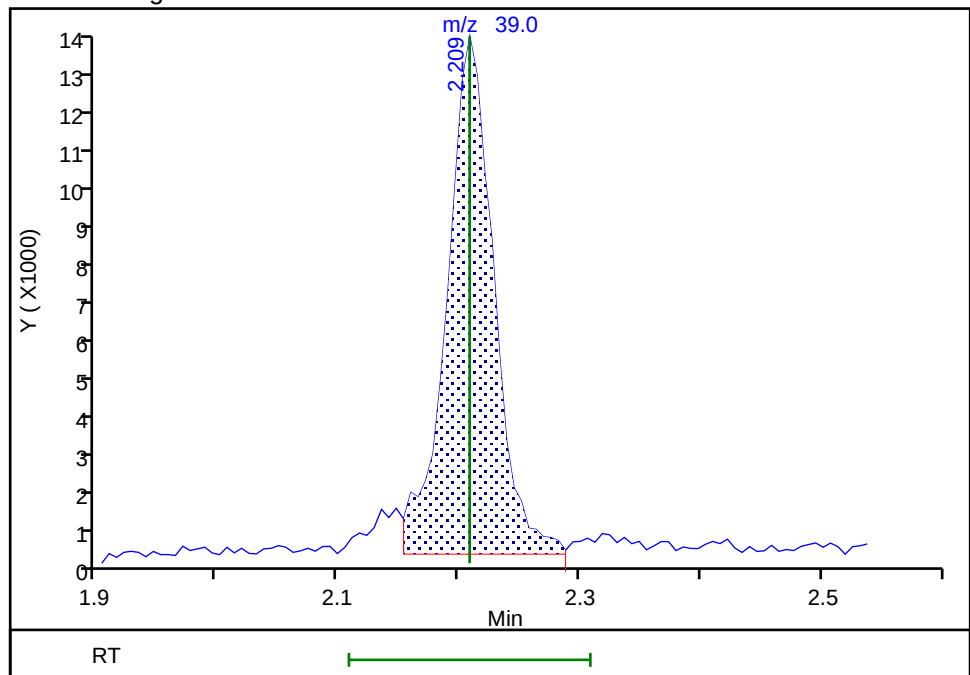
RT: 2.21
Area: 36737
Amount: 0.531655
Amount Units: ug/l

Processing Integration Results



RT: 2.21
Area: 37166
Amount: 0.535389
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:04:06

Audit Action: Assigned New Baseline

Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC

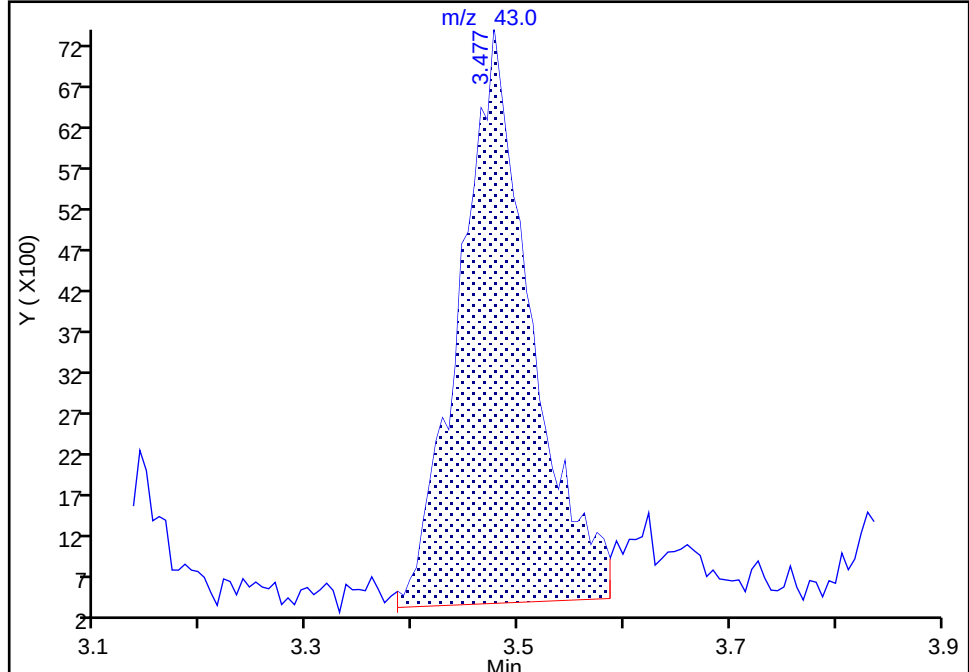
Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I06.D
Injection Date: 01-Sep-2020 15:26:30 Instrument ID: 10193
Lims ID: IC STD2
Client ID:
Operator ID: dvv10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

16 Acetone, CAS: 67-64-1

Signal: 1

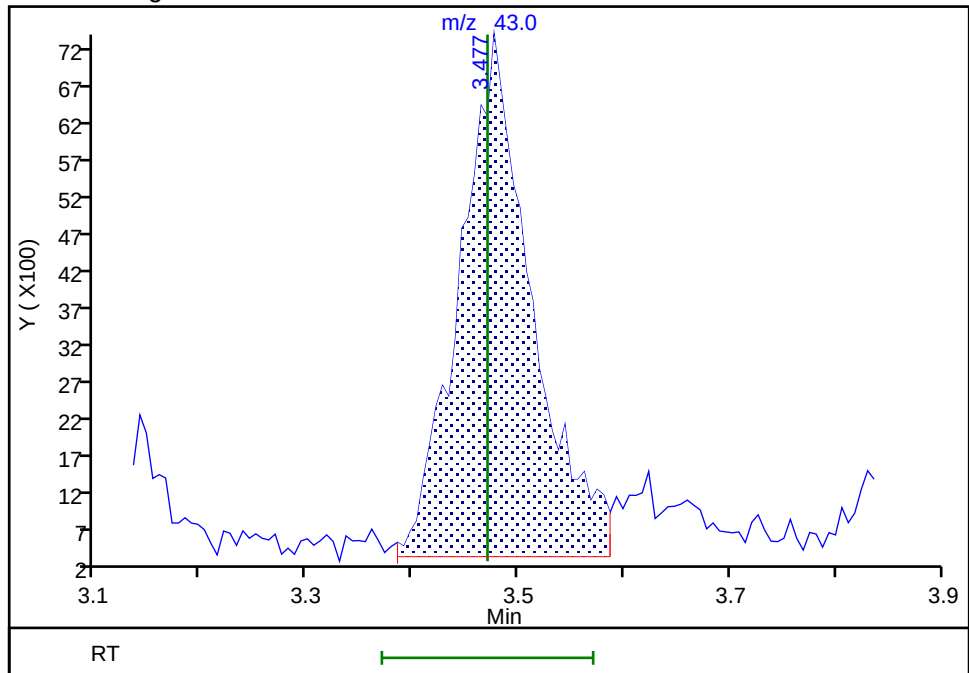
RT: 3.48
Area: 32844
Amount: 5.326538
Amount Units: ug/l

Processing Integration Results



RT: 3.48
Area: 33503
Amount: 5.416872
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:04:18

Audit Action: Assigned New Baseline

Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC

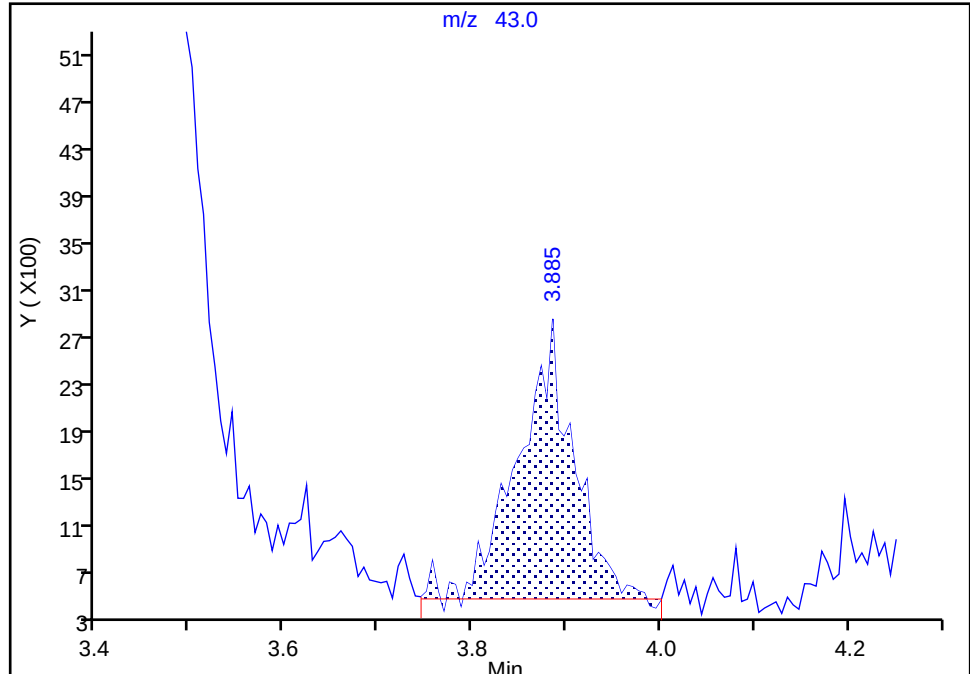
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Injection Date: 01-Sep-2020 15:26:30 Instrument ID: 10193
Lims ID: IC STD2
Client ID:
Operator ID: dvv10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

22 Methyl acetate, CAS: 79-20-9

Signal: 1

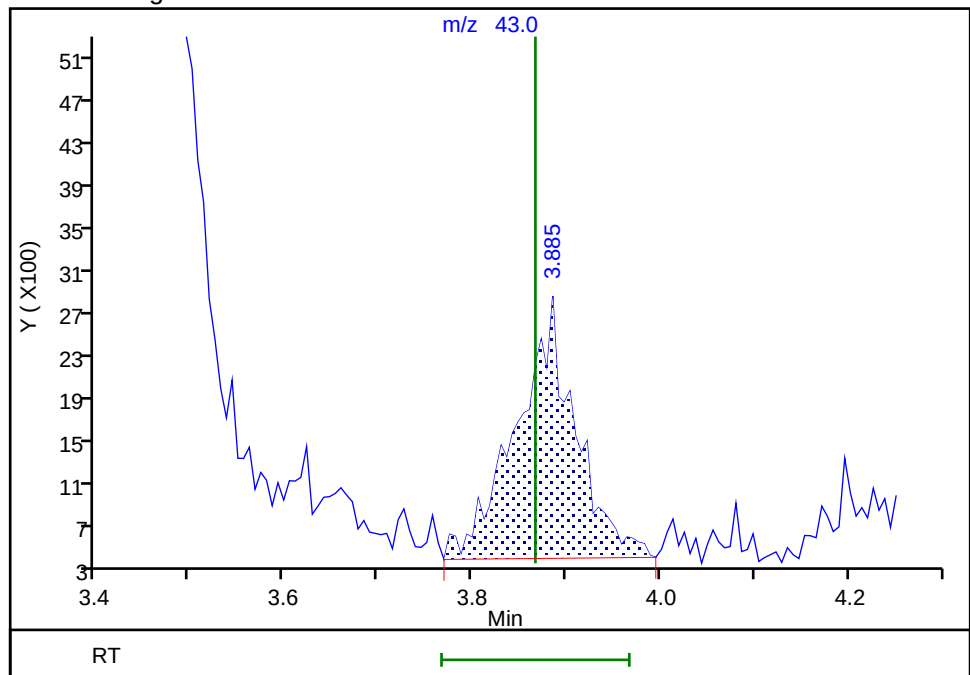
RT: 3.89
Area: 9648
Amount: 0.319685
Amount Units: ug/l

Processing Integration Results



RT: 3.89
Area: 10666
Amount: 0.438891
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:04:37

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

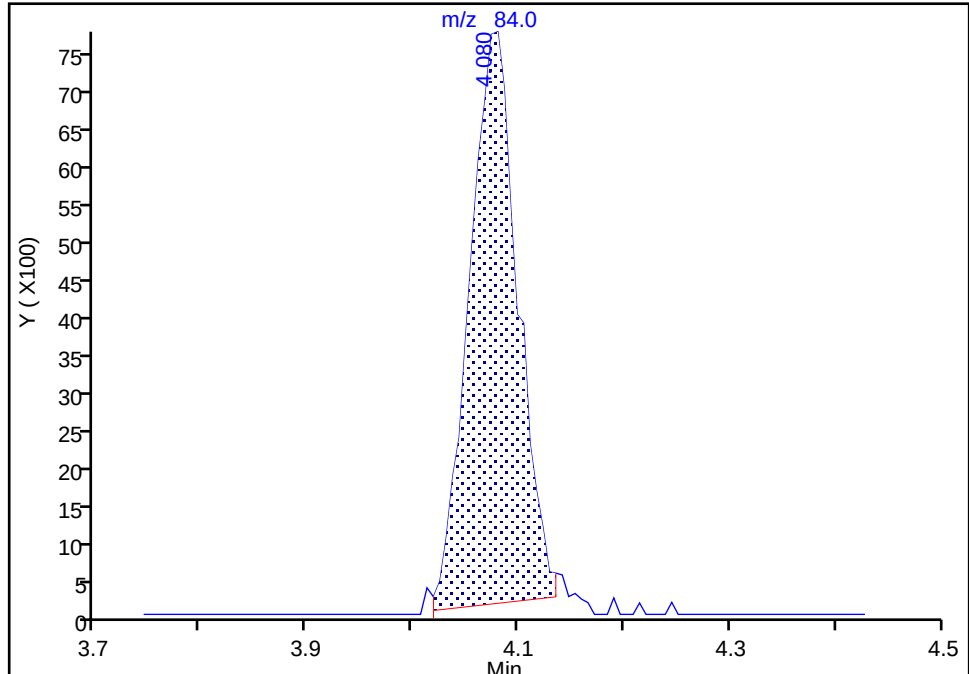
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Injection Date: 01-Sep-2020 15:26:30 Instrument ID: 10193
Lims ID: IC STD2
Client ID:
Operator ID: dvv10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

24 Methylene Chloride, CAS: 75-09-2

Signal: 1

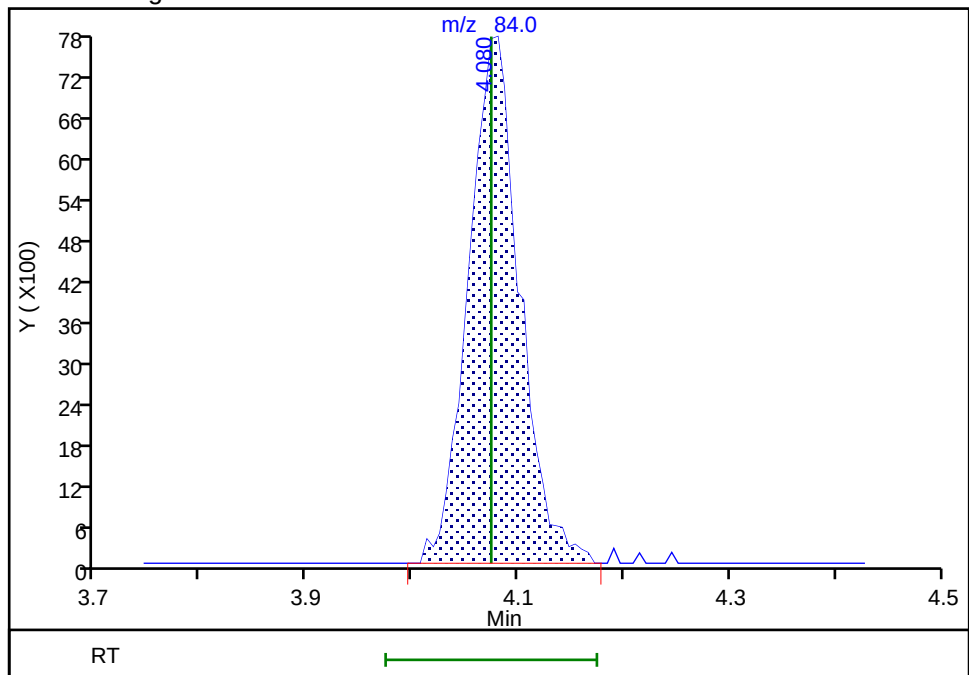
RT: 4.08
Area: 24403
Amount: 0.493670
Amount Units: ug/l

Processing Integration Results



RT: 4.08
Area: 26091
Amount: 0.522718
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:04:54

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

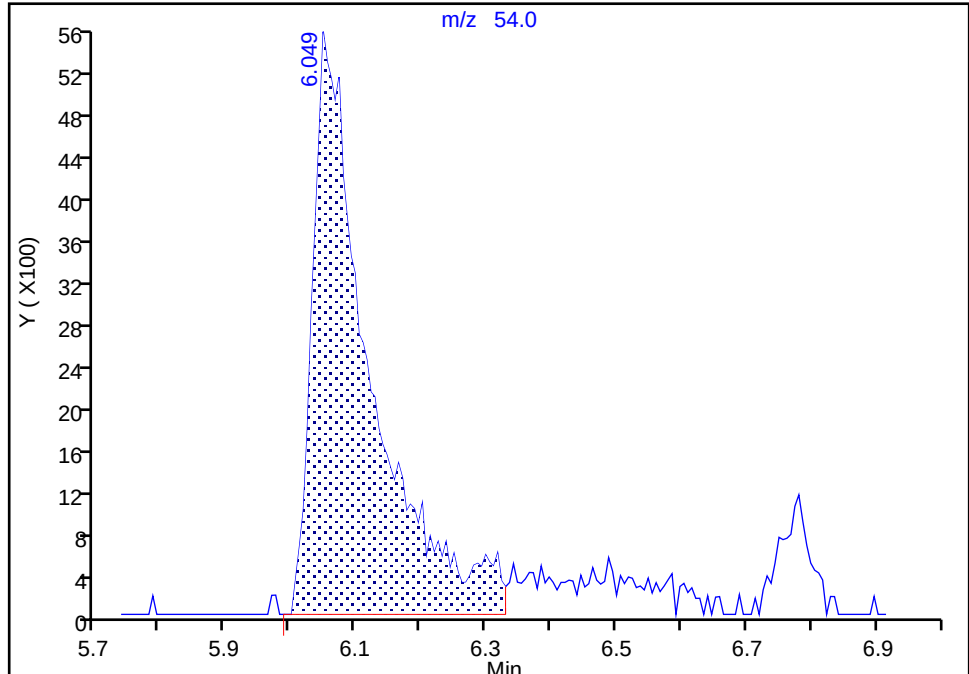
Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I06.D
Injection Date: 01-Sep-2020 15:26:30 Instrument ID: 10193
Lims ID: IC STD2
Client ID:
Operator ID: dvv10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

40 Propionitrile, CAS: 107-12-0

Signal: 1

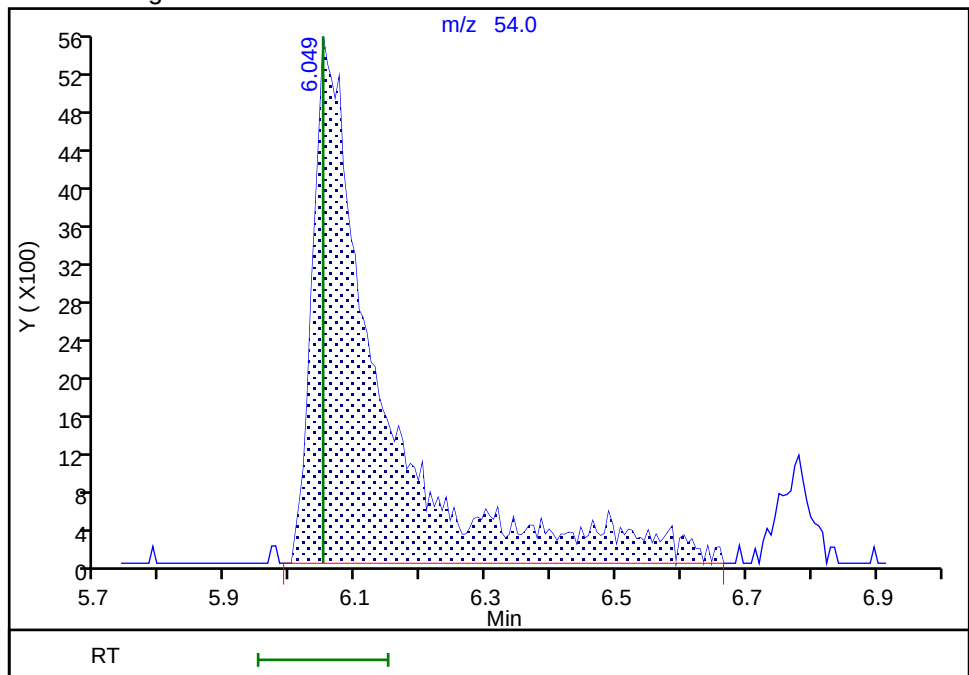
RT: 6.05
Area: 33664
Amount: 9.345852
Amount Units: ug/l

Processing Integration Results



RT: 6.05
Area: 39217
Amount: 10.652873
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:05:07

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

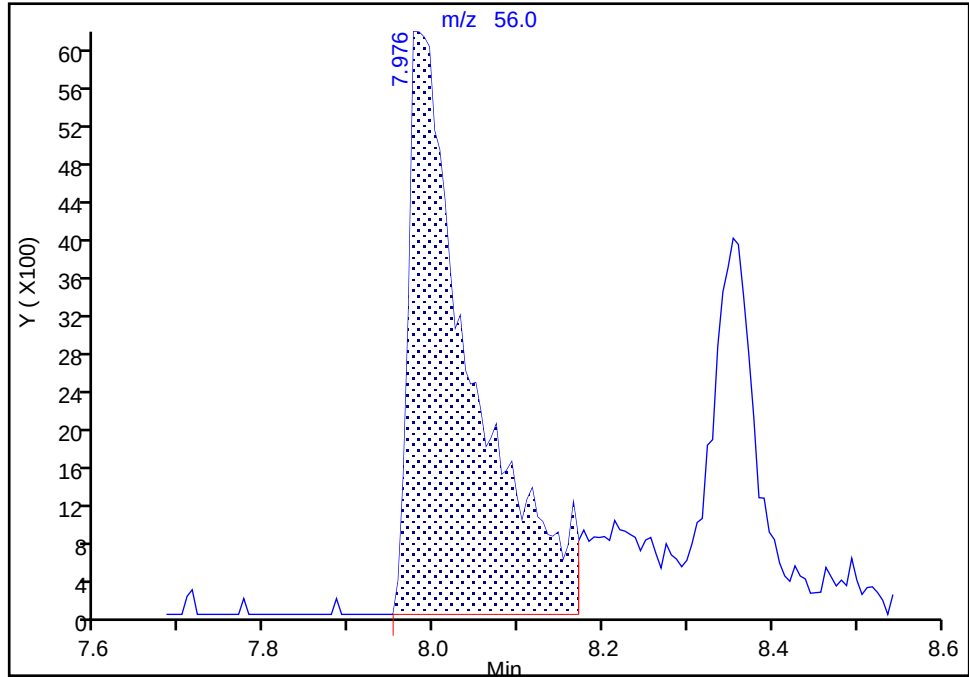
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Injection Date: 01-Sep-2020 15:26:30 Instrument ID: 10193
Lims ID: IC STD2
Client ID:
Operator ID: dvv10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm i.d.) Detector: MS Quad

59 n-Butanol, CAS: 71-36-3

Signal: 1

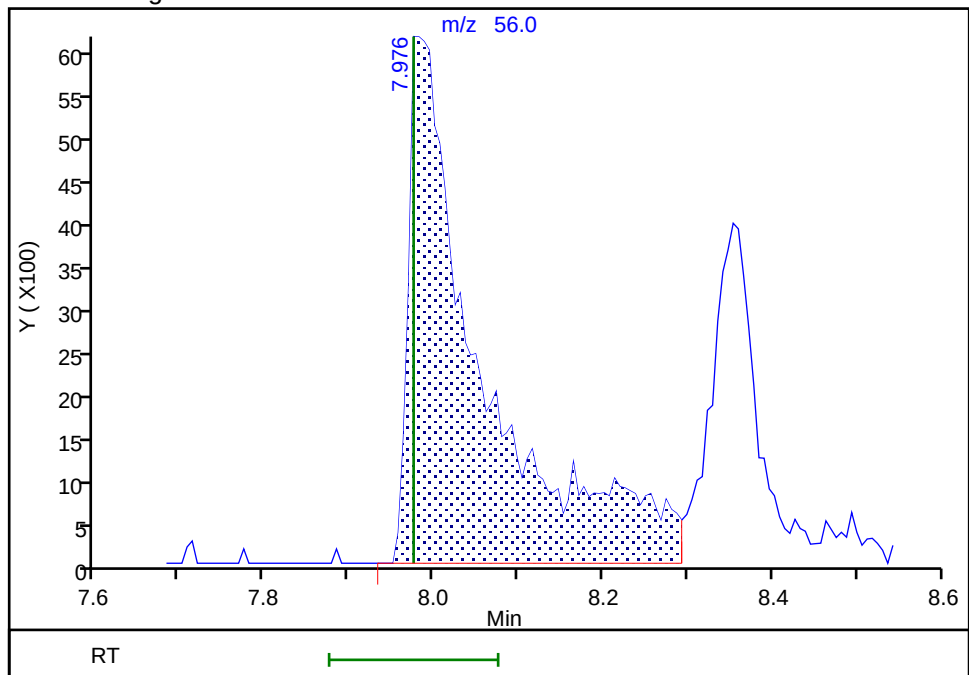
RT: 7.98
Area: 31328
Amount: 41.986609
Amount Units: ug/l

Processing Integration Results



RT: 7.98
Area: 36853
Amount: 47.321069
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:16:57

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

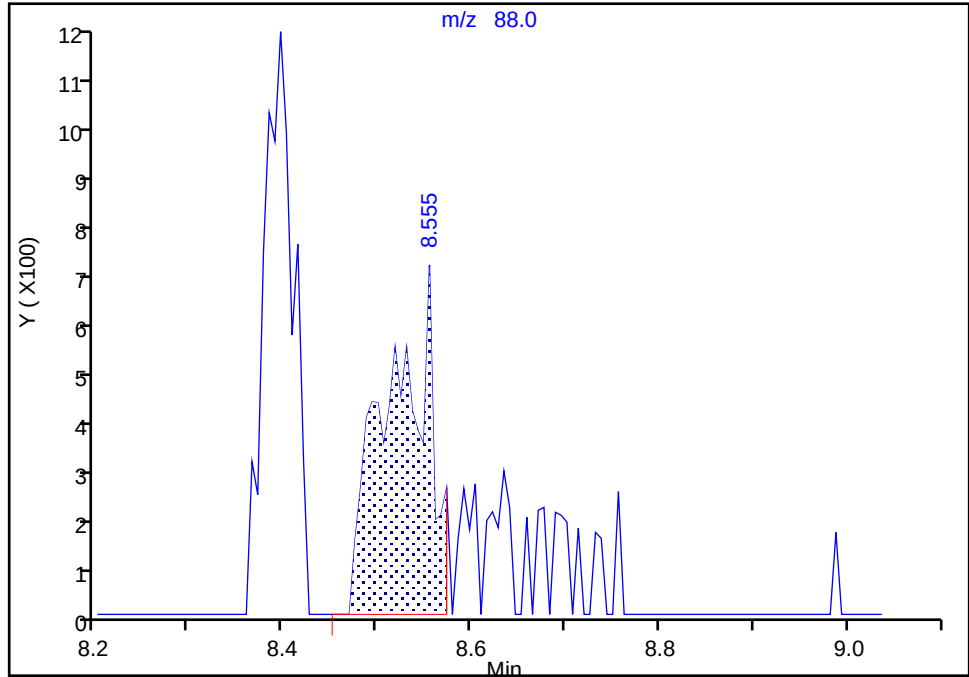
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Injection Date: 01-Sep-2020 15:26:30 Instrument ID: 10193
Lims ID: IC STD2
Client ID:
Operator ID: dvv10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

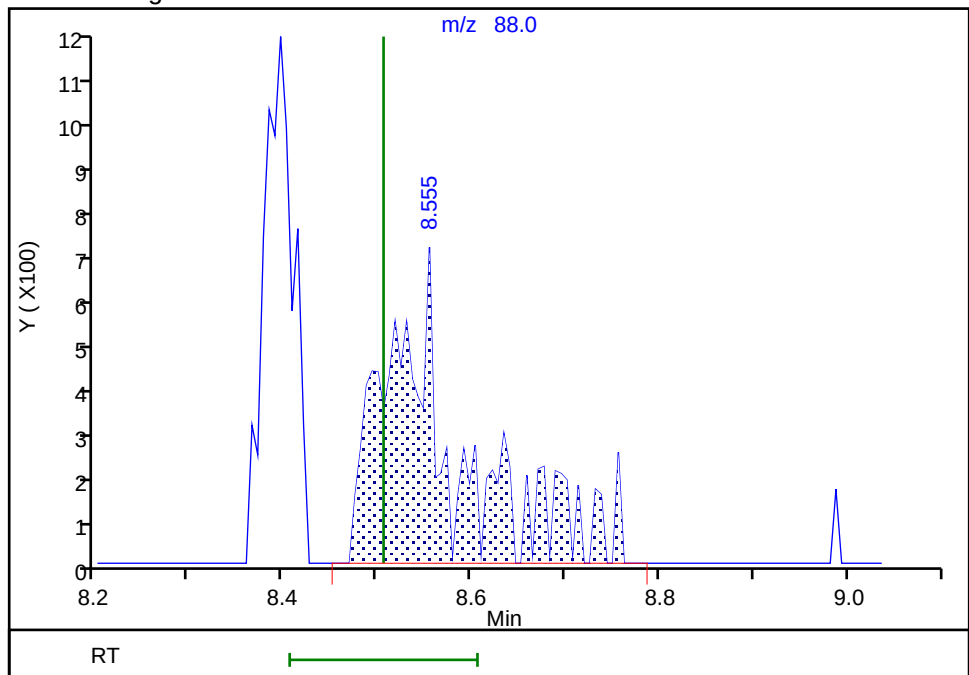
RT: 8.56
Area: 2364
Amount: 15.473810
Amount Units: ug/l

Processing Integration Results



RT: 8.56
Area: 3795
Amount: 24.473370
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:05:22

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I07.D
 Lims ID: IC STD1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 01-Sep-2020 15:48:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: IC STD1
 Misc. Info.: 410-0009503-009
 Operator ID: dvv10203 Instrument ID: 10193
 Sublist: chrom-MSV_10193_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Sep-2020 20:11:06 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1059

First Level Reviewer: campbellme

Date: 01-Sep-2020 16:26:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.904	1.910	-0.006	97	11305	0.2000	0.1809	
3 Chloromethane	50	2.093	2.099	-0.006	99	15951	0.2000	0.2165	
4 Butadiene	39	2.197	2.209	-0.012	91	14355	0.2000	0.2071	M
5 Vinyl chloride	62	2.215	2.215	0.000	85	14371	0.2000	0.2110	
6 Bromomethane	94	2.514	2.520	-0.006	93	10152	0.2000	0.2112	
7 Chloroethane	64	2.587	2.605	-0.018	99	9373	0.2000	0.2227	
8 Dichlorofluoromethane	67	2.825	2.837	-0.013	96	19377	0.2000	0.2122	
9 Trichlorofluoromethane	101	2.892	2.898	-0.006	96	17838	0.2000	0.2013	
11 Ethyl ether	59	3.123	3.135	-0.012	92	9388	0.2000	0.2091	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.215	3.208	0.007	93	15559	0.2000	0.2365	
13 Acrolein	56	3.300	3.306	-0.006	97	57475	10.0	10.1	
14 1,1-Dichloroethene	96	3.416	3.428	-0.012	98	9367	0.2000	0.2092	
15 1,1,2,2-Tetrafluoroethane	101	3.471	3.464	0.007	85	8535	0.2000	0.1874	
16 Acetone	43	3.465	3.471	-0.006	96	13971	2.00	2.30	
17 Iodomethane	142	3.611	3.617	-0.006	100	18680	0.2000	0.2112	
19 Ethyl bromide	108	3.641	3.641	0.000	98	7374	0.2001	0.1983	
18 Isopropyl alcohol	45	3.629	3.647	-0.018	52	7471	4.00	11.4	
20 Carbon disulfide	76	3.702	3.708	-0.006	100	33471	0.2000	0.2116	
22 Methyl acetate	43	3.879	3.867	0.012	26	5400	0.2000	0.2266	
23 3-Chloro-1-propene	41	3.873	3.891	-0.018	88	16597	0.2000	0.2118	
24 Methylene Chloride	84	4.068	4.074	-0.006	98	10355	0.2000	0.2078	
* 25 t-Butyl alcohol-d10 (IS)	65	4.093	4.111	-0.018	94	142677	50.0	50.0	
26 2-Methyl-2-propanol	59	4.208	4.227	-0.018	97	12311	4.00	4.33	
27 Acrylonitrile	53	4.434	4.409	0.025	96	10290	1.00	1.07	
28 Methyl tert-butyl ether	73	4.440	4.464	-0.024	96	31299	0.2000	0.2159	
29 trans-1,2-Dichloroethene	96	4.458	4.470	-0.012	97	10888	0.2000	0.2080	
30 Hexane	57	4.891	4.897	-0.006	94	14606	0.2000	0.1979	
32 1,1-Dichloroethane	63	5.129	5.135	-0.006	96	20597	0.2000	0.2137	
33 Isopropyl ether	45	5.196	5.196	0.000	95	38832	0.2000	0.2114	
34 2-Chloro-1,3-butadiene	53	5.233	5.251	-0.018	95	19967	0.2000	0.2199	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Tert-butyl ethyl ether	59	5.726	5.732	-0.006	97	36977	0.2000	0.2107	
36 2-Butanone (MEK)	43	5.964	5.946	0.018	95	31084	2.00	2.19	
37 cis-1,2-Dichloroethene	96	5.976	5.970	0.006	84	12683	0.2000	0.2137	
38 2,2-Dichloropropane	77	5.989	5.988	0.001	72	17391	0.2000	0.2091	
40 Propionitrile	54	6.080	6.049	0.031	88	12804	4.00	3.55	
S 42 1,2-Dichloroethene, Total	100				0			0.4217	
43 Methacrylonitrile	67	6.257	6.251	0.007	89	27261	2.00	1.95	
44 Chlorobromomethane	128	6.299	6.305	-0.006	83	5261	0.2000	0.2014	
45 Tetrahydrofuran	71	6.318	6.305	0.013	89	7984	2.00	1.98	
46 Chloroform	83	6.458	6.464	-0.006	93	20153	0.2000	0.2110	
\$ 47 Dibromofluoromethane (Surr)	113	6.677	6.683	-0.006	93	459388	10.0	9.98	
48 1,1,1-Trichloroethane	97	6.671	6.683	-0.012	37	17452	0.2000	0.2028	
49 Cyclohexane	56	6.775	6.775	0.000	93	18443	0.2000	0.2027	
50 Carbon tetrachloride	117	6.891	6.891	0.000	92	14471	0.2000	0.2008	
51 1,1-Dichloropropene	75	6.897	6.897	0.000	89	16330	0.2000	0.2114	
52 Isobutyl alcohol	41	7.092	7.086	0.006	90	10703	10.0	11.6	M
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.135	7.134	0.001	0	92975	10.0	9.92	
54 Benzene	78	7.159	7.159	0.000	94	46486	0.2000	0.2090	
55 1,2-Dichloroethane	62	7.238	7.238	0.000	79	16105	0.2000	0.2402	
56 Tert-amyl methyl ether	73	7.348	7.360	-0.012	96	34074	0.2000	0.2132	
* 57 Fluorobenzene (IS)	96	7.567	7.573	-0.006	99	1936882	10.0	10.0	
58 n-Heptane	43	7.574	7.580	-0.006	37	16903	0.2000	0.2057	
59 n-Butanol	56	8.000	7.976	0.024	81	15142	20.0	19.8	M
60 Trichloroethene	95	8.049	8.049	0.000	96	11853	0.2000	0.2067	
61 Methylcyclohexane	83	8.354	8.354	0.000	87	15190	0.2000	0.1729	
62 1,2-Dichloropropane	63	8.384	8.390	-0.006	73	12253	0.2000	0.2145	
63 2-ethoxy-2-methyl butane	87	8.397	8.396	0.001	89	17738	0.2000	0.1995	
64 Methyl methacrylate	69	8.482	8.482	0.000	89	6103	0.2000	0.2047	
66 Dibromomethane	93	8.512	8.494	0.018	86	6094	0.2000	0.2180	
65 1,4-Dioxane	88	8.506	8.506	0.000	33	1094	10.0	7.20	M
67 Dichlorobromomethane	83	8.738	8.738	0.000	96	14281	0.2000	0.2071	
68 2-Nitropropane	41	9.025	9.024	0.001	99	17977	2.00	1.94	
71 1-Bromo-2-chloroethane	63	9.134	9.134	0.000	98	11914	0.2000	0.2016	
72 cis-1,3-Dichloropropene	75	9.299	9.299	0.000	93	17450	0.2000	0.2036	
73 4-Methyl-2-pentanone (MIBK)	43	9.488	9.488	0.000	98	79991	2.00	1.94	
\$ 74 Toluene-d8 (Surr)	98	9.610	9.610	0.000	95	1926152	10.0	10.0	
75 Toluene	92	9.689	9.689	0.000	97	29375	0.2000	0.2037	
76 trans-1,3-Dichloropropene	75	9.957	9.957	0.000	96	14266	0.2000	0.1975	
78 Ethyl methacrylate	69	10.030	10.024	0.006	89	11251	0.2000	0.1846	
S 77 1,3-Dichloropropene, Total	100				0			0.4011	
79 1,1,2-Trichloroethane	97	10.165	10.164	0.001	91	8186	0.2000	0.2055	
80 Tetrachloroethene	166	10.244	10.250	-0.006	96	13549	0.2000	0.2103	
81 1,3-Dichloropropane	76	10.329	10.329	0.000	93	14740	0.2000	0.2099	
82 2-Hexanone	43	10.396	10.396	0.000	97	53208	2.00	1.82	
83 Chlorodibromomethane	129	10.543	10.548	-0.006	92	8028	0.2000	0.1737	
84 Ethylene Dibromide	107	10.658	10.658	0.000	99	7944	0.2000	0.2020	
* 85 Chlorobenzene-d5 (IS)	117	11.097	11.097	0.000	87	1468133	10.0	10.0	
86 1-Chlorohexane	91	11.103	11.109	-0.006	82	18891	0.2000	0.2294	
87 Chlorobenzene	112	11.122	11.122	0.000	97	34035	0.2000	0.2090	
89 1,1,1,2-Tetrachloroethane	131	11.207	11.207	0.000	93	10641	0.2000	0.1921	
90 Ethylbenzene	91	11.213	11.213	0.000	99	59671	0.2000	0.2088	
S 88 Xylenes, Total	106				0			0.5952	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
91 m-Xylene & p-Xylene	106	11.329	11.329	0.000	0	43867	0.4000	0.3928	
92 o-Xylene	106	11.664	11.664	0.000	97	22149	0.2000	0.2024	
93 Styrene	104	11.676	11.676	0.000	95	35521	0.2000	0.1934	
94 Bromoform	173	11.835	11.835	0.000	94	4087	0.2000	0.1592	
95 Isopropylbenzene	105	11.969	11.969	0.000	96	57134	0.2000	0.1974	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.109	12.109	0.000	90	711441	10.0	9.87	
99 1,1,2,2-Tetrachloroethane	83	12.219	12.219	0.000	62	10523	0.2000	0.2064	
100 Bromobenzene	156	12.225	12.231	-0.006	96	15119	0.2000	0.2160	
101 trans-1,4-Dichloro-2-butene	53	12.249	12.243	0.006	93	25153	2.00	1.78	
102 1,2,3-Trichloropropane	110	12.268	12.268	0.000	82	2945	0.2000	0.2122	
103 N-Propylbenzene	91	12.298	12.298	0.000	98	67115	0.2000	0.2042	
104 2-Chlorotoluene	126	12.378	12.377	0.001	97	14651	0.2000	0.2179	
105 1,3,5-Trimethylbenzene	105	12.438	12.438	0.000	92	50066	0.2000	0.2056	
106 4-Chlorotoluene	126	12.475	12.469	0.006	96	14993	0.2000	0.2146	
107 tert-Butylbenzene	134	12.682	12.682	0.000	93	12027	0.2000	0.2272	
108 Pentachloroethane	167	12.713	12.713	0.000	76	6746	0.2000	0.1706	
109 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	98	48590	0.2000	0.1945	
110 sec-Butylbenzene	105	12.847	12.847	0.000	94	63813	0.2000	0.2034	
111 1,3-Dichlorobenzene	146	12.944	12.944	0.000	97	28222	0.2000	0.2018	
112 4-Isopropyltoluene	119	12.957	12.957	0.000	98	54332	0.2000	0.1986	
* 113 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	96	816488	10.0	10.0	
114 1,4-Dichlorobenzene	146	13.018	13.017	0.001	93	30493	0.2000	0.2119	
115 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	98	22229	0.2000	0.2027	
116 Benzyl chloride	126	13.103	13.103	0.000	98	3443	0.2000	0.1698	
119 n-Butylbenzene	92	13.249	13.249	0.000	98	26466	0.2000	0.1909	
120 1,2-Dichlorobenzene	146	13.286	13.286	0.000	97	26969	0.2000	0.2044	
118 p-Diethylbenzene	119	13.304	13.304	0.000	0	28577	0.2000	0.2057	
123 1,2-Dibromo-3-Chloropropane	155	13.841	13.834	0.007	80	1161	0.2000	0.1660	
124 1,3,5-Trichlorobenzene	180	13.963	13.956	0.007	96	22982	0.2000	0.2014	
125 1,2,4-Trichlorobenzene	180	14.395	14.383	0.012	93	21212	0.2000	0.2072	
126 Hexachlorobutadiene	225	14.469	14.468	0.001	95	10701	0.2000	0.2141	
127 Naphthalene	128	14.578	14.566	0.012	97	36400	0.2000	0.1993	
128 1,2,3-Trichlorobenzene	180	14.719	14.712	0.007	94	18586	0.2000	0.2051	
129 2-Methylnaphthalene	142	15.353	15.340	0.013	0	23157	0.2000	0.1876	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00022

Amount Added: 2.00

Units: uL

MSV_RV4_826_00024

Amount Added: 2.00

Units: uL

MSV_RV4GAS826_00072

Amount Added: 2.00

Units: uL

MSV_25_826ISS_00001

Amount Added: 1.00

Units: uL

Run Reagent

Report Date: 01-Sep-2020 20:11:07

Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I07.D

Injection Date: 01-Sep-2020 15:48:30

Instrument ID: 10193

Operator ID: dwv10203

Lims ID: IC STD1

Worklist Smp#: 9

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

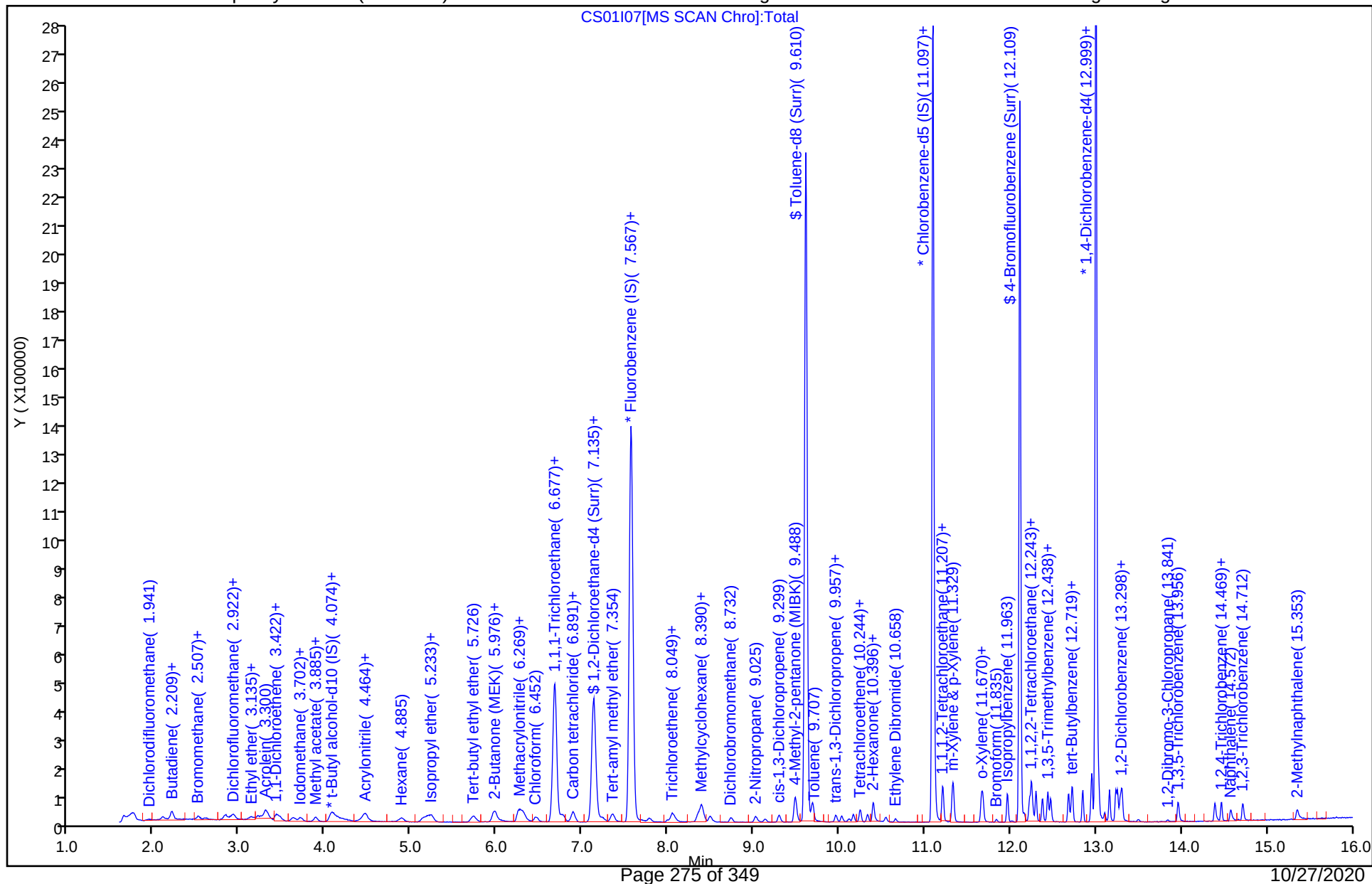
ALS Bottle#: 8

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

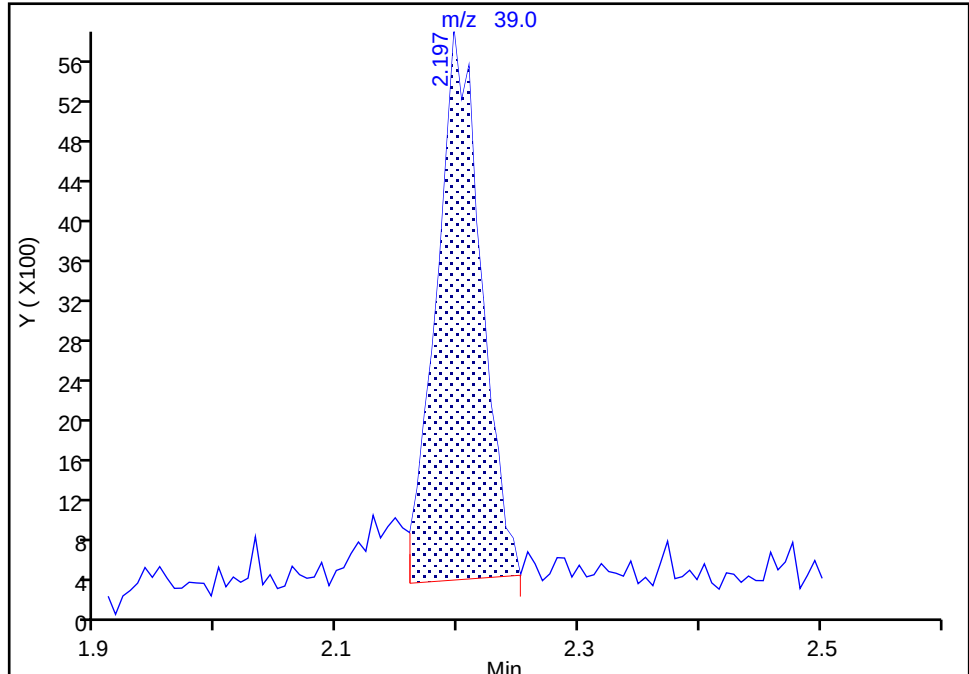
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Injection Date: 01-Sep-2020 15:48:30 Instrument ID: 10193
Lims ID: IC STD1
Client ID:
Operator ID: dvv10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

4 Butadiene, CAS: 106-99-0

Signal: 1

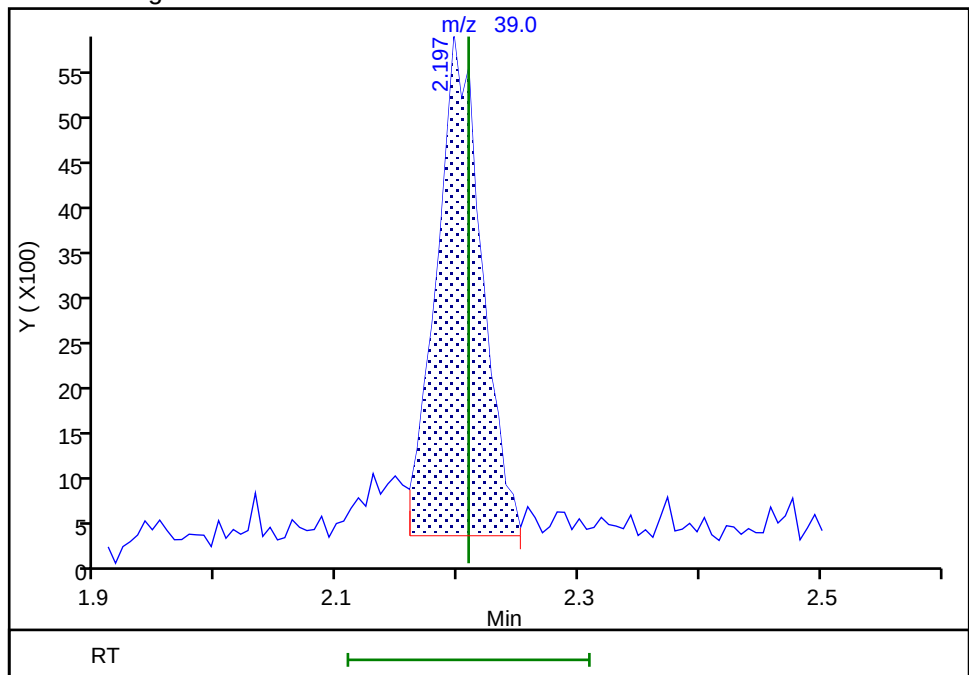
RT: 2.20
Area: 14080
Amount: 0.203738
Amount Units: ug/l

Processing Integration Results



RT: 2.20
Area: 14355
Amount: 0.207128
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:06:05

Audit Action: Assigned New Baseline

Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC

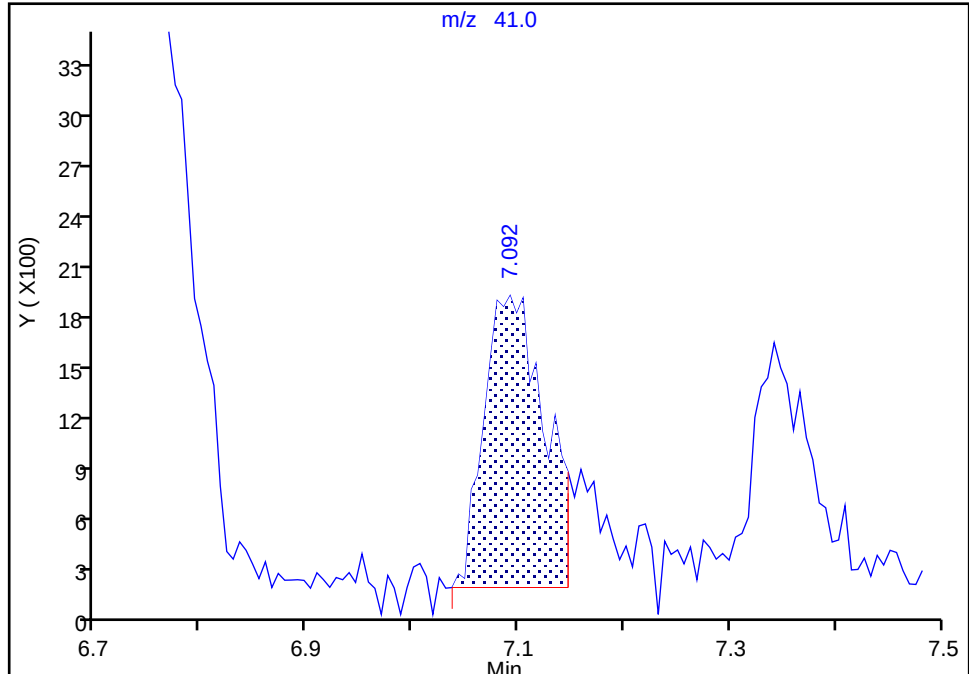
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Injection Date: 01-Sep-2020 15:48:30 Instrument ID: 10193
Lims ID: IC STD1
Client ID:
Operator ID: dvv10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm i.d.) Detector: MS Quad

52 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

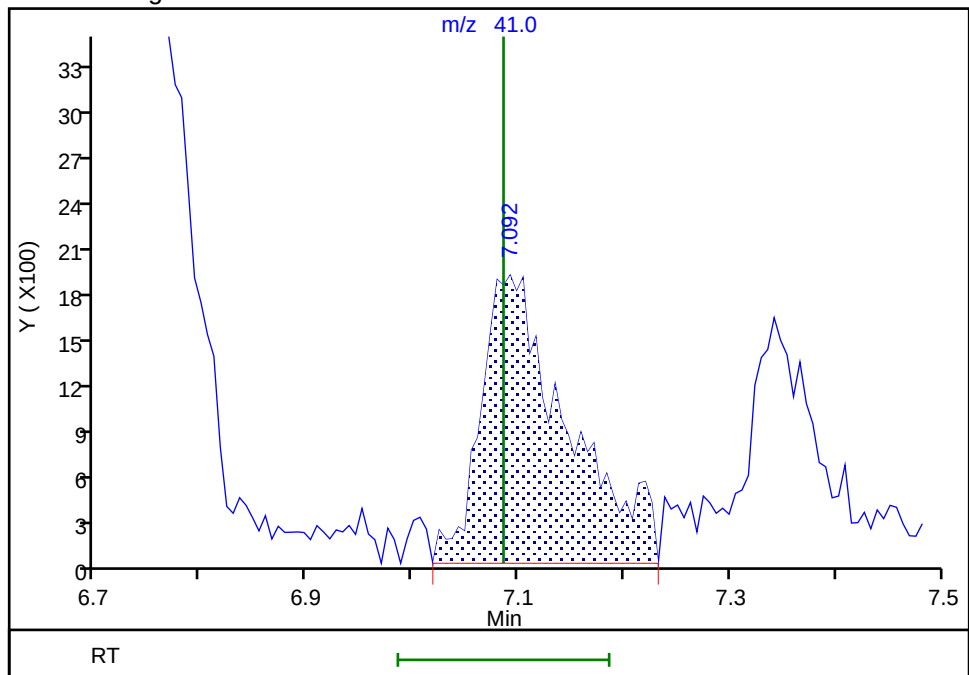
RT: 7.09
Area: 6884
Amount: 7.941417
Amount Units: ug/l

Processing Integration Results



RT: 7.09
Area: 10703
Amount: 11.615957
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:06:35

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

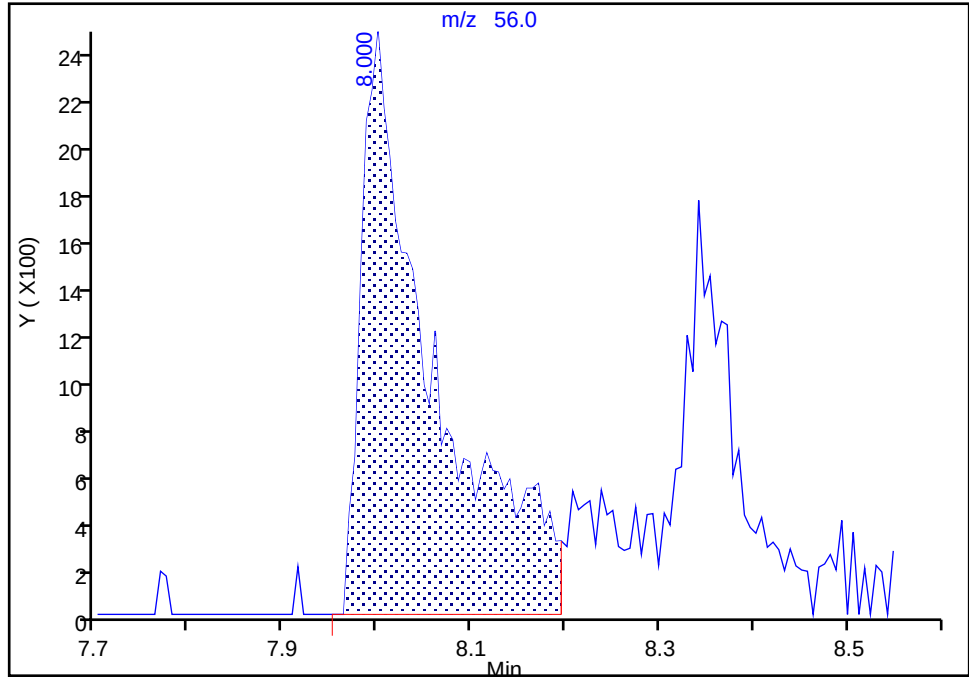
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Injection Date: 01-Sep-2020 15:48:30 Instrument ID: 10193
Lims ID: IC STD1
Client ID:
Operator ID: dvv10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm i.d.) Detector: MS Quad

59 n-Butanol, CAS: 71-36-3

Signal: 1

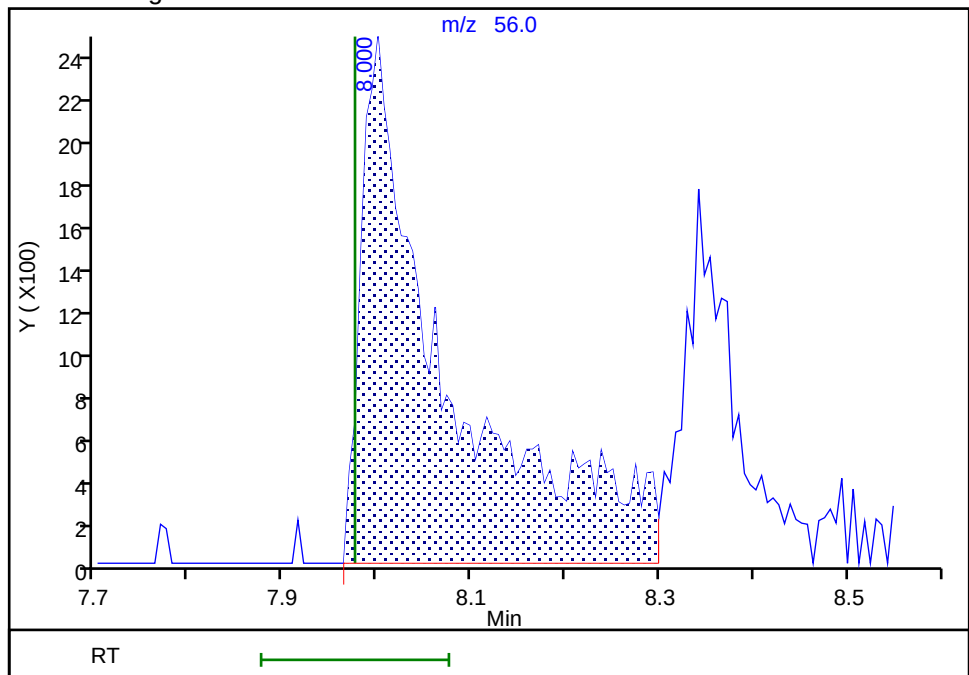
RT: 8.00
Area: 12828
Amount: 17.171709
Amount Units: ug/l

Processing Integration Results



RT: 8.00
Area: 15142
Amount: 19.830500
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:17:24

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

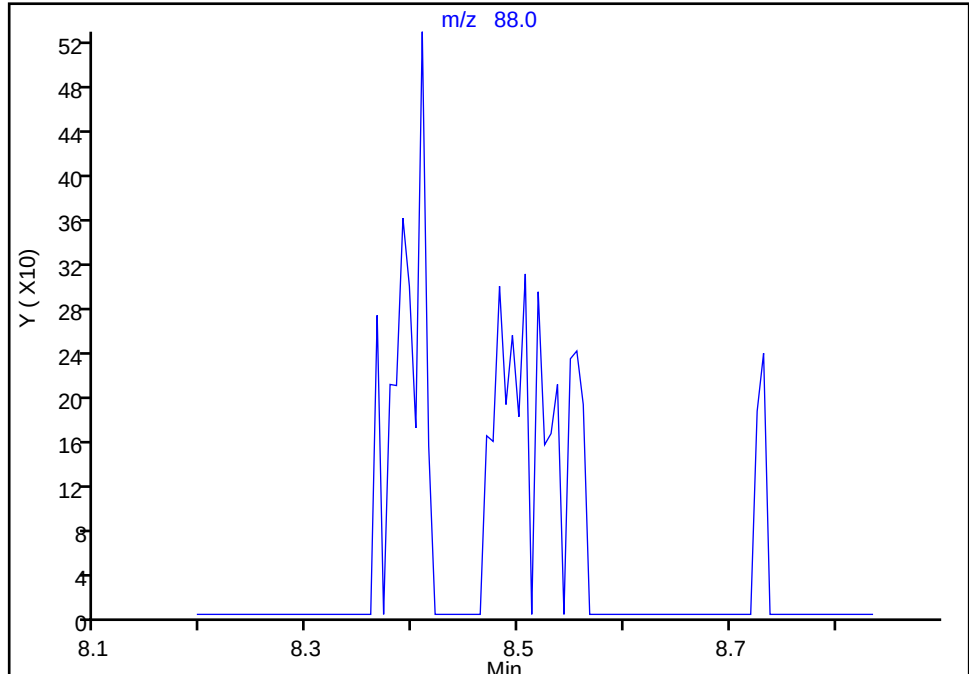
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Injection Date: 01-Sep-2020 15:48:30 Instrument ID: 10193
Lims ID: IC STD1
Client ID:
Operator ID: dvv10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

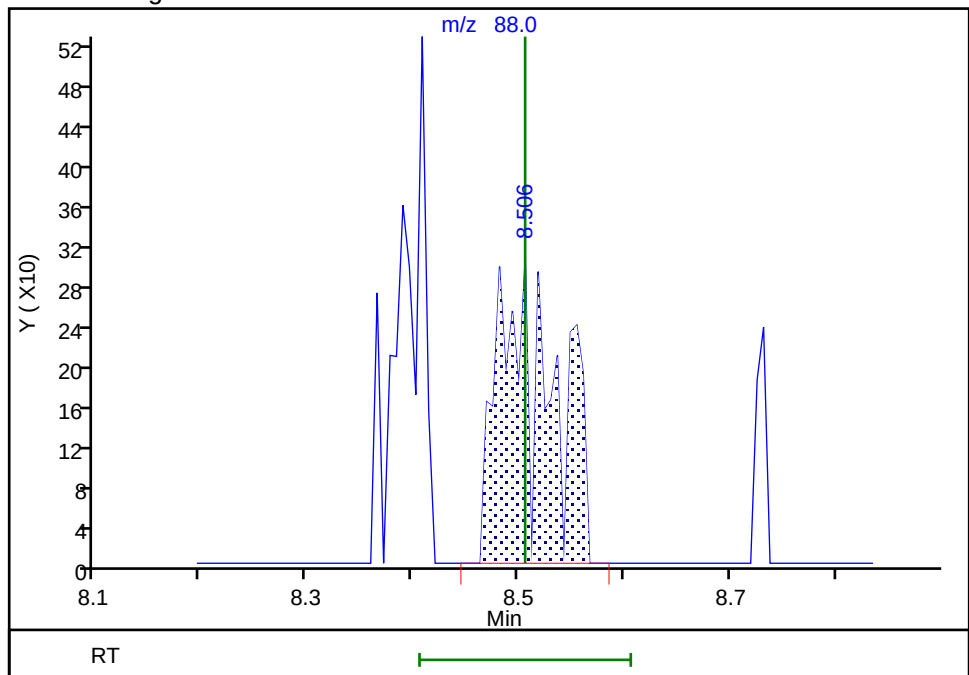
Signal: 1

Not Detected
Expected RT: 8.51

Processing Integration Results



Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:06:44
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
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10/27/2020

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I07.D

Injection Date: 01-Sep-2020 15:48:30

Instrument ID: 10193

Lims ID: IC STD1

Client ID:

Operator ID: dwv10203

ALS Bottle#:

8

Worklist Smp#: 9

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_10193_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

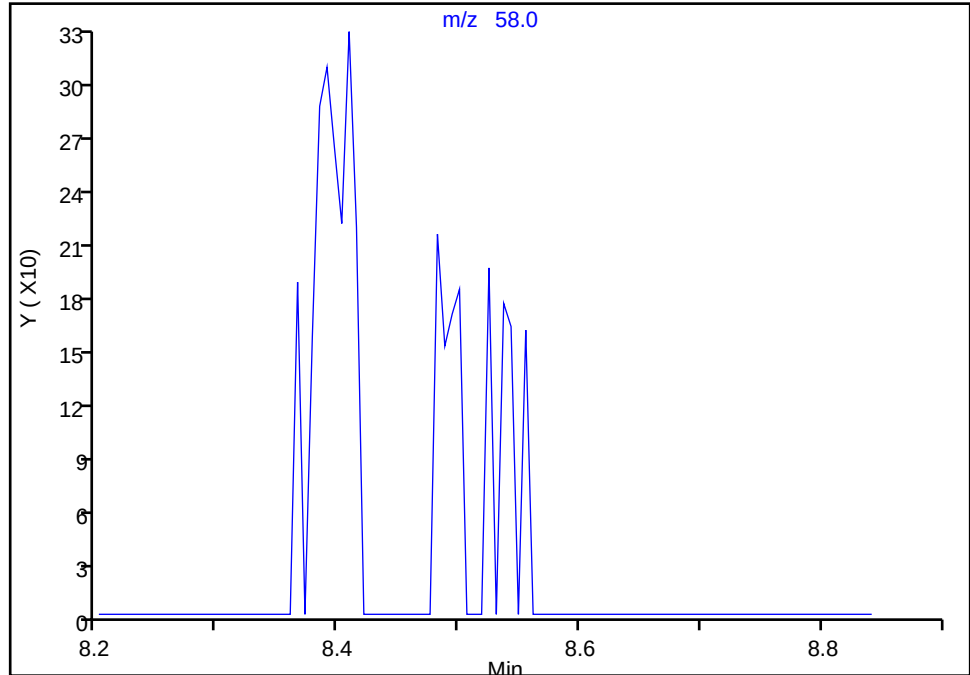
65 1,4-Dioxane, CAS: 123-91-1

Signal: 2

Not Detected

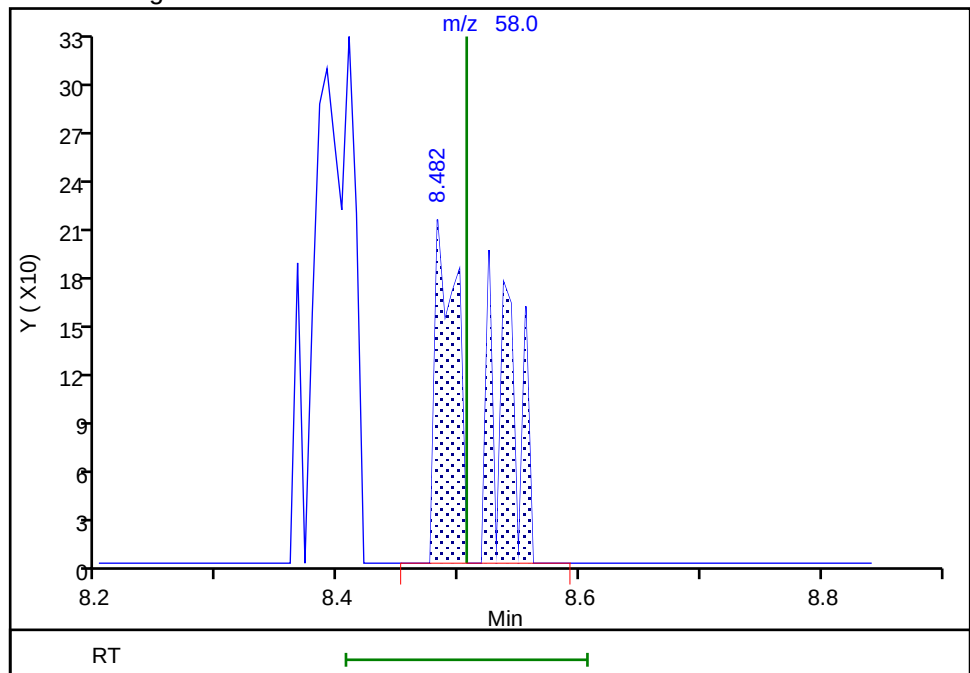
Expected RT: 8.51

Processing Integration Results



Manual Integration Results

RT: 8.48
Area: 515
Amount: 7.195617
Amount Units: ug/l



Reviewer: campbellme, 01-Sep-2020 17:06:48

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1

SDG No.: _____

Lab Sample ID: ICV 410-39724/10 Calibration Date: 09/01/2020 16:10

Instrument ID: 10193 Calib Start Date: 09/01/2020 13:35

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 09/01/2020 15:48

Lab File ID: CS01V01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3227	0.2655	0.1000	4.11	5.00	-17.7	30.0
Chloromethane	Ave	0.3804	0.3562	0.1000	4.68	5.00	-6.4	30.0
1,3-Butadiene	Ave	0.3578	0.2620		3.66	5.00	-26.8	30.0
Vinyl chloride	Ave	0.3517	0.3461	0.1000	4.92	5.00	-1.6	30.0
Bromomethane	Ave	0.2482	0.2411	0.1000	4.86	5.00	-2.9	30.0
Chloroethane	Ave	0.2173	0.2006	0.1000	4.62	5.00	-7.7	30.0
Dichlorofluoromethane	Ave	0.4713	0.4600		4.88	5.00	-2.4	30.0
Trichlorofluoromethane	Ave	0.4575	0.4312	0.1000	4.71	5.00	-5.8	30.0
Ethyl ether	Ave	0.2318	0.2359		5.09	5.01	1.8	30.0
Freon 123a	Ave	0.3397	0.3020		4.45	5.00	-11.1	30.0
Acrolein	Ave	2.001	1.892		35.5	37.5	-5.4	30.0
1,1-Dichloroethene	Ave	0.2312	0.2117	0.1000	4.58	5.00	-8.4	30.0
Freon 113	Ave	0.2352	0.1884	0.1000	4.01	5.00	-19.9	30.0
Acetone	Ave	2.125	2.093	0.1000	36.9	37.5	-1.5	30.0
Methyl iodide	Ave	0.4567	0.3802		4.16	5.00	-16.8	30.0
Ethyl bromide	Ave	0.1920	0.1921		4.94	4.93	0.0	30.0
Carbon disulfide	Ave	0.8167	0.6841	0.1000	4.19	5.00	-16.2	30.0
Methyl acetate	Ave	8.350	6.856	0.1000	4.11	5.00	-17.9	30.0
Allyl chloride	Ave	0.4045	0.3946		4.88	5.00	-2.5	30.0
Methylene Chloride	Ave	0.2573	0.2481	0.1000	4.82	5.00	-3.6	30.0
t-Butyl alcohol	Ave	0.996	0.9520		47.8	50.0	-4.4	30.0
Acrylonitrile	Ave	3.375	3.260		24.1	25.0	-3.4	30.0
Methyl tertiary butyl ether	Ave	0.7484	0.6818	0.1000	4.55	5.00	-8.9	30.0
trans-1,2-Dichloroethene	Ave	0.2703	0.2572	0.1000	4.76	5.00	-4.8	30.0
n-Hexane	Ave	0.3811	0.3137		4.12	5.00	-17.7	30.0
1,1-Dichloroethane	Ave	0.4975	0.4811	0.2000	4.84	5.00	-3.3	30.0
di-Isopropyl ether	Ave	0.9484	0.8957		4.72	5.00	-5.6	30.0
2-Chloro-1,3-butadiene	Ave	0.4688	0.4198		4.48	5.00	-10.5	30.0
Ethyl t-butyl ether	Ave	0.9061	0.8489		4.68	5.00	-6.3	30.0
2-Butanone	Ave	4.984	4.790	0.1000	36.0	37.5	-3.9	30.0
cis-1,2-Dichloroethene	Ave	0.3064	0.3042	0.1000	4.96	5.00	-0.7	30.0
2,2-Dichloropropane	Ave	0.4293	0.4087		4.76	5.00	-4.8	30.0
Propionitrile	Ave	1.265	1.271		37.7	37.5	0.5	30.0
Methacrylonitrile	Ave	4.902	4.714		36.1	37.5	-3.8	30.0
Bromochloromethane	Ave	0.1349	0.1264		4.68	5.00	-6.3	30.0
Tetrahydrofuran	Ave	1.410	1.351		24.0	25.0	-4.2	30.0
Chloroform	Ave	0.4930	0.4756	0.2000	4.82	5.00	-3.5	30.0
1,1,1-Trichloroethane	Ave	0.4442	0.4159	0.1000	4.68	5.00	-6.4	30.0
Cyclohexane	Ave	0.4697	0.4135	0.1000	4.40	5.00	-12.0	30.0
Carbon tetrachloride	Ave	0.3722	0.3538	0.1000	4.75	5.00	-4.9	30.0
1,1-Dichloropropene	Ave	0.3988	0.3706		4.65	5.00	-7.1	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1

SDG No.: _____

Lab Sample ID: ICV 410-39724/10 Calibration Date: 09/01/2020 16:10

Instrument ID: 10193 Calib Start Date: 09/01/2020 13:35

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 09/01/2020 15:48

Lab File ID: CS01V01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isobutyl alcohol	Ave	0.3229	0.2828		109	125	-12.4	30.0
Benzene	Ave	1.149	1.092	0.5000	4.75	5.00	-5.0	30.0
1,2-Dichloroethane	Ave	0.3462	0.3217	0.1000	4.65	5.00	-7.1	30.0
t-Amyl methyl ether	Ave	0.8253	0.7936		4.81	5.00	-3.8	30.0
n-Heptane	Ave	0.4242	0.3694		4.35	5.00	-12.9	30.0
n-Butanol	Ave	0.2676	0.2616		244	250	-2.2	30.0
Trichloroethene	Ave	0.2961	0.2842	0.2000	4.80	5.00	-4.0	30.0
Methylcyclohexane	Ave	0.4535	0.4365	0.1000	4.81	5.00	-3.7	30.0
1,2-Dichloropropane	Ave	0.2950	0.2906	0.1000	4.93	5.00	-1.5	30.0
Methyl methacrylate	Ave	10.45	10.05		4.81	5.00	-3.8	30.0
Dibromomethane	Ave	0.1443	0.1405		4.87	5.00	-2.6	30.0
1,4-Dioxane	Ave	0.0533	0.0559	0.0050	131	125	5.0	30.0
Bromodichloromethane	Ave	0.3561	0.3507	0.2000	4.92	5.00	-1.5	30.0
2-Nitropropane	Ave	3.241	2.885		4.45	5.00	-11.0	30.0
1-Bromo-2-chloroethane	Ave	0.3051	0.3043		4.99	5.00	-0.2	30.0
cis-1,3-Dichloropropene	Ave	0.4426	0.4313	0.2000	4.87	5.00	-2.5	30.0
4-Methyl-2-pentanone	Ave	14.48	13.77	0.1000	23.8	25.0	-4.9	30.0
Toluene	Ave	0.9823	0.9494	0.4000	4.83	5.00	-3.4	30.0
trans-1,3-Dichloropropene	Ave	0.4919	0.4842	0.1000	4.92	5.00	-1.6	30.0
Ethyl methacrylate	Ave	0.4151	0.4260		5.13	5.00	2.6	30.0
1,1,2-Trichloroethane	Ave	0.2713	0.2787	0.1000	5.14	5.00	2.7	30.0
Tetrachloroethene	Ave	0.4389	0.4223	0.2000	4.81	5.00	-3.8	30.0
1,3-Dichloropropane	Ave	0.4783	0.4650		4.86	5.00	-2.8	30.0
2-Hexanone	Ave	10.23	10.23	0.1000	25.0	25.0	-0.0	30.0
Dibromochloromethane	Ave	0.3148	0.3277		5.21	5.00	4.1	30.0
1,2-Dibromoethane	Ave	0.2679	0.2650	0.1000	4.95	5.00	-1.1	30.0
1-Chlorohexane	Ave	0.5609	0.5151		4.59	5.00	-8.2	30.0
Chlorobenzene	Ave	1.109	1.087	0.5000	4.90	5.00	-2.0	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3774	0.3730		4.94	5.00	-1.2	30.0
Ethylbenzene	Ave	1.947	1.889	0.1000	4.85	5.00	-3.0	30.0
m&p-Xylene	Ave	0.7608	0.7544	0.1000	9.92	10.0	-0.8	30.0
o-Xylene	Ave	0.7453	0.7426	0.3000	4.98	5.00	-0.4	30.0
Styrene	Ave	1.251	1.265	0.3000	5.06	5.00	1.2	30.0
Bromoform	Ave	0.1748	0.1830	0.1000	5.23	5.00	4.7	30.0
Isopropylbenzene	Ave	1.971	1.961	0.1000	4.97	5.00	-0.6	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6245	0.6168	0.3000	4.94	5.00	-1.2	30.0
Bromobenzene	Ave	0.8574	0.8335		4.86	5.00	-2.8	30.0
trans-1,4-Dichloro-2-butene	Ave	0.1729	0.1773		25.6	25.0	2.5	30.0
1,2,3-Trichloropropane	Ave	0.1700	0.1678		4.94	5.00	-1.3	30.0
N-Propylbenzene	Ave	4.026	4.008		4.98	5.00	-0.5	30.0
2-Chlorotoluene	Ave	0.8233	0.8004		4.86	5.00	-2.8	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1
 SDG No.: _____
 Lab Sample ID: ICV 410-39724/10 Calibration Date: 09/01/2020 16:10
 Instrument ID: 10193 Calib Start Date: 09/01/2020 13:35
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 09/01/2020 15:48
 Lab File ID: CS01V01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	2.982	2.928		4.91	5.00	-1.8	30.0
4-Chlorotoluene	Ave	0.8558	0.8396		4.91	5.00	-1.9	30.0
tert-Butylbenzene	Ave	0.6485	0.6174		4.76	5.00	-4.8	30.0
Pentachloroethane	Ave	0.4842	0.4885		5.04	5.00	0.9	30.0
1,2,4-Trimethylbenzene	Ave	3.060	2.989		4.88	5.00	-2.3	30.0
sec-Butylbenzene	Ave	3.843	3.781		4.92	5.00	-1.6	30.0
1,3-Dichlorobenzene	Ave	1.713	1.693	0.6000	4.94	5.00	-1.1	30.0
p-Isopropyltoluene	Ave	3.351	3.368		5.03	5.00	0.5	30.0
1,4-Dichlorobenzene	Ave	1.763	1.744	0.5000	4.95	5.00	-1.1	30.0
1,2,3-Trimethylbenzene	Ave	1.343	1.414		5.26	5.00	5.3	30.0
Benzyl chloride	Ave	0.2484	0.2561		5.16	5.00	3.1	30.0
n-Butylbenzene	Ave	1.698	1.693		4.99	5.00	-0.3	30.0
1,2-Dichlorobenzene	Ave	1.616	1.619	0.4000	5.01	5.00	0.2	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.0856	0.0908	0.0500	5.30	5.00	6.0	30.0
1,3,5-Trichlorobenzene	Ave	1.397	1.368		4.89	5.00	-2.1	30.0
1,2,4-Trichlorobenzene	Ave	1.254	1.256	0.2000	5.01	5.00	0.2	30.0
Hexachlorobutadiene	Ave	0.6122	0.6020		4.92	5.00	-1.7	30.0
Naphthalene	Ave	2.236	2.184		4.88	5.00	-2.4	30.0
1,2,3-Trichlorobenzene	Ave	1.110	1.084		4.88	5.00	-2.4	30.0
Dibromofluoromethane (Surr)	Ave	0.2376	0.2368		9.97	10.0	-0.3	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0484	0.0489		10.1	10.0	1.0	30.0
Toluene-d8 (Surr)	Ave	1.306	1.306		10.0	10.0	0.0	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4909	0.4964		10.1	10.0	1.1	30.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01V01.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 01-Sep-2020 16:10:30 ALS Bottle#: 9 Worklist Smp#: 10
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: ICV
 Misc. Info.: 410-0009503-010
 Operator ID: dvv10203 Instrument ID: 10193
 Sublist:
 Method: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Sep-2020 20:14:46 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1048

First Level Reviewer: campbellme

Date: 01-Sep-2020 17:33:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.916	1.910	0.006	99	264279	5.00	4.11	M
3 Chloromethane	50	2.105	2.099	0.006	99	354625	5.00	4.68	
4 Butadiene	39	2.209	2.209	0.000	94	260871	5.00	3.66	M
5 Vinyl chloride	62	2.215	2.215	0.000	98	344571	5.00	4.92	
6 Bromomethane	94	2.520	2.520	0.000	91	240018	5.00	4.86	
7 Chloroethane	64	2.605	2.605	0.000	99	199689	5.00	4.62	
8 Dichlorofluoromethane	67	2.837	2.837	0.000	97	457908	5.00	4.88	
9 Trichlorofluoromethane	101	2.897	2.898	-0.001	99	429242	5.00	4.71	
11 Ethyl ether	59	3.135	3.135	0.000	92	235125	5.01	5.09	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.221	3.208	0.013	92	300678	5.00	4.45	
13 Acrolein	56	3.306	3.306	0.000	98	210460	37.5	35.5	
14 1,1-Dichloroethene	96	3.434	3.428	0.006	96	210789	5.00	4.58	
15 1,1,2,2-Tetrafluoroethane	101	3.464	3.464	0.000	92	187589	5.00	4.01	M
16 Acetone	43	3.471	3.471	0.000	99	232764	37.5	36.9	
17 Iodomethane	142	3.623	3.617	0.006	99	378488	5.00	4.16	
19 Ethyl bromide	108	3.647	3.641	0.006	99	188731	4.93	4.94	
18 Isopropyl alcohol	45	3.629	3.647	-0.018	72	39562	37.5	36.3	
20 Carbon disulfide	76	3.714	3.708	0.006	100	681004	5.00	4.19	
22 Methyl acetate	43	3.867	3.867	0.000	98	101664	5.00	4.11	
23 3-Chloro-1-propene	41	3.885	3.891	-0.006	88	392813	5.00	4.88	
24 Methylene Chloride	84	4.074	4.074	0.000	95	247001	5.00	4.82	
* 25 t-Butyl alcohol-d10 (IS)	65	4.111	4.117	-0.006	98	148288	50.0	50.0	M
26 2-Methyl-2-propanol	59	4.227	4.227	0.000	97	141172	50.0	47.8	
27 Acrylonitrile	53	4.409	4.409	0.000	99	241713	25.0	24.1	
28 Methyl tert-butyl ether	73	4.464	4.464	0.000	97	678723	5.00	4.55	
29 trans-1,2-Dichloroethene	96	4.470	4.470	0.000	98	256056	5.00	4.76	
30 Hexane	57	4.897	4.897	0.000	95	312253	5.00	4.12	
32 1,1-Dichloroethane	63	5.135	5.135	0.000	96	478958	5.00	4.84	
33 Isopropyl ether	45	5.196	5.196	0.000	93	891675	5.00	4.72	
34 2-Chloro-1,3-butadiene	53	5.245	5.251	-0.006	93	417876	5.00	4.48	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Tert-butyl ethyl ether	59	5.732	5.732	0.000	97	845060	5.00	4.68	
36 2-Butanone (MEK)	43	5.946	5.946	0.000	100	532750	37.5	36.0	
37 cis-1,2-Dichloroethene	96	5.976	5.970	0.006	84	302828	5.00	4.96	
38 2,2-Dichloropropane	77	5.988	5.988	0.000	71	406838	5.00	4.76	
40 Propionitrile	54	6.049	6.049	0.000	97	141387	37.5	37.7	M
43 Methacrylonitrile	67	6.250	6.251	0.000	94	524313	37.5	36.1	
44 Chlorobromomethane	128	6.311	6.305	0.006	94	125796	5.00	4.68	
45 Tetrahydrofuran	71	6.311	6.305	0.006	91	100170	25.0	24.0	
46 Chloroform	83	6.464	6.464	0.000	94	473508	5.00	4.82	
\$ 47 Dibromofluoromethane (Surr)	113	6.683	6.683	0.000	93	471541	10.0	9.97	
48 1,1,1-Trichloroethane	97	6.683	6.683	0.000	99	414044	5.00	4.68	
49 Cyclohexane	56	6.769	6.775	-0.006	93	411644	5.00	4.40	
50 Carbon tetrachloride	117	6.891	6.891	0.000	95	352249	5.00	4.75	
51 1,1-Dichloropropene	75	6.897	6.897	0.000	94	368901	5.00	4.65	
52 Isobutyl alcohol	41	7.080	7.086	-0.006	94	104834	125.0	109.5	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.134	7.134	0.000	0	97321	10.0	10.1	
54 Benzene	78	7.159	7.159	0.000	97	1086680	5.00	4.75	
55 1,2-Dichloroethane	62	7.238	7.238	0.000	97	320287	5.00	4.65	
56 Tert-amyl methyl ether	73	7.354	7.360	-0.006	98	790095	5.00	4.81	
* 57 Fluorobenzene (IS)	96	7.573	7.567	0.006	98	1991070	10.0	10.0	
58 n-Heptane	43	7.580	7.580	0.000	93	367740	5.00	4.35	
59 n-Butanol	56	7.976	7.976	0.000	91	193947	250.0	244.4	M
60 Trichloroethene	95	8.049	8.049	0.000	97	282972	5.00	4.80	
61 Methylcyclohexane	83	8.354	8.354	0.000	92	434594	5.00	4.81	
62 1,2-Dichloropropane	63	8.390	8.390	0.000	93	289309	5.00	4.93	
63 2-ethoxy-2-methyl butane	87	8.396	8.396	0.000	91	450498	5.00	4.93	
64 Methyl methacrylate	69	8.482	8.482	0.000	92	149094	5.00	4.81	
66 Dibromomethane	93	8.500	8.494	0.006	96	139880	5.00	4.87	
65 1,4-Dioxane	88	8.506	8.506	0.000	29	20737	125.0	131.2	M
67 Dichlorobromomethane	83	8.738	8.738	0.000	99	349091	5.00	4.92	
68 2-Nitropropane	41	9.024	9.024	0.000	98	42778	5.00	4.45	
69 2-Chloroethyl vinyl ether	63		9.116				ND	ND	
71 1-Bromo-2-chloroethane	63	9.134	9.134	0.000	99	302961	5.00	4.99	
72 cis-1,3-Dichloropropene	75	9.299	9.299	0.000	93	429373	5.00	4.87	
73 4-Methyl-2-pentanone (MIBK)	43	9.488	9.488	0.000	98	1020805	25.0	23.8	
\$ 74 Toluene-d8 (Surr)	98	9.610	9.610	0.000	94	1974214	10.0	10.0	
75 Toluene	92	9.689	9.689	0.000	97	717293	5.00	4.83	
76 trans-1,3-Dichloropropene	75	9.957	9.957	0.000	96	365821	5.00	4.92	
78 Ethyl methacrylate	69	10.024	10.024	0.000	90	321895	5.00	5.13	
79 1,1,2-Trichloroethane	97	10.164	10.164	0.000	91	210589	5.00	5.14	
80 Tetrachloroethene	166	10.244	10.250	-0.006	97	319078	5.00	4.81	
81 1,3-Dichloropropane	76	10.329	10.329	0.000	94	351288	5.00	4.86	
82 2-Hexanone	43	10.390	10.396	-0.006	97	758216	25.0	25.0	
83 Chlorodibromomethane	129	10.548	10.548	0.000	90	247564	5.00	5.21	
84 Ethylene Dibromide	107	10.658	10.658	0.000	99	200231	5.00	4.95	
* 85 Chlorobenzene-d5 (IS)	117	11.097	11.097	0.000	87	1511072	10.0	10.0	
86 1-Chlorohexane	91	11.109	11.109	0.000	98	389170	5.00	4.59	
87 Chlorobenzene	112	11.121	11.122	-0.001	94	821508	5.00	4.90	
89 1,1,1,2-Tetrachloroethane	131	11.207	11.207	0.000	94	281793	5.00	4.94	
90 Ethylbenzene	91	11.213	11.213	0.000	98	1427334	5.00	4.85	
91 m-Xylene & p-Xylene	106	11.329	11.329	0.000	0	1139958	10.0	9.92	
92 o-Xylene	106	11.658	11.664	-0.006	97	561093	5.00	4.98	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
93 Styrene	104	11.676	11.676	0.000	95	956073	5.00	5.06	
94 Bromoform	173	11.835	11.835	0.000	96	138272	5.00	5.23	
95 Isopropylbenzene	105	11.963	11.969	-0.006	96	1481268	5.00	4.97	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.109	12.109	0.000	91	750136	10.0	10.1	
99 1,1,2,2-Tetrachloroethane	83	12.219	12.219	0.000	94	271685	5.00	4.94	
100 Bromobenzene	156	12.225	12.231	-0.006	95	367124	5.00	4.86	
101 trans-1,4-Dichloro-2-butene	53	12.243	12.243	0.000	93	390404	25.0	25.6	
102 1,2,3-Trichloropropane	110	12.262	12.268	-0.006	83	73933	5.00	4.94	
103 N-Propylbenzene	91	12.298	12.298	0.000	99	1765255	5.00	4.98	
104 2-Chlorotoluene	126	12.371	12.377	-0.006	96	352540	5.00	4.86	
105 1,3,5-Trimethylbenzene	105	12.438	12.438	0.000	94	1289854	5.00	4.91	
106 4-Chlorotoluene	126	12.469	12.469	0.000	98	369849	5.00	4.91	
107 tert-Butylbenzene	134	12.682	12.682	0.000	93	271974	5.00	4.76	
108 Pentachloroethane	167	12.713	12.713	0.000	92	215173	5.00	5.04	
109 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	1316654	5.00	4.88	
110 sec-Butylbenzene	105	12.847	12.847	0.000	94	1665555	5.00	4.92	
111 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	745869	5.00	4.94	
112 4-Isopropyltoluene	119	12.957	12.957	-0.001	97	1483427	5.00	5.03	
* 113 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	96	880960	10.0	10.0	
114 1,4-Dichlorobenzene	146	13.017	13.017	0.000	95	768103	5.00	4.95	
115 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	99	622827	5.00	5.26	
116 Benzyl chloride	126	13.097	13.103	-0.006	99	112804	5.00	5.16	
119 n-Butylbenzene	92	13.249	13.249	0.000	97	745894	5.00	4.99	
120 1,2-Dichlorobenzene	146	13.280	13.286	-0.006	98	713058	5.00	5.01	
118 p-Diethylbenzene	119	13.304	13.304	0.000	0	749866	5.00	5.00	
123 1,2-Dibromo-3-Chloropropane	155	13.834	13.834	0.000	86	39996	5.00	5.30	
124 1,3,5-Trichlorobenzene	180	13.956	13.956	0.000	97	602454	5.00	4.89	
125 1,2,4-Trichlorobenzene	180	14.383	14.383	0.000	94	553460	5.00	5.01	
126 Hexachlorobutadiene	225	14.468	14.468	0.000	98	265181	5.00	4.92	
127 Naphthalene	128	14.566	14.566	0.000	97	961807	5.00	4.88	
128 1,2,3-Trichlorobenzene	180	14.712	14.712	0.000	96	477279	5.00	4.88	
129 2-Methylnaphthalene	142	15.334	15.340	-0.006	0	607671	5.00	4.56	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_QVOA1_00044	Amount Added: 12.50	Units: uL	
MSV_Q_QARC_00043	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA6_00041	Amount Added: 12.50	Units: uL	
MSV_Q_EE_00002	Amount Added: 12.50	Units: uL	
MSV_Q_ETBR_00003	Amount Added: 12.50	Units: uL	
MSV_QGAS_826_00069	Amount Added: 12.50	Units: uL	
MSV_25_826ISS_00001	Amount Added: 1.00	Units: uL	Run Reagent

Report Date: 01-Sep-2020 20:59:13

Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01V01.D

Injection Date: 01-Sep-2020 16:10:30

Instrument ID: 10193

Operator ID: dwv10203

Lims ID: ICV

Worklist Smp#: 10

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

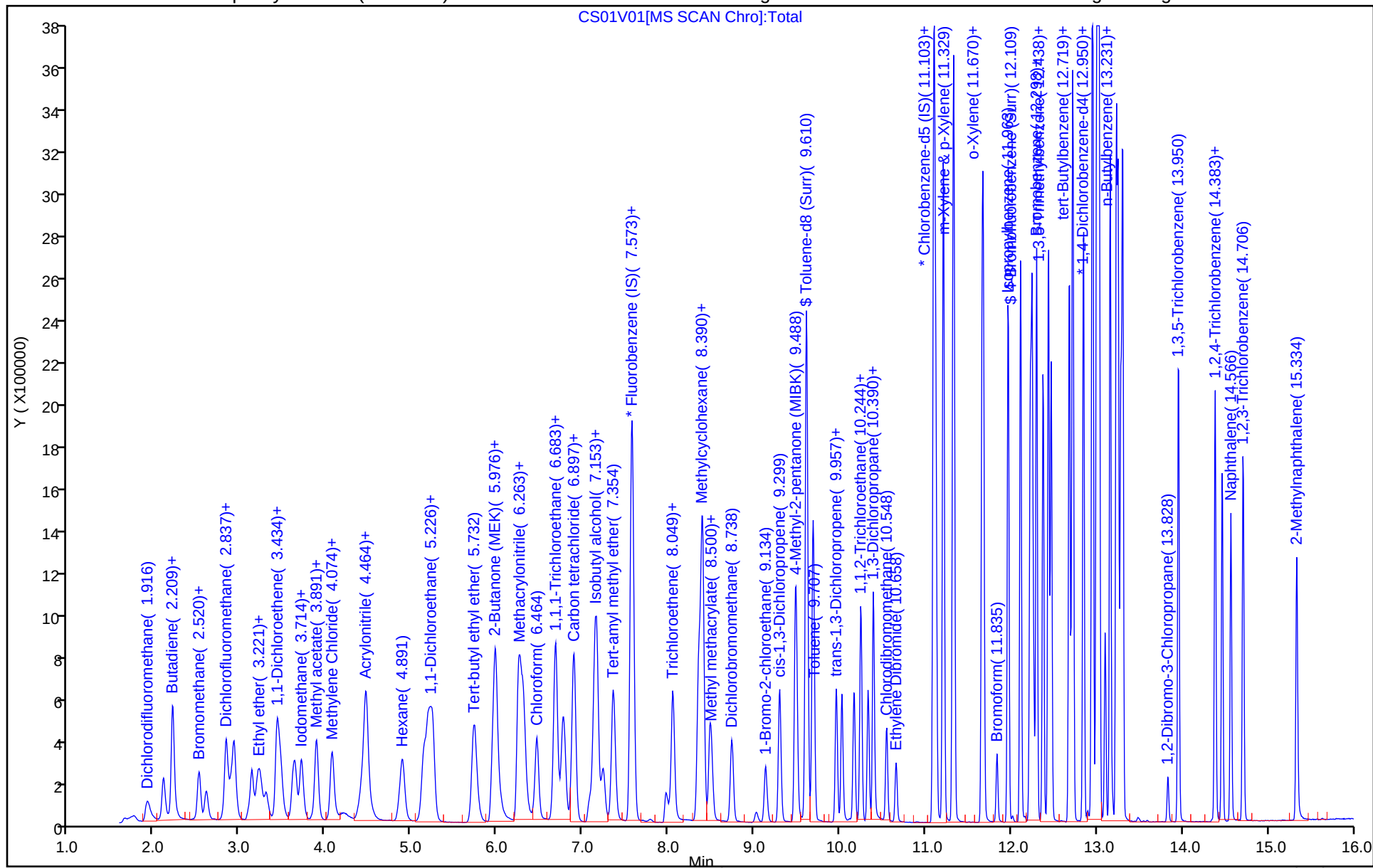
ALS Bottle#: 9

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

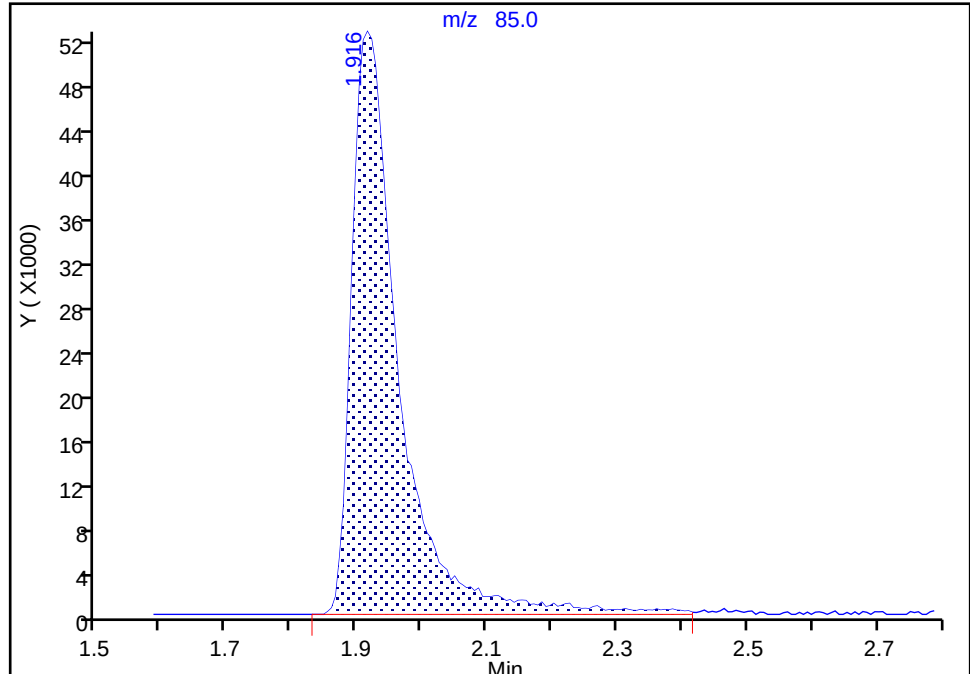
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Injection Date: 01-Sep-2020 16:10:30 Instrument ID: 10193
Lims ID: ICV
Client ID:
Operator ID: dvv10203 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

2 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

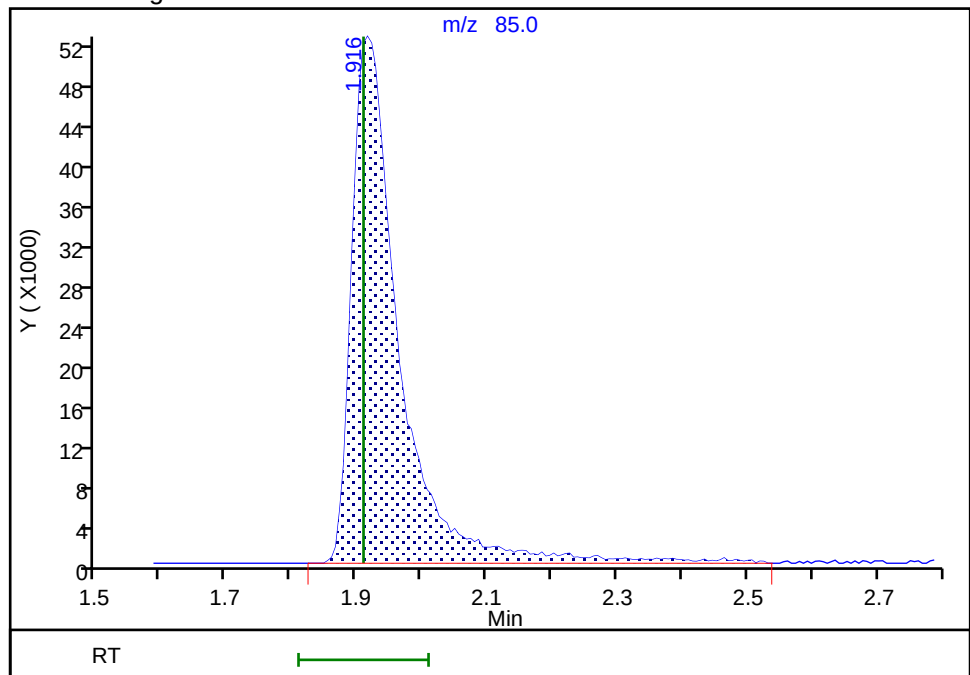
RT: 1.92
Area: 262611
Amount: 4.087385
Amount Units: ug/l

Processing Integration Results



RT: 1.92
Area: 264279
Amount: 4.113346
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:26:05
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
Page 288 of 349

10/27/2020

Eurofins Lancaster Laboratories Env, LLC

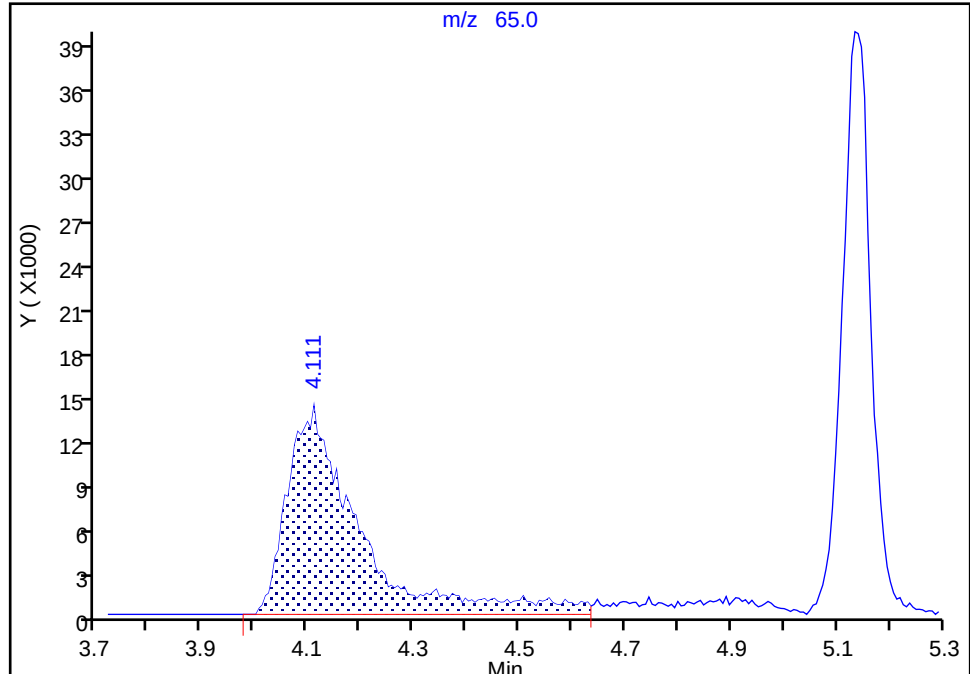
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Injection Date: 01-Sep-2020 16:10:30 Instrument ID: 10193
Lims ID: ICV
Client ID:
Operator ID: dvv10203 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm i.d.) Detector: MS Quad

* 25 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

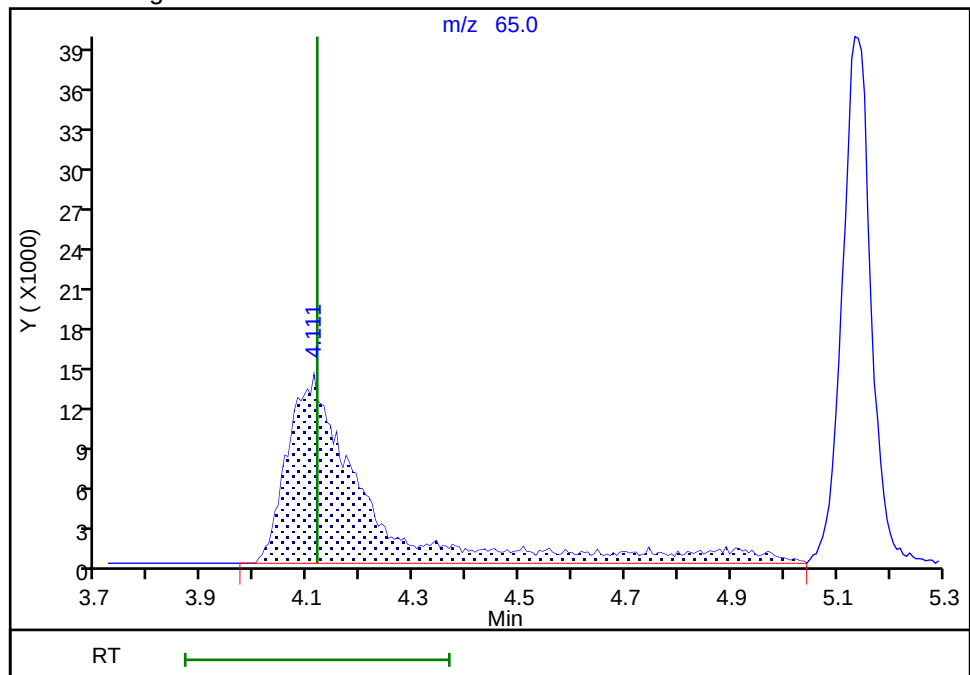
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Area: 131313
Amount: 50.000000
Amount Units: ug/l

Processing Integration Results



RT: 4.11
Area: 148288
Amount: 50.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:26:30

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01V01.D

Injection Date: 01-Sep-2020 16:10:30

Instrument ID: 10193

Lims ID: ICV

Client ID:

Operator ID: dvv10203

ALS Bottle#:

9

Worklist Smp#: 10

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_10193_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

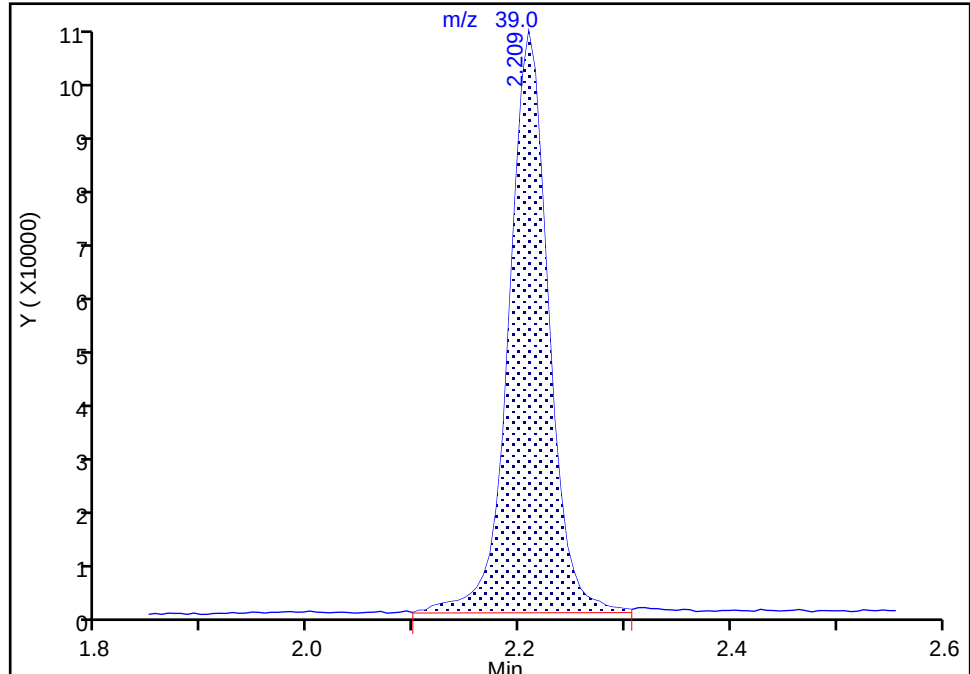
MS Quad

4 Butadiene, CAS: 106-99-0

Signal: 1

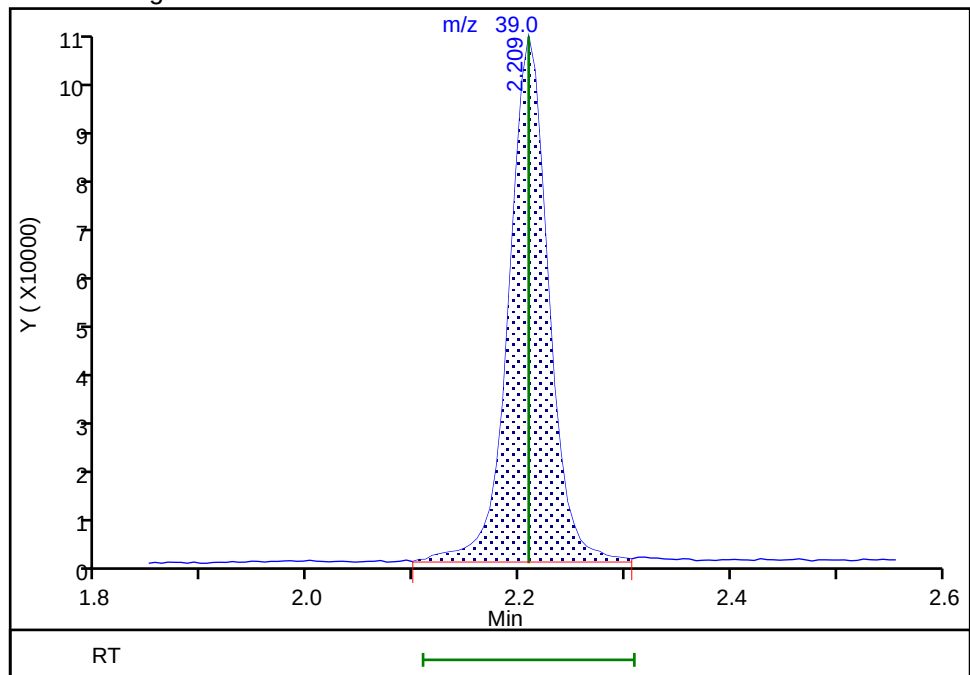
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Area: 260372
Amount: 3.654662
Amount Units: ug/l

Processing Integration Results



RT: 2.21
Area: 260871
Amount: 3.661667
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:30:49

Audit Action: Assigned New Baseline

Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01V01.D

Injection Date: 01-Sep-2020 16:10:30

Instrument ID: 10193

Lims ID: ICV

Client ID:

Operator ID: dvv10203

ALS Bottle#:

9

Worklist Smp#: 10

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_10193_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

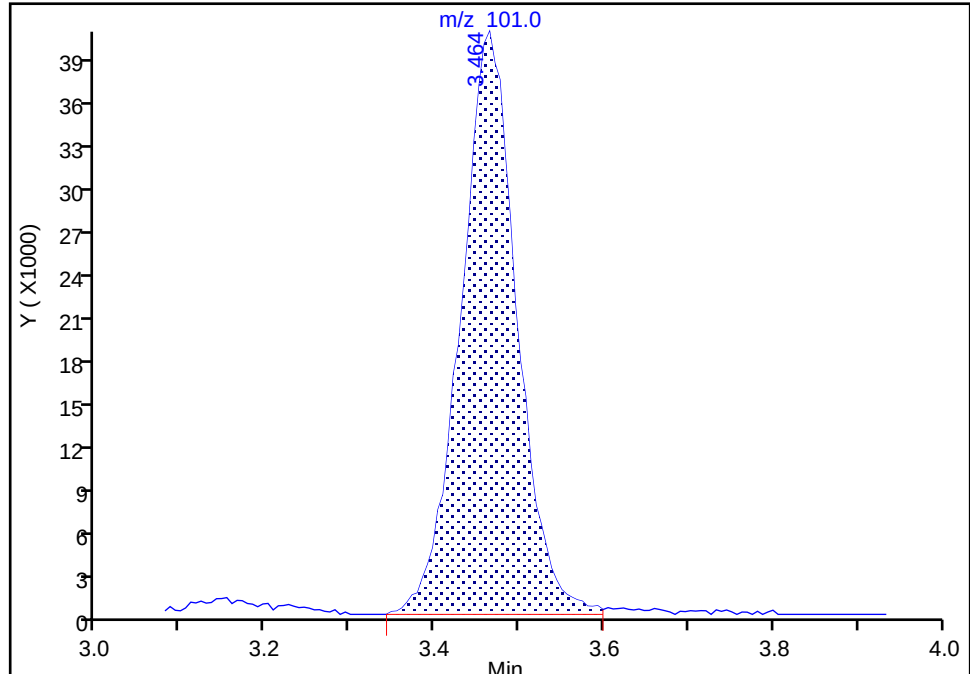
MS Quad

15 112TCTFE, CAS: 76-13-1

Signal: 1

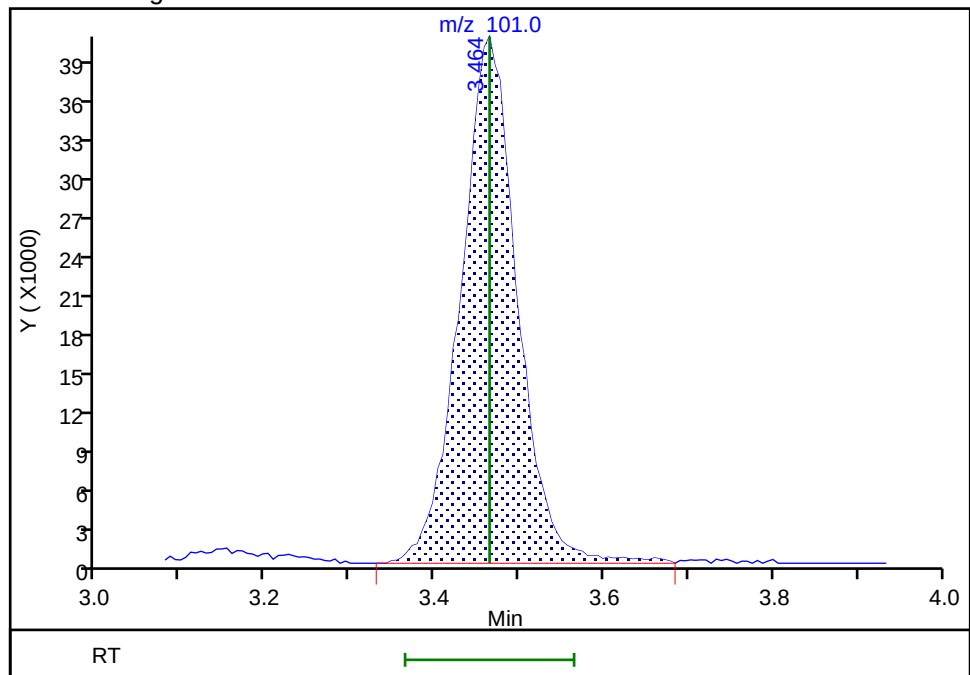
RT: 3.46
Area: 185974
Amount: 3.971572
Amount Units: ug/l

Processing Integration Results



RT: 3.46
Area: 187589
Amount: 4.006061
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:31:05

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

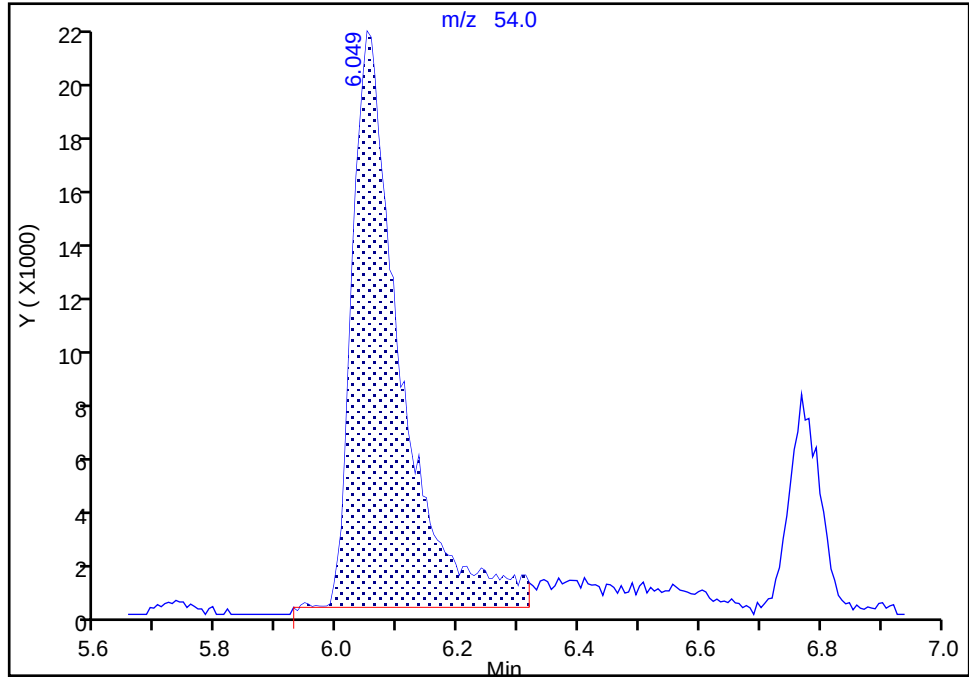
Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01V01.D
Injection Date: 01-Sep-2020 16:10:30 Instrument ID: 10193
Lims ID: ICV
Client ID:
Operator ID: dvv10203 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

40 Propionitrile, CAS: 107-12-0

Signal: 1

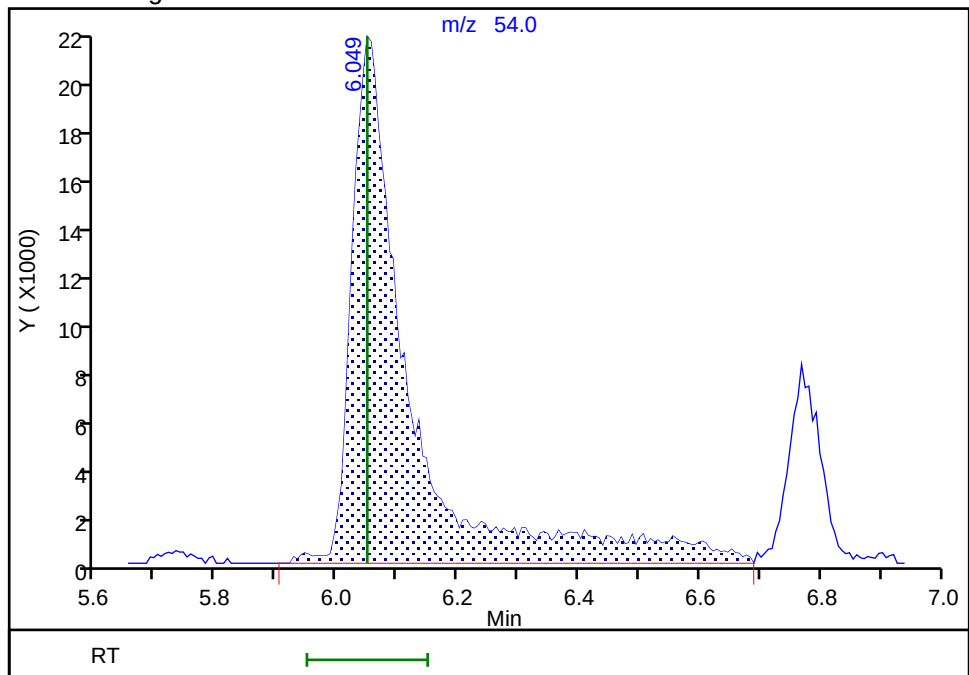
RT: 6.05
Area: 115982
Amount: 30.917165
Amount Units: ug/l

Processing Integration Results



RT: 6.05
Area: 141387
Amount: 37.689341
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:27:06

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

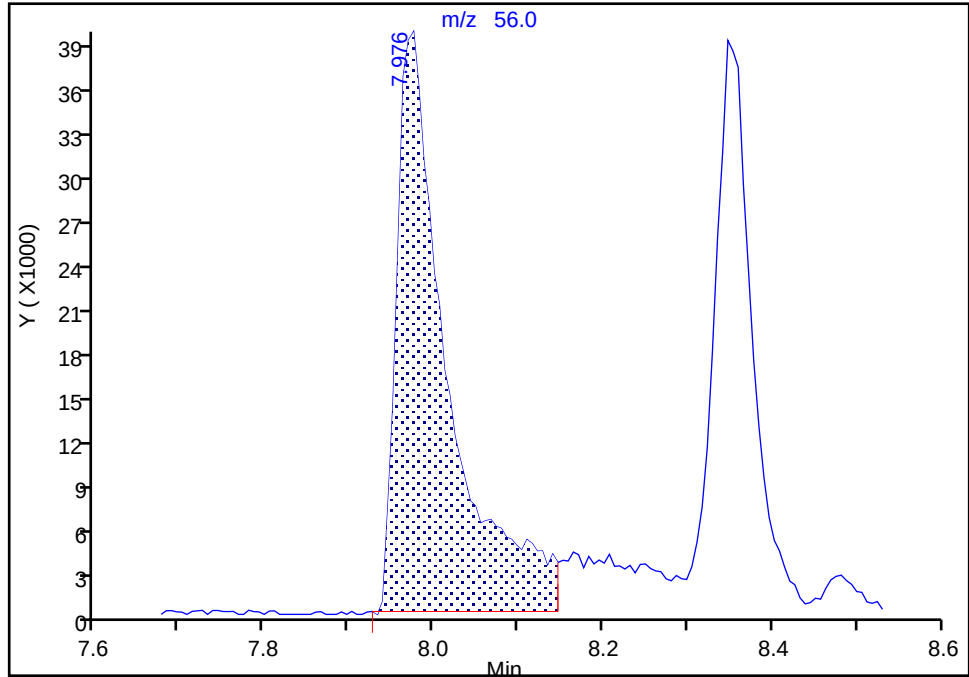
Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01V01.D
Injection Date: 01-Sep-2020 16:10:30 Instrument ID: 10193
Lims ID: ICV
Client ID:
Operator ID: dvv10203 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

59 n-Butanol, CAS: 71-36-3

Signal: 1

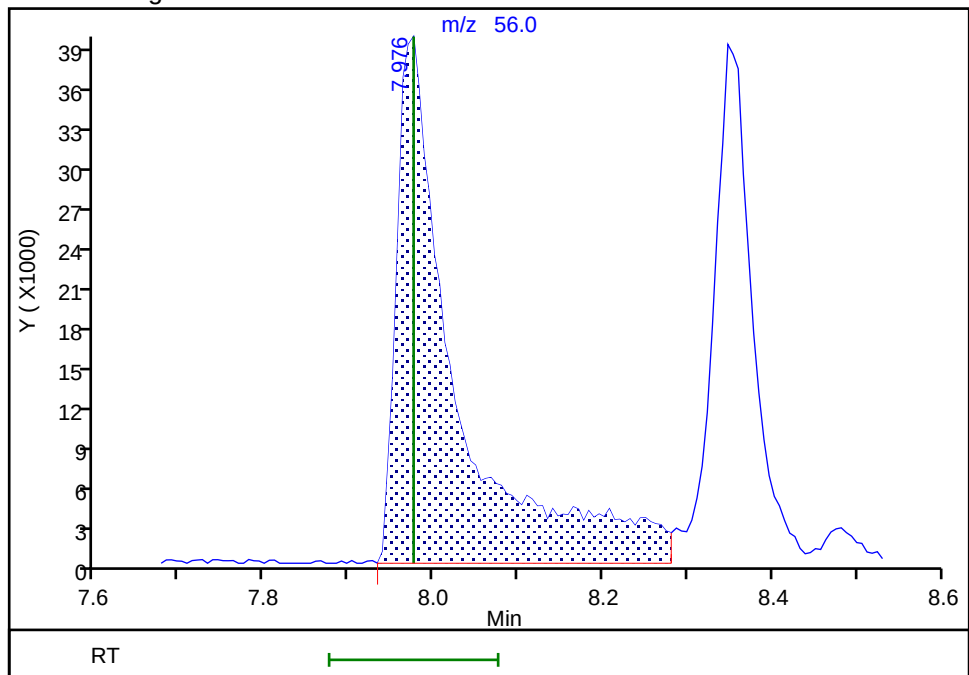
RT: 7.98
Area: 164567
Amount: 207.3677
Amount Units: ug/l

Processing Integration Results



RT: 7.98
Area: 193947
Amount: 244.3889
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:28:44

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

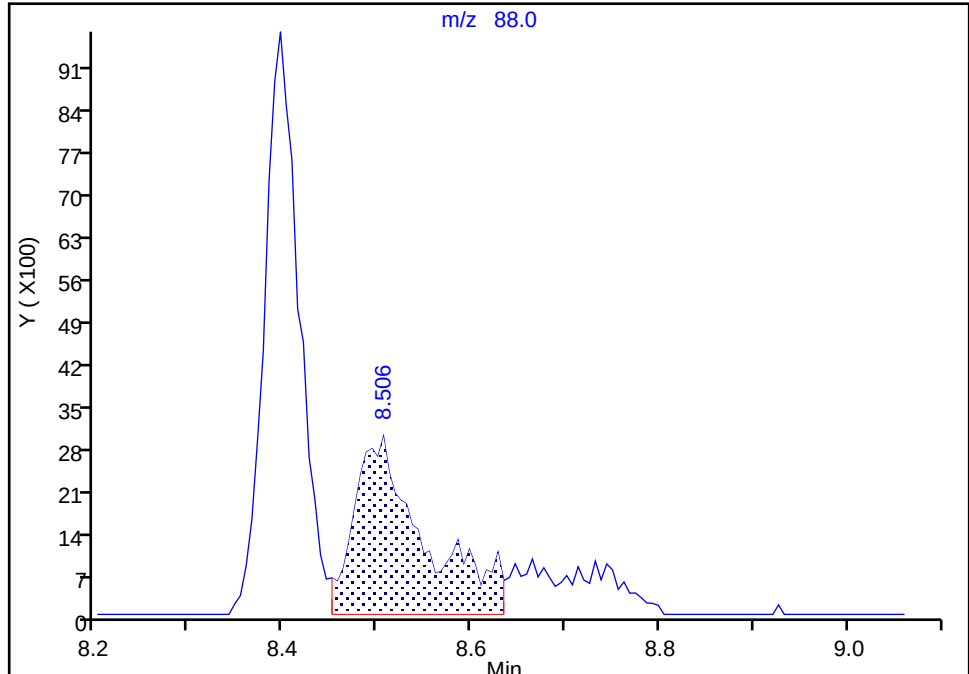
Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01V01.D
Injection Date: 01-Sep-2020 16:10:30 Instrument ID: 10193
Lims ID: ICV
Client ID:
Operator ID: dvv10203 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

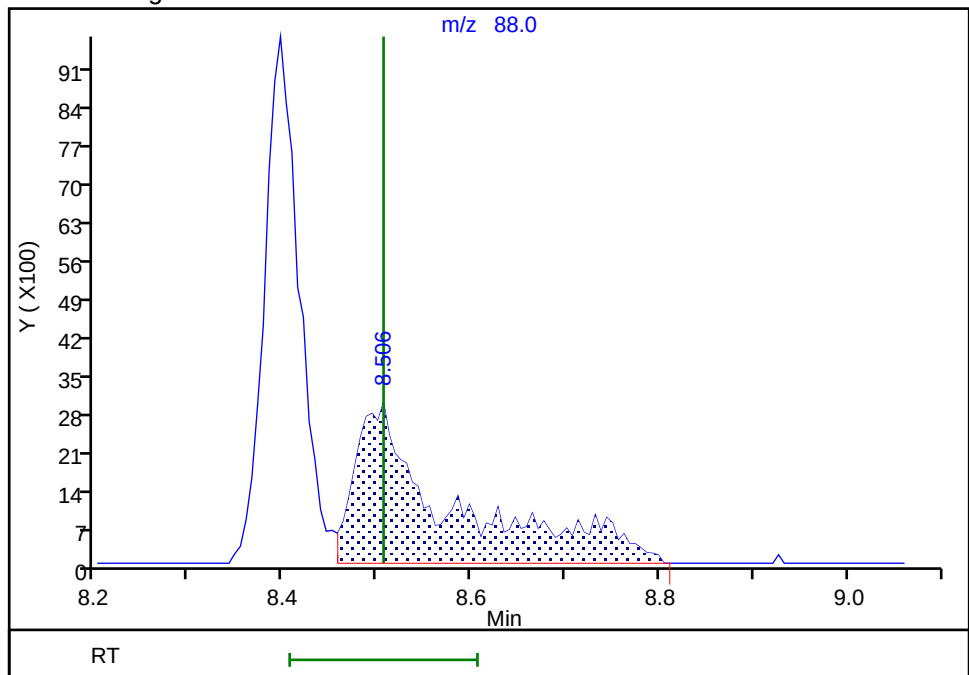
RT: 8.51
Area: 15392
Amount: 97.407800
Amount Units: ug/l

Processing Integration Results



RT: 8.51
Area: 20737
Amount: 131.2335
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 01-Sep-2020 17:26:53

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-57283/3 Calibration Date: 10/22/2020 09:20
 Instrument ID: 10193 Calib Start Date: 09/01/2020 13:35
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 09/01/2020 15:48
 Lab File ID: CC21C31.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3227	0.3482	0.1000	10.8	10.0	7.9	20.0
Chloromethane	Ave	0.3804	0.3913	0.1000	10.3	10.0	2.9	20.0
1,3-Butadiene	Ave	0.3578	0.5399		15.1	10.0	50.9*	20.0
Vinyl chloride	Ave	0.3517	0.3359	0.1000	9.55	10.0	-4.5	20.0
Bromomethane	Ave	0.2482	0.2111	0.1000	8.50	10.0	-15.0	20.0
Chloroethane	Ave	0.2173	0.1982	0.1000	9.12	10.0	-8.8	20.0
Dichlorofluoromethane	Ave	0.4713	0.4853		10.3	10.0	3.0	20.0
Trichlorofluoromethane	Ave	0.4575	0.4513	0.1000	9.87	10.0	-1.3	20.0
Ethyl ether	Ave	0.2318	0.2362		10.2	10.0	1.9	20.0
Freon 123a	Ave	0.3397	0.2864		8.43	10.0	-15.7	20.0
Acrolein	Ave	2.001	1.825		457	501	-8.8	20.0
1,1-Dichloroethene	Ave	0.2312	0.2173	0.1000	9.40	10.0	-6.0	20.0
Acetone	Ave	2.125	2.058	0.1000	96.8	100	-3.2	20.0
Freon 113	Ave	0.2352	0.2421	0.1000	10.3	10.0	3.0	20.0
Methyl iodide	Ave	0.4567	0.4341		9.50	10.0	-5.0	20.0
Ethyl bromide	Ave	0.1920	0.2096		10.9	10.0	9.2	20.0
Carbon disulfide	Ave	0.8167	0.7761	0.1000	9.50	10.0	-5.0	20.0
Methyl acetate	Ave	8.350	8.675	0.1000	10.4	10.0	3.9	20.0
Allyl chloride	Ave	0.4045	0.4970		12.3	10.0	22.9*	20.0
Methylene Chloride	Ave	0.2573	0.2542	0.1000	9.88	10.0	-1.2	20.0
t-Butyl alcohol	Ave	0.996	0.7694		154	200	-22.8*	20.0
Acrylonitrile	Ave	3.375	3.366		49.9	50.0	-0.3	20.0
Methyl tertiary butyl ether	Ave	0.7484	0.7382	0.1000	9.86	10.0	-1.4	20.0
trans-1,2-Dichloroethene	Ave	0.2703	0.2546	0.1000	9.42	10.0	-5.8	20.0
n-Hexane	Ave	0.3811	0.4267		11.2	10.0	12.0	20.0
1,1-Dichloroethane	Ave	0.4975	0.4971	0.2000	9.99	10.0	-0.0	20.0
di-Isopropyl ether	Ave	0.9484	1.010		10.7	10.0	6.5	20.0
2-Chloro-1,3-butadiene	Ave	0.4688	0.4543		9.69	10.0	-3.1	20.0
Ethyl t-butyl ether	Ave	0.9061	0.8614		9.51	10.0	-4.9	20.0
2-Butanone	Ave	4.984	5.107	0.1000	102	100	2.5	20.0
cis-1,2-Dichloroethene	Ave	0.3064	0.2907	0.1000	9.48	10.0	-5.2	20.0
2,2-Dichloropropane	Ave	0.4293	0.4026		9.38	10.0	-6.2	20.0
Propionitrile	Ave	1.265	1.315		208	200	4.0	20.0
Methacrylonitrile	Ave	4.902	4.019		82.0	100	-18.0	20.0
Bromochloromethane	Ave	0.1349	0.1480		11.0	10.0	9.7	20.0
Tetrahydrofuran	Ave	1.410	1.294		91.8	100	-8.2	20.0
Chloroform	Ave	0.4930	0.4770	0.2000	9.68	10.0	-3.2	20.0
1,1,1-Trichloroethane	Ave	0.4442	0.4218	0.1000	9.49	10.0	-5.1	20.0
Cyclohexane	Ave	0.4697	0.5071	0.1000	10.8	10.0	8.0	20.0
Carbon tetrachloride	Ave	0.3722	0.3700	0.1000	9.94	10.0	-0.6	20.0
1,1-Dichloropropene	Ave	0.3988	0.3801		9.53	10.0	-4.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-57283/3 Calibration Date: 10/22/2020 09:20
 Instrument ID: 10193 Calib Start Date: 09/01/2020 13:35
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 09/01/2020 15:48
 Lab File ID: CC21C31.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isobutyl alcohol	Ave	0.3229	0.3937		610	500	21.9*	20.0
Benzene	Ave	1.149	1.136	0.5000	9.89	10.0	-1.1	20.0
1,2-Dichloroethane	Ave	0.3462	0.3422	0.1000	9.88	10.0	-1.2	20.0
t-Amyl methyl ether	Ave	0.8253	0.7940		9.62	10.0	-3.8	20.0
n-Heptane	Ave	0.4242	0.5265		12.4	10.0	24.1*	20.0
n-Butanol	Ave	0.2676	0.3468		1300	1000	29.6*	20.0
Trichloroethene	Ave	0.2961	0.2854	0.2000	9.64	10.0	-3.6	20.0
Methylcyclohexane	Ave	0.4535	0.5368	0.1000	11.8	10.0	18.4	20.0
1,2-Dichloropropane	Ave	0.2950	0.3064	0.1000	10.4	10.0	3.9	20.0
Methyl methacrylate	Ave	10.45	7.711		7.38	10.0	-26.2*	20.0
1,4-Dioxane	Ave	0.0533	0.0736	0.0050	690	500	38.1*	20.0
Dibromomethane	Ave	0.1443	0.1482		10.3	10.0	2.7	20.0
Bromodichloromethane	Ave	0.3561	0.3657	0.2000	10.3	10.0	2.7	20.0
2-Nitropropane	Ave	3.241	2.929		90.4	100	-9.6	20.0
1-Bromo-2-chloroethane	Ave	0.3051	0.3598		11.8	10.0	17.9	20.0
cis-1,3-Dichloropropene	Ave	0.4426	0.4546	0.2000	10.3	10.0	2.7	20.0
4-Methyl-2-pentanone	Ave	14.48	13.92	0.1000	96.1	100	-3.9	20.0
Toluene	Ave	0.9823	0.9385	0.4000	9.55	10.0	-4.5	20.0
trans-1,3-Dichloropropene	Ave	0.4919	0.5083	0.1000	10.3	10.0	3.3	20.0
Ethyl methacrylate	Ave	0.4151	0.4432		10.7	10.0	6.8	20.0
1,1,2-Trichloroethane	Ave	0.2713	0.2763	0.1000	10.2	10.0	1.8	20.0
Tetrachloroethene	Ave	0.4389	0.4500	0.2000	10.3	10.0	2.5	20.0
1,3-Dichloropropane	Ave	0.4783	0.4967		10.4	10.0	3.9	20.0
2-Hexanone	Ave	10.23	10.00	0.1000	97.8	100	-2.2	20.0
Dibromochloromethane	Ave	0.3148	0.3561		11.3	10.0	13.1	20.0
1,2-Dibromoethane	Ave	0.2679	0.2850	0.1000	10.6	10.0	6.4	20.0
1-Chlorohexane	Ave	0.5609	0.5132		9.15	10.0	-8.5	20.0
Chlorobenzene	Ave	1.109	1.076	0.5000	9.70	10.0	-3.0	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3774	0.3874		10.3	10.0	2.7	20.0
Ethylbenzene	Ave	1.947	1.891	0.1000	9.71	10.0	-2.9	20.0
m&p-Xylene	Ave	0.7608	0.7353	0.1000	19.3	20.0	-3.3	20.0
o-Xylene	Ave	0.7453	0.7194	0.3000	9.65	10.0	-3.5	20.0
Styrene	Ave	1.251	1.249	0.3000	9.98	10.0	-0.2	20.0
Bromoform	Ave	0.1748	0.2368	0.1000	13.5	10.0	35.5*	20.0
Isopropylbenzene	Ave	1.971	1.888	0.1000	9.58	10.0	-4.2	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6245	0.6412	0.3000	10.3	10.0	2.7	20.0
Bromobenzene	Ave	0.8574	0.8750		10.2	10.0	2.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1729	0.1541		89.1	100	-10.9	20.0
1,2,3-Trichloropropane	Ave	0.1700	0.1771		10.4	10.0	4.2	20.0
N-Propylbenzene	Ave	4.026	3.866		9.60	10.0	-4.0	20.0
2-Chlorotoluene	Ave	0.8233	0.7799		9.47	10.0	-5.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-57283/3 Calibration Date: 10/22/2020 09:20
 Instrument ID: 10193 Calib Start Date: 09/01/2020 13:35
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 09/01/2020 15:48
 Lab File ID: CC21C31.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	2.982	2.805		9.40	10.0	-6.0	20.0
4-Chlorotoluene	Ave	0.8558	0.8219		9.60	10.0	-4.0	20.0
tert-Butylbenzene	Ave	0.6485	0.6074		9.37	10.0	-6.3	20.0
Pentachloroethane	Ave	0.4842	0.5683		11.7	10.0	17.4	20.0
1,2,4-Trimethylbenzene	Ave	3.060	2.955		9.66	10.0	-3.4	20.0
sec-Butylbenzene	Ave	3.843	3.635		9.46	10.0	-5.4	20.0
1,3-Dichlorobenzene	Ave	1.713	1.706	0.6000	9.96	10.0	-0.4	20.0
p-Isopropyltoluene	Ave	3.351	3.218		9.60	10.0	-4.0	20.0
1,4-Dichlorobenzene	Ave	1.763	1.745	0.5000	9.90	10.0	-1.0	20.0
1,2,3-Trimethylbenzene	Ave	1.343	1.331		9.91	10.0	-0.9	20.0
Benzyl chloride	Ave	0.2484	0.2809		11.3	10.0	13.1	20.0
n-Butylbenzene	Ave	1.698	1.623		9.56	10.0	-4.4	20.0
1,2-Dichlorobenzene	Ave	1.616	1.614	0.4000	9.99	10.0	-0.1	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0856	0.1033	0.0500	12.1	10.0	20.7*	20.0
1,3,5-Trichlorobenzene	Ave	1.397	1.450		10.4	10.0	3.8	20.0
1,2,4-Trichlorobenzene	Ave	1.254	1.284	0.2000	10.2	10.0	2.4	20.0
Hexachlorobutadiene	Ave	0.6122	0.6531		10.7	10.0	6.7	20.0
Naphthalene	Ave	2.236	2.211		9.88	10.0	-1.2	20.0
1,2,3-Trichlorobenzene	Ave	1.110	1.110		10.0	10.0	-0.0	20.0
Dibromofluoromethane (Surr)	Ave	0.2376	0.2429		10.2	10.0	2.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0484	0.0517		10.7	10.0	6.8	20.0
Toluene-d8 (Surr)	Ave	1.306	1.289		9.87	10.0	-1.3	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4909	0.4886		9.95	10.0	-0.5	20.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC21C31.D
 Lims ID: CCVIS VSTD010
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 22-Oct-2020 09:20:30 ALS Bottle#: 2 Worklist Smp#: 3
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-003
 Misc. Info.: CCVIS VSTD010
 Operator ID: jkh09052 Instrument ID: 10193
 Sublist: chrom-MSV_10193_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 11:26:35 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1011

First Level Reviewer: howej

Date: 22-Oct-2020 10:21:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.898	1.898	0.000	99	640840	10.0	10.8	
3 Chloromethane	50	2.093	2.093	0.000	99	720303	10.0	10.3	
4 Butadiene	39	2.203	2.203	0.000	97	993773	10.0	15.1	M
5 Vinyl chloride	62	2.203	2.203	0.000	89	618300	10.0	9.55	
6 Bromomethane	94	2.514	2.514	0.000	92	388456	10.0	8.50	
7 Chloroethane	64	2.599	2.599	0.000	99	364776	10.0	9.12	
8 Dichlorofluoromethane	67	2.824	2.824	0.000	98	893231	10.0	10.3	
9 Trichlorofluoromethane	101	2.879	2.879	0.000	97	830729	10.0	9.87	
11 Ethyl ether	59	3.111	3.111	0.000	96	434710	10.0	10.2	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.202	3.202	0.000	94	527070	10.0	8.43	
13 Acrolein	56	3.282	3.282	0.000	99	3480200	500.9	457.0	
14 1,1-Dichloroethene	96	3.410	3.410	0.000	96	399984	10.0	9.40	
16 Acetone	43	3.446	3.446	0.000	98	783211	100.0	96.8	
15 112TCTFE	101	3.452	3.452	0.000	95	445644	10.0	10.3	
17 Iodomethane	142	3.599	3.599	0.000	99	799004	10.0	9.50	
18 Isopropyl alcohol	45	3.617	3.617	0.000	46	445629	200.0	277.5	
19 Ethyl bromide	108	3.623	3.623	0.000	99	385660	10.0	10.9	
20 Carbon disulfide	76	3.690	3.690	0.000	100	1428425	10.0	9.50	
22 Methyl acetate	43	3.843	3.843	0.000	98	330213	10.0	10.4	M
23 3-Chloro-1-propene	41	3.867	3.867	0.000	90	914745	10.0	12.3	
24 Methylene Chloride	84	4.044	4.044	0.000	99	467820	10.0	9.88	
* 25 t-Butyl alcohol-d10 (IS)	65	4.080	4.080	0.000	0	190322	50.0	50.0	M
26 2-Methyl-2-propanol	59	4.196	4.196	0.000	98	585710	200.0	154.5	
27 Acrylonitrile	53	4.385	4.385	0.000	98	640672	50.0	49.9	
28 Methyl tert-butyl ether	73	4.434	4.434	0.000	93	1358745	10.0	9.86	
29 trans-1,2-Dichloroethene	96	4.440	4.440	0.000	96	468660	10.0	9.42	
30 Hexane	57	4.861	4.861	0.000	96	785307	10.0	11.2	
32 1,1-Dichloroethane	63	5.111	5.111	0.000	96	914983	10.0	10.0	
33 Isopropyl ether	45	5.172	5.172	0.000	94	1859223	10.0	10.7	
34 2-Chloro-1,3-butadiene	53	5.214	5.214	0.000	93	836102	10.0	9.69	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Tert-butyl ethyl ether	59	5.702	5.702	0.000	98	1585446	10.0	9.51	
36 2-Butanone (MEK)	43	5.915	5.915	0.000	99	1944128	100.0	102.5	
37 cis-1,2-Dichloroethene	96	5.946	5.946	0.000	84	534979	10.0	9.48	
38 2,2-Dichloropropane	77	5.958	5.958	0.000	89	741087	10.0	9.38	
40 Propionitrile	54	6.007	6.007	0.000	99	1001125	200.0	207.9	
43 Methacrylonitrile	67	6.226	6.226	0.000	96	1529785	100.0	82.0	
44 Chlorobromomethane	128	6.275	6.275	0.000	96	272330	10.0	11.0	
45 Tetrahydrofuran	71	6.287	6.287	0.000	89	492430	100.0	91.8	
46 Chloroform	83	6.433	6.433	0.000	95	877995	10.0	9.68	
\$ 47 Dibromofluoromethane (Surr)	113	6.647	6.647	0.000	95	447078	10.0	10.2	
48 1,1,1-Trichloroethane	97	6.659	6.659	0.000	98	776264	10.0	9.49	
49 Cyclohexane	56	6.744	6.744	0.000	95	933436	10.0	10.8	
50 Carbon tetrachloride	117	6.860	6.860	0.000	97	680957	10.0	9.94	
51 1,1-Dichloropropene	75	6.866	6.866	0.000	93	699635	10.0	9.53	
52 Isobutyl alcohol	41	7.043	7.043	0.000	93	749213	500.0	609.6	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.110	7.110	0.000	0	95124	10.0	10.7	
54 Benzene	78	7.135	7.135	0.000	98	2091701	10.0	9.89	
55 1,2-Dichloroethane	62	7.208	7.208	0.000	97	629900	10.0	9.88	
56 Tert-amyl methyl ether	73	7.330	7.330	0.000	97	1461430	10.0	9.62	
* 57 Fluorobenzene (IS)	96	7.543	7.543	0.000	98	1840577	10.0	10.0	
58 n-Heptane	43	7.549	7.549	0.000	96	969062	10.0	12.4	
59 n-Butanol	56	7.939	7.939	0.000	93	1320082	1000.0	1296.0	
60 Trichloroethene	95	8.025	8.025	0.000	97	525280	10.0	9.64	
61 Methylcyclohexane	83	8.323	8.323	0.000	95	988099	10.0	11.8	
62 1,2-Dichloropropane	63	8.360	8.360	0.000	94	563941	10.0	10.4	
63 2-ethoxy-2-methyl butane	87	8.372	8.372	0.000	91	802820	10.0	9.50	
64 Methyl methacrylate	69	8.451	8.451	0.000	94	293524	10.0	7.38	
65 1,4-Dioxane	88	8.457	8.457	0.000	33	140021	500.0	690.4	M
66 Dibromomethane	93	8.470	8.470	0.000	93	272712	10.0	10.3	
67 Dichlorobromomethane	83	8.714	8.714	0.000	98	673074	10.0	10.3	
68 2-Nitropropane	41	8.994	8.994	0.000	98	1114851	100.0	90.4	
71 1-Bromo-2-chloroethane	63	9.104	9.104	0.000	99	662223	10.0	11.8	
72 cis-1,3-Dichloropropene	75	9.274	9.274	0.000	93	836789	10.0	10.3	
73 4-Methyl-2-pentanone (MIBK)	43	9.457	9.457	0.000	99	5297654	100.0	96.1	
\$ 74 Toluene-d8 (Surr)	98	9.585	9.585	0.000	95	1847058	10.0	9.87	
75 Toluene	92	9.665	9.665	0.000	97	1344697	10.0	9.55	
76 trans-1,3-Dichloropropene	75	9.933	9.933	0.000	96	728231	10.0	10.3	
78 Ethyl methacrylate	69	10.000	10.000	0.000	92	635087	10.0	10.7	
79 1,1,2-Trichloroethane	97	10.146	10.146	0.000	92	395873	10.0	10.2	
80 Tetrachloroethene	166	10.225	10.225	0.000	98	644819	10.0	10.3	
81 1,3-Dichloropropane	76	10.311	10.311	0.000	96	711690	10.0	10.4	
82 2-Hexanone	43	10.372	10.372	0.000	99	3807326	100.0	97.8	
83 Chlorodibromomethane	129	10.524	10.524	0.000	90	510200	10.0	11.3	
84 Ethylene Dibromide	107	10.634	10.634	0.000	99	408323	10.0	10.6	
* 85 Chlorobenzene-d5 (IS)	117	11.079	11.079	0.000	86	1432804	10.0	10.0	
86 1-Chlorohexane	91	11.085	11.085	0.000	92	735302	10.0	9.15	
87 Chlorobenzene	112	11.103	11.103	0.000	94	1541621	10.0	9.70	
89 1,1,1,2-Tetrachloroethane	131	11.189	11.189	0.000	94	555078	10.0	10.3	
90 Ethylbenzene	91	11.189	11.189	0.000	99	2709323	10.0	9.71	
91 m-Xylene & p-Xylene	106	11.311	11.311	0.000	0	2107141	20.0	19.3	
92 o-Xylene	106	11.640	11.640	0.000	97	1030824	10.0	9.65	
93 Styrene	104	11.658	11.658	0.000	95	1789359	10.0	9.98	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
94 Bromoform	173	11.817	11.817	0.000	98	339300	10.0	13.5	
95 Isopropylbenzene	105	11.945	11.945	0.000	96	2704755	10.0	9.58	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.091	12.091	0.000	95	700031	10.0	9.95	
99 1,1,2,2-Tetrachloroethane	83	12.201	12.201	0.000	94	549509	10.0	10.3	
100 Bromobenzene	156	12.207	12.207	0.000	93	749861	10.0	10.2	
101 trans-1,4-Dichloro-2-butene	53	12.225	12.225	0.000	96	1320570	100.0	89.1	
102 1,2,3-Trichloropropane	110	12.243	12.243	0.000	81	151754	10.0	10.4	
103 N-Propylbenzene	91	12.280	12.280	0.000	99	3312875	10.0	9.60	
104 2-Chlorotoluene	126	12.359	12.359	0.000	96	668361	10.0	9.47	
105 1,3,5-Trimethylbenzene	105	12.420	12.420	0.000	94	2403498	10.0	9.40	
106 4-Chlorotoluene	126	12.451	12.451	0.000	98	704354	10.0	9.60	
107 tert-Butylbenzene	134	12.664	12.664	0.000	95	520552	10.0	9.37	
108 Pentachloroethane	167	12.694	12.694	0.000	92	486972	10.0	11.7	
109 1,2,4-Trimethylbenzene	105	12.707	12.707	0.000	97	2532573	10.0	9.66	
110 sec-Butylbenzene	105	12.829	12.829	0.000	94	3115209	10.0	9.46	
111 1,3-Dichlorobenzene	146	12.926	12.926	0.000	99	1462131	10.0	9.96	
112 4-Isopropyltoluene	119	12.938	12.938	0.000	97	2757862	10.0	9.60	
* 113 1,4-Dichlorobenzene-d4	152	12.981	12.981	0.000	94	856952	10.0	10.0	
114 1,4-Dichlorobenzene	146	12.999	12.999	0.000	95	1495064	10.0	9.90	
115 1,2,3-Trimethylbenzene	120	13.011	13.011	0.000	99	1140664	10.0	9.91	
116 Benzyl chloride	126	13.079	13.079	0.000	99	240744	10.0	11.3	
119 n-Butylbenzene	92	13.231	13.231	0.000	97	1390517	10.0	9.56	
120 1,2-Dichlorobenzene	146	13.261	13.261	0.000	99	1383149	10.0	9.99	
118 p-Diethylbenzene	119	13.286	13.286	0.000	86	1447138	10.0	9.93	
123 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	87	88555	10.0	12.1	
124 1,3,5-Trichlorobenzene	180	13.938	13.938	0.000	98	1242897	10.0	10.4	
125 1,2,4-Trichlorobenzene	180	14.365	14.365	0.000	94	1100022	10.0	10.2	
126 Hexachlorobutadiene	225	14.450	14.450	0.000	96	559650	10.0	10.7	
127 Naphthalene	128	14.548	14.548	0.000	97	1894382	10.0	9.88	
128 1,2,3-Trichlorobenzene	180	14.694	14.694	0.000	95	950986	10.0	10.0	
129 2-Methylnaphthalene	142	15.316	15.316	0.000	93	1137013	10.0	8.77	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00026

Amount Added: 20.00

Units: uL

MSV_RV4_826_00030

Amount Added: 20.00

Units: uL

MSV_RV4GAS826_00087

Amount Added: 20.00

Units: uL

MSV_HP25_ISSS_00016

Amount Added: 1.00

Units: uL

Run Reagent

Report Date: 22-Oct-2020 11:26:37

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC21C31.D

Injection Date: 22-Oct-2020 09:20:30

Instrument ID: 10193

Operator ID: jkh09052

Lims ID: CCVIS VSTD010

Worklist Smp#: 3

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

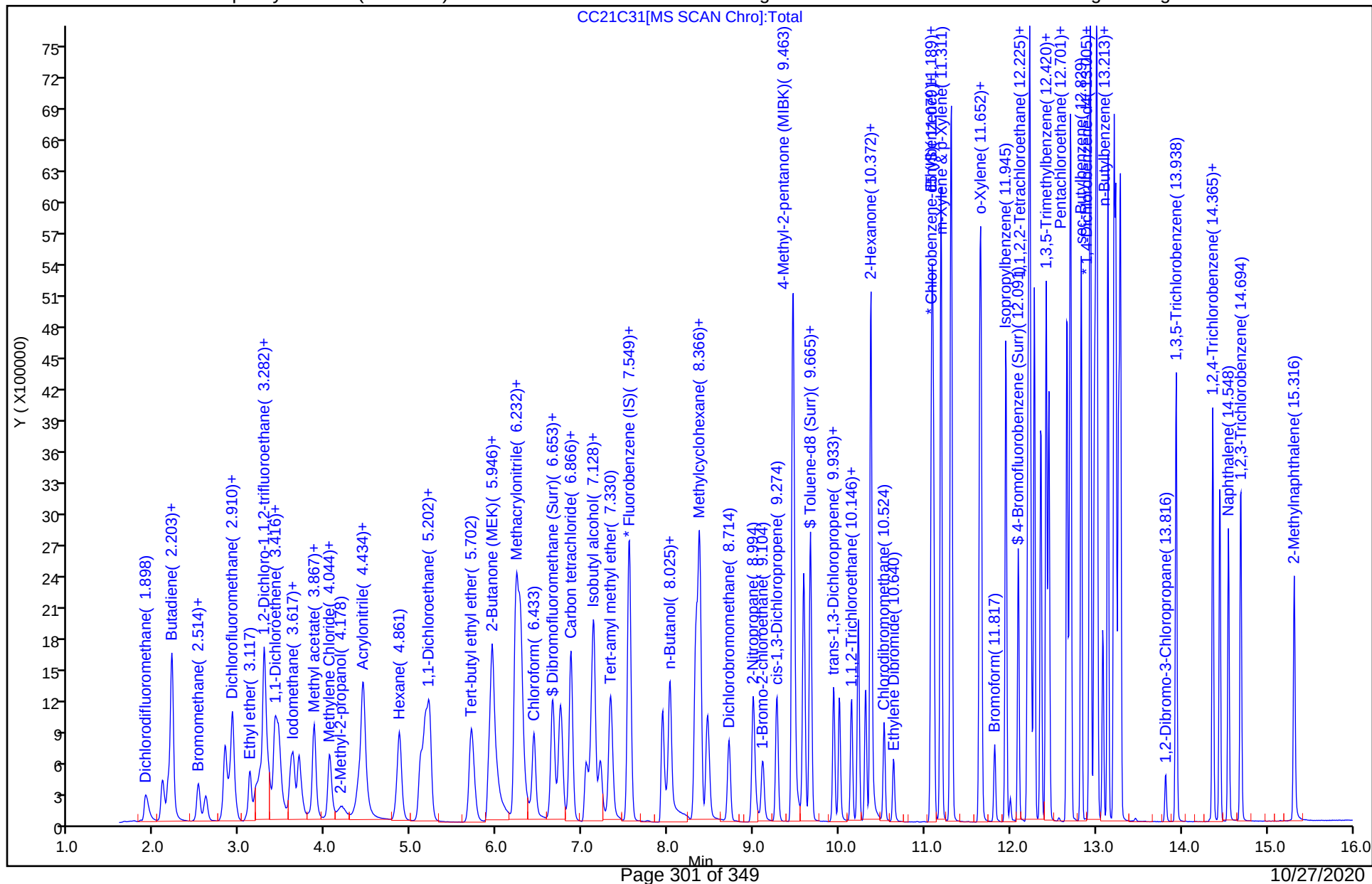
ALS Bottle#: 2

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC21C31.D

Injection Date: 22-Oct-2020 09:20:30

Instrument ID: 10193

Lims ID: CCVIS VSTD010

Client ID:

Operator ID: jkh09052

ALS Bottle#:

2

Worklist Smp#: 3

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_10193_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

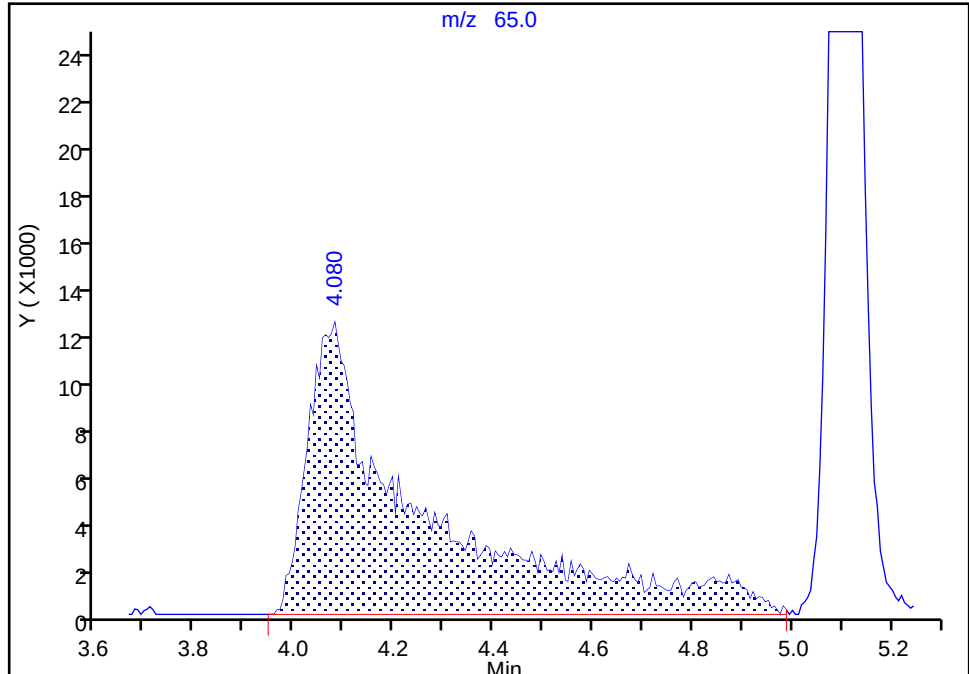
MS Quad

* 25 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

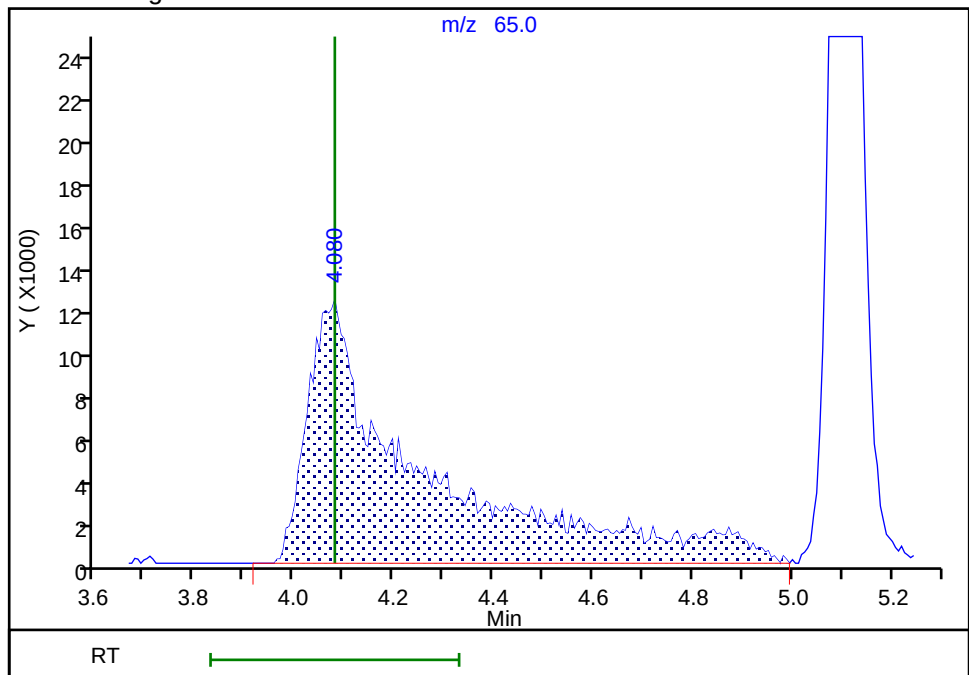
RT: 4.08
Area: 190321
Amount: 50.000000
Amount Units: ug/l

Processing Integration Results



RT: 4.08
Area: 190322
Amount: 50.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 22-Oct-2020 10:03:32

Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC21C31.D

Injection Date: 22-Oct-2020 09:20:30

Instrument ID: 10193

Lims ID: CCVIS VSTD010

Client ID:

Operator ID: jkh09052

ALS Bottle#:

2

Worklist Smp#: 3

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_10193_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

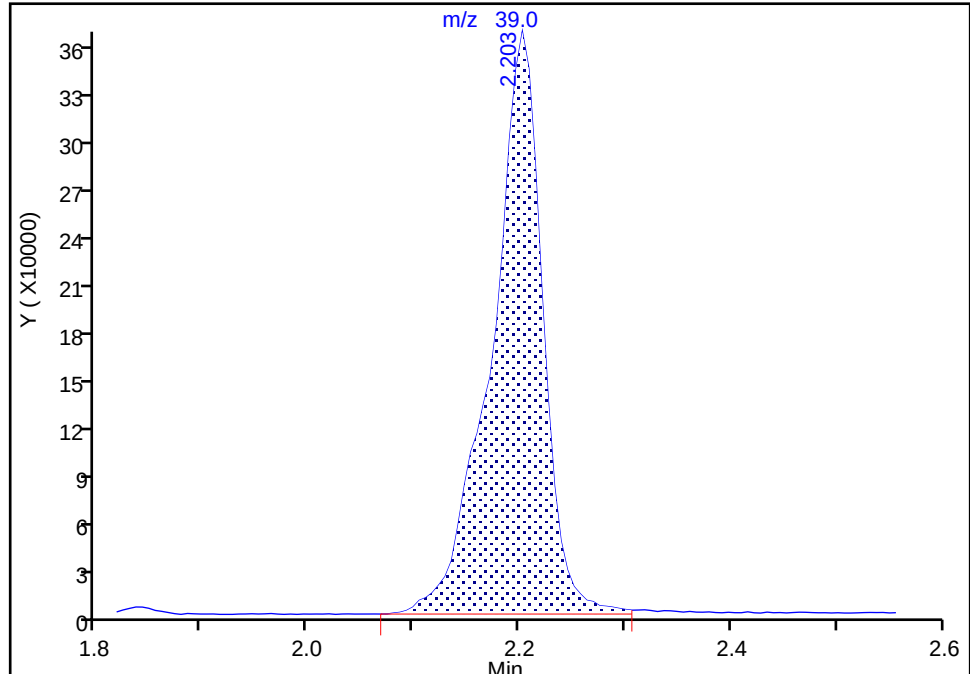
MS Quad

4 Butadiene, CAS: 106-99-0

Signal: 1

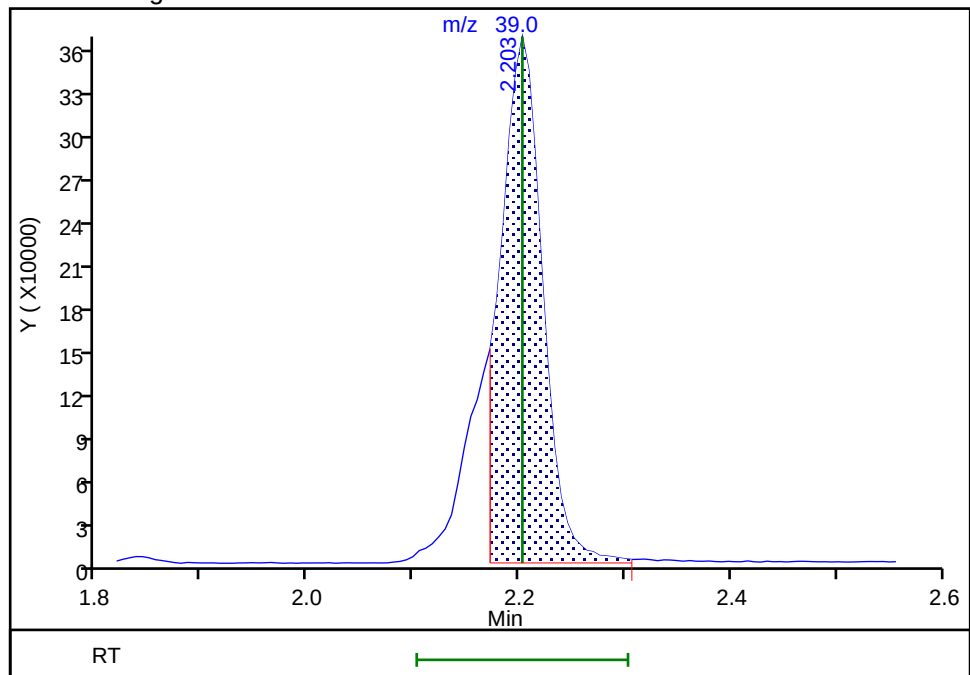
RT: 2.20
Area: 1209481
Amount: 18.364731
Amount Units: ug/l

Processing Integration Results



RT: 2.20
Area: 993773
Amount: 15.089426
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 22-Oct-2020 10:02:52

Audit Action: Split an Integrated Peak

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC21C31.D

Injection Date: 22-Oct-2020 09:20:30

Instrument ID: 10193

Lims ID: CCVIS VSTD010

Client ID:

Operator ID: jkh09052

ALS Bottle#:

2

Worklist Smp#: 3

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_10193_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

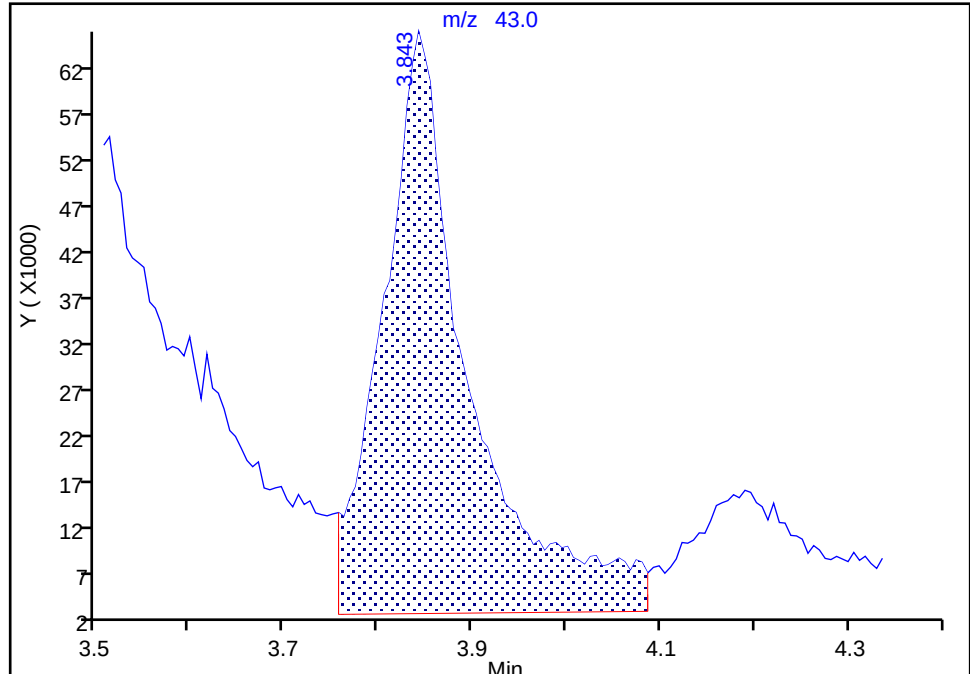
MS Quad

22 Methyl acetate, CAS: 79-20-9

Signal: 1

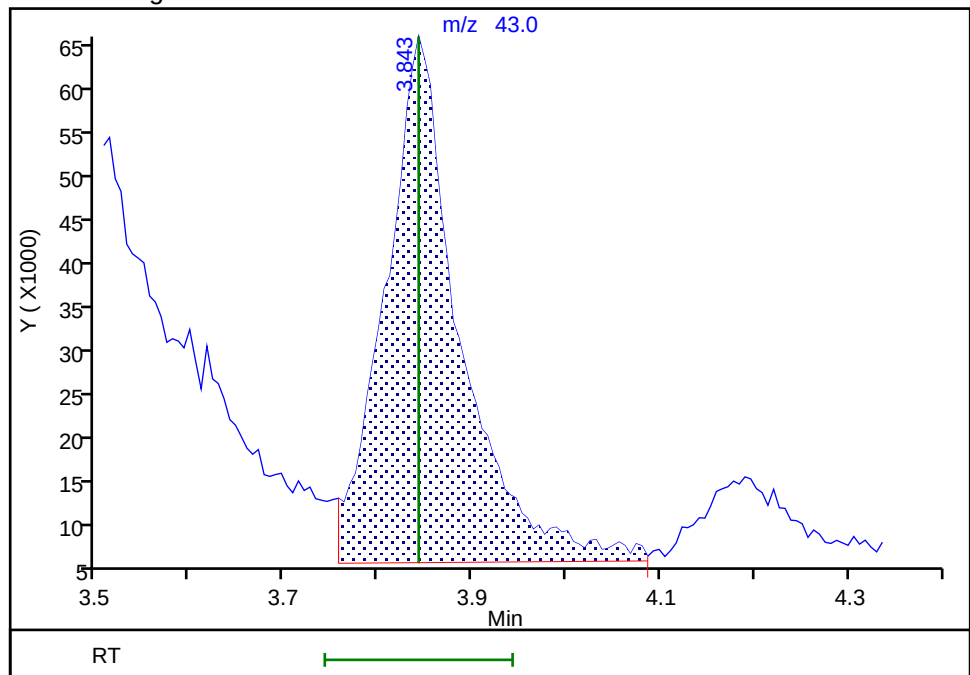
RT: 3.84
Area: 403838
Amount: 12.705617
Amount Units: ug/l

Processing Integration Results



RT: 3.84
Area: 330213
Amount: 10.389215
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 22-Oct-2020 10:03:43

Audit Action: Assigned New Baseline

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC21C31.D

Injection Date: 22-Oct-2020 09:20:30

Instrument ID: 10193

Lims ID: CCVIS VSTD010

Client ID:

Operator ID: jkh09052

ALS Bottle#:

2

Worklist Smp#: 3

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

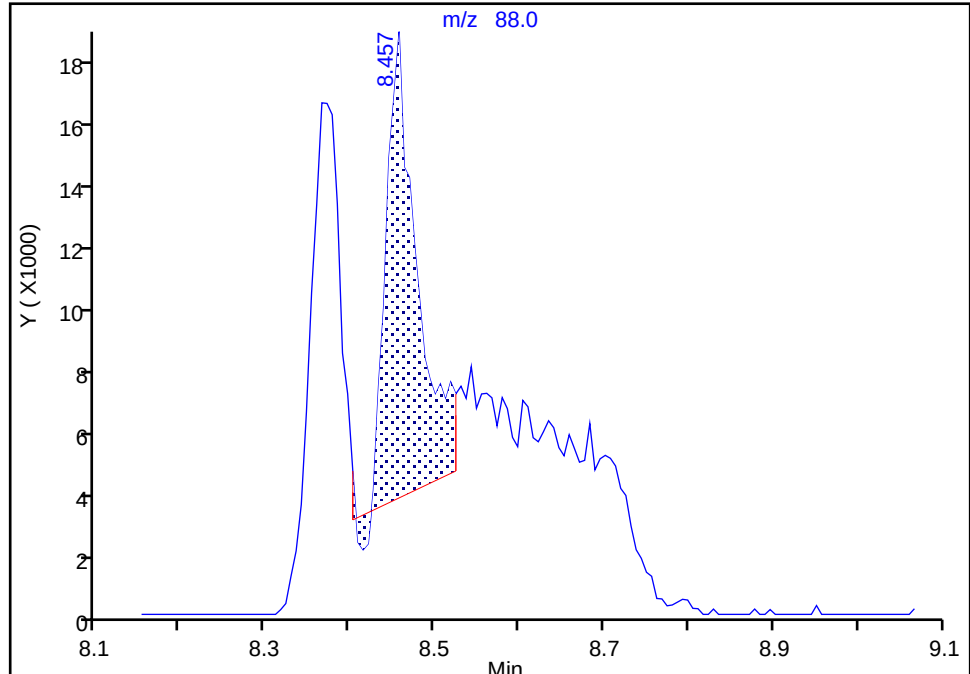
MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

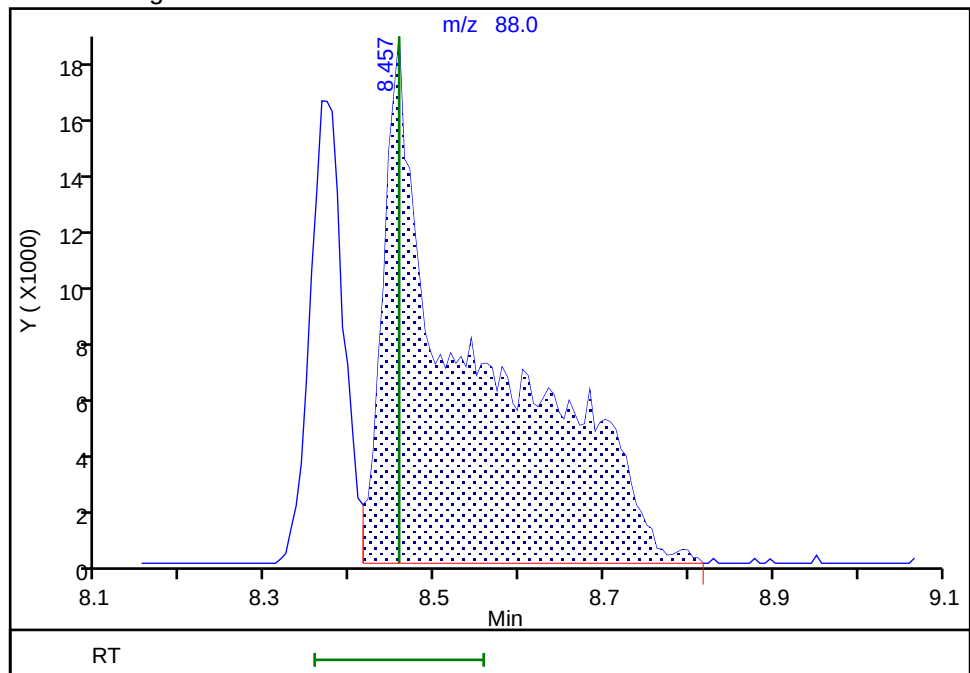
RT: 8.46
Area: 38043
Amount: 187.5817
Amount Units: ug/l

Processing Integration Results



RT: 8.46
Area: 140021
Amount: 690.4129
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 22-Oct-2020 10:04:13

Audit Action: Split an Integrated Peak

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01T01.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 01-Sep-2020 12:45:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 410-0009503-001
Operator ID: dvv10203 Instrument ID: 10193
Method: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Sep-2020 20:14:46 Calib Date: 01-Sep-2020 19:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1059

First Level Reviewer: virayd

Date: 01-Sep-2020 12:56:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 165 BFB	95	5.160	5.160	0.000	88	127617	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

MSV_V_BFB_00003

Amount Added: 1.00

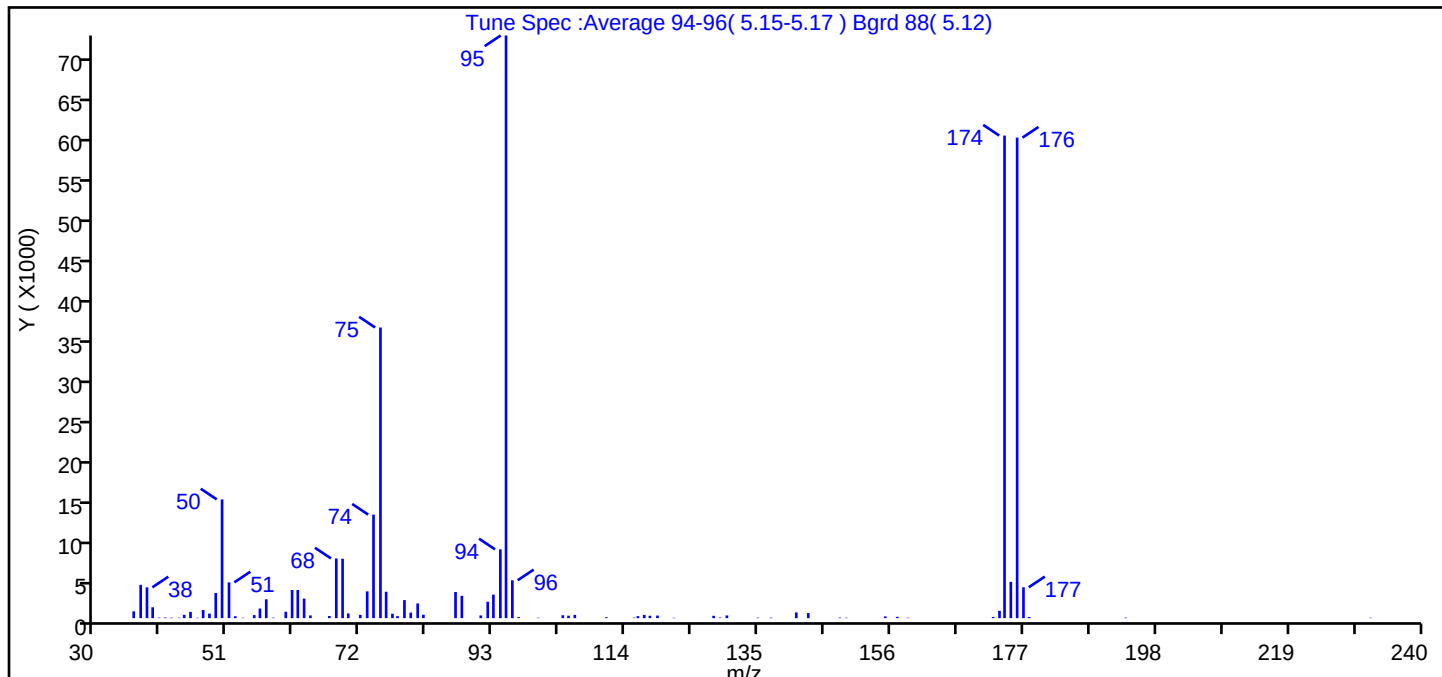
Units: uL

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01T01.D
Injection Date: 01-Sep-2020 12:45:30 Instrument ID: 10193
Lims ID: BFB
Client ID:
Operator ID: dvv10203
Injection Vol: 1.0 uL
Method: MSV_10193_25mL
Tune Method: BFB Method 8260

ALS Bottle#: 1 Worklist Smp#: 1
Dil. Factor: 1.0000
Limit Group: MSV - 8260C_D

\$ 165 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.4
75	30 to 60% of m/z 95	49.9
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	1.3 (1.5)
174	50 to 120% of m/z 95	82.8
175	5 to 9% of m/z 174	6.2 (7.5)
176	Greater than 95% but less than 101% of m/z 174	82.5 (99.6)
177	5 to 9% of m/z 176	5.3 (6.4)

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01T01.D\MSV_10193_25mL.rslt\spectra.d
Injection Date: 01-Sep-2020 12:45:30
Spectrum: Tune Spec :Average 94-96(5.15-5.17) Bgrd 88(5.12)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 83

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	849	58.00	59	87.00	3249	129.00	66
37.00	4140	60.00	797	88.00	2781	130.00	340
38.00	3829	61.00	3495	91.00	335	135.00	62
39.00	1350	62.00	3499	92.00	2042	137.00	64
40.00	62	63.00	2433	93.00	2922	141.00	712
41.00	79	64.00	339	94.00	8556	143.00	634
42.00	64	67.00	265	95.00	72472	148.00	75
43.00	58	68.00	7426	96.00	4710	149.00	56
44.00	414	69.00	7382	97.00	129	155.00	212
45.00	774	70.00	584	100.00	53	157.00	165
46.00	51	72.00	409	104.00	361	159.00	55
47.00	1016	73.00	3331	105.00	305	172.00	140
48.00	566	74.00	12877	106.00	407	173.00	911
49.00	3135	75.00	36152	111.00	112	174.00	60024
50.00	14770	76.00	3285	115.00	61	175.00	4518
51.00	4452	77.00	548	116.00	250	176.00	59768
52.00	235	78.00	250	117.00	403	177.00	3839
53.00	51	79.00	2245	118.00	298	178.00	141
55.00	379	80.00	691	119.00	321	193.00	64
56.00	1192	81.00	1829	122.00	51	232.00	52
57.00	2349	82.00	424	128.00	291		

Report Date: 01-Sep-2020 20:14:46

Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01T01.D

Injection Date: 01-Sep-2020 12:45:30

Instrument ID: 10193

Operator ID: dwv10203

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

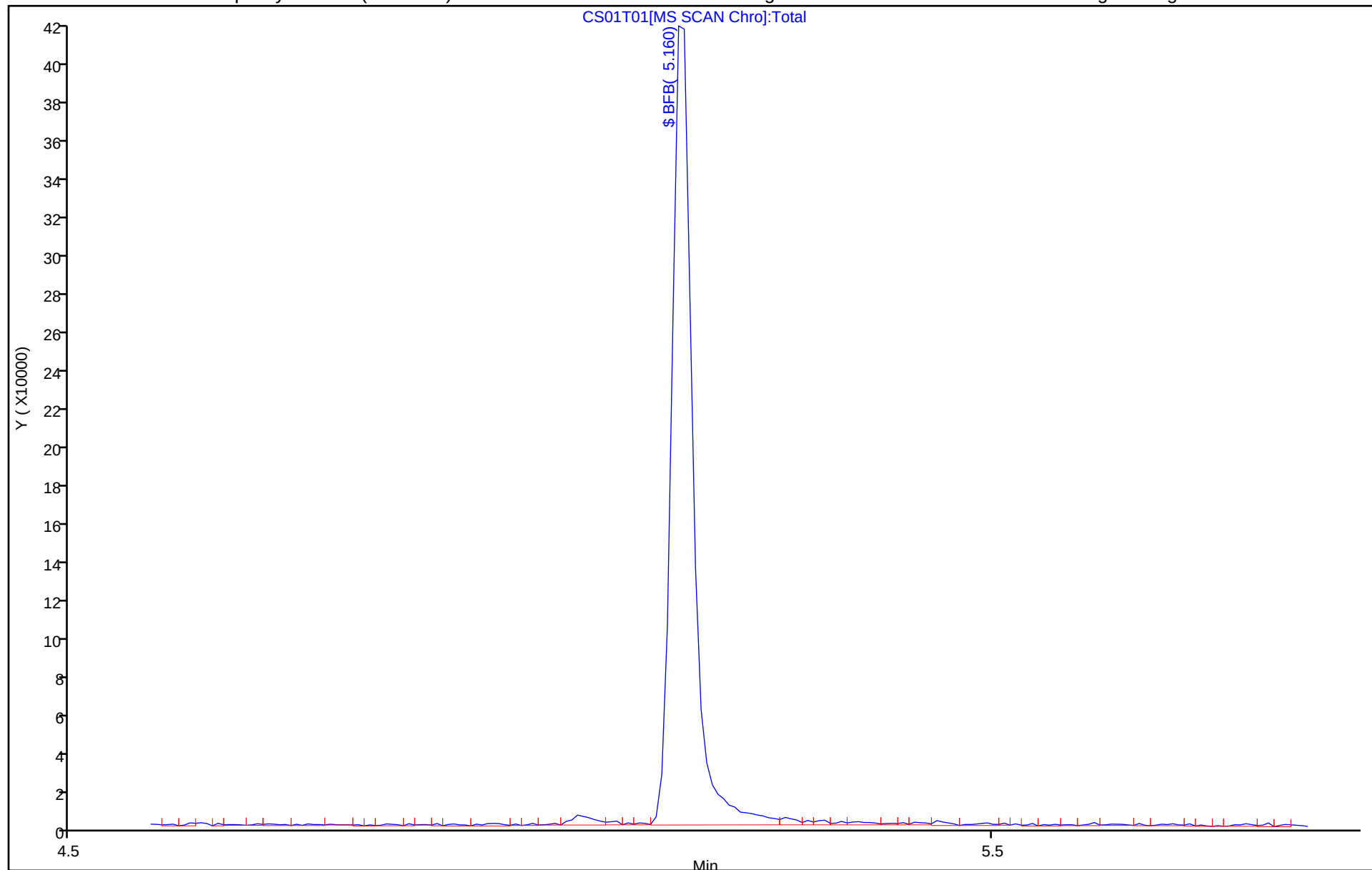
ALS Bottle#: 1

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22T01.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 22-Oct-2020 08:42:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 410-0013561-001
 Misc. Info.: BFB
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 11:27:07 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1011

First Level Reviewer: howej

Date: 22-Oct-2020 08:55:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 165 BFB	95	5.148	5.148	0.000	92	147957	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

MSV_V_BFB_00003

Amount Added: 1.00

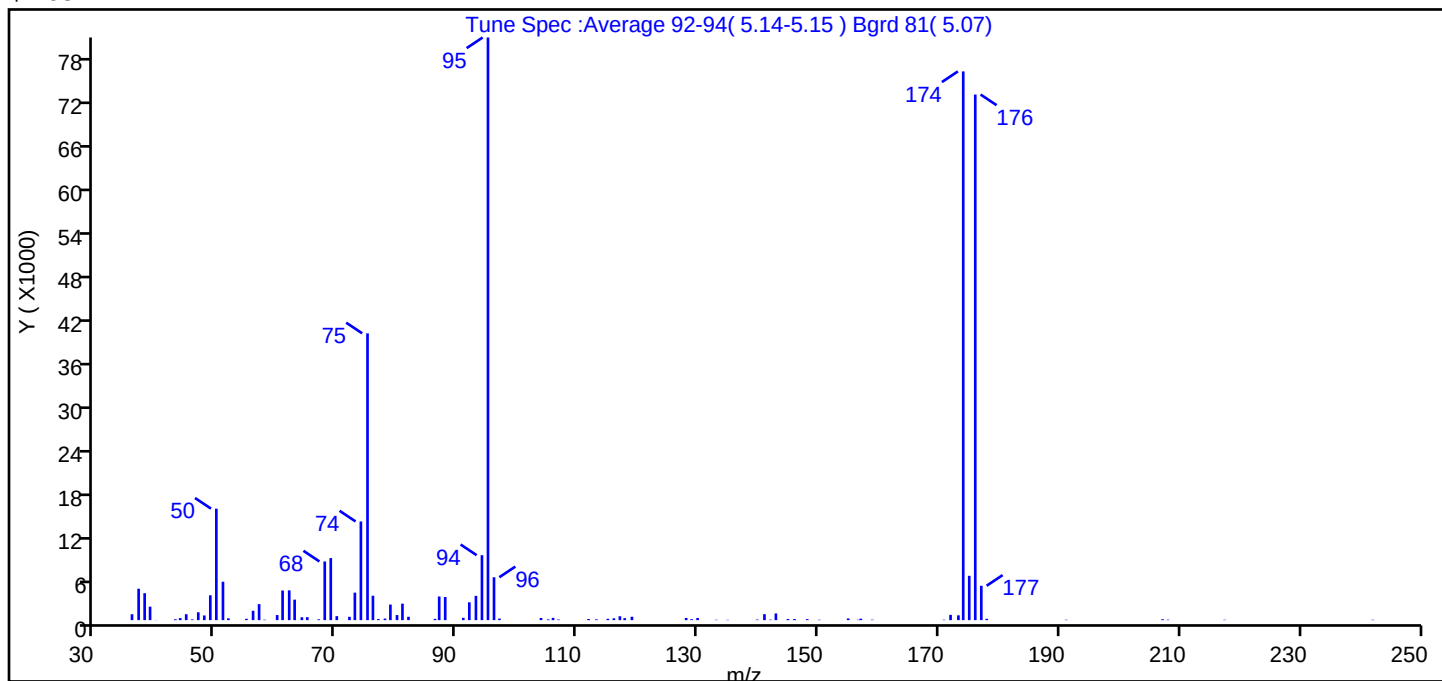
Units: uL

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22T01.D
 Injection Date: 22-Oct-2020 08:42:30 Instrument ID: 10193
 Lims ID: BFB
 Client ID:
 Operator ID: jkh09052
 Injection Vol: 1.0 uL
 Method: MSV_10193_25mL
 Tune Method: BFB Method 8260

ALS Bottle#: 1 Worklist Smp#: 1
 Dil. Factor: 1.0000
 Limit Group: MSV - 8260C_D

\$ 165 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.1
75	30 to 60% of m/z 95	49.2
96	5 to 9% of m/z 95	7.4
173	Less than 2% of m/z 174	0.8 (0.9)
174	50 to 120% of m/z 95	94.2
175	5 to 9% of m/z 174	7.6 (8.1)
176	Greater than 95% but less than 101% of m/z 174	90.2 (95.8)
177	5 to 9% of m/z 176	5.9 (6.5)

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22T01.D\MSV_10193_25mL.rslt\spectra.d
Injection Date: 22-Oct-2020 08:42:30
Spectrum: Tune Spec :Average 92-94(5.14-5.15) Bgrd 81(5.07)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 91

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	814	64.00	396	94.00	8961	143.00	924
37.00	4334	65.00	408	95.00	80384	145.00	155
38.00	3718	67.00	115	96.00	5917	146.00	157
39.00	1858	68.00	8096	97.00	209	148.00	139
40.00	18	69.00	8562	104.00	296	150.00	61
43.00	124	70.00	553	105.00	107	155.00	234
44.00	285	72.00	463	106.00	314	157.00	56
45.00	815	73.00	3792	107.00	85	157.00	200
46.00	100	74.00	13615	112.00	157	159.00	65
47.00	1088	75.00	39568	113.00	111	171.00	61
48.00	646	76.00	3369	115.00	183	172.00	730
49.00	3430	77.00	153	116.00	257	173.00	667
50.00	15383	78.00	216	117.00	537	174.00	75704
51.00	5299	79.00	2150	118.00	275	175.00	6117
52.00	249	80.00	699	119.00	471	176.00	72512
55.00	188	81.00	2273	128.00	301	177.00	4741
56.00	1297	82.00	467	129.00	136	178.00	181
57.00	2211	86.00	180	130.00	291	191.00	61
58.00	64	87.00	3264	133.00	54	207.00	126
60.00	702	88.00	3190	135.00	50	208.00	66
61.00	4086	91.00	320	140.00	81	217.00	55
62.00	4111	92.00	2461	141.00	824	242.00	57
63.00	2829	93.00	3350	142.00	69		

Report Date: 22-Oct-2020 11:27:07

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22T01.D

Injection Date: 22-Oct-2020 08:42:30

Instrument ID: 10193

Operator ID: jkh09052

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

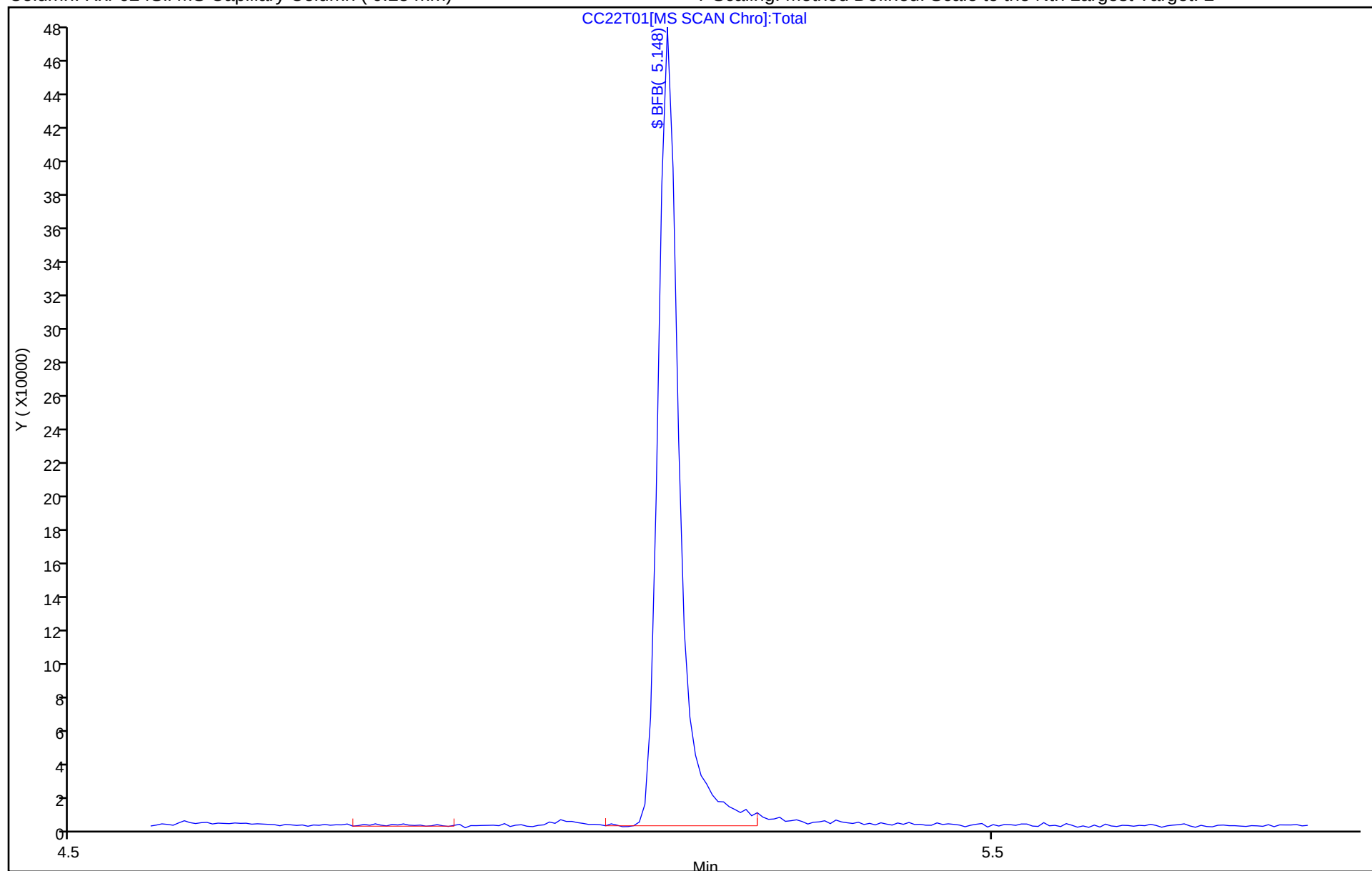
ALS Bottle#: 1

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-17705-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 410-57283/6
 Matrix: Water Lab File ID: CC21B31.D
 Analysis Method: 8260C LL Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 10/22/2020 10:28
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 57283 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.80
75-35-4	1,1-Dichloroethene	ND		1.0	0.44
79-01-6	Trichloroethene	ND		1.0	0.18
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC21B31.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 22-Oct-2020 10:28:30 ALS Bottle#: 5 Worklist Smp#: 6
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-006
 Misc. Info.: MB
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 11:26:35 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1011

First Level Reviewer: howej

Date: 22-Oct-2020 11:22:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85		1.898					ND	
1 Chlorodifluoromethane	51		1.928					ND	7
140 Dimethyl ether	45		1.993					ND	7
3 Chloromethane	50		2.093					ND	
4 Butadiene	39		2.203					ND	7
5 Vinyl chloride	62		2.203					ND	
6 Bromomethane	94		2.514					ND	7
7 Chloroethane	64		2.599					ND	7
8 Dichlorofluoromethane	67		2.824					ND	
9 Trichlorofluoromethane	101		2.879					ND	
11 Ethyl ether	59		3.111					ND	
12 1,2-Dichloro-1,1,2-trifluoroethane	67		3.202					ND	
13 Acrolein	56		3.282					ND	7
14 1,1-Dichloroethene	96		3.410					ND	
16 Acetone	43		3.446					ND	7
15 112TCTFE	101		3.452					ND	
17 Iodomethane	142		3.599					ND	
18 Isopropyl alcohol	45		3.617					ND	
19 Ethyl bromide	108		3.623					ND	
20 Carbon disulfide	76		3.690					ND	7
21 Acetonitrile	41		3.836					ND	7
22 Methyl acetate	43		3.843					ND	7
23 3-Chloro-1-propene	41		3.867					ND	
24 Methylene Chloride	84		4.044					ND	
* 25 t-Butyl alcohol-d10 (IS)	65	4.098	4.080	0.018	0	199412	50.0	50.0	
26 2-Methyl-2-propanol	59		4.196					ND	
27 Acrylonitrile	53		4.385					ND	
28 Methyl tert-butyl ether	73		4.434					ND	
29 trans-1,2-Dichloroethene	96		4.440					ND	
30 Hexane	57		4.861					ND	
32 1,1-Dichloroethane	63		5.111					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Vinyl acetate	43		5.135					ND	7
33 Isopropyl ether	45		5.172					ND	
34 2-Chloro-1,3-butadiene	53		5.214					ND	
35 Tert-butyl ethyl ether	59		5.702					ND	
36 2-Butanone (MEK)	43		5.915					ND	
37 cis-1,2-Dichloroethene	96		5.946					ND	
38 2,2-Dichloropropane	77		5.958					ND	
40 Propionitrile	54		6.007					ND	
39 Ethyl acetate	43		6.013					ND	U
41 Methyl acrylate	55		6.074					ND	
S 42 1,2-Dichloroethene, Total	100		6.155					ND	7
43 Methacrylonitrile	67		6.226					ND	
44 Chlorobromomethane	128		6.275					ND	
45 Tetrahydrofuran	71		6.287					ND	
46 Chloroform	83		6.433					ND	
\$ 47 Dibromofluoromethane (Surr)	113	6.647	6.647	0.000	94	446699	10.0	10.5	
48 1,1,1-Trichloroethane	97		6.659					ND	
49 Cyclohexane	56		6.744					ND	
145 1-Chlorobutane	56		6.842					ND	7
50 Carbon tetrachloride	117		6.860					ND	
51 1,1-Dichloropropene	75		6.866					ND	
52 Isobutyl alcohol	41		7.043					ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.104	7.110	-0.006	0	98228	10.0	11.3	
54 Benzene	78		7.135					ND	7
55 1,2-Dichloroethane	62		7.208					ND	
152 Isopropyl acetate	43		7.257					ND	
56 Tert-amyl methyl ether	73		7.330					ND	
* 57 Fluorobenzene (IS)	96	7.537	7.543	-0.006	98	1792566	10.0	10.0	
58 n-Heptane	43		7.549					ND	7
59 n-Butanol	56		7.939					ND	
60 Trichloroethene	95		8.025					ND	
61 Methylcyclohexane	83		8.323					ND	
62 1,2-Dichloropropane	63		8.360					ND	
63 2-ethoxy-2-methyl butane	87		8.372					ND	
64 Methyl methacrylate	69		8.451					ND	
65 1,4-Dioxane	88		8.457					ND	
66 Dibromomethane	93		8.470					ND	
160 n-Propyl acetate	61		8.561					ND	
67 Dichlorobromomethane	83		8.714					ND	
68 2-Nitropropane	41		8.994					ND	7
71 1-Bromo-2-chloroethane	63		9.104					ND	
69 2-Chloroethyl vinyl ether	63		9.116					ND	
70 Chloroacetonitrile	75		9.116					ND	
72 cis-1,3-Dichloropropene	75		9.274					ND	
73 4-Methyl-2-pentanone (MIBK)	43		9.457					ND	7
\$ 74 Toluene-d8 (Surr)	98	9.585	9.585	0.000	95	1767173	10.0	9.80	
75 Toluene	92		9.665					ND	7
76 trans-1,3-Dichloropropene	75		9.933					ND	
78 Ethyl methacrylate	69		10.000					ND	
S 77 1,3-Dichloropropene, Total	100		10.060					ND	7
79 1,1,2-Trichloroethane	97		10.146					ND	
80 Tetrachloroethene	166		10.225					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
81 1,3-Dichloropropane	76		10.311					ND	
82 2-Hexanone	43		10.372					ND	7
161 n-Butyl acetate	43		10.512					ND	
83 Chlorodibromomethane	129		10.524					ND	
84 Ethylene Dibromide	107		10.634					ND	
* 85 Chlorobenzene-d5 (IS)	117	11.073	11.079	-0.006	87	1380825	10.0	10.0	
86 1-Chlorohexane	91		11.085					ND	7
87 Chlorobenzene	112		11.103					ND	7
89 1,1,1,2-Tetrachloroethane	131		11.189					ND	
90 Ethylbenzene	91		11.189					ND	7
S 88 Xylenes, Total	106		11.245					ND	7
91 m-Xylene & p-Xylene	106		11.311					ND	7
92 o-Xylene	106		11.640					ND	
93 Styrene	104		11.658					ND	
94 Bromoform	173		11.817					ND	
95 Isopropylbenzene	105		11.945					ND	
96 cis-1,4-Dichloro-2-butene	88		12.018					ND	U
97 Cyclohexanone	55		12.048					ND	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.091	12.091	0.000	95	644457	10.0	9.51	
99 1,1,2,2-Tetrachloroethane	83		12.201					ND	
100 Bromobenzene	156		12.207					ND	
101 trans-1,4-Dichloro-2-butene	53		12.225					ND	
102 1,2,3-Trichloropropane	110		12.243					ND	
103 N-Propylbenzene	91		12.280					ND	7
104 2-Chlorotoluene	126		12.359					ND	
105 1,3,5-Trimethylbenzene	105		12.420					ND	
106 4-Chlorotoluene	126		12.451					ND	
107 tert-Butylbenzene	134		12.664					ND	
108 Pentachloroethane	167		12.694					ND	
109 1,2,4-Trimethylbenzene	105		12.707					ND	
110 sec-Butylbenzene	105		12.829					ND	
111 1,3-Dichlorobenzene	146		12.926					ND	7
112 4-Isopropyltoluene	119		12.938					ND	7
* 113 1,4-Dichlorobenzene-d4	152	12.981	12.981	0.000	95	773857	10.0	10.0	
114 1,4-Dichlorobenzene	146		12.999					ND	7
115 1,2,3-Trimethylbenzene	120		13.011					ND	7
116 Benzyl chloride	126		13.079					ND	
119 n-Butylbenzene	92		13.231					ND	
120 1,2-Dichlorobenzene	146		13.261					ND	
118 p-Diethylbenzene	119		13.286					ND	
122 Hexachloroethane	117		13.475					ND	
123 1,2-Dibromo-3-Chloropropane	155		13.816					ND	
124 1,3,5-Trichlorobenzene	180		13.938					ND	7
125 1,2,4-Trichlorobenzene	180		14.365					ND	7
126 Hexachlorobutadiene	225		14.450					ND	7
127 Naphthalene	128		14.548					ND	7
128 1,2,3-Trichlorobenzene	180		14.694					ND	7
129 2-Methylnaphthalene	142		15.316					ND	U
130 Dodecane	57		0.000					ND	
159 tert-Butyl Formate	1		0.000					ND	
131 2-Bromo-1-chloropropane	1		0.000					ND	
133 1-Chloropropane	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
136 Methylal	1		0.000						ND
138 n-Decane	57		0.000						ND
142 1-Bromo-3-Chloropropane	1		0.000						ND
155 2-Chloro-1,1,1-Trifluoroethane	1		0.000						ND
149 Chlorotrifluoroethene	1		0.000						ND
151 Propene oxide	1		0.000						ND
157 t-Amyl alcohol	1		0.000						ND
158 1,1-Dichloro-1-fluoroethane	1		0.000						ND
162 Ethanol	45		0.000						ND

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_HP25_ISSS_00016

Amount Added: 1.00

Units: uL

Run Reagent

Report Date: 22-Oct-2020 11:27:04

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC21B31.D

Injection Date: 22-Oct-2020 10:28:30

Instrument ID: 10193

Operator ID: jkh09052

Lims ID: MB

Worklist Smp#: 6

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

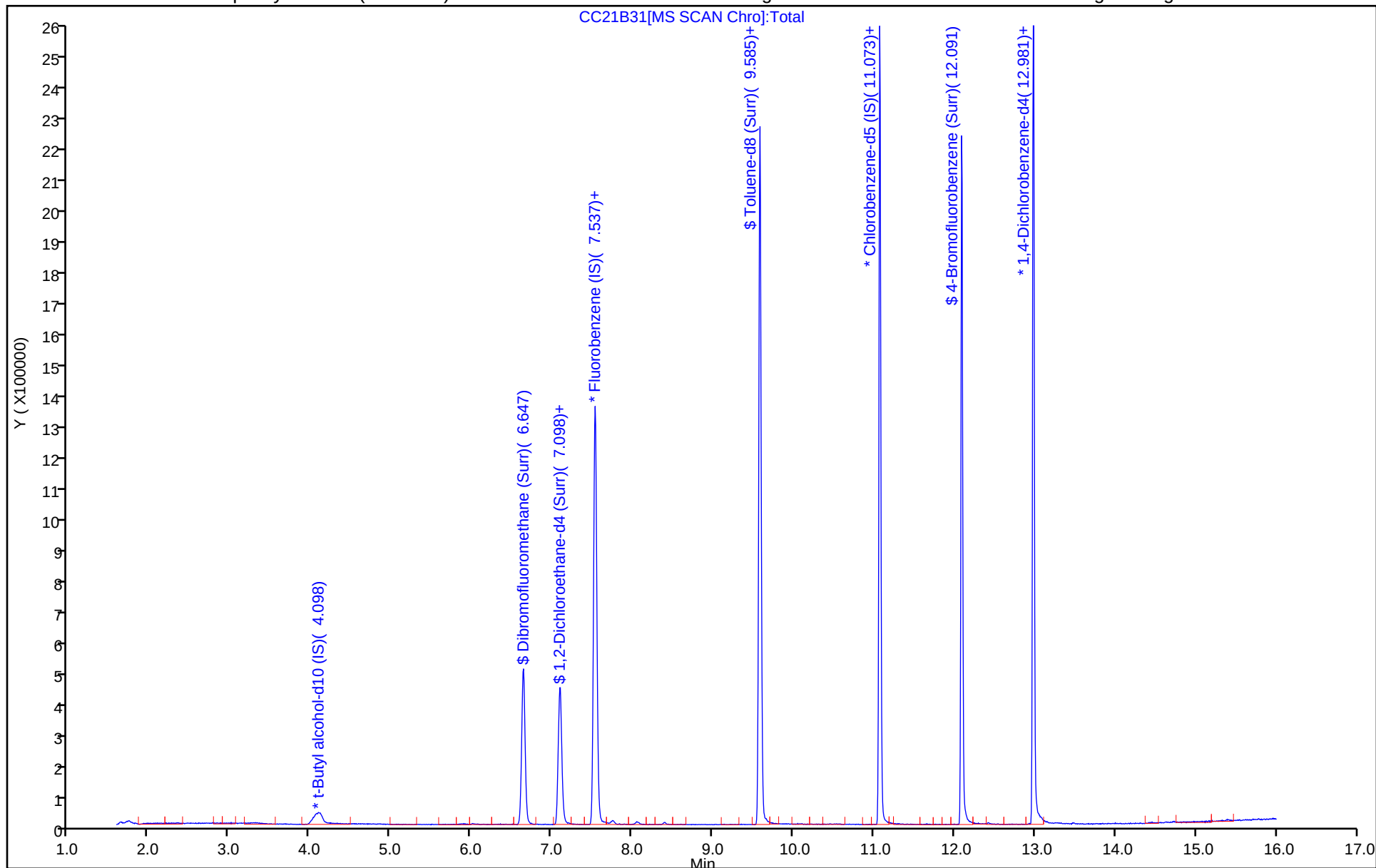
ALS Bottle#: 5

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC21B31.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 22-Oct-2020 10:28:30 ALS Bottle#: 5 Worklist Smp#: 6
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-006
 Misc. Info.: MB
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 11:26:35 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1011

First Level Reviewer: howej

Date: 22-Oct-2020 11:22:37

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	10.5	104.87
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	11.3	113.20
\$ 74 Toluene-d8 (Surr)	10.0	9.80	97.99
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.51	95.08

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-17705-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 410-57283/4
 Matrix: Water Lab File ID: CC21L31.D
 Analysis Method: 8260C LL Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 10/22/2020 09:43
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 57283 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	5.00		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	4.80		1.0	0.80
75-35-4	1,1-Dichloroethene	4.72		1.0	0.44
79-01-6	Trichloroethene	4.88		1.0	0.18
156-59-2	cis-1,2-Dichloroethene	5.00		1.0	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC21L31.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 22-Oct-2020 09:43:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-004
 Misc. Info.: LCS
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 11:26:35 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1011

First Level Reviewer: howej

Date: 22-Oct-2020 10:22:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.891	1.898	-0.007	99	280128	5.00	4.61	
3 Chloromethane	50	2.087	2.093	-0.006	99	383827	5.00	5.36	
4 Butadiene	39	2.196	2.203	-0.007	97	399173	5.00	5.93	M
5 Vinyl chloride	62	2.196	2.203	-0.007	80	330712	5.00	5.00	
6 Bromomethane	94	2.507	2.514	-0.007	92	211487	5.00	4.53	
7 Chloroethane	64	2.586	2.599	-0.013	99	191439	5.00	4.68	
8 Dichlorofluoromethane	67	2.818	2.824	-0.006	98	462202	5.00	5.21	
9 Trichlorofluoromethane	101	2.873	2.879	-0.006	97	421886	5.00	4.90	
11 Ethyl ether	59	3.105	3.111	-0.006	96	218207	5.01	5.00	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.190	3.202	-0.012	93	273879	5.00	4.28	
13 Acrolein	56	3.275	3.282	-0.007	99	231771	37.4	30.4	
14 1,1-Dichloroethene	96	3.397	3.410	-0.013	96	205193	5.00	4.72	
16 Acetone	43	3.440	3.446	-0.006	99	391094	37.5	48.4	
15 112TCTFE	101	3.446	3.452	-0.006	90	195821	5.00	4.43	
17 Iodomethane	142	3.586	3.599	-0.013	98	382666	5.00	4.45	
18 Isopropyl alcohol	45	3.598	3.617	-0.019	33	70665	37.5	48.4	
19 Ethyl bromide	108	3.617	3.623	-0.006	98	196567	4.93	5.44	
20 Carbon disulfide	76	3.678	3.690	-0.012	100	706694	5.00	4.60	
22 Methyl acetate	43	3.842	3.843	-0.001	43	157357	5.00	4.95	
23 3-Chloro-1-propene	41	3.855	3.867	-0.012	90	442220	5.00	5.81	
24 Methylene Chloride	84	4.037	4.044	-0.007	97	247736	5.00	5.12	
* 25 t-Butyl alcohol-d10 (IS)	65	4.098	4.080	0.018	0	190264	50.0	50.0	
26 2-Methyl-2-propanol	59	4.190	4.196	-0.006	95	163885	50.0	43.2	
27 Acrylonitrile	53	4.379	4.385	-0.006	99	328445	25.0	25.6	
28 Methyl tert-butyl ether	73	4.428	4.434	-0.006	91	678689	5.00	4.82	
29 trans-1,2-Dichloroethene	96	4.428	4.440	-0.012	96	243941	5.00	4.80	
30 Hexane	57	4.848	4.861	-0.013	96	350235	5.00	4.88	
32 1,1-Dichloroethane	63	5.098	5.111	-0.013	97	472610	5.00	5.05	
33 Isopropyl ether	45	5.153	5.172	-0.019	94	945516	5.00	5.30	
34 2-Chloro-1,3-butadiene	53	5.202	5.214	-0.012	93	410786	5.00	4.66	
35 Tert-butyl ethyl ether	59	5.696	5.702	-0.006	97	811090	5.00	4.76	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	5.915	5.915	0.000	99	767982	37.5	40.5	
37 cis-1,2-Dichloroethene	96	5.933	5.946	-0.013	84	288202	5.00	5.00	
38 2,2-Dichloropropane	77	5.946	5.958	-0.012	63	388094	5.00	4.80	
40 Propionitrile	54	6.013	6.007	0.006	97	196102	37.5	40.7	
43 Methacrylonitrile	67	6.226	6.226	0.000	95	615254	37.5	33.0	
44 Chlorobromomethane	128	6.275	6.275	0.000	96	128628	5.00	5.07	
45 Tetrahydrofuran	71	6.275	6.287	-0.012	77	121267	25.0	22.6	
46 Chloroform	83	6.427	6.433	-0.006	94	453130	5.00	4.88	
\$ 47 Dibromofluoromethane (Surr)	113	6.647	6.647	0.000	94	461029	10.0	10.3	
48 1,1,1-Trichloroethane	97	6.647	6.659	-0.012	97	392438	5.00	4.70	
49 Cyclohexane	56	6.738	6.744	-0.006	95	429455	5.00	4.86	
50 Carbon tetrachloride	117	6.854	6.860	-0.006	95	345126	5.00	4.93	
51 1,1-Dichloropropene	75	6.860	6.866	-0.006	94	357274	5.00	4.76	
52 Isobutyl alcohol	41	7.049	7.043	0.006	93	169082	125.0	137.6	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.098	7.110	-0.012	0	97608	10.0	10.7	
54 Benzene	78	7.128	7.135	-0.007	97	1075401	5.00	4.98	
55 1,2-Dichloroethane	62	7.201	7.208	-0.007	97	332894	5.00	5.11	
56 Tert-amyl methyl ether	73	7.323	7.330	-0.007	96	747018	5.00	4.81	
* 57 Fluorobenzene (IS)	96	7.537	7.543	-0.006	98	1881540	10.0	10.0	
58 n-Heptane	43	7.543	7.549	-0.006	95	442585	5.00	5.54	
59 n-Butanol	56	7.933	7.939	-0.006	91	296902	250.0	291.6	
60 Trichloroethene	95	8.018	8.025	-0.007	97	271876	5.00	4.88	
61 Methylcyclohexane	83	8.323	8.323	0.000	95	441227	5.00	5.17	
62 1,2-Dichloropropane	63	8.354	8.360	-0.006	90	288833	5.00	5.20	
63 2-ethoxy-2-methyl butane	87	8.372	8.372	0.000	91	409962	5.00	4.75	
64 Methyl methacrylate	69	8.451	8.451	0.000	95	156085	5.00	3.93	
65 1,4-Dioxane	88	8.457	8.457	0.000	29	34285	125.0	169.1	M
66 Dibromomethane	93	8.469	8.470	-0.001	92	141676	5.00	5.22	
67 Dichlorobromomethane	83	8.707	8.714	-0.007	98	351816	5.00	5.25	
68 2-Nitropropane	41	8.994	8.994	0.000	99	47769	5.00	3.87	
71 1-Bromo-2-chloroethane	63	9.103	9.104	-0.001	99	330953	5.00	5.77	
69 2-Chloroethyl vinyl ether	63		9.116				ND	ND	
72 cis-1,3-Dichloropropene	75	9.268	9.274	-0.006	93	411242	5.00	4.94	
73 4-Methyl-2-pentanone (MIBK)	43	9.457	9.457	0.000	99	1246169	25.0	22.6	
\$ 74 Toluene-d8 (Surr)	98	9.585	9.585	0.000	95	1857254	10.0	9.91	
75 Toluene	92	9.664	9.665	-0.001	98	686773	5.00	4.87	
76 trans-1,3-Dichloropropene	75	9.939	9.933	0.006	96	361505	5.00	5.12	
78 Ethyl methacrylate	69	10.000	10.000	0.000	92	318468	5.00	5.35	
79 1,1,2-Trichloroethane	97	10.146	10.146	0.000	92	217825	5.00	5.60	
80 Tetrachloroethene	166	10.225	10.225	0.000	98	325537	5.00	5.17	
81 1,3-Dichloropropane	76	10.311	10.311	0.000	96	361337	5.00	5.27	
82 2-Hexanone	43	10.372	10.372	0.000	99	924179	25.0	23.7	
83 Chlorodibromomethane	129	10.524	10.524	0.000	90	258729	5.00	5.73	
84 Ethylene Dibromide	107	10.634	10.634	0.000	98	207491	5.00	5.40	
* 85 Chlorobenzene-d5 (IS)	117	11.073	11.079	-0.006	86	1434739	10.0	10.0	
86 1-Chlorohexane	91	11.085	11.085	0.000	93	360128	5.00	4.47	
87 Chlorobenzene	112	11.103	11.103	0.000	94	795728	5.00	5.00	
89 1,1,1,2-Tetrachloroethane	131	11.188	11.189	-0.001	94	278415	5.00	5.14	
90 Ethylbenzene	91	11.188	11.189	-0.001	99	1352989	5.00	4.84	
91 m-Xylene & p-Xylene	106	11.310	11.311	-0.001	0	1068693	10.0	9.79	
92 o-Xylene	106	11.640	11.640	0.000	97	512991	5.00	4.80	
93 Styrene	104	11.658	11.658	0.000	95	888247	5.00	4.95	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
94 Bromoform	173	11.816	11.817	-0.001	97	163832	5.00	6.53	
95 Isopropylbenzene	105	11.944	11.945	-0.001	96	1349574	5.00	4.77	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.091	12.091	0.000	95	696981	10.0	9.90	
99 1,1,2,2-Tetrachloroethane	83	12.200	12.201	-0.001	95	275558	5.00	5.15	
100 Bromobenzene	156	12.207	12.207	0.000	94	377483	5.00	5.14	
101 trans-1,4-Dichloro-2-butene	53	12.225	12.225	0.000	90	292910	25.0	19.8	
102 1,2,3-Trichloropropane	110	12.243	12.243	0.000	84	79637	5.00	5.47	
103 N-Propylbenzene	91	12.280	12.280	0.000	99	1647585	5.00	4.78	
104 2-Chlorotoluene	126	12.353	12.359	-0.006	96	332731	5.00	4.72	
105 1,3,5-Trimethylbenzene	105	12.420	12.420	0.000	94	1187891	5.00	4.65	
106 4-Chlorotoluene	126	12.450	12.451	-0.001	98	351387	5.00	4.80	
107 tert-Butylbenzene	134	12.664	12.664	0.000	94	256983	5.00	4.63	
108 Pentachloroethane	167	12.694	12.694	0.000	92	230230	5.00	5.55	
109 1,2,4-Trimethylbenzene	105	12.706	12.707	-0.001	97	1238472	5.00	4.73	
110 sec-Butylbenzene	105	12.828	12.829	-0.001	94	1538082	5.00	4.68	
111 1,3-Dichlorobenzene	146	12.926	12.926	0.000	99	730756	5.00	4.98	
112 4-Isopropyltoluene	119	12.938	12.938	0.000	97	1370605	5.00	4.78	
* 113 1,4-Dichlorobenzene-d4	152	12.981	12.981	0.000	95	856042	10.0	10.0	
114 1,4-Dichlorobenzene	146	12.999	12.999	0.000	95	758810	5.00	5.03	
115 1,2,3-Trimethylbenzene	120	13.011	13.011	0.000	99	579722	5.00	5.04	
116 Benzyl chloride	126	13.084	13.079	0.005	99	116573	5.00	5.48	
119 n-Butylbenzene	92	13.231	13.231	0.000	97	686636	5.00	4.72	
120 1,2-Dichlorobenzene	146	13.261	13.261	0.000	99	699053	5.00	5.05	
118 p-Diethylbenzene	119	13.286	13.286	0.000	86	693427	5.00	4.76	
123 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	85	42514	5.00	5.80	
124 1,3,5-Trichlorobenzene	180	13.938	13.938	0.000	98	622342	5.00	5.20	
125 1,2,4-Trichlorobenzene	180	14.365	14.365	0.000	93	560368	5.00	5.22	
126 Hexachlorobutadiene	225	14.450	14.450	0.000	96	287907	5.00	5.49	
127 Naphthalene	128	14.548	14.548	0.000	97	945828	5.00	4.94	
128 1,2,3-Trichlorobenzene	180	14.694	14.694	0.000	96	498246	5.00	5.24	
129 2-Methylnaphthalene	142	15.316	15.316	0.000	93	552097	5.00	4.27	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_EE_00002	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA6_00049	Amount Added: 12.50	Units: uL	
MSV_Q_ETBR_00004	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA1_00051	Amount Added: 12.50	Units: uL	
MSV_Q_QARC_00050	Amount Added: 12.50	Units: uL	
MSV_QGAS_826_00082	Amount Added: 12.50	Units: uL	
MSV_HP25_ISSS_00016	Amount Added: 1.00	Units: uL	Run Reagent

Report Date: 22-Oct-2020 11:26:48

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC21L31.D

Injection Date: 22-Oct-2020 09:43:30

Instrument ID: 10193

Operator ID: jkh09052

Lims ID: LCS

Worklist Smp#: 4

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

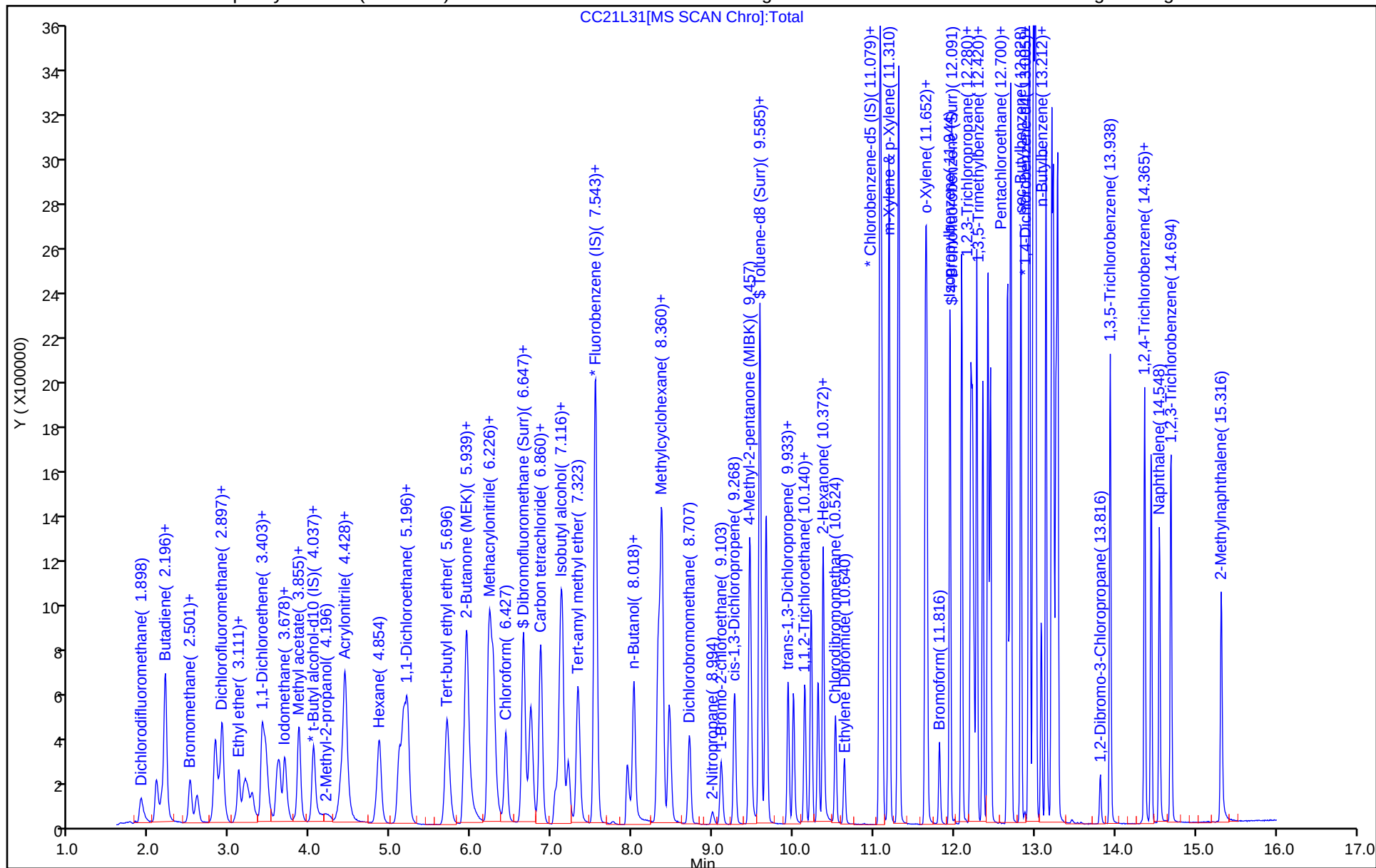
ALS Bottle#: 3

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC21L31.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 22-Oct-2020 09:43:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-004
 Misc. Info.: LCS
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 11:26:35 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1011

First Level Reviewer: howej

Date: 22-Oct-2020 10:22:22

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	10.3	103.12
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.7	107.16
\$ 74 Toluene-d8 (Surr)	10.0	9.91	99.11
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.90	98.96

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-17705-1
 SDG No.: _____
 Client Sample ID: 5W7B MS Lab Sample ID: 410-17705-3 MS
 Matrix: Ground Water Lab File ID: CC22S17.D
 Analysis Method: 8260C LL Date Collected: 10/19/2020 10:05
 Sample wt/vol: 25 (mL) Date Analyzed: 10/22/2020 16:55
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 57283 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	5.52		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	2.50		1.0	0.80
75-35-4	1,1-Dichloroethene	2.53		1.0	0.44
79-01-6	Trichloroethene	2.98		1.0	0.18
156-59-2	cis-1,2-Dichloroethene	2.58		1.0	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		80-120
1868-53-7	Dibromofluoromethane (Surr)	104		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S17.D
 Lims ID: 410-17705-A-3 MS
 Client ID: 5W7B
 Sample Type: MS
 Inject. Date: 22-Oct-2020 16:55:30 ALS Bottle#: 22 Worklist Smp#: 23
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-023
 Misc. Info.: 410-17705-A-3 MS
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 21:41:19 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: johnsons

Date: 22-Oct-2020 21:29:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.892	1.898	-0.006	99	299179	5.38	5.13	
3 Chloromethane	50	2.087	2.093	-0.006	99	390866	5.38	5.68	
4 Butadiene	39	2.196	2.203	-0.007	93	256115	5.38	3.96	
5 Vinyl chloride	62	2.196	2.203	-0.007	98	351224	5.38	5.52	
6 Bromomethane	94	2.507	2.514	-0.007	92	213897	5.38	4.77	
7 Chloroethane	64	2.593	2.599	-0.006	99	199846	5.38	5.09	
8 Dichlorofluoromethane	67	2.818	2.824	-0.006	97	488753	5.38	5.73	
9 Trichlorofluoromethane	101	2.879	2.879	0.000	97	456675	5.38	5.52	
11 Ethyl ether	59	3.111	3.111	0.000	96	239734	5.39	5.72	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.202	3.202	0.000	94	142031	5.38	2.31	
13 Acrolein	56	3.282	3.282	0.000	98	202442	40.3	25.9	
14 1,1-Dichloroethene	96	3.403	3.410	-0.007	96	105838	5.38	2.53	
16 Acetone	43	3.446	3.446	0.000	99	150485	40.4	18.1	
15 112TCTFE	101	3.440	3.452	-0.012	89	96762	5.38	2.28	
17 Iodomethane	142	3.592	3.599	-0.007	99	194051	5.38	2.35	
18 Isopropyl alcohol	45	3.605	3.617	-0.012	33	21342	40.4	18.0	
19 Ethyl bromide	108	3.617	3.623	-0.006	98	211312	5.31	6.09	
20 Carbon disulfide	76	3.684	3.690	-0.006	100	366453	5.38	2.48	
22 Methyl acetate	43	3.842	3.843	-0.001	99	124599	5.38	3.82	
23 3-Chloro-1-propene	41	3.861	3.867	-0.006	90	459933	5.38	6.29	
24 Methylene Chloride	84	4.037	4.044	-0.007	98	126214	5.38	2.71	
* 25 t-Butyl alcohol-d10 (IS)	65	4.062	4.080	-0.018	0	195267	50.0	50.0	
26 2-Methyl-2-propanol	59	4.184	4.196	-0.012	93	72971	53.8	18.8	
27 Acrylonitrile	53	4.385	4.385	0.000	99	149527	26.9	11.3	
28 Methyl tert-butyl ether	73	4.428	4.434	-0.006	97	310101	5.38	2.29	
29 trans-1,2-Dichloroethene	96	4.434	4.440	-0.006	96	122298	5.38	2.50	
30 Hexane	57	4.867	4.861	0.006	95	137748	5.38	2.00	
32 1,1-Dichloroethane	63	5.104	5.111	-0.007	97	233872	5.38	2.60	
33 Isopropyl ether	45	5.159	5.172	-0.013	95	437957	5.38	2.55	
34 2-Chloro-1,3-butadiene	53	5.214	5.214	0.000	93	204810	5.38	2.42	
35 Tert-butyl ethyl ether	59	5.702	5.702	0.000	98	378546	5.38	2.31	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	5.915	5.915	0.000	99	337669	40.4	17.3	
37 cis-1,2-Dichloroethene	96	5.940	5.946	-0.006	85	142714	5.38	2.58	
38 2,2-Dichloropropane	77	5.958	5.958	0.000	92	187553	5.38	2.42	
40 Propionitrile	54	6.013	6.007	0.006	97	97442	40.4	19.7	
43 Methacrylonitrile	67	6.226	6.226	0.000	96	269040	40.4	14.1	
44 Chlorobromomethane	128	6.275	6.275	0.000	96	130356	5.38	5.35	
45 Tetrahydrofuran	71	6.287	6.287	0.000	72	50494	26.9	9.17	
46 Chloroform	83	6.427	6.433	-0.006	95	612285	5.38	6.87	
\$ 47 Dibromofluoromethane (Surr)	113	6.647	6.647	0.000	94	445866	10.0	10.4	
48 1,1,1-Trichloroethane	97	6.647	6.659	-0.012	90	196831	5.38	2.45	
49 Cyclohexane	56	6.744	6.744	0.000	95	195102	5.38	2.30	
50 Carbon tetrachloride	117	6.860	6.860	0.000	95	169949	5.38	2.53	
51 1,1-Dichloropropene	75	6.860	6.866	-0.006	94	172927	5.38	2.40	
52 Isobutyl alcohol	41	7.049	7.043	0.006	92	78614	134.5	62.3	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.098	7.110	-0.012	0	94295	10.0	10.8	
54 Benzene	78	7.128	7.135	-0.007	97	521487	5.38	2.51	
55 1,2-Dichloroethane	62	7.214	7.208	0.006	97	160808	5.38	2.57	
56 Tert-amyl methyl ether	73	7.323	7.330	-0.007	96	340464	5.38	2.28	
* 57 Fluorobenzene (IS)	96	7.537	7.543	-0.006	98	1808074	10.0	10.0	
58 n-Heptane	43	7.543	7.549	-0.006	42	157447	5.38	2.05	
59 n-Butanol	56	7.939	7.939	0.000	95	136156	269.0	130.3	
60 Trichloroethene	95	8.018	8.025	-0.007	97	159368	5.38	2.98	
61 Methylcyclohexane	83	8.323	8.323	0.000	95	485516	5.38	5.92	
62 1,2-Dichloropropane	63	8.360	8.360	0.000	88	143692	5.38	2.69	
63 2-ethoxy-2-methyl butane	87	8.372	8.372	0.000	90	193728	5.38	2.33	
64 Methyl methacrylate	69	8.457	8.451	0.006	94	67228	5.38	1.65	
65 1,4-Dioxane	88	8.463	8.457	0.006	28	18893	134.5	90.8	M
66 Dibromomethane	93	8.470	8.470	0.000	91	66553	5.38	2.55	
67 Dichlorobromomethane	83	8.713	8.714	-0.001	98	171896	5.38	2.67	
68 2-Nitropropane	41	8.994	8.994	0.000	98	23138	5.38	1.83	
71 1-Bromo-2-chloroethane	63	9.104	9.104	0.000	99	323509	5.38	5.86	
69 2-Chloroethyl vinyl ether	63		9.116				ND	ND	
72 cis-1,3-Dichloropropene	75	9.268	9.274	-0.006	93	190943	5.38	2.39	
73 4-Methyl-2-pentanone (MIBK)	43	9.457	9.457	0.000	98	554209	26.9	9.80	
\$ 74 Toluene-d8 (Surr)	98	9.585	9.585	0.000	95	1816362	10.0	9.96	
75 Toluene	92	9.664	9.665	-0.001	97	326775	5.38	2.38	
76 trans-1,3-Dichloropropene	75	9.939	9.933	0.006	97	160488	5.38	2.34	
78 Ethyl methacrylate	69	10.006	10.000	0.006	91	141929	5.38	2.45	
79 1,1,2-Trichloroethane	97	10.140	10.146	-0.006	91	102463	5.38	2.70	
80 Tetrachloroethene	166	10.219	10.225	-0.006	98	149282	5.38	2.44	
81 1,3-Dichloropropane	76	10.305	10.311	-0.006	96	170986	5.38	2.56	
82 2-Hexanone	43	10.372	10.372	0.000	98	408842	26.9	10.2	
83 Chlorodibromomethane	129	10.524	10.524	0.000	91	119631	5.38	2.72	
84 Ethylene Dibromide	107	10.634	10.634	0.000	98	96692	5.38	2.58	
* 85 Chlorobenzene-d5 (IS)	117	11.073	11.079	-0.006	87	1396775	10.0	10.0	
86 1-Chlorohexane	91	11.085	11.085	0.000	94	142237	5.38	1.82	
87 Chlorobenzene	112	11.103	11.103	0.000	95	371278	5.38	2.40	
89 1,1,1,2-Tetrachloroethane	131	11.182	11.189	-0.007	95	127897	5.38	2.43	
90 Ethylbenzene	91	11.189	11.189	-0.001	99	598702	5.38	2.20	
91 m-Xylene & p-Xylene	106	11.310	11.311	-0.001	0	474476	10.8	4.47	
92 o-Xylene	106	11.640	11.640	0.000	97	221398	5.38	2.13	
93 Styrene	104	11.658	11.658	0.000	95	381088	5.38	2.18	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
94 Bromoform	173	11.816	11.817	-0.001	97	72333	5.38	2.96	
95 Isopropylbenzene	105	11.944	11.945	-0.001	96	541502	5.38	1.97	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.091	12.091	0.000	95	676618	10.0	9.87	
99 1,1,2,2-Tetrachloroethane	83	12.200	12.201	-0.001	95	125059	5.38	2.43	
100 Bromobenzene	156	12.207	12.207	0.000	93	173402	5.38	2.45	
101 trans-1,4-Dichloro-2-butene	53	12.225	12.225	0.000	86	86413	26.9	6.07	
102 1,2,3-Trichloropropane	110	12.243	12.243	0.000	85	35827	5.38	2.56	
103 N-Propylbenzene	91	12.280	12.280	0.000	99	653397	5.38	1.97	
104 2-Chlorotoluene	126	12.353	12.359	-0.006	96	141002	5.38	2.08	
105 1,3,5-Trimethylbenzene	105	12.420	12.420	0.000	94	459070	5.38	1.87	
106 4-Chlorotoluene	126	12.450	12.451	-0.001	97	146630	5.38	2.08	
107 tert-Butylbenzene	134	12.688	12.664	0.024	81	29495	5.38	0.5520	M
108 Pentachloroethane	167	12.694	12.694	0.000	89	227773	5.38	5.71	
109 1,2,4-Trimethylbenzene	105	12.706	12.707	-0.001	97	478734	5.38	1.90	
110 sec-Butylbenzene	105	12.828	12.829	-0.001	94	568698	5.38	1.80	
111 1,3-Dichlorobenzene	146	12.926	12.926	0.000	99	303730	5.38	2.15	
112 4-Isopropyltoluene	119	12.938	12.938	0.000	97	498013	5.38	1.80	
* 113 1,4-Dichlorobenzene-d4	152	12.981	12.981	0.000	94	823951	10.0	10.0	
114 1,4-Dichlorobenzene	146	12.999	12.999	0.000	96	330434	5.38	2.28	
115 1,2,3-Trimethylbenzene	120	13.011	13.011	0.000	99	583422	5.38	5.27	
116 Benzyl chloride	126	13.084	13.079	0.005	99	46792	5.38	2.29	
119 n-Butylbenzene	92	13.231	13.231	0.000	97	256688	5.38	1.83	
120 1,2-Dichlorobenzene	146	13.261	13.261	0.000	98	293613	5.38	2.20	
118 p-Diethylbenzene	119	13.286	13.286	0.000	86	720185	5.38	5.14	
123 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	82	19488	5.38	2.76	
124 1,3,5-Trichlorobenzene	180	13.938	13.938	0.000	97	221230	5.38	1.92	
125 1,2,4-Trichlorobenzene	180	14.365	14.365	0.000	94	193999	5.38	1.88	
126 Hexachlorobutadiene	225	14.444	14.450	-0.006	96	95125	5.38	1.89	
127 Naphthalene	128	14.548	14.548	0.000	97	342463	5.38	1.86	
128 1,2,3-Trichlorobenzene	180	14.694	14.694	0.000	96	175114	5.38	1.92	
129 2-Methylnaphthalene	142	15.316	15.316	0.000	92	477184	5.38	3.83	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_EE_00002	Amount Added: 5.38	Units: uL	
MSV_Q_QVOA6_00049	Amount Added: 5.38	Units: uL	
MSV_Q_ETBR_00004	Amount Added: 5.38	Units: uL	
MSV_Q_QVOA1_00051	Amount Added: 5.38	Units: uL	
MSV_Q_QARC_00050	Amount Added: 5.38	Units: uL	
MSV_QGAS_826_00082	Amount Added: 5.38	Units: uL	
MSV_HP25_ISSS_00016	Amount Added: 1.00	Units: uL	Run Reagent

Report Date: 22-Oct-2020 21:42:25

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S17.D

Injection Date: 22-Oct-2020 16:55:30

Instrument ID: 10193

Operator ID: jkh09052

Lims ID: 410-17705-A-3 MS

Worklist Smp#: 23

Client ID: 5W7B

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

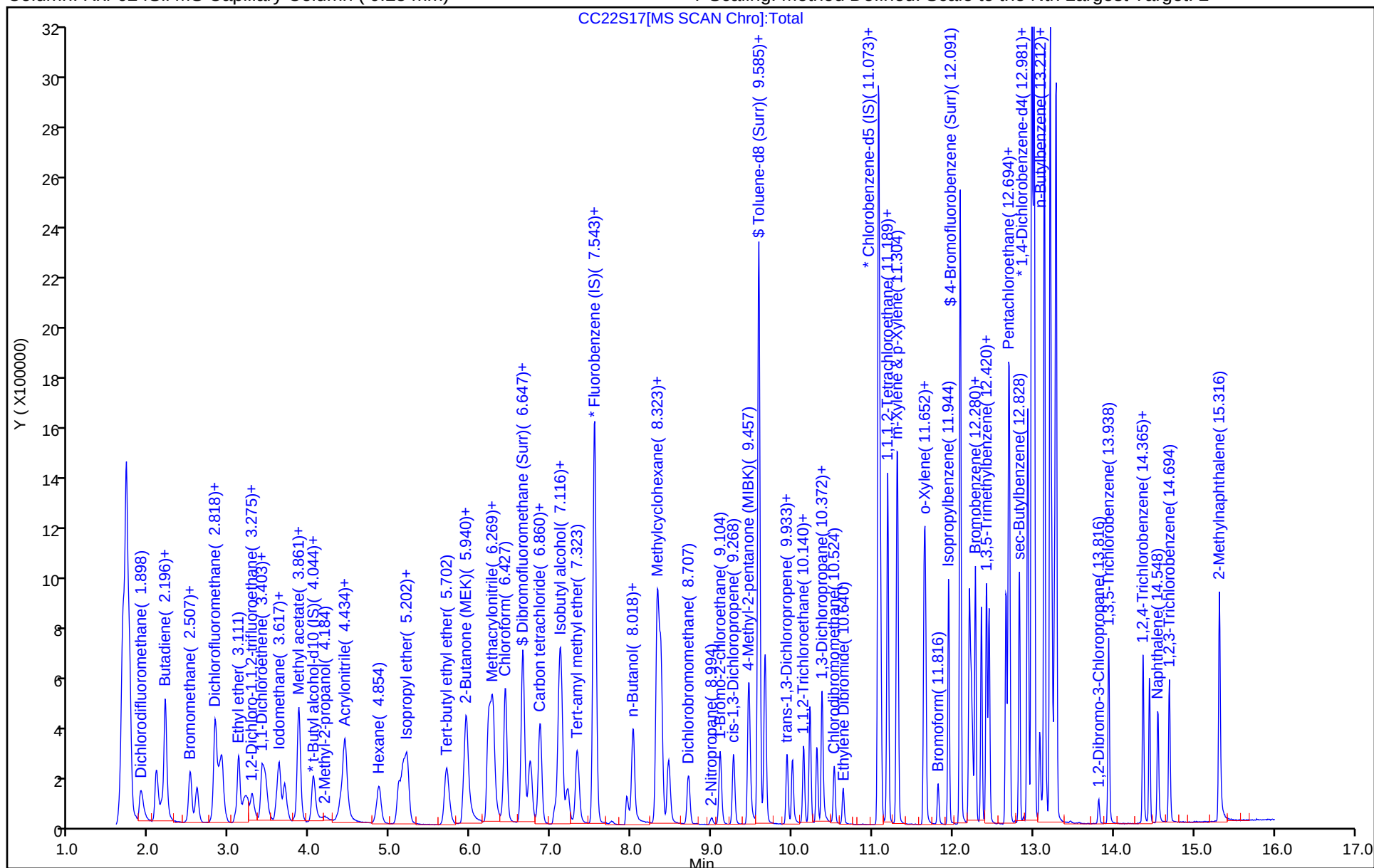
ALS Bottle#: 22

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S17.D
 Lims ID: 410-17705-A-3 MS
 Client ID: 5W7B
 Sample Type: MS
 Inject. Date: 22-Oct-2020 16:55:30 ALS Bottle#: 22 Worklist Smp#: 23
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-023
 Misc. Info.: 410-17705-A-3 MS
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 21:41:19 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: johnsons

Date: 22-Oct-2020 21:29:39

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	10.4	103.78
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.8	107.73
\$ 74 Toluene-d8 (Surr)	10.0	9.96	99.57
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.87	98.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-17705-1
 SDG No.: _____
 Client Sample ID: 5W7B MSD Lab Sample ID: 410-17705-3 MSD
 Matrix: Ground Water Lab File ID: CC22S18.D
 Analysis Method: 8260C LL Date Collected: 10/19/2020 10:05
 Sample wt/vol: 25 (mL) Date Analyzed: 10/22/2020 17:17
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 57283 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	5.71		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	5.52		1.0	0.80
75-35-4	1,1-Dichloroethene	5.50		1.0	0.44
79-01-6	Trichloroethene	6.17		1.0	0.18
156-59-2	cis-1,2-Dichloroethene	5.83		1.0	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		80-120
1868-53-7	Dibromofluoromethane (Surr)	104		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S18.D
 Lims ID: 410-17705-A-3 MSD
 Client ID: 5W7B
 Sample Type: MSD
 Inject. Date: 22-Oct-2020 17:17:30 ALS Bottle#: 23 Worklist Smp#: 24
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-024
 Misc. Info.: 410-17705-A-3 MSD
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 21:41:19 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: johnsons

Date: 22-Oct-2020 21:34:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.898	1.898	0.000	99	308038	5.38	5.24	
3 Chloromethane	50	2.093	2.093	0.000	99	419484	5.38	6.06	
4 Butadiene	39	2.202	2.203	-0.001	98	563644	5.38	8.65	
5 Vinyl chloride	62	2.202	2.203	-0.001	79	365967	5.38	5.71	
6 Bromomethane	94	2.507	2.514	-0.007	92	224935	5.38	4.98	
7 Chloroethane	64	2.593	2.599	-0.006	99	206300	5.38	5.21	
8 Dichlorofluoromethane	67	2.824	2.824	0.000	98	504136	5.38	5.87	
9 Trichlorofluoromethane	101	2.879	2.879	0.000	98	476747	5.38	5.72	
11 Ethyl ether	59	3.117	3.111	0.006	96	242138	5.39	5.74	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.208	3.202	0.006	93	313980	5.38	5.08	
13 Acrolein	56	3.288	3.282	0.006	99	219166	40.3	30.5	
14 1,1-Dichloroethene	96	3.410	3.410	0.000	97	231701	5.38	5.50	
16 Acetone	43	3.446	3.446	0.000	98	398506	40.4	52.2	
15 112TCTFE	101	3.446	3.452	-0.006	91	232316	5.38	5.42	
17 Iodomethane	142	3.592	3.599	-0.007	99	428823	5.38	5.16	
18 Isopropyl alcohol	45	3.629	3.617	0.012	37	79048	40.4	56.4	
19 Ethyl bromide	108	3.617	3.623	-0.006	99	213433	5.31	6.11	
20 Carbon disulfide	76	3.684	3.690	-0.006	100	817032	5.38	5.49	
22 Methyl acetate	43	3.842	3.843	-0.001	99	181694	5.38	6.06	
23 3-Chloro-1-propene	41	3.861	3.867	-0.006	89	472851	5.38	6.42	
24 Methylene Chloride	84	4.044	4.044	0.000	98	275924	5.38	5.89	
* 25 t-Butyl alcohol-d10 (IS)	65	4.098	4.080	0.018	0	179576	50.0	50.0	
26 2-Methyl-2-propanol	59	4.196	4.196	0.000	95	176074	53.8	49.2	
27 Acrylonitrile	53	4.391	4.385	0.006	99	338758	26.9	27.9	
28 Methyl tert-butyl ether	73	4.428	4.434	-0.006	92	706090	5.38	5.18	
29 trans-1,2-Dichloroethene	96	4.440	4.440	0.000	95	271776	5.38	5.52	
30 Hexane	57	4.860	4.861	-0.001	96	403362	5.38	5.81	
32 1,1-Dichloroethane	63	5.104	5.111	-0.007	96	520685	5.38	5.75	
33 Isopropyl ether	45	5.165	5.172	-0.007	94	1014798	5.38	5.88	
34 2-Chloro-1,3-butadiene	53	5.208	5.214	-0.006	93	469121	5.38	5.50	
35 Tert-butyl ethyl ether	59	5.702	5.702	0.000	98	870987	5.38	5.28	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	5.915	5.915	0.000	99	779218	40.4	43.5	
37 cis-1,2-Dichloroethene	96	5.946	5.946	0.000	84	325357	5.38	5.83	
38 2,2-Dichloropropane	77	5.952	5.958	-0.006	91	432959	5.38	5.54	
40 Propionitrile	54	6.019	6.007	0.012	97	194887	40.4	42.9	
43 Methacrylonitrile	67	6.226	6.226	0.000	95	631215	40.4	35.9	
44 Chlorobromomethane	128	6.275	6.275	0.000	97	138785	5.38	5.65	
45 Tetrahydrofuran	71	6.275	6.287	-0.012	62	133170	26.9	26.3	M
46 Chloroform	83	6.427	6.433	-0.006	95	905511	5.38	10.1	
\$ 47 Dibromofluoromethane (Surr)	113	6.647	6.647	0.000	94	450150	10.0	10.4	
48 1,1,1-Trichloroethane	97	6.647	6.659	-0.012	82	449330	5.38	5.55	
49 Cyclohexane	56	6.738	6.744	-0.006	95	513797	5.38	6.01	
50 Carbon tetrachloride	117	6.860	6.860	0.000	96	401814	5.38	5.93	
51 1,1-Dichloropropene	75	6.866	6.866	0.000	93	406524	5.38	5.60	
52 Isobutyl alcohol	41	7.049	7.043	0.006	92	182570	134.5	157.4	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.104	7.110	-0.006	0	94314	10.0	10.7	
54 Benzene	78	7.128	7.135	-0.007	97	1190436	5.38	5.69	
55 1,2-Dichloroethane	62	7.208	7.208	0.000	98	361090	5.38	5.73	
56 Tert-amyl methyl ether	73	7.330	7.330	0.000	96	798703	5.38	5.31	
* 57 Fluorobenzene (IS)	96	7.543	7.543	0.000	98	1820863	10.0	10.0	
58 n-Heptane	43	7.549	7.549	0.000	94	506812	5.38	6.56	
59 n-Butanol	56	7.939	7.939	0.000	94	247961	269.0	258.0	
60 Trichloroethene	95	8.018	8.025	-0.007	97	332364	5.38	6.17	
61 Methylcyclohexane	83	8.323	8.323	0.000	94	509825	5.38	6.17	
62 1,2-Dichloropropane	63	8.360	8.360	0.000	94	321773	5.38	5.99	
63 2-ethoxy-2-methyl butane	87	8.372	8.372	0.000	92	444318	5.38	5.32	
64 Methyl methacrylate	69	8.457	8.451	0.006	93	163478	5.38	4.36	M
65 1,4-Dioxane	88	8.457	8.457	0.000	29	39296	134.5	205.4	M
66 Dibromomethane	93	8.470	8.470	0.000	91	151244	5.38	5.76	
67 Dichlorobromomethane	83	8.713	8.714	-0.001	99	380940	5.38	5.87	
68 2-Nitropropane	41	9.000	8.994	0.006	98	50972	5.38	4.38	
71 1-Bromo-2-chloroethane	63	9.104	9.104	0.000	99	341481	5.38	6.15	
69 2-Chloroethyl vinyl ether	63		9.116				ND	ND	
72 cis-1,3-Dichloropropene	75	9.268	9.274	-0.006	93	449738	5.38	5.58	
73 4-Methyl-2-pentanone (MIBK)	43	9.457	9.457	0.000	99	1305701	26.9	25.1	
\$ 74 Toluene-d8 (Surr)	98	9.585	9.585	0.000	95	1809648	10.0	9.89	
75 Toluene	92	9.664	9.665	-0.001	97	760715	5.38	5.53	
76 trans-1,3-Dichloropropene	75	9.939	9.933	0.006	96	384419	5.38	5.58	
78 Ethyl methacrylate	69	10.000	10.000	0.000	92	336197	5.38	5.78	
79 1,1,2-Trichloroethane	97	10.146	10.146	0.000	92	229339	5.38	6.03	
80 Tetrachloroethene	166	10.225	10.225	0.000	98	370082	5.38	6.02	
81 1,3-Dichloropropane	76	10.305	10.311	-0.006	96	384537	5.38	5.74	
82 2-Hexanone	43	10.372	10.372	0.000	99	940660	26.9	25.6	
83 Chlorodibromomethane	129	10.524	10.524	0.000	90	279808	5.38	6.34	
84 Ethylene Dibromide	107	10.634	10.634	0.000	99	219060	5.38	5.84	
* 85 Chlorobenzene-d5 (IS)	117	11.073	11.079	-0.006	86	1401101	10.0	10.0	
86 1-Chlorohexane	91	11.085	11.085	0.000	91	411904	5.38	5.24	
87 Chlorobenzene	112	11.103	11.103	0.000	94	869078	5.38	5.59	
89 1,1,1,2-Tetrachloroethane	131	11.189	11.189	0.000	95	305890	5.38	5.79	
90 Ethylbenzene	91	11.189	11.189	0.000	99	1506896	5.38	5.52	
91 m-Xylene & p-Xylene	106	11.304	11.311	-0.007	0	1184604	10.8	11.1	
92 o-Xylene	106	11.640	11.640	0.000	97	574269	5.38	5.50	
93 Styrene	104	11.658	11.658	0.000	96	943796	5.38	5.38	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
94 Bromoform	173	11.816	11.817	-0.001	97	175409	5.38	7.16	
95 Isopropylbenzene	105	11.944	11.945	-0.001	96	1520458	5.38	5.50	
\$ 98 4-Bromofluorobenzene (Surr)	95	12.091	12.091	0.000	95	684957	10.0	9.96	
99 1,1,2,2-Tetrachloroethane	83	12.201	12.201	0.000	95	287247	5.38	5.53	
100 Bromobenzene	156	12.207	12.207	0.000	94	416554	5.38	5.84	
101 trans-1,4-Dichloro-2-butene	53	12.225	12.225	0.000	89	233983	26.9	16.3	
102 1,2,3-Trichloropropane	110	12.243	12.243	0.000	85	82722	5.38	5.85	
103 N-Propylbenzene	91	12.280	12.280	0.000	99	1854760	5.38	5.53	
104 2-Chlorotoluene	126	12.353	12.359	-0.006	96	364846	5.38	5.32	
105 1,3,5-Trimethylbenzene	105	12.420	12.420	0.000	94	1319395	5.38	5.31	
106 4-Chlorotoluene	126	12.450	12.451	-0.001	98	394831	5.38	5.54	
107 tert-Butylbenzene	134	12.658	12.664	-0.006	94	282251	5.38	5.23	
108 Pentachloroethane	167	12.694	12.694	0.000	92	243171	5.38	6.03	
109 1,2,4-Trimethylbenzene	105	12.707	12.707	0.000	98	1371913	5.38	5.39	
110 sec-Butylbenzene	105	12.828	12.829	-0.001	94	1738122	5.38	5.43	
111 1,3-Dichlorobenzene	146	12.926	12.926	0.000	99	806244	5.38	5.65	
112 4-Isopropyltoluene	119	12.938	12.938	0.000	97	1536621	5.38	5.51	
* 113 1,4-Dichlorobenzene-d4	152	12.981	12.981	0.000	94	832446	10.0	10.0	
114 1,4-Dichlorobenzene	146	12.999	12.999	0.000	95	829591	5.38	5.65	
115 1,2,3-Trimethylbenzene	120	13.011	13.011	0.000	99	617501	5.38	5.52	
116 Benzyl chloride	126	13.078	13.079	-0.001	99	119318	5.38	5.77	
119 n-Butylbenzene	92	13.231	13.231	0.000	97	760901	5.38	5.38	
120 1,2-Dichlorobenzene	146	13.261	13.261	0.000	99	762987	5.38	5.67	
118 p-Diethylbenzene	119	13.286	13.286	0.000	87	759905	5.38	5.37	
123 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	86	47749	5.38	6.70	
124 1,3,5-Trichlorobenzene	180	13.938	13.938	0.000	98	679192	5.38	5.84	
125 1,2,4-Trichlorobenzene	180	14.365	14.365	0.000	94	598559	5.38	5.74	
126 Hexachlorobutadiene	225	14.444	14.450	-0.006	96	322325	5.38	6.32	
127 Naphthalene	128	14.548	14.548	0.000	97	978201	5.38	5.25	
128 1,2,3-Trichlorobenzene	180	14.694	14.694	0.000	95	517114	5.38	5.60	
129 2-Methylnaphthalene	142	15.316	15.316	0.000	92	542285	5.38	4.31	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_QVOA6_00049	Amount Added: 5.38	Units: uL	
MSV_Q_ETBR_00004	Amount Added: 5.38	Units: uL	
MSV_Q_QVOA1_00051	Amount Added: 5.38	Units: uL	
MSV_Q_QARC_00050	Amount Added: 5.38	Units: uL	
MSV_QGAS_826_00082	Amount Added: 5.38	Units: uL	
MSV_Q_EE_00002	Amount Added: 5.38	Units: uL	
MSV_HP25_ISSS_00016	Amount Added: 1.00	Units: uL	Run Reagent

Report Date: 22-Oct-2020 21:42:29

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S18.D

Injection Date: 22-Oct-2020 17:17:30

Instrument ID: 10193

Operator ID: jkh09052

Lims ID: 410-17705-A-3 MSD

Worklist Smp#: 24

Client ID: 5W7B

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

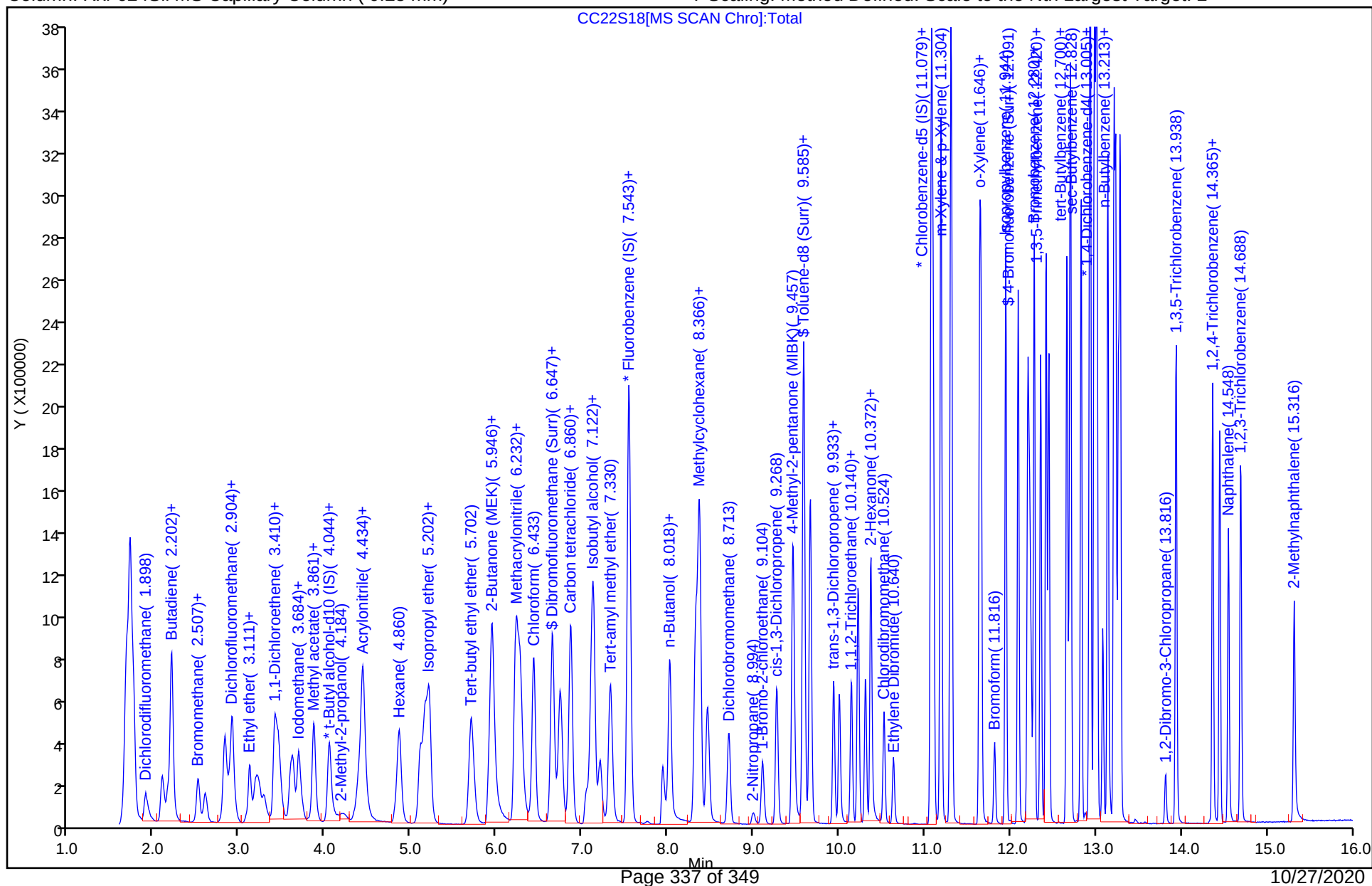
ALS Bottle#: 23

Method: MSV_10193_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\CC22S18.D
 Lims ID: 410-17705-A-3 MSD
 Client ID: 5W7B
 Sample Type: MSD
 Inject. Date: 22-Oct-2020 17:17:30 ALS Bottle#: 23 Worklist Smp#: 24
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0013561-024
 Misc. Info.: 410-17705-A-3 MSD
 Operator ID: jkh09052 Instrument ID: 10193
 Method: \\chromfs\Lancaster\ChromData\10193\20201022-13561.b\MSV_10193_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 22-Oct-2020 21:41:19 Calib Date: 01-Sep-2020 19:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\10193\20200901-9503.b\CS01I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: johnsons

Date: 22-Oct-2020 21:34:12

Compound	Amount Added	Amount Recovered	% Rec.
\$ 47 Dibromofluoromethane (Surr)	10.0	10.4	104.04
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.7	107.00
\$ 74 Toluene-d8 (Surr)	10.0	9.89	98.89
\$ 98 4-Bromofluorobenzene (Surr)	10.0	9.96	99.59

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1

SDG No.: _____

Instrument ID: 10193 Start Date: 09/01/2020 12:45Analysis Batch Number: 39724 End Date: 09/01/2020 19:31

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-39724/1		09/01/2020 12:45	1	CS01T01.D	R-624SilMS 30m 0.25 (mm)
IC 410-39724/3		09/01/2020 13:35	1	CS01I01.D	R-624SilMS 30m 0.25 (mm)
ICIS 410-39724/4		09/01/2020 13:57	1	CS01I02.D	R-624SilMS 30m 0.25 (mm)
IC 410-39724/5		09/01/2020 14:19	1	CS01I03.D	R-624SilMS 30m 0.25 (mm)
IC 410-39724/6		09/01/2020 14:42	1	CS01I04.D	R-624SilMS 30m 0.25 (mm)
IC 410-39724/7		09/01/2020 15:04	1	CS01I05.D	R-624SilMS 30m 0.25 (mm)
IC 410-39724/8		09/01/2020 15:26	1	CS01I06.D	R-624SilMS 30m 0.25 (mm)
IC 410-39724/9		09/01/2020 15:48	1	CS01I07.D	R-624SilMS 30m 0.25 (mm)
ICV 410-39724/10		09/01/2020 16:10	1	CS01V01.D	R-624SilMS 30m 0.25 (mm)
IC 410-39724/12		09/01/2020 16:55	1		R-624SilMS 30m 0.25 (mm)
IC 410-39724/13		09/01/2020 17:17	1		R-624SilMS 30m 0.25 (mm)
IC 410-39724/14		09/01/2020 17:39	1		R-624SilMS 30m 0.25 (mm)
IC 410-39724/15		09/01/2020 18:02	1		R-624SilMS 30m 0.25 (mm)
IC 410-39724/16		09/01/2020 18:24	1		R-624SilMS 30m 0.25 (mm)
IC 410-39724/17		09/01/2020 18:46	1		R-624SilMS 30m 0.25 (mm)
IC 410-39724/18		09/01/2020 19:09	1		R-624SilMS 30m 0.25 (mm)
ICV 410-39724/19		09/01/2020 19:31	1		R-624SilMS 30m 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-17705-1

SDG No.: _____

Instrument ID: 10193 Start Date: 10/22/2020 08:42Analysis Batch Number: 57283 End Date: 10/22/2020 19:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-57283/1		10/22/2020 08:42	1	CC22T01.D	R-624SilMS 30m 0.25 (mm)
CCVIS 410-57283/3		10/22/2020 09:20	1	CC21C31.D	R-624SilMS 30m 0.25 (mm)
LCS 410-57283/4		10/22/2020 09:43	1	CC21L31.D	R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/22/2020 10:06	1		R-624SilMS 30m 0.25 (mm)
MB 410-57283/6		10/22/2020 10:28	1	CC21B31.D	R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/22/2020 10:59	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/22/2020 11:21	1		R-624SilMS 30m 0.25 (mm)
410-17705-9	Trip Blank 1	10/22/2020 11:44	1	CC22S03.D	R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/22/2020 12:06	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/22/2020 12:28	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/22/2020 12:51	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/22/2020 13:13	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/22/2020 13:35	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/22/2020 13:57	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/22/2020 14:20	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/22/2020 14:42	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/22/2020 15:04	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/22/2020 15:26	10		R-624SilMS 30m 0.25 (mm)
410-17705-1	5W8B	10/22/2020 15:48	1	CC22S14.D	R-624SilMS 30m 0.25 (mm)
410-17705-2	5W5B	10/22/2020 16:10	1	CC22S15.D	R-624SilMS 30m 0.25 (mm)
410-17705-3	5W7B	10/22/2020 16:33	1	CC22S16.D	R-624SilMS 30m 0.25 (mm)
410-17705-3 MS	5W7B MS	10/22/2020 16:55	1	CC22S17.D	R-624SilMS 30m 0.25 (mm)
410-17705-3 MSD	5W7B MSD	10/22/2020 17:17	1	CC22S18.D	R-624SilMS 30m 0.25 (mm)
410-17705-4	5WC21	10/22/2020 17:39	1	CC22S19.D	R-624SilMS 30m 0.25 (mm)
410-17705-5	5WDUP	10/22/2020 18:00	1	CC22S20.D	R-624SilMS 30m 0.25 (mm)
410-17705-6	5WC22	10/22/2020 18:23	1	CC22S21.D	R-624SilMS 30m 0.25 (mm)
410-17705-7	5WC23	10/22/2020 18:45	1	CC22S22.D	R-624SilMS 30m 0.25 (mm)
410-17705-8	5W12A	10/22/2020 19:08	1	CC22S23.D	R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/22/2020 19:30	10		R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/22/2020 19:52	100		R-624SilMS 30m 0.25 (mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-17705-1

SDG No.: _____

Batch Number: 39724 Batch Start Date: 09/01/20 12:45 Batch Analyst: Campbell, Miranda EBatch Method: 8260C LL Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MSV_25_826ISS 00001	MSV_Q_EE 00002	MSV_Q_ETBR 00003	MSV_Q_QARC 00043
BFB 410-39724/1		8260C LL		1 uL	1 uL				
IC 410-39724/3		8260C LL		25 mL	25 mL	1 uL			
ICIS 410-39724/4		8260C LL		25 mL	25 mL	1 uL			
IC 410-39724/5		8260C LL		25 mL	25 mL	1 uL			
IC 410-39724/6		8260C LL		25 mL	25 mL	1 uL			
IC 410-39724/7		8260C LL		25 mL	25 mL	1 uL			
IC 410-39724/8		8260C LL		25 mL	25 mL	1 uL			
IC 410-39724/9		8260C LL		25 mL	25 mL	1 uL			
ICV 410-39724/10		8260C LL		25 mL	25 mL	1 uL	12.5 uL	12.5 uL	12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_QVOA1 00044	MSV_Q_QVOA6 00041	MSV_QGAS 826 00069	MSV_RV1 826 00022	MSV_RV4 826 00024	MSV_RV4GAS826 00072
BFB 410-39724/1		8260C LL							
IC 410-39724/3		8260C LL					25 uL	25 uL	25 uL
ICIS 410-39724/4		8260C LL					10 uL	10 uL	10 uL
IC 410-39724/5		8260C LL					5 uL	5 uL	5 uL
IC 410-39724/6		8260C LL					2 uL	2 uL	2 uL
IC 410-39724/7		8260C LL					2 uL	2 uL	2 uL
IC 410-39724/8		8260C LL					2 uL	2 uL	2 uL
IC 410-39724/9		8260C LL					2 uL	2 uL	2 uL
ICV 410-39724/10		8260C LL		12.5 uL	12.5 uL	12.5 uL			

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_V_BFB 00003					
BFB 410-39724/1		8260C LL		1 uL					
IC 410-39724/3		8260C LL							
ICIS 410-39724/4		8260C LL							
IC 410-39724/5		8260C LL							
IC 410-39724/6		8260C LL							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8260C LL

Page 1 of 2

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-17705-1

SDG No.: _____

Batch Number: 39724 Batch Start Date: 09/01/20 12:45 Batch Analyst: Campbell, Miranda EBatch Method: 8260C LL Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_V_BFB 00003					
IC 410-39724/7		8260C LL							
IC 410-39724/8		8260C LL							
IC 410-39724/9		8260C LL							
ICV 410-39724/10		8260C LL							

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8260C LL

Page 2 of 2

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-17705-1

SDG No.:

Batch Number: 57283

Batch Start Date: 10/22/20 08:42

Batch Analyst: Howe, Jennifer K

Batch Method: 8260C LL

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloChe ck	Headspace	MSV_HP25_ISSS 00016
BFB 410-57283/1		8260C LL		1 uL	1 uL				
CCVIS 410-57283/3		8260C LL		25 mL	25 mL				1 uL
LCS 410-57283/4		8260C LL		25 mL	25 mL				1 uL
MB 410-57283/6		8260C LL		25 mL	25 mL				1 uL
410-17705-A-9	Trip Blank 1	8260C LL	T	25 mL	25 mL	<2 SU	N	N	1 uL
410-17705-A-1	5W8B	8260C LL	T	25 mL	25 mL	<2 SU	N	N	1 uL
410-17705-A-2	5W5B	8260C LL	T	25 mL	25 mL	<2 SU	N	N	1 uL
410-17705-A-3	5W7B	8260C LL	T	25 mL	25 mL	<2 SU	N	N	1 uL
410-17705-A-3 MS	5W7B	8260C LL	T	25 mL	25 mL	<2 SU	N	N	1 uL
410-17705-A-3 MSD	5W7B	8260C LL	T	25 mL	25 mL	<2 SU	N	N	1 uL
410-17705-A-4	5WC21	8260C LL	T	25 mL	25 mL	<2 SU	N	N	1 uL
410-17705-A-5	5WDUP	8260C LL	T	25 mL	25 mL	<2 SU	N	N	1 uL
410-17705-A-6	5WC22	8260C LL	T	25 mL	25 mL	<2 SU	N	N	1 uL
410-17705-A-7	5WC23	8260C LL	T	25 mL	25 mL	<2 SU	N	N	1 uL
410-17705-A-8	5W12A	8260C LL	T	25 mL	25 mL	<2 SU	N	N	1 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_EE 00002	MSV_Q_ETBR 00004	MSV_Q_QARC 00050	MSV_Q_QVOA1 00051	MSV_Q_QVOA6 00049	MSV_QGAS 826 00082
BFB 410-57283/1		8260C LL							
CCVIS 410-57283/3		8260C LL							
LCS 410-57283/4		8260C LL		12.5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL
MB 410-57283/6		8260C LL							
410-17705-A-9	Trip Blank 1	8260C LL	T						
410-17705-A-1	5W8B	8260C LL	T						
410-17705-A-2	5W5B	8260C LL	T						
410-17705-A-3	5W7B	8260C LL	T						
410-17705-A-3 MS	5W7B	8260C LL	T	5.38 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL
410-17705-A-3 MSD	5W7B	8260C LL	T	5.38 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8260C LL

Page 1 of 3

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-17705-1

SDG No.: _____

Batch Number: 57283 Batch Start Date: 10/22/20 08:42 Batch Analyst: Howe, Jennifer KBatch Method: 8260C LL Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_EE 00002	MSV_Q_ETBR 00004	MSV_Q_QARC 00050	MSV_Q_QVOA1 00051	MSV_Q_QVOA6 00049	MSV_QGAS_826 00082
410-17705-A-4	5WC21	8260C LL	T						
410-17705-A-5	5WDUP	8260C LL	T						
410-17705-A-6	5WC22	8260C LL	T						
410-17705-A-7	5WC23	8260C LL	T						
410-17705-A-8	5W12A	8260C LL	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_RV1_826 00026	MSV_RV4_826 00030	MSV_RV4GAS826 00087	MSV_V_BFB 00003		
BFB 410-57283/1		8260C LL					1 uL		
CCVIS 410-57283/3		8260C LL		20 uL	20 uL	20 uL			
LCS 410-57283/4		8260C LL							
MB 410-57283/6		8260C LL							
410-17705-A-9	Trip Blank 1	8260C LL	T						
410-17705-A-1	5W8B	8260C LL	T						
410-17705-A-2	5W5B	8260C LL	T						
410-17705-A-3	5W7B	8260C LL	T						
410-17705-A-3	5W7B	8260C LL	T						
MS 410-17705-A-3	5W7B	8260C LL	T						
MSD 410-17705-A-4	5WC21	8260C LL	T						
410-17705-A-5	5WDUP	8260C LL	T						
410-17705-A-6	5WC22	8260C LL	T						
410-17705-A-7	5WC23	8260C LL	T						
410-17705-A-8	5W12A	8260C LL	T						

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-17705-1

SDG No.: _____

Batch Number: 57283 Batch Start Date: 10/22/20 08:42 Batch Analyst: Howe, Jennifer KBatch Method: 8260C LL Batch End Date: _____

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8260C LL

Shipping and Receiving Documents



410-17705-02 Chain of Custody

HWMU5 Appendix - J
Radford Army Ammunition Plant (RFAAP)
Groundwater Corrective Action Semiannual Monitoring Event
DAA JN: B03204-20A

ANALYTICAL METHOD: 8260C/5030C
TYPE METHOD: GCMS
CLASS: VOLATILE

Appendix – J Target Analyte List

No.	ANALYTE	CAS RN	Required QL (µg/l)	Required MDL*
1.	Trichloroethene	79-01-6	1	0.177
2.	1,1-Dichloroethene	75-35-4	1	0.44
3.	Cis-1,2-Dichloroethene	156-59-2	1	0.1
4.	Trans-1,2-Dichloroethene	156-60-5	1	0.8
5.	Vinyl Chloride	75-01-4	1	0.1

Note: *Report current lab MDL if higher.

25 ml purge volume

Page 2 of 2 JCF 9-21-2020

.t:\environmental\bbg\databases\raap\sample event set up\semi-annual events\hwmu-5\hwmu5 - coc rev 2010\hwmu 5 - appendix j cap target
analyte list - rev 2015.docx

Login Sample Receipt Checklist

Client: Draper Aden Associates, Inc.

Job Number: 410-17705-1

Login Number: 17705

List Number: 1

Creator: Rivera-Santa, Julissa

List Source: Eurofins Lancaster Laboratories Env

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable ($\leq 6^{\circ}\text{C}$, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	True	

Comprehensive Data Validation Report

Radford Army Ammunition Plant (RFAAP), Radford, Virginia

Facility: HWMU-16 Monitoring Event: Fourth Quarter 2020

Analyte	Sample ID	Laboratory		Validated	QL	Validation Notes	
		Result	Q	Result	Q		(ug/L)
Method: 6020B							
Laboratory: Pace - West Columbia, SC							
Arsenic	16C1	10	U	U	10	Analyte not detected at or above the QL.	
	16MW8	10	U	U	10	Analyte not detected at or above the QL.	
	16MW9	10	U	U	10	Analyte not detected at or above the QL.	
	16WC1A	10	U	U	10	Analyte not detected at or above the QL.	
	16WC1B	10	U	U	10	Analyte not detected at or above the QL.	
	16WC2B	10	U	U	10	Analyte not detected at or above the QL.	
	16-2	10	U	U	10	Analyte not detected at or above the QL.	
	16-3	10	U	U	10	Analyte not detected at or above the QL.	
	16-5	10	U	U	10	Analyte not detected at or above the QL.	
	16SPRING	10	U	U	10	Analyte not detected at or above the QL.	
	16WDUP	10	U	U	10	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.	
Barium	16C1	170		170	10	No action taken.	
	16MW8	130		130	10	No action taken.	
	16MW9	570		570	10	No action taken.	
	16WC1A	390		390	10	No action taken.	
	16WC1B	110		110	10	No action taken.	
	16WC2B	110		110	10	No action taken.	
	16-2	200		200	10	No action taken.	
	16-3	730		730	10	No action taken.	
	16-5	160		160	10	No action taken.	
	16SPRING	210		210	10	No action taken.	
	16WDUP	390		390	10	No action taken. Blind field duplicate of 16WC1A.	
Beryllium	16C1	1	U	U	J	1	Analyte not detected at or above the QL. Recovered low from MS/MSD (42%/42%).
	16MW8	1	U	U	J	1	Analyte not detected at or above the QL. Recovered low from MS/MSD (42%/42%).
	16MW9	1	U	U	J	1	Analyte not detected at or above the QL. Recovered low from MS/MSD (42%/42%).
	16WC1A	1	U	U	J	1	Analyte not detected at or above the QL. Recovered low from MS/MSD (42%/42%).
	16WC1B	1	U	U	J	1	Analyte not detected at or above the QL. Recovered low from MS/MSD (42%/42%).
	16WC2B	1	U	U	J	1	Analyte not detected at or above the QL. Recovered low from MS/MSD (42%/42%).
	16-2	1	U	U	J	1	Analyte not detected at or above the QL. Recovered low from MS/MSD (42%/42%).
	16-3	1	U	U	J	1	Analyte not detected at or above the QL. Recovered low from MS/MSD (42%/42%).
	16-5	1	U	U	J	1	Analyte not detected at or above the QL. Recovered low from MS/MSD (42%/42%).
	16SPRING	1	U	U	J	1	Analyte not detected at or above the QL. Recovered low from MS/MSD (42%/42%).

Comprehensive Data Validation Report

Radford Army Ammunition Plant (RFAAP), Radford, Virginia

Facility: **Monitoring Event: Fourth Quarter 2020**

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 6020B							
<i>Laboratory: Pace - West Columbia, SC</i>							
Beryllium	16WDUP	1	U	U	J	1	Analyte not detected at or above the QL. Recovered low from MS/MSD (42%/42%). Blind field duplicate of 16WC1A.
Cadmium	16C1	1	U	U		1	Analyte not detected at or above the QL.
	16MW8	1	U	U		1	Analyte not detected at or above the QL.
	16MW9	1	U	U		1	Analyte not detected at or above the QL.
	16WC1A	1	U	U		1	Analyte not detected at or above the QL.
	16WC1B	1	U	U		1	Analyte not detected at or above the QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
Chromium	16WDUP	1	U	U		1	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
	16C1	5	U	U		5	Analyte not detected at or above the QL.
	16MW8	5	U	U		5	Analyte not detected at or above the QL.
	16MW9	5	U	U		5	Analyte not detected at or above the QL.
	16WC1A	5	U	U		5	Analyte not detected at or above the QL.
	16WC1B	5	U	U		5	Analyte not detected at or above the QL.
	16WC2B	5	U	U		5	Analyte not detected at or above the QL.
	16-2	5	U	U		5	Analyte not detected at or above the QL.
	16-3	5	U	U		5	Analyte not detected at or above the QL.
	16-5	5	U	U		5	Analyte not detected at or above the QL.
Cobalt	16SPRING	5	U	U		5	Analyte not detected at or above the QL.
	16WDUP	5	U	U		5	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
	16C1	5	U	U		5	Analyte not detected at or above the QL.
	16MW8	5	U	U		5	Analyte not detected at or above the QL.
	16MW9	5.3		5.3		5	No action taken.
	16WC1A	12		12		5	No action taken.
	16WC1B	13		13		5	No action taken.
	16WC2B	5	U	U		5	Analyte not detected at or above the QL.
	16-2	5	U	U		5	Analyte not detected at or above the QL.
	16-3	5	U	U		5	Analyte not detected at or above the QL.
	16-5	5	U	U		5	Analyte not detected at or above the QL.

Comprehensive Data Validation Report
Radford Army Ammunition Plant (RFAAP), Radford, Virginia
Facility: HWMU-16 Monitoring Event: Fourth Quarter 2020

Analyte	Sample ID	Laboratory Result (ug/L)	Validated Result (ug/L)	QL (ug/L)	Validation Notes
Method: 6020B					
<i>Laboratory: Pace - West Columbia, SC</i>					
Cobalt	16SPRING	5	U	5	Analyte not detected at or above the QL.
	16WDUP	12	12	5	No action taken. Blind field duplicate of 16WC1A.
Copper	16C1	5	U	5	Analyte not detected at or above the QL.
	16MW8	15	15	5	No action taken.
	16MW9	5	U	5	Analyte not detected at or above the QL.
	16WC1A	5	U	5	Analyte not detected at or above the QL.
	16WC1B	5	U	5	Analyte not detected at or above the QL.
	16WC2B	5	U	5	Analyte not detected at or above the QL.
	16-2	5	U	5	Analyte not detected at or above the QL.
	16-3	5	U	5	Analyte not detected at or above the QL.
	16-5	5	U	5	Analyte not detected at or above the QL.
	16SPRING	5	U	5	Analyte not detected at or above the QL.
Lead	16WDUP	5	U	5	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
	16C1	3	U	3	Analyte not detected at or above the QL.
	16MW8	3	U	3	Analyte not detected at or above the QL.
	16MW9	3	U	3	Analyte not detected at or above the QL.
	16WC1A	3	U	3	Analyte not detected at or above the QL.
	16WC1B	3	U	3	Analyte not detected at or above the QL.
	16WC2B	3	U	3	Analyte not detected at or above the QL.
	16-2	3	U	3	Analyte not detected at or above the QL.
	16-3	3	U	3	Analyte not detected at or above the QL.
	16-5	3	U	3	Analyte not detected at or above the QL.
Nickel	16SPRING	3	U	3	Analyte not detected at or above the QL.
	16WDUP	3	U	3	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
	16C1	10	U	10	Analyte not detected at or above the QL.
	16MW8	10	U	10	Analyte not detected at or above the QL.
	16MW9	14	14	10	No action taken.
	16WC1A	13	13	10	No action taken.
	16WC1B	10	U	10	Analyte not detected at or above the QL.
	16WC2B	10	U	10	Analyte not detected at or above the QL.
	16-2	10	U	10	Analyte not detected at or above the QL.
	16-3	10	U	10	Analyte not detected at or above the QL.

Comprehensive Data Validation Report
Radford Army Ammunition Plant (RFAAP), Radford, Virginia
Facility: HWMU-16 Monitoring Event: Fourth Quarter 2020

Analyte	Sample ID	Laboratory	Validated	QL	Validation Notes		
		Result (ug/L) Q	Result (ug/L) Q	(ug/L)			
Method: 6020B							
Laboratory: Pace - West Columbia, SC							
Nickel	16-5	10	U	U	10	Analyte not detected at or above the QL.	
	16SPRING	10	U	U	10	Analyte not detected at or above the QL.	
	16WDUP	13		13	10	No action taken. Blind field duplicate of 16WC1A.	
Vanadium	16C1	10	U	U	10	Analyte not detected at or above the QL.	
	16MW8	10	U	U	10	Analyte not detected at or above the QL.	
	16MW9	10	U	U	10	Analyte not detected at or above the QL.	
	16WC1A	10	U	U	10	Analyte not detected at or above the QL.	
	16WC1B	10	U	U	10	Analyte not detected at or above the QL.	
	16WC2B	10	U	U	10	Analyte not detected at or above the QL.	
	16-2	10	U	U	10	Analyte not detected at or above the QL.	
	16-3	10	U	U	10	Analyte not detected at or above the QL.	
	16-5	10	U	U	10	Analyte not detected at or above the QL.	
	16SPRING	10	U	U	10	Analyte not detected at or above the QL.	
	16WDUP	10	U	U	10	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.	
	Zinc	16C1	30	U	U	30	Analyte not detected at or above the QL.
		16MW8	44		44	30	No action taken.
		16MW9	30	U	U	30	Analyte not detected at or above the QL.
		16WC1A	30	U	U	30	Analyte not detected at or above the QL.
		16WC1B	30	U	U	30	Analyte not detected at or above the QL.
16WC2B		30	U	U	30	Analyte not detected at or above the QL.	
16-2		30	U	U	30	Analyte not detected at or above the QL.	
16-3		30	U	U	30	Analyte not detected at or above the QL.	
16-5	30	U	U	30	Analyte not detected at or above the QL.		
16SPRING	30	U	U	30	Analyte not detected at or above the QL.		
16WDUP	30	U	U	30	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.		

Comprehensive Data Validation Report
Radford Army Ammunition Plant (RFAAP), Radford, Virginia
Facility: HWMU-16 Monitoring Event: Fourth Quarter 2020

Analyte	Sample ID	Laboratory		Validated		QL	Validation Notes
		Result	Q	Result	Q	(ug/L)	
Method: 7470A							
Laboratory: Pace - West Columbia, SC							
Mercury	16C1	2	U	U		2	Analyte not detected at or above the QL.
	16MW8	2	U	U		2	Analyte not detected at or above the QL.
	16MW9	2	U	U		2	Analyte not detected at or above the QL.
	16WC1A	2	U	U		2	Analyte not detected at or above the QL.
	16WC1B	2	U	U		2	Analyte not detected at or above the QL.
	16WC2B	2	U	U		2	Analyte not detected at or above the QL.
	16-2	2	U	U		2	Analyte not detected at or above the QL.
	16-3	2	U	U		2	Analyte not detected at or above the QL.
	16-5	2	U	U		2	Analyte not detected at or above the QL.
	16SPRING	2	U	U		2	Analyte not detected at or above the QL.
	16WDUP	2	U	U		2	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.

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Radford Army Ammunition Plant (RFAAP), Radford, Virginia
Facility: HWMU-16 Monitoring Event: Fourth Quarter 2020

Analyte	Sample ID	Laboratory	Result	Validated	QL	Validation Notes
		(ug/L)	Q	(ug/L)	Q	
Method: 8260C						
Laboratory: ELLE, Lancaster, PA						
Benzene	16C1	1	U	U	1	Analyte not detected at or above the QL.
	16MW8	1	U	U	1	Analyte not detected at or above the QL.
	16MW9	1	U	U	1	Analyte not detected at or above the QL.
	16WC1A	1	U	U	1	Analyte not detected at or above the QL.
	16WC1B	1	U	U	1	Analyte not detected at or above the QL.
	16WC2B	1	U	U	1	Analyte not detected at or above the QL.
	16-2	1	U	U	1	Analyte not detected at or above the QL.
	16-3	1	U	U	1	Analyte not detected at or above the QL.
	16-5	1	U	U	1	Analyte not detected at or above the QL.
	16SPRING	1	U	U	1	Analyte not detected at or above the QL.
	16WDUP	1	U	U	1	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
2-Butanone	16C1	10	U	U	10	Analyte not detected at or above the QL.
	16MW8	10	U	U	10	Analyte not detected at or above the QL.
	16MW9	10	U	U	10	Analyte not detected at or above the QL.
	16WC1A	10	U	U	10	Analyte not detected at or above the QL.
	16WC1B	10	U	U	10	Analyte not detected at or above the QL.
	16WC2B	10	U	U	10	Analyte not detected at or above the QL.
	16-2	10	U	U	10	Analyte not detected at or above the QL.
	16-3	10	U	U	10	Analyte not detected at or above the QL.
	16-5	10	U	U	10	Analyte not detected at or above the QL.
	16SPRING	10	U	U	10	Analyte not detected at or above the QL.
	16WDUP	10	U	U	10	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
Carbon tetrachloride	16C1	1	U	U	1	Analyte not detected at or above the QL.
	16MW8	1	U	U	1	Analyte not detected at or above the QL.
	16MW9	1	U	U	1	Analyte not detected at or above the QL.
	16WC1A	1	U	U	1	Analyte not detected at or above the QL.
	16WC1B	1	U	U	1	Analyte not detected at or above the QL.
	16WC2B	1	U	U	1	Analyte not detected at or above the QL.
	16-2	1	U	U	1	Analyte not detected at or above the QL.
	16-3	1	U	U	1	Analyte not detected at or above the QL.
	16-5	1	U	U	1	Analyte not detected at or above the QL.
	16SPRING	1	U	U	1	Analyte not detected at or above the QL.

Comprehensive Data Validation Report
Radford Army Ammunition Plant (RFAAP), Radford, Virginia
Facility: HWMU-16 Monitoring Event: Fourth Quarter 2020

Analyte	Sample ID	Laboratory	Result	Validated	QL	Validation Notes
		(ug/L)	Q	(ug/L)	Q	
Method: 8260C						
Laboratory: ELLE, Lancaster, PA						
Carbon tetrachloride	16WDUP	1	U	U	1	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
Chloroethane	16C1	4.6		4.6	1	No action taken.
	16MW8	1	U	U	1	Analyte not detected at or above the QL.
	16MW9	2.2		2.2	1	No action taken.
	16WC1A	1.8		1.8	1	No action taken.
	16WC1B	1	U	U	1	Analyte not detected at or above the QL.
	16WC2B	1	U	U	1	Analyte not detected at or above the QL.
	16-2	1	U	U	1	Analyte not detected at or above the QL.
	16-3	1	U	U	1	Analyte not detected at or above the QL.
	16-5	1	U	U	1	Analyte not detected at or above the QL.
	16SPRING	1	U	U	1	Analyte not detected at or above the QL.
	16WDUP	1.9		1.9	1	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A (5.4 RPD).
	Dichlorodifluoromethane	16C1	1	U	U	1
16MW8		1	U	U	1	Analyte not detected at or above the QL.
16MW9		1	U	U	1	Analyte not detected at or above the QL.
16WC1A		1	U	U	1	Analyte not detected at or above the QL.
16WC1B		1	U	U	1	Analyte not detected at or above the QL.
16WC2B		1	U	U	1	Analyte not detected at or above the QL.
16-2		1	U	U	1	Analyte not detected at or above the QL.
16-3		1	U	U	1	Analyte not detected at or above the QL.
16-5		1	U	U	1	Analyte not detected at or above the QL.
16SPRING		1	U	U	1	Analyte not detected at or above the QL.
16WDUP		1	U	U	1	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
1,1-Dichloroethane		16C1	6.3		6.3	1
	16MW8	1	U	U	1	Analyte not detected at or above the QL.
	16MW9	6.5		6.5	1	No action taken.
	16WC1A	4.3		4.3	1	No action taken.
	16WC1B	1	U	U	1	Analyte not detected at or above the QL.
	16WC2B	1	U	U	1	Analyte not detected at or above the QL.
	16-2	1	U	U	1	Analyte not detected at or above the QL.
	16-3	1	U	U	1	Analyte not detected at or above the QL.
	16-5	1	U	U	1	Analyte not detected at or above the QL.

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Radford Army Ammunition Plant (RFAAP), Radford, Virginia
Facility: HWMU-16 Monitoring Event: Fourth Quarter 2020

Analyte	Sample ID	Laboratory	Result	Validated	QL	Validation Notes	
		(ug/L)	Q	(ug/L)	Q		(ug/L)
Method: 8260C							
Laboratory: ELLE, Lancaster, PA							
1,1-Dichloroethane	16SPRING	1	U	U	1	Analyte not detected at or above the QL.	
	16WDUP	4.4		4.4	1	No action taken. Blind field duplicate of 16WC1A (2.3 RPD).	
1,1-Dichloroethene	16C1	1	U	U	1	Analyte not detected at or above the QL.	
	16MW8	1	U	U	1	Analyte not detected at or above the QL.	
	16MW9	1	U	U	1	Analyte not detected at or above the QL.	
	16WC1A	1	U	U	1	Analyte not detected at or above the QL.	
	16WC1B	1	U	U	1	Analyte not detected at or above the QL.	
	16WC2B	1	U	U	1	Analyte not detected at or above the QL.	
	16-2	1	U	U	1	Analyte not detected at or above the QL.	
	16-3	1	U	U	1	Analyte not detected at or above the QL.	
	16-5	1	U	U	1	Analyte not detected at or above the QL.	
	16SPRING	1	U	U	1	Analyte not detected at or above the QL.	
	16WDUP	1	U	U	1	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.	
	Diethyl ether	16C1	43		43	12.5	No action taken. Analyzed in dilution (1:2.5). QL 31 ppb.
16MW8		15		15	12.5	No action taken.	
16MW9		84		84	12.5	No action taken. Analyzed in dilution (1:4). QL 50 ppb.	
16WC1A		20		20	12.5	No action taken.	
16WC1B		13	U	U	12.5	Analyte not detected at or above the QL.	
16WC2B		13	U	U	12.5	Analyte not detected at or above the QL.	
16-2		13	U	U	12.5	Analyte not detected at or above the QL.	
16-3		13	U	U	12.5	Analyte not detected at or above the QL.	
16-5		13	U	U	12.5	Analyte not detected at or above the QL.	
16SPRING		13	U	U	12.5	Analyte not detected at or above the QL.	
16WDUP		21		21	12.5	No action taken. Blind field duplicate of 16WC1A (4.9 RPD).	
Dimethyl ether		16C1	14		14	J	12.5
	16MW8	13	U	U	12.5	Analyte not detected at or above the QL.	
	16MW9	13	U	U	12.5	Analyte not detected at or above the QL.	
	16WC1A	13	U	U	12.5	Analyte not detected at or above the QL.	
	16WC1B	13	U	U	12.5	Analyte not detected at or above the QL.	
	16WC2B	13	U	U	12.5	Analyte not detected at or above the QL.	
	16-2	13	U	U	12.5	Analyte not detected at or above the QL.	
	16-3	13	U	U	12.5	Analyte not detected at or above the QL.	

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Radford Army Ammunition Plant (RFAAP), Radford, Virginia

Facility: HWMU-16

Monitoring Event: Fourth Quarter 2020

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8260C							
Laboratory: ELLE, Lancaster, PA							
Dimethyl ether	16-5	13	U	U		12.5	Analyte not detected at or above the QL.
	16SPRING	13	U	U		12.5	Analyte not detected at or above the QL.
	16WDUP	13	U	U		12.5	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
Ethylbenzene	16C1	1	U	U		1	Analyte not detected at or above the QL.
	16MW8	1	U	U		1	Analyte not detected at or above the QL.
	16MW9	1	U	U		1	Analyte not detected at or above the QL.
	16WC1A	1	U	U		1	Analyte not detected at or above the QL.
	16WC1B	1	U	U		1	Analyte not detected at or above the QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	1	U	U		1	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
	Chloromethane	16C1	1	U	U		1
16MW8		1	U	U		1	Analyte not detected at or above the QL.
16MW9		1	U	U		1	Analyte not detected at or above the QL.
16WC1A		1	U	U		1	Analyte not detected at or above the QL.
16WC1B		1	U	U		1	Analyte not detected at or above the QL.
16WC2B		1	U	U		1	Analyte not detected at or above the QL.
16-2		1	U	U		1	Analyte not detected at or above the QL.
16-3		1	U	U		1	Analyte not detected at or above the QL.
16-5		1	U	U		1	Analyte not detected at or above the QL.
16SPRING		1	U	U		1	Analyte not detected at or above the QL.
16WDUP		1	U	U		1	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
Methylene chloride		16C1	1.3		1.3		1
	16MW8	1	U	U		1	Analyte not detected at or above the QL.
	16MW9	1	U	U		1	Analyte not detected at or above the QL.
	16WC1A	1	U	U		1	Analyte not detected at or above the QL.
	16WC1B	1	U	U		1	Analyte not detected at or above the QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.

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Facility: HWMU-16 Monitoring Event: Fourth Quarter 2020

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8260C							
<i>Laboratory: ELLE, Lancaster, PA</i>							
Methylene chloride	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	1	U	U		1	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
Tetrachloroethene	16C1	1	U	U		1	Analyte not detected at or above the QL.
	16MW8	1	U	U		1	Analyte not detected at or above the QL.
	16MW9	1	U	U		1	Analyte not detected at or above the QL.
	16WC1A	1	U	U		1	Analyte not detected at or above the QL.
	16WC1B	1	U	U		1	Analyte not detected at or above the QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	1	U	U		1	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
Tetrahydrofuran	16C1	25	U	U		25	Analyte not detected at or above the QL.
	16MW8	25	U	U		25	Analyte not detected at or above the QL.
	16MW9	25	U	U		25	Analyte not detected at or above the QL.
	16WC1A	25	U	U		25	Analyte not detected at or above the QL.
	16WC1B	25	U	U		25	Analyte not detected at or above the QL.
	16WC2B	25	U	U		25	Analyte not detected at or above the QL.
	16-2	25	U	U		25	Analyte not detected at or above the QL.
	16-3	25	U	U		25	Analyte not detected at or above the QL.
	16-5	25	U	U		25	Analyte not detected at or above the QL.
	16SPRING	25	U	U		25	Analyte not detected at or above the QL.
	16WDUP	25	U	U		25	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
Toluene	16C1	1	U	U		1	Analyte not detected at or above the QL.
	16MW8	1	U	U		1	Analyte not detected at or above the QL.
	16MW9	1	U	U		1	Analyte not detected at or above the QL.
	16WC1A	1	U	U		1	Analyte not detected at or above the QL.
	16WC1B	1	U	U		1	Analyte not detected at or above the QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.

Comprehensive Data Validation Report
Radford Army Ammunition Plant (RFAAP), Radford, Virginia
Facility: HWMU-16 Monitoring Event: Fourth Quarter 2020

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 8260C							
<i>Laboratory: ELLE, Lancaster, PA</i>							
Toluene	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	1	U	U		1	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
1,1,1-Trichloroethane	16C1	1	U	U		1	Analyte not detected at or above the QL.
	16MW8	1	U	U		1	Analyte not detected at or above the QL.
	16MW9	1	U	U		1	Analyte not detected at or above the QL.
	16WC1A	1	U	U		1	Analyte not detected at or above the QL.
	16WC1B	1	U	U		1	Analyte not detected at or above the QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
Trichloroethene	16WDUP	1	U	U		1	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
	16C1	1	U	U		1	Analyte not detected at or above the QL.
	16MW8	1	U	U		1	Analyte not detected at or above the QL.
	16MW9	1	U	U		1	Analyte not detected at or above the QL.
	16WC1A	1	U	U		1	Analyte not detected at or above the QL.
	16WC1B	1	U	U		1	Analyte not detected at or above the QL.
	16WC2B	1	U	U		1	Analyte not detected at or above the QL.
	16-2	1	U	U		1	Analyte not detected at or above the QL.
	16-3	1	U	U		1	Analyte not detected at or above the QL.
	16-5	1	U	U		1	Analyte not detected at or above the QL.
Trichlorofluoromethane	16SPRING	1	U	U		1	Analyte not detected at or above the QL.
	16WDUP	1	U	U		1	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
	16C1	1	U	U		1	Analyte not detected at or above the QL.
	16MW8	1	U	U		1	Analyte not detected at or above the QL.
	16MW9	1	U	U		1	Analyte not detected at or above the QL.
	16WC1A	1	U	U		1	Analyte not detected at or above the QL.
	16WC1B	1	U	U		1	Analyte not detected at or above the QL.

Comprehensive Data Validation Report

Radford Army Ammunition Plant (RFAAP), Radford, Virginia

Facility: HWMU-16

Monitoring Event: Fourth Quarter 2020

Analyte	Sample ID	Laboratory Result (ug/L)	Validated Result (ug/L)	QL (ug/L)	Validation Notes
Method: 8260C					
Laboratory: ELLE, Lancaster, PA					
Trichlorofluoromethane	16WC2B	1	U	1	Analyte not detected at or above the QL.
	16-2	1	U	1	Analyte not detected at or above the QL.
	16-3	1	U	1	Analyte not detected at or above the QL.
	16-5	1	U	1	Analyte not detected at or above the QL.
	16SPRING	1	U	1	Analyte not detected at or above the QL.
	16WDUP	1	U	1	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
	16C1	1	U	1	Analyte not detected at or above the QL.
	16MW8	1	U	1	Analyte not detected at or above the QL.
	16MW9	1	U	1	Analyte not detected at or above the QL.
	16WC1A	1	U	1	Analyte not detected at or above the QL.
1,1,2-Trichloro-1,2,2-Trifluoroethane	16WC1B	1	U	1	Analyte not detected at or above the QL.
	16WC2B	1	U	1	Analyte not detected at or above the QL.
	16-2	1	U	1	Analyte not detected at or above the QL.
	16-3	1	U	1	Analyte not detected at or above the QL.
	16-5	1	U	1	Analyte not detected at or above the QL.
	16SPRING	1	U	1	Analyte not detected at or above the QL.
	16WDUP	1	U	1	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
	16C1	1	U	1	Analyte not detected at or above the QL.
	16MW8	1	U	1	Analyte not detected at or above the QL.
	16MW9	1	U	1	Analyte not detected at or above the QL.
Vinyl chloride	16WC1A	1	U	1	Analyte not detected at or above the QL.
	16WC1B	1	U	1	Analyte not detected at or above the QL.
	16WC2B	1	U	1	Analyte not detected at or above the QL.
	16-2	1	U	1	Analyte not detected at or above the QL.
	16-3	1	U	1	Analyte not detected at or above the QL.
	16-5	1	U	1	Analyte not detected at or above the QL.
	16SPRING	1	U	1	Analyte not detected at or above the QL.
	16WDUP	1	U	1	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
	16C1	3	U	3	Analyte not detected at or above the QL.
	16MW8	3	U	3	Analyte not detected at or above the QL.
Xylenes (Total)	16MW9	3	U	3	Analyte not detected at or above the QL.
	16WC1A	3	U	3	Analyte not detected at or above the QL.

Comprehensive Data Validation Report

Radford Army Ammunition Plant (RFAAP), Radford, Virginia

Facility: HWMU-16

Monitoring Event: Fourth Quarter 2020

Analyte	Sample ID	Laboratory	Validated	QL	Validation Notes	
		Result (ug/L)	Q	Result (ug/L)		Q
Method: 8260C						
Laboratory: ELLE, Lancaster, PA						
Xylenes (Total)	16WC1B	3	U	U	3	Analyte not detected at or above the QL.
	16WC2B	3	U	U	3	Analyte not detected at or above the QL.
	16-2	3	U	U	3	Analyte not detected at or above the QL.
	16-3	3	U	U	3	Analyte not detected at or above the QL.
	16-5	3	U	U	3	Analyte not detected at or above the QL.
	16SPRING	3	U	U	3	Analyte not detected at or above the QL.
	16WDUP	3	U	U	3	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.

Comprehensive Data Validation Report

Radford Army Ammunition Plant (RFAAP), Radford, Virginia

Facility: HWMU-16

Monitoring Event: Fourth Quarter 2020

Analyte	Sample ID	Laboratory Result (ug/L)	Validated Result (ug/L)	QL (ug/L)	Validation Notes
Method: 8270D					
Laboratory: ELLE, Lancaster, PA					
Diethyl phthalate	16C1	5	U	5	Analyte not detected at or above the QL.
	16MW8	5	U	5	Analyte not detected at or above the QL.
	16MW9	5	U	5	Analyte not detected at or above the QL.
	16WC1A	5.3	U	5	Analyte not detected at or above the QL.
	16WC1B	5	U	5	Analyte not detected at or above the QL.
	16WC2B	5	U	5	Analyte not detected at or above the QL.
	16-2	5	U	5	Analyte not detected at or above the QL.
	16-3	5	U	5	Analyte not detected at or above the QL.
	16-5	5	U	5	Analyte not detected at or above the QL.
	16SPRING	5.1	U	5	Analyte not detected at or above the QL.
2,4-Dinitrotoluene	16WDUP	5	U	5	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
	16C1	10	U	10	Analyte not detected at or above the QL.
	16MW8	10	U	10	Analyte not detected at or above the QL.
	16MW9	10	U	10	Analyte not detected at or above the QL.
	16WC1A	11	U	10	Analyte not detected at or above the QL.
	16WC1B	10	U	10	Analyte not detected at or above the QL.
	16WC2B	10	U	10	Analyte not detected at or above the QL.
	16-2	10	U	10	Analyte not detected at or above the QL.
	16-3	10	U	10	Analyte not detected at or above the QL.
	16-5	10	U	10	Analyte not detected at or above the QL.
2,6-Dinitrotoluene	16SPRING	10	U	10	Analyte not detected at or above the QL.
	16WDUP	10	U	10	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.
	16C1	10	U	10	Analyte not detected at or above the QL.
	16MW8	10	U	10	Analyte not detected at or above the QL.
	16MW9	10	U	10	Analyte not detected at or above the QL.
	16WC1A	11	U	10	Analyte not detected at or above the QL.
	16WC1B	10	U	10	Analyte not detected at or above the QL.
	16WC2B	10	U	10	Analyte not detected at or above the QL.
	16-2	10	U	10	Analyte not detected at or above the QL.
	16-3	10	U	10	Analyte not detected at or above the QL.
	16-5	10	U	10	Analyte not detected at or above the QL.
	16SPRING	10	U	10	Analyte not detected at or above the QL.

Comprehensive Data Validation Report

Radford Army Ammunition Plant (RFAAP), Radford, Virginia

Facility: HWMU-16

Monitoring Event: Fourth Quarter 2020

Analyte	Sample ID	Laboratory	Validated	QL	Validation Notes
		Result (ug/L) Q	Result (ug/L) Q	(ug/L)	
Method: 8270D					
Laboratory: ELLE, Lancaster, PA					
2,6-Dinitrotoluene	16WDUP	10 U	U	10	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A.

Definitions:

Appendix IX monitoring events and compliance monitoring wells:

For Appendix IX monitoring events, all compliance well results evaluated to the project detection limit.

See separate table for Appendix IX monitoring event detection limits.

QL Denotes permit quantitation limit.

Q Denotes data qualifier.

U Denotes analyte not detected at or above laboratory detection limit (DL) or QL.

J Denotes analyte reported at or above laboratory detection limit and associated result is estimated. When used with "U" (i.e., "UJ"), denotes analyte not detected at or above laboratory detection limit and project required quantitation limit/detection limit is estimated.

UA Denotes analyte not detected at or above adjusted sample detection limit /QL.

UN Denotes analyte concentration is less than the quantitation limit and five times the blank concentration. Analyte was not reliably detected due to blank contamination.

R Denotes result rejected.

Laboratory Data Qualifiers,

"U" and "<", denote not detected at or above the detection limit or QL.

B or J denote result detected between DL and QL, associated value should be considered an estimated concentration.

Appendix IX monitoring events:

Third Quarter 2003, Second Quarter 2004, Second Quarter 2005, Third Quarter 2006, Second Quarter 2007, Second Quarter 2008, Second Quarter 2009, Second Quarter 2010, 2Q 2011, 2Q 2012, 2Q 2013, 2Q 2014, 2Q 2015, 2Q 2016, 2Q 2017

Definitions for Non-Appendix IX Monitoring Events and plume monitoring wells:

QL Denotes permit quantitation limit.

Q Denotes data qualifier.

U Denotes analyte not detected at or above QL.

UA Denotes analyte not detected at or above adjusted sample QL. See data validation report for further explanation.

UN Denotes analyte concentration is less than five times the blank concentration. Analyte was not reliably detected due to blank contamination.

J Denotes analyte reported at or above QL and associated result is estimated. When used with "U" (i.e., "UJ"), denotes analyte not detected at or above QL and QL is estimated.

When used with "UA" (i.e., "UAJ"), denotes analyte not detected at or above adjusted QL and adjusted QL is estimated.

R Denotes result rejected. See data validation report for further explanation.

Laboratory Data Qualifiers, "U" and "<", denote not detected at or above the QL.

Comprehensive Data Validation Report

Radford Army Ammunition Plant (RFAAP), Radford, Virginia

Sample/Blind Field Duplicate Results Greater Than the Quantitation Limit

Facility: HWMU-16

Monitoring Event: Fourth Quarter 2020



Analyte	Sample ID	Laboratory Result (ug/L)	Validated Result (ug/L)	QL (ug/L)	Validation Notes
Method: 6020B					
Laboratory: Pace - West Columbia, SC					
Barium	16WC1A	390	390	10	No action taken.
	16WDUP	390	390	10	No action taken.
Cobalt	16WC1A	12	12	5	No action taken.
	16WDUP	12	12	5	No action taken.
Nickel	16WC1A	13	13	10	No action taken.
	16WDUP	13	13	10	No action taken.
Method: 8260C					
Laboratory: ELLE, Lancaster, PA					
Chloroethane	16WC1A	1.8	1.8	1	No action taken.
	16WDUP	1.9	1.9	1	Analyte not detected at or above the QL. Blind field duplicate of 16WC1A (5.4 RPD).
1,1-Dichloroethane	16WC1A	4.3	4.3	1	No action taken.
	16WDUP	4.4	4.4	1	No action taken. Blind field duplicate of 16WC1A (2.3 RPD).
Diethyl ether	16WC1A	20	20	12.5	No action taken.
	16WDUP	21	21	12.5	No action taken. Blind field duplicate of 16WC1A (4.9 RPD).

Definitions:

Data Validation Qualifiers:

QL Denotes permit quantitation limit. Q Denotes data qualifier.

J Denotes analyte reported at or above quantitation limit and associated result is estimated.



Report of Analysis

Draper Aden Associates
2206 South Main Street
Blacksburg, VA 24060
Attention: Janet Frazier

Project Name: RAAP HWMU16
Project Number: B03204-20A
Lot Number: **VJ23005**
Date Completed: 11/24/2020

11/24/2020
Approved and released by:
Project Manager II: **Cathy S. Dover**



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PACE ANALYTICAL SERVICES, LLC

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

Case Narrative Draper Aden Associates Lot Number: VJ23005

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved The NELAC Institute (TNI) standards, the Pace Analytical Services, LLC ("Pace") Laboratory Quality Manual, standard operating procedures (SOPs), and Pace policies. Any exceptions to the TNI standards, the Laboratory Quality Manual, SOPs or policies are qualified on the results page or discussed below.

Metals 6020B

The MS/MSD for batch 71157 and parent sample VJ23005-001 (16C1) recovered outside control limits for Beryllium, but the associated LCS passed all acceptance criteria.

The MS/MSD for batch 71157 and parent sample VJ23005-004 (16C1A) recovered outside control limits for Beryllium, but the associated LCS passed all acceptance criteria.

Mercury 7470A

The MSD for batch 72243 and parent sample VJ23005-004 (16C1A) recovered marginally biased low outside control limits. The associated LCS and MS passed all acceptance criteria.

If you have any questions regarding this report please contact the Pace Project Manager listed on the cover page.

PACE ANALYTICAL SERVICES, LLC

Sample Summary
Draper Aden Associates
Lot Number: VJ23005
Project Name: RAAP HWMU16
Project Number: B03204-20A

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	16C1	Aqueous	10/22/2020 1055	10/23/2020
002	16MW8	Aqueous	10/21/2020 1035	10/23/2020
003	16MW9	Aqueous	10/22/2020 1020	10/23/2020
004	16WC1A	Aqueous	10/22/2020 0925	10/23/2020
005	16WDUP	Aqueous	10/22/2020 0935	10/23/2020
006	16WC1B	Aqueous	10/22/2020 0840	10/23/2020
007	16-2	Aqueous	10/21/2020 0955	10/23/2020
008	16-3	Aqueous	10/21/2020 1115	10/23/2020
009	16-5	Aqueous	10/21/2020 0830	10/23/2020
010	16WC2B	Aqueous	10/21/2020 0920	10/23/2020
011	16SPRING	Aqueous	10/21/2020 0840	10/23/2020

(11 samples)

Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-001			
Description: 16C1				Matrix: Aqueous			
Date Sampled: 10/22/2020 1055				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1052	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

H = Out of holding time

W = Reported on wet weight basis

D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-001			
Description: 16C1				Matrix: Aqueous			
Date Sampled: 10/22/2020 1055				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1414	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	170		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	5.0	U	5.0	ug/L	1
Copper	7440-50-8	6020B	5.0	U	5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	10	U	10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	ug/L	1

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

H = Out of holding time

W = Reported on wet weight basis

D = Dilution > 1

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Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-002			
Description: 16MW8				Matrix: Aqueous			
Date Sampled: 10/21/2020 1035				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1054	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

H = Out of holding time

W = Reported on wet weight basis

D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-002			
Description: 16MW8				Matrix: Aqueous			
Date Sampled: 10/21/2020 1035				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1443	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	130		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	5.0	U	5.0	ug/L	1
Copper	7440-50-8	6020B	15		5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	10	U	10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	44		30	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range
U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%
H = Out of holding time W = Reported on wet weight basis

D = Dilution > 1

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Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-003			
Description: 16MW9				Matrix: Aqueous			
Date Sampled: 10/22/2020 1020				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1057	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range
 U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%
 H = Out of holding time W = Reported on wet weight basis D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-003			
Description: 16MW9				Matrix: Aqueous			
Date Sampled: 10/22/2020 1020				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1449	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	570		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	5.3		5.0	ug/L	1
Copper	7440-50-8	6020B	5.0	U	5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	14		10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	ug/L	1

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

H = Out of holding time

W = Reported on wet weight basis

D = Dilution > 1

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Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-004			
Description: 16WC1A				Matrix: Aqueous			
Date Sampled: 10/22/2020 0925				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1044	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

H = Out of holding time

W = Reported on wet weight basis

D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-004			
Description: 16WC1A				Matrix: Aqueous			
Date Sampled: 10/22/2020 0925				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1455	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	390		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	12		5.0	ug/L	1
Copper	7440-50-8	6020B	5.0	U	5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	13		10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	ug/L	1

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

H = Out of holding time

W = Reported on wet weight basis

D = Dilution > 1

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Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-005			
Description: 16WDUP				Matrix: Aqueous			
Date Sampled: 10/22/2020 0935				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1059	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

H = Out of holding time

W = Reported on wet weight basis

D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-005			
Description: 16WDUP				Matrix: Aqueous			
Date Sampled: 10/22/2020 0935				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1535	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	390		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	12		5.0	ug/L	1
Copper	7440-50-8	6020B	5.0	U	5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	13		10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%

H = Out of holding time W = Reported on wet weight basis D = Dilution > 1

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Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-006			
Description: 16WC1B				Matrix: Aqueous			
Date Sampled: 10/22/2020 0840				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1107	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

H = Out of holding time

W = Reported on wet weight basis

D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-006			
Description: 16WC1B				Matrix: Aqueous			
Date Sampled: 10/22/2020 0840				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1541	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	110		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	13		5.0	ug/L	1
Copper	7440-50-8	6020B	5.0	U	5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	10	U	10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%

H = Out of holding time W = Reported on wet weight basis D = Dilution > 1

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Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-007			
Description: 16-2				Matrix: Aqueous			
Date Sampled: 10/21/2020 0955				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1109	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

H = Out of holding time

W = Reported on wet weight basis

D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-007			
Description: 16-2				Matrix: Aqueous			
Date Sampled: 10/21/2020 0955				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1547	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	200		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	5.0	U	5.0	ug/L	1
Copper	7440-50-8	6020B	5.0	U	5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	10	U	10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%

H = Out of holding time W = Reported on wet weight basis D = Dilution > 1

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Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-008			
Description: 16-3				Matrix: Aqueous			
Date Sampled: 10/21/2020 1115				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1112	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range
U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%
H = Out of holding time W = Reported on wet weight basis D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-008			
Description: 16-3				Matrix: Aqueous			
Date Sampled: 10/21/2020 1115				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1553	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	730		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	5.0	U	5.0	ug/L	1
Copper	7440-50-8	6020B	5.0	U	5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	10	U	10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range
U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%
H = Out of holding time W = Reported on wet weight basis

D = Dilution > 1

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Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-009			
Description: 16-5				Matrix: Aqueous			
Date Sampled: 10/21/2020 0830				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1114	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range
U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%
H = Out of holding time W = Reported on wet weight basis D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-009			
Description: 16-5				Matrix: Aqueous			
Date Sampled: 10/21/2020 0830				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1559	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	160		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	5.0	U	5.0	ug/L	1
Copper	7440-50-8	6020B	5.0	U	5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	10	U	10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range
U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%
H = Out of holding time W = Reported on wet weight basis

D = Dilution > 1

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Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-010			
Description: 16WC2B				Matrix: Aqueous			
Date Sampled: 10/21/2020 0920				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1117	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range
 U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%
 H = Out of holding time W = Reported on wet weight basis D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-010			
Description: 16WC2B				Matrix: Aqueous			
Date Sampled: 10/21/2020 0920				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1605	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	110		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	5.0	U	5.0	ug/L	1
Copper	7440-50-8	6020B	5.0	U	5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	10	U	10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%

H = Out of holding time W = Reported on wet weight basis D = Dilution > 1

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Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-011			
Description: 16SPRING				Matrix: Aqueous			
Date Sampled: 10/21/2020 0840				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1119	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range
 U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%
 H = Out of holding time W = Reported on wet weight basis D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-011			
Description: 16SPRING				Matrix: Aqueous			
Date Sampled: 10/21/2020 0840				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1622	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	210		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	5.0	U	5.0	ug/L	1
Copper	7440-50-8	6020B	5.0	U	5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	10	U	10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range
U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%
H = Out of holding time W = Reported on wet weight basis

D = Dilution > 1

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

QC Summary

ICP-MS - MB

Sample ID: VQ71157-001

Matrix: Aqueous

Batch: 71157

Prep Method: 3005A

Analytical Method: 6020B

Prep Date: 10/28/2020 1551

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Arsenic	10	U	1	10	ug/L	10/29/2020 1402
Barium	10	U	1	10	ug/L	10/29/2020 1402
Beryllium	1.0	U	1	1.0	ug/L	10/29/2020 1402
Cadmium	1.0	U	1	1.0	ug/L	10/29/2020 1402
Chromium	5.0	U	1	5.0	ug/L	10/29/2020 1402
Cobalt	5.0	U	1	5.0	ug/L	10/29/2020 1402
Copper	5.0	U	1	5.0	ug/L	10/29/2020 1402
Lead	3.0	U	1	3.0	ug/L	10/29/2020 1402
Nickel	10	U	1	10	ug/L	10/29/2020 1402
Vanadium	10	U	1	10	ug/L	10/29/2020 1402
Zinc	30	U	1	30	ug/L	10/29/2020 1402

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

ICP-MS - LCS

Sample ID: VQ71157-002

Matrix: Aqueous

Batch: 71157

Prep Method: 3005A

Analytical Method: 6020B

Prep Date: 10/28/2020 1551

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Arsenic	100	100		1	101	80-120	10/29/2020 1408
Barium	100	97		1	97	80-120	10/29/2020 1408
Beryllium	100	97		1	97	80-120	10/29/2020 1408
Cadmium	100	97		1	97	80-120	10/29/2020 1408
Chromium	100	100		1	102	80-120	10/29/2020 1408
Cobalt	100	100		1	103	80-120	10/29/2020 1408
Copper	100	100		1	104	80-120	10/29/2020 1408
Lead	100	97		1	97	80-120	10/29/2020 1408
Nickel	100	100		1	103	80-120	10/29/2020 1408
Vanadium	100	100		1	101	80-120	10/29/2020 1408
Zinc	100	100		1	102	80-120	10/29/2020 1408

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

ICP-MS - MS

Sample ID: VJ23005-001MS

Matrix: Aqueous

Batch: 71157

Prep Method: 3005A

Analytical Method: 6020B

Prep Date: 10/28/2020 1551

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Arsenic	0.0	100	99		1	99	75-125	10/29/2020 1420
Barium	170	100	270		1	93	75-125	10/29/2020 1420
Beryllium	0.0	100	45	N	1	45	75-125	10/29/2020 1420
Cadmium	0.0	100	99		1	99	75-125	10/29/2020 1420
Chromium	0.0	100	98		1	98	75-125	10/29/2020 1420
Cobalt	0.0	100	95		1	95	75-125	10/29/2020 1420
Copper	0.0	100	95		1	95	75-125	10/29/2020 1420
Lead	0.0	100	100		1	100	75-125	10/29/2020 1420
Nickel	0.0	100	99		1	99	75-125	10/29/2020 1420
Vanadium	0.0	100	98		1	98	75-125	10/29/2020 1420
Zinc	0.0	100	96		1	96	75-125	10/29/2020 1420

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

ICP-MS - MSD

Sample ID: VJ23005-001MD

Matrix: Aqueous

Batch: 71157

Prep Method: 3005A

Analytical Method: 6020B

Prep Date: 10/28/2020 1551

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Arsenic	0.0	100	100		1	100	1.5	75-125	20	10/29/2020 1425
Barium	170	100	260		1	91	0.83	75-125	20	10/29/2020 1425
Beryllium	0.0	100	45	N	1	45	1.8	75-125	20	10/29/2020 1425
Cadmium	0.0	100	100		1	100	0.84	75-125	20	10/29/2020 1425
Chromium	0.0	100	100		1	100	2.3	75-125	20	10/29/2020 1425
Cobalt	0.0	100	98		1	98	2.8	75-125	20	10/29/2020 1425
Copper	0.0	100	96		1	96	0.51	75-125	20	10/29/2020 1425
Lead	0.0	100	99		1	99	1.0	75-125	20	10/29/2020 1425
Nickel	0.0	100	100		1	101	2.0	75-125	20	10/29/2020 1425
Vanadium	0.0	100	100		1	101	2.2	75-125	20	10/29/2020 1425
Zinc	0.0	100	100		1	101	5.1	75-125	20	10/29/2020 1425

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

ICP-MS - MS

Sample ID: VJ23005-004MS

Matrix: Aqueous

Batch: 71157

Prep Method: 3005A

Analytical Method: 6020B

Prep Date: 10/28/2020 1551

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Arsenic	0.0	100	100		1	105	75-125	10/29/2020 1512
Barium	390	100	490		1	94	75-125	10/29/2020 1512
Beryllium	0.0	100	42	N	1	42	75-125	10/29/2020 1512
Cadmium	0.0	100	99		1	99	75-125	10/29/2020 1512
Chromium	0.0	100	100		1	101	75-125	10/29/2020 1512
Cobalt	12	100	110		1	98	75-125	10/29/2020 1512
Copper	0.0	100	97		1	97	75-125	10/29/2020 1512
Lead	0.0	100	99		1	99	75-125	10/29/2020 1512
Nickel	13	100	110		1	97	75-125	10/29/2020 1512
Vanadium	0.0	100	100		1	103	75-125	10/29/2020 1512
Zinc	0.0	100	110		1	106	75-125	10/29/2020 1512

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

ICP-MS - MSD

Sample ID: VJ23005-004MD

Matrix: Aqueous

Batch: 71157

Prep Method: 3005A

Analytical Method: 6020B

Prep Date: 10/28/2020 1551

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Arsenic	0.0	100	100		1	104	0.57	75-125	20	10/29/2020 1518
Barium	390	100	490		1	96	0.39	75-125	20	10/29/2020 1518
Beryllium	0.0	100	42	N	1	42	0.31	75-125	20	10/29/2020 1518
Cadmium	0.0	100	99		1	99	0.34	75-125	20	10/29/2020 1518
Chromium	0.0	100	98		1	98	3.2	75-125	20	10/29/2020 1518
Cobalt	12	100	110		1	96	2.3	75-125	20	10/29/2020 1518
Copper	0.0	100	95		1	95	2.9	75-125	20	10/29/2020 1518
Lead	0.0	100	100		1	100	0.53	75-125	20	10/29/2020 1518
Nickel	13	100	110		1	95	1.8	75-125	20	10/29/2020 1518
Vanadium	0.0	100	100		1	100	3.0	75-125	20	10/29/2020 1518
Zinc	0.0	100	100		1	100	5.4	75-125	20	10/29/2020 1518

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Mercury - MB

Sample ID: VQ72243-001

Matrix: Aqueous

Batch: 72243

Prep Method:

Analytical Method: 7470A

Prep Date: 11/05/2020 0550

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Mercury	2.0	U	1	2.0	ug/L	11/05/2020 1039

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Mercury - LCS

Sample ID: VQ72243-002

Matrix: Aqueous

Batch: 72243

Prep Method:

Analytical Method: 7470A

Prep Date: 11/05/2020 0550

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	2.0	1.9		1	95	80-120	11/05/2020 1041

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Mercury - MS

Sample ID: VJ23005-004MS

Matrix: Aqueous

Batch: 72243

Prep Method:

Analytical Method: 7470A

Prep Date: 11/05/2020 0550

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.0	2.0	1.7		1	87	85-115	11/05/2020 1047

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Mercury - MSD

Sample ID: VJ23005-004MD

Matrix: Aqueous

Batch: 72243

Prep Method:

Analytical Method: 7470A

Prep Date: 11/05/2020 0550

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Mercury	0.0	2.0	1.6	N	1	80	8.5	85-115	20	11/05/2020 1049

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody and Miscellaneous Documents

20407

CHAIN OF CUSTODY RECORD

Laboratory: PACE - Sheeley Environmental - 106 Vantage Point Dr. West Columbia, SC 29172 803-227-3160 PM: Cathy Dover cell 915-616-1180 FAX 9-22-2020

Client: Project: 12-237-30401-9487-8-100 Cur Loc: Treating Name:		Sample ID: 12-237-30401-9487-8-100	
Consent: A: ☐ B: ☐ C: ☐ D: ☐ E: ☐ F: ☐ G: ☐ H: ☐ I: ☐ J: ☐ K: ☐ L: ☐ M: ☐ N: ☐ O: ☐ P: ☐ Q: ☐ R: ☐ S: ☐ T: ☐ U: ☐ V: ☐ W: ☐ X: ☐ Y: ☐ Z: ☐		Sample Description: A: ☐ B: ☐ C: ☐ D: ☐ E: ☐ F: ☐ G: ☐ H: ☐ I: ☐ J: ☐ K: ☐ L: ☐ M: ☐ N: ☐ O: ☐ P: ☐ Q: ☐ R: ☐ S: ☐ T: ☐ U: ☐ V: ☐ W: ☐ X: ☐ Y: ☐ Z: ☐	
Box 1 - Sample Type: A: ☐ B: ☐ C: ☐ D: ☐ E: ☐ F: ☐ G: ☐ H: ☐ I: ☐ J: ☐ K: ☐ L: ☐ M: ☐ N: ☐ O: ☐ P: ☐ Q: ☐ R: ☐ S: ☐ T: ☐ U: ☐ V: ☐ W: ☐ X: ☐ Y: ☐ Z: ☐		Box 2 - Sample Container Type: A: ☐ B: ☐ C: ☐ D: ☐ E: ☐ F: ☐ G: ☐ H: ☐ I: ☐ J: ☐ K: ☐ L: ☐ M: ☐ N: ☐ O: ☐ P: ☐ Q: ☐ R: ☐ S: ☐ T: ☐ U: ☐ V: ☐ W: ☐ X: ☐ Y: ☐ Z: ☐	
Box 3 - Sample Date: Date: 10/22/2020		Box 4 - Sample Time: Time: 10:55	
Box 5 - Sample Location: Location: 16C1		Box 6 - Sample Volume: Volume: 1	
Box 7 - Sample Analysis: Analysis: Metals PH		Box 8 - Sample Method: Method: 7470A (Mercury)	
Box 9 - Sample Results: Results: 16C1 10/22/2020 10:55		Box 10 - Sample Comments: Comments:	
Box 11 - Sample Signature: Signature:		Box 12 - Sample Date: Date: 10/22/2020	
Box 13 - Sample Time: Time: 10:55		Box 14 - Sample Location: Location: 16C1	
Box 15 - Sample Volume: Volume: 1		Box 16 - Sample Analysis: Analysis: Metals PH	
Box 17 - Sample Results: Results: 16C1 10/22/2020 10:55		Box 18 - Sample Comments: Comments:	
Box 19 - Sample Signature: Signature:		Box 20 - Sample Date: Date: 10/22/2020	
Box 21 - Sample Time: Time: 10:55		Box 22 - Sample Location: Location: 16C1	
Box 23 - Sample Volume: Volume: 1		Box 24 - Sample Analysis: Analysis: Metals PH	
Box 25 - Sample Results: Results: 16C1 10/22/2020 10:55		Box 26 - Sample Comments: Comments:	
Box 27 - Sample Signature: Signature:		Box 28 - Sample Date: Date: 10/22/2020	
Box 29 - Sample Time: Time: 10:55		Box 30 - Sample Location: Location: 16C1	
Box 31 - Sample Volume: Volume: 1		Box 32 - Sample Analysis: Analysis: Metals PH	
Box 33 - Sample Results: Results: 16C1 10/22/2020 10:55		Box 34 - Sample Comments: Comments:	
Box 35 - Sample Signature: Signature:		Box 36 - Sample Date: Date: 10/22/2020	
Box 37 - Sample Time: Time: 10:55		Box 38 - Sample Location: Location: 16C1	
Box 39 - Sample Volume: Volume: 1		Box 40 - Sample Analysis: Analysis: Metals PH	
Box 41 - Sample Results: Results: 16C1 10/22/2020 10:55		Box 42 - Sample Comments: Comments:	
Box 43 - Sample Signature: Signature:		Box 44 - Sample Date: Date: 10/22/2020	
Box 45 - Sample Time: Time: 10:55		Box 46 - Sample Location: Location: 16C1	
Box 47 - Sample Volume: Volume: 1		Box 48 - Sample Analysis: Analysis: Metals PH	
Box 49 - Sample Results: Results: 16C1 10/22/2020 10:55		Box 50 - Sample Comments: Comments:	
Box 51 - Sample Signature: Signature:		Box 52 - Sample Date: Date: 10/22/2020	
Box 53 - Sample Time: Time: 10:55		Box 54 - Sample Location: Location: 16C1	
Box 55 - Sample Volume: Volume: 1		Box 56 - Sample Analysis: Analysis: Metals PH	
Box 57 - Sample Results: Results: 16C1 10/22/2020 10:55		Box 58 - Sample Comments: Comments:	
Box 59 - Sample Signature: Signature:		Box 60 - Sample Date: Date: 10/22/2020	
Box 61 - Sample Time: Time: 10:55		Box 62 - Sample Location: Location: 16C1	
Box 63 - Sample Volume: Volume: 1		Box 64 - Sample Analysis: Analysis: Metals PH	
Box 65 - Sample Results: Results: 16C1 10/22/2020 10:55		Box 66 - Sample Comments: Comments:	
Box 67 - Sample Signature: Signature:		Box 68 - Sample Date: Date: 10/22/2020	
Box 69 - Sample Time: Time: 10:55		Box 70 - Sample Location: Location: 16C1	
Box 71 - Sample Volume: Volume: 1		Box 72 - Sample Analysis: Analysis: Metals PH	
Box 73 - Sample Results: Results: 16C1 10/22/2020 10:55		Box 74 - Sample Comments: Comments:	
Box 75 - Sample Signature: Signature:		Box 76 - Sample Date: Date: 10/22/2020	
Box 77 - Sample Time: Time: 10:55		Box 78 - Sample Location: Location: 16C1	
Box 79 - Sample Volume: Volume: 1		Box 80 - Sample Analysis: Analysis: Metals PH	
Box 81 - Sample Results: Results: 16C1 10/22/2020 10:55		Box 82 - Sample Comments: Comments:	
Box 83 - Sample Signature: Signature:		Box 84 - Sample Date: Date: 10/22/2020	
Box 85 - Sample Time: Time: 10:55		Box 86 - Sample Location: Location: 16C1	
Box 87 - Sample Volume: Volume: 1		Box 88 - Sample Analysis: Analysis: Metals PH	
Box 89 - Sample Results: Results: 16C1 10/22/2020 10:55		Box 90 - Sample Comments: Comments:	
Box 91 - Sample Signature: Signature:		Box 92 - Sample Date: Date: 10/22/2020	
Box 93 - Sample Time: Time: 10:55		Box 94 - Sample Location: Location: 16C1	
Box 95 - Sample Volume: Volume: 1		Box 96 - Sample Analysis: Analysis: Metals PH	
Box 97 - Sample Results: Results: 16C1 10/22/2020 10:55		Box 98 - Sample Comments: Comments:	
Box 99 - Sample Signature: Signature:		Box 100 - Sample Date: Date: 10/22/2020	

HWMU16
Radford Army Ammunition Plant (RFAAP)
Semiannual Monitoring Event
DAA JN: B03204-20A

ANALYTICAL METHOD: SEE BELOW
 TYPE METHOD: SEE BELOW
 CLASS: TOTAL

Method SW 846-~~6020B~~/3005A (ICP/MS)

No.	ANALYTE	CAS RN	Required LOQ (µg/l)
1.	Arsenic	7440-38-2	10
2.	Barium	7440-39-3	10
3.	Beryllium	7440-41-7	1
4.	Cadmium	7440-43-9	1
5.	Chromium	7440-47-3	5
6.	Cobalt	7440-48-4	5
7.	Copper	7440-50-8	5
8.	Lead	7440-32-1	2-3 (per DEQ 2019- class 1 permit mod pending)
9.	Nickel	7440-02-0	10
10.	Vanadium	7440-62-2	10
11.	Zinc	7440-66-6	30

Method SW 7470A/CVAA

12	Mercury	7439-97-6 2/7470A	2
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Notes:

- Antimony, selenium and silver deleted 4-6,2012.
- 11 Zinc QL increased 11/2016, lead increased to 2 ppb.
- 10/2016 JCF- rev 10/2017
- 10/2018 – Changed to 6020 "B" for Shealy. 6020 "A" can still be used. No other changes. Still current.

Report to at or above QL only. JCF 3-25-2020

page 2 of 2 -
 JCF 9-22-2020

J:\environmental\hbg\databases\raap\sample event set up\semi-annual events\hwmu-16\hwmu16-target analytic list-q as of 08/2020.doc
 JCF 11/01/2024

PACE ANALYTICAL SERVICES, LLC



Samples Receipt Checklist (SRC) (ME0018C-15)

Issuing Authority: Pace ENV - WCOL

Revised: 9/29/2020

Page 1 of 1

Sample Receipt Checklist (SRC)

Client: DRAPER Cooler Inspected by/date: JOSL 10/23/20 Lot #: W23005

Means of receipt: ☐ SESI ☐ Client ☒ UPS ☐ FedEx ☐ Other: _____	
☒ Yes ☐ No	1. Were custody seals present on the cooler?
☒ Yes ☐ No ☐ NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: <u>20-2295</u> Chlorine Strip ID: <u>NA</u> Tested by: <u>JOSL</u>	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt: <u>1.6 / 1.6 °C NA / NA °C NA / NA °C NA / NA °C</u> %Solid Snap-Cup ID: <u>NA</u>	
Method: ☐ Temperature Blank ☐ Against Bottles IR Gun ID: <u>5</u> IR Gun Correction Factor: <u>0</u> °C	
Method of coolant: ☒ Wet Ice ☐ Ice Packs ☐ Dry Ice ☐ None	
☐ Yes ☐ No ☒ NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
☒ Yes ☐ No ☐ NA	4. Is the commercial courier's packing slip attached to this form?
☒ Yes ☐ No	5. Were proper custody procedures (relinquished/received) followed?
☒ Yes ☐ No	6. Were sample IDs listed on the COC?
☒ Yes ☐ No	7. Were sample IDs listed on all sample containers?
☒ Yes ☐ No	8. Was collection date & time listed on the COC?
☒ Yes ☐ No	9. Was collection date & time listed on all sample containers?
☒ Yes ☐ No	10. Did all container label information (ID, date, time) agree with the COC?
☒ Yes ☐ No	11. Were tests to be performed listed on the COC?
☒ Yes ☐ No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
☒ Yes ☐ No	13. Was adequate sample volume available?
☒ Yes ☐ No	14. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
☐ Yes ☒ No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
☐ Yes ☐ No ☒ NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (1/4") or 6mm in diameter) in any of the VOA vials?
☒ Yes ☐ No ☐ NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
☐ Yes ☐ No ☒ NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
☐ Yes ☐ No ☒ NA	19. Were all applicable NH ₃ /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
☐ Yes ☐ No ☒ NA	20. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc...) correctly transcribed from the COC into the comment section in LIMS?
☐ Yes ☒ No	21. Was the quote number listed on the container label? If yes, Quote #
Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) <u>NA</u> were received incorrectly preserved and were adjusted accordingly in sample receiving with <u>NA</u> mL of circle one: H ₂ SO ₄ , HNO ₃ , HCl, NaOH using SR # <u>NA</u> .	
Time of preservation <u>NA</u> . If more than one preservative is needed, please note in the comments below.	
Sample(s) <u>NA</u> were received with bubbles >6 mm in diameter.	
Samples(s) <u>NA</u> were received with TRC > 0.5 mg/L (If #19 is <u>no</u>) and were adjusted accordingly in sample receiving with sodium thiosulfate (Na ₂ S ₂ O ₃) with Shealy ID: <u>NA</u> .	
SR barcode labels applied by: <u>JOSL</u> Date: <u>10/23/20</u>	

Comments:

Metals



Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-001			
Description: 16C1				Matrix: Aqueous			
Date Sampled: 10/22/2020 1055				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1052	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation
 U = Not detected at or above the LOQ
 H = Out of holding time

B = Detected in the method blank
 N = Recovery is out of criteria
 W = Reported on wet weight basis

E = Quantitation of compound exceeded the calibration range
 P = The RPD between two GC columns exceeds 40%
 D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-001			
Description: 16C1				Matrix: Aqueous			
Date Sampled: 10/22/2020 1055				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1414	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	170		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	5.0	U	5.0	ug/L	1
Copper	7440-50-8	6020B	5.0	U	5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	10	U	10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%

H = Out of holding time W = Reported on wet weight basis D = Dilution > 1

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Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-002			
Description: 16MW8				Matrix: Aqueous			
Date Sampled: 10/21/2020 1035				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1054	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range
U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%
H = Out of holding time W = Reported on wet weight basis

D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-002			
Description: 16MW8				Matrix: Aqueous			
Date Sampled: 10/21/2020 1035				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1443	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	130		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	5.0	U	5.0	ug/L	1
Copper	7440-50-8	6020B	15		5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	10	U	10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	44		30	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range
U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%
H = Out of holding time W = Reported on wet weight basis D = Dilution > 1

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Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-003			
Description: 16MW9				Matrix: Aqueous			
Date Sampled: 10/22/2020 1020				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1057	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range
 U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%
 H = Out of holding time W = Reported on wet weight basis D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-003			
Description: 16MW9				Matrix: Aqueous			
Date Sampled: 10/22/2020 1020				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1449	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	570		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	5.3		5.0	ug/L	1
Copper	7440-50-8	6020B	5.0	U	5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	14		10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	ug/L	1

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

H = Out of holding time

W = Reported on wet weight basis

D = Dilution > 1

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Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-004			
Description: 16WC1A				Matrix: Aqueous			
Date Sampled: 10/22/2020 0925				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1044	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

H = Out of holding time

W = Reported on wet weight basis

D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-004			
Description: 16WC1A				Matrix: Aqueous			
Date Sampled: 10/22/2020 0925				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1455	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	390		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	12		5.0	ug/L	1
Copper	7440-50-8	6020B	5.0	U	5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	13		10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%

H = Out of holding time W = Reported on wet weight basis D = Dilution > 1

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Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-005			
Description: 16WDUP				Matrix: Aqueous			
Date Sampled: 10/22/2020 0935				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1059	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

H = Out of holding time

W = Reported on wet weight basis

D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-005			
Description: 16WDUP				Matrix: Aqueous			
Date Sampled: 10/22/2020 0935				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1535	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	390		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	12		5.0	ug/L	1
Copper	7440-50-8	6020B	5.0	U	5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	13		10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%

H = Out of holding time W = Reported on wet weight basis D = Dilution > 1

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Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-006			
Description: 16WC1B				Matrix: Aqueous			
Date Sampled: 10/22/2020 0840				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1107	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range
U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%
H = Out of holding time W = Reported on wet weight basis

D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-006			
Description: 16WC1B				Matrix: Aqueous			
Date Sampled: 10/22/2020 0840				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1541	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	110		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	13		5.0	ug/L	1
Copper	7440-50-8	6020B	5.0	U	5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	10	U	10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	ug/L	1

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

H = Out of holding time

W = Reported on wet weight basis

D = Dilution > 1

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Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-007			
Description: 16-2				Matrix: Aqueous			
Date Sampled: 10/21/2020 0955				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1109	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range
 U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%
 H = Out of holding time W = Reported on wet weight basis D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-007			
Description: 16-2				Matrix: Aqueous			
Date Sampled: 10/21/2020 0955				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1547	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	200		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	5.0	U	5.0	ug/L	1
Copper	7440-50-8	6020B	5.0	U	5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	10	U	10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range
U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%
H = Out of holding time W = Reported on wet weight basis

D = Dilution > 1

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Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-008			
Description: 16-3				Matrix: Aqueous			
Date Sampled: 10/21/2020 1115				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1112	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

H = Out of holding time

W = Reported on wet weight basis

D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-008			
Description: 16-3				Matrix: Aqueous			
Date Sampled: 10/21/2020 1115				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1553	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	730		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	5.0	U	5.0	ug/L	1
Copper	7440-50-8	6020B	5.0	U	5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	10	U	10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%

H = Out of holding time W = Reported on wet weight basis D = Dilution > 1

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Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-009			
Description: 16-5				Matrix: Aqueous			
Date Sampled: 10/21/2020 0830				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1114	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation
U = Not detected at or above the LOQ
H = Out of holding time

B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis

E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-009			
Description: 16-5				Matrix: Aqueous			
Date Sampled: 10/21/2020 0830				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1559	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	160		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	5.0	U	5.0	ug/L	1
Copper	7440-50-8	6020B	5.0	U	5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	10	U	10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%

H = Out of holding time W = Reported on wet weight basis D = Dilution > 1

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Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-010			
Description: 16WC2B				Matrix: Aqueous			
Date Sampled: 10/21/2020 0920				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1117	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

H = Out of holding time

W = Reported on wet weight basis

D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-010			
Description: 16WC2B				Matrix: Aqueous			
Date Sampled: 10/21/2020 0920				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1605	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	110		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	5.0	U	5.0	ug/L	1
Copper	7440-50-8	6020B	5.0	U	5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	10	U	10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	ug/L	1

LOQ = Limit of Quantitation B = Detected in the method blank E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%

H = Out of holding time W = Reported on wet weight basis D = Dilution > 1

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Mercury

Client: Draper Aden Associates				Laboratory ID: VJ23005-011			
Description: 16SPRING				Matrix: Aqueous			
Date Sampled: 10/21/2020 0840				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	11/05/2020 1119	JAB2	11/05/2020 0550	72243

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Mercury	7439-97-6	7470A	2.0	U	2.0	ug/L	1

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

H = Out of holding time

W = Reported on wet weight basis

D = Dilution > 1

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ICP-MS

Client: Draper Aden Associates				Laboratory ID: VJ23005-011			
Description: 16SPRING				Matrix: Aqueous			
Date Sampled: 10/21/2020 0840				Project Name: RAAP HWMU16			
Date Received: 10/23/2020				Project Number: B03204-20A			

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	10/29/2020 1622	BPK	10/28/2020 1551	71157

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Arsenic	7440-38-2	6020B	10	U	10	ug/L	1
Barium	7440-39-3	6020B	210		10	ug/L	1
Beryllium	7440-41-7	6020B	1.0	U	1.0	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	ug/L	1
Cobalt	7440-48-4	6020B	5.0	U	5.0	ug/L	1
Copper	7440-50-8	6020B	5.0	U	5.0	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	ug/L	1
Nickel	7440-02-0	6020B	10	U	10	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	ug/L	1

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

H = Out of holding time

W = Reported on wet weight basis

D = Dilution > 1

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QC Summary

ICP-MS - MB

Sample ID: VQ71157-001

Matrix: Aqueous

Batch: 71157

Prep Method: 3005A

Analytical Method: 6020B

Prep Date: 10/28/2020 1551

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Arsenic	10	U	1	10	ug/L	10/29/2020 1402
Barium	10	U	1	10	ug/L	10/29/2020 1402
Beryllium	1.0	U	1	1.0	ug/L	10/29/2020 1402
Cadmium	1.0	U	1	1.0	ug/L	10/29/2020 1402
Chromium	5.0	U	1	5.0	ug/L	10/29/2020 1402
Cobalt	5.0	U	1	5.0	ug/L	10/29/2020 1402
Copper	5.0	U	1	5.0	ug/L	10/29/2020 1402
Lead	3.0	U	1	3.0	ug/L	10/29/2020 1402
Nickel	10	U	1	10	ug/L	10/29/2020 1402
Vanadium	10	U	1	10	ug/L	10/29/2020 1402
Zinc	30	U	1	30	ug/L	10/29/2020 1402

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

ICP-MS - LCS

Sample ID: VQ71157-002

Matrix: Aqueous

Batch: 71157

Prep Method: 3005A

Analytical Method: 6020B

Prep Date: 10/28/2020 1551

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Arsenic	100	100		1	101	80-120	10/29/2020 1408
Barium	100	97		1	97	80-120	10/29/2020 1408
Beryllium	100	97		1	97	80-120	10/29/2020 1408
Cadmium	100	97		1	97	80-120	10/29/2020 1408
Chromium	100	100		1	102	80-120	10/29/2020 1408
Cobalt	100	100		1	103	80-120	10/29/2020 1408
Copper	100	100		1	104	80-120	10/29/2020 1408
Lead	100	97		1	97	80-120	10/29/2020 1408
Nickel	100	100		1	103	80-120	10/29/2020 1408
Vanadium	100	100		1	101	80-120	10/29/2020 1408
Zinc	100	100		1	102	80-120	10/29/2020 1408

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

ICP-MS - MS

Sample ID: VJ23005-001MS

Matrix: Aqueous

Batch: 71157

Prep Method: 3005A

Analytical Method: 6020B

Prep Date: 10/28/2020 1551

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Arsenic	0.0	100	99		1	99	75-125	10/29/2020 1420
Barium	170	100	270		1	93	75-125	10/29/2020 1420
Beryllium	0.0	100	45	N	1	45	75-125	10/29/2020 1420
Cadmium	0.0	100	99		1	99	75-125	10/29/2020 1420
Chromium	0.0	100	98		1	98	75-125	10/29/2020 1420
Cobalt	0.0	100	95		1	95	75-125	10/29/2020 1420
Copper	0.0	100	95		1	95	75-125	10/29/2020 1420
Lead	0.0	100	100		1	100	75-125	10/29/2020 1420
Nickel	0.0	100	99		1	99	75-125	10/29/2020 1420
Vanadium	0.0	100	98		1	98	75-125	10/29/2020 1420
Zinc	0.0	100	96		1	96	75-125	10/29/2020 1420

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

ICP-MS - MSD

Sample ID: VJ23005-001MD

Matrix: Aqueous

Batch: 71157

Prep Method: 3005A

Analytical Method: 6020B

Prep Date: 10/28/2020 1551

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Arsenic	0.0	100	100		1	100	1.5	75-125	20	10/29/2020 1425
Barium	170	100	260		1	91	0.83	75-125	20	10/29/2020 1425
Beryllium	0.0	100	45	N	1	45	1.8	75-125	20	10/29/2020 1425
Cadmium	0.0	100	100		1	100	0.84	75-125	20	10/29/2020 1425
Chromium	0.0	100	100		1	100	2.3	75-125	20	10/29/2020 1425
Cobalt	0.0	100	98		1	98	2.8	75-125	20	10/29/2020 1425
Copper	0.0	100	96		1	96	0.51	75-125	20	10/29/2020 1425
Lead	0.0	100	99		1	99	1.0	75-125	20	10/29/2020 1425
Nickel	0.0	100	100		1	101	2.0	75-125	20	10/29/2020 1425
Vanadium	0.0	100	100		1	101	2.2	75-125	20	10/29/2020 1425
Zinc	0.0	100	100		1	101	5.1	75-125	20	10/29/2020 1425

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

ICP-MS - MS

Sample ID: VJ23005-004MS

Matrix: Aqueous

Batch: 71157

Prep Method: 3005A

Analytical Method: 6020B

Prep Date: 10/28/2020 1551

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Arsenic	0.0	100	100		1	105	75-125	10/29/2020 1512
Barium	390	100	490		1	94	75-125	10/29/2020 1512
Beryllium	0.0	100	42	N	1	42	75-125	10/29/2020 1512
Cadmium	0.0	100	99		1	99	75-125	10/29/2020 1512
Chromium	0.0	100	100		1	101	75-125	10/29/2020 1512
Cobalt	12	100	110		1	98	75-125	10/29/2020 1512
Copper	0.0	100	97		1	97	75-125	10/29/2020 1512
Lead	0.0	100	99		1	99	75-125	10/29/2020 1512
Nickel	13	100	110		1	97	75-125	10/29/2020 1512
Vanadium	0.0	100	100		1	103	75-125	10/29/2020 1512
Zinc	0.0	100	110		1	106	75-125	10/29/2020 1512

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

ICP-MS - MSD

Sample ID: VJ23005-004MD

Matrix: Aqueous

Batch: 71157

Prep Method: 3005A

Analytical Method: 6020B

Prep Date: 10/28/2020 1551

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Arsenic	0.0	100	100		1	104	0.57	75-125	20	10/29/2020 1518
Barium	390	100	490		1	96	0.39	75-125	20	10/29/2020 1518
Beryllium	0.0	100	42	N	1	42	0.31	75-125	20	10/29/2020 1518
Cadmium	0.0	100	99		1	99	0.34	75-125	20	10/29/2020 1518
Chromium	0.0	100	98		1	98	3.2	75-125	20	10/29/2020 1518
Cobalt	12	100	110		1	96	2.3	75-125	20	10/29/2020 1518
Copper	0.0	100	95		1	95	2.9	75-125	20	10/29/2020 1518
Lead	0.0	100	100		1	100	0.53	75-125	20	10/29/2020 1518
Nickel	13	100	110		1	95	1.8	75-125	20	10/29/2020 1518
Vanadium	0.0	100	100		1	100	3.0	75-125	20	10/29/2020 1518
Zinc	0.0	100	100		1	100	5.4	75-125	20	10/29/2020 1518

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Mercury - MB

Sample ID: VQ72243-001

Matrix: Aqueous

Batch: 72243

Prep Method:

Analytical Method: 7470A

Prep Date: 11/05/2020 0550

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Mercury	2.0	U	1	2.0	ug/L	11/05/2020 1039

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Mercury - LCS

Sample ID: VQ72243-002

Matrix: Aqueous

Batch: 72243

Prep Method:

Analytical Method: 7470A

Prep Date: 11/05/2020 0550

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	2.0	1.9		1	95	80-120	11/05/2020 1041

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Mercury - MS

Sample ID: VJ23005-004MS

Matrix: Aqueous

Batch: 72243

Prep Method:

Analytical Method: 7470A

Prep Date: 11/05/2020 0550

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.0	2.0	1.7		1	87	85-115	11/05/2020 1047

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Mercury - MSD

Sample ID: VJ23005-004MD

Matrix: Aqueous

Batch: 72243

Prep Method:

Analytical Method: 7470A

Prep Date: 11/05/2020 0550

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Mercury	0.0	2.0	1.6	N	1	80	8.5	85-115	20	11/05/2020 1049

LOQ = Limit of Quantitation

U = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

ICP-MS Metals

- COVER PAGE -
INORGANIC ANALYSIS DATA PACKAGE

Client: Draper Aden Associates

SDG No.: VJ23005

Method Type: ICP-MS

SOW No.: _____

Contract: RAAP HWMU16

Lab Code: _____

Case No.: _____

SAS No.: _____

Lab Sample ID	Client Sample ID	QC Description
VJ23005-001	16C1	
VJ23005-001S	16C1S	Matrix Spike
VJ23005-001SD	16C1SD	Matrix Spike Duplicate
VJ23005-002	16MW8	
VJ23005-003	16MW9	
VJ23005-004	16WC1A	
VJ23005-004S	16WC1AS	Matrix Spike
VJ23005-004SD	16WC1ASD	Matrix Spike Duplicate
VJ23005-005	16WDUP	
VJ23005-006	16WC1B	
VJ23005-007	16-2	
VJ23005-008	16-3	
VJ23005-009	16-5	

Were ICP interelement corrections applied? Yes/No Yes _____

Were ICP background corrections applied? Yes/No Yes _____

If yes - were raw data generated before applications of background corrections? Yes/No No _____

Comments: _____

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: _____

Date: _____ Title: _____

- COVER PAGE -
INORGANIC ANALYSIS DATA PACKAGE

Client: Draper Aden Associates

SDG No.: VJ23005

Method Type: ICP-MS

SOW No.: _____

Contract: RAAP HWMU16

Lab Code: _____

Case No.: _____

SAS No.: _____

Lab Sample ID

Client Sample ID

QC Description

VJ23005-010

16WC2B

VJ23005-011

16SPRING

Were ICP interelement corrections applied?

Yes/No

Yes

Were ICP background corrections applied?

Yes/No

Yes

If yes - were raw data generated before
applications of background corrections?

Yes/No

No

Comments: _____

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____

Name: _____

Date: _____

Title: _____

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Draper Aden Associates SDG No.: VJ23005

Contract: RAAP HWMU16 Lab Code: Case No.: SAS No.:

Initial Calibration Source: VHG

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV1									
	Arsenic	207.13	200.0	104	90.0 - 110.0	MS	10/29/2020	13:33	MS2102920A 6020B 200.8, g
	Barium	200.03	200.0	100	90.0 - 110.0	MS	10/29/2020	13:33	MS2102920A 6020B 200.8, g
	Beryllium	199.33	200.0	100	90.0 - 110.0	MS	10/29/2020	13:33	MS2102920A 6020B 200.8, g
	Cadmium	200.70	200.0	100	90.0 - 110.0	MS	10/29/2020	13:33	MS2102920A 6020B 200.8, g
	Chromium	200.00	200.0	100	90.0 - 110.0	MS	10/29/2020	13:33	MS2102920A 6020B 200.8, g
	Cobalt	199.33	200.0	100	90.0 - 110.0	MS	10/29/2020	13:33	MS2102920A 6020B 200.8, g
	Copper	196.80	200.0	98	90.0 - 110.0	MS	10/29/2020	13:33	MS2102920A 6020B 200.8, g
	Lead	201.67	200.0	101	90.0 - 110.0	MS	10/29/2020	13:33	MS2102920A 6020B 200.8, g
	Nickel	197.70	200.0	99	90.0 - 110.0	MS	10/29/2020	13:33	MS2102920A 6020B 200.8, g
	Vanadium	203.07	200.0	102	90.0 - 110.0	MS	10/29/2020	13:33	MS2102920A 6020B 200.8, g
	Zinc	202.20	200.0	101	90.0 - 110.0	MS	10/29/2020	13:33	MS2102920A 6020B 200.8, g
CCV1									
	Arsenic	300.63	300.0	100	90.0 - 110.0	MS	10/29/2020	13:50	MS2102920A 6020B 200.8, g
	Barium	289.37	300.0	96	90.0 - 110.0	MS	10/29/2020	13:50	MS2102920A 6020B 200.8, g
	Beryllium	293.03	300.0	98	90.0 - 110.0	MS	10/29/2020	13:50	MS2102920A 6020B 200.8, g
	Cadmium	296.17	300.0	99	90.0 - 110.0	MS	10/29/2020	13:50	MS2102920A 6020B 200.8, g
	Chromium	296.17	300.0	99	90.0 - 110.0	MS	10/29/2020	13:50	MS2102920A 6020B 200.8, g
	Cobalt	296.50	300.0	99	90.0 - 110.0	MS	10/29/2020	13:50	MS2102920A 6020B 200.8, g
	Copper	283.33	300.0	94	90.0 - 110.0	MS	10/29/2020	13:50	MS2102920A 6020B 200.8, g
	Lead	302.17	300.0	101	90.0 - 110.0	MS	10/29/2020	13:50	MS2102920A 6020B 200.8, g
	Nickel	286.07	300.0	95	90.0 - 110.0	MS	10/29/2020	13:50	MS2102920A 6020B 200.8, g
	Vanadium	303.20	300.0	101	90.0 - 110.0	MS	10/29/2020	13:50	MS2102920A 6020B 200.8, g
	Zinc	287.20	300.0	96	90.0 - 110.0	MS	10/29/2020	13:50	MS2102920A 6020B 200.8, g
CCV2									
	Arsenic	296.60	300.0	99	90.0 - 110.0	MS	10/29/2020	15:00	MS2102920A 6020B 200.8, g
	Barium	295.73	300.0	99	90.0 - 110.0	MS	10/29/2020	15:00	MS2102920A 6020B 200.8, g
	Beryllium	304.93	300.0	102	90.0 - 110.0	MS	10/29/2020	15:00	MS2102920A 6020B 200.8, g
	Cadmium	296.93	300.0	99	90.0 - 110.0	MS	10/29/2020	15:00	MS2102920A 6020B 200.8, g
	Chromium	295.23	300.0	98	90.0 - 110.0	MS	10/29/2020	15:00	MS2102920A 6020B 200.8, g
	Cobalt	295.60	300.0	99	90.0 - 110.0	MS	10/29/2020	15:00	MS2102920A 6020B 200.8, g
	Copper	284.73	300.0	95	90.0 - 110.0	MS	10/29/2020	15:00	MS2102920A 6020B 200.8, g
	Lead	305.03	300.0	102	90.0 - 110.0	MS	10/29/2020	15:00	MS2102920A 6020B 200.8, g
	Nickel	289.30	300.0	96	90.0 - 110.0	MS	10/29/2020	15:00	MS2102920A 6020B 200.8, g
	Vanadium	303.93	300.0	101	90.0 - 110.0	MS	10/29/2020	15:00	MS2102920A 6020B 200.8, g
	Zinc	293.53	300.0	98	90.0 - 110.0	MS	10/29/2020	15:00	MS2102920A 6020B 200.8, g

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Draper Aden Associates SDG No.: VJ23005

Contract: RAAP HWMU16 Lab Code: Case No.: SAS No.:

Initial Calibration Source: VHG

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV3									
	Arsenic	301.70	300.0	101	90.0 - 110.0	MS	10/29/2020	16:10	MS2102920A 6020B 200.8, g
	Barium	294.53	300.0	98	90.0 - 110.0	MS	10/29/2020	16:10	MS2102920A 6020B 200.8, g
	Beryllium	302.60	300.0	101	90.0 - 110.0	MS	10/29/2020	16:10	MS2102920A 6020B 200.8, g
	Cadmium	297.30	300.0	99	90.0 - 110.0	MS	10/29/2020	16:10	MS2102920A 6020B 200.8, g
	Chromium	304.63	300.0	102	90.0 - 110.0	MS	10/29/2020	16:10	MS2102920A 6020B 200.8, g
	Cobalt	303.43	300.0	101	90.0 - 110.0	MS	10/29/2020	16:10	MS2102920A 6020B 200.8, g
	Copper	285.03	300.0	95	90.0 - 110.0	MS	10/29/2020	16:10	MS2102920A 6020B 200.8, g
	Lead	304.23	300.0	101	90.0 - 110.0	MS	10/29/2020	16:10	MS2102920A 6020B 200.8, g
	Nickel	295.30	300.0	98	90.0 - 110.0	MS	10/29/2020	16:10	MS2102920A 6020B 200.8, g
	Vanadium	309.10	300.0	103	90.0 - 110.0	MS	10/29/2020	16:10	MS2102920A 6020B 200.8, g
	Zinc	295.73	300.0	99	90.0 - 110.0	MS	10/29/2020	16:10	MS2102920A 6020B 200.8, g
CCV4									
	Arsenic	301.60	300.0	101	90.0 - 110.0	MS	10/29/2020	17:20	MS2102920A 6020B 200.8, g
	Barium	296.53	300.0	99	90.0 - 110.0	MS	10/29/2020	17:20	MS2102920A 6020B 200.8, g
	Beryllium	299.97	300.0	100	90.0 - 110.0	MS	10/29/2020	17:20	MS2102920A 6020B 200.8, g
	Cadmium	301.03	300.0	100	90.0 - 110.0	MS	10/29/2020	17:20	MS2102920A 6020B 200.8, g
	Chromium	302.47	300.0	101	90.0 - 110.0	MS	10/29/2020	17:20	MS2102920A 6020B 200.8, g
	Cobalt	300.63	300.0	100	90.0 - 110.0	MS	10/29/2020	17:20	MS2102920A 6020B 200.8, g
	Copper	290.67	300.0	97	90.0 - 110.0	MS	10/29/2020	17:20	MS2102920A 6020B 200.8, g
	Lead	304.97	300.0	102	90.0 - 110.0	MS	10/29/2020	17:20	MS2102920A 6020B 200.8, g
	Nickel	292.43	300.0	97	90.0 - 110.0	MS	10/29/2020	17:20	MS2102920A 6020B 200.8, g
	Vanadium	309.87	300.0	103	90.0 - 110.0	MS	10/29/2020	17:20	MS2102920A 6020B 200.8, g
	Zinc	301.83	300.0	101	90.0 - 110.0	MS	10/29/2020	17:20	MS2102920A 6020B 200.8, g

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Draper Aden Associates

SDG No.: VJ23005

Contract: RAAP HWMU16

Lab Code:

Case No.:

SAS No.:

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	½LOQ	½LOQ	M	Analysis Date	Analysis Time	Run
ICB1										
	Arsenic	0.054	+/-1.000	U	1.000	1.000	MS	10/29/2020	13:39	MS2102920A 6
	Barium	-0.017	+/-2.500	U	2.500	2.500	MS	10/29/2020	13:39	MS2102920A 6
	Beryllium	0.024	+/-0.200	U	0.200	0.200	MS	10/29/2020	13:39	MS2102920A 6
	Cadmium	0.009	+/-0.250	U	0.250	0.250	MS	10/29/2020	13:39	MS2102920A 6
	Chromium	-0.020	+/-2.500	U	2.500	2.500	MS	10/29/2020	13:39	MS2102920A 6
	Cobalt	-0.004	+/-2.500	U	2.500	2.500	MS	10/29/2020	13:39	MS2102920A 6
	Copper	0.027	+/-2.500	U	2.500	2.500	MS	10/29/2020	13:39	MS2102920A 6
	Lead	0.004	+/-0.500	U	0.500	0.500	MS	10/29/2020	13:39	MS2102920A 6
	Nickel	0.002	+/-2.500	U	2.500	2.500	MS	10/29/2020	13:39	MS2102920A 6
	Vanadium	0.003	+/-2.500	U	2.500	2.500	MS	10/29/2020	13:39	MS2102920A 6
	Zinc	-0.013	+/-5.000	U	5.000	5.000	MS	10/29/2020	13:39	MS2102920A 6
CCB1										
	Arsenic	0.093	+/-1.000	U	1.000	1.000	MS	10/29/2020	13:56	MS2102920A 6
	Barium	-0.003	+/-2.500	U	2.500	2.500	MS	10/29/2020	13:56	MS2102920A 6
	Beryllium	0.030	+/-0.200	U	0.200	0.200	MS	10/29/2020	13:56	MS2102920A 6
	Cadmium	0.002	+/-0.250	U	0.250	0.250	MS	10/29/2020	13:56	MS2102920A 6
	Chromium	-0.026	+/-2.500	U	2.500	2.500	MS	10/29/2020	13:56	MS2102920A 6
	Cobalt	-0.004	+/-2.500	U	2.500	2.500	MS	10/29/2020	13:56	MS2102920A 6
	Copper	-0.008	+/-2.500	U	2.500	2.500	MS	10/29/2020	13:56	MS2102920A 6
	Lead	0.005	+/-0.500	U	0.500	0.500	MS	10/29/2020	13:56	MS2102920A 6
	Nickel	0.006	+/-2.500	U	2.500	2.500	MS	10/29/2020	13:56	MS2102920A 6
	Vanadium	0.016	+/-2.500	U	2.500	2.500	MS	10/29/2020	13:56	MS2102920A 6
	Zinc	0.003	+/-5.000	U	5.000	5.000	MS	10/29/2020	13:56	MS2102920A 6

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Draper Aden Associates

SDG No.: VJ23005

Contract: RAAP HWMU16

Lab Code:

Case No.:

SAS No.:

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	½LOQ	½LOQ	M	Analysis Date	Analysis Time	Run
CCB2										
	Arsenic	0.078	+/-1.000	U	1.000	1.000	MS	10/29/2020	15:06	MS2102920A 6
	Barium	-0.007	+/-2.500	U	2.500	2.500	MS	10/29/2020	15:06	MS2102920A 6
	Beryllium	0.041	+/-0.200	U	0.200	0.200	MS	10/29/2020	15:06	MS2102920A 6
	Cadmium	0.008	+/-0.250	U	0.250	0.250	MS	10/29/2020	15:06	MS2102920A 6
	Chromium	-0.019	+/-2.500	U	2.500	2.500	MS	10/29/2020	15:06	MS2102920A 6
	Cobalt	0.000	+/-2.500	U	2.500	2.500	MS	10/29/2020	15:06	MS2102920A 6
	Copper	-0.010	+/-2.500	U	2.500	2.500	MS	10/29/2020	15:06	MS2102920A 6
	Lead	0.008	+/-0.500	U	0.500	0.500	MS	10/29/2020	15:06	MS2102920A 6
	Nickel	-0.003	+/-2.500	U	2.500	2.500	MS	10/29/2020	15:06	MS2102920A 6
	Vanadium	0.014	+/-2.500	U	2.500	2.500	MS	10/29/2020	15:06	MS2102920A 6
	Zinc	0.086	+/-5.000	U	5.000	5.000	MS	10/29/2020	15:06	MS2102920A 6
CCB3										
	Arsenic	0.083	+/-1.000	U	1.000	1.000	MS	10/29/2020	16:16	MS2102920A 6
	Barium	0.000	+/-2.500	U	2.500	2.500	MS	10/29/2020	16:16	MS2102920A 6
	Beryllium	0.042	+/-0.200	U	0.200	0.200	MS	10/29/2020	16:16	MS2102920A 6
	Cadmium	0.012	+/-0.250	U	0.250	0.250	MS	10/29/2020	16:16	MS2102920A 6
	Chromium	-0.028	+/-2.500	U	2.500	2.500	MS	10/29/2020	16:16	MS2102920A 6
	Cobalt	-0.002	+/-2.500	U	2.500	2.500	MS	10/29/2020	16:16	MS2102920A 6
	Copper	0.003	+/-2.500	U	2.500	2.500	MS	10/29/2020	16:16	MS2102920A 6
	Lead	0.009	+/-0.500	U	0.500	0.500	MS	10/29/2020	16:16	MS2102920A 6
	Nickel	0.015	+/-2.500	U	2.500	2.500	MS	10/29/2020	16:16	MS2102920A 6
	Vanadium	0.010	+/-2.500	U	2.500	2.500	MS	10/29/2020	16:16	MS2102920A 6
	Zinc	0.039	+/-5.000	U	5.000	5.000	MS	10/29/2020	16:16	MS2102920A 6

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Draper Aden Associates

SDG No.: VJ23005

Contract: RAAP HWMU16

Lab Code:

Case No.:

SAS No.:

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	½LOQ	½LOQ	M	Analysis Date	Analysis Time	Run
CCB4										
	Arsenic	-0.034	+/-1.000	U	1.000	1.000	MS	10/29/2020	17:26	MS2102920A 6
	Barium	-0.011	+/-2.500	U	2.500	2.500	MS	10/29/2020	17:26	MS2102920A 6
	Beryllium	0.030	+/-0.200	U	0.200	0.200	MS	10/29/2020	17:26	MS2102920A 6
	Cadmium	0.013	+/-0.250	U	0.250	0.250	MS	10/29/2020	17:26	MS2102920A 6
	Chromium	0.003	+/-2.500	U	2.500	2.500	MS	10/29/2020	17:26	MS2102920A 6
	Cobalt	0.007	+/-2.500	U	2.500	2.500	MS	10/29/2020	17:26	MS2102920A 6
	Copper	0.010	+/-2.500	U	2.500	2.500	MS	10/29/2020	17:26	MS2102920A 6
	Lead	0.015	+/-0.500	U	0.500	0.500	MS	10/29/2020	17:26	MS2102920A 6
	Nickel	0.037	+/-2.500	U	2.500	2.500	MS	10/29/2020	17:26	MS2102920A 6
	Vanadium	0.032	+/-2.500	U	2.500	2.500	MS	10/29/2020	17:26	MS2102920A 6
	Zinc	0.087	+/-5.000	U	5.000	5.000	MS	10/29/2020	17:26	MS2102920A 6

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INTERFERENCE CHECK SAMPLE

Client: Draper Aden Associates

SDG No.: VJ23005

Contract: RAAP HWMU16

Lab Code:

Case No.:

SAS No.:

ICS Source: Inorganic Ventures

Instrument ID: ICPMS2

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window	Analysis Date	Analysis Time	Run Number
ICSA								
	Arsenic	-0.063			-4.000 to 4.000	10/29/2020	13:45	MS2102920A 6
	Barium	0.0040			-10.0000 to 10.000	10/29/2020	13:45	MS2102920A 6
	Beryllium	0.029			-0.800 to 0.800	10/29/2020	13:45	MS2102920A 6
	Cadmium	-0.42			-1.00 to 1.00	10/29/2020	13:45	MS2102920A 6
	Chromium	-1.1			-10.0 to 10.0	10/29/2020	13:45	MS2102920A 6
	Cobalt	0.24			-10.00 to 10.00	10/29/2020	13:45	MS2102920A 6
	Copper	-0.27			-10.00 to 10.00	10/29/2020	13:45	MS2102920A 6
	Lead	0.034			-2.000 to 2.000	10/29/2020	13:45	MS2102920A 6
	Nickel	0.80			-10.00 to 10.00	10/29/2020	13:45	MS2102920A 6
	Vanadium	-0.63			-10.00 to 10.00	10/29/2020	13:45	MS2102920A 6
	Zinc	1.7			-20.0 to 20.0	10/29/2020	13:45	MS2102920A 6

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POST DIGEST SPIKE SUMMARY

Client: Draper Aden Associates

SDG No.: VJ23005

Contract: RAAP HWMU16

Lab Code:

Case No.:

SAS No.:

Matrix: WATER

Level:

Client ID: 16C1A

Sample ID: VJ23005-001

Spiked ID: VJ23005-001A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Beryllium	ug/L	80 - 120	44.82		0.15	U	100.0	44.8		MS

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POST DIGEST SPIKE SUMMARY

Client: Draper Aden Associates

SDG No.: VJ23005

Contract: RAAP HWMU16

Lab Code:

Case No.:

SAS No.:

Matrix: WATER

Level:

Client ID: 16WC1AA

Sample ID: VJ23005-004

Spiked ID: VJ23005-004A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Beryllium	ug/L	80 - 120	42.43		0.15	U	100.0	42.4		MS

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SERIAL DILUTION SAMPLE SUMMARY

Client: Draper Aden Associates SDG No.: VJ23005
 Contract: RAAP HWMU16 Lab Code: _____ Case No.: _____ SAS No.: _____
 Matrix: WATER Level: _____ Client ID: 16C1L
 Sample ID: VJ23005-001 Serial Dilution ID: VJ23005-001L
 Batch Number: 71157

Analyte	Initial Result ug/L	C	Serial Result ug/L	C	% Difference	Qual	Acceptance Limits	M
Arsenic	10.00	U	50.00	U			10.00 %	MS
Barium	171.80		167.80		2.3		10.00 %	MS
Beryllium	1.00	U	5.00	U			10.00 %	MS
Cadmium	1.00	U	5.00	U			10.00 %	MS
Chromium	5.00	U	25.00	U			10.00 %	MS
Cobalt	5.00	U	25.00	U			10.00 %	MS
Copper	5.00	U	25.00	U			10.00 %	MS
Lead	3.00	U	15.00	U			10.00 %	MS
Nickel	10.00	U	50.00	U			10.00 %	MS
Vanadium	10.00	U	50.00	U			10.00 %	MS
Zinc	30.00	U	150.00	U			10.00 %	MS

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SERIAL DILUTION SAMPLE SUMMARY

Client: Draper Aden Associates **SDG No.:** VJ23005
Contract: RAAP HWMU16 **Lab Code:** **Case No.:** **SAS No.:**
Matrix: WATER **Level:** **Client ID:** 16WC1AL
Sample ID: VJ23005-004 **Serial Dilution ID:** VJ23005-004L
Batch Number: 71157

Analyte	Initial Result ug/L	C	Serial Result ug/L	C	% Difference	Qual	Acceptance Limits	M
Arsenic	10.00	U	50.00	U			10.00 %	MS
Barium	394.60		410.60		4.1		10.00 %	MS
Beryllium	1.00	U	5.00	U			10.00 %	MS
Cadmium	1.00	U	5.00	U			10.00 %	MS
Chromium	5.00	U	25.00	U			10.00 %	MS
Cobalt	11.89		25.00	U	100.0		10.00 %	MS
Copper	5.00	U	25.00	U			10.00 %	MS
Lead	3.00	U	15.00	U			10.00 %	MS
Nickel	12.76		50.00	U	100.0		10.00 %	MS
Vanadium	10.00	U	50.00	U			10.00 %	MS
Zinc	30.00	U	150.00	U			10.00 %	MS

9-IN
METHOD DETECTION LIMITS (MDL) (ANNUALLY)

Lab Name: Pace Analytical Services, LLC Contract: RAAP HWMU16

Lab Code: _____ Case No.: _____ Mod. Ref. No.: _____ SDG No.: VJ23005

Instrument Type: MS Instrument ID: ICPMS2 _____

Preparation Method: 3005A

Concentration Units (ug/L, mg/kg, or ug): UG/L

Analyte	Wavelength/Mass	MDL
Arsenic	75.00	1.25
Barium	135.00	1.3
Beryllium	9.00	0.150
Cadmium	114.00	0.13
Chromium	52.00	1.25
Cobalt	59.00	1.250
Copper	65.00	1.25
Lead	208.00	0.25
Nickel	60.00	1.250
Vanadium	51.00	2.500
Zinc	66.00	2.50

Comments: _____

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LINEAR RANGES

Client: Draper Aden Associates SDG No.: VJ23005
Contract: RAAP HWMU16 Lab Code: Case No.: SAS No.:
Instrument ID: ICPMS2 Date: Analyzed Daily

Analyte	Integration Time (sec)	LDR ug/L
Arsenic	0.10	2000
Barium	0.10	10000
Beryllium	0.10	1000
Cadmium	0.10	2000
Chromium	0.10	2000
Cobalt	0.10	2000
Copper	0.10	2000
Lead	0.10	2000
Nickel	0.10	2000
Vanadium	0.10	2000
Zinc	0.10	2000

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU16

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: VJ23005

Instrument ID Number: ICPMS2 Run Number: MS2102920A 6020B 200.8, generate

Start Date: 10/29/2020 End Date: 10/29/2020

EPA Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S G	A A	N L	T L	V N	Z N	C N
ZZZZZZ	1.00	1222																									
ZZZZZZ	1.00	1228																									
BLANK	1.00	1234				X	X	X	X		X	X	X	X					X						X	X	
MW15096	1.00	1240																									
MW15190	1.00	1246																									
CAL1	1.00	1252				X	X	X	X		X	X	X	X					X						X	X	
MW15153	1.00	1258				X	X	X	X		X	X	X	X					X						X	X	
CAL2	1.00	1303				X	X	X	X		X	X	X	X					X						X	X	
CAL3	1.00	1309				X	X	X	X		X	X	X	X					X						X	X	
CAL4	1.00	1315				X	X	X	X		X	X	X	X					X						X	X	
CAL5	1.00	1321																									
CAL6	1.00	1327																									
ICV1	1.00	1333				X	X	X	X		X	X	X	X					X						X	X	
ICB1	1.00	1339				X	X	X	X		X	X	X	X					X						X	X	
ICSA	1.00	1345				X	X	X	X		X	X	X	X					X						X	X	
CCV1	1.00	1350				X	X	X	X		X	X	X	X					X						X	X	
CCB1	1.00	1356				X	X	X	X		X	X	X	X					X						X	X	
VO71157-001	1.00	1402				X	X	X	X		X	X	X	X					X						X	X	
VO71157-002	1.00	1408				X	X	X	X		X	X	X	X					X						X	X	
VJ23005-001	1.00	1414				X	X	X	X		X	X	X	X					X						X	X	
VJ23005-001S	1.00	1420				X	X	X	X		X	X	X	X					X						X	X	
VJ23005-001SD	1.00	1425				X	X	X	X		X	X	X	X					X						X	X	
VJ23005-001L	5.00	1431				X	X	X	X		X	X	X	X					X						X	X	
VJ23005-001A	1.00	1437						X																			
VJ23005-002	1.00	1443				X	X	X	X		X	X	X	X					X						X	X	
VJ23005-003	1.00	1449				X	X	X	X		X	X	X	X					X						X	X	
VJ23005-004	1.00	1455				X	X	X	X		X	X	X	X					X						X	X	
CCV2	1.00	1500				X	X	X	X		X	X	X	X					X						X	X	
CCB2	1.00	1506				X	X	X	X		X	X	X	X					X						X	X	
VJ23005-004S	1.00	1512				X	X	X	X		X	X	X	X					X						X	X	
VJ23005-004SD	1.00	1518				X	X	X	X		X	X	X	X					X						X	X	
VJ23005-004L	5.00	1524				X	X	X	X		X	X	X	X					X						X	X	
VJ23005-004A	1.00	1530						X																			
VJ23005-005	1.00	1535				X	X	X	X		X	X	X	X					X						X	X	
VJ23005-006	1.00	1541				X	X	X	X		X	X	X	X					X						X	X	
VJ23005-007	1.00	1547				X	X	X	X		X	X	X	X					X						X	X	

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical Services, LLC Contract: RAAP HWMU16Lab Code: _____ Case No.: _____ NRAS No.: _____ SDG NO.: VJ23005ICP-MS Instrument ID: ICPMS2 Start Date: 10/29/2020 End Date: 10/29/2020

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element 209Bi	Q	Element 115In	Q	Element 6Li	Q	Element 45Sc	Q	Element 159Tb	Q	Element 89Y	Q
RINSE	ZZZZZZ	1222												
TUNE	ZZZZZZ	1228												
BLANK	BLANK IM10195-01	1234	100		100		100		100		100		100	
MW15096	MW15096	1240	102		100		101		100		102		100	
MW15190	MW15190	1246	88		92		100		96		93		94	
CAL1	CAL1 MW-15152	1252	100		99		100		99		100		98	
MW15153	MW15153	1258	100		100		100		100		101		99	
CAL2	CAL2 MW-15154	1303	92		92		97		95		95		93	
CAL3	CAL3 MW-15224	1309	99		94		97		96		98		94	
CAL4	CAL4 MW-15225	1315	99		94		93		92		98		93	
CAL5	CAL5 MW-15234	1321	91		83		83		83		91		83	
CAL6	CAL6 MW-15235	1327	80		79		83		84		85		81	
ICV1	ICV1	1333	96		90		89		91		96		90	
ICB1	ICB1	1339	102		99		98		100		101		98	
ICSA	ICSA	1345	84		76		80		79		85		77	
CCV1	CCV1	1350	95		87		85		85		95		86	
CCB1	CCB1	1356	104		98		97		97		101		96	
VQ71157-001	VQ71157-001MB	1402	108		98		99		98		101		96	
VQ71157-002	LCS	1408	94		88		96		91		93		89	
VJ23005-001	16C1	1414	97		92		98		94		96		93	
VJ23005-001	16C1S	1420	95		88		95		89		95		89	
VJ23005-001	16C1SD	1425	90		82		92		85		89		84	
VJ23005-001	16C1L	1431	94		87		93		89		92		86	
VJ23005-001	16C1A	1437	93		85		90		85		91		85	
VJ23005-002	16MW8	1443	95		85		89		84		90		86	
VJ23005-003	16MW9	1449	85		80		91		84		86		80	
VJ23005-004	16WC1A	1455	90		82		89		83		88		81	
CCV2	CCV2	1500	90		85		87		86		90		85	
CCB2	CCB2	1506	97		91		95		92		95		90	
VJ23005-004	16WC1AS	1512	83		77		88		81		84		79	
VJ23005-004	16WC1ASD	1518	90		83		88		83		88		82	
VJ23005-004	16WC1AL	1524	95		91		93		90		93		89	
VJ23005-004	16WC1AA	1530	89		80		88		83		87		80	
VJ23005-005	16WDUP	1535	88		79		89		82		86		80	
VJ23005-006	16WC1B	1541	90		83		89		82		87		89	
VJ23005-007	16-2	1547	91		84		91		85		90		82	
VJ23005-008	16-3	1553	85		80		93		84		85		80	
VJ23005-009	16-5	1559	91		84		93		85		89		82	
VJ23005-010	16WC2B	1605	92		85		94		86		90		84	
CCV3	CCV3	1610	88		82		86		83		89		82	
CCB3	CCB3	1616	85		83		92		88		86		84	
VJ23005-011	16SPRING	1622	90		82		91		83		88		83	
VQ71296-001	ZZZZZZ	1628												
VQ71296-002	ZZZZZZ	1634												
VJ19014-001	ZZZZZZ	1640												

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical Services, LLC Contract: RAAP HWMU16

Lab Code: _____ Case No.: _____ NRAS No.: _____ SDG NO.: VJ23005

ICP-MS Instrument ID: ICPMS2 Start Date: 10/29/2020 End Date: 10/29/2020

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element 209Bi	Q	Element 115In	Q	Element 6Li	Q	Element 45Sc	Q	Element 159Tb	Q	Element 89Y	Q
VJ19014-002	ZZZZZZ	1645												
VJ19014-003	ZZZZZZ	1651												
VJ20086-001	ZZZZZZ	1657												
VJ23066-001	ZZZZZZ	1703												
VJ23066-001	ZZZZZZ	1709												
VJ23066-001	ZZZZZZ	1715												
CCV4	CCV4	1720	86		80		85		83		86		81	
CCB4	CCB4	1726	87		84		93		88		87		85	
VJ23066-001	ZZZZZZ	1732												
VJ23066-001	ZZZZZZ	1738												
VJ23066-002	ZZZZZZ	1744												
CCV	ZZZZZZ	1750												
CCB	ZZZZZZ	1755												
VJ23069-001	ZZZZZZ	1801												
VJ23075-002	ZZZZZZ	1807												
VJ23075-004	ZZZZZZ	1813												
CCV	ZZZZZZ	1819												
CCB	ZZZZZZ	1824												
LR	ZZZZZZ	1830												
RINSE	ZZZZZZ	1836												
RINSE	ZZZZZZ	1842												

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Pace Analytical Services, LLC Contract: RAAP HWMU16

Lab Code: _____ Case No.: _____ MA No.: _____ SDG No.: VJ23005

Instrument ID: ICPMS2 Start Date: 10/29/2020

Analytical Method: ICP-MS Run Batch: MS2102920A 6020B 200.8, generated 1

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Arsenic	0.00	0	0	2.00	2.1	6	10.0	10.6	6
Barium	0.00	0	0	5.00	5.1	3	25.0	25.0	0
Beryllium	0.00	0	0	0.400	0.43	8	2.00	2.2	9
Cadmium	0.00	0	0	0.100	0.072	-28	0.500	0.55	10
Chromium	0.00	0	0	5.00	4.9	-2	25.0	25.6	3
Cobalt	0.00	0	0	1.00	0.99	-1	5.00	5.0	0
Copper	0.00	0	0	5.00	5.1	3	25.0	25.5	2
Lead	0.00	0	0	1.00	0.99	-1	5.00	4.9	-2
Nickel	0.00	0	0	5.00	4.9	-1	25.0	25.0	0
Vanadium	0.00	0	0	5.00	5.0	-1	25.0	25.0	0
Zinc	0.00	0	0	10.0	10.2	2	50.0	53.2	6

FORM 15-IN

INITIAL CALIBRATION

Lab Name: Pace Analytical Services, LLC Contract: RAAP HWMU16

Lab Code: Case No.: MA No.: SDG No.: VJ23005

Instrument ID: ICPMS2 Start Date: 10/29/2020

Analytical Method: ICP-MS Run Batch: MS2102920A 6020B 200.8, generat

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Arsenic	250	251	0	500	500	0			
Barium	250	251	0	500	499	0			
Beryllium	250	244	-2	500	503	1			
Cadmium	250	248	-1	500	501	0			
Chromium	250	252	1	500	499	0			
Cobalt	250	252	1	500	501	0			
Copper	250	251	0	500	498	0			
Lead	250	249	-1	500	512	2			
Nickel	250	255	2	500	498	0			
Vanadium	250	251	0	500	499	0			
Zinc	250	257	3	500	498	0			

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Pace Analytical Services, LLC Contract: RAAP HWMU16

Lab Code: Case No.: MA No.: SDG No.: VJ23005

Instrument ID: ICPMS2 Start Date: 10/29/2020

Analytical Method: ICP-MS Run Batch: MS2102920A 6020B 200.8, generat

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Arsenic				4.00	3.9	-4			
Barium				10.0	10.1	1			
Beryllium				0.800	0.80	0			
Cadmium				0.200	0.19	-6			
Chromium				10.0	9.9	-1			
Cobalt				2.00	2.0	-1			
Copper				10.0	10.3	3			
Lead				2.00	2.0	-1			
Nickel				10.0	10.0	0			
Vanadium				10.0	10.0	0			
Zinc				20.0	20.1	0			

Raw Sample Data

Performance Report

Sample details

Acquired at : 10/29/2020 11:37:06

Report name : Shealy Performance Report ICPMS2 [6/23/2020 16:02:16]

Mass Calibration verification

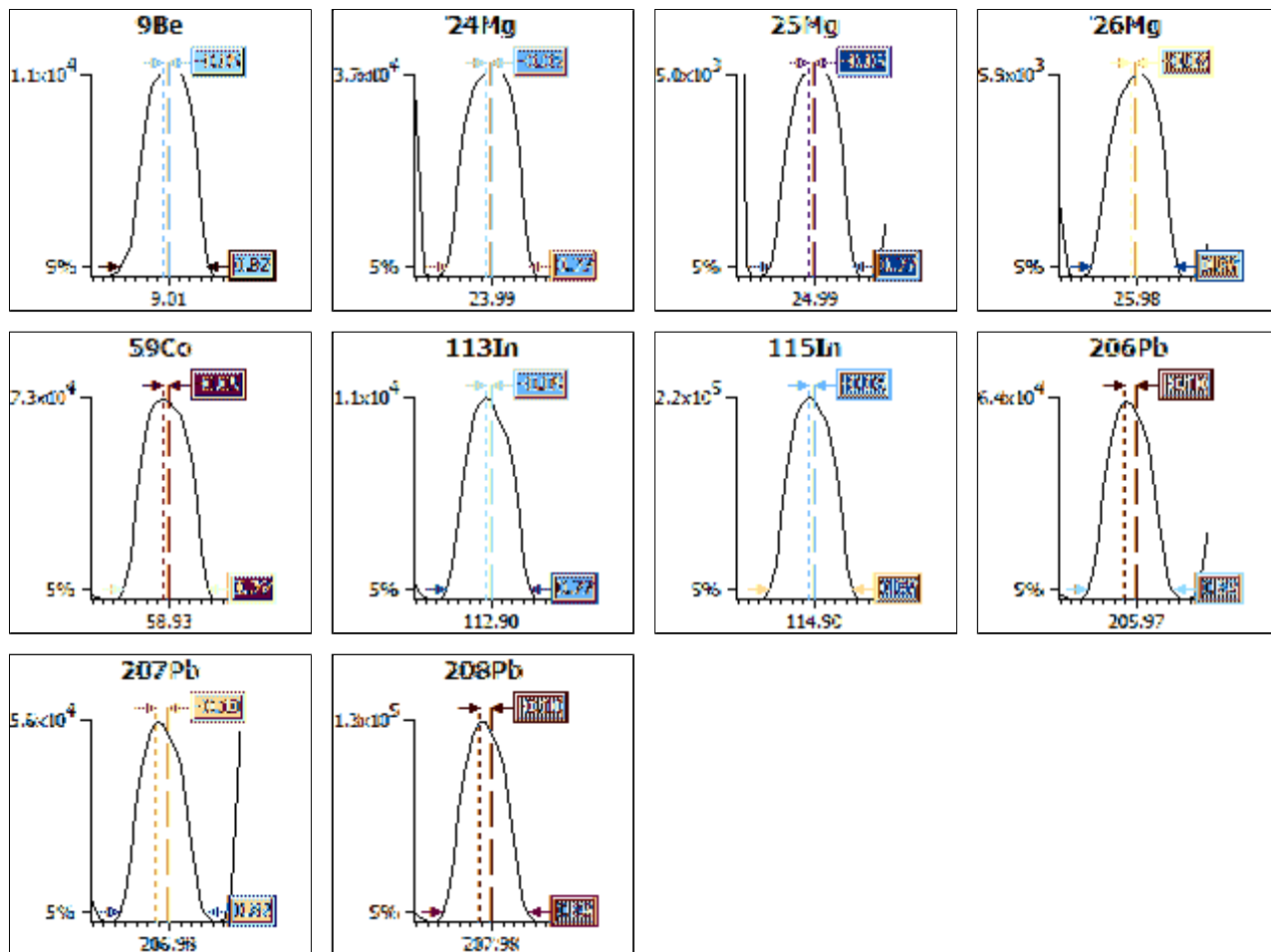
Acquisition parameters

Sweeps : 25

Dwell : 10.0 mSecs

Point spacing : 0.05 amu

Peak width measured at 5% of the peak maximum



Analyte	Limits			Results	
	Max. width	Min. width	Max. error	Peak width	Peak error
9Be	0.85	0.65	0.11	0.82	-0.05
24Mg	0.85	0.65	0.11	0.77	-0.05
25Mg	0.85	0.65	0.11	0.77	-0.05
26Mg	0.85	0.65	0.11	0.77	-0.05
59Co	0.85	0.65	0.11	0.77	-0.05
113In	0.85	0.65	0.11	0.77	-0.05
115In	0.85	0.65	0.11	0.77	-0.05
206Pb	0.85	0.65	0.11	0.82	-0.10
207Pb	0.85	0.65	0.11	0.82	-0.10
208Pb	0.85	0.65	0.11	0.82	-0.10

Sample details

Acquired at : 10/29/2020 11:37:06

Report name : Shealy Performance Report ICPMS2 [6/23/2020 16:02:16]

Tune conditions

Major		Minor		Global		Add. Gases
Extraction	-117.6	Lens 3	-189.0	Standard resolution	110	
Lens 1	-1169	Forward power	1404	High resolution	80	
Lens 2	-83.9	Horizontal	79	Analogue Detector	1804	
Focus	18.8	Vertical	646	PC Detector	2853	
D1	-35.3	DA	-51.8			
D2	-130	Cool	12.2			
Pole Bias	-1.0	Auxiliary	1.08			
Hexapole Bias	-2.0	Sampling Depth	150			
Nebuliser	0.85					

Sensitivity and stability results**Acquisition parameters**

Sweeps : 130

Run	Time	5Bkg	9Be	24Mg	25Mg	26Mg	56Ar O	59Co	136Ba + +	101Bkg
Dwell (mSecs)		10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Limits	%RSD	-	5.0%	5.0%	5.0%	5.0%	-	5.0%	-	-
	CountRate	-	>5000	>1000	>1000	>1000	-	>10000	-	-
1	11:38:30	0.000	9770.632	35652.080	4735.849	5554.004	120895.48	68879.185	516.168	0.000
2	11:39:02	0.769	9727.509	36080.689	4785.875	5439.319	122253.46	69007.847	516.938	0.000
3	11:39:34	0.000	9769.862	35688.376	4744.315	5427.774	121851.19	68745.099	484.628	0.000
4	11:40:06	0.000	9799.895	36215.068	4752.781	5522.446	123476.75	69596.153	493.860	0.000
5	11:40:38	0.000	9671.295	36493.872	4786.644	5597.107	123472.07	69269.828	503.091	0.000
x		0.154	9747.839	36026.017	4761.093	5508.130	122389.79	69099.622	502.937	0.000
s		0.34	49.97	357.58	23.74	73.18	1106.17	338.46	14.04	0.00
%RSD		223.607	0.513	0.993	0.499	1.328	0.904	0.490	2.792	0.000

Run	Time	113In	115In	138Ba	140Ce	156Ce O	206Pb	207Pb	208Pb	220Bkg
Dwell (mSecs)		10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Limits	%RSD	5.0%	5.0%	-	-	-	5.0%	5.0%	5.0%	-
	CountRate	>1000	>10000	-	-	-	>10000	>10000	>10000	<2
1	11:38:30	7067.361	168208.84	127946.38	178753.37	2425.708	55452.456	48535.371	119901.68	0.000
2	11:39:02	7092.766	168920.31	128780.34	179564.51	2409.550	56104.902	49024.137	120787.91	0.000
3	11:39:34	7128.948	169051.96	128798.28	180087.00	2516.502	56368.061	49278.584	121845.73	1.538
4	11:40:06	7257.511	169127.97	129531.67	180048.56	2531.122	56032.148	49876.447	121132.45	0.000
5	11:40:38	7194.384	167079.06	128437.85	179986.58	2454.947	56402.117	49332.723	122431.99	0.000
x		7148.194	168477.63	128698.91	179688.00	2467.566	56071.937	49209.453	121219.95	0.308
s		77.56	862.70	579.75	562.83	54.11	381.82	488.26	973.76	0.69
%RSD		1.085	0.512	0.450	0.313	2.193	0.681	0.992	0.803	223.607

Ratio results

Run	Time	56Ar O / 59Co	136Ba + + / 138Ba	115In / 101Bkg	156Ce O / 140Ce
Ratio limits		-	-	-	-
1	11:38:30	1.755	0.004	INF	0.014
2	11:39:02	1.772	0.004	INF	0.013
3	11:39:34	1.773	0.004	INF	0.014
4	11:40:06	1.774	0.004	INF	0.014
5	11:40:38	1.782	0.004	INF	0.014
x		1.7712	0.0039	0.0000	0.0137
s		0.01	0.00	0.00	0.00
%RSD		0.5608	3.0674	0.0000	1.9861

Result : The performance report passed.

FORM 11-IN

ICP-MS INTERNAL STANDARD ASSOCIATION

Lab Name: Pace Analytical Services, LLC Contract: _____

Lab Code: _____ Case No.: _____ MA No.: _____ SDG No.: _____

Instrument ID: ICPMS2Run Batch: MS2102920A 6020B 200.8, gen Date: 10/29/2020

Analyte	Assoc. Internal Standard 1	Assoc. Internal Standard 2
Aluminum	45Sc	
Antimony	159Tb	
Arsenic	45Sc	
Barium	159Tb	
Beryllium	6Li	45Sc
Boron	6Li	
Cadmium	115In	
Calcium	45Sc	
Chromium	45Sc	
Cobalt	45Sc	
Copper	45Sc	
Iron	45Sc	
Lead	209Bi	
Magnesium	45Sc	
Manganese	45Sc	
Molybdenum	89Y	
Nickel	45Sc	
Potassium	6Li	45Sc
Selenium	115In	
Silicon	6Li	45Sc
Silver	115In	
Sodium	6Li	
Strontium	89Y	
Thallium	209Bi	
Tin	115In	
Titanium	45Sc	
Vanadium	45Sc	
Zinc	115In	

Experiment Details

Description	PlasmaLab Template BlankExperiment
Template Filename	C:\Program Files\Thermo Fisher\PlasmaLab\data\MS2042320A 6020B 200.8.tee
Created By User	DemoX
Analyte Database	200_8.tea
Creation Timestamp	12/1/2004 11:33:01
Last Edited By	DELL
Last Edit Timestamp	10/29/2020 12:20:36
Instrument Detector	Simultaneous
Database Version	3.51
Acquisition Mode	Unknown

Numerical Results report key (text indicates meaning)

Blue text indicates that cell is a statistic.

Underlining indicates that a data warning flag is set.

Column headings	Result cells	Data warning flags
No flag	Internal Standard	I - Invalid calibration
Semi Quant	Excluded	T - Tripped
Standard Addition	QC Warning	F - Interference correction failed
Multi Element	QC Failure	M - Result over max
	Transient TRA only:	V - Valley integration failed
	Peak Not Found	D - Different method used
	Manually Edited	
	Merged Peak	

Fully Quantitative Concentrations

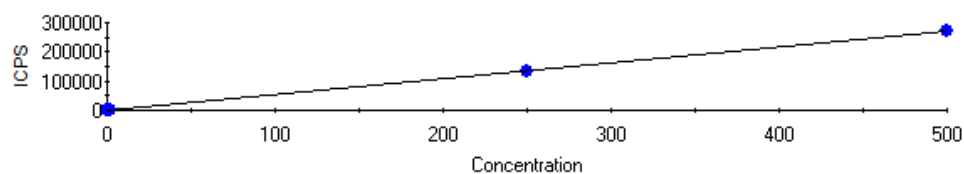
Id	Label	9Be	10B	11B	23Na	24Mg	25Mg	26Mg	27Al	28Si	39K
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
4	MW15096										
5	MW15190			25.000				50.000			200.000
6	cal1 MW-15152	0.400	50.000	50.000	400.000	400.000	400.000	400.000	40.000	100.000	400.000
7	MW15153	0.800		100.000	800.000	800.000	800.000	800.000	80.000		800.000
8	cal2 MW-15154	2.000			2000.000	2000.000	2000.000	2000.000	200.000		2000.000
9	cal3 MW-15224	250.000	250.000	250.000					250.000	250.000	
10	cal4 MW-15225	500.000	500.000	500.000					500.000	500.000	
11	cal5 MW-15234				50000.000	50000.000	50000.000	50000.000		5000.000	50000.000
12	cal6 MW-15235				100000.000	100000.000	100000.000	100000.000		10000.000	100000.000
Id	Label	43Ca	44Ca	47Ti	51V	52Cr	55Mn	54Fe	56Fe	57Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
4	MW15096										
5	MW15190									20.000	
6	cal1 MW-15152	400.000	400.000	5.000	5.000	5.000	5.000	50.000	50.000	50.000	1.000
7	MW15153	800.000	800.000	10.000	10.000	10.000	10.000			100.000	2.000
8	cal2 MW-15154	2000.000	2000.000	25.000	25.000	25.000	25.000				5.000
9	cal3 MW-15224			250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000
10	cal4 MW-15225			500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000
11	cal5 MW-15234	50000.000	50000.000					50000.000	50000.000	50000.000	
12	cal6 MW-15235	100000.000	100000.000					100000.000	100000.000	100000.000	
Id	Label	60Ni	62Ni	63Cu	65Cu	66Zn	67Zn	68Zn	75As	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
4	MW15096	2.000									
5	MW15190				1.000						
6	cal1 MW-15152	5.000	5.000	5.000	5.000	10.000	10.000	10.000	2.000	5.000	5.000
7	MW15153	10.000			10.000	20.000			4.000		10.000
8	cal2 MW-15154	25.000	25.000	25.000	25.000	50.000	50.000	50.000	10.000	25.000	25.000
9	cal3 MW-15224	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000
10	cal4 MW-15225	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000
11	cal5 MW-15234										
12	cal6 MW-15235										
Id	Label	88Sr	95Mo	97Mo	98Mo	107Ag	109Ag	106Cd	111Cd	114Cd	116Sn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
4	MW15096										
5	MW15190									0.100	
6	cal1 MW-15152	10.000	10.000	10.000	10.000	1.000	1.000	0.100	0.100		20.000
7	MW15153	20.000		20.000	20.000	2.000				0.200	
8	cal2 MW-15154	50.000	50.000	50.000	50.000	5.000	5.000	0.500	0.500	0.500	100.000
9	cal3 MW-15224	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000
10	cal4 MW-15225	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000
11	cal5 MW-15234										
12	cal6 MW-15235										
Id	Label	118Sn	121Sb	123Sb	135Ba	137Ba	203Tl	205Tl	206Pb	207Pb	208Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
4	MW15096										

5	MW15190	5.000	1.000	1.000							
6	cal1 MW-15152	20.000			5.000	5.000	0.500	0.500	1.000	1.000	1.000
7	MW15153	40.000	4.000	4.000	10.000	10.000	1.000	1.000	2.000	2.000	2.000
8	cal2 MW-15154	100.000	10.000	10.000	25.000	25.000	2.500	2.500	5.000	5.000	5.000
9	cal3 MW-15224	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000
10	cal4 MW-15225	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000
11	cal5 MW-15234										
12	cal6 MW-15235										
Id	Label	232Th	238U								
		ppb	ppb								
4	MW15096										
5	MW15190										
6	cal1 MW-15152		50.000								
7	MW15153										
8	cal2 MW-15154		250.000								
9	cal3 MW-15224										
10	cal4 MW-15225		500.000								
11	cal5 MW-15234										
12	cal6 MW-15235										

Sample List

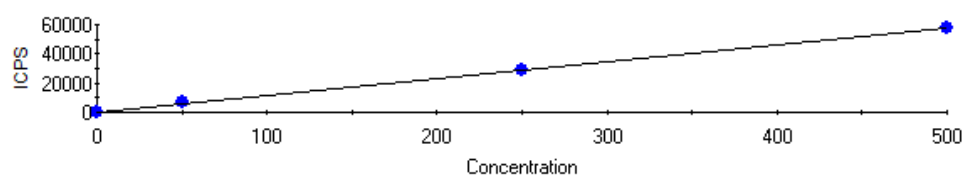
No	Label	Type	Weight	Rack	Row	Col	Height
1	RINSE	Unknown	1.000	0	1	1	144
2	TUNE MW15272	Unknown	1.000	0	1	2	144
3	BLANK IM10195-01	Blank	1.000	0	1	3	144
4	MW15096	Fully Quant Standard	1.000	4	5	1	144
5	MW15190	Fully Quant Standard	1.000	4	5	2	144
6	cal1 MW-15152	Fully Quant Standard	1.000	4	5	3	144
7	MW15153	Fully Quant Standard	1.000	4	5	4	144
8	cal2 MW-15154	Fully Quant Standard	1.000	4	5	5	144
9	cal3 MW-15224	Fully Quant Standard	1.000	4	5	6	144
10	cal4 MW-15225	Fully Quant Standard	1.000	4	5	7	144
11	cal5 MW-15234	Fully Quant Standard	1.000	4	5	8	144
12	cal6 MW-15235	Fully Quant Standard	1.000	4	5	9	144
13	ICV MW15339 PREP 10/29/20	QC Sample	1.000	4	5	11	144
14	ICB IM10195-01	QC Sample	1.000	0	1	3	144
15	ICSA MW15277	QC Sample	1.000	4	5	12	144
16	CCV MW15278	QC Sample	1.000	0	1	7	144
17	CCB IM10195-01	QC Sample	1.000	0	1	3	144
18	VQ71157-001	QC Sample	1.000	1	1	1	144
19	VQ71157-002	QC Sample	1.000	1	1	2	144
20	VJ23005-001	Unknown	1.000	1	1	3	144
21	VJ23005-001S	Unknown	1.000	1	1	4	144
22	VJ23005-001SD	Unknown	1.000	1	1	5	144
23	VJ23005-001L(5)	Unknown	1.000	1	1	6	144
24	VJ23005-001A	Unknown	1.000	1	1	7	144
25	VJ23005-002	Unknown	1.000	1	1	8	144
26	VJ23005-003	Unknown	1.000	1	1	9	144
27	VJ23005-004	Unknown	1.000	1	1	10	144
28	CCV MW15278	QC Sample	1.000	0	1	7	144
29	CCB IM10195-01	QC Sample	1.000	0	1	3	144
30	VJ23005-004S	Unknown	1.000	1	2	1	144
31	VJ23005-004SD	Unknown	1.000	1	2	2	144
32	VJ23005-004L(5)	Unknown	1.000	1	2	3	144
33	VJ23005-004A	Unknown	1.000	1	2	4	144
34	VJ23005-005	Unknown	1.000	1	2	5	144
35	VJ23005-006	Unknown	1.000	1	2	6	144
36	VJ23005-007	Unknown	1.000	1	2	7	144
37	VJ23005-008	Unknown	1.000	1	2	8	144
38	VJ23005-009	Unknown	1.000	1	2	9	144
39	VJ23005-010	Unknown	1.000	1	2	10	144
40	CCV MW15278	QC Sample	1.000	0	1	7	144
41	CCB IM10195-01	QC Sample	1.000	0	1	3	144
42	VJ23005-011	Unknown	1.000	1	3	1	144
43	VQ71296-001	QC Sample	1.000	1	3	2	144
44	VQ71296-002	QC Sample	1.000	1	3	3	144
45	VJ19014-001	Unknown	1.000	1	3	4	144
46	VJ19014-002	Unknown	1.000	1	3	5	144
47	VJ19014-003	Unknown	1.000	1	3	6	144
48	VJ20086-001	Unknown	1.000	1	3	7	144
49	VJ20066-001	Unknown	1.000	1	3	8	144
50	VJ20066-001S	Unknown	1.000	1	3	9	144
51	VJ20066-001SD	Unknown	1.000	1	3	10	144
52	CCV MW15278	QC Sample	1.000	0	1	7	144
53	CCB IM10195-01	QC Sample	1.000	0	1	3	144
54	VJ20066-001L(5)	Unknown	1.000	1	4	1	144
55	VJ20066-001A	Unknown	1.000	1	4	2	144
56	VJ20066-002	Unknown	1.000	1	4	3	144
57	CCV MW15278	QC Sample	1.000	0	1	7	144
58	CCB IM10195-01	QC Sample	1.000	0	1	3	144
59	VJ23069-001(10)	Unknown	1.000	1	5	1	144

60	VJ23075-002	Unknown	1.000	1	5	2	144
61	VJ23075-004(10)	Unknown	1.000	1	5	3	144
62	CCV MW15278	QC Sample	1.000	0	1	7	144
63	CCB IM10195-01	QC Sample	1.000	0	1	3	144
64	LR	QC Sample	1.000	4	5	10	144
65	RINSE	Unknown	1.000	0	1	1	144
66	RINSE	Unknown	1.000	0	1	1	144

Fully Quant Calibration**9Be FQ Block 1**

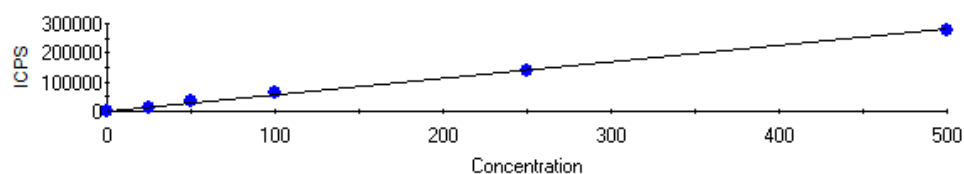
Intercept CPS=14.720386 Intercept Conc=0.027042
Sensitivity=544.348928 Correlation Coeff=0.999911

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	14.72	0.00
cal1 MW-15152	0.400	0.432	0.032	249.62	7.88
MW15153	0.800	0.801	0.001	450.65	0.10
cal2 MW-15154	2.000	2.175	0.175	1198.79	8.76
cal3 MW-15224	250.000	244.292	5.708	132994.75	2.28
cal4 MW-15225	500.000	502.853	2.853	273742.39	0.57

10B FQ Block 1

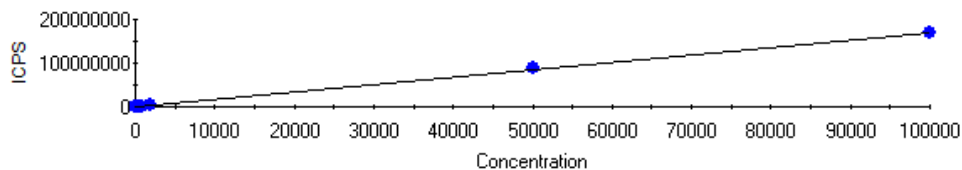
Intercept CPS=130.741450 Intercept Conc=1.139752
Sensitivity=114.710445 Correlation Coeff=0.999710

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	130.74	0.00
cal1 MW-15152	50.000	60.508	10.508	7071.61	21.02
cal3 MW-15224	250.000	246.946	3.054	28458.02	1.22
cal4 MW-15225	500.000	500.476	0.476	57540.59	0.10

11B FQ Block 1

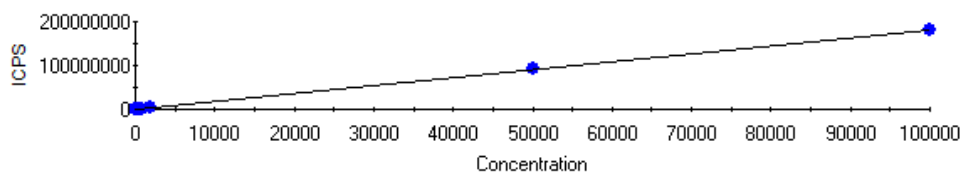
Intercept CPS=500.077131 Intercept Conc=0.894188
Sensitivity=559.253022 Correlation Coeff=0.999510

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	500.08	0.00
MW15190	25.000	24.705	0.295	14316.59	1.18
cal1 MW-15152	50.000	60.604	10.604	34392.88	21.21
MW15153	100.000	111.917	11.917	63090.05	11.92
cal3 MW-15224	250.000	247.507	2.493	138919.19	1.00
cal4 MW-15225	500.000	497.817	2.183	278905.95	0.44

23Na FQ Block 1

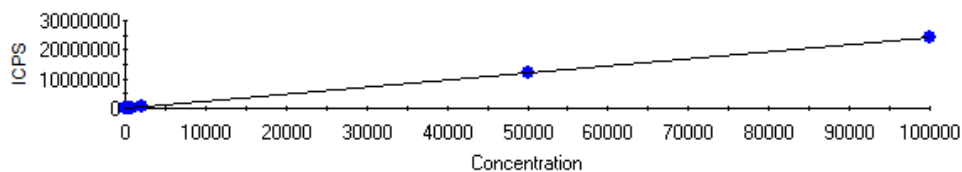
Intercept CPS=35828.889167 Intercept Conc=21.155956
Sensitivity=1693.560389 Correlation Coeff=0.999907

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	35828.89	0.00
cal1 MW-15152	400.000	429.969	29.969	764007.20	7.49
MW15153	800.000	843.173	43.173	1463793.22	5.40
cal2 MW-15154	2000.000	2029.502	29.502	3472913.48	1.48
cal5 MW-15234	50000.000	51165.752	1165.752	86688120.26	2.33
cal6 MW-15235	100000.000	99416.069	583.931	168402944.60	0.58

24Mg FQ Block 1

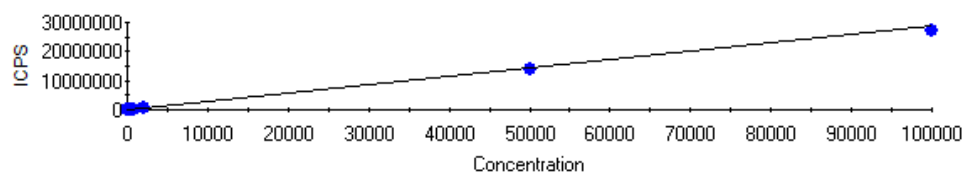
Intercept CPS=1795.988456 Intercept Conc=1.000529
Sensitivity=1795.039587 Correlation Coeff=0.999990

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	1795.99	0.00
cal1 MW-15152	400.000	434.025	34.025	780887.61	8.51
MW15153	800.000	869.376	69.376	1562360.56	8.67
cal2 MW-15154	2000.000	2120.946	120.946	3808978.35	6.05
cal5 MW-15234	50000.000	50391.181	391.181	90455960.76	0.78
cal6 MW-15235	100000.000	99801.299	198.701	179149079.36	0.20

25Mg FQ Block 1

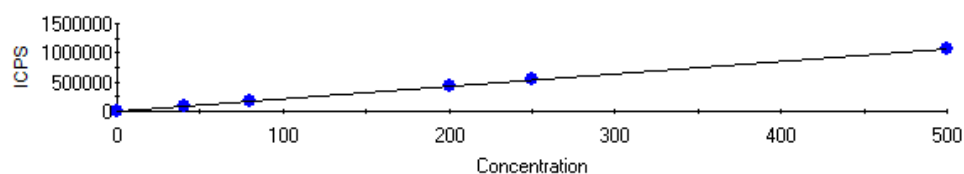
Intercept CPS=233.284998 Intercept Conc=0.968572
Sensitivity=240.854494 Correlation Coeff=0.999978

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	233.28	0.00
cal1 MW-15152	400.000	418.482	18.482	101026.52	4.62
MW15153	800.000	833.050	33.050	200877.02	4.13
cal2 MW-15154	2000.000	2122.361	122.361	511413.39	6.12
cal5 MW-15234	50000.000	50569.745	569.745	12180183.62	1.14
cal6 MW-15235	100000.000	99712.342	287.658	24016398.99	0.29

26Mg FQ Block 1

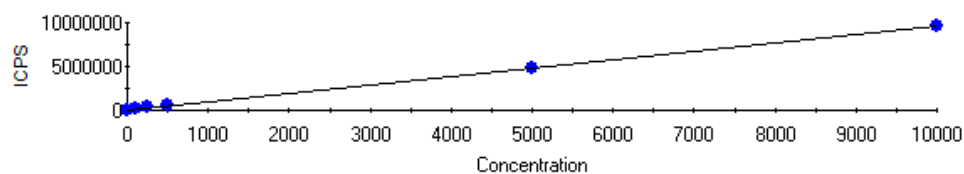
Intercept CPS=253.443051 Intercept Conc=0.887114
Sensitivity=285.693874 Correlation Coeff=0.999993

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	253.44	0.00
MW15190	50.000	52.892	2.892	15364.31	5.78
cal1 MW-15152	400.000	401.132	1.132	114854.26	0.28
MW15153	800.000	805.120	5.120	230271.26	0.64
cal2 MW-15154	2000.000	2024.402	24.402	578612.59	1.22
cal5 MW-15234	50000.000	48096.223	1903.777	13741049.73	3.81
cal6 MW-15235	100000.000	95391.856	4608.144	27253122.49	4.61

27Al FQ Block 1

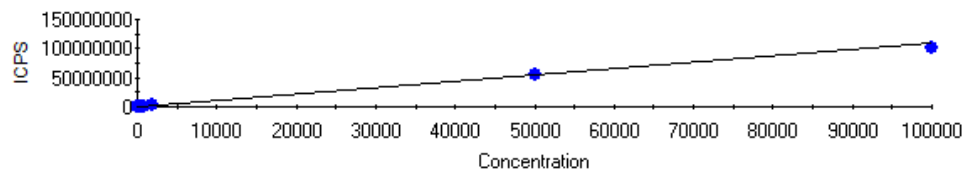
Intercept CPS=1931.200683 Intercept Conc=0.902378
Sensitivity=2140.124409 Correlation Coeff=0.999993

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	1931.20	0.00
cal1 MW-15152	40.000	39.951	0.049	87431.78	0.12
MW15153	80.000	79.894	0.106	172913.39	0.13
cal2 MW-15154	200.000	200.272	0.272	430537.97	0.14
cal3 MW-15224	250.000	248.532	1.468	533820.14	0.59
cal4 MW-15225	500.000	500.646	0.646	1073376.53	0.13

28Si FQ Block 1

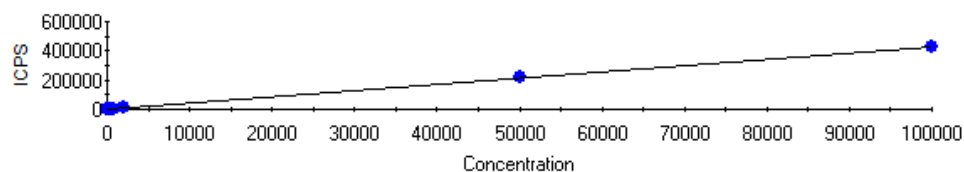
Intercept CPS=36103.357449 Intercept Conc=37.869713
Sensitivity=953.357048 Correlation Coeff=0.999971

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	36103.36	0.00
cal1 MW-15152	100.000	117.896	17.896	148500.48	17.90
cal3 MW-15224	250.000	269.949	19.949	293461.39	7.98
cal4 MW-15225	500.000	547.679	47.679	558237.12	9.54
cal5 MW-15234	5000.000	4952.110	47.890	4757231.96	0.96
cal6 MW-15235	10000.000	10020.884	20.884	9589583.32	0.21

39K FQ Block 1

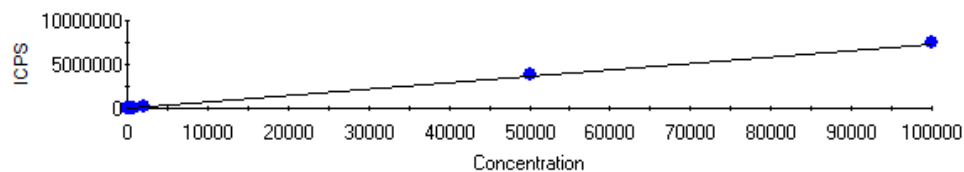
Intercept CPS=81934.762352 Intercept Conc=75.577151
Sensitivity=1084.120820 Correlation Coeff=0.999422

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	81934.76	0.00
MW15190	200.000	182.838	17.162	280153.56	8.58
cal1 MW-15152	400.000	402.029	2.029	517783.22	0.51
MW15153	800.000	834.229	34.229	986339.48	4.28
cal2 MW-15154	2000.000	1996.988	3.012	2246910.87	0.15
cal5 MW-15234	50000.000	49457.322	542.678	53699646.68	1.09
cal6 MW-15235	100000.000	91974.621	8025.379	99793535.94	8.03

43Ca FQ Block 1

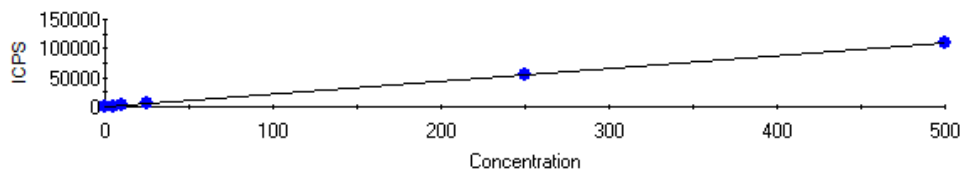
Intercept CPS=22.727580 Intercept Conc=5.372625
Sensitivity=4.230256 Correlation Coeff=0.999971

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	22.73	0.00
cal1 MW-15152	400.000	424.841	24.841	1819.91	6.21
MW15153	800.000	825.607	25.607	3515.25	3.20
cal2 MW-15154	2000.000	2054.344	54.344	8713.13	2.72
cal5 MW-15234	50000.000	50654.675	654.675	214304.97	1.31
cal6 MW-15235	100000.000	99671.271	328.729	421657.72	0.33

44Ca FQ Block 1

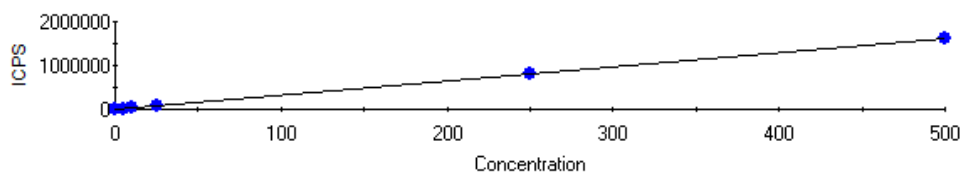
Intercept CPS=2430.797490 Intercept Conc=32.856046
Sensitivity=73.983262 Correlation Coeff=0.999957

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	2430.80	0.00
cal1 MW-15152	400.000	390.529	9.471	31323.43	2.37
MW15153	800.000	797.433	2.567	61427.53	0.32
cal2 MW-15154	2000.000	1981.448	18.552	149024.80	0.93
cal5 MW-15234	50000.000	51127.308	1127.308	3784995.81	2.25
cal6 MW-15235	100000.000	100282.221	282.221	7421636.62	0.28

47Ti FQ Block 1

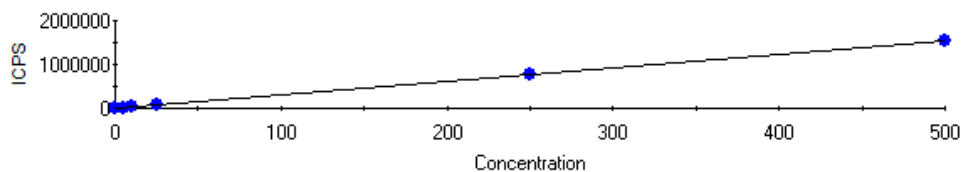
Intercept CPS=27.994439 Intercept Conc=0.127956
Sensitivity=218.782574 Correlation Coeff=0.999991

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	27.99	0.00
cal1 MW-15152	5.000	5.132	0.132	1150.86	2.65
MW15153	10.000	10.195	0.195	2258.57	1.95
cal2 MW-15154	25.000	27.204	2.204	5979.67	8.81
cal3 MW-15224	250.000	249.933	0.067	54709.04	0.03
cal4 MW-15225	500.000	498.896	1.104	109177.78	0.22

51V FQ Block 1

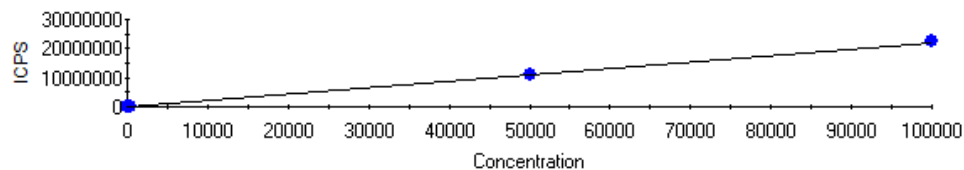
Intercept CPS=157.424450 Intercept Conc=0.048280
Sensitivity=3260.627237 Correlation Coeff=0.999995

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	157.42	0.00
cal1 MW-15152	5.000	4.956	0.044	16315.95	0.89
MW15153	10.000	9.990	0.010	32730.36	0.10
cal2 MW-15154	25.000	25.017	0.017	81728.29	0.07
cal3 MW-15224	250.000	251.132	1.132	819004.49	0.45
cal4 MW-15225	500.000	498.956	1.044	1627067.49	0.21

52Cr FQ Block 1

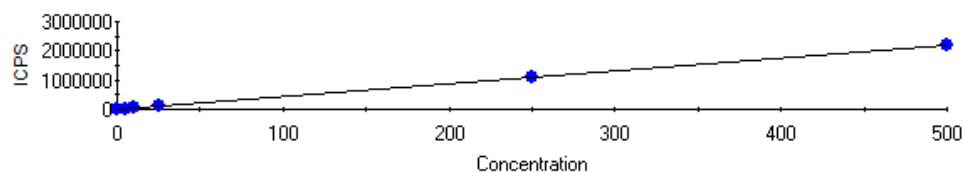
Intercept CPS=702.305313 Intercept Conc=0.226853
Sensitivity=3095.854890 Correlation Coeff=0.999988

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	702.31	0.00
cal1 MW-15152	5.000	4.882	0.118	15817.19	2.35
MW15153	10.000	9.896	0.104	31337.85	1.04
cal2 MW-15154	25.000	25.630	0.630	80048.27	2.52
cal3 MW-15224	250.000	252.015	2.015	780904.70	0.81
cal4 MW-15225	500.000	498.964	1.036	1545423.04	0.21

54Fe FQ Block 1

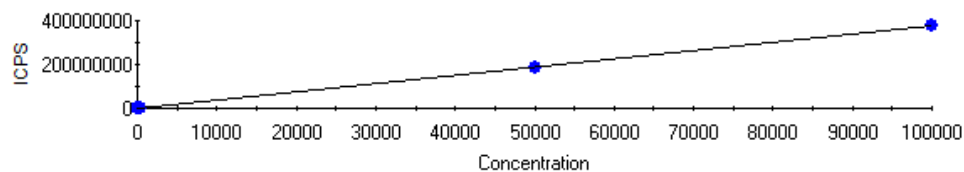
Intercept CPS=3427.655026 Intercept Conc=15.474303
Sensitivity=221.506263 Correlation Coeff=0.999977

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	3427.66	0.00
cal1 MW-15152	50.000	49.536	0.464	14400.09	0.93
cal3 MW-15224	250.000	356.997	106.997	82504.63	42.80
cal4 MW-15225	500.000	703.830	203.830	159330.48	40.77
cal5 MW-15234	50000.000	49469.501	530.499	10961231.95	1.06
cal6 MW-15235	100000.000	100263.963	263.963	22212523.42	0.26

55Mn FQ Block 1

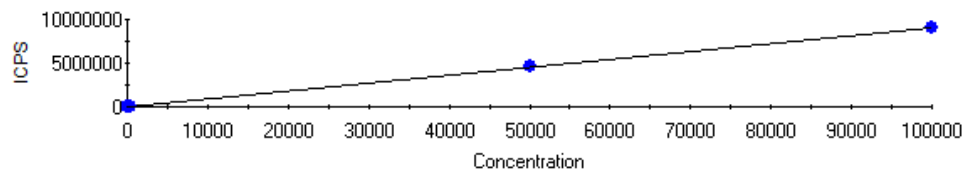
Intercept CPS=314.618364 Intercept Conc=0.072253
Sensitivity=4354.413558 Correlation Coeff=0.999997

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	314.62	0.00
cal1 MW-15152	5.000	4.881	0.119	21570.41	2.37
MW15153	10.000	9.911	0.089	43472.20	0.89
cal2 MW-15154	25.000	24.919	0.081	108822.54	0.32
cal3 MW-15224	250.000	254.186	4.186	1107145.48	1.67
cal4 MW-15225	500.000	506.305	6.305	2204975.19	1.26

56Fe FQ Block 1

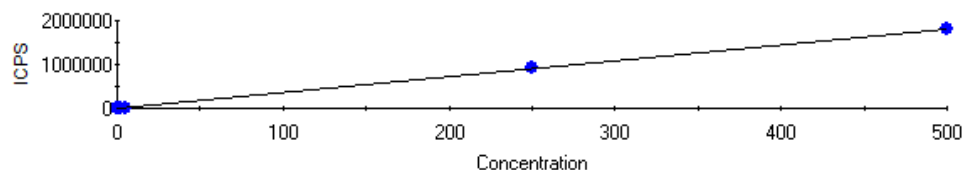
Intercept CPS=143937.652907 Intercept Conc=38.315851
Sensitivity=3756.608557 Correlation Coeff=0.999990

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	143937.65	0.00
cal1 MW-15152	50.000	47.982	2.018	324185.38	4.04
cal3 MW-15224	250.000	250.384	0.384	1084530.88	0.15
cal4 MW-15225	500.000	496.412	3.588	2008761.47	0.72
cal5 MW-15234	50000.000	49615.079	384.921	186528366.36	0.77
cal6 MW-15235	100000.000	100192.479	192.479	376527860.48	0.19

57Fe FQ Block 1

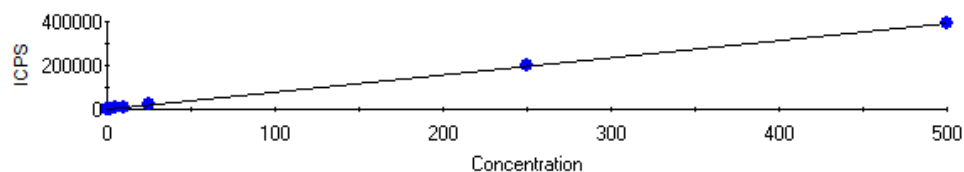
Intercept CPS=3055.763447 Intercept Conc=33.844493
Sensitivity=90.288350 Correlation Coeff=0.999999

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	3055.76	0.00
MW15190	20.000	20.535	0.535	4909.82	2.67
cal1 MW-15152	50.000	47.392	2.608	7334.75	5.22
MW15153	100.000	97.453	2.547	11854.60	2.55
cal3 MW-15224	250.000	249.472	0.528	25580.20	0.21
cal4 MW-15225	500.000	497.447	2.553	47969.41	0.51
cal5 MW-15234	50000.000	50387.943	387.943	4552500.00	0.78
cal6 MW-15235	100000.000	101015.239	1015.239	9123555.03	1.02

59Co FQ Block 1

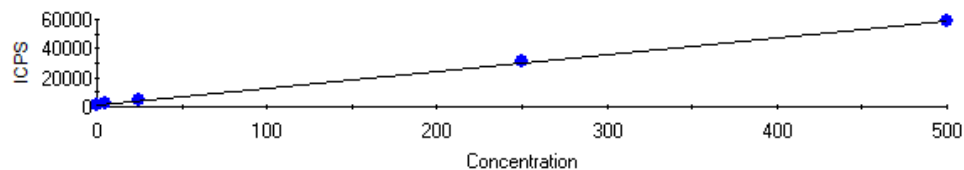
Intercept CPS=75.990792 Intercept Conc=0.020883
Sensitivity=3638.960756 Correlation Coeff=0.999996

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	75.99	0.00
cal1 MW-15152	1.000	0.988	0.012	3670.52	1.22
MW15153	2.000	1.983	0.017	7292.91	0.84
cal2 MW-15154	5.000	4.990	0.010	18235.16	0.20
cal3 MW-15224	250.000	252.055	2.055	917293.68	0.82
cal4 MW-15225	500.000	500.978	0.978	1823114.01	0.20

60Ni FQ Block 1

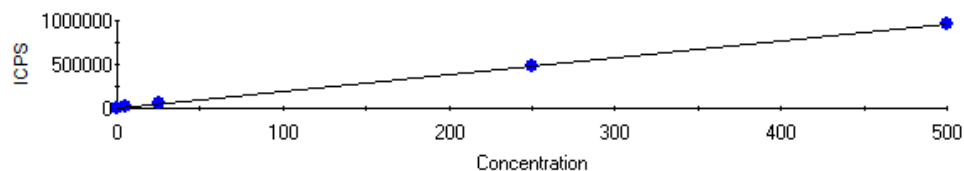
Intercept CPS=60.079582 Intercept Conc=0.075882
Sensitivity=791.755182 Correlation Coeff=0.999936

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	60.08	0.00
MW15096	2.000	2.054	0.054	1686.56	2.71
cal1 MW-15152	5.000	4.928	0.072	3962.12	1.43
MW15153	10.000	9.973	0.027	7955.88	0.27
cal2 MW-15154	25.000	25.011	0.011	19862.68	0.04
cal3 MW-15224	250.000	254.884	4.884	201866.00	1.95
cal4 MW-15225	500.000	497.558	2.442	394004.50	0.49

62Ni FQ Block 1

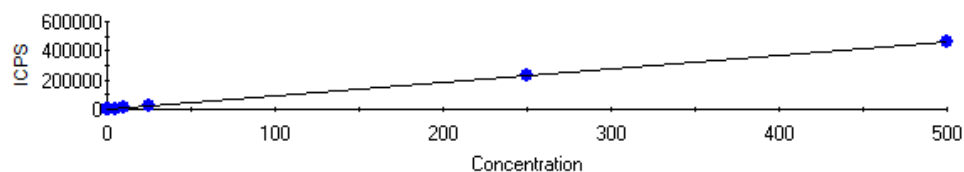
Intercept CPS=1319.248830 Intercept Conc=11.531626
Sensitivity=114.402668 Correlation Coeff=0.999814

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	1319.25	0.00
cal1 MW-15152	5.000	4.274	0.726	1808.21	14.52
cal2 MW-15154	25.000	24.378	0.622	4108.14	2.49
cal3 MW-15224	250.000	259.412	9.412	30996.67	3.76
cal4 MW-15225	500.000	499.805	0.195	58498.29	0.04

63Cu FQ Block 1

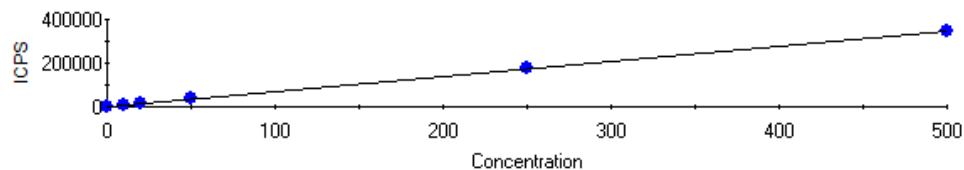
Intercept CPS=938.462450 Intercept Conc=0.486417
Sensitivity=1929.337744 Correlation Coeff=0.999990

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	938.46	0.00
cal1 MW-15152	5.000	4.982	0.018	10550.00	0.36
cal2 MW-15154	25.000	25.407	0.407	49957.44	1.63
cal3 MW-15224	250.000	251.867	1.867	486875.11	0.75
cal4 MW-15225	500.000	499.046	0.954	963767.31	0.19

65Cu FQ Block 1

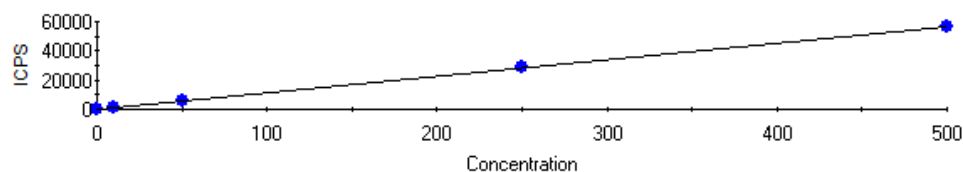
Intercept CPS=82.595846 Intercept Conc=0.089354
Sensitivity=924.364005 Correlation Coeff=0.999995

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	82.60	0.00
MW15190	1.000	1.135	0.135	1131.84	13.51
cal1 MW-15152	5.000	5.132	0.132	4826.03	2.63
MW15153	10.000	10.257	0.257	9563.68	2.57
cal2 MW-15154	25.000	25.449	0.449	23606.52	1.80
cal3 MW-15224	250.000	250.890	0.890	231996.59	0.36
cal4 MW-15225	500.000	498.177	1.823	460579.50	0.36

66Zn FQ Block 1

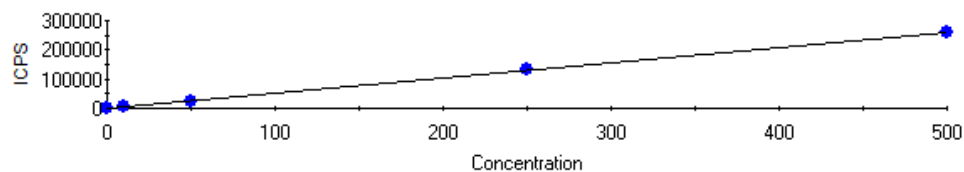
Intercept CPS=358.604491 Intercept Conc=0.515244
Sensitivity=695.989467 Correlation Coeff=0.999865

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	358.60	0.00
cal1 MW-15152	10.000	10.235	0.235	7482.12	2.35
MW15153	20.000	20.060	0.060	14319.82	0.30
cal2 MW-15154	50.000	53.216	3.216	37396.43	6.43
cal3 MW-15224	250.000	257.409	7.409	179512.53	2.96
cal4 MW-15225	500.000	498.301	1.699	347171.14	0.34

67Zn FQ Block 1

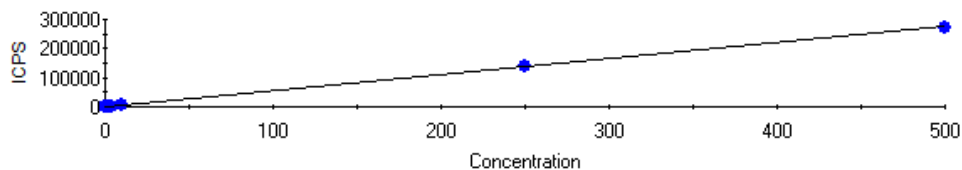
Intercept CPS=53.313177 Intercept Conc=0.468648
Sensitivity=113.759635 Correlation Coeff=0.999950

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	53.31	0.00
cal1 MW-15152	10.000	9.249	0.751	1105.47	7.51
cal2 MW-15154	50.000	49.209	0.791	5651.35	1.58
cal3 MW-15224	250.000	253.734	3.734	28917.99	1.49
cal4 MW-15225	500.000	498.227	1.773	56731.45	0.35

68Zn FQ Block 1

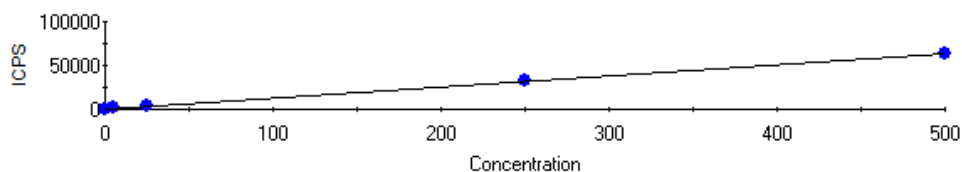
Intercept CPS=250.596792 Intercept Conc=0.484146
Sensitivity=517.606012 Correlation Coeff=0.999957

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	250.60	0.00
cal1 MW-15152	10.000	9.930	0.070	5390.63	0.70
cal2 MW-15154	50.000	49.498	0.502	25871.20	1.00
cal3 MW-15224	250.000	253.330	3.330	131375.63	1.33
cal4 MW-15225	500.000	497.653	2.347	257838.67	0.47

75As FQ Block 1

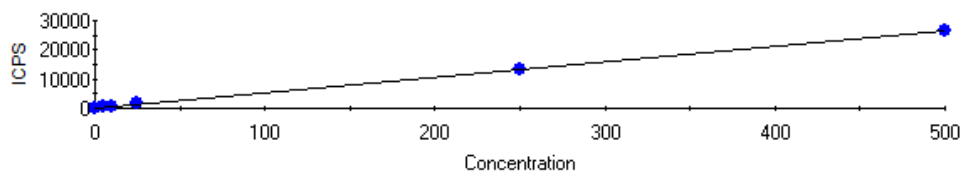
Intercept CPS=112.087195 Intercept Conc=0.204549
Sensitivity=547.972799 Correlation Coeff=0.999997

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	112.09	0.00
cal1 MW-15152	2.000	2.123	0.123	1275.28	6.14
MW15153	4.000	3.851	0.149	2222.17	3.73
cal2 MW-15154	10.000	10.586	0.586	5913.18	5.86
cal3 MW-15224	250.000	250.927	0.927	137613.31	0.37
cal4 MW-15225	500.000	499.525	0.475	273838.43	0.09

78Se FQ Block 1

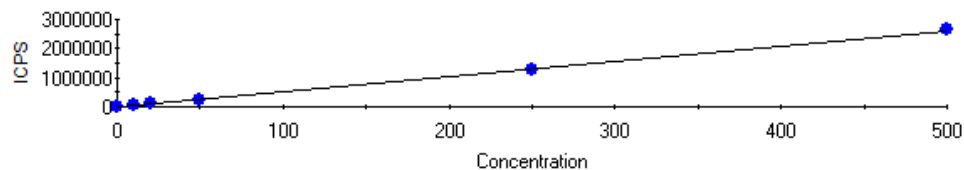
Intercept CPS=425.380078 Intercept Conc=3.371210
Sensitivity=126.180230 Correlation Coeff=0.999998

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	425.38	0.00
cal1 MW-15152	5.000	4.500	0.500	993.22	10.00
cal2 MW-15154	25.000	25.643	0.643	3661.05	2.57
cal3 MW-15224	250.000	250.407	0.407	32021.76	0.16
cal4 MW-15225	500.000	499.769	0.231	63486.41	0.05

82Se FQ Block 1

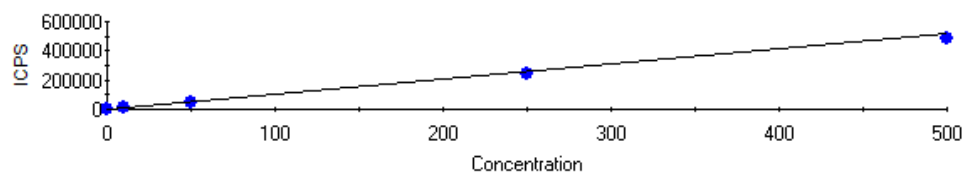
Intercept CPS=49.782344 Intercept Conc=0.939257
Sensitivity=53.001846 Correlation Coeff=0.999991

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	49.78	0.00
cal1 MW-15152	5.000	5.475	0.475	339.97	9.50
MW15153	10.000	10.533	0.533	608.05	5.33
cal2 MW-15154	25.000	27.387	2.387	1501.33	9.55
cal3 MW-15224	250.000	250.789	0.789	13342.09	0.32
cal4 MW-15225	500.000	499.471	0.529	26522.64	0.11

88Sr FQ Block 1

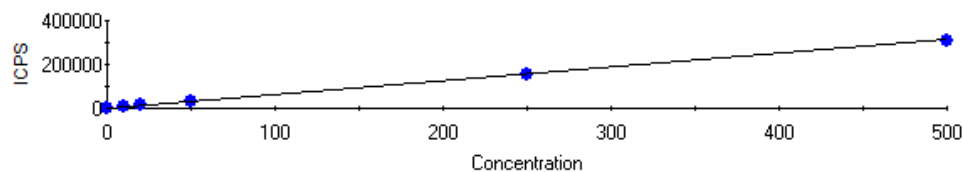
Intercept CPS=59.992297 Intercept Conc=0.011577
Sensitivity=5181.902218 Correlation Coeff=0.999923

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	59.99	0.00
cal1 MW-15152	10.000	9.782	0.218	50746.78	2.18
MW15153	20.000	19.885	0.115	103100.04	0.58
cal2 MW-15154	50.000	48.948	1.052	253704.68	2.10
cal3 MW-15224	250.000	250.217	0.217	1296660.43	0.09
cal4 MW-15225	500.000	513.721	13.721	2662114.29	2.74

95Mo FQ Block 1

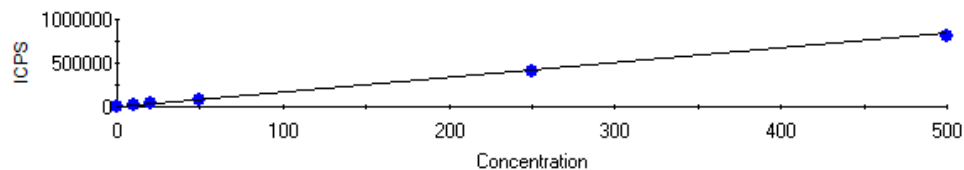
Intercept CPS=58.657775 Intercept Conc=0.057094
Sensitivity=1027.391095 Correlation Coeff=0.999932

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	58.66	0.00
cal1 MW-15152	10.000	9.899	0.101	10228.73	1.01
cal2 MW-15154	50.000	50.286	0.286	51721.89	0.57
cal3 MW-15224	250.000	233.389	16.611	239840.57	6.64
cal4 MW-15225	500.000	475.265	24.735	488341.81	4.95

97Mo FQ Block 1

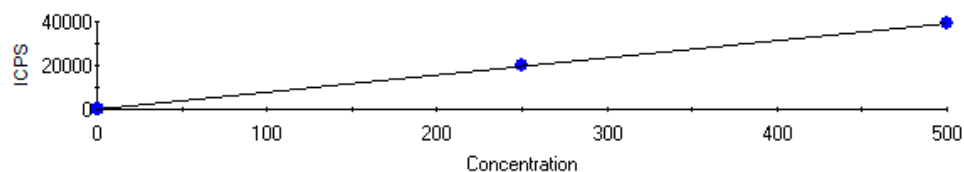
Intercept CPS=33.319594 Intercept Conc=0.052348
Sensitivity=636.500424 Correlation Coeff=0.999956

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	33.32	0.00
cal1 MW-15152	10.000	10.022	0.022	6412.51	0.22
MW15153	20.000	20.900	0.900	13336.45	4.50
cal2 MW-15154	50.000	51.253	1.253	32655.60	2.51
cal3 MW-15224	250.000	240.001	9.999	152793.93	4.00
cal4 MW-15225	500.000	486.723	13.277	309832.90	2.66

98Mo FQ Block 1

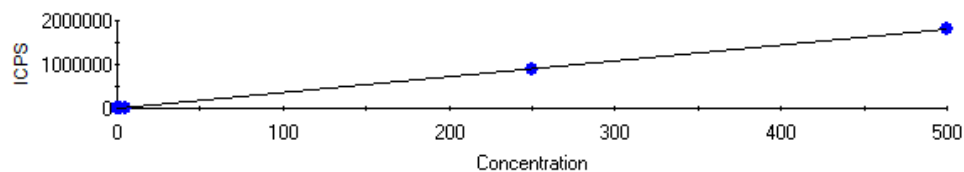
Intercept CPS=99.745881 Intercept Conc=0.058697
Sensitivity=1699.329303 Correlation Coeff=0.999922

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	99.75	0.00
cal1 MW-15152	10.000	10.092	0.092	17249.42	0.92
MW15153	20.000	20.364	0.364	34704.15	1.82
cal2 MW-15154	50.000	50.278	0.278	85538.98	0.56
cal3 MW-15224	250.000	233.670	16.330	397181.50	6.53
cal4 MW-15225	500.000	477.332	22.668	811244.41	4.53

106Cd FQ Block 1

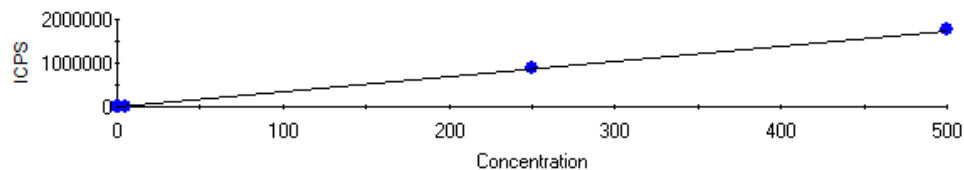
Intercept CPS=179.915058 Intercept Conc=2.305299
Sensitivity=78.044142 Correlation Coeff=0.999995

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	179.92	0.00
cal1 MW-15152	0.100	0.891	0.791	249.44	790.85
cal2 MW-15154	0.500	2.307	1.807	359.99	361.47
cal3 MW-15224	250.000	250.886	0.886	19760.13	0.35
cal4 MW-15225	500.000	499.555	0.445	39167.24	0.09

107Ag FQ Block 1

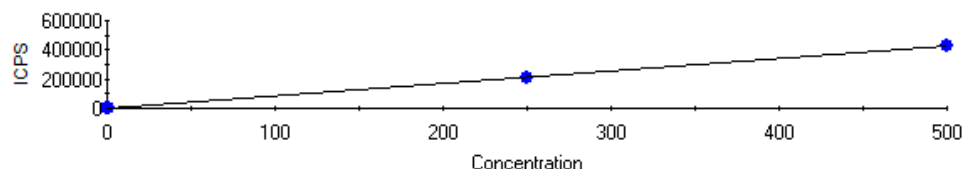
Intercept CPS=5.358175 Intercept Conc=0.001493
Sensitivity=3589.845596 Correlation Coeff=0.999993

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	5.36	0.00
cal1 MW-15152	1.000	0.963	0.037	3461.22	3.73
MW15153	2.000	1.974	0.026	7093.48	1.28
cal2 MW-15154	5.000	4.988	0.012	17911.97	0.24
cal3 MW-15224	250.000	249.276	0.724	894866.97	0.29
cal4 MW-15225	500.000	502.670	2.670	1804513.09	0.53

109Ag FQ Block 1

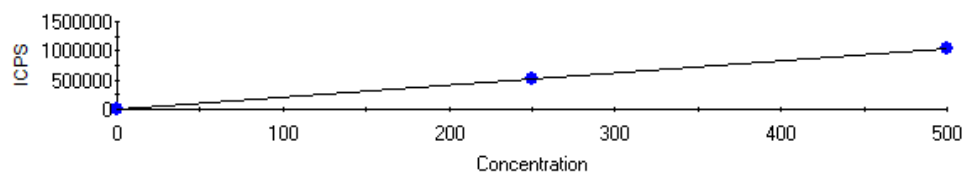
Intercept CPS=10.656105 Intercept Conc=0.003045
Sensitivity=3499.482468 Correlation Coeff=0.999999

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	10.66	0.00
cal1 MW-15152	1.000	0.970	0.030	3406.39	2.96
cal2 MW-15154	5.000	4.939	0.061	17296.28	1.21
cal3 MW-15224	250.000	250.365	0.365	876157.69	0.15
cal4 MW-15225	500.000	502.005	2.005	1756769.29	0.40

111Cd FQ Block 1

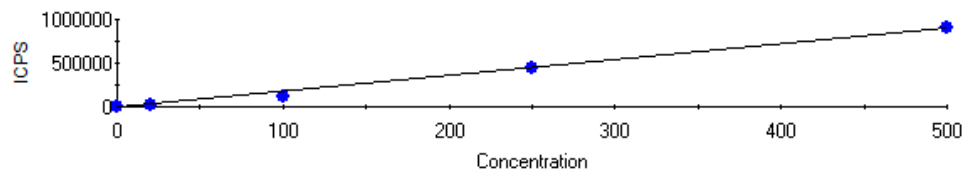
Intercept CPS=3.810644 Intercept Conc=0.004443
Sensitivity=857.737104 Correlation Coeff=0.999996

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	3.81	0.00
cal1 MW-15152	0.100	0.052	0.048	48.42	47.99
cal2 MW-15154	0.500	0.374	0.126	324.44	25.24
cal3 MW-15224	250.000	248.815	1.185	213421.69	0.47
cal4 MW-15225	500.000	500.593	0.593	429380.68	0.12

114Cd FQ Block 1

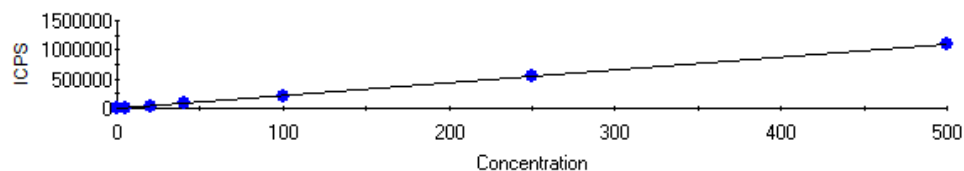
Intercept CPS=11.153986 Intercept Conc=0.005382
Sensitivity=2072.484352 Correlation Coeff=0.999993

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	11.15	0.00
MW15190	0.100	0.101	0.001	220.04	0.79
MW15153	0.200	0.188	0.012	400.09	6.17
cal2 MW-15154	0.500	0.548	0.048	1146.30	9.54
cal3 MW-15224	250.000	248.424	1.576	514865.73	0.63
cal4 MW-15225	500.000	500.788	0.788	1037886.49	0.16

116Sn FQ Block 1

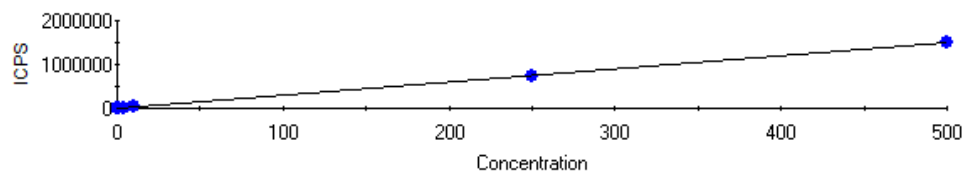
Intercept CPS=56.043110 Intercept Conc=0.031181
Sensitivity=1797.343778 Correlation Coeff=0.998077

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	56.04	0.00
cal1 MW-15152	20.000	13.431	6.569	24195.86	32.85
cal2 MW-15154	100.000	68.496	31.504	123166.39	31.50
cal3 MW-15224	250.000	249.914	0.086	449237.91	0.03
cal4 MW-15225	500.000	506.606	6.606	910602.06	1.32

118Sn FQ Block 1

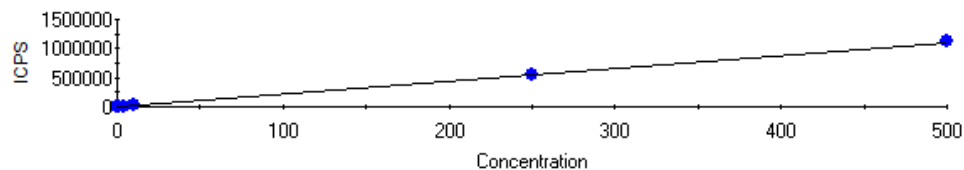
Intercept CPS=82.675603 Intercept Conc=0.038107
Sensitivity=2169.587166 Correlation Coeff=0.999982

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	82.68	0.00
MW15190	5.000	4.655	0.345	10181.18	6.91
cal1 MW-15152	20.000	19.138	0.862	41603.87	4.31
MW15153	40.000	39.673	0.327	86156.45	0.82
cal2 MW-15154	100.000	98.306	1.694	213365.27	1.69
cal3 MW-15224	250.000	247.811	2.189	537729.24	0.88
cal4 MW-15225	500.000	501.498	1.498	1088125.69	0.30

121Sb FQ Block 1

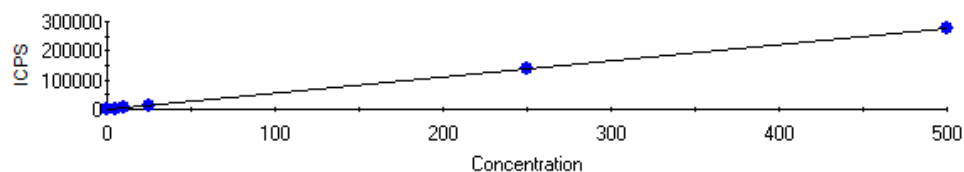
Intercept CPS=66.614321 Intercept Conc=0.022447
Sensitivity=2967.685062 Correlation Coeff=0.999868

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	66.61	0.00
MW15190	1.000	0.957	0.043	2906.42	4.31
MW15153	4.000	3.162	0.838	9449.33	20.96
cal2 MW-15154	10.000	8.698	1.302	25878.80	13.02
cal3 MW-15224	250.000	244.057	5.943	724351.05	2.38
cal4 MW-15225	500.000	505.859	5.859	1501297.28	1.17

123Sb FQ Block 1

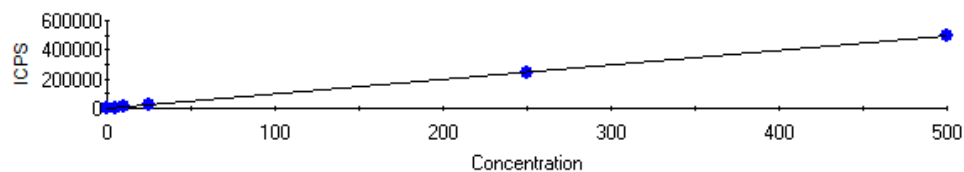
Intercept CPS=75.771375 Intercept Conc=0.034295
Sensitivity=2209.425654 Correlation Coeff=0.999915

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	75.77	0.00
MW15190	1.000	0.929	0.071	2129.04	7.07
MW15153	4.000	3.261	0.739	7281.60	18.46
cal2 MW-15154	10.000	8.924	1.076	19792.83	10.76
cal3 MW-15224	250.000	246.059	3.941	543725.23	1.58
cal4 MW-15225	500.000	506.459	6.459	1119060.14	1.29

135Ba FQ Block 1

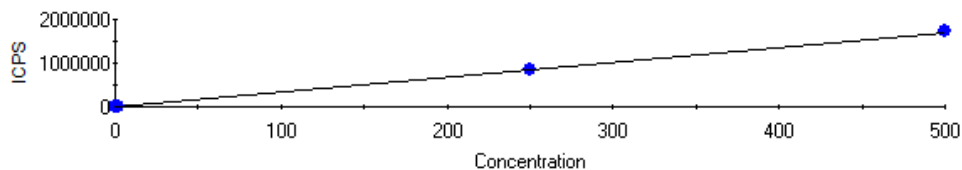
Intercept CPS=29.372616 Intercept Conc=0.053097
Sensitivity=553.192096 Correlation Coeff=0.999996

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	29.37	0.00
cal1 MW-15152	5.000	5.148	0.148	2877.14	2.96
MW15153	10.000	10.117	0.117	5625.81	1.17
cal2 MW-15154	25.000	24.949	0.051	13830.93	0.20
cal3 MW-15224	250.000	250.947	0.947	138851.21	0.38
cal4 MW-15225	500.000	499.078	0.922	276115.24	0.18

137Ba FQ Block 1

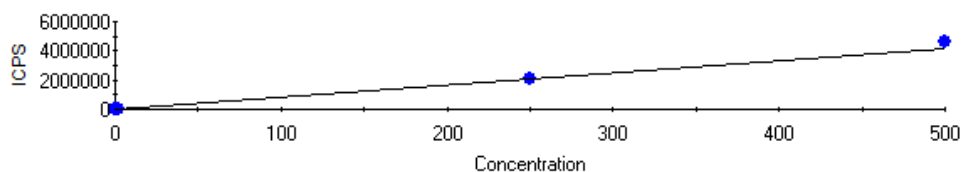
Intercept CPS=47.985596 Intercept Conc=0.048900
Sensitivity=981.293365 Correlation Coeff=0.999999

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	47.99	0.00
cal1 MW-15152	5.000	5.072	0.072	5024.86	1.43
MW15153	10.000	10.053	0.053	9912.70	0.53
cal2 MW-15154	25.000	24.743	0.257	24328.38	1.03
cal3 MW-15224	250.000	250.693	0.693	246050.92	0.28
cal4 MW-15225	500.000	499.974	0.026	490668.92	0.01

203Tl FQ Block 1

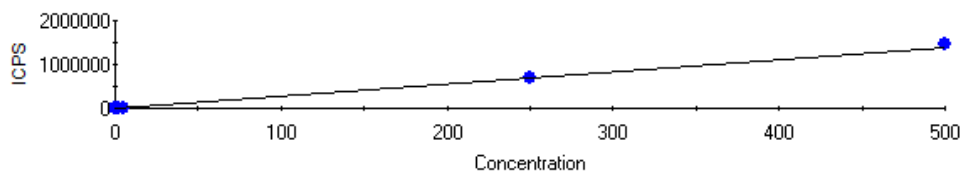
Intercept CPS=34.846653 Intercept Conc=0.010299
Sensitivity=3383.494042 Correlation Coeff=0.999971

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	34.85	0.00
cal1 MW-15152	0.500	0.497	0.003	1717.15	0.56
MW15153	1.000	0.980	0.020	3349.87	2.02
cal2 MW-15154	2.500	2.437	0.063	8281.09	2.51
cal3 MW-15224	250.000	248.996	1.004	842511.39	0.40
cal4 MW-15225	500.000	506.312	6.312	1713137.66	1.26

205Tl FQ Block 1

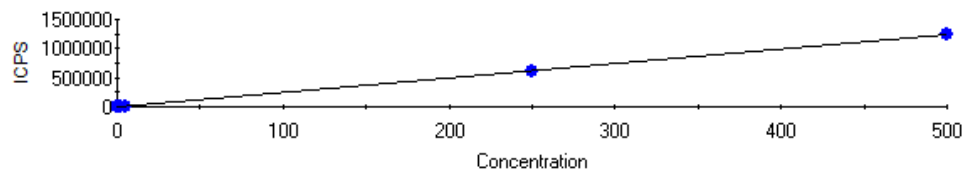
Intercept CPS=42.512616 Intercept Conc=0.005070
Sensitivity=8385.283922 Correlation Coeff=0.998772

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	42.51	0.00
cal1 MW-15152	0.500	0.485	0.015	4105.50	3.09
MW15153	1.000	0.959	0.041	8086.02	4.08
cal2 MW-15154	2.500	2.440	0.060	20506.64	2.38
cal3 MW-15224	250.000	245.978	4.022	2062641.23	1.61
cal4 MW-15225	500.000	549.501	49.501	4607762.46	9.90

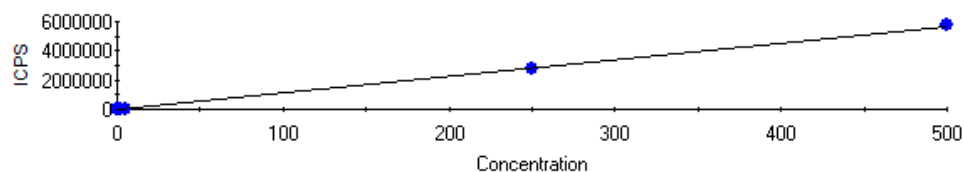
206Pb FQ Block 1

Intercept CPS=37.279372 Intercept Conc=0.013504
Sensitivity=2760.617883 Correlation Coeff=0.999752

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	-0.000	0.000	37.28	0.00
cal1 MW-15152	1.000	0.980	0.020	2742.07	2.02
MW15153	2.000	1.985	0.015	5516.04	0.77
cal2 MW-15154	5.000	4.925	0.075	13632.42	1.51
cal3 MW-15224	250.000	250.688	0.688	692090.00	0.28
cal4 MW-15225	500.000	526.352	26.352	1453094.81	5.27

207Pb FQ Block 1

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	25.29	0.00
cal1 MW-15152	1.000	0.995	0.005	2473.04	0.47
MW15153	2.000	1.960	0.040	4846.73	1.98
cal2 MW-15154	5.000	4.910	0.090	12100.15	1.80
cal3 MW-15224	250.000	247.660	2.340	609104.95	0.94
cal4 MW-15225	500.000	501.171	1.171	1232573.86	0.23

208Pb FQ Block 1

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM10195-01	0.000	0.000	0.000	117.40	0.00
cal1 MW-15152	1.000	0.992	0.008	11297.10	0.84
MW15153	2.000	1.987	0.013	22525.89	0.63
cal2 MW-15154	5.000	4.918	0.082	55567.40	1.64
cal3 MW-15224	250.000	248.653	1.347	2803667.07	0.54
cal4 MW-15225	500.000	511.655	11.655	5768992.36	2.33

Dilution Corrected Concentrations

RINSE 10/29/2020 12:22:55

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:23:21	101.0%	0.010	12.020	10.580	226.500	0.434	-0.490	-0.354	-0.374	-0.665
2	12:23:48	101.0%	0.010	11.500	10.860	221.800	-0.167	-0.501	-0.401	-0.380	-0.671
3	12:24:15	98.1%	0.002	11.520	11.280	216.500	0.947	-0.517	-0.539	-0.368	-0.672
X		100.0%	0.007	11.680	10.910	221.600	0.405	-0.503	-0.431	-0.374	-0.669
S		1.7%	0.005	0.292	0.355	5.013	0.558	0.014	0.096	0.006	0.004
%RSD		1.7	62.380	2.503	3.259	2.262	137.800	2.727	22.270	1.562	0.538
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:23:21	5.338	63.030	-4.617	-0.687	1.443	100.9%	-0.092	0.002	-0.044	-8.150
2	12:23:48	6.731	61.180	-6.355	2.244	0.137	99.3%	0.038	0.014	-0.003	-26.680
3	12:24:15	5.909	56.540	-6.338	-2.530	0.689	99.8%	-0.036	0.002	-0.025	-11.990
X		5.993	60.250	-5.770	-0.324	0.756	100.0%	-0.030	0.006	-0.024	-15.610
S		0.700	3.343	0.999	2.407	0.655	0.8%	0.065	0.007	0.020	9.778
%RSD		11.680	5.549	17.310	742.400	86.670	0.8	215.700	124.300	84.480	62.660
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:23:21	-0.903	-0.037	-0.706	-0.513	-0.002	0.004	2.365	0.024	-0.025	0.041
2	12:23:48	-0.235	-0.034	-0.905	-0.117	-0.006	-0.025	1.248	0.019	-0.024	0.093
3	12:24:15	0.636	-0.013	-0.763	-1.072	-0.018	-0.035	0.453	0.056	0.032	-0.077
X		-0.168	-0.028	-0.792	-0.567	-0.009	-0.019	1.356	0.033	-0.006	0.019
S		0.772	0.013	0.103	0.480	0.008	0.021	0.961	0.020	0.033	0.087
%RSD		460.700	45.770	12.980	84.650	89.290	109.700	70.860	60.800	571.700	455.900
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:23:21	-0.157	-0.127	-0.048	-1.166	1.378	3.357	4.214	0.002	4.470	-0.009
2	12:23:48	0.276	-0.001	0.003	-0.235	1.267	3.350	4.659	0.092	3.999	-0.005
3	12:24:15	0.099	0.077	-0.039	-0.357	2.000	3.133	3.427	-0.213	4.320	-0.008
X		0.072	-0.017	-0.028	-0.586	1.548	3.280	4.100	-0.039	4.263	-0.007
S		0.218	0.103	0.027	0.506	0.396	0.128	0.624	0.157	0.240	0.002
%RSD		300.800	608.400	97.470	86.320	25.540	3.889	15.220	397.800	5.637	33.650
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:23:21	102.5%	-0.011	0.015	0.001	0.386	-0.000	-0.002	-0.005	-0.002	100.1%
2	12:23:48	99.0%	0.033	0.030	0.003	0.623	0.002	-0.001	-0.005	-0.006	100.2%
3	12:24:15	98.6%	-0.014	0.005	0.008	-0.093	-0.000	-0.003	-0.005	-0.006	99.7%
X		100.0%	0.003	0.017	0.004	0.305	0.000	-0.002	-0.005	-0.005	100.0%
S		2.1%	0.027	0.013	0.003	0.365	0.001	0.001	0.000	0.002	0.3%
%RSD		2.1	966.700	75.410	86.580	119.500	353.200	59.900	0.215	44.600	0.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:23:21	-0.011	-0.007	-0.006	-0.020	-0.010	0.008	100.8%	-0.007	-0.004	-0.008
2	12:23:48	-0.009	-0.023	-0.002	-0.009	-0.002	-0.008	99.9%	-0.009	-0.004	-0.012
3	12:24:15	-0.020	0.001	-0.001	-0.009	-0.002	0.013	99.4%	-0.010	-0.005	-0.008
X		-0.013	-0.010	-0.003	-0.013	-0.005	0.004	100.0%	-0.009	-0.004	-0.009
S		0.006	0.012	0.003	0.006	0.004	0.011	0.7%	0.002	0.000	0.003
%RSD		43.640	125.800	91.430	50.960	91.910	264.900	0.7	20.390	11.260	27.450
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	12:23:21	-0.010	-0.007	101.4%							
2	12:23:48	-0.005	-0.008	100.1%							
3	12:24:15	-0.009	-0.006	98.6%							
X		-0.008	-0.007	100.0%							
S		0.002	0.001	1.4%							
%RSD		30.600	10.650	1.4							

TUNE MW15272 10/29/2020 12:28:43

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:29:10	98.7%	0.033	3.877	3.933	227.100	2.527	2.104	2.150	2.434	-0.489
2	12:29:37	98.9%	0.011	3.374	3.750	226.800	2.689	2.272	2.306	2.145	-0.471
3	12:30:04	99.2%	0.049	3.639	3.986	235.400	2.853	2.308	2.706	2.271	-0.486
X		98.9%	0.031	3.630	3.890	229.800	2.689	2.228	2.387	2.283	-0.482
S		0.3%	0.019	0.252	0.124	4.892	0.163	0.109	0.287	0.145	0.010
%RSD		0.3	62.950	6.940	3.188	2.129	6.055	4.901	12.020	6.355	2.007
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:29:10	1.751	67.820	-3.501	-2.497	4.472	98.7%	-0.091	0.010	-0.045	-19.930
2	12:29:37	1.284	64.820	-2.639	-1.563	5.538	99.3%	-0.054	-0.008	-0.027	-11.460
3	12:30:04	4.876	65.950	-2.377	6.053	4.334	99.3%	-0.091	0.016	-0.002	-14.390
X		2.637	66.200	-2.839	0.664	4.781	99.1%	-0.079	0.006	-0.024	-15.260
S		1.953	1.511	0.588	4.690	0.658	0.4%	0.021	0.013	0.022	4.298
%RSD		74.050	2.283	20.710	706.100	13.770	0.4	26.900	199.400	88.550	28.170
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:29:10	2.816	0.018	3.704	4.649	-0.003	-0.004	0.307	0.061	0.003	0.029
2	12:29:37	2.534	0.004	2.231	4.980	0.009	0.011	1.146	0.070	0.002	0.063
3	12:30:04	2.459	0.008	1.957	3.011	0.009	-0.015	1.180	-0.023	0.011	-0.044
X		2.603	0.010	2.630	4.213	0.005	-0.003	0.877	0.036	0.005	0.016
S		0.188	0.007	0.940	1.054	0.007	0.013	0.494	0.051	0.005	0.055
%RSD		7.235	74.100	35.720	25.020	139.700	456.200	56.350	143.100	93.090	346.100
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:29:10	-0.002	-0.010	0.131	-0.121	1.014	3.481	6.948	0.686	4.067	0.004
2	12:29:37	0.135	0.093	-0.033	0.024	1.383	3.203	4.043	-0.096	6.160	0.010
3	12:30:04	-0.150	0.076	-0.015	-0.470	1.415	3.224	3.403	-0.208	3.983	0.009
X		-0.006	0.053	0.028	-0.189	1.271	3.303	4.798	0.127	4.737	0.008
S		0.142	0.055	0.090	0.254	0.223	0.155	1.889	0.487	1.234	0.003
%RSD		2471.000	105.000	325.300	134.500	17.550	4.690	39.370	383.100	26.040	39.870
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:29:10	97.2%	0.035	0.058	0.026	1.781	0.011	0.009	0.029	0.003	96.1%
2	12:29:37	98.8%	0.073	0.075	0.046	0.034	0.009	0.007	0.009	0.009	98.4%
3	12:30:04	99.5%	0.037	0.055	0.067	0.051	0.004	0.003	0.004	0.013	100.1%
X		98.5%	0.048	0.062	0.046	0.622	0.008	0.006	0.014	0.008	98.2%
S		1.2%	0.021	0.011	0.020	1.004	0.004	0.003	0.013	0.005	2.0%
%RSD		1.2	44.220	17.190	43.910	161.300	45.480	51.300	91.580	57.390	2.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:29:10	0.004	0.010	0.029	0.037	-0.023	0.027	96.4%	-0.000	0.001	0.002
2	12:29:37	0.003	0.014	0.054	0.058	-0.024	0.009	98.3%	-0.002	-0.001	-0.000
3	12:30:04	0.002	-0.003	0.045	0.047	-0.003	-0.000	100.4%	-0.001	0.002	-0.004
X		0.003	0.007	0.043	0.047	-0.016	0.012	98.3%	-0.001	0.001	-0.001
S		0.001	0.009	0.013	0.010	0.012	0.014	2.0%	0.001	0.001	0.003
%RSD		24.730	128.800	29.240	21.940	72.540	115.200	2.0	73.340	189.900	367.000
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	12:29:10	0.007	0.004	95.0%							
2	12:29:37	0.006	0.002	99.4%							
3	12:30:04	0.003	0.003	101.6%							
X		0.005	0.003	98.7%							
S		0.002	0.001	3.3%							
%RSD		44.700	34.550	3.4							

BLANK IM10195-01 10/29/2020 12:34:31

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:34:58	99.4%	-0.012	0.193	-0.009	-0.731	0.350	0.047	0.021	0.086	-0.026
2	12:35:25	100.0%	-0.020	-0.059	0.085	2.240	-0.410	-0.002	-0.151	0.076	0.025
3	12:35:52	100.6%	0.032	-0.134	-0.076	-1.509	0.060	-0.045	0.129	-0.163	0.002
X		100.0%	-0.000	0.000	0.000	0.000	-0.000	-0.000	-0.000	0.000	-0.000
S		0.6%	0.028	0.172	0.081	1.979	0.384	0.046	0.141	0.141	0.025
%RSD		0.6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:34:58	0.925	2.095	0.196	-2.555	0.548	100.7%	0.054	-0.007	0.000	3.879
2	12:35:25	-0.233	1.172	0.502	2.282	-0.407	98.8%	0.002	0.010	0.002	-5.806
3	12:35:52	-0.692	-3.267	-0.697	0.273	-0.141	100.5%	-0.055	-0.003	-0.002	1.927
X		0.000	-0.000	0.000	0.000	0.000	100.0%	-0.000	0.000	0.000	0.000
S		0.833	2.867	0.623	2.430	0.493	1.0%	0.054	0.009	0.002	5.122
%RSD		0.000	0.000	0.000	0.000	0.000	1.0	0.000	0.000	0.000	0.000
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:34:58	-0.281	0.005	0.054	0.173	-0.003	-0.016	-1.044	-0.007	0.005	0.000
2	12:35:25	0.244	-0.002	0.604	1.176	-0.001	0.016	0.641	-0.000	0.003	0.073
3	12:35:52	0.036	-0.004	-0.658	-1.349	0.004	-0.000	0.403	0.007	-0.008	-0.074
X		0.000	-0.000	-0.000	0.000	-0.000	0.000	0.000	-0.000	-0.000	0.000
S		0.264	0.005	0.633	1.271	0.004	0.016	0.912	0.007	0.007	0.073
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:34:58	0.093	-0.075	-0.082	-0.231	-0.062	-0.132	-1.327	-0.300	-0.802	-0.002
2	12:35:25	-0.080	-0.034	0.006	0.283	0.016	-0.094	0.520	0.133	-0.500	0.005
3	12:35:52	-0.013	0.109	0.075	-0.053	0.046	0.226	0.806	0.168	1.302	-0.002
X		-0.000	-0.000	-0.000	0.000	-0.000	0.000	0.000	-0.000	0.000	-0.000
S		0.087	0.096	0.079	0.261	0.056	0.197	1.158	0.261	1.138	0.004
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:34:58	99.7%	-0.006	-0.021	-0.007	0.480	0.002	-0.001	0.000	-0.001	99.2%
2	12:35:25	100.1%	0.005	0.029	-0.002	-0.213	-0.000	0.000	-0.000	0.001	100.6%
3	12:35:52	100.2%	0.001	-0.008	0.009	-0.268	-0.001	0.000	-0.000	-0.001	100.2%
X		100.0%	-0.000	-0.000	-0.000	-0.000	-0.000	0.000	0.000	0.000	100.0%
S		0.3%	0.006	0.026	0.008	0.417	0.002	0.001	0.000	0.001	0.7%
%RSD		0.3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:34:58	0.002	-0.001	-0.003	-0.005	0.013	-0.004	99.0%	0.005	-0.002	0.001
2	12:35:25	-0.011	-0.005	0.004	0.010	-0.024	-0.000	100.6%	-0.001	0.000	-0.005
3	12:35:52	0.009	0.006	-0.001	-0.005	0.012	0.004	100.4%	-0.004	0.001	0.004
X		-0.000	0.000	-0.000	-0.000	-0.000	-0.000	100.0%	-0.000	-0.000	-0.000
S		0.010	0.006	0.004	0.009	0.021	0.004	0.9%	0.005	0.002	0.004
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.9	0.000	0.000	0.000
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	12:34:58	-0.000	0.002	98.4%							
2	12:35:25	-0.002	-0.002	99.8%							
3	12:35:52	0.002	0.000	101.9%							
X		0.000	0.000	100.0%							
S		0.002	0.002	1.8%							
%RSD		0.000	0.000	1.8							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:40:50	100.9%	0.148	12.170	13.630	8.599	85.820	22.420	21.880	21.410	15.800
2	12:41:17	100.4%	0.148	13.350	13.280	-4.586	86.910	22.830	22.880	21.900	16.210
3	12:41:44	100.3%	0.124	13.260	13.580	-9.496	87.410	22.790	23.140	21.730	16.030
X		100.5%	0.140	12.930	13.500	-1.828	86.710	22.680	22.640	21.680	16.010
S		0.3%	0.014	0.658	0.191	9.358	0.811	0.224	0.665	0.247	0.202
%RSD		0.3	10.070	5.092	1.412	512.000	0.935	0.988	2.936	1.141	1.260
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:40:50	46.010	0.111	81.260	77.060	76.850	99.8%	2.016	2.032	0.399	-13.550
2	12:41:17	45.790	-3.373	81.190	86.960	79.190	100.4%	1.949	2.133	0.348	44.450
3	12:41:44	45.150	-7.068	79.630	79.250	76.540	100.6%	2.126	2.020	0.371	-28.180
X		45.650	-3.443	80.690	81.090	77.530	100.2%	2.030	2.062	0.373	0.907
S		0.447	3.590	0.922	5.199	1.450	0.4%	0.090	0.062	0.026	38.410
%RSD		0.980	104.300	1.143	6.411	1.870	0.4	4.417	3.019	6.875	4236.000
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:40:50	7.893	1.947	8.911	7.361	2.053	1.990	2.799	0.408	0.473	3.958
2	12:41:17	7.905	1.924	7.522	7.966	1.932	2.033	1.394	0.448	0.427	4.660
3	12:41:44	7.372	1.988	8.222	8.806	2.076	2.140	1.124	0.414	0.460	4.554
X		7.723	1.953	8.218	8.044	2.020	2.054	1.772	0.423	0.453	4.391
S		0.304	0.032	0.695	0.726	0.078	0.077	0.899	0.021	0.024	0.378
%RSD		3.942	1.647	8.453	9.022	3.847	3.752	50.750	5.075	5.266	8.616
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:40:50	4.071	4.110	0.304	0.783	-0.101	0.237	2.052	0.480	1.017	-0.003
2	12:41:17	4.277	4.238	0.390	0.153	-0.137	-0.093	1.141	0.334	-2.021	0.008
3	12:41:44	4.065	3.928	0.428	0.250	-0.136	0.059	0.528	0.186	-2.629	0.001
X		4.138	4.092	0.374	0.395	-0.125	0.067	1.240	0.333	-1.211	0.002
S		0.121	0.156	0.063	0.339	0.021	0.165	0.767	0.147	1.953	0.006
%RSD		2.920	3.811	16.930	85.810	16.460	244.900	61.820	44.090	161.300	299.100
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:40:50	100.0%	4.167	3.761	3.903	0.053	0.412	0.393	0.041	0.049	100.0%
2	12:41:17	99.7%	3.955	4.216	3.893	-0.298	0.408	0.397	0.018	0.028	99.5%
3	12:41:44	99.5%	3.992	4.102	4.164	0.303	0.392	0.348	0.035	0.049	100.6%
X		99.8%	4.038	4.027	3.987	0.019	0.404	0.379	0.032	0.042	100.0%
S		0.3%	0.113	0.237	0.154	0.302	0.011	0.027	0.012	0.012	0.5%
%RSD		0.3	2.801	5.878	3.851	1578.000	2.673	7.109	38.050	29.140	0.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:40:50	1.483	1.949	0.376	0.293	2.130	2.104	100.7%	0.185	0.199	0.382
2	12:41:17	1.451	2.039	0.364	0.372	2.045	2.019	102.0%	0.202	0.196	0.415
3	12:41:44	1.464	2.059	0.345	0.326	1.937	2.103	102.1%	0.200	0.206	0.445
X		1.466	2.016	0.362	0.330	2.037	2.076	101.6%	0.196	0.200	0.414
S		0.016	0.059	0.016	0.040	0.096	0.049	0.8%	0.009	0.005	0.032
%RSD		1.086	2.923	4.302	12.050	4.733	2.369	0.8	4.827	2.617	7.648
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	12:40:50	0.457	0.426	101.2%							
2	12:41:17	0.409	0.393	101.7%							
3	12:41:44	0.429	0.419	101.8%							
X		0.432	0.413	101.6%							
S		0.024	0.017	0.3%							
%RSD		5.656	4.220	0.3							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:46:44	99.0%	0.516	23.510	24.060	10.410	211.400	56.790	54.900	51.990	40.990
2	12:47:11	100.9%	0.370	23.520	24.850	-0.986	206.700	54.550	53.270	53.140	40.350
3	12:47:38	99.8%	0.349	25.790	25.200	-6.533	207.000	53.770	52.920	53.540	40.880
X		99.9%	0.412	24.270	24.710	0.965	208.400	55.040	53.700	52.890	40.740
S		0.9%	0.091	1.317	0.585	8.639	2.652	1.570	1.054	0.809	0.343
%RSD		0.9	22.100	5.426	2.367	895.400	1.273	2.852	1.963	1.530	0.841
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:46:44	109.800	-1.550	185.700	202.800	191.500	96.8%	5.314	5.238	0.994	8.571
2	12:47:11	106.700	-5.390	180.100	219.400	191.900	96.8%	5.371	5.259	0.997	-28.670
3	12:47:38	103.800	-7.744	182.700	181.800	192.400	95.5%	4.696	5.274	1.056	-30.700
X		106.800	-4.895	182.800	201.300	191.900	96.3%	5.127	5.257	1.016	-16.930
S		3.000	3.126	2.763	18.870	0.477	0.7%	0.374	0.018	0.035	22.110
%RSD		2.809	63.870	1.511	9.372	0.248	0.8	7.298	0.347	3.460	130.600
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:46:44	19.050	5.030	21.340	20.110	5.075	5.215	3.936	0.950	1.204	10.940
2	12:47:11	19.290	5.051	20.020	21.980	5.135	5.178	4.116	1.015	1.003	11.060
3	12:47:38	20.050	5.082	21.660	19.510	5.257	5.152	5.091	1.014	1.199	11.250
X		19.460	5.054	21.010	20.530	5.156	5.181	4.381	0.993	1.135	11.090
S		0.522	0.026	0.866	1.289	0.093	0.032	0.621	0.037	0.115	0.158
%RSD		2.683	0.511	4.123	6.279	1.799	0.611	14.180	3.751	10.110	1.426
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:46:44	10.820	9.788	1.263	1.419	-0.260	-0.154	4.718	1.223	0.452	-0.003
2	12:47:11	9.674	10.180	1.286	0.950	-0.340	0.004	6.347	1.658	-1.487	-0.001
3	12:47:38	10.780	10.050	0.976	1.132	-0.135	0.327	4.409	1.188	-1.479	0.008
X		10.420	10.010	1.175	1.167	-0.245	0.059	5.158	1.356	-0.838	0.001
S		0.650	0.199	0.173	0.237	0.103	0.245	1.041	0.262	1.117	0.006
%RSD		6.231	1.987	14.690	20.280	42.170	416.000	20.180	19.310	133.300	468.000
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:46:44	93.9%	10.130	10.160	10.140	0.581	0.965	1.008	0.043	0.088	91.1%
2	12:47:11	94.0%	10.200	10.360	9.780	0.232	1.011	0.986	0.059	0.090	92.1%
3	12:47:38	94.0%	9.843	10.770	9.892	0.190	0.942	0.976	0.049	0.124	91.2%
X		94.0%	10.060	10.430	9.937	0.335	0.973	0.990	0.050	0.101	91.5%
S		0.0%	0.188	0.310	0.183	0.215	0.035	0.016	0.008	0.020	0.6%
%RSD		0.0	1.867	2.970	1.838	64.160	3.613	1.658	16.090	20.090	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:46:44	3.272	4.787	0.919	0.892	5.271	4.995	92.2%	0.474	0.479	0.991
2	12:47:11	3.224	4.550	0.912	0.952	5.275	4.791	92.6%	0.547	0.496	1.049
3	12:47:38	3.273	4.626	1.040	0.944	5.006	5.133	93.6%	0.484	0.467	1.016
X		3.257	4.655	0.957	0.929	5.184	4.973	92.8%	0.502	0.481	1.019
S		0.028	0.121	0.072	0.032	0.154	0.172	0.7%	0.039	0.015	0.029
%RSD		0.860	2.602	7.523	3.474	2.977	3.461	0.8	7.827	3.055	2.865
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	12:46:44	1.053	0.990	87.8%							
2	12:47:11	1.045	1.007	87.3%							
3	12:47:38	1.019	0.972	88.0%							
X		1.039	0.990	87.7%							
S		0.018	0.017	0.4%							
%RSD		1.685	1.741	0.4							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:52:37	101.4%	0.468	58.100	58.240	-4.109	420.000	427.500	418.800	396.900	38.860
2	12:53:03	99.5%	0.360	61.990	62.280	-1.373	437.000	441.300	421.400	400.100	40.090
3	12:53:30	99.2%	0.466	61.440	61.290	-12.620	432.900	433.300	415.300	406.400	40.910
X		100.0%	0.431	60.510	60.600	-6.034	430.000	434.000	418.500	401.100	39.950
S		1.2%	0.062	2.104	2.108	5.865	8.857	6.898	3.060	4.858	1.029
%RSD		1.2	14.270	3.478	3.478	97.200	2.060	1.589	0.731	1.211	2.577
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:52:37	115.500	3.507	395.000	409.000	391.500	99.9%	5.525	4.987	4.889	51.600
2	12:53:03	120.100	-2.891	404.300	463.500	392.600	99.4%	4.910	4.875	4.742	115.300
3	12:53:30	118.200	-2.925	406.800	402.000	387.500	98.4%	4.962	5.005	5.015	8.652
X		117.900	-0.770	402.000	424.800	390.500	99.3%	5.132	4.956	4.882	58.510
S		2.315	3.704	6.253	33.660	2.662	0.8%	0.341	0.070	0.137	53.650
%RSD		1.964	481.200	1.555	7.922	0.682	0.8	6.640	1.421	2.801	91.690
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:52:37	49.530	4.859	48.340	48.320	0.968	4.884	3.897	4.977	4.991	10.020
2	12:53:03	48.030	4.926	48.130	47.140	0.990	4.859	4.399	4.945	5.065	10.260
3	12:53:30	51.050	4.859	47.480	46.710	1.006	5.043	4.527	5.023	5.338	10.430
X		49.540	4.881	47.980	47.390	0.988	4.928	4.274	4.982	5.132	10.240
S		1.511	0.039	0.447	0.834	0.019	0.100	0.333	0.039	0.183	0.207
%RSD		3.050	0.791	0.931	1.760	1.913	2.026	7.787	0.787	3.564	2.023
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:52:37	9.470	10.460	2.239	4.556	0.170	0.252	26.890	6.594	-1.612	9.867
2	12:53:03	9.677	9.692	1.820	5.098	0.076	0.369	18.120	4.466	-1.966	9.741
3	12:53:30	8.599	9.635	2.310	3.847	0.169	0.056	21.470	5.365	-2.025	9.737
X		9.249	9.930	2.123	4.500	0.138	0.226	22.160	5.475	-1.868	9.782
S		0.572	0.463	0.265	0.627	0.054	0.158	4.428	1.069	0.224	0.074
%RSD		6.184	4.662	12.480	13.940	38.830	70.090	19.980	19.520	11.970	0.755
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:52:37	96.8%	10.150	9.960	10.160	1.208	0.907	0.958	0.048	0.050	97.9%
2	12:53:03	98.1%	9.955	10.050	9.833	0.701	0.990	0.983	0.058	0.090	98.9%
3	12:53:30	100.1%	9.595	10.060	10.280	0.764	0.991	0.969	0.050	0.075	99.1%
X		98.4%	9.899	10.020	10.090	0.891	0.963	0.970	0.052	0.072	98.6%
S		1.7%	0.280	0.054	0.232	0.276	0.048	0.013	0.005	0.020	0.7%
%RSD		1.7	2.830	0.537	2.303	31.010	4.990	1.298	9.664	28.360	0.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:52:37	13.550	18.990	1.455	1.466	5.466	5.278	99.5%	0.450	0.498	0.955
2	12:53:03	13.150	19.110	1.491	1.441	4.894	4.914	100.3%	0.517	0.490	0.982
3	12:53:30	13.590	19.320	1.509	1.478	5.084	5.023	100.9%	0.524	0.465	1.002
X		13.430	19.140	1.485	1.462	5.148	5.072	100.2%	0.497	0.484	0.980
S		0.242	0.165	0.028	0.019	0.291	0.187	0.7%	0.041	0.017	0.024
%RSD		1.806	0.862	1.859	1.300	5.658	3.686	0.7	8.209	3.606	2.427
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	12:52:37	1.082	1.009	98.8%							
2	12:53:03	0.932	0.988	100.2%							
3	12:53:30	0.972	0.978	102.1%							
X		0.995	0.992	100.4%							
S		0.078	0.016	1.7%							
%RSD		7.805	1.575	1.7							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:58:29	98.8%	0.797	113.200	115.200	5.265	819.400	864.200	828.300	798.800	78.990
2	12:58:56	100.0%	0.855	115.900	111.200	-8.024	884.000	878.500	832.900	798.900	80.030
3	12:59:23	100.4%	0.750	110.100	109.300	-2.870	826.100	865.500	837.900	817.700	80.660
X		99.7%	0.801	113.100	111.900	-1.877	843.200	869.400	833.000	805.100	79.890
S		0.8%	0.053	2.904	2.978	6.700	35.520	7.893	4.788	10.920	0.847
%RSD		0.8	6.559	2.568	2.661	357.000	4.213	0.908	0.575	1.356	1.060
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:58:29	226.400	-0.545	829.500	783.400	782.200	100.8%	10.260	10.040	9.848	-1.192
2	12:58:56	225.800	-0.770	833.600	871.600	797.100	100.0%	10.720	9.793	10.010	-28.420
3	12:59:23	221.800	-4.553	839.500	821.900	813.000	98.4%	9.606	10.130	9.826	52.530
X		224.700	-1.956	834.200	825.600	797.400	99.7%	10.200	9.990	9.896	7.639
S		2.495	2.252	5.030	44.210	15.380	1.2%	0.559	0.177	0.102	41.190
%RSD		1.110	115.100	0.603	5.355	1.929	1.2	5.484	1.769	1.028	539.300
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:58:29	101.800	9.772	97.550	95.230	1.901	9.873	9.795	10.050	9.680	20.290
2	12:58:56	104.300	10.010	99.730	98.340	1.984	10.010	9.035	10.030	10.900	20.240
3	12:59:23	107.300	9.956	98.970	98.790	2.065	10.030	9.179	10.630	10.190	19.650
X		104.500	9.911	98.750	97.450	1.983	9.973	9.337	10.230	10.260	20.060
S		2.744	0.123	1.109	1.939	0.082	0.087	0.404	0.339	0.612	0.358
%RSD		2.626	1.241	1.123	1.990	4.142	0.870	4.324	3.310	5.970	1.783
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:58:29	18.080	19.830	3.944	8.960	-0.329	-0.582	45.170	11.010	2.245	19.600
2	12:58:56	20.070	19.520	3.958	10.010	0.288	0.143	41.690	10.180	-0.476	19.780
3	12:59:23	18.720	20.240	3.649	9.957	0.330	-0.240	43.720	10.410	1.216	20.280
X		18.960	19.860	3.851	9.643	0.096	-0.226	43.530	10.530	0.995	19.880
S		1.015	0.361	0.174	0.592	0.369	0.363	1.745	0.431	1.374	0.352
%RSD		5.354	1.817	4.532	6.142	382.900	160.300	4.009	4.094	138.000	1.771
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:58:29	99.7%	20.270	20.570	19.840	0.511	2.070	1.970	0.187	0.208	100.0%
2	12:58:56	99.3%	20.050	20.650	20.180	0.246	1.949	1.976	0.167	0.221	100.0%
3	12:59:23	96.9%	20.660	21.480	21.070	0.885	1.904	1.975	0.134	0.134	99.6%
X		98.7%	20.320	20.900	20.360	0.548	1.974	1.974	0.162	0.188	99.9%
S		1.5%	0.311	0.508	0.636	0.321	0.086	0.003	0.027	0.047	0.2%
%RSD		1.5	1.528	2.430	3.125	58.600	4.351	0.161	16.530	25.000	0.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:58:29	27.440	39.380	3.025	3.282	10.010	9.824	100.8%	0.979	0.977	2.106
2	12:58:56	26.980	39.630	3.164	3.214	9.994	10.170	101.4%	1.020	0.918	1.980
3	12:59:23	27.620	40.010	3.296	3.288	10.350	10.160	100.7%	0.940	0.982	1.868
X		27.350	39.670	3.162	3.261	10.120	10.050	101.0%	0.980	0.959	1.985
S		0.334	0.321	0.136	0.041	0.203	0.198	0.3%	0.040	0.035	0.119
%RSD		1.220	0.810	4.285	1.264	2.010	1.969	0.3	4.097	3.684	6.001
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	12:58:29	1.916	2.003	99.8%							
2	12:58:56	2.004	1.982	100.0%							
3	12:59:23	1.961	1.978	100.9%							
X		1.960	1.987	100.2%							
S		0.044	0.013	0.6%							
%RSD		2.254	0.678	0.6							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:04:22	97.6%	2.161	252.200	254.200	3.311	±2009.000	±2149.000	2151.000	2031.000	202.900
2	13:04:49	96.8%	2.429	266.300	263.900	0.279	±2043.000	±2083.000	2093.000	2022.000	198.400
3	13:05:16	96.7%	1.936	265.700	268.500	8.980	±2036.000	±2131.000	2123.000	2021.000	199.400
X		97.1%	2.175	261.400	262.200	4.190	±2030.000	±2121.000	2122.000	2024.000	200.300
S		0.5%	0.247	7.983	7.302	4.416	±18.020	±34.040	28.550	5.440	2.355
%RSD		0.5	11.330	3.054	2.785	105.400	±0.888	±1.605	1.345	0.269	1.176
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:04:22	582.600	2.074	±2014.000	2089.000	1988.000	94.4%	27.730	24.780	26.270	350.700
2	13:04:49	565.600	-6.212	±1983.000	2066.000	1987.000	96.2%	27.960	25.050	25.120	272.500
3	13:05:16	579.800	-7.491	±1994.000	2008.000	1970.000	95.7%	25.930	25.210	25.490	49.410
X		576.000	-3.876	±1997.000	2054.000	1981.000	95.4%	27.200	25.020	25.630	224.200
S		9.163	5.193	±15.850	41.470	10.180	0.9%	1.111	0.217	0.587	156.400
%RSD		1.591	134.000	±0.794	2.019	0.514	1.0	4.085	0.867	2.291	69.740
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:04:22	269.600	25.710	261.100	264.700	5.219	24.880	24.580	25.360	26.430	53.080
2	13:04:49	261.700	24.600	257.100	242.700	4.901	24.780	23.630	25.670	25.310	52.650
3	13:05:16	262.800	24.440	257.400	263.100	4.851	25.370	24.920	25.190	24.600	53.910
X		264.700	24.920	258.500	256.800	4.990	25.010	24.380	25.410	25.450	53.220
S		4.285	0.692	2.177	12.240	0.200	0.319	0.672	0.244	0.923	0.642
%RSD		1.619	2.777	0.842	4.766	4.002	1.276	2.759	0.962	3.627	1.207
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:04:22	50.570	49.670	11.030	26.480	-0.037	0.608	113.500	27.990	-1.431	48.710
2	13:04:49	49.160	48.740	10.090	26.360	-0.163	0.563	103.200	25.660	-1.106	49.140
3	13:05:16	47.900	50.090	10.640	24.100	0.077	0.712	113.100	28.500	0.184	49.000
X		49.210	49.500	10.590	25.640	-0.041	0.627	109.900	27.390	-0.784	48.950
S		1.339	0.690	0.468	1.341	0.120	0.076	5.842	1.514	0.854	0.218
%RSD		2.720	1.394	4.419	5.231	293.500	12.190	5.315	5.528	108.900	0.446
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:04:22	92.9%	50.540	51.140	50.290	1.863	4.941	4.991	0.369	0.518	92.8%
2	13:04:49	92.7%	50.170	50.630	50.440	2.604	4.959	4.850	0.371	0.545	92.1%
3	13:05:16	93.1%	50.150	51.990	50.100	2.456	5.064	4.977	0.381	0.580	91.1%
X		92.9%	50.290	51.250	50.280	2.307	4.988	4.939	0.374	0.548	92.0%
S		0.2%	0.224	0.687	0.175	0.392	0.067	0.077	0.007	0.031	0.9%
%RSD		0.2	0.446	1.339	0.348	17.000	1.337	1.566	1.775	5.687	0.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:04:22	67.860	97.000	8.545	8.842	24.830	24.510	95.8%	2.451	2.463	5.072
2	13:04:49	68.180	99.280	8.584	8.893	25.010	25.070	95.2%	2.485	2.425	4.864
3	13:05:16	69.450	98.640	8.964	9.037	25.010	24.650	95.2%	2.375	2.433	4.838
X		68.500	98.310	8.698	8.924	24.950	24.740	95.4%	2.437	2.440	4.925
S		0.841	1.175	0.232	0.101	0.107	0.289	0.4%	0.056	0.020	0.128
%RSD		1.227	1.195	2.662	1.132	0.428	1.168	0.4	2.300	0.830	2.600
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	13:04:22	5.012	4.999	92.1%							
2	13:04:49	4.823	4.874	91.9%							
3	13:05:16	4.894	4.881	91.5%							
X		4.910	4.918	91.8%							
S		0.095	0.070	0.3%							
%RSD		1.940	1.430	0.3							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:10:14	98.3%	239.000	245.700	243.900	-2.047	257.400	262.000	256.000	247.000	246.000
2	13:10:41	97.3%	249.500	246.800	245.600	6.797	264.000	269.000	265.100	256.200	248.400
3	13:11:08	95.1%	244.300	248.400	253.000	0.722	268.000	271.600	265.100	254.700	251.200
X		96.9%	244.300	246.900	247.500	1.824	263.100	267.500	262.100	252.700	248.500
S		1.7%	5.250	1.367	4.854	4.524	5.363	4.983	5.277	4.950	2.599
%RSD		1.7	2.149	0.553	1.961	248.000	2.038	1.863	2.014	1.959	1.046
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:10:14	268.100	1.729	238.800	499.700	347.900	96.4%	249.300	250.900	250.600	1421.000
2	13:10:41	272.200	-2.643	243.700	444.100	347.200	95.9%	250.600	249.000	252.700	88.460
3	13:11:08	269.500	-5.454	250.200	478.000	351.800	94.7%	249.800	253.500	252.800	-124.900
X		269.900	-2.123	244.200	473.900	348.900	95.7%	249.900	251.100	252.000	461.400
S		2.083	3.620	5.747	28.020	2.452	0.9%	0.650	2.236	1.233	837.500
%RSD		0.772	170.500	2.353	5.912	0.703	0.9	0.260	0.890	0.489	181.500
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:10:14	360.800	255.600	254.600	247.800	254.800	256.800	259.500	259.200	252.900	260.600
2	13:10:41	352.100	252.200	249.000	250.400	247.800	253.000	254.000	246.000	252.700	258.900
3	13:11:08	358.100	254.700	247.600	250.300	253.600	254.800	264.700	250.400	247.000	252.700
X		357.000	254.200	250.400	249.500	252.100	254.900	259.400	251.900	250.900	257.400
S		4.423	1.753	3.726	1.477	3.703	1.882	5.377	6.708	3.362	4.136
%RSD		1.239	0.690	1.488	0.592	1.469	0.738	2.073	2.663	1.340	1.607
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:10:14	253.900	254.500	251.500	246.400	-0.419	0.284	1027.000	253.100	1.104	250.000
2	13:10:41	253.100	251.700	249.900	251.500	-0.175	-0.582	1018.000	249.200	2.731	250.100
3	13:11:08	254.200	253.800	251.300	253.300	-0.134	-0.424	1029.000	250.000	-0.511	250.500
X		253.700	253.300	250.900	250.400	-0.243	-0.241	1025.000	250.800	1.108	250.200
S		0.593	1.484	0.884	3.609	0.154	0.461	5.907	2.064	1.621	0.269
%RSD		0.234	0.586	0.352	1.441	63.350	191.600	0.577	0.823	146.300	0.107
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:10:14	93.9%	228.100	237.600	228.900	242.700	249.900	252.100	248.700	248.800	93.8%
2	13:10:41	93.8%	233.200	238.400	234.700	254.400	249.700	249.400	249.300	249.300	94.3%
3	13:11:08	94.1%	238.900	244.000	237.300	255.600	248.200	249.600	248.500	247.200	95.1%
X		94.0%	233.400	240.000	233.700	250.900	249.300	250.400	248.800	248.400	94.4%
S		0.2%	5.409	3.460	4.317	7.160	0.935	1.466	0.413	1.125	0.7%
%RSD		0.2	2.318	1.441	1.848	2.854	0.375	0.586	0.166	0.453	0.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:10:14	250.100	246.900	240.000	241.100	250.100	248.100	96.8%	249.300	247.900	252.600
2	13:10:41	250.300	246.800	245.100	246.900	252.400	251.900	97.5%	250.400	245.100	251.000
3	13:11:08	249.300	249.700	247.100	250.200	250.300	252.000	98.6%	247.300	244.900	248.600
X		249.900	247.800	244.100	246.100	250.900	250.700	97.6%	249.000	246.000	250.700
S		0.530	1.615	3.656	4.622	1.242	2.208	0.9%	1.542	1.690	2.017
%RSD		0.212	0.652	1.498	1.878	0.495	0.881	0.9	0.619	0.687	0.804
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	13:10:14	248.600	250.400	96.6%							
2	13:10:41	247.200	247.900	99.0%							
3	13:11:08	247.100	247.700	100.3%							
X		247.700	248.700	98.6%							
S		0.824	1.475	1.8%							
%RSD		0.333	0.593	1.9							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:06	95.0%	<u>M 507.900</u>	<u>M 504.500</u>	498.200	1.525	528.500	549.500	528.900	493.700	<u>M 500.300</u>
2	13:16:34	92.1%	<u>M 504.300</u>	497.300	499.800	4.785	546.900	538.100	532.500	497.300	498.700
3	13:17:01	91.5%	496.400	499.600	495.500	-4.682	542.000	536.300	516.900	490.900	<u>M 503.000</u>
X		92.9%	<u>M 502.900</u>	<u>M 500.500</u>	497.800	0.543	539.100	541.300	526.100	494.000	<u>M 500.600</u>
S		1.9%	<u>M 5.854</u>	<u>M 3.678</u>	2.158	4.809	9.491	7.150	8.206	3.211	<u>M 2.206</u>
%RSD		2.0	<u>M 1.164</u>	<u>M 0.735</u>	0.434	886.300	1.760	1.321	1.560	0.650	<u>M 0.441</u>
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:06	549.200	-0.003	515.600	941.600	704.700	93.7%	<u>M 503.700</u>	<u>M 505.000</u>	<u>M 503.000</u>	1316.000
2	13:16:34	550.300	-5.224	519.400	898.700	707.500	91.5%	492.600	497.600	499.800	1059.000
3	13:17:01	543.500	-6.328	511.500	927.100	688.500	90.7%	<u>M 500.400</u>	494.400	494.000	3035.000
X		547.700	-3.852	515.500	922.500	700.300	92.0%	<u>M 498.900</u>	<u>M 499.000</u>	<u>M 499.000</u>	1803.000
S		3.688	3.378	3.969	21.800	10.240	1.6%	<u>M 5.682</u>	<u>M 5.441</u>	<u>M 4.565</u>	1075.000
%RSD		0.673	87.710	0.770	2.363	1.462	1.7	<u>M 1.139</u>	<u>M 1.090</u>	<u>M 0.915</u>	59.590
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:06	705.400	<u>M 501.400</u>	<u>T 496.900</u>	490.700	<u>M 515.900</u>	<u>M 500.700</u>	497.200	498.500	<u>M 501.900</u>	499.500
2	13:16:34	706.400	<u>M 505.800</u>	<u>T 490.500</u>	499.000	492.900	497.500	499.800	495.800	497.900	498.400
3	13:17:01	699.700	<u>M 511.600</u>	501.800	502.600	494.100	494.500	<u>M 502.400</u>	<u>M 502.800</u>	494.700	497.000
X		703.800	<u>M 506.300</u>	<u>T 496.400</u>	497.400	<u>M 501.000</u>	<u>M 497.600</u>	<u>M 499.800</u>	<u>M 499.000</u>	<u>M 498.200</u>	498.300
S		3.624	<u>M 5.126</u>	<u>T 5.651</u>	6.091	<u>M 12.940</u>	<u>M 3.109</u>	<u>M 2.616</u>	<u>M 3.527</u>	<u>M 3.618</u>	1.229
%RSD		0.515	<u>M 1.012</u>	<u>T 1.138</u>	1.224	<u>M 2.584</u>	<u>M 0.625</u>	<u>M 0.523</u>	<u>M 0.707</u>	<u>M 0.726</u>	0.247
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:06	493.900	497.100	498.200	<u>M 503.900</u>	-0.408	0.474	2081.000	<u>M 502.400</u>	-3.078	<u>M 513.800</u>
2	13:16:34	<u>M 505.000</u>	<u>M 501.400</u>	<u>M 506.500</u>	498.500	-0.507	-0.096	2098.000	500.000	0.309	<u>M 516.700</u>
3	13:17:01	495.800	494.500	493.900	496.800	-0.147	-0.333	2047.000	496.000	-1.081	<u>M 510.700</u>
X		<u>M 498.200</u>	<u>M 497.700</u>	<u>M 499.500</u>	<u>M 499.800</u>	-0.354	0.015	2075.000	<u>M 499.500</u>	-1.283	<u>M 513.700</u>
S		<u>M 5.941</u>	<u>M 3.467</u>	<u>M 6.420</u>	<u>M 3.714</u>	0.186	0.415	26.180	<u>M 3.206</u>	1.703	<u>M 2.980</u>
%RSD		<u>M 1.192</u>	<u>M 0.697</u>	<u>M 1.285</u>	<u>M 0.743</u>	52.450	2756.000	1.262	<u>M 0.642</u>	132.700	<u>M 0.580</u>
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:06	93.5%	464.500	475.600	470.000	<u>M 503.800</u>	<u>M 505.100</u>	<u>M 504.100</u>	496.000	497.900	95.0%
2	13:16:34	91.5%	477.600	493.200	479.600	<u>M 503.700</u>	<u>M 500.500</u>	<u>M 502.300</u>	<u>M 507.000</u>	<u>M 507.800</u>	94.2%
3	13:17:01	93.0%	483.700	491.400	482.300	491.100	<u>M 502.400</u>	499.600	498.800	496.700	93.7%
X		92.6%	475.300	486.700	477.300	<u>M 499.600</u>	<u>M 502.700</u>	<u>M 502.000</u>	<u>M 500.600</u>	<u>M 500.800</u>	94.3%
S		1.0%	9.779	9.677	6.466	<u>M 7.319</u>	<u>M 2.341</u>	<u>M 2.267</u>	<u>M 5.714</u>	<u>M 6.059</u>	0.7%
%RSD		1.1	2.058	1.988	1.355	<u>M 1.465</u>	<u>M 0.466</u>	<u>M 0.452</u>	<u>M 1.141</u>	<u>M 1.210</u>	0.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:06	<u>M 504.000</u>	496.800	<u>M 503.900</u>	<u>M 505.500</u>	<u>M 501.800</u>	499.100	98.0%	<u>M 507.900</u>	<u>M 549.800</u>	<u>M 510.400</u>
2	13:16:34	<u>M 509.300</u>	<u>M 502.600</u>	<u>M 505.200</u>	<u>M 506.300</u>	497.300	<u>M 501.400</u>	97.5%	<u>M 509.600</u>	<u>M 555.000</u>	<u>M 511.700</u>
3	13:17:01	<u>M 506.500</u>	<u>M 505.100</u>	<u>M 508.400</u>	<u>M 507.600</u>	498.100	499.400	97.5%	<u>M 501.400</u>	<u>M 543.700</u>	<u>M 557.100</u>
X		<u>M 506.600</u>	<u>M 501.500</u>	<u>M 505.900</u>	<u>M 506.500</u>	<u>M 499.100</u>	<u>M 500.000</u>	97.7%	<u>M 506.300</u>	<u>M 549.500</u>	<u>M 526.400</u>
S		<u>M 2.675</u>	<u>M 4.286</u>	<u>M 2.318</u>	<u>M 1.054</u>	<u>M 2.424</u>	<u>M 1.224</u>	0.3%	<u>M 4.323</u>	<u>M 5.658</u>	<u>M 26.590</u>
%RSD		<u>M 0.528</u>	<u>M 0.855</u>	<u>M 0.458</u>	<u>M 0.208</u>	<u>M 0.486</u>	<u>M 0.245</u>	0.3	<u>M 0.854</u>	<u>M 1.030</u>	<u>M 5.052</u>
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	13:16:06	<u>M 506.800</u>	<u>M 512.000</u>	97.9%							
2	13:16:34	<u>M 500.900</u>	<u>M 507.700</u>	98.2%							
3	13:17:01	495.800	<u>M 515.200</u>	100.5%							
X		<u>M 501.200</u>	<u>M 511.700</u>	98.9%							
S		<u>M 5.512</u>	<u>M 3.769</u>	1.4%							
%RSD		<u>M 1.100</u>	<u>M 0.737</u>	1.4							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:22:00	82.8%	0.036	0.418	1.196	2.417	50600.000	51570.000	51060.000	48500.000	0.523
2	13:22:27	82.2%	0.033	1.151	0.559	-19.060	51330.000	49400.000	50180.000	47680.000	0.629
3	13:22:54	82.9%	0.061	0.752	0.658	-0.323	51570.000	50210.000	50470.000	48110.000	0.650
X		82.7%	0.044	0.774	0.804	-5.656	51170.000	50390.000	50570.000	48100.000	0.601
S		0.4%	0.015	0.367	0.343	11.690	507.900	1096.000	451.600	407.900	0.068
%RSD		0.5	34.690	47.440	42.600	206.700	0.993	2.176	0.893	0.848	11.300
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:22:00	4961.000	-0.555	49910.000	51930.000	51470.000	82.2%	0.495	0.029	0.112	-2.743
2	13:22:27	4918.000	-5.357	49670.000	50710.000	50890.000	83.6%	0.659	0.007	0.160	3.582
3	13:22:54	4977.000	-8.816	48790.000	49320.000	51020.000	84.0%	0.503	0.024	0.134	-8.848
X		4952.000	-4.909	49460.000	50650.000	51130.000	83.3%	0.552	0.020	0.135	-2.670
S		30.450	4.148	590.600	1306.000	300.400	1.0%	0.093	0.012	0.024	6.216
%RSD		0.615	84.500	1.194	2.579	0.588	1.2	16.790	57.120	17.850	232.800
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:22:00	49730.000	0.769	50570.000	51490.000	2.279	1.989	1.527	0.241	0.216	1.160
2	13:22:27	49320.000	0.716	49120.000	49450.000	2.331	1.906	2.606	0.168	0.252	1.326
3	13:22:54	49360.000	0.739	49160.000	50220.000	2.257	1.950	0.617	0.185	0.101	1.192
X		49470.000	0.741	49620.000	50390.000	2.289	1.949	1.583	0.198	0.189	1.226
S		224.900	0.027	826.200	1030.000	0.038	0.041	0.996	0.038	0.079	0.088
%RSD		0.455	3.630	1.665	2.043	1.662	2.128	62.890	19.230	41.650	7.172
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:22:00	0.689	1.155	0.304	-0.315	0.635	-0.508	0.850	0.229	-1.221	0.398
2	13:22:27	1.561	1.124	0.286	0.757	0.197	-0.314	1.904	0.437	0.936	0.393
3	13:22:54	1.426	1.376	0.493	-0.401	0.647	-0.504	2.991	0.767	-1.287	0.390
X		1.225	1.219	0.361	0.014	0.493	-0.442	1.915	0.478	-0.524	0.394
S		0.469	0.138	0.114	0.645	0.257	0.111	1.071	0.271	1.265	0.004
%RSD		38.320	11.290	31.690	4639.000	52.090	25.060	55.900	56.810	241.200	0.971
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:22:00	81.8%	2.212	2.259	2.099	0.738	0.021	0.033	-0.001	0.011	82.7%
2	13:22:27	82.7%	2.297	2.136	2.193	0.778	0.019	0.029	-0.013	0.009	83.3%
3	13:22:54	83.0%	2.233	2.227	2.256	0.091	0.041	0.037	0.004	0.016	83.1%
X		82.5%	2.247	2.207	2.182	0.535	0.027	0.033	-0.003	0.012	83.1%
S		0.6%	0.044	0.064	0.079	0.386	0.012	0.004	0.008	0.003	0.3%
%RSD		0.7	1.965	2.889	3.628	72.000	45.860	12.720	246.000	29.090	0.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:22:00	0.622	0.798	1.346	1.302	0.003	0.041	89.6%	0.011	0.027	0.032
2	13:22:27	0.656	0.838	1.339	1.276	0.002	0.017	91.3%	0.019	0.025	0.021
3	13:22:54	0.687	0.856	1.428	1.300	0.010	0.012	91.5%	0.017	0.021	0.007
X		0.655	0.831	1.371	1.293	0.005	0.023	90.8%	0.016	0.024	0.020
S		0.033	0.029	0.050	0.014	0.004	0.016	1.1%	0.004	0.003	0.012
%RSD		5.003	3.536	3.621	1.118	80.160	67.660	1.2	28.310	13.300	61.330
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	13:22:00	0.033	0.034	89.8%							
2	13:22:27	0.027	0.029	91.6%							
3	13:22:54	0.034	0.025	91.1%							
X		0.032	0.029	90.8%							
S		0.004	0.005	0.9%							
%RSD		12.520	15.680	1.0							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:53	82.8%	0.042	0.798	0.730	10.160	97900.000	99220.000	99750.000	94840.000	1.059
2	13:28:20	82.7%	0.017	0.462	0.826	11.270	99930.000	100500.000	99020.000	95330.000	1.229
3	13:28:47	83.2%	0.025	0.579	0.610	3.394	100400.000	99680.000	100400.000	96000.000	1.147
X		82.9%	0.028	0.613	0.722	8.276	99420.000	99800.000	99710.000	95390.000	1.145
S		0.3%	0.013	0.171	0.108	4.265	1340.000	646.200	677.600	584.000	0.085
%RSD		0.3	45.650	27.840	14.980	51.530	1.348	0.647	0.679	0.612	7.413
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:53	9929.000	-4.184	90900.000	99390.000	100100.000	83.4%	1.254	-0.020	0.354	8.918
2	13:28:20	10180.000	0.397	91750.000	100200.000	100700.000	83.9%	0.896	-0.001	0.351	-0.129
3	13:28:47	9949.000	-2.628	93280.000	99440.000	100100.000	85.3%	1.051	-0.036	0.311	24.560
X		10020.000	-2.139	91970.000	99670.000	100300.000	84.2%	1.067	-0.019	0.339	11.120
S		142.100	2.330	1206.000	443.500	319.200	1.0%	0.179	0.018	0.024	12.490
%RSD		1.418	108.900	1.311	0.445	0.208	1.2	16.810	94.290	7.087	112.400
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:53	100600.000	1.375	101200.000	100500.000	4.636	3.954	5.327	0.588	0.289	2.312
2	13:28:20	100200.000	1.400	99690.000	101000.000	4.848	3.934	6.466	0.587	0.446	2.437
3	13:28:47	99990.000	1.329	99730.000	101600.000	4.492	4.017	4.825	0.603	0.427	2.185
X		100300.000	1.368	100200.000	101000.000	4.659	3.968	5.540	0.593	0.387	2.311
S		321.300	0.036	829.900	558.700	0.179	0.044	0.841	0.009	0.086	0.126
%RSD		0.320	2.631	0.828	0.553	3.853	1.100	15.180	1.540	22.220	5.438
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:53	2.152	2.303	0.479	-0.245	2.395	0.354	-0.223	-0.019	0.349	0.807
2	13:28:20	1.710	1.856	0.629	-0.104	2.609	0.750	0.515	0.224	-2.307	0.823
3	13:28:47	2.044	1.956	0.575	0.319	2.563	-0.100	0.405	0.164	-1.282	0.769
X		1.969	2.039	0.561	-0.010	2.522	0.335	0.233	0.123	-1.080	0.800
S		0.230	0.235	0.076	0.293	0.113	0.425	0.398	0.127	1.339	0.028
%RSD		11.690	11.520	13.500	2973.000	4.477	127.000	171.100	102.800	124.000	3.479
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:53	80.4%	0.558	0.628	0.527	0.705	0.019	0.018	-0.007	-0.003	77.0%
2	13:28:20	80.7%	0.526	0.843	0.562	-0.171	0.021	0.032	-0.001	0.001	78.5%
3	13:28:47	82.7%	0.602	0.693	0.568	0.530	0.023	0.015	-0.001	0.005	80.7%
X		81.3%	0.562	0.721	0.552	0.355	0.021	0.022	-0.003	0.001	78.7%
S		1.2%	0.038	0.110	0.022	0.464	0.002	0.009	0.003	0.004	1.8%
%RSD		1.5	6.762	15.300	3.999	130.700	10.940	41.290	114.200	408.300	2.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:53	0.087	0.156	0.814	0.762	0.007	0.007	83.6%	0.005	0.009	0.026
2	13:28:20	0.113	0.152	0.893	0.797	0.031	0.011	85.6%	0.006	0.013	0.030
3	13:28:47	0.134	0.172	0.832	0.872	-0.011	0.058	86.9%	0.007	0.013	0.034
X		0.111	0.160	0.846	0.811	0.009	0.025	85.4%	0.006	0.011	0.030
S		0.024	0.011	0.042	0.056	0.021	0.029	1.6%	0.001	0.003	0.004
%RSD		21.150	6.656	4.924	6.937	235.700	112.500	1.9	16.770	22.090	13.560
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	13:27:53	0.040	0.032	77.3%							
2	13:28:20	0.037	0.030	79.8%							
3	13:28:47	0.023	0.027	82.4%							
X		0.033	0.030	79.8%							
S		0.009	0.002	2.5%							
%RSD		26.730	8.249	3.2							

ICV MW15339 PREP 10/29/20 10/29/2020 13:33:18 QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:33:45	90.1%	195.100	203.200	206.500	-35.700	40320.000	41040.000	40940.000	39450.000	198.700
2	13:34:12	87.3%	198.700	210.600	208.600	-40.400	41850.000	41720.000	41490.000	39410.000	201.400
3	13:34:39	89.2%	204.200	204.000	199.100	-28.760	41220.000	42060.000	41090.000	38480.000	195.300
X		88.9%	99.656%	205.900	102.360%	-34.950	102.834%	41610.000	41170.000	97.784%	99.223%
S		1.4%	n/a	4.030	n/a	5.852	n/a	517.600	283.000	n/a	n/a
%RSD		1.6	2.295	1.957	2.415	16.740	1.868	1.244	0.687	1.398	1.525
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:33:45	2372.000	3.901	41340.000	41370.000	41120.000	91.4%	204.400	202.700	199.900	545.000
2	13:34:12	2237.000	-3.443	41440.000	41500.000	41320.000	90.8%	207.200	203.400	200.200	886.400
3	13:34:39	2278.000	-6.909	41060.000	40960.000	41010.000	91.5%	200.400	203.100	199.900	935.900
X		2296.000	-2.150	103.198%	41280.000	102.871%	91.2%	102.012%	101.517%	99.984%	789.100
S		69.560	5.520	n/a	281.000	n/a	0.4%	n/a	n/a	n/a	212.800
%RSD		3.030	256.700	0.467	0.681	0.374	0.4	1.674	0.165	0.083	26.970
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:33:45	39800.000	197.700	40040.000	40260.000	201.000	196.800	208.500	200.800	198.400	202.400
2	13:34:12	39850.000	199.400	40310.000	40130.000	201.900	199.000	201.600	198.900	195.300	202.200
3	13:34:39	38910.000	197.600	39770.000	39550.000	195.100	197.300	202.400	192.900	196.700	202.000
X		39520.000	99.111%	100.103%	99.959%	99.668%	98.866%	204.200	197.500	98.402%	101.107%
S		527.400	n/a	n/a	n/a	n/a	n/a	3.742	4.123	n/a	n/a
%RSD		1.335	0.524	0.672	0.944	1.861	0.577	1.833	2.087	0.775	0.097
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:33:45	194.500	192.200	206.100	193.900	0.297	-0.029	808.200	199.300	-1.317	201.600
2	13:34:12	196.900	196.300	207.600	197.000	0.142	0.410	818.500	200.800	-0.606	202.600
3	13:34:39	187.800	192.400	207.700	192.500	1.355	0.643	816.800	200.000	-1.299	204.700
X		193.100	193.600	103.576%	194.500	0.598	0.342	814.500	100.007%	-1.074	101.489%
S		4.721	2.355	n/a	2.348	0.660	0.341	5.531	n/a	0.405	n/a
%RSD		2.445	1.216	0.425	1.208	110.300	99.890	0.679	0.378	37.740	0.757
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:33:45	90.6%	204.000	208.000	203.300	194.400	185.900	184.900	201.100	200.200	90.2%
2	13:34:12	89.8%	208.800	214.000	209.300	201.300	187.400	186.200	200.500	200.700	90.0%
3	13:34:39	90.1%	214.500	219.200	212.600	192.700	187.100	184.600	199.700	201.200	90.5%
X		90.2%	104.549%	106.877%	104.215%	196.100	93.414%	185.200	100.234%	100.344%	90.3%
S		0.4%	n/a	n/a	n/a	4.561	n/a	0.864	n/a	n/a	0.2%
%RSD		0.4	2.524	2.626	2.265	2.325	0.420	0.466	0.357	0.254	0.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:33:45	203.900	206.000	206.200	207.300	199.700	204.700	94.6%	198.500	198.000	201.700
2	13:34:12	208.400	207.600	208.900	205.200	200.800	204.300	96.1%	202.900	200.300	203.900
3	13:34:39	207.800	207.300	209.600	205.000	199.600	205.100	96.5%	202.500	200.900	204.500
X		103.374%	103.479%	208.200	102.897%	100.014%	102.342%	95.7%	201.300	99.877%	203.400
S		n/a	n/a	1.819	n/a	n/a	n/a	1.0%	2.426	n/a	1.444
%RSD		1.183	0.406	0.874	0.623	0.346	0.193	1.1	1.205	0.758	0.710
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	13:33:45	197.700	199.900	95.8%							
2	13:34:12	200.800	202.100	95.4%							
3	13:34:39	201.900	203.000	95.8%							
X		200.100	100.839%	95.7%							
S		2.176	n/a	0.2%							
%RSD		1.087	0.795	0.2							

ICB IM10195-01 10/29/2020 13:39:09 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:39:37	98.3%	0.019	-0.111	-0.006	-2.862	14.480	1.146	1.448	1.376	0.015
2	13:40:04	97.0%	0.041	-0.241	0.242	-3.324	12.820	0.845	0.849	0.824	0.064
3	13:40:31	99.2%	0.011	-0.121	0.093	4.176	12.360	0.623	0.493	0.555	-0.014
X		98.2%	0.024	-0.157	0.110	-0.670	13.220	0.871	0.930	0.918	0.022
S		1.1%	0.016	0.072	0.125	4.203	1.117	0.263	0.482	0.418	0.040
%RSD		1.1	65.700	46.000	113.900	627.000	8.447	30.130	51.880	45.550	181.900
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:39:37	0.361	1.960	3.010	-3.474	-13.100	99.6%	0.001	-0.002	-0.048	-2.670
2	13:40:04	1.105	-4.042	4.857	2.267	-12.220	99.0%	0.001	-0.006	0.017	0.830
3	13:40:31	1.155	-6.575	3.367	-1.589	-10.680	100.0%	-0.037	0.018	-0.029	-14.470
X		0.874	-2.886	3.745	-0.932	-12.000	99.5%	-0.012	0.003	-0.020	-5.437
S		0.445	4.384	0.980	2.926	1.224	0.5%	0.022	0.013	0.033	8.018
%RSD		50.910	151.900	26.160	313.900	10.200	0.5	186.800	394.600	166.800	147.500
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:39:37	1.444	0.002	-1.658	6.281	-0.003	0.010	-0.018	0.038	-0.020	0.030
2	13:40:04	1.599	-0.003	-2.004	3.878	-0.005	0.011	-1.750	0.060	0.059	0.004
3	13:40:31	1.239	-0.014	-2.767	0.818	-0.004	-0.015	-1.038	0.003	0.040	-0.073
X		1.427	-0.005	-2.143	3.659	-0.004	0.002	-0.935	0.034	0.027	-0.013
S		0.180	0.008	0.567	2.738	0.001	0.015	0.871	0.029	0.041	0.054
%RSD		12.650	159.200	26.470	74.820	24.530	751.000	93.120	85.080	155.700	407.000
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:39:37	0.241	0.031	-0.048	-0.161	-0.738	-0.587	-0.978	-0.201	-1.361	0.015
2	13:40:04	0.064	0.023	0.133	-0.295	-0.239	-0.405	2.122	0.538	-1.065	-0.002
3	13:40:31	0.065	-0.015	0.076	0.205	0.000	-0.689	0.918	0.236	-1.339	0.007
X		0.123	0.013	0.054	-0.084	-0.326	-0.560	0.687	0.191	-1.255	0.006
S		0.102	0.025	0.093	0.259	0.376	0.144	1.563	0.372	0.165	0.009
%RSD		82.760	188.600	171.500	310.000	115.600	25.700	227.400	194.600	13.120	133.500
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:39:37	98.5%	0.587	0.605	0.462	0.408	0.004	0.012	0.017	0.001	98.1%
2	13:40:04	98.9%	0.522	0.456	0.613	-0.087	0.011	0.010	-0.002	0.021	99.6%
3	13:40:31	97.9%	0.556	0.603	0.550	0.738	0.003	0.008	0.007	0.006	100.2%
X		98.4%	0.555	0.554	0.542	0.353	0.006	0.010	0.007	0.009	99.3%
S		0.5%	0.033	0.085	0.075	0.415	0.004	0.002	0.010	0.011	1.1%
%RSD		0.5	5.930	15.390	13.920	117.600	70.620	19.020	131.600	111.600	1.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:39:37	0.016	0.005	0.049	0.034	0.012	0.000	100.4%	0.003	0.007	0.009
2	13:40:04	0.025	0.034	0.053	0.036	-0.046	-0.000	100.7%	-0.005	0.000	-0.004
3	13:40:31	0.011	0.015	0.047	0.026	-0.018	0.004	101.7%	0.004	0.002	0.006
X		0.017	0.018	0.050	0.032	-0.017	0.001	101.0%	0.001	0.003	0.004
S		0.007	0.015	0.003	0.005	0.029	0.002	0.7%	0.004	0.003	0.007
%RSD		39.590	80.970	6.146	15.900	166.900	152.900	0.7	812.700	119.000	168.000
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	13:39:37	0.009	0.008	100.9%							
2	13:40:04	-0.002	0.001	102.2%							
3	13:40:31	0.006	0.004	102.7%							
X		0.004	0.004	101.9%							
S		0.006	0.003	1.0%							
%RSD		142.300	73.170	0.9							

ICSA MW15277 10/29/2020 13:45:00 QC Status: WARNING (Initial: WARNING)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:27	80.5%	0.008	-0.231	0.136	1039.000	98900.000	97190.000	95370.000	95110.000	95030.000
2	13:45:54	80.1%	0.043	0.167	0.106	1023.000	100300.000	96030.000	96570.000	95110.000	96390.000
3	13:46:22	80.3%	0.035	-0.011	0.183	1041.000	100500.000	97620.000	96630.000	95390.000	95760.000
X		80.3%	1.#10%	-0.025	1.#10%	1034.000	99.899%	96950.000	96190.000	95.206%	95.728%
S		0.2%	n/a	0.199	n/a	9.997	n/a	819.000	709.400	n/a	n/a
%RSD		0.3	64.290	795.800	27.290	0.967	0.867	0.845	0.738	0.171	0.714
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:27	15.790	37840.000	91620.000	99750.000	100500.000	79.0%	2133.000	-0.566	-1.142	1050.000
2	13:45:54	14.630	37170.000	91090.000	99370.000	100700.000	78.8%	2158.000	-0.629	-1.192	1124.000
3	13:46:22	13.040	36770.000	90950.000	101700.000	101400.000	77.8%	2111.000	-0.697	-1.111	1138.000
X		14.490	37260.000	91.218%	100300.000	100.872%	78.5%	106.706%	-1.#10%	-1.#10%	1104.000
S		1.381	541.700	n/a	1243.000	n/a	0.6%	n/a	n/a	n/a	47.290
%RSD		9.533	1.454	0.392	1.239	0.497	0.8	1.083	10.360	3.541	4.284
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:27	99070.000	0.204	97850.000	100200.000	0.230	0.755	5.729	-1.653	-0.283	1.666
2	13:45:54	101100.000	0.173	98980.000	100100.000	0.276	0.861	5.515	-1.714	-0.241	1.947
3	13:46:22	99040.000	0.159	98290.000	100800.000	0.214	0.788	3.707	-1.544	-0.276	1.561
X		99750.000	1.#10%	98370.000	100.392%	1.#10%	1.#10%	4.984	-1.637	-1.#10%	1.#10%
S		1204.000	n/a	569.600	n/a	n/a	n/a	1.111	0.086	n/a	n/a
%RSD		1.207	13.000	0.579	0.381	13.580	6.718	22.280	5.263	8.459	11.560
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:27	1.335	0.379	-0.059	-0.303	1.841	1.144	1.561	0.148	10.480	0.912
2	13:45:54	1.749	0.561	-0.154	0.244	2.201	1.163	3.186	0.702	4.613	0.852
3	13:46:22	1.034	0.647	0.024	0.213	1.321	1.317	-0.005	-0.189	7.798	0.901
X		1.373	0.529	-1.#10%	0.051	1.788	1.208	1.581	1.#10%	7.631	0.888
S		0.359	0.137	n/a	0.307	0.443	0.095	1.596	n/a	2.938	0.032
%RSD		26.160	25.930	141.100	596.700	24.770	7.830	100.900	204.300	38.500	3.601
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:27	77.0%	2228.000	2252.000	2269.000	-1.663	0.013	0.017	-6.417	-0.350	75.6%
2	13:45:54	76.6%	2208.000	2253.000	2304.000	-1.833	0.018	0.015	-6.345	-0.360	75.4%
3	13:46:22	76.7%	2213.000	2237.000	2290.000	-2.095	0.016	0.013	-6.447	-0.537	76.4%
X		76.8%	2216.000	112.375%	2288.000	-1.864	1.#10%	0.015	-6.403	-1.#10%	75.8%
S		0.2%	10.490	n/a	17.850	0.218	n/a	0.002	0.052	n/a	0.5%
%RSD		0.3	0.473	0.404	0.780	11.670	14.430	10.610	0.819	25.260	0.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:27	0.758	0.055	0.092	0.081	-0.002	0.017	84.7%	-0.005	0.002	0.026
2	13:45:54	0.802	0.065	0.120	0.095	0.006	-0.013	85.1%	-0.005	0.004	0.020
3	13:46:22	0.806	0.061	0.155	0.115	0.006	-0.008	85.1%	-0.000	0.000	0.027
X		1.#10%	1.#10%	0.122	1.#10%	0.004	-1.#10%	85.0%	-0.003	1.#10%	0.024
S		n/a	n/a	0.032	n/a	0.005	n/a	0.2%	0.002	n/a	0.004
%RSD		3.333	8.471	25.930	17.330	132.400	1169.000	0.3	77.230	96.860	16.020
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	13:45:27	0.040	0.030	84.9%							
2	13:45:54	0.031	0.032	83.2%							
3	13:46:22	0.045	0.039	82.9%							
X		0.038	1.#10%	83.7%							
S		0.007	n/a	1.1%							
%RSD		18.270	13.390	1.3							

CCV MW15278 10/29/2020 13:50:54 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:51:21	84.1%	294.900	308.600	304.600	-4.079	±63010.000	±61190.000	±61000.000	±58430.000	296.800
2	13:51:48	84.7%	292.100	308.900	308.200	-10.480	±62400.000	±61230.000	±60370.000	±58240.000	290.800
3	13:52:15	85.1%	292.100	307.800	305.800	-12.250	±62490.000	±60610.000	±60570.000	±57760.000	292.300
X		84.6%	97.673%	102.811%	102.059%	-8.935	±104.390%	±61010.000	±60650.000	±96.906%	97.762%
S		0.5%	n/a	n/a	n/a	4.297	±n/a	±347.300	±320.300	±n/a	n/a
%RSD		0.6	0.547	0.192	0.590	48.090	±0.527	±0.569	±0.528	±0.589	1.075
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:51:21	±3329.000	56.960	±60570.000	63200.000	±62180.000	85.1%	307.300	302.300	295.700	1027.000
2	13:51:48	±3276.000	49.730	±61010.000	63860.000	±62770.000	85.1%	307.600	306.300	298.600	564.800
3	13:52:15	±3328.000	43.100	±60850.000	63190.000	±62080.000	85.7%	301.900	301.000	294.200	1635.000
X		±3311.000	49.930	±101.347%	63420.000	±103.904%	85.3%	101.867%	101.061%	98.721%	1076.000
S		±30.460	6.935	±n/a	385.200	±n/a	0.4%	n/a	n/a	n/a	536.700
%RSD		±0.920	13.890	±0.370	0.607	±0.597	0.4	1.059	0.917	0.755	49.900
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:51:21	±60210.000	299.000	±59340.000	±60120.000	296.200	289.800	299.800	276.900	287.500	286.200
2	13:51:48	±59890.000	301.700	±60320.000	±60030.000	300.200	290.300	304.600	280.600	282.600	286.400
3	13:52:15	±59470.000	296.500	±59330.000	±59670.000	293.100	278.100	297.400	278.800	279.900	289.000
X		±59860.000	99.696%	±59660.000	±99.902%	98.834%	95.357%	300.600	278.800	94.443%	95.741%
S		±370.600	n/a	±568.900	±n/a	n/a	n/a	3.662	1.884	n/a	n/a
%RSD		±0.619	0.860	±0.954	±0.402	1.193	2.427	1.218	0.676	1.359	0.533
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:51:21	289.900	289.800	301.900	292.100	2.057	0.383	1213.000	293.200	2.153	299.500
2	13:51:48	284.600	286.700	303.700	289.300	1.762	0.048	1181.000	288.200	-0.039	299.800
3	13:52:15	289.600	283.500	296.300	286.100	2.258	0.362	1193.000	287.700	0.338	302.900
X		288.000	286.700	100.214%	289.200	2.026	0.264	1196.000	96.580%	0.817	100.247%
S		2.965	3.121	n/a	3.011	0.249	0.188	16.250	n/a	1.172	n/a
%RSD		1.029	1.089	1.286	1.041	12.300	71.000	1.359	1.045	143.400	0.635
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:51:21	85.6%	311.400	320.500	312.700	293.600	286.900	289.000	297.100	294.500	86.8%
2	13:51:48	86.5%	313.000	320.100	314.200	286.800	288.800	286.000	296.600	297.600	86.8%
3	13:52:15	86.0%	315.500	331.500	322.500	290.100	286.800	289.500	297.400	296.400	87.4%
X		86.0%	104.433%	108.013%	316.400	290.200	95.830%	288.200	297.000	98.718%	87.0%
S		0.5%	n/a	n/a	5.283	3.397	n/a	1.894	0.401	n/a	0.4%
%RSD		0.6	0.656	1.992	1.669	1.171	0.405	0.657	0.135	0.512	0.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:51:21	303.100	303.200	302.200	291.000	287.800	297.900	94.6%	302.100	301.500	302.600
2	13:51:48	307.300	305.400	303.700	293.500	288.500	300.500	94.8%	303.000	302.100	305.100
3	13:52:15	303.900	307.800	308.400	298.000	291.800	300.400	94.8%	301.500	303.500	301.600
X		101.592%	101.820%	304.800	98.058%	96.447%	99.859%	94.7%	302.200	100.783%	101.034%
S		n/a	n/a	3.246	n/a	n/a	n/a	0.1%	0.736	n/a	n/a
%RSD		0.722	0.751	1.065	1.197	0.737	0.491	0.2	0.244	0.335	0.584
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	13:51:21	300.000	302.100	94.6%							
2	13:51:48	300.500	302.700	95.1%							
3	13:52:15	298.100	301.700	95.8%							
X		99.842%	100.730%	95.2%							
S		n/a	n/a	0.6%							
%RSD		0.426	0.172	0.7							

CCB IM10195-01 10/29/2020 13:56:44 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:57:11	96.0%	0.027	0.531	0.544	-3.043	32.860	0.872	1.026	1.018	0.001
2	13:57:38	96.8%	0.028	-0.203	0.185	-0.734	30.010	0.885	0.727	0.891	-0.017
3	13:58:05	97.0%	0.035	0.190	0.337	-12.060	26.560	0.838	1.135	0.632	0.005
X		96.6%	0.030	0.172	0.355	-5.279	29.810	0.865	0.963	0.847	-0.004
S		0.5%	0.004	0.367	0.180	5.986	3.155	0.024	0.211	0.196	0.012
%RSD		0.6	13.710	213.000	50.790	113.400	10.580	2.811	21.930	23.180	318.300
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:57:11	0.089	17.910	10.610	0.474	-10.290	97.0%	0.098	0.021	0.003	-10.860
2	13:57:38	0.338	15.730	10.780	-1.468	-10.810	96.9%	0.023	0.015	-0.024	0.481
3	13:58:05	-0.306	7.876	5.838	7.213	-10.770	97.7%	0.059	0.013	-0.058	-0.058
X		0.040	13.840	9.077	2.073	-10.620	97.2%	0.060	0.016	-0.026	-3.478
S		0.325	5.277	2.806	4.556	0.290	0.4%	0.038	0.004	0.031	6.396
%RSD		805.400	38.130	30.920	219.800	2.731	0.4	62.480	23.470	116.400	183.900
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:57:11	0.366	0.002	-2.762	3.830	-0.002	-0.008	5.190	0.235	-0.014	-0.019
2	13:57:38	0.746	-0.009	-3.511	1.831	-0.003	0.044	3.267	0.196	-0.005	0.040
3	13:58:05	0.947	-0.018	-3.556	1.542	-0.009	-0.019	2.073	0.180	-0.005	-0.013
X		0.686	-0.008	-3.277	2.401	-0.004	0.006	3.510	0.204	-0.008	0.003
S		0.295	0.010	0.446	1.246	0.004	0.034	1.573	0.028	0.005	0.032
%RSD		42.960	116.600	13.620	51.900	86.210	599.200	44.810	13.980	64.400	1221.000
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:57:11	-0.212	-0.017	0.121	0.476	0.722	0.205	1.073	0.264	-0.893	0.005
2	13:57:38	-0.103	0.086	0.036	0.233	0.080	-0.275	0.410	0.027	1.953	0.002
3	13:58:05	-0.035	-0.095	0.123	-0.401	-0.215	-0.006	2.564	0.576	0.593	-0.000
X		-0.117	-0.009	0.093	0.103	0.196	-0.025	1.349	0.289	0.551	0.002
S		0.089	0.091	0.049	0.453	0.479	0.240	1.103	0.275	1.423	0.003
%RSD		76.560	1052.000	52.900	441.500	244.700	948.200	81.750	95.300	258.300	119.600
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:57:11	95.1%	1.052	0.979	0.969	0.351	0.008	0.006	-0.008	0.005	97.2%
2	13:57:38	95.6%	1.137	1.184	1.075	-0.411	0.006	0.006	0.001	0.000	98.4%
3	13:58:05	97.0%	1.079	1.108	1.083	1.019	0.009	0.007	0.010	0.001	99.6%
X		95.9%	1.090	1.090	1.042	0.320	0.008	0.007	0.001	0.002	98.4%
S		1.0%	0.043	0.104	0.064	0.715	0.001	0.001	0.009	0.002	1.2%
%RSD		1.0	3.957	9.536	6.109	223.600	14.210	8.544	992.400	118.000	1.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:57:11	0.042	0.074	0.526	0.440	0.033	0.025	100.5%	-0.002	0.002	0.005
2	13:57:38	0.041	0.093	0.469	0.523	-0.010	-0.008	100.4%	-0.006	0.004	-0.007
3	13:58:05	0.056	0.112	0.565	0.470	-0.032	0.008	101.2%	-0.002	0.001	0.004
X		0.046	0.093	0.520	0.477	-0.003	0.008	100.7%	-0.003	0.002	0.001
S		0.008	0.019	0.048	0.042	0.033	0.017	0.4%	0.002	0.001	0.006
%RSD		17.850	20.450	9.238	8.807	1195.000	196.400	0.4	57.900	66.670	687.400
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	13:57:11	0.006	0.008	102.2%							
2	13:57:38	0.004	0.004	103.8%							
3	13:58:05	0.001	0.005	105.1%							
X		0.003	0.005	103.7%							
S		0.003	0.002	1.5%							
%RSD		77.250	38.910	1.4							

VQ71157-001 10/29/2020 14:02:32 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:02:59	98.8%	0.004	-0.151	0.091	5.297	13.480	0.493	0.768	0.423	0.362
2	14:03:25	99.1%	0.011	-0.295	0.260	-1.656	10.240	0.684	0.647	0.728	0.418
3	14:03:52	99.8%	0.035	0.118	0.059	7.779	6.779	0.643	0.488	0.731	0.458
X		99.2%	0.016	-0.110	0.137	3.807	10.170	0.607	0.634	0.627	0.413
S		0.5%	0.016	0.210	0.108	4.891	3.351	0.100	0.141	0.177	0.048
%RSD		0.5	99.240	191.700	79.130	128.500	32.960	16.500	22.170	28.190	11.630
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:02:59	1.739	75450.000	10.590	3.284	-6.125	98.3%	0.095	-0.043	0.113	1577.000
2	14:03:25	0.707	74190.000	9.673	-3.442	-3.602	98.0%	-0.016	0.014	0.121	1657.000
3	14:03:52	2.421	74810.000	11.160	-0.494	-5.738	96.9%	0.004	0.019	0.160	1617.000
X		1.622	74820.000	10.470	-0.217	-5.155	97.7%	0.028	-0.004	0.131	1617.000
S		0.863	631.400	0.749	3.372	1.359	0.7%	0.059	0.035	0.025	39.570
%RSD		53.180	0.844	7.146	1551.000	26.360	0.7	213.300	961.200	18.870	2.447
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:02:59	8.816	-0.020	-1.315	-0.807	-0.011	0.047	-2.498	-0.055	-0.010	0.548
2	14:03:25	9.437	-0.009	-2.448	-1.821	-0.011	0.074	-2.359	-0.010	0.043	0.538
3	14:03:52	10.160	-0.013	-3.072	-0.969	-0.011	0.138	-3.269	-0.048	-0.018	0.342
X		9.470	-0.014	-2.278	-1.199	-0.011	0.086	-2.708	-0.038	0.005	0.476
S		0.670	0.005	0.890	0.545	0.000	0.047	0.490	0.024	0.033	0.117
%RSD		7.080	38.630	39.080	45.430	0.706	53.880	18.110	63.940	673.700	24.490
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:02:59	0.182	0.517	0.094	1.080	4.463	3.128	0.683	0.194	-1.587	0.000
2	14:03:25	0.657	0.410	0.253	-0.343	4.576	4.909	-0.888	-0.225	0.023	0.003
3	14:03:52	0.553	0.494	0.362	-0.700	4.309	3.365	1.998	0.501	-1.560	0.003
X		0.464	0.474	0.236	0.012	4.449	3.801	0.598	0.157	-1.041	0.002
S		0.250	0.056	0.135	0.942	0.134	0.967	1.445	0.364	0.922	0.001
%RSD		53.860	11.890	57.060	7616.000	3.011	25.440	241.700	232.800	88.520	68.520
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:02:59	96.4%	0.476	0.561	0.478	-0.425	0.010	0.003	-0.006	-0.007	97.8%
2	14:03:25	95.8%	0.516	0.617	0.543	0.118	0.003	0.003	-0.007	-0.001	97.1%
3	14:03:52	95.9%	0.544	0.662	0.564	0.051	0.005	0.005	-0.007	0.001	97.9%
X		96.0%	0.512	0.613	0.528	-0.086	0.006	0.004	-0.007	-0.003	97.6%
S		0.3%	0.034	0.051	0.045	0.296	0.003	0.001	0.000	0.004	0.4%
%RSD		0.3	6.649	8.292	8.502	345.600	56.740	37.110	2.435	173.400	0.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:02:59	0.035	0.018	0.299	0.277	0.012	-0.020	100.0%	-0.006	-0.002	-0.001
2	14:03:25	0.028	0.089	0.287	0.288	-0.025	-0.008	101.5%	-0.009	-0.002	0.001
3	14:03:52	0.030	0.071	0.371	0.381	-0.010	-0.012	101.2%	-0.007	-0.003	-0.004
X		0.031	0.060	0.319	0.315	-0.008	-0.013	100.9%	-0.007	-0.002	-0.001
S		0.003	0.037	0.045	0.057	0.018	0.006	0.8%	0.002	0.001	0.003
%RSD		10.680	61.660	14.260	18.040	241.900	46.580	0.8	22.830	48.700	197.600
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:02:59	-0.004	0.000	108.2%							
2	14:03:25	0.000	0.001	107.0%							
3	14:03:52	-0.006	-0.004	108.4%							
X		-0.003	-0.001	107.9%							
S		0.003	0.003	0.7%							
%RSD		99.020	251.000	0.7							

VQ71157-002 10/29/2020 14:08:20 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:08:48	96.9%	96.800	100.600	100.800	-2.844	1015.000	1065.000	1037.000	1041.000	101.700
2	14:09:15	95.5%	99.010	99.730	97.690	4.905	1013.000	1097.000	1042.000	1045.000	100.400
3	14:09:42	96.6%	95.370	96.390	98.750	3.798	1010.000	1063.000	1024.000	1013.000	100.600
X		96.3%	97.059%	98.900	99.070	1.953	101.250%	1075.000	1034.000	103.325%	100.894%
S		0.7%	n/a	2.217	1.563	4.191	n/a	18.840	9.318	n/a	n/a
%RSD		0.8	1.886	2.242	1.578	214.600	0.231	1.752	0.901	1.703	0.733
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:08:48	1067.000	68770.000	985.600	1129.000	1026.000	91.4%	102.100	102.200	102.400	3943.000
2	14:09:15	1068.000	67810.000	971.500	1147.000	1036.000	90.9%	102.500	99.740	102.200	3920.000
3	14:09:42	1043.000	66730.000	971.600	1107.000	1020.000	90.7%	97.420	102.100	101.200	3367.000
X		1060.000	67770.000	97.622%	1128.000	102.711%	91.0%	100.695%	101.362%	101.949%	3743.000
S		13.980	1019.000	n/a	20.030	n/a	0.3%	n/a	n/a	n/a	326.500
%RSD		1.320	1.504	0.828	1.776	0.790	0.4	2.826	1.387	0.601	8.721
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:08:48	1094.000	101.600	1073.000	1033.000	103.800	101.300	105.000	103.400	104.600	102.600
2	14:09:15	1077.000	100.900	1046.000	1026.000	102.400	103.300	102.600	102.900	104.600	101.300
3	14:09:42	1076.000	101.500	1065.000	1030.000	101.900	103.600	102.200	101.700	102.100	101.200
X		1083.000	101.345%	1061.000	102.956%	102.692%	102.729%	103.300	102.654%	103.773%	101.711%
S		10.020	n/a	13.610	n/a	n/a	n/a	1.518	n/a	n/a	n/a
%RSD		0.925	0.347	1.282	0.299	0.943	1.228	1.470	0.834	1.359	0.780
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:08:48	99.720	98.720	99.580	90.070	3.532	4.491	387.300	96.500	-0.249	98.230
2	14:09:15	95.340	95.370	102.500	93.560	3.127	3.853	396.700	98.360	-0.910	98.670
3	14:09:42	97.200	97.930	101.600	93.390	3.295	3.683	371.000	92.820	-0.573	97.440
X		97.420	97.340	101.229%	92.340	3.318	4.009	385.000	95.896%	-0.577	98.110
S		2.197	1.749	n/a	1.966	0.203	0.426	13.010	n/a	0.331	0.622
%RSD		2.255	1.797	1.470	2.129	6.133	10.630	3.379	2.939	57.310	0.634
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:08:48	89.4%	104.800	105.800	104.800	95.650	100.400	100.800	98.970	97.490	88.3%
2	14:09:15	89.1%	104.900	105.400	105.000	100.400	101.000	99.760	97.300	96.740	88.5%
3	14:09:42	89.2%	104.200	106.900	104.800	98.100	100.500	100.600	100.100	97.410	87.7%
X		89.2%	104.600	106.100	104.900	98.050	100.606%	100.400	98.790	97.213%	88.2%
S		0.2%	0.392	0.789	0.136	2.369	n/a	0.538	1.404	n/a	0.4%
%RSD		0.2	0.375	0.744	0.129	2.417	0.319	0.536	1.421	0.424	0.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:08:48	99.810	98.630	99.250	99.400	95.850	99.630	92.7%	96.740	93.020	96.780
2	14:09:15	98.610	98.910	100.100	99.220	97.000	98.910	93.1%	97.580	94.830	98.410
3	14:09:42	99.760	99.510	100.500	100.200	98.680	100.000	92.6%	98.610	96.260	99.380
X		99.390	99.014%	99.920	99.623%	97.180	99.513%	92.8%	97.640	94.704%	98.190
S		0.680	n/a	0.616	n/a	1.422	n/a	0.2%	0.935	n/a	1.312
%RSD		0.684	0.454	0.616	0.551	1.463	0.553	0.3	0.957	1.711	1.336
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:08:48	95.720	95.850	95.2%							
2	14:09:15	97.420	97.120	93.9%							
3	14:09:42	98.180	97.500	93.2%							
X		97.110	96.820%	94.1%							
S		1.258	n/a	1.0%							
%RSD		1.295	0.893	1.1							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:37	97.5%	0.000	3.331	3.970	-117.600	4614.000	18740.000	19230.000	26500.000	0.915
2	14:15:04	98.0%	0.004	3.629	4.107	-117.700	4635.000	19090.000	19110.000	26380.000	0.877
3	14:15:31	97.6%	-0.003	4.077	3.936	-115.900	4689.000	18840.000	19340.000	26840.000	1.009
X		97.7%	0.001	3.679	4.004	-117.100	4646.000	18890.000	19220.000	26570.000	0.934
S		0.3%	0.003	0.376	0.090	1.040	38.830	178.600	116.200	241.200	0.068
%RSD		0.3	590.000	10.210	2.259	0.888	0.836	0.946	0.604	0.908	7.282
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:37	5900.000	60160.000	3316.000	84050.000	85070.000	94.6%	0.626	0.077	0.360	3042.000
2	14:15:04	5934.000	59880.000	3328.000	85280.000	84660.000	94.7%	0.664	-0.016	0.328	3484.000
3	14:15:31	6036.000	60780.000	3324.000	85770.000	84660.000	94.1%	0.844	-0.157	0.322	3690.000
X		5957.000	60270.000	3323.000	85030.000	84800.000	94.4%	0.711	-0.032	0.336	3405.000
S		70.840	459.100	6.198	883.700	234.400	0.3%	0.116	0.118	0.020	331.200
%RSD		1.189	0.762	0.187	1.039	0.276	0.3	16.370	366.400	6.062	9.727
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:37	11.710	88.360	17.350	225.600	0.525	4.640	-0.593	-0.100	0.143	0.968
2	14:15:04	9.811	87.660	16.170	221.000	0.566	4.894	0.400	-0.098	0.189	0.980
3	14:15:31	11.830	88.210	16.020	223.700	0.570	5.091	0.251	-0.156	0.080	0.871
X		11.120	88.080	16.510	223.500	0.554	4.875	0.019	-0.118	0.138	0.940
S		1.133	0.372	0.724	2.316	0.025	0.226	0.535	0.033	0.055	0.060
%RSD		10.190	0.422	4.385	1.036	4.485	4.643	2747.000	27.940	39.740	6.379
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:37	7.723	5.920	0.132	-0.612	19.420	19.150	0.229	0.024	1.863	44.120
2	14:15:04	7.751	5.546	-0.727	-0.230	21.070	19.310	-0.142	-0.046	0.816	44.500
3	14:15:31	8.491	5.746	-0.166	-0.122	18.640	20.700	-0.793	-0.237	2.127	44.480
X		7.989	5.737	-0.253	-0.321	19.710	19.720	-0.235	-0.086	1.602	44.360
S		0.436	0.188	0.436	0.258	1.242	0.852	0.517	0.135	0.693	0.215
%RSD		5.453	3.269	172.100	80.240	6.303	4.320	219.600	156.300	43.270	0.485
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:37	92.6%	0.157	0.219	0.183	1.173	0.006	0.003	0.056	0.046	91.4%
2	14:15:04	93.6%	0.222	0.331	0.332	0.412	0.006	0.002	0.070	0.059	92.6%
3	14:15:31	93.5%	0.218	0.290	0.222	2.520	0.009	0.007	0.045	0.056	92.0%
X		93.2%	0.199	0.280	0.246	1.368	0.007	0.004	0.057	0.053	92.0%
S		0.6%	0.036	0.056	0.077	1.068	0.002	0.003	0.012	0.007	0.6%
%RSD		0.6	18.100	20.120	31.360	78.030	30.020	64.850	21.560	13.210	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:37	0.129	0.103	0.089	0.069	173.000	173.600	95.0%	0.034	0.030	0.013
2	14:15:04	0.091	0.107	0.063	0.049	172.700	174.400	95.8%	0.021	0.031	0.003
3	14:15:31	0.111	0.106	0.094	0.075	169.600	173.600	97.5%	0.033	0.028	0.012
X		0.111	0.105	0.082	0.064	171.800	173.900	96.1%	0.029	0.030	0.009
S		0.019	0.002	0.017	0.014	1.910	0.439	1.3%	0.007	0.002	0.006
%RSD		17.210	2.048	20.200	21.320	1.112	0.252	1.4	23.850	6.427	60.760
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:14:37	-0.005	0.005	96.8%							
2	14:15:04	0.013	0.006	97.4%							
3	14:15:31	0.005	0.008	97.9%							
X		0.004	0.006	97.4%							
S		0.009	0.001	0.6%							
%RSD		219.800	18.210	0.6							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:20:27	96.7%	44.530	100.600	99.650	-113.200	5440.000	19450.000	20060.000	27940.000	100.800
2	14:20:54	93.9%	44.370	102.200	99.880	-115.300	5516.000	18970.000	19420.000	27120.000	98.970
3	14:21:20	93.8%	44.590	104.200	103.300	-114.500	5524.000	19100.000	19240.000	27460.000	99.290
X		94.8%	44.500	102.300	100.900	-114.300	5493.000	19180.000	19570.000	27510.000	99.680
S		1.7%	0.115	1.798	2.038	1.092	46.240	250.200	430.400	415.300	0.973
%RSD		1.8	0.258	1.756	2.019	0.956	0.842	1.305	2.199	1.510	0.976
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:20:27	6700.000	59850.000	4345.000	86890.000	86410.000	89.1%	105.100	101.200	98.890	4544.000
2	14:20:54	6437.000	58980.000	4258.000	85120.000	85720.000	89.2%	99.810	96.740	96.730	4301.000
3	14:21:20	6362.000	58790.000	4278.000	87900.000	86470.000	88.8%	101.800	97.510	97.670	4572.000
X		6500.000	59210.000	4294.000	86640.000	86200.000	89.1%	102.200	98.480	97.760	4472.000
S		177.100	564.400	45.270	1409.000	416.900	0.2%	2.686	2.377	1.082	149.500
%RSD		2.724	0.953	1.054	1.627	0.484	0.3	2.628	2.414	1.107	3.343
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:20:27	1035.000	187.500	1018.000	1211.000	97.280	100.300	97.370	95.740	96.310	96.720
2	14:20:54	997.900	182.100	1001.000	1157.000	93.400	97.470	96.510	93.870	93.480	96.880
3	14:21:20	996.200	184.200	976.600	1175.000	94.660	98.240	93.620	93.430	95.570	94.440
X		1010.000	184.600	998.300	1181.000	95.110	98.680	95.830	94.350	95.120	96.010
S		22.100	2.748	20.590	27.870	1.980	1.480	1.966	1.226	1.468	1.362
%RSD		2.189	1.488	2.063	2.360	2.082	1.499	2.051	1.300	1.544	1.419
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:20:27	101.600	100.400	100.600	97.280	25.570	25.400	399.500	98.280	-0.211	142.400
2	14:20:54	96.300	96.150	98.550	94.820	23.510	25.270	401.200	98.730	-1.581	141.100
3	14:21:20	99.430	97.310	97.570	93.020	26.950	26.850	384.600	95.280	0.849	140.100
X		99.100	97.940	98.900	95.040	25.340	25.840	395.100	97.430	-0.314	141.200
S		2.651	2.174	1.533	2.135	1.731	0.879	9.125	1.875	1.218	1.122
%RSD		2.675	2.220	1.551	2.247	6.830	3.403	2.310	1.924	387.500	0.795
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:20:27	89.0%	101.800	103.700	103.200	99.940	97.880	97.120	98.950	99.150	88.8%
2	14:20:54	89.0%	102.100	105.400	101.700	103.000	97.230	98.040	98.410	98.220	88.8%
3	14:21:20	88.6%	101.400	103.800	103.200	101.000	97.950	97.950	99.760	99.310	87.7%
X		88.9%	101.800	104.300	102.700	101.300	97.690	97.700	99.040	98.890	88.4%
S		0.3%	0.348	0.936	0.862	1.541	0.397	0.509	0.680	0.588	0.6%
%RSD		0.3	0.342	0.897	0.839	1.521	0.406	0.521	0.687	0.595	0.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:20:27	100.900	100.100	102.800	100.700	266.200	271.300	94.2%	101.000	99.940	102.000
2	14:20:54	100.100	100.700	101.700	100.600	266.200	268.800	94.8%	100.500	98.370	100.400
3	14:21:20	101.600	102.000	103.300	99.860	262.900	272.900	94.9%	99.500	97.620	100.300
X		100.900	100.900	102.600	100.400	265.100	271.000	94.6%	100.300	98.650	100.900
S		0.740	0.981	0.859	0.456	1.886	2.082	0.3%	0.761	1.186	0.947
%RSD		0.734	0.972	0.837	0.454	0.712	0.768	0.4	0.758	1.202	0.938
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:20:27	99.810	100.800	93.9%							
2	14:20:54	100.100	99.810	94.4%							
3	14:21:20	98.860	99.560	95.8%							
X		99.580	100.000	94.7%							
S		0.640	0.632	1.0%							
%RSD		0.643	0.632	1.0							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:26:15	91.7%	46.080	107.500	103.000	-109.100	5534.000	19710.000	20010.000	27890.000	100.300
2	14:26:42	92.0%	44.870	106.500	105.900	-116.500	5431.000	19700.000	20150.000	28490.000	101.100
3	14:27:09	91.3%	45.050	106.000	104.100	-111.200	5475.000	19690.000	19780.000	28060.000	98.970
X		91.7%	45.330	106.700	104.300	-112.300	5480.000	19700.000	19980.000	28150.000	100.100
S		0.3%	0.652	0.762	1.452	3.803	51.790	10.060	188.400	308.900	1.057
%RSD		0.4	1.439	0.715	1.392	3.388	0.945	0.051	0.943	1.097	1.056
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:26:15	6755.000	61270.000	4109.000	84720.000	86330.000	86.5%	103.000	99.070	97.710	5421.000
2	14:26:42	6638.000	61960.000	4145.000	86050.000	87230.000	84.2%	105.600	102.000	102.500	4611.000
3	14:27:09	6633.000	60850.000	4088.000	84760.000	85950.000	84.8%	99.860	100.900	99.770	5254.000
X		6675.000	61360.000	4114.000	85180.000	86500.000	85.2%	102.800	100.700	99.990	5096.000
S		68.780	563.200	29.030	753.600	658.300	1.2%	2.857	1.471	2.395	427.900
%RSD		1.030	0.918	0.706	0.885	0.761	1.4	2.779	1.462	2.395	8.398
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:26:15	1051.000	187.700	1037.000	1217.000	96.780	100.700	97.090	97.030	95.730	102.800
2	14:26:42	1046.000	193.800	1059.000	1232.000	99.170	103.000	101.200	96.180	95.570	98.590
3	14:27:09	1045.000	186.300	1052.000	1212.000	97.500	98.510	96.390	96.590	95.540	101.400
X		1048.000	189.200	1049.000	1220.000	97.820	100.700	98.230	96.600	95.610	101.000
S		3.357	3.987	11.500	10.760	1.227	2.258	2.603	0.423	0.100	2.162
%RSD		0.321	2.107	1.096	0.881	1.255	2.241	2.650	0.438	0.105	2.142
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:26:15	105.300	99.220	99.570	98.100	24.330	24.730	409.400	103.600	0.099	143.900
2	14:26:42	102.000	99.070	100.400	93.310	25.670	24.140	390.500	98.400	1.135	140.800
3	14:27:09	103.200	101.600	101.200	97.000	23.450	25.420	420.800	105.600	1.639	143.200
X		103.500	99.950	100.400	96.130	24.490	24.760	406.900	102.500	0.958	142.700
S		1.638	1.394	0.796	2.506	1.120	0.637	15.270	3.706	0.785	1.623
%RSD		1.582	1.395	0.793	2.607	4.573	2.571	3.753	3.615	81.950	1.138
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:26:15	83.9%	104.900	106.900	103.000	102.900	98.600	99.370	102.500	99.470	81.7%
2	14:26:42	85.0%	102.700	103.600	102.800	101.700	98.700	96.710	99.750	98.840	82.6%
3	14:27:09	82.9%	104.500	108.200	103.800	100.000	98.770	99.690	99.030	100.800	81.4%
X		83.9%	104.000	106.200	103.200	101.500	98.690	98.590	100.400	99.720	81.9%
S		1.0%	1.163	2.339	0.541	1.416	0.086	1.637	1.823	1.026	0.6%
%RSD		1.2	1.118	2.201	0.524	1.395	0.088	1.661	1.815	1.029	0.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:26:15	102.300	102.200	103.200	98.160	262.500	272.700	90.2%	99.980	97.760	101.100
2	14:26:42	100.700	100.400	102.700	99.710	263.500	270.600	89.3%	100.900	97.830	100.300
3	14:27:09	102.300	100.900	102.800	100.100	262.700	272.900	88.7%	99.980	97.670	99.900
X		101.800	101.200	102.900	99.320	262.900	272.100	89.4%	100.300	97.760	100.400
S		0.954	0.898	0.276	1.022	0.515	1.280	0.7%	0.542	0.080	0.581
%RSD		0.937	0.888	0.268	1.029	0.196	0.470	0.8	0.540	0.082	0.579
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:26:15	98.920	99.350	90.9%							
2	14:26:42	99.380	99.030	90.3%							
3	14:27:09	98.410	98.580	89.5%							
X		98.900	98.990	90.3%							
S		0.484	0.389	0.7%							
%RSD		0.489	0.393	0.8							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:05	92.9%	0.011	0.549	0.638	-76.060	950.100	4923.000	4962.000	5621.000	0.157
2	14:32:32	93.9%	0.018	0.345	0.484	-74.640	896.700	4943.000	5095.000	5561.000	0.166
3	14:32:59	92.7%	-0.021	0.365	0.719	-75.510	913.400	4852.000	4936.000	5535.000	0.184
X		93.2%	0.003	0.420	0.613	-75.400	920.000	4906.000	4997.000	5572.000	0.169
S		0.7%	0.021	0.112	0.119	0.716	27.290	48.150	85.110	44.290	0.014
%RSD		0.7	755.600	26.760	19.410	0.949	2.966	0.982	1.703	0.795	8.288
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:05	1489.000	12230.000	662.000	16700.000	16730.000	88.6%	0.574	0.089	0.066	1404.000
2	14:32:32	1528.000	12240.000	676.700	17050.000	16590.000	88.2%	0.224	0.100	0.092	1342.000
3	14:32:59	1491.000	12290.000	673.500	17140.000	16770.000	88.6%	-0.004	0.025	0.054	1439.000
X		1503.000	12250.000	670.800	16960.000	16700.000	88.5%	0.265	0.071	0.071	1395.000
S		21.620	29.870	7.726	229.400	90.890	0.2%	0.291	0.040	0.019	49.450
%RSD		1.439	0.244	1.152	1.352	0.544	0.3	110.000	56.260	27.370	3.545
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:05	1.832	18.010	7.725	48.730	0.134	1.076	-5.376	-0.202	0.018	0.302
2	14:32:32	0.476	17.880	7.772	49.460	0.108	0.955	-4.753	-0.232	0.013	0.162
3	14:32:59	1.241	17.640	6.005	39.930	0.109	1.104	-5.139	-0.205	0.033	0.314
X		1.183	17.840	7.167	46.040	0.117	1.045	-5.089	-0.213	0.021	0.259
S		0.680	0.189	1.007	5.305	0.015	0.079	0.314	0.016	0.010	0.085
%RSD		57.470	1.061	14.050	11.520	12.740	7.587	6.171	7.574	47.650	32.650
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:05	0.745	1.251	0.109	-0.720	3.935	4.143	0.611	0.151	0.356	9.104
2	14:32:32	1.940	1.105	0.039	-0.502	4.424	3.433	-1.232	-0.308	-0.092	8.829
3	14:32:59	1.779	1.016	0.048	-0.788	3.825	4.135	0.899	0.216	-0.777	9.082
X		1.488	1.124	0.065	-0.670	4.061	3.904	0.093	0.020	-0.171	9.005
S		0.648	0.119	0.038	0.149	0.319	0.408	1.156	0.285	0.571	0.153
%RSD		43.580	10.560	58.400	22.290	7.851	10.440	1246.000	1443.000	334.300	1.699
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:05	85.3%	0.235	0.265	0.264	0.217	0.008	0.006	0.005	-0.003	85.1%
2	14:32:32	87.0%	0.283	0.287	0.293	0.354	0.001	0.001	0.021	0.006	88.3%
3	14:32:59	86.6%	0.239	0.238	0.297	0.305	0.004	0.002	0.010	0.008	88.8%
X		86.3%	0.253	0.263	0.285	0.292	0.004	0.003	0.012	0.004	87.4%
S		0.9%	0.027	0.025	0.018	0.069	0.003	0.003	0.008	0.006	2.0%
%RSD		1.0	10.510	9.401	6.283	23.750	82.290	93.260	65.620	167.700	2.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:05	0.005	0.040	0.023	0.004	34.070	34.510	91.0%	0.012	0.023	0.002
2	14:32:32	0.042	0.027	0.040	0.040	33.250	34.040	92.2%	0.020	0.025	0.002
3	14:32:59	0.031	0.022	0.030	0.011	33.350	34.480	92.8%	0.019	0.026	-0.005
X		0.026	0.030	0.031	0.018	33.560	34.340	92.0%	0.017	0.025	-0.000
S		0.019	0.009	0.008	0.019	0.450	0.266	0.9%	0.005	0.001	0.004
%RSD		71.620	31.280	26.920	107.500	1.342	0.773	1.0	27.300	5.818	4102.000
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:32:05	0.004	0.001	91.8%							
2	14:32:32	-0.005	-0.003	93.8%							
3	14:32:59	-0.000	-0.001	96.6%							
X		-0.000	-0.001	94.1%							
S		0.004	0.002	2.5%							
%RSD		987.400	280.900	2.6							

VJ23005-001A

10/29/2020 14:37:28

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:37:55	88.9%	43.380	104.200	103.100	-108.200	5529.000	19370.000	19540.000	27290.000	98.700
2	14:38:22	89.9%	46.030	104.300	102.000	-114.300	5534.000	19300.000	19620.000	27470.000	98.800
3	14:38:49	90.9%	45.060	101.000	100.400	-111.200	5455.000	19360.000	19400.000	27480.000	100.500
X		89.9%	44.820	103.200	101.800	-111.200	5506.000	19340.000	19520.000	27410.000	99.350
S		1.0%	1.339	1.852	1.373	3.020	44.270	36.040	114.300	107.800	1.037
%RSD		1.1	2.988	1.795	1.348	2.715	0.804	0.186	0.586	0.394	1.044
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:37:55	6608.000	59830.000	4232.000	86340.000	85320.000	85.4%	102.000	100.400	98.290	4531.000
2	14:38:22	6656.000	60490.000	4271.000	85710.000	86370.000	84.8%	99.970	99.100	98.730	4361.000
3	14:38:49	6437.000	58940.000	4209.000	86130.000	86220.000	84.9%	103.100	97.550	98.380	5121.000
X		6567.000	59750.000	4237.000	86060.000	85970.000	85.0%	101.700	99.030	98.470	4671.000
S		115.100	777.400	31.330	317.200	567.000	0.3%	1.568	1.446	0.229	398.500
%RSD		1.752	1.301	0.739	0.369	0.659	0.4	1.542	1.460	0.233	8.531
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:37:55	1033.000	183.700	1006.000	1190.000	95.470	98.140	95.770	92.120	94.980	97.850
2	14:38:22	1019.000	183.500	1000.000	1185.000	96.880	100.100	97.240	94.520	97.140	96.670
3	14:38:49	1031.000	187.500	1014.000	1199.000	96.720	97.050	93.230	92.920	94.870	96.660
X		1028.000	184.900	1007.000	1192.000	96.360	98.420	95.410	93.190	95.660	97.060
S		7.282	2.269	6.968	6.932	0.773	1.533	2.031	1.224	1.277	0.683
%RSD		0.709	1.227	0.692	0.582	0.803	1.557	2.128	1.313	1.334	0.704
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:37:55	99.820	99.220	99.110	93.950	18.530	20.110	382.300	94.860	1.431	140.400
2	14:38:22	99.070	97.640	102.200	92.930	19.970	20.130	421.200	103.200	3.271	143.500
3	14:38:49	101.700	98.220	99.870	95.010	17.960	21.150	405.100	98.630	-1.352	142.300
X		100.200	98.360	100.400	93.960	18.820	20.460	402.900	98.890	1.117	142.100
S		1.373	0.800	1.613	1.037	1.036	0.593	19.510	4.169	2.328	1.560
%RSD		1.370	0.813	1.606	1.104	5.507	2.896	4.844	4.215	208.400	1.098
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:37:55	85.7%	101.300	105.000	101.200	101.600	98.160	97.130	97.400	99.400	84.6%
2	14:38:22	85.1%	102.100	107.400	102.600	105.100	96.010	97.360	99.170	99.130	85.1%
3	14:38:49	84.3%	103.900	106.200	103.200	103.400	96.660	96.880	98.040	98.700	85.0%
X		85.0%	102.400	106.200	102.400	103.400	96.940	97.120	98.200	99.080	84.9%
S		0.7%	1.292	1.162	1.033	1.785	1.100	0.239	0.899	0.352	0.3%
%RSD		0.8	1.262	1.094	1.010	1.727	1.135	0.246	0.915	0.355	0.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:37:55	100.900	99.690	95.440	94.850	267.700	271.300	90.2%	99.980	98.020	101.000
2	14:38:22	101.700	100.600	96.300	94.900	263.800	269.600	90.7%	100.600	99.390	101.600
3	14:38:49	101.100	101.800	98.240	96.490	263.700	269.700	91.1%	99.770	98.960	99.970
X		101.200	100.700	96.660	95.410	265.100	270.200	90.7%	100.100	98.790	100.900
S		0.444	1.034	1.432	0.936	2.266	0.930	0.5%	0.432	0.701	0.834
%RSD		0.439	1.027	1.481	0.981	0.855	0.344	0.5	0.432	0.710	0.827
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:37:55	98.860	99.630	92.4%							
2	14:38:22	100.100	100.400	92.2%							
3	14:38:49	98.130	98.790	93.2%							
X		99.040	99.610	92.6%							
S		1.018	0.810	0.5%							
%RSD		1.027	0.813	0.6							

VJ23005-002

10/29/2020 14:43:20

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:43:47	88.8%	0.151	1.139	1.765	-87.610	±5857.000	±4454.000	4539.000	5669.000	29.790
2	14:44:14	87.8%	0.107	1.601	1.518	-83.590	±5996.000	±4444.000	4499.000	5726.000	28.160
3	14:44:40	88.8%	0.177	0.783	1.763	-95.980	±5917.000	±4400.000	4517.000	5616.000	28.890
X		88.5%	0.145	1.174	1.682	-89.060	±5923.000	±4433.000	4518.000	5670.000	28.940
S		0.6%	0.035	0.410	0.142	6.322	±69.890	±29.010	20.170	55.170	0.817
%RSD		0.7	24.260	34.910	8.451	7.099	±1.180	±0.654	0.446	0.973	2.822
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:43:47	±5482.000	±67520.000	±3814.000	10050.000	9531.000	84.4%	1.541	-0.346	1.391	8091.000
2	14:44:14	±5480.000	±66380.000	±3762.000	9749.000	9472.000	83.3%	1.168	0.408	1.352	7843.000
3	14:44:40	±5365.000	±65790.000	±3737.000	9538.000	9360.000	83.6%	1.119	0.431	1.360	7627.000
X		±5442.000	±66560.000	±3771.000	9780.000	9454.000	83.7%	1.276	0.164	1.368	7854.000
S		±66.940	±881.700	±39.350	258.700	87.040	0.6%	0.231	0.442	0.020	232.400
%RSD		±1.230	±1.325	±1.043	2.645	0.921	0.7	18.080	268.900	1.487	2.958
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:43:47	109.100	TM 926.900	105.900	128.500	2.127	5.602	-0.009	14.060	15.200	44.490
2	14:44:14	113.700	TM 914.700	106.400	125.900	2.024	5.921	-1.452	14.930	14.830	43.060
3	14:44:40	108.300	TM 904.900	104.700	129.400	2.056	6.141	-1.363	14.280	14.640	43.680
X		110.400	TM 915.500	105.700	127.900	2.069	5.888	-0.941	14.430	14.890	43.740
S		2.914	TM 11.060	0.867	1.794	0.053	0.271	0.809	0.452	0.284	0.717
%RSD		2.640	TM 1.209	0.821	1.402	2.562	4.598	85.900	3.135	1.910	1.639
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:43:47	47.950	46.300	-0.826	-0.536	21.360	19.330	-1.200	-0.243	-1.804	40.420
2	14:44:14	46.840	45.050	0.074	-1.073	19.240	20.240	-0.107	-0.001	-1.074	40.810
3	14:44:40	45.020	44.640	-0.365	-0.453	19.490	18.200	1.390	0.330	0.413	41.160
X		46.600	45.330	-0.372	-0.687	20.030	19.260	0.028	0.029	-0.822	40.800
S		1.475	0.865	0.450	0.337	1.160	1.021	1.300	0.288	1.130	0.367
%RSD		3.164	1.909	121.000	48.980	5.793	5.301	4665.000	998.000	137.600	0.900
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:43:47	86.7%	0.275	0.332	0.291	1.157	0.536	0.501	0.405	0.362	85.2%
2	14:44:14	86.3%	0.308	0.450	0.389	1.488	0.515	0.556	0.331	0.369	85.8%
3	14:44:40	85.1%	0.213	0.302	0.279	2.565	0.524	0.566	0.418	0.426	84.8%
X		86.0%	0.265	0.361	0.319	1.737	0.525	0.541	0.384	0.386	85.3%
S		0.8%	0.049	0.078	0.060	0.736	0.010	0.035	0.047	0.035	0.5%
%RSD		0.9	18.290	21.670	18.880	42.390	1.965	6.442	12.190	9.095	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:43:47	0.180	0.109	0.786	0.853	133.400	136.300	89.7%	0.056	0.070	0.688
2	14:44:14	0.155	0.082	0.764	0.746	132.900	135.000	90.0%	0.056	0.087	0.685
3	14:44:40	0.155	0.084	0.882	0.860	132.200	137.700	90.7%	0.064	0.083	0.648
X		0.163	0.092	0.811	0.820	132.800	136.400	90.2%	0.059	0.080	0.674
S		0.014	0.015	0.062	0.064	0.598	1.321	0.5%	0.004	0.009	0.022
%RSD		8.829	16.450	7.705	7.803	0.450	0.969	0.6	7.352	11.240	3.244
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:43:47	0.588	0.624	94.7%							
2	14:44:14	0.607	0.629	94.4%							
3	14:44:40	0.642	0.634	96.3%							
X		0.612	0.629	95.1%							
S		0.027	0.005	1.0%							
%RSD		4.475	0.751	1.1							

VJ23005-003

10/29/2020 14:49:10

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:49:37	90.1%	-0.016	5.907	5.984	-132.200	6009.000	30160.000	30630.000	47940.000	0.739
2	14:50:04	91.2%	-0.016	7.044	6.221	-135.900	5999.000	29750.000	30870.000	48560.000	0.776
3	14:50:31	92.1%	-0.014	6.165	6.397	-133.900	5972.000	30570.000	31150.000	49800.000	0.805
X		91.1%	-0.015	6.372	6.201	-134.000	5993.000	30160.000	30880.000	48770.000	0.773
S		1.0%	0.002	0.596	0.207	1.856	19.470	408.700	258.900	947.800	0.033
%RSD		1.1	10.410	9.355	3.339	1.385	0.325	1.355	0.838	1.944	4.306
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:49:37	7124.000	58520.000	3047.000	136200.000	136700.000	84.0%	1.048	-0.076	0.337	4262.000
2	14:50:04	7207.000	58210.000	3028.000	137000.000	135400.000	84.5%	0.824	-0.032	0.304	4381.000
3	14:50:31	7293.000	59290.000	3037.000	138300.000	139800.000	83.0%	1.018	-0.080	0.317	4620.000
X		7208.000	58670.000	3037.000	137200.000	137300.000	83.8%	0.963	-0.063	0.319	4421.000
S		84.080	559.500	9.578	1077.000	2240.000	0.8%	0.122	0.027	0.016	182.100
%RSD		1.166	0.954	0.315	0.785	1.632	0.9	12.630	43.010	5.150	4.120
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:49:37	1909.000	352.300	1968.000	2279.000	5.264	13.380	4.711	-0.138	0.302	1.265
2	14:50:04	1891.000	345.600	1918.000	2203.000	5.213	13.600	4.974	-0.134	0.284	1.410
3	14:50:31	1963.000	360.900	2014.000	2329.000	5.409	13.790	4.690	-0.189	0.228	1.019
X		1921.000	353.000	1967.000	2270.000	5.295	13.590	4.792	-0.154	0.271	1.231
S		37.320	7.689	48.290	63.150	0.102	0.203	0.158	0.031	0.038	0.198
%RSD		1.943	2.178	2.455	2.782	1.924	1.497	3.303	20.000	14.170	16.050
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:49:37	23.230	18.200	2.232	-0.916	64.680	68.160	-0.232	-0.096	1.841	85.620
2	14:50:04	23.350	17.220	1.729	-0.246	65.470	69.500	0.544	0.057	3.003	85.580
3	14:50:31	23.660	18.040	2.183	0.262	64.910	67.860	-0.987	-0.283	1.849	85.190
X		23.420	17.820	2.048	-0.300	65.020	68.510	-0.225	-0.107	2.231	85.460
S		0.222	0.527	0.277	0.591	0.405	0.873	0.766	0.170	0.668	0.238
%RSD		0.950	2.955	13.540	197.100	0.623	1.274	340.500	158.600	29.960	0.279
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:49:37	80.5%	0.267	0.127	0.125	2.322	0.231	0.215	0.001	-0.003	79.7%
2	14:50:04	80.1%	0.186	0.207	0.167	1.974	0.215	0.216	0.012	0.002	80.3%
3	14:50:31	80.5%	0.170	0.205	0.143	3.520	0.224	0.214	0.001	0.004	79.4%
X		80.4%	0.208	0.180	0.145	2.605	0.223	0.215	0.004	0.001	79.8%
S		0.3%	0.052	0.045	0.021	0.811	0.008	0.001	0.007	0.003	0.5%
%RSD		0.3	25.010	25.290	14.760	31.140	3.508	0.439	146.900	268.500	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:49:37	0.030	0.031	0.163	0.129	570.700	587.900	85.5%	0.031	0.032	-0.002
2	14:50:04	0.024	0.035	0.180	0.121	564.100	584.800	86.4%	0.030	0.022	-0.001
3	14:50:31	0.028	0.050	0.161	0.167	569.200	587.800	86.4%	0.031	0.046	0.002
X		0.027	0.039	0.168	0.139	568.000	586.900	86.1%	0.031	0.033	-0.000
S		0.003	0.010	0.011	0.025	3.453	1.757	0.5%	0.000	0.012	0.002
%RSD		11.000	25.490	6.361	17.750	0.608	0.299	0.6	1.487	36.390	404.700
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:49:37	-0.003	-0.000	85.8%							
2	14:50:04	-0.004	0.001	84.2%							
3	14:50:31	0.009	0.005	85.6%							
X		0.001	0.002	85.2%							
S		0.007	0.003	0.8%							
%RSD		1404.000	136.100	1.0							

VJ23005-004 10/29/2020 14:55:02

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:55:30	88.7%	-0.016	5.858	7.010	-117.000	7908.000	26220.000	26770.000	38310.000	1.009
2	14:55:57	89.2%	0.021	7.223	6.152	-120.300	7858.000	25490.000	25700.000	36850.000	0.956
3	14:56:24	88.4%	-0.013	7.065	6.308	-121.500	7992.000	25500.000	25880.000	37290.000	1.010
X		88.8%	-0.003	6.715	6.490	-119.600	7919.000	25740.000	26120.000	37480.000	0.991
S		0.4%	0.021	0.746	0.457	2.344	67.650	417.400	576.900	749.300	0.031
%RSD		0.5	753.500	11.110	7.042	1.960	0.854	1.622	2.209	1.999	3.115
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:55:30	6296.000	61400.000	2570.000	M109300.000	TM110600.000	82.3%	0.739	-0.096	0.184	2677.000
2	14:55:57	6074.000	60800.000	2484.000	M107500.000	TM106800.000	84.2%	0.654	0.073	0.161	2432.000
3	14:56:24	6126.000	60910.000	2519.000	M106700.000	TM107700.000	83.1%	0.576	-0.031	0.164	2332.000
X		6165.000	61040.000	2525.000	M107800.000	TM108400.000	83.2%	0.656	-0.018	0.170	2480.000
S		115.700	320.200	43.110	M1319.000	TM1967.000	1.0%	0.081	0.085	0.012	177.600
%RSD		1.876	0.525	1.708	M1.224	TM1.815	1.2	12.410	472.800	7.362	7.160
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:55:30	3607.000	TM4335.000	3546.000	3753.000	12.130	12.700	6.618	-0.100	0.268	4.463
2	14:55:57	3470.000	TM4183.000	3486.000	3608.000	11.790	12.850	4.580	-0.075	0.239	4.632
3	14:56:24	3382.000	TM4160.000	3456.000	3629.000	11.760	12.710	5.930	-0.086	0.316	4.249
X		3487.000	TM4226.000	3496.000	3663.000	11.890	12.760	5.710	-0.087	0.274	4.448
S		113.300	TM95.210	45.860	78.380	0.201	0.085	1.037	0.013	0.039	0.192
%RSD		3.249	TM2.253	1.311	2.140	1.689	0.668	18.160	14.490	14.250	4.318
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:55:30	19.870	15.820	2.503	-0.309	31.770	35.100	-0.208	-0.001	-2.280	96.370
2	14:55:57	18.820	14.790	2.934	-0.590	31.060	33.610	0.857	0.195	0.278	94.930
3	14:56:24	19.660	15.830	2.882	-0.682	31.340	31.070	-0.995	-0.279	1.079	95.830
X		19.450	15.480	2.773	-0.527	31.390	33.260	-0.116	-0.028	-0.308	95.710
S		0.557	0.600	0.235	0.194	0.357	2.038	0.929	0.238	1.755	0.728
%RSD		2.864	3.874	8.487	36.850	1.137	6.127	803.200	842.200	570.200	0.761
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:55:30	80.3%	0.491	0.543	0.346	2.635	-0.000	0.003	-0.006	0.002	80.8%
2	14:55:57	81.4%	0.512	0.496	0.401	2.735	0.004	-0.002	0.005	-0.005	82.2%
3	14:56:24	80.8%	0.575	0.446	0.396	0.673	-0.001	-0.000	-0.006	-0.003	81.8%
X		80.8%	0.526	0.495	0.381	2.014	0.001	0.000	-0.002	-0.002	81.6%
S		0.6%	0.043	0.049	0.030	1.162	0.003	0.002	0.006	0.004	0.7%
%RSD		0.7	8.238	9.812	7.970	57.700	363.800	921.700	282.300	173.400	0.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:55:30	0.016	0.037	0.088	0.063	391.400	403.100	87.4%	0.053	0.058	-0.007
2	14:55:57	0.020	0.029	0.101	0.067	394.800	404.100	87.7%	0.058	0.058	0.004
3	14:56:24	0.031	0.032	0.095	0.104	397.600	406.100	87.8%	0.045	0.061	-0.007
X		0.022	0.033	0.095	0.078	394.600	404.500	87.6%	0.052	0.059	-0.003
S		0.008	0.004	0.006	0.023	3.101	1.542	0.2%	0.007	0.002	0.006
%RSD		36.200	12.460	6.847	29.080	0.786	0.381	0.3	12.890	3.557	193.900
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:55:30	0.004	0.001	89.8%							
2	14:55:57	0.001	0.007	90.4%							
3	14:56:24	0.004	0.005	90.6%							
X		0.003	0.004	90.2%							
S		0.002	0.003	0.4%							
%RSD		71.320	76.910	0.4							

CCV MW15278 10/29/2020 15:00:56 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:23	88.4%	296.000	304.700	295.900	0.108	±61080.000	±60470.000	±60630.000	±58910.000	292.600
2	15:01:51	86.9%	312.900	305.500	304.800	-0.065	±61610.000	±63000.000	±61990.000	±58910.000	299.700
3	15:02:18	86.0%	305.900	307.100	297.300	-0.938	±62950.000	±61770.000	±60460.000	±58170.000	296.100
X		87.1%	101.642%	101.931%	99.782%	-0.298	±103.138%	±61750.000	±61020.000	±97.769%	98.719%
S		1.2%	n/a	n/a	n/a	0.561	±n/a	±1262.000	±838.300	±n/a	n/a
%RSD		1.3	2.792	0.405	1.609	187.900	±1.558	±2.043	±1.374	±0.723	1.196
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:23	±3399.000	230.200	±62330.000	63060.000	±62230.000	86.8%	305.700	301.200	293.700	103.300
2	15:01:51	±3460.000	212.100	±63070.000	62690.000	±62730.000	85.6%	306.700	306.500	298.500	751.200
3	15:02:18	±3350.000	208.500	±62000.000	61990.000	±62210.000	86.2%	306.000	304.100	293.500	1499.000
X		±3403.000	217.000	±104.116%	62580.000	±103.987%	86.2%	102.040%	101.306%	98.420%	784.400
S		±54.960	11.610	±n/a	542.300	±n/a	0.6%	n/a	n/a	n/a	698.300
%RSD		±1.615	5.350	±0.879	0.867	±0.467	0.7	0.162	0.862	0.952	89.020
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:23	±59130.000	291.700	±58910.000	±59000.000	288.500	288.200	290.300	284.000	279.700	294.400
2	15:01:51	±60250.000	298.200	±60250.000	±60200.000	301.400	288.200	295.600	287.600	292.600	293.700
3	15:02:18	±58930.000	295.800	±58750.000	±60250.000	296.900	291.500	287.300	284.400	281.900	292.500
X		±59440.000	98.411%	±59300.000	±99.697%	98.533%	96.429%	291.100	285.300	94.914%	97.848%
S		±713.500	n/a	±823.800	±n/a	n/a	n/a	4.200	1.992	n/a	n/a
%RSD		±1.200	1.101	±1.389	±1.181	2.222	0.649	1.443	0.698	2.420	0.336
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:23	286.400	285.600	297.000	283.200	0.823	0.932	1222.000	301.900	-0.658	301.400
2	15:01:51	294.500	286.100	298.000	288.300	1.320	0.277	1200.000	293.500	0.061	303.000
3	15:02:18	286.200	287.300	294.800	290.300	1.763	1.590	1183.000	288.300	3.287	304.200
X		289.100	286.300	98.869%	287.300	1.302	0.933	1202.000	98.193%	0.896	100.956%
S		4.738	0.869	n/a	3.668	0.470	0.657	19.230	n/a	2.101	n/a
%RSD		1.639	0.303	0.545	1.277	36.120	70.400	1.600	2.344	234.400	0.464
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:23	84.5%	309.200	316.700	309.100	289.300	293.300	290.800	299.400	297.000	84.3%
2	15:01:51	84.7%	316.500	323.800	317.700	296.300	293.000	291.100	294.800	297.400	85.1%
3	15:02:18	84.7%	319.300	331.600	319.900	288.900	294.200	293.500	299.500	296.400	85.5%
X		84.7%	104.996%	108.013%	315.600	291.500	97.837%	291.800	297.900	98.980%	85.0%
S		0.1%	n/a	n/a	5.672	4.146	n/a	1.500	2.698	n/a	0.6%
%RSD		0.1	1.664	2.293	1.797	1.423	0.227	0.514	0.906	0.175	0.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:23	307.700	305.400	304.300	297.300	295.300	302.000	90.0%	303.000	303.500	304.600
2	15:01:51	307.900	308.900	307.400	301.200	296.200	302.500	90.4%	304.600	306.700	307.100
3	15:02:18	308.500	308.800	306.500	303.800	295.700	302.600	90.8%	304.700	302.000	303.200
X		102.678%	102.568%	306.000	100.262%	98.577%	100.789%	90.4%	304.100	101.359%	101.654%
S		n/a	n/a	1.564	n/a	n/a	n/a	0.4%	0.972	n/a	n/a
%RSD		0.133	0.647	0.511	1.081	0.149	0.113	0.5	0.320	0.799	0.644
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	15:01:23	302.500	305.600	88.4%							
2	15:01:51	302.900	305.400	89.5%							
3	15:02:18	302.800	304.100	90.7%							
X		100.916%	101.681%	89.5%							
S		n/a	n/a	1.2%							
%RSD		0.071	0.273	1.3							

CCB IM10195-01 10/29/2020 15:06:50 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:07:16	95.8%	0.061	0.316	0.427	1.836	-5.396	2.392	2.101	1.962	0.036
2	15:07:43	96.3%	0.057	-0.488	0.338	-11.680	-6.183	1.662	1.931	1.441	-0.012
3	15:08:10	93.3%	0.004	-0.056	0.332	-2.336	-5.756	1.281	1.293	1.355	0.020
X		95.2%	0.041	-0.076	0.366	-4.061	-5.779	1.779	1.775	1.586	0.015
S		1.6%	0.032	0.403	0.053	6.923	0.394	0.565	0.426	0.328	0.024
%RSD		1.7	78.410	529.400	14.570	170.500	6.817	31.750	24.010	20.700	167.300
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:07:16	-0.960	123.600	0.385	1.754	-10.440	92.9%	-0.069	0.028	-0.039	-0.360
2	15:07:43	-0.850	119.400	-0.645	1.775	-11.020	92.6%	0.010	0.005	-0.016	16.390
3	15:08:10	-0.678	114.700	0.108	-3.298	-13.520	91.2%	-0.028	0.008	-0.003	14.220
X		-0.829	119.200	-0.051	0.077	-11.660	92.2%	-0.029	0.014	-0.019	10.080
S		0.142	4.422	0.533	2.923	1.636	0.9%	0.040	0.012	0.018	9.107
%RSD		17.110	3.709	1054.000	3791.000	14.030	1.0	137.600	87.380	93.770	90.330
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:07:16	3.604	-0.025	-0.497	1.651	0.006	-0.005	-6.336	-0.265	-0.015	0.036
2	15:07:43	2.821	-0.009	-0.783	4.483	0.000	-0.016	-6.661	-0.241	-0.029	0.110
3	15:08:10	1.804	-0.006	-1.871	4.509	-0.008	0.013	-6.622	-0.289	0.015	0.114
X		2.743	-0.013	-1.050	3.548	-0.000	-0.003	-6.540	-0.265	-0.010	0.086
S		0.903	0.010	0.725	1.642	0.007	0.014	0.177	0.024	0.022	0.044
%RSD		32.910	78.130	69.020	46.300	2646.000	527.400	2.710	9.006	234.900	51.080
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:07:16	-0.006	0.041	0.088	-0.672	-0.242	-0.755	1.394	0.349	-0.611	0.003
2	15:07:43	-0.086	0.071	0.134	-0.570	0.197	0.633	2.312	0.652	-3.022	0.008
3	15:08:10	0.039	0.040	0.012	0.138	-0.355	0.481	0.764	0.184	-0.902	0.007
X		-0.018	0.051	0.078	-0.368	-0.133	0.120	1.490	0.395	-1.512	0.006
S		0.064	0.017	0.062	0.441	0.291	0.762	0.779	0.237	1.316	0.002
%RSD		358.600	34.050	79.130	120.000	218.300	635.700	52.270	60.100	87.050	42.600
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:07:16	89.6%	0.590	0.782	0.656	0.020	0.016	0.015	0.013	0.019	90.8%
2	15:07:43	91.4%	0.757	0.691	0.702	0.282	0.016	0.004	0.008	-0.003	91.0%
3	15:08:10	88.9%	0.718	0.761	0.749	0.188	0.006	0.008	-0.007	0.008	91.3%
X		90.0%	0.689	0.745	0.702	0.163	0.012	0.009	0.005	0.008	91.0%
S		1.3%	0.087	0.048	0.047	0.133	0.006	0.005	0.011	0.011	0.3%
%RSD		1.4	12.690	6.424	6.671	81.460	45.860	56.090	230.200	140.700	0.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:07:16	0.037	0.074	0.490	0.540	-0.007	-0.018	94.3%	0.006	0.003	0.003
2	15:07:43	0.062	0.106	0.509	0.490	-0.015	-0.018	94.6%	0.001	0.007	0.001
3	15:08:10	0.061	0.057	0.490	0.558	0.000	-0.014	95.1%	-0.005	0.004	0.012
X		0.053	0.079	0.497	0.529	-0.007	-0.017	94.7%	0.000	0.004	0.005
S		0.014	0.025	0.011	0.035	0.007	0.002	0.4%	0.006	0.002	0.006
%RSD		26.020	31.600	2.257	6.622	102.900	14.480	0.5	2028.000	45.090	105.800
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	15:07:16	0.013	0.007	96.9%							
2	15:07:43	0.006	0.007	97.9%							
3	15:08:10	0.010	0.009	97.1%							
X		0.010	0.008	97.3%							
S		0.003	0.001	0.5%							
%RSD		35.200	12.040	0.5							

VJ23005-004S 10/29/2020 15:12:38

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:13:06	88.4%	42.640	106.900	108.400	-110.100	8629.000	26900.000	26930.000	39090.000	99.800
2	15:13:33	87.2%	41.440	112.200	108.200	-114.100	8819.000	26340.000	26730.000	39190.000	98.140
3	15:13:59	88.2%	42.290	107.300	105.900	-114.800	8683.000	27020.000	27350.000	40030.000	101.600
X		87.9%	42.120	108.800	107.500	-113.000	8710.000	26750.000	27000.000	39430.000	99.850
S		0.6%	0.615	2.957	1.373	2.534	97.780	361.300	316.900	514.000	1.729
%RSD		0.7	1.459	2.718	1.277	2.243	1.123	1.350	1.174	1.304	1.731
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:13:06	7098.000	58100.000	3301.000	108000.000	108300.000	82.1%	103.300	102.200	102.000	2445.000
2	15:13:33	6927.000	57940.000	3324.000	108400.000	108400.000	81.4%	97.950	102.700	99.400	2524.000
3	15:13:59	7083.000	59430.000	3343.000	108900.000	109900.000	80.4%	105.300	104.600	102.500	916.100
X		7036.000	58490.000	3323.000	108400.000	108900.000	81.3%	102.200	103.200	101.300	1962.000
S		94.680	819.900	21.340	473.500	860.200	0.8%	3.825	1.286	1.645	906.200
%RSD		1.346	1.402	0.642	0.437	0.790	1.0	3.742	1.247	1.624	46.200
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:13:06	4509.000	4427.000	4541.000	4741.000	108.800	110.200	107.700	97.500	98.330	108.900
2	15:13:33	4545.000	4385.000	4565.000	4757.000	109.200	110.100	108.400	97.100	96.280	107.200
3	15:13:59	4517.000	4418.000	4654.000	4852.000	111.900	109.400	109.500	97.260	97.650	102.000
X		4524.000	4410.000	4587.000	4783.000	110.000	109.900	108.500	97.290	97.420	106.000
S		19.050	22.020	59.480	60.200	1.675	0.407	0.920	0.202	1.043	3.611
%RSD		0.421	0.499	1.297	1.258	1.523	0.370	0.848	0.207	1.071	3.406
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:13:06	115.900	114.100	104.400	98.830	28.040	30.680	393.200	99.570	-0.663	194.800
2	15:13:33	117.300	112.100	105.800	100.900	27.190	28.180	415.900	105.100	1.178	192.400
3	15:13:59	110.500	113.100	104.300	97.470	28.090	28.190	396.100	98.090	-1.016	197.800
X		114.600	113.100	104.800	99.050	27.770	29.020	401.700	100.900	-0.167	195.000
S		3.547	1.015	0.836	1.707	0.505	1.443	12.350	3.703	1.178	2.711
%RSD		3.096	0.898	0.797	1.723	1.820	4.973	3.075	3.669	704.400	1.390
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:13:06	78.4%	102.800	105.100	103.200	105.900	98.410	98.760	99.940	98.060	76.5%
2	15:13:33	79.7%	102.300	106.700	102.700	101.100	99.010	99.480	100.800	98.500	77.6%
3	15:13:59	78.0%	107.100	110.900	106.600	98.670	98.500	99.210	101.800	99.930	77.7%
X		78.7%	104.100	107.600	104.200	101.900	98.640	99.150	100.800	98.830	77.3%
S		0.9%	2.636	2.980	2.132	3.663	0.322	0.361	0.908	0.977	0.6%
%RSD		1.1	2.533	2.769	2.047	3.596	0.327	0.364	0.901	0.988	0.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:13:06	101.300	101.200	102.900	99.830	488.300	505.800	82.8%	99.610	97.490	100.500
2	15:13:33	100.900	101.300	102.800	100.300	491.700	502.900	83.8%	99.590	99.360	101.800
3	15:13:59	101.500	101.300	103.900	99.790	484.700	504.500	85.7%	99.870	97.870	99.920
X		101.200	101.300	103.200	99.980	488.200	504.400	84.1%	99.690	98.240	100.700
S		0.308	0.060	0.598	0.295	3.530	1.451	1.5%	0.154	0.988	0.950
%RSD		0.304	0.059	0.580	0.295	0.723	0.288	1.7	0.155	1.006	0.943
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	15:13:06	98.560	98.800	80.7%							
2	15:13:33	100.000	99.990	82.0%							
3	15:13:59	99.020	98.760	85.0%							
X		99.200	99.180	82.6%							
S		0.739	0.700	2.2%							
%RSD		0.745	0.706	2.6							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:18:53	88.1%	41.430	109.300	110.100	-116.000	8885.000	26650.000	26970.000	39450.000	101.300
2	15:19:20	87.9%	42.660	103.400	111.300	-110.900	8970.000	26540.000	26580.000	38450.000	98.840
3	15:19:47	89.2%	42.670	108.400	106.600	-115.800	8783.000	26090.000	26680.000	38760.000	101.700
X		88.4%	42.250	107.000	109.300	-114.200	8879.000	26430.000	26740.000	38890.000	100.600
S		0.7%	0.715	3.195	2.427	2.873	93.630	295.500	203.200	508.800	1.542
%RSD		0.8	1.691	2.985	2.220	2.515	1.055	1.118	0.760	1.309	1.533
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:18:53	7039.000	60880.000	3505.000	110500.000	109700.000	82.7%	102.900	102.100	99.180	2084.000
2	15:19:20	6766.000	59680.000	3421.000	108900.000	107900.000	83.8%	102.800	97.630	98.060	2630.000
3	15:19:47	6803.000	59600.000	3462.000	106800.000	109500.000	83.3%	104.200	100.400	97.140	2393.000
X		6869.000	60050.000	3463.000	108800.000	109000.000	83.3%	103.300	100.100	98.130	2369.000
S		147.800	719.700	42.000	1843.000	970.200	0.6%	0.803	2.263	1.021	273.800
%RSD		2.152	1.198	1.213	1.695	0.890	0.7	0.777	2.262	1.041	11.560
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:18:53	4498.000	4307.000	4524.000	4676.000	109.400	108.300	103.300	97.680	95.720	102.100
2	15:19:20	4480.000	4265.000	4483.000	4739.000	108.100	107.800	102.200	94.410	93.240	99.080
3	15:19:47	4463.000	4231.000	4378.000	4642.000	105.000	107.600	98.080	94.810	95.040	100.000
X		4480.000	4268.000	4462.000	4686.000	107.500	107.900	101.200	95.640	94.670	100.400
S		17.290	37.720	75.140	49.120	2.260	0.344	2.741	1.783	1.282	1.531
%RSD		0.386	0.884	1.684	1.048	2.102	0.319	2.708	1.864	1.355	1.525
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:18:53	116.000	109.000	102.500	96.820	29.160	26.520	384.400	93.120	2.913	196.300
2	15:19:20	112.000	109.500	104.300	95.590	26.150	28.420	397.600	96.400	2.901	195.400
3	15:19:47	109.000	111.400	105.700	94.080	27.940	28.410	396.200	96.360	0.989	196.100
X		112.300	109.900	104.200	95.490	27.750	27.790	392.700	95.290	2.268	195.900
S		3.524	1.266	1.639	1.372	1.514	1.094	7.272	1.887	1.107	0.471
%RSD		3.138	1.152	1.573	1.437	5.457	3.938	1.852	1.980	48.830	0.241
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:18:53	81.3%	103.300	107.600	103.300	99.260	97.140	97.110	97.820	97.630	82.5%
2	15:19:20	81.3%	104.500	108.000	105.500	99.700	97.890	97.710	98.980	100.100	82.6%
3	15:19:47	82.0%	105.900	107.900	105.900	101.600	96.550	97.230	98.320	99.770	82.9%
X		81.5%	104.600	107.800	104.900	100.200	97.190	97.350	98.370	99.170	82.6%
S		0.4%	1.293	0.222	1.419	1.243	0.668	0.313	0.584	1.342	0.2%
%RSD		0.5	1.236	0.205	1.352	1.241	0.688	0.322	0.593	1.353	0.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:18:53	101.800	100.900	103.200	103.200	497.400	505.000	86.7%	100.700	99.390	101.100
2	15:19:20	101.100	101.300	102.800	101.700	485.800	502.200	88.7%	99.980	98.590	99.810
3	15:19:47	102.200	102.500	104.100	101.800	487.300	506.700	88.7%	101.400	98.790	100.300
X		101.700	101.600	103.400	102.200	490.100	504.700	88.0%	100.700	98.920	100.400
S		0.552	0.822	0.623	0.862	6.299	2.255	1.2%	0.684	0.418	0.626
%RSD		0.543	0.809	0.602	0.843	1.285	0.447	1.3	0.679	0.422	0.624
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	15:18:53	100.800	100.400	88.9%							
2	15:19:20	98.650	99.300	89.8%							
3	15:19:47	98.680	99.460	90.5%							
X		99.390	99.710	89.7%							
S		1.249	0.579	0.8%							
%RSD		1.257	0.581	0.9							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:24:47	92.9%	-0.015	0.624	1.146	-79.570	1608.000	6953.000	7028.000	7603.000	0.402
2	15:25:14	92.5%	0.010	0.971	1.085	-73.740	1625.000	6916.000	7089.000	7576.000	0.396
3	15:25:41	93.6%	0.004	0.947	1.124	-76.440	1603.000	6944.000	7003.000	7645.000	0.520
X		93.0%	0.000	0.847	1.118	-76.580	1612.000	6938.000	7040.000	7608.000	0.439
S		0.5%	0.013	0.194	0.031	2.915	11.230	19.120	44.070	35.160	0.070
%RSD		0.6	12640.000	22.880	2.730	3.806	0.697	0.276	0.626	0.462	15.930
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:24:47	1622.000	13130.000	548.800	21720.000	21230.000	90.4%	0.074	0.030	0.029	426.400
2	15:25:14	1628.000	13020.000	542.200	21440.000	20950.000	90.4%	0.236	0.048	0.014	431.300
3	15:25:41	1595.000	13950.000	555.600	21790.000	21290.000	89.1%	-0.005	-0.008	0.031	465.400
X		1615.000	13370.000	548.900	21650.000	21160.000	90.0%	0.102	0.023	0.025	441.000
S		17.310	508.100	6.663	183.200	179.900	0.8%	0.123	0.028	0.009	21.240
%RSD		1.071	3.800	1.214	0.846	0.850	0.8	120.600	121.700	37.090	4.815
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:24:47	689.900	TM 848.200	705.600	738.000	2.400	2.534	-4.918	-0.295	0.083	0.959
2	15:25:14	678.000	TM 856.300	709.100	761.600	2.383	2.796	-3.761	-0.308	0.025	1.017
3	15:25:41	694.300	TM 856.800	705.200	732.100	2.435	2.725	-4.782	-0.223	0.027	0.961
X		687.400	TM 853.800	706.600	743.900	2.406	2.685	-4.487	-0.275	0.045	0.979
S		8.423	TM 4.847	2.168	15.600	0.027	0.136	0.633	0.046	0.033	0.033
%RSD		1.225	TM 0.568	0.307	2.096	1.106	5.047	14.100	16.530	72.610	3.360
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:24:47	4.474	3.311	0.524	-0.565	6.593	5.421	1.115	0.301	-2.265	19.180
2	15:25:14	3.196	3.218	0.217	-0.238	6.181	6.332	-2.358	-0.548	-1.285	18.810
3	15:25:41	4.829	3.444	0.680	-0.267	5.002	6.837	0.441	0.120	-1.569	19.060
X		4.167	3.325	0.474	-0.357	5.925	6.197	-0.267	-0.043	-1.706	19.020
S		0.859	0.113	0.235	0.181	0.826	0.718	1.841	0.447	0.505	0.189
%RSD		20.610	3.412	49.680	50.720	13.940	11.580	688.900	1051.000	29.570	0.995
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:24:47	88.9%	0.359	0.322	0.333	0.416	0.002	0.006	0.004	-0.005	91.2%
2	15:25:14	89.9%	0.298	0.269	0.234	-0.279	0.008	0.006	-0.006	0.002	90.4%
3	15:25:41	88.8%	0.333	0.344	0.342	0.637	0.001	-0.003	-0.001	-0.003	91.1%
X		89.2%	0.330	0.312	0.303	0.258	0.004	0.003	-0.001	-0.002	90.9%
S		0.6%	0.031	0.039	0.060	0.478	0.004	0.005	0.005	0.003	0.4%
%RSD		0.7	9.303	12.380	19.770	185.400	103.800	179.800	746.200	153.500	0.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:24:47	-0.002	0.000	0.047	0.044	81.390	80.290	92.6%	0.019	0.023	-0.010
2	15:25:14	-0.007	0.015	0.041	0.044	82.470	81.730	92.7%	0.024	0.032	-0.007
3	15:25:41	0.005	0.027	0.034	0.049	82.500	81.510	93.2%	0.029	0.028	-0.004
X		-0.001	0.014	0.041	0.046	82.120	81.180	92.9%	0.024	0.028	-0.007
S		0.006	0.013	0.007	0.003	0.636	0.772	0.3%	0.005	0.004	0.003
%RSD		594.200	94.610	16.420	6.772	0.774	0.951	0.4	22.080	15.190	40.290
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	15:24:47	0.004	-0.004	93.8%							
2	15:25:14	0.005	-0.001	94.4%							
3	15:25:41	0.005	0.001	96.0%							
X		0.005	-0.001	94.7%							
S		0.001	0.002	1.1%							
%RSD		19.110	182.600	1.2							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:35	88.4%	41.810	103.400	107.500	-119.100	└8852.000	└26450.000	└27090.000	└38720.000	101.300
2	15:31:02	87.9%	43.850	111.000	108.300	-113.900	└8866.000	└26750.000	└27370.000	└39120.000	100.800
3	15:31:29	87.2%	41.620	105.700	108.000	-116.500	└8946.000	└26190.000	└26700.000	└39130.000	98.030
X		87.8%	42.430	106.700	107.900	-116.500	└8888.000	└26460.000	└27050.000	└38990.000	100.000
S		0.6%	1.238	3.911	0.371	2.572	└50.710	└277.300	└334.900	└236.500	1.762
%RSD		0.7	2.919	3.667	0.344	2.208	└0.571	└1.048	└1.238	└0.607	1.761
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:35	└6965.000	└60250.000	└3412.000	M108200.000	TM110900.000	83.1%	102.700	101.300	99.860	2140.000
2	15:31:02	└7000.000	└60470.000	└3424.000	M109700.000	TM109800.000	82.3%	103.300	102.500	100.800	1780.000
3	15:31:29	└7052.000	└58470.000	└3351.000	M107500.000	TM108700.000	82.8%	101.700	99.350	98.760	2634.000
X		└7006.000	└59730.000	└3396.000	M108400.000	TM109800.000	82.7%	102.600	101.100	99.820	2185.000
S		└43.470	└1098.000	└38.980	M1133.000	TM1112.000	0.4%	0.800	1.581	1.037	428.700
%RSD		└0.621	└1.838	└1.148	M1.045	TM1.012	0.5	0.780	1.564	1.039	19.620
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:35	4460.000	TM4354.000	└4575.000	4708.000	109.900	108.200	103.700	98.290	97.840	105.200
2	15:31:02	4618.000	TM4372.000	└4572.000	4842.000	108.300	111.000	102.900	95.280	98.940	103.700
3	15:31:29	4467.000	TM4295.000	└4477.000	4626.000	104.600	106.200	98.790	95.610	93.710	102.700
X		4515.000	TM4340.000	└4541.000	4725.000	107.600	108.500	101.800	96.390	96.830	103.800
S		89.230	TM40.730	└56.030	108.900	2.724	2.394	2.653	1.653	2.758	1.248
%RSD		1.977	TM0.938	└1.234	2.306	2.532	2.207	2.605	1.715	2.848	1.202
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:35	116.000	109.100	104.800	99.510	28.710	30.950	400.400	99.800	-1.909	195.300
2	15:31:02	109.100	107.200	103.000	95.380	29.120	29.530	403.200	99.310	2.609	194.400
3	15:31:29	115.000	109.300	101.000	98.230	29.480	30.670	390.800	96.070	0.460	196.600
X		113.300	108.500	102.900	97.710	29.100	30.380	398.100	98.390	0.387	195.400
S		3.726	1.140	1.879	2.118	0.381	0.751	6.497	2.026	2.260	1.152
%RSD		3.288	1.051	1.825	2.167	1.307	2.473	1.632	2.059	584.500	0.590
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:35	80.3%	103.500	106.800	104.200	105.200	98.100	97.800	99.890	99.430	79.5%
2	15:31:02	80.6%	103.200	106.200	102.800	100.400	97.530	96.980	99.260	98.380	80.5%
3	15:31:29	78.8%	105.100	106.400	104.400	100.700	97.270	98.020	100.500	98.400	79.2%
X		79.9%	104.000	106.500	103.800	102.100	97.630	97.600	99.870	98.740	79.7%
S		0.9%	1.016	0.348	0.880	2.712	0.422	0.547	0.602	0.598	0.7%
%RSD		1.2	0.977	0.327	0.848	2.657	0.432	0.561	0.603	0.606	0.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:35	102.100	100.900	97.550	93.250	494.900	M509.600	87.0%	100.300	97.880	98.570
2	15:31:02	101.500	100.200	96.290	94.110	483.900	499.600	86.9%	99.360	97.740	99.370
3	15:31:29	100.400	101.900	98.500	94.480	487.600	M505.200	86.6%	99.410	97.150	100.000
X		101.400	101.000	97.450	93.950	488.800	M504.800	86.8%	99.690	97.590	99.320
S		0.861	0.826	1.111	0.632	5.582	M5.032	0.2%	0.524	0.388	0.725
%RSD		0.849	0.818	1.140	0.673	1.142	M0.997	0.2	0.526	0.398	0.730
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	15:30:35	98.180	97.700	89.8%							
2	15:31:02	99.510	98.920	88.7%							
3	15:31:29	99.650	99.320	87.3%							
X		99.110	98.650	88.6%							
S		0.807	0.844	1.3%							
%RSD		0.815	0.856	1.4							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:36:24	89.3%	-0.009	5.812	5.996	-114.600	7829.000	26420.000	26490.000	38100.000	0.748
2	15:36:51	87.8%	0.016	6.489	6.149	-115.300	7902.000	26200.000	26960.000	37910.000	0.900
3	15:37:19	88.5%	-0.013	6.074	6.198	-114.400	7933.000	25650.000	25840.000	37630.000	0.835
X		88.5%	-0.002	6.125	6.114	-114.800	7888.000	26090.000	26430.000	37880.000	0.828
S		0.8%	0.015	0.342	0.105	0.475	53.060	395.600	560.800	238.900	0.076
%RSD		0.9	722.200	5.575	1.723	0.414	0.673	1.516	2.122	0.631	9.232
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:36:24	6260.000	57420.000	2469.000	107200.000	107400.000	82.6%	0.913	0.235	0.188	1714.000
2	15:36:51	6294.000	58230.000	2525.000	109100.000	109800.000	81.2%	0.930	-0.169	0.148	1961.000
3	15:37:19	6154.000	57640.000	2495.000	107300.000	107600.000	82.0%	0.630	-0.227	0.133	1952.000
X		6236.000	57760.000	2496.000	107900.000	108200.000	81.9%	0.824	-0.054	0.156	1876.000
S		72.700	417.100	28.260	1041.000	1340.000	0.7%	0.169	0.252	0.029	139.700
%RSD		1.166	0.722	1.132	0.965	1.238	0.8	20.450	468.400	18.300	7.447
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:36:24	3451.000	4265.000	3500.000	3686.000	12.030	12.790	4.519	-0.127	0.209	4.552
2	15:36:51	3546.000	4364.000	3644.000	3710.000	12.020	13.500	3.973	-0.160	0.326	4.486
3	15:37:19	3493.000	4248.000	3486.000	3689.000	11.820	12.740	4.031	-0.242	0.221	4.647
X		3496.000	4292.000	3543.000	3695.000	11.960	13.010	4.174	-0.176	0.252	4.562
S		47.610	62.520	87.240	13.410	0.117	0.423	0.300	0.060	0.064	0.081
%RSD		1.362	1.456	2.462	0.363	0.981	3.253	7.185	33.800	25.470	1.776
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:36:24	19.500	15.900	2.195	-0.429	29.730	32.880	-0.533	-0.160	1.613	95.390
2	15:36:51	21.230	15.380	2.436	-0.424	27.350	31.160	-1.356	-0.330	0.362	94.650
3	15:37:19	20.580	15.640	3.309	-0.420	28.160	33.940	1.332	0.350	-1.135	95.690
X		20.440	15.640	2.647	-0.424	28.410	32.660	-0.186	-0.047	0.280	95.240
S		0.875	0.257	0.586	0.004	1.210	1.402	1.377	0.354	1.376	0.535
%RSD		4.281	1.645	22.150	1.031	4.257	4.293	741.300	755.700	491.300	0.562
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:36:24	78.8%	0.664	0.657	0.588	1.186	0.011	0.003	0.011	0.004	78.0%
2	15:36:51	80.5%	0.688	0.697	0.640	2.532	0.007	0.006	0.005	0.007	78.7%
3	15:37:19	80.1%	0.730	0.709	0.634	3.210	0.004	0.001	0.010	-0.003	80.5%
X		79.8%	0.694	0.688	0.621	2.309	0.007	0.003	0.009	0.003	79.1%
S		0.9%	0.034	0.027	0.028	1.030	0.004	0.002	0.003	0.005	1.3%
%RSD		1.1	4.847	3.923	4.567	44.600	49.280	69.780	39.840	204.700	1.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:36:24	0.023	0.045	0.360	0.349	388.500	403.300	85.0%	0.081	0.061	0.005
2	15:36:51	0.011	0.044	0.444	0.364	392.800	408.500	86.7%	0.073	0.064	-0.002
3	15:37:19	0.035	0.042	0.417	0.380	397.400	406.500	86.5%	0.042	0.066	-0.002
X		0.023	0.043	0.407	0.365	392.900	406.100	86.0%	0.065	0.064	0.000
S		0.012	0.001	0.043	0.016	4.477	2.636	1.0%	0.020	0.003	0.004
%RSD		51.950	2.997	10.530	4.253	1.140	0.649	1.1	31.090	4.030	1456.000
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	15:36:24	0.009	0.007	85.5%							
2	15:36:51	0.006	0.006	88.4%							
3	15:37:19	0.002	0.007	90.1%							
X		0.006	0.007	88.0%							
S		0.003	0.001	2.4%							
%RSD		55.700	7.993	2.7							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:13	88.5%	0.019	5.597	5.894	-46.710	2378.000	18020.000	17620.000	20060.000	51.180
2	15:42:41	88.8%	0.039	6.279	5.515	-49.120	2362.000	17710.000	17660.000	19320.000	48.680
3	15:43:08	89.5%	0.006	5.833	5.699	-46.670	2354.000	17490.000	17390.000	19400.000	48.910
X		89.0%	0.022	5.903	5.703	-47.500	2365.000	17740.000	17560.000	19590.000	49.590
S		0.5%	0.017	0.346	0.190	1.401	12.540	265.500	141.500	402.500	1.384
%RSD		0.6	77.240	5.864	3.327	2.950	0.530	1.497	0.806	2.054	2.790
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:13	3027.000	68570.000	2842.000	52010.000	52460.000	81.8%	1.840	0.639	3.046	1512.000
2	15:42:41	2994.000	67200.000	2850.000	52470.000	52980.000	81.7%	2.021	0.928	3.131	1294.000
3	15:43:08	2991.000	66900.000	2784.000	51270.000	52180.000	83.2%	2.070	0.798	3.038	1295.000
X		3004.000	67560.000	2825.000	51920.000	52540.000	82.2%	1.977	0.788	3.072	1367.000
S		20.020	888.300	36.000	607.300	407.900	0.9%	0.121	0.145	0.051	125.500
%RSD		0.666	1.315	1.274	1.170	0.776	1.0	6.137	18.370	1.673	9.180
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:13	2996.000	7177.000	3110.000	3152.000	12.970	3.428	-3.707	0.497	0.862	6.064
2	15:42:41	3042.000	7131.000	3047.000	3064.000	12.570	3.253	-3.868	0.493	0.911	5.428
3	15:43:08	2975.000	6968.000	3004.000	3055.000	12.680	3.295	-5.311	0.389	0.887	5.418
X		3004.000	7092.000	3054.000	3090.000	12.740	3.325	-4.295	0.460	0.886	5.637
S		34.380	109.800	53.050	53.450	0.207	0.091	0.884	0.061	0.024	0.370
%RSD		1.144	1.549	1.737	1.730	1.623	2.745	20.570	13.280	2.752	6.561
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:13	10.260	8.284	-0.103	-0.690	11.110	12.130	0.123	0.024	2.582	123.900
2	15:42:41	11.010	8.071	0.123	-0.661	12.970	11.930	-0.880	-0.148	-1.151	126.600
3	15:43:08	8.730	8.498	0.373	-1.197	10.950	12.580	0.833	0.220	1.915	125.100
X		10.000	8.284	0.131	-0.850	11.680	12.210	0.025	0.032	1.115	125.200
S		1.162	0.213	0.238	0.301	1.120	0.336	0.861	0.184	1.991	1.376
%RSD		11.620	2.574	181.600	35.490	9.592	2.747	3401.000	581.500	178.500	1.099
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:13	89.6%	0.230	0.172	0.193	2.501	0.089	0.060	0.163	0.156	82.9%
2	15:42:41	88.3%	0.207	0.289	0.170	4.096	0.081	0.045	0.186	0.170	82.8%
3	15:43:08	89.0%	0.267	0.188	0.219	4.143	0.075	0.085	0.157	0.113	83.2%
X		89.0%	0.234	0.216	0.194	3.580	0.081	0.064	0.169	0.146	83.0%
S		0.6%	0.030	0.064	0.024	0.935	0.007	0.020	0.015	0.030	0.2%
%RSD		0.7	12.730	29.400	12.500	26.120	8.467	31.460	9.109	20.250	0.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:13	0.122	0.115	0.166	0.102	114.400	114.400	88.0%	0.036	0.041	0.139
2	15:42:41	0.154	0.113	0.193	0.109	114.800	116.400	86.9%	0.034	0.038	0.124
3	15:43:08	0.161	0.124	0.163	0.148	113.900	115.300	87.2%	0.027	0.035	0.141
X		0.146	0.117	0.174	0.120	114.400	115.300	87.4%	0.032	0.038	0.135
S		0.021	0.005	0.016	0.025	0.444	0.995	0.6%	0.005	0.003	0.009
%RSD		14.490	4.648	9.437	20.940	0.388	0.863	0.6	15.650	7.494	6.868
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	15:42:13	0.128	0.126	89.3%							
2	15:42:41	0.144	0.121	90.6%							
3	15:43:08	0.170	0.146	90.1%							
X		0.147	0.131	90.0%							
S		0.021	0.014	0.7%							
%RSD		14.410	10.330	0.7							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:48:02	90.3%	-0.006	9.444	9.162	-106.700	3893.000	15090.000	15180.000	20340.000	0.648
2	15:48:29	91.9%	-0.006	8.235	8.699	-106.400	3811.000	15140.000	15120.000	20330.000	0.751
3	15:48:56	91.2%	-0.015	8.802	9.752	-109.800	3889.000	15150.000	14980.000	20630.000	0.756
X		91.1%	-0.009	8.827	9.204	-107.600	3864.000	15120.000	15090.000	20430.000	0.718
S		0.8%	0.005	0.605	0.528	1.902	46.030	33.670	103.400	169.300	0.061
%RSD		0.9	60.510	6.850	5.732	1.767	1.191	0.223	0.685	0.829	8.521
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:48:02	5363.000	63800.000	3197.000	76700.000	75590.000	85.4%	0.429	0.033	0.829	3260.000
2	15:48:29	5402.000	63170.000	3181.000	76060.000	76030.000	85.2%	0.559	-0.113	0.849	3732.000
3	15:48:56	5337.000	63200.000	3218.000	77070.000	77580.000	84.1%	0.481	0.202	0.762	3839.000
X		5367.000	63390.000	3199.000	76610.000	76400.000	84.9%	0.489	0.041	0.813	3610.000
S		32.860	355.100	18.790	509.500	1045.000	0.7%	0.065	0.158	0.046	308.300
%RSD		0.612	0.560	0.588	0.665	1.367	0.8	13.350	388.100	5.606	8.539
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:48:02	2.738	0.560	6.014	192.200	0.031	0.699	-8.133	-0.250	0.164	0.970
2	15:48:29	3.049	0.439	5.760	182.300	0.055	0.837	-7.593	-0.210	0.200	0.975
3	15:48:56	2.800	0.440	5.299	177.300	0.072	0.735	-8.123	-0.220	0.101	0.850
X		2.862	0.480	5.691	183.900	0.053	0.757	-7.950	-0.226	0.155	0.931
S		0.164	0.070	0.363	7.571	0.021	0.072	0.309	0.021	0.050	0.071
%RSD		5.743	14.570	6.371	4.117	39.510	9.447	3.885	9.168	32.420	7.585
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:48:02	8.837	6.955	-0.554	0.006	5.134	6.855	0.826	0.202	-0.496	40.030
2	15:48:29	9.149	7.025	-0.472	-0.795	6.716	6.602	2.334	0.606	-1.972	40.350
3	15:48:56	7.846	6.551	0.126	-0.412	5.372	5.870	2.593	0.610	0.520	39.380
X		8.611	6.844	-0.300	-0.400	5.741	6.442	1.918	0.473	-0.649	39.920
S		0.680	0.256	0.371	0.401	0.853	0.511	0.954	0.234	1.253	0.495
%RSD		7.902	3.738	123.700	100.100	14.860	7.939	49.760	49.590	192.900	1.239
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:48:02	81.7%	0.467	0.471	0.396	0.953	0.001	-0.002	0.005	-0.000	83.2%
2	15:48:29	81.6%	0.563	0.533	0.544	0.155	0.001	-0.003	0.010	-0.000	83.0%
3	15:48:56	83.4%	0.545	0.573	0.469	-0.031	0.005	-0.002	-0.001	-0.000	84.2%
X		82.2%	0.525	0.526	0.470	0.359	0.003	-0.002	0.005	-0.000	83.5%
S		1.0%	0.051	0.052	0.074	0.522	0.002	0.001	0.006	0.000	0.7%
%RSD		1.2	9.760	9.851	15.700	145.500	90.820	36.930	115.300	22.340	0.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:48:02	0.009	0.024	0.077	0.060	195.900	197.300	88.6%	0.002	0.005	-0.004
2	15:48:29	0.028	0.017	0.114	0.062	195.600	200.500	89.8%	-0.004	0.005	-0.010
3	15:48:56	0.030	0.012	0.093	0.102	194.500	201.900	90.0%	-0.003	0.007	0.002
X		0.022	0.018	0.095	0.075	195.400	199.900	89.5%	-0.002	0.006	-0.004
S		0.011	0.006	0.019	0.024	0.758	2.341	0.8%	0.003	0.001	0.006
%RSD		51.900	32.710	19.590	32.000	0.388	1.171	0.9	174.700	20.980	155.900
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	15:48:02	-0.003	-0.002	89.7%							
2	15:48:29	0.002	0.000	91.9%							
3	15:48:56	0.002	0.001	92.6%							
X		0.000	-0.000	91.4%							
S		0.003	0.002	1.5%							
%RSD		811.400	454.100	1.6							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:53:54	93.3%	-0.009	2.075	2.457	-90.130	500.800	13660.000	13980.000	18050.000	4.130
2	15:54:21	93.9%	-0.009	2.390	2.764	-91.340	504.600	13550.000	13920.000	18070.000	3.791
3	15:54:48	92.7%	0.000	2.508	2.408	-99.720	515.500	13550.000	13840.000	17810.000	4.314
X		93.3%	-0.006	2.325	2.543	-93.730	506.900	13590.000	13910.000	17970.000	4.079
S		0.6%	0.005	0.224	0.193	5.223	7.614	65.260	72.560	144.300	0.265
%RSD		0.6	91.860	9.627	7.595	5.572	1.502	0.480	0.521	0.803	6.499
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:53:54	3578.000	62090.000	896.700	19540.000	19390.000	83.9%	0.264	0.188	1.932	6485.000
2	15:54:21	3594.000	60810.000	895.300	19730.000	19480.000	84.4%	0.370	0.269	1.896	6663.000
3	15:54:48	3552.000	61120.000	885.800	19820.000	19520.000	84.6%	0.564	0.243	1.875	6822.000
X		3575.000	61340.000	892.600	19700.000	19460.000	84.3%	0.399	0.234	1.901	6657.000
S		21.220	668.100	5.968	142.400	70.430	0.3%	0.152	0.041	0.029	168.600
%RSD		0.594	1.089	0.668	0.723	0.362	0.4	38.030	17.610	1.517	2.532
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:53:54	11.110	0.363	13.320	51.670	0.018	0.454	-8.740	-0.090	0.297	1.492
2	15:54:21	7.956	0.334	12.140	52.520	0.005	0.403	-8.011	-0.120	0.361	1.415
3	15:54:48	10.800	0.349	12.400	55.140	0.018	0.336	-8.265	-0.152	0.381	1.203
X		9.955	0.349	12.620	53.110	0.014	0.398	-8.339	-0.121	0.346	1.370
S		1.739	0.015	0.624	1.810	0.008	0.059	0.370	0.031	0.044	0.150
%RSD		17.470	4.280	4.945	3.407	54.460	14.830	4.435	25.650	12.650	10.940
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:53:54	30.700	23.460	-0.563	-1.036	3.875	4.794	-0.617	-0.106	-1.176	25.060
2	15:54:21	31.330	24.040	0.116	-0.634	4.886	6.128	-2.502	-0.600	-0.393	24.860
3	15:54:48	30.780	23.100	0.531	-0.454	4.713	5.253	2.038	0.567	-1.550	24.560
X		30.940	23.540	0.028	-0.708	4.491	5.392	-0.360	-0.046	-1.039	24.830
S		0.344	0.476	0.552	0.298	0.541	0.678	2.281	0.586	0.590	0.253
%RSD		1.110	2.024	1975.000	42.090	12.050	12.580	633.000	1262.000	56.790	1.020
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:53:54	80.6%	0.204	0.166	0.222	0.002	0.001	0.003	0.000	-0.000	79.6%
2	15:54:21	80.0%	0.245	0.223	0.226	0.282	0.003	-0.003	-0.006	-0.007	79.8%
3	15:54:48	80.5%	0.190	0.236	0.201	0.478	0.004	0.003	-0.005	0.009	79.6%
X		80.4%	0.213	0.208	0.216	0.254	0.003	0.001	-0.004	0.001	79.7%
S		0.3%	0.029	0.037	0.013	0.239	0.001	0.003	0.003	0.008	0.1%
%RSD		0.4	13.450	17.960	6.183	94.080	51.760	423.200	95.120	1211.000	0.1
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:53:54	-0.012	0.027	0.070	0.086	734.400	753.500	84.4%	-0.006	0.001	0.022
2	15:54:21	0.047	0.022	0.085	0.088	729.400	746.300	85.6%	-0.007	-0.002	0.019
3	15:54:48	0.022	0.041	0.098	0.070	736.000	750.600	85.3%	-0.005	0.000	0.014
X		0.019	0.030	0.084	0.081	733.300	750.200	85.1%	-0.006	-0.001	0.019
S		0.029	0.010	0.014	0.010	3.417	3.619	0.6%	0.001	0.001	0.004
%RSD		154.300	32.540	16.820	12.420	0.466	0.482	0.8	22.890	268.100	23.070
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	15:53:54	0.020	0.023	84.7%							
2	15:54:21	0.021	0.025	84.3%							
3	15:54:48	0.028	0.022	84.4%							
X		0.023	0.023	84.5%							
S		0.004	0.001	0.2%							
%RSD		19.330	5.015	0.2							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:59:44	93.3%	0.008	24.250	23.940	-79.170	3022.000	18330.000	18460.000	22750.000	2.187
2	16:00:11	92.7%	0.009	23.090	24.540	-75.330	3061.000	18440.000	18280.000	23070.000	2.005
3	16:00:38	93.4%	-0.012	26.010	24.420	-81.880	3053.000	18440.000	18320.000	22650.000	2.096
X		93.1%	0.002	24.450	24.300	-78.790	3045.000	18400.000	18350.000	22820.000	2.096
S		0.4%	0.012	1.475	0.319	3.291	20.990	62.710	93.640	217.700	0.091
%RSD		0.4	696.300	6.032	1.312	4.177	0.689	0.341	0.510	0.954	4.342
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:59:44	4657.000	64150.000	2096.000	65900.000	66720.000	84.4%	0.587	0.506	1.136	4744.000
2	16:00:11	4689.000	65030.000	2077.000	65510.000	65550.000	85.2%	0.387	0.075	1.022	5105.000
3	16:00:38	4645.000	63770.000	2075.000	65480.000	66210.000	84.7%	0.304	-0.145	1.126	5329.000
X		4664.000	64320.000	2083.000	65630.000	66160.000	84.8%	0.426	0.145	1.095	5059.000
S		22.660	645.700	11.860	232.500	583.400	0.4%	0.146	0.331	0.063	295.200
%RSD		0.486	1.004	0.570	0.354	0.882	0.5	34.220	228.000	5.731	5.835
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:59:44	4.994	0.101	11.550	179.200	0.070	0.984	-7.926	-0.115	0.182	0.982
2	16:00:11	5.216	0.086	9.373	166.500	0.033	0.825	-8.331	-0.158	0.342	0.791
3	16:00:38	5.374	0.096	8.449	154.700	0.058	0.956	-8.107	-0.115	0.222	1.129
X		5.194	0.094	9.792	166.800	0.054	0.922	-8.121	-0.129	0.249	0.967
S		0.191	0.007	1.594	12.280	0.019	0.085	0.203	0.025	0.083	0.169
%RSD		3.670	7.888	16.280	7.361	34.990	9.182	2.499	19.180	33.490	17.480
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:59:44	7.251	6.010	-0.108	0.264	8.004	8.705	0.801	0.206	-0.523	65.620
2	16:00:11	7.149	5.719	-0.107	-0.115	8.388	8.506	3.800	0.955	-2.357	66.320
3	16:00:38	8.420	5.752	0.289	-0.616	8.924	9.431	1.176	0.291	-0.889	65.200
X		7.607	5.827	0.025	-0.156	8.439	8.881	1.926	0.484	-1.256	65.710
S		0.706	0.160	0.229	0.441	0.462	0.487	1.634	0.410	0.970	0.567
%RSD		9.283	2.737	928.800	283.200	5.476	5.481	84.840	84.680	77.230	0.863
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:59:44	82.4%	1.219	1.199	0.987	2.711	0.001	-0.002	-0.003	-0.001	82.9%
2	16:00:11	82.0%	1.245	1.389	1.303	2.216	0.004	-0.000	-0.009	-0.004	84.0%
3	16:00:38	82.2%	1.231	1.331	1.189	1.808	-0.000	0.001	-0.009	-0.005	83.9%
X		82.2%	1.231	1.306	1.160	2.245	0.002	-0.000	-0.007	-0.003	83.6%
S		0.2%	0.013	0.097	0.160	0.452	0.002	0.001	0.004	0.002	0.6%
%RSD		0.3	1.032	7.461	13.780	20.120	125.200	427.900	53.250	60.450	0.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:59:44	-0.004	0.037	0.050	0.044	158.100	160.400	88.1%	0.018	0.022	-0.002
2	16:00:11	0.030	0.026	0.056	0.039	158.600	160.900	88.5%	0.027	0.029	0.006
3	16:00:38	-0.002	0.010	0.054	0.053	157.900	161.800	89.3%	0.027	0.031	0.005
X		0.008	0.024	0.053	0.045	158.200	161.100	88.6%	0.024	0.027	0.003
S		0.019	0.014	0.003	0.007	0.366	0.701	0.7%	0.005	0.005	0.005
%RSD		245.500	55.950	5.324	15.130	0.231	0.435	0.7	20.960	18.150	157.200
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	15:59:44	-0.003	0.004	90.9%							
2	16:00:11	0.002	0.004	91.1%							
3	16:00:38	-0.005	0.002	92.1%							
X		-0.002	0.003	91.4%							
S		0.004	0.001	0.7%							
%RSD		190.400	36.690	0.7							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:35	94.7%	0.000	5.638	6.111	-65.180	559.100	20090.000	20120.000	23940.000	2.350
2	16:06:02	93.9%	-0.016	5.507	6.503	-63.100	564.500	20100.000	20190.000	24040.000	2.418
3	16:06:29	93.5%	-0.016	6.802	6.273	-69.130	562.400	19970.000	20070.000	23930.000	2.285
X		94.0%	-0.010	5.982	6.295	-65.800	562.000	20050.000	20130.000	23970.000	2.351
S		0.6%	0.009	0.713	0.197	3.063	2.692	70.980	59.010	64.650	0.067
%RSD		0.6	89.640	11.910	3.124	4.655	0.479	0.354	0.293	0.270	2.847
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:35	3513.000	67870.000	1182.000	26580.000	25810.000	86.8%	0.273	-0.207	0.380	6677.000
2	16:06:02	3539.000	69840.000	1200.000	27030.000	26850.000	85.9%	0.192	0.095	0.414	6609.000
3	16:06:29	3475.000	69960.000	1230.000	26650.000	26080.000	85.1%	0.259	0.077	0.415	6965.000
X		3509.000	69220.000	1204.000	26750.000	26240.000	85.9%	0.241	-0.012	0.403	6750.000
S		32.160	1175.000	24.460	240.300	542.000	0.8%	0.043	0.169	0.020	189.200
%RSD		0.917	1.698	2.032	0.898	2.065	1.0	17.990	1437.000	4.867	2.803
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:35	26.840	0.563	32.460	81.830	0.021	0.361	-8.589	-0.261	0.140	0.994
2	16:06:02	28.650	0.564	32.150	92.850	0.030	0.354	-8.925	-0.249	0.132	0.910
3	16:06:29	25.210	0.611	32.600	81.230	0.018	0.310	-9.231	-0.227	0.210	0.816
X		26.900	0.580	32.400	85.300	0.023	0.342	-8.915	-0.246	0.161	0.907
S		1.721	0.027	0.232	6.541	0.006	0.028	0.321	0.017	0.043	0.089
%RSD		6.397	4.700	0.717	7.667	28.200	8.079	3.601	7.085	26.790	9.836
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:35	6.064	3.836	0.369	-0.586	4.508	6.082	0.724	0.171	-0.235	44.780
2	16:06:02	5.634	4.149	0.053	-0.947	5.973	5.501	0.666	0.175	-1.018	43.720
3	16:06:29	4.911	4.082	0.822	-0.689	4.980	6.102	1.466	0.346	-0.229	44.560
X		5.536	4.022	0.414	-0.741	5.154	5.895	0.952	0.231	-0.494	44.350
S		0.583	0.165	0.387	0.186	0.747	0.342	0.447	0.100	0.454	0.559
%RSD		10.530	4.095	93.320	25.070	14.500	5.797	46.900	43.380	91.850	1.261
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:35	83.4%	2.389	2.351	2.374	1.530	-0.000	-0.000	0.003	0.004	84.9%
2	16:06:02	84.7%	2.531	2.508	2.301	2.120	-0.000	-0.003	-0.002	-0.004	85.9%
3	16:06:29	83.5%	2.353	2.310	2.289	0.761	0.004	-0.002	-0.008	0.014	85.0%
X		83.9%	2.424	2.390	2.321	1.470	0.001	-0.002	-0.002	0.004	85.3%
S		0.7%	0.094	0.104	0.046	0.681	0.002	0.001	0.005	0.009	0.5%
%RSD		0.8	3.894	4.367	1.992	46.330	202.200	79.210	230.600	202.800	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:35	0.024	0.038	0.055	0.057	112.300	112.500	89.0%	-0.009	-0.003	-0.010
2	16:06:02	0.015	0.022	0.068	0.051	114.000	114.800	89.6%	-0.009	-0.001	-0.009
3	16:06:29	0.016	0.025	0.078	0.053	111.500	114.900	91.0%	-0.008	-0.004	-0.009
X		0.018	0.028	0.067	0.054	112.600	114.100	89.9%	-0.009	-0.003	-0.009
S		0.005	0.009	0.012	0.003	1.308	1.356	1.0%	0.001	0.001	0.001
%RSD		25.770	30.140	17.390	6.227	1.162	1.189	1.1	8.458	43.230	9.608
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	16:05:35	-0.005	-0.006	90.9%							
2	16:06:02	-0.007	-0.003	91.2%							
3	16:06:29	-0.007	-0.006	92.6%							
X		-0.006	-0.005	91.6%							
S		0.001	0.002	0.9%							
%RSD		17.180	34.460	1.0							

CCV MW15278 10/29/2020 16:10:59 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:11:26	86.7%	299.300	306.200	302.400	-6.479	±60600.000	±61920.000	±61610.000	±59900.000	294.300
2	16:11:53	84.8%	308.200	317.600	308.000	4.241	±62730.000	±62710.000	±62810.000	±59800.000	302.400
3	16:12:20	85.6%	300.300	304.500	299.400	7.848	±61780.000	±62920.000	±62440.000	±60240.000	304.000
X		85.7%	100.865%	103.145%	101.086%	1.870	±102.837%	±62520.000	±62290.000	±99.964%	100.079%
S		1.0%	n/a	n/a	n/a	7.452	±n/a	±525.500	±612.700	±n/a	n/a
%RSD		1.1	1.609	2.299	1.429	398.500	±1.727	±0.841	±0.984	±0.380	1.737
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:11:26	±3416.000	248.000	±62720.000	62630.000	±62960.000	84.7%	303.600	306.600	300.400	1701.000
2	16:11:53	±3522.000	238.500	±63610.000	62890.000	±63210.000	83.0%	305.000	308.700	304.900	1017.000
3	16:12:20	±3475.000	241.900	±63280.000	63710.000	±64160.000	82.6%	307.200	312.000	308.600	1122.000
X		±3471.000	242.800	±105.338%	63070.000	±105.741%	83.4%	101.746%	103.030%	101.542%	1280.000
S		±53.060	4.807	±n/a	563.600	±n/a	1.1%	n/a	n/a	n/a	368.200
%RSD		±1.528	1.980	±0.717	0.893	±0.999	1.3	0.597	0.878	1.350	28.770
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:11:26	±61040.000	299.300	±60910.000	±59710.000	299.600	295.600	295.400	288.800	283.200	293.600
2	16:11:53	±61480.000	300.200	±61050.000	±60470.000	300.900	292.600	297.400	291.400	281.800	294.300
3	16:12:20	±60790.000	300.500	±60780.000	±61350.000	309.800	297.700	304.800	291.500	290.100	299.300
X		±61100.000	100.002%	±60910.000	±100.852%	101.144%	98.438%	299.200	290.600	95.005%	98.570%
S		±353.400	n/a	±139.100	±n/a	n/a	n/a	4.953	1.539	n/a	n/a
%RSD		±0.578	0.207	±0.228	±1.357	1.838	0.877	1.655	0.530	1.555	1.046
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:11:26	291.300	289.000	294.200	290.100	0.284	0.040	1188.000	291.200	-0.542	300.400
2	16:11:53	288.700	285.500	304.900	289.800	1.192	0.177	1208.000	295.200	-1.588	303.900
3	16:12:20	296.000	292.900	306.000	295.300	0.500	0.228	1182.000	289.900	-1.582	303.600
X		292.000	289.100	100.567%	291.700	0.658	0.148	1192.000	97.359%	-1.237	100.880%
S		3.710	3.709	n/a	3.078	0.475	0.097	13.390	n/a	0.602	n/a
%RSD		1.270	1.283	2.158	1.055	72.090	65.650	1.123	0.939	48.660	0.634
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:11:26	82.7%	309.700	315.800	311.700	289.200	289.500	289.300	296.000	295.900	83.0%
2	16:11:53	81.6%	312.700	319.800	318.100	305.000	294.100	291.300	297.300	296.500	82.1%
3	16:12:20	81.5%	322.200	325.500	325.900	291.100	294.700	295.800	300.700	299.500	81.7%
X		81.9%	104.958%	106.783%	318.600	295.100	97.592%	292.100	298.000	99.088%	82.3%
S		0.6%	n/a	n/a	7.148	8.626	n/a	3.351	2.423	n/a	0.7%
%RSD		0.8	2.083	1.531	2.244	2.923	0.968	1.147	0.813	0.653	0.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:11:26	306.000	304.800	299.600	298.000	298.100	302.300	87.4%	308.300	303.800	306.400
2	16:11:53	307.200	308.700	306.400	295.700	292.300	303.100	88.8%	306.300	305.800	306.200
3	16:12:20	308.000	306.300	309.800	296.700	293.200	303.900	89.5%	304.700	302.900	306.000
X		102.352%	102.203%	305.300	98.936%	98.179%	101.029%	88.6%	306.400	101.394%	102.067%
S		n/a	n/a	5.191	n/a	n/a	n/a	1.1%	1.826	n/a	n/a
%RSD		0.331	0.638	1.701	0.402	1.055	0.277	1.2	0.596	0.492	0.067
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	16:11:26	302.700	304.500	87.4%							
2	16:11:53	302.400	304.500	88.2%							
3	16:12:20	300.900	303.700	89.0%							
X		100.669%	101.423%	88.2%							
S		n/a	n/a	0.8%							
%RSD		0.314	0.152	0.9							

CCB IM10195-01 10/29/2020 16:16:52 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:17:18	91.9%	0.064	-0.002	0.530	8.458	-7.819	2.140	1.960	2.374	0.033
2	16:17:45	91.8%	0.039	0.379	0.079	10.080	-8.233	1.872	2.061	2.071	0.007
3	16:18:12	93.4%	0.021	-0.356	0.346	-2.432	-8.138	1.719	1.900	1.937	0.022
X		92.4%	0.042	0.007	0.318	5.368	-8.063	1.910	1.974	2.127	0.021
S		0.9%	0.022	0.368	0.226	6.803	0.217	0.213	0.081	0.224	0.013
%RSD		1.0	52.100	5157.000	71.120	126.700	2.692	11.160	4.120	10.520	62.270
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:17:18	1.087	168.100	-2.264	-1.034	-15.800	87.2%	-0.086	0.024	-0.025	4.125
2	16:17:45	1.630	171.000	-1.837	2.187	-14.450	87.6%	0.123	0.021	-0.049	9.120
3	16:18:12	-0.033	178.700	-2.421	1.092	-14.680	87.8%	-0.065	-0.016	-0.011	35.040
X		0.894	172.600	-2.174	0.748	-14.980	87.5%	-0.010	0.010	-0.028	16.100
S		0.848	5.495	0.302	1.638	0.720	0.3%	0.115	0.023	0.019	16.600
%RSD		94.820	3.183	13.890	218.800	4.805	0.3	1196.000	232.100	68.200	103.100
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:17:18	1.889	0.000	0.670	6.110	-0.003	0.011	-8.082	-0.315	-0.005	0.101
2	16:17:45	2.721	-0.005	0.495	4.719	-0.003	-0.007	-8.656	-0.279	-0.001	0.124
3	16:18:12	2.244	0.002	-0.441	7.252	0.000	0.039	-8.225	-0.248	0.014	-0.108
X		2.285	-0.001	0.241	6.027	-0.002	0.015	-8.321	-0.281	0.003	0.039
S		0.417	0.004	0.597	1.268	0.002	0.023	0.299	0.034	0.010	0.128
%RSD		18.260	437.300	247.400	21.040	104.000	159.000	3.593	11.930	349.700	326.800
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:17:18	0.106	0.085	0.019	-0.907	0.067	-0.245	-0.047	0.081	-2.444	0.003
2	16:17:45	0.025	0.113	0.227	-0.408	-0.375	0.303	5.097	1.350	-2.423	0.005
3	16:18:12	-0.223	0.120	0.003	-0.606	-0.290	0.729	0.325	0.104	-0.993	0.011
X		-0.031	0.106	0.083	-0.640	-0.199	0.262	1.791	0.512	-1.953	0.007
S		0.171	0.019	0.125	0.252	0.235	0.488	2.868	0.726	0.832	0.004
%RSD		559.500	17.650	150.100	39.290	117.600	186.200	160.100	142.000	42.580	66.760
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:17:18	84.2%	0.581	0.649	0.582	0.294	0.013	0.014	0.016	0.005	82.1%
2	16:17:45	83.5%	0.679	0.723	0.837	0.226	0.009	0.008	-0.002	0.008	82.7%
3	16:18:12	83.9%	0.671	0.644	0.623	0.545	0.009	0.008	0.010	0.023	84.6%
X		83.9%	0.644	0.672	0.681	0.355	0.011	0.010	0.008	0.012	83.1%
S		0.3%	0.055	0.044	0.137	0.168	0.002	0.003	0.009	0.010	1.3%
%RSD		0.4	8.477	6.518	20.170	47.250	23.330	34.010	118.600	79.850	1.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:17:18	0.058	0.070	0.520	0.531	0.015	0.029	84.9%	0.005	0.009	0.006
2	16:17:45	0.036	0.058	0.516	0.499	-0.011	0.004	85.6%	0.004	0.007	0.000
3	16:18:12	0.066	0.077	0.476	0.506	-0.004	0.003	88.4%	-0.002	0.005	0.001
X		0.053	0.068	0.504	0.512	0.000	0.012	86.3%	0.002	0.007	0.002
S		0.016	0.010	0.024	0.017	0.013	0.015	1.9%	0.004	0.002	0.003
%RSD		29.150	14.510	4.786	3.260	29070.000	121.100	2.2	176.700	24.340	120.000
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	16:17:18	0.013	0.009	83.3%							
2	16:17:45	0.013	0.012	84.7%							
3	16:18:12	0.014	0.007	87.8%							
X		0.013	0.009	85.2%							
S		0.001	0.003	2.3%							
%RSD		3.944	27.870	2.7							

VJ23005-011 10/29/2020 16:22:40

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:23:06	92.2%	0.030	33.100	35.470	-48.480	14635.000	18970.000	18980.000	125060.000	162.300
2	16:23:33	89.0%	-0.014	35.580	34.900	-58.100	14847.000	18450.000	18640.000	125450.000	163.200
3	16:24:00	90.5%	-0.006	36.450	35.470	-62.430	14770.000	18430.000	18910.000	125690.000	159.700
X		90.6%	0.004	35.040	35.280	-56.340	14751.000	18620.000	18840.000	125400.000	161.700
S		1.6%	0.024	1.739	0.328	7.139	1107.400	1306.200	1180.800	1318.700	1.834
%RSD		1.8	669.800	4.963	0.931	12.670	12.260	11.644	10.959	11.255	1.134
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:23:06	15199.000	166340.000	13219.000	75870.000	176720.000	83.8%	4.628	0.886	1.433	3442.000
2	16:23:33	15098.000	166470.000	13221.000	76680.000	176980.000	83.3%	4.835	0.689	1.370	4140.000
3	16:24:00	15089.000	167370.000	13259.000	77040.000	177200.000	82.6%	4.700	0.947	1.390	4307.000
X		15129.000	166720.000	13233.000	76530.000	176970.000	83.2%	4.721	0.841	1.398	3963.000
S		161.390	1562.100	122.330	596.900	1241.300	0.6%	0.105	0.135	0.033	458.400
%RSD		1.197	10.842	10.691	0.780	10.314	0.8	2.228	16.080	2.329	11.570
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:23:06	837.600	81.470	1886.200	1068.000	0.206	0.780	-6.943	0.047	0.455	6.362
2	16:23:33	847.200	81.920	1880.900	1056.000	0.210	0.731	-7.584	0.034	0.432	5.952
3	16:24:00	854.600	81.020	1891.200	1038.000	0.225	0.873	-7.212	0.087	0.552	5.803
X		846.500	81.470	1886.100	1054.000	0.214	0.795	-7.246	0.056	0.480	6.039
S		8.531	0.447	15.139	15.390	0.010	0.072	0.322	0.028	0.064	0.289
%RSD		1.008	0.548	10.580	1.460	4.787	9.046	4.445	49.320	13.290	4.789
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:23:06	13.950	12.070	-0.236	-0.210	24.180	25.450	-0.339	-0.018	-2.387	57.290
2	16:23:33	14.280	11.970	0.157	-0.412	23.810	23.900	0.071	0.021	-0.138	58.480
3	16:24:00	14.380	11.830	0.233	-0.868	23.400	23.940	0.452	0.025	3.201	58.160
X		14.200	11.960	0.052	-0.497	23.800	24.430	0.061	0.009	0.225	57.980
S		0.227	0.116	0.252	0.337	0.392	0.884	0.395	0.024	2.811	0.618
%RSD		1.596	0.971	488.500	67.880	1.647	3.619	644.100	252.400	1249.000	1.067
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:23:06	83.0%	0.623	0.636	0.625	1.627	0.005	-0.003	0.004	0.008	82.4%
2	16:23:33	82.3%	0.577	0.673	0.680	0.784	0.003	0.001	0.010	0.007	82.2%
3	16:24:00	82.2%	0.677	0.704	0.628	3.214	0.007	-0.003	-0.001	-0.000	82.7%
X		82.5%	0.626	0.671	0.644	1.875	0.005	-0.002	0.004	0.005	82.4%
S		0.5%	0.050	0.034	0.031	1.234	0.002	0.002	0.006	0.004	0.2%
%RSD		0.5	7.960	5.051	4.784	65.780	42.560	145.500	131.900	87.820	0.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:23:06	0.044	0.051	0.275	0.223	207.700	213.300	87.3%	0.019	0.013	0.259
2	16:23:33	0.058	0.099	0.275	0.242	209.100	212.400	87.2%	0.011	0.009	0.217
3	16:24:00	0.090	0.091	0.269	0.243	208.000	213.300	88.2%	0.012	0.013	0.245
X		0.064	0.080	0.273	0.236	208.300	213.000	87.6%	0.014	0.012	0.240
S		0.023	0.025	0.004	0.011	0.748	0.512	0.5%	0.004	0.002	0.022
%RSD		36.380	31.630	1.366	4.767	0.359	0.240	0.6	30.980	19.440	9.055
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	16:23:06	0.202	0.225	89.7%							
2	16:23:33	0.225	0.221	90.0%							
3	16:24:00	0.271	0.244	90.2%							
X		0.232	0.230	90.0%							
S		0.035	0.012	0.2%							
%RSD		15.180	5.381	0.3							

VQ71296-001 10/29/2020 16:28:28 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:28:56	92.3%	0.020	-0.007	0.198	-9.314	26.150	2.384	2.169	2.693	1.585
2	16:29:22	91.8%	0.052	-0.266	0.158	-13.110	27.900	2.290	2.053	2.060	1.631
3	16:29:49	93.9%	-0.010	-0.286	0.103	-9.830	25.630	2.349	2.298	2.218	1.689
X		92.7%	0.021	-0.186	0.153	-10.750	26.560	2.341	2.173	2.324	1.635
S		1.1%	0.031	0.156	0.048	2.057	1.192	0.047	0.122	0.329	0.052
%RSD		1.2	151.700	83.630	31.090	19.140	4.490	2.025	5.631	14.170	3.186
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:28:56	3.209	71400.000	7.234	4.747	-4.437	84.1%	-0.041	-0.120	0.365	6370.000
2	16:29:22	3.024	72430.000	4.672	2.543	-3.305	83.6%	0.025	0.041	0.359	6231.000
3	16:29:49	3.010	73330.000	4.143	6.898	-4.853	84.8%	-0.085	-0.103	0.343	6310.000
X		3.081	72390.000	5.350	4.729	-4.198	84.2%	-0.034	-0.061	0.355	6304.000
S		0.111	964.300	1.653	2.178	0.801	0.6%	0.055	0.089	0.011	69.730
%RSD		3.604	1.332	30.900	46.050	19.070	0.7	164.800	146.500	3.105	1.106
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:28:56	9.355	0.129	6.226	1.509	-0.007	0.032	-8.122	-0.130	0.086	1.570
2	16:29:22	10.490	0.121	5.462	-3.695	-0.006	0.033	-8.312	-0.146	0.123	1.633
3	16:29:49	10.890	0.124	3.247	0.707	-0.009	0.079	-8.190	-0.140	0.125	1.639
X		10.240	0.125	4.978	-0.493	-0.007	0.048	-8.208	-0.139	0.111	1.614
S		0.794	0.004	1.548	2.802	0.002	0.027	0.096	0.008	0.022	0.038
%RSD		7.756	3.105	31.090	568.600	21.500	55.880	1.171	5.660	19.950	2.382
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:28:56	2.303	1.546	-0.266	-0.071	2.868	3.100	-1.830	-0.496	1.613	0.007
2	16:29:22	2.360	1.641	0.351	-0.778	2.571	2.820	0.407	0.073	-0.549	0.014
3	16:29:49	2.013	1.662	-0.620	-0.775	1.798	1.934	2.647	0.629	-1.269	0.003
X		2.225	1.616	-0.178	-0.541	2.412	2.618	0.408	0.069	-0.069	0.008
S		0.186	0.061	0.491	0.407	0.552	0.609	2.238	0.562	1.500	0.005
%RSD		8.370	3.800	276.100	75.240	22.890	23.260	548.400	818.100	2187.000	64.740
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:28:56	83.4%	0.102	0.098	0.076	-0.067	-0.001	-0.002	-0.005	-0.006	84.9%
2	16:29:22	83.0%	0.060	0.122	0.098	-1.991	0.001	-0.003	-0.005	-0.008	86.4%
3	16:29:49	82.5%	0.141	0.123	0.098	-0.556	-0.000	-0.003	-0.005	-0.002	85.6%
X		82.9%	0.101	0.114	0.091	-0.872	-0.000	-0.003	-0.005	-0.006	85.7%
S		0.5%	0.040	0.014	0.012	1.000	0.001	0.001	0.000	0.003	0.8%
%RSD		0.5	40.050	12.130	13.680	114.700	646.700	29.940	0.778	60.620	0.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:28:56	0.034	0.081	1.118	1.152	0.054	0.079	87.5%	-0.010	-0.003	0.004
2	16:29:22	0.056	0.073	1.117	1.240	0.021	0.035	87.8%	-0.003	-0.003	-0.012
3	16:29:49	0.042	0.080	1.165	1.088	0.004	0.045	88.8%	-0.009	-0.003	0.002
X		0.044	0.078	1.133	1.160	0.026	0.053	88.0%	-0.007	-0.003	-0.002
S		0.011	0.005	0.028	0.076	0.026	0.023	0.7%	0.004	0.000	0.009
%RSD		25.500	5.934	2.433	6.586	97.070	43.280	0.8	56.040	10.370	401.000
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	16:28:56	-0.002	0.000	93.6%							
2	16:29:22	-0.007	-0.002	93.3%							
3	16:29:49	-0.002	0.001	93.2%							
X		-0.003	-0.000	93.4%							
S		0.003	0.001	0.2%							
%RSD		90.910	352.000	0.2							

VQ71296-002 10/29/2020 16:34:16 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:44	88.4%	102.500	102.600	101.100	10.480	1028.000	1104.000	1081.000	1044.000	106.100
2	16:35:11	87.6%	100.500	102.900	102.700	-2.445	1024.000	1085.000	1057.000	1055.000	104.700
3	16:35:38	86.9%	99.680	100.100	100.600	-4.786	1042.000	1097.000	1028.000	1065.000	104.500
X		87.7%	100.898%	101.800	101.451%	1.083	103.154%	1095.000	1055.000	105.472%	105.083%
S		0.7%	n/a	1.548	n/a	8.222	n/a	9.588	26.270	n/a	n/a
%RSD		0.8	1.454	1.520	1.060	759.200	0.922	0.875	2.489	0.972	0.808
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:44	1108.000	67970.000	1085.000	1176.000	1047.000	81.5%	104.400	102.100	103.700	4310.000
2	16:35:11	1071.000	66250.000	1072.000	1208.000	1045.000	80.1%	103.700	102.200	103.500	3900.000
3	16:35:38	1058.000	66220.000	1067.000	1060.000	1033.000	80.1%	99.780	98.740	100.800	3732.000
X		107.884%	66810.000	107.459%	1148.000	104.150%	80.6%	102.629%	101.036%	102.688%	3981.000
S		n/a	1003.000	n/a	78.050	n/a	0.8%	n/a	n/a	n/a	297.100
%RSD		2.383	1.502	0.896	6.799	0.746	1.0	2.423	1.967	1.600	7.463
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:44	1080.000	103.300	1063.000	1017.000	102.400	103.400	96.080	102.900	105.500	99.870
2	16:35:11	1062.000	100.300	1045.000	1028.000	100.500	102.000	97.390	102.600	102.100	97.370
3	16:35:38	1065.000	100.200	1048.000	1024.000	100.200	101.200	97.150	101.500	101.800	98.370
X		1069.000	101.286%	1052.000	102.314%	101.037%	102.170%	96.880	102.300	103.144%	98.536%
S		9.990	n/a	9.981	n/a	n/a	n/a	0.699	0.743	n/a	n/a
%RSD		0.935	1.724	0.949	0.568	1.155	1.118	0.722	0.726	2.010	1.275
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Se	83Kr	88Sr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:44	97.650	97.630	100.500	94.200	2.847	2.443	400.700	97.270	1.431	100.900
2	16:35:11	96.980	98.610	101.600	93.540	3.420	2.880	395.500	95.060	3.027	101.200
3	16:35:38	99.830	99.950	98.160	97.970	1.839	2.231	380.100	90.140	-0.716	100.200
X		98.160	98.730	100.105%	95.240	2.702	2.518	392.100	94.155%	1.248	100.800
S		1.493	1.166	n/a	2.389	0.800	0.331	10.720	n/a	1.878	0.538
%RSD		1.521	1.181	1.772	2.508	29.620	13.140	2.735	3.876	150.600	0.534
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:44	81.3%	107.400	108.800	106.800	99.140	101.700	102.000	100.300	100.200	82.2%
2	16:35:11	80.5%	105.300	110.900	108.200	101.100	102.600	101.300	101.100	99.960	82.0%
3	16:35:38	79.6%	108.900	110.600	106.900	98.860	99.850	100.400	100.300	99.110	82.4%
X		80.5%	107.200	110.064%	107.300	99.700	101.393%	101.200	100.600	99.763%	82.2%
S		0.8%	1.818	n/a	0.792	1.220	n/a	0.811	0.471	n/a	0.2%
%RSD		1.0	1.697	1.039	0.738	1.223	1.382	0.802	0.468	0.586	0.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:44	103.400	102.600	104.000	102.000	98.500	100.800	87.6%	99.420	97.690	101.100
2	16:35:11	102.300	102.100	103.200	101.000	98.730	101.300	87.6%	98.040	96.430	100.100
3	16:35:38	101.700	101.600	102.800	101.400	95.850	99.750	87.3%	98.580	96.550	99.410
X		102.400	102.121%	103.300	101.461%	97.692%	100.600	87.5%	98.680	96.892%	100.200
S		0.859	n/a	0.618	n/a	n/a	0.773	0.2%	0.694	n/a	0.863
%RSD		0.838	0.489	0.598	0.518	1.635	0.768	0.2	0.704	0.716	0.861
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	16:34:44	98.650	99.590	92.7%							
2	16:35:11	98.630	99.390	93.8%							
3	16:35:38	97.910	98.280	94.5%							
X		98.390	99.086%	93.6%							
S		0.421	n/a	0.9%							
%RSD		0.428	0.711	1.0							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:40:32	87.4%	0.043	4.448	4.428	-12.940	1533.000	620.600	597.900	613.300	69.310
2	16:40:59	87.1%	0.088	3.744	4.567	-27.700	1531.000	606.100	578.600	623.500	70.350
3	16:41:26	87.4%	0.041	4.882	4.931	-13.410	1553.000	605.600	596.200	606.500	67.430
X		87.3%	0.057	4.358	4.642	-18.010	1539.000	610.800	590.900	614.400	69.030
S		0.2%	0.026	0.575	0.260	8.390	11.960	8.510	10.670	8.575	1.480
%RSD		0.2	46.040	13.180	5.597	46.570	0.777	1.393	1.806	1.396	2.145
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:40:32	2652.000	68060.000	114.600	62.280	78.120	78.3%	0.363	-0.259	0.268	6117.000
2	16:40:59	2492.000	65960.000	108.300	70.100	75.900	77.7%	0.272	0.080	0.310	6044.000
3	16:41:26	2500.000	66270.000	110.500	65.620	80.080	77.2%	0.369	-0.090	0.284	6066.000
X		2548.000	66760.000	111.100	66.000	78.030	77.7%	0.335	-0.090	0.287	6076.000
S		90.450	1135.000	3.210	3.922	2.093	0.5%	0.054	0.170	0.021	37.110
%RSD		3.550	1.700	2.889	5.942	2.682	0.7	16.190	189.000	7.379	0.611
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:40:32	9.818	3.295	3.163	4.424	0.285	0.350	-7.869	0.015	0.181	1.797
2	16:40:59	9.010	3.377	3.085	2.774	0.282	0.249	-8.876	-0.017	0.250	1.796
3	16:41:26	7.487	3.344	2.457	0.972	0.315	0.264	-7.730	-0.085	0.224	1.563
X		8.771	3.339	2.902	2.723	0.294	0.288	-8.158	-0.029	0.219	1.719
S		1.184	0.041	0.387	1.726	0.018	0.054	0.626	0.051	0.035	0.135
%RSD		13.500	1.241	13.330	63.400	6.179	18.910	7.669	176.100	15.940	7.841
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:40:32	3.072	1.692	-0.092	0.455	9.364	9.695	4.792	1.116	3.034	2.347
2	16:40:59	2.127	2.019	0.520	0.335	11.400	10.180	3.993	0.979	1.052	2.322
3	16:41:26	2.322	1.990	-0.300	-0.518	11.750	11.790	1.615	0.344	2.668	2.358
X		2.507	1.900	0.043	0.090	10.840	10.560	3.467	0.813	2.251	2.342
S		0.499	0.181	0.426	0.531	1.286	1.097	1.653	0.412	1.055	0.019
%RSD		19.910	9.517	994.500	586.600	11.870	10.390	47.670	50.700	46.850	0.792
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:40:32	76.7%	0.161	0.095	0.156	-0.495	0.004	0.006	0.007	0.013	76.3%
2	16:40:59	76.8%	0.146	0.202	0.165	-0.168	0.010	0.006	-0.005	0.010	75.8%
3	16:41:26	76.5%	0.172	0.276	0.125	-0.091	0.004	0.008	0.007	0.020	75.8%
X		76.6%	0.160	0.191	0.149	-0.251	0.006	0.006	0.003	0.014	76.0%
S		0.1%	0.013	0.091	0.021	0.214	0.003	0.001	0.007	0.005	0.3%
%RSD		0.2	8.231	47.640	13.890	85.340	53.710	13.760	242.200	37.110	0.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:40:32	0.027	0.042	0.272	0.199	10.320	10.950	81.5%	0.007	0.028	0.178
2	16:40:59	0.045	0.047	0.254	0.259	10.910	10.410	81.6%	0.018	0.027	0.193
3	16:41:26	0.036	0.049	0.259	0.257	10.630	11.040	81.9%	0.004	0.030	0.216
X		0.036	0.046	0.262	0.238	10.620	10.800	81.7%	0.009	0.028	0.196
S		0.009	0.004	0.009	0.034	0.292	0.341	0.2%	0.007	0.001	0.019
%RSD		24.820	8.722	3.501	14.290	2.754	3.157	0.3	78.650	5.194	9.713
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	16:40:32	0.205	0.194	83.9%							
2	16:40:59	0.195	0.189	84.1%							
3	16:41:26	0.195	0.198	84.0%							
X		0.198	0.194	84.0%							
S		0.006	0.005	0.1%							
%RSD		2.953	2.399	0.2							

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10/29/2020 16:45:53

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:46:20	87.6%	0.024	5.910	6.860	-0.919	└2963.000	1248.000	1191.000	1181.000	3.510
2	16:46:48	90.3%	0.048	5.731	6.082	-8.691	└2918.000	└1201.000	1190.000	1169.000	3.399
3	16:47:15	91.7%	0.048	5.702	6.459	-3.948	└2929.000	└1219.000	1209.000	1198.000	3.405
X		89.9%	0.040	5.781	6.467	-4.519	└2937.000	└1223.000	1197.000	1183.000	3.438
S		2.1%	0.014	0.113	0.389	3.917	└23.660	└23.920	10.530	14.630	0.063
%RSD		2.4	35.330	1.947	6.017	86.680	└0.806	└1.956	0.880	1.238	1.821
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:46:20	2166.000	└69700.000	457.000	1253.000	1177.000	81.9%	0.117	0.213	0.259	1326.000
2	16:46:48	2190.000	└68650.000	457.800	1203.000	1174.000	83.4%	0.157	0.179	0.173	1244.000
3	16:47:15	2220.000	└70810.000	468.100	1302.000	1190.000	82.6%	0.315	0.542	0.231	1168.000
X		2192.000	└69720.000	461.000	1253.000	1180.000	82.6%	0.196	0.311	0.221	1246.000
S		27.360	└1082.000	6.170	49.600	8.695	0.7%	0.104	0.201	0.044	78.990
%RSD		1.248	└1.552	1.339	3.960	0.737	0.9	53.100	64.450	19.850	6.338
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:46:20	└36140.000	8.535	└37060.000	└36480.000	0.391	0.522	-8.118	-0.152	0.211	4.388
2	16:46:48	└36080.000	8.427	└36450.000	└35980.000	0.361	0.506	-8.051	-0.158	0.134	4.132
3	16:47:15	└36230.000	8.837	└37170.000	└36200.000	0.364	0.585	-8.146	-0.114	0.162	4.442
X		└36150.000	8.600	└36890.000	└36220.000	0.372	0.537	-8.105	-0.141	0.169	4.320
S		└77.270	0.212	└387.900	└248.800	0.016	0.042	0.049	0.024	0.039	0.166
%RSD		└0.214	2.470	└1.051	└0.687	4.408	7.730	0.605	16.830	23.320	3.833
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:46:20	4.420	4.661	24.180	-0.583	9.463	10.050	-0.923	-0.142	-0.864	11.900
2	16:46:48	4.539	4.866	23.400	-0.203	9.916	8.373	1.416	0.443	-0.268	11.920
3	16:47:15	5.187	5.264	22.960	0.350	9.902	11.240	-0.323	0.016	-0.977	11.600
X		4.715	4.931	23.510	-0.145	9.760	9.890	0.057	0.106	-0.703	11.810
S		0.413	0.307	0.617	0.469	0.258	1.442	1.215	0.303	0.381	0.176
%RSD		8.752	6.219	2.622	323.000	2.640	14.580	2143.000	287.000	54.190	1.492
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:46:20	89.6%	0.065	0.102	0.077	-0.437	-0.000	-0.002	-0.005	-0.002	81.2%
2	16:46:48	91.1%	0.118	0.044	0.078	1.657	0.005	-0.002	-0.005	0.004	84.0%
3	16:47:15	92.0%	0.066	0.153	0.108	0.529	0.004	-0.003	-0.005	-0.001	83.6%
X		90.9%	0.083	0.100	0.088	0.583	0.003	-0.002	-0.005	0.000	82.9%
S		1.2%	0.031	0.054	0.017	1.048	0.003	0.001	0.000	0.003	1.5%
%RSD		1.3	36.950	54.460	19.790	179.700	92.820	37.660	1.461	679.500	1.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:46:20	0.015	0.012	0.708	0.593	39.110	40.460	86.6%	-0.004	0.002	0.016
2	16:46:48	0.011	0.039	0.653	0.660	40.760	39.430	86.9%	-0.003	0.008	0.025
3	16:47:15	-0.002	0.035	0.697	0.729	39.870	40.350	88.0%	0.005	0.004	0.015
X		0.008	0.028	0.686	0.661	39.910	40.080	87.1%	-0.000	0.005	0.019
S		0.009	0.015	0.029	0.068	0.825	0.565	0.8%	0.005	0.003	0.006
%RSD		110.000	51.070	4.202	10.290	2.066	1.408	0.9	983.800	61.050	31.250
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	16:46:20	0.014	0.017	93.4%							
2	16:46:48	0.011	0.017	93.5%							
3	16:47:15	0.011	0.017	92.9%							
X		0.012	0.017	93.3%							
S		0.002	0.000	0.3%							
%RSD		16.770	0.525	0.3							

VJ19014-003

10/29/2020 16:51:43

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:52:09	86.8%	0.101	4.523	5.730	-9.877	└3007.000	282.800	279.900	269.400	19.290
2	16:52:36	86.6%	0.040	5.019	5.340	-13.210	└3001.000	277.900	271.000	274.800	19.500
3	16:53:03	88.8%	0.058	4.558	5.731	-15.940	└2945.000	278.700	271.300	266.800	19.500
X		87.4%	0.066	4.700	5.600	-13.010	└2984.000	279.800	274.100	270.300	19.430
S		1.2%	0.031	0.277	0.226	3.039	└34.190	2.620	5.018	4.084	0.122
%RSD		1.3	47.270	5.889	4.027	23.360	└1.146	0.937	1.831	1.511	0.625
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:52:09	2305.000	└75060.000	308.800	246.000	204.300	80.1%	0.192	-0.073	0.076	3037.000
2	16:52:36	2266.000	└74350.000	302.400	167.200	193.900	80.0%	0.261	-0.010	0.068	3070.000
3	16:53:03	2319.000	└74450.000	301.900	196.200	200.500	80.2%	0.054	-0.055	0.079	3181.000
X		2297.000	└74620.000	304.400	203.100	199.500	80.1%	0.169	-0.046	0.074	3096.000
S		27.550	└385.700	3.846	39.870	5.234	0.1%	0.105	0.032	0.006	75.500
%RSD		1.199	└0.517	1.264	19.620	2.623	0.1	62.160	70.380	7.428	2.439
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:52:09	16.720	1.319	8.539	10.680	0.167	0.189	-8.520	-0.099	0.197	323.300
2	16:52:36	17.830	1.253	6.869	9.301	0.172	0.208	-8.123	-0.046	0.170	322.400
3	16:53:03	18.440	1.206	6.221	7.972	0.164	0.182	-8.524	-0.138	0.234	316.700
X		17.660	1.259	7.210	9.316	0.168	0.193	-8.389	-0.094	0.200	320.800
S		0.872	0.057	1.196	1.352	0.004	0.013	0.231	0.046	0.032	3.582
%RSD		4.937	4.497	16.590	14.510	2.209	6.977	2.750	49.140	16.100	1.117
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:52:09	296.200	310.600	-0.191	-1.244	9.133	8.293	0.178	0.120	-3.793	1.685
2	16:52:36	302.900	312.400	-0.416	-0.749	7.651	9.237	0.605	0.105	1.190	1.852
3	16:53:03	295.500	306.800	0.455	-0.175	7.587	8.359	0.186	0.025	0.001	1.779
X		298.200	309.900	-0.051	-0.723	8.123	8.630	0.323	0.083	-0.867	1.772
S		4.103	2.859	0.452	0.535	0.875	0.527	0.245	0.051	2.602	0.084
%RSD		1.376	0.922	890.500	73.990	10.760	6.104	75.740	61.000	300.100	4.729
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:52:09	80.6%	-0.004	0.018	0.003	0.145	0.003	-0.000	0.001	-0.002	81.8%
2	16:52:36	79.7%	0.026	0.066	0.006	0.747	-0.001	-0.002	0.007	0.010	80.8%
3	16:53:03	80.4%	0.035	0.002	0.026	-0.302	-0.001	-0.002	0.001	0.001	82.0%
X		80.2%	0.019	0.029	0.012	0.197	-0.000	-0.001	0.003	0.003	81.6%
S		0.4%	0.020	0.033	0.012	0.526	0.002	0.001	0.003	0.006	0.6%
%RSD		0.6	107.300	115.400	107.500	267.400	1798.000	68.100	115.500	199.800	0.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:52:09	0.001	-0.007	0.207	0.198	7.856	8.565	84.9%	-0.001	0.006	0.045
2	16:52:36	0.018	0.010	0.185	0.194	8.260	8.854	85.0%	0.000	0.005	0.039
3	16:53:03	0.012	-0.004	0.222	0.195	8.200	8.413	86.1%	-0.004	0.009	0.055
X		0.011	-0.000	0.205	0.196	8.106	8.611	85.3%	-0.001	0.006	0.046
S		0.009	0.009	0.019	0.002	0.218	0.224	0.6%	0.002	0.002	0.008
%RSD		80.390	2262.000	9.297	1.167	2.688	2.600	0.7	153.400	33.730	16.820
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	16:52:09	0.047	0.048	88.7%							
2	16:52:36	0.038	0.043	88.2%							
3	16:53:03	0.050	0.053	89.4%							
X		0.045	0.048	88.8%							
S		0.006	0.005	0.6%							
%RSD		14.020	9.536	0.7							

VJ20086-001

10/29/2020 16:57:31

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:57:58	87.9%	0.008	5.090	5.854	30.550	40940.000	10590.000	10370.000	10100.000	1.119
2	16:58:25	88.4%	0.035	5.013	5.603	27.200	41440.000	10800.000	10770.000	10460.000	1.244
3	16:58:52	87.0%	0.016	5.514	5.544	25.440	41630.000	10420.000	10570.000	10320.000	1.349
X		87.8%	0.020	5.206	5.667	27.730	41340.000	10600.000	10570.000	10290.000	1.237
S		0.7%	0.014	0.270	0.164	2.596	354.100	191.900	203.700	185.300	0.115
%RSD		0.8	71.000	5.184	2.900	9.360	0.857	1.810	1.927	1.800	9.331
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:57:58	609.800	76810.000	3260.000	13700.000	13210.000	82.6%	0.071	0.090	0.105	1035.000
2	16:58:25	612.900	77030.000	3362.000	14080.000	13890.000	79.2%	0.011	0.079	0.080	1001.000
3	16:58:52	599.600	75440.000	3295.000	13970.000	13600.000	81.1%	0.007	0.193	0.133	973.100
X		607.400	76430.000	3306.000	13920.000	13570.000	81.0%	0.030	0.121	0.106	1003.000
S		6.968	862.700	51.880	195.000	340.400	1.7%	0.036	0.063	0.027	30.880
%RSD		1.147	1.129	1.569	1.401	2.509	2.1	121.200	51.940	25.150	3.080
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:57:58	21010.000	43.880	21280.000	21000.000	1.443	0.646	-7.680	-0.247	0.047	0.957
2	16:58:25	21780.000	45.770	21560.000	21890.000	1.502	0.741	-6.541	-0.120	0.025	1.048
3	16:58:52	20850.000	44.120	21300.000	20970.000	1.462	0.740	-7.437	-0.144	0.076	0.974
X		21210.000	44.590	21380.000	21290.000	1.469	0.709	-7.219	-0.171	0.049	0.993
S		496.400	1.029	154.900	525.000	0.030	0.055	0.600	0.067	0.025	0.048
%RSD		2.340	2.308	0.724	2.466	2.063	7.707	8.306	39.400	51.490	4.880
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:57:58	4.089	3.498	0.669	-0.685	112.100	117.100	2.132	0.426	3.086	86.970
2	16:58:25	4.718	3.417	0.559	0.374	111.900	121.100	4.375	1.099	-2.283	86.580
3	16:58:52	3.596	3.196	-0.005	-0.048	116.700	115.800	1.360	0.285	0.791	87.560
X		4.134	3.370	0.408	-0.119	113.600	118.000	2.622	0.603	0.531	87.040
S		0.563	0.156	0.362	0.533	2.727	2.746	1.566	0.435	2.694	0.494
%RSD		13.610	4.627	88.660	446.800	2.401	2.327	59.730	72.110	507.100	0.568
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:57:58	79.5%	0.011	0.043	-0.012	0.569	-0.000	-0.002	-0.005	0.008	80.4%
2	16:58:25	80.8%	0.001	0.025	-0.007	1.992	-0.000	-0.003	-0.005	-0.013	81.2%
3	16:58:52	79.8%	0.001	0.058	-0.009	2.837	-0.001	-0.002	-0.005	-0.001	81.1%
X		80.0%	0.005	0.042	-0.009	1.799	-0.001	-0.002	-0.005	-0.002	80.9%
S		0.7%	0.006	0.016	0.003	1.146	0.001	0.001	0.000	0.011	0.4%
%RSD		0.9	132.200	38.760	30.790	63.690	138.800	38.910	0.239	511.800	0.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:57:58	0.682	1.104	0.232	0.238	76.280	79.170	86.3%	-0.009	0.002	-0.010
2	16:58:25	0.825	1.076	0.234	0.246	75.880	77.710	86.7%	0.000	0.001	-0.007
3	16:58:52	0.742	0.972	0.292	0.222	75.680	78.870	86.8%	-0.002	-0.000	-0.009
X		0.750	1.051	0.253	0.235	75.950	78.580	86.6%	-0.004	0.001	-0.009
S		0.072	0.070	0.034	0.012	0.304	0.770	0.3%	0.005	0.001	0.002
%RSD		9.594	6.626	13.580	5.121	0.401	0.979	0.3	122.900	130.100	17.660
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	16:57:58	-0.005	-0.006	89.9%							
2	16:58:25	-0.007	-0.005	91.9%							
3	16:58:52	-0.001	-0.003	91.3%							
X		-0.004	-0.005	91.0%							
S		0.003	0.002	1.0%							
%RSD		62.950	35.420	1.1							

VJ20066-001

10/29/2020 17:03:21

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:03:48	89.6%	0.040	6.251	6.567	-8.607	788.500	585.300	569.700	568.700	77.360
2	17:04:15	87.8%	0.006	7.996	7.352	-7.811	824.400	584.600	566.900	573.500	78.590
3	17:04:42	89.3%	0.022	6.398	7.559	-7.556	805.900	578.200	546.300	562.000	76.570
X		88.9%	0.023	6.882	7.160	-7.992	806.200	582.700	561.000	568.100	77.510
S		1.0%	0.017	0.968	0.523	0.548	17.960	3.914	12.790	5.778	1.018
%RSD		1.1	74.480	14.060	7.310	6.862	2.228	0.672	2.280	1.017	1.314
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:03:48	1943.000	69650.000	306.900	306.900	284.900	81.2%	0.097	0.144	0.225	3922.000
2	17:04:15	1896.000	68970.000	305.200	307.100	291.500	80.8%	0.121	-0.064	0.173	4178.000
3	17:04:42	1848.000	68940.000	304.900	278.300	291.100	80.0%	0.192	-0.130	0.162	4474.000
X		1896.000	69190.000	305.700	297.400	289.100	80.7%	0.137	-0.017	0.187	4191.000
S		47.570	400.300	1.106	16.590	3.696	0.6%	0.049	0.143	0.034	276.400
%RSD		2.509	0.579	0.362	5.578	1.278	0.7	36.010	857.200	18.110	6.596
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:03:48	32.260	10.470	25.670	22.450	0.384	0.428	-7.697	0.149	0.534	5.021
2	17:04:15	29.820	10.410	22.640	22.090	0.374	0.368	-8.459	0.165	0.387	5.267
3	17:04:42	29.550	10.440	23.550	22.420	0.395	0.391	-8.516	0.162	0.478	5.351
X		30.540	10.440	23.950	22.320	0.384	0.396	-8.224	0.159	0.467	5.213
S		1.492	0.032	1.554	0.202	0.011	0.030	0.458	0.008	0.074	0.171
%RSD		4.885	0.305	6.489	0.904	2.833	7.690	5.564	5.257	15.930	3.285
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:03:48	5.289	4.949	0.027	-0.897	8.848	10.020	-1.302	-0.316	0.086	6.221
2	17:04:15	4.610	4.945	0.182	-0.644	8.321	11.360	-2.067	-0.520	0.502	6.220
3	17:04:42	6.595	5.192	-0.027	-1.035	9.134	10.800	2.249	0.574	-1.029	6.118
X		5.498	5.029	0.061	-0.859	8.767	10.730	-0.374	-0.087	-0.147	6.187
S		1.009	0.142	0.108	0.198	0.412	0.673	2.303	0.582	0.792	0.059
%RSD		18.360	2.815	178.700	23.100	4.704	6.278	616.500	668.000	538.300	0.957
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:03:48	78.9%	-0.008	-0.013	0.013	0.351	-0.001	-0.003	-0.005	0.000	78.5%
2	17:04:15	78.5%	-0.003	0.044	0.034	0.098	-0.000	-0.002	0.001	-0.002	78.8%
3	17:04:42	78.3%	0.047	-0.004	-0.005	0.435	-0.000	-0.000	0.001	-0.004	78.7%
X		78.6%	0.012	0.009	0.014	0.295	-0.001	-0.002	-0.001	-0.002	78.7%
S		0.3%	0.030	0.030	0.019	0.175	0.001	0.001	0.003	0.002	0.2%
%RSD		0.4	246.000	336.800	137.000	59.430	148.700	91.160	444.100	107.500	0.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:03:48	0.017	0.025	0.448	0.401	12.130	13.380	83.7%	0.001	0.000	0.015
2	17:04:15	0.017	0.027	0.491	0.458	12.160	12.220	84.2%	-0.003	0.002	0.017
3	17:04:42	0.022	0.002	0.491	0.486	12.110	13.070	84.8%	-0.004	0.003	0.023
X		0.019	0.018	0.477	0.448	12.140	12.890	84.2%	-0.002	0.002	0.018
S		0.003	0.014	0.025	0.044	0.022	0.599	0.6%	0.002	0.001	0.004
%RSD		17.340	78.580	5.304	9.761	0.182	4.643	0.7	117.100	63.790	22.580
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	17:03:48	0.012	0.017	86.0%							
2	17:04:15	0.014	0.014	86.8%							
3	17:04:42	0.016	0.022	87.7%							
X		0.014	0.017	86.8%							
S		0.002	0.004	0.9%							
%RSD		11.610	23.840	1.0							

VJ20066-001S

10/29/2020 17:09:12

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:09:38	88.4%	101.800	107.900	110.800	-5.087	<u>1832.000</u>	<u>1608.000</u>	1605.000	1655.000	180.700
2	17:10:05	90.4%	104.600	108.200	107.500	-1.441	<u>1778.000</u>	<u>1674.000</u>	1643.000	1658.000	182.100
3	17:10:32	89.4%	102.500	115.000	108.700	-8.842	<u>1816.000</u>	<u>1643.000</u>	1604.000	1641.000	180.400
X		89.4%	102.900	110.400	109.000	-5.123	<u>1809.000</u>	<u>1642.000</u>	1617.000	1652.000	181.100
S		1.0%	1.454	4.034	1.628	3.701	<u>28.070</u>	<u>32.800</u>	22.080	8.920	0.943
%RSD		1.1	1.412	3.655	1.493	72.240	<u>1.552</u>	<u>1.998</u>	1.365	0.540	0.521
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:09:38	<u>2869.000</u>	<u>71870.000</u>	1388.000	1397.000	1355.000	81.7%	104.800	101.100	101.900	5235.000
2	17:10:05	<u>2888.000</u>	<u>74480.000</u>	1414.000	1401.000	1360.000	81.3%	106.600	101.100	99.860	5229.000
3	17:10:32	<u>2887.000</u>	<u>73460.000</u>	1416.000	1502.000	1374.000	81.5%	102.700	101.400	101.500	5183.000
X		<u>2881.000</u>	<u>73270.000</u>	1406.000	1433.000	1363.000	81.5%	104.700	101.200	101.100	5216.000
S		<u>10.580</u>	<u>1316.000</u>	15.460	59.400	9.852	0.2%	1.970	0.168	1.078	28.750
%RSD		<u>0.367</u>	<u>1.797</u>	1.099	4.144	0.723	0.3	1.881	0.166	1.066	0.551
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:09:38	1088.000	112.100	<u>1070.000</u>	1050.000	102.400	104.800	99.480	104.900	105.000	107.200
2	17:10:05	1100.000	112.900	<u>1070.000</u>	1042.000	102.000	101.000	98.640	104.500	103.600	106.500
3	17:10:32	1083.000	111.200	<u>1073.000</u>	1046.000	101.000	102.400	97.010	103.000	103.600	105.300
X		1090.000	112.100	<u>1071.000</u>	1046.000	101.800	102.700	98.380	104.100	104.100	106.400
S		8.754	0.832	<u>1.840</u>	4.041	0.718	1.910	1.256	1.009	0.780	0.979
%RSD		0.803	0.742	<u>0.172</u>	0.386	0.705	1.859	1.277	0.969	0.750	0.921
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:09:38	108.100	108.500	103.900	98.220	8.193	9.502	426.300	102.500	1.865	108.300
2	17:10:05	111.800	107.900	106.600	99.250	8.342	9.169	436.400	105.600	-0.051	107.600
3	17:10:32	108.900	105.500	105.700	97.670	7.741	8.832	435.900	103.300	0.744	109.400
X		109.600	107.300	105.400	98.380	8.092	9.168	432.900	103.800	0.853	108.500
S		1.961	1.576	1.383	0.804	0.313	0.335	5.687	1.614	0.963	0.912
%RSD		1.789	1.469	1.312	0.818	3.871	3.652	1.314	1.554	112.900	0.841
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:09:38	80.5%	107.300	110.600	106.800	106.400	103.400	103.700	103.600	103.800	82.3%
2	17:10:05	81.1%	105.300	109.500	107.500	99.780	103.800	103.600	102.400	102.100	82.2%
3	17:10:32	80.4%	108.000	110.900	106.300	103.800	101.900	102.900	102.000	101.600	83.4%
X		80.7%	106.800	110.300	106.900	103.300	103.000	103.400	102.700	102.500	82.6%
S		0.4%	1.399	0.735	0.575	3.313	1.021	0.446	0.836	1.146	0.6%
%RSD		0.5	1.309	0.666	0.538	3.207	0.991	0.431	0.814	1.119	0.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:09:38	103.000	103.600	104.200	105.300	116.100	114.800	85.5%	100.700	99.860	103.200
2	17:10:05	103.900	103.400	103.600	104.300	114.900	114.300	86.0%	100.100	98.510	101.600
3	17:10:32	103.200	102.600	103.700	103.300	112.500	114.400	86.6%	101.100	99.230	103.000
X		103.400	103.200	103.800	104.300	114.500	114.500	86.1%	100.600	99.200	102.600
S		0.476	0.541	0.342	0.978	1.802	0.285	0.6%	0.546	0.672	0.878
%RSD		0.461	0.525	0.330	0.937	1.574	0.249	0.7	0.543	0.678	0.856
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	17:09:38	101.700	102.200	89.6%							
2	17:10:05	100.700	100.700	90.7%							
3	17:10:32	103.100	102.500	90.2%							
X		101.800	101.800	90.2%							
S		1.188	0.976	0.5%							
%RSD		1.166	0.958	0.6							

VJ20066-001SD 10/29/2020 17:15:02

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:29	92.0%	99.550	106.500	104.800	-4.679	<u>1723.000</u>	<u>1619.000</u>	1603.000	1589.000	178.900
2	17:15:56	88.4%	96.830	106.000	111.000	-10.160	<u>1795.000</u>	<u>1598.000</u>	1585.000	1575.000	177.100
3	17:16:23	90.0%	99.750	108.000	102.400	0.638	<u>1740.000</u>	<u>1588.000</u>	1588.000	1559.000	176.900
X		90.1%	98.710	106.900	106.100	-4.735	<u>1752.000</u>	<u>1602.000</u>	1592.000	1574.000	177.600
S		1.8%	1.632	1.038	4.414	5.402	<u>137.580</u>	<u>15.830</u>	9.597	14.980	1.135
%RSD		2.1	1.654	0.971	4.162	114.100	<u>2.145</u>	<u>0.989</u>	0.603	0.951	0.639
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:29	<u>2778.000</u>	<u>71560.000</u>	1377.000	1442.000	1340.000	82.9%	101.300	97.680	100.300	5529.000
2	17:15:56	<u>2756.000</u>	<u>70760.000</u>	1394.000	1367.000	1338.000	81.9%	102.000	99.470	99.220	4686.000
3	17:16:23	<u>2781.000</u>	<u>71500.000</u>	1381.000	1401.000	1311.000	81.1%	103.500	97.160	101.200	5081.000
X		<u>2771.000</u>	<u>71270.000</u>	1384.000	1403.000	1330.000	82.0%	102.200	98.100	100.200	5099.000
S		<u>13.480</u>	<u>446.800</u>	8.927	37.230	16.380	0.9%	1.121	1.213	0.974	421.700
%RSD		<u>0.486</u>	<u>0.627</u>	0.645	2.653	1.232	1.1	1.096	1.237	0.972	8.270
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:29	1055.000	108.700	<u>1035.000</u>	996.600	99.200	99.310	94.740	103.600	99.880	104.000
2	17:15:56	1055.000	108.900	<u>1027.000</u>	998.900	98.440	99.660	95.210	100.300	102.600	102.600
3	17:16:23	1076.000	108.000	<u>1053.000</u>	1008.000	99.590	97.200	96.660	100.400	101.200	103.100
X		1062.000	108.500	<u>1038.000</u>	1001.000	99.080	98.720	95.540	101.400	101.200	103.300
S		12.330	0.465	<u>12.880</u>	5.920	0.585	1.328	1.002	1.870	1.364	0.712
%RSD		1.160	0.429	<u>1.240</u>	0.591	0.590	1.345	1.049	1.843	1.347	0.689
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:29	101.800	101.800	101.800	98.830	7.695	8.244	411.300	98.690	-2.704	106.100
2	17:15:56	106.400	101.800	100.200	94.240	7.980	8.290	418.700	101.400	1.391	104.700
3	17:16:23	103.800	102.000	100.300	100.800	8.093	8.137	411.700	97.510	-1.562	104.100
X		104.000	101.900	100.800	97.950	7.923	8.224	413.900	99.190	-0.959	105.000
S		2.281	0.130	0.905	3.359	0.205	0.078	4.184	1.973	2.113	0.999
%RSD		2.194	0.128	0.898	3.430	2.588	0.952	1.011	1.989	220.400	0.952
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:29	81.6%	104.100	106.100	102.100	95.770	99.480	98.510	98.390	99.130	83.7%
2	17:15:56	81.8%	103.100	106.200	102.800	95.040	100.300	100.900	101.300	100.700	82.9%
3	17:16:23	81.3%	105.200	107.600	105.200	97.430	99.220	98.390	99.820	98.140	84.2%
X		81.6%	104.100	106.600	103.400	96.080	99.660	99.280	99.850	99.330	83.6%
S		0.2%	1.071	0.837	1.624	1.224	0.566	1.440	1.475	1.296	0.7%
%RSD		0.3	1.028	0.785	1.571	1.274	0.568	1.450	1.477	1.305	0.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:29	100.000	99.420	99.450	100.900	111.800	111.300	86.2%	100.200	99.020	101.800
2	17:15:56	99.400	100.700	101.100	102.700	113.000	112.500	86.0%	99.580	97.200	100.300
3	17:16:23	101.800	99.800	100.300	102.200	111.700	112.100	86.3%	99.820	96.970	100.400
X		100.400	99.960	100.300	101.900	112.200	112.000	86.2%	99.880	97.730	100.800
S		1.217	0.642	0.815	0.919	0.743	0.642	0.2%	0.324	1.125	0.856
%RSD		1.212	0.642	0.813	0.902	0.662	0.573	0.2	0.325	1.152	0.849
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	17:15:29	99.640	100.100	88.0%							
2	17:15:56	99.420	99.450	89.8%							
3	17:16:23	99.170	99.580	89.7%							
X		99.410	99.720	89.2%							
S		0.233	0.364	1.0%							
%RSD		0.234	0.365	1.1							

CCV MW15278 10/29/2020 17:20:53 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:21:20	84.5%	291.800	312.300	308.900	-7.434	62280.000	60760.000	61370.000	58480.000	297.600
2	17:21:47	83.1%	300.800	317.500	315.900	-2.881	62730.000	61680.000	60990.000	60660.000	298.600
3	17:22:14	86.1%	307.300	309.600	296.900	-6.478	60640.000	63220.000	62340.000	59970.000	308.200
X		84.6%	99.996%	104.367%	102.413%	-5.598	103.138%	61890.000	61570.000	99.500%	100.491%
S		1.5%	n/a	n/a	n/a	2.401	n/a	1243.000	696.100	n/a	n/a
%RSD		1.7	2.602	1.284	3.137	42.890	1.779	2.008	1.131	1.863	1.929
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:21:20	3465.000	259.700	62430.000	62710.000	62800.000	83.4%	304.700	310.200	298.300	2259.000
2	17:21:47	3426.000	256.900	62590.000	62820.000	62320.000	82.9%	310.500	306.200	302.600	852.700
3	17:22:14	3508.000	242.700	63550.000	63510.000	64330.000	81.3%	310.400	313.200	306.500	169.500
X		3466.000	253.100	104.764%	63020.000	105.253%	82.6%	102.843%	103.298%	100.822%	1094.000
S		40.580	9.076	n/a	433.800	n/a	1.1%	n/a	n/a	n/a	1065.000
%RSD		1.171	3.586	0.961	0.689	1.665	1.3	1.077	1.133	1.355	97.410
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:21:20	59940.000	298.500	61160.000	60600.000	298.200	295.500	291.800	288.300	288.400	304.000
2	17:21:47	60610.000	295.700	61150.000	61570.000	298.800	284.900	298.900	292.300	287.700	300.000
3	17:22:14	61530.000	299.500	61540.000	62630.000	304.900	296.900	300.300	293.100	295.900	301.500
X		60690.000	99.303%	61280.000	102.667%	100.209%	97.485%	297.000	291.200	96.883%	100.604%
S		797.300	n/a	223.400	n/a	n/a	n/a	4.559	2.561	n/a	n/a
%RSD		1.314	0.659	0.364	1.645	1.226	2.245	1.535	0.879	1.567	0.672
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:21:20	293.100	288.500	301.200	293.000	0.414	0.198	1229.000	309.600	-1.185	304.300
2	17:21:47	290.500	285.700	298.400	296.100	0.703	-0.203	1224.000	302.900	-1.168	307.200
3	17:22:14	289.200	294.200	305.200	296.400	0.571	-0.702	1227.000	302.200	1.859	303.200
X		291.000	289.500	100.538%	295.200	0.563	-0.236	1226.000	101.638%	-0.165	101.642%
S		1.961	4.317	n/a	1.870	0.144	0.451	2.484	n/a	1.753	n/a
%RSD		0.674	1.491	1.144	0.633	25.700	191.100	0.203	1.331	1063.000	0.671
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:21:20	80.9%	312.900	314.700	312.300	293.200	300.700	299.100	302.400	302.800	79.2%
2	17:21:47	80.6%	317.500	326.100	321.600	299.300	297.400	298.700	299.900	301.400	80.3%
3	17:22:14	80.7%	318.400	327.000	324.800	292.200	294.000	294.400	301.100	298.900	80.4%
X		80.7%	105.421%	107.541%	319.600	294.900	99.122%	297.400	301.200	100.344%	80.0%
S		0.1%	n/a	n/a	6.467	3.849	n/a	2.618	1.260	n/a	0.7%
%RSD		0.2	0.938	2.137	2.023	1.305	1.129	0.880	0.418	0.644	0.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:21:20	310.300	311.900	306.000	297.700	296.500	307.600	85.9%	306.900	306.700	308.000
2	17:21:47	308.700	308.200	305.100	300.100	297.500	307.000	85.8%	305.800	303.300	305.900
3	17:22:14	307.400	308.200	305.800	300.400	295.600	304.700	86.6%	302.500	301.700	304.000
X		102.940%	103.152%	305.600	99.788%	98.842%	102.132%	86.1%	305.100	101.297%	101.991%
S		n/a	n/a	0.492	n/a	n/a	n/a	0.5%	2.288	n/a	n/a
%RSD		0.481	0.697	0.161	0.498	0.320	0.494	0.5	0.750	0.833	0.639
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	17:21:20	306.000	308.200	84.8%							
2	17:21:47	302.500	304.300	86.3%							
3	17:22:14	298.300	302.400	87.2%							
X		100.753%	101.666%	86.1%							
S		n/a	n/a	1.2%							
%RSD		1.282	0.963	1.4							

CCB IM10195-01 10/29/2020 17:26:44 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:27:11	92.3%	0.022	0.107	0.261	8.324	-7.737	2.149	1.898	2.057	0.056
2	17:27:38	93.7%	0.037	0.200	0.373	0.939	-7.777	2.499	2.029	2.472	0.041
3	17:28:05	94.2%	0.030	0.081	0.260	5.347	-7.705	2.356	1.872	2.476	-0.009
X		93.4%	0.030	0.129	0.298	4.870	-7.740	2.335	1.933	2.335	0.029
S		1.0%	0.007	0.062	0.065	3.716	0.036	0.176	0.084	0.241	0.034
%RSD		1.1	24.650	48.050	21.840	76.290	0.469	7.539	4.365	10.330	115.200
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:27:11	0.489	189.700	-2.707	0.000	-16.820	88.0%	-0.003	0.025	0.014	3.686
2	17:27:38	0.261	190.900	-3.332	-0.047	-16.720	88.8%	-0.025	0.040	0.000	-2.149
3	17:28:05	1.538	201.600	-0.960	4.314	-15.990	87.9%	-0.003	0.031	-0.005	-0.648
X		0.763	194.100	-2.333	1.423	-16.510	88.2%	-0.010	0.032	0.003	0.296
S		0.681	6.543	1.230	2.504	0.450	0.5%	0.013	0.008	0.010	3.030
%RSD		89.250	3.371	52.710	176.000	2.727	0.6	120.300	23.800	322.200	1022.000
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:27:11	2.629	-0.010	2.318	4.073	0.008	0.004	-7.876	-0.266	-0.006	0.121
2	17:27:38	3.957	-0.009	2.696	4.490	0.006	0.055	-8.459	-0.354	0.018	0.107
3	17:28:05	2.906	-0.015	2.265	5.144	0.005	0.051	-8.308	-0.286	0.019	0.032
X		3.164	-0.011	2.426	4.569	0.007	0.037	-8.214	-0.302	0.010	0.087
S		0.700	0.003	0.235	0.540	0.001	0.028	0.303	0.046	0.014	0.048
%RSD		22.140	27.860	9.684	11.810	18.930	76.230	3.685	15.140	135.800	55.160
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:27:11	0.020	0.035	-0.028	-0.148	-0.435	-0.093	0.641	0.141	1.822	0.014
2	17:27:38	0.137	0.031	-0.065	-0.322	-0.223	0.055	-1.546	-0.347	-0.721	0.002
3	17:28:05	-0.144	-0.047	-0.011	-0.649	-0.266	0.881	0.960	0.240	0.343	0.016
X		0.004	0.006	-0.034	-0.373	-0.308	0.281	0.018	0.011	0.481	0.011
S		0.141	0.046	0.027	0.254	0.112	0.524	1.364	0.315	1.277	0.008
%RSD		3379.000	735.200	79.290	68.150	36.320	186.500	7471.000	2760.000	265.300	71.670
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:27:11	84.8%	0.756	0.681	0.674	-0.162	0.013	0.015	-0.002	0.010	83.1%
2	17:27:38	85.5%	0.649	0.823	0.723	0.240	0.013	0.008	0.015	0.018	84.1%
3	17:28:05	85.6%	0.693	0.748	0.714	0.160	0.009	0.016	0.020	0.013	85.1%
X		85.3%	0.699	0.750	0.704	0.080	0.012	0.013	0.011	0.013	84.1%
S		0.4%	0.054	0.071	0.026	0.213	0.002	0.004	0.011	0.004	1.0%
%RSD		0.5	7.668	9.409	3.708	267.400	20.520	33.870	102.300	29.910	1.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:27:11	0.036	0.071	0.483	0.498	-0.019	-0.015	85.7%	0.002	0.009	0.003
2	17:27:38	0.053	0.107	0.582	0.560	-0.020	0.008	87.1%	0.005	0.009	0.015
3	17:28:05	0.081	0.105	0.521	0.532	0.005	-0.021	87.2%	0.003	0.014	0.011
X		0.057	0.094	0.529	0.530	-0.011	-0.009	86.7%	0.003	0.011	0.010
S		0.023	0.020	0.050	0.031	0.014	0.015	0.8%	0.001	0.003	0.006
%RSD		40.400	21.610	9.462	5.872	124.000	167.700	1.0	40.170	26.230	60.190
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	17:27:11	0.026	0.015	85.7%							
2	17:27:38	0.012	0.014	86.0%							
3	17:28:05	0.012	0.017	87.9%							
X		0.017	0.015	86.5%							
S		0.008	0.002	1.2%							
%RSD		47.040	11.600	1.3							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:32:59	93.0%	0.044	0.698	1.129	-22.790	8487.000	2136.000	2113.000	2105.000	0.394
2	17:33:26	96.3%	-0.003	0.163	0.932	-16.170	8228.000	2191.000	2145.000	2048.000	0.463
3	17:33:53	94.3%	0.020	0.488	0.874	-29.610	8545.000	2139.000	2127.000	2054.000	0.481
X		94.5%	0.020	0.450	0.978	-22.860	8420.000	2155.000	2128.000	2069.000	0.446
S		1.7%	0.023	0.270	0.134	6.718	169.000	31.230	16.300	31.350	0.046
%RSD		1.8	114.900	59.910	13.690	29.390	2.007	1.449	0.766	1.515	10.370
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:32:59	120.000	15440.000	657.500	2778.000	2660.000	90.7%	-0.068	-0.012	-0.026	268.300
2	17:33:26	123.400	15480.000	651.500	2709.000	2637.000	91.9%	-0.028	-0.038	-0.051	269.800
3	17:33:53	122.100	15360.000	653.700	2715.000	2677.000	92.1%	-0.068	0.028	-0.024	203.800
X		121.800	15430.000	654.200	2734.000	2658.000	91.6%	-0.055	-0.007	-0.034	247.300
S		1.759	64.680	3.062	38.330	20.200	0.8%	0.023	0.033	0.015	37.680
%RSD		1.443	0.419	0.468	1.402	0.760	0.8	41.610	456.400	45.410	15.240
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:32:59	4335.000	9.147	4415.000	4248.000	0.276	0.130	-7.986	-0.282	0.039	0.344
2	17:33:26	4167.000	8.880	4277.000	4213.000	0.276	0.139	-7.651	-0.310	0.009	0.164
3	17:33:53	4225.000	8.702	4277.000	4166.000	0.270	0.133	-7.585	-0.245	0.033	0.380
X		4242.000	8.909	4323.000	4209.000	0.274	0.134	-7.741	-0.279	0.027	0.296
S		85.160	0.224	79.800	41.070	0.003	0.004	0.215	0.033	0.016	0.116
%RSD		2.007	2.513	1.846	0.976	1.188	3.234	2.781	11.660	57.760	39.170
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:32:59	0.860	0.951	0.182	0.238	23.120	22.970	1.782	0.508	-2.619	17.270
2	17:33:26	1.225	0.684	-0.096	-1.248	23.260	21.880	-1.027	-0.292	1.684	17.320
3	17:33:53	0.500	0.650	0.213	-0.765	21.500	24.580	1.076	0.241	0.769	17.670
X		0.862	0.761	0.100	-0.592	22.630	23.140	0.610	0.153	-0.055	17.420
S		0.362	0.165	0.170	0.758	0.981	1.359	1.461	0.408	2.267	0.216
%RSD		42.030	21.660	170.700	128.100	4.334	5.871	239.400	267.400	4091.000	1.242
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:32:59	89.2%	0.117	0.103	0.113	0.683	0.002	-0.000	-0.005	-0.004	88.9%
2	17:33:26	90.8%	0.102	0.121	0.185	1.021	0.002	0.006	-0.005	-0.008	90.6%
3	17:33:53	89.3%	0.187	0.180	0.134	0.657	0.001	-0.002	0.000	-0.004	89.9%
X		89.8%	0.135	0.134	0.144	0.787	0.002	0.001	-0.003	-0.005	89.8%
S		0.9%	0.045	0.040	0.037	0.203	0.001	0.004	0.003	0.003	0.8%
%RSD		1.0	33.600	30.070	25.820	25.790	39.610	342.600	87.350	50.130	0.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:32:59	0.169	0.229	0.162	0.152	16.410	15.670	90.3%	-0.006	0.005	-0.010
2	17:33:26	0.178	0.235	0.178	0.146	15.900	16.240	90.6%	-0.006	0.003	-0.007
3	17:33:53	0.142	0.222	0.193	0.164	15.930	16.350	91.4%	-0.004	0.004	-0.007
X		0.163	0.229	0.178	0.154	16.080	16.090	90.7%	-0.006	0.004	-0.008
S		0.019	0.006	0.015	0.009	0.286	0.366	0.6%	0.001	0.001	0.002
%RSD		11.380	2.682	8.709	6.023	1.779	2.278	0.6	24.970	28.120	21.430
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	17:32:59	-0.007	-0.007	91.5%							
2	17:33:26	-0.009	-0.005	91.7%							
3	17:33:53	-0.007	-0.005	94.1%							
X		-0.007	-0.006	92.4%							
S		0.001	0.001	1.4%							
%RSD		13.620	18.910	1.6							

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10/29/2020 17:38:20

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:38:48	92.8%	100.100	112.700	106.100	-7.344	1798.000	1603.000	1610.000	1634.000	177.100
2	17:39:15	91.9%	98.410	112.800	107.300	-1.138	1784.000	1636.000	1645.000	1617.000	180.900
3	17:39:42	91.7%	101.000	109.900	106.500	-8.926	1791.000	1647.000	1609.000	1604.000	179.400
X		92.1%	99.830	111.800	106.600	-5.803	1791.000	1629.000	1621.000	1618.000	179.200
S		0.6%	1.306	1.657	0.642	4.116	7.039	22.720	20.550	14.890	1.902
%RSD		0.6	1.309	1.482	0.602	70.930	0.393	1.395	1.267	0.920	1.062
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:38:48	2831.000	71750.000	1414.000	1446.000	1315.000	86.9%	103.200	101.000	102.300	5342.000
2	17:39:15	2860.000	72690.000	1461.000	1493.000	1358.000	83.6%	102.800	102.600	101.700	5205.000
3	17:39:42	2910.000	72670.000	1446.000	1476.000	1358.000	83.6%	103.500	99.060	101.800	6240.000
X		2867.000	72370.000	1440.000	1472.000	1344.000	84.7%	103.200	100.900	101.900	5595.000
S		39.740	535.900	23.950	23.860	24.830	1.9%	0.386	1.761	0.327	562.400
%RSD		1.386	0.741	1.663	1.621	1.848	2.3	0.374	1.745	0.321	10.050
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:38:48	1102.000	111.900	1085.000	1034.000	104.500	103.800	98.530	104.300	105.500	107.000
2	17:39:15	1107.000	110.800	1073.000	1036.000	104.800	105.200	98.140	105.000	104.300	104.600
3	17:39:42	1105.000	109.800	1078.000	1056.000	100.700	98.830	96.560	102.000	103.300	106.700
X		1105.000	110.800	1079.000	1042.000	103.300	102.600	97.740	103.800	104.400	106.100
S		2.863	1.050	5.786	12.280	2.271	3.353	1.041	1.549	1.101	1.302
%RSD		0.259	0.947	0.536	1.178	2.198	3.268	1.065	1.493	1.055	1.227
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:38:48	108.600	104.600	105.700	101.200	8.338	8.956	418.200	101.500	-0.323	108.100
2	17:39:15	105.200	106.100	104.900	101.300	7.439	8.106	414.200	98.850	1.221	108.200
3	17:39:42	106.100	105.000	107.100	99.170	8.887	8.891	436.900	106.100	0.824	106.800
X		106.600	105.200	105.900	100.600	8.221	8.651	423.100	102.200	0.574	107.700
S		1.758	0.787	1.149	1.219	0.731	0.473	12.120	3.673	0.801	0.806
%RSD		1.649	0.748	1.085	1.212	8.893	5.468	2.864	3.595	139.600	0.748
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:38:48	85.0%	105.200	108.300	105.400	102.900	102.300	102.200	101.800	102.500	86.1%
2	17:39:15	83.9%	106.500	109.700	106.200	103.000	101.500	102.200	102.600	103.100	86.1%
3	17:39:42	84.4%	105.500	107.800	105.700	101.200	103.500	102.200	102.100	101.800	85.1%
X		84.4%	105.700	108.600	105.800	102.400	102.400	102.200	102.200	102.400	85.8%
S		0.5%	0.672	0.999	0.382	1.005	1.028	0.042	0.413	0.642	0.6%
%RSD		0.7	0.635	0.920	0.361	0.982	1.003	0.041	0.404	0.627	0.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:38:48	103.700	103.200	100.200	101.900	112.500	116.200	87.7%	102.700	99.980	103.500
2	17:39:15	103.700	102.500	100.900	101.100	115.700	113.900	88.4%	100.500	98.540	100.900
3	17:39:42	104.300	103.900	101.300	101.100	111.700	113.600	88.6%	100.500	99.690	102.500
X		103.900	103.200	100.800	101.300	113.300	114.500	88.2%	101.200	99.410	102.300
S		0.336	0.684	0.555	0.476	2.139	1.410	0.5%	1.297	0.762	1.309
%RSD		0.323	0.663	0.551	0.470	1.888	1.231	0.5	1.281	0.767	1.280
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	17:38:48	101.700	101.800	90.4%							
2	17:39:15	99.680	100.400	92.1%							
3	17:39:42	100.500	101.500	91.5%							
X		100.600	101.200	91.4%							
S		0.993	0.753	0.9%							
%RSD		0.987	0.744	0.9							

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10/29/2020 17:44:10

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:37	92.5%	0.054	7.835	7.182	-5.886	852.200	605.100	590.500	583.300	80.520
2	17:45:04	90.9%	0.040	6.261	7.453	-0.829	872.900	613.000	597.900	602.800	82.030
3	17:45:31	91.9%	0.044	7.209	7.125	-19.280	856.100	579.800	569.400	573.100	80.840
X		91.8%	0.046	7.102	7.253	-8.664	860.400	599.300	585.900	586.400	81.130
S		0.8%	0.007	0.792	0.175	9.533	11.010	17.370	14.790	15.120	0.795
%RSD		0.9	16.250	11.150	2.419	110.000	1.279	2.898	2.524	2.579	0.980
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:37	1986.000	77850.000	360.400	309.300	297.300	84.1%	0.089	-0.100	0.450	7348.000
2	17:45:04	1977.000	79870.000	363.800	274.900	293.800	83.0%	0.180	-0.145	0.467	7555.000
3	17:45:31	1906.000	76220.000	352.100	274.500	293.900	83.8%	0.156	-0.234	0.414	7560.000
X		1956.000	77980.000	358.800	286.300	295.000	83.6%	0.142	-0.160	0.444	7488.000
S		44.170	1827.000	6.030	19.990	1.966	0.6%	0.047	0.068	0.027	120.800
%RSD		2.258	2.342	1.681	6.984	0.667	0.7	33.210	42.670	6.064	1.613
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:37	28.630	10.430	22.180	23.520	0.357	0.405	-7.750	0.105	0.451	5.060
2	17:45:04	30.650	10.280	21.760	22.050	0.410	0.387	-8.077	0.157	0.448	4.801
3	17:45:31	29.770	10.530	22.060	19.260	0.371	0.346	-7.358	0.123	0.375	4.564
X		29.680	10.410	22.000	21.610	0.379	0.379	-7.728	0.129	0.424	4.808
S		1.011	0.124	0.215	2.163	0.027	0.030	0.360	0.026	0.043	0.248
%RSD		3.406	1.194	0.979	10.010	7.190	7.880	4.658	20.490	10.030	5.164
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:37	5.629	4.767	0.270	-0.481	8.126	8.041	1.503	0.417	-2.391	6.504
2	17:45:04	5.946	4.849	0.466	-0.138	9.316	8.771	-0.403	-0.103	0.082	6.236
3	17:45:31	5.085	5.167	0.675	-1.169	9.068	9.316	1.491	0.235	4.175	6.523
X		5.553	4.928	0.471	-0.596	8.837	8.710	0.864	0.183	0.622	6.421
S		0.435	0.211	0.203	0.525	0.628	0.640	1.097	0.264	3.316	0.161
%RSD		7.839	4.284	43.020	88.080	7.105	7.345	127.000	144.000	533.400	2.504
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:37	83.1%	0.219	0.167	0.225	0.391	0.004	0.006	0.000	-0.005	83.9%
2	17:45:04	84.8%	0.274	0.303	0.247	0.110	0.006	0.001	0.011	-0.001	84.7%
3	17:45:31	83.4%	0.223	0.287	0.249	0.450	0.004	0.008	0.005	0.003	85.3%
X		83.8%	0.239	0.252	0.240	0.317	0.005	0.005	0.005	-0.001	84.6%
S		0.9%	0.030	0.074	0.013	0.182	0.002	0.004	0.005	0.004	0.7%
%RSD		1.1	12.700	29.510	5.576	57.330	32.650	70.360	99.780	389.800	0.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:37	0.024	0.028	0.849	0.867	13.420	13.190	86.8%	-0.001	0.002	0.023
2	17:45:04	0.050	0.051	0.806	0.825	13.090	12.920	87.9%	-0.004	0.005	0.034
3	17:45:31	0.029	0.061	0.798	0.910	13.390	13.200	87.1%	-0.001	0.011	0.036
X		0.034	0.047	0.818	0.867	13.300	13.100	87.3%	-0.002	0.006	0.031
S		0.014	0.017	0.027	0.042	0.183	0.157	0.5%	0.002	0.005	0.007
%RSD		40.020	36.730	3.335	4.882	1.375	1.198	0.6	76.430	71.880	22.300
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	17:44:37	0.017	0.022	90.6%							
2	17:45:04	0.015	0.023	90.8%							
3	17:45:31	0.022	0.030	90.5%							
X		0.018	0.025	90.7%							
S		0.004	0.004	0.2%							
%RSD		21.210	16.410	0.2							

CCV MW15278 10/29/2020 17:50:00 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:50:27	84.3%	300.600	318.000	304.000	-7.235	60730.000	61390.000	61950.000	59410.000	300.000
2	17:50:54	84.7%	304.100	306.300	302.100	-4.965	60910.000	61060.000	60740.000	59870.000	301.200
3	17:51:21	84.9%	295.100	305.200	302.100	-9.639	60200.000	59760.000	59850.000	59290.000	296.400
X		84.6%	99.980%	103.273%	100.900%	-7.280	101.021%	60740.000	60850.000	99.207%	99.731%
S		0.3%	n/a	n/a	n/a	2.337	n/a	859.400	1054.000	n/a	n/a
%RSD		0.3	1.514	2.288	0.364	32.100	0.616	1.415	1.732	0.514	0.837
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:50:27	3452.000	231.700	61440.000	62950.000	63210.000	81.9%	312.600	314.600	305.000	1650.000
2	17:50:54	3486.000	223.100	61490.000	62510.000	62900.000	82.3%	304.900	305.600	301.700	1142.000
3	17:51:21	3371.000	213.500	59230.000	61790.000	62500.000	82.7%	309.900	311.700	299.800	524.000
X		3436.000	222.800	101.198%	62420.000	104.787%	82.3%	103.041%	103.546%	100.730%	1105.000
S		59.100	9.083	n/a	585.200	n/a	0.4%	n/a	n/a	n/a	563.700
%RSD		1.720	4.077	1.119	0.938	0.564	0.5	1.268	1.485	0.864	51.000
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:50:27	61760.000	304.000	62400.000	62510.000	310.700	305.300	298.400	298.000	299.900	308.800
2	17:50:54	60400.000	295.500	60950.000	60890.000	298.100	298.800	304.100	294.500	290.700	304.600
3	17:51:21	60200.000	297.100	61760.000	62110.000	302.600	303.000	313.900	298.900	290.200	308.700
X		60790.000	99.629%	61700.000	103.063%	101.265%	100.797%	305.400	297.100	97.877%	102.453%
S		847.800	n/a	724.600	n/a	n/a	n/a	7.855	2.293	n/a	n/a
%RSD		1.395	1.499	1.174	1.366	2.107	1.089	2.572	0.771	1.860	0.781
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:50:27	294.600	291.200	298.000	295.000	0.494	0.719	1204.000	301.300	0.031	303.600
2	17:50:54	289.600	288.900	298.800	295.300	0.444	0.064	1218.000	306.000	-3.019	301.500
3	17:51:21	290.400	290.500	296.600	295.900	1.203	0.345	1217.000	305.100	1.557	302.200
X		291.500	290.200	99.268%	295.400	0.714	0.376	1213.000	101.369%	-0.477	100.824%
S		2.700	1.189	n/a	0.457	0.425	0.329	7.743	n/a	2.330	n/a
%RSD		0.926	0.410	0.369	0.155	59.510	87.420	0.638	0.818	488.400	0.356
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:50:27	79.6%	309.700	318.600	310.600	290.700	296.500	295.700	300.400	295.000	78.5%
2	17:50:54	79.7%	318.000	324.700	312.700	288.500	296.900	297.100	296.300	300.600	78.2%
3	17:51:21	79.5%	322.900	332.600	320.900	290.000	296.600	294.300	294.300	298.800	78.3%
X		79.6%	105.613%	108.431%	314.700	289.700	98.899%	295.700	297.000	99.384%	78.3%
S		0.1%	n/a	n/a	5.425	1.145	n/a	1.405	3.119	n/a	0.1%
%RSD		0.1	2.102	2.167	1.724	0.395	0.074	0.475	1.050	0.965	0.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:50:27	305.200	306.600	301.500	295.100	292.900	304.200	84.5%	306.300	306.400	307.100
2	17:50:54	305.500	310.800	306.500	295.000	294.800	303.600	84.8%	303.000	301.400	304.700
3	17:51:21	308.900	310.300	307.900	299.100	288.800	302.500	85.2%	304.000	304.800	309.200
X		102.169%	103.080%	305.300	98.796%	97.399%	101.146%	84.9%	304.400	101.404%	102.331%
S		n/a	n/a	3.353	n/a	n/a	n/a	0.3%	1.682	n/a	n/a
%RSD		0.667	0.749	1.098	0.780	1.054	0.289	0.4	0.552	0.841	0.733
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	17:50:27	305.200	305.900	82.9%							
2	17:50:54	302.000	303.200	84.1%							
3	17:51:21	304.200	305.900	83.0%							
X		101.272%	101.665%	83.3%							
S		n/a	n/a	0.7%							
%RSD		0.534	0.500	0.8							

CCB IM10195-01 10/29/2020 17:55:51 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:18	92.4%	0.029	0.182	0.492	-5.523	-6.162	2.659	2.435	2.109	0.075
2	17:56:44	94.0%	0.013	-0.101	0.156	-7.251	-6.730	2.413	2.736	2.637	-0.026
3	17:57:11	93.3%	0.028	0.057	0.041	-10.070	-6.441	2.605	2.666	2.127	-0.071
X		93.2%	0.023	0.046	0.230	-7.615	-6.445	2.559	2.612	2.291	-0.007
S		0.8%	0.009	0.142	0.234	2.296	0.284	0.129	0.157	0.299	0.075
%RSD		0.9	40.270	310.800	102.000	30.150	4.405	5.041	6.018	13.070	1052.000
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:18	1.713	187.000	0.906	-3.232	-14.860	88.3%	-0.045	0.017	0.025	12.520
2	17:56:44	-0.149	185.900	0.390	0.945	-16.900	89.8%	-0.047	-0.000	-0.013	8.691
3	17:57:11	-0.678	180.100	1.203	3.022	-16.360	90.1%	-0.006	-0.002	0.007	12.630
X		0.295	184.400	0.833	0.245	-16.040	89.4%	-0.033	0.005	0.006	11.280
S		1.256	3.708	0.411	3.185	1.058	1.0%	0.023	0.011	0.019	2.244
%RSD		425.100	2.011	49.390	1300.000	6.594	1.1	70.110	225.600	296.400	19.890
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:18	3.257	-0.020	2.862	5.587	0.003	-0.019	-7.494	-0.304	-0.001	-0.102
2	17:56:44	2.909	-0.009	1.607	1.928	-0.000	0.003	-8.417	-0.279	0.031	0.147
3	17:57:11	2.724	-0.012	0.967	2.442	-0.007	0.025	-7.807	-0.278	-0.027	0.027
X		2.963	-0.014	1.812	3.319	-0.002	0.003	-7.906	-0.287	0.001	0.024
S		0.271	0.006	0.964	1.981	0.005	0.022	0.469	0.015	0.029	0.124
%RSD		9.132	42.820	53.210	59.680	331.700	710.800	5.937	5.301	3095.000	517.900
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:18	-0.027	-0.034	0.085	-0.097	-0.367	-0.409	1.604	0.454	-1.831	0.018
2	17:56:44	-0.151	-0.022	-0.056	-0.417	-0.119	0.287	-0.904	-0.199	-0.823	0.011
3	17:57:11	-0.034	0.045	0.097	0.389	0.087	0.097	0.815	0.226	-0.854	0.005
X		-0.071	-0.003	0.042	-0.042	-0.133	-0.008	0.505	0.160	-1.169	0.011
S		0.070	0.043	0.085	0.406	0.227	0.360	1.282	0.332	0.573	0.006
%RSD		98.600	1321.000	202.400	974.400	170.500	4274.000	253.800	207.000	49.000	55.620
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:18	86.7%	0.634	0.650	0.682	0.010	0.017	0.005	0.025	0.022	86.1%
2	17:56:44	87.4%	0.767	0.818	0.717	-0.028	0.021	0.015	0.019	0.011	87.7%
3	17:57:11	88.0%	0.629	0.733	0.626	-0.442	0.019	0.023	0.009	0.013	88.0%
X		87.4%	0.677	0.734	0.675	-0.153	0.019	0.014	0.018	0.015	87.3%
S		0.6%	0.078	0.084	0.046	0.251	0.002	0.009	0.008	0.006	1.0%
%RSD		0.7	11.580	11.390	6.795	163.500	12.610	62.940	46.560	39.970	1.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:18	0.067	0.080	0.501	0.534	-0.029	0.007	88.6%	-0.001	0.005	0.019
2	17:56:44	0.047	0.084	0.586	0.497	0.011	-0.017	89.6%	0.005	0.010	0.010
3	17:57:11	0.060	0.067	0.582	0.595	0.019	-0.003	90.3%	0.005	0.011	0.008
X		0.058	0.077	0.556	0.542	0.001	-0.004	89.5%	0.003	0.009	0.012
S		0.010	0.009	0.048	0.049	0.026	0.012	0.9%	0.004	0.003	0.005
%RSD		16.970	11.740	8.567	9.108	4206.000	280.300	1.0	119.300	34.710	44.540
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	17:56:18	0.020	0.017	90.5%							
2	17:56:44	0.004	0.014	92.0%							
3	17:57:11	0.011	0.011	93.3%							
X		0.012	0.014	91.9%							
S		0.008	0.003	1.4%							
%RSD		71.150	21.930	1.5							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:02:06	96.2%	0.003	-0.415	0.050	-3.999	14733.000	18.990	18.920	18.860	68.300
2	18:02:33	93.6%	0.021	-0.097	0.076	6.097	14875.000	19.380	19.230	19.260	68.000
3	18:03:00	94.1%	0.005	-0.287	0.109	-2.006	14844.000	19.160	20.360	17.270	67.360
X		94.6%	0.010	-0.266	0.079	0.031	14817.000	19.180	19.500	18.460	67.890
S		1.4%	0.010	0.160	0.030	5.347	174.770	0.194	0.761	1.055	0.483
%RSD		1.4	100.400	60.060	37.800	17350.000	1.552	1.012	3.904	5.714	0.711
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:02:06	110.300	6613.000	49.510	205.900	168.400	91.8%	22.490	0.399	0.548	184.500
2	18:02:33	112.500	6725.000	50.380	187.100	173.500	90.9%	11.080	0.493	0.643	144.500
3	18:03:00	116.200	6772.000	48.840	182.700	175.000	91.5%	15.640	0.341	0.603	222.700
X		113.000	6703.000	49.580	191.900	172.300	91.4%	16.400	0.411	0.598	183.900
S		3.012	81.760	0.768	12.290	3.455	0.4%	5.745	0.077	0.048	39.080
%RSD		2.666	1.220	1.548	6.406	2.005	0.5	35.030	18.660	7.982	21.250
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:02:06	86.440	1.116	120.200	92.280	0.106	0.155	-7.683	39.240	38.260	4.747
2	18:02:33	85.910	1.046	92.100	90.690	0.130	0.196	-7.608	38.570	38.480	4.397
3	18:03:00	79.870	1.075	105.600	86.850	0.118	0.206	-7.327	37.070	38.620	4.468
X		84.070	1.079	106.000	89.940	0.118	0.186	-7.540	38.290	38.450	4.537
S		3.649	0.035	14.070	2.790	0.012	0.027	0.188	1.111	0.185	0.185
%RSD		4.340	3.290	13.280	3.102	10.220	14.430	2.489	2.903	0.480	4.087
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:02:06	5.145	5.143	0.002	-0.565	11.970	12.380	-0.316	-0.026	-1.968	2.076
2	18:02:33	5.922	5.085	0.062	-0.057	10.430	11.790	-0.639	-0.110	-2.291	2.106
3	18:03:00	5.269	5.339	0.074	-0.458	10.960	12.760	-0.314	-0.074	0.061	2.194
X		5.445	5.189	0.046	-0.360	11.120	12.310	-0.423	-0.070	-1.399	2.125
S		0.417	0.133	0.038	0.268	0.781	0.488	0.187	0.042	1.275	0.062
%RSD		7.667	2.560	83.150	74.460	7.029	3.968	44.300	60.160	91.130	2.895
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:02:06	89.9%	66.560	67.810	66.660	-0.595	0.031	0.011	-0.141	0.025	89.9%
2	18:02:33	89.6%	65.920	68.310	67.680	0.469	0.021	0.012	-0.179	-0.011	90.8%
3	18:03:00	89.9%	66.830	69.750	68.600	-0.258	0.013	0.019	-0.139	-0.006	89.6%
X		89.8%	66.440	68.620	67.650	-0.128	0.022	0.014	-0.153	0.003	90.1%
S		0.2%	0.469	1.006	0.970	0.543	0.009	0.004	0.022	0.020	0.6%
%RSD		0.2	0.706	1.466	1.435	424.300	40.290	29.950	14.640	737.000	0.7
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:02:06	0.051	0.034	0.141	0.133	20.490	20.150	90.7%	-0.002	-0.003	0.185
2	18:02:33	0.052	0.015	0.162	0.121	21.060	20.730	89.6%	-0.009	-0.003	0.188
3	18:03:00	0.061	0.032	0.155	0.168	20.940	20.610	90.6%	-0.006	-0.003	0.186
X		0.054	0.027	0.153	0.141	20.830	20.500	90.3%	-0.006	-0.003	0.187
S		0.005	0.010	0.011	0.024	0.300	0.305	0.6%	0.003	0.000	0.002
%RSD		10.010	39.200	7.052	17.060	1.440	1.486	0.7	56.660	9.664	0.822
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	18:02:06	0.183	0.192	89.0%							
2	18:02:33	0.167	0.173	89.8%							
3	18:03:00	0.178	0.177	89.9%							
X		0.176	0.181	89.6%							
S		0.008	0.010	0.5%							
%RSD		4.684	5.633	0.6							

VJ23075-002 10/29/2020 18:07:28

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:54	83.9%	0.004	296.500	287.000	8693.000	±57690.000	±1629.000	1617.000	1689.000	TM 5357.000
2	18:08:21	86.4%	-0.004	280.100	267.500	8404.000	±57010.000	±1615.000	1585.000	1687.000	TM 5384.000
3	18:08:48	84.5%	0.012	277.000	274.600	8395.000	±57300.000	±1593.000	1556.000	1652.000	TM 5208.000
X		84.9%	0.004	284.500	276.400	8498.000	±57330.000	±1613.000	1586.000	1676.000	TM 5316.000
S		1.3%	0.008	10.440	9.897	169.400	±345.700	±18.210	30.980	20.910	TM 95.080
%RSD		1.5	191.800	3.671	3.581	1.993	±0.603	±1.129	1.953	1.247	TM 1.788
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:54	±5144.000	±75810.000	±27830.000	M 134500.000	TM 132400.000	78.6%	3.666	1.124	2.146	2003.000
2	18:08:21	±5169.000	±75510.000	±27610.000	M 133400.000	TM 134400.000	78.9%	3.417	1.021	2.167	2164.000
3	18:08:48	±4987.000	±73570.000	±27550.000	M 131900.000	TM 131900.000	78.5%	3.504	1.092	2.217	2250.000
X		±5100.000	±74970.000	±27660.000	M 133300.000	TM 132900.000	78.7%	3.529	1.079	2.177	2139.000
S		±98.400	±1214.000	±146.400	M 1304.000	TM 1350.000	0.2%	0.126	0.053	0.036	125.400
%RSD		±1.929	±1.619	±0.529	M 0.978	TM 1.015	0.3	3.581	4.882	1.662	5.860
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:54	351.900	15.430	363.900	653.500	0.167	1.969	-5.924	7.522	8.250	M 512.900
2	18:08:21	344.200	14.970	362.600	632.500	0.178	1.915	-5.639	8.061	8.179	M 519.500
3	18:08:48	342.300	14.630	359.300	624.300	0.165	2.015	-5.610	7.710	8.144	M 510.400
X		346.200	15.010	361.900	636.700	0.170	1.967	-5.724	7.764	8.191	M 514.300
S		5.061	0.400	2.357	15.060	0.007	0.050	0.173	0.274	0.054	M 4.676
%RSD		1.462	2.665	0.651	2.365	4.205	2.548	3.029	3.523	0.663	M 0.909
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:54	481.600	491.200	0.661	-1.029	683.900	701.400	2.898	0.653	-1.498	125.600
2	18:08:21	477.400	492.100	0.049	-0.133	671.300	683.300	3.348	0.632	3.915	124.600
3	18:08:48	471.000	M 501.000	0.658	-0.228	668.200	684.400	2.629	0.557	-0.265	126.500
X		476.700	M 494.800	0.456	-0.463	674.500	689.700	2.958	0.614	0.717	125.600
S		5.308	M 5.412	0.353	0.492	8.307	10.170	0.363	0.051	2.837	0.942
%RSD		1.114	M 1.094	77.380	106.300	1.232	1.474	12.290	8.249	395.700	0.751
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:54	80.3%	39.500	40.620	39.970	3.754	0.018	0.003	-0.097	0.027	80.6%
2	18:08:21	79.4%	40.070	41.130	39.710	4.027	0.008	0.010	-0.077	0.028	79.8%
3	18:08:48	78.7%	40.080	40.660	39.870	3.391	0.013	0.011	-0.089	0.011	79.4%
X		79.5%	39.890	40.800	39.850	3.724	0.013	0.008	-0.088	0.022	79.9%
S		0.8%	0.331	0.286	0.132	0.319	0.005	0.005	0.010	0.010	0.6%
%RSD		1.0	0.830	0.702	0.330	8.569	37.270	58.700	11.090	44.960	0.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:54	0.913	1.445	108.600	108.800	32.420	33.780	84.9%	-0.006	0.002	1.411
2	18:08:21	0.951	1.348	110.000	107.000	32.330	34.470	85.7%	-0.002	-0.000	1.363
3	18:08:48	0.960	1.303	111.400	106.800	32.090	34.230	86.9%	-0.005	-0.002	1.466
X		0.941	1.365	110.000	107.500	32.280	34.160	85.9%	-0.004	-0.000	1.413
S		0.025	0.073	1.385	1.093	0.171	0.353	1.0%	0.002	0.002	0.052
%RSD		2.667	5.340	1.259	1.017	0.530	1.033	1.2	49.050	976.700	3.649
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	18:07:54	1.339	1.361	84.8%							
2	18:08:21	1.381	1.370	85.4%							
3	18:08:48	1.326	1.377	84.2%							
X		1.349	1.369	84.8%							
S		0.028	0.008	0.6%							
%RSD		2.106	0.556	0.7							

VJ23075-004(10) 10/29/2020 18:13:16
User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:13:43	91.7%	0.005	1.827	3.117	75.590	±4538.000	±1307.000	1289.000	1315.000	127.300
2	18:14:10	91.4%	0.006	3.055	3.181	69.440	±4517.000	±1333.000	1296.000	1298.000	126.400
3	18:14:37	90.9%	0.013	2.773	2.780	63.770	±4521.000	±1296.000	1294.000	1317.000	122.000
X		91.3%	0.008	2.552	3.026	69.600	±4525.000	±1312.000	1293.000	1310.000	125.200
S		0.4%	0.005	0.643	0.215	5.913	±11.200	±18.970	3.690	10.470	2.831
%RSD		0.4	56.120	25.200	7.111	8.495	±0.248	±1.445	0.285	0.799	2.261
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:13:43	2153.000	6814.000	±8388.000	2100.000	1963.000	87.0%	±159.100	0.084	1.137	1259.000
2	18:14:10	2125.000	6908.000	±8481.000	2142.000	2000.000	86.0%	77.870	0.078	1.116	1290.000
3	18:14:37	2100.000	6764.000	±8400.000	2050.000	1968.000	85.5%	±167.300	0.104	1.142	1275.000
X		2126.000	6829.000	±8423.000	2097.000	1977.000	86.2%	±134.700	0.089	1.132	1274.000
S		26.820	73.010	±50.910	45.930	20.200	0.8%	±49.420	0.014	0.014	15.470
%RSD		1.262	1.069	±0.604	2.190	1.022	0.9	±36.680	15.430	1.222	1.214
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:13:43	111.800	10.680	116.200	107.800	0.645	0.539	-7.233	14.990	15.210	207.400
2	18:14:10	112.100	10.940	113.200	109.000	0.656	0.612	-6.243	14.610	15.610	212.100
3	18:14:37	109.300	10.990	114.000	111.900	0.663	0.574	-7.483	14.670	14.950	207.700
X		111.100	10.870	114.500	109.600	0.655	0.575	-6.986	14.750	15.260	209.100
S		1.555	0.166	1.578	2.094	0.009	0.036	0.656	0.206	0.332	2.605
%RSD		1.400	1.528	1.378	1.911	1.404	6.292	9.385	1.394	2.176	1.246
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:13:43	192.100	202.900	0.180	-0.180	2.862	3.406	5.335	1.200	2.539	3.372
2	18:14:10	199.200	202.700	-0.152	0.028	3.294	3.226	-0.778	-0.191	-0.651	3.308
3	18:14:37	190.100	200.200	0.183	-0.283	2.872	2.321	2.093	0.522	-1.393	3.169
X		193.800	201.900	0.070	-0.145	3.009	2.984	2.216	0.510	0.165	3.283
S		4.800	1.512	0.193	0.158	0.247	0.582	3.059	0.696	2.089	0.104
%RSD		2.477	0.749	273.700	108.900	8.192	19.490	138.000	136.300	1265.000	3.162
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:13:43	84.9%	0.479	0.525	0.435	-0.228	0.023	0.018	0.037	0.019	87.1%
2	18:14:10	84.5%	0.491	0.505	0.520	-0.713	0.024	0.022	0.026	0.025	86.6%
3	18:14:37	85.1%	0.423	0.531	0.513	-0.416	0.027	0.025	0.010	0.025	86.7%
X		84.9%	0.465	0.520	0.489	-0.452	0.025	0.022	0.024	0.023	86.8%
S		0.3%	0.036	0.013	0.047	0.245	0.002	0.003	0.014	0.003	0.3%
%RSD		0.4	7.806	2.578	9.670	54.090	8.163	15.640	56.700	14.080	0.3
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:13:43	0.045	0.099	1.178	1.223	2.348	2.478	89.7%	-0.010	0.001	0.206
2	18:14:10	0.069	0.056	1.214	1.242	2.317	2.323	89.4%	-0.008	-0.001	0.244
3	18:14:37	0.059	0.058	1.165	1.155	2.366	2.341	89.4%	-0.008	-0.000	0.217
X		0.058	0.071	1.186	1.206	2.344	2.381	89.5%	-0.009	-0.000	0.223
S		0.012	0.025	0.025	0.046	0.025	0.085	0.2%	0.001	0.001	0.020
%RSD		20.450	35.010	2.134	3.775	1.068	3.566	0.2	17.480	6895.000	8.807
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	18:13:43	0.202	0.214	91.1%							
2	18:14:10	0.176	0.216	91.7%							
3	18:14:37	0.211	0.210	91.1%							
X		0.197	0.213	91.3%							
S		0.018	0.003	0.3%							
%RSD		9.290	1.245	0.4							

CCV MW15278 10/29/2020 18:19:06 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:33	85.3%	306.000	307.300	297.600	15.140	59380.000	62480.000	62990.000	60060.000	310.200
2	18:20:00	83.8%	303.200	315.300	314.200	3.751	61130.000	60530.000	60600.000	59010.000	298.300
3	18:20:27	83.9%	303.700	307.400	308.600	7.947	62100.000	61990.000	61340.000	60860.000	303.500
X		84.3%	101.434%	103.327%	102.265%	8.946	101.453%	61670.000	61640.000	99.961%	101.336%
S		0.9%	n/a	n/a	n/a	5.759	n/a	1013.000	1223.000	n/a	n/a
%RSD		1.0	0.493	1.472	2.751	64.380	2.264	1.643	1.545	1.545	1.970
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:33	3583.000	127.800	59350.000	62170.000	63700.000	81.0%	315.400	311.000	310.700	590.800
2	18:20:00	3402.000	129.000	59180.000	62010.000	63190.000	82.3%	310.300	309.100	304.600	934.500
3	18:20:27	3469.000	130.600	59940.000	63200.000	62530.000	81.9%	311.800	311.300	303.000	1795.000
X		3485.000	129.100	99.150%	62460.000	105.234%	81.8%	104.161%	103.479%	102.040%	1107.000
S		91.510	1.396	n/a	644.900	n/a	0.7%	n/a	n/a	n/a	620.200
%RSD		2.626	1.081	0.670	1.033	0.932	0.8	0.838	0.382	1.332	56.040
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:33	61340.000	305.600	62730.000	62520.000	304.700	298.300	301.400	305.200	293.400	314.700
2	18:20:00	61900.000	304.100	62440.000	62380.000	300.600	302.600	306.300	296.100	290.300	309.800
3	18:20:27	62540.000	298.300	61690.000	62300.000	300.400	297.000	304.900	297.000	289.200	311.800
X		61920.000	100.890%	62290.000	103.998%	100.637%	99.765%	304.200	299.500	96.975%	104.027%
S		601.500	n/a	540.700	n/a	n/a	n/a	2.495	4.974	n/a	n/a
%RSD		0.971	1.268	0.868	0.181	0.810	0.975	0.820	1.661	0.750	0.781
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:33	293.500	291.300	299.800	293.500	0.282	0.821	1238.000	314.200	0.886	302.700
2	18:20:00	284.700	284.800	298.100	292.500	1.559	-0.377	1209.000	309.600	-0.774	300.600
3	18:20:27	297.500	292.200	300.000	289.900	1.219	-0.056	1186.000	298.700	-1.852	305.100
X		291.900	289.400	99.778%	292.000	1.020	0.130	1211.000	102.493%	-0.580	100.940%
S		6.575	4.032	n/a	1.870	0.661	0.620	26.440	n/a	1.379	n/a
%RSD		2.252	1.393	0.346	0.641	64.860	478.700	2.184	2.593	237.700	0.740
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:33	78.5%	311.700	316.100	309.700	293.600	299.000	296.400	297.500	298.200	76.3%
2	18:20:00	80.4%	307.100	318.500	309.900	294.500	298.100	295.000	299.700	295.200	77.3%
3	18:20:27	79.1%	319.100	329.300	320.600	296.000	297.500	297.800	304.000	299.700	77.5%
X		79.3%	104.204%	107.099%	313.400	294.700	99.399%	296.400	300.400	99.231%	77.0%
S		1.0%	n/a	n/a	6.206	1.219	n/a	1.388	3.312	n/a	0.6%
%RSD		1.2	1.944	2.186	1.980	0.414	0.237	0.468	1.103	0.771	0.8
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:33	306.700	307.300	306.400	294.100	296.600	307.000	83.5%	303.600	302.900	307.200
2	18:20:00	302.700	307.900	304.600	296.800	293.500	301.300	83.8%	306.700	307.600	308.400
3	18:20:27	306.800	308.300	307.000	298.300	295.100	304.800	84.4%	304.600	303.400	305.900
X		101.804%	102.621%	306.000	98.803%	98.361%	101.457%	83.9%	304.900	101.550%	102.390%
S		n/a	n/a	1.265	n/a	n/a	n/a	0.5%	1.570	n/a	n/a
%RSD		0.756	0.167	0.413	0.722	0.537	0.938	0.5	0.515	0.840	0.412
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	18:19:33	305.200	305.200	80.0%							
2	18:20:00	307.300	307.700	80.3%							
3	18:20:27	300.700	302.700	81.3%							
X		101.473%	101.733%	80.5%							
S		n/a	n/a	0.7%							
%RSD		1.112	0.822	0.8							

CCB IM10195-01 10/29/2020 18:24:58 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:26	93.2%	0.046	-0.130	0.479	-1.810	-4.900	2.911	2.575	2.960	0.028
2	18:25:53	93.2%	0.035	0.244	0.371	-6.045	-4.930	2.851	2.796	3.162	-0.013
3	18:26:20	93.9%	0.030	-0.062	0.462	1.057	-5.323	2.754	2.730	2.627	-0.065
X		93.4%	0.037	0.017	0.438	-2.266	-5.051	2.838	2.700	2.916	-0.017
S		0.4%	0.008	0.199	0.058	3.573	0.236	0.079	0.114	0.270	0.047
%RSD		0.4	22.730	1150.000	13.260	157.700	4.670	2.799	4.208	9.264	276.400
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:26	2.146	121.700	4.777	5.319	-16.590	88.4%	-0.107	0.055	0.016	-19.440
2	18:25:53	-1.044	120.700	3.642	-3.245	-15.940	88.9%	0.037	0.046	0.003	-5.502
3	18:26:20	-0.165	120.200	-0.299	-2.237	-18.210	90.5%	-0.047	0.040	0.013	-13.870
X		0.312	120.800	2.707	-0.054	-16.920	89.3%	-0.039	0.047	0.010	-12.940
S		1.648	0.787	2.664	4.680	1.168	1.1%	0.072	0.008	0.007	7.016
%RSD		527.900	0.651	98.440	8638.000	6.902	1.2	184.100	16.140	65.640	54.230
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:26	3.886	-0.006	2.478	5.635	0.009	0.067	-7.934	-0.281	0.013	0.013
2	18:25:53	3.751	-0.009	3.226	2.251	0.004	-0.008	-7.519	-0.247	-0.012	0.030
3	18:26:20	3.436	-0.003	1.295	4.414	-0.004	0.041	-7.550	-0.293	0.011	-0.001
X		3.691	-0.006	2.333	4.100	0.003	0.034	-7.668	-0.274	0.004	0.014
S		0.231	0.003	0.974	1.714	0.006	0.038	0.231	0.024	0.014	0.016
%RSD		6.259	49.770	41.720	41.800	216.800	113.000	3.015	8.611	321.200	111.600
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:26	0.206	-0.022	0.016	-0.727	-0.432	-0.379	0.098	0.088	-2.253	0.001
2	18:25:53	-0.190	-0.011	0.036	-0.345	0.139	-0.013	1.192	0.314	-1.178	0.017
3	18:26:20	-0.038	0.066	0.063	0.062	-0.357	-0.278	1.437	0.352	-0.576	0.016
X		-0.007	0.011	0.038	-0.337	-0.217	-0.223	0.909	0.252	-1.336	0.012
S		0.200	0.048	0.024	0.394	0.311	0.189	0.713	0.143	0.850	0.009
%RSD		2680.000	439.400	61.700	117.100	143.300	84.530	78.470	56.850	63.600	76.000
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:26	88.8%	0.671	0.577	0.636	0.537	0.028	0.013	0.004	0.009	88.1%
2	18:25:53	87.7%	0.698	0.836	0.840	0.542	0.016	0.006	0.019	0.014	88.5%
3	18:26:20	89.3%	0.697	0.771	0.711	0.596	0.011	0.016	0.029	0.008	90.5%
X		88.6%	0.689	0.728	0.729	0.558	0.018	0.011	0.017	0.010	89.1%
S		0.8%	0.015	0.135	0.103	0.033	0.009	0.005	0.013	0.003	1.3%
%RSD		0.9	2.246	18.480	14.200	5.895	47.140	43.860	74.990	32.710	1.5
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:26	0.055	0.069	0.500	0.508	0.003	-0.017	90.5%	0.009	0.018	0.010
2	18:25:53	0.067	0.093	0.582	0.568	-0.013	0.010	90.2%	0.004	0.009	0.007
3	18:26:20	0.077	0.068	0.577	0.543	0.026	-0.013	91.0%	0.011	0.010	0.018
X		0.066	0.077	0.553	0.540	0.005	-0.006	90.6%	0.008	0.013	0.012
S		0.011	0.014	0.046	0.030	0.020	0.015	0.4%	0.004	0.005	0.006
%RSD		16.920	18.860	8.309	5.610	366.700	227.800	0.5	48.390	36.680	48.470
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	18:25:26	0.023	0.020	91.9%							
2	18:25:53	0.006	0.010	92.6%							
3	18:26:20	0.025	0.017	92.6%							
X		0.018	0.016	92.3%							
S		0.011	0.005	0.4%							
%RSD		60.010	31.010	0.4							

LR 10/29/2020 18:30:49 QC Status: FAIL (Initial: FAIL)
User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:31:16	77.8%	M 952.000	M 1900.000	M 1913.000	-4.065	TM 120300.000	TM 116800.000	TM 117900.000	TM 114600.000	TM 115900.000
2	18:31:44	77.5%	M 972.000	M 1930.000	M 1889.000	1.622	TM 121900.000	TM 121400.000	TM 119700.000	TM 118900.000	TM 117800.000
3	18:32:11	78.9%	M 963.900	M 1932.000	M 1932.000	-12.370	TM 119500.000	TM 119800.000	TM 118000.000	TM 116600.000	TM 115700.000
X		78.1%	M 96.265%	M 96.028%	M 95.561%	-4.939	TM 100.457%	TM 119300.000	TM 118500.000	TM 97.247%	TM 97.030%
S		0.7%	M n/a	M n/a	M n/a	7.039	TM n/a	TM 2360.000	TM 1031.000	TM n/a	TM n/a
%RSD		1.0	M 1.047	M 0.919	M 1.119	142.500	TM 1.025	TM 1.977	TM 0.870	TM 1.861	TM 1.007
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cr O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:31:16	6.978	102.100	TM 123100.000	M 124500.000	TM 122800.000	78.1%	M 2025.000	TM 2071.000	TM 2042.000	-4264.000
2	18:31:44	8.974	100.300	TM 125600.000	M 128600.000	TM 126800.000	76.1%	M 2083.000	TM 2096.000	TM 2051.000	-1331.000
3	18:32:11	7.098	89.240	TM 123400.000	M 124900.000	TM 126100.000	76.9%	M 2053.000	TM 2084.000	TM 2017.000	-3023.000
X		7.683	97.230	TM 103.365%	M 126000.000	TM 104.382%	77.0%	M 102.687%	TM 104.191%	TM 101.829%	-2872.000
S		1.119	6.972	TM n/a	M 2254.000	TM n/a	1.0%	M n/a	TM n/a	TM n/a	1472.000
%RSD		14.570	7.171	TM 1.107	M 1.789	TM 1.719	1.3	M 1.414	TM 0.607	TM 0.849	51.260
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:31:16	TM 116700.000	TM 2030.000	TM 118100.000	TM 119200.000	TM 2019.000	M 1897.000	M 1995.000	TM 1959.000	M 1871.000	M 1944.000
2	18:31:44	TM 119700.000	TM 2050.000	TM 120200.000	TM 120500.000	TM 2044.000	M 1924.000	M 1977.000	TM 1996.000	M 1903.000	M 1921.000
3	18:32:11	TM 119000.000	TM 2010.000	TM 119200.000	TM 119400.000	TM 2046.000	M 1923.000	M 1975.000	TM 1937.000	M 1861.000	M 1915.000
X		TM 118500.000	TM 101.502%	TM 119200.000	TM 99.762%	TM 101.830%	M 95.736%	M 1982.000	TM 1964.000	M 93.911%	M 96.311%
S		TM 1579.000	TM n/a	TM 1047.000	TM n/a	TM n/a	M n/a	M 10.990	TM 29.950	M n/a	M n/a
%RSD		TM 1.333	TM 0.968	TM 0.879	TM 0.594	TM 0.740	M 0.783	M 0.554	TM 1.525	M 1.160	M 0.794
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:31:16	M 2156.000	M 2101.000	M 1978.000	M 1844.000	3.642	0.298	7638.000	M 1920.000	5.815	TM 2103.000
2	18:31:44	M 2125.000	M 2088.000	M 2036.000	M 1841.000	5.127	0.315	7626.000	M 1929.000	4.515	TM 2098.000
3	18:32:11	M 2146.000	M 2070.000	M 2018.000	M 1814.000	4.637	0.413	7561.000	M 1884.000	9.241	TM 2111.000
X		M 2142.000	M 2087.000	M 100.525%	M 1833.000	4.469	0.342	7608.000	M 95.557%	6.524	TM 105.202%
S		M 15.910	M 15.620	M n/a	M 16.750	0.757	0.062	41.210	M n/a	2.442	TM n/a
%RSD		M 0.743	M 0.749	M 1.463	M 0.914	16.940	18.250	0.542	M 1.250	37.430	TM 0.321
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:31:16	76.6%	M 2244.000	M 2281.000	TM 2267.000	M 1935.000	292.800	291.300	M 1998.000	TM 2141.000	75.0%
2	18:31:44	77.9%	M 2260.000	M 2287.000	TM 2290.000	M 1961.000	294.500	289.400	M 2008.000	TM 2135.000	75.3%
3	18:32:11	77.7%	M 2282.000	M 2293.000	TM 2274.000	M 1956.000	289.600	288.200	M 2002.000	TM 2126.000	76.3%
X		77.4%	M 2262.000	M 114.357%	TM 2277.000	M 1951.000	292.300	289.600	M 2003.000	TM 106.706%	75.5%
S		0.7%	M 18.890	M n/a	TM 11.800	M 13.730	2.529	1.561	M 4.970	TM n/a	0.7%
%RSD		0.9	M 0.835	M 0.243	TM 0.518	M 0.704	0.865	0.539	M 0.248	TM 0.347	0.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:31:16	M 2086.000	TM 2192.000	M 1089.000	M 1030.000	TM 10790.000	TM 11240.000	82.9%	M 854.300	TM 932.200	TM 2246.000
2	18:31:44	M 2108.000	TM 2187.000	M 1087.000	M 1010.000	TM 10630.000	TM 11240.000	84.7%	M 852.500	TM 928.400	TM 2252.000
3	18:32:11	M 2089.000	TM 2177.000	TM 1135.000	M 1031.000	TM 10820.000	TM 11210.000	84.1%	M 859.300	TM 936.800	TM 2268.000
X		M 2094.000	TM 109.256%	TM 1104.000	M 102.381%	TM 107.464%	TM 11230.000	83.9%	M 855.400	TM 93.245%	TM 2255.000
S		M 12.050	TM n/a	TM 27.310	M n/a	TM n/a	TM 19.210	0.9%	M 3.503	TM n/a	TM 11.190
%RSD		M 0.576	TM 0.352	TM 2.474	M 1.210	TM 0.933	TM 0.171	1.1	M 0.409	TM 0.452	TM 0.496
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	18:31:16	TM 2215.000	TM 2240.000	82.3%							
2	18:31:44	TM 2223.000	TM 2234.000	82.9%							
3	18:32:11	TM 2232.000	TM 2250.000	83.5%							
X		TM 2223.000	TM 112.065%	82.9%							
S		TM 8.572	TM n/a	0.6%							
%RSD		TM 0.386	TM 0.369	0.7							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:08	95.7%	0.076	14.010	13.720	3.209	0.276	1.640	1.863	1.832	1.542
2	18:37:35	94.2%	0.029	13.190	13.960	-4.456	-0.248	1.429	1.539	1.257	1.047
3	18:38:02	95.7%	0.051	13.700	13.030	-11.690	-1.566	0.765	0.874	1.109	0.813
X		95.2%	0.052	13.630	13.570	-4.314	-0.513	1.278	1.425	1.399	1.134
S		0.9%	0.023	0.417	0.481	7.453	0.949	0.457	0.505	0.382	0.372
%RSD		0.9	45.060	3.060	3.546	172.800	185.100	35.740	35.400	27.290	32.830
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:08	6.573	78.880	3.810	-2.312	-19.090	92.7%	0.030	0.056	0.013	-0.899
2	18:37:35	6.161	73.460	3.308	1.765	-20.260	92.7%	-0.029	0.068	-0.040	-0.006
3	18:38:02	6.636	70.860	0.569	-2.332	-20.450	93.3%	-0.108	0.066	-0.029	-0.050
X		6.457	74.400	2.562	-0.960	-19.930	92.9%	-0.036	0.064	-0.019	-0.318
S		0.258	4.096	1.745	2.360	0.738	0.3%	0.069	0.006	0.028	0.503
%RSD		3.995	5.506	68.090	245.900	3.703	0.4	192.800	10.030	148.600	158.100
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:08	2.570	-0.010	0.896	0.048	0.027	0.011	-6.100	-0.181	-0.010	0.106
2	18:37:35	1.199	-0.028	0.516	1.516	0.021	0.011	-6.554	-0.219	0.027	-0.013
3	18:38:02	0.653	-0.023	0.114	-3.020	0.007	-0.005	-6.809	-0.212	-0.015	0.064
X		1.474	-0.020	0.509	-0.485	0.018	0.006	-6.488	-0.204	0.001	0.052
S		0.988	0.009	0.391	2.315	0.010	0.010	0.359	0.020	0.023	0.060
%RSD		67.000	45.930	76.950	477.100	53.920	169.700	5.541	10.040	3477.000	115.500
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:08	0.105	0.087	0.206	0.501	-0.260	0.307	3.319	0.915	-4.021	0.032
2	18:37:35	0.104	0.129	0.031	-0.091	0.028	-0.429	1.966	0.518	-2.029	0.018
3	18:38:02	0.067	-0.055	0.016	0.346	-0.212	0.204	1.676	0.376	0.679	0.023
X		0.092	0.054	0.084	0.252	-0.148	0.027	2.321	0.603	-1.790	0.024
S		0.022	0.096	0.106	0.307	0.154	0.399	0.877	0.279	2.359	0.007
%RSD		23.510	180.000	125.700	121.700	104.300	1465.000	37.800	46.310	131.800	28.780
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:08	91.4%	2.398	2.369	2.230	-0.120	0.009	0.007	0.028	0.024	91.6%
2	18:37:35	91.5%	2.454	2.455	2.339	0.523	0.003	0.002	0.007	0.023	92.7%
3	18:38:02	90.6%	2.513	2.549	2.311	-0.517	0.005	0.004	0.017	0.004	92.3%
X		91.1%	2.455	2.458	2.294	-0.038	0.006	0.004	0.017	0.017	92.2%
S		0.5%	0.058	0.090	0.057	0.525	0.003	0.003	0.010	0.011	0.6%
%RSD		0.5	2.344	3.659	2.481	1370.000	56.340	57.380	60.880	65.230	0.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:08	1.111	1.585	0.192	0.189	0.141	0.211	93.2%	0.017	0.016	0.023
2	18:37:35	1.162	1.591	0.211	0.201	0.093	0.117	93.9%	0.014	0.016	0.036
3	18:38:02	1.084	1.595	0.202	0.163	0.039	0.108	94.5%	0.006	0.011	0.015
X		1.119	1.591	0.202	0.184	0.091	0.146	93.9%	0.012	0.014	0.025
S		0.039	0.005	0.010	0.019	0.051	0.057	0.7%	0.006	0.003	0.011
%RSD		3.529	0.325	4.787	10.560	56.240	39.310	0.7	48.370	21.020	43.180
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	18:37:08	0.027	0.033	94.9%							
2	18:37:35	0.012	0.028	96.1%							
3	18:38:02	0.020	0.020	96.5%							
X		0.020	0.027	95.8%							
S		0.008	0.007	0.8%							
%RSD		39.820	24.350	0.9							

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:57	97.5%	0.027	12.090	11.750	1.961	-7.202	0.005	0.075	0.153	-0.194
2	18:43:24	95.5%	0.012	12.450	12.320	-4.263	-6.875	0.021	0.112	-0.042	-0.248
3	18:43:51	96.6%	0.037	12.120	11.860	13.340	-7.494	-0.090	0.006	0.180	-0.227
X		96.5%	0.025	12.220	11.980	3.679	-7.190	-0.021	0.064	0.097	-0.223
S		1.0%	0.013	0.201	0.304	8.925	0.310	0.060	0.054	0.121	0.027
%RSD		1.1	49.780	1.642	2.538	242.600	4.310	282.100	83.850	124.900	12.080
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:57	7.029	66.920	-4.861	-2.319	-20.170	92.9%	-0.010	0.011	-0.006	0.364
2	18:43:24	7.274	65.340	-5.219	-2.315	-21.720	92.8%	-0.049	0.016	-0.017	8.230
3	18:43:51	7.647	71.190	-5.725	1.833	-21.970	91.9%	-0.048	0.001	-0.022	7.023
X		7.317	67.820	-5.268	-0.934	-21.290	92.5%	-0.036	0.009	-0.015	5.206
S		0.311	3.029	0.434	2.396	0.976	0.6%	0.022	0.008	0.008	4.236
%RSD		4.250	4.466	8.239	256.600	4.584	0.6	62.700	81.330	54.790	81.380
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:57	0.156	-0.033	0.205	-3.321	-0.006	-0.016	-6.639	-0.237	0.027	0.128
2	18:43:24	-0.250	-0.038	1.360	-2.704	-0.001	-0.005	-6.783	-0.209	0.004	0.068
3	18:43:51	0.098	-0.028	0.988	-3.698	-0.010	-0.015	-7.535	-0.247	0.010	0.090
X		0.001	-0.033	0.851	-3.241	-0.005	-0.012	-6.986	-0.231	0.013	0.095
S		0.220	0.005	0.590	0.502	0.005	0.006	0.481	0.020	0.012	0.031
%RSD		18070.000	14.230	69.320	15.480	85.970	50.500	6.889	8.680	89.550	32.070
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:57	-0.005	0.136	-0.120	-0.384	0.015	0.039	-1.670	-0.379	-0.597	-0.006
2	18:43:24	0.152	-0.023	-0.046	-0.719	-0.315	-0.649	-0.618	-0.165	1.147	-0.005
3	18:43:51	0.150	0.120	-0.112	-0.425	-0.494	-0.384	-0.998	-0.230	0.060	-0.005
X		0.099	0.077	-0.093	-0.509	-0.265	-0.331	-1.095	-0.258	0.203	-0.005
S		0.090	0.088	0.041	0.183	0.258	0.347	0.533	0.110	0.881	0.001
%RSD		91.350	113.200	43.640	35.890	97.460	104.600	48.670	42.460	433.400	19.140
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:57	89.3%	0.518	0.693	0.637	0.253	0.002	0.001	-0.002	0.001	87.5%
2	18:43:24	88.6%	0.663	0.678	0.616	0.489	0.004	-0.003	-0.002	0.001	87.7%
3	18:43:51	89.9%	0.783	0.591	0.654	0.753	0.001	-0.002	-0.002	0.019	88.3%
X		89.3%	0.655	0.654	0.635	0.498	0.002	-0.001	-0.002	0.007	87.8%
S		0.6%	0.133	0.055	0.019	0.250	0.001	0.002	0.000	0.010	0.4%
%RSD		0.7	20.270	8.442	2.983	50.170	55.180	152.700	5.512	151.300	0.4
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:57	0.358	0.451	0.091	0.087	-0.005	0.011	89.9%	-0.004	0.001	-0.000
2	18:43:24	0.337	0.548	0.114	0.099	-0.021	0.002	89.6%	0.000	0.001	-0.004
3	18:43:51	0.435	0.595	0.113	0.095	-0.037	-0.031	89.7%	-0.004	0.001	-0.004
X		0.376	0.531	0.106	0.093	-0.021	-0.006	89.7%	-0.002	0.001	-0.003
S		0.052	0.074	0.013	0.006	0.016	0.022	0.1%	0.002	0.000	0.002
%RSD		13.800	13.850	12.210	6.809	76.940	361.300	0.2	100.600	3.238	76.550
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	18:42:57	0.003	0.002	87.7%							
2	18:43:24	0.003	0.001	88.5%							
3	18:43:51	0.003	-0.002	87.9%							
X		0.003	0.000	88.1%							
S		0.000	0.002	0.4%							
%RSD		2.359	458.600	0.5							

Performance Report

Raw Supportive Data

Analyst: WCM

Level 2 Analyst: BPK

Printed: 11/16/20 1507

Status: Level 2 review released

Prep Batch: 71157

Matrix: Aqueous

3005A - Total Recoverable Acid Digestion (ICP-MS) Linked: 6020A,6020B and

Start Date: 10/28/2020 1551

End Date: 10/28/2020 2051

Digestion Cup ID: 20-2336

Ext Solvent: 1:1 HNO3/1:1 HCl

Reagents Vol. (mL): 1, 0.5

Chem ID: IM 10223-01, IM 10136-01

Hot Block ID: Hot Block # 11

Thermometer ID: 1134

Start Temperature (°C): 95

End Temperature (°C): 95

Sample ID	QC Code	Client Sample ID	Run	Analysis Method	Initial Vol. (mL)	Spike ID	Spike Vol. (mL)	Final Vol. (mL)	Holding Time Expires	Analytical Due Date	Comments
VQ71157-001	MB	PBW	1	6020B	50		0.0	50			PIPET ID 388
VQ71157-002	LCS	LCS	1	6020B	50	20-1757 (8/5/21)	0.5	50			
VJ23005-001	Sample	16C1	1	6020B	50		0.0	50	04/20/2021 2359	11/06/2020	
VJ23005-001MS MS		16C1S	1	6020B	50	20-1757 (8/5/21)	0.5	50			
VJ23005-001MD MSD		16C1SD	1	6020B	50	20-1757 (8/5/21)	0.5	50			
VJ23005-002	Sample	16MW8	1	6020B	50		0.0	50	04/19/2021 2359	11/06/2020	
VJ23005-003	Sample	16MW9	1	6020B	50		0.0	50	04/20/2021 2359	11/06/2020	
VJ23005-004	Sample	16WC1A	1	6020B	50		0.0	50	04/20/2021 2359	11/06/2020	
VJ23005-004MS MS		16WC1AS	1	6020B	50	20-1757 (8/5/21)	0.5	50			
VJ23005-004MD MSD		16WC1ASD	1	6020B	50	20-1757 (8/5/21)	0.5	50			
VJ23005-005	Sample	16WDUP	1	6020B	50		0.0	50	04/20/2021 2359	11/06/2020	
VJ23005-006	Sample	16WC1B	1	6020B	50		0.0	50	04/20/2021 2359	11/06/2020	
VJ23005-007	Sample	16-2	1	6020B	50		0.0	50	04/19/2021 2359	11/06/2020	
VJ23005-008	Sample	16-3	1	6020B	50		0.0	50	04/19/2021 2359	11/06/2020	
VJ23005-010	Sample	16WC2B	1	6020B	50		0.0	50	04/19/2021 2359	11/06/2020	
VJ23005-009	Sample	16-5	1	6020B	50		0.0	50	04/19/2021 2359	11/06/2020	
VJ23005-011	Sample	16SPRING	1	6020B	50		0.0	50	04/19/2021 2359	11/06/2020	

(end of report)

Total Samples: 11

Mercury



- COVER PAGE -
INORGANIC ANALYSIS DATA PACKAGE

Client: Draper Aden Associates

SDG No.: VJ23005

Method Type: CVAA

SOW No.: _____

Contract: RAAP HWMU16

Lab Code: _____

Case No.: _____

SAS No.: _____

Lab Sample ID	Client Sample ID	QC Description
VJ23005-001	16C1	
VJ23005-002	16MW8	
VJ23005-003	16MW9	
VJ23005-004	16WC1A	
VJ23005-004S	16WC1AS	Matrix Spike
VJ23005-004SD	16WC1ASD	Matrix Spike Duplicate
VJ23005-005	16WDUP	
VJ23005-006	16WC1B	
VJ23005-007	16-2	
VJ23005-008	16-3	
VJ23005-009	16-5	
VJ23005-010	16WC2B	
VJ23005-011	16SPRING	

Were ICP interelement corrections applied? Yes/No Yes _____

Were ICP background corrections applied? Yes/No Yes _____

If yes - were raw data generated before applications of background corrections? Yes/No No _____

Comments: _____

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____

Name: _____

Date: _____

Title: _____

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Draper Aden Associates

SDG No.: VJ23005

Contract: RAAP HWMU16

Lab Code:

Case No.:

SAS No.:

Initial Calibration Source: VHG

Continuing Calibration Source: Inorganic VenturesInorganic Ventu

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV1	Mercury	2.000000	2.000000	94	90.0 - 110.0	CV	11/5/2020	04:56	HG4110520A
CCV1	Mercury	2.000000	2.000000	96	80.0 - 120.0	CV	11/5/2020	05:03	HG4110520A
CCV2	Mercury	2.000000	2.000000	97	80.0 - 120.0	CV	11/5/2020	05:08	HG4110520A
CCV3	Mercury	2.000000	2.000000	94	80.0 - 120.0	CV	11/5/2020	09:01	HG4110520A
CCV4	Mercury	2.000000	2.000000	92	80.0 - 120.0	CV	11/5/2020	10:31	HG4110520A
CCV5	Mercury	2.000000	2.000000	93	80.0 - 120.0	CV	11/5/2020	11:02	HG4110520A
CCV6	Mercury	2.000000	2.000000	92	80.0 - 120.0	CV	11/5/2020	11:32	HG4110520A

CRDL STANDARD FOR AA & ICP

SDG No.: VJ23005

AA CRDL Standard Source: _____

ICP CRDL Standard Source:

LLCCV

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Draper Aden Associates

SDG No.: VJ23005

Contract: RAAP HWMU16

Lab Code:

Case No.:

SAS No.:

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOQ	LOQ	M	Analysis Date	Analysis Time	Run
ICB1	Mercury	-0.043900	+/-2.000000	U	2.000000	2.000000	CV	11/5/2020	04:58	HG4110520A
CCB1	Mercury	-0.050700	+/-2.000000	U	2.000000	2.000000	CV	11/5/2020	05:06	HG4110520A
CCB2	Mercury	-0.044800	+/-2.000000	U	2.000000	2.000000	CV	11/5/2020	05:11	HG4110520A
CCB3	Mercury	-0.033900	+/-2.000000	U	2.000000	2.000000	CV	11/5/2020	09:03	HG4110520A
CCB4	Mercury	-0.040200	+/-2.000000	U	2.000000	2.000000	CV	11/5/2020	10:34	HG4110520A
CCB5	Mercury	-0.043100	+/-2.000000	U	2.000000	2.000000	CV	11/5/2020	11:04	HG4110520A
CCB6	Mercury	-0.035600	+/-2.000000	U	2.000000	2.000000	CV	11/5/2020	11:34	HG4110520A

METHOD DETECTION LIMITS (MDL) (ANNUALLY)

Lab Name: Pace Analytical Services, LLC Contract: RAAP HWMU16Lab Code: EQI Case No.: 48412 Mod. Ref. No.: _____ SDG No.: VJ23005Instrument Type: CV Instrument ID: Hg4 _____Preparation Method: 7470AConcentration Units (ug/L, mg/kg, or ug): UG/L

Analyte	Wavelength/Mass	MDL
Mercury	253.70	0.120000

Comments: _____

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU16

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: VJ23005

Instrument ID Number: Hg4 Run Number: HG4110520A

Start Date: 11/5/2020 End Date: 11/5/2020

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N				
S0 20HG2056	1.00	0440															X														
S01 20HG2057	1.00	0443															X														
S02 20HG2058	1.00	0446															X														
S03 20HG2059	1.00	0448															X														
S04 20HG2060	1.00	0451															X														
S05 20HG2061	1.00	0453															X														
ICV1	1.00	0456															X														
ICB1	1.00	0458															X														
LLCCV 20HG2057	1.00	0501															X														
CCV1	1.00	0503															X														
CCB1	1.00	0506															X														
CCV2	1.00	0508															X														
CCB2	1.00	0511															X														
CCV3	1.00	0901															X														
CCB3	1.00	0903															X														
ZZZZZZ	1.00	0906																													
ZZZZZZ	1.00	0908																													
ZZZZZZ	1.00	0911																													
ZZZZZZ	1.00	0913																													
ZZZZZZ	1.00	0916																													
ZZZZZZ	1.00	0918																													
ZZZZZZ	1.00	0921																													
ZZZZZZ	1.00	0924																													
ZZZZZZ	1.00	0926																													
ZZZZZZ	1.00	0929																													
ZZZZZZ	1.00	0931																													
ZZZZZZ	1.00	0934																													
ZZZZZZ	1.00	0936																													
ZZZZZZ	1.00	0939																													
ZZZZZZ	1.00	0941																													
ZZZZZZ	1.00	0944																													
ZZZZZZ	1.00	0946																													
ZZZZZZ	1.00	0949																													
ZZZZZZ	1.00	0951																													
ZZZZZZ	1.00	0954																													
ZZZZZZ	1.00	0956																													

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU16

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: VJ23005

Instrument ID Number: Hg4 Run Number: HG4110520A

Start Date: 11/5/2020 End Date: 11/5/2020

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N				
ZZZZZZ	1.00	0959																													
ZZZZZZ	1.00	1001																													
ZZZZZZ	1.00	1004																													
ZZZZZZ	1.00	1006																													
ZZZZZZ	1.00	1009																													
ZZZZZZ	1.00	1011																													
ZZZZZZ	1.00	1014																													
ZZZZZZ	1.00	1016																													
ZZZZZZ	1.00	1019																													
ZZZZZZ	1.00	1021																													
ZZZZZZ	1.00	1024																													
ZZZZZZ	1.00	1026																													
ZZZZZZ	1.00	1029																													
CCV4	1.00	1031																X													
CCB4	1.00	1034																X													
ZZZZZZ	1.00	1036																													
V072243-001	1.00	1039																X													
V072243-002	1.00	1041																X													
VJ23005-004	1.00	1044																X													
VJ23005-004S	1.00	1047																X													
VJ23005-004SD	1.00	1049																X													
VJ23005-001	1.00	1052																X													
VJ23005-002	1.00	1054																X													
VJ23005-003	1.00	1057																X													
VJ23005-005	1.00	1059																X													
CCV5	1.00	1102																X													
CCB5	1.00	1104																X													
VJ23005-006	1.00	1107																X													
VJ23005-007	1.00	1109																X													
VJ23005-008	1.00	1112																X													
VJ23005-009	1.00	1114																X													
VJ23005-010	1.00	1117																X													
VJ23005-011	1.00	1119																X													
ZZZZZZ	1.00	1122																													
ZZZZZZ	1.00	1124																													
ZZZZZZ	1.00	1127																													

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU16

Lab Code: Case No.: SAS No.: SDG No.: VJ23005

Instrument ID Number: Hg4 Run Number: HG4110520A

Start Date: 11/5/2020 End Date: 11/5/2020

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
ZZZZZZ	1.00	1129																											
CCV6	1.00	1132																X											
CCB6	1.00	1134																X											
ZZZZZZ	1.00	1137																											
ZZZZZZ	1.00	1139																											
ZZZZZZ	1.00	1142																											
ZZZZZZ	1.00	1144																											
ZZZZZZ	1.00	1147																											
ZZZZZZ	1.00	1149																											
ZZZZZZ	1.00	1152																											
ZZZZZZ	1.00	1154																											
ZZZZZZ	1.00	1157																											
ZZZZZZ	1.00	1200																											
ZZZZZZ	1.00	1202																											
ZZZZZZ	1.00	1205																											
ZZZZZZ	1.00	1207																											
ZZZZZZ	1.00	1210																											
ZZZZZZ	1.00	1212																											
ZZZZZZ	1.00	1215																											
ZZZZZZ	1.00	1217																											
ZZZZZZ	1.00	1220																											
ZZZZZZ	1.00	1222																											
ZZZZZZ	1.00	1225																											
ZZZZZZ	1.00	1227																											
ZZZZZZ	1.00	1230																											
ZZZZZZ	1.00	1232																											
ZZZZZZ	1.00	1235																											
ZZZZZZ	1.00	1237																											
ZZZZZZ	1.00	1240																											
ZZZZZZ	1.00	1242																											
ZZZZZZ	1.00	1245																											
ZZZZZZ	1.00	1247																											
ZZZZZZ	1.00	1250																											
ZZZZZZ	1.00	1252																											
ZZZZZZ	1.00	1255																											
ZZZZZZ	1.00	1258																											

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU16

Lab Code: Case No.: SAS No.: SDG No.: VJ23005

Instrument ID Number: Hg4 Run Number: HG4110520A

Start Date: 11/5/2020 End Date: 11/5/2020

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N				
ZZZZZZ	1.00	1300																													
ZZZZZZ	1.00	1303																													
ZZZZZZ	1.00	1305																													
ZZZZZZ	1.00	1308																													
ZZZZZZ	1.00	1310																													
ZZZZZZ	1.00	1313																													
ZZZZZZ	1.00	1315																													
ZZZZZZ	1.00	1318																													
ZZZZZZ	1.00	1320																													
ZZZZZZ	1.00	1323																													
ZZZZZZ	1.00	1325																													
ZZZZZZ	1.00	1328																													
ZZZZZZ	1.00	1330																													
ZZZZZZ	1.00	1333																													
ZZZZZZ	1.00	1335																													
ZZZZZZ	1.00	1338																													
ZZZZZZ	1.00	1340																													
ZZZZZZ	1.00	1343																													
ZZZZZZ	1.00	1345																													
ZZZZZZ	1.00	1348																													
ZZZZZZ	1.00	1350																													
ZZZZZZ	1.00	1353																													
ZZZZZZ	1.00	1356																													
ZZZZZZ	1.00	1358																													
ZZZZZZ	1.00	1401																													
ZZZZZZ	1.00	1403																													
ZZZZZZ	1.00	1405																													
ZZZZZZ	1.00	1408																													
ZZZZZZ	1.00	1410																													

Raw Sample Data



HG4110520A

Method: 7470A/245.1

Operator: JAB2

Date of Analysis: 05 Nov 2020 04:40:46

Sample ID	Extended ID	Conc.	Units	µ Abs.	Date
S0 20HG2056 11/5/20 - 1		-	ppb	-101	05 Nov 2020 04:40:58
S01 20HG2057 11/5/20 - 1		-	ppb	1383	05 Nov 2020 04:43:30
S02 20HG2058 11/5/20 - 1		-	ppb	3626	05 Nov 2020 04:46:02
S03 20HG2059 11/5/20 - 1		-	ppb	7581	05 Nov 2020 04:48:34
S04 20HG2060 11/5/20 - 1		-	ppb	15601	05 Nov 2020 04:51:04
S05 20HG2061 11/5/20 - 1		-	ppb	39400	05 Nov 2020 04:53:35
ICV 20HG2062 11/5/20 - 1		94.1% 1.8810	ppb	14663	05 Nov 2020 04:56:04
ICB 20HG2056 11/5/20 - 1		-0.0439	ppb	-586	05 Nov 2020 04:58:35
LLCCV 20HG2057 11/5/20 - 1		96.7% 0.1934	ppb	1294	05 Nov 2020 05:01:07
CCV 20HG2060 11/5/20 - 1		95.6% 1.9118	ppb	14907	05 Nov 2020 05:03:39
CCB 20HG2056 11/5/20 - 1		-0.0507	ppb	-640	05 Nov 2020 05:06:08
CCV 20HG2060 11/5/20 - 1		96.5% 1.9304	ppb	15054	05 Nov 2020 05:08:39
CCB 20HG2056 11/5/20 - 1		-0.0448	ppb	-593	05 Nov 2020 05:11:08
CCV 20HG2060 11/5/20 - 1		93.6% 1.8713	ppb	14586	05 Nov 2020 09:01:28
CCB 20HG2056 11/5/20 - 1		-0.0339	ppb	-507	05 Nov 2020 09:03:57
SnCl2 - 1		0.0600	ppb	237	05 Nov 2020 09:06:27
VQ72332001 - 1	PBW	0.0701	ppb	317	05 Nov 2020 09:08:58
VQ72332002 - 1	LCS	1.9106	ppb	14897	05 Nov 2020 09:11:28
VK03065002 - 1	Influent Comp	0.0451	ppb	119	05 Nov 2020 09:13:58
VK03065002MS - 1	Influent CompS	2.0207	ppb	15769	05 Nov 2020 09:16:29
VK03065002MD - 1	Influent CompSD	1.8135	ppb	14128	05 Nov 2020 09:18:59
VJ22007001 - 1	TANK A+B	0.2514	ppb	1753	05 Nov 2020 09:21:29
VK02050016 - 1	MDLv HG (245.1 7470A Share) Aq HG6	0.2372	ppb	1641	05 Nov 2020 09:24:00
VK03003001 - 1	TANK B	0.1821	ppb	1204	05 Nov 2020 09:26:31
VK05015003 - 1	Wester Aeration Comp	0.2926	ppb	2080	05 Nov 2020 09:29:02
CCV 20HG2060 11/5/20 - 1		93.1% 1.8627	ppb	14518	05 Nov 2020 09:31:34
CCB 20HG2056 11/5/20 - 1		-0.0425	ppb	-575	05 Nov 2020 09:34:03
VQ72244001 - 1	PBW	0.0558	ppb	204	05 Nov 2020 09:36:34
VQ72244002 - 1	LCS	1.9002	ppb	14815	05 Nov 2020 09:39:06
VJ30032006 - 1	43 MW01	0.0090	ppb	-167	05 Nov 2020 09:41:38
VJ30032006MS - 1	43 MW01S	1.6840	ppb	13102	05 Nov 2020 09:44:08
VJ30032006MD - 1	43 MW01SD	1.6829	ppb	13093	05 Nov 2020 09:46:39
VJ30032001 - 1	43 MW03	-0.0266	ppb	-449	05 Nov 2020 09:49:09
VJ30032002 - 1	43 MW03 DUP 102720	0.0637	ppb	266	05 Nov 2020 09:51:40
VJ30032003 - 1	43 MW04	0.0541	ppb	190	05 Nov 2020 09:54:10
VJ30032004 - 1	43 MW05	0.0607	ppb	243	05 Nov 2020 09:56:41
VJ30032005 - 1	43 MW06	0.0746	ppb	353	05 Nov 2020 09:59:12
CCV 20HG2060 11/5/20 - 1		95.1% 1.9021	ppb	14830	05 Nov 2020 10:01:43
CCB 20HG2056 11/5/20 - 1		-0.0416	ppb	-568	05 Nov 2020 10:04:13
VJ30032007 - 1	EB102720	0.0594	ppb	232	05 Nov 2020 10:06:43
VJ27021007 - 1	43 SW03	0.0520	ppb	174	05 Nov 2020 10:09:15
VJ27021009 - 1	43 SW02	0.0947	ppb	512	05 Nov 2020 10:11:46
VJ27021013 - 1	43 DP01	0.0587	ppb	227	05 Nov 2020 10:14:18
VQ72333001 - 1	PBW	0.0539	ppb	189	05 Nov 2020 10:16:51
VQ72333002 - 1	LCS	1.8980	ppb	14797	05 Nov 2020 10:19:21
VJ31021001 - 1	067-CPWB004A-WA-ER0004	0.0118	ppb	-145	05 Nov 2020 10:21:52
VJ31021001MS - 1	067-CPWB004A-WA-ER0004S	1.8942	ppb	14767	05 Nov 2020 10:24:23
VJ31021001MD - 1	067-CPWB004A-WA-ER0004SD	1.8722	ppb	14593	05 Nov 2020 10:26:53
VJ31021002 - 1	067-CPWB004B-WA-ER0004	-0.0070	ppb	-294	05 Nov 2020 10:29:24
CCV 20HG2060 11/5/20 - 1		92.2% 1.8431	ppb	14362	05 Nov 2020 10:31:55
CCB 20HG2056 11/5/20 - 1		-0.0402	ppb	-557	05 Nov 2020 10:34:24
VJ31021003 - 1	067-CPWB004SP01-WA-ER0004	0.0672	ppb	294	05 Nov 2020 10:36:55
VQ72243001 - 1	PBW	0.0498	ppb	156	05 Nov 2020 10:39:26
VQ72243002 - 1	LCS	1.8954	ppb	14777	05 Nov 2020 10:41:57
VJ23005004 - 1	16WC1A	0.0038	ppb	-208	05 Nov 2020 10:44:29
VJ23005004MS - 1	16WC1AS	1.7426	ppb	13566	05 Nov 2020 10:47:00
VJ23005004MD - 1	16WC1ASD	1.6011	ppb	12445	05 Nov 2020 10:49:32
VJ23005001 - 1	16C1	-0.0683	ppb	-779	05 Nov 2020 10:52:04
VJ23005002 - 1	16MW8	0.0659	ppb	284	05 Nov 2020 10:54:35
VJ23005003 - 1	16MW9	0.0416	ppb	91	05 Nov 2020 10:57:06
VJ23005005 - 1	16WDUP	0.0474	ppb	137	05 Nov 2020 10:59:37
CCV 20HG2060 11/5/20 - 1		92.7% 1.8547	ppb	14454	05 Nov 2020 11:02:08
CCB 20HG2056 11/5/20 - 1		-0.0431	ppb	-580	05 Nov 2020 11:04:37
VJ23005006 - 1	16WC1B	0.1795	ppb	1184	05 Nov 2020 11:07:08
VJ23005007 - 1	16-2	0.0432	ppb	104	05 Nov 2020 11:09:39
VJ23005008 - 1	16-3	0.0642	ppb	270	05 Nov 2020 11:12:09
VJ23005009 - 1	16-5	0.0495	ppb	154	05 Nov 2020 11:14:40
VJ23005010 - 1	16WC2B	0.0474	ppb	137	05 Nov 2020 11:17:11
VJ23005011 - 1	16SPRING	0.0557	ppb	203	05 Nov 2020 11:19:43
VQ72245001 - 1	PBW	0.0549	ppb	197	05 Nov 2020 11:22:14
VQ72245002 - 1	LCS	2.0070	ppb	15661	05 Nov 2020 11:24:46
VJ28058002 - 1	CMR-MW95-201026	0.0696	ppb	313	05 Nov 2020 11:27:19
VJ28058002MS - 1	CMR-MW95-201026S	2.0809	ppb	16246	05 Nov 2020 11:29:50
CCV 20HG2060 11/5/20 - 1		92.0% 1.8390	ppb	14330	05 Nov 2020 11:32:20
CCB 20HG2056 11/5/20 - 1		-0.0356	ppb	-520	05 Nov 2020 11:34:50
VJ28058002MD - 1	CMR-MW95-201026SD	2.0037	ppb	15635	05 Nov 2020 11:37:21
VJ28058001 - 1	CMR-MW01-201026	0.0008	ppb	-232	05 Nov 2020 11:39:51
VJ28058003 - 1	CMR-MW96-201026	0.0421	ppb	95	05 Nov 2020 11:42:22
VJ28058004 - 1	CMR-MW85-201026	0.0390	ppb	71	05 Nov 2020 11:44:53
VJ28058006 - 1	CMR-MW55-201026	0.0354	ppb	42	05 Nov 2020 11:47:24
VJ28058007 - 1	CMR-DS01-201026	0.0383	ppb	65	05 Nov 2020 11:49:55
VJ28058008 - 1	CMR-MW65-201027	0.0421	ppb	95	05 Nov 2020 11:52:26
VJ28058009 - 1	CMR-MW93-201027	0.0416	ppb	91	05 Nov 2020 11:54:57
VJ28058010 - 1	CMR-DS02-201027	0.0239	ppb	-49	05 Nov 2020 11:57:29
VJ28058011 - 1	CMR-MW66-201027	0.0297	ppb	-3	05 Nov 2020 12:00:01
CCV 20HG2060 11/5/20 - 1		95.3% 1.9053	ppb	14855	05 Nov 2020 12:02:33
CCB 20HG2056 11/5/20 - 1		-0.0381	ppb	-540	05 Nov 2020 12:05:03
VJ28058012 - 1	CMR-MW67-201027	0.0190	ppb	-88	05 Nov 2020 12:07:33
VJ28058013 - 1	CMR-MW72-201027	0.0110	ppb	-151	05 Nov 2020 12:10:04
VJ28058014 - 1	CMR-MW16-201027	0.0111	ppb	-150	05 Nov 2020 12:12:36
VQ72338001 - 1	PBW	0.0152	ppb	-118	05 Nov 2020 12:15:07
VQ72338002 - 1	LCS	1.9021	ppb	14830	05 Nov 2020 12:17:39

1995-2020

HG4110520A

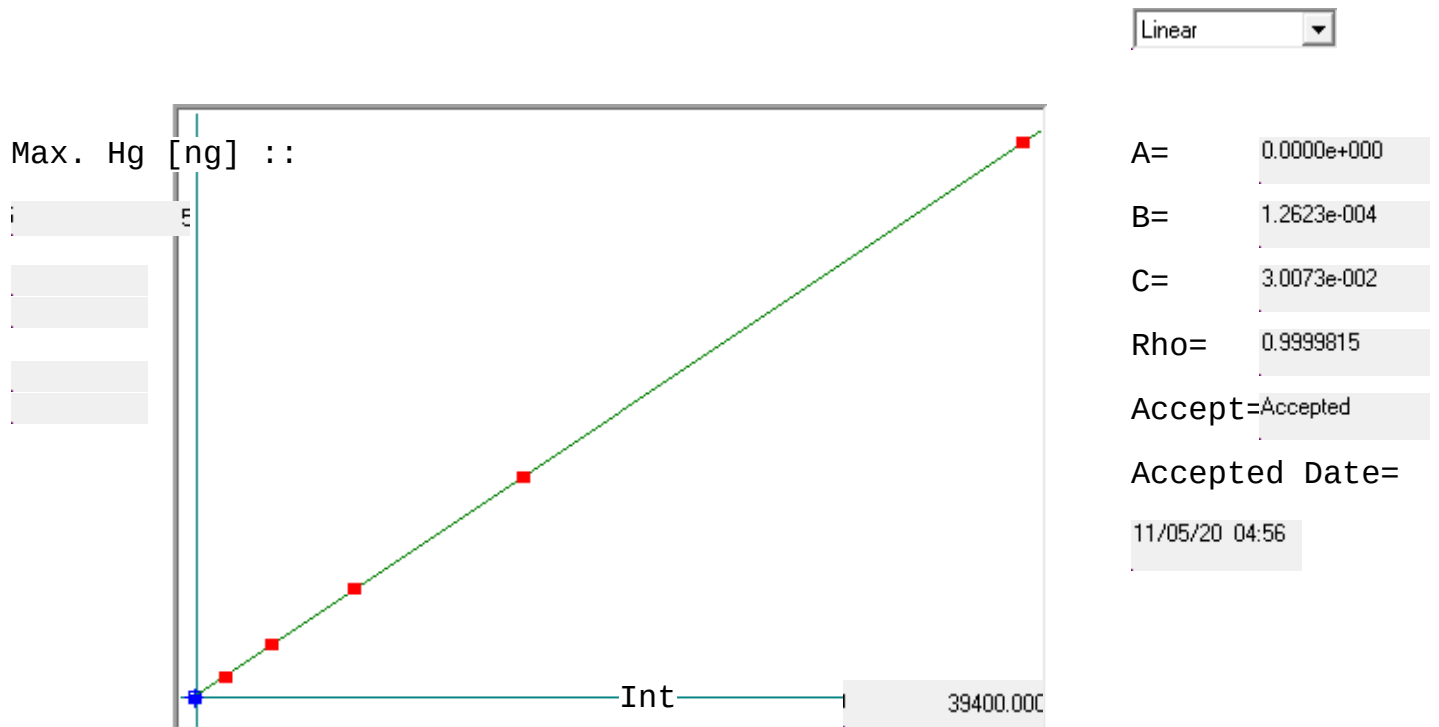
Method: 7470A/245.1

Operator: JAB2

Date of Analysis: 05 Nov 2020 04:40:46

Sample ID	Extended ID	Conc.	Units	μ Abs.	Date
VJ28058005 - 1	CMR-MW49-201026	-0.0319	ppb	-491	05 Nov 2020 12:20:10
VJ28058005MS - 1	CMR-MW49-201026S	1.9663	ppb	15338	05 Nov 2020 12:22:41
VJ28058005MD - 1	CMR-MW49-201026SD	1.9573	ppb	15267	05 Nov 2020 12:25:12
VJ26005001 - 1	L106-1	0.0119	ppb	-144	05 Nov 2020 12:27:44
VJ26005002 - 1	WT-1	0.3757	ppb	2738	05 Nov 2020 12:30:16
CCV 20HG2060 11/5/20 - 1		94.6% 1.8924	ppb	14753	05 Nov 2020 12:32:48
CCB 20HG2056 11/5/20 - 1		-0.0405	ppb	-559	05 Nov 2020 12:35:18
VJ26005003 - 1	WT-2	0.0244	ppb	-45	05 Nov 2020 12:37:48
VJ30053001 - 1	CMR-MW11-201028	0.0119	ppb	-144	05 Nov 2020 12:40:20
VJ30053002 - 1	CMR-MW86-201028	0.0070	ppb	-183	05 Nov 2020 12:42:52
VJ30053003 - 1	CMR-MW91-201028	0.0108	ppb	-153	05 Nov 2020 12:45:23
VJ30053004 - 1	CMR-MW97-201028	0.0062	ppb	-189	05 Nov 2020 12:47:55
VJ30053005 - 1	CMR-MW98-201028	0.0119	ppb	-144	05 Nov 2020 12:50:26
VJ30053006 - 1	CMR-MW99-201028	0.0138	ppb	-129	05 Nov 2020 12:52:58
VJ30053008 - 1	CMR-MW61D-201028	0.0161	ppb	-111	05 Nov 2020 12:55:29
VJ30053009 - 1	CMR-MW61S-201028	0.0193	ppb	-85	05 Nov 2020 12:58:00
VJ30053010 - 1	CMR-MW62-201028	0.0124	ppb	-140	05 Nov 2020 13:00:32
CCV 20HG2060 11/5/20 - 1		92.9% 1.8586	ppb	14485	05 Nov 2020 13:03:03
CCB 20HG2056 11/5/20 - 1		-0.0396	ppb	-552	05 Nov 2020 13:05:33
VJ30053011 - 1	CMR-MW54-201029	0.0124	ppb	-140	05 Nov 2020 13:08:04
VJ30053012 - 1	CMR-MW87-201029	0.0109	ppb	-152	05 Nov 2020 13:10:35
VJ30053013 - 1	CMR-DS03-201028	0.0076	ppb	-178	05 Nov 2020 13:13:07
VK02050014 - 1	MDLv HG (245.1 7470A Share) Aq HG4	0.1975	ppb	1326	05 Nov 2020 13:15:39
VQ72339001 - 1	PBW	0.0119	ppb	-144	05 Nov 2020 13:18:11
VQ72339002 - 1	LCS	1.8545	ppb	14453	05 Nov 2020 13:20:42
VK03004002 - 1	MW-2	1.0292	ppb	7915	05 Nov 2020 13:23:14
VK03004002MS - 1	MW-2S	3.0127	ppb	23628	05 Nov 2020 13:25:45
VK03004002MD - 1	MW-2SD	2.9708	ppb	23296	05 Nov 2020 13:28:16
VK03004001 - 1	MW-1	-0.0695	ppb	-789	05 Nov 2020 13:30:48
CCV 20HG2060 11/5/20 - 1		95.6% 1.9116	ppb	14905	05 Nov 2020 13:33:19
CCB 20HG2056 11/5/20 - 1		-0.0415	ppb	-567	05 Nov 2020 13:35:49
VK03004003 - 1	DUP	0.0138	ppb	-129	05 Nov 2020 13:38:20
VK04036001 - 1	GRD-001	0.0777	ppb	377	05 Nov 2020 13:40:51
VK05020001 - 1	B20024	0.0050	ppb	-199	05 Nov 2020 13:43:23
VK04064001 - 1	MW053P	0.0118	ppb	-145	05 Nov 2020 13:45:54
VQ72329001TC - 1	PBW	0.0009	ppb	-231	05 Nov 2020 13:48:26
VQ72329002TC - 1	LCS	1.8733	ppb	14602	05 Nov 2020 13:50:59
VJ24006001TC - 1	CE-GF-1	-0.0488	ppb	-625	05 Nov 2020 13:53:30
VJ24006001MSTC - 1	CE-GF-1S	1.8621	ppb	14513	05 Nov 2020 13:56:02
VJ24006001MDTC - 1	CE-GF-1SD	1.8441	ppb	14370	05 Nov 2020 13:58:34
VK02028001TC - 1	PD-01 Pool Deck	HIGH	ppb	305504	05 Nov 2020 14:01:05
CCV 20HG2060 11/5/20 - 1		(L)-0.7% -0.0136	ppb	-346	05 Nov 2020 14:03:14
CCB 20HG2056 11/5/20 - 1		-0.0531	ppb	-659	05 Nov 2020 14:05:43
CCV 20HG2060 11/5/20 - 1		94.2% 1.8850	ppb	14694	05 Nov 2020 14:08:14
CCB 20HG2056 11/5/20 - 1		-0.0366	ppb	-528	05 Nov 2020 14:10:44

7470A/245.1



Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4
S0 20HG2056 11/5/20	0.000	0.017	0.017	-101	0.000	-101			
S01 20HG2057 11/5/20	0.200	0.205	0.005	1383	0.0 %	1383			
S02 20HG2058 11/5/20	0.500	0.488	-0.012	3626	0.0 %	3626			
S03 20HG2059 11/5/20	1.000	0.987	-0.013	7581	0.0 %	7581			
S04 20HG2060 11/5/20	2.000	1.999	-0.001	15601	0.0 %	15601			
S05 20HG2061 11/5/20	5.000	5.004	0.004	39400	0.0 %	39400			

Raw Supportive Data



Analyst: JAB2

Level 2 Analyst: BNW

Printed: 11/16/20 1024

Status: Level 2 review released

Prep Batch: 72076

Matrix: ERROR

7470A-P - Mercury Preparation Linked: 7470A,245.1 and 7470A-P Draper

Start Date: 11/04/2020 0545

End Date: 11/04/2020 0745

Digestion Cup ID: 20-2336

Ext Solvent: H2SO4/1:1HNO3/KMnO4/K2S2O8/NaCl-NH2OH-HCl

Reagents Vol. (mL): 2.0, 2.0, 6.0, 3.2, 2.4

Hot Block ID: Hot Block # 11

Chem ID: 20-1913, IM10223-01, IM10243-01, IM10213-01, IM10218-01

Thermometer ID: 1134

Start Temperature (°C): 95

End Temperature (°C): 97

Sample ID	QC Code	Client Sample ID	Run	Analysis Method	Initial Vol. (mL)	Spike ID	Spike Vol. (mL)	Final Vol. (mL)	Holding Time Expires	Analytical Due Date	Comments
VQ72076-004	Standard	Conc = 0.0 mg/L	1	245.1	40.000	20HG2056	0.0	50			CAL0
VQ72076-104	Standard	Conc = 0.00020 mg/L	1	245.1	40.000	20HG2057	0.0	50			11/5/20
VQ72076-204	Standard	Conc = 0.00050 mg/L	1	245.1	40.000	20HG2058	0.0	50			11/5/20
VQ72076-304	Standard	Conc = 0.0010 mg/L	1	245.1	40.000	20HG2059	0.0	50			11/5/20
VQ72076-404	Standard	Conc = 0.0020 mg/L	1	245.1	40.000	20HG2060	0.0	50			11/5/20
VQ72076-504	Standard	Conc = 0.0050 mg/L	1	245.1	40.000	20HG2061	0.0	50			11/5/20
VQ72076-604	Standard	Conc = 0.0 mg/L	1	245.1	40.000	20HG2056	0.0	50			CCB
VQ72076-704	Standard	Conc = 0.0020 mg/L	1	245.1	40.000	20HG2060	0.0	50			CCV
VQ72076-804	Standard	Conc = 0.0 mg/L	1	245.1	40.000	20HG2056	0.0	50			ICB
VQ72076-904	Standard	Conc = 0.0020 mg/L	1	245.1	40.000	20HG2062	0.0	50			ICV

(end of report)

Total Samples: 0

Analyst: JAB2

Level 2 Analyst: BNW

Printed: 11/16/20 1025

Status: Level 2 review released

Prep Batch: 72243

Matrix: Aqueous

7470A-P Draper - Mercury Preparation and 7470A-P

Start Date: 11/05/2020 0550

End Date: 11/05/2020 0750

Digestion Cup ID: 20-2337

Ext Solvent: H2SO4/1:1HNO3/KMnO4/K2S2O8/NaCl-NH2OH-HCl

Reagents Vol. (mL): 2.0, 2.0, 6.0, 3.2, 2.4

Hot Block ID: Hot Block # 11

Chem ID: 20-1913, IM10223-01, IM10246-01, IM10253-01, IM10218-01

Thermometer ID: 1134

Start Temperature (°C): 94

End Temperature (°C): 95

Sample ID	QC Code	Client Sample ID	Run	Analysis Method	Initial Vol. (mL)	Spike ID	Spike Vol. (mL)	Final Vol. (mL)	Holding Time Expires	Analytical Due Date	Comments
VQ72243-001	MB	PBW	1	7470A	40.000		0.0	50			Pipet ID: 388
VQ72243-002	LCS	LCS	1	7470A	40.000	20HG2054	0.8	50			
VJ23005-004	Sample	16WC1A	1	7470A	40.000		0.0	50	11/19/2020 2359	11/06/2020	
VJ23005-004MS MS		16WC1AS	1	7470A	40.000	20HG2054	0.8	50			
VJ23005-004MD MSD		16WC1ASD	1	7470A	40.000	20HG2054	0.8	50			
VJ23005-001	Sample	16C1	1	7470A	40.000		0.0	50	11/19/2020 2359	11/06/2020	
VJ23005-002	Sample	16MW8	1	7470A	40.000		0.0	50	11/18/2020 2359	11/06/2020	
VJ23005-003	Sample	16MW9	1	7470A	40.000		0.0	50	11/19/2020 2359	11/06/2020	
VJ23005-005	Sample	16WDUP	1	7470A	40.000		0.0	50	11/19/2020 2359	11/06/2020	
VJ23005-006	Sample	16WC1B	1	7470A	40.000		0.0	50	11/19/2020 2359	11/06/2020	
VJ23005-007	Sample	16-2	1	7470A	40.000		0.0	50	11/18/2020 2359	11/06/2020	
VJ23005-008	Sample	16-3	1	7470A	40.000		0.0	50	11/18/2020 2359	11/06/2020	
VJ23005-009	Sample	16-5	1	7470A	40.000		0.0	50	11/18/2020 2359	11/06/2020	
VJ23005-010	Sample	16WC2B	1	7470A	40.000		0.0	50	11/18/2020 2359	11/06/2020	
VJ23005-011	Sample	16SPRING	1	7470A	40.000		0.0	50	11/18/2020 2359	11/06/2020	
VQ72243-004	Standard	Conc = 0.0 mg/L	1	7470A	40.000		0.0	50			PB: 72076

(end of report)

Total Samples: 11

ANALYTICAL REPORT

Job Number: 410-18116-1

Job Description: RFAAP, Radford, VA HWMU16

For:

Draper Aden Associates, Inc.
2206 South Main Street
Blacksburg, VA 24060
Attention: Janet Frazier



Approved for release.
Barbara A Weyandt
Project Manager
11/2/2020 7:19 PM

Barbara A Weyandt, Project Manager
2425 New Holland Pike, Lancaster, PA, 17601
(717)556-7264
barbaraweyandt@eurofinsus.com
11/02/2020

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Job Number: 410-18116-1

Job Description: RFAAP, Radford, VA HWMU16

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.

- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

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Definitions/Glossary

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
410-18116-1

Receipt

The samples were received on 10/23/2020 10:02 AM; the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.3°C and 1.3°C

Receipt Exceptions

The container count for the following samples did not match the information listed on the Chain-of-Custody (COC): 16C1 (410-18116-1) and 16MW9 (410-18116-3). The lab received 5 containers per sample, while the COC lists 6.

The container count for the following samples did not match the information listed on the Chain-of-Custody (COC): Trip Blank1 (410-18116-12) and Trip Blank2 (410-18116-13). The lab received 2 containers per sample, while the COC lists 3.

GC/MS VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Client Sample ID: 16C1

Lab Sample ID: 410-18116-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
1,1-Dichloroethane	6.3		1.0		ug/L		1		8260C LL	Total/NA
Chloroethane	4.6		1.0		ug/L		1		8260C LL	Total/NA
Methoxymethane	14		13		ug/L		1		8260C LL	Total/NA
Methylene Chloride	1.3		1.0		ug/L		1		8260C LL	Total/NA
Ethyl ether - DL	43		31		ug/L		2.5		8260C LL	Total/NA

Client Sample ID: 16MW8

Lab Sample ID: 410-18116-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Ethyl ether	15		13		ug/L		1		8260C LL	Total/NA

Client Sample ID: 16MW9

Lab Sample ID: 410-18116-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
1,1-Dichloroethane	6.5		1.0		ug/L		1		8260C LL	Total/NA
Chloroethane	2.2		1.0		ug/L		1		8260C LL	Total/NA
Ethyl ether - DL	84		50		ug/L		4		8260C LL	Total/NA

Client Sample ID: 16WC1A

Lab Sample ID: 410-18116-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
1,1-Dichloroethane	4.3		1.0		ug/L		1		8260C LL	Total/NA
Chloroethane	1.8		1.0		ug/L		1		8260C LL	Total/NA
Ethyl ether	20		13		ug/L		1		8260C LL	Total/NA

Client Sample ID: 16WDUP

Lab Sample ID: 410-18116-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
1,1-Dichloroethane	4.4		1.0		ug/L		1		8260C LL	Total/NA
Chloroethane	1.9		1.0		ug/L		1		8260C LL	Total/NA
Ethyl ether	21		13		ug/L		1		8260C LL	Total/NA

Client Sample ID: 16WC1B

Lab Sample ID: 410-18116-6

No Detections.

Client Sample ID: 16-2

Lab Sample ID: 410-18116-7

No Detections.

Client Sample ID: 16-3

Lab Sample ID: 410-18116-8

No Detections.

Client Sample ID: 16-5

Lab Sample ID: 410-18116-9

No Detections.

Client Sample ID: 16WC2B

Lab Sample ID: 410-18116-10

No Detections.

Client Sample ID: 16SPRING

Lab Sample ID: 410-18116-11

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Detection Summary

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Client Sample ID: Trip Blank1

Lab Sample ID: 410-18116-12

☐ No Detections.

Client Sample ID: Trip Blank2

Lab Sample ID: 410-18116-13

☐ No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Client Sample ID: 16C1

Lab Sample ID: 410-18116-1

Date Collected: 10/22/20 10:55

Matrix: Ground Water

Date Received: 10/23/20 10:02

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			10/28/20 12:43	1
1,1-Dichloroethane	6.3		1.0		ug/L			10/28/20 12:43	1
1,1-Dichloroethene	ND		1.0		ug/L			10/28/20 12:43	1
2-Butanone	ND		10		ug/L			10/28/20 12:43	1
Benzene	ND		1.0		ug/L			10/28/20 12:43	1
Carbon tetrachloride	ND		1.0		ug/L			10/28/20 12:43	1
Chloroethane	4.6		1.0		ug/L			10/28/20 12:43	1
Chloromethane	ND		1.0		ug/L			10/28/20 12:43	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/28/20 12:43	1
Methoxymethane	14		13		ug/L			10/28/20 12:43	1
Ethylbenzene	ND		1.0		ug/L			10/28/20 12:43	1
Freon 113	ND		1.0		ug/L			10/28/20 12:43	1
Methylene Chloride	1.3		1.0		ug/L			10/28/20 12:43	1
Tetrachloroethene	ND		1.0		ug/L			10/28/20 12:43	1
Tetrahydrofuran	ND		25		ug/L			10/28/20 12:43	1
Toluene	ND		1.0		ug/L			10/28/20 12:43	1
Trichloroethene	ND		1.0		ug/L			10/28/20 12:43	1
Trichlorofluoromethane	ND		1.0		ug/L			10/28/20 12:43	1
Vinyl chloride	ND		1.0		ug/L			10/28/20 12:43	1
Xylenes, Total	ND		3.0		ug/L			10/28/20 12:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		80 - 120		10/28/20 12:43	1
Dibromofluoromethane (Surr)	114		80 - 120		10/28/20 12:43	1
4-Bromofluorobenzene (Surr)	95		80 - 120		10/28/20 12:43	1
Toluene-d8 (Surr)	95		80 - 120		10/28/20 12:43	1

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	43		31		ug/L			10/28/20 13:04	2.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		80 - 120		10/28/20 13:04	2.5
Dibromofluoromethane (Surr)	114		80 - 120		10/28/20 13:04	2.5
4-Bromofluorobenzene (Surr)	95		80 - 120		10/28/20 13:04	2.5
Toluene-d8 (Surr)	96		80 - 120		10/28/20 13:04	2.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		10		ug/L		10/29/20 09:00	10/30/20 16:26	1
2,6-Dinitrotoluene	ND		10		ug/L		10/29/20 09:00	10/30/20 16:26	1
Diethyl phthalate	ND		5.0		ug/L		10/29/20 09:00	10/30/20 16:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	79		44 - 102	10/29/20 09:00	10/30/20 16:26	1
Nitrobenzene-d5 (Surr)	71		38 - 113	10/29/20 09:00	10/30/20 16:26	1
p-Terphenyl-d14 (Surr)	96		34 - 128	10/29/20 09:00	10/30/20 16:26	1

Client Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Client Sample ID: 16MW8

Date Collected: 10/21/20 10:35

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-2

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			10/28/20 13:26	1
1,1-Dichloroethane	ND		1.0		ug/L			10/28/20 13:26	1
1,1-Dichloroethene	ND		1.0		ug/L			10/28/20 13:26	1
2-Butanone	ND		10		ug/L			10/28/20 13:26	1
Benzene	ND		1.0		ug/L			10/28/20 13:26	1
Carbon tetrachloride	ND		1.0		ug/L			10/28/20 13:26	1
Chloroethane	ND		1.0		ug/L			10/28/20 13:26	1
Chloromethane	ND		1.0		ug/L			10/28/20 13:26	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/28/20 13:26	1
Methoxymethane	ND		13		ug/L			10/28/20 13:26	1
Ethyl ether	15		13		ug/L			10/28/20 13:26	1
Ethylbenzene	ND		1.0		ug/L			10/28/20 13:26	1
Freon 113	ND		1.0		ug/L			10/28/20 13:26	1
Methylene Chloride	ND		1.0		ug/L			10/28/20 13:26	1
Tetrachloroethene	ND		1.0		ug/L			10/28/20 13:26	1
Tetrahydrofuran	ND		25		ug/L			10/28/20 13:26	1
Toluene	ND		1.0		ug/L			10/28/20 13:26	1
Trichloroethene	ND		1.0		ug/L			10/28/20 13:26	1
Trichlorofluoromethane	ND		1.0		ug/L			10/28/20 13:26	1
Vinyl chloride	ND		1.0		ug/L			10/28/20 13:26	1
Xylenes, Total	ND		3.0		ug/L			10/28/20 13:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		80 - 120		10/28/20 13:26	1
Dibromofluoromethane (Surr)	113		80 - 120		10/28/20 13:26	1
4-Bromofluorobenzene (Surr)	96		80 - 120		10/28/20 13:26	1
Toluene-d8 (Surr)	95		80 - 120		10/28/20 13:26	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		10		ug/L		10/28/20 09:30	10/28/20 19:32	1
2,6-Dinitrotoluene	ND		10		ug/L		10/28/20 09:30	10/28/20 19:32	1
Diethyl phthalate	ND		5.0		ug/L		10/28/20 09:30	10/28/20 19:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	80		44 - 102	10/28/20 09:30	10/28/20 19:32	1
Nitrobenzene-d5 (Surr)	85		38 - 113	10/28/20 09:30	10/28/20 19:32	1
p-Terphenyl-d14 (Surr)	50		34 - 128	10/28/20 09:30	10/28/20 19:32	1

Client Sample ID: 16MW9

Date Collected: 10/22/20 10:20

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-3

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			10/28/20 13:47	1
1,1-Dichloroethane	6.5		1.0		ug/L			10/28/20 13:47	1
1,1-Dichloroethene	ND		1.0		ug/L			10/28/20 13:47	1
2-Butanone	ND		10		ug/L			10/28/20 13:47	1
Benzene	ND		1.0		ug/L			10/28/20 13:47	1
Carbon tetrachloride	ND		1.0		ug/L			10/28/20 13:47	1

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Client Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Client Sample ID: 16MW9

Date Collected: 10/22/20 10:20

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-3

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	2.2		1.0		ug/L			10/28/20 13:47	1
Chloromethane	ND		1.0		ug/L			10/28/20 13:47	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/28/20 13:47	1
Methoxymethane	ND		13		ug/L			10/28/20 13:47	1
Ethylbenzene	ND		1.0		ug/L			10/28/20 13:47	1
Freon 113	ND		1.0		ug/L			10/28/20 13:47	1
Methylene Chloride	ND		1.0		ug/L			10/28/20 13:47	1
Tetrachloroethene	ND		1.0		ug/L			10/28/20 13:47	1
Tetrahydrofuran	ND		25		ug/L			10/28/20 13:47	1
Toluene	ND		1.0		ug/L			10/28/20 13:47	1
Trichloroethene	ND		1.0		ug/L			10/28/20 13:47	1
Trichlorofluoromethane	ND		1.0		ug/L			10/28/20 13:47	1
Vinyl chloride	ND		1.0		ug/L			10/28/20 13:47	1
Xylenes, Total	ND		3.0		ug/L			10/28/20 13:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		80 - 120		10/28/20 13:47	1
Dibromofluoromethane (Surr)	112		80 - 120		10/28/20 13:47	1
4-Bromofluorobenzene (Surr)	95		80 - 120		10/28/20 13:47	1
Toluene-d8 (Surr)	97		80 - 120		10/28/20 13:47	1

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	84		50		ug/L			10/28/20 14:09	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		80 - 120		10/28/20 14:09	4
Dibromofluoromethane (Surr)	114		80 - 120		10/28/20 14:09	4
4-Bromofluorobenzene (Surr)	94		80 - 120		10/28/20 14:09	4
Toluene-d8 (Surr)	96		80 - 120		10/28/20 14:09	4

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		10		ug/L		10/29/20 09:00	10/30/20 16:56	1
2,6-Dinitrotoluene	ND		10		ug/L		10/29/20 09:00	10/30/20 16:56	1
Diethyl phthalate	ND		5.0		ug/L		10/29/20 09:00	10/30/20 16:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	72		44 - 102	10/29/20 09:00	10/30/20 16:56	1
Nitrobenzene-d5 (Surr)	77		38 - 113	10/29/20 09:00	10/30/20 16:56	1
p-Terphenyl-d14 (Surr)	85		34 - 128	10/29/20 09:00	10/30/20 16:56	1

Client Sample ID: 16WC1A

Date Collected: 10/22/20 09:25

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-4

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			10/28/20 14:31	1
1,1-Dichloroethane	4.3		1.0		ug/L			10/28/20 14:31	1
1,1-Dichloroethene	ND		1.0		ug/L			10/28/20 14:31	1

Client Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Client Sample ID: 16WC1A

Date Collected: 10/22/20 09:25

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-4

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		10		ug/L			10/28/20 14:31	1
Benzene	ND		1.0		ug/L			10/28/20 14:31	1
Carbon tetrachloride	ND		1.0		ug/L			10/28/20 14:31	1
Chloroethane	1.8		1.0		ug/L			10/28/20 14:31	1
Chloromethane	ND		1.0		ug/L			10/28/20 14:31	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/28/20 14:31	1
Methoxymethane	ND	F1	13		ug/L			10/28/20 14:31	1
Ethyl ether	20		13		ug/L			10/28/20 14:31	1
Ethylbenzene	ND		1.0		ug/L			10/28/20 14:31	1
Freon 113	ND		1.0		ug/L			10/28/20 14:31	1
Methylene Chloride	ND		1.0		ug/L			10/28/20 14:31	1
Tetrachloroethene	ND		1.0		ug/L			10/28/20 14:31	1
Tetrahydrofuran	ND		25		ug/L			10/28/20 14:31	1
Toluene	ND		1.0		ug/L			10/28/20 14:31	1
Trichloroethene	ND		1.0		ug/L			10/28/20 14:31	1
Trichlorofluoromethane	ND		1.0		ug/L			10/28/20 14:31	1
Vinyl chloride	ND		1.0		ug/L			10/28/20 14:31	1
Xylenes, Total	ND		3.0		ug/L			10/28/20 14:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		80 - 120		10/28/20 14:31	1
Dibromofluoromethane (Surr)	112		80 - 120		10/28/20 14:31	1
4-Bromofluorobenzene (Surr)	94		80 - 120		10/28/20 14:31	1
Toluene-d8 (Surr)	95		80 - 120		10/28/20 14:31	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		11		ug/L		10/29/20 09:00	10/30/20 04:04	1
2,6-Dinitrotoluene	ND		11		ug/L		10/29/20 09:00	10/30/20 04:04	1
Diethyl phthalate	ND		5.3		ug/L		10/29/20 09:00	10/30/20 04:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	65		44 - 102	10/29/20 09:00	10/30/20 04:04	1
Nitrobenzene-d5 (Surr)	66		38 - 113	10/29/20 09:00	10/30/20 04:04	1
p-Terphenyl-d14 (Surr)	46		34 - 128	10/29/20 09:00	10/30/20 04:04	1

Client Sample ID: 16WDUP

Date Collected: 10/22/20 09:35

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-5

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			10/28/20 16:20	1
1,1-Dichloroethane	4.4		1.0		ug/L			10/28/20 16:20	1
1,1-Dichloroethene	ND		1.0		ug/L			10/28/20 16:20	1
2-Butanone	ND		10		ug/L			10/28/20 16:20	1
Benzene	ND		1.0		ug/L			10/28/20 16:20	1
Carbon tetrachloride	ND		1.0		ug/L			10/28/20 16:20	1
Chloroethane	1.9		1.0		ug/L			10/28/20 16:20	1
Chloromethane	ND		1.0		ug/L			10/28/20 16:20	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/28/20 16:20	1

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Client Sample ID: 16WDUP

Date Collected: 10/22/20 09:35

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-5

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methoxymethane	ND		13		ug/L			10/28/20 16:20	1
Ethyl ether	21		13		ug/L			10/28/20 16:20	1
Ethylbenzene	ND		1.0		ug/L			10/28/20 16:20	1
Freon 113	ND		1.0		ug/L			10/28/20 16:20	1
Methylene Chloride	ND		1.0		ug/L			10/28/20 16:20	1
Tetrachloroethene	ND		1.0		ug/L			10/28/20 16:20	1
Tetrahydrofuran	ND		25		ug/L			10/28/20 16:20	1
Toluene	ND		1.0		ug/L			10/28/20 16:20	1
Trichloroethene	ND		1.0		ug/L			10/28/20 16:20	1
Trichlorofluoromethane	ND		1.0		ug/L			10/28/20 16:20	1
Vinyl chloride	ND		1.0		ug/L			10/28/20 16:20	1
Xylenes, Total	ND		3.0		ug/L			10/28/20 16:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		80 - 120		10/28/20 16:20	1
Dibromofluoromethane (Surr)	115		80 - 120		10/28/20 16:20	1
4-Bromofluorobenzene (Surr)	96		80 - 120		10/28/20 16:20	1
Toluene-d8 (Surr)	95		80 - 120		10/28/20 16:20	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		10		ug/L		10/29/20 09:00	10/30/20 17:26	1
2,6-Dinitrotoluene	ND		10		ug/L		10/29/20 09:00	10/30/20 17:26	1
Diethyl phthalate	ND		5.0		ug/L		10/29/20 09:00	10/30/20 17:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	72		44 - 102	10/29/20 09:00	10/30/20 17:26	1
Nitrobenzene-d5 (Surr)	76		38 - 113	10/29/20 09:00	10/30/20 17:26	1
p-Terphenyl-d14 (Surr)	54		34 - 128	10/29/20 09:00	10/30/20 17:26	1

Client Sample ID: 16WC1B

Date Collected: 10/22/20 08:40

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-6

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			10/28/20 16:42	1
1,1-Dichloroethane	ND		1.0		ug/L			10/28/20 16:42	1
1,1-Dichloroethene	ND		1.0		ug/L			10/28/20 16:42	1
2-Butanone	ND		10		ug/L			10/28/20 16:42	1
Benzene	ND		1.0		ug/L			10/28/20 16:42	1
Carbon tetrachloride	ND		1.0		ug/L			10/28/20 16:42	1
Chloroethane	ND		1.0		ug/L			10/28/20 16:42	1
Chloromethane	ND		1.0		ug/L			10/28/20 16:42	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/28/20 16:42	1
Methoxymethane	ND		13		ug/L			10/28/20 16:42	1
Ethyl ether	ND		13		ug/L			10/28/20 16:42	1
Ethylbenzene	ND		1.0		ug/L			10/28/20 16:42	1
Freon 113	ND		1.0		ug/L			10/28/20 16:42	1
Methylene Chloride	ND		1.0		ug/L			10/28/20 16:42	1
Tetrachloroethene	ND		1.0		ug/L			10/28/20 16:42	1

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Client Sample ID: 16WC1B

Date Collected: 10/22/20 08:40

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-6

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	ND		25		ug/L			10/28/20 16:42	1
Toluene	ND		1.0		ug/L			10/28/20 16:42	1
Trichloroethene	ND		1.0		ug/L			10/28/20 16:42	1
Trichlorofluoromethane	ND		1.0		ug/L			10/28/20 16:42	1
Vinyl chloride	ND		1.0		ug/L			10/28/20 16:42	1
Xylenes, Total	ND		3.0		ug/L			10/28/20 16:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		80 - 120		10/28/20 16:42	1
Dibromofluoromethane (Surr)	115		80 - 120		10/28/20 16:42	1
4-Bromofluorobenzene (Surr)	95		80 - 120		10/28/20 16:42	1
Toluene-d8 (Surr)	95		80 - 120		10/28/20 16:42	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		10		ug/L		10/29/20 09:00	10/30/20 17:56	1
2,6-Dinitrotoluene	ND		10		ug/L		10/29/20 09:00	10/30/20 17:56	1
Diethyl phthalate	ND		5.0		ug/L		10/29/20 09:00	10/30/20 17:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	76		44 - 102	10/29/20 09:00	10/30/20 17:56	1
Nitrobenzene-d5 (Surr)	75		38 - 113	10/29/20 09:00	10/30/20 17:56	1
p-Terphenyl-d14 (Surr)	36		34 - 128	10/29/20 09:00	10/30/20 17:56	1

Client Sample ID: 16-2

Date Collected: 10/21/20 09:55

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-7

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			10/28/20 17:03	1
1,1-Dichloroethane	ND		1.0		ug/L			10/28/20 17:03	1
1,1-Dichloroethene	ND		1.0		ug/L			10/28/20 17:03	1
2-Butanone	ND		10		ug/L			10/28/20 17:03	1
Benzene	ND		1.0		ug/L			10/28/20 17:03	1
Carbon tetrachloride	ND		1.0		ug/L			10/28/20 17:03	1
Chloroethane	ND		1.0		ug/L			10/28/20 17:03	1
Chloromethane	ND		1.0		ug/L			10/28/20 17:03	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/28/20 17:03	1
Methoxymethane	ND		13		ug/L			10/28/20 17:03	1
Ethyl ether	ND		13		ug/L			10/28/20 17:03	1
Ethylbenzene	ND		1.0		ug/L			10/28/20 17:03	1
Freon 113	ND		1.0		ug/L			10/28/20 17:03	1
Methylene Chloride	ND		1.0		ug/L			10/28/20 17:03	1
Tetrachloroethene	ND		1.0		ug/L			10/28/20 17:03	1
Tetrahydrofuran	ND		25		ug/L			10/28/20 17:03	1
Toluene	ND		1.0		ug/L			10/28/20 17:03	1
Trichloroethene	ND		1.0		ug/L			10/28/20 17:03	1
Trichlorofluoromethane	ND		1.0		ug/L			10/28/20 17:03	1
Vinyl chloride	ND		1.0		ug/L			10/28/20 17:03	1
Xylenes, Total	ND		3.0		ug/L			10/28/20 17:03	1

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Client Sample ID: 16-2

Date Collected: 10/21/20 09:55

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-7

Matrix: Ground Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		80 - 120		10/28/20 17:03	1
Dibromofluoromethane (Surr)	114		80 - 120		10/28/20 17:03	1
4-Bromofluorobenzene (Surr)	95		80 - 120		10/28/20 17:03	1
Toluene-d8 (Surr)	95		80 - 120		10/28/20 17:03	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		10		ug/L		10/28/20 09:30	10/28/20 20:01	1
2,6-Dinitrotoluene	ND		10		ug/L		10/28/20 09:30	10/28/20 20:01	1
Diethyl phthalate	ND		5.0		ug/L		10/28/20 09:30	10/28/20 20:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	67		44 - 102	10/28/20 09:30	10/28/20 20:01	1
Nitrobenzene-d5 (Surr)	74		38 - 113	10/28/20 09:30	10/28/20 20:01	1
p-Terphenyl-d14 (Surr)	87		34 - 128	10/28/20 09:30	10/28/20 20:01	1

Client Sample ID: 16-3

Date Collected: 10/21/20 11:15

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-8

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			10/28/20 17:25	1
1,1-Dichloroethane	ND		1.0		ug/L			10/28/20 17:25	1
1,1-Dichloroethene	ND		1.0		ug/L			10/28/20 17:25	1
2-Butanone	ND		10		ug/L			10/28/20 17:25	1
Benzene	ND		1.0		ug/L			10/28/20 17:25	1
Carbon tetrachloride	ND		1.0		ug/L			10/28/20 17:25	1
Chloroethane	ND		1.0		ug/L			10/28/20 17:25	1
Chloromethane	ND		1.0		ug/L			10/28/20 17:25	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/28/20 17:25	1
Methoxymethane	ND		13		ug/L			10/28/20 17:25	1
Ethyl ether	ND		13		ug/L			10/28/20 17:25	1
Ethylbenzene	ND		1.0		ug/L			10/28/20 17:25	1
Freon 113	ND		1.0		ug/L			10/28/20 17:25	1
Methylene Chloride	ND		1.0		ug/L			10/28/20 17:25	1
Tetrachloroethene	ND		1.0		ug/L			10/28/20 17:25	1
Tetrahydrofuran	ND		25		ug/L			10/28/20 17:25	1
Toluene	ND		1.0		ug/L			10/28/20 17:25	1
Trichloroethene	ND		1.0		ug/L			10/28/20 17:25	1
Trichlorofluoromethane	ND		1.0		ug/L			10/28/20 17:25	1
Vinyl chloride	ND		1.0		ug/L			10/28/20 17:25	1
Xylenes, Total	ND		3.0		ug/L			10/28/20 17:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		80 - 120		10/28/20 17:25	1
Dibromofluoromethane (Surr)	115		80 - 120		10/28/20 17:25	1
4-Bromofluorobenzene (Surr)	95		80 - 120		10/28/20 17:25	1
Toluene-d8 (Surr)	95		80 - 120		10/28/20 17:25	1

Client Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Client Sample ID: 16-3

Date Collected: 10/21/20 11:15

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-8

Matrix: Ground Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		10		ug/L		10/28/20 09:30	10/28/20 20:30	1
2,6-Dinitrotoluene	ND		10		ug/L		10/28/20 09:30	10/28/20 20:30	1
Diethyl phthalate	ND		5.0		ug/L		10/28/20 09:30	10/28/20 20:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	77		44 - 102				10/28/20 09:30	10/28/20 20:30	1
Nitrobenzene-d5 (Surr)	84		38 - 113				10/28/20 09:30	10/28/20 20:30	1
p-Terphenyl-d14 (Surr)	86		34 - 128				10/28/20 09:30	10/28/20 20:30	1

Client Sample ID: 16-5

Date Collected: 10/21/20 08:30

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-9

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			10/28/20 17:47	1
1,1-Dichloroethane	ND		1.0		ug/L			10/28/20 17:47	1
1,1-Dichloroethene	ND		1.0		ug/L			10/28/20 17:47	1
2-Butanone	ND		10		ug/L			10/28/20 17:47	1
Benzene	ND		1.0		ug/L			10/28/20 17:47	1
Carbon tetrachloride	ND		1.0		ug/L			10/28/20 17:47	1
Chloroethane	ND		1.0		ug/L			10/28/20 17:47	1
Chloromethane	ND		1.0		ug/L			10/28/20 17:47	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/28/20 17:47	1
Methoxymethane	ND		13		ug/L			10/28/20 17:47	1
Ethyl ether	ND		13		ug/L			10/28/20 17:47	1
Ethylbenzene	ND		1.0		ug/L			10/28/20 17:47	1
Freon 113	ND		1.0		ug/L			10/28/20 17:47	1
Methylene Chloride	ND		1.0		ug/L			10/28/20 17:47	1
Tetrachloroethene	ND		1.0		ug/L			10/28/20 17:47	1
Tetrahydrofuran	ND		25		ug/L			10/28/20 17:47	1
Toluene	ND		1.0		ug/L			10/28/20 17:47	1
Trichloroethene	ND		1.0		ug/L			10/28/20 17:47	1
Trichlorofluoromethane	ND		1.0		ug/L			10/28/20 17:47	1
Vinyl chloride	ND		1.0		ug/L			10/28/20 17:47	1
Xylenes, Total	ND		3.0		ug/L			10/28/20 17:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		80 - 120					10/28/20 17:47	1
Dibromofluoromethane (Surr)	116		80 - 120					10/28/20 17:47	1
4-Bromofluorobenzene (Surr)	94		80 - 120					10/28/20 17:47	1
Toluene-d8 (Surr)	94		80 - 120					10/28/20 17:47	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		10		ug/L		10/28/20 09:30	10/28/20 20:59	1
2,6-Dinitrotoluene	ND		10		ug/L		10/28/20 09:30	10/28/20 20:59	1
Diethyl phthalate	ND		5.0		ug/L		10/28/20 09:30	10/28/20 20:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	75		44 - 102				10/28/20 09:30	10/28/20 20:59	1

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Client Sample ID: 16-5

Date Collected: 10/21/20 08:30

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-9

Matrix: Ground Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	84		38 - 113	10/28/20 09:30	10/28/20 20:59	1
p-Terphenyl-d14 (Surr)	90		34 - 128	10/28/20 09:30	10/28/20 20:59	1

Client Sample ID: 16WC2B

Date Collected: 10/21/20 09:20

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-10

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			10/28/20 18:08	1
1,1-Dichloroethane	ND		1.0		ug/L			10/28/20 18:08	1
1,1-Dichloroethene	ND		1.0		ug/L			10/28/20 18:08	1
2-Butanone	ND		10		ug/L			10/28/20 18:08	1
Benzene	ND		1.0		ug/L			10/28/20 18:08	1
Carbon tetrachloride	ND		1.0		ug/L			10/28/20 18:08	1
Chloroethane	ND		1.0		ug/L			10/28/20 18:08	1
Chloromethane	ND		1.0		ug/L			10/28/20 18:08	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/28/20 18:08	1
Methoxymethane	ND		13		ug/L			10/28/20 18:08	1
Ethyl ether	ND		13		ug/L			10/28/20 18:08	1
Ethylbenzene	ND		1.0		ug/L			10/28/20 18:08	1
Freon 113	ND		1.0		ug/L			10/28/20 18:08	1
Methylene Chloride	ND		1.0		ug/L			10/28/20 18:08	1
Tetrachloroethene	ND		1.0		ug/L			10/28/20 18:08	1
Tetrahydrofuran	ND		25		ug/L			10/28/20 18:08	1
Toluene	ND		1.0		ug/L			10/28/20 18:08	1
Trichloroethene	ND		1.0		ug/L			10/28/20 18:08	1
Trichlorofluoromethane	ND		1.0		ug/L			10/28/20 18:08	1
Vinyl chloride	ND		1.0		ug/L			10/28/20 18:08	1
Xylenes, Total	ND		3.0		ug/L			10/28/20 18:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		80 - 120		10/28/20 18:08	1
Dibromofluoromethane (Surr)	116		80 - 120		10/28/20 18:08	1
4-Bromofluorobenzene (Surr)	93		80 - 120		10/28/20 18:08	1
Toluene-d8 (Surr)	94		80 - 120		10/28/20 18:08	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		10		ug/L		10/28/20 09:30	10/28/20 21:28	1
2,6-Dinitrotoluene	ND		10		ug/L		10/28/20 09:30	10/28/20 21:28	1
Diethyl phthalate	ND		5.0		ug/L		10/28/20 09:30	10/28/20 21:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	73		44 - 102	10/28/20 09:30	10/28/20 21:28	1
Nitrobenzene-d5 (Surr)	78		38 - 113	10/28/20 09:30	10/28/20 21:28	1
p-Terphenyl-d14 (Surr)	89		34 - 128	10/28/20 09:30	10/28/20 21:28	1

Client Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Client Sample ID: 16SPRING

Date Collected: 10/21/20 08:40

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-11

Matrix: Ground Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			10/28/20 18:30	1
1,1-Dichloroethane	ND		1.0		ug/L			10/28/20 18:30	1
1,1-Dichloroethene	ND		1.0		ug/L			10/28/20 18:30	1
2-Butanone	ND		10		ug/L			10/28/20 18:30	1
Benzene	ND		1.0		ug/L			10/28/20 18:30	1
Carbon tetrachloride	ND		1.0		ug/L			10/28/20 18:30	1
Chloroethane	ND		1.0		ug/L			10/28/20 18:30	1
Chloromethane	ND		1.0		ug/L			10/28/20 18:30	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/28/20 18:30	1
Methoxymethane	ND		13		ug/L			10/28/20 18:30	1
Ethyl ether	ND		13		ug/L			10/28/20 18:30	1
Ethylbenzene	ND		1.0		ug/L			10/28/20 18:30	1
Freon 113	ND		1.0		ug/L			10/28/20 18:30	1
Methylene Chloride	ND		1.0		ug/L			10/28/20 18:30	1
Tetrachloroethene	ND		1.0		ug/L			10/28/20 18:30	1
Tetrahydrofuran	ND		25		ug/L			10/28/20 18:30	1
Toluene	ND		1.0		ug/L			10/28/20 18:30	1
Trichloroethene	ND		1.0		ug/L			10/28/20 18:30	1
Trichlorofluoromethane	ND		1.0		ug/L			10/28/20 18:30	1
Vinyl chloride	ND		1.0		ug/L			10/28/20 18:30	1
Xylenes, Total	ND		3.0		ug/L			10/28/20 18:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		80 - 120		10/28/20 18:30	1
Dibromofluoromethane (Surr)	114		80 - 120		10/28/20 18:30	1
4-Bromofluorobenzene (Surr)	94		80 - 120		10/28/20 18:30	1
Toluene-d8 (Surr)	96		80 - 120		10/28/20 18:30	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		10		ug/L		10/28/20 09:30	10/28/20 21:57	1
2,6-Dinitrotoluene	ND		10		ug/L		10/28/20 09:30	10/28/20 21:57	1
Diethyl phthalate	ND		5.1		ug/L		10/28/20 09:30	10/28/20 21:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	77		44 - 102	10/28/20 09:30	10/28/20 21:57	1
Nitrobenzene-d5 (Surr)	82		38 - 113	10/28/20 09:30	10/28/20 21:57	1
p-Terphenyl-d14 (Surr)	91		34 - 128	10/28/20 09:30	10/28/20 21:57	1

Client Sample ID: Trip Blank1

Date Collected: 10/21/20 00:00

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-12

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			10/28/20 11:37	1
1,1-Dichloroethane	ND		1.0		ug/L			10/28/20 11:37	1
1,1-Dichloroethene	ND		1.0		ug/L			10/28/20 11:37	1
2-Butanone	ND		10		ug/L			10/28/20 11:37	1
Benzene	ND		1.0		ug/L			10/28/20 11:37	1
Carbon tetrachloride	ND		1.0		ug/L			10/28/20 11:37	1

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Client Sample ID: Trip Blank1

Lab Sample ID: 410-18116-12

Date Collected: 10/21/20 00:00

Matrix: Water

Date Received: 10/23/20 10:02

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		1.0		ug/L			10/28/20 11:37	1
Chloromethane	ND		1.0		ug/L			10/28/20 11:37	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/28/20 11:37	1
Methoxymethane	ND		13		ug/L			10/28/20 11:37	1
Ethyl ether	ND		13		ug/L			10/28/20 11:37	1
Ethylbenzene	ND		1.0		ug/L			10/28/20 11:37	1
Freon 113	ND		1.0		ug/L			10/28/20 11:37	1
Methylene Chloride	ND		1.0		ug/L			10/28/20 11:37	1
Tetrachloroethene	ND		1.0		ug/L			10/28/20 11:37	1
Tetrahydrofuran	ND		25		ug/L			10/28/20 11:37	1
Toluene	ND		1.0		ug/L			10/28/20 11:37	1
Trichloroethene	ND		1.0		ug/L			10/28/20 11:37	1
Trichlorofluoromethane	ND		1.0		ug/L			10/28/20 11:37	1
Vinyl chloride	ND		1.0		ug/L			10/28/20 11:37	1
Xylenes, Total	ND		3.0		ug/L			10/28/20 11:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		80 - 120					10/28/20 11:37	1
Dibromofluoromethane (Surr)	116		80 - 120					10/28/20 11:37	1
4-Bromofluorobenzene (Surr)	94		80 - 120					10/28/20 11:37	1
Toluene-d8 (Surr)	94		80 - 120					10/28/20 11:37	1

Client Sample ID: Trip Blank2

Lab Sample ID: 410-18116-13

Date Collected: 10/21/20 00:00

Matrix: Water

Date Received: 10/23/20 10:02

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			10/28/20 11:59	1
1,1-Dichloroethane	ND		1.0		ug/L			10/28/20 11:59	1
1,1-Dichloroethene	ND		1.0		ug/L			10/28/20 11:59	1
2-Butanone	ND		10		ug/L			10/28/20 11:59	1
Benzene	ND		1.0		ug/L			10/28/20 11:59	1
Carbon tetrachloride	ND		1.0		ug/L			10/28/20 11:59	1
Chloroethane	ND		1.0		ug/L			10/28/20 11:59	1
Chloromethane	ND		1.0		ug/L			10/28/20 11:59	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/28/20 11:59	1
Methoxymethane	ND		13		ug/L			10/28/20 11:59	1
Ethyl ether	ND		13		ug/L			10/28/20 11:59	1
Ethylbenzene	ND		1.0		ug/L			10/28/20 11:59	1
Freon 113	ND		1.0		ug/L			10/28/20 11:59	1
Methylene Chloride	ND		1.0		ug/L			10/28/20 11:59	1
Tetrachloroethene	ND		1.0		ug/L			10/28/20 11:59	1
Tetrahydrofuran	ND		25		ug/L			10/28/20 11:59	1
Toluene	ND		1.0		ug/L			10/28/20 11:59	1
Trichloroethene	ND		1.0		ug/L			10/28/20 11:59	1
Trichlorofluoromethane	ND		1.0		ug/L			10/28/20 11:59	1
Vinyl chloride	ND		1.0		ug/L			10/28/20 11:59	1
Xylenes, Total	ND		3.0		ug/L			10/28/20 11:59	1

Client Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Client Sample ID: Trip Blank2

Lab Sample ID: 410-18116-13

Date Collected: 10/21/20 00:00

Matrix: Water

Date Received: 10/23/20 10:02

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	117		80 - 120		10/28/20 11:59	1
Dibromofluoromethane (Surr)	113		80 - 120		10/28/20 11:59	1
4-Bromofluorobenzene (Surr)	95		80 - 120		10/28/20 11:59	1
Toluene-d8 (Surr)	95		80 - 120		10/28/20 11:59	1

Default Detection Limits

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	RL	MDL	Units
1,1,1-Trichloroethane	1.0	0.060	ug/L
1,1-Dichloroethane	1.0	0.070	ug/L
1,1-Dichloroethene	1.0	0.060	ug/L
2-Butanone	10	0.60	ug/L
Benzene	1.0	0.050	ug/L
Carbon tetrachloride	1.0	0.070	ug/L
Chloroethane	1.0	0.070	ug/L
Chloromethane	1.0	0.060	ug/L
Dichlorodifluoromethane	1.0	0.050	ug/L
Ethyl ether	13	0.050	ug/L
Ethylbenzene	1.0	0.060	ug/L
Freon 113	1.0	0.060	ug/L
Methoxymethane	13	0.040	ug/L
Methylene Chloride	1.0	0.070	ug/L
Tetrachloroethene	1.0	0.060	ug/L
Tetrahydrofuran	25	0.80	ug/L
Toluene	1.0	0.070	ug/L
Trichloroethene	1.0	0.060	ug/L
Trichlorofluoromethane	1.0	0.050	ug/L
Vinyl chloride	1.0	0.10	ug/L
Xylenes, Total	3.0	0.15	ug/L

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Prep: 3510C

Analyte	RL	MDL	Units
2,4-Dinitrotoluene	10	1.0	ug/L
2,6-Dinitrotoluene	10	0.50	ug/L
Diethyl phthalate	5.0	2.0	ug/L

Surrogate Summary

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Matrix: Ground Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-120)	DBFM (80-120)	BFB (80-120)	TOL (80-120)
410-18116-1	16C1	115	114	95	95
410-18116-1 - DL	16C1	108	114	95	96
410-18116-2	16MW8	109	113	96	95
410-18116-3	16MW9	112	112	95	97
410-18116-3 - DL	16MW9	112	114	94	96
410-18116-4	16WC1A	110	112	94	95
410-18116-4 MS	16WC1A	107	107	99	97
410-18116-4 MS	16WC1A	109	110	100	95
410-18116-4 MSD	16WC1A	104	106	99	97
410-18116-4 MSD	16WC1A	110	110	100	94
410-18116-5	16WDUP	112	115	96	95
410-18116-6	16WC1B	114	115	95	95
410-18116-7	16-2	111	114	95	95
410-18116-8	16-3	111	115	95	95
410-18116-9	16-5	113	116	94	94
410-18116-10	16WC2B	120	116	93	94
410-18116-11	16SPRING	110	114	94	96

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-120)	DBFM (80-120)	BFB (80-120)	TOL (80-120)
410-18116-12	Trip Blank1	112	116	94	94
410-18116-13	Trip Blank2	117	113	95	95
LCS 410-59437/5	Lab Control Sample	105	105	100	98
LCS 410-59437/6	Lab Control Sample	107	109	98	96
MB 410-59437/8	Method Blank	110	111	96	97

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Ground Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		FBP (44-102)	NBZ (38-113)	TPHd14 (34-128)
410-18116-1	16C1	79	71	96
410-18116-2	16MW8	80	85	50
410-18116-3	16MW9	72	77	85

Surrogate Summary

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Ground Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		FBP (44-102)	NBZ (38-113)	TPHd14 (34-128)
410-18116-4	16WC1A	65	66	46
410-18116-4 MS	16WC1A	83	77	89
410-18116-4 MSD	16WC1A	85	82	86
410-18116-5	16WDUP	72	76	54
410-18116-6	16WC1B	76	75	36
410-18116-7	16-2	67	74	87
410-18116-8	16-3	77	84	86
410-18116-9	16-5	75	84	90
410-18116-10	16WC2B	73	78	89
410-18116-11	16SPRING	77	82	91

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)

NBZ = Nitrobenzene-d5 (Surr)

TPHd14 = p-Terphenyl-d14 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		FBP (44-102)	NBZ (38-113)	TPHd14 (34-128)
LCS 410-59339/2-A	Lab Control Sample	72	82	78
LCS 410-59818/2-A	Lab Control Sample	84	86	98
LCSD 410-59339/3-A	Lab Control Sample Dup	69	73	69
MB 410-59339/1-A	Method Blank	84	88	83
MB 410-59818/1-A	Method Blank	92	88	91

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)

NBZ = Nitrobenzene-d5 (Surr)

TPHd14 = p-Terphenyl-d14 (Surr)

QC Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-59437/8

Matrix: Water

Analysis Batch: 59437

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			10/28/20 11:15	1
1,1-Dichloroethane	ND		1.0		ug/L			10/28/20 11:15	1
1,1-Dichloroethene	ND		1.0		ug/L			10/28/20 11:15	1
2-Butanone	ND		10		ug/L			10/28/20 11:15	1
Benzene	ND		1.0		ug/L			10/28/20 11:15	1
Carbon tetrachloride	ND		1.0		ug/L			10/28/20 11:15	1
Chloroethane	ND		1.0		ug/L			10/28/20 11:15	1
Chloromethane	ND		1.0		ug/L			10/28/20 11:15	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/28/20 11:15	1
Methoxymethane	ND		13		ug/L			10/28/20 11:15	1
Ethyl ether	ND		13		ug/L			10/28/20 11:15	1
Ethylbenzene	ND		1.0		ug/L			10/28/20 11:15	1
Freon 113	ND		1.0		ug/L			10/28/20 11:15	1
Methylene Chloride	ND		1.0		ug/L			10/28/20 11:15	1
Tetrachloroethene	ND		1.0		ug/L			10/28/20 11:15	1
Tetrahydrofuran	ND		25		ug/L			10/28/20 11:15	1
Toluene	ND		1.0		ug/L			10/28/20 11:15	1
Trichloroethene	ND		1.0		ug/L			10/28/20 11:15	1
Trichlorofluoromethane	ND		1.0		ug/L			10/28/20 11:15	1
Vinyl chloride	ND		1.0		ug/L			10/28/20 11:15	1
Xylenes, Total	ND		3.0		ug/L			10/28/20 11:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		80 - 120		10/28/20 11:15	1
Dibromofluoromethane (Surr)	111		80 - 120		10/28/20 11:15	1
4-Bromofluorobenzene (Surr)	96		80 - 120		10/28/20 11:15	1
Toluene-d8 (Surr)	97		80 - 120		10/28/20 11:15	1

Lab Sample ID: LCS 410-59437/5

Matrix: Water

Analysis Batch: 59437

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	5.00	5.21		ug/L		104	78 - 126
1,1-Dichloroethane	5.00	5.01		ug/L		100	74 - 120
1,1-Dichloroethene	5.00	5.10		ug/L		102	80 - 131
2-Butanone	37.5	35.0		ug/L		93	59 - 141
Benzene	5.00	5.01		ug/L		100	80 - 120
Carbon tetrachloride	5.00	5.26		ug/L		105	64 - 141
Chloroethane	5.00	4.89		ug/L		98	63 - 120
Chloromethane	5.00	4.71		ug/L		94	56 - 124
Dichlorodifluoromethane	5.00	5.22		ug/L		104	43 - 123
Ethyl ether	5.01	5.12	J	ug/L		102	72 - 121
Ethylbenzene	5.00	4.82		ug/L		96	80 - 120
Freon 113	5.00	4.68		ug/L		94	75 - 133
Methylene Chloride	5.00	5.28		ug/L		106	80 - 120
Tetrachloroethene	5.00	4.85		ug/L		97	80 - 120
Tetrahydrofuran	25.0	24.7	J	ug/L		99	67 - 137

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QC Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-59437/5

Matrix: Water

Analysis Batch: 59437

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	5.00	4.76		ug/L		95	80 - 120
Trichloroethene	5.00	5.06		ug/L		101	80 - 120
Trichlorofluoromethane	5.00	5.03		ug/L		101	62 - 136
Vinyl chloride	5.00	4.94		ug/L		99	60 - 125
Xylenes, Total	15.0	15.2		ug/L		101	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		80 - 120
Dibromofluoromethane (Surr)	105		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: LCS 410-59437/6

Matrix: Water

Analysis Batch: 59437

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methoxymethane	5.00	5.02	J	ug/L		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107		80 - 120
Dibromofluoromethane (Surr)	109		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120
Toluene-d8 (Surr)	96		80 - 120

Lab Sample ID: 410-18116-4 MS

Matrix: Ground Water

Analysis Batch: 59437

Client Sample ID: 16WC1A

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		5.00	5.59		ug/L		112	78 - 126
1,1-Dichloroethane	4.3		5.00	9.41		ug/L		101	74 - 120
1,1-Dichloroethene	ND		5.00	5.60		ug/L		109	80 - 131
2-Butanone	ND		37.5	34.6		ug/L		92	59 - 141
Benzene	ND		5.00	5.56		ug/L		105	80 - 120
Carbon tetrachloride	ND		5.00	5.70		ug/L		114	64 - 141
Chloroethane	1.8		5.00	7.05		ug/L		105	63 - 120
Chloromethane	ND		5.00	5.34		ug/L		107	80 - 120
Dichlorodifluoromethane	ND		5.00	5.63		ug/L		110	43 - 123
Ethyl ether	20		5.01	23.8		ug/L		78	72 - 121
Ethylbenzene	ND		5.00	5.07		ug/L		101	80 - 120
Freon 113	ND		5.00	5.11		ug/L		102	75 - 133
Methylene Chloride	ND		5.00	5.53		ug/L		110	80 - 120
Tetrachloroethene	ND		5.00	5.19		ug/L		101	80 - 120
Tetrahydrofuran	ND		25.0	26.6		ug/L		96	67 - 137
Toluene	ND		5.00	5.01		ug/L		100	80 - 120
Trichloroethene	ND		5.00	5.54		ug/L		107	80 - 120
Trichlorofluoromethane	ND		5.00	5.61		ug/L		112	62 - 136

Eurofins Lancaster Laboratories Env, LLC

QC Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 410-18116-4 MS

Matrix: Ground Water

Analysis Batch: 59437

Client Sample ID: 16WC1A

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	ND		5.00	5.70		ug/L		110	60 - 125
Xylenes, Total	ND		15.0	15.7		ug/L		105	80 - 120
Surrogate	MS %Recovery	MS Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	107		80 - 120						
Dibromofluoromethane (Surr)	107		80 - 120						
4-Bromofluorobenzene (Surr)	99		80 - 120						
Toluene-d8 (Surr)	97		80 - 120						

Lab Sample ID: 410-18116-4 MS

Matrix: Ground Water

Analysis Batch: 59437

Client Sample ID: 16WC1A

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methoxymethane	ND	F1	5.00	ND		ug/L		125	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	109		80 - 120						
Dibromofluoromethane (Surr)	110		80 - 120						
4-Bromofluorobenzene (Surr)	100		80 - 120						
Toluene-d8 (Surr)	95		80 - 120						

Lab Sample ID: 410-18116-4 MSD

Matrix: Ground Water

Analysis Batch: 59437

Client Sample ID: 16WC1A

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		5.00	5.54		ug/L		111	78 - 126	1	30
1,1-Dichloroethane	4.3		5.00	9.42		ug/L		101	74 - 120	0	30
1,1-Dichloroethene	ND		5.00	5.64		ug/L		110	80 - 131	1	30
2-Butanone	ND		37.5	33.1		ug/L		88	59 - 141	4	30
Benzene	ND		5.00	5.51		ug/L		104	80 - 120	1	30
Carbon tetrachloride	ND		5.00	5.76		ug/L		115	64 - 141	1	30
Chloroethane	1.8		5.00	7.47		ug/L		113	63 - 120	6	30
Chloromethane	ND		5.00	5.63		ug/L		112	80 - 120	5	30
Dichlorodifluoromethane	ND		5.00	6.18		ug/L		121	43 - 123	9	30
Ethyl ether	20		5.01	24.1		ug/L		83	72 - 121	1	30
Ethylbenzene	ND		5.00	4.99		ug/L		100	80 - 120	2	30
Freon 113	ND		5.00	5.23		ug/L		104	75 - 133	2	30
Methylene Chloride	ND		5.00	5.56		ug/L		111	80 - 120	1	30
Tetrachloroethene	ND		5.00	5.25		ug/L		102	80 - 120	1	30
Tetrahydrofuran	ND		25.0	26.8		ug/L		96	67 - 137	1	30
Toluene	ND		5.00	5.02		ug/L		100	80 - 120	0	30
Trichloroethene	ND		5.00	5.59		ug/L		108	80 - 120	1	30
Trichlorofluoromethane	ND		5.00	6.07		ug/L		121	62 - 136	8	30
Vinyl chloride	ND		5.00	6.22		ug/L		120	60 - 125	9	30
Xylenes, Total	ND		15.0	15.7		ug/L		104	80 - 120	0	30

QC Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 410-18116-4 MSD
Matrix: Ground Water
Analysis Batch: 59437

Client Sample ID: 16WC1A
Prep Type: Total/NA

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		80 - 120
Dibromofluoromethane (Surr)	106		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: 410-18116-4 MSD
Matrix: Ground Water
Analysis Batch: 59437

Client Sample ID: 16WC1A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methoxymethane	ND	F1	5.00	ND	F1	ug/L		133	70 - 130	6	30

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	110		80 - 120
Dibromofluoromethane (Surr)	110		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Toluene-d8 (Surr)	94		80 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-59339/1-A
Matrix: Water
Analysis Batch: 59610

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 59339

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		10		ug/L		10/28/20 09:30	10/28/20 17:35	1
2,6-Dinitrotoluene	ND		10		ug/L		10/28/20 09:30	10/28/20 17:35	1
Diethyl phthalate	ND		5.0		ug/L		10/28/20 09:30	10/28/20 17:35	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
2-Fluorobiphenyl (Surr)	84		44 - 102	10/28/20 09:30	10/28/20 17:35	1			
Nitrobenzene-d5 (Surr)	88		38 - 113	10/28/20 09:30	10/28/20 17:35	1			
p-Terphenyl-d14 (Surr)	83		34 - 128	10/28/20 09:30	10/28/20 17:35	1			

Lab Sample ID: LCS 410-59339/2-A
Matrix: Water
Analysis Batch: 59610

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 59339

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	50.0	40.7		ug/L		81	66 - 122
2,6-Dinitrotoluene	50.0	43.6		ug/L		87	71 - 120
Diethyl phthalate	50.0	39.1		ug/L		78	41 - 126

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	72		44 - 102
Nitrobenzene-d5 (Surr)	82		38 - 113
p-Terphenyl-d14 (Surr)	78		34 - 128

QC Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 410-59339/3-A

Matrix: Water

Analysis Batch: 59610

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 59339

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	50.0	39.4		ug/L		79	66 - 122	3	30
2,6-Dinitrotoluene	50.0	41.6		ug/L		83	71 - 120	5	30
Diethyl phthalate	50.0	36.2		ug/L		72	41 - 126	8	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl (Surr)	69		44 - 102
Nitrobenzene-d5 (Surr)	73		38 - 113
p-Terphenyl-d14 (Surr)	69		34 - 128

Lab Sample ID: MB 410-59818/1-A

Matrix: Water

Analysis Batch: 60208

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 59818

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		10		ug/L		10/29/20 09:00	10/30/20 02:03	1
2,6-Dinitrotoluene	ND		10		ug/L		10/29/20 09:00	10/30/20 02:03	1
Diethyl phthalate	ND		5.0		ug/L		10/29/20 09:00	10/30/20 02:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	92		44 - 102	10/29/20 09:00	10/30/20 02:03	1
Nitrobenzene-d5 (Surr)	88		38 - 113	10/29/20 09:00	10/30/20 02:03	1
p-Terphenyl-d14 (Surr)	91		34 - 128	10/29/20 09:00	10/30/20 02:03	1

Lab Sample ID: LCS 410-59818/2-A

Matrix: Water

Analysis Batch: 60208

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 59818

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	50.0	44.1		ug/L		88	66 - 122
2,6-Dinitrotoluene	50.0	48.2		ug/L		96	71 - 120
Diethyl phthalate	50.0	42.5		ug/L		85	41 - 126

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	84		44 - 102
Nitrobenzene-d5 (Surr)	86		38 - 113
p-Terphenyl-d14 (Surr)	98		34 - 128

Lab Sample ID: 410-18116-4 MS

Matrix: Ground Water

Analysis Batch: 60208

Client Sample ID: 16WC1A

Prep Type: Total/NA

Prep Batch: 59818

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	ND		50.7	46.1		ug/L		91	66 - 122
2,6-Dinitrotoluene	ND		50.7	49.2		ug/L		97	71 - 120
Diethyl phthalate	ND		50.7	46.7		ug/L		92	41 - 126

QC Sample Results

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 410-18116-4 MS

Matrix: Ground Water

Analysis Batch: 60208

Client Sample ID: 16WC1A

Prep Type: Total/NA

Prep Batch: 59818

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	83		44 - 102
Nitrobenzene-d5 (Surr)	77		38 - 113
p-Terphenyl-d14 (Surr)	89		34 - 128

Lab Sample ID: 410-18116-4 MSD

Matrix: Ground Water

Analysis Batch: 60208

Client Sample ID: 16WC1A

Prep Type: Total/NA

Prep Batch: 59818

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	ND		50.1	44.3		ug/L		88	66 - 122	4	30
2,6-Dinitrotoluene	ND		50.1	48.3		ug/L		96	71 - 120	2	30
Diethyl phthalate	ND		50.1	46.6		ug/L		93	41 - 126	0	30

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	85		44 - 102
Nitrobenzene-d5 (Surr)	82		38 - 113
p-Terphenyl-d14 (Surr)	86		34 - 128

QC Association Summary

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

GC/MS VOA

Analysis Batch: 59437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-18116-1	16C1	Total/NA	Ground Water	8260C LL	
410-18116-1 - DL	16C1	Total/NA	Ground Water	8260C LL	
410-18116-2	16MW8	Total/NA	Ground Water	8260C LL	
410-18116-3	16MW9	Total/NA	Ground Water	8260C LL	
410-18116-3 - DL	16MW9	Total/NA	Ground Water	8260C LL	
410-18116-4	16WC1A	Total/NA	Ground Water	8260C LL	
410-18116-5	16WDUP	Total/NA	Ground Water	8260C LL	
410-18116-6	16WC1B	Total/NA	Ground Water	8260C LL	
410-18116-7	16-2	Total/NA	Ground Water	8260C LL	
410-18116-8	16-3	Total/NA	Ground Water	8260C LL	
410-18116-9	16-5	Total/NA	Ground Water	8260C LL	
410-18116-10	16WC2B	Total/NA	Ground Water	8260C LL	
410-18116-11	16SPRING	Total/NA	Ground Water	8260C LL	
410-18116-12	Trip Blank1	Total/NA	Water	8260C LL	
410-18116-13	Trip Blank2	Total/NA	Water	8260C LL	
MB 410-59437/8	Method Blank	Total/NA	Water	8260C LL	
LCS 410-59437/5	Lab Control Sample	Total/NA	Water	8260C LL	
LCS 410-59437/6	Lab Control Sample	Total/NA	Water	8260C LL	
410-18116-4 MS	16WC1A	Total/NA	Ground Water	8260C LL	
410-18116-4 MS	16WC1A	Total/NA	Ground Water	8260C LL	
410-18116-4 MSD	16WC1A	Total/NA	Ground Water	8260C LL	
410-18116-4 MSD	16WC1A	Total/NA	Ground Water	8260C LL	

GC/MS Semi VOA

Prep Batch: 59339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-18116-2	16MW8	Total/NA	Ground Water	3510C	
410-18116-7	16-2	Total/NA	Ground Water	3510C	
410-18116-8	16-3	Total/NA	Ground Water	3510C	
410-18116-9	16-5	Total/NA	Ground Water	3510C	
410-18116-10	16WC2B	Total/NA	Ground Water	3510C	
410-18116-11	16SPRING	Total/NA	Ground Water	3510C	
MB 410-59339/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-59339/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-59339/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 59610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-18116-2	16MW8	Total/NA	Ground Water	8270D	59339
410-18116-7	16-2	Total/NA	Ground Water	8270D	59339
410-18116-8	16-3	Total/NA	Ground Water	8270D	59339
410-18116-9	16-5	Total/NA	Ground Water	8270D	59339
410-18116-10	16WC2B	Total/NA	Ground Water	8270D	59339
410-18116-11	16SPRING	Total/NA	Ground Water	8270D	59339
MB 410-59339/1-A	Method Blank	Total/NA	Water	8270D	59339
LCS 410-59339/2-A	Lab Control Sample	Total/NA	Water	8270D	59339
LCSD 410-59339/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	59339

QC Association Summary

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

GC/MS Semi VOA

Prep Batch: 59818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-18116-1	16C1	Total/NA	Ground Water	3510C	
410-18116-3	16MW9	Total/NA	Ground Water	3510C	
410-18116-4	16WC1A	Total/NA	Ground Water	3510C	
410-18116-5	16WDUP	Total/NA	Ground Water	3510C	
410-18116-6	16WC1B	Total/NA	Ground Water	3510C	
MB 410-59818/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-59818/2-A	Lab Control Sample	Total/NA	Water	3510C	
410-18116-4 MS	16WC1A	Total/NA	Ground Water	3510C	
410-18116-4 MSD	16WC1A	Total/NA	Ground Water	3510C	

Analysis Batch: 60208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-18116-4	16WC1A	Total/NA	Ground Water	8270D	59818
MB 410-59818/1-A	Method Blank	Total/NA	Water	8270D	59818
LCS 410-59818/2-A	Lab Control Sample	Total/NA	Water	8270D	59818
410-18116-4 MS	16WC1A	Total/NA	Ground Water	8270D	59818
410-18116-4 MSD	16WC1A	Total/NA	Ground Water	8270D	59818

Analysis Batch: 60388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-18116-1	16C1	Total/NA	Ground Water	8270D	59818
410-18116-3	16MW9	Total/NA	Ground Water	8270D	59818
410-18116-5	16WDUP	Total/NA	Ground Water	8270D	59818
410-18116-6	16WC1B	Total/NA	Ground Water	8270D	59818

Lab Chronicle

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Client Sample ID: 16C1

Date Collected: 10/22/20 10:55

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-1

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	59437	10/28/20 12:43	K4WN	ELLE
Total/NA	Analysis	8260C LL	DL	2.5	59437	10/28/20 13:04	K4WN	ELLE
Total/NA	Prep	3510C			59818	10/29/20 09:00	R9CT	ELLE
Total/NA	Analysis	8270D		1	60388	10/30/20 16:26	ULM3	ELLE

Client Sample ID: 16MW8

Date Collected: 10/21/20 10:35

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-2

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	59437	10/28/20 13:26	K4WN	ELLE
Total/NA	Prep	3510C			59339	10/28/20 09:30	R9CT	ELLE
Total/NA	Analysis	8270D		1	59610	10/28/20 19:32	SJ89	ELLE

Client Sample ID: 16MW9

Date Collected: 10/22/20 10:20

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-3

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	59437	10/28/20 13:47	K4WN	ELLE
Total/NA	Analysis	8260C LL	DL	4	59437	10/28/20 14:09	K4WN	ELLE
Total/NA	Prep	3510C			59818	10/29/20 09:00	R9CT	ELLE
Total/NA	Analysis	8270D		1	60388	10/30/20 16:56	ULM3	ELLE

Client Sample ID: 16WC1A

Date Collected: 10/22/20 09:25

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-4

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	59437	10/28/20 14:31	K4WN	ELLE
Total/NA	Prep	3510C			59818	10/29/20 09:00	R9CT	ELLE
Total/NA	Analysis	8270D		1	60208	10/30/20 04:04	LW6J	ELLE

Client Sample ID: 16WDUP

Date Collected: 10/22/20 09:35

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-5

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	59437	10/28/20 16:20	K4WN	ELLE
Total/NA	Prep	3510C			59818	10/29/20 09:00	R9CT	ELLE
Total/NA	Analysis	8270D		1	60388	10/30/20 17:26	ULM3	ELLE

Lab Chronicle

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Client Sample ID: 16WC1B

Date Collected: 10/22/20 08:40

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-6

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	59437	10/28/20 16:42	K4WN	ELLE
Total/NA	Prep	3510C			59818	10/29/20 09:00	R9CT	ELLE
Total/NA	Analysis	8270D		1	60388	10/30/20 17:56	ULM3	ELLE

Client Sample ID: 16-2

Date Collected: 10/21/20 09:55

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-7

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	59437	10/28/20 17:03	K4WN	ELLE
Total/NA	Prep	3510C			59339	10/28/20 09:30	R9CT	ELLE
Total/NA	Analysis	8270D		1	59610	10/28/20 20:01	SJ89	ELLE

Client Sample ID: 16-3

Date Collected: 10/21/20 11:15

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-8

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	59437	10/28/20 17:25	K4WN	ELLE
Total/NA	Prep	3510C			59339	10/28/20 09:30	R9CT	ELLE
Total/NA	Analysis	8270D		1	59610	10/28/20 20:30	SJ89	ELLE

Client Sample ID: 16-5

Date Collected: 10/21/20 08:30

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-9

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	59437	10/28/20 17:47	K4WN	ELLE
Total/NA	Prep	3510C			59339	10/28/20 09:30	R9CT	ELLE
Total/NA	Analysis	8270D		1	59610	10/28/20 20:59	SJ89	ELLE

Client Sample ID: 16WC2B

Date Collected: 10/21/20 09:20

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-10

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	59437	10/28/20 18:08	K4WN	ELLE
Total/NA	Prep	3510C			59339	10/28/20 09:30	R9CT	ELLE
Total/NA	Analysis	8270D		1	59610	10/28/20 21:28	SJ89	ELLE

Client Sample ID: 16SPRING

Date Collected: 10/21/20 08:40

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-11

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	59437	10/28/20 18:30	K4WN	ELLE

Lab Chronicle

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Client Sample ID: 16SPRING

Date Collected: 10/21/20 08:40

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-11

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			59339	10/28/20 09:30	R9CT	ELLE
Total/NA	Analysis	8270D		1	59610	10/28/20 21:57	SJ89	ELLE

Client Sample ID: Trip Blank1

Date Collected: 10/21/20 00:00

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	59437	10/28/20 11:37	K4WN	ELLE

Client Sample ID: Trip Blank2

Date Collected: 10/21/20 00:00

Date Received: 10/23/20 10:02

Lab Sample ID: 410-18116-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	59437	10/28/20 11:59	K4WN	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Virginia	NELAP	10561	06-14-21

Method Summary

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Method	Method Description	Protocol	Laboratory
8260C LL	Volatile Organic Compounds by GC/MS	SW846	ELLE
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford, VA HWMU16

Job ID: 410-18116-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-18116-1	16C1	Ground Water	10/22/20 10:55	10/23/20 10:02	
410-18116-2	16MW8	Ground Water	10/21/20 10:35	10/23/20 10:02	
410-18116-3	16MW9	Ground Water	10/22/20 10:20	10/23/20 10:02	
410-18116-4	16WC1A	Ground Water	10/22/20 09:25	10/23/20 10:02	
410-18116-5	16WDUP	Ground Water	10/22/20 09:35	10/23/20 10:02	
410-18116-6	16WC1B	Ground Water	10/22/20 08:40	10/23/20 10:02	
410-18116-7	16-2	Ground Water	10/21/20 09:55	10/23/20 10:02	
410-18116-8	16-3	Ground Water	10/21/20 11:15	10/23/20 10:02	
410-18116-9	16-5	Ground Water	10/21/20 08:30	10/23/20 10:02	
410-18116-10	16WC2B	Ground Water	10/21/20 09:20	10/23/20 10:02	
410-18116-11	16SPRING	Ground Water	10/21/20 08:40	10/23/20 10:02	
410-18116-12	Trip Blank1	Water	10/21/20 00:00	10/23/20 10:02	
410-18116-13	Trip Blank2	Water	10/21/20 00:00	10/23/20 10:02	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-18116-1

SDG No.: _____

Instrument ID: 19094 Analysis Batch Number: 44043Lab Sample ID: IC 410-44043/3 Client Sample ID: _____Date Analyzed: 09/15/20 15:07 Lab File ID: hs15i11.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorodifluoromethane	2.09	Incomplete Integration	campbellm e	09/15/20 22:14

Lab Sample ID: IC 410-44043/4 Client Sample ID: _____Date Analyzed: 09/15/20 15:29 Lab File ID: hs15i12.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorodifluoromethane	2.09	Incomplete Integration	campbellm e	09/15/20 22:14

Lab Sample ID: IC 410-44043/5 Client Sample ID: _____Date Analyzed: 09/15/20 15:50 Lab File ID: hs15i13.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorodifluoromethane	2.08	Incomplete Integration	campbellm e	09/15/20 22:15

Lab Sample ID: IC 410-44043/6 Client Sample ID: _____Date Analyzed: 09/15/20 16:12 Lab File ID: hs15i14.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorodifluoromethane	2.09	Incomplete Integration	campbellm e	09/15/20 22:15

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-18116-1

SDG No.: _____

Instrument ID: 19094 Analysis Batch Number: 44043Lab Sample ID: IC 410-44043/7 Client Sample ID: _____Date Analyzed: 09/15/20 16:34 Lab File ID: hs15i15.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorodifluoromethane	2.09	Incomplete Integration	campbellm e	09/15/20 22:15
Acetonitrile	4.22	Incomplete Integration	campbellm e	09/15/20 22:15

Lab Sample ID: IC 410-44043/8 Client Sample ID: _____Date Analyzed: 09/15/20 16:56 Lab File ID: hs15i16.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methoxymethane	2.18	Incomplete Integration	campbellm e	09/15/20 22:16
Acetonitrile	4.23	Incomplete Integration	campbellm e	09/15/20 22:16

Lab Sample ID: IC 410-44043/9 Client Sample ID: _____Date Analyzed: 09/15/20 17:18 Lab File ID: hs15i17.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetonitrile	4.26	Incomplete Integration	campbellm e	09/15/20 22:21
Chloroacetonitrile	9.44	Incomplete Integration	campbellm e	09/15/20 22:17

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-18116-1

SDG No.: _____

Instrument ID: 19094 Analysis Batch Number: 44043Lab Sample ID: ICV 410-44043/10 Client Sample ID: _____Date Analyzed: 09/15/20 17:39 Lab File ID: hs15v11.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorodifluoromethane	2.09	Incomplete Integration	campbellm e	09/15/20 22:19
Methoxymethane	2.17	Incomplete Integration	campbellm e	09/15/20 22:19

Lab Sample ID: IC 410-44043/12 Client Sample ID: _____Date Analyzed: 09/15/20 18:23 Lab File ID: hs15i01.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	4.25	Baseline	campbellm e	09/15/20 22:36
t-Butyl alcohol-d10 (IS)	4.48	Incomplete Integration	campbellm e	09/15/20 22:36
1,4-Dioxane	8.86	Split Peak	campbellm e	09/15/20 22:37

Lab Sample ID: ICIS 410-44043/13 Client Sample ID: _____Date Analyzed: 09/15/20 18:44 Lab File ID: hs15i02.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.86	Split Peak	campbellm e	09/15/20 22:38

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-18116-1

SDG No.: _____

Instrument ID: 19094 Analysis Batch Number: 44043Lab Sample ID: IC 410-44043/14 Client Sample ID: _____Date Analyzed: 09/15/20 19:06 Lab File ID: hs15i03.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	2.29	Baseline	campbellm e	09/15/20 22:39
n-Butanol	8.30	Incomplete Integration	campbellm e	09/15/20 22:39

Lab Sample ID: IC 410-44043/15 Client Sample ID: _____Date Analyzed: 09/15/20 19:28 Lab File ID: hs15i04.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	2.08	Incomplete Integration	campbellm e	09/15/20 22:40
n-Butanol	8.31	Incomplete Integration	campbellm e	09/15/20 22:41

Lab Sample ID: IC 410-44043/16 Client Sample ID: _____Date Analyzed: 09/15/20 19:50 Lab File ID: hs15i05.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Butanol	8.30	Incomplete Integration	campbellm e	09/15/20 22:42
1,4-Dioxane	8.85	Incomplete Integration	campbellm e	09/15/20 22:42

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-18116-1

SDG No.: _____

Instrument ID: 19094 Analysis Batch Number: 44043Lab Sample ID: IC 410-44043/17 Client Sample ID: _____Date Analyzed: 09/15/20 20:12 Lab File ID: hs15i06.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Butadiene	2.40	Incomplete Integration	campbellm e	09/15/20 22:43
n-Butanol	8.31	Incomplete Integration	campbellm e	09/15/20 22:43

Lab Sample ID: ICV 410-44043/19 Client Sample ID: _____Date Analyzed: 09/15/20 20:55 Lab File ID: hu08v01.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	2.06	Incomplete Integration	campbellm e	09/15/20 22:52
n-Butanol	8.30	Incomplete Integration	campbellm e	09/15/20 22:53
1,4-Dioxane	8.85	Split Peak	campbellm e	09/15/20 22:53

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-18116-1

SDG No.: _____

Instrument ID: 19094 Analysis Batch Number: 59437Lab Sample ID: CCVIS 410-59437/3 Client Sample ID: _____Date Analyzed: 10/28/20 09:27 Lab File ID: HC26C01.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Butadiene	2.41	Other	howej	10/28/20 10:03
t-Butyl alcohol-d10 (IS)	4.51	Other	howej	10/28/20 10:03

Lab Sample ID: 410-18116-1 Client Sample ID: 16C1Date Analyzed: 10/28/20 12:43 Lab File ID: HC28S04.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane		Invalid Compound ID	howej	10/28/20 13:28

Lab Sample ID: 410-18116-3 Client Sample ID: 16MW9Date Analyzed: 10/28/20 13:47 Lab File ID: HC28S07.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methoxymethane		Invalid Compound ID	campbellm e	10/28/20 18:05

Lab Sample ID: 410-18116-4 Client Sample ID: 16WC1ADate Analyzed: 10/28/20 14:31 Lab File ID: HC28S09.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	8.43	Incomplete Integration	campbellm e	10/28/20 18:06

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-18116-1

SDG No.: _____

Instrument ID: 19094 Analysis Batch Number: 59437Lab Sample ID: 410-18116-4 MS Client Sample ID: 16WC1A MSDate Analyzed: 10/28/20 14:52 Lab File ID: HC28S10.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane-d4 (Surr)	7.53	Incomplete Integration	campbellm e	10/28/20 18:08

Lab Sample ID: 410-18116-5 Client Sample ID: 16WDUPDate Analyzed: 10/28/20 16:20 Lab File ID: HC28S14.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Vinyl chloride	2.41	Incomplete Integration	campbellm e	10/28/20 18:12
Trichloroethene	8.44	Incomplete Integration	campbellm e	10/28/20 18:13
Ethylbenzene	11.46	Incomplete Integration	campbellm e	10/28/20 18:13
m-Xylene & p-Xylene	11.57	Incomplete Integration	campbellm e	10/28/20 18:13
o-Xylene	11.90	Incomplete Integration	campbellm e	10/28/20 18:13

Lab Sample ID: 410-18116-7 Client Sample ID: 16-2Date Analyzed: 10/28/20 17:03 Lab File ID: HC28S16.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethane	5.57	Incomplete Integration	campbellm e	10/28/20 18:13
Tetrachloroethene	10.54	Incomplete Integration	campbellm e	10/28/20 18:13

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-18116-1

SDG No.: _____

Instrument ID: 19094 Analysis Batch Number: 59437Lab Sample ID: 410-18116-9 Client Sample ID: 16-5Date Analyzed: 10/28/20 17:47 Lab File ID: HC28S18.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethane	5.55	Peak assignment corrected	campbellm e	10/28/20 18:14
1,1,1-Trichloroethane	7.09	Incomplete Integration	campbellm e	10/28/20 18:14

Lab Sample ID: 410-18116-11 Client Sample ID: 16SPRINGDate Analyzed: 10/28/20 18:30 Lab File ID: HC28S20.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1-Trichloroethane	7.10	Incomplete Integration	campbellm e	10/28/20 19:17

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-18116-1

SDG No.: _____

Instrument ID: HP20296 Analysis Batch Number: 55998Lab Sample ID: ICIS 410-55998/2 Client Sample ID: _____Date Analyzed: 10/19/20 17:17 Lab File ID: LJ0701.D GC Column: DB-5MS 20m 0. ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	8.61	Incomplete Integration	luttek	10/19/20 18:01
2,6-Dinitrotoluene	11.50	Peak assignment corrected	luttek	10/20/20 18:38
1,2-Diphenylhydrazine	12.74	Incomplete Integration	luttek	10/19/20 18:01

Lab Sample ID: IC 410-55998/3 Client Sample ID: _____Date Analyzed: 10/19/20 18:09 Lab File ID: LJ0702.D GC Column: DB-5MS 20m 0. ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl methanesulfonate	4.82	Assign Peak	luttek	10/19/20 23:04
Phenol-d5 (Surr)	6.43	Assign Peak	luttek	10/19/20 23:04
2-Methylphenol	7.38	Assign Peak	luttek	10/19/20 23:04
Benzoic acid	8.52	Assign Peak	luttek	10/19/20 23:05
Isosafrole Peak 1	10.48	Assign Peak	luttek	10/19/20 23:05
4-Bromophenyl-phenylether	13.15	Assign Peak	luttek	10/19/20 23:05
3,3'-Dichlorobenzidine	17.83	Assign Peak	luttek	10/19/20 23:06
Indeno[1,2,3-cd]pyrene	22.00	Split Peak	luttek	10/19/20 23:07

Lab Sample ID: IC 410-55998/4 Client Sample ID: _____Date Analyzed: 10/19/20 18:38 Lab File ID: LJ0703.D GC Column: DB-5MS 20m 0. ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	8.68	Incomplete Integration	luttek	10/19/20 23:08
Caprolactam	9.70	Incomplete Integration	luttek	10/19/20 23:08

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-18116-1

SDG No.: _____

Instrument ID: HP20296 Analysis Batch Number: 55998Lab Sample ID: IC 410-55998/5 Client Sample ID: _____Date Analyzed: 10/19/20 19:07 Lab File ID: LJ0704.D GC Column: DB-5MS 20m 0. ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	8.65	Incomplete Integration	luttek	10/19/20 23:10
Caprolactam	9.68	Incomplete Integration	luttek	10/19/20 23:10
Indeno[1,2,3-cd]pyrene	22.03	Split Peak	luttek	10/19/20 23:11

Lab Sample ID: IC 410-55998/6 Client Sample ID: _____Date Analyzed: 10/19/20 19:36 Lab File ID: LJ0705.D GC Column: DB-5MS 20m 0. ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	8.62	Incomplete Integration	luttek	10/19/20 23:12
Indeno[1,2,3-cd]pyrene	22.02	Split Peak	luttek	10/19/20 23:13

Lab Sample ID: IC 410-55998/7 Client Sample ID: _____Date Analyzed: 10/19/20 20:05 Lab File ID: LJ0706.D GC Column: DB-5MS 20m 0. ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	22.00	Split Peak	luttek	10/19/20 23:14

Lab Sample ID: IC 410-55998/8 Client Sample ID: _____Date Analyzed: 10/19/20 20:34 Lab File ID: LJ0707.D GC Column: DB-5MS 20m 0. ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N-Nitrosomethylethylamine	4.35	Incomplete Integration	luttek	10/19/20 23:15
Indeno[1,2,3-cd]pyrene	22.00	Split Peak	luttek	10/19/20 23:17

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-18116-1

SDG No.: _____

Instrument ID: HP20296 Analysis Batch Number: 55998Lab Sample ID: IC 410-55998/9 Client Sample ID: _____Date Analyzed: 10/19/20 21:03 Lab File ID: LJ0708.D GC Column: DB-5MS 20m 0. ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Phenol-d5 (Surr)	6.43	Assign Peak	luttek	10/19/20 23:18
4-Bromophenyl-phenylether	13.16	Assign Peak	luttek	10/19/20 23:19

Lab Sample ID: ICV 410-55998/12 Client Sample ID: _____Date Analyzed: 10/19/20 22:31 Lab File ID: LJ0711.D GC Column: DB-5MS 20m 0. ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	8.62	Assign Peak	beckk	10/20/20 12:50
Isosafrole Peak 2	10.86	Assign Peak	beckk	10/20/20 12:50
2,6-Dinitrotoluene	11.50	Peak assignment corrected	luttek	10/20/20 18:52
Indeno[1,2,3-cd]pyrene	22.02	Split Peak	beckk	10/20/20 12:49

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-18116-1

SDG No.: _____

Instrument ID: HP20296 Analysis Batch Number: 59610Lab Sample ID: CCVIS 410-59610/2 Client Sample ID: _____Date Analyzed: 10/28/20 16:54 Lab File ID: LJ1001.D GC Column: DB-5MS 20m 0. ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	8.61	Incomplete Integration	luttek	10/28/20 17:25
1,2-Diphenylhydrazine	12.70	Incomplete Integration	luttek	10/28/20 17:25
Indeno[1,2,3-cd]pyrene	21.96	Split Peak	luttek	10/28/20 17:25

Lab Sample ID: 410-18116-10 Client Sample ID: 16WC2BDate Analyzed: 10/28/20 21:28 Lab File ID: LJ1010.D GC Column: DB-5MS 20m 0. ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene		Invalid Compound ID	luttek	10/28/20 22:20

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-18116-1

SDG No.: _____

Instrument ID: HP23264 Analysis Batch Number: 48994Lab Sample ID: ICIS 410-48994/2 Client Sample ID: _____Date Analyzed: 09/29/20 19:00 Lab File ID: J11151a.D GC Column: DB-5MS 30m 0. ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bis(2-chloroethoxy)methane	8.50	Assign Peak	beckk	09/30/20 07:39
1,2-Diphenylhydrazine	12.56	Assign Peak	beckk	09/30/20 07:39

Lab Sample ID: IC 410-48994/3 Client Sample ID: _____Date Analyzed: 09/29/20 19:37 Lab File ID: J11152.D GC Column: DB-5MS 30m 0. ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	2.46	Assign Peak	beckk	09/30/20 07:40
Pyridine	3.06	Assign Peak	beckk	09/30/20 07:40
2-Picoline	4.20	Assign Peak	beckk	09/30/20 07:41
Bis(2-chloroethoxy)methane	8.50	Assign Peak	beckk	09/30/20 07:41
Naphthalene	8.86	Assign Peak	beckk	09/30/20 07:41
Caprolactam	9.46	Assign Peak	beckk	09/30/20 07:41
2-Chloronaphthalene	10.73	Assign Peak	beckk	09/30/20 07:41
1-Chloronaphthalene	10.77	Assign Peak	beckk	09/30/20 07:42
1,4-Dinitrobenzene	11.26	Assign Peak	beckk	09/30/20 07:42
Thionazin	12.36	Assign Peak	beckk	09/30/20 07:43
cis-Diallate	12.88	Assign Peak	beckk	09/30/20 07:43
trans-Diallate	12.98	Assign Peak	beckk	09/30/20 07:43
Indeno[1,2,3-cd]pyrene	21.60	Split Peak	beckk	10/01/20 12:29

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-18116-1

SDG No.: _____

Instrument ID: HP23264 Analysis Batch Number: 48994Lab Sample ID: IC 410-48994/4 Client Sample ID: _____Date Analyzed: 09/29/20 20:08 Lab File ID: J11153.D GC Column: DB-5MS 30m 0. ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bis(2-chloroethoxy)methane	8.51	Assign Peak	beckk	09/30/20 07:44
2-Chloronaphthalene	10.74	Assign Peak	beckk	09/30/20 07:44
1-Chloronaphthalene	10.78	Assign Peak	beckk	09/30/20 07:45
Indeno[1,2,3-cd]pyrene	21.64	Assign Peak	beckk	09/30/20 07:45

Lab Sample ID: IC 410-48994/5 Client Sample ID: _____Date Analyzed: 09/29/20 20:38 Lab File ID: J11154.D GC Column: DB-5MS 30m 0. ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bis(2-chloroethoxy)methane	8.51	Assign Peak	beckk	09/30/20 07:47
Indeno[1,2,3-cd]pyrene	21.62	Assign Peak	beckk	09/30/20 07:48

Lab Sample ID: IC 410-48994/6 Client Sample ID: _____Date Analyzed: 09/29/20 21:08 Lab File ID: J11155.D GC Column: DB-5MS 30m 0. ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bis(2-chloroethoxy)methane	8.50	Assign Peak	beckk	09/30/20 07:50
2-Chloronaphthalene	10.74	Assign Peak	beckk	09/30/20 07:51
1-Chloronaphthalene	10.77	Split Peak	beckk	09/30/20 10:46
Indeno[1,2,3-cd]pyrene	21.61	Assign Peak	beckk	09/30/20 07:51

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-18116-1

SDG No.: _____

Instrument ID: HP23264 Analysis Batch Number: 48994Lab Sample ID: IC 410-48994/7 Client Sample ID: _____Date Analyzed: 09/29/20 21:39 Lab File ID: J11156.D GC Column: DB-5MS 30m 0. ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bis(2-chloroethoxy)methane	8.50	Assign Peak	beckk	09/30/20 08:55
Isosafrole Peak 1	10.33	Assign Peak	beckk	09/30/20 09:45
2-Chloronaphthalene	10.73	Assign Peak	beckk	09/30/20 08:55
1-Chloronaphthalene	10.77	Assign Peak	beckk	09/30/20 08:55
1,3-Dinitrobenzene	11.15	Assign Peak	beckk	09/30/20 08:56
1,4-Dinitrobenzene	11.26	Assign Peak	beckk	09/30/20 08:57
trans-Diallate	12.99	Assign Peak	beckk	09/30/20 08:58

Lab Sample ID: IC 410-48994/8 Client Sample ID: _____Date Analyzed: 09/29/20 22:09 Lab File ID: J11157.D GC Column: DB-5MS 30m 0. ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bis(2-chloroethoxy)methane	8.50	Assign Peak	beckk	10/01/20 12:30
2-Chloronaphthalene	10.73	Split Peak	beckk	09/30/20 08:59
1-Chloronaphthalene	10.77	Split Peak	beckk	09/30/20 08:59
trans-Diallate	12.98	Assign Peak	beckk	09/30/20 09:05

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-18116-1

SDG No.: _____

Instrument ID: HP23264 Analysis Batch Number: 48994Lab Sample ID: IC 410-48994/9 Client Sample ID: _____Date Analyzed: 09/29/20 22:52 Lab File ID: J11158a.D GC Column: DB-5MS 30m 0. ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bis(2-chloroethoxy)methane	8.50	Split Peak	beckk	10/01/20 12:31
Naphthalene	8.86	Assign Peak	beckk	09/30/20 09:13
N-Nitrosodi-n-butylamine	9.53	Assign Peak	beckk	09/30/20 09:13
Isosafrole Peak 1	10.32	Assign Peak	beckk	09/30/20 09:13
2,4,5-Trichlorophenol	10.47	Assign Peak	beckk	09/30/20 09:13
2-Chloronaphthalene	10.73	Assign Peak	beckk	09/30/20 09:13
1-Chloronaphthalene	10.77	Assign Peak	beckk	09/30/20 09:14
1,3-Dinitrobenzene	11.14	Assign Peak	beckk	09/30/20 09:14
cis-Diallate	12.88	Assign Peak	beckk	09/30/20 09:14
Phenacetin	12.90	Assign Peak	beckk	09/30/20 09:14
trans-Diallate	12.98	Assign Peak	beckk	09/30/20 09:14

Lab Sample ID: ICV 410-48994/12 Client Sample ID: _____Date Analyzed: 09/30/20 00:23 Lab File ID: J11161.D GC Column: DB-5MS 30m 0. ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bis(2-chloroethoxy)methane	8.50	Assign Peak	beckk	09/30/20 09:28

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-18116-1

SDG No.: _____

Instrument ID: HP23264 Analysis Batch Number: 60208Lab Sample ID: CCVIS 410-60208/2 Client Sample ID: _____Date Analyzed: 10/29/20 23:51 Lab File ID: JJ1301.D GC Column: DB-5MS 30m 0. ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Chloronaphthalene	10.56	Split Peak	williamss	10/30/20 00:45
1-Chloronaphthalene	10.59	Split Peak	williamss	10/30/20 00:45
trans-Diallate	12.83	Split Peak	williamss	10/30/20 00:46

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-18116-1

SDG No.: _____

Instrument ID: HP23264 Analysis Batch Number: 60388Lab Sample ID: CCVIS 410-60388/2 Client Sample ID: _____Date Analyzed: 10/30/20 10:15 Lab File ID: JJ1321.D GC Column: DB-5MS 30m 0. ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Nitroaniline	12.26	Assign Peak	beckk	10/30/20 11:03
Indeno[1,2,3-cd]pyrene	21.37	Assign Peak	beckk	10/30/20 11:03

Lab Sample ID: 410-18116-1 Client Sample ID: 16C1Date Analyzed: 10/30/20 16:26 Lab File ID: JJ1331.D GC Column: DB-5MS 30m 0. ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene		Invalid Compound ID	hartensti nel	11/02/20 12:10

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MSS_RV8270_1_00009	12/30/20	09/24/20	MeCl2, Lot 203170	2 mL	MSS_FV8270_1_00008	500 uL	2,4-Dinitrophenol	1.125 ppm
							4,6-Dinitro-2-methylphenol	0.625 ppm
							4-Nitrophenol	0.625 ppm
							Benzidine	1 ppm
							Benzyl alcohol	0.125 ppm
							Indene	0.125 ppm
							Octachlorostyrene	0.125 ppm
							Benzoic acid	1.25 ppm
							1,1'-Biphenyl	0.125 ppm
							Acetophenone	0.125 ppm
							Atrazine	0.125 ppm
							Benzaldehyde	0.125 ppm
							Caprolactam	0.125 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
							2,4,6-Tribromophenol	0.25 ppm
							2-Fluorobiphenyl (Surr)	0.25 ppm
							2-Fluorophenol	0.25 ppm
							Nitrobenzene-d5 (Surr)	0.25 ppm
							p-Terphenyl-d14 (Surr)	0.25 ppm
							Phenol-d5	0.25 ppm
							N-Nitrosodiphenylamine	0.125 ppm
							1,4-Naphthoquinone	0.125 ppm
							1-Chloronaphthalene	0.125 ppm
							6-Methylchrysene	0.125 ppm
							Chlorobenzilate	0.125 ppm
							Dibenz[a,h]acridine	0.125 ppm
							Dibenz[a,j]acridine	0.125 ppm
							Dimethoate	0.125 ppm
							Ethyl Parathion	0.125 ppm
							Isodrin	0.125 ppm
							Methyl parathion	0.125 ppm
							o,o',o''-Triethylphosphorothioate	0.125 ppm
							Phorate	0.125 ppm
							Pronamide	0.125 ppm
							Quinoline	0.125 ppm
							Sulfotepp	0.125 ppm
							Thionazin	0.125 ppm
							1,2,4-Trichlorobenzene	0.125 ppm
							1,2-Dichlorobenzene	0.125 ppm
							1,2-Diphenylhydrazine	0.125 ppm
							1,3-Dichlorobenzene	0.125 ppm
							1,4-Dichlorobenzene	0.125 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,2'-oxybis[1-chloropropane]	0.125 ppm
							2,4,5-Trichlorophenol	0.125 ppm
							2,4,6-Trichlorophenol	0.125 ppm
							2,4-Dichlorophenol	0.125 ppm
							2,4-Dimethylphenol	0.125 ppm
							2,4-Dinitrotoluene	0.125 ppm
							2,6-Dinitrotoluene	0.125 ppm
							2-Chloronaphthalene	0.125 ppm
							2-Chlorophenol	0.125 ppm
							2-Methylnaphthalene	0.125 ppm
							2-Methylphenol	0.125 ppm
							2-Nitroaniline	0.125 ppm
							2-Nitrophenol	0.125 ppm
							3-Nitroaniline	0.125 ppm
							4-Bromophenyl phenyl ether	0.125 ppm
							4-Chloro-3-methylphenol	0.125 ppm
							4-Chloroaniline	0.125 ppm
							4-Chlorophenyl phenyl ether	0.125 ppm
							4-Methylphenol	0.125 ppm
							4-Nitroaniline	0.125 ppm
							Acenaphthene	0.125 ppm
							Acenaphthylene	0.125 ppm
							Anthracene	0.125 ppm
							Benzo[a]anthracene	0.125 ppm
							Benzo[a]pyrene	0.125 ppm
							Benzo[b]fluoranthene	0.125 ppm
							Benzo[g,h,i]perylene	0.125 ppm
							Benzo[k]fluoranthene	0.125 ppm
							Bis(2-chloroethoxy)methane	0.125 ppm
							Bis(2-chloroethyl)ether	0.125 ppm
							Bis(2-ethylhexyl) phthalate	0.125 ppm
							Butyl benzyl phthalate	0.125 ppm
							Carbazole	0.125 ppm
							Chrysene	0.125 ppm
							Di-n-butyl phthalate	0.125 ppm
							Di-n-octyl phthalate	0.125 ppm
							Dibenz(a,h)anthracene	0.125 ppm
							Dibenzofuran	0.125 ppm
							Diethyl phthalate	0.125 ppm
							Dimethyl phthalate	0.125 ppm
							Fluoranthene	0.125 ppm
							Fluorene	0.125 ppm
							Hexachlorobenzene	0.125 ppm
							Hexachlorobutadiene	0.125 ppm
							Hexachlorocyclopentadiene	0.125 ppm
							Hexachloroethane	0.125 ppm
							Indeno[1,2,3-cd]pyrene	0.125 ppm
							Isophorone	0.125 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodi-n-propylamine	0.125 ppm
							N-Nitrosodimethylamine	0.125 ppm
							Naphthalene	0.125 ppm
							Nitrobenzene	0.125 ppm
							Pentachlorophenol	0.125 ppm
							Phenanthrene	0.125 ppm
							Phenol	0.125 ppm
							Pyrene	0.125 ppm
							3,3'-Dichlorobenzidine	0.125 ppm
							3,3'-Dimethylbenzidine	0.125 ppm
							1,2,4,5-Tetrachlorobenzene	0.125 ppm
							1,3-Dinitrobenzene	0.125 ppm
							1,4-Dinitrobenzene	0.125 ppm
							2,3,4,6-Tetrachlorophenol	0.125 ppm
							2,6-Dichlorophenol	0.125 ppm
							2-Acetylaminofluorene	0.125 ppm
							3-Methylcholanthrene	0.125 ppm
							4,4'-Methylene bis(2-chloroaniline)	0.125 ppm
							4-Aminobiphenyl	0.125 ppm
							4-Nitroquinoline-1-oxide	0.125 ppm
							cis-Diallate	0.0925 ppm
							Dinoseb	0.125 ppm
							Ethyl methanesulfonate	0.125 ppm
							Hexachloropropene	0.125 ppm
							Isosafrole Peak 1	0.02 ppm
							Isosafrole Peak 2	0.105 ppm
							Methyl methanesulfonate	0.125 ppm
							N-Nitro-o-toluidine	0.125 ppm
							N-Nitrosodi-n-butylamine	0.125 ppm
							N-Nitrosodiethylamine	0.125 ppm
							N-Nitrosomethylethylamine	0.125 ppm
							N-Nitrosomorpholine	0.125 ppm
							N-Nitrosopiperidine	0.125 ppm
							N-Nitrosopyrrolidine	0.125 ppm
							p-Dimethylamino azobenzene	0.125 ppm
							Pentachlorobenzene	0.125 ppm
							Pentachloronitrobenzene	0.125 ppm
							Phenacetin	0.125 ppm
							Safrole, Total	0.125 ppm
							trans-Diallate	0.0325 ppm
							1,4-Dioxane	0.125 ppm
							1-Methylnaphthalene	0.125 ppm
							1-Naphthylamine	0.125 ppm
							2-Naphthylamine	0.125 ppm
							2-Picoline	0.125 ppm
							2-Toluidine	0.125 ppm
							7,12-Dimethylbenz (a) anthracene	0.125 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MSS_FV8270_1_00008	12/30/20	07/28/20	MeCl2, Lot 201838	2 mL	MSS_FV8270_2_00008	1000 uL	Aniline	0.125 ppm
							Phenyl ether	0.125 ppm
							Pyridine	0.125 ppm
							2,4-Dinitrophenol	4.5 ppm
							4,6-Dinitro-2-methylphenol	2.5 ppm
							4-Nitrophenol	2.5 ppm
							Benzidine	4 ppm
							Benzyl alcohol	0.5 ppm
							Indene	0.5 ppm
							Octachlorostyrene	0.5 ppm
							Benzoic acid	5 ppm
							1,1'-Biphenyl	0.5 ppm
							Acetophenone	0.5 ppm
							Atrazine	0.5 ppm
							Benzaldehyde	0.5 ppm
							Caprolactam	0.5 ppm
							1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
							2,4,6-Tribromophenol	1 ppm
							2-Fluorobiphenyl (Surr)	1 ppm
							2-Fluorophenol	1 ppm
							Nitrobenzene-d5 (Surr)	1 ppm
							p-Terphenyl-d14 (Surr)	1 ppm
							Phenol-d5	1 ppm
							N-Nitrosodiphenylamine	0.5 ppm
							1,4-Naphthoquinone	0.5 ppm
							1-Chloronaphthalene	0.5 ppm
							6-Methylchrysene	0.5 ppm
							Chlorobenzilate	0.5 ppm
							Dibenz[a,h]acridine	0.5 ppm
							Dibenz[a,j]acridine	0.5 ppm
							Dimethoate	0.5 ppm
							Ethyl Parathion	0.5 ppm
							Isodrin	0.5 ppm
							Methyl parathion	0.5 ppm
							o,o',o''-Triethylphosphorothioate	0.5 ppm
							Phorate	0.5 ppm
							Pronamide	0.5 ppm
							Quinoline	0.5 ppm
							Sulfotepp	0.5 ppm
							Thionazin	0.5 ppm
							1,2,4-Trichlorobenzene	0.5 ppm
							1,2-Dichlorobenzene	0.5 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Diphenylhydrazine	0.5 ppm
							1,3-Dichlorobenzene	0.5 ppm
							1,4-Dichlorobenzene	0.5 ppm
							2,2'-oxybis[1-chloropropane]	0.5 ppm
							2,4,5-Trichlorophenol	0.5 ppm
							2,4,6-Trichlorophenol	0.5 ppm
							2,4-Dichlorophenol	0.5 ppm
							2,4-Dimethylphenol	0.5 ppm
							2,4-Dinitrotoluene	0.5 ppm
							2,6-Dinitrotoluene	0.5 ppm
							2-Chloronaphthalene	0.5 ppm
							2-Chlorophenol	0.5 ppm
							2-Methylnaphthalene	0.5 ppm
							2-Methylphenol	0.5 ppm
							2-Nitroaniline	0.5 ppm
							2-Nitrophenol	0.5 ppm
							3-Nitroaniline	0.5 ppm
							4-Bromophenyl phenyl ether	0.5 ppm
							4-Chloro-3-methylphenol	0.5 ppm
							4-Chloroaniline	0.5 ppm
							4-Chlorophenyl phenyl ether	0.5 ppm
							4-Methylphenol	0.5 ppm
							4-Nitroaniline	0.5 ppm
							Acenaphthene	0.5 ppm
							Acenaphthylene	0.5 ppm
							Anthracene	0.5 ppm
							Benzo[a]anthracene	0.5 ppm
							Benzo[a]pyrene	0.5 ppm
							Benzo[b]fluoranthene	0.5 ppm
							Benzo[g,h,i]perylene	0.5 ppm
							Benzo[k]fluoranthene	0.5 ppm
							Bis(2-chloroethoxy)methane	0.5 ppm
							Bis(2-chloroethyl)ether	0.5 ppm
							Bis(2-ethylhexyl) phthalate	0.5 ppm
							Butyl benzyl phthalate	0.5 ppm
							Carbazole	0.5 ppm
							Chrysene	0.5 ppm
							Di-n-butyl phthalate	0.5 ppm
							Di-n-octyl phthalate	0.5 ppm
							Dibenz(a,h)anthracene	0.5 ppm
							Dibenzofuran	0.5 ppm
							Diethyl phthalate	0.5 ppm
							Dimethyl phthalate	0.5 ppm
							Fluoranthene	0.5 ppm
							Fluorene	0.5 ppm
							Hexachlorobenzene	0.5 ppm
							Hexachlorobutadiene	0.5 ppm
							Hexachlorocyclopentadiene	0.5 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachloroethane	0.5 ppm
							Indeno[1,2,3-cd]pyrene	0.5 ppm
							Isophorone	0.5 ppm
							N-Nitrosodi-n-propylamine	0.5 ppm
							N-Nitrosodimethylamine	0.5 ppm
							Naphthalene	0.5 ppm
							Nitrobenzene	0.5 ppm
							Pentachlorophenol	0.5 ppm
							Phenanthrene	0.5 ppm
							Phenol	0.5 ppm
							Pyrene	0.5 ppm
							3,3'-Dichlorobenzidine	0.5 ppm
							3,3'-Dimethylbenzidine	0.5 ppm
							1,2,4,5-Tetrachlorobenzene	0.5 ppm
							1,3-Dinitrobenzene	0.5 ppm
							1,4-Dinitrobenzene	0.5 ppm
							2,3,4,6-Tetrachlorophenol	0.5 ppm
							2,6-Dichlorophenol	0.5 ppm
							2-Acetylaminofluorene	0.5 ppm
							3-Methylcholanthrene	0.5 ppm
							4,4'-Methylene bis (2-chloroaniline)	0.5 ppm
							4-Aminobiphenyl	0.5 ppm
							4-Nitroquinoline-1-oxide	0.5 ppm
							cis-Diallate	0.37 ppm
							Dinoseb	0.5 ppm
							Ethyl methanesulfonate	0.5 ppm
							Hexachloropropene	0.5 ppm
							Isosafrole Peak 1	0.08 ppm
							Isosafrole Peak 2	0.42 ppm
							Methyl methanesulfonate	0.5 ppm
							N-Nitro-o-toluidine	0.5 ppm
							N-Nitrosodi-n-butylamine	0.5 ppm
							N-Nitrosodiethylamine	0.5 ppm
							N-Nitrosomethylethylamine	0.5 ppm
							N-Nitrosomorpholine	0.5 ppm
							N-Nitrosopiperidine	0.5 ppm
							N-Nitrosopyrrolidine	0.5 ppm
							p-Dimethylamino azobenzene	0.5 ppm
							Pentachlorobenzene	0.5 ppm
							Pentachloronitrobenzene	0.5 ppm
							Phenacetin	0.5 ppm
							Safrole, Total	0.5 ppm
							trans-Diallate	0.13 ppm
							1,4-Dioxane	0.5 ppm
							1-Methylnaphthalene	0.5 ppm
							1-Naphthylamine	0.5 ppm
							2-Naphthylamine	0.5 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Picoline	0.5 ppm
							2-Toluidine	0.5 ppm
							7,12-Dimethylbenz(a)anthracene	0.5 ppm
							Aniline	0.5 ppm
							Phenyl ether	0.5 ppm
							Pyridine	0.5 ppm
					MSS_FV8270_IS_00002	20 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_FV8270_2_00008	12/30/20	07/28/20	MeCl2, Lot 201838	5 mL	MSS_AB_24DNP_00003	40 uL	2,4-Dinitrophenol	9 ppm
					MSS_AB_46D2MP_00003	20 uL	4,6-Dinitro-2-methylphenol	5 ppm
					MSS_AB_4NP_00001	20 uL	4-Nitrophenol	5 ppm
					MSS_AB_BZIDIN_00006	5 uL	Benzidine	8 ppm
					MSS_CR#9_DL_00005	5 uL	Benzyl alcohol	1 ppm
							Indene	1 ppm
							Octachlorostyrene	1 ppm
					MSS_CR8270_6_00005	25 uL	Benzoic acid	10 ppm
					MSS_CR8270_8_00002	2.5 uL	1,1'-Biphenyl	1 ppm
							Acetophenone	1 ppm
							Atrazine	1 ppm
							Benzaldehyde	1 ppm
							Caprolactam	1 ppm
					MSS_FV8270_IS_00002	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
					MSS_FV8270_WS_00005	25 uL	Pyrene-d10 (IS)	20 ppm
							2,4,6-Tribromophenol	2 ppm
							2-Fluorobiphenyl (Surr)	2 ppm
							2-Fluorophenol	2 ppm
							Nitrobenzene-d5 (Surr)	2 ppm
							p-Terphenyl-d14 (Surr)	2 ppm
							Phenol-d5	2 ppm
							Benzidine	8 ppm
							N-Nitrosodiphenylamine	1 ppm
							1,4-Naphthoquinone	1 ppm
							1-Chloronaphthalene	1 ppm
							6-Methylchrysene	1 ppm
							Chlorobenzilate	1 ppm
							Dibenz[a,h]acridine	1 ppm
							Dibenz[a,j]acridine	1 ppm
							Dimethoate	1 ppm
							Ethyl Parathion	1 ppm
							Isodrin	1 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl parathion	1 ppm
							o,o',o''-Triethylphosphorothioate	1 ppm
							Phorate	1 ppm
							Pronamide	1 ppm
							Quinoline	1 ppm
							Sulfotepp	1 ppm
							Thionazin	1 ppm
							1,2,4-Trichlorobenzene	1 ppm
							1,2-Dichlorobenzene	1 ppm
							1,2-Diphenylhydrazine	1 ppm
							1,3-Dichlorobenzene	1 ppm
							1,4-Dichlorobenzene	1 ppm
							2,2'-oxybis[1-chloropropane]	1 ppm
							2,4,5-Trichlorophenol	1 ppm
							2,4,6-Trichlorophenol	1 ppm
							2,4-Dichlorophenol	1 ppm
							2,4-Dimethylphenol	1 ppm
							2,4-Dinitrophenol	9 ppm
							2,4-Dinitrotoluene	1 ppm
							2,6-Dinitrotoluene	1 ppm
							2-Chloronaphthalene	1 ppm
							2-Chlorophenol	1 ppm
							2-Methylnaphthalene	1 ppm
							2-Methylphenol	1 ppm
							2-Nitroaniline	1 ppm
							2-Nitrophenol	1 ppm
							3-Nitroaniline	1 ppm
							4,6-Dinitro-2-methylphenol	5 ppm
							4-Bromophenyl phenyl ether	1 ppm
							4-Chloro-3-methylphenol	1 ppm
							4-Chloroaniline	1 ppm
							4-Chlorophenyl phenyl ether	1 ppm
							4-Methylphenol	1 ppm
							4-Nitroaniline	1 ppm
							4-Nitrophenol	5 ppm
							Acenaphthene	1 ppm
							Acenaphthylene	1 ppm
							Anthracene	1 ppm
							Benzo[a]anthracene	1 ppm
							Benzo[a]pyrene	1 ppm
							Benzo[b]fluoranthene	1 ppm
							Benzo[g,h,i]perylene	1 ppm
							Benzo[k]fluoranthene	1 ppm
							Bis(2-chloroethoxy)methane	1 ppm
							Bis(2-chloroethyl)ether	1 ppm
							Bis(2-ethylhexyl) phthalate	1 ppm
							Butyl benzyl phthalate	1 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbazole	1 ppm
							Chrysene	1 ppm
							Di-n-butyl phthalate	1 ppm
							Di-n-octyl phthalate	1 ppm
							Dibenz (a,h) anthracene	1 ppm
							Dibenzofuran	1 ppm
							Diethyl phthalate	1 ppm
							Dimethyl phthalate	1 ppm
							Fluoranthene	1 ppm
							Fluorene	1 ppm
							Hexachlorobenzene	1 ppm
							Hexachlorobutadiene	1 ppm
							Hexachlorocyclopentadiene	1 ppm
							Hexachloroethane	1 ppm
							Indeno[1,2,3-cd]pyrene	1 ppm
							Isophorone	1 ppm
							N-Nitrosodi-n-propylamine	1 ppm
							N-Nitrosodimethylamine	1 ppm
							Naphthalene	1 ppm
							Nitrobenzene	1 ppm
							Pentachlorophenol	1 ppm
							Phenanthrene	1 ppm
							Phenol	1 ppm
							Pyrene	1 ppm
							3,3'-Dichlorobenzidine	1 ppm
							3,3'-Dimethylbenzidine	1 ppm
							1,2,4,5-Tetrachlorobenzene	1 ppm
							1,3-Dinitrobenzene	1 ppm
							1,4-Dinitrobenzene	1 ppm
							2,3,4,6-Tetrachlorophenol	1 ppm
							2,6-Dichlorophenol	1 ppm
							2-Acetylaminofluorene	1 ppm
							3-Methylcholanthrene	1 ppm
							4,4'-Methylene bis (2-chloroaniline)	1 ppm
							4-Aminobiphenyl	1 ppm
							4-Nitroquinoline-1-oxide	1 ppm
							cis-Diallate	0.74 ppm
							Dinoseb	1 ppm
							Ethyl methanesulfonate	1 ppm
							Hexachloropropene	1 ppm
							Isosafrole Peak 1	0.16 ppm
							Isosafrole Peak 2	0.84 ppm
							Methyl methanesulfonate	1 ppm
							N-Nitro-o-toluidine	1 ppm
							N-Nitrosodi-n-butylamine	1 ppm
							N-Nitrosodiethylamine	1 ppm
							N-Nitrosomethylethylamine	1 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosomorpholine	1 ppm
							N-Nitrosopiperidine	1 ppm
							N-Nitrosopyrrolidine	1 ppm
							p-Dimethylamino azobenzene	1 ppm
							Pentachlorobenzene	1 ppm
							Pentachloronitrobenzene	1 ppm
							Phenacetin	1 ppm
							Safrole, Total	1 ppm
							trans-Diallyl	0.26 ppm
							1,4-Dioxane	1 ppm
							1-Methylnaphthalene	1 ppm
							1-Naphthylamine	1 ppm
							2-Naphthylamine	1 ppm
							2-Picoline	1 ppm
							2-Toluidine	1 ppm
							7,12-Dimethylbenz (a) anthracene	1 ppm
							Aniline	1 ppm
							Phenyl ether	1 ppm
							Pyridine	1 ppm
...MSS AB 24DNP_00003	09/05/23		Absolute, Lot 090518		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
...MSS AB 46D2MP_00003	10/20/22		Absolute, Lot 102017		(Purchased Reagent)		4,6-Dinitro-2-methylphenol	1000 ug/mL
...MSS AB 4NP_00001	10/07/21		Absolute, Lot 100716		(Purchased Reagent)		4-Nitrophenol	1000 ug/mL
...MSS AB BZIDIN_00006	01/29/23		Absolute, Lot 012920		(Purchased Reagent)		Benzidine	5000 ug/mL
...MSS_CR#9_DL_00005	09/30/21	07/21/20	MeCl2, Lot 200018	5 mL	MSS_CR8270_9_00003	1000 uL	Benzyl alcohol	1000 ppm
							Indene	1000 ppm
							Octachlorostyrene	1000 ppm
....MSS_CR8270_9_00003	09/30/21		Restek, Lot A0131112		(Purchased Reagent)		Benzyl alcohol	5000 ug/mL
							Indene	5000 ug/mL
							Octachlorostyrene	5000 ug/mL
...MSS_CR8270_6_00005	02/28/21		Restek, Lot A0146280		(Purchased Reagent)		Benzoic acid	2000 ug/mL
...MSS_CR8270_8_00002	02/28/21		Restek, Lot A0146313		(Purchased Reagent)		1,1'-Biphenyl	2000 ug/mL
							Acetophenone	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
...MSS_FV8270_IS_00002	02/28/21		Restek, Lot A0134880		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
...MSS_FV8270_WS_00005	12/30/20	07/13/20	MeCl2, Lot 200018	25 mL	MSS_8270_SURR_00002	2500 uL	2,4,6-Tribromophenol	400 ppm
							2-Fluorobiphenyl (Surr)	400 ppm
							2-Fluorophenol	400 ppm
							Nitrobenzene-d5 (Surr)	400 ppm
							p-Terphenyl-d14 (Surr)	400 ppm
							Phenol-d5	400 ppm
					MSS_AB_BZIDIN_00004	2000 uL	Benzidine	600 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MSS_CR8270_1_00004	1000 uL	N-Nitrosodiphenylamine	200 ppm
					MSS_CR8270_10_00004	2500 uL	1,4-Naphthoquinone	200 ppm
							1-Chloronaphthalene	200 ppm
							6-Methylchrysene	200 ppm
							Chlorobenzilate	200 ppm
							Dibenz[a,h]acridine	200 ppm
							Dibenz[a,j]acridine	200 ppm
							Dimethoate	200 ppm
							Ethyl Parathion	200 ppm
							Isodrin	200 ppm
							Methyl parathion	200 ppm
							o,o',o''-Triethylphosphorothioate	200 ppm
							Phorate	200 ppm
							Pronamide	200 ppm
							Quinoline	200 ppm
							Sulfotepp	200 ppm
							Thionazin	200 ppm
					MSS_CR8270_2_00007	5000 uL	1,2,4-Trichlorobenzene	200 ppm
							1,2-Dichlorobenzene	200 ppm
							1,2-Diphenylhydrazine	200 ppm
							1,3-Dichlorobenzene	200 ppm
							1,4-Dichlorobenzene	200 ppm
							2,2'-oxybis[1-chloropropane]	200 ppm
							2,4,5-Trichlorophenol	200 ppm
							2,4,6-Trichlorophenol	200 ppm
							2,4-Dichlorophenol	200 ppm
							2,4-Dimethylphenol	200 ppm
							2,4-Dinitrophenol	200 ppm
							2,4-Dinitrotoluene	200 ppm
							2,6-Dinitrotoluene	200 ppm
							2-Chloronaphthalene	200 ppm
							2-Chlorophenol	200 ppm
							2-Methylnaphthalene	200 ppm
							2-Methylphenol	200 ppm
							2-Nitroaniline	200 ppm
							2-Nitrophenol	200 ppm
							3-Nitroaniline	200 ppm
							4,6-Dinitro-2-methylphenol	200 ppm
							4-Bromophenyl phenyl ether	200 ppm
							4-Chloro-3-methylphenol	200 ppm
							4-Chloroaniline	200 ppm
							4-Chlorophenyl phenyl ether	200 ppm
							4-Methylphenol	200 ppm
							4-Nitroaniline	200 ppm
							4-Nitrophenol	200 ppm
							Acenaphthene	200 ppm
							Acenaphthylene	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Anthracene	200 ppm
							Benzo[a]anthracene	200 ppm
							Benzo[a]pyrene	200 ppm
							Benzo[b]fluoranthene	200 ppm
							Benzo[g,h,i]perylene	200 ppm
							Benzo[k]fluoranthene	200 ppm
							Bis (2-chloroethoxy)methane	200 ppm
							Bis (2-chloroethyl) ether	200 ppm
							Bis (2-ethylhexyl) phthalate	200 ppm
							Butyl benzyl phthalate	200 ppm
							Carbazole	200 ppm
							Chrysene	200 ppm
							Di-n-butyl phthalate	200 ppm
							Di-n-octyl phthalate	200 ppm
							Dibenz (a,h) anthracene	200 ppm
							Dibenzofuran	200 ppm
							Diethyl phthalate	200 ppm
							Dimethyl phthalate	200 ppm
							Fluoranthene	200 ppm
							Fluorene	200 ppm
							Hexachlorobenzene	200 ppm
							Hexachlorobutadiene	200 ppm
							Hexachlorocyclopentadiene	200 ppm
							Hexachloroethane	200 ppm
							Indeno[1,2,3-cd]pyrene	200 ppm
							Isophorone	200 ppm
							N-Nitrosodi-n-propylamine	200 ppm
							N-Nitrosodimethylamine	200 ppm
							Naphthalene	200 ppm
							Nitrobenzene	200 ppm
							Pentachlorophenol	200 ppm
							Phenanthrene	200 ppm
							Phenol	200 ppm
							Pyrene	200 ppm
					MSS_CR8270_3_00004	2500 uL	3,3'-Dichlorobenzidine	200 ppm
							3,3'-Dimethylbenzidine	200 ppm
							Benazidine	600 ppm
					MSS_CR8270_4_00004	2500 uL	1,2,4,5-Tetrachlorobenzene	200 ppm
							1,3-Dinitrobenzene	200 ppm
							1,4-Dinitrobenzene	200 ppm
							2,3,4,6-Tetrachlorophenol	200 ppm
							2,6-Dichlorophenol	200 ppm
							2-Acetylaminofluorene	200 ppm
							3-Methylcholanthrene	200 ppm
							4,4'-Methylene bis (2-chloroaniline)	200 ppm
							4-Aminobiphenyl	200 ppm
							4-Nitroquinoline-1-oxide	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-Diallate	148 ppm
							Dinoseb	200 ppm
							Ethyl methanesulfonate	200 ppm
							Hexachloropropene	200 ppm
							Isosafrole Peak 1	32 ppm
							Isosafrole Peak 2	168 ppm
							Methyl methanesulfonate	200 ppm
							N-Nitro-o-toluidine	200 ppm
							N-Nitrosodi-n-butylamine	200 ppm
							N-Nitrosodiethylamine	200 ppm
							N-Nitrosomethylethylamine	200 ppm
							N-Nitrosomorpholine	200 ppm
							N-Nitrosopiperidine	200 ppm
							N-Nitrosopyrrolidine	200 ppm
							p-Dimethylamino azobenzene	200 ppm
							Pentachlorobenzene	200 ppm
							Pentachloronitrobenzene	200 ppm
							Phenacetin	200 ppm
							Safrole, Total	200 ppm
							trans-Diallate	52 ppm
					MSS_CR8270_7_00004	2500 uL	1,4-Dioxane	200 ppm
							1-Methylnaphthalene	200 ppm
							1-Naphthylamine	200 ppm
							2-Naphthylamine	200 ppm
							2-Picoline	200 ppm
							2-Toluidine	200 ppm
							7,12-Dimethylbenz (a) anthracene	200 ppm
							Aniline	200 ppm
							Phenyl ether	200 ppm
							Pyridine	200 ppm
....MSS_8270_SURR_00002	04/30/23	Sigma- Aldrich, Lot LRAC6081			(Purchased Reagent)		2,4,6-Tribromophenol	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5	4000 ug/mL
....MSS_AB_BZIDIN_00004	01/29/23	Absolute, Lot 012920			(Purchased Reagent)		Benzidine	5000 ug/mL
...MSS_CR8270_1_00004	10/31/22	Restek, Lot A0154042			(Purchased Reagent)		N-Nitrosodiphenylamine	5000 ug/mL
....MSS_CR8270_10_00004	06/30/21	Restek, Lot A0156085			(Purchased Reagent)		1,4-Naphthoquinone	2000 ug/mL
							1-Chloronaphthalene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
							Chlorobenzilate	2000 ug/mL
							Dibenz[a,h]acridine	2000 ug/mL
							Dibenz[a,j]acridine	2000 ug/mL
							Dimethoate	2000 ug/mL
							Ethyl Parathion	2000 ug/mL
							Isodrin	2000 ug/mL
							Methyl parathion	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							o,o',o''-Triethylphosphorothioate	2000 ug/mL
							Phorate	2000 ug/mL
							Pronamide	2000 ug/mL
							Quinoline	2000 ug/mL
							Sulfotepp	2000 ug/mL
							Thionazin	2000 ug/mL
....MSS_CR8270_2_00007	02/28/22		Restek, Lot A0146253		(Purchased Reagent)		1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	1000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	1000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Bis (2-chloroethoxy)methane	1000 ug/mL
							Bis (2-chloroethyl) ether	1000 ug/mL
							Bis (2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	1000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
....MSS_CR8270_3_00004	09/30/21		Restek, Lot A0130858		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							3,3'-Dimethylbenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
....MSS_CR8270_4_00004	12/31/20		Restek, Lot A0150344		(Purchased Reagent)		1,2,4,5-Tetrachlorobenzene	2000 ug/mL
							1,3-Dinitrobenzene	2000 ug/mL
							1,4-Dinitrobenzene	2000 ug/mL
							2,3,4,6-Tetrachlorophenol	2000 ug/mL
							2,6-Dichlorophenol	2000 ug/mL
							2-Acetylaminofluorene	2000 ug/mL
							3-Methylcholanthrene	2000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	2000 ug/mL
							4-Aminobiphenyl	2000 ug/mL
							4-Nitroquinoline-1-oxide	2000 ug/mL
							cis-Diallate	1480 ug/mL
							Dinoseb	2000 ug/mL
							Ethyl methanesulfonate	2000 ug/mL
							Hexachloropropene	2000 ug/mL
							Isosafrole Peak 1	320 ug/mL
							Isosafrole Peak 2	1680 ug/mL
							Methyl methanesulfonate	2000 ug/mL
							N-Nitro-o-toluidine	2000 ug/mL
							N-Nitrosodi-n-butylamine	2000 ug/mL
							N-Nitrosodiethylamine	2000 ug/mL
							N-Nitrosomethylethylamine	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosomorpholine	2000 ug/mL
							N-Nitrosopiperidine	2000 ug/mL
							N-Nitrosopyrrolidine	2000 ug/mL
							p-Dimethylamino azobenzene	2000 ug/mL
							Pentachlorobenzene	2000 ug/mL
							Pentachloronitrobenzene	2000 ug/mL
							Phenacetin	2000 ug/mL
							Safrole, Total	2000 ug/mL
							trans-Diallate	520 ug/mL
....MSS_CR8270_7_00004	11/30/22		Restek, Lot A0155157		(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
							1-Methylnaphthalene	2000 ug/mL
							1-Naphthylamine	2000 ug/mL
							2-Naphthylamine	2000 ug/mL
							2-Picoline	2000 ug/mL
							2-Toluidine	2000 ug/mL
							7,12-Dimethylbenz (a) anthracene	2000 ug/mL
							Aniline	2000 ug/mL
							Phenyl ether	2000 ug/mL
							Pyridine	2000 ug/mL
..MSS_FV8270_IS_00002	02/28/21		Restek, Lot A0134880		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_2_00008	12/30/20	09/24/20	MeCl2, Lot 203170	2 mL	MSS_FV8270_2_00008	500 uL	2,4-Dinitrophenol	2.25 ppm
							4,6-Dinitro-2-methylphenol	1.25 ppm
							4-Nitrophenol	1.25 ppm
							Benzidine	2 ppm
							Benzyl alcohol	0.25 ppm
							Indene	0.25 ppm
							Octachlorostyrene	0.25 ppm
							Benzoic acid	2.5 ppm
							1,1'-Biphenyl	0.25 ppm
							Acetophenone	0.25 ppm
							Atrazine	0.25 ppm
							Benzaldehyde	0.25 ppm
							Caprolactam	0.25 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
							2,4,6-Tribromophenol	0.5 ppm
							2-Fluorobiphenyl (Surr)	0.5 ppm
							2-Fluorophenol	0.5 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nitrobenzene-d5 (Surr)	0.5 ppm
							p-Terphenyl-d14 (Surr)	0.5 ppm
							Phenol-d5	0.5 ppm
							N-Nitrosodiphenylamine	0.25 ppm
							1,4-Naphthoquinone	0.25 ppm
							1-Chloronaphthalene	0.25 ppm
							6-Methylchrysene	0.25 ppm
							Chlorobenzilate	0.25 ppm
							Dibenz[a,h]acridine	0.25 ppm
							Dibenz[a,j]acridine	0.25 ppm
							Dimethoate	0.25 ppm
							Ethyl Parathion	0.25 ppm
							Isodrin	0.25 ppm
							Methyl parathion	0.25 ppm
							o,o',o''-Triethylphosphorothioate	0.25 ppm
							Phorate	0.25 ppm
							Pronamide	0.25 ppm
							Quinoline	0.25 ppm
							Sulfotepp	0.25 ppm
							Thionazin	0.25 ppm
							1,2,4-Trichlorobenzene	0.25 ppm
							1,2-Dichlorobenzene	0.25 ppm
							1,2-Diphenylhydrazine	0.25 ppm
							1,3-Dichlorobenzene	0.25 ppm
							1,4-Dichlorobenzene	0.25 ppm
							2,2'-oxybis[1-chloropropane]	0.25 ppm
							2,4,5-Trichlorophenol	0.25 ppm
							2,4,6-Trichlorophenol	0.25 ppm
							2,4-Dichlorophenol	0.25 ppm
							2,4-Dimethylphenol	0.25 ppm
							2,4-Dinitrotoluene	0.25 ppm
							2,6-Dinitrotoluene	0.25 ppm
							2-Chloronaphthalene	0.25 ppm
							2-Chlorophenol	0.25 ppm
							2-Methylnaphthalene	0.25 ppm
							2-Methylphenol	0.25 ppm
							2-Nitroaniline	0.25 ppm
							2-Nitrophenol	0.25 ppm
							3-Nitroaniline	0.25 ppm
							4-Bromophenyl phenyl ether	0.25 ppm
							4-Chloro-3-methylphenol	0.25 ppm
							4-Chloroaniline	0.25 ppm
							4-Chlorophenyl phenyl ether	0.25 ppm
							4-Methylphenol	0.25 ppm
							4-Nitroaniline	0.25 ppm
							Acenaphthene	0.25 ppm
							Acenaphthylene	0.25 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Anthracene	0.25 ppm
							Benzo[a]anthracene	0.25 ppm
							Benzo[a]pyrene	0.25 ppm
							Benzo[b]fluoranthene	0.25 ppm
							Benzo[g,h,i]perylene	0.25 ppm
							Benzo[k]fluoranthene	0.25 ppm
							Bis(2-chloroethoxy)methane	0.25 ppm
							Bis(2-chloroethyl)ether	0.25 ppm
							Bis(2-ethylhexyl) phthalate	0.25 ppm
							Butyl benzyl phthalate	0.25 ppm
							Carbazole	0.25 ppm
							Chrysene	0.25 ppm
							Di-n-butyl phthalate	0.25 ppm
							Di-n-octyl phthalate	0.25 ppm
							Dibenz(a,h)anthracene	0.25 ppm
							Dibenzofuran	0.25 ppm
							Diethyl phthalate	0.25 ppm
							Dimethyl phthalate	0.25 ppm
							Fluoranthene	0.25 ppm
							Fluorene	0.25 ppm
							Hexachlorobenzene	0.25 ppm
							Hexachlorobutadiene	0.25 ppm
							Hexachlorocyclopentadiene	0.25 ppm
							Hexachloroethane	0.25 ppm
							Indeno[1,2,3-cd]pyrene	0.25 ppm
							Isophorone	0.25 ppm
							N-Nitrosodi-n-propylamine	0.25 ppm
							N-Nitrosodimethylamine	0.25 ppm
							Naphthalene	0.25 ppm
							Nitrobenzene	0.25 ppm
							Pentachlorophenol	0.25 ppm
							Phenanthrene	0.25 ppm
							Phenol	0.25 ppm
							Pyrene	0.25 ppm
							3,3'-Dichlorobenzidine	0.25 ppm
							3,3'-Dimethylbenzidine	0.25 ppm
							1,2,4,5-Tetrachlorobenzene	0.25 ppm
							1,3-Dinitrobenzene	0.25 ppm
							1,4-Dinitrobenzene	0.25 ppm
							2,3,4,6-Tetrachlorophenol	0.25 ppm
							2,6-Dichlorophenol	0.25 ppm
							2-Acetylaminofluorene	0.25 ppm
							3-Methylcholanthrene	0.25 ppm
							4,4'-Methylene bis(2-chloroaniline)	0.25 ppm
							4-Aminobiphenyl	0.25 ppm
							4-Nitroquinoline-1-oxide	0.25 ppm
							cis-Diallate	0.185 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dinoseb	0.25 ppm
							Ethyl methanesulfonate	0.25 ppm
							Hexachloropropene	0.25 ppm
							Isosafrole Peak 1	0.04 ppm
							Isosafrole Peak 2	0.21 ppm
							Methyl methanesulfonate	0.25 ppm
							N-Nitro-o-toluidine	0.25 ppm
							N-Nitrosodi-n-butylamine	0.25 ppm
							N-Nitrosodiethylamine	0.25 ppm
							N-Nitrosomethylethylamine	0.25 ppm
							N-Nitrosomorpholine	0.25 ppm
							N-Nitrosopiperidine	0.25 ppm
							N-Nitrosopyrrolidine	0.25 ppm
							p-Dimethylamino azobenzene	0.25 ppm
							Pentachlorobenzene	0.25 ppm
							Pentachloronitrobenzene	0.25 ppm
							Phenacetin	0.25 ppm
							Safrole, Total	0.25 ppm
							trans-Diallate	0.065 ppm
							1,4-Dioxane	0.25 ppm
							1-Methylnaphthalene	0.25 ppm
							1-Naphthylamine	0.25 ppm
							2-Naphthylamine	0.25 ppm
							2-Picoline	0.25 ppm
							2-Toluidine	0.25 ppm
							7,12-Dimethylbenz (a) anthracene	0.25 ppm
							Aniline	0.25 ppm
							Phenyl ether	0.25 ppm
							Pyridine	0.25 ppm
.MSS_FV8270_2_00008	12/30/20	07/28/20	MeCl2, Lot 201838	5 mL	MSS_AB_24DNP_00003	40 uL	2,4-Dinitrophenol	9 ppm
					MSS_AB_46D2MP_00003	20 uL	4,6-Dinitro-2-methylphenol	5 ppm
					MSS_AB_4NP_00001	20 uL	4-Nitrophenol	5 ppm
					MSS_AB_BZIDIN_00006	5 uL	Benzidine	8 ppm
					MSS_CR#9_DL_00005	5 uL	Benzyl alcohol	1 ppm
							Indene	1 ppm
							Octachlorostyrene	1 ppm
					MSS_CR8270_6_00005	25 uL	Benzoic acid	10 ppm
					MSS_CR8270_8_00002	2.5 uL	1,1'-Biphenyl	1 ppm
							Acetophenone	1 ppm
							Atrazine	1 ppm
							Benzaldehyde	1 ppm
							Caprolactam	1 ppm
					MSS_FV8270_IS_00002	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MSS_FV8270_WS_00005	25 uL	2,4,6-Tribromophenol	2 ppm
							2-Fluorobiphenyl (Surr)	2 ppm
							2-Fluorophenol	2 ppm
							Nitrobenzene-d5 (Surr)	2 ppm
							p-Terphenyl-d14 (Surr)	2 ppm
							Phenol-d5	2 ppm
							Benzidine	8 ppm
							N-Nitrosodiphenylamine	1 ppm
							1,4-Naphthoquinone	1 ppm
							1-Chloronaphthalene	1 ppm
							6-Methylchrysene	1 ppm
							Chlorobenzilate	1 ppm
							Dibenz[a,h]acridine	1 ppm
							Dibenz[a,j]acridine	1 ppm
							Dimethoate	1 ppm
							Ethyl Parathion	1 ppm
							Isodrin	1 ppm
							Methyl parathion	1 ppm
							o,o',o''-Triethylphosphorothioate	1 ppm
							Phorate	1 ppm
							Pronamide	1 ppm
							Quinoline	1 ppm
							Sulfotepp	1 ppm
							Thionazin	1 ppm
							1,2,4-Trichlorobenzene	1 ppm
							1,2-Dichlorobenzene	1 ppm
							1,2-Diphenylhydrazine	1 ppm
							1,3-Dichlorobenzene	1 ppm
							1,4-Dichlorobenzene	1 ppm
							2,2'-oxybis[1-chloropropane]	1 ppm
							2,4,5-Trichlorophenol	1 ppm
							2,4,6-Trichlorophenol	1 ppm
							2,4-Dichlorophenol	1 ppm
							2,4-Dimethylphenol	1 ppm
							2,4-Dinitrophenol	9 ppm
							2,4-Dinitrotoluene	1 ppm
							2,6-Dinitrotoluene	1 ppm
							2-Chloronaphthalene	1 ppm
							2-Chlorophenol	1 ppm
							2-Methylnaphthalene	1 ppm
							2-Methylphenol	1 ppm
							2-Nitroaniline	1 ppm
							2-Nitrophenol	1 ppm
							3-Nitroaniline	1 ppm
							4,6-Dinitro-2-methylphenol	5 ppm
							4-Bromophenyl phenyl ether	1 ppm
							4-Chloro-3-methylphenol	1 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chloroaniline	1 ppm
							4-Chlorophenyl phenyl ether	1 ppm
							4-Methylphenol	1 ppm
							4-Nitroaniline	1 ppm
							4-Nitrophenol	5 ppm
							Acenaphthene	1 ppm
							Acenaphthylene	1 ppm
							Anthracene	1 ppm
							Benzo[a]anthracene	1 ppm
							Benzo[a]pyrene	1 ppm
							Benzo[b]fluoranthene	1 ppm
							Benzo[g,h,i]perylene	1 ppm
							Benzo[k]fluoranthene	1 ppm
							Bis(2-chloroethoxy)methane	1 ppm
							Bis(2-chloroethyl)ether	1 ppm
							Bis(2-ethylhexyl) phthalate	1 ppm
							Butyl benzyl phthalate	1 ppm
							Carbazole	1 ppm
							Chrysene	1 ppm
							Di-n-butyl phthalate	1 ppm
							Di-n-octyl phthalate	1 ppm
							Dibenz(a,h)anthracene	1 ppm
							Dibenzofuran	1 ppm
							Diethyl phthalate	1 ppm
							Dimethyl phthalate	1 ppm
							Fluoranthene	1 ppm
							Fluorene	1 ppm
							Hexachlorobenzene	1 ppm
							Hexachlorobutadiene	1 ppm
							Hexachlorocyclopentadiene	1 ppm
							Hexachloroethane	1 ppm
							Indeno[1,2,3-cd]pyrene	1 ppm
							Isophorone	1 ppm
							N-Nitrosodi-n-propylamine	1 ppm
							N-Nitrosodimethylamine	1 ppm
							Naphthalene	1 ppm
							Nitrobenzene	1 ppm
							Pentachlorophenol	1 ppm
							Phenanthrene	1 ppm
							Phenol	1 ppm
							Pyrene	1 ppm
							3,3'-Dichlorobenzidine	1 ppm
							3,3'-Dimethylbenzidine	1 ppm
							1,2,4,5-Tetrachlorobenzene	1 ppm
							1,3-Dinitrobenzene	1 ppm
							1,4-Dinitrobenzene	1 ppm
							2,3,4,6-Tetrachlorophenol	1 ppm
							2,6-Dichlorophenol	1 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Acetylaminofluorene	1 ppm
							3-Methylcholanthrene	1 ppm
							4,4'-Methylene bis (2-chloroaniline)	1 ppm
							4-Aminobiphenyl	1 ppm
							4-Nitroquinoline-1-oxide	1 ppm
							cis-Diallate	0.74 ppm
							Dinoseb	1 ppm
							Ethyl methanesulfonate	1 ppm
							Hexachloropropene	1 ppm
							Isosafrole Peak 1	0.16 ppm
							Isosafrole Peak 2	0.84 ppm
							Methyl methanesulfonate	1 ppm
							N-Nitro-o-toluidine	1 ppm
							N-Nitrosodi-n-butylamine	1 ppm
							N-Nitrosodiethylamine	1 ppm
							N-Nitrosomethylethylamine	1 ppm
							N-Nitrosomorpholine	1 ppm
							N-Nitrosopiperidine	1 ppm
							N-Nitrosopyrrolidine	1 ppm
							p-Dimethylamino azobenzene	1 ppm
							Pentachlorobenzene	1 ppm
							Pentachloronitrobenzene	1 ppm
							Phenacetin	1 ppm
							Safrole, Total	1 ppm
							trans-Diallate	0.26 ppm
							1,4-Dioxane	1 ppm
							1-Methylnaphthalene	1 ppm
							1-Naphthylamine	1 ppm
							2-Naphthylamine	1 ppm
							2-Picoline	1 ppm
							2-Toluidine	1 ppm
							7,12-Dimethylbenz (a) anthracene	1 ppm
							Aniline	1 ppm
							Phenyl ether	1 ppm
							Pyridine	1 ppm
..MSS AB 24DNP 00003	09/05/23		Absolute, Lot 090518		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
..MSS AB 46D2MP 00003	10/20/22		Absolute, Lot 102017		(Purchased Reagent)		4,6-Dinitro-2-methylphenol	1000 ug/mL
..MSS AB 4NP 00001	10/07/21		Absolute, Lot 100716		(Purchased Reagent)		4-Nitrophenol	1000 ug/mL
..MSS AB BZIDIN 00006	01/29/23		Absolute, Lot 012920		(Purchased Reagent)		Benzidine	5000 ug/mL
..MSS_CR#9_DL_00005	09/30/21	07/21/20	MeCl2, Lot 200018	5 mL	MSS_CR8270_9_00003	1000 uL	Benzyl alcohol	1000 ppm
							Indene	1000 ppm
							Octachlorostyrene	1000 ppm
...MSS_CR8270_9_00003	09/30/21		Restek, Lot A0131112		(Purchased Reagent)		Benzyl alcohol	5000 ug/mL
							Indene	5000 ug/mL
							Octachlorostyrene	5000 ug/mL
..MSS_CR8270_6_00005	02/28/21		Restek, Lot A0146280		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..MSS_CR8270_8_00002	02/28/21		Restek, Lot A0146313		(Purchased Reagent)		1,1'-Biphenyl	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetophenone	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..MSS_FV8270_IS_00002	02/28/21		Restek, Lot A0134880		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
..MSS_FV8270_WS_00005	12/30/20	07/13/20	MeCl2, Lot 200018	25 mL	MSS_8270_SURR_00002	2500 uL	2,4,6-Tribromophenol	400 ppm
							2-Fluorobiphenyl (Surr)	400 ppm
							2-Fluorophenol	400 ppm
							Nitrobenzene-d5 (Surr)	400 ppm
							p-Terphenyl-d14 (Surr)	400 ppm
							Phenol-d5	400 ppm
					MSS_AB_BZIDIN_00004	2000 uL	Benzidine	600 ppm
					MSS_CR8270_1_00004	1000 uL	N-Nitrosodiphenylamine	200 ppm
					MSS_CR8270_10_00004	2500 uL	1,4-Naphthoquinone	200 ppm
							1-Chloronaphthalene	200 ppm
							6-Methylchrysene	200 ppm
							Chlorobenzilate	200 ppm
							Dibenz[a,h]acridine	200 ppm
							Dibenz[a,j]acridine	200 ppm
							Dimethoate	200 ppm
							Ethyl Parathion	200 ppm
							Isodrin	200 ppm
							Methyl parathion	200 ppm
							o,o',o''-Triethylphosphorothioate	200 ppm
							Phorate	200 ppm
							Pronamide	200 ppm
							Quinoline	200 ppm
							Sulfotepp	200 ppm
							Thionazin	200 ppm
					MSS_CR8270_2_00007	5000 uL	1,2,4-Trichlorobenzene	200 ppm
							1,2-Dichlorobenzene	200 ppm
							1,2-Diphenylhydrazine	200 ppm
							1,3-Dichlorobenzene	200 ppm
							1,4-Dichlorobenzene	200 ppm
							2,2'-oxybis[1-chloropropane]	200 ppm
							2,4,5-Trichlorophenol	200 ppm
							2,4,6-Trichlorophenol	200 ppm
							2,4-Dichlorophenol	200 ppm
							2,4-Dimethylphenol	200 ppm
							2,4-Dinitrophenol	200 ppm
							2,4-Dinitrotoluene	200 ppm
							2,6-Dinitrotoluene	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chloronaphthalene	200 ppm
							2-Chlorophenol	200 ppm
							2-Methylnaphthalene	200 ppm
							2-Methylphenol	200 ppm
							2-Nitroaniline	200 ppm
							2-Nitrophenol	200 ppm
							3-Nitroaniline	200 ppm
							4,6-Dinitro-2-methylphenol	200 ppm
							4-Bromophenyl phenyl ether	200 ppm
							4-Chloro-3-methylphenol	200 ppm
							4-Chloroaniline	200 ppm
							4-Chlorophenyl phenyl ether	200 ppm
							4-Methylphenol	200 ppm
							4-Nitroaniline	200 ppm
							4-Nitrophenol	200 ppm
							Acenaphthene	200 ppm
							Acenaphthylene	200 ppm
							Anthracene	200 ppm
							Benzo[a]anthracene	200 ppm
							Benzo[a]pyrene	200 ppm
							Benzo[b]fluoranthene	200 ppm
							Benzo[g,h,i]perylene	200 ppm
							Benzo[k]fluoranthene	200 ppm
							Bis (2-chloroethoxy)methane	200 ppm
							Bis (2-chloroethyl) ether	200 ppm
							Bis (2-ethylhexyl) phthalate	200 ppm
							Butyl benzyl phthalate	200 ppm
							Carbazole	200 ppm
							Chrysene	200 ppm
							Di-n-butyl phthalate	200 ppm
							Di-n-octyl phthalate	200 ppm
							Dibenz (a,h) anthracene	200 ppm
							Dibenzofuran	200 ppm
							Diethyl phthalate	200 ppm
							Dimethyl phthalate	200 ppm
							Fluoranthene	200 ppm
							Fluorene	200 ppm
							Hexachlorobenzene	200 ppm
							Hexachlorobutadiene	200 ppm
							Hexachlorocyclopentadiene	200 ppm
							Hexachloroethane	200 ppm
							Indeno[1,2,3-cd]pyrene	200 ppm
							Isophorone	200 ppm
							N-Nitrosodi-n-propylamine	200 ppm
							N-Nitrosodimethylamine	200 ppm
							Naphthalene	200 ppm
							Nitrobenzene	200 ppm
							Pentachlorophenol	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene	200 ppm
							Phenol	200 ppm
							Pyrene	200 ppm
					MSS_CR8270_3_00004	2500 uL	3,3'-Dichlorobenzidine	200 ppm
							3,3'-Dimethylbenzidine	200 ppm
							Benzidine	600 ppm
					MSS_CR8270_4_00004	2500 uL	1,2,4,5-Tetrachlorobenzene	200 ppm
							1,3-Dinitrobenzene	200 ppm
							1,4-Dinitrobenzene	200 ppm
							2,3,4,6-Tetrachlorophenol	200 ppm
							2,6-Dichlorophenol	200 ppm
							2-Acetylaminofluorene	200 ppm
							3-Methylcholanthrene	200 ppm
							4,4'-Methylene bis(2-chloroaniline)	200 ppm
							4-Aminobiphenyl	200 ppm
							4-Nitroquinoline-1-oxide	200 ppm
							cis-Diallate	148 ppm
							Dinoseb	200 ppm
							Ethyl methanesulfonate	200 ppm
							Hexachloropropene	200 ppm
							Isosafrole Peak 1	32 ppm
							Isosafrole Peak 2	168 ppm
							Methyl methanesulfonate	200 ppm
							N-Nitro-o-toluidine	200 ppm
							N-Nitrosodi-n-butylamine	200 ppm
							N-Nitrosodiethylamine	200 ppm
							N-Nitrosomethylethylamine	200 ppm
							N-Nitrosomorpholine	200 ppm
							N-Nitrosopiperidine	200 ppm
							N-Nitrosopyrrolidine	200 ppm
							p-Dimethylamino azobenzene	200 ppm
							Pentachlorobenzene	200 ppm
							Pentachloronitrobenzene	200 ppm
							Phenacetin	200 ppm
							Safrole, Total	200 ppm
							trans-Diallate	52 ppm
					MSS_CR8270_7_00004	2500 uL	1,4-Dioxane	200 ppm
							1-Methylnaphthalene	200 ppm
							1-Naphthylamine	200 ppm
							2-Naphthylamine	200 ppm
							2-Picoline	200 ppm
							2-Toluidine	200 ppm
							7,12-Dimethylbenz (a) anthracene	200 ppm
							Aniline	200 ppm
							Phenyl ether	200 ppm
							Pyridine	200 ppm
...MSS 8270 SURR 00002	04/30/23		Sigma- Aldrich, Lot LRAC6081		(Purchased Reagent)		2,4,6-Tribromophenol	4000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5	4000 ug/mL
...MSS AB BZIDIN 00004	01/29/23		Absolute, Lot 012920		(Purchased Reagent)		Benzidine	5000 ug/mL
...MSS CR8270 1 00004	10/31/22		Restek, Lot A0154042		(Purchased Reagent)		N-Nitrosodiphenylamine	5000 ug/mL
...MSS_CR8270_10_00004	06/30/21		Restek, Lot A0156085		(Purchased Reagent)		1,4-Naphthoquinone	2000 ug/mL
							1-Chloronaphthalene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
							Chlorobenzilate	2000 ug/mL
							Dibenz[a,h]acridine	2000 ug/mL
							Dibenz[a,j]acridine	2000 ug/mL
							Dimethoate	2000 ug/mL
							Ethyl Parathion	2000 ug/mL
							Isodrin	2000 ug/mL
							Methyl parathion	2000 ug/mL
							o,o',o''-Triethylphosphorothioate	2000 ug/mL
							Phorate	2000 ug/mL
							Pronamide	2000 ug/mL
							Quinoline	2000 ug/mL
							Sulfotepp	2000 ug/mL
							Thionazin	2000 ug/mL
...MSS_CR8270_2_00007	02/28/22		Restek, Lot A0146253		(Purchased Reagent)		1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	1000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	1000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	1000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
...MSS_CR8270_3_00004	09/30/21		Restek, Lot A0130858		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
...MSS_CR8270_4_00004	12/31/20		Restek, Lot A0150344		(Purchased Reagent)		3,3'-Dimethylbenzidine	2000 ug/mL
							Benidine	2000 ug/mL
							1,2,4,5-Tetrachlorobenzene	2000 ug/mL
							1,3-Dinitrobenzene	2000 ug/mL
							1,4-Dinitrobenzene	2000 ug/mL
							2,3,4,6-Tetrachlorophenol	2000 ug/mL
							2,6-Dichlorophenol	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Acetylaminofluorene	2000 ug/mL
							3-Methylcholanthrene	2000 ug/mL
							4,4'-Methylene bis (2-chloroaniline)	2000 ug/mL
							4-Aminobiphenyl	2000 ug/mL
							4-Nitroquinoline-1-oxide	2000 ug/mL
							cis-Diallate	1480 ug/mL
							Dinoseb	2000 ug/mL
							Ethyl methanesulfonate	2000 ug/mL
							Hexachloropropene	2000 ug/mL
							Isosafrole Peak 1	320 ug/mL
							Isosafrole Peak 2	1680 ug/mL
							Methyl methanesulfonate	2000 ug/mL
							N-Nitro-o-toluidine	2000 ug/mL
							N-Nitrosodi-n-butylamine	2000 ug/mL
							N-Nitrosodiethylamine	2000 ug/mL
							N-Nitrosomethylethylamine	2000 ug/mL
							N-Nitrosomorpholine	2000 ug/mL
							N-Nitrosopiperidine	2000 ug/mL
							N-Nitrosopyrrolidine	2000 ug/mL
							p-Dimethylamino azobenzene	2000 ug/mL
							Pentachlorobenzene	2000 ug/mL
							Pentachloronitrobenzene	2000 ug/mL
							Phenacetin	2000 ug/mL
							Safrole, Total	2000 ug/mL
							trans-Diallate	520 ug/mL
...MSS_CR8270_7_00004	11/30/22		Restek, Lot A0155157		(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
							1-Methylnaphthalene	2000 ug/mL
							1-Naphthylamine	2000 ug/mL
							2-Naphthylamine	2000 ug/mL
							2-Picoline	2000 ug/mL
							2-Toluidine	2000 ug/mL
							7,12-Dimethylbenz (a) anthracene	2000 ug/mL
							Aniline	2000 ug/mL
							Phenyl ether	2000 ug/mL
							Pyridine	2000 ug/mL
MSS_RV8270_3_00008	12/30/20	09/24/20	MeCl2, Lot 203170	2 mL	MSS_FV8270_3_00008	500 uL	2,4-Dinitrophenol	3.75 ppm
							4,6-Dinitro-2-methylphenol	2.5 ppm
							4-Nitrophenol	2.5 ppm
							Benzyl alcohol	1.25 ppm
							Indene	1.25 ppm
							Octachlorostyrene	1.25 ppm
							Benzoic acid	3.75 ppm
							1,1'-Biphenyl	1.25 ppm
							Acetophenone	1.25 ppm
							Atrazine	1.25 ppm
							Benzaldehyde	1.25 ppm
							Caprolactam	1.25 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
							2,4,6-Tribromophenol	2.5 ppm
							2-Fluorobiphenyl (Surr)	2.5 ppm
							2-Fluorophenol	2.5 ppm
							Nitrobenzene-d5 (Surr)	2.5 ppm
							p-Terphenyl-d14 (Surr)	2.5 ppm
							Phenol-d5	2.5 ppm
							Benzidine	3.75 ppm
							N-Nitrosodiphenylamine	1.25 ppm
							1,4-Naphthoquinone	1.25 ppm
							1-Chloronaphthalene	1.25 ppm
							6-Methylchrysene	1.25 ppm
							Chlorobenzilate	1.25 ppm
							Dibenz[a,h]acridine	1.25 ppm
							Dibenz[a,j]acridine	1.25 ppm
							Dimethoate	1.25 ppm
							Ethyl Parathion	1.25 ppm
							Isodrin	1.25 ppm
							Methyl parathion	1.25 ppm
							o,o',o''-Triethylphosphorothioate	1.25 ppm
							Phorate	1.25 ppm
							Pronamide	1.25 ppm
							Quinoline	1.25 ppm
							Sulfotepp	1.25 ppm
							Thionazin	1.25 ppm
							1,2,4-Trichlorobenzene	1.25 ppm
							1,2-Dichlorobenzene	1.25 ppm
							1,2-Diphenylhydrazine	1.25 ppm
							1,3-Dichlorobenzene	1.25 ppm
							1,4-Dichlorobenzene	1.25 ppm
							2,2'-oxybis[1-chloropropane]	1.25 ppm
							2,4,5-Trichlorophenol	1.25 ppm
							2,4,6-Trichlorophenol	1.25 ppm
							2,4-Dichlorophenol	1.25 ppm
							2,4-Dimethylphenol	1.25 ppm
							2,4-Dinitrotoluene	1.25 ppm
							2,6-Dinitrotoluene	1.25 ppm
							2-Chloronaphthalene	1.25 ppm
							2-Chlorophenol	1.25 ppm
							2-Methylnaphthalene	1.25 ppm
							2-Methylphenol	1.25 ppm
							2-Nitroaniline	1.25 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Nitrophenol	1.25 ppm
							3-Nitroaniline	1.25 ppm
							4-Bromophenyl phenyl ether	1.25 ppm
							4-Chloro-3-methylphenol	1.25 ppm
							4-Chloroaniline	1.25 ppm
							4-Chlorophenyl phenyl ether	1.25 ppm
							4-Methylphenol	1.25 ppm
							4-Nitroaniline	1.25 ppm
							Acenaphthene	1.25 ppm
							Acenaphthylene	1.25 ppm
							Anthracene	1.25 ppm
							Benzo[a]anthracene	1.25 ppm
							Benzo[a]pyrene	1.25 ppm
							Benzo[b]fluoranthene	1.25 ppm
							Benzo[g,h,i]perylene	1.25 ppm
							Benzo[k]fluoranthene	1.25 ppm
							Bis(2-chloroethoxy)methane	1.25 ppm
							Bis(2-chloroethyl)ether	1.25 ppm
							Bis(2-ethylhexyl) phthalate	1.25 ppm
							Butyl benzyl phthalate	1.25 ppm
							Carbazole	1.25 ppm
							Chrysene	1.25 ppm
							Di-n-butyl phthalate	1.25 ppm
							Di-n-octyl phthalate	1.25 ppm
							Dibenz(a,h)anthracene	1.25 ppm
							Dibenzofuran	1.25 ppm
							Diethyl phthalate	1.25 ppm
							Dimethyl phthalate	1.25 ppm
							Fluoranthene	1.25 ppm
							Fluorene	1.25 ppm
							Hexachlorobenzene	1.25 ppm
							Hexachlorobutadiene	1.25 ppm
							Hexachlorocyclopentadiene	1.25 ppm
							Hexachloroethane	1.25 ppm
							Indeno[1,2,3-cd]pyrene	1.25 ppm
							Isophorone	1.25 ppm
							N-Nitrosodi-n-propylamine	1.25 ppm
							N-Nitrosodimethylamine	1.25 ppm
							Naphthalene	1.25 ppm
							Nitrobenzene	1.25 ppm
							Pentachlorophenol	1.25 ppm
							Phenanthrene	1.25 ppm
							Phenol	1.25 ppm
							Pyrene	1.25 ppm
							3,3'-Dichlorobenzidine	1.25 ppm
							3,3'-Dimethylbenzidine	1.25 ppm
							1,2,4,5-Tetrachlorobenzene	1.25 ppm
							1,3-Dinitrobenzene	1.25 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dinitrobenzene	1.25 ppm
							2,3,4,6-Tetrachlorophenol	1.25 ppm
							2,6-Dichlorophenol	1.25 ppm
							2-Acetylaminofluorene	1.25 ppm
							3-Methylcholanthrene	1.25 ppm
							4,4'-Methylene bis(2-chloroaniline)	1.25 ppm
							4-Aminobiphenyl	1.25 ppm
							4-Nitroquinoline-1-oxide	1.25 ppm
							cis-Diallate	0.925 ppm
							Dinoseb	1.25 ppm
							Ethyl methanesulfonate	1.25 ppm
							Hexachloropropene	1.25 ppm
							Isosafrole Peak 1	0.2 ppm
							Isosafrole Peak 2	1.05 ppm
							Methyl methanesulfonate	1.25 ppm
							N-Nitro-o-toluidine	1.25 ppm
							N-Nitrosodi-n-butylamine	1.25 ppm
							N-Nitrosodiethylamine	1.25 ppm
							N-Nitrosomethylethylamine	1.25 ppm
							N-Nitrosomorpholine	1.25 ppm
							N-Nitrosopiperidine	1.25 ppm
							N-Nitrosopyrrolidine	1.25 ppm
							p-Dimethylamino azobenzene	1.25 ppm
							Pentachlorobenzene	1.25 ppm
							Pentachloronitrobenzene	1.25 ppm
							Phenacetin	1.25 ppm
							Safrole, Total	1.25 ppm
							trans-Diallate	0.325 ppm
							1,4-Dioxane	1.25 ppm
							1-Methylnaphthalene	1.25 ppm
							1-Naphthylamine	1.25 ppm
							2-Naphthylamine	1.25 ppm
							2-Picoline	1.25 ppm
							2-Toluidine	1.25 ppm
							7,12-Dimethylbenz (a) anthracene	1.25 ppm
							Aniline	1.25 ppm
							Phenyl ether	1.25 ppm
							Pyridine	1.25 ppm
.MSS_FV8270_3_00008	12/30/20	07/28/20	MeCl2, Lot 201838	2 mL	MSS AB 24DNP 00003	20 uL	2,4-Dinitrophenol	15 ppm
					MSS AB 46D2MP 00003	10 uL	4,6-Dinitro-2-methylphenol	10 ppm
					MSS AB 4NP 00001	10 uL	4-Nitrophenol	10 ppm
					MSS_CR#9_DL_00005	10 uL	Benzyl alcohol	5 ppm
							Indene	5 ppm
							Octachlorostyrene	5 ppm
					MSS CR8270 6 00005	15 uL	Benzoic acid	15 ppm
					MSS_CR8270_8_00002	5 uL	1,1'-Biphenyl	5 ppm
							Acetophenone	5 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Atrazine	5 ppm
							Benzaldehyde	5 ppm
							Caprolactam	5 ppm
					MSS_FV8270_IS_00002	40 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
					MSS_FV8270_WS_00005	50 uL	2,4,6-Tribromophenol	10 ppm
							2-Fluorobiphenyl (Surr)	10 ppm
							2-Fluorophenol	10 ppm
							Nitrobenzene-d5 (Surr)	10 ppm
							p-Terphenyl-d14 (Surr)	10 ppm
							Phenol-d5	10 ppm
							Benzidine	15 ppm
							N-Nitrosodiphenylamine	5 ppm
							1,4-Naphthoquinone	5 ppm
							1-Chloronaphthalene	5 ppm
							6-Methylchrysene	5 ppm
							Chlorobenzilate	5 ppm
							Dibenz[a,h]acridine	5 ppm
							Dibenz[a,j]acridine	5 ppm
							Dimethoate	5 ppm
							Ethyl Parathion	5 ppm
							Isodrin	5 ppm
							Methyl parathion	5 ppm
							o,o',o''-Triethylphosphorothioate	5 ppm
							Phorate	5 ppm
							Pronamide	5 ppm
							Quinoline	5 ppm
							Sulfotepp	5 ppm
							Thionazin	5 ppm
							1,2,4-Trichlorobenzene	5 ppm
							1,2-Dichlorobenzene	5 ppm
							1,2-Diphenylhydrazine	5 ppm
							1,3-Dichlorobenzene	5 ppm
							1,4-Dichlorobenzene	5 ppm
							2,2'-oxybis[1-chloropropane]	5 ppm
							2,4,5-Trichlorophenol	5 ppm
							2,4,6-Trichlorophenol	5 ppm
							2,4-Dichlorophenol	5 ppm
							2,4-Dimethylphenol	5 ppm
							2,4-Dinitrophenol	15 ppm
							2,4-Dinitrotoluene	5 ppm
							2,6-Dinitrotoluene	5 ppm
							2-Chloronaphthalene	5 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorophenol	5 ppm
							2-Methylnaphthalene	5 ppm
							2-Methylphenol	5 ppm
							2-Nitroaniline	5 ppm
							2-Nitrophenol	5 ppm
							3-Nitroaniline	5 ppm
							4,6-Dinitro-2-methylphenol	10 ppm
							4-Bromophenyl phenyl ether	5 ppm
							4-Chloro-3-methylphenol	5 ppm
							4-Chloroaniline	5 ppm
							4-Chlorophenyl phenyl ether	5 ppm
							4-Methylphenol	5 ppm
							4-Nitroaniline	5 ppm
							4-Nitrophenol	10 ppm
							Acenaphthene	5 ppm
							Acenaphthylene	5 ppm
							Anthracene	5 ppm
							Benzo[a]anthracene	5 ppm
							Benzo[a]pyrene	5 ppm
							Benzo[b]fluoranthene	5 ppm
							Benzo[g,h,i]perylene	5 ppm
							Benzo[k]fluoranthene	5 ppm
							Bis (2-chloroethoxy)methane	5 ppm
							Bis (2-chloroethyl) ether	5 ppm
							Bis (2-ethylhexyl) phthalate	5 ppm
							Butyl benzyl phthalate	5 ppm
							Carbazole	5 ppm
							Chrysene	5 ppm
							Di-n-butyl phthalate	5 ppm
							Di-n-octyl phthalate	5 ppm
							Dibenz (a,h) anthracene	5 ppm
							Dibenzofuran	5 ppm
							Diethyl phthalate	5 ppm
							Dimethyl phthalate	5 ppm
							Fluoranthene	5 ppm
							Fluorene	5 ppm
							Hexachlorobenzene	5 ppm
							Hexachlorobutadiene	5 ppm
							Hexachlorocyclopentadiene	5 ppm
							Hexachloroethane	5 ppm
							Indeno[1,2,3-cd]pyrene	5 ppm
							Isophorone	5 ppm
							N-Nitrosodi-n-propylamine	5 ppm
							N-Nitrosodimethylamine	5 ppm
							Naphthalene	5 ppm
							Nitrobenzene	5 ppm
							Pentachlorophenol	5 ppm
							Phenanthrene	5 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol	5 ppm
							Pyrene	5 ppm
							3,3'-Dichlorobenzidine	5 ppm
							3,3'-Dimethylbenzidine	5 ppm
							1,2,4,5-Tetrachlorobenzene	5 ppm
							1,3-Dinitrobenzene	5 ppm
							1,4-Dinitrobenzene	5 ppm
							2,3,4,6-Tetrachlorophenol	5 ppm
							2,6-Dichlorophenol	5 ppm
							2-Acetylaminofluorene	5 ppm
							3-Methylcholanthrene	5 ppm
							4,4'-Methylene bis(2-chloroaniline)	5 ppm
							4-Aminobiphenyl	5 ppm
							4-Nitroquinoline-1-oxide	5 ppm
							cis-Diallate	3.7 ppm
							Dinoseb	5 ppm
							Ethyl methanesulfonate	5 ppm
							Hexachloropropene	5 ppm
							Isosafrole Peak 1	0.8 ppm
							Isosafrole Peak 2	4.2 ppm
							Methyl methanesulfonate	5 ppm
							N-Nitro-o-toluidine	5 ppm
							N-Nitrosodi-n-butylamine	5 ppm
							N-Nitrosodiethylamine	5 ppm
							N-Nitrosomethylethylamine	5 ppm
							N-Nitrosomorpholine	5 ppm
							N-Nitrosopiperidine	5 ppm
							N-Nitrosopyrrolidine	5 ppm
							p-Dimethylamino azobenzene	5 ppm
							Pentachlorobenzene	5 ppm
							Pentachloronitrobenzene	5 ppm
							Phenacetin	5 ppm
							Safrole, Total	5 ppm
							trans-Diallate	1.3 ppm
							1,4-Dioxane	5 ppm
							1-Methylnaphthalene	5 ppm
							1-Naphthylamine	5 ppm
							2-Naphthylamine	5 ppm
							2-Picoline	5 ppm
							2-Toluidine	5 ppm
							7,12-Dimethylbenz (a) anthracene	5 ppm
							Aniline	5 ppm
							Phenyl ether	5 ppm
							Pyridine	5 ppm
..MSS AB 24DNP 00003	09/05/23		Absolute, Lot 090518		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
..MSS AB 46D2MP 00003	10/20/22		Absolute, Lot 102017		(Purchased Reagent)		4,6-Dinitro-2-methylphenol	1000 ug/mL
..MSS AB 4NP 00001	10/07/21		Absolute, Lot 100716		(Purchased Reagent)		4-Nitrophenol	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..MSS_CR#9_DL_00005	09/30/21	07/21/20	MeCl2, Lot 200018	5 mL	MSS_CR8270_9_00003	1000 uL	Benzyl alcohol	1000 ppm
							Indene	1000 ppm
							Octachlorostyrene	1000 ppm
...MSS_CR8270_9_00003	09/30/21	Restek, Lot A0131112			(Purchased Reagent)		Benzyl alcohol	5000 ug/mL
							Indene	5000 ug/mL
							Octachlorostyrene	5000 ug/mL
..MSS_CR8270_6_00005	02/28/21	Restek, Lot A0146280			(Purchased Reagent)		Benzoic acid	2000 ug/mL
..MSS_CR8270_8_00002	02/28/21	Restek, Lot A0146313			(Purchased Reagent)		1,1'-Biphenyl	2000 ug/mL
							Acetophenone	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..MSS_FV8270_IS_00002	02/28/21	Restek, Lot A0134880			(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
..MSS_FV8270_WS_00005	12/30/20	07/13/20	MeCl2, Lot 200018	25 mL	MSS_8270_SURR_00002	2500 uL	2,4,6-Tribromophenol	400 ppm
							2-Fluorobiphenyl (Surr)	400 ppm
							2-Fluorophenol	400 ppm
							Nitrobenzene-d5 (Surr)	400 ppm
							p-Terphenyl-d14 (Surr)	400 ppm
							Phenol-d5	400 ppm
					MSS_AB_BZIDIN_00004	2000 uL	Benzidine	600 ppm
					MSS_CR8270_1_00004	1000 uL	N-Nitrosodiphenylamine	200 ppm
					MSS_CR8270_10_00004	2500 uL	1,4-Naphthoquinone	200 ppm
							1-Chloronaphthalene	200 ppm
							6-Methylchrysene	200 ppm
							Chlorobenzilate	200 ppm
							Dibenz[a,h]acridine	200 ppm
							Dibenz[a,j]acridine	200 ppm
							Dimethoate	200 ppm
							Ethyl Parathion	200 ppm
							Isodrin	200 ppm
							Methyl parathion	200 ppm
							o,o',o''-Triethylphosphorothioate	200 ppm
							Phorate	200 ppm
							Pronamide	200 ppm
							Quinoline	200 ppm
							Sulfotepp	200 ppm
							Thionazin	200 ppm
					MSS_CR8270_2_00007	5000 uL	1,2,4-Trichlorobenzene	200 ppm
							1,2-Dichlorobenzene	200 ppm
							1,2-Diphenylhydrazine	200 ppm
							1,3-Dichlorobenzene	200 ppm
							1,4-Dichlorobenzene	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,2'-oxybis[1-chloropropane]	200 ppm
							2,4,5-Trichlorophenol	200 ppm
							2,4,6-Trichlorophenol	200 ppm
							2,4-Dichlorophenol	200 ppm
							2,4-Dimethylphenol	200 ppm
							2,4-Dinitrophenol	200 ppm
							2,4-Dinitrotoluene	200 ppm
							2,6-Dinitrotoluene	200 ppm
							2-Chloronaphthalene	200 ppm
							2-Chlorophenol	200 ppm
							2-Methylnaphthalene	200 ppm
							2-Methylphenol	200 ppm
							2-Nitroaniline	200 ppm
							2-Nitrophenol	200 ppm
							3-Nitroaniline	200 ppm
							4,6-Dinitro-2-methylphenol	200 ppm
							4-Bromophenyl phenyl ether	200 ppm
							4-Chloro-3-methylphenol	200 ppm
							4-Chloroaniline	200 ppm
							4-Chlorophenyl phenyl ether	200 ppm
							4-Methylphenol	200 ppm
							4-Nitroaniline	200 ppm
							4-Nitrophenol	200 ppm
							Acenaphthene	200 ppm
							Acenaphthylene	200 ppm
							Anthracene	200 ppm
							Benzo[a]anthracene	200 ppm
							Benzo[a]pyrene	200 ppm
							Benzo[b]fluoranthene	200 ppm
							Benzo[g,h,i]perylene	200 ppm
							Benzo[k]fluoranthene	200 ppm
							Bis(2-chloroethoxy)methane	200 ppm
							Bis(2-chloroethyl)ether	200 ppm
							Bis(2-ethylhexyl) phthalate	200 ppm
							Butyl benzyl phthalate	200 ppm
							Carbazole	200 ppm
							Chrysene	200 ppm
							Di-n-butyl phthalate	200 ppm
							Di-n-octyl phthalate	200 ppm
							Dibenz(a,h)anthracene	200 ppm
							Dibenzofuran	200 ppm
							Diethyl phthalate	200 ppm
							Dimethyl phthalate	200 ppm
							Fluoranthene	200 ppm
							Fluorene	200 ppm
							Hexachlorobenzene	200 ppm
							Hexachlorobutadiene	200 ppm
							Hexachlorocyclopentadiene	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachloroethane	200 ppm
							Indeno[1,2,3-cd]pyrene	200 ppm
							Isophorone	200 ppm
							N-Nitrosodi-n-propylamine	200 ppm
							N-Nitrosodimethylamine	200 ppm
							Naphthalene	200 ppm
							Nitrobenzene	200 ppm
							Pentachlorophenol	200 ppm
							Phenanthrene	200 ppm
							Phenol	200 ppm
							Pyrene	200 ppm
					MSS_CR8270_3_00004	2500 uL	3,3'-Dichlorobenzidine	200 ppm
							3,3'-Dimethylbenzidine	200 ppm
							Benzidine	600 ppm
					MSS_CR8270_4_00004	2500 uL	1,2,4,5-Tetrachlorobenzene	200 ppm
							1,3-Dinitrobenzene	200 ppm
							1,4-Dinitrobenzene	200 ppm
							2,3,4,6-Tetrachlorophenol	200 ppm
							2,6-Dichlorophenol	200 ppm
							2-Acetylaminofluorene	200 ppm
							3-Methylcholanthrene	200 ppm
							4,4'-Methylene bis(2-chloroaniline)	200 ppm
							4-Aminobiphenyl	200 ppm
							4-Nitroquinoline-1-oxide	200 ppm
							cis-Diallate	148 ppm
							Dinoseb	200 ppm
							Ethyl methanesulfonate	200 ppm
							Hexachloropropene	200 ppm
							Isosafrole Peak 1	32 ppm
							Isosafrole Peak 2	168 ppm
							Methyl methanesulfonate	200 ppm
							N-Nitro-o-toluidine	200 ppm
							N-Nitrosodi-n-butylamine	200 ppm
							N-Nitrosodiethylamine	200 ppm
							N-Nitrosomethylethylamine	200 ppm
							N-Nitrosomorpholine	200 ppm
							N-Nitrosopiperidine	200 ppm
							N-Nitrosopyrrolidine	200 ppm
							p-Dimethylamino azobenzene	200 ppm
							Pentachlorobenzene	200 ppm
							Pentachloronitrobenzene	200 ppm
							Phenacetin	200 ppm
							Safrole, Total	200 ppm
							trans-Diallate	52 ppm
					MSS_CR8270_7_00004	2500 uL	1,4-Dioxane	200 ppm
							1-Methylnaphthalene	200 ppm
							1-Naphthylamine	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Naphthylamine	200 ppm
							2-Picoline	200 ppm
							2-Toluidine	200 ppm
							7,12-Dimethylbenz (a) anthracene	200 ppm
							Aniline	200 ppm
							Phenyl ether	200 ppm
							Pyridine	200 ppm
...MSS_8270_SURR_00002	04/30/23		Sigma- Aldrich, Lot LRAC6081		(Purchased Reagent)		2,4,6-Tribromophenol	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5	4000 ug/mL
...MSS AB BZIDIN 00004	01/29/23		Absolute, Lot 012920		(Purchased Reagent)		Benzidine	5000 ug/mL
...MSS CR8270_1_00004	10/31/22		Restek, Lot A0154042		(Purchased Reagent)		N-Nitrosodiphenylamine	5000 ug/mL
...MSS_CR8270_10_00004	06/30/21		Restek, Lot A0156085		(Purchased Reagent)		1,4-Naphthoquinone	2000 ug/mL
							1-Chloronaphthalene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
							Chlorobenzilate	2000 ug/mL
							Dibenz[a,h]acridine	2000 ug/mL
							Dibenz[a,j]acridine	2000 ug/mL
							Dimethoate	2000 ug/mL
							Ethyl Parathion	2000 ug/mL
							Isodrin	2000 ug/mL
							Methyl parathion	2000 ug/mL
							o,o',o''-Triethylphosphorothioate	2000 ug/mL
							Phorate	2000 ug/mL
							Pronamide	2000 ug/mL
							Quinoline	2000 ug/mL
							Sulfotepp	2000 ug/mL
							Thionazin	2000 ug/mL
...MSS_CR8270_2_00007	02/28/22		Restek, Lot A0146253		(Purchased Reagent)		1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	1000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	1000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	1000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...MSS_CR8270_3_00004	09/30/21		Restek, Lot A0130858		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							3,3'-Dimethylbenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...MSS_CR8270_4_00004	12/31/20		Restek, Lot A0150344		(Purchased Reagent)		1,2,4,5-Tetrachlorobenzene	2000 ug/mL
							1,3-Dinitrobenzene	2000 ug/mL
							1,4-Dinitrobenzene	2000 ug/mL
							2,3,4,6-Tetrachlorophenol	2000 ug/mL
							2,6-Dichlorophenol	2000 ug/mL
							2-Acetylaminofluorene	2000 ug/mL
							3-Methylcholanthrene	2000 ug/mL
							4,4'-Methylene bis (2-chloroaniline)	2000 ug/mL
							4-Aminobiphenyl	2000 ug/mL
							4-Nitroquinoline-1-oxide	2000 ug/mL
							cis-Diallate	1480 ug/mL
							Dinoseb	2000 ug/mL
							Ethyl methanesulfonate	2000 ug/mL
							Hexachloropropene	2000 ug/mL
							Isosafrole Peak 1	320 ug/mL
							Isosafrole Peak 2	1680 ug/mL
							Methyl methanesulfonate	2000 ug/mL
							N-Nitro-o-toluidine	2000 ug/mL
							N-Nitrosodi-n-butylamine	2000 ug/mL
							N-Nitrosodiethylamine	2000 ug/mL
							N-Nitrosomethylethylamine	2000 ug/mL
							N-Nitrosomorpholine	2000 ug/mL
							N-Nitrosopiperidine	2000 ug/mL
							N-Nitrosopyrrolidine	2000 ug/mL
							p-Dimethylamino azobenzene	2000 ug/mL
							Pentachlorobenzene	2000 ug/mL
							Pentachloronitrobenzene	2000 ug/mL
							Phenacetin	2000 ug/mL
							Safrole, Total	2000 ug/mL
							trans-Diallate	520 ug/mL
...MSS_CR8270_7_00004	11/30/22		Restek, Lot A0155157		(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
							1-Methylnaphthalene	2000 ug/mL
							1-Naphthylamine	2000 ug/mL
							2-Naphthylamine	2000 ug/mL
							2-Picoline	2000 ug/mL
							2-Toluidine	2000 ug/mL
							7,12-Dimethylbenz (a) anthracene	2000 ug/mL
							Aniline	2000 ug/mL
							Phenyl ether	2000 ug/mL
							Pyridine	2000 ug/mL
MSS_RV8270_4_00008	12/30/20	09/24/20	MeCl2, Lot 203170	3 mL	MSS_FV8270_4_00008	750 uL	2,4-Dinitrophenol	7.5 ppm
							Benzyl alcohol	3.75 ppm
							Indene	3.75 ppm
							Octachlorostyrene	3.75 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzoic acid	7.5 ppm
							1,1'-Biphenyl	3.75 ppm
							Acetophenone	3.75 ppm
							Atrazine	3.75 ppm
							Benzaldehyde	3.75 ppm
							Caprolactam	3.75 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
							2,4,6-Tribromophenol	7.5 ppm
							2-Fluorobiphenyl (Surr)	7.5 ppm
							2-Fluorophenol	7.5 ppm
							Nitrobenzene-d5 (Surr)	7.5 ppm
							p-Terphenyl-d14 (Surr)	7.5 ppm
							Phenol-d5	7.5 ppm
							Benidine	11.25 ppm
							N-Nitrosodiphenylamine	3.75 ppm
							1,4-Naphthoquinone	3.75 ppm
							1-Chloronaphthalene	3.75 ppm
							6-Methylchrysene	3.75 ppm
							Chlorobenzilate	3.75 ppm
							Dibenz[a,h]acridine	3.75 ppm
							Dibenz[a,j]acridine	3.75 ppm
							Dimethoate	3.75 ppm
							Ethyl Parathion	3.75 ppm
							Isodrin	3.75 ppm
							Methyl parathion	3.75 ppm
							o,o',o''-Triethylphosphorothioate	3.75 ppm
							Phorate	3.75 ppm
							Pronamide	3.75 ppm
							Quinoline	3.75 ppm
							Sulfotepp	3.75 ppm
							Thionazin	3.75 ppm
							1,2,4-Trichlorobenzene	3.75 ppm
							1,2-Dichlorobenzene	3.75 ppm
							1,2-Diphenylhydrazine	3.75 ppm
							1,3-Dichlorobenzene	3.75 ppm
							1,4-Dichlorobenzene	3.75 ppm
							2,2'-oxybis[1-chloropropane]	3.75 ppm
							2,4,5-Trichlorophenol	3.75 ppm
							2,4,6-Trichlorophenol	3.75 ppm
							2,4-Dichlorophenol	3.75 ppm
							2,4-Dimethylphenol	3.75 ppm
							2,4-Dinitrotoluene	3.75 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,6-Dinitrotoluene	3.75 ppm
							2-Chloronaphthalene	3.75 ppm
							2-Chlorophenol	3.75 ppm
							2-Methylnaphthalene	3.75 ppm
							2-Methylphenol	3.75 ppm
							2-Nitroaniline	3.75 ppm
							2-Nitrophenol	3.75 ppm
							3-Nitroaniline	3.75 ppm
							4,6-Dinitro-2-methylphenol	3.75 ppm
							4-Bromophenyl phenyl ether	3.75 ppm
							4-Chloro-3-methylphenol	3.75 ppm
							4-Chloroaniline	3.75 ppm
							4-Chlorophenyl phenyl ether	3.75 ppm
							4-Methylphenol	3.75 ppm
							4-Nitroaniline	3.75 ppm
							4-Nitrophenol	3.75 ppm
							Acenaphthene	3.75 ppm
							Acenaphthylene	3.75 ppm
							Anthracene	3.75 ppm
							Benzo[a]anthracene	3.75 ppm
							Benzo[a]pyrene	3.75 ppm
							Benzo[b]fluoranthene	3.75 ppm
							Benzo[g,h,i]perylene	3.75 ppm
							Benzo[k]fluoranthene	3.75 ppm
							Bis(2-chloroethoxy)methane	3.75 ppm
							Bis(2-chloroethyl) ether	3.75 ppm
							Bis(2-ethylhexyl) phthalate	3.75 ppm
							Butyl benzyl phthalate	3.75 ppm
							Carbazole	3.75 ppm
							Chrysene	3.75 ppm
							Di-n-butyl phthalate	3.75 ppm
							Di-n-octyl phthalate	3.75 ppm
							Dibenz(a,h)anthracene	3.75 ppm
							Dibenzofuran	3.75 ppm
							Diethyl phthalate	3.75 ppm
							Dimethyl phthalate	3.75 ppm
							Fluoranthene	3.75 ppm
							Fluorene	3.75 ppm
							Hexachlorobenzene	3.75 ppm
							Hexachlorobutadiene	3.75 ppm
							Hexachlorocyclopentadiene	3.75 ppm
							Hexachloroethane	3.75 ppm
							Indeno[1,2,3-cd]pyrene	3.75 ppm
							Isophorone	3.75 ppm
							N-Nitrosodi-n-propylamine	3.75 ppm
							N-Nitrosodimethylamine	3.75 ppm
							Naphthalene	3.75 ppm
							Nitrobenzene	3.75 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MSS_FV8270_4_00008	12/30/20	07/28/20	MeCl2, Lot 201838	2 mL	MSS_AB_24DNP_00003	30 uL	Pentachlorophenol	3.75 ppm
							Phenanthrene	3.75 ppm
							Phenol	3.75 ppm
							Pyrene	3.75 ppm
							3,3'-Dichlorobenzidine	3.75 ppm
							3,3'-Dimethylbenzidine	3.75 ppm
							1,2,4,5-Tetrachlorobenzene	3.75 ppm
							1,3-Dinitrobenzene	3.75 ppm
							1,4-Dinitrobenzene	3.75 ppm
							2,3,4,6-Tetrachlorophenol	3.75 ppm
							2,6-Dichlorophenol	3.75 ppm
							2-Acetylaminofluorene	3.75 ppm
							3-Methylcholanthrene	3.75 ppm
							4,4'-Methylene bis(2-chloroaniline)	3.75 ppm
							4-Aminobiphenyl	3.75 ppm
							4-Nitroquinoline-1-oxide	3.75 ppm
							cis-Diallate	2.775 ppm
							Dinoseb	3.75 ppm
							Ethyl methanesulfonate	3.75 ppm
							Hexachloropropene	3.75 ppm
							Isosafrole Peak 1	0.6 ppm
							Isosafrole Peak 2	3.15 ppm
							Methyl methanesulfonate	3.75 ppm
							N-Nitro-o-toluidine	3.75 ppm
							N-Nitrosodi-n-butylamine	3.75 ppm
							N-Nitrosodiethylamine	3.75 ppm
							N-Nitrosomethylethylamine	3.75 ppm
							N-Nitrosomorpholine	3.75 ppm
							N-Nitrosopiperidine	3.75 ppm
							N-Nitrosopyrrolidine	3.75 ppm
							p-Dimethylamino azobenzene	3.75 ppm
							Pentachlorobenzene	3.75 ppm
							Pentachloronitrobenzene	3.75 ppm
							Phenacetin	3.75 ppm
							Safrole, Total	3.75 ppm
							trans-Diallate	0.975 ppm
							1,4-Dioxane	3.75 ppm
							1-Methylnaphthalene	3.75 ppm
							1-Naphthylamine	3.75 ppm
							2-Naphthylamine	3.75 ppm
							2-Picoline	3.75 ppm
							2-Toluidine	3.75 ppm
							7,12-Dimethylbenz (a) anthracene	3.75 ppm
							Aniline	3.75 ppm
							Phenyl ether	3.75 ppm
							Pyridine	3.75 ppm
							2,4-Dinitrophenol	30 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MSS_CR#9_DL_00005	30 uL	Benzyl alcohol	15 ppm
							Indene	15 ppm
							Octachlorostyrene	15 ppm
					MSS_CR8270_6_00005	30 uL	Benzoic acid	30 ppm
					MSS_CR8270_8_00002	15 uL	1,1'-Biphenyl	15 ppm
							Acetophenone	15 ppm
							Atrazine	15 ppm
							Benzaldehyde	15 ppm
							Caprolactam	15 ppm
					MSS_FV8270_IS_00002	40 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
					MSS_FV8270_WS_00005	150 uL	Pyrene-d10 (IS)	20 ppm
							2,4,6-Tribromophenol	30 ppm
							2-Fluorobiphenyl (Surr)	30 ppm
							2-Fluorophenol	30 ppm
							Nitrobenzene-d5 (Surr)	30 ppm
							p-Terphenyl-d14 (Surr)	30 ppm
							Phenol-d5	30 ppm
							Benzidine	45 ppm
							N-Nitrosodiphenylamine	15 ppm
							1,4-Naphthoquinone	15 ppm
							1-Chloronaphthalene	15 ppm
							6-Methylchrysene	15 ppm
							Chlorobenzilate	15 ppm
							Dibenz[a,h]acridine	15 ppm
							Dibenz[a,j]acridine	15 ppm
							Dimethoate	15 ppm
							Ethyl Parathion	15 ppm
							Isodrin	15 ppm
							Methyl parathion	15 ppm
							o,o',o''-Triethylphosphorothioate	15 ppm
							Phorate	15 ppm
							Pronamide	15 ppm
							Quinoline	15 ppm
							Sulfotepp	15 ppm
							Thionazin	15 ppm
							1,2,4-Trichlorobenzene	15 ppm
							1,2-Dichlorobenzene	15 ppm
							1,2-Diphenylhydrazine	15 ppm
							1,3-Dichlorobenzene	15 ppm
							1,4-Dichlorobenzene	15 ppm
							2,2'-oxybis[1-chloropropane]	15 ppm
							2,4,5-Trichlorophenol	15 ppm
							2,4,6-Trichlorophenol	15 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dichlorophenol	15 ppm
							2,4-Dimethylphenol	15 ppm
							2,4-Dinitrophenol	30 ppm
							2,4-Dinitrotoluene	15 ppm
							2,6-Dinitrotoluene	15 ppm
							2-Chloronaphthalene	15 ppm
							2-Chlorophenol	15 ppm
							2-Methylnaphthalene	15 ppm
							2-Methylphenol	15 ppm
							2-Nitroaniline	15 ppm
							2-Nitrophenol	15 ppm
							3-Nitroaniline	15 ppm
							4,6-Dinitro-2-methylphenol	15 ppm
							4-Bromophenyl phenyl ether	15 ppm
							4-Chloro-3-methylphenol	15 ppm
							4-Chloroaniline	15 ppm
							4-Chlorophenyl phenyl ether	15 ppm
							4-Methylphenol	15 ppm
							4-Nitroaniline	15 ppm
							4-Nitrophenol	15 ppm
							Acenaphthene	15 ppm
							Acenaphthylene	15 ppm
							Anthracene	15 ppm
							Benzo[a]anthracene	15 ppm
							Benzo[a]pyrene	15 ppm
							Benzo[b]fluoranthene	15 ppm
							Benzo[g,h,i]perylene	15 ppm
							Benzo[k]fluoranthene	15 ppm
							Bis(2-chloroethoxy)methane	15 ppm
							Bis(2-chloroethyl)ether	15 ppm
							Bis(2-ethylhexyl) phthalate	15 ppm
							Butyl benzyl phthalate	15 ppm
							Carbazole	15 ppm
							Chrysene	15 ppm
							Di-n-butyl phthalate	15 ppm
							Di-n-octyl phthalate	15 ppm
							Dibenz(a,h)anthracene	15 ppm
							Dibenzofuran	15 ppm
							Diethyl phthalate	15 ppm
							Dimethyl phthalate	15 ppm
							Fluoranthene	15 ppm
							Fluorene	15 ppm
							Hexachlorobenzene	15 ppm
							Hexachlorobutadiene	15 ppm
							Hexachlorocyclopentadiene	15 ppm
							Hexachloroethane	15 ppm
							Indeno[1,2,3-cd]pyrene	15 ppm
							Isophorone	15 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodi-n-propylamine	15 ppm
							N-Nitrosodimethylamine	15 ppm
							Naphthalene	15 ppm
							Nitrobenzene	15 ppm
							Pentachlorophenol	15 ppm
							Phenanthrene	15 ppm
							Phenol	15 ppm
							Pyrene	15 ppm
							3,3'-Dichlorobenzidine	15 ppm
							3,3'-Dimethylbenzidine	15 ppm
							1,2,4,5-Tetrachlorobenzene	15 ppm
							1,3-Dinitrobenzene	15 ppm
							1,4-Dinitrobenzene	15 ppm
							2,3,4,6-Tetrachlorophenol	15 ppm
							2,6-Dichlorophenol	15 ppm
							2-Acetylaminofluorene	15 ppm
							3-Methylcholanthrene	15 ppm
							4,4'-Methylene bis(2-chloroaniline)	15 ppm
							4-Aminobiphenyl	15 ppm
							4-Nitroquinoline-1-oxide	15 ppm
							cis-Diallate	11.1 ppm
							Dinoseb	15 ppm
							Ethyl methanesulfonate	15 ppm
							Hexachloropropene	15 ppm
							Isosafrole Peak 1	2.4 ppm
							Isosafrole Peak 2	12.6 ppm
							Methyl methanesulfonate	15 ppm
							N-Nitro-o-toluidine	15 ppm
							N-Nitrosodi-n-butylamine	15 ppm
							N-Nitrosodiethylamine	15 ppm
							N-Nitrosomethylethylamine	15 ppm
							N-Nitrosomorpholine	15 ppm
							N-Nitrosopiperidine	15 ppm
							N-Nitrosopyrrolidine	15 ppm
							p-Dimethylamino azobenzene	15 ppm
							Pentachlorobenzene	15 ppm
							Pentachloronitrobenzene	15 ppm
							Phenacetin	15 ppm
							Safrole, Total	15 ppm
							trans-Diallate	3.9 ppm
							1,4-Dioxane	15 ppm
							1-Methylnaphthalene	15 ppm
							1-Naphthylamine	15 ppm
							2-Naphthylamine	15 ppm
							2-Picoline	15 ppm
							2-Toluidine	15 ppm
							7,12-Dimethylbenz (a) anthracene	15 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Aniline	15 ppm
							Phenyl ether	15 ppm
							Pyridine	15 ppm
..MSS_AB_24DNP_00003	09/05/23		Absolute, Lot 090518		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
..MSS_CR#9_DL_00005	09/30/21	07/21/20	MeCl2, Lot 200018	5 mL	MSS_CR8270_9_00003	1000 uL	Benzyl alcohol	1000 ppm
							Indene	1000 ppm
							Octachlorostyrene	1000 ppm
...MSS_CR8270_9_00003	09/30/21		Restek, Lot A0131112		(Purchased Reagent)		Benzyl alcohol	5000 ug/mL
							Indene	5000 ug/mL
							Octachlorostyrene	5000 ug/mL
..MSS_CR8270_6_00005	02/28/21		Restek, Lot A0146280		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..MSS_CR8270_8_00002	02/28/21		Restek, Lot A0146313		(Purchased Reagent)		1,1'-Biphenyl	2000 ug/mL
							Acetophenone	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..MSS_FV8270_IS_00002	02/28/21		Restek, Lot A0134880		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
..MSS_FV8270_WS_00005	12/30/20	07/13/20	MeCl2, Lot 200018	25 mL	MSS_8270_SURR_00002	2500 uL	2,4,6-Tribromophenol	400 ppm
							2-Fluorobiphenyl (Surr)	400 ppm
							2-Fluorophenol	400 ppm
							Nitrobenzene-d5 (Surr)	400 ppm
							p-Terphenyl-d14 (Surr)	400 ppm
							Phenol-d5	400 ppm
					MSS_AB_BZIDIN_00004	2000 uL	Benzidine	600 ppm
					MSS_CR8270_1_00004	1000 uL	N-Nitrosodiphenylamine	200 ppm
					MSS_CR8270_10_00004	2500 uL	1,4-Naphthoquinone	200 ppm
							1-Chloronaphthalene	200 ppm
							6-Methylchrysene	200 ppm
							Chlorobenzilate	200 ppm
							Dibenz[a,h]acridine	200 ppm
							Dibenz[a,j]acridine	200 ppm
							Dimethoate	200 ppm
							Ethyl Parathion	200 ppm
							Isodrin	200 ppm
							Methyl parathion	200 ppm
							o,o',o''-Triethylphosphorothioate	200 ppm
							Phorate	200 ppm
							Pronamide	200 ppm
							Quinoline	200 ppm
							Sulfotepp	200 ppm
							Thionazin	200 ppm
					MSS_CR8270_2_00007	5000 uL	1,2,4-Trichlorobenzene	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene	200 ppm
							1,2-Diphenylhydrazine	200 ppm
							1,3-Dichlorobenzene	200 ppm
							1,4-Dichlorobenzene	200 ppm
							2,2'-oxybis[1-chloropropane]	200 ppm
							2,4,5-Trichlorophenol	200 ppm
							2,4,6-Trichlorophenol	200 ppm
							2,4-Dichlorophenol	200 ppm
							2,4-Dimethylphenol	200 ppm
							2,4-Dinitrophenol	200 ppm
							2,4-Dinitrotoluene	200 ppm
							2,6-Dinitrotoluene	200 ppm
							2-Chloronaphthalene	200 ppm
							2-Chlorophenol	200 ppm
							2-Methylnaphthalene	200 ppm
							2-Methylphenol	200 ppm
							2-Nitroaniline	200 ppm
							2-Nitrophenol	200 ppm
							3-Nitroaniline	200 ppm
							4,6-Dinitro-2-methylphenol	200 ppm
							4-Bromophenyl phenyl ether	200 ppm
							4-Chloro-3-methylphenol	200 ppm
							4-Chloroaniline	200 ppm
							4-Chlorophenyl phenyl ether	200 ppm
							4-Methylphenol	200 ppm
							4-Nitroaniline	200 ppm
							4-Nitrophenol	200 ppm
							Acenaphthene	200 ppm
							Acenaphthylene	200 ppm
							Anthracene	200 ppm
							Benzo[a]anthracene	200 ppm
							Benzo[a]pyrene	200 ppm
							Benzo[b]fluoranthene	200 ppm
							Benzo[g,h,i]perylene	200 ppm
							Benzo[k]fluoranthene	200 ppm
							Bis (2-chloroethoxy)methane	200 ppm
							Bis (2-chloroethyl) ether	200 ppm
							Bis (2-ethylhexyl) phthalate	200 ppm
							Butyl benzyl phthalate	200 ppm
							Carbazole	200 ppm
							Chrysene	200 ppm
							Di-n-butyl phthalate	200 ppm
							Di-n-octyl phthalate	200 ppm
							Dibenz (a,h) anthracene	200 ppm
							Dibenzofuran	200 ppm
							Diethyl phthalate	200 ppm
							Dimethyl phthalate	200 ppm
							Fluoranthene	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluorene	200 ppm
							Hexachlorobenzene	200 ppm
							Hexachlorobutadiene	200 ppm
							Hexachlorocyclopentadiene	200 ppm
							Hexachloroethane	200 ppm
							Indeno[1,2,3-cd]pyrene	200 ppm
							Isophorone	200 ppm
							N-Nitrosodi-n-propylamine	200 ppm
							N-Nitrosodimethylamine	200 ppm
							Naphthalene	200 ppm
							Nitrobenzene	200 ppm
							Pentachlorophenol	200 ppm
							Phenanthrene	200 ppm
							Phenol	200 ppm
							Pyrene	200 ppm
					MSS_CR8270_3_00004	2500 uL	3,3'-Dichlorobenzidine	200 ppm
							3,3'-Dimethylbenzidine	200 ppm
							Benzidine	600 ppm
					MSS_CR8270_4_00004	2500 uL	1,2,4,5-Tetrachlorobenzene	200 ppm
							1,3-Dinitrobenzene	200 ppm
							1,4-Dinitrobenzene	200 ppm
							2,3,4,6-Tetrachlorophenol	200 ppm
							2,6-Dichlorophenol	200 ppm
							2-Acetylaminofluorene	200 ppm
							3-Methylcholanthrene	200 ppm
							4,4'-Methylene bis(2-chloroaniline)	200 ppm
							4-Aminobiphenyl	200 ppm
							4-Nitroquinoline-1-oxide	200 ppm
							cis-Diallate	148 ppm
							Dinoseb	200 ppm
							Ethyl methanesulfonate	200 ppm
							Hexachloropropene	200 ppm
							Isosafrole Peak 1	32 ppm
							Isosafrole Peak 2	168 ppm
							Methyl methanesulfonate	200 ppm
							N-Nitro-o-toluidine	200 ppm
							N-Nitrosodi-n-butylamine	200 ppm
							N-Nitrosodiethylamine	200 ppm
							N-Nitrosomethylethylamine	200 ppm
							N-Nitrosomorpholine	200 ppm
							N-Nitrosopiperidine	200 ppm
							N-Nitrosopyrrolidine	200 ppm
							p-Dimethylamino azobenzene	200 ppm
							Pentachlorobenzene	200 ppm
							Pentachloronitrobenzene	200 ppm
							Phenacetin	200 ppm
							Safrole, Total	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MSS_CR8270_7_00004	2500 uL	trans-Diallate	52 ppm
							1,4-Dioxane	200 ppm
							1-Methylnaphthalene	200 ppm
							1-Naphthylamine	200 ppm
							2-Naphthylamine	200 ppm
							2-Picoline	200 ppm
							2-Toluidine	200 ppm
							7,12-Dimethylbenz (a) anthracene	200 ppm
							Aniline	200 ppm
							Phenyl ether	200 ppm
...MSS_8270_SURR_00002	04/30/23	Sigma- Aldrich, Lot LRAC6081			(Purchased Reagent)		Pyridine	200 ppm
							2,4,6-Tribromophenol	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
...MSS_AB_BZIDIN_00004	01/29/23	Absolute, Lot 012920			(Purchased Reagent)		Phenol-d5	4000 ug/mL
							Benzidine	5000 ug/mL
...MSS_CR8270_1_00004	10/31/22	Restek, Lot A0154042			(Purchased Reagent)		N-Nitrosodiphenylamine	5000 ug/mL
...MSS_CR8270_10_00004	06/30/21	Restek, Lot A0156085			(Purchased Reagent)		1,4-Naphthoquinone	2000 ug/mL
							1-Chloronaphthalene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
							Chlorobenzilate	2000 ug/mL
							Dibenz[a,h]acridine	2000 ug/mL
							Dibenz[a,j]acridine	2000 ug/mL
							Dimethoate	2000 ug/mL
							Ethyl Parathion	2000 ug/mL
							Isodrin	2000 ug/mL
							Methyl parathion	2000 ug/mL
							o,o',o''-Triethylphosphorothioate	2000 ug/mL
							Phorate	2000 ug/mL
							Pronamide	2000 ug/mL
							Quinoline	2000 ug/mL
							Sulfotepp	2000 ug/mL
							Thionazin	2000 ug/mL
...MSS_CR8270_2_00007	02/28/22	Restek, Lot A0146253			(Purchased Reagent)		1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	1000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	1000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Bis (2-chloroethoxy)methane	1000 ug/mL
							Bis (2-chloroethyl) ether	1000 ug/mL
							Bis (2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz (a,h) anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentachlorophenol	1000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
...MSS_CR8270_3_00004	09/30/21		Restek, Lot A0130858		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							3,3'-Dimethylbenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...MSS_CR8270_4_00004	12/31/20		Restek, Lot A0150344		(Purchased Reagent)		1,2,4,5-Tetrachlorobenzene	2000 ug/mL
							1,3-Dinitrobenzene	2000 ug/mL
							1,4-Dinitrobenzene	2000 ug/mL
							2,3,4,6-Tetrachlorophenol	2000 ug/mL
							2,6-Dichlorophenol	2000 ug/mL
							2-Acetylaminofluorene	2000 ug/mL
							3-Methylcholanthrene	2000 ug/mL
							4,4'-Methylene bis (2-chloroaniline)	2000 ug/mL
							4-Aminobiphenyl	2000 ug/mL
							4-Nitroquinoline-1-oxide	2000 ug/mL
							cis-Diallate	1480 ug/mL
							Dinoseb	2000 ug/mL
							Ethyl methanesulfonate	2000 ug/mL
							Hexachloropropene	2000 ug/mL
							Isosafrole Peak 1	320 ug/mL
							Isosafrole Peak 2	1680 ug/mL
							Methyl methanesulfonate	2000 ug/mL
							N-Nitro-o-toluidine	2000 ug/mL
							N-Nitrosodi-n-butylamine	2000 ug/mL
							N-Nitrosodiethylamine	2000 ug/mL
							N-Nitrosomethylethylamine	2000 ug/mL
							N-Nitrosomorpholine	2000 ug/mL
							N-Nitrosopiperidine	2000 ug/mL
							N-Nitrosopyrrolidine	2000 ug/mL
							p-Dimethylamino azobenzene	2000 ug/mL
							Pentachlorobenzene	2000 ug/mL
							Pentachloronitrobenzene	2000 ug/mL
							Phenacetin	2000 ug/mL
							Safrole, Total	2000 ug/mL
							trans-Diallate	520 ug/mL
...MSS_CR8270_7_00004	11/30/22		Restek, Lot A0155157		(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
							1-Methylnaphthalene	2000 ug/mL
							1-Naphthylamine	2000 ug/mL
							2-Naphthylamine	2000 ug/mL
							2-Picoline	2000 ug/mL
							2-Toluidine	2000 ug/mL
							7,12-Dimethylbenz (a) anthracene	2000 ug/mL
							Aniline	2000 ug/mL
							Phenyl ether	2000 ug/mL
							Pyridine	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MSS_RV8270_5_00008	12/30/20	09/24/20	MeCl2, Lot 203170	5 mL	MSS_FV8270_5_00008	1250 uL	2,4-Dinitrophenol	10 ppm
							Benzyl alcohol	7.5 ppm
							Indene	7.5 ppm
							Octachlorostyrene	7.5 ppm
							Benzoic acid	10 ppm
							1,1'-Biphenyl	7.5 ppm
							Acetophenone	7.5 ppm
							Atrazine	7.5 ppm
							Benzaldehyde	7.5 ppm
							Caprolactam	7.5 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
							2,4,6-Tribromophenol	15 ppm
							2-Fluorobiphenyl (Surr)	15 ppm
							2-Fluorophenol	15 ppm
							Nitrobenzene-d5 (Surr)	15 ppm
							p-Terphenyl-d14 (Surr)	15 ppm
							Phenol-d5	15 ppm
							Benzidine	22.5 ppm
							N-Nitrosodiphenylamine	7.5 ppm
							1,4-Naphthoquinone	7.5 ppm
							1-Chloronaphthalene	7.5 ppm
							6-Methylchrysene	7.5 ppm
							Chlorobenzilate	7.5 ppm
							Dibenz[a,h]acridine	7.5 ppm
							Dibenz[a,j]acridine	7.5 ppm
							Dimethoate	7.5 ppm
							Ethyl Parathion	7.5 ppm
							Isodrin	7.5 ppm
							Methyl parathion	7.5 ppm
							o,o',o''-Triethylphosphorothioate	7.5 ppm
							Phorate	7.5 ppm
							Pronamide	7.5 ppm
							Quinoline	7.5 ppm
							Sulfotepp	7.5 ppm
							Thionazin	7.5 ppm
							1,2,4-Trichlorobenzene	7.5 ppm
							1,2-Dichlorobenzene	7.5 ppm
							1,2-Diphenylhydrazine	7.5 ppm
							1,3-Dichlorobenzene	7.5 ppm
							1,4-Dichlorobenzene	7.5 ppm
							2,2'-oxybis[1-chloropropane]	7.5 ppm
							2,4,5-Trichlorophenol	7.5 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,6-Trichlorophenol	7.5 ppm
							2,4-Dichlorophenol	7.5 ppm
							2,4-Dimethylphenol	7.5 ppm
							2,4-Dinitrotoluene	7.5 ppm
							2,6-Dinitrotoluene	7.5 ppm
							2-Chloronaphthalene	7.5 ppm
							2-Chlorophenol	7.5 ppm
							2-Methylnaphthalene	7.5 ppm
							2-Methylphenol	7.5 ppm
							2-Nitroaniline	7.5 ppm
							2-Nitrophenol	7.5 ppm
							3-Nitroaniline	7.5 ppm
							4,6-Dinitro-2-methylphenol	7.5 ppm
							4-Bromophenyl phenyl ether	7.5 ppm
							4-Chloro-3-methylphenol	7.5 ppm
							4-Chloroaniline	7.5 ppm
							4-Chlorophenyl phenyl ether	7.5 ppm
							4-Methylphenol	7.5 ppm
							4-Nitroaniline	7.5 ppm
							4-Nitrophenol	7.5 ppm
							Acenaphthene	7.5 ppm
							Acenaphthylene	7.5 ppm
							Anthracene	7.5 ppm
							Benzo[a]anthracene	7.5 ppm
							Benzo[a]pyrene	7.5 ppm
							Benzo[b]fluoranthene	7.5 ppm
							Benzo[g,h,i]perylene	7.5 ppm
							Benzo[k]fluoranthene	7.5 ppm
							Bis(2-chloroethoxy)methane	7.5 ppm
							Bis(2-chloroethyl)ether	7.5 ppm
							Bis(2-ethylhexyl) phthalate	7.5 ppm
							Butyl benzyl phthalate	7.5 ppm
							Carbazole	7.5 ppm
							Chrysene	7.5 ppm
							Di-n-butyl phthalate	7.5 ppm
							Di-n-octyl phthalate	7.5 ppm
							Dibenz(a,h)anthracene	7.5 ppm
							Dibenzofuran	7.5 ppm
							Diethyl phthalate	7.5 ppm
							Dimethyl phthalate	7.5 ppm
							Fluoranthene	7.5 ppm
							Fluorene	7.5 ppm
							Hexachlorobenzene	7.5 ppm
							Hexachlorobutadiene	7.5 ppm
							Hexachlorocyclopentadiene	7.5 ppm
							Hexachloroethane	7.5 ppm
							Indeno[1,2,3-cd]pyrene	7.5 ppm
							Isophorone	7.5 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodi-n-propylamine	7.5 ppm
							N-Nitrosodimethylamine	7.5 ppm
							Naphthalene	7.5 ppm
							Nitrobenzene	7.5 ppm
							Pentachlorophenol	7.5 ppm
							Phenanthrene	7.5 ppm
							Phenol	7.5 ppm
							Pyrene	7.5 ppm
							3,3'-Dichlorobenzidine	7.5 ppm
							3,3'-Dimethylbenzidine	7.5 ppm
							1,2,4,5-Tetrachlorobenzene	7.5 ppm
							1,3-Dinitrobenzene	7.5 ppm
							1,4-Dinitrobenzene	7.5 ppm
							2,3,4,6-Tetrachlorophenol	7.5 ppm
							2,6-Dichlorophenol	7.5 ppm
							2-Acetylaminofluorene	7.5 ppm
							3-Methylcholanthrene	7.5 ppm
							4,4'-Methylene bis(2-chloroaniline)	7.5 ppm
							4-Aminobiphenyl	7.5 ppm
							4-Nitroquinoline-1-oxide	7.5 ppm
							cis-Diallate	5.55 ppm
							Dinoseb	7.5 ppm
							Ethyl methanesulfonate	7.5 ppm
							Hexachloropropene	7.5 ppm
							Isosafrole Peak 1	1.2 ppm
							Isosafrole Peak 2	6.3 ppm
							Methyl methanesulfonate	7.5 ppm
							N-Nitro-o-toluidine	7.5 ppm
							N-Nitrosodi-n-butylamine	7.5 ppm
							N-Nitrosodiethylamine	7.5 ppm
							N-Nitrosomethylethylamine	7.5 ppm
							N-Nitrosomorpholine	7.5 ppm
							N-Nitrosopiperidine	7.5 ppm
							N-Nitrosopyrrolidine	7.5 ppm
							p-Dimethylamino azobenzene	7.5 ppm
							Pentachlorobenzene	7.5 ppm
							Pentachloronitrobenzene	7.5 ppm
							Phenacetin	7.5 ppm
							Safrole, Total	7.5 ppm
							trans-Diallate	1.95 ppm
							1,4-Dioxane	7.5 ppm
							1-Methylnaphthalene	7.5 ppm
							1-Naphthylamine	7.5 ppm
							2-Naphthylamine	7.5 ppm
							2-Picoline	7.5 ppm
							2-Toluidine	7.5 ppm
							7,12-Dimethylbenz (a) anthracene	7.5 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MSS_FV8270_5_00008	12/30/20	07/28/20	MeCl2, Lot 201838	5 mL			Aniline	7.5 ppm
							Phenyl ether	7.5 ppm
							Pyridine	7.5 ppm
					MSS_AB_24DNP_00003	50 uL	2,4-Dinitrophenol	40 ppm
					MSS_CR#9_DL_00005	150 uL	Benzyl alcohol	30 ppm
							Indene	30 ppm
							Octachlorostyrene	30 ppm
					MSS_CR8270_6_00005	100 uL	Benzoic acid	40 ppm
					MSS_CR8270_8_00002	75 uL	1,1'-Biphenyl	30 ppm
							Acetophenone	30 ppm
							Atrazine	30 ppm
							Benzaldehyde	30 ppm
							Caprolactam	30 ppm
					MSS_FV8270_IS_00002	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
					MSS_FV8270_WS_00005	750 uL	Pyrene-d10 (IS)	20 ppm
							2,4,6-Tribromophenol	60 ppm
							2-Fluorobiphenyl (Surr)	60 ppm
							2-Fluorophenol	60 ppm
							Nitrobenzene-d5 (Surr)	60 ppm
							p-Terphenyl-d14 (Surr)	60 ppm
							Phenol-d5	60 ppm
							Benzidine	90 ppm
							N-Nitrosodiphenylamine	30 ppm
							1,4-Naphthoquinone	30 ppm
							1-Chloronaphthalene	30 ppm
							6-Methylchrysene	30 ppm
							Chlorobenzilate	30 ppm
							Dibenz[a,h]acridine	30 ppm
							Dibenz[a,j]acridine	30 ppm
							Dimethoate	30 ppm
							Ethyl Parathion	30 ppm
							Isodrin	30 ppm
							Methyl parathion	30 ppm
							o,o',o''-Triethylphosphorothioate	30 ppm
							Phorate	30 ppm
							Pronamide	30 ppm
							Quinoline	30 ppm
							Sulfotepp	30 ppm
							Thionazin	30 ppm
							1,2,4-Trichlorobenzene	30 ppm
							1,2-Dichlorobenzene	30 ppm
							1,2-Diphenylhydrazine	30 ppm
							1,3-Dichlorobenzene	30 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dichlorobenzene	30 ppm
							2,2'-oxybis[1-chloropropane]	30 ppm
							2,4,5-Trichlorophenol	30 ppm
							2,4,6-Trichlorophenol	30 ppm
							2,4-Dichlorophenol	30 ppm
							2,4-Dimethylphenol	30 ppm
							2,4-Dinitrophenol	40 ppm
							2,4-Dinitrotoluene	30 ppm
							2,6-Dinitrotoluene	30 ppm
							2-Chloronaphthalene	30 ppm
							2-Chlorophenol	30 ppm
							2-Methylnaphthalene	30 ppm
							2-Methylphenol	30 ppm
							2-Nitroaniline	30 ppm
							2-Nitrophenol	30 ppm
							3-Nitroaniline	30 ppm
							4,6-Dinitro-2-methylphenol	30 ppm
							4-Bromophenyl phenyl ether	30 ppm
							4-Chloro-3-methylphenol	30 ppm
							4-Chloroaniline	30 ppm
							4-Chlorophenyl phenyl ether	30 ppm
							4-Methylphenol	30 ppm
							4-Nitroaniline	30 ppm
							4-Nitrophenol	30 ppm
							Acenaphthene	30 ppm
							Acenaphthylene	30 ppm
							Anthracene	30 ppm
							Benzo[a]anthracene	30 ppm
							Benzo[a]pyrene	30 ppm
							Benzo[b]fluoranthene	30 ppm
							Benzo[g,h,i]perylene	30 ppm
							Benzo[k]fluoranthene	30 ppm
							Bis(2-chloroethoxy)methane	30 ppm
							Bis(2-chloroethyl)ether	30 ppm
							Bis(2-ethylhexyl) phthalate	30 ppm
							Butyl benzyl phthalate	30 ppm
							Carbazole	30 ppm
							Chrysene	30 ppm
							Di-n-butyl phthalate	30 ppm
							Di-n-octyl phthalate	30 ppm
							Dibenz(a,h)anthracene	30 ppm
							Dibenzofuran	30 ppm
							Diethyl phthalate	30 ppm
							Dimethyl phthalate	30 ppm
							Fluoranthene	30 ppm
							Fluorene	30 ppm
							Hexachlorobenzene	30 ppm
							Hexachlorobutadiene	30 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorocyclopentadiene	30 ppm
							Hexachloroethane	30 ppm
							Indeno[1,2,3-cd]pyrene	30 ppm
							Isophorone	30 ppm
							N-Nitrosodi-n-propylamine	30 ppm
							N-Nitrosodimethylamine	30 ppm
							Naphthalene	30 ppm
							Nitrobenzene	30 ppm
							Pentachlorophenol	30 ppm
							Phenanthrene	30 ppm
							Phenol	30 ppm
							Pyrene	30 ppm
							3,3'-Dichlorobenzidine	30 ppm
							3,3'-Dimethylbenzidine	30 ppm
							1,2,4,5-Tetrachlorobenzene	30 ppm
							1,3-Dinitrobenzene	30 ppm
							1,4-Dinitrobenzene	30 ppm
							2,3,4,6-Tetrachlorophenol	30 ppm
							2,6-Dichlorophenol	30 ppm
							2-Acetylaminofluorene	30 ppm
							3-Methylcholanthrene	30 ppm
							4,4'-Methylene bis(2-chloroaniline)	30 ppm
							4-Aminobiphenyl	30 ppm
							4-Nitroquinoline-1-oxide	30 ppm
							cis-Diallate	22.2 ppm
							Dinoseb	30 ppm
							Ethyl methanesulfonate	30 ppm
							Hexachloropropene	30 ppm
							Isosafrole Peak 1	4.8 ppm
							Isosafrole Peak 2	25.2 ppm
							Methyl methanesulfonate	30 ppm
							N-Nitro-o-toluidine	30 ppm
							N-Nitrosodi-n-butylamine	30 ppm
							N-Nitrosodiethylamine	30 ppm
							N-Nitrosomethylethylamine	30 ppm
							N-Nitrosomorpholine	30 ppm
							N-Nitrosopiperidine	30 ppm
							N-Nitrosopyrrolidine	30 ppm
							p-Dimethylamino azobenzene	30 ppm
							Pentachlorobenzene	30 ppm
							Pentachloronitrobenzene	30 ppm
							Phenacetin	30 ppm
							Safrole, Total	30 ppm
							trans-Diallate	7.8 ppm
							1,4-Dioxane	30 ppm
							1-Methylnaphthalene	30 ppm
							1-Naphthylamine	30 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Naphthylamine	30 ppm
							2-Picoline	30 ppm
							2-Toluidine	30 ppm
							7,12-Dimethylbenz (a) anthracene	30 ppm
							Aniline	30 ppm
							Phenyl ether	30 ppm
							Pyridine	30 ppm
..MSS_AB_24DNP_00003	09/05/23		Absolute, Lot 090518		(Purchased Reagent)		2,4-Dinitrophenol	1000 ug/mL
..MSS_CR#9_DL_00005	09/30/21	07/21/20	MeCl2, Lot 200018	5 mL	MSS_CR8270_9_00003	1000 uL	Benzyl alcohol	1000 ppm
							Indene	1000 ppm
							Octachlorostyrene	1000 ppm
...MSS_CR8270_9_00003	09/30/21		Restek, Lot A0131112		(Purchased Reagent)		Benzyl alcohol	5000 ug/mL
							Indene	5000 ug/mL
							Octachlorostyrene	5000 ug/mL
..MSS_CR8270_6_00005	02/28/21		Restek, Lot A0146280		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..MSS_CR8270_8_00002	02/28/21		Restek, Lot A0146313		(Purchased Reagent)		1,1'-Biphenyl	2000 ug/mL
							Acetophenone	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..MSS_FV8270_IS_00002	02/28/21		Restek, Lot A0134880		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
..MSS_FV8270_WS_00005	12/30/20	07/13/20	MeCl2, Lot 200018	25 mL	MSS_8270_SURR_00002	2500 uL	2,4,6-Tribromophenol	400 ppm
							2-Fluorobiphenyl (Surr)	400 ppm
							2-Fluorophenol	400 ppm
							Nitrobenzene-d5 (Surr)	400 ppm
							p-Terphenyl-d14 (Surr)	400 ppm
							Phenol-d5	400 ppm
					MSS_AB_BZIDIN_00004	2000 uL	Benzidine	600 ppm
					MSS_CR8270_1_00004	1000 uL	N-Nitrosodiphenylamine	200 ppm
					MSS_CR8270_10_00004	2500 uL	1,4-Naphthoquinone	200 ppm
							1-Chloronaphthalene	200 ppm
							6-Methylchrysene	200 ppm
							Chlorobenzilate	200 ppm
							Dibenz[a,h]acridine	200 ppm
							Dibenz[a,j]acridine	200 ppm
							Dimethoate	200 ppm
							Ethyl Parathion	200 ppm
							Isodrin	200 ppm
							Methyl parathion	200 ppm
							o,o',o''-Triethylphosphorothioate	200 ppm
							Phorate	200 ppm
							Pronamide	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MSS_CR8270_2_00007	5000 uL	Quinoline	200 ppm
							Sulfotepp	200 ppm
							Thionazin	200 ppm
							1,2,4-Trichlorobenzene	200 ppm
							1,2-Dichlorobenzene	200 ppm
							1,2-Diphenylhydrazine	200 ppm
							1,3-Dichlorobenzene	200 ppm
							1,4-Dichlorobenzene	200 ppm
							2,2'-oxybis[1-chloropropane]	200 ppm
							2,4,5-Trichlorophenol	200 ppm
							2,4,6-Trichlorophenol	200 ppm
							2,4-Dichlorophenol	200 ppm
							2,4-Dimethylphenol	200 ppm
							2,4-Dinitrophenol	200 ppm
							2,4-Dinitrotoluene	200 ppm
							2,6-Dinitrotoluene	200 ppm
							2-Chloronaphthalene	200 ppm
							2-Chlorophenol	200 ppm
							2-Methylnaphthalene	200 ppm
							2-Methylphenol	200 ppm
							2-Nitroaniline	200 ppm
							2-Nitrophenol	200 ppm
							3-Nitroaniline	200 ppm
							4,6-Dinitro-2-methylphenol	200 ppm
							4-Bromophenyl phenyl ether	200 ppm
							4-Chloro-3-methylphenol	200 ppm
							4-Chloroaniline	200 ppm
							4-Chlorophenyl phenyl ether	200 ppm
							4-Methylphenol	200 ppm
							4-Nitroaniline	200 ppm
							4-Nitrophenol	200 ppm
							Acenaphthene	200 ppm
							Acenaphthylene	200 ppm
							Anthracene	200 ppm
							Benzo[a]anthracene	200 ppm
							Benzo[a]pyrene	200 ppm
							Benzo[b]fluoranthene	200 ppm
							Benzo[g,h,i]perylene	200 ppm
							Benzo[k]fluoranthene	200 ppm
							Bis(2-chloroethoxy)methane	200 ppm
							Bis(2-chloroethyl)ether	200 ppm
							Bis(2-ethylhexyl) phthalate	200 ppm
							Butyl benzyl phthalate	200 ppm
							Carbazole	200 ppm
							Chrysene	200 ppm
							Di-n-butyl phthalate	200 ppm
							Di-n-octyl phthalate	200 ppm
							Dibenz(a,h)anthracene	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenzofuran	200 ppm
							Diethyl phthalate	200 ppm
							Dimethyl phthalate	200 ppm
							Fluoranthene	200 ppm
							Fluorene	200 ppm
							Hexachlorobenzene	200 ppm
							Hexachlorobutadiene	200 ppm
							Hexachlorocyclopentadiene	200 ppm
							Hexachloroethane	200 ppm
							Indeno[1,2,3-cd]pyrene	200 ppm
							Isophorone	200 ppm
							N-Nitrosodi-n-propylamine	200 ppm
							N-Nitrosodimethylamine	200 ppm
							Naphthalene	200 ppm
							Nitrobenzene	200 ppm
							Pentachlorophenol	200 ppm
							Phenanthrene	200 ppm
							Phenol	200 ppm
							Pyrene	200 ppm
					MSS_CR8270_3_00004	2500 uL	3,3'-Dichlorobenzidine	200 ppm
							3,3'-Dimethylbenzidine	200 ppm
							Benzidine	600 ppm
					MSS_CR8270_4_00004	2500 uL	1,2,4,5-Tetrachlorobenzene	200 ppm
							1,3-Dinitrobenzene	200 ppm
							1,4-Dinitrobenzene	200 ppm
							2,3,4,6-Tetrachlorophenol	200 ppm
							2,6-Dichlorophenol	200 ppm
							2-Acetylaminofluorene	200 ppm
							3-Methylcholanthrene	200 ppm
							4,4'-Methylene bis(2-chloroaniline)	200 ppm
							4-Aminobiphenyl	200 ppm
							4-Nitroquinoline-1-oxide	200 ppm
							cis-Diallate	148 ppm
							Dinoseb	200 ppm
							Ethyl methanesulfonate	200 ppm
							Hexachloropropene	200 ppm
							Isosafrole Peak 1	32 ppm
							Isosafrole Peak 2	168 ppm
							Methyl methanesulfonate	200 ppm
							N-Nitro-o-toluidine	200 ppm
							N-Nitrosodi-n-butylamine	200 ppm
							N-Nitrosodiethylamine	200 ppm
							N-Nitrosomethylethylamine	200 ppm
							N-Nitrosomorpholine	200 ppm
							N-Nitrosopiperidine	200 ppm
							N-Nitrosopyrrolidine	200 ppm
							p-Dimethylamino azobenzene	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentachlorobenzene	200 ppm
							Pentachloronitrobenzene	200 ppm
							Phenacetin	200 ppm
							Safrole, Total	200 ppm
							trans-Diallate	52 ppm
					MSS_CR8270_7_00004	2500 uL	1,4-Dioxane	200 ppm
							1-Methylnaphthalene	200 ppm
							1-Naphthylamine	200 ppm
							2-Naphthylamine	200 ppm
							2-Picoline	200 ppm
							2-Toluidine	200 ppm
							7,12-Dimethylbenz (a) anthracene	200 ppm
							Aniline	200 ppm
							Phenyl ether	200 ppm
							Pyridine	200 ppm
...MSS_8270_SURR_00002	04/30/23		Sigma- Aldrich, Lot LRAC6081		(Purchased Reagent)		2,4,6-Tribromophenol	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5	4000 ug/mL
...MSS AB BZIDIN 00004	01/29/23		Absolute, Lot 012920		(Purchased Reagent)		Benzidine	5000 ug/mL
...MSS CR8270_1_00004	10/31/22		Restek, Lot A0154042		(Purchased Reagent)		N-Nitrosodiphenylamine	5000 ug/mL
...MSS_CR8270_10_00004	06/30/21		Restek, Lot A0156085		(Purchased Reagent)		1,4-Naphthoquinone	2000 ug/mL
							1-Chloronaphthalene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
							Chlorobenzilate	2000 ug/mL
							Dibenz[a,h]acridine	2000 ug/mL
							Dibenz[a,j]acridine	2000 ug/mL
							Dimethoate	2000 ug/mL
							Ethyl Parathion	2000 ug/mL
							Isodrin	2000 ug/mL
							Methyl parathion	2000 ug/mL
							o,o',o''-Triethylphosphorothioate	2000 ug/mL
							Phorate	2000 ug/mL
							Pronamide	2000 ug/mL
							Quinoline	2000 ug/mL
							Sulfotepp	2000 ug/mL
							Thionazin	2000 ug/mL
...MSS_CR8270_2_00007	02/28/22		Restek, Lot A0146253		(Purchased Reagent)		1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	1000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	1000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	1000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
...MSS_CR8270_3_00004	09/30/21		Restek, Lot A0130858		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							3,3'-Dimethylbenzidine	2000 ug/mL
							Benidine	2000 ug/mL
...MSS_CR8270_4_00004	12/31/20		Restek, Lot A0150344		(Purchased Reagent)		1,2,4,5-Tetrachlorobenzene	2000 ug/mL
							1,3-Dinitrobenzene	2000 ug/mL
							1,4-Dinitrobenzene	2000 ug/mL
							2,3,4,6-Tetrachlorophenol	2000 ug/mL
							2,6-Dichlorophenol	2000 ug/mL
							2-Acetylaminofluorene	2000 ug/mL
							3-Methylcholanthrene	2000 ug/mL
							4,4'-Methylene bis (2-chloroaniline)	2000 ug/mL
							4-Aminobiphenyl	2000 ug/mL
							4-Nitroquinoline-1-oxide	2000 ug/mL
							cis-Diallate	1480 ug/mL
							Dinoseb	2000 ug/mL
							Ethyl methanesulfonate	2000 ug/mL
							Hexachloropropene	2000 ug/mL
							Isosafrole Peak 1	320 ug/mL
							Isosafrole Peak 2	1680 ug/mL
							Methyl methanesulfonate	2000 ug/mL
							N-Nitro-o-toluidine	2000 ug/mL
							N-Nitrosodi-n-butylamine	2000 ug/mL
							N-Nitrosodiethylamine	2000 ug/mL
							N-Nitrosomethylethylamine	2000 ug/mL
							N-Nitrosomorpholine	2000 ug/mL
							N-Nitrosopiperidine	2000 ug/mL
							N-Nitrosopyrrolidine	2000 ug/mL
							p-Dimethylamino azobenzene	2000 ug/mL
							Pentachlorobenzene	2000 ug/mL
							Pentachloronitrobenzene	2000 ug/mL
							Phenacetin	2000 ug/mL
							Safrole, Total	2000 ug/mL
							trans-Diallate	520 ug/mL
...MSS_CR8270_7_00004	11/30/22		Restek, Lot A0155157		(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
							1-Methylnaphthalene	2000 ug/mL
							1-Naphthylamine	2000 ug/mL
							2-Naphthylamine	2000 ug/mL
							2-Picoline	2000 ug/mL
							2-Toluidine	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							7,12-Dimethylbenz(a)anthracene	2000 ug/mL
							Aniline	2000 ug/mL
							Phenyl ether	2000 ug/mL
							Pyridine	2000 ug/mL
MSS_RV8270_6_00007	12/30/20	07/28/20	MeCl2, Lot 201838	5 mL	MSS_FV8270_6_00012	1250 uL	Benzyl alcohol	12.5 ppm
							Indene	12.5 ppm
							Octachlorostyrene	12.5 ppm
							Benzoic acid	12.5 ppm
							1,1'-Biphenyl	12.5 ppm
							Acetophenone	12.5 ppm
							Atrazine	12.5 ppm
							Benzaldehyde	12.5 ppm
							Caprolactam	12.5 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
							2,4,6-Tribromophenol	25 ppm
							2-Fluorobiphenyl (Surr)	25 ppm
							2-Fluorophenol	25 ppm
							Nitrobenzene-d5 (Surr)	25 ppm
							p-Terphenyl-d14 (Surr)	25 ppm
							Phenol-d5	25 ppm
							Benzidine	37.5 ppm
							N-Nitrosodiphenylamine	12.5 ppm
							1,4-Naphthoquinone	12.5 ppm
							1-Chloronaphthalene	12.5 ppm
							6-Methylchrysene	12.5 ppm
							Chlorobenzilate	12.5 ppm
							Dibenz[a,h]acridine	12.5 ppm
							Dibenz[a,j]acridine	12.5 ppm
							Dimethoate	12.5 ppm
							Ethyl Parathion	12.5 ppm
							Isodrin	12.5 ppm
							Methyl parathion	12.5 ppm
							o,o',o''-Triethylphosphorothioate	12.5 ppm
							Phorate	12.5 ppm
							Pronamide	12.5 ppm
							Quinoline	12.5 ppm
							Sulfotepp	12.5 ppm
							Thionazin	12.5 ppm
							1,2,4-Trichlorobenzene	12.5 ppm
							1,2-Dichlorobenzene	12.5 ppm
							1,2-Diphenylhydrazine	12.5 ppm
							1,3-Dichlorobenzene	12.5 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dichlorobenzene	12.5 ppm
							2,2'-oxybis[1-chloropropane]	12.5 ppm
							2,4,5-Trichlorophenol	12.5 ppm
							2,4,6-Trichlorophenol	12.5 ppm
							2,4-Dichlorophenol	12.5 ppm
							2,4-Dimethylphenol	12.5 ppm
							2,4-Dinitrophenol	12.5 ppm
							2,4-Dinitrotoluene	12.5 ppm
							2,6-Dinitrotoluene	12.5 ppm
							2-Chloronaphthalene	12.5 ppm
							2-Chlorophenol	12.5 ppm
							2-Methylnaphthalene	12.5 ppm
							2-Methylphenol	12.5 ppm
							2-Nitroaniline	12.5 ppm
							2-Nitrophenol	12.5 ppm
							3-Nitroaniline	12.5 ppm
							4,6-Dinitro-2-methylphenol	12.5 ppm
							4-Bromophenyl phenyl ether	12.5 ppm
							4-Chloro-3-methylphenol	12.5 ppm
							4-Chloroaniline	12.5 ppm
							4-Chlorophenyl phenyl ether	12.5 ppm
							4-Methylphenol	12.5 ppm
							4-Nitroaniline	12.5 ppm
							4-Nitrophenol	12.5 ppm
							Acenaphthene	12.5 ppm
							Acenaphthylene	12.5 ppm
							Anthracene	12.5 ppm
							Benzo[a]anthracene	12.5 ppm
							Benzo[a]pyrene	12.5 ppm
							Benzo[b]fluoranthene	12.5 ppm
							Benzo[g,h,i]perylene	12.5 ppm
							Benzo[k]fluoranthene	12.5 ppm
							Bis(2-chloroethoxy)methane	12.5 ppm
							Bis(2-chloroethyl)ether	12.5 ppm
							Bis(2-ethylhexyl) phthalate	12.5 ppm
							Butyl benzyl phthalate	12.5 ppm
							Carbazole	12.5 ppm
							Chrysene	12.5 ppm
							Di-n-butyl phthalate	12.5 ppm
							Di-n-octyl phthalate	12.5 ppm
							Dibenz(a,h)anthracene	12.5 ppm
							Dibenzofuran	12.5 ppm
							Diethyl phthalate	12.5 ppm
							Dimethyl phthalate	12.5 ppm
							Fluoranthene	12.5 ppm
							Fluorene	12.5 ppm
							Hexachlorobenzene	12.5 ppm
							Hexachlorobutadiene	12.5 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorocyclopentadiene	12.5 ppm
							Hexachloroethane	12.5 ppm
							Indeno[1,2,3-cd]pyrene	12.5 ppm
							Isophorone	12.5 ppm
							N-Nitrosodi-n-propylamine	12.5 ppm
							N-Nitrosodimethylamine	12.5 ppm
							Naphthalene	12.5 ppm
							Nitrobenzene	12.5 ppm
							Pentachlorophenol	12.5 ppm
							Phenanthrene	12.5 ppm
							Phenol	12.5 ppm
							Pyrene	12.5 ppm
							3,3'-Dichlorobenzidine	12.5 ppm
							3,3'-Dimethylbenzidine	12.5 ppm
							1,2,4,5-Tetrachlorobenzene	12.5 ppm
							1,3-Dinitrobenzene	12.5 ppm
							1,4-Dinitrobenzene	12.5 ppm
							2,3,4,6-Tetrachlorophenol	12.5 ppm
							2,6-Dichlorophenol	12.5 ppm
							2-Acetylaminofluorene	12.5 ppm
							3-Methylcholanthrene	12.5 ppm
							4,4'-Methylene bis(2-chloroaniline)	12.5 ppm
							4-Aminobiphenyl	12.5 ppm
							4-Nitroquinoline-1-oxide	12.5 ppm
							cis-Diallate	9.25 ppm
							Dinoseb	12.5 ppm
							Ethyl methanesulfonate	12.5 ppm
							Hexachloropropene	12.5 ppm
							Isosafrole Peak 1	2 ppm
							Isosafrole Peak 2	10.5 ppm
							Methyl methanesulfonate	12.5 ppm
							N-Nitro-o-toluidine	12.5 ppm
							N-Nitrosodi-n-butylamine	12.5 ppm
							N-Nitrosodiethylamine	12.5 ppm
							N-Nitrosomethylethylamine	12.5 ppm
							N-Nitrosomorpholine	12.5 ppm
							N-Nitrosopiperidine	12.5 ppm
							N-Nitrosopyrrolidine	12.5 ppm
							p-Dimethylamino azobenzene	12.5 ppm
							Pentachlorobenzene	12.5 ppm
							Pentachloronitrobenzene	12.5 ppm
							Phenacetin	12.5 ppm
							Safrole, Total	12.5 ppm
							trans-Diallate	3.25 ppm
							1,4-Dioxane	12.5 ppm
							1-Methylnaphthalene	12.5 ppm
							1-Naphthylamine	12.5 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MSS_FV8270_6_00012	12/30/20	07/28/20	MeCl2, Lot 201838	5 mL	MSS_CR#9_DL_00005	250 uL	2-Naphthylamine	12.5 ppm
							2-Picoline	12.5 ppm
							2-Toluidine	12.5 ppm
							7,12-Dimethylbenz (a) anthracene	12.5 ppm
							Aniline	12.5 ppm
							Phenyl ether	12.5 ppm
							Pyridine	12.5 ppm
					MSS_CR8270_6_00005	125 uL	Benzyl alcohol	50 ppm
							Indene	50 ppm
							Octachlorostyrene	50 ppm
							Benzoic acid	50 ppm
							1,1'-Biphenyl	50 ppm
							Acetophenone	50 ppm
							Atrazine	50 ppm
					MSS_CR8270_8_00002	125 uL	Benzaldehyde	50 ppm
							Caprolactam	50 ppm
							1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
					MSS_FV8270_IS_00002	100 uL	Pyrene-d10 (IS)	20 ppm
							2,4,6-Tribromophenol	100 ppm
							2-Fluorobiphenyl (Surr)	100 ppm
							2-Fluorophenol	100 ppm
							Nitrobenzene-d5 (Surr)	100 ppm
							p-Terphenyl-d14 (Surr)	100 ppm
							Phenol-d5	100 ppm
					MSS_FV8270_WS_00005	1250 uL	Benzidine	150 ppm
							N-Nitrosodiphenylamine	50 ppm
							1,4-Naphthoquinone	50 ppm
							1-Chloronaphthalene	50 ppm
							6-Methylchrysene	50 ppm
							Chlorobenzilate	50 ppm
							Dibenz[a,h]acridine	50 ppm
							Dibenz[a,j]acridine	50 ppm
							Dimethoate	50 ppm
							Ethyl Parathion	50 ppm
							Isodrin	50 ppm
							Methyl parathion	50 ppm
							o,o',o''-Triethylphosphorothioate	50 ppm
							Phorate	50 ppm
							Pronamide	50 ppm
							Quinoline	50 ppm
							Sulfotepp	50 ppm
							Thionazin	50 ppm
							1,2,4-Trichlorobenzene	50 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene	50 ppm
							1,2-Diphenylhydrazine	50 ppm
							1,3-Dichlorobenzene	50 ppm
							1,4-Dichlorobenzene	50 ppm
							2,2'-oxybis[1-chloropropane]	50 ppm
							2,4,5-Trichlorophenol	50 ppm
							2,4,6-Trichlorophenol	50 ppm
							2,4-Dichlorophenol	50 ppm
							2,4-Dimethylphenol	50 ppm
							2,4-Dinitrophenol	50 ppm
							2,4-Dinitrotoluene	50 ppm
							2,6-Dinitrotoluene	50 ppm
							2-Chloronaphthalene	50 ppm
							2-Chlorophenol	50 ppm
							2-Methylnaphthalene	50 ppm
							2-Methylphenol	50 ppm
							2-Nitroaniline	50 ppm
							2-Nitrophenol	50 ppm
							3-Nitroaniline	50 ppm
							4,6-Dinitro-2-methylphenol	50 ppm
							4-Bromophenyl phenyl ether	50 ppm
							4-Chloro-3-methylphenol	50 ppm
							4-Chloroaniline	50 ppm
							4-Chlorophenyl phenyl ether	50 ppm
							4-Methylphenol	50 ppm
							4-Nitroaniline	50 ppm
							4-Nitrophenol	50 ppm
							Acenaphthene	50 ppm
							Acenaphthylene	50 ppm
							Anthracene	50 ppm
							Benzo[a]anthracene	50 ppm
							Benzo[a]pyrene	50 ppm
							Benzo[b]fluoranthene	50 ppm
							Benzo[g,h,i]perylene	50 ppm
							Benzo[k]fluoranthene	50 ppm
							Bis (2-chloroethoxy)methane	50 ppm
							Bis (2-chloroethyl) ether	50 ppm
							Bis (2-ethylhexyl) phthalate	50 ppm
							Butyl benzyl phthalate	50 ppm
							Carbazole	50 ppm
							Chrysene	50 ppm
							Di-n-butyl phthalate	50 ppm
							Di-n-octyl phthalate	50 ppm
							Dibenz (a,h) anthracene	50 ppm
							Dibenzofuran	50 ppm
							Diethyl phthalate	50 ppm
							Dimethyl phthalate	50 ppm
							Fluoranthene	50 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluorene	50 ppm
							Hexachlorobenzene	50 ppm
							Hexachlorobutadiene	50 ppm
							Hexachlorocyclopentadiene	50 ppm
							Hexachloroethane	50 ppm
							Indeno[1,2,3-cd]pyrene	50 ppm
							Isophorone	50 ppm
							N-Nitrosodi-n-propylamine	50 ppm
							N-Nitrosodimethylamine	50 ppm
							Naphthalene	50 ppm
							Nitrobenzene	50 ppm
							Pentachlorophenol	50 ppm
							Phenanthrene	50 ppm
							Phenol	50 ppm
							Pyrene	50 ppm
							3,3'-Dichlorobenzidine	50 ppm
							3,3'-Dimethylbenzidine	50 ppm
							1,2,4,5-Tetrachlorobenzene	50 ppm
							1,3-Dinitrobenzene	50 ppm
							1,4-Dinitrobenzene	50 ppm
							2,3,4,6-Tetrachlorophenol	50 ppm
							2,6-Dichlorophenol	50 ppm
							2-Acetylaminofluorene	50 ppm
							3-Methylcholanthrene	50 ppm
							4,4'-Methylene bis (2-chloroaniline)	50 ppm
							4-Aminobiphenyl	50 ppm
							4-Nitroquinoline-1-oxide	50 ppm
							cis-Diallate	37 ppm
							Dinoseb	50 ppm
							Ethyl methanesulfonate	50 ppm
							Hexachloropropene	50 ppm
							Isosafrole Peak 1	8 ppm
							Isosafrole Peak 2	42 ppm
							Methyl methanesulfonate	50 ppm
							N-Nitro-o-toluidine	50 ppm
							N-Nitrosodi-n-butylamine	50 ppm
							N-Nitrosodiethylamine	50 ppm
							N-Nitrosomethylethylamine	50 ppm
							N-Nitrosomorpholine	50 ppm
							N-Nitrosopiperidine	50 ppm
							N-Nitrosopyrrolidine	50 ppm
							p-Dimethylamino azobenzene	50 ppm
							Pentachlorobenzene	50 ppm
							Pentachloronitrobenzene	50 ppm
							Phenacetin	50 ppm
							Safrole, Total	50 ppm
							trans-Diallate	13 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dioxane	50 ppm
							1-Methylnaphthalene	50 ppm
							1-Naphthylamine	50 ppm
							2-Naphthylamine	50 ppm
							2-Picoline	50 ppm
							2-Toluidine	50 ppm
							7,12-Dimethylbenz(a)anthracene	50 ppm
							Aniline	50 ppm
							Phenyl ether	50 ppm
							Pyridine	50 ppm
..MSS_CR#9_DL_00005	09/30/21	07/21/20	MeCl2, Lot 200018	5 mL	MSS_CR8270_9_00003	1000 uL	Benzyl alcohol	1000 ppm
							Indene	1000 ppm
							Octachlorostyrene	1000 ppm
...MSS_CR8270_9_00003	09/30/21		Restek, Lot A0131112		(Purchased Reagent)		Benzyl alcohol	5000 ug/mL
							Indene	5000 ug/mL
							Octachlorostyrene	5000 ug/mL
..MSS_CR8270_6_00005	02/28/21		Restek, Lot A0146280		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..MSS_CR8270_8_00002	02/28/21		Restek, Lot A0146313		(Purchased Reagent)		1,1'-Biphenyl	2000 ug/mL
							Acetophenone	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..MSS_FV8270_IS_00002	02/28/21		Restek, Lot A0134880		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
..MSS_FV8270_WS_00005	12/30/20	07/13/20	MeCl2, Lot 200018	25 mL	MSS_8270_SURR_00002	2500 uL	2,4,6-Tribromophenol	400 ppm
							2-Fluorobiphenyl (Surr)	400 ppm
							2-Fluorophenol	400 ppm
							Nitrobenzene-d5 (Surr)	400 ppm
							p-Terphenyl-d14 (Surr)	400 ppm
							Phenol-d5	400 ppm
					MSS_AB_BZIDIN_00004	2000 uL	Benzidine	600 ppm
					MSS_CR8270_1_00004	1000 uL	N-Nitrosodiphenylamine	200 ppm
					MSS_CR8270_10_00004	2500 uL	1,4-Naphthoquinone	200 ppm
							1-Chloronaphthalene	200 ppm
							6-Methylchrysene	200 ppm
							Chlorobenzilate	200 ppm
							Dibenz[a,h]acridine	200 ppm
							Dibenz[a,j]acridine	200 ppm
							Dimethoate	200 ppm
							Ethyl Parathion	200 ppm
							Isodrin	200 ppm
							Methyl parathion	200 ppm
							o,o',o''-Triethylphosphorothioate	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MSS_CR8270_2_00007	5000 uL	Phorate	200 ppm
							Pronamide	200 ppm
							Quinoline	200 ppm
							Sulfotepp	200 ppm
							Thionazin	200 ppm
							1,2,4-Trichlorobenzene	200 ppm
							1,2-Dichlorobenzene	200 ppm
							1,2-Diphenylhydrazine	200 ppm
							1,3-Dichlorobenzene	200 ppm
							1,4-Dichlorobenzene	200 ppm
							2,2'-oxybis[1-chloropropane]	200 ppm
							2,4,5-Trichlorophenol	200 ppm
							2,4,6-Trichlorophenol	200 ppm
							2,4-Dichlorophenol	200 ppm
							2,4-Dimethylphenol	200 ppm
							2,4-Dinitrophenol	200 ppm
							2,4-Dinitrotoluene	200 ppm
							2,6-Dinitrotoluene	200 ppm
							2-Chloronaphthalene	200 ppm
							2-Chlorophenol	200 ppm
							2-Methylnaphthalene	200 ppm
							2-Methylphenol	200 ppm
							2-Nitroaniline	200 ppm
							2-Nitrophenol	200 ppm
							3-Nitroaniline	200 ppm
							4,6-Dinitro-2-methylphenol	200 ppm
							4-Bromophenyl phenyl ether	200 ppm
							4-Chloro-3-methylphenol	200 ppm
							4-Chloroaniline	200 ppm
							4-Chlorophenyl phenyl ether	200 ppm
							4-Methylphenol	200 ppm
							4-Nitroaniline	200 ppm
							4-Nitrophenol	200 ppm
							Acenaphthene	200 ppm
							Acenaphthylene	200 ppm
							Anthracene	200 ppm
							Benzo[a]anthracene	200 ppm
							Benzo[a]pyrene	200 ppm
							Benzo[b]fluoranthene	200 ppm
							Benzo[g,h,i]perylene	200 ppm
							Benzo[k]fluoranthene	200 ppm
							Bis(2-chloroethoxy)methane	200 ppm
							Bis(2-chloroethyl)ether	200 ppm
							Bis(2-ethylhexyl) phthalate	200 ppm
							Butyl benzyl phthalate	200 ppm
							Carbazole	200 ppm
							Chrysene	200 ppm
							Di-n-butyl phthalate	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Di-n-octyl phthalate	200 ppm
							Dibenz (a,h) anthracene	200 ppm
							Dibenzofuran	200 ppm
							Diethyl phthalate	200 ppm
							Dimethyl phthalate	200 ppm
							Fluoranthene	200 ppm
							Fluorene	200 ppm
							Hexachlorobenzene	200 ppm
							Hexachlorobutadiene	200 ppm
							Hexachlorocyclopentadiene	200 ppm
							Hexachloroethane	200 ppm
							Indeno[1,2,3-cd]pyrene	200 ppm
							Isophorone	200 ppm
							N-Nitrosodi-n-propylamine	200 ppm
							N-Nitrosodimethylamine	200 ppm
							Naphthalene	200 ppm
							Nitrobenzene	200 ppm
							Pentachlorophenol	200 ppm
							Phenanthrene	200 ppm
							Phenol	200 ppm
							Pyrene	200 ppm
					MSS_CR8270_3_00004	2500 uL	3,3'-Dichlorobenzidine	200 ppm
							3,3'-Dimethylbenzidine	200 ppm
							Benzidine	600 ppm
					MSS_CR8270_4_00004	2500 uL	1,2,4,5-Tetrachlorobenzene	200 ppm
							1,3-Dinitrobenzene	200 ppm
							1,4-Dinitrobenzene	200 ppm
							2,3,4,6-Tetrachlorophenol	200 ppm
							2,6-Dichlorophenol	200 ppm
							2-Acetylaminofluorene	200 ppm
							3-Methylcholanthrene	200 ppm
							4,4'-Methylene bis (2-chloroaniline)	200 ppm
							4-Aminobiphenyl	200 ppm
							4-Nitroquinoline-1-oxide	200 ppm
							cis-Diallate	148 ppm
							Dinoseb	200 ppm
							Ethyl methanesulfonate	200 ppm
							Hexachloropropene	200 ppm
							Isosafrole Peak 1	32 ppm
							Isosafrole Peak 2	168 ppm
							Methyl methanesulfonate	200 ppm
							N-Nitro-o-toluidine	200 ppm
							N-Nitrosodi-n-butylamine	200 ppm
							N-Nitrosodiethylamine	200 ppm
							N-Nitrosomethylethylamine	200 ppm
							N-Nitrosomorpholine	200 ppm
							N-Nitrosopiperidine	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosopyrrolidine	200 ppm
							p-Dimethylamino azobenzene	200 ppm
							Pentachlorobenzene	200 ppm
							Pentachloronitrobenzene	200 ppm
							Phenacetin	200 ppm
							Safrole, Total	200 ppm
							trans-Diallate	52 ppm
					MSS_CR8270_7_00004	2500 uL	1,4-Dioxane	200 ppm
							1-Methylnaphthalene	200 ppm
							1-Naphthylamine	200 ppm
							2-Naphthylamine	200 ppm
							2-Picoline	200 ppm
							2-Toluidine	200 ppm
							7,12-Dimethylbenz(a)anthracene	200 ppm
							Aniline	200 ppm
							Phenyl ether	200 ppm
							Pyridine	200 ppm
...MSS_8270_SURR_00002	04/30/23		Sigma- Aldrich, Lot LRAC6081		(Purchased Reagent)		2,4,6-Tribromophenol	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5	4000 ug/mL
...MSS AB BZIDIN 00004	01/29/23		Absolute, Lot 012920		(Purchased Reagent)		Benzidine	5000 ug/mL
...MSS CR8270_1_00004	10/31/22		Restek, Lot A0154042		(Purchased Reagent)		N-Nitrosodiphenylamine	5000 ug/mL
...MSS_CR8270_10_00004	06/30/21		Restek, Lot A0156085		(Purchased Reagent)		1,4-Naphthoquinone	2000 ug/mL
							1-Chloronaphthalene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
							Chlorobenzilate	2000 ug/mL
							Dibenz[a,h]acridine	2000 ug/mL
							Dibenz[a,j]acridine	2000 ug/mL
							Dimethoate	2000 ug/mL
							Ethyl Parathion	2000 ug/mL
							Isodrin	2000 ug/mL
							Methyl parathion	2000 ug/mL
							o,o',o''-Triethylphosphorothioate	2000 ug/mL
							Phorate	2000 ug/mL
							Pronamide	2000 ug/mL
							Quinoline	2000 ug/mL
							Sulfotepp	2000 ug/mL
							Thionazin	2000 ug/mL
...MSS_CR8270_2_00007	02/28/22		Restek, Lot A0146253		(Purchased Reagent)		1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	1000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	1000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	1000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
...MSS_CR8270_3_00004	09/30/21		Restek, Lot A0130858		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							3,3'-Dimethylbenzidine	2000 ug/mL
							Benidine	2000 ug/mL
...MSS_CR8270_4_00004	12/31/20		Restek, Lot A0150344		(Purchased Reagent)		1,2,4,5-Tetrachlorobenzene	2000 ug/mL
							1,3-Dinitrobenzene	2000 ug/mL
							1,4-Dinitrobenzene	2000 ug/mL
							2,3,4,6-Tetrachlorophenol	2000 ug/mL
							2,6-Dichlorophenol	2000 ug/mL
							2-Acetylaminofluorene	2000 ug/mL
							3-Methylcholanthrene	2000 ug/mL
							4,4'-Methylene bis (2-chloroaniline)	2000 ug/mL
							4-Aminobiphenyl	2000 ug/mL
							4-Nitroquinoline-1-oxide	2000 ug/mL
							cis-Diallate	1480 ug/mL
							Dinoseb	2000 ug/mL
							Ethyl methanesulfonate	2000 ug/mL
							Hexachloropropene	2000 ug/mL
							Isosafrole Peak 1	320 ug/mL
							Isosafrole Peak 2	1680 ug/mL
							Methyl methanesulfonate	2000 ug/mL
							N-Nitro-o-toluidine	2000 ug/mL
							N-Nitrosodi-n-butylamine	2000 ug/mL
							N-Nitrosodiethylamine	2000 ug/mL
							N-Nitrosomethylethylamine	2000 ug/mL
							N-Nitrosomorpholine	2000 ug/mL
							N-Nitrosopiperidine	2000 ug/mL
							N-Nitrosopyrrolidine	2000 ug/mL
							p-Dimethylamino azobenzene	2000 ug/mL
							Pentachlorobenzene	2000 ug/mL
							Pentachloronitrobenzene	2000 ug/mL
							Phenacetin	2000 ug/mL
							Safrole, Total	2000 ug/mL
							trans-Diallate	520 ug/mL
...MSS_CR8270_7_00004	11/30/22		Restek, Lot A0155157		(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
							1-Methylnaphthalene	2000 ug/mL
							1-Naphthylamine	2000 ug/mL
							2-Naphthylamine	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Picoline	2000 ug/mL
							2-Toluidine	2000 ug/mL
							7,12-Dimethylbenz (a) anthracene	2000 ug/mL
							Aniline	2000 ug/mL
							Phenyl ether	2000 ug/mL
							Pyridine	2000 ug/mL
MSS_RV8270_6_00009	12/30/20	09/24/20	MeCl2, Lot 203170	5 mL	MSS_FV8270_6_00012	1250 uL	1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_FV8270_6_00012	12/30/20	07/28/20	MeCl2, Lot 201838	5 mL	MSS_FV8270_IS_00002	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_FV8270_IS_00002	02/28/21		Restek, Lot A0134880		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270_6_00009	12/30/20	09/24/20	MeCl2, Lot 203170	5 mL	MSS_FV8270_6_00012	1250 uL	2,4,6-Tribromophenol	25 ppm
							2-Fluorobiphenyl (Surr)	25 ppm
							2-Fluorophenol	25 ppm
							Nitrobenzene-d5 (Surr)	25 ppm
							p-Terphenyl-d14 (Surr)	25 ppm
							Phenol-d5	25 ppm
							2,4-Dinitrotoluene	12.5 ppm
							2,6-Dinitrotoluene	12.5 ppm
							Diethyl phthalate	12.5 ppm
.MSS_FV8270_6_00012	12/30/20	07/28/20	MeCl2, Lot 201838	5 mL	MSS_FV8270_WS_00005	1250 uL	2,4,6-Tribromophenol	100 ppm
							2-Fluorobiphenyl (Surr)	100 ppm
							2-Fluorophenol	100 ppm
							Nitrobenzene-d5 (Surr)	100 ppm
							p-Terphenyl-d14 (Surr)	100 ppm
							Phenol-d5	100 ppm
							2,4-Dinitrotoluene	50 ppm
							2,6-Dinitrotoluene	50 ppm
							Diethyl phthalate	50 ppm
..MSS_FV8270_WS_00005	12/30/20	07/13/20	MeCl2, Lot 200018	25 mL	MSS_8270_SURR_00002	2500 uL	2,4,6-Tribromophenol	400 ppm
							2-Fluorobiphenyl (Surr)	400 ppm
							2-Fluorophenol	400 ppm
							Nitrobenzene-d5 (Surr)	400 ppm
							p-Terphenyl-d14 (Surr)	400 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MSS_CR8270_2_00007	5000 uL	Phenol-d5	400 ppm
							2,4-Dinitrotoluene	200 ppm
							2,6-Dinitrotoluene	200 ppm
							Diethyl phthalate	200 ppm
...MSS_8270_SURR_00002	04/30/23		Sigma- Aldrich, Lot LRAC6081		(Purchased Reagent)		2,4,6-Tribromophenol	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5	4000 ug/mL
...MSS_CR8270_2_00007	02/28/22		Restek, Lot A0146253		(Purchased Reagent)		2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
MSS_RV8270_7_00008	12/30/20	09/24/20	MeCl2, Lot 203170	2 mL	MSS_FV8270_7_00009	500 uL	Benzyl alcohol	20 ppm
							Indene	20 ppm
							Octachlorostyrene	20 ppm
							Benzoic acid	20 ppm
							1,1'-Biphenyl	20 ppm
							Acetophenone	20 ppm
							Atrazine	20 ppm
							Benzaldehyde	20 ppm
							Caprolactam	20 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
							2,4,6-Tribromophenol	40 ppm
							2-Fluorobiphenyl (Surr)	40 ppm
							2-Fluorophenol	40 ppm
							Nitrobenzene-d5 (Surr)	40 ppm
							p-Terphenyl-d14 (Surr)	40 ppm
							Phenol-d5	40 ppm
							Benzidine	60 ppm
							N-Nitrosodiphenylamine	20 ppm
							1,4-Naphthoquinone	20 ppm
							1-Chloronaphthalene	20 ppm
							6-Methylchrysene	20 ppm
							Chlorobenzilate	20 ppm
							Dibenz[a,h]acridine	20 ppm
							Dibenz[a,j]acridine	20 ppm
							Dimethoate	20 ppm
							Ethyl Parathion	20 ppm
							Isodrin	20 ppm
							Methyl parathion	20 ppm
							o,o',o''-Triethylphosphorothioate	20 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phorate	20 ppm
							Pronamide	20 ppm
							Quinoline	20 ppm
							Sulfotepp	20 ppm
							Thionazin	20 ppm
							1,2,4-Trichlorobenzene	20 ppm
							1,2-Dichlorobenzene	20 ppm
							1,2-Diphenylhydrazine	20 ppm
							1,3-Dichlorobenzene	20 ppm
							1,4-Dichlorobenzene	20 ppm
							2,2'-oxybis[1-chloropropane]	20 ppm
							2,4,5-Trichlorophenol	20 ppm
							2,4,6-Trichlorophenol	20 ppm
							2,4-Dichlorophenol	20 ppm
							2,4-Dimethylphenol	20 ppm
							2,4-Dinitrophenol	20 ppm
							2,4-Dinitrotoluene	20 ppm
							2,6-Dinitrotoluene	20 ppm
							2-Chloronaphthalene	20 ppm
							2-Chlorophenol	20 ppm
							2-Methylnaphthalene	20 ppm
							2-Methylphenol	20 ppm
							2-Nitroaniline	20 ppm
							2-Nitrophenol	20 ppm
							3-Nitroaniline	20 ppm
							4,6-Dinitro-2-methylphenol	20 ppm
							4-Bromophenyl phenyl ether	20 ppm
							4-Chloro-3-methylphenol	20 ppm
							4-Chloroaniline	20 ppm
							4-Chlorophenyl phenyl ether	20 ppm
							4-Methylphenol	20 ppm
							4-Nitroaniline	20 ppm
							4-Nitrophenol	20 ppm
							Acenaphthene	20 ppm
							Acenaphthylene	20 ppm
							Anthracene	20 ppm
							Benzo[a]anthracene	20 ppm
							Benzo[a]pyrene	20 ppm
							Benzo[b]fluoranthene	20 ppm
							Benzo[g,h,i]perylene	20 ppm
							Benzo[k]fluoranthene	20 ppm
							Bis(2-chloroethoxy)methane	20 ppm
							Bis(2-chloroethyl)ether	20 ppm
							Bis(2-ethylhexyl) phthalate	20 ppm
							Butyl benzyl phthalate	20 ppm
							Carbazole	20 ppm
							Chrysene	20 ppm
							Di-n-butyl phthalate	20 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Di-n-octyl phthalate	20 ppm
							Dibenz (a,h) anthracene	20 ppm
							Dibenzofuran	20 ppm
							Diethyl phthalate	20 ppm
							Dimethyl phthalate	20 ppm
							Fluoranthene	20 ppm
							Fluorene	20 ppm
							Hexachlorobenzene	20 ppm
							Hexachlorobutadiene	20 ppm
							Hexachlorocyclopentadiene	20 ppm
							Hexachloroethane	20 ppm
							Indeno[1,2,3-cd]pyrene	20 ppm
							Isophorone	20 ppm
							N-Nitrosodi-n-propylamine	20 ppm
							N-Nitrosodimethylamine	20 ppm
							Naphthalene	20 ppm
							Nitrobenzene	20 ppm
							Pentachlorophenol	20 ppm
							Phenanthrene	20 ppm
							Phenol	20 ppm
							Pyrene	20 ppm
							3,3'-Dichlorobenzidine	20 ppm
							3,3'-Dimethylbenzidine	20 ppm
							1,2,4,5-Tetrachlorobenzene	20 ppm
							1,3-Dinitrobenzene	20 ppm
							1,4-Dinitrobenzene	20 ppm
							2,3,4,6-Tetrachlorophenol	20 ppm
							2,6-Dichlorophenol	20 ppm
							2-Acetylaminofluorene	20 ppm
							3-Methylcholanthrene	20 ppm
							4,4'-Methylene bis (2-chloroaniline)	20 ppm
							4-Aminobiphenyl	20 ppm
							4-Nitroquinoline-1-oxide	20 ppm
							cis-Diallate	14.8 ppm
							Dinoseb	20 ppm
							Ethyl methanesulfonate	20 ppm
							Hexachloropropene	20 ppm
							Isosafrole Peak 1	3.2 ppm
							Isosafrole Peak 2	16.8 ppm
							Methyl methanesulfonate	20 ppm
							N-Nitro-o-toluidine	20 ppm
							N-Nitrosodi-n-butylamine	20 ppm
							N-Nitrosodiethylamine	20 ppm
							N-Nitrosomethylethylamine	20 ppm
							N-Nitrosomorpholine	20 ppm
							N-Nitrosopiperidine	20 ppm
							N-Nitrosopyrrolidine	20 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							p-Dimethylamino azobenzene	20 ppm
							Pentachlorobenzene	20 ppm
							Pentachloronitrobenzene	20 ppm
							Phenacetin	20 ppm
							Safrole, Total	20 ppm
							trans-Diallate	5.2 ppm
							1,4-Dioxane	20 ppm
							1-Methylnaphthalene	20 ppm
							1-Naphthylamine	20 ppm
							2-Naphthylamine	20 ppm
							2-Picoline	20 ppm
							2-Toluidine	20 ppm
							7,12-Dimethylbenz (a) anthracene	20 ppm
							Aniline	20 ppm
							Phenyl ether	20 ppm
							Pyridine	20 ppm
.MSS_FV8270_7_00009	12/30/20	07/28/20	MeCl2, Lot 201838	2 mL	MSS_CR#9_DL_00005	160 uL	Benzyl alcohol	80 ppm
							Indene	80 ppm
							Octachlorostyrene	80 ppm
					MSS_CR8270_6_00005	80 uL	Benzoic acid	80 ppm
					MSS_CR8270_8_00002	80 uL	1,1'-Biphenyl	80 ppm
							Acetophenone	80 ppm
							Atrazine	80 ppm
							Benzaldehyde	80 ppm
							Caprolactam	80 ppm
					MSS_FV8270_IS_00002	40 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
					MSS_FV8270_WS_00005	800 uL	2,4,6-Tribromophenol	160 ppm
							2-Fluorobiphenyl (Surr)	160 ppm
							2-Fluorophenol	160 ppm
							Nitrobenzene-d5 (Surr)	160 ppm
							p-Terphenyl-d14 (Surr)	160 ppm
							Phenol-d5	160 ppm
							Benzidine	240 ppm
							N-Nitrosodiphenylamine	80 ppm
							1,4-Naphthoquinone	80 ppm
							1-Chloronaphthalene	80 ppm
							6-Methylchrysene	80 ppm
							Chlorobenzilate	80 ppm
							Dibenz[a,h]acridine	80 ppm
							Dibenz[a,j]acridine	80 ppm
							Dimethoate	80 ppm
							Ethyl Parathion	80 ppm
							Isodrin	80 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl parathion	80 ppm
							o,o',o''-Triethylphosphorothioate	80 ppm
							Phorate	80 ppm
							Pronamide	80 ppm
							Quinoline	80 ppm
							Sulfotepp	80 ppm
							Thionazin	80 ppm
							1,2,4-Trichlorobenzene	80 ppm
							1,2-Dichlorobenzene	80 ppm
							1,2-Diphenylhydrazine	80 ppm
							1,3-Dichlorobenzene	80 ppm
							1,4-Dichlorobenzene	80 ppm
							2,2'-oxybis[1-chloropropane]	80 ppm
							2,4,5-Trichlorophenol	80 ppm
							2,4,6-Trichlorophenol	80 ppm
							2,4-Dichlorophenol	80 ppm
							2,4-Dimethylphenol	80 ppm
							2,4-Dinitrophenol	80 ppm
							2,4-Dinitrotoluene	80 ppm
							2,6-Dinitrotoluene	80 ppm
							2-Chloronaphthalene	80 ppm
							2-Chlorophenol	80 ppm
							2-Methylnaphthalene	80 ppm
							2-Methylphenol	80 ppm
							2-Nitroaniline	80 ppm
							2-Nitrophenol	80 ppm
							3-Nitroaniline	80 ppm
							4,6-Dinitro-2-methylphenol	80 ppm
							4-Bromophenyl phenyl ether	80 ppm
							4-Chloro-3-methylphenol	80 ppm
							4-Chloroaniline	80 ppm
							4-Chlorophenyl phenyl ether	80 ppm
							4-Methylphenol	80 ppm
							4-Nitroaniline	80 ppm
							4-Nitrophenol	80 ppm
							Acenaphthene	80 ppm
							Acenaphthylene	80 ppm
							Anthracene	80 ppm
							Benzo[a]anthracene	80 ppm
							Benzo[a]pyrene	80 ppm
							Benzo[b]fluoranthene	80 ppm
							Benzo[g,h,i]perylene	80 ppm
							Benzo[k]fluoranthene	80 ppm
							Bis(2-chloroethoxy)methane	80 ppm
							Bis(2-chloroethyl)ether	80 ppm
							Bis(2-ethylhexyl) phthalate	80 ppm
							Butyl benzyl phthalate	80 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbazole	80 ppm
							Chrysene	80 ppm
							Di-n-butyl phthalate	80 ppm
							Di-n-octyl phthalate	80 ppm
							Dibenz(a,h)anthracene	80 ppm
							Dibenzofuran	80 ppm
							Diethyl phthalate	80 ppm
							Dimethyl phthalate	80 ppm
							Fluoranthene	80 ppm
							Fluorene	80 ppm
							Hexachlorobenzene	80 ppm
							Hexachlorobutadiene	80 ppm
							Hexachlorocyclopentadiene	80 ppm
							Hexachloroethane	80 ppm
							Indeno[1,2,3-cd]pyrene	80 ppm
							Isophorone	80 ppm
							N-Nitrosodi-n-propylamine	80 ppm
							N-Nitrosodimethylamine	80 ppm
							Naphthalene	80 ppm
							Nitrobenzene	80 ppm
							Pentachlorophenol	80 ppm
							Phenanthrene	80 ppm
							Phenol	80 ppm
							Pyrene	80 ppm
							3,3'-Dichlorobenzidine	80 ppm
							3,3'-Dimethylbenzidine	80 ppm
							1,2,4,5-Tetrachlorobenzene	80 ppm
							1,3-Dinitrobenzene	80 ppm
							1,4-Dinitrobenzene	80 ppm
							2,3,4,6-Tetrachlorophenol	80 ppm
							2,6-Dichlorophenol	80 ppm
							2-Acetylaminofluorene	80 ppm
							3-Methylcholanthrene	80 ppm
							4,4'-Methylene bis(2-chloroaniline)	80 ppm
							4-Aminobiphenyl	80 ppm
							4-Nitroquinoline-1-oxide	80 ppm
							cis-Diallate	59.2 ppm
							Dinoseb	80 ppm
							Ethyl methanesulfonate	80 ppm
							Hexachloropropene	80 ppm
							Isosafrole Peak 1	12.8 ppm
							Isosafrole Peak 2	67.2 ppm
							Methyl methanesulfonate	80 ppm
							N-Nitro-o-toluidine	80 ppm
							N-Nitrosodi-n-butylamine	80 ppm
							N-Nitrosodiethylamine	80 ppm
							N-Nitrosomethylethylamine	80 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosomorpholine	80 ppm
							N-Nitrosopiperidine	80 ppm
							N-Nitrosopyrrolidine	80 ppm
							p-Dimethylamino azobenzene	80 ppm
							Pentachlorobenzene	80 ppm
							Pentachloronitrobenzene	80 ppm
							Phenacetin	80 ppm
							Safrole, Total	80 ppm
							trans-Diallate	20.8 ppm
							1,4-Dioxane	80 ppm
							1-Methylnaphthalene	80 ppm
							1-Naphthylamine	80 ppm
							2-Naphthylamine	80 ppm
							2-Picoline	80 ppm
							2-Toluidine	80 ppm
							7,12-Dimethylbenz (a) anthracene	80 ppm
							Aniline	80 ppm
							Phenyl ether	80 ppm
							Pyridine	80 ppm
..MSS_CR#9_DL_00005	09/30/21	07/21/20	MeCl2, Lot 200018	5 mL	MSS_CR8270_9_00003	1000 uL	Benzyl alcohol	1000 ppm
							Indene	1000 ppm
							Octachlorostyrene	1000 ppm
...MSS_CR8270_9_00003	09/30/21		Restek, Lot A0131112		(Purchased Reagent)		Benzyl alcohol	5000 ug/mL
							Indene	5000 ug/mL
							Octachlorostyrene	5000 ug/mL
..MSS_CR8270_6_00005	02/28/21		Restek, Lot A0146280		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..MSS_CR8270_8_00002	02/28/21		Restek, Lot A0146313		(Purchased Reagent)		1,1'-Biphenyl	2000 ug/mL
							Acetophenone	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..MSS_FV8270_IS_00002	02/28/21		Restek, Lot A0134880		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
..MSS_FV8270_WS_00005	12/30/20	07/13/20	MeCl2, Lot 200018	25 mL	MSS_8270_SURR_00002	2500 uL	2,4,6-Tribromophenol	400 ppm
							2-Fluorobiphenyl (Surr)	400 ppm
							2-Fluorophenol	400 ppm
							Nitrobenzene-d5 (Surr)	400 ppm
							p-Terphenyl-d14 (Surr)	400 ppm
							Phenol-d5	400 ppm
					MSS_AB_BZIDIN_00004	2000 uL	Benzidine	600 ppm
					MSS_CR8270_1_00004	1000 uL	N-Nitrosodiphenylamine	200 ppm
					MSS_CR8270_10_00004	2500 uL	1,4-Naphthoquinone	200 ppm
							1-Chloronaphthalene	200 ppm
							6-Methylchrysene	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzilate	200 ppm
							Dibenz[a,h]acridine	200 ppm
							Dibenz[a,j]acridine	200 ppm
							Dimethoate	200 ppm
							Ethyl Parathion	200 ppm
							Isodrin	200 ppm
							Methyl parathion	200 ppm
							o,o',o''-Triethylphosphorothioate	200 ppm
							Phorate	200 ppm
							Pronamide	200 ppm
							Quinoline	200 ppm
							Sulfotepp	200 ppm
							Thionazin	200 ppm
					MSS_CR8270_2_00007	5000 uL	1,2,4-Trichlorobenzene	200 ppm
							1,2-Dichlorobenzene	200 ppm
							1,2-Diphenylhydrazine	200 ppm
							1,3-Dichlorobenzene	200 ppm
							1,4-Dichlorobenzene	200 ppm
							2,2'-oxybis[1-chloropropane]	200 ppm
							2,4,5-Trichlorophenol	200 ppm
							2,4,6-Trichlorophenol	200 ppm
							2,4-Dichlorophenol	200 ppm
							2,4-Dimethylphenol	200 ppm
							2,4-Dinitrophenol	200 ppm
							2,4-Dinitrotoluene	200 ppm
							2,6-Dinitrotoluene	200 ppm
							2-Chloronaphthalene	200 ppm
							2-Chlorophenol	200 ppm
							2-Methylnaphthalene	200 ppm
							2-Methylphenol	200 ppm
							2-Nitroaniline	200 ppm
							2-Nitrophenol	200 ppm
							3-Nitroaniline	200 ppm
							4,6-Dinitro-2-methylphenol	200 ppm
							4-Bromophenyl phenyl ether	200 ppm
							4-Chloro-3-methylphenol	200 ppm
							4-Chloroaniline	200 ppm
							4-Chlorophenyl phenyl ether	200 ppm
							4-Methylphenol	200 ppm
							4-Nitroaniline	200 ppm
							4-Nitrophenol	200 ppm
							Acenaphthene	200 ppm
							Acenaphthylene	200 ppm
							Anthracene	200 ppm
							Benzo[a]anthracene	200 ppm
							Benzo[a]pyrene	200 ppm
							Benzo[b]fluoranthene	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[g,h,i]perylene	200 ppm
							Benzo[k]fluoranthene	200 ppm
							Bis(2-chloroethoxy)methane	200 ppm
							Bis(2-chloroethyl) ether	200 ppm
							Bis(2-ethylhexyl) phthalate	200 ppm
							Butyl benzyl phthalate	200 ppm
							Carbazole	200 ppm
							Chrysene	200 ppm
							Di-n-butyl phthalate	200 ppm
							Di-n-octyl phthalate	200 ppm
							Dibenz(a,h)anthracene	200 ppm
							Dibenzofuran	200 ppm
							Diethyl phthalate	200 ppm
							Dimethyl phthalate	200 ppm
							Fluoranthene	200 ppm
							Fluorene	200 ppm
							Hexachlorobenzene	200 ppm
							Hexachlorobutadiene	200 ppm
							Hexachlorocyclopentadiene	200 ppm
							Hexachloroethane	200 ppm
							Indeno[1,2,3-cd]pyrene	200 ppm
							Isophorone	200 ppm
							N-Nitrosodi-n-propylamine	200 ppm
							N-Nitrosodimethylamine	200 ppm
							Naphthalene	200 ppm
							Nitrobenzene	200 ppm
							Pentachlorophenol	200 ppm
							Phenanthrene	200 ppm
							Phenol	200 ppm
							Pyrene	200 ppm
					MSS_CR8270_3_00004	2500 uL	3,3'-Dichlorobenzidine	200 ppm
					MSS_CR8270_3_00004	2500 uL	3,3'-Dimethylbenzidine	200 ppm
							Benidine	600 ppm
					MSS_CR8270_4_00004	2500 uL	1,2,4,5-Tetrachlorobenzene	200 ppm
					MSS_CR8270_4_00004	2500 uL	1,3-Dinitrobenzene	200 ppm
							1,4-Dinitrobenzene	200 ppm
							2,3,4,6-Tetrachlorophenol	200 ppm
							2,6-Dichlorophenol	200 ppm
							2-Acetylaminofluorene	200 ppm
							3-Methylcholanthrene	200 ppm
							4,4'-Methylene bis(2-chloroaniline)	200 ppm
							4-Aminobiphenyl	200 ppm
							4-Nitroquinoline-1-oxide	200 ppm
							cis-Diallate	148 ppm
							Dinoseb	200 ppm
							Ethyl methanesulfonate	200 ppm
							Hexachloropropene	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isosafrole Peak 1	32 ppm
							Isosafrole Peak 2	168 ppm
							Methyl methanesulfonate	200 ppm
							N-Nitro-o-toluidine	200 ppm
							N-Nitrosodi-n-butylamine	200 ppm
							N-Nitrosodiethylamine	200 ppm
							N-Nitrosomethylethylamine	200 ppm
							N-Nitrosomorpholine	200 ppm
							N-Nitrosopiperidine	200 ppm
							N-Nitrosopyrrolidine	200 ppm
							p-Dimethylamino azobenzene	200 ppm
							Pentachlorobenzene	200 ppm
							Pentachloronitrobenzene	200 ppm
							Phenacetin	200 ppm
							Safrole, Total	200 ppm
							trans-Diallate	52 ppm
					MSS_CR8270_7_00004	2500 uL	1,4-Dioxane	200 ppm
					1-Methylnaphthalene	200 ppm		
					1-Naphthylamine	200 ppm		
					2-Naphthylamine	200 ppm		
					2-Picoline	200 ppm		
					2-Toluidine	200 ppm		
					7,12-Dimethylbenz (a) anthracene	200 ppm		
					Aniline	200 ppm		
					Phenyl ether	200 ppm		
					Pyridine	200 ppm		
...MSS_8270_SURR_00002	04/30/23	Sigma- Aldrich, Lot LRAC6081			(Purchased Reagent)		2,4,6-Tribromophenol	4000 ug/mL
						2-Fluorobiphenyl (Surr)	4000 ug/mL	
						2-Fluorophenol	4000 ug/mL	
						Nitrobenzene-d5 (Surr)	4000 ug/mL	
						p-Terphenyl-d14 (Surr)	4000 ug/mL	
						Phenol-d5	4000 ug/mL	
...MSS_AB_BZIDIN_00004	01/29/23	Absolute, Lot 012920			(Purchased Reagent)		Benzidine	5000 ug/mL
...MSS_CR8270_1_00004	10/31/22	Restek, Lot A0154042			(Purchased Reagent)		N-Nitrosodiphenylamine	5000 ug/mL
...MSS_CR8270_10_00004	06/30/21	Restek, Lot A0156085			(Purchased Reagent)		1,4-Naphthoquinone	2000 ug/mL
						1-Chloronaphthalene	2000 ug/mL	
						6-Methylchrysene	2000 ug/mL	
						Chlorobenzilate	2000 ug/mL	
						Dibenz[a,h]acridine	2000 ug/mL	
						Dibenz[a,j]acridine	2000 ug/mL	
						Dimethoate	2000 ug/mL	
						Ethyl Parathion	2000 ug/mL	
						Isodrin	2000 ug/mL	
						Methyl parathion	2000 ug/mL	
						o,o',o''-Triethylphosphorothioate	2000 ug/mL	
						Phorate	2000 ug/mL	
						Pronamide	2000 ug/mL	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...MSS_CR8270_2_00007	02/28/22		Restek, Lot A0146253		(Purchased Reagent)		Quinoline	2000 ug/mL
							Sulfotepp	2000 ug/mL
							Thionazin	2000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	1000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	1000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	1000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
...MSS_CR8270_3_00004	09/30/21		Restek, Lot A0130858		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							3,3'-Dimethylbenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...MSS_CR8270_4_00004	12/31/20		Restek, Lot A0150344		(Purchased Reagent)		1,2,4,5-Tetrachlorobenzene	2000 ug/mL
							1,3-Dinitrobenzene	2000 ug/mL
							1,4-Dinitrobenzene	2000 ug/mL
							2,3,4,6-Tetrachlorophenol	2000 ug/mL
							2,6-Dichlorophenol	2000 ug/mL
							2-Acetylaminofluorene	2000 ug/mL
							3-Methylcholanthrene	2000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	2000 ug/mL
							4-Aminobiphenyl	2000 ug/mL
							4-Nitroquinoline-1-oxide	2000 ug/mL
							cis-Diallate	1480 ug/mL
							Dinoseb	2000 ug/mL
							Ethyl methanesulfonate	2000 ug/mL
							Hexachloropropene	2000 ug/mL
							Isosafrole Peak 1	320 ug/mL
							Isosafrole Peak 2	1680 ug/mL
							Methyl methanesulfonate	2000 ug/mL
							N-Nitro-o-toluidine	2000 ug/mL
							N-Nitrosodi-n-butylamine	2000 ug/mL
							N-Nitrosodiethylamine	2000 ug/mL
							N-Nitrosomethylethylamine	2000 ug/mL
							N-Nitrosomorpholine	2000 ug/mL
							N-Nitrosopiperidine	2000 ug/mL
							N-Nitrosopyrrolidine	2000 ug/mL
							p-Dimethylamino azobenzene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...MSS_CR8270_7_00004	11/30/22	Restek, Lot A0155157			(Purchased Reagent)		Pentachlorobenzene	2000 ug/mL
							Pentachloronitrobenzene	2000 ug/mL
							Phenacetin	2000 ug/mL
							Safrole, Total	2000 ug/mL
							trans-Diallate	520 ug/mL
							1,4-Dioxane	2000 ug/mL
							1-Methylnaphthalene	2000 ug/mL
							1-Naphthylamine	2000 ug/mL
							2-Naphthylamine	2000 ug/mL
							2-Picoline	2000 ug/mL
							2-Toluidine	2000 ug/mL
							7,12-Dimethylbenz (a) anthracene	2000 ug/mL
							Aniline	2000 ug/mL
							Phenyl ether	2000 ug/mL
							Pyridine	2000 ug/mL
MSS_RV8270_8_00008	12/30/20	09/24/20	MeCl2, Lot 203170	2 mL	MSS_FV8270_8_00009	500 uL	Benzyl alcohol	30 ppm
							Indene	30 ppm
							Octachlorostyrene	30 ppm
							Benzoic acid	30 ppm
							1,1'-Biphenyl	30 ppm
							Acetophenone	30 ppm
							Atrazine	30 ppm
							Benzaldehyde	30 ppm
							Caprolactam	30 ppm
							1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
							2,4,6-Tribromophenol	60 ppm
							2-Fluorobiphenyl (Surr)	60 ppm
							2-Fluorophenol	60 ppm
							Nitrobenzene-d5 (Surr)	60 ppm
							p-Terphenyl-d14 (Surr)	60 ppm
							Phenol-d5	60 ppm
							Benzidine	90 ppm
							N-Nitrosodiphenylamine	30 ppm
							1,4-Naphthoquinone	30 ppm
							1-Chloronaphthalene	30 ppm
							6-Methylchrysene	30 ppm
							Chlorobenzilate	30 ppm
							Dibenz[a,h]acridine	30 ppm
							Dibenz[a,j]acridine	30 ppm
							Dimethoate	30 ppm
							Ethyl Parathion	30 ppm
							Isodrin	30 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl parathion	30 ppm
							o,o',o''-Triethylphosphorothioate	30 ppm
							Phorate	30 ppm
							Pronamide	30 ppm
							Quinoline	30 ppm
							Sulfotepp	30 ppm
							Thionazin	30 ppm
							1,2,4-Trichlorobenzene	30 ppm
							1,2-Dichlorobenzene	30 ppm
							1,2-Diphenylhydrazine	30 ppm
							1,3-Dichlorobenzene	30 ppm
							1,4-Dichlorobenzene	30 ppm
							2,2'-oxybis[1-chloropropane]	30 ppm
							2,4,5-Trichlorophenol	30 ppm
							2,4,6-Trichlorophenol	30 ppm
							2,4-Dichlorophenol	30 ppm
							2,4-Dimethylphenol	30 ppm
							2,4-Dinitrophenol	30 ppm
							2,4-Dinitrotoluene	30 ppm
							2,6-Dinitrotoluene	30 ppm
							2-Chloronaphthalene	30 ppm
							2-Chlorophenol	30 ppm
							2-Methylnaphthalene	30 ppm
							2-Methylphenol	30 ppm
							2-Nitroaniline	30 ppm
							2-Nitrophenol	30 ppm
							3-Nitroaniline	30 ppm
							4,6-Dinitro-2-methylphenol	30 ppm
							4-Bromophenyl phenyl ether	30 ppm
							4-Chloro-3-methylphenol	30 ppm
							4-Chloroaniline	30 ppm
							4-Chlorophenyl phenyl ether	30 ppm
							4-Methylphenol	30 ppm
							4-Nitroaniline	30 ppm
							4-Nitrophenol	30 ppm
							Acenaphthene	30 ppm
							Acenaphthylene	30 ppm
							Anthracene	30 ppm
							Benzo[a]anthracene	30 ppm
							Benzo[a]pyrene	30 ppm
							Benzo[b]fluoranthene	30 ppm
							Benzo[g,h,i]perylene	30 ppm
							Benzo[k]fluoranthene	30 ppm
							Bis(2-chloroethoxy)methane	30 ppm
							Bis(2-chloroethyl)ether	30 ppm
							Bis(2-ethylhexyl) phthalate	30 ppm
							Butyl benzyl phthalate	30 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbazole	30 ppm
							Chrysene	30 ppm
							Di-n-butyl phthalate	30 ppm
							Di-n-octyl phthalate	30 ppm
							Dibenz (a,h) anthracene	30 ppm
							Dibenzofuran	30 ppm
							Diethyl phthalate	30 ppm
							Dimethyl phthalate	30 ppm
							Fluoranthene	30 ppm
							Fluorene	30 ppm
							Hexachlorobenzene	30 ppm
							Hexachlorobutadiene	30 ppm
							Hexachlorocyclopentadiene	30 ppm
							Hexachloroethane	30 ppm
							Indeno[1,2,3-cd]pyrene	30 ppm
							Isophorone	30 ppm
							N-Nitrosodi-n-propylamine	30 ppm
							N-Nitrosodimethylamine	30 ppm
							Naphthalene	30 ppm
							Nitrobenzene	30 ppm
							Pentachlorophenol	30 ppm
							Phenanthrene	30 ppm
							Phenol	30 ppm
							Pyrene	30 ppm
							3,3'-Dichlorobenzidine	30 ppm
							3,3'-Dimethylbenzidine	30 ppm
							1,2,4,5-Tetrachlorobenzene	30 ppm
							1,3-Dinitrobenzene	30 ppm
							1,4-Dinitrobenzene	30 ppm
							2,3,4,6-Tetrachlorophenol	30 ppm
							2,6-Dichlorophenol	30 ppm
							2-Acetylaminofluorene	30 ppm
							3-Methylcholanthrene	30 ppm
							4,4'-Methylene bis (2-chloroaniline)	30 ppm
							4-Aminobiphenyl	30 ppm
							4-Nitroquinoline-1-oxide	30 ppm
							cis-Diallate	22.2 ppm
							Dinoseb	30 ppm
							Ethyl methanesulfonate	30 ppm
							Hexachloropropene	30 ppm
							Isosafrole Peak 1	4.8 ppm
							Isosafrole Peak 2	25.2 ppm
							Methyl methanesulfonate	30 ppm
							N-Nitro-o-toluidine	30 ppm
							N-Nitrosodi-n-butylamine	30 ppm
							N-Nitrosodiethylamine	30 ppm
							N-Nitrosomethylethylamine	30 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosomorpholine	30 ppm
							N-Nitrosopiperidine	30 ppm
							N-Nitrosopyrrolidine	30 ppm
							p-Dimethylamino azobenzene	30 ppm
							Pentachlorobenzene	30 ppm
							Pentachloronitrobenzene	30 ppm
							Phenacetin	30 ppm
							Safrole, Total	30 ppm
							trans-Diallate	7.8 ppm
							1,4-Dioxane	30 ppm
							1-Methylnaphthalene	30 ppm
							1-Naphthylamine	30 ppm
							2-Naphthylamine	30 ppm
							2-Picoline	30 ppm
							2-Toluidine	30 ppm
							7,12-Dimethylbenz (a) anthracene	30 ppm
							Aniline	30 ppm
							Phenyl ether	30 ppm
							Pyridine	30 ppm
.MSS_FV8270_8_00009	12/30/20	07/28/20	MeCl2, Lot 201838	2 mL	MSS_CR#9_DL_00005	240 uL	Benzyl alcohol	120 ppm
							Indene	120 ppm
							Octachlorostyrene	120 ppm
					MSS_CR8270_6_00005	120 uL	Benzoic acid	120 ppm
					MSS_CR8270_8_00002	120 uL	1,1'-Biphenyl	120 ppm
							Acetophenone	120 ppm
							Atrazine	120 ppm
							Benzaldehyde	120 ppm
							Caprolactam	120 ppm
					MSS_FV8270_IS_00002	40 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
					MSS_FV8270_WS_00005	1200 uL	2,4,6-Tribromophenol	240 ppm
							2-Fluorobiphenyl (Surr)	240 ppm
							2-Fluorophenol	240 ppm
							Nitrobenzene-d5 (Surr)	240 ppm
							p-Terphenyl-d14 (Surr)	240 ppm
							Phenol-d5	240 ppm
							Benzidine	360 ppm
							N-Nitrosodiphenylamine	120 ppm
							1,4-Naphthoquinone	120 ppm
							1-Chloronaphthalene	120 ppm
							6-Methylchrysene	120 ppm
							Chlorobenzilate	120 ppm
							Dibenz[a,h]acridine	120 ppm
							Dibenz[a,j]acridine	120 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dimethoate	120 ppm
							Ethyl Parathion	120 ppm
							Isodrin	120 ppm
							Methyl parathion	120 ppm
							o,o',o''-Triethylphosphorothioate	120 ppm
							Phorate	120 ppm
							Pronamide	120 ppm
							Quinoline	120 ppm
							Sulfotepp	120 ppm
							Thionazin	120 ppm
							1,2,4-Trichlorobenzene	120 ppm
							1,2-Dichlorobenzene	120 ppm
							1,2-Diphenylhydrazine	120 ppm
							1,3-Dichlorobenzene	120 ppm
							1,4-Dichlorobenzene	120 ppm
							2,2'-oxybis[1-chloropropane]	120 ppm
							2,4,5-Trichlorophenol	120 ppm
							2,4,6-Trichlorophenol	120 ppm
							2,4-Dichlorophenol	120 ppm
							2,4-Dimethylphenol	120 ppm
							2,4-Dinitrophenol	120 ppm
							2,4-Dinitrotoluene	120 ppm
							2,6-Dinitrotoluene	120 ppm
							2-Chloronaphthalene	120 ppm
							2-Chlorophenol	120 ppm
							2-Methylnaphthalene	120 ppm
							2-Methylphenol	120 ppm
							2-Nitroaniline	120 ppm
							2-Nitrophenol	120 ppm
							3-Nitroaniline	120 ppm
							4,6-Dinitro-2-methylphenol	120 ppm
							4-Bromophenyl phenyl ether	120 ppm
							4-Chloro-3-methylphenol	120 ppm
							4-Chloroaniline	120 ppm
							4-Chlorophenyl phenyl ether	120 ppm
							4-Methylphenol	120 ppm
							4-Nitroaniline	120 ppm
							4-Nitrophenol	120 ppm
							Acenaphthene	120 ppm
							Acenaphthylene	120 ppm
							Anthracene	120 ppm
							Benzo[a]anthracene	120 ppm
							Benzo[a]pyrene	120 ppm
							Benzo[b]fluoranthene	120 ppm
							Benzo[g,h,i]perylene	120 ppm
							Benzo[k]fluoranthene	120 ppm
							Bis (2-chloroethoxy) methane	120 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis (2-chloroethyl) ether	120 ppm
							Bis (2-ethylhexyl) phthalate	120 ppm
							Butyl benzyl phthalate	120 ppm
							Carbazole	120 ppm
							Chrysene	120 ppm
							Di-n-butyl phthalate	120 ppm
							Di-n-octyl phthalate	120 ppm
							Dibenz (a,h) anthracene	120 ppm
							Dibenzofuran	120 ppm
							Diethyl phthalate	120 ppm
							Dimethyl phthalate	120 ppm
							Fluoranthene	120 ppm
							Fluorene	120 ppm
							Hexachlorobenzene	120 ppm
							Hexachlorobutadiene	120 ppm
							Hexachlorocyclopentadiene	120 ppm
							Hexachloroethane	120 ppm
							Indeno[1,2,3-cd]pyrene	120 ppm
							Isophorone	120 ppm
							N-Nitrosodi-n-propylamine	120 ppm
							N-Nitrosodimethylamine	120 ppm
							Naphthalene	120 ppm
							Nitrobenzene	120 ppm
							Pentachlorophenol	120 ppm
							Phenanthrene	120 ppm
							Phenol	120 ppm
							Pyrene	120 ppm
							3,3'-Dichlorobenzidine	120 ppm
							3,3'-Dimethylbenzidine	120 ppm
							1,2,4,5-Tetrachlorobenzene	120 ppm
							1,3-Dinitrobenzene	120 ppm
							1,4-Dinitrobenzene	120 ppm
							2,3,4,6-Tetrachlorophenol	120 ppm
							2,6-Dichlorophenol	120 ppm
							2-Acetylaminofluorene	120 ppm
							3-Methylcholanthrene	120 ppm
							4,4'-Methylene bis (2-chloroaniline)	120 ppm
							4-Aminobiphenyl	120 ppm
							4-Nitroquinoline-1-oxide	120 ppm
							cis-Diallate	88.8 ppm
							Dinoseb	120 ppm
							Ethyl methanesulfonate	120 ppm
							Hexachloropropene	120 ppm
							Isosafrole Peak 1	19.2 ppm
							Isosafrole Peak 2	100.8 ppm
							Methyl methanesulfonate	120 ppm
							N-Nitro-o-toluidine	120 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodi-n-butylamine	120 ppm
							N-Nitrosodiethylamine	120 ppm
							N-Nitrosomethylethylamine	120 ppm
							N-Nitrosomorpholine	120 ppm
							N-Nitrosopiperidine	120 ppm
							N-Nitrosopyrrolidine	120 ppm
							p-Dimethylamino azobenzene	120 ppm
							Pentachlorobenzene	120 ppm
							Pentachloronitrobenzene	120 ppm
							Phenacetin	120 ppm
							Safole, Total	120 ppm
							trans-Diallate	31.2 ppm
							1,4-Dioxane	120 ppm
							1-Methylnaphthalene	120 ppm
							1-Naphthylamine	120 ppm
							2-Naphthylamine	120 ppm
							2-Picoline	120 ppm
							2-Toluidine	120 ppm
							7,12-Dimethylbenz(a)anthracene	120 ppm
							Aniline	120 ppm
							Phenyl ether	120 ppm
							Pyridine	120 ppm
..MSS_CR#9_DL_00005	09/30/21	07/21/20	MeCl2, Lot 200018	5 mL	MSS_CR8270_9_00003	1000 uL	Benzyl alcohol	1000 ppm
							Indene	1000 ppm
							Octachlorostyrene	1000 ppm
...MSS_CR8270_9_00003	09/30/21		Restek, Lot A0131112		(Purchased Reagent)		Benzyl alcohol	5000 ug/mL
							Indene	5000 ug/mL
							Octachlorostyrene	5000 ug/mL
..MSS_CR8270_6_00005	02/28/21		Restek, Lot A0146280		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..MSS_CR8270_8_00002	02/28/21		Restek, Lot A0146313		(Purchased Reagent)		1,1'-Biphenyl	2000 ug/mL
							Acetophenone	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..MSS_FV8270_IS_00002	02/28/21		Restek, Lot A0134880		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
..MSS_FV8270_WS_00005	12/30/20	07/13/20	MeCl2, Lot 200018	25 mL	MSS_8270_SURR_00002	2500 uL	2,4,6-Tribromophenol	400 ppm
							2-Fluorobiphenyl (Surr)	400 ppm
							2-Fluorophenol	400 ppm
							Nitrobenzene-d5 (Surr)	400 ppm
							p-Terphenyl-d14 (Surr)	400 ppm
							Phenol-d5	400 ppm
					MSS_AB_BZIDIN_00004	2000 uL	Benzydine	600 ppm
					MSS_CR8270_1_00004	1000 uL	N-Nitrosodiphenylamine	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MSS_CR8270_10_00004	2500 uL	1,4-Naphthoquinone	200 ppm
							1-Chloronaphthalene	200 ppm
							6-Methylchrysene	200 ppm
							Chlorobenzilate	200 ppm
							Dibenz[a,h]acridine	200 ppm
							Dibenz[a,j]acridine	200 ppm
							Dimethoate	200 ppm
							Ethyl Parathion	200 ppm
							Isodrin	200 ppm
							Methyl parathion	200 ppm
							o,o',o''-Triethylphosphorothioate	200 ppm
							Phorate	200 ppm
							Pronamide	200 ppm
							Quinoline	200 ppm
							Sulfotepp	200 ppm
							Thionazin	200 ppm
					MSS_CR8270_2_00007	5000 uL	1,2,4-Trichlorobenzene	200 ppm
							1,2-Dichlorobenzene	200 ppm
							1,2-Diphenylhydrazine	200 ppm
							1,3-Dichlorobenzene	200 ppm
							1,4-Dichlorobenzene	200 ppm
							2,2'-oxybis[1-chloropropane]	200 ppm
							2,4,5-Trichlorophenol	200 ppm
							2,4,6-Trichlorophenol	200 ppm
							2,4-Dichlorophenol	200 ppm
							2,4-Dimethylphenol	200 ppm
							2,4-Dinitrophenol	200 ppm
							2,4-Dinitrotoluene	200 ppm
							2,6-Dinitrotoluene	200 ppm
							2-Chloronaphthalene	200 ppm
							2-Chlorophenol	200 ppm
							2-Methylnaphthalene	200 ppm
							2-Methylphenol	200 ppm
							2-Nitroaniline	200 ppm
							2-Nitrophenol	200 ppm
							3-Nitroaniline	200 ppm
							4,6-Dinitro-2-methylphenol	200 ppm
							4-Bromophenyl phenyl ether	200 ppm
							4-Chloro-3-methylphenol	200 ppm
							4-Chloroaniline	200 ppm
							4-Chlorophenyl phenyl ether	200 ppm
							4-Methylphenol	200 ppm
							4-Nitroaniline	200 ppm
							4-Nitrophenol	200 ppm
							Acenaphthene	200 ppm
							Acenaphthylene	200 ppm
							Anthracene	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]anthracene	200 ppm
							Benzo[a]pyrene	200 ppm
							Benzo[b]fluoranthene	200 ppm
							Benzo[g,h,i]perylene	200 ppm
							Benzo[k]fluoranthene	200 ppm
							Bis (2-chloroethoxy) methane	200 ppm
							Bis (2-chloroethyl) ether	200 ppm
							Bis (2-ethylhexyl) phthalate	200 ppm
							Butyl benzyl phthalate	200 ppm
							Carbazole	200 ppm
							Chrysene	200 ppm
							Di-n-butyl phthalate	200 ppm
							Di-n-octyl phthalate	200 ppm
							Dibenz (a,h) anthracene	200 ppm
							Dibenzofuran	200 ppm
							Diethyl phthalate	200 ppm
							Dimethyl phthalate	200 ppm
							Fluoranthene	200 ppm
							Fluorene	200 ppm
							Hexachlorobenzene	200 ppm
							Hexachlorobutadiene	200 ppm
							Hexachlorocyclopentadiene	200 ppm
							Hexachloroethane	200 ppm
							Indeno[1,2,3-cd]pyrene	200 ppm
							Isophorone	200 ppm
							N-Nitrosodi-n-propylamine	200 ppm
							N-Nitrosodimethylamine	200 ppm
							Naphthalene	200 ppm
							Nitrobenzene	200 ppm
							Pentachlorophenol	200 ppm
							Phenanthrene	200 ppm
							Phenol	200 ppm
							Pyrene	200 ppm
					MSS_CR8270_3_00004	2500 uL	3,3'-Dichlorobenzidine	200 ppm
							3,3'-Dimethylbenzidine	200 ppm
							Benazidine	600 ppm
					MSS_CR8270_4_00004	2500 uL	1,2,4,5-Tetrachlorobenzene	200 ppm
							1,3-Dinitrobenzene	200 ppm
							1,4-Dinitrobenzene	200 ppm
							2,3,4,6-Tetrachlorophenol	200 ppm
							2,6-Dichlorophenol	200 ppm
							2-Acetylaminofluorene	200 ppm
							3-Methylcholanthrene	200 ppm
							4,4'-Methylene bis (2-chloroaniline)	200 ppm
							4-Aminobiphenyl	200 ppm
							4-Nitroquinoline-1-oxide	200 ppm
							cis-Diallate	148 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dinoseb	200 ppm
							Ethyl methanesulfonate	200 ppm
							Hexachloropropene	200 ppm
							Isosafrole Peak 1	32 ppm
							Isosafrole Peak 2	168 ppm
							Methyl methanesulfonate	200 ppm
							N-Nitro-o-toluidine	200 ppm
							N-Nitrosodi-n-butylamine	200 ppm
							N-Nitrosodiethylamine	200 ppm
							N-Nitrosomethylethylamine	200 ppm
							N-Nitrosomorpholine	200 ppm
							N-Nitrosopiperidine	200 ppm
							N-Nitrosopyrrolidine	200 ppm
							p-Dimethylamino azobenzene	200 ppm
							Pentachlorobenzene	200 ppm
							Pentachloronitrobenzene	200 ppm
							Phenacetin	200 ppm
							Safrole, Total	200 ppm
							trans-Diallate	52 ppm
					MSS_CR8270_7_00004	2500 uL	1,4-Dioxane	200 ppm
					1-Methylnaphthalene	200 ppm		
					1-Naphthylamine	200 ppm		
					2-Naphthylamine	200 ppm		
					2-Picoline	200 ppm		
					2-Toluidine	200 ppm		
					7,12-Dimethylbenz (a) anthracene	200 ppm		
					Aniline	200 ppm		
					Phenyl ether	200 ppm		
					Pyridine	200 ppm		
...MSS_8270_SURR_00002	04/30/23	Sigma- Aldrich, Lot LRAC6081			(Purchased Reagent)		2,4,6-Tribromophenol	4000 ug/mL
							2-Fluorobiphenyl (Surr)	4000 ug/mL
							2-Fluorophenol	4000 ug/mL
							Nitrobenzene-d5 (Surr)	4000 ug/mL
							p-Terphenyl-d14 (Surr)	4000 ug/mL
							Phenol-d5	4000 ug/mL
...MSS_AB_BZIDIN_00004	01/29/23	Absolute, Lot 012920			(Purchased Reagent)		Benzidine	5000 ug/mL
...MSS_CR8270_1_00004	10/31/22	Restek, Lot A0154042			(Purchased Reagent)		N-Nitrosodiphenylamine	5000 ug/mL
...MSS_CR8270_10_00004	06/30/21	Restek, Lot A0156085			(Purchased Reagent)		1,4-Naphthoquinone	2000 ug/mL
							1-Chloronaphthalene	2000 ug/mL
							6-Methylchrysene	2000 ug/mL
							Chlorobenzilate	2000 ug/mL
							Dibenz[a,h]acridine	2000 ug/mL
							Dibenz[a,j]acridine	2000 ug/mL
							Dimethoate	2000 ug/mL
							Ethyl Parathion	2000 ug/mL
							Isodrin	2000 ug/mL
							Methyl parathion	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							o,o',o''-Triethylphosphorothioate	2000 ug/mL
							Phorate	2000 ug/mL
							Pronamide	2000 ug/mL
							Quinoline	2000 ug/mL
							Sulfotepp	2000 ug/mL
							Thionazin	2000 ug/mL
...MSS_CR8270_2_00007	02/28/22		Restek, Lot A0146253		(Purchased Reagent)		1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	1000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	1000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Bis (2-chloroethoxy)methane	1000 ug/mL
							Bis (2-chloroethyl) ether	1000 ug/mL
							Bis (2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	1000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
...MSS_CR8270_3_00004	09/30/21		Restek, Lot A0130858		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							3,3'-Dimethylbenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
...MSS_CR8270_4_00004	12/31/20		Restek, Lot A0150344		(Purchased Reagent)		1,2,4,5-Tetrachlorobenzene	2000 ug/mL
							1,3-Dinitrobenzene	2000 ug/mL
							1,4-Dinitrobenzene	2000 ug/mL
							2,3,4,6-Tetrachlorophenol	2000 ug/mL
							2,6-Dichlorophenol	2000 ug/mL
							2-Acetylaminofluorene	2000 ug/mL
							3-Methylcholanthrene	2000 ug/mL
							4,4'-Methylene bis(2-chloroaniline)	2000 ug/mL
							4-Aminobiphenyl	2000 ug/mL
							4-Nitroquinoline-1-oxide	2000 ug/mL
							cis-Diallate	1480 ug/mL
							Dinoseb	2000 ug/mL
							Ethyl methanesulfonate	2000 ug/mL
							Hexachloropropene	2000 ug/mL
							Isosafrole Peak 1	320 ug/mL
							Isosafrole Peak 2	1680 ug/mL
							Methyl methanesulfonate	2000 ug/mL
							N-Nitro-o-toluidine	2000 ug/mL
							N-Nitrosodi-n-butylamine	2000 ug/mL
							N-Nitrosodiethylamine	2000 ug/mL
							N-Nitrosomethylethylamine	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosomorpholine	2000 ug/mL
							N-Nitrosopiperidine	2000 ug/mL
							N-Nitrosopyrrolidine	2000 ug/mL
							p-Dimethylamino azobenzene	2000 ug/mL
							Pentachlorobenzene	2000 ug/mL
							Pentachloronitrobenzene	2000 ug/mL
							Phenacetin	2000 ug/mL
							Safrole, Total	2000 ug/mL
							trans-Diallate	520 ug/mL
...MSS_CR8270_7_00004	11/30/22		Restek, Lot A0155157		(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
							1-Methylnaphthalene	2000 ug/mL
							1-Naphthylamine	2000 ug/mL
							2-Naphthylamine	2000 ug/mL
							2-Picoline	2000 ug/mL
							2-Toluidine	2000 ug/mL
							7,12-Dimethylbenz (a) anthracene	2000 ug/mL
							Aniline	2000 ug/mL
							Phenyl ether	2000 ug/mL
							Pyridine	2000 ug/mL
MSS_RV8270_IS_00015	02/28/21	09/20/20	MeCl2, Lot 203170	25 mL	MSS_FV8270_IS_00002	6250 uL	1,4-Dichlorobenzene-d4	250 ppm
							Acenaphthene-d10	250 ppm
							Naphthalene-d8	250 ppm
							Perylene-d12	250 ppm
							Phenanthrene-d10	250 ppm
							Pyrene-d10 (IS)	250 ppm
.MSS_FV8270_IS_00002	02/28/21		Restek, Lot A0134880		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270ICV_00006	10/31/20	09/17/20	MeCl2, Lot 203525	1 mL	MSS_FV8270ICV_00004	250 uL	1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_FV8270ICV_00004	10/31/20	09/16/20	MeCl2, Lot 203525	5 mL	MSS_FV8270_IS_00004	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_FV8270_IS_00004	02/28/21		Restek, Lot A0134880		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RV8270ICV_00006	10/31/20	09/17/20	MeCl2, Lot 203525	1 mL	MSS_FV8270ICV_00004	250 uL	2,4-Dinitrotoluene	12.5 ppm
							2,6-Dinitrotoluene	12.5 ppm
							Diethyl phthalate	12.5 ppm
							Aramite, Total	12.5 ppm
.MSS_FV8270ICV_00004	10/31/20	09/16/20	MeCl2, Lot 203525	5 mL	MS_RES_ICV1_00001	250 uL	2,4-Dinitrotoluene	50 ppm
							2,6-Dinitrotoluene	50 ppm
							Diethyl phthalate	50 ppm
					MS_RES_ICV7_00001	250 uL	Aramite, Total	50 ppm
..MS_RES_ICV1_00001	09/30/21		Restek, Lot A0159459		(Purchased Reagent)		2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
..MS_RES_ICV7_00001	02/28/21		Restek, Lot A0146274		(Purchased Reagent)		Aramite, Total	1000 ug/mL
MSS_RVDFTPP_00004							4,4'-DDD	
							4,4'-DDE	
							Aramite, Total	
							Diallate	
							Isosafrole	
							m&p-Methylphenol	
							Tentatively Identified Compound	
							Total Cresols	
					MSS_AB_DFTPP_00005	625 uL	4,4'-DDT	12.5 ppm
							Benzidine_T	12.5 ppm
							DFTPP	12.5 ppm
							Pentachlorophenol_T	12.5 ppm
.MSS_AB_DFTPP_00005	11/25/22		Absolute, Lot 112519		(Purchased Reagent)		4,4'-DDT	500 ug/mL
							Benzidine_T	500 ug/mL
							DFTPP	500 ug/mL
							Pentachlorophenol_T	500 ug/mL
MSS_RVDFTPP_00005							4,4'-DDD	
							4,4'-DDE	
							Aramite, Total	
							Diallate	
							Isosafrole	
							m&p-Methylphenol	
							Tentatively Identified Compound	
							Total Cresols	
					MSS_AB_DFTPP_00010	625 uL	4,4'-DDT	12.5 ppm
							Benzidine_T	12.5 ppm
							DFTPP	12.5 ppm
							Pentachlorophenol_T	12.5 ppm
.MSS_AB_DFTPP_00010	11/25/22		Absolute, Lot 112519		(Purchased Reagent)		4,4'-DDT	500 ug/mL
							Benzidine_T	500 ug/mL
							DFTPP	500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentachlorophenol T	500 ug/mL
MSS_RVHCPICV_00005	12/23/20	06/29/20	MeCl2, Lot 200018	1 mL	MSS_RV8270_IS_00011	20 uL	1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_RV8270_IS_00011	12/23/20	06/23/20	MeCl2, Lot 200018	25 mL	MSS_FV8270_IS_00002	6250 uL	1,4-Dichlorobenzene-d4	250 ppm
							Acenaphthene-d10	250 ppm
							Naphthalene-d8	250 ppm
							Perylene-d12	250 ppm
							Phenanthrene-d10	250 ppm
							Pyrene-d10 (IS)	250 ppm
..MSS_FV8270_IS_00002	02/28/21		Restek, Lot A0134880		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RVICV_BAS_00001	01/28/21	07/31/20	MeCl2, Lot 201838	2 mL	MSS_FVICV_BAS_00001	500 uL	1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_FVICV_BAS_00001	01/28/21	07/28/20	MeCl2, Lot 200018	5 mL	MSS_FV8270_IS_00002	100 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_FV8270_IS_00002	02/28/21		Restek, Lot A0134880		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSS_RVICV_DMP_00002	02/28/21	09/16/20	MeCl2, Lot 203525	2 mL	MSS_FVICV_DMP_00003	500 uL	1,4-Dichlorobenzene-d4	5 ppm
							Acenaphthene-d10	5 ppm
							Naphthalene-d8	5 ppm
							Perylene-d12	5 ppm
							Phenanthrene-d10	5 ppm
							Pyrene-d10 (IS)	5 ppm
.MSS_FVICV_DMP_00003	02/28/21	09/16/20	MeCl2, Lot 203525	2 mL	MSS_FV8270_IS_00004	40 uL	1,4-Dichlorobenzene-d4	20 ppm
							Acenaphthene-d10	20 ppm
							Naphthalene-d8	20 ppm
							Perylene-d12	20 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene-d10	20 ppm
							Pyrene-d10 (IS)	20 ppm
..MSS_FV8270_IS_00004	02/28/21		Restek, Lot A0134880		(Purchased Reagent)		1,4-Dichlorobenzene-d4	1000 ug/mL
							Acenaphthene-d10	1000 ug/mL
							Naphthalene-d8	1000 ug/mL
							Perylene-d12	1000 ug/mL
							Phenanthrene-d10	1000 ug/mL
							Pyrene-d10 (IS)	1000 ug/mL
MSV_30_826ISO_00003	11/27/20	05/27/20	Methanol, Lot DX212	50 mL	MSV_Cus826_IS_00076	1 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5 (IS)	50 ug/mL
							Fluorobenzene (IS)	50 ug/mL
							t-Butyl alcohol-d10 (IS)	250 ug/mL
.MSV_Cus826_IS_00076	05/31/21		Restek, Lot A0138205		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_30_826ISS_00005	11/27/20	05/27/20	Methanol, Lot DX212	50 mL	MSV_8260_SS_00120	1 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
					MSV_Cus826_IS_00076	1 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5 (IS)	50 ug/mL
							Fluorobenzene (IS)	50 ug/mL
							t-Butyl alcohol-d10 (IS)	250 ug/mL
.MSV_8260_SS_00120	03/31/22		Restek, Lot A0146938		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
.MSV_Cus826_IS_00076	05/31/21		Restek, Lot A0138205		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_CDFM_00010	10/09/20		Absolute Standards Inc., Lot 120517		(Purchased Reagent)		Chlorodifluoromethane	1000 ug/mL
MSV_DME_00022	10/09/20		Absolute Standards, Inc, Lot 081920		(Purchased Reagent)		Methoxymethane	1000 ug/mL
MSV_DME_00023	11/27/20		Absolute Standards, Inc, Lot 081920		(Purchased Reagent)		Methoxymethane	1000 ug/mL
MSV_Q_EE_00002	10/28/20	04/28/20	Methanol, Lot DX212	100 mL	MSV_QEE_MiscS_00003	0.11 mL	Ethyl ether	40.04 ug/mL
.MSV_QEE_MiscS_00003	10/28/20	04/28/20	Methanol, Lot DX212	10 mL	MSV_EE_Neat_00002	0.364 g	Ethyl ether	36400 ug/mL
..MSV_EE_Neat_00002	11/30/21		Chem Service, Lot 7967000		(Purchased Reagent)		Ethyl ether	1 g/g
MSV_Q_QDME_00008	10/09/20	09/09/20	Methanol, Lot DX212	1 mL	MSV_DME_00022	100 uL	Methoxymethane	100 ug/mL
.MSV_DME_00022	10/09/20		Absolute Standards, Inc, Lot 081920		(Purchased Reagent)		Methoxymethane	1000 ug/mL
MSV_Q_QDME_00009	11/27/20	10/28/20	Methanol, Lot DX212	1 mL	MSV_DME_00023	100 uL	Methoxymethane	100 ug/mL
.MSV_DME_00023	11/27/20		Absolute Standards, Inc, Lot 081920		(Purchased Reagent)		Methoxymethane	1000 ug/mL
MSV_Q_QVOA1_00046	10/14/20	09/14/20	Methanol, Lot DX212	25 mL	MSV_Q#1B_00057	1 mL	1,1,1-Trichloroethane	40 mg/L
							1,1-Dichloroethane	40 mg/L
							1,1-Dichloroethene	40 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	40 mg/L
							Carbon tetrachloride	40 mg/L
							Ethylbenzene	40 mg/L
							Methylene Chloride	40 mg/L
							Tetrachloroethene	40 mg/L
							Toluene	40 mg/L
							Trichloroethene	40 mg/L
					MSV_Q#3B_00049	1 mL	2-Butanone	300 mg/L
							Tetrahydrofuran	200 mg/L
					MSV_Q#4C_00055	1 mL	Freon 113	40 mg/L
.MSV_Q#1B_00057	04/30/22		Restek, Lot A0148625		(Purchased Reagent)		1,1,1-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							Benzene	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Methylene Chloride	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							Trichloroethene	1000 ug/mL
.MSV_Q#3B_00049	09/30/21		Restek, Lot A0158722		(Purchased Reagent)		2-Butanone	7500 ug/mL
							Tetrahydrofuran	5000 ug/mL
.MSV_Q#4C_00055	03/31/21		Restek, Lot A0158704		(Purchased Reagent)		Freon 113	1000 ug/mL
MSV_Q_QVOA1_00052	11/25/20	10/26/20	Methanol, Lot DX212	25 mL	MSV_Q#1B_00065	1 mL	1,1,1-Trichloroethane	40 mg/L
							1,1-Dichloroethane	40 mg/L
							1,1-Dichloroethene	40 mg/L
							Benzene	40 mg/L
							Carbon tetrachloride	40 mg/L
							Ethylbenzene	40 mg/L
							Methylene Chloride	40 mg/L
							Tetrachloroethene	40 mg/L
							Toluene	40 mg/L
							Trichloroethene	40 mg/L
					MSV_Q#3B_00057	1 mL	2-Butanone	300 mg/L
							Tetrahydrofuran	200 mg/L
					MSV_Q#4C_00068	1 mL	Freon 113	40 mg/L
.MSV_Q#1B_00065	04/30/22		Restek, Lot A0148625		(Purchased Reagent)		1,1,1-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							Benzene	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Methylene Chloride	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							Trichloroethene	1000 ug/mL
.MSV_Q#3B_00057	09/30/21		Restek, Lot A0158722		(Purchased Reagent)		2-Butanone	7500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MSV_Q#4C_00068	03/31/21		Restek, Lot A0158704		(Purchased Reagent)		Tetrahydrofuran	5000 ug/mL
							Freon 113	1000 ug/mL
MSV_QGAS_826_00073	09/21/20	09/14/20	Methanol, Lot DX212	1 mL	MSV_502QGas_00096	20 uL	Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Dichlorodifluoromethane	40 ug/mL
							Trichlorofluoromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_502QGas_00096	09/21/20		Restek, Lot A0155823		(Purchased Reagent)		Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_QGAS_826_00083	10/29/20	10/22/20	Methanol, Lot DX212	1 mL	MSV_502QGas_00109	20 uL	Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Dichlorodifluoromethane	40 ug/mL
							Trichlorofluoromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_502QGas_00109	10/29/20		Restek, Lot A0155823		(Purchased Reagent)		Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_RV1_826_00024	10/14/20	09/14/20	Methanol, Lot DX212	1 mL	MSV_V#1B_00105	10 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1-Chlorohexane	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
					MSV_V#2B_00127	10 uL	1,4-Dioxane	2500 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	5000 ug/mL
							Propionitrile	1000 ug/mL
							trans-1,4-Dichloro-2-butene	500 ug/mL
					MSV_V#4C_00086	10 uL	1,2-Dichloro-1,1,2-trifluoroethane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							Benzyl chloride	50 ug/mL
							Butadiene	50 ug/mL
							Carbon disulfide	50 ug/mL
							Cyclohexane	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Freon 113	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isopropyl ether	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl methacrylate	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							n-Heptane	50 ug/mL
							Tert-amyl methyl ether	50 ug/mL
							Tert-butyl ethyl ether	50 ug/mL
					MSV_V_VOA2_00049	150 uL	1,4-Dioxane	2500 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	5000 ug/mL
							Propionitrile	1000 ug/mL
							trans-1,4-Dichloro-2-butene	500 ug/mL
					MSV_V_VOA3_00046	100 uL	2-Butanone	500 ug/mL
							2-Hexanone	500 ug/mL
							2-Nitropropane	500 ug/mL
							4-Methyl-2-pentanone (MIBK)	500 ug/mL
							Acetone	500 ug/mL
							Acrylonitrile	250 ug/mL
Tetrahydrofuran	500 ug/mL							
Acrolein	2504.69 ug/mL							
.MSV_V#1B_00105	10/14/20	Restek, Lot A0158586			(Purchased Reagent)	1,1,1,2-Tetrachloroethane	5000 ug/mL	
						1,1,1-Trichloroethane	5000 ug/mL	
						1,1,2,2-Tetrachloroethane	5000 ug/mL	
						1,1,2-Trichloroethane	5000 ug/mL	
						1,1-Dichloroethane	5000 ug/mL	
						1,1-Dichloroethene	5000 ug/mL	
						1,1-Dichloropropene	5000 ug/mL	
						1,2,3-Trichlorobenzene	5000 ug/mL	
						1,2,3-Trichloropropane	5000 ug/mL	
						1,2,4-Trichlorobenzene	5000 ug/mL	
						1,2,4-Trimethylbenzene	5000 ug/mL	
						1,2-Dibromo-3-Chloropropane	5000 ug/mL	
						1,2-Dichlorobenzene	5000 ug/mL	
						1,2-Dichloroethane	5000 ug/mL	
						1,2-Dichloropropane	5000 ug/mL	
						1,3,5-Trichlorobenzene	5000 ug/mL	
						1,3,5-Trimethylbenzene	5000 ug/mL	
						1,3-Dichlorobenzene	5000 ug/mL	
						1,3-Dichloropropane	5000 ug/mL	
						1,4-Dichlorobenzene	5000 ug/mL	
						1-Chlorohexane	5000 ug/mL	
						2,2-Dichloropropane	5000 ug/mL	
						2-Chlorotoluene	5000 ug/mL	
						4-Chlorotoluene	5000 ug/mL	
						4-Isopropyltoluene	5000 ug/mL	
						Benzene	5000 ug/mL	
						Bromobenzene	5000 ug/mL	
						Bromoform	5000 ug/mL	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon tetrachloride	5000 ug/mL
							Chlorobenzene	5000 ug/mL
							Chlorodibromomethane	5000 ug/mL
							Chloroform	5000 ug/mL
							cis-1,2-Dichloroethene	5000 ug/mL
							cis-1,3-Dichloropropene	5000 ug/mL
							Dibromomethane	5000 ug/mL
							Dichlorobromomethane	5000 ug/mL
							Ethylbenzene	5000 ug/mL
							Ethylene Dibromide	5000 ug/mL
							Hexachlorobutadiene	5000 ug/mL
							Isopropylbenzene	5000 ug/mL
							m-Xylene & p-Xylene	10000 ug/mL
							Methylene Chloride	5000 ug/mL
							n-Butylbenzene	5000 ug/mL
							N-Propylbenzene	5000 ug/mL
							Naphthalene	5000 ug/mL
							o-Xylene	5000 ug/mL
							sec-Butylbenzene	5000 ug/mL
							Styrene	5000 ug/mL
.MSV_V#2B_00127	10/14/20	Restek, Lot A0159694			(Purchased Reagent)		tert-Butylbenzene	5000 ug/mL
							Tetrachloroethene	5000 ug/mL
							Toluene	5000 ug/mL
							trans-1,2-Dichloroethene	5000 ug/mL
							trans-1,3-Dichloropropene	5000 ug/mL
							Trichloroethene	5000 ug/mL
							1,4-Dioxane	62500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
.MSV_V#4C_00086	10/14/20	Restek, Lot A0158660			(Purchased Reagent)		Isobutyl alcohol	62500 ug/mL
							Methacrylonitrile	12500 ug/mL
							n-Butanol	125000 ug/mL
							Propionitrile	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
							1,2-Dichloro-1,1,2-trifluoroethane	5000 ug/mL
							2-Chloro-1,3-butadiene	5000 ug/mL
							Benzyl chloride	5000 ug/mL
							Butadiene	5000 ug/mL
							Carbon disulfide	5000 ug/mL
							Cyclohexane	5000 ug/mL
							Ethyl methacrylate	5000 ug/mL
							Freon 113	5000 ug/mL
							Hexane	5000 ug/mL
							Iodomethane	5000 ug/mL
							Isopropyl ether	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
							n-Heptane	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tert-amyl methyl ether	5000 ug/mL
							Tert-butyl ethyl ether	5000 ug/mL
.MSV_V_VOA2_00049	10/14/20	09/14/20	Methanol, Lot DX212	5 mL	MSV_V#2B_00127	1 mL	1,4-Dioxane	12500 ug/mL
							2-Methyl-2-propanol	5000 ug/mL
							Isobutyl alcohol	12500 ug/mL
							Methacrylonitrile	2500 ug/mL
							n-Butanol	25000 ug/mL
							Propionitrile	5000 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
..MSV_V#2B_00127	10/14/20		Restek, Lot A0159694		(Purchased Reagent)		1,4-Dioxane	62500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Methacrylonitrile	12500 ug/mL
							n-Butanol	125000 ug/mL
							Propionitrile	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
.MSV_V_VOA3_00046	10/14/20	09/14/20	Methanol, Lot DX212	5 mL	MSV_V#3B_00052	1 mL	2-Butanone	5000 ug/mL
							2-Hexanone	5000 ug/mL
							2-Nitropropane	5000 ug/mL
							4-Methyl-2-pentanone (MIBK)	5000 ug/mL
							Acetone	5000 ug/mL
							Acrylonitrile	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
					MSV_VACR_00012	1 mL	Acrolein	25046.9 ug/mL
..MSV_V#3B_00052	10/14/20		Restek, Lot A0158677		(Purchased Reagent)		2-Butanone	25000 ug/mL
							2-Hexanone	25000 ug/mL
							2-Nitropropane	25000 ug/mL
							4-Methyl-2-pentanone (MIBK)	25000 ug/mL
							Acetone	25000 ug/mL
							Acrylonitrile	12500 ug/mL
							Tetrahydrofuran	25000 ug/mL
..MSV_VACR_00012	11/08/20	09/09/20	Methanol, Lot DX212	10 mL	MSV_VACR_STK_00014	9.14 mL	Acrolein	125234 ug/mL
...MSV_VACR_STK_00014	11/08/20	09/09/20	Methanol, Lot DX212	10 mL	MSV_ACROLEIN_00007	1.453 g	Acrolein	137018 ug/mL
...MSV_ACROLEIN_00007	12/31/20		Chem Service, Lot 10410200		(Purchased Reagent)		Acrolein	0.943 g/g
MSV_RV1_826_00026	11/08/20	10/12/20	Methanol, Lot DX212	1 mL	MSV_V#1B_00114	10 uL	1,1,1-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							Benzene	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Ethylbenzene	50 ug/mL
							Methylene Chloride	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							Trichloroethene	50 ug/mL
					MSV_V#4C_00094	10 uL	Freon 113	50 ug/mL
					MSV_V_VOA3_00050	100 uL	2-Butanone	500 ug/mL
							Tetrahydrofuran	500 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MSV_V#1B_00114	11/11/20		Restek, Lot A0158586		(Purchased Reagent)		1,1,1-Trichloroethane	5000 ug/mL
							1,1-Dichloroethane	5000 ug/mL
							1,1-Dichloroethene	5000 ug/mL
							Benzene	5000 ug/mL
							Carbon tetrachloride	5000 ug/mL
							Ethylbenzene	5000 ug/mL
							Methylene Chloride	5000 ug/mL
							Tetrachloroethene	5000 ug/mL
							Toluene	5000 ug/mL
							Trichloroethene	5000 ug/mL
.MSV_V#4C_00094	11/11/20		Restek, Lot A0158660		(Purchased Reagent)		Freon 113	5000 ug/mL
.MSV_V_VOA3_00050	11/08/20	10/12/20	Methanol, Lot DX212	5 mL	MSV_V#3B_00062	1 mL	2-Butanone	5000 ug/mL
							Tetrahydrofuran	5000 ug/mL
..MSV_V#3B_00062	11/11/20		Restek, Lot A0158677		(Purchased Reagent)		2-Butanone	25000 ug/mL
							Tetrahydrofuran	25000 ug/mL
MSV_RV4_826_00026	09/25/20	09/15/20	Methanol, Lot DX212	1 mL	MSV_BCE_00015	25 uL	1-Bromo-2-chloroethane	50 ug/mL
					MSV_V_EE_00003	50 uL	Ethyl ether	49.9925 ug/mL
					MSV_V_ETBR_00005	50 uL	Ethyl bromide	50.0256 ug/mL
					MSV_V_VOA6_00052	50 uL	1,2,3-Trimethylbenzene	50 ug/mL
							3-Chloro-1-propene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Methyl acetate	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Pentachloroethane	50 ug/mL
.MSV_BCE_00015	09/25/20		Restek, Lot A0149919		(Purchased Reagent)		1-Bromo-2-chloroethane	2000 ug/mL
.MSV_V_EE_00003	10/28/20	04/28/20	Methanol, Lot DX212	100 mL	MSV_EE_MISCSK_00004	2.059 mL	Ethyl ether	999.85 ug/mL
..MSV_EE_MISCSK_00004	10/28/20	04/28/20	Methanol, Lot DX212	10 mL	MSV_EE_Neat_00002	0.4856 g	Ethyl ether	48560 ug/mL
...MSV_EE_Neat_00002	11/30/21		Chem Service, Lot 7967000		(Purchased Reagent)		Ethyl ether	1 g/g
.MSV_V_ETBR_00005	10/22/20	04/22/20	Methanol, Lot DX212	10 mL	MSV_VETBR_STK_00005	0.576 mL	Ethyl bromide	1000.51 ug/mL
..MSV_VETBR_STK_00005	10/22/20	04/22/20	Methanol, Lot DX212	10 mL	MSV_EtBr_Neat_00001	0.1737 g	Ethyl bromide	17370 ug/mL
...MSV_EtBr_Neat_00001	12/31/20		Chem Service, Lot 7832000		(Purchased Reagent)		Ethyl bromide	1 g/g
.MSV_V_VOA6_00052	10/10/20	09/10/20	Methanol, Lot DX212	5 mL	MSV_V#6_00034	1 mL	1,2,3-Trimethylbenzene	1000 ug/mL
							3-Chloro-1-propene	1000 ug/mL
							Chlorobromomethane	1000 ug/mL
							Methyl acetate	1000 ug/mL
							Methylcyclohexane	1000 ug/mL
							Pentachloroethane	1000 ug/mL
..MSV_V#6_00034	10/10/20		Restek, Lot A0158625		(Purchased Reagent)		1,2,3-Trimethylbenzene	5000 ug/mL
							3-Chloro-1-propene	5000 ug/mL
							Chlorobromomethane	5000 ug/mL
							Methyl acetate	5000 ug/mL
							Methylcyclohexane	5000 ug/mL
							Pentachloroethane	5000 ug/mL
MSV_RV4_826_00030	10/28/20	10/22/20	Methanol, Lot DX212	1 mL	MSV_V_EE_00003	50 uL	Ethyl ether	49.9925 ug/mL
.MSV_V_EE_00003	10/28/20	04/28/20	Methanol, Lot DX212	100 mL	MSV_EE_MISCSK_00004	2.059 mL	Ethyl ether	999.85 ug/mL
..MSV_EE_MISCSK_00004	10/28/20	04/28/20	Methanol, Lot DX212	10 mL	MSV_EE_Neat_00002	0.4856 g	Ethyl ether	48560 ug/mL
...MSV_EE_Neat_00002	11/30/21		Chem Service, Lot 7967000		(Purchased Reagent)		Ethyl ether	1 g/g

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration																																																																																																																																																																																																																																																																																																																																													
					Reagent ID	Volume Added																																																																																																																																																																																																																																																																																																																																															
MSV_RV4GAS826_00077	09/22/20	09/15/20	Methanol, Lot DX212	1 mL	MSV_DCFM_00021	25 uL	Dichlorofluoromethane	50 ug/mL																																																																																																																																																																																																																																																																																																																																													
					MSV_V_Gas_00144	25 uL	Bromomethane	50 ug/mL																																																																																																																																																																																																																																																																																																																																													
							Chloroethane	50 ug/mL																																																																																																																																																																																																																																																																																																																																													
							Chloromethane	50 ug/mL																																																																																																																																																																																																																																																																																																																																													
							Dichlorodifluoromethane	50 ug/mL																																																																																																																																																																																																																																																																																																																																													
							Trichlorofluoromethane	50 ug/mL																																																																																																																																																																																																																																																																																																																																													
							Vinyl chloride	50 ug/mL																																																																																																																																																																																																																																																																																																																																													
.MSV_DCFM_00021	10/01/20	AccuStandard, Lot 219051360		(Purchased Reagent)		Dichlorofluoromethane	2000 ug/mL																																																																																																																																																																																																																																																																																																																																														
.MSV_V_Gas_00144	09/22/20	Restek, Lot A0159812		(Purchased Reagent)		Bromomethane	2000 ug/mL																																																																																																																																																																																																																																																																																																																																														
						Chloroethane	2000 ug/mL																																																																																																																																																																																																																																																																																																																																														
						Chloromethane	2000 ug/mL																																																																																																																																																																																																																																																																																																																																														
						Dichlorodifluoromethane	2000 ug/mL																																																																																																																																																																																																																																																																																																																																														
						Trichlorofluoromethane	2000 ug/mL																																																																																																																																																																																																																																																																																																																																														
						Vinyl chloride	2000 ug/mL																																																																																																																																																																																																																																																																																																																																														
MSV_RV4GAS826_00087	10/29/20	10/22/20	Methanol, Lot DX212	1 mL	MSV_V_Gas_00160	25 uL	Chloroethane	50 ug/mL																																																																																																																																																																																																																																																																																																																																													
							Chloromethane	50 ug/mL																																																																																																																																																																																																																																																																																																																																													
							Dichlorodifluoromethane	50 ug/mL																																																																																																																																																																																																																																																																																																																																													
							Trichlorofluoromethane	50 ug/mL																																																																																																																																																																																																																																																																																																																																													
							Vinyl chloride	50 ug/mL																																																																																																																																																																																																																																																																																																																																													
							.MSV_V_Gas_00160	10/29/20	Restek, Lot A0159812		(Purchased Reagent)		Chloroethane	2000 ug/mL																																																																																																																																																																																																																																																																																																																																							
													Chloromethane	2000 ug/mL																																																																																																																																																																																																																																																																																																																																							
Dichlorodifluoromethane	2000 ug/mL																																																																																																																																																																																																																																																																																																																																																				
Trichlorofluoromethane	2000 ug/mL																																																																																																																																																																																																																																																																																																																																																				
							Vinyl chloride	2000 ug/mL																																																																																																																																																																																																																																																																																																																																													
							MSV_V_BFB_00003						1,2-Dichloroethene, Total																																																																																																																																																																																																																																																																																																																																								
															MSV_VBFB_STK_00004	01/22/21	07/22/20	Methanol, Lot DX212	10 mL	MSV_4BFB_NEAT_00002	1.0689 g	BFB	50.0245 ug/mL																																																																																																																																																																																																																																																																																																																														
																								..MSV_4BFB_NEAT_00002	01/31/21	Chem Service, Lot 8601300		(Purchased Reagent)	BFB	1 g/g																																																																																																																																																																																																																																																																																																																							
																															MSV_V_REV4_25_00013	09/29/20	08/30/20	Methanol, Lot DX212	10 mL	MSV_REV4_B_00010	1 mL	Methyl acrylate	250 ug/mL																																																																																																																																																																																																																																																																																																														
																																				MSV_REV4A25mL_00003	1 mL	1-Chlorobutane	50 ug/mL																																																																																																																																																																																																																																																																																																														
.MSV_REV4_B_00010	03/31/21	Restek, Lot A0158527		(Purchased Reagent)		Chloroacetonitrile	2500 ug/mL																																																																																																																																																																																																																																																																																																																																														
						.MSV_REV4A25mL_00003	03/31/21	Restek, Lot A0158507		(Purchased Reagent)		Methyl acrylate	2500 ug/mL																																																																																																																																																																																																																																																																																																																																								
												1-Chlorobutane	500 ug/mL																																																																																																																																																																																																																																																																																																																																								
MSV_V_SMRV4_00013	10/14/20	09/14/20	Methanol, Lot DX212	1 mL	MSV_V_2CEVE_00104	200 uL	2-Chloroethyl vinyl ether	200 ug/mL																																																																																																																																																																																																																																																																																																																																													
					MSV_VLKB_00004	400 uL	cis-1,4-Dichloro-2-butene	399.86 ug/mL																																																																																																																																																																																																																																																																																																																																													
					MSV_V1B_2CEVE_00075	1 mL	2-Chloroethyl vinyl ether	1000 ug/mL																																																																																																																																																																																																																																																																																																																																													
					(Purchased Reagent)		2-Chloroethyl vinyl ether	5000 ug/mL																																																																																																																																																																																																																																																																																																																																													
					MSV_Vc14d_STK_00003	03/09/21	09/09/20	Methanol, Lot DX212	50 mL	MSV_Vc14d_STK_00003	0.954 mL	cis-1,4-Dichloro-2-butene	999.649 ug/mL																																																																																																																																																																																																																																																																																																																																								
..MSV_Vc14d_STK_00003	08/11/25	Aldrich, Lot SHBH4584V																																																																																																																																																																																																																																																																																																																																																			

REAGENT TRACEABILITY SUMMARY

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MSV_V_Acetate_00011	05/31/21		Restek, Lot A0155352		(Purchased Reagent)		Vinyl acetate	200 ug/mL
							Ethyl acetate	2000 ug/mL
							Vinyl acetate	2000 ug/mL
MSV_VAcet_00005	10/28/20	04/28/20	Methanol, Lot DX212	100 mL	MSV_Acet_MSTK_00004	2.53 mL	Acetonitrile	5000.55 ug/mL
.MSV_Acet_MSTK_00004	10/28/20	04/28/20	Methanol, Lot DX212	10 mL	MSV_Acet_00006	1.9765 g	Acetonitrile	197650 ug/mL
..MSV_Acet_00006	10/28/22		Chem Service, Lot 7915600		(Purchased Reagent)		Acetonitrile	1 g/g
MSV_VCYC_00005	02/19/21	08/19/20	50/50 MeOH/Water, Lot DX212	200 mL	MSV_VCYC_STK_00004	6.093 mL	Cyclohexanone	6249.59 ug/mL
.MSV_VCYC_STK_00004	02/19/21	08/19/20	50/50 MeOH/Water, Lot DX212	10 mL	MSV_CYC_00003	2.0514 g	Cyclohexanone	205140 ug/mL
..MSV_CYC_00003	05/31/23		Chem Service, Lot 10135700		(Purchased Reagent)		Cyclohexanone	1 g/g
OP_MINIBNA_SS_00024	03/09/21	10/26/20	Methanol, Lot 197075	1000 mL	OP_BNA_SS_00014	250 mL	1-Methylnaphthalene-d10	250 ppb
							2,4,6-Tribromophenol	50175 ppb
							2-Fluorobiphenyl (Surr)	25075 ppb
							2-Fluorophenol	50175 ppb
							Benzo(a)pyrene-d12 (Surr)	250 ppb
							Fluoranthene-d10 (Surr)	250 ppb
							Nitrobenzene-d5 (Surr)	25025 ppb
							p-Terphenyl-d14 (Surr)	25100 ppb
							Phenol-d5	50175 ppb
.OP_BNA_SS_00014	03/09/21	09/09/20	Methanol, Lot 197075	2000 mL	OP_BNA_STK_00014	2000 mL	1-Methylnaphthalene-d10	1000 ppb
							2,4,6-Tribromophenol	200700 ppb
							2-Fluorobiphenyl (Surr)	100300 ppb
							2-Fluorophenol	200700 ppb
							Benzo(a)pyrene-d12 (Surr)	1000 ppb
							Fluoranthene-d10 (Surr)	1000 ppb
							Nitrobenzene-d5 (Surr)	100100 ppb
							p-Terphenyl-d14 (Surr)	100400 ppb
							Phenol-d5	200700 ppb
..OP_BNA_STK_00014	03/09/21		Agilent, Lot 0006535106		(Purchased Reagent)		1-Methylnaphthalene-d10	1 ug/mL
							2,4,6-Tribromophenol	200.7 ug/mL
							2-Fluorobiphenyl (Surr)	100.3 ug/mL
							2-Fluorophenol	200.7 ug/mL
							Benzo(a)pyrene-d12 (Surr)	1 ug/mL
							Fluoranthene-d10 (Surr)	1 ug/mL
							Nitrobenzene-d5 (Surr)	100.1 ug/mL
							p-Terphenyl-d14 (Surr)	100.4 ug/mL
							Phenol-d5	200.7 ug/mL
OP_MINLCS1_MS_00043	11/22/20	10/22/20	ACETONE, Lot DZ240-US	100 mL	OP_LCS1_MS_00019	25 mL	1,1'-Biphenyl	12500 ppb
							1,2,4,5-Tetrachlorobenzene	12500 ppb
							1,2,4-Trichlorobenzene	12500 ppb
							1,2-Dichlorobenzene	12500 ppb
							1,2-Diphenylhydrazine	12500 ppb
							1,3-Dichlorobenzene	12500 ppb
							1,3-Dinitrobenzene	12500 ppb
							1,4-Dichlorobenzene	12500 ppb
							1,4-Dioxane	12500 ppb

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1-Methylnaphthalene	12500 ppb
							2,2'-oxybis[1-chloropropane]	12500 ppb
							2,3,4,6-Tetrachlorophenol	12500 ppb
							2,4,5-Trichlorophenol	12500 ppb
							2,4,6-Trichlorophenol	12500 ppb
							2,4-Dichlorophenol	12500 ppb
							2,4-Dimethylphenol	12500 ppb
							2,4-Dinitrophenol	25000 ppb
							2,4-Dinitrotoluene	12500 ppb
							2,6-Dichlorophenol	12500 ppb
							2,6-Dinitrotoluene	12500 ppb
							2-Chloronaphthalene	12500 ppb
							2-Chlorophenol	12500 ppb
							2-Methylnaphthalene	12500 ppb
							2-Methylphenol	12500 ppb
							2-Nitroaniline	12500 ppb
							2-Nitrophenol	12500 ppb
							3-Nitroaniline	12500 ppb
							4,6-Dinitro-2-methylphenol	25000 ppb
							4-Bromophenyl phenyl ether	12500 ppb
							4-Chloro-3-methylphenol	12500 ppb
							4-Chloroaniline	12500 ppb
							4-Chlorophenyl phenyl ether	12500 ppb
							4-Methylphenol	12500 ppb
							4-Nitroaniline	12500 ppb
							4-Nitrophenol	25000 ppb
							Acenaphthene	12500 ppb
							Acenaphthylene	12500 ppb
							Acetophenone	12500 ppb
							Aniline	12500 ppb
							Anthracene	12500 ppb
							Benzo[a]anthracene	12500 ppb
							Benzo[a]pyrene	12500 ppb
							Benzo[b]fluoranthene	12500 ppb
							Benzo[g,h,i]perylene	12500 ppb
							Benzo[k]fluoranthene	12500 ppb
							Benzyl alcohol	12500 ppb
							Bis (2-chloroethoxy)methane	12500 ppb
							Bis (2-chloroethyl) ether	12500 ppb
							Bis (2-ethylhexyl) phthalate	12500 ppb
							Butyl benzyl phthalate	12500 ppb
							Carbazole	12500 ppb
							Chrysene	12500 ppb
							Di-n-butyl phthalate	12500 ppb
							Di-n-octyl phthalate	12500 ppb
							Dibenz (a,h) anthracene	12500 ppb
							Dibenzofuran	12500 ppb
							Diethyl phthalate	12500 ppb

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dimethyl phthalate	12500 ppb
							Fluoranthene	12500 ppb
							Fluorene	12500 ppb
							Hexachlorobenzene	12500 ppb
							Hexachlorobutadiene	12500 ppb
							Hexachlorocyclopentadiene	12500 ppb
							Hexachloroethane	12500 ppb
							Hexadecane	12500 ppb
							Indeno[1,2,3-cd]pyrene	12500 ppb
							Isophorone	12500 ppb
							n-Decane	12500 ppb
							N-Nitrosodi-n-propylamine	12500 ppb
							N-Nitrosodimethylamine	12500 ppb
							N-Nitrosodiphenylamine	10625 ppb
							n-Octadecane	12500 ppb
							Naphthalene	12500 ppb
							Nitrobenzene	12500 ppb
							Pentachlorophenol	25000 ppb
							Phenanthrene	12500 ppb
							Phenol	12500 ppb
							Pyrene	12500 ppb
							Pyridine	25000 ppb
							3,3'-Dichlorobenzidine	25000 ppb
							Benztidine	25000 ppb
							Benzoic acid	12500 ppb
							Indene	12500 ppb
.OP_LCS1_MS_00019	11/22/20	10/22/20	Acetone, Lot DZ240-US	200 mL	OP_RES_LCS1_00001	10 mL	1,1'-Biphenyl	50000 ppb
							1,2,4,5-Tetrachlorobenzene	50000 ppb
							1,2,4-Trichlorobenzene	50000 ppb
							1,2-Dichlorobenzene	50000 ppb
							1,2-Diphenylhydrazine	50000 ppb
							1,3-Dichlorobenzene	50000 ppb
							1,3-Dinitrobenzene	50000 ppb
							1,4-Dichlorobenzene	50000 ppb
							1,4-Dioxane	50000 ppb
							1-Methylnaphthalene	50000 ppb
							2,2'-oxybis[1-chloropropane]	50000 ppb
							2,3,4,6-Tetrachlorophenol	50000 ppb
							2,4,5-Trichlorophenol	50000 ppb
							2,4,6-Trichlorophenol	50000 ppb
							2,4-Dichlorophenol	50000 ppb
							2,4-Dimethylphenol	50000 ppb
							2,4-Dinitrophenol	100000 ppb
							2,4-Dinitrotoluene	50000 ppb
							2,6-Dichlorophenol	50000 ppb
							2,6-Dinitrotoluene	50000 ppb
							2-Chloronaphthalene	50000 ppb
							2-Chlorophenol	50000 ppb

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methylnaphthalene	50000 ppb
							2-Methylphenol	50000 ppb
							2-Nitroaniline	50000 ppb
							2-Nitrophenol	50000 ppb
							3-Nitroaniline	50000 ppb
							4,6-Dinitro-2-methylphenol	100000 ppb
							4-Bromophenyl phenyl ether	50000 ppb
							4-Chloro-3-methylphenol	50000 ppb
							4-Chloroaniline	50000 ppb
							4-Chlorophenyl phenyl ether	50000 ppb
							4-Methylphenol	50000 ppb
							4-Nitroaniline	50000 ppb
							4-Nitrophenol	100000 ppb
							Acenaphthene	50000 ppb
							Acenaphthylene	50000 ppb
							Acetophenone	50000 ppb
							Aniline	50000 ppb
							Anthracene	50000 ppb
							Benzo[a]anthracene	50000 ppb
							Benzo[a]pyrene	50000 ppb
							Benzo[b]fluoranthene	50000 ppb
							Benzo[g,h,i]perylene	50000 ppb
							Benzo[k]fluoranthene	50000 ppb
							Benzyl alcohol	50000 ppb
							Bis(2-chloroethoxy)methane	50000 ppb
							Bis(2-chloroethyl)ether	50000 ppb
							Bis(2-ethylhexyl) phthalate	50000 ppb
							Butyl benzyl phthalate	50000 ppb
							Carbazole	50000 ppb
							Chrysene	50000 ppb
							Di-n-butyl phthalate	50000 ppb
							Di-n-octyl phthalate	50000 ppb
							Dibenz(a,h)anthracene	50000 ppb
							Dibenzofuran	50000 ppb
							Diethyl phthalate	50000 ppb
							Dimethyl phthalate	50000 ppb
							Fluoranthene	50000 ppb
							Fluorene	50000 ppb
							Hexachlorobenzene	50000 ppb
							Hexachlorobutadiene	50000 ppb
							Hexachlorocyclopentadiene	50000 ppb
							Hexachloroethane	50000 ppb
							Hexadecane	50000 ppb
							Indeno[1,2,3-cd]pyrene	50000 ppb
							Isophorone	50000 ppb
							n-Decane	50000 ppb
							N-Nitrosodi-n-propylamine	50000 ppb
							N-Nitrosodimethylamine	50000 ppb

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodiphenylamine	42500 ppb
							n-Octadecane	50000 ppb
							Naphthalene	50000 ppb
							Nitrobenzene	50000 ppb
							Pentachlorophenol	100000 ppb
							Phenanthrene	50000 ppb
							Phenol	50000 ppb
							Pyrene	50000 ppb
							Pyridine	100000 ppb
					OP_RES_LCS2_00001	10 mL	3,3'-Dichlorobenzidine	100000 ppb
					OP_RES_LCS3_00001	5 mL	Benzidine	100000 ppb
							Benzoic acid	50000 ppb
..OP_RES_LCS1_00001	08/31/21	Restek, Lot A0158300			(Purchased Reagent)		Indene	50000 ppb
					1,1'-Biphenyl	1000 ug/mL		
					1,2,4,5-Tetrachlorobenzene	1000 ug/mL		
					1,2,4-Trichlorobenzene	1000 ug/mL		
					1,2-Dichlorobenzene	1000 ug/mL		
					1,2-Diphenylhydrazine	1000 ug/mL		
					1,3-Dichlorobenzene	1000 ug/mL		
					1,3-Dinitrobenzene	1000 ug/mL		
					1,4-Dichlorobenzene	1000 ug/mL		
					1,4-Dioxane	1000 ug/mL		
					1-Methylnaphthalene	1000 ug/mL		
					2,2'-oxybis[1-chloropropane]	1000 ug/mL		
					2,3,4,6-Tetrachlorophenol	1000 ug/mL		
					2,4,5-Trichlorophenol	1000 ug/mL		
					2,4,6-Trichlorophenol	1000 ug/mL		
					2,4-Dichlorophenol	1000 ug/mL		
					2,4-Dimethylphenol	1000 ug/mL		
					2,4-Dinitrophenol	2000 ug/mL		
					2,4-Dinitrotoluene	1000 ug/mL		
					2,6-Dichlorophenol	1000 ug/mL		
					2,6-Dinitrotoluene	1000 ug/mL		
					2-Chloronaphthalene	1000 ug/mL		
					2-Chlorophenol	1000 ug/mL		
					2-Methylnaphthalene	1000 ug/mL		
					2-Methylphenol	1000 ug/mL		
					2-Nitroaniline	1000 ug/mL		
					2-Nitrophenol	1000 ug/mL		
					3-Nitroaniline	1000 ug/mL		
					4,6-Dinitro-2-methylphenol	2000 ug/mL		
					4-Bromophenyl phenyl ether	1000 ug/mL		
					4-Chloro-3-methylphenol	1000 ug/mL		
					4-Chloroaniline	1000 ug/mL		
					4-Chlorophenyl phenyl ether	1000 ug/mL		
					4-Methylphenol	1000 ug/mL		
					4-Nitroaniline	1000 ug/mL		
					4-Nitrophenol	2000 ug/mL		

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis (2-chloroethoxy)methane	1000 ug/mL
							Bis (2-chloroethyl) ether	1000 ug/mL
							Bis (2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz (a,h) anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	850 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
..OP_RES_LCS2_00001	08/31/21		Restek, Lot A0157555		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benizidine	2000 ug/mL
..OP_RES_LCS3_00001	05/31/21		Restek, Lot A0154868		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
OP_MINLCS2_MS_00025	11/27/20	10/27/20	ACETONE, Lot DZ240-US	100 mL	OP_LCS 2_MS_00012	25 mL	Atrazine	12610 ppb
							Benzaldehyde	12621.3 ppb
							Caprolactam	12622.5 ppb
.OP_LCS 2_MS_00012	11/27/20	10/27/20	ACETONE, Lot DZ240-US	400 mL	OP_LCS4_STK_00002	20 mL	Atrazine	50440 ppb
							Benzaldehyde	50485 ppb
							Caprolactam	50490 ppb
..OP_LCS4_STK_00002	03/31/21	Restek, Lot A0147047			(Purchased Reagent)		Atrazine	1008.8 ug/mL
							Benzaldehyde	1009.7 ug/mL
							Caprolactam	1009.8 ug/mL

Reagent

MSS_8270_SURR_00002

Certificate of Analysis

8270 SURROGATE

STANDARD, 1X1ML, 4000UG/ML, DICHLOROMETHANE

*Certified
Reference
Material*

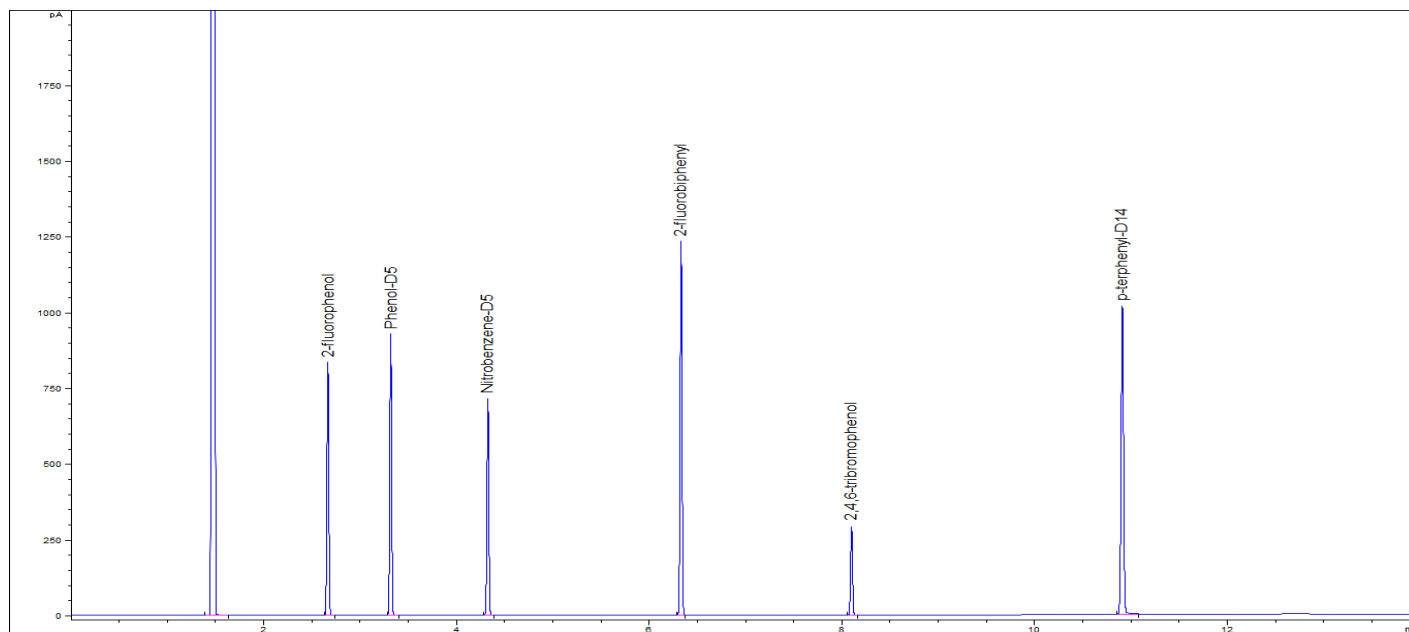
Description

Product ID CRM47960
Lot LRAC6081
Expiration Date April 2023
Manufacturing Date April 2020
Storage Conditions Refrigerate
Solvent/Matrix DICHLOROMETHANE

Certified Values

Analyte	Certified Value ^{1,4}	Units	Raw Material Purity, %	Elution order	Raw Material Lot	CAS
2-FLUOROPHENOL	4001 ± 104	µg/mL	99.9	01	LB92543	367-12-4
PHENOL-D5	4001 ± 88	µg/mL	98.0	02	MBBC4769	4165-62-2
NITROBENZENE-D5	4001 ± 66	µg/mL	99.9	03	LB83753	4165-60-0
2-FLUOROBIPHENYL	4002 ± 115	µg/mL	99.9	04	LB99948	321-60-8
2,4,6-TRIBROMOPHENOL	4001 ± 124	µg/mL	99.7	05	LB81262	118-79-6
P-TERPHENYL-D14	4002 ± 117	µg/mL	99.5	06	PR-27278/121 715	1718-51-0

Informational Values



Additional Information:

Analytical Method Parameters:

Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness (Column #215)

Carrier Gas: H₂, Flow: 4.7 mL/min

Inlet Temperature: 250 °C, Injection Volume: 1.0 µL

SIGMA-ALDRICH®

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800-325-5832
TechService@milliporesigma.com www.sigma-aldrich.com



Description

Lot **LRAC6081**
Expiration Date April 2023
Manufacturing Date April 2020
Storage Conditions Refrigerate
Solvent/Matrix DICHLOROMETHANE

Injection Mode: Split, Split Ratio: 40: 1
Temperature Program: 100 °C (Hold 1 min) @ 20 °C/min to 280 °C (Hold 4 min)
Detector: FID
Detector Temperature: 330 °C

1 Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.
4 Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a t-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

k: Coverage factor derived from a t-distribution table, based on the degrees of freedom of the data set. Assume 2.0 for a **Confidence interval = 95%**

6 Analytical Value- For QC verification of the certified value only- not to be used in calculations. Represents the analytical data obtained by comparison to a standard as analyzed by the method described in the CoA or another acceptable method. The result may differ from the certified value and UCRM based on method uncertainty as well as the uncertainty associated with the standard used for comparison.

Traceability: The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Homogeneity: Homogeneity was assessed in accordance with ISO 17034:2016. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared using a one-way analysis of variance approach as described by TNI EL-V3-2009 Appendix A.2. See Instructions for minimum sub-sample size.

Expiration is at end of month given on certificate and label.

MSDS reports for components comprising greater than 1.0% of the solution or 0.1% for components known to be carcinogens are available upon request.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH **ISO/IEC 17025:2017 (ANAB Cert AT-1467)** and **ISO 17034:2016 (ANAB Cert AR-1470)**.



Andy Ommen - QC Manager



Mark Pooler - QA Supervisor

Certification Date April 23, 2020
Version 0-4232020



Reagent

MSS_AB_24DNP_00003



CERTIFIED WEIGHT REPORT

Part Number: **70159**
Lot Number: **090518**
Description: **2,4-Dinitrophenol**

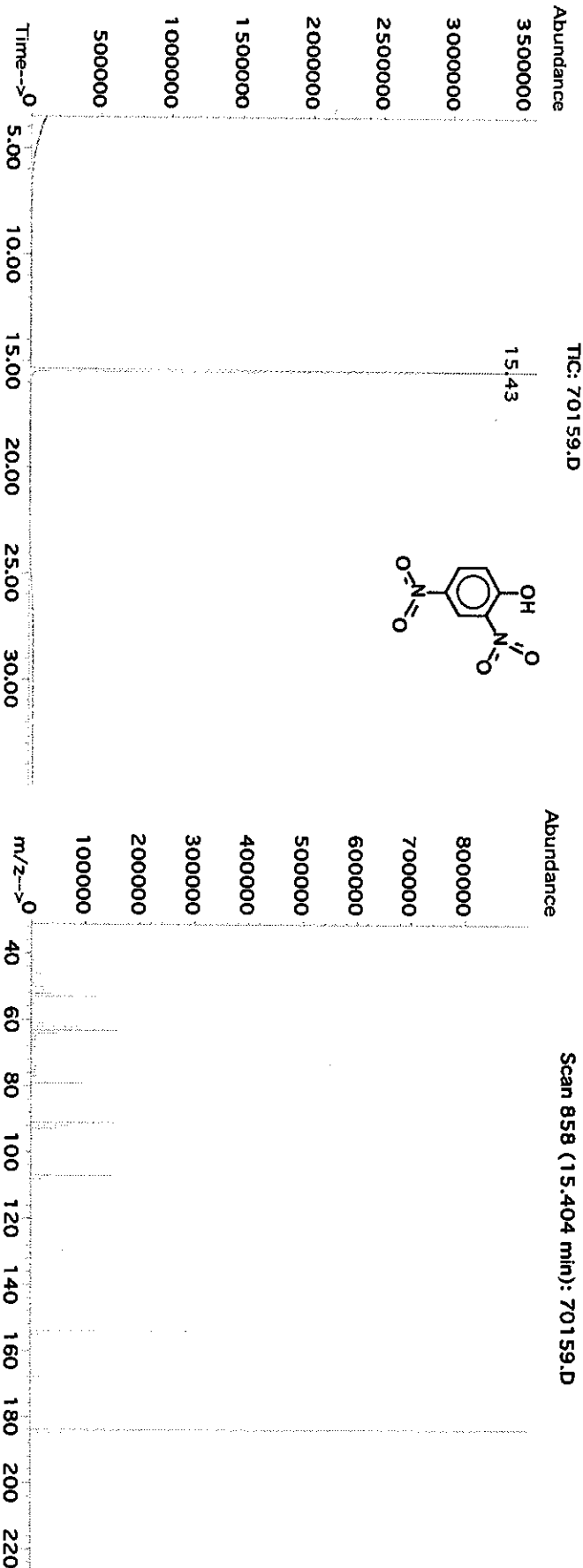
Solvent(s): **Lot#**
Methanol **DT140**

Expiration Date: **090523**
Recommended Storage: **Refrigerate (4 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test ID#: **2694186**
Weight(s) shown below were combined and diluted to (mL): **100.0**
SE-05 Balance Uncertainty
0.001 Flask Uncertainty

Formulated By: <i>Eli Allaga</i>	090518
Reviewed By: <i>Pedro L. Renteria</i>	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)
1. 2,4-Dinitrophenol	159	032516	1000	98	0.2	0.10205	0.10213	1000.8	4.2	51-28-5 N/A of rat 30mg/kg

Method GC8MSD-3.M: Column: (30m X 0.25mm ID X 0.25µm film thickness), Temp 1 = 50°C (1 min.), Temp 2 = 300°C (4 min.), Rate = 10°C/min, Injector B= 200°C, Detector B = 300°C. Analysis performed by Melissa Stouier.



• The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
• Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
• Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
• All Standards, after opening sample, should be stored with caps tight and under appropriate laboratory conditions.
• Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Reagent

MSS_AB_46D2MP_00003



Certified Reference Material CRM



CERTIFIED WEIGHT REPORT

Part Number:
Lot Number:
Description:

Z0158
102017
4,6-Dinitro-2-methylphenol

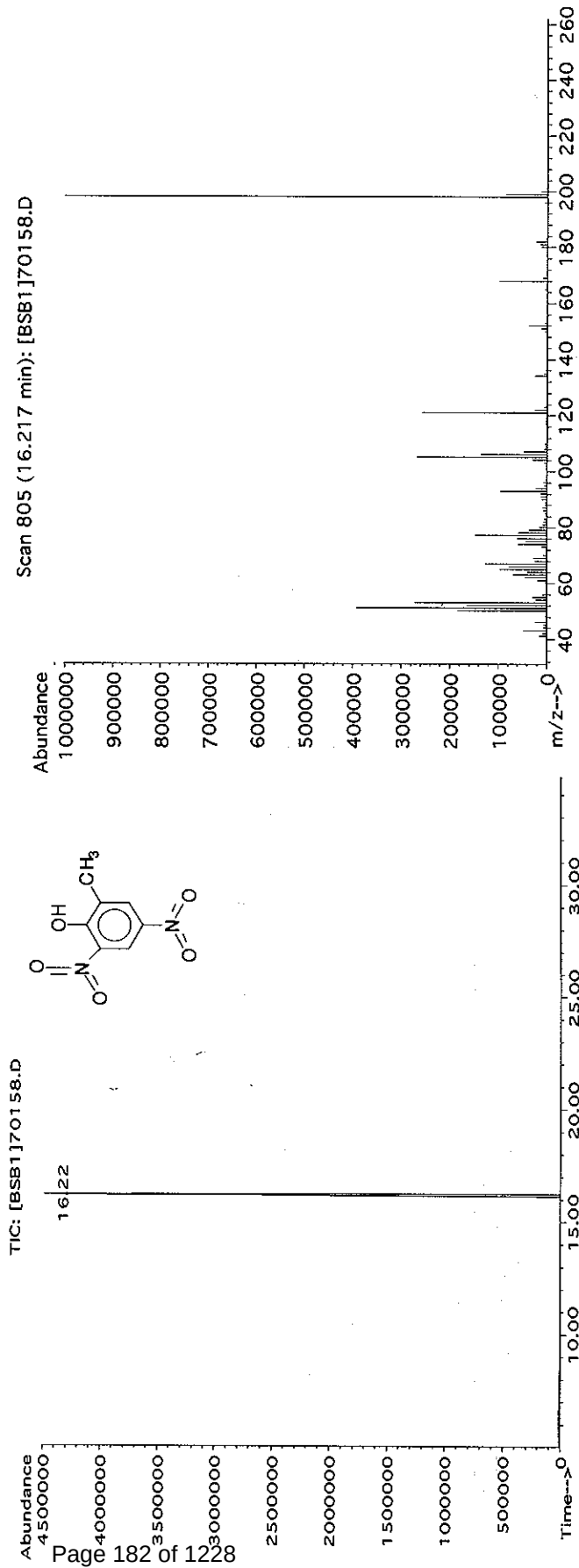
Solvent(s):
Methanol

Formulated By:	Mario L. Rentes	102017	DATE
Reviewed By:	Pedro L. Rentes	102017	DATE

Expiration Date: 102022
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 2506734D
Weight(s) shown below were combined and diluted to (mL): 10.0 0.002 Balance Uncertainty
Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty	Target Weight (g)	Expanded		SDS Information		
							Actual Weight (g)	Actual Conc(µg/mL)	Uncertainty (+/-) (µg/mL)	(Solvent Safety Info. On Attached pg.)	CAS#

Method GC8MSDLM: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B=200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Melissa Stonier.



The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

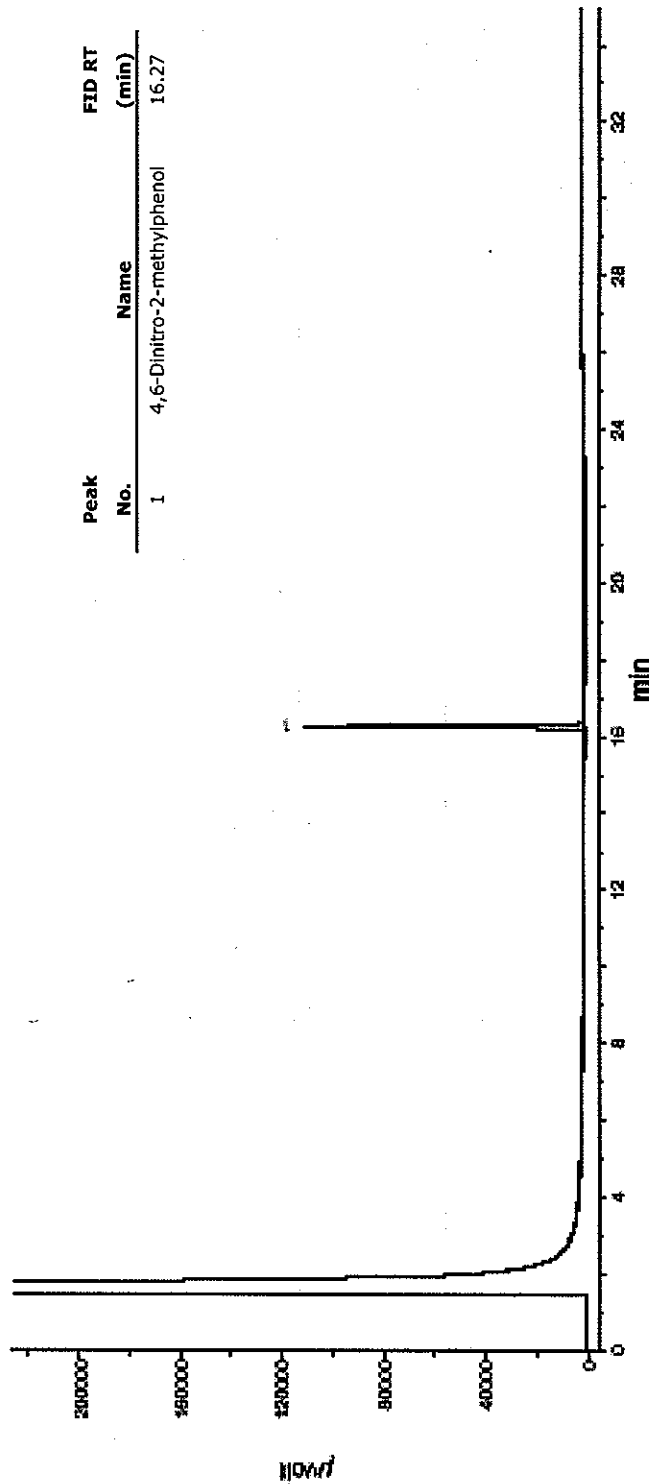


Run 103, "P70158 L102017 [1000µg/mL in methanol]"

Run Length: 35.00 min, 20998 points at 10 points/second.
Created: Tue, Oct 24, 2017 at 11:13:01 PM.
Sampled: Sequence "102017-GC4-M1", Method "GC4-M1".
Analyzed using Method "GC4-M1".

Comments

GC4-M1 Analysis by Melissa Stonier
Column ID SPB5 L#60062-01A : 30 meter x 0.53mm x 1.5µm Film Thickness
Flow rates: Total Flow = 300 mL/min, Helium (carrier) = 6.5 mL, Hydrogen (detector) = 30 mL,
Air (detector) = 360 mL
Oven Temp 1 = 50°C (1 min), Rate = 10°C/min, Oven Temp 2 = 300°C (9 min), Total Run Time = 35 Minutes.
Injector Temp = 200°C, FID Temp = 300°C, FID Signal = eDAQ Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 µL, Range = 3



Reagent

MSS_AB_4NP_00001



CERTIFIED WEIGHT REPORT

Part Number:

Lot Number: **70231**
Description: **100716**
4-Nitrophenol

Solvent(s): Lot#
Methanol DP303

Expiration Date: 100721

Recommended Storage: Refrigerate (4 °C)

Nominal Concentration (µg/mL): 1000

NIST Test ID#: 822-275872-11

Weight(s) shown below were combined and diluted to (mL): 100.0

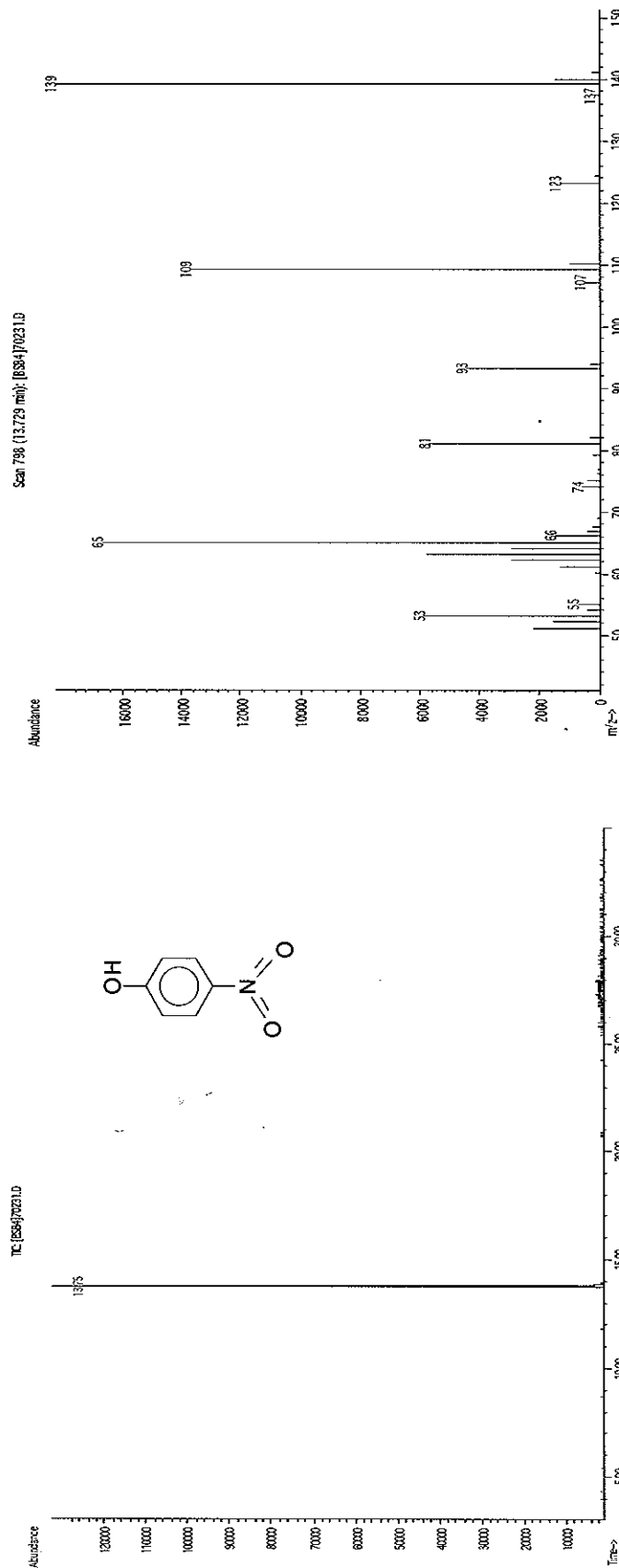
5E-05 Balance Uncertainty

0.001 Flask Uncertainty

Formulated By:	Paul Barron	100716	DATE
Reviewed By:	Pedro L. Rentas	100716	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty	Target Weight (g)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded Uncertainty (µg/mL)	MSDS Information
1. 4-Nitrophenol	231	FGM01	1000	99	0.2	0.10102	0.10125	1002.3	4.2	100-02-7 N/A orl-rat 250mg/kg

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B = 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Reagent

MSS_AB_BZIDIN_00004



CERTIFIED WEIGHT REPORT

Part Number:
Lot Number:
Description:

Solvent:
Methylene chloride

43124		Lot#	012920
012920		DATE	012920
Benzidine			

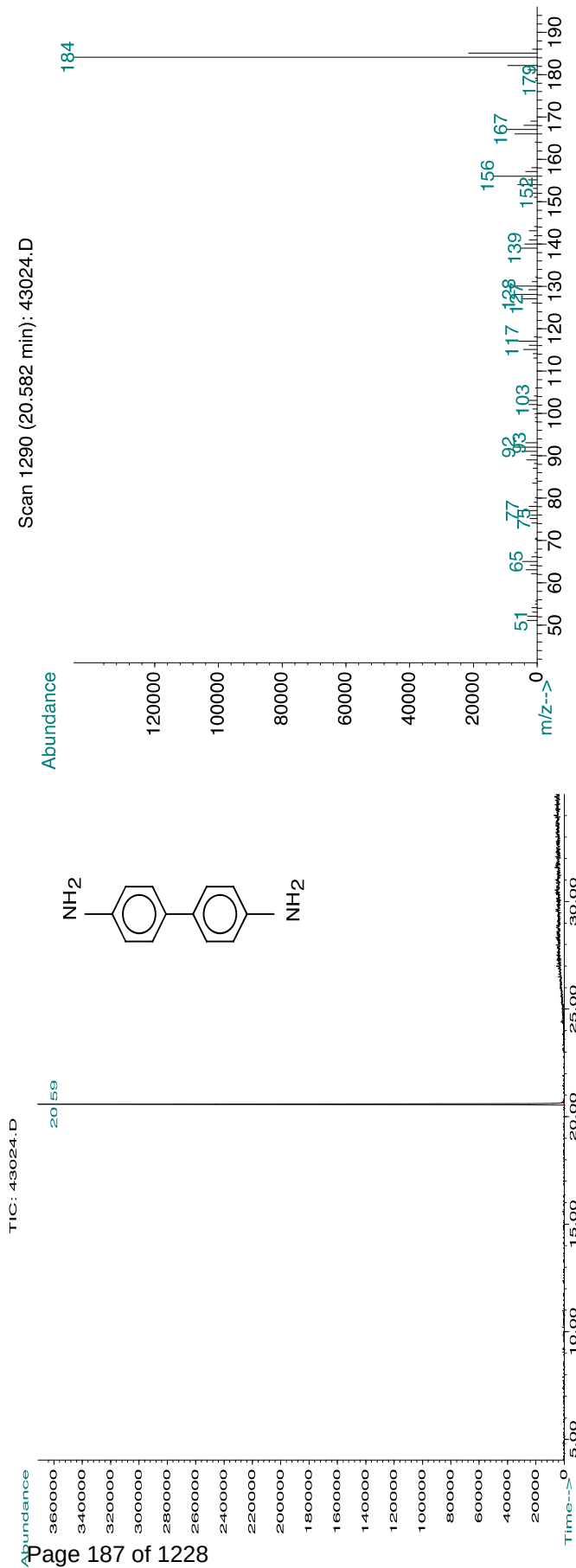
Expiration Date: 012923
Refrigerate (4 °C)
5000
Nominal Concentration (µg/mL): 6UTB
NIST Test ID#:

Weight(s) shown below were combined and diluted to (mL): 30.0

5E-05 Balance Uncertainty
0.002 Flask Uncertainty

SDS Information									
Expanded Uncertainty (Solvent Safety Info. On Attached pg.)									
Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty (%)	Target Weight (g)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)
1. Benzidine	27	SLBH5327V	5000	98	0.2	0.15318	0.15320	5000.7	20.7
								92-87-5	N/A
								ori-rat	309mg/kg

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Nicole Davis.



The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).



Run 63, "P43124 L012920 [5000]µg/mL in MeCl2]"

Run Length: 31.55 min, 18929 points at 10 points/second.

Created: Fri, Jan 31, 2020 at 11:15:27 AM.

Sampled: Sequence "012820-GC4M1", Method "GC4-M1".

Analyzed using Method "GC4-M1".

Comments

GC4-M1 Analysis by Melissa Stonier

Column ID SPB5 L#60062-01A : 30 meter x 0.53mm x 1.5µm Film Thickness

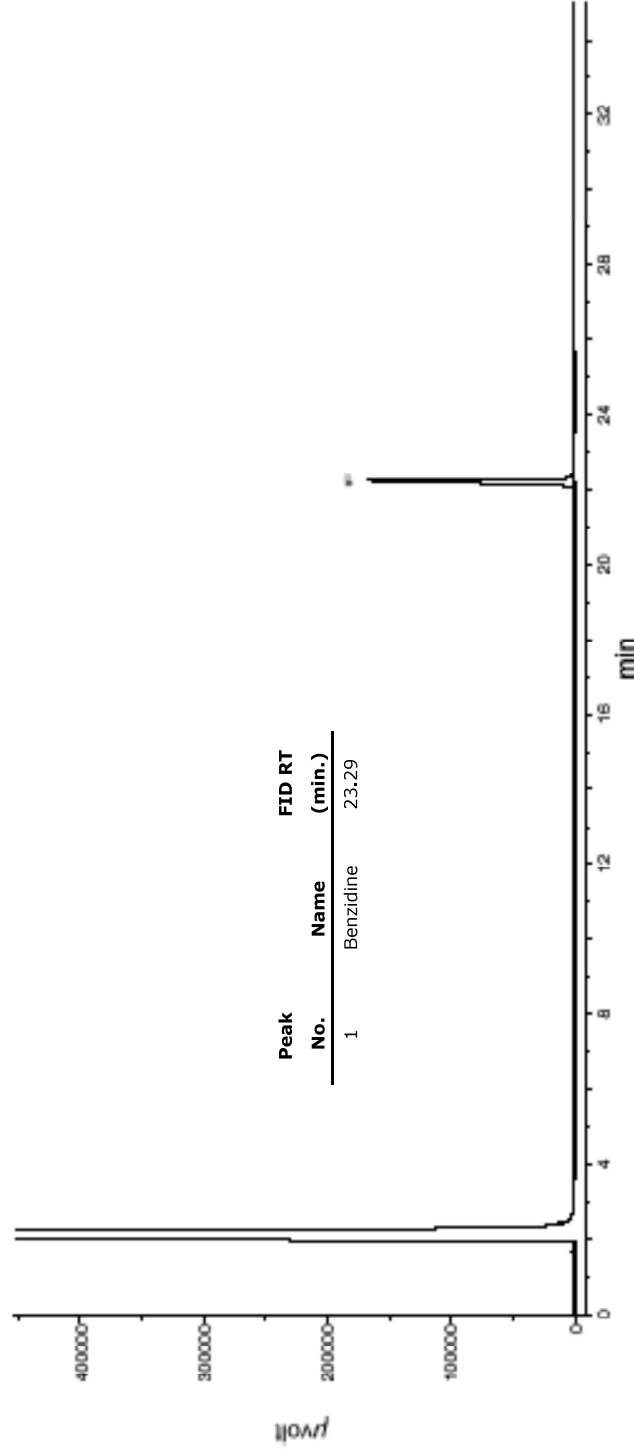
Flow rates: Total Flow = 300 mL/min, Helium (carrier) = 6.5 mL, Helium (make-up) = 25 mL, Hydrogen (detector) = 30 mL,

Air (detector) = 360 mL

Oven Temp 1 = 50°C (1 min), Rate = 10°C/min, Oven Temp 2 = 300°C (9 min), Total Run Time = 35 Minutes.

Injector Temp = 200°C, FID Temp = 300°C, FID Signal = eDAQ Channel 1.

Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 µL, Range = 6



Reagent

MSS_AB_BZIDIN_00006



Certified Reference Material CRM



CERTIFIED WEIGHT REPORT

Part Number: **43124**
Lot Number: **012920**
Description: **Benzidine**

Solvent: **Methylene chloride**
Lot#: **104929**

Expiration Date: **012923**
Recommended Storage: **Refrigerate (4 °C)**
Nominal Concentration (µg/mL): **5000**
NIST Test ID#: **6UTB**

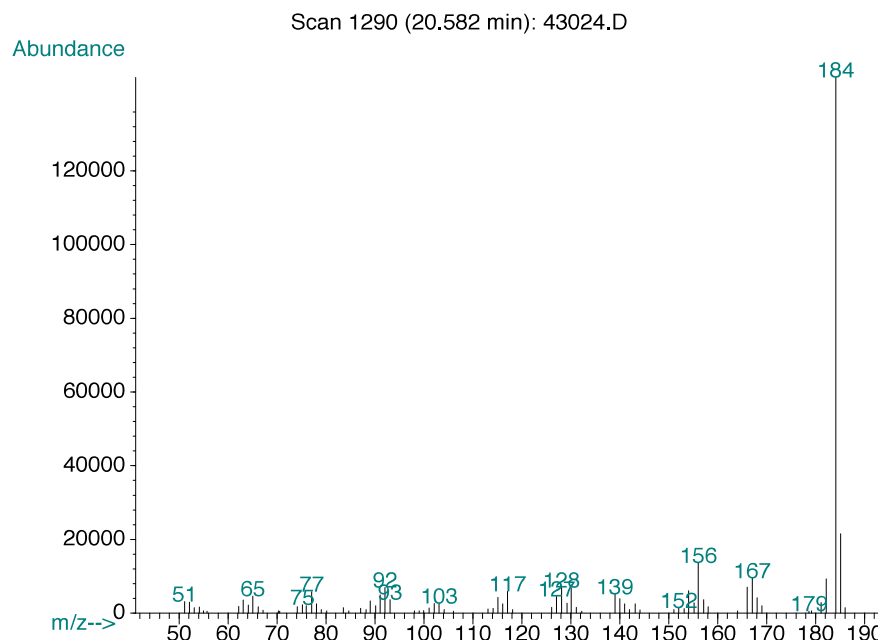
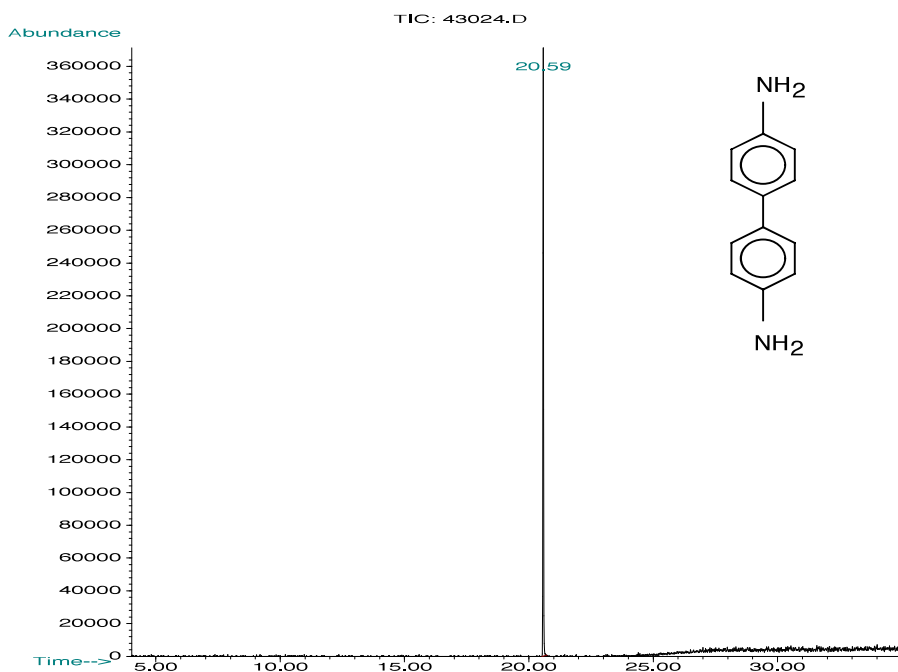
Weight(s) shown below were combined and diluted to (mL): **30.0**
5E-05 Balance Uncertainty
0.002 Flask Uncertainty

<i>Eli Aliaga</i>		012920
Formulated By:	Eli Aliaga	DATE
<i>Pedro L. Rentas</i>		012920
Reviewed By:	Pedro L. Rentas	DATE

Expanded
Uncertainty
SDS Information
(Solvent Safety Info. On Attached pg.)

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity (%)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	CAS#	OSHA PEL (TWA)	LD50
1. Benzidine	27	SLBH5327V	5000	98	0.2	0.15318	0.15320	5000.7	20.7	92-87-5	N/A	orl-rat 309mg/kg

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Nicole Davis.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).



Run 63, "P43124 L012920 [5000µg/mL in MeCl2]"

Run Length: 31.55 min, 18929 points at 10 points/second.
Created: Fri, Jan 31, 2020 at 11:15:27 AM.
Sampled: Sequence "012820-GC4M1", Method "GC4-M1".
Analyzed using Method "GC4-M1".

Comments

GC4-M1 Analysis by Melissa Stonier

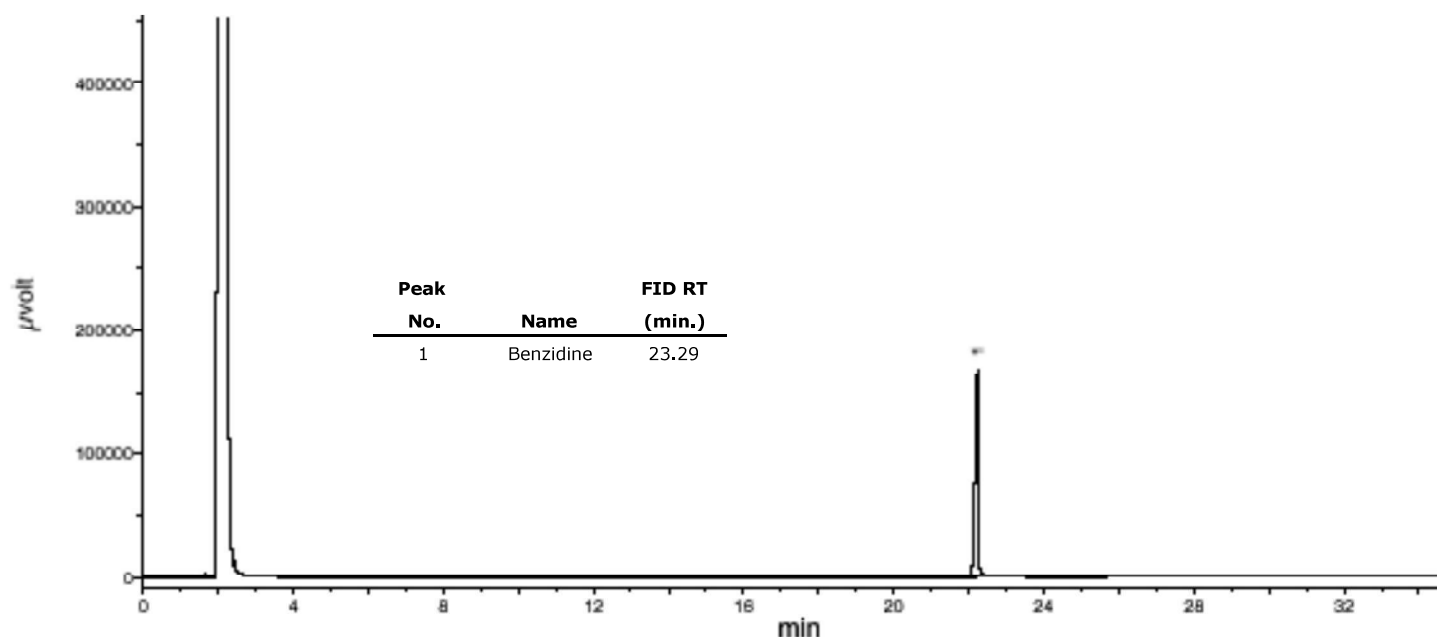
Column ID SPB5 L#60062-01A : 30 meter x 0.53mm x 1.5µm Film Thickness

Flow rates: Total Flow = 300 ml/min, Helium (carrier) = 6.5 mL, Helium (make-up) = 25 mL, Hydrogen (detector) = 30 mL,
Air (detector) = 360 mL

Oven Temp 1 = 50°C (1 min), Rate = 10°C/min, Oven Temp 2 = 300°C (9 min), Total Run Time = 35 Minutes.

Injector Temp = 200°C, FID Temp = 300°C, FID Signal = eDaq Channel 1.

Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 µL, Range = 6.



Reagent

MSS_AB_DFTPP_00005



CERTIFIED WEIGHT REPORT

Part Number: **43030**

Lot Number: **112519**

Description: **CLP Semi-Volatile Tuning Standard**

Solvent(s): **Methylene chloride** Lot# **102968**

Expiration Date: **112522**

Recommended Storage: **Refrigerate (4 °C)**
Nominal Concentration (µg/mL): **500**

NIST Test ID#:

5E-05 Balance Uncertainty
6UJB First Uncertainty

Weight(s) shown below were combined and diluted to (mL): **200.0**

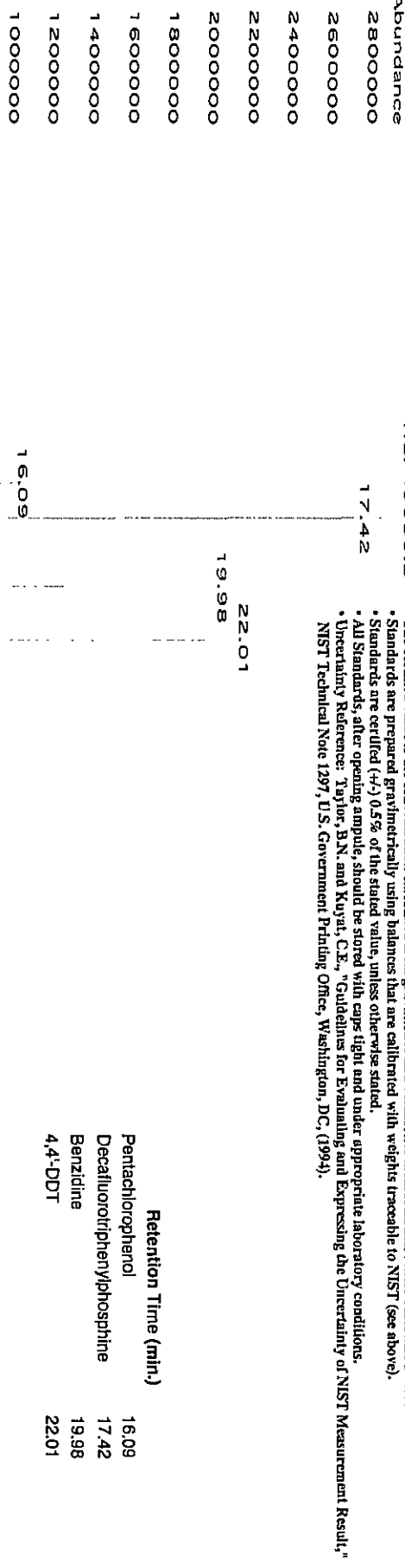
CAUTION: Sonicate Before Use

Formulated By: <i>El Alaga</i>	112519
DATE	
Reviewed By: <i>Pedro L. Renteria</i>	112519
DATE	

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (±) (µg/mL)	SDS Information	
										(Solvent Safety Info. On Attached pg.)	CAS#

1. Benzidine	27	SLBH5327V	500	98	0.2	0.10205	0.10220	500.7	2.1	92-87-5	N/A	ori-tal 306mg/kg
2. 4,4'-DDT	101	04029MM	500	99	0.2	0.10102	0.10115	500.6	2.1	50-29-3	N/A	ori-tal 87mg/kg
3. Decalorotriphenylphosphine	105	10220909	500	97	0.2	0.10311	0.10325	500.7	2.1	5074-71-5	N/A	N/A
4. Pentachlorophenol	243	06324ED	500	98	0.2	0.10205	0.10220	500.7	2.1	87-86-5	0.5mg/m ³ /8H (skin)	ori-tal 27mg/kg

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B = 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Gina McLane.



*The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
*Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
*Standards are certified (±) 0.5% of the stated value, unless otherwise stated.
*All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
*Uncertainty Reference: Taylor, B.N., and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).



Reagent

MSS_CR8270_1_00004



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
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Tel: (800)356-1688
Fax: (814)353-1309

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 572878-1 **Lot No.:** A0154042

Description : Custom 8270 Kit Ampul #1

Custom 8270 Kit Ampul #1 5,000µg/mL, Methylene chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Diphenylamine CAS # 122-39-4 Purity 99% (Lot MKBN8295V)	5,006.0 µg/mL	+/- 29.3780 µg/mL Gravimetric +/- 59.9751 µg/mL Unstressed +/- 95.3214 µg/mL Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

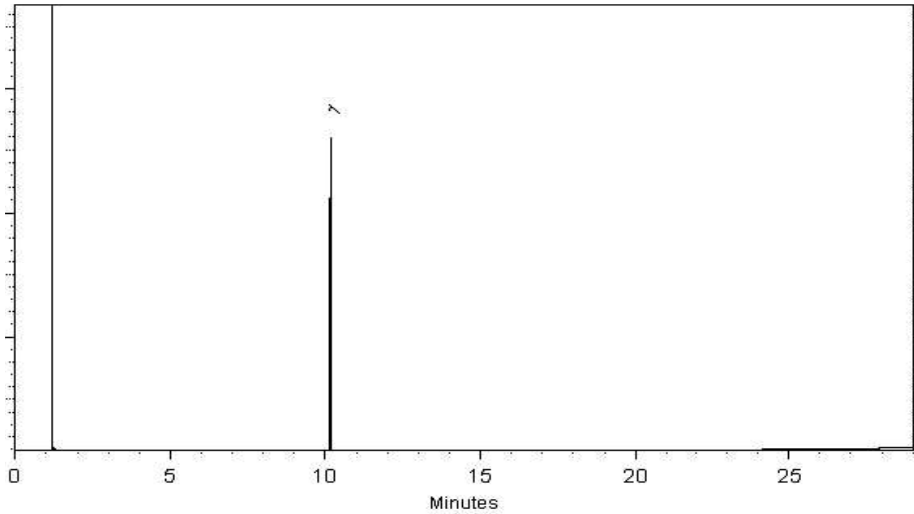
Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

Temp. Program:
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Walker Workman - Operations Technician I

Date Mixed: 16-Oct-2019 **Balance:** 1128360905


Feng-Yan Lu - QC Analyst

Date Passed: 20-Oct-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSS_CR8270_3_00004



110 Benner Circle
Bellefonte, PA 16823-8812
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Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 572878-3 **Lot No.:** A0130858

Description : Custom 8270 Kit Ampul #3

Custom 8270 Kit Ampul #3 2,000µg/mL, Methylene chloride, 2.5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 2.5 mL

Expiration Date : September 30, 2021 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Benzidine CAS # 92-87-5 (Lot 171707KJA) Purity 99%	2,011.0 µg/mL	+/- 11.8017 µg/mL Gravimetric
			+/- 24.0931 µg/mL Unstressed
			+/- 38.2923 µg/mL Stressed
2	3,3'-Dimethylbenzidine (o-tolidine) CAS # 119-93-7 (Lot HO6DO) Purity 95%	2,007.4 µg/mL	+/- 11.7803 µg/mL Gravimetric
			+/- 24.0494 µg/mL Unstressed
			+/- 38.2228 µg/mL Stressed
3	3,3'-Dichlorobenzidine CAS # 91-94-1 (Lot 161027KJA) Purity 99%	1,984.0 µg/mL	+/- 11.7844 µg/mL Gravimetric
			+/- 23.8391 µg/mL Unstressed
			+/- 37.8219 µg/mL Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant flow 1.8 mL/min.

Temp. Program:

80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

Inj. Temp:

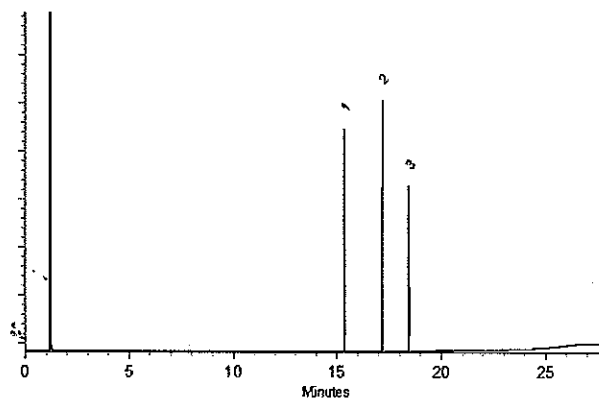
250°C

Det. Temp:

340°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dawn Brownson
Dawn Brownson - Mix Technician

Date Mixed: 18-Sep-2017

Balance: 1128360905

Justin Albertson
Justin Albertson - Operations Tech-ARM QC

Date Passed: 29-Sep-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

MSS_CR8270_6_00005



CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 572878-6 **Lot No.:** A0146280

Description : Custom 8270 Kit Ampul #6

Custom 8270 Kit Ampul #6 2,000µg/mL, Methylene chloride, 2.5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 2.5 mL

Expiration Date : February 28, 2021 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Benzoic acid CAS # 65-85-0 Purity 99% (Lot MKCC9722)	2,013.0 µg/mL	+/- 11.8134 µg/mL Gravimetric +/- 107.0769 µg/mL Unstressed +/- 107.2563 µg/mL Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant flow 1.8 mL/min.

Temp. Program:

80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

Inj. Temp:

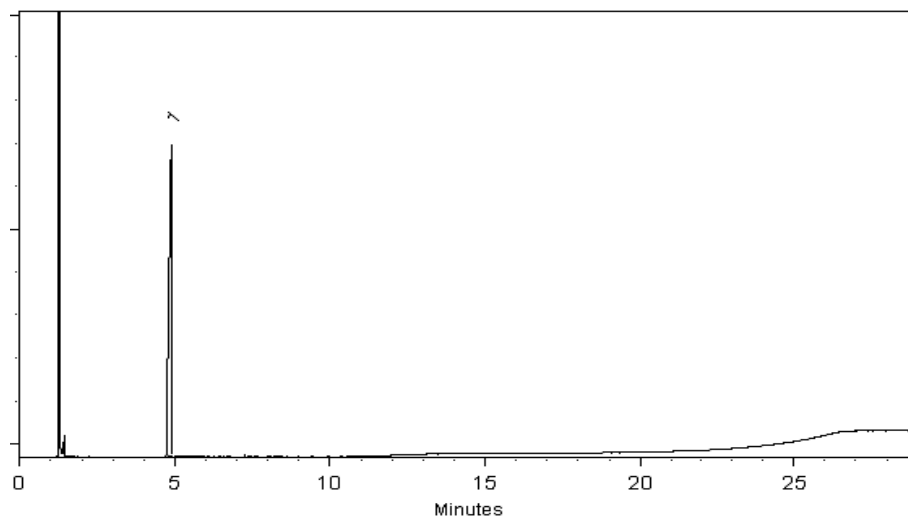
250°C

Det. Temp:

340°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Rebecca Jauer

Date Mixed: 21-Feb-2019

Balance: B442140311

Justin Albertson
Justin Albertson - Operations Tech-ARM QC

Date Passed: 22-Feb-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSS_CR8270_7_00004



CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 572878-7 **Lot No.:** A0155157

Description : Custom 8270 Kit Ampul #7

Custom 8270 Kit Ampul #7 2,000µg/mL, Methylene chloride, 2.5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 2.5 mL

Expiration Date : November 30, 2022 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1,4-Dioxane CAS # 123-91-1 (Lot SHBK6493) Purity 99%	2,004.0 µg/mL	+/- 11.7606 µg/mL Gravimetric +/- 24.0092 µg/mL Unstressed +/- 38.1590 µg/mL Stressed
2	Pyridine CAS # 110-86-1 (Lot SHBK6453) Purity 99%	2,004.0 µg/mL	+/- 11.7606 µg/mL Gravimetric +/- 24.0092 µg/mL Unstressed +/- 38.1590 µg/mL Stressed
3	2-Picoline CAS # 109-06-8 (Lot STBD4888V) Purity 99%	2,010.0 µg/mL	+/- 11.7958 µg/mL Gravimetric +/- 24.0811 µg/mL Unstressed +/- 38.2733 µg/mL Stressed
4	Aniline CAS # 62-53-3 (Lot K22Z462) Purity 99%	2,010.0 µg/mL	+/- 11.7958 µg/mL Gravimetric +/- 24.0811 µg/mL Unstressed +/- 38.2733 µg/mL Stressed
5	o-Toluidine CAS # 95-53-4 (Lot 03417PZ) Purity 99%	2,004.0 µg/mL	+/- 11.7606 µg/mL Gravimetric +/- 24.0092 µg/mL Unstressed +/- 38.1590 µg/mL Stressed
6	1-Methylnaphthalene CAS # 90-12-0 (Lot 523400-9) Purity 98%	2,005.1 µg/mL	+/- 11.7669 µg/mL Gravimetric +/- 24.0222 µg/mL Unstressed +/- 38.1796 µg/mL Stressed
7	Diphenyl ether CAS # 101-84-8 (Lot MKCB1958V) Purity 99%	2,002.0 µg/mL	+/- 11.7489 µg/mL Gravimetric +/- 23.9853 µg/mL Unstressed +/- 38.1209 µg/mL Stressed

8	1-Naphthylamine (1-aminonaphthalene)		2,009.0	µg/mL	+/-	11.7899	µg/mL	Gravimetric
	CAS #	134-32-7 (Lot R7NAN-IP)				24.0691		
	Purity	99%				38.2542		
9	2-Naphthylamine (2-aminonaphthalene)		2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS #	91-59-8 (Lot SLBN2887V)				24.0811		
	Purity	99%				38.2733		
10	7,12-Dimethylbenz(a)anthracene		2,002.0	µg/mL	+/-	11.7489	µg/mL	Gravimetric
	CAS #	57-97-6 (Lot VLKJI)				23.9853		
	Purity	99%				38.1209		

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

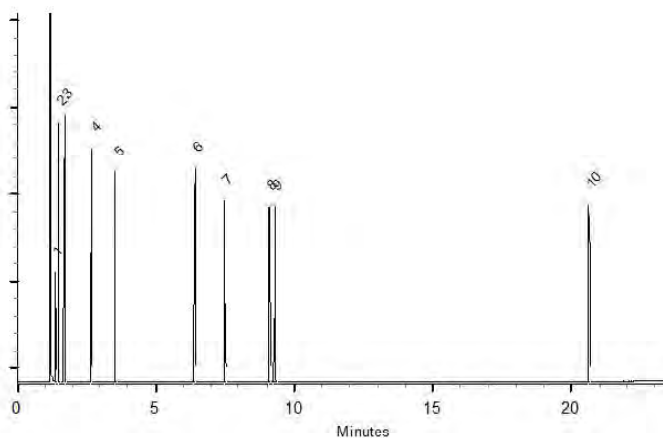
Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

Temp. Program:
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Clara Windle
Clara Windle - Operations Technician I

Date Mixed: 18-Nov-2019

Balance: B442140311

Justin Alberson
Justin Alberson - Operations Tech-ARM QC

Date Passed: 21-Nov-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSS_CR8270_8_00002



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 572878-8 **Lot No.:** A0146313

Description : Custom 8270 Kit Ampul #8

Custom 8270 Kit Ampul #8 2,000µg/mL, Methylene chloride, 2.5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 2.5 mL

Expiration Date : February 28, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound			Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	Benzaldehyde			2,006.0	µg/mL	+/-	11.7723	µg/mL	Gravimetric
	CAS #	100-52-7	(Lot SHBG8690V)			+/-	64.3236	µg/mL	Unstressed
	Purity	99%				+/-	74.7676	µg/mL	Stressed
2	Acetophenone			2,020.0	µg/mL	+/-	11.8545	µg/mL	Gravimetric
	CAS #	98-86-2	(Lot STBG8586)			+/-	64.7725	µg/mL	Unstressed
	Purity	99%				+/-	75.2894	µg/mL	Stressed
3	epsilon-Caprolactam			2,004.0	µg/mL	+/-	11.7606	µg/mL	Gravimetric
	CAS #	105-60-2	(Lot I16X016)			+/-	64.2594	µg/mL	Unstressed
	Purity	99%				+/-	74.6931	µg/mL	Stressed
4	Biphenyl			2,014.0	µg/mL	+/-	11.8193	µg/mL	Gravimetric
	CAS #	92-52-4	(Lot MKBV9808V)			+/-	64.5801	µg/mL	Unstressed
	Purity	99%				+/-	75.0658	µg/mL	Stressed
5	Atrazine			2,020.0	µg/mL	+/-	11.8545	µg/mL	Gravimetric
	CAS #	1912-24-9	(Lot 77P7D)			+/-	64.7725	µg/mL	Unstressed
	Purity	99%				+/-	75.2894	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

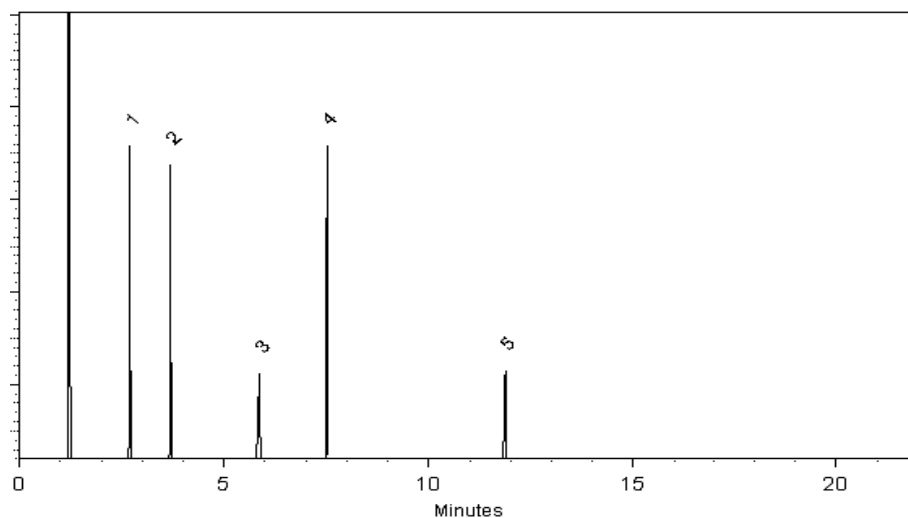
Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

Temp. Program:
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cydnei L. Crust
Cydnei L. Crust - Mix Technician

Date Mixed: 21-Feb-2019 **Balance:** 1128360905

Jennifer L. Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 26-Feb-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSS_CR8270_9_00003



110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 572878-9 **Lot No.:** A0131112

Description : Custom 8270 Kit Ampul #9

Custom 8270 Kit Ampul #9 5,000µg/mL, Methylene chloride, 2.5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 2.5 mL

Expiration Date : September 30, 2021 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	alpha-Methylstyrene CAS # 98-83-9 Purity 99% (Lot MKBS2502V)	5,007.0 µg/mL	+/- 29.3839 µg/mL Gravimetric +/- 107.2749 µg/mL Unstressed +/- 110.3893 µg/mL Stressed
2	Benzyl alcohol CAS # 100-51-6 Purity 99% (Lot SHBC1850V)	5,016.0 µg/mL	+/- 29.4367 µg/mL Gravimetric +/- 107.4677 µg/mL Unstressed +/- 110.5877 µg/mL Stressed
3	Indene CAS # 95-13-6 Purity 98% (Lot MKBT8433V)	5,032.3 µg/mL	+/- 29.5324 µg/mL Gravimetric +/- 107.8169 µg/mL Unstressed +/- 110.9470 µg/mL Stressed
4	Octachlorostyrene CAS # 29082-74-4 Purity 99% (Lot 35081-16)	5,050.0 µg/mL	+/- 29.6362 µg/mL Gravimetric +/- 108.1961 µg/mL Unstressed +/- 111.3373 µg/mL Stressed

Solvent: Methylene chloride
 CAS # 75-09-2
 Purity 99%

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant flow 1.8 mL/min.

Temp. Program:

80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

Inj. Temp:

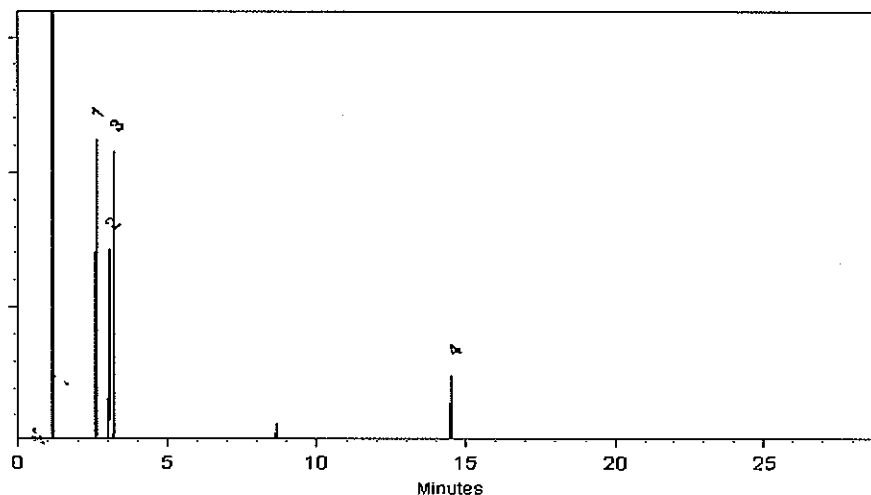
250°C

Det. Temp:

340°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dawn Brownson - Mix Technician

Date Mixed: 26-Sep-2017

Balance: B442140311

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 28-Sep-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

MSS_FV8270_IS_00002



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Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Composition



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 573355 **Lot No.:** A0134880

Description : Custom Internal Standard
Custom Internal Standard 1,000µg/mL, Methylene chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2021 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 (Lot PR-18488) Purity 99%	1,000.9 µg/mL	+/-	5.8193	µg/mL	Gravimetric
			+/-	45.0811	µg/mL	Unstressed
			+/-	50.0231	µg/mL	Stressed
2	Naphthalene-d8 CAS # 1146-65-2 (Lot PR-20449) Purity 99%	1,002.9 µg/mL	+/-	5.8307	µg/mL	Gravimetric
			+/-	45.1690	µg/mL	Unstressed
			+/-	50.1205	µg/mL	Stressed
3	Acenaphthene-d10 CAS # 15067-26-2 (Lot PR-25444) Purity 99%	1,001.1 µg/mL	+/-	5.8205	µg/mL	Gravimetric
			+/-	45.0901	µg/mL	Unstressed
			+/-	50.0331	µg/mL	Stressed
4	Phenanthrene-d10 CAS # 1517-22-2 (Lot PR-27621) Purity 99%	1,003.1 µg/mL	+/-	5.8318	µg/mL	Gravimetric
			+/-	45.1780	µg/mL	Unstressed
			+/-	50.1305	µg/mL	Stressed
5	Pyrene-d10 CAS # 1718-52-1 (Lot PR-14089) Purity 98%	1,003.3 µg/mL	+/-	5.8331	µg/mL	Gravimetric
			+/-	45.1881	µg/mL	Unstressed
			+/-	50.1418	µg/mL	Stressed
6	Perylene-d12 CAS # 1520-96-3 (Lot PR-27342) Purity 99%	1,001.7 µg/mL	+/-	5.8237	µg/mL	Gravimetric
			+/-	45.1149	µg/mL	Unstressed
			+/-	50.0606	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

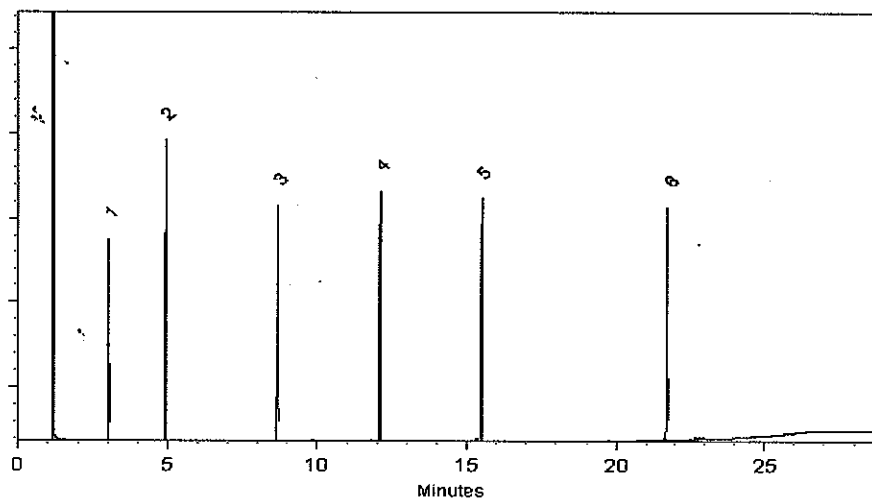
Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

Temp. Program:
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

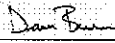
Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID

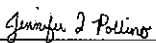


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Dawn Brownson - Mix Technician

Date Mixed: 05-Feb-2018

Balance: 1128360905


Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 07-Feb-2018



Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

MSV_4BFB_NEAT_00002



660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

4-Bromofluorobenzene

CATALOG NUMBER	N-10809-1G ✓✓
LOT NUMBER	8601300 ✓✓
DATE CERTIFIED	01/06/16 ✓✓
EXPIRATION DATE	01/31/21 ✓✓
CAS NUMBER	460-00-4
MOLECULAR FORMULA	C ₆ H ₄ BrF
MOLECULAR WEIGHT	175.00
STORAGE	Store in a cool dry place.
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.
ISO GUIDE 34 CERTIFIED	[]

Analytical Test	Value
FT-IR SPECTROSCOPY	CONFORMS TO STRUCTURE
PHYSICAL APPEARANCE	COLORLESS LIQUID ✓✓
% PURITY (GC/FID)	99.5 ✓✓

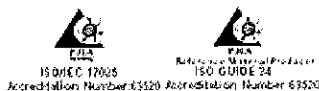
Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

Chem Service, Inc. is accredited to ISO Guide 34:2009, ISO/IEC 17025:2005 and certified to ISO 9001:2008



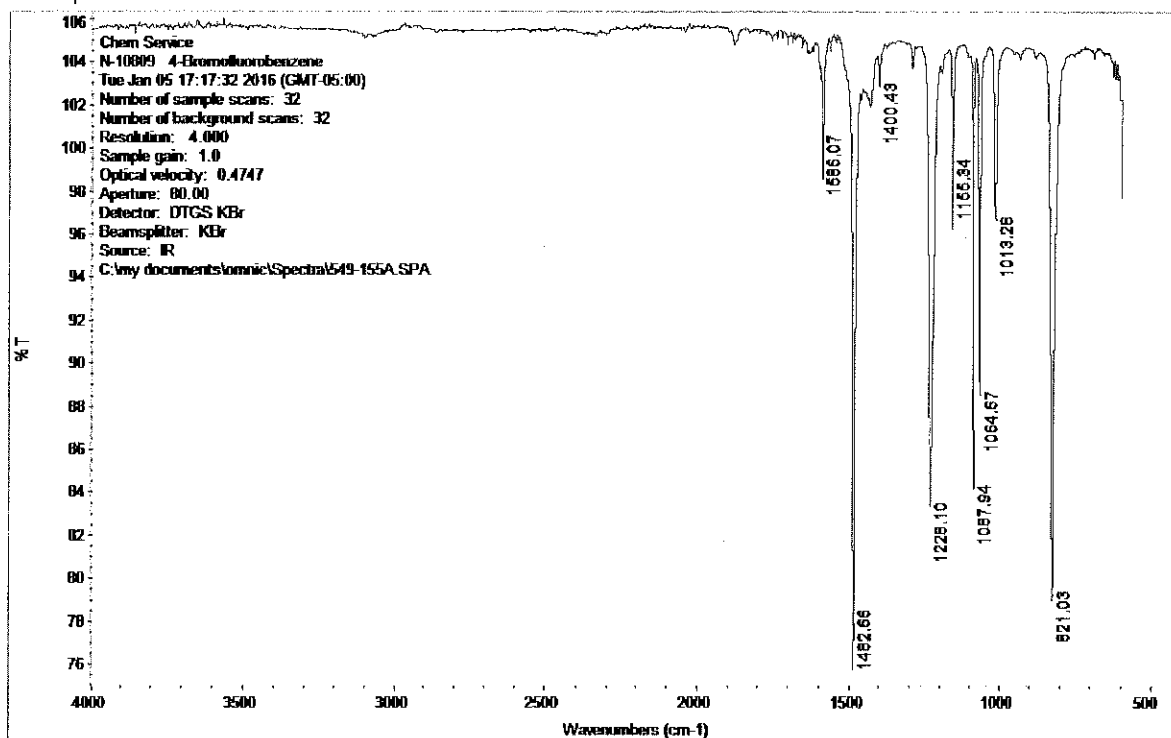
COA Form
Revision 3 (3/2015)

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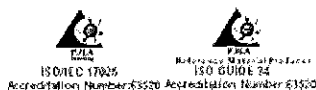
CERTIFICATE OF ANALYSIS

Analysis Method: FTIR- Spectroscopy

Catalog Number: N-10809-1G
Description: 4-Bromofluorobenzene
Lot Number: 8601300
Expiration Date: 01/31/21



Chem Service, Inc. is accredited to ISO Guide 34:2009, ISO/IEC 17025:2005 and certified to ISO 9001:2008





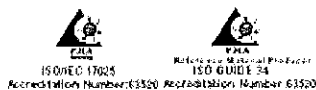
660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-10809-1G
Description:	4-Bromofluorobenzene
Lot Number:	8601300
Expiration Date:	01/31/21

Chem Service, Inc. is accredited to ISO Guide 34:2009, ISO/IEC 17025:2005 and certified to ISO 9001:2009

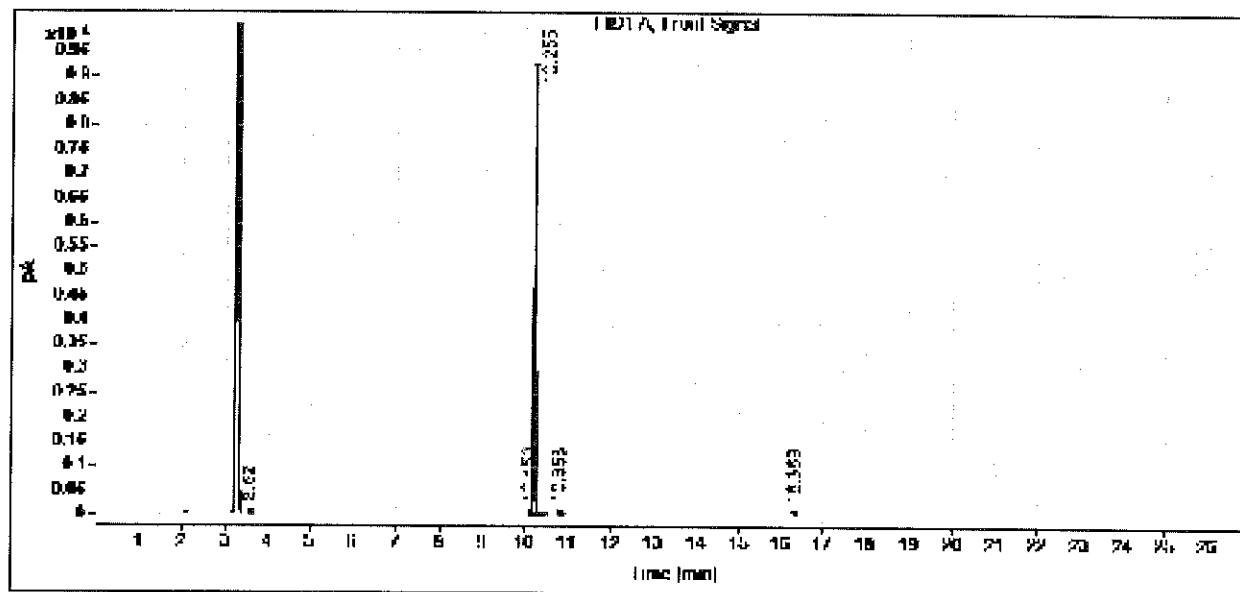


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 1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
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CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

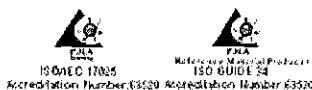
Data file: C:\CHEM3211\DATA\1215\SIG1007347.D
Sample name: N-10809/CH2CL2
Instrument: GC 1 **Sample type:** Sample
Injection date: 1/5/2016 4:20:37 PM **Location:** Vial 6
Acq. method: MIX1.M **Injection volume:** 1.0uL
Column name: DB-824 (30m x 0.53mm x 3.0um)



Signal: FID1 A, Front Signal

RT [min]	Type	Width [min]	Area	Height	Area%
3.820	BB	0.0403	3.8748	1.1723	0.0145
10.155	BV	0.0195	0.7424	0.4888	0.0028
10.255	VB S	0.0437	26687.8328	9172.4229	99.7795
10.853	BB	0.0583	54.3345	12.3602	0.2031
16.389	BB	0.0034	0.0123	0.0605	0.0000
Sum			26748.5988		

Chem Service, Inc. is accredited to ISO Guide 34:2009, ISO/IEC 17025:2005 and certified to ISO 9001:2008



Reagent

MSV_502QGas_00096



110 Benner Circle
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Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 55669.SEC Lot No.: A0155823

Description : Custom 502.2 "Q" Gas Mix

Custom 502.2 "Q" Gas Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : January 31, 2027 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)			
1	Dichlorodifluoromethane (CFC-12)	2,016.5 µg/mL	+/-	19.3550	µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 26165)		+/-	114.1077	µg/mL	Unstressed
	Purity 99%		+/-	116.7296	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,005.6 µg/mL	+/-	18.7428	µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/-	113.4037	µg/mL	Unstressed
	Purity 99%		+/-	116.0133	µg/mL	Stressed
3	Vinyl chloride	2,004.4 µg/mL	+/-	15.4000	µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/-	112.8325	µg/mL	Unstressed
	Purity 99%		+/-	115.4519	µg/mL	Stressed
4	Bromomethane (methyl bromide)	2,022.0 µg/mL	+/-	18.0735	µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot Q119-46)		+/-	114.2018	µg/mL	Unstressed
	Purity 99%		+/-	116.8358	µg/mL	Stressed
5	Chloroethane (ethyl chloride)	2,013.1 µg/mL	+/-	20.5181	µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/-	114.1209	µg/mL	Unstressed
	Purity 99%		+/-	116.7336	µg/mL	Stressed
6	Trichlorofluoromethane (CFC-11)	2,001.1 µg/mL	+/-	17.4531	µg/mL	Gravimetric
	CAS # 75-69-4.SEC (Lot 253600)		+/-	112.9531	µg/mL	Unstressed
	Purity 99%		+/-	115.5613	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

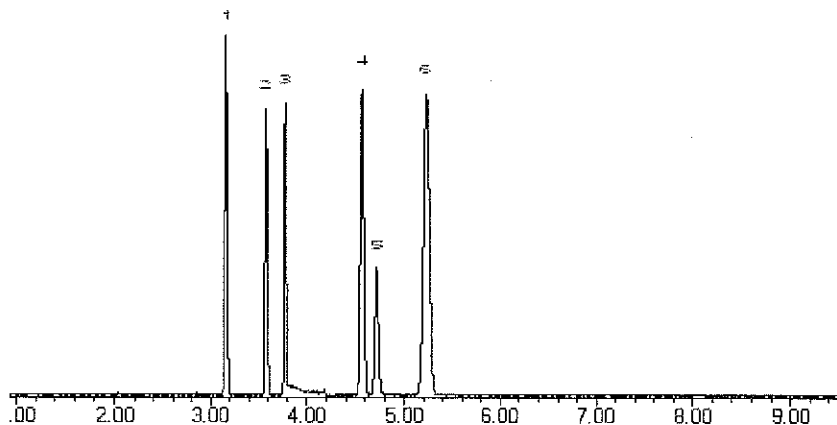
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

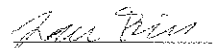
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Lane Kibe - Mix Technician

Date Mixed: 16-Dec-2019 **Balance:** 1127510105


Amanda Miller - Operations Tech-ARM QC

Date Passed: 27-Dec-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_502QGas_00109



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 55669.SEC Lot No.: A0155823

Description : Custom 502.2 "Q" Gas Mix

Custom 502.2 "Q" Gas Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : January 31, 2027 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)
1	Dichlorodifluoromethane (CFC-12) CAS # 75-71-8.SEC (Lot 26165) Purity 99%	2,016.5 µg/mL	+/- 19.3550 µg/mL Gravimetric +/- 114.1077 µg/mL Unstressed +/- 116.7296 µg/mL Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3.SEC (Lot 18343) Purity 99%	2,005.6 µg/mL	+/- 18.7428 µg/mL Gravimetric +/- 113.4037 µg/mL Unstressed +/- 116.0133 µg/mL Stressed
3	Vinyl chloride CAS # 75-01-4.SEC (Lot MKBK6872V) Purity 99%	2,004.4 µg/mL	+/- 15.4000 µg/mL Gravimetric +/- 112.8325 µg/mL Unstressed +/- 115.4519 µg/mL Stressed
4	Bromomethane (methyl bromide) CAS # 74-83-9.SEC (Lot Q119-46) Purity 99%	2,022.0 µg/mL	+/- 18.0735 µg/mL Gravimetric +/- 114.2018 µg/mL Unstressed +/- 116.8358 µg/mL Stressed
5	Chloroethane (ethyl chloride) CAS # 75-00-3.SEC (Lot 00004202) Purity 99%	2,013.1 µg/mL	+/- 20.5181 µg/mL Gravimetric +/- 114.1209 µg/mL Unstressed +/- 116.7336 µg/mL Stressed
6	Trichlorofluoromethane (CFC-11) CAS # 75-69-4.SEC (Lot 253600) Purity 99%	2,001.1 µg/mL	+/- 17.4531 µg/mL Gravimetric +/- 112.9531 µg/mL Unstressed +/- 115.5613 µg/mL Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:

60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant flow 2.0 mL/min.

Temp. Program:

40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:

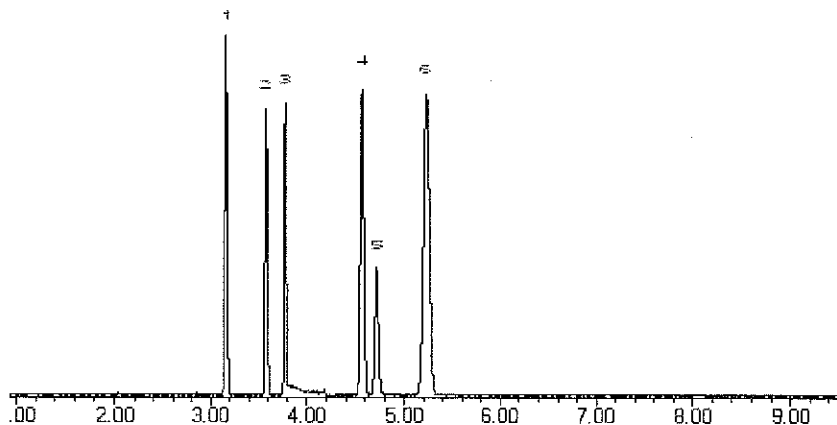
200°C

Det. Temp:

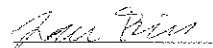
250°C

Det. Type:

MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Lane Kibe - Mix Technician

Date Mixed: 16-Dec-2019 Balance: 1127510105


Amanda Miller - Operations Tech-ARM QC

Date Passed: 27-Dec-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
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0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_8260_SS_00120



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 55671 Lot No.: A0146938
Description: 8260A Surrogate Mix
8260A Surrogate Mix 2,500µg/mL, P&T Methanol, 1mL/ampul
Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: March 31, 2022 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Dibromofluoromethane CAS # 1868-53-7 (Lot 0012016) Purity 99%	2,505.2 µg/mL	+/- 14.5653 µg/mL Gravimetric +/- 140.4622 µg/mL Unstressed +/- 143.7488 µg/mL Stressed
2	1,2-Dichloroethane-d4 CAS # 17060-07-0 (Lot PR-26748) Purity 99%	2,517.2 µg/mL	+/- 14.6350 µg/mL Gravimetric +/- 141.1350 µg/mL Unstressed +/- 144.4374 µg/mL Stressed
3	Toluene-d8 CAS # 2037-26-5 (Lot PR-27311) Purity 99%	2,507.7 µg/mL	+/- 14.5798 µg/mL Gravimetric +/- 140.6024 µg/mL Unstressed +/- 143.8923 µg/mL Stressed
4	1-Bromo-4-fluorobenzene (BFB) CAS # 460-00-4 (Lot 20401KO) Purity 99%	2,507.7 µg/mL	+/- 14.5798 µg/mL Gravimetric +/- 140.6024 µg/mL Unstressed +/- 143.8923 µg/mL Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:

105m x 0.53mm x 3.0µm
Rtx-S02.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

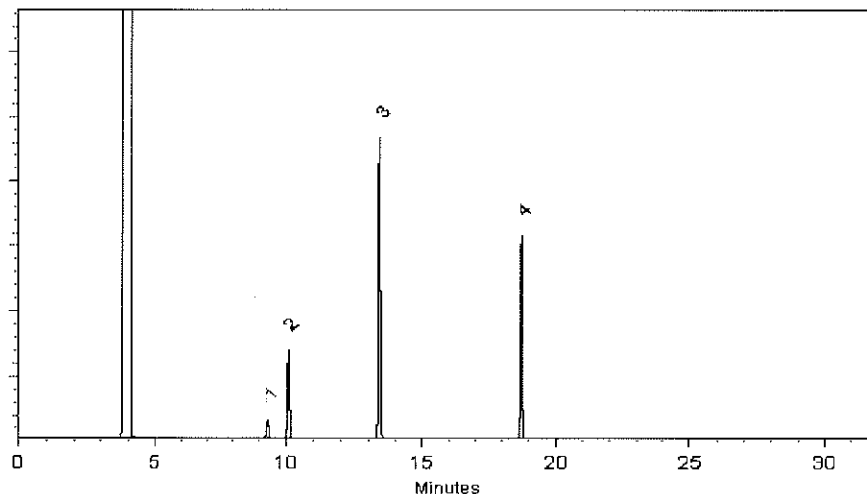
200°C

Det. Temp:

250°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Maggie Wang

Maggie Wang - Operations Technician I

Date Mixed: 12-Mar-2019

Balance: 1128342314

Jennifer L Pollino

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 15-Mar-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

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- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

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Manufacturing Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_ACROLEIN_00007



660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Acrolein

CATALOG NUMBER	RPN-11030-1G
LOT NUMBER	10410200
DATE CERTIFIED	12/06/19
EXPIRATION DATE	12/31/20
CAS NUMBER	107-02-8
MOLECULAR FORMULA	C ₃ H ₄ O
MOLECULAR WEIGHT	56.06
STORAGE	Refrigerator storage (2 - 8 °C)
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.
NOTES	Contains water and hydroquinone as an inhibitor.

Analytical Test	Value
% PURITY (GC/TCD)	94.3
% WATER (KARL FISCHER)	1.9

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

Chem Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015

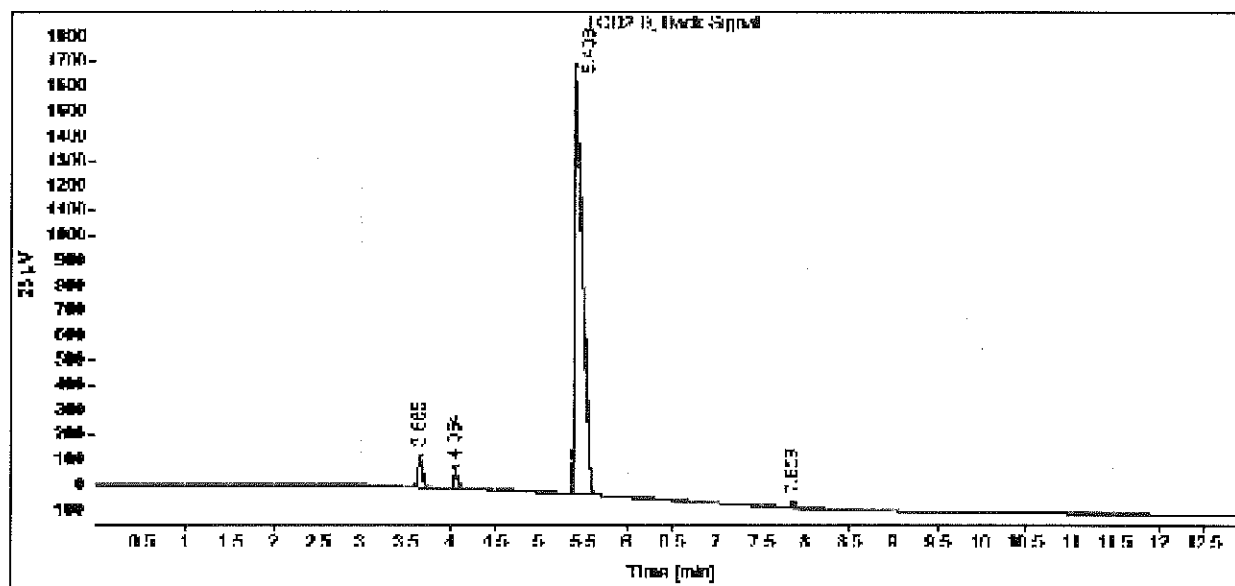


COA Form
Revision 3 (3/2015)

CERTIFICATE OF ANALYSIS

Gas Chromatography / Thermal Conductivity Detector (GC/TCD)

Data file: C:\CHEM32\1\DATA\2019 DATA\1219\SIG2022887.D
Sample name: Acrolein
Instrument: GC 1 **Sample type:** Sample
Injection date: 12/8/2019 10:34:12 AM **Location:** Vial 11
Acq. method: GASBOMB_TCD.M **Injection volume:** 1.0uL
Column name: DB-824 (30m x 0.53mm x 3.0um)



Signal: TCD2 B, Back Signal

RT [min]	Type	Width [min]	Area	Height	Area%
3.655	BB	0.0554	405.7875	114.3327	3.5675
4.064	BB	0.0475	217.2787	71.5037	1.9102
5.408	BV	0.0795	10720.3574	1725.8987	94.2472
7.859	BB	0.1249	31.2959	3.7865	0.2751
Sum			11374.7178		



660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	RPN-11030-1G
Description:	Acrolein
Lot Number:	10410200
Expiration Date:	12/31/20

Chem Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015



Reagent

MSV_BCE_00015



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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Catalog No. : 30469 Lot No.: A0149919
Description : 1-Bromo-2-chloroethane Standard
1-Bromo-2-Chloroethane Std, 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : June 30, 2024 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1-Bromo-2-chloroethane CAS # 107-04-0 (Lot BCBQ8054V) Purity 99%	2,006.0 µg/mL	+/- 11.7723 µg/mL Gravimetric +/- 112.4858 µg/mL Unstressed +/- 115.1173 µg/mL Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:

105m x 0.53mm x 3.0µm
Rtx-S02.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

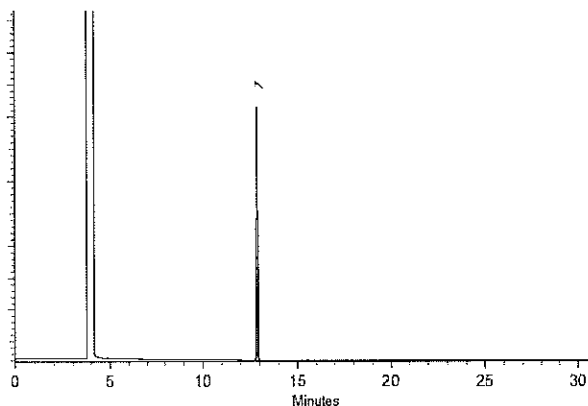
200°C

Det. Temp:

250°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Jessica McClenahan - Operations Technician I

Date Mixed: 07-Jun-2019

Balance: B251644995

Justine Albertain - Operations Tech-ARM QG

Date Passed: 10-Jun-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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Manufacturing Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_c14dcb_Nt_00003

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.comEmail USA: techserv@sial.comOutside USA: eurtechserv@sial.com

Certificate of Analysis

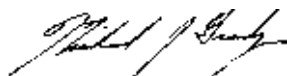
Product Name:

cis-1,4-Dichloro-2-butene - 95%

Product Number: 195707
Batch Number: SHBH4584V
Brand: ALDRICH
CAS Number: 1476-11-5
MDL Number: MFCD00062950
Formula: C₄H₆Cl₂
Formula Weight: 125.00 g/mol
Storage Temperature: Store at 2 - 8 °C
Quality Release Date: 30 AUG 2016



Test	Specification	Result
Appearance (Color)	Colorless to Light Yellow	Very Faint Yellow
Appearance (Form)	Liquid	Liquid
Infrared Spectrum	Conforms to Structure	Conforms
Purity (GC)	≥ 94.5 %	98.0 %



Michael Grady, Manager
Quality Control
Sheboygan Falls, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Reagent

MSV_CDFM_00010



Certified Reference Material CRM

CERTIFIED WEIGHT REPORT

Part Number: 71295
Lot Number: 120517
Description: Chlorodifluoromethane

Solvent(s): Methanol
Lot#: DR193

Expiration Date: 120522
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 2506734D

Volume(s) shown below were combined and diluted to (mL): 100.0

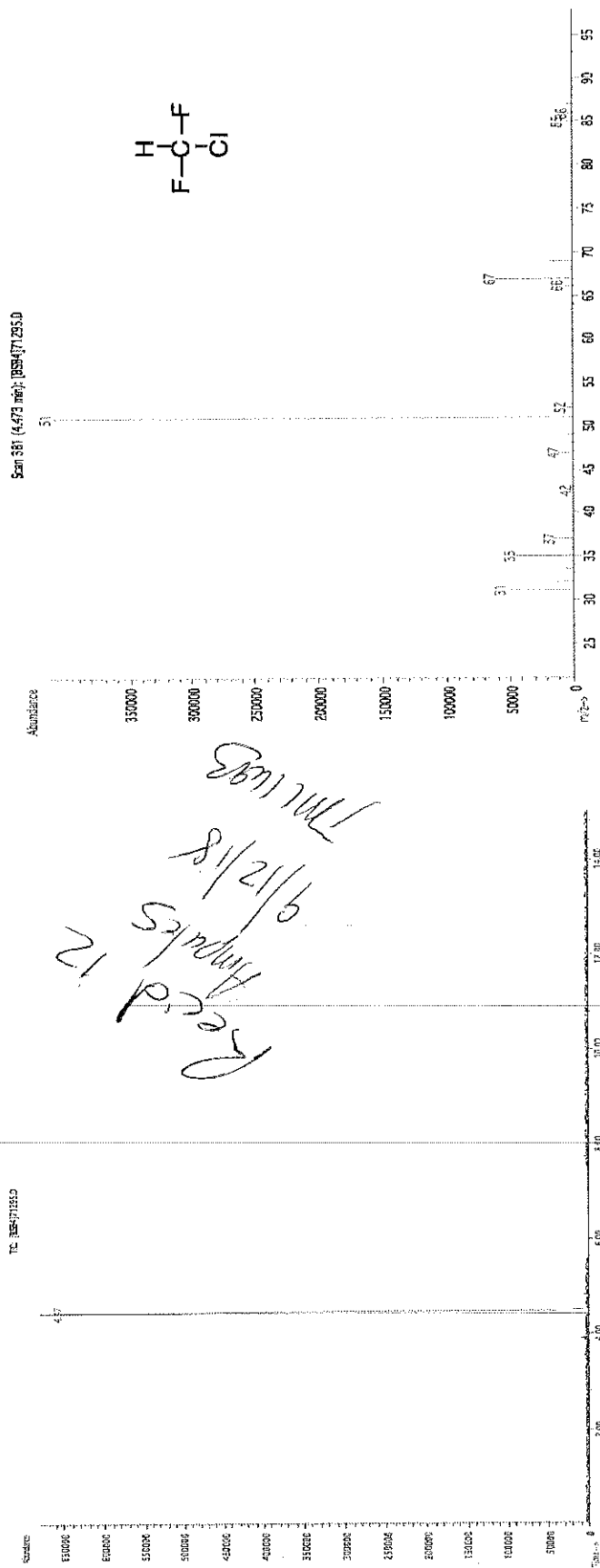
Balance Uncertainty: 5E-05
Flask Uncertainty: 0.001

Formulated By:	Mario Luis	120517	DATE
Reviewed By:	Pedro L. Rentas	120517	DATE

Compound	Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	Solvent Safety Info. On Attached pg.)	OSHA PEL (TWA)	LD50
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1. Chlorodifluoromethane 33601 102015 0.05 5.00 0.017 20010.5 1000.4 7.9 75-45-6 1000 ppm(3500mg/m3/8H) N/A

Method: GC6GAS. Detector: MSD (Scan mode). Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). Oven Profile: Temp. 1=35°C (9 min.), Temp. 2=200°C (1 min.), Rate=33°C/min., Injector Temp.=200°C, Detector Temp.=200°C. Analyst: Candice Warren.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

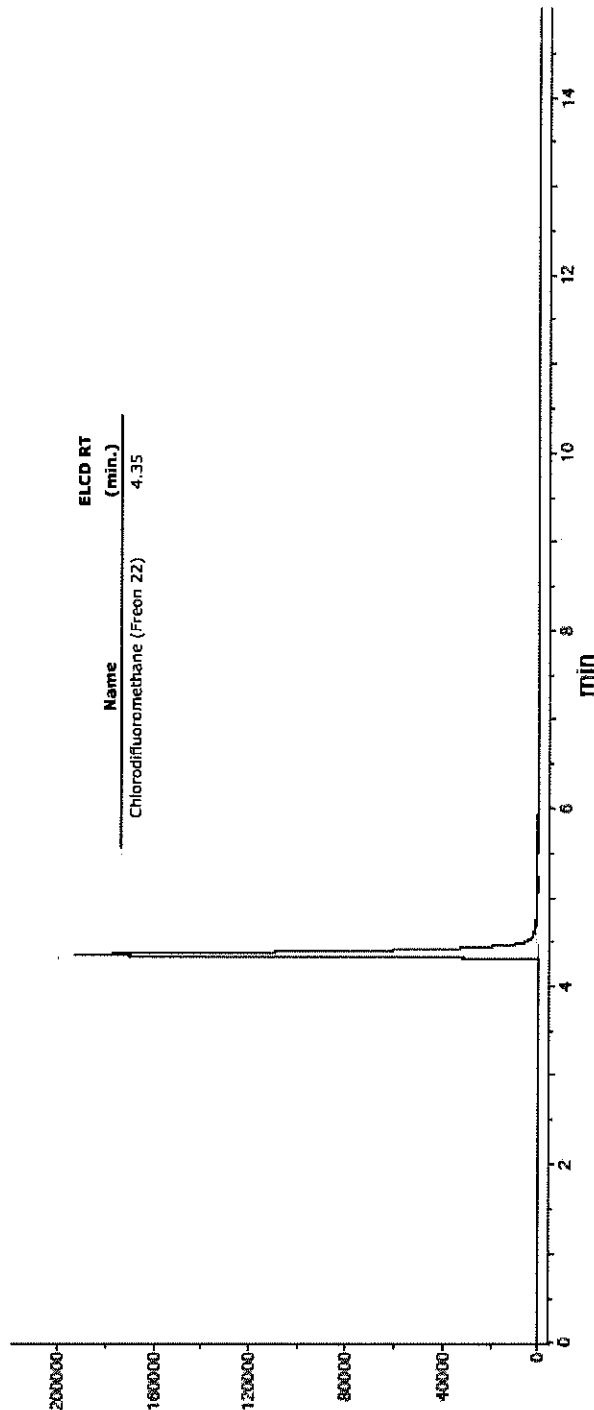


Run 32, "P71295 L120517 [1000µg/mL in MeOH]"

Run Length: 15.00 min, 8999 points at 10 points/second.
Created: Wed, Dec 6, 2017 at 12:33:22 PM.
Sampled: Sequence "120317-GC1", Method "GC1-M9".
Analyzed using Method "GC1-M9".

Comments

GC1-M9 Analysis by Cardice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=150mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=40mL/min., Hydrogen(make-up)=100mL/min.,
Oven Profile: Temp. 1=35°C (Time 1=9 min.), Temp 2=200°C (Time 2=1 min.),
Rate = 33°C/min., Total run time=15 min. Injector temp =200°C, FID Temp =200°C.
ELCD Signal = Edaq Channel 1 PID Signal = Edaq Channel 2
Standard injection = 0.5µL, Range=4 Purge Valve = 0 min.



Reagent

MSV_Cus826_IS_00076



110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 558267 **Lot No.:** A0138205

Description : Custom 8260A IS Mix

Custom 8260A IS Mix 2,500-12,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	tert-Butyl Alcohol-d10	12,613.8 µg/mL	+/-	73.3376	µg/mL	Gravimetric
	CAS # 53001-22-2 (Lot PR-29485)		+/-	270.0624	µg/mL	Unstressed
	Purity 98%		+/-	277.9136	µg/mL	Stressed
2	Fluorobenzene	2,517.8 µg/mL	+/-	14.6387	µg/mL	Gravimetric
	CAS # 462-06-6 (Lot BCBK8171V)		+/-	53.9064	µg/mL	Unstressed
	Purity 99%		+/-	55.4736	µg/mL	Stressed
3	Chlorobenzene-d5	2,518.8 µg/mL	+/-	14.6445	µg/mL	Gravimetric
	CAS # 3114-55-4 (Lot PR-22736)		+/-	53.9278	µg/mL	Unstressed
	Purity 99%		+/-	55.4956	µg/mL	Stressed
4	1,4-Dichlorobenzene-d4	2,511.0 µg/mL	+/-	14.5992	µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-18488)		+/-	53.7608	µg/mL	Unstressed
	Purity 99%		+/-	55.3237	µg/mL	Stressed
Solvent: P&T Methanol						
CAS # 67-56-1						
Purity 99%						

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

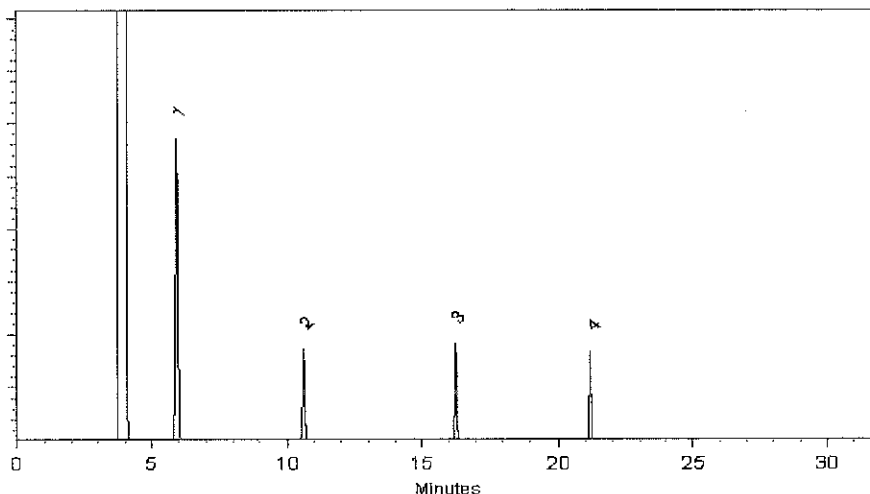
200°C

Det. Temp:

250°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 21-May-2018

Balance: 1128342314

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 23-May-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_CYC_00003

CHEM SERVICE INC.

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Cyclohexanone

CATALOG NUMBER	N-11531-1G	✓✓✓✓
LOT NUMBER	10135700	✓✓✓✓
DATE CERTIFIED	05/15/18	
EXPIRATION DATE	05/31/23	✓✓✓✓
CAS NUMBER	108-94-1	
MOLECULAR FORMULA	C ₆ H ₁₀ O	
MOLECULAR WEIGHT	98.16	
STORAGE	Store at room temperature (20 - 25 °C).	
HANDLING	See Safety Data Sheet	
INTENDED USE	For laboratory use only.	

Analytical Test

% PURITY (GC/FID)

Value

99.5

FT-IR SPECTROSCOPY

CONFORMS TO STRUCTURE

PHYSICAL APPEARANCE

COLORLESS LIQUID

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

HR 2032
7-1-20

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

Chem Service is accredited to ISO 17034:2015, ISO/IEC 17025:2017 and certified to ISO 9001:2015



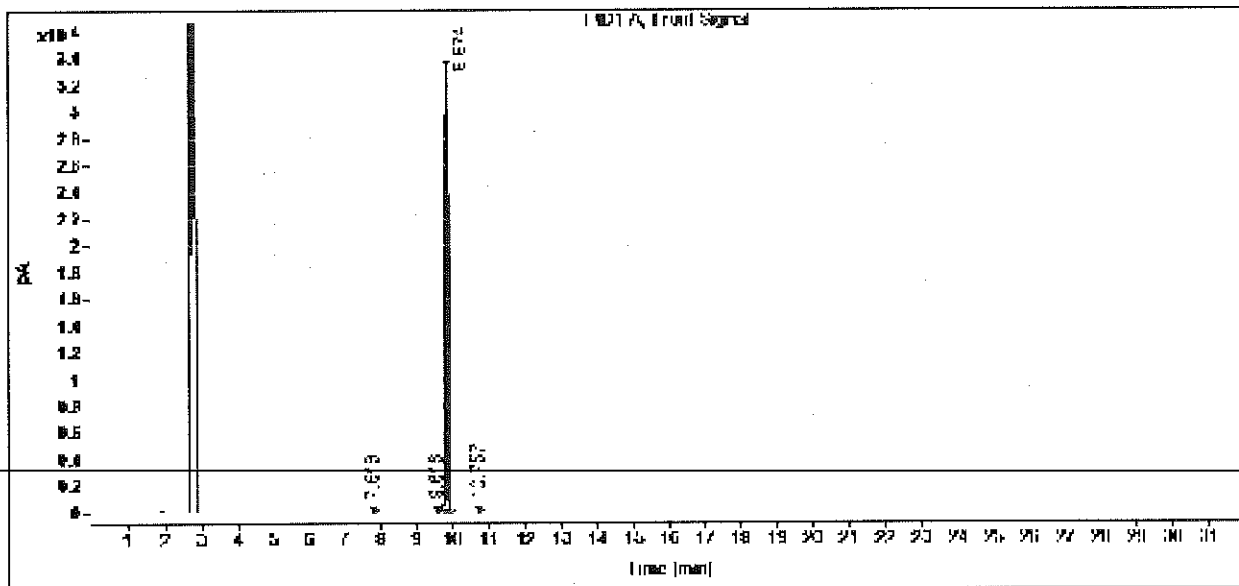
COA Form
Revision 3 (3/2015)

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info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file:	C:\CHEM32\1\DATA\2018 DATA\0518\SIG1010143.D		
Sample name:	N-11531/ACETONE		
Instrument:	GC 1	Sample type:	Sample
Injection date:	5/15/2018 8:14:17 AM	Location:	Vial 1
Acq. method:	MIX1.M	Injection volume:	1.0uL
Column name:	DB-624 (30m x 0.53mm x 3.0um)		



Signal: FID1 A, Front Signal

RT [min]	Type	Width [min]	Area	Height	Area%
7.818	BB	0.0567	12.4787	2.8831	0.0090
9.616	BB	0.0420	22.9558	6.9935	0.0165
9.874	BB S	0.0575	135838.7188	33378.9727	99.9600
10.757	BB	0.0524	20.1641	4.8068	0.0145
Sum:			135894.3173		

Chem Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015

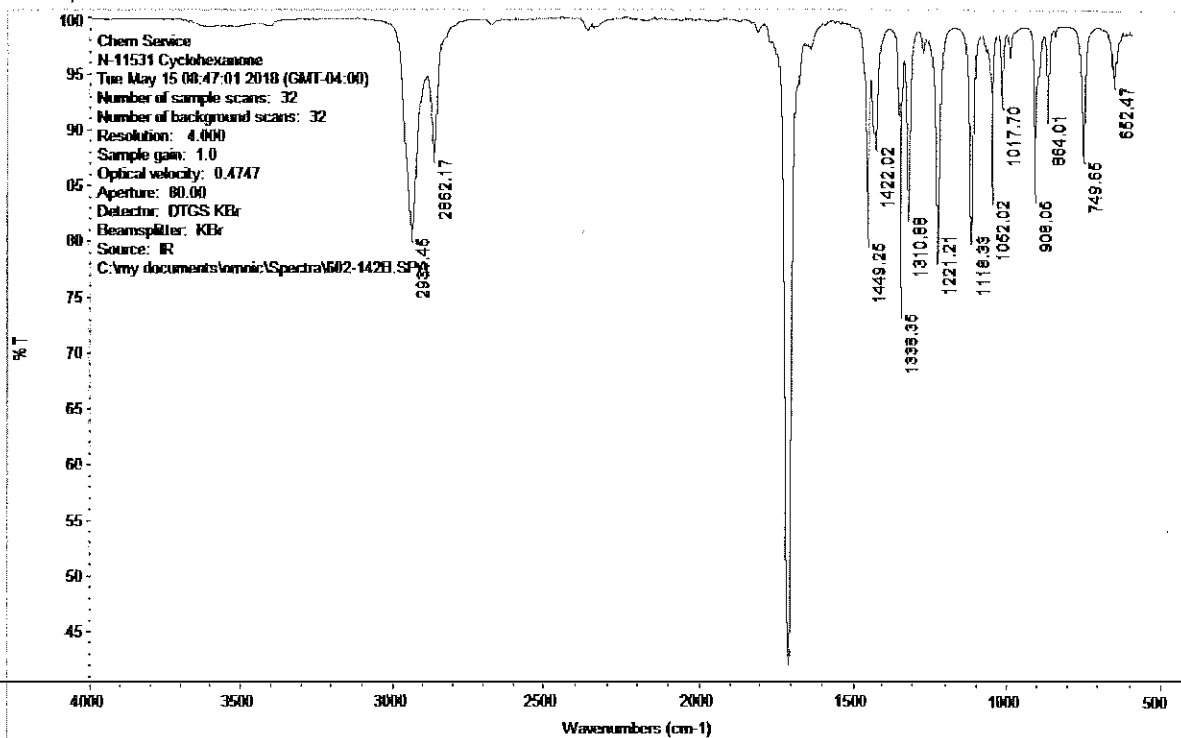


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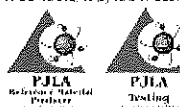
CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number: N-11531-1G
Description: Cyclohexanone
Lot Number: 10135700
Expiration Date: 05/31/23



Chem Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015



Reagent

MSV_DCFM_00021

CERTIFICATE OF ANALYSIS

Catalog No: M-502-61-10X
Description: Dichlorofluoromethane
Lot: 219051360
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: May 13, 2019
Expiration: May 13, 2029
Sample Size: 1 mL
Components: 1
Storage Condition: Refriger (0-5 °C)



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity %	Prepared Concentration ²	Certified Analyte Concentration ¹
		(GC/FID)	(µg/mL)	(µg/mL)
Dichlorofluoromethane	75-43-4	98.0	2000	1960

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

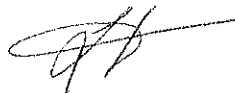
¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is $\pm 2.4\%$. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Certified By:


Larry Decker, Organic QC Manager

1. Quality Standards:

ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

ISO 9001:2015 – Quality Management System – Requirements
Eagle Registrations Certificate Number 3774

- 2. Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.
- 3. Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this Standard.
- 4. Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.
- 5. Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label
- 6. Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(V))^2 + (u(m))^2 + (u(IV))^2 + (u(RO))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.
- 7. Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

Reagent

MSV_DME_00022



Certified Reference Material CRM



CERTIFIED WEIGHT REPORT

Part Number: 72297	
Lot Number: 081920	Solvent(s): Methanol
Description: Methyl ether [Dimethyl ether]	Lot# DX932-US
Expiration Date: 081925	
Recommended Storage: Refrigerate (4 °C)	
Nominal Concentration (µg/mL): 1000	
NIST Test ID#: 23060	

Weight(s) shown below were combined and diluted to (mL):

5E-05 Balance Uncertainty
0.012 Flask Uncertainty

Formulated By: Vincent K. Criscio, Jr.		DATE: 081920
Reviewed By: Pedro L. Rientas		DATE: 081920

SDS Information			
Expanded			
Uncertainty	Actual	Weight(g)	Conc (µg/mL)
(+/-) µg/mL			
CAS#			OSHA PEL (TWA)
LD50			

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty	SDS Information
1. Methyl ether	2297	00225LO	1000	99	0.2	0.10101	0.1020	1009.8	4.2	115-10-6 N/A

Method: GC/GAS, **Detector:** MSD (Scan mode), **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness), **Oven Profile:** Temp. 1=35°C (9 min.), Temp. 2=200°C (1 min.), **Rate:** 33°C/min., **Injector Temp:** 200°C, **Detector Temp:** 200°C, **Analyst:** Candice Warren.

TIC: [BSB*]72297.D

Abundance

45

6.10

25000000

20000000

15000000

10000000

5000000

Time-->

5.00 10.00 15.00 20.00 25.00 30.00 35.00 40.00 45.00 50.00 55.00

m/z-->

41 43 45 47

56

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyal, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

11/02/2020

Reagent

MSV_DME_00023



Certified Reference Material CRM



CERTIFIED WEIGHT REPORT

Part Number:

Lot Number:

Description:

72297

081920

Methyl ether

[Dimethyl ether]

Expiration Date:

Recommended Storage:

Nominal Concentration (µg/mL):

NIST Test ID#:

081925

Refrigerate (4 °C)

1000

23060

Weight(s) shown below were combined and diluted to (mL):

100.0

5E-05 Balance Uncertainty

0.012 Flask Uncertainty

Solvent(s):

Methanol

Lot#

DX932-US

<i>V. K. Criscio, Jr.</i>		081920
Formulated By:	Vincent K. Criscio, Jr.	DATE
<i>Pedro L. Rente</i>		081920
Reviewed By:	Pedro L. Rente	DATE

SDS Information

Expanded
Uncertainty
(Solvent Safety Info. On Attached pg.)
Conc (µg/mL) (+/-) µg/mL CAS# OSHA PEL (TWA) LD50

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) µg/mL	CAS#	OSHA PEL (TWA)	LD50
1. Methyl ether	2297	00225LO	1000	99	0.2	0.10101	0.1020	1009.8	4.2	115-10-6	N/A	N/A

Method: GC/GAS. **Detector:** MSD (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1=35°C (9 min.), Temp. 2=200°C (1 min.), Rate=33°C/min., Injector Temp.=200°C, Detector Temp.=200°C. **Analyst:** Candice Warren.

TIC: [BSB*]72297.D

Abundance

6.10

25000000

20000000

15000000

10000000

5000000

Abundance

1800000

1600000

1400000

1200000

1000000

800000

600000

400000

200000

45

45

Scan 461 (6.098 min): [BSB*]72297.D

Time-->

5.00 10.00 15.00 20.00 25.00 30.00 35.00 40.00 45.00 50.00 55.00

m/z-->

41

43

47

56

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- All Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyal, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

11/02/2020

Reagent

MSV_EtBr_Neat_00001



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CERTIFICATE OF ANALYSIS

Ethyl bromide

CATALOG NUMBER	N-11888-1G
LOT NUMBER	7832000
DATE CERTIFIED	12/01/17
EXPIRATION DATE	12/31/20
CAS NUMBER	74-96-4
MOLECULAR FORMULA	C ₂ H ₅ Br
MOLECULAR WEIGHT	108.97
STORAGE	Store in a cool dry place.
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.

Analytical Test	Value
% PURITY (GC/FID)	99.5

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

Chem Service, Inc. is accredited to ISO Guide 34:2009, ISO/IEC 17025:2005 and certified to ISO 9001:2008



ISO/IEC 17025
Accreditation Number 03320



ISO GUIDE 34
Registration Number 03320

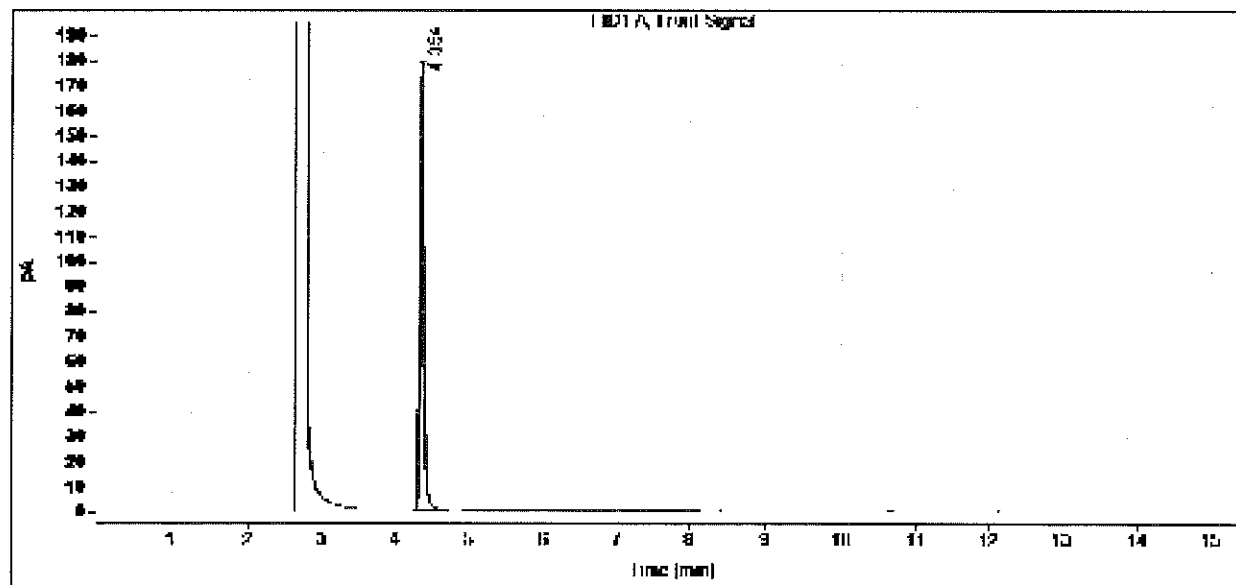
COA Form
Revision 3 (3/2015)

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CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

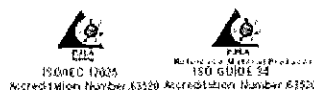
Data file:	C:\CHEM32\1\DATA\2017 DATA\1117\SIG1009528.D		
Sample name:	Bromoethane		
Instrument:	GC 1	Sample type:	Sample
Injection date:	12/1/2017 9:30:43 AM	Location:	Vial 21
Acq. method:	MIX1.M	Injection volume:	1.0uL
Column name:	DB-624 (30m x 0.53mm x 3.0um)		



Signal: FID1 A, Front Signal

RT [min]	Type	Width [min]	Area	Height	Area%
4.354	BB	0.0547	648.4102	178.9945	100.0000
Sum			648.4102		

Chem Service, Inc. is accredited to ISO Guide 34:2009, ISO/IEC 17025:2005 and certified to ISO 9001:2008



Reagent

MSV_Q#1B_00057



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569936-1.sec **Lot No.:** A0148625

Description : Custom Revised Q #1B Standard

Custom Revised Q #1B Standard 1,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1,1-Dichloroethene CAS # 75-35-4.SEC (Lot 5111300) Purity 99%	1,005.5 µg/mL	+/- 7.1750 µg/mL Gravimetric +/- 56.5279 µg/mL Unstressed +/- 57.8435 µg/mL Stressed
2	Methylene chloride (dichloromethane) CAS # 75-09-2.SEC (Lot FGM02) Purity 99%	1,004.5 µg/mL	+/- 7.1682 µg/mL Gravimetric +/- 56.4745 µg/mL Unstressed +/- 57.7888 µg/mL Stressed
3	trans-1,2-Dichloroethene CAS # 156-60-5.SEC (Lot TS5UB) Purity 97%	1,002.8 µg/mL	+/- 7.1558 µg/mL Gravimetric +/- 56.3767 µg/mL Unstressed +/- 57.6888 µg/mL Stressed
4	1,1-Dichloroethane CAS # 75-34-3.SEC (Lot 5379000) Purity 99%	1,006.8 µg/mL	+/- 7.1846 µg/mL Gravimetric +/- 56.6038 µg/mL Unstressed +/- 57.9211 µg/mL Stressed
5	2,2-Dichloropropane CAS # 594-20-7.SEC (Lot I7E8E) Purity 98%	1,003.2 µg/mL	+/- 7.7659 µg/mL Gravimetric +/- 56.4820 µg/mL Unstressed +/- 57.7928 µg/mL Stressed
6	cis-1,2-Dichloroethene CAS # 156-59-2.SEC (Lot HGC01-BLKT) Purity 98%	1,001.2 µg/mL	+/- 7.7507 µg/mL Gravimetric +/- 56.3716 µg/mL Unstressed +/- 57.6799 µg/mL Stressed
7	Chloroform CAS # 67-66-3.SEC (Lot 1297547) Purity 99%	1,004.5 µg/mL	+/- 7.1684 µg/mL Gravimetric +/- 56.4759 µg/mL Unstressed +/- 57.7903 µg/mL Stressed

8	1,1,1-trichloroethane CAS # 71-55-6 * Purity 99%	(Lot B15W12061)	1,000.9 µg/mL	+/- 7.1427 +/- 56.2735 +/- 57.5832	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,1-Dichloropropene CAS # 563-58-6.SEC Purity 96%	(Lot 4672600)	1,005.1 µg/mL	+/- 7.7804 +/- 56.5876 +/- 57.9008	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Carbon tetrachloride CAS # 56-23-5.SEC Purity 99%	(Lot 11466)	1,006.6 µg/mL	+/- 7.1828 +/- 56.5897 +/- 57.9068	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	1,2-Dichloroethane CAS # 107-06-2.SEC Purity 99%	(Lot FO6PK)	1,003.3 µg/mL	+/- 7.1598 +/- 56.4084 +/- 57.7212	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Benzene CAS # 71-43-2.SEC Purity 99%	(Lot B28Y008)	1,003.5 µg/mL	+/- 7.7683 +/- 56.4996 +/- 57.8109	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Trichloroethene CAS # 79-01-6.SEC Purity 99%	(Lot H04X050)	1,005.6 µg/mL	+/- 7.1760 +/- 56.5363 +/- 57.8521	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,2-Dichloropropane CAS # 78-87-5.SEC Purity 99%	(Lot OGG01)	1,004.3 µg/mL	+/- 7.1666 +/- 56.4618 +/- 57.7759	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Bromodichloromethane CAS # 75-27-4.SEC Purity 99%	(Lot 10171168)	1,006.2 µg/mL	+/- 7.1801 +/- 56.5686 +/- 57.8852	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Dibromomethane CAS # 74-95-3.SEC Purity 99%	(Lot FGI01-OICH)	1,006.1 µg/mL	+/- 7.7881 +/- 56.6438 +/- 57.9584	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	cis-1,3-Dichloropropene CAS # 10061-01-5.SEC Purity 99%	(Lot 4870A)	1,001.9 µg/mL	+/- 7.1498 +/- 56.3297 +/- 57.6407	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Toluene CAS # 108-88-3.SEC Purity 99%	(Lot YND2B-BD)	1,004.8 µg/mL	+/- 7.7782 +/- 56.5717 +/- 57.8846	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	trans-1,3-Dichloropropene CAS # 10061-02-6.SEC Purity 99%	(Lot ZDMSL)	1,002.6 µg/mL	+/- 7.1548 +/- 56.3691 +/- 57.6810	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	1,1,2-Trichloroethane CAS # 79-00-5.SEC Purity 98%	(Lot 3440900)	1,007.8 µg/mL	+/- 7.1920 +/- 56.6618 +/- 57.9805	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,3-Dichloropropane CAS # 142-28-9.SEC Purity 99%	(Lot AGN01-EFPC)	1,003.8 µg/mL	+/- 7.7708 +/- 56.5177 +/- 57.8293	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Tetrachloroethene CAS # 127-18-4.SEC Purity 99%	(Lot F09W014)	1,004.1 µg/mL	+/- 7.1652 +/- 56.4506 +/- 57.7644	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	Dibromochloromethane CAS # 124-48-1.SEC Purity 97%	(Lot 10181507)	1,009.5 µg/mL	+/- 7.2035 +/- 56.7530 +/- 58.0739	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	1,2-Dibromoethane (EDB) CAS # 106-93-4.SEC Purity 99%	(Lot 3505900)	1,007.8 µg/mL	+/- 7.8017 +/- 56.7429 +/- 58.0598	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1-Chlorohexane CAS # 544-10-5.SEC Purity 99%	(Lot 8171700)	1,001.0 µg/mL	+/- 5.8744 +/- 56.1308 +/- 57.4439	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Chlorobenzene CAS # 108-90-7.SEC Purity 99%	(Lot 1161936)	1,004.8 µg/mL	+/- 7.1703 +/- 56.4913 +/- 57.8061	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	1,1,1,2-Tetrachloroethane CAS # 630-20-6.SEC Purity 99%	(Lot GC01)	1,003.4 µg/mL	+/- 7.7677 +/- 56.4951 +/- 57.8063	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethylbenzene CAS # 100-41-4.SEC Purity 99%	(Lot PI4SE)	1,003.4 µg/mL	+/- 7.7677 +/- 56.4951 +/- 57.8063	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	m-Xylene CAS # 108-38-3.SEC Purity 99%	(Lot OUKMG-GB)	1,005.9 µg/mL	+/- 7.7869 +/- 56.6348 +/- 57.9491	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	p-Xylene CAS # 106-42-3.SEC Purity 99%	(Lot GM01)	1,008.3 µg/mL	+/- 7.8054 +/- 56.7699 +/- 58.0874	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	o-Xylene CAS # 95-47-6.SEC Purity 99%	(Lot FGL01)	1,005.8 µg/mL	+/- 7.7862 +/- 56.6303 +/- 57.9445	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Styrene CAS # 100-42-5.SEC Purity 99%	(Lot QGQ7F)	1,001.1 µg/mL	+/- 7.7497 +/- 56.3645 +/- 57.6726	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Isopropylbenzene (cumene) CAS # 98-82-8.SEC Purity 99%	(Lot WVREC)	1,004.3 µg/mL	+/- 7.7745 +/- 56.5447 +/- 57.8570	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Bromoform CAS # 75-25-2.SEC Purity 98%	(Lot 5197400)	1,005.7 µg/mL	+/- 7.1764 +/- 56.5392 +/- 57.8551	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,1,2,2-Tetrachloroethane CAS # 79-34-5.SEC Purity 99%	(Lot CFA4D-AQ)	1,006.8 µg/mL	+/- 7.1848 +/- 56.6052 +/- 57.9226	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,2,3-Trichloropropane CAS # 96-18-4.SEC Purity 98%	(Lot OGI01)	1,002.4 µg/mL	+/- 7.7598 +/- 56.4378 +/- 57.7477	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	n-Propylbenzene CAS # 103-65-1.SEC Purity 99%	(Lot T2HFC)	1,007.8 µg/mL	+/- 7.8011 +/- 56.7384 +/- 58.0551	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	Bromobenzene CAS # 108-86-1.SEC Purity 99%	(Lot 2FUHG-EM)	1,004.8 µg/mL	+/- 7.7782 +/- 56.5717 +/- 57.8846	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	1,3,5-Trichlorobenzene CAS # 108-70-3.SEC Purity 99%	(Lot I28U021)	1,002.0 µg/mL	+/- 5.8803 +/- 56.1868 +/- 57.5013	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	2-Chlorotoluene CAS # 95-49-8.SEC Purity 99%	(Lot SW8QG-AO)	1,008.1	µg/mL	+/- +/- +/-	7.8036 56.7564 58.0736	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	4-Chlorotoluene CAS # 106-43-4.SEC Purity 99%	(Lot P4XHJ-AO)	1,002.1	µg/mL	+/- +/- +/-	7.7571 56.4186 57.7279	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	tert-Butylbenzene CAS # 98-06-6.SEC Purity 99%	(Lot D6OHC)	1,004.2	µg/mL	+/- +/- +/-	7.7732 56.5357 57.8478	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	1,2,4-Trimethylbenzene CAS # 95-63-6.SEC Purity 99%	(Lot SC7LO-QA)	1,009.5	µg/mL	+/- +/- +/-	7.8147 56.8374 58.1565	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	sec-Butylbenzene CAS # 135-98-8.SEC Purity 99%	(Lot O4HRF)	1,006.9	µg/mL	+/- +/- +/-	7.7943 56.6888 58.0044	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	4-Isopropyltoluene (p-cymene) CAS # 99-87-6.SEC Purity 96%	(Lot 1195000)	1,000.0	µg/mL	+/- +/- +/-	7.7410 56.3015 57.6081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,3-Dichlorobenzene CAS # 541-73-1.SEC Purity 99%	(Lot FMDFD)	1,003.3	µg/mL	+/- +/- +/-	7.1593 56.4042 57.7169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	1,4-Dichlorobenzene CAS # 106-46-7.SEC Purity 99%	(Lot 4Y5DC)	1,008.5	µg/mL	+/- +/- +/-	7.1967 56.6994 58.0189	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	n-Butylbenzene CAS # 104-51-8.SEC Purity 99%	(Lot MMPGA)	1,005.4	µg/mL	+/- +/- +/-	7.7825 56.6032 57.9169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	1,2-Dichlorobenzene CAS # 95-50-1.SEC Purity 99%	(Lot 4NRGF-OT)	1,006.8	µg/mL	+/- +/- +/-	7.1842 56.6010 57.9183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	1,2-Dibromo-3-chloropropane CAS # 96-12-8.SEC Purity 98%	(Lot LC00408V)	1,002.7	µg/mL	+/- +/- +/-	7.7616 56.4511 57.7612	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	1,3,5-Trimethylbenzene CAS # 108-67-8.SEC Purity 99%	(Lot FGH02-CMLN)	1,002.2	µg/mL	+/- +/- +/-	7.7584 56.4276 57.7371	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,2,4-Trichlorobenzene CAS # 120-82-1.SEC Purity 99%	(Lot 3LYYC)	1,007.2	µg/mL	+/- +/- +/-	7.7968 56.7068 58.0229	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	Hexachlorobutadiene CAS # 87-68-3.SEC Purity 97%	(Lot 5526800)	1,005.8	µg/mL	+/- +/- +/-	7.7857 56.6265 57.9407	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	Naphthalene CAS # 91-20-3.SEC Purity 99%	(Lot SKZ5N)	1,001.8	µg/mL	+/- +/- +/-	7.7553 56.4050 57.7141	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	1,2,3-Trichlorobenzene CAS # 87-61-6.SEC Purity 98%	(Lot A0043055)	1,005.9	µg/mL	+/- +/- +/-	7.7865 56.6321 57.9464	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.# 10910)

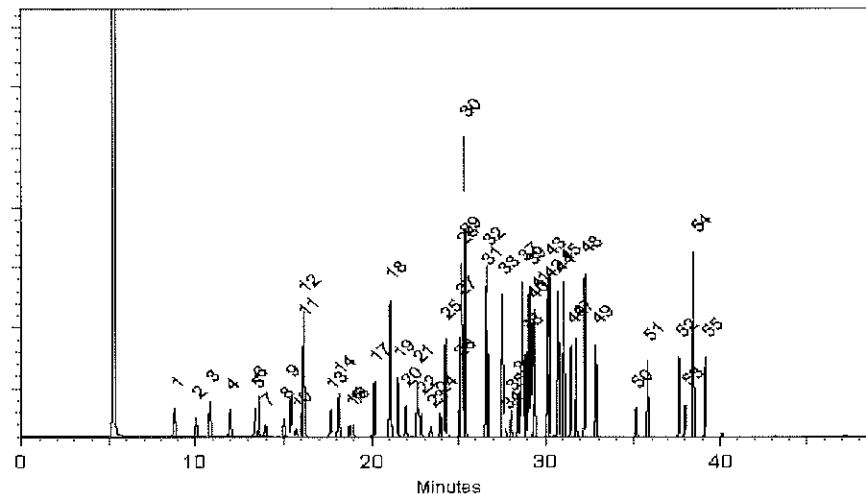
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael Mage

Date Mixed: 26-Apr-2019 **Balance:** 1127510105

Jennifer I. Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 30-Apr-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_Q#1B_00065



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569936-1.sec **Lot No.:** A0148625

Description : Custom Revised Q #1B Standard

Custom Revised Q #1B Standard 1,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1,1-Dichloroethene CAS # 75-35-4.SEC (Lot 5111300) Purity 99%	1,005.5 µg/mL	+/- 7.1750 µg/mL Gravimetric +/- 56.5279 µg/mL Unstressed +/- 57.8435 µg/mL Stressed
2	Methylene chloride (dichloromethane) CAS # 75-09-2.SEC (Lot FGM02) Purity 99%	1,004.5 µg/mL	+/- 7.1682 µg/mL Gravimetric +/- 56.4745 µg/mL Unstressed +/- 57.7888 µg/mL Stressed
3	trans-1,2-Dichloroethene CAS # 156-60-5.SEC (Lot TS5UB) Purity 97%	1,002.8 µg/mL	+/- 7.1558 µg/mL Gravimetric +/- 56.3767 µg/mL Unstressed +/- 57.6888 µg/mL Stressed
4	1,1-Dichloroethane CAS # 75-34-3.SEC (Lot 5379000) Purity 99%	1,006.8 µg/mL	+/- 7.1846 µg/mL Gravimetric +/- 56.6038 µg/mL Unstressed +/- 57.9211 µg/mL Stressed
5	2,2-Dichloropropane CAS # 594-20-7.SEC (Lot I7E8E) Purity 98%	1,003.2 µg/mL	+/- 7.7659 µg/mL Gravimetric +/- 56.4820 µg/mL Unstressed +/- 57.7928 µg/mL Stressed
6	cis-1,2-Dichloroethene CAS # 156-59-2.SEC (Lot HGC01-BLKT) Purity 98%	1,001.2 µg/mL	+/- 7.7507 µg/mL Gravimetric +/- 56.3716 µg/mL Unstressed +/- 57.6799 µg/mL Stressed
7	Chloroform CAS # 67-66-3.SEC (Lot 1297547) Purity 99%	1,004.5 µg/mL	+/- 7.1684 µg/mL Gravimetric +/- 56.4759 µg/mL Unstressed +/- 57.7903 µg/mL Stressed

8	1,1,1-trichloroethane CAS # 71-55-6 * Purity 99%	(Lot B15W12061)	1,000.9 µg/mL	+/- 7.1427 +/- 56.2735 +/- 57.5832	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,1-Dichloropropene CAS # 563-58-6.SEC Purity 96%	(Lot 4672600)	1,005.1 µg/mL	+/- 7.7804 +/- 56.5876 +/- 57.9008	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Carbon tetrachloride CAS # 56-23-5.SEC Purity 99%	(Lot 11466)	1,006.6 µg/mL	+/- 7.1828 +/- 56.5897 +/- 57.9068	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	1,2-Dichloroethane CAS # 107-06-2.SEC Purity 99%	(Lot FO6PK)	1,003.3 µg/mL	+/- 7.1598 +/- 56.4084 +/- 57.7212	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Benzene CAS # 71-43-2.SEC Purity 99%	(Lot B28Y008)	1,003.5 µg/mL	+/- 7.7683 +/- 56.4996 +/- 57.8109	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Trichloroethene CAS # 79-01-6.SEC Purity 99%	(Lot H04X050)	1,005.6 µg/mL	+/- 7.1760 +/- 56.5363 +/- 57.8521	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,2-Dichloropropane CAS # 78-87-5.SEC Purity 99%	(Lot OGG01)	1,004.3 µg/mL	+/- 7.1666 +/- 56.4618 +/- 57.7759	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Bromodichloromethane CAS # 75-27-4.SEC Purity 99%	(Lot 10171168)	1,006.2 µg/mL	+/- 7.1801 +/- 56.5686 +/- 57.8852	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Dibromomethane CAS # 74-95-3.SEC Purity 99%	(Lot FGI01-OICH)	1,006.1 µg/mL	+/- 7.7881 +/- 56.6438 +/- 57.9584	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	cis-1,3-Dichloropropene CAS # 10061-01-5.SEC Purity 99%	(Lot 4870A)	1,001.9 µg/mL	+/- 7.1498 +/- 56.3297 +/- 57.6407	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Toluene CAS # 108-88-3.SEC Purity 99%	(Lot YND2B-BD)	1,004.8 µg/mL	+/- 7.7782 +/- 56.5717 +/- 57.8846	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	trans-1,3-Dichloropropene CAS # 10061-02-6.SEC Purity 99%	(Lot ZDMSL)	1,002.6 µg/mL	+/- 7.1548 +/- 56.3691 +/- 57.6810	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	1,1,2-Trichloroethane CAS # 79-00-5.SEC Purity 98%	(Lot 3440900)	1,007.8 µg/mL	+/- 7.1920 +/- 56.6618 +/- 57.9805	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,3-Dichloropropane CAS # 142-28-9.SEC Purity 99%	(Lot AGN01-EFPC)	1,003.8 µg/mL	+/- 7.7708 +/- 56.5177 +/- 57.8293	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Tetrachloroethene CAS # 127-18-4.SEC Purity 99%	(Lot F09W014)	1,004.1 µg/mL	+/- 7.1652 +/- 56.4506 +/- 57.7644	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	Dibromochloromethane CAS # 124-48-1.SEC Purity 97%	(Lot 10181507)	1,009.5 µg/mL	+/- 7.2035 +/- 56.7530 +/- 58.0739	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	1,2-Dibromoethane (EDB) CAS # 106-93-4.SEC Purity 99%	(Lot 3505900)	1,007.8 µg/mL	+/- 7.8017 +/- 56.7429 +/- 58.0598	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1-Chlorohexane CAS # 544-10-5.SEC Purity 99%	(Lot 8171700)	1,001.0 µg/mL	+/- 5.8744 +/- 56.1308 +/- 57.4439	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Chlorobenzene CAS # 108-90-7.SEC Purity 99%	(Lot 1161936)	1,004.8 µg/mL	+/- 7.1703 +/- 56.4913 +/- 57.8061	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	1,1,1,2-Tetrachloroethane CAS # 630-20-6.SEC Purity 99%	(Lot GC01)	1,003.4 µg/mL	+/- 7.7677 +/- 56.4951 +/- 57.8063	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethylbenzene CAS # 100-41-4.SEC Purity 99%	(Lot PI4SE)	1,003.4 µg/mL	+/- 7.7677 +/- 56.4951 +/- 57.8063	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	m-Xylene CAS # 108-38-3.SEC Purity 99%	(Lot OUKMG-GB)	1,005.9 µg/mL	+/- 7.7869 +/- 56.6348 +/- 57.9491	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	p-Xylene CAS # 106-42-3.SEC Purity 99%	(Lot GM01)	1,008.3 µg/mL	+/- 7.8054 +/- 56.7699 +/- 58.0874	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	o-Xylene CAS # 95-47-6.SEC Purity 99%	(Lot FGL01)	1,005.8 µg/mL	+/- 7.7862 +/- 56.6303 +/- 57.9445	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Styrene CAS # 100-42-5.SEC Purity 99%	(Lot QGQ7F)	1,001.1 µg/mL	+/- 7.7497 +/- 56.3645 +/- 57.6726	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Isopropylbenzene (cumene) CAS # 98-82-8.SEC Purity 99%	(Lot WVREC)	1,004.3 µg/mL	+/- 7.7745 +/- 56.5447 +/- 57.8570	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Bromoform CAS # 75-25-2.SEC Purity 98%	(Lot 5197400)	1,005.7 µg/mL	+/- 7.1764 +/- 56.5392 +/- 57.8551	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,1,2,2-Tetrachloroethane CAS # 79-34-5.SEC Purity 99%	(Lot CFA4D-AQ)	1,006.8 µg/mL	+/- 7.1848 +/- 56.6052 +/- 57.9226	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,2,3-Trichloropropane CAS # 96-18-4.SEC Purity 98%	(Lot OGI01)	1,002.4 µg/mL	+/- 7.7598 +/- 56.4378 +/- 57.7477	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	n-Propylbenzene CAS # 103-65-1.SEC Purity 99%	(Lot T2HFC)	1,007.8 µg/mL	+/- 7.8011 +/- 56.7384 +/- 58.0551	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	Bromobenzene CAS # 108-86-1.SEC Purity 99%	(Lot 2FUHG-EM)	1,004.8 µg/mL	+/- 7.7782 +/- 56.5717 +/- 57.8846	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	1,3,5-Trichlorobenzene CAS # 108-70-3.SEC Purity 99%	(Lot I28U021)	1,002.0 µg/mL	+/- 5.8803 +/- 56.1868 +/- 57.5013	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	2-Chlorotoluene CAS # 95-49-8.SEC Purity 99%	(Lot SW8QG-AO)	1,008.1	µg/mL	+/-	7.8036	µg/mL	Gravimetric
					+/-	56.7564	µg/mL	Unstressed
					+/-	58.0736	µg/mL	Stressed
41	4-Chlorotoluene CAS # 106-43-4.SEC Purity 99%	(Lot P4XHJ-AO)	1,002.1	µg/mL	+/-	7.7571	µg/mL	Gravimetric
					+/-	56.4186	µg/mL	Unstressed
					+/-	57.7279	µg/mL	Stressed
42	tert-Butylbenzene CAS # 98-06-6.SEC Purity 99%	(Lot D6OHC)	1,004.2	µg/mL	+/-	7.7732	µg/mL	Gravimetric
					+/-	56.5357	µg/mL	Unstressed
					+/-	57.8478	µg/mL	Stressed
43	1,2,4-Trimethylbenzene CAS # 95-63-6.SEC Purity 99%	(Lot SC7LO-QA)	1,009.5	µg/mL	+/-	7.8147	µg/mL	Gravimetric
					+/-	56.8374	µg/mL	Unstressed
					+/-	58.1565	µg/mL	Stressed
44	sec-Butylbenzene CAS # 135-98-8.SEC Purity 99%	(Lot O4HRF)	1,006.9	µg/mL	+/-	7.7943	µg/mL	Gravimetric
					+/-	56.6888	µg/mL	Unstressed
					+/-	58.0044	µg/mL	Stressed
45	4-Isopropyltoluene (p-cymene) CAS # 99-87-6.SEC Purity 96%	(Lot 1195000)	1,000.0	µg/mL	+/-	7.7410	µg/mL	Gravimetric
					+/-	56.3015	µg/mL	Unstressed
					+/-	57.6081	µg/mL	Stressed
46	1,3-Dichlorobenzene CAS # 541-73-1.SEC Purity 99%	(Lot FMDFD)	1,003.3	µg/mL	+/-	7.1593	µg/mL	Gravimetric
					+/-	56.4042	µg/mL	Unstressed
					+/-	57.7169	µg/mL	Stressed
47	1,4-Dichlorobenzene CAS # 106-46-7.SEC Purity 99%	(Lot 4Y5DC)	1,008.5	µg/mL	+/-	7.1967	µg/mL	Gravimetric
					+/-	56.6994	µg/mL	Unstressed
					+/-	58.0189	µg/mL	Stressed
48	n-Butylbenzene CAS # 104-51-8.SEC Purity 99%	(Lot MMPGA)	1,005.4	µg/mL	+/-	7.7825	µg/mL	Gravimetric
					+/-	56.6032	µg/mL	Unstressed
					+/-	57.9169	µg/mL	Stressed
49	1,2-Dichlorobenzene CAS # 95-50-1.SEC Purity 99%	(Lot 4NRGF-OT)	1,006.8	µg/mL	+/-	7.1842	µg/mL	Gravimetric
					+/-	56.6010	µg/mL	Unstressed
					+/-	57.9183	µg/mL	Stressed
50	1,2-Dibromo-3-chloropropane CAS # 96-12-8.SEC Purity 98%	(Lot LC00408V)	1,002.7	µg/mL	+/-	7.7616	µg/mL	Gravimetric
					+/-	56.4511	µg/mL	Unstressed
					+/-	57.7612	µg/mL	Stressed
51	1,3,5-Trimethylbenzene CAS # 108-67-8.SEC Purity 99%	(Lot FGH02-CMLN)	1,002.2	µg/mL	+/-	7.7584	µg/mL	Gravimetric
					+/-	56.4276	µg/mL	Unstressed
					+/-	57.7371	µg/mL	Stressed
52	1,2,4-Trichlorobenzene CAS # 120-82-1.SEC Purity 99%	(Lot 3LYYC)	1,007.2	µg/mL	+/-	7.7968	µg/mL	Gravimetric
					+/-	56.7068	µg/mL	Unstressed
					+/-	58.0229	µg/mL	Stressed
53	Hexachlorobutadiene CAS # 87-68-3.SEC Purity 97%	(Lot 5526800)	1,005.8	µg/mL	+/-	7.7857	µg/mL	Gravimetric
					+/-	56.6265	µg/mL	Unstressed
					+/-	57.9407	µg/mL	Stressed
54	Naphthalene CAS # 91-20-3.SEC Purity 99%	(Lot SKZ5N)	1,001.8	µg/mL	+/-	7.7553	µg/mL	Gravimetric
					+/-	56.4050	µg/mL	Unstressed
					+/-	57.7141	µg/mL	Stressed
55	1,2,3-Trichlorobenzene CAS # 87-61-6.SEC Purity 98%	(Lot A0043055)	1,005.9	µg/mL	+/-	7.7865	µg/mL	Gravimetric
					+/-	56.6321	µg/mL	Unstressed
					+/-	57.9464	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.# 10910)

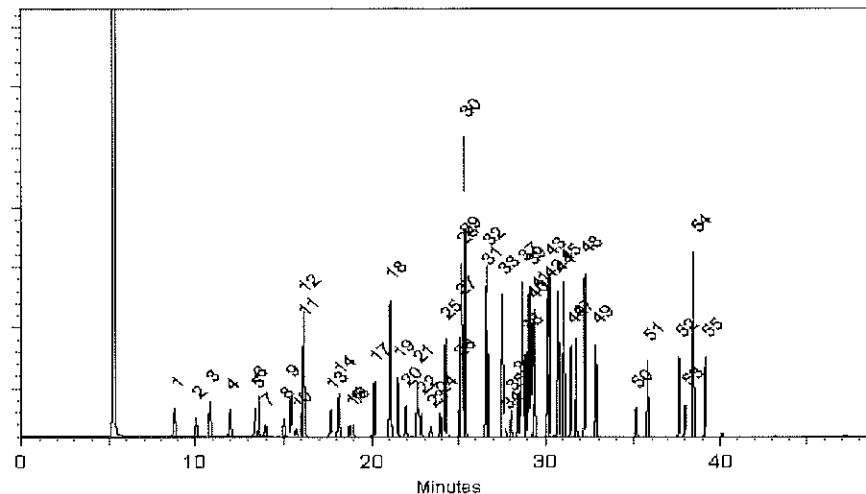
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael Mage

Date Mixed: 26-Apr-2019 **Balance:** 1127510105

Jennifer I. Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 30-Apr-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_Q#3B_00049



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 56736.SEC Lot No.: A0158722

Description: Custom Q #3B Standard

Custom Q #3B Standard 1,000-7,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size: 2 mL Pkg Amt: > 1 mL

Expiration Date: September 30, 2021 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Acetone CAS # 67-64-1.SEC (Lot U13B039) Purity 99%	7,550.0 µg/mL	+/- 44.3076 µg/mL Gravimetric +/- 373.5308 µg/mL Unstressed +/- 382.8166 µg/mL Stressed
2	Acrylonitrile CAS # 107-13-1.SEC (Lot CCFKL-GL) Purity 99%	5,003.0 µg/mL	+/- 29.3604 µg/mL Gravimetric +/- 247.5198 µg/mL Unstressed +/- 253.6730 µg/mL Stressed
3	2-Butanone (MEK) CAS # 78-93-3.SEC (Lot RGZ2A) Purity 99%	7,517.0 µg/mL	+/- 44.1140 µg/mL Gravimetric +/- 371.8982 µg/mL Unstressed +/- 381.1434 µg/mL Stressed
4	Tetrahydrofuran CAS # 109-99-9.SEC (Lot 8DAOJ) Purity 99%	5,023.0 µg/mL	+/- 29.4778 µg/mL Gravimetric +/- 248.5093 µg/mL Unstressed +/- 254.6871 µg/mL Stressed
5	2-Nitropropane CAS # 79-46-9.SEC (Lot Y4YWD) Purity 98%	1,000.6 µg/mL	+/- 5.9431 µg/mL Gravimetric +/- 49.5115 µg/mL Unstressed +/- 50.7419 µg/mL Stressed
6	4-Methyl-2-pentanone (MIBK) CAS # 108-10-1.SEC (Lot E29T040) Purity 99%	5,032.0 µg/mL	+/- 29.5306 µg/mL Gravimetric +/- 248.9546 µg/mL Unstressed +/- 255.1435 µg/mL Stressed
7	2-Hexanone CAS # 591-78-6.SEC (Lot Y3TUO) Purity 98%	5,036.2 µg/mL	+/- 29.5554 µg/mL Gravimetric +/- 249.1634 µg/mL Unstressed +/- 255.3574 µg/mL Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

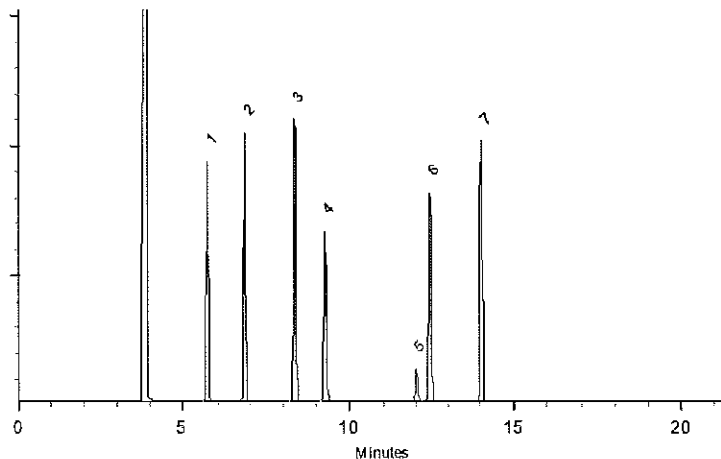
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

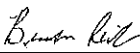
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Brandon Reish - Mix Technician

Date Mixed: 11-Mar-2020 **Balance:** 1127510105


Justine Albarton - Operations Tech-ARM QC

Date Passed: 19-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_Q#3B_00057



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 56736.SEC Lot No.: A0158722
Description: Custom Q #3B Standard
Custom Q #3B Standard 1,000-7,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul
Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: September 30, 2021 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Acetone CAS # 67-64-1.SEC (Lot U13B039) Purity 99%	7,550.0 µg/mL	+/- 44.3076 µg/mL Gravimetric +/- 373.5308 µg/mL Unstressed +/- 382.8166 µg/mL Stressed
2	Acrylonitrile CAS # 107-13-1.SEC (Lot CCFKL-GL) Purity 99%	5,003.0 µg/mL	+/- 29.3604 µg/mL Gravimetric +/- 247.5198 µg/mL Unstressed +/- 253.6730 µg/mL Stressed
3	2-Butanone (MEK) CAS # 78-93-3.SEC (Lot RGZ2A) Purity 99%	7,517.0 µg/mL	+/- 44.1140 µg/mL Gravimetric +/- 371.8982 µg/mL Unstressed +/- 381.1434 µg/mL Stressed
4	Tetrahydrofuran CAS # 109-99-9.SEC (Lot 8DAOJ) Purity 99%	5,023.0 µg/mL	+/- 29.4778 µg/mL Gravimetric +/- 248.5093 µg/mL Unstressed +/- 254.6871 µg/mL Stressed
5	2-Nitropropane CAS # 79-46-9.SEC (Lot Y4YWD) Purity 98%	1,000.6 µg/mL	+/- 5.9431 µg/mL Gravimetric +/- 49.5115 µg/mL Unstressed +/- 50.7419 µg/mL Stressed
6	4-Methyl-2-pentanone (MIBK) CAS # 108-10-1.SEC (Lot E29T040) Purity 99%	5,032.0 µg/mL	+/- 29.5306 µg/mL Gravimetric +/- 248.9546 µg/mL Unstressed +/- 255.1435 µg/mL Stressed
7	2-Hexanone CAS # 591-78-6.SEC (Lot Y3TUO) Purity 98%	5,036.2 µg/mL	+/- 29.5554 µg/mL Gravimetric +/- 249.1634 µg/mL Unstressed +/- 255.3574 µg/mL Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

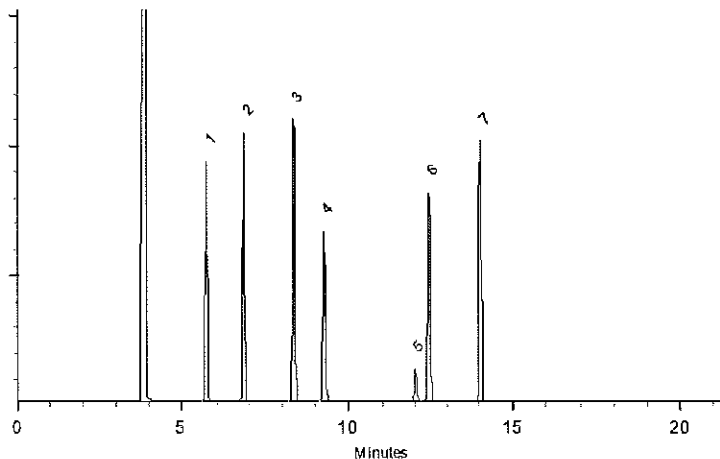
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 11-Mar-2020 **Balance:** 1127510105

Justine Albarton - Operations Tech-ARM QC

Date Passed: 19-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_Q#4C_00055



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 572312.SEC Lot No.: A0158704
Description : Custom Q #4C (Rev 3) Standard
Custom Q #4C (Rev 3) Standard 1,000µg/mL, P&T Methanol,
1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : March 31, 2021 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1,3-Butadiene CAS # 106-99-0.SEC (Lot 24033) Purity 99%	999.8 µg/mL	+/- 9.3559 µg/mL Gravimetric +/- 60.7686 µg/mL Unstressed +/- 60.9107 µg/mL Stressed
2	1,2-Dichloro-1,1,2-trifluoroethane (CFC-123a) CAS # 354-23-4 * (Lot Q9B-64) Purity 99%	998.8 µg/mL	+/- 17.4916 µg/mL Gravimetric +/- 62.4823 µg/mL Unstressed +/- 62.6203 µg/mL Stressed
3	n-Pentane (C5) CAS # 109-66-0.SEC (Lot FGH02) Purity 99%	1,002.5 µg/mL	+/- 5.8832 µg/mL Gravimetric +/- 60.4906 µg/mL Unstressed +/- 60.6341 µg/mL Stressed
4	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1.SEC (Lot 18342) Purity 99%	1,003.5 µg/mL	+/- 5.8891 µg/mL Gravimetric +/- 60.5509 µg/mL Unstressed +/- 60.6946 µg/mL Stressed
5	Iodomethane (methyl iodide) CAS # 74-88-4.SEC (Lot Y25A027) Purity 99%	1,008.0 µg/mL	+/- 5.9155 µg/mL Gravimetric +/- 60.8224 µg/mL Unstressed +/- 60.9668 µg/mL Stressed
6	Carbon disulfide CAS # 75-15-0.SEC (Lot MKBL1376V) Purity 99%	1,005.0 µg/mL	+/- 5.8979 µg/mL Gravimetric +/- 60.6414 µg/mL Unstressed +/- 60.7854 µg/mL Stressed
7	Methyl-tert-butyl ether (MTBE) CAS # 1634-04-4.SEC (Lot ZHKYA) Purity 99%	1,002.0 µg/mL	+/- 5.8803 µg/mL Gravimetric +/- 60.4604 µg/mL Unstressed +/- 60.6039 µg/mL Stressed

8	n-Hexane (C6) CAS # 110-54-3.SEC Purity 99%	(Lot 10188491)	1,002.0	µg/mL	+/-	5.8803	µg/mL	Gravimetric
					+/-	60.4604	µg/mL	Unstressed
					+/-	60.6039	µg/mL	Stressed
9	Diisopropyl ether (DIPE) CAS # 108-20-3.SEC Purity 99%	(Lot LL7TN-SH)	1,003.0	µg/mL	+/-	5.8862	µg/mL	Gravimetric
					+/-	60.5207	µg/mL	Unstressed
					+/-	60.6644	µg/mL	Stressed
10	Chloroprene (2-chloro-1,3-butadiene) CAS # 126-99-8 * Purity 99%	(Lot 191204JLM)	1,001.5	µg/mL	+/-	5.8774	µg/mL	Gravimetric
					+/-	60.4302	µg/mL	Unstressed
					+/-	60.5737	µg/mL	Stressed
11	Ethyl-tert-butyl ether (ETBE) CAS # 637-92-3.SEC Purity 99%	(Lot MHBIG-QK)	1,001.0	µg/mL	+/-	5.8744	µg/mL	Gravimetric
					+/-	60.4000	µg/mL	Unstressed
					+/-	60.5434	µg/mL	Stressed
12	Cyclohexane CAS # 110-82-7.SEC Purity 99%	(Lot YADRA)	1,001.5	µg/mL	+/-	5.8774	µg/mL	Gravimetric
					+/-	60.4302	µg/mL	Unstressed
					+/-	60.5737	µg/mL	Stressed
13	tert-Amyl methyl ether (TAME) CAS # 994-05-8.SEC Purity 99%	(Lot 8471400)	1,006.0	µg/mL	+/-	5.9038	µg/mL	Gravimetric
					+/-	60.7017	µg/mL	Unstressed
					+/-	60.8458	µg/mL	Stressed
14	n-Heptane (C7) CAS # 142-82-5.SEC Purity 99%	(Lot OGM01)	1,006.0	µg/mL	+/-	5.9038	µg/mL	Gravimetric
					+/-	60.7017	µg/mL	Unstressed
					+/-	60.8458	µg/mL	Stressed
15	tert-Amyl ethyl ether (TAEE) CAS # 919-94-8.SEC Purity 99%	(Lot 6455100)	1,006.0	µg/mL	+/-	5.9038	µg/mL	Gravimetric
					+/-	60.7017	µg/mL	Unstressed
					+/-	60.8458	µg/mL	Stressed
16	Methyl methacrylate CAS # 80-62-6.SEC Purity 99%	(Lot G01X021)	1,006.0	µg/mL	+/-	5.9038	µg/mL	Gravimetric
					+/-	60.7017	µg/mL	Unstressed
					+/-	60.8458	µg/mL	Stressed
17	Ethyl methacrylate CAS # 97-63-2.SEC Purity 99%	(Lot MLWYK-LS)	1,004.5	µg/mL	+/-	5.8950	µg/mL	Gravimetric
					+/-	60.6112	µg/mL	Unstressed
					+/-	60.7551	µg/mL	Stressed
18	Benzyl chloride CAS # 100-44-7.SEC Purity 99%	(Lot H29N03)	1,003.5	µg/mL	+/-	5.8891	µg/mL	Gravimetric
					+/-	60.5509	µg/mL	Unstressed
					+/-	60.6946	µg/mL	Stressed
Solvent: P&T Methanol								
	CAS # 67-56-1							
	Purity 99%							

* Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.

Tech Tips:

Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

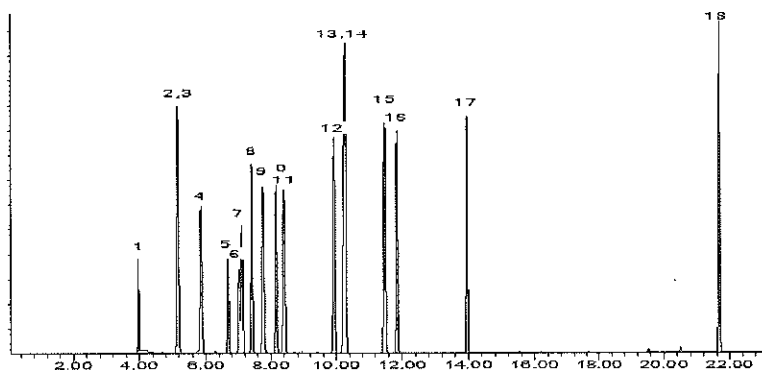
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

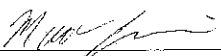
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Matt Fragassi - Mix Technician

Date Mixed: 11-Mar-2020 Balance: 1128342314


Feng-Yun Lo - QC Analyst

Date Passed: 25-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_Q#4C_00068



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 572312.SEC Lot No.: A0158704
Description : Custom Q #4C (Rev 3) Standard
Custom Q #4C (Rev 3) Standard 1,000µg/mL, P&T Methanol,
1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : March 31, 2021 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1,3-Butadiene CAS # 106-99-0.SEC (Lot 24033) Purity 99%	999.8 µg/mL	+/- 9.3559 µg/mL Gravimetric +/- 60.7686 µg/mL Unstressed +/- 60.9107 µg/mL Stressed
2	1,2-Dichloro-1,1,2-trifluoroethane (CFC-123a) CAS # 354-23-4 * (Lot Q9B-64) Purity 99%	998.8 µg/mL	+/- 17.4916 µg/mL Gravimetric +/- 62.4823 µg/mL Unstressed +/- 62.6203 µg/mL Stressed
3	n-Pentane (C5) CAS # 109-66-0.SEC (Lot FGH02) Purity 99%	1,002.5 µg/mL	+/- 5.8832 µg/mL Gravimetric +/- 60.4906 µg/mL Unstressed +/- 60.6341 µg/mL Stressed
4	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1.SEC (Lot 18342) Purity 99%	1,003.5 µg/mL	+/- 5.8891 µg/mL Gravimetric +/- 60.5509 µg/mL Unstressed +/- 60.6946 µg/mL Stressed
5	Iodomethane (methyl iodide) CAS # 74-88-4.SEC (Lot Y25A027) Purity 99%	1,008.0 µg/mL	+/- 5.9155 µg/mL Gravimetric +/- 60.8224 µg/mL Unstressed +/- 60.9668 µg/mL Stressed
6	Carbon disulfide CAS # 75-15-0.SEC (Lot MKBL1376V) Purity 99%	1,005.0 µg/mL	+/- 5.8979 µg/mL Gravimetric +/- 60.6414 µg/mL Unstressed +/- 60.7854 µg/mL Stressed
7	Methyl-tert-butyl ether (MTBE) CAS # 1634-04-4.SEC (Lot ZHKYA) Purity 99%	1,002.0 µg/mL	+/- 5.8803 µg/mL Gravimetric +/- 60.4604 µg/mL Unstressed +/- 60.6039 µg/mL Stressed

8	n-Hexane (C6) CAS # 110-54-3.SEC Purity 99%	(Lot 10188491)	1,002.0	µg/mL	+/-	5.8803	µg/mL	Gravimetric
					+/-	60.4604	µg/mL	Unstressed
					+/-	60.6039	µg/mL	Stressed
9	Diisopropyl ether (DIPE) CAS # 108-20-3.SEC Purity 99%	(Lot LL7TN-SH)	1,003.0	µg/mL	+/-	5.8862	µg/mL	Gravimetric
					+/-	60.5207	µg/mL	Unstressed
					+/-	60.6644	µg/mL	Stressed
10	Chloroprene (2-chloro-1,3-butadiene) CAS # 126-99-8 * Purity 99%	(Lot 191204JLM)	1,001.5	µg/mL	+/-	5.8774	µg/mL	Gravimetric
					+/-	60.4302	µg/mL	Unstressed
					+/-	60.5737	µg/mL	Stressed
11	Ethyl-tert-butyl ether (ETBE) CAS # 637-92-3.SEC Purity 99%	(Lot MHBIG-QK)	1,001.0	µg/mL	+/-	5.8744	µg/mL	Gravimetric
					+/-	60.4000	µg/mL	Unstressed
					+/-	60.5434	µg/mL	Stressed
12	Cyclohexane CAS # 110-82-7.SEC Purity 99%	(Lot YADRA)	1,001.5	µg/mL	+/-	5.8774	µg/mL	Gravimetric
					+/-	60.4302	µg/mL	Unstressed
					+/-	60.5737	µg/mL	Stressed
13	tert-Amyl methyl ether (TAME) CAS # 994-05-8.SEC Purity 99%	(Lot 8471400)	1,006.0	µg/mL	+/-	5.9038	µg/mL	Gravimetric
					+/-	60.7017	µg/mL	Unstressed
					+/-	60.8458	µg/mL	Stressed
14	n-Heptane (C7) CAS # 142-82-5.SEC Purity 99%	(Lot OGM01)	1,006.0	µg/mL	+/-	5.9038	µg/mL	Gravimetric
					+/-	60.7017	µg/mL	Unstressed
					+/-	60.8458	µg/mL	Stressed
15	tert-Amyl ethyl ether (TAEE) CAS # 919-94-8.SEC Purity 99%	(Lot 6455100)	1,006.0	µg/mL	+/-	5.9038	µg/mL	Gravimetric
					+/-	60.7017	µg/mL	Unstressed
					+/-	60.8458	µg/mL	Stressed
16	Methyl methacrylate CAS # 80-62-6.SEC Purity 99%	(Lot G01X021)	1,006.0	µg/mL	+/-	5.9038	µg/mL	Gravimetric
					+/-	60.7017	µg/mL	Unstressed
					+/-	60.8458	µg/mL	Stressed
17	Ethyl methacrylate CAS # 97-63-2.SEC Purity 99%	(Lot MLWYK-LS)	1,004.5	µg/mL	+/-	5.8950	µg/mL	Gravimetric
					+/-	60.6112	µg/mL	Unstressed
					+/-	60.7551	µg/mL	Stressed
18	Benzyl chloride CAS # 100-44-7.SEC Purity 99%	(Lot H29N03)	1,003.5	µg/mL	+/-	5.8891	µg/mL	Gravimetric
					+/-	60.5509	µg/mL	Unstressed
					+/-	60.6946	µg/mL	Stressed
Solvent: P&T Methanol								
	CAS # 67-56-1							
	Purity 99%							

* Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.

Tech Tips:

Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

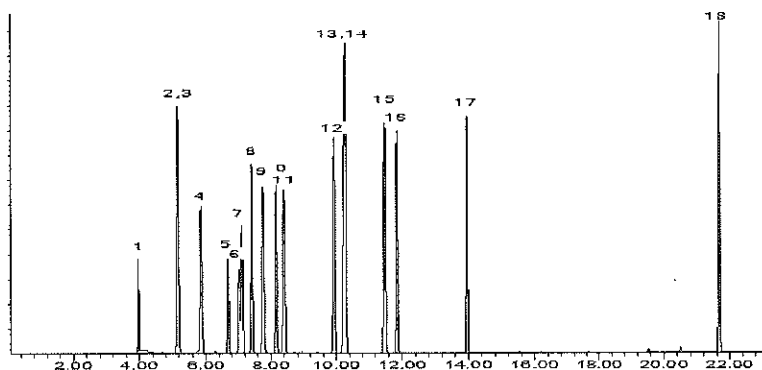
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

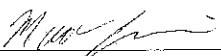
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Matt Fragassi - Mix Technician

Date Mixed: 11-Mar-2020 Balance: 1128342314


Feng-Yun Le - QC Analyst

Date Passed: 25-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_REV4_B_00010



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 558270B Lot No.: A0158527
Description : Custom REV 4 Standard Mix B
Custom REV 4 Standard Mix B 2,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : March 31, 2021 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Methyl acrylate CAS # 96-33-3 Purity 99% (Lot SHBG6616V)	2,506.0 µg/mL	+/- 14.8849 µg/mL Gravimetric +/- 151.2287 µg/mL Unstressed +/- 151.5876 µg/mL Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

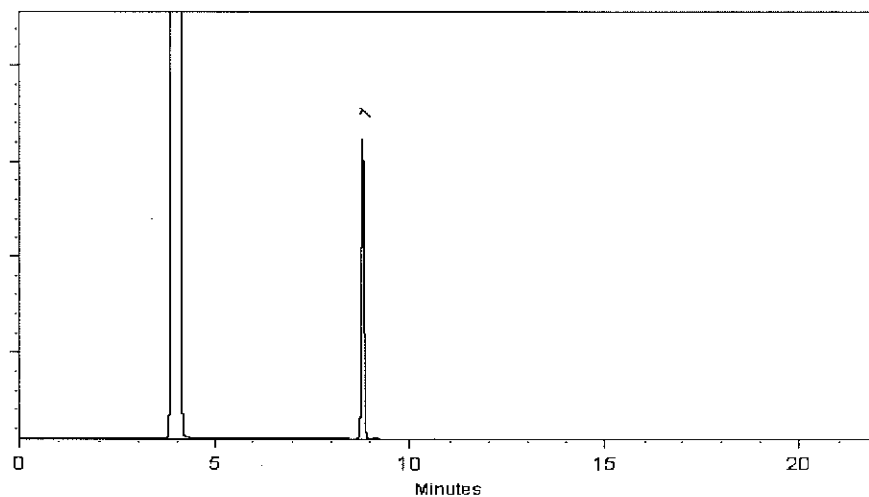
200°C

Det. Temp:

250°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Kyle Struble
Kyle Struble - Operations Technician I

Date Mixed: 05-Mar-2020

Balance: B251644995

Jennifer Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 11-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V#1B_00105



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 569936-1 **Lot No.:** A0158586

Description: Custom Revised V #1B Standard

Custom Revised V #1B Standard 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: March 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1,1-dichloroethene CAS # 75-35-4 (Lot SHBK2437) Purity 99%	5,011.4 µg/mL	+/- 31.9644 µg/mL	Gravimetric		
			+/- 281.2901 µg/mL	Unstressed		
			+/- 287.8577 µg/mL	Stressed		
2	Methylene chloride (dichloromethane) CAS # 75-09-2 (Lot SHBL3107) Purity 99%	5,004.6 µg/mL	+/- 31.9213 µg/mL	Gravimetric		
			+/- 280.9112 µg/mL	Unstressed		
			+/- 287.4700 µg/mL	Stressed		
3	trans-1,2-Dichloroethene CAS # 156-60-5 (Lot MKBH9850V) Purity 99%	5,017.5 µg/mL	+/- 32.0035 µg/mL	Gravimetric		
			+/- 281.6339 µg/mL	Unstressed		
			+/- 288.2096 µg/mL	Stressed		
4	1,1-Dichloroethane CAS # 75-34-3 (Lot 580900) Purity 99%	5,020.4 µg/mL	+/- 32.0218 µg/mL	Gravimetric		
			+/- 281.7953 µg/mL	Unstressed		
			+/- 288.3747 µg/mL	Stressed		
5	2,2-Dichloropropane CAS # 594-20-7 (Lot BCBT5124) Purity 99%	5,050.0 µg/mL	+/- 32.0202 µg/mL	Gravimetric		
			+/- 283.4366 µg/mL	Unstressed		
			+/- 290.0553 µg/mL	Stressed		
6	cis-1,2-Dichloroethene CAS # 156-59-2 (Lot MKBX5945V) Purity 99%	5,046.5 µg/mL	+/- 31.9980 µg/mL	Gravimetric		
			+/- 283.2401 µg/mL	Unstressed		
			+/- 289.8543 µg/mL	Stressed		
7	chloroform CAS # 67-66-3 (Lot SHBJ9076) Purity 99%	5,034.3 µg/mL	+/- 32.1103 µg/mL	Gravimetric		
			+/- 282.5741 µg/mL	Unstressed		
			+/- 289.1717 µg/mL	Stressed		

8	1,1,1-trichloroethane CAS # 71-55-6 Purity 98%	(Lot 190123CG)	5,001.3	µg/mL	+/- +/- +/-	31.9002 280.7250 287.2795	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,1-Dichloropropene CAS # 563-58-6 Purity 99%	(Lot 170301JLM)	5,048.9	µg/mL	+/- +/- +/-	32.0131 283.3734 289.9907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	carbon tetrachloride CAS # 56-23-5 Purity 99%	(Lot SHBG8938V)	5,022.9	µg/mL	+/- +/- +/-	32.0378 281.9356 288.5183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	(Lot MKCH9948)	5,007.9	µg/mL	+/- +/- +/-	31.9421 281.0937 287.6567	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Benzene CAS # 71-43-2 Purity 99%	(Lot SHBG7317V)	5,042.9	µg/mL	+/- +/- +/-	31.9750 283.0367 289.6461	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Trichloroethene CAS # 79-01-6 Purity 99%	(Lot SHBJ4611)	5,012.9	µg/mL	+/- +/- +/-	31.9740 281.3743 287.9439	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	(Lot BCBR0882V)	5,012.6	µg/mL	+/- +/- +/-	31.9724 281.3603 287.9295	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	bromodichloromethane CAS # 75-27-4 Purity 99%	(Lot MKCJ0238)	5,039.1	µg/mL	+/- +/- +/-	32.1414 282.8477 289.4517	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Dibromomethane CAS # 74-95-3 Purity 99%	(Lot 10201030)	5,047.3	µg/mL	+/- +/- +/-	32.0027 283.2822 289.8973	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	(Lot 200107JLM)	5,015.1	µg/mL	+/- +/- +/-	31.9883 281.5006 288.0731	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Toluene CAS # 108-88-3 Purity 99%	(Lot SHBH9895)	5,031.9	µg/mL	+/- +/- +/-	31.9053 282.4193 289.0143	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 99%	(Lot 19420164-D1219)	5,003.8	µg/mL	+/- +/- +/-	31.9158 280.8621 287.4198	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	(Lot FGB01)	5,015.4	µg/mL	+/- +/- +/-	31.9899 281.5146 288.0875	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	(Lot BCBG2162V)	5,042.4	µg/mL	+/- +/- +/-	31.9718 283.0086 289.6173	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Tetrachloroethene CAS # 127-18-4 Purity 99%	(Lot SHBJ7422)	5,014.3	µg/mL	+/- +/- +/-	31.9827 281.4515 288.0229	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	dibromochloromethane CAS # 124-48-1 Purity 99%	(Lot MKCK6472)	5,016.1	µg/mL	+/- +/- +/-	31.9947 281.5567 288.1306	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	1,2-Dibromoethane (EDB) CAS # 106-93-4 Purity 99%	(Lot BCBP2268V)	5,037.4 µg/mL	+/- +/- +/-	31.9401 282.7280 289.3302	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1-Chlorohexane CAS # 544-10-5 Purity 98%	(Lot BCBS3368V)	5,010.7 µg/mL	+/- +/- +/-	29.3390 280.9687 287.5420	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Chlorobenzene CAS # 108-90-7 Purity 99%	(Lot SHBJ0839)	5,009.0 µg/mL	+/- +/- +/-	31.9493 281.1568 287.7213	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	1,1,1,2-Tetrachloroethane CAS # 630-20-6 Purity 99%	(Lot MKBS3769V)	5,038.6 µg/mL	+/- +/- +/-	31.9481 282.7981 289.4020	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethylbenzene CAS # 100-41-4 Purity 99%	(Lot SHBJ3183)	5,029.3 µg/mL	+/- +/- +/-	31.8886 282.2719 288.8635	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	m-Xylene CAS # 108-38-3 Purity 99%	(Lot SHBH8323)	5,038.4 µg/mL	+/- +/- +/-	31.9465 282.7841 289.3876	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	p-Xylene CAS # 106-42-3 Purity 99%	(Lot SHBJ0052)	5,038.0 µg/mL	+/- +/- +/-	31.9441 282.7630 289.3661	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	o-Xylene CAS # 95-47-6 Purity 99%	(Lot SHBH3432V)	5,046.4 µg/mL	+/- +/- +/-	31.9972 283.2331 289.8471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Styrene CAS # 100-42-5 Purity 99%	(Lot MKBV4061V)	5,047.0 µg/mL	+/- +/- +/-	32.0012 283.2682 289.8830	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Isopropylbenzene (cumene) CAS # 98-82-8 Purity 99%	(Lot 10185056)	5,035.3 µg/mL	+/- +/- +/-	31.9267 282.6087 289.2081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	bromoform CAS # 75-25-2 Purity 99%	(Lot SHBJ4835)	5,013.0 µg/mL	+/- +/- +/-	31.9748 281.3813 287.9511	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,1,2,2-Tetrachloroethane CAS # 79-34-5 Purity 99%	(Lot CFA4D)	5,016.0 µg/mL	+/- +/- +/-	31.9939 281.5497 288.1234	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,2,3-Trichloropropane CAS # 96-18-4 Purity 99%	(Lot BCBH8722V)	5,033.4 µg/mL	+/- +/- +/-	31.9148 282.5035 289.1004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	n-Propylbenzene CAS # 103-65-1 Purity 99%	(Lot MKBJ0332V)	5,032.4 µg/mL	+/- +/- +/-	31.9084 282.4473 289.0430	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot WXBC5147V)	5,035.5 µg/mL	+/- +/- +/-	31.9282 282.6227 289.2225	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBS7648V)	5,029.8 µg/mL	+/- +/- +/-	31.8918 282.3000 288.8922	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBW5554V)	5,037.5 µg/mL	+/- +/- +/-	31.9409 282.7350 289.3373	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBL7753V)	5,039.1 µg/mL	+/- +/- +/-	31.9512 282.8262 289.4307	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot STBD6954V)	5,049.8 µg/mL	+/- +/- +/-	32.0186 283.4225 290.0409	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 98%	(Lot MKBJ6229V)	5,046.8 µg/mL	+/- +/- +/-	31.9996 283.2544 289.8689	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBR9260V)	5,042.8 µg/mL	+/- +/- +/-	31.9742 283.0296 289.6389	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBV3556V)	5,038.4 µg/mL	+/- +/- +/-	31.9465 282.7841 289.3876	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBQ7100V)	5,017.6 µg/mL	+/- +/- +/-	32.0043 281.6409 288.2167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBS4401V)	5,023.8 µg/mL	+/- +/- +/-	32.0433 281.9847 288.5686	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09804AE)	5,024.8 µg/mL	+/- +/- +/-	31.8601 282.0194 288.6050	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot SHBG3111V)	5,024.5 µg/mL	+/- +/- +/-	32.0481 282.0268 288.6117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01)	5,036.4 µg/mL	+/- +/- +/-	31.9338 282.6718 289.2727	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	1,3,5-Trichlorobenzene CAS # 108-70-3 Purity 99%	(Lot 11319AS)	5,034.0 µg/mL	+/- +/- +/-	29.4752 282.2729 288.8768	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot SHBJ0905)	5,036.5 µg/mL	+/- +/- +/-	31.9346 282.6789 289.2799	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	Hexachlorobutadiene CAS # 87-68-3 Purity 99%	(Lot J31X013)	5,033.6 µg/mL	+/- +/- +/-	31.9164 282.5175 289.1148	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBW2603V)	5,033.6 µg/mL	+/- +/- +/-	31.9164 282.5175 289.1148	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	1,2,3-Trichlorobenzene CAS # 87-61-6 Purity 99%	(Lot MKBS4859V)	5,016.0 µg/mL	+/- +/- +/-	31.8046 281.5283 288.1024	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.# 10910)

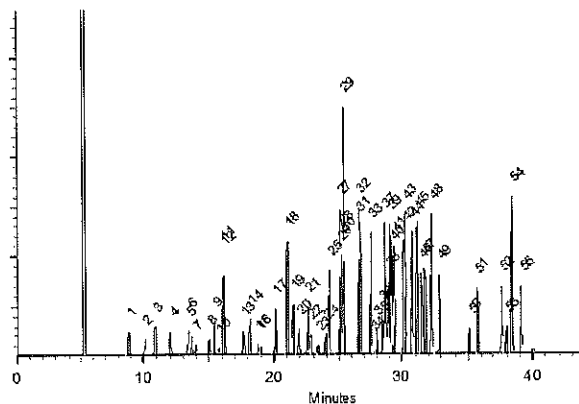
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cyndee L. Crust
Cyndee L. Crust - Mix Technician

Date Mixed: 09-Mar-2020

Balance: B251644995

Feng-Yan Lo
Feng-Yan Lo - GC Analyst

Date Passed: 11-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V#1B_00114



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 569936-1 **Lot No.:** A0158586

Description: Custom Revised V #1B Standard

Custom Revised V #1B Standard 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: March 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1,1-dichloroethene CAS # 75-35-4 (Lot SHBK2437) Purity 99%	5,011.4 µg/mL	+/- 31.9644 µg/mL	Gravimetric		
			+/- 281.2901 µg/mL	Unstressed		
			+/- 287.8577 µg/mL	Stressed		
2	Methylene chloride (dichloromethane) CAS # 75-09-2 (Lot SHBL3107) Purity 99%	5,004.6 µg/mL	+/- 31.9213 µg/mL	Gravimetric		
			+/- 280.9112 µg/mL	Unstressed		
			+/- 287.4700 µg/mL	Stressed		
3	trans-1,2-Dichloroethene CAS # 156-60-5 (Lot MKBH9850V) Purity 99%	5,017.5 µg/mL	+/- 32.0035 µg/mL	Gravimetric		
			+/- 281.6339 µg/mL	Unstressed		
			+/- 288.2096 µg/mL	Stressed		
4	1,1-Dichloroethane CAS # 75-34-3 (Lot 580900) Purity 99%	5,020.4 µg/mL	+/- 32.0218 µg/mL	Gravimetric		
			+/- 281.7953 µg/mL	Unstressed		
			+/- 288.3747 µg/mL	Stressed		
5	2,2-Dichloropropane CAS # 594-20-7 (Lot BCBT5124) Purity 99%	5,050.0 µg/mL	+/- 32.0202 µg/mL	Gravimetric		
			+/- 283.4366 µg/mL	Unstressed		
			+/- 290.0553 µg/mL	Stressed		
6	cis-1,2-Dichloroethene CAS # 156-59-2 (Lot MKBX5945V) Purity 99%	5,046.5 µg/mL	+/- 31.9980 µg/mL	Gravimetric		
			+/- 283.2401 µg/mL	Unstressed		
			+/- 289.8543 µg/mL	Stressed		
7	chloroform CAS # 67-66-3 (Lot SHBJ9076) Purity 99%	5,034.3 µg/mL	+/- 32.1103 µg/mL	Gravimetric		
			+/- 282.5741 µg/mL	Unstressed		
			+/- 289.1717 µg/mL	Stressed		

8	1,1,1-trichloroethane CAS # 71-55-6 Purity 98%	(Lot 190123CG)	5,001.3	µg/mL	+/- +/- +/-	31.9002 280.7250 287.2795	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,1-Dichloropropene CAS # 563-58-6 Purity 99%	(Lot 170301JLM)	5,048.9	µg/mL	+/- +/- +/-	32.0131 283.3734 289.9907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	carbon tetrachloride CAS # 56-23-5 Purity 99%	(Lot SHBG8938V)	5,022.9	µg/mL	+/- +/- +/-	32.0378 281.9356 288.5183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	(Lot MKCH9948)	5,007.9	µg/mL	+/- +/- +/-	31.9421 281.0937 287.6567	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Benzene CAS # 71-43-2 Purity 99%	(Lot SHBG7317V)	5,042.9	µg/mL	+/- +/- +/-	31.9750 283.0367 289.6461	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Trichloroethene CAS # 79-01-6 Purity 99%	(Lot SHBJ4611)	5,012.9	µg/mL	+/- +/- +/-	31.9740 281.3743 287.9439	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	(Lot BCBR0882V)	5,012.6	µg/mL	+/- +/- +/-	31.9724 281.3603 287.9295	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	bromodichloromethane CAS # 75-27-4 Purity 99%	(Lot MKCJ0238)	5,039.1	µg/mL	+/- +/- +/-	32.1414 282.8477 289.4517	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Dibromomethane CAS # 74-95-3 Purity 99%	(Lot 10201030)	5,047.3	µg/mL	+/- +/- +/-	32.0027 283.2822 289.8973	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	(Lot 200107JLM)	5,015.1	µg/mL	+/- +/- +/-	31.9883 281.5006 288.0731	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Toluene CAS # 108-88-3 Purity 99%	(Lot SHBH9895)	5,031.9	µg/mL	+/- +/- +/-	31.9053 282.4193 289.0143	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 99%	(Lot 19420164-D1219)	5,003.8	µg/mL	+/- +/- +/-	31.9158 280.8621 287.4198	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	(Lot FGB01)	5,015.4	µg/mL	+/- +/- +/-	31.9899 281.5146 288.0875	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	(Lot BCBG2162V)	5,042.4	µg/mL	+/- +/- +/-	31.9718 283.0086 289.6173	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Tetrachloroethene CAS # 127-18-4 Purity 99%	(Lot SHBJ7422)	5,014.3	µg/mL	+/- +/- +/-	31.9827 281.4515 288.0229	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	dibromochloromethane CAS # 124-48-1 Purity 99%	(Lot MKCK6472)	5,016.1	µg/mL	+/- +/- +/-	31.9947 281.5567 288.1306	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	1,2-Dibromoethane (EDB) CAS # 106-93-4 Purity 99%	(Lot BCBP2268V)	5,037.4 µg/mL	+/- +/- +/-	31.9401 282.7280 289.3302	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1-Chlorohexane CAS # 544-10-5 Purity 98%	(Lot BCBS3368V)	5,010.7 µg/mL	+/- +/- +/-	29.3390 280.9687 287.5420	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Chlorobenzene CAS # 108-90-7 Purity 99%	(Lot SHBJ0839)	5,009.0 µg/mL	+/- +/- +/-	31.9493 281.1568 287.7213	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	1,1,1,2-Tetrachloroethane CAS # 630-20-6 Purity 99%	(Lot MKBS3769V)	5,038.6 µg/mL	+/- +/- +/-	31.9481 282.7981 289.4020	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethylbenzene CAS # 100-41-4 Purity 99%	(Lot SHBJ3183)	5,029.3 µg/mL	+/- +/- +/-	31.8886 282.2719 288.8635	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	m-Xylene CAS # 108-38-3 Purity 99%	(Lot SHBH8323)	5,038.4 µg/mL	+/- +/- +/-	31.9465 282.7841 289.3876	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	p-Xylene CAS # 106-42-3 Purity 99%	(Lot SHBJ0052)	5,038.0 µg/mL	+/- +/- +/-	31.9441 282.7630 289.3661	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	o-Xylene CAS # 95-47-6 Purity 99%	(Lot SHBH3432V)	5,046.4 µg/mL	+/- +/- +/-	31.9972 283.2331 289.8471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Styrene CAS # 100-42-5 Purity 99%	(Lot MKBV4061V)	5,047.0 µg/mL	+/- +/- +/-	32.0012 283.2682 289.8830	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Isopropylbenzene (cumene) CAS # 98-82-8 Purity 99%	(Lot 10185056)	5,035.3 µg/mL	+/- +/- +/-	31.9267 282.6087 289.2081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	bromoform CAS # 75-25-2 Purity 99%	(Lot SHBJ4835)	5,013.0 µg/mL	+/- +/- +/-	31.9748 281.3813 287.9511	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,1,2,2-Tetrachloroethane CAS # 79-34-5 Purity 99%	(Lot CFA4D)	5,016.0 µg/mL	+/- +/- +/-	31.9939 281.5497 288.1234	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,2,3-Trichloropropane CAS # 96-18-4 Purity 99%	(Lot BCBH8722V)	5,033.4 µg/mL	+/- +/- +/-	31.9148 282.5035 289.1004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	n-Propylbenzene CAS # 103-65-1 Purity 99%	(Lot MKBJ0332V)	5,032.4 µg/mL	+/- +/- +/-	31.9084 282.4473 289.0430	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot WXBC5147V)	5,035.5 µg/mL	+/- +/- +/-	31.9282 282.6227 289.2225	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBS7648V)	5,029.8 µg/mL	+/- +/- +/-	31.8918 282.3000 288.8922	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBW5554V)	5,037.5 µg/mL	+/-	31.9409 µg/mL	Gravimetric
				+/-	282.7350 µg/mL	Unstressed
				+/-	289.3373 µg/mL	Stressed
41	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBL7753V)	5,039.1 µg/mL	+/-	31.9512 µg/mL	Gravimetric
				+/-	282.8262 µg/mL	Unstressed
				+/-	289.4307 µg/mL	Stressed
42	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot STBD6954V)	5,049.8 µg/mL	+/-	32.0186 µg/mL	Gravimetric
				+/-	283.4225 µg/mL	Unstressed
				+/-	290.0409 µg/mL	Stressed
43	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 98%	(Lot MKBJ6229V)	5,046.8 µg/mL	+/-	31.9996 µg/mL	Gravimetric
				+/-	283.2544 µg/mL	Unstressed
				+/-	289.8689 µg/mL	Stressed
44	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBR9260V)	5,042.8 µg/mL	+/-	31.9742 µg/mL	Gravimetric
				+/-	283.0296 µg/mL	Unstressed
				+/-	289.6389 µg/mL	Stressed
45	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBV3556V)	5,038.4 µg/mL	+/-	31.9465 µg/mL	Gravimetric
				+/-	282.7841 µg/mL	Unstressed
				+/-	289.3876 µg/mL	Stressed
46	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBQ7100V)	5,017.6 µg/mL	+/-	32.0043 µg/mL	Gravimetric
				+/-	281.6409 µg/mL	Unstressed
				+/-	288.2167 µg/mL	Stressed
47	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBS4401V)	5,023.8 µg/mL	+/-	32.0433 µg/mL	Gravimetric
				+/-	281.9847 µg/mL	Unstressed
				+/-	288.5686 µg/mL	Stressed
48	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09804AE)	5,024.8 µg/mL	+/-	31.8601 µg/mL	Gravimetric
				+/-	282.0194 µg/mL	Unstressed
				+/-	288.6050 µg/mL	Stressed
49	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot SHBG3111V)	5,024.5 µg/mL	+/-	32.0481 µg/mL	Gravimetric
				+/-	282.0268 µg/mL	Unstressed
				+/-	288.6117 µg/mL	Stressed
50	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01)	5,036.4 µg/mL	+/-	31.9338 µg/mL	Gravimetric
				+/-	282.6718 µg/mL	Unstressed
				+/-	289.2727 µg/mL	Stressed
51	1,3,5-Trichlorobenzene CAS # 108-70-3 Purity 99%	(Lot 11319AS)	5,034.0 µg/mL	+/-	29.4752 µg/mL	Gravimetric
				+/-	282.2729 µg/mL	Unstressed
				+/-	288.8768 µg/mL	Stressed
52	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot SHBJ0905)	5,036.5 µg/mL	+/-	31.9346 µg/mL	Gravimetric
				+/-	282.6789 µg/mL	Unstressed
				+/-	289.2799 µg/mL	Stressed
53	Hexachlorobutadiene CAS # 87-68-3 Purity 99%	(Lot J31X013)	5,033.6 µg/mL	+/-	31.9164 µg/mL	Gravimetric
				+/-	282.5175 µg/mL	Unstressed
				+/-	289.1148 µg/mL	Stressed
54	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBW2603V)	5,033.6 µg/mL	+/-	31.9164 µg/mL	Gravimetric
				+/-	282.5175 µg/mL	Unstressed
				+/-	289.1148 µg/mL	Stressed
55	1,2,3-Trichlorobenzene CAS # 87-61-6 Purity 99%	(Lot MKBS4859V)	5,016.0 µg/mL	+/-	31.8046 µg/mL	Gravimetric
				+/-	281.5283 µg/mL	Unstressed
				+/-	288.1024 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.# 10910)

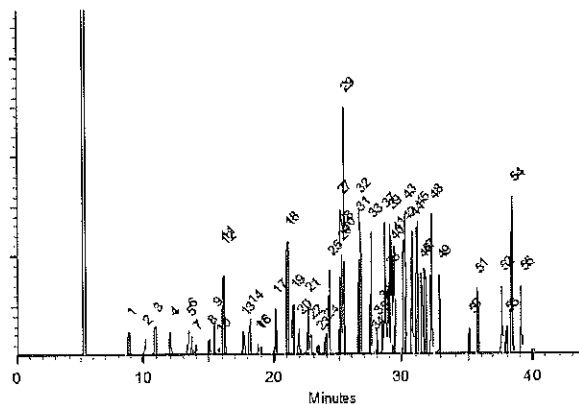
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cyndee L. Crust
Cyndee L. Crust - Mix Technician

Date Mixed: 09-Mar-2020

Balance: B251644995

Feng-Yan Lo
Feng-Yan Lo - GC Analyst

Date Passed: 11-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V#2B_00127



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 56734 **Lot No.:** A0159694
Description : Custom V # 2B Standard
Custom V #2B Standard 12,500-125,000µg/mL, P&T Methanol,
1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2022 **Storage:** 0°C or colder

Elution Order	Compound	CAS #	Percent Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2-Propanol (isopropanol)	67-63-0	99%	25,019.2 µg/mL	+/- 146.4929 µg/mL
2	tert-Butanol (TBA)	75-65-0	99%	25,022.4 µg/mL	+/- 146.5117 µg/mL
3	Propionitrile	107-12-0	99%	25,020.0 µg/mL	+/- 146.4976 µg/mL
4	Methacrylonitrile	126-98-7	99%	12,533.6 µg/mL	+/- 73.3870 µg/mL
5	Isobutanol (2-Methyl-1-propanol)	78-83-1	99%	62,702.0 µg/mL	+/- 367.1151 µg/mL
6	1-Butanol	71-36-3	99%	125,150.0 µg/mL	+/- 732.7430 µg/mL
7	1,4-Dioxane	123-91-1	99%	62,550.0 µg/mL	+/- 366.2251 µg/mL
8	trans-1,4-dichloro-2-butene	110-57-6	95%	12,549.5 µg/mL	+/- 73.4801 µg/mL
Solvent:	P&T Methanol	67-56-1	99%		

Specific Reference Material Notes:

This RM (Reference Material) is not a CRM (Certified Reference Material) due to the 1-butanol concentration exceeding the maximum concentration on Restek's ISO Guide 34 scope of accreditation.

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

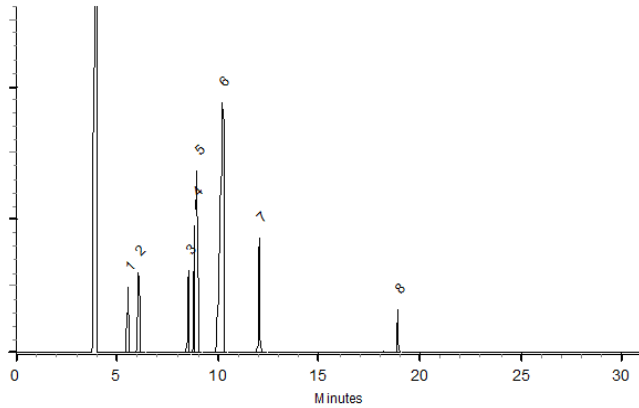
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Clara Windle - Operations Technician I

Date Mixed: 07-Apr-2020 Balance: B251644995


Fang-Yun Lo - QC Analyst

Date Passed: 10-Apr-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the RM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Uncertainty Value Notes:

- Uncertainties are determined using data from balances and glassware, raw material purity, and, when significant, equipment tolerances or calibration results.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V#3B_00052



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 56736 **Lot No.:** A0158677

Description : Custom V # 3B Standard

Custom V #3B Standard 12,500-25,000µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Acetone CAS # 67-64-1 (Lot MKCK2598) Purity 99%	25,001.0 µg/mL	+/- 146.3864 µg/mL Gravimetric +/- 1,236.8670 µg/mL Unstressed +/- 1,267.6168 µg/mL Stressed
2	Acrylonitrile CAS # 107-13-1 (Lot A0387097) Purity 99%	12,511.0 µg/mL	+/- 73.2547 µg/mL Gravimetric +/- 618.9529 µg/mL Unstressed +/- 634.3408 µg/mL Stressed
3	2-Butanone (MEK) CAS # 78-93-3 (Lot SHBK9603) Purity 99%	25,007.0 µg/mL	+/- 146.4215 µg/mL Gravimetric +/- 1,237.1638 µg/mL Unstressed +/- 1,267.9210 µg/mL Stressed
4	Tetrahydrofuran CAS # 109-99-9 (Lot SHBK8926) Purity 99%	25,049.0 µg/mL	+/- 146.6674 µg/mL Gravimetric +/- 1,239.2417 µg/mL Unstressed +/- 1,270.0505 µg/mL Stressed
5	2-Nitropropane CAS # 79-46-9 (Lot BCCB9352) Purity 97%	24,758.3 µg/mL	+/- 144.9652 µg/mL Gravimetric +/- 1,224.8589 µg/mL Unstressed +/- 1,255.3102 µg/mL Stressed
6	4-Methyl-2-pentanone (MIBK) CAS # 108-10-1 (Lot SHBL5515) Purity 99%	25,014.0 µg/mL	+/- 146.4625 µg/mL Gravimetric +/- 1,237.5101 µg/mL Unstressed +/- 1,268.2759 µg/mL Stressed
7	2-Hexanone CAS # 591-78-6 (Lot MKCL1599) Purity 99%	25,016.0 µg/mL	+/- 146.4742 µg/mL Gravimetric +/- 1,237.6091 µg/mL Unstressed +/- 1,268.3773 µg/mL Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

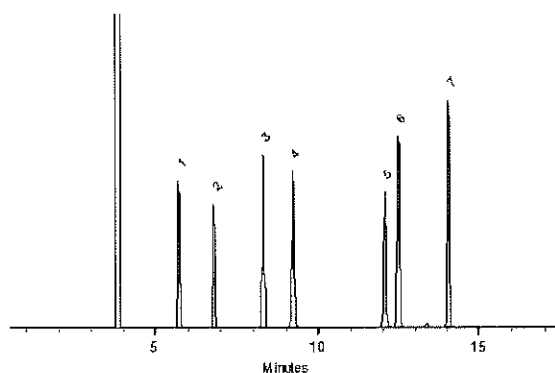
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

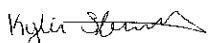
Inj. Temp:
200°C

Det. Temp:
250°C

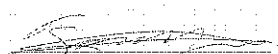
Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Kyle Struble - Operations Technician I

Date Mixed: 10-Mar-2020 **Balance:** B251644995


Fang-Yun Lo - QC Analyst

Date Passed: 12-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V#3B_00062



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 56736 **Lot No.:** A0158677

Description : Custom V # 3B Standard

Custom V #3B Standard 12,500-25,000µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Acetone CAS # 67-64-1 (Lot MKCK2598) Purity 99%	25,001.0 µg/mL	+/- 146.3864 µg/mL Gravimetric +/- 1,236.8670 µg/mL Unstressed +/- 1,267.6168 µg/mL Stressed
2	Acrylonitrile CAS # 107-13-1 (Lot A0387097) Purity 99%	12,511.0 µg/mL	+/- 73.2547 µg/mL Gravimetric +/- 618.9529 µg/mL Unstressed +/- 634.3408 µg/mL Stressed
3	2-Butanone (MEK) CAS # 78-93-3 (Lot SHBK9603) Purity 99%	25,007.0 µg/mL	+/- 146.4215 µg/mL Gravimetric +/- 1,237.1638 µg/mL Unstressed +/- 1,267.9210 µg/mL Stressed
4	Tetrahydrofuran CAS # 109-99-9 (Lot SHBK8926) Purity 99%	25,049.0 µg/mL	+/- 146.6674 µg/mL Gravimetric +/- 1,239.2417 µg/mL Unstressed +/- 1,270.0505 µg/mL Stressed
5	2-Nitropropane CAS # 79-46-9 (Lot BCCB9352) Purity 97%	24,758.3 µg/mL	+/- 144.9652 µg/mL Gravimetric +/- 1,224.8589 µg/mL Unstressed +/- 1,255.3102 µg/mL Stressed
6	4-Methyl-2-pentanone (MIBK) CAS # 108-10-1 (Lot SHBL5515) Purity 99%	25,014.0 µg/mL	+/- 146.4625 µg/mL Gravimetric +/- 1,237.5101 µg/mL Unstressed +/- 1,268.2759 µg/mL Stressed
7	2-Hexanone CAS # 591-78-6 (Lot MKCL1599) Purity 99%	25,016.0 µg/mL	+/- 146.4742 µg/mL Gravimetric +/- 1,237.6091 µg/mL Unstressed +/- 1,268.3773 µg/mL Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

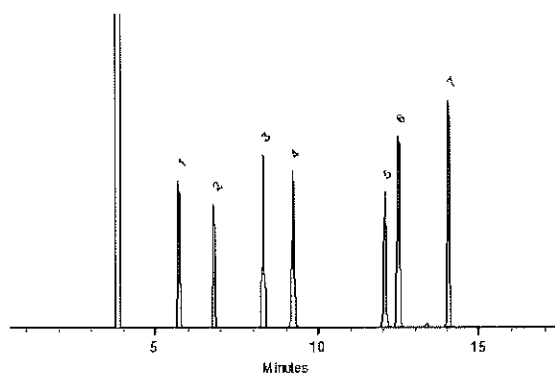
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

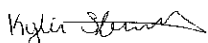
Inj. Temp:
200°C

Det. Temp:
250°C

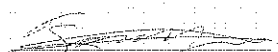
Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Kyle Struble - Operations Technician I

Date Mixed: 10-Mar-2020 **Balance:** B251644995


Fang-Yun Lo - QC Analyst

Date Passed: 12-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V#4C_00086



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 572312 **Lot No.:** A0158660

Description : Custom V #4C (Rev 3) Standard
Custom V #4C (Rev 3) Standard 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1,3-Butadiene CAS # 106-99-0 (Lot SHBK2299) Purity 99%	5,002.1 µg/mL	+/- 39.8717 µg/mL Gravimetric +/- 303.0271 µg/mL Unstressed +/- 303.7407 µg/mL Stressed
2	1,2-Dichloro-1,1,2-trifluoroethane (CFC-123a) CAS # 354-23-4 (Lot Q9B-64) Purity 99%	5,001.4 µg/mL	+/- 47.3932 µg/mL Gravimetric +/- 304.0702 µg/mL Unstressed +/- 304.7812 µg/mL Stressed
3	n-Pentane (C5) CAS # 109-66-0 (Lot SHBL0400) Purity 99%	5,025.0 µg/mL	+/- 29.4225 µg/mL Gravimetric +/- 303.2005 µg/mL Unstressed +/- 303.9203 µg/mL Stressed
4	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1 (Lot 00016133) Purity 99%	5,024.0 µg/mL	+/- 29.4166 µg/mL Gravimetric +/- 303.1402 µg/mL Unstressed +/- 303.8598 µg/mL Stressed
5	Iodomethane (methyl iodide) CAS # 74-88-4 (Lot D4406-0122JM) Purity 99%	5,035.0 µg/mL	+/- 29.4810 µg/mL Gravimetric +/- 303.8039 µg/mL Unstressed +/- 304.5251 µg/mL Stressed
6	Carbon disulfide CAS # 75-15-0 (Lot U22D706) Purity 99%	5,046.0 µg/mL	+/- 29.5454 µg/mL Gravimetric +/- 304.4676 µg/mL Unstressed +/- 305.1904 µg/mL Stressed
7	Methyl-tert-butyl ether (MTBE) CAS # 1634-04-4 (Lot SHBK4806) Purity 99%	5,025.0 µg/mL	+/- 29.4225 µg/mL Gravimetric +/- 303.2005 µg/mL Unstressed +/- 303.9203 µg/mL Stressed

8	n-Hexane (C6) CAS # 110-54-3 Purity 99%	(Lot SHBL0924)	5,025.5	µg/mL	+/-	29.4254	µg/mL	Gravimetric
					+/-	303.2307	µg/mL	Unstressed
					+/-	303.9505	µg/mL	Stressed
9	Diisopropyl ether (DIPE) CAS # 108-20-3 Purity 99%	(Lot SHBH1927V)	5,015.0	µg/mL	+/-	29.3639	µg/mL	Gravimetric
					+/-	302.5971	µg/mL	Unstressed
					+/-	303.3154	µg/mL	Stressed
10	Chloroprene (2-chloro-1,3-butadiene) CAS # 126-99-8 Purity 99%	(Lot 191204JLM)	5,046.5	µg/mL	+/-	29.5484	µg/mL	Gravimetric
					+/-	304.4978	µg/mL	Unstressed
					+/-	305.2206	µg/mL	Stressed
11	Ethyl-tert-butyl ether (ETBE) CAS # 637-92-3 Purity 99%	(Lot MKCJ3589)	5,026.5	µg/mL	+/-	29.4313	µg/mL	Gravimetric
					+/-	303.2910	µg/mL	Unstressed
					+/-	304.0110	µg/mL	Stressed
12	Cyclohexane CAS # 110-82-7 Purity 99%	(Lot MKCF5831)	5,028.5	µg/mL	+/-	29.4430	µg/mL	Gravimetric
					+/-	303.4117	µg/mL	Unstressed
					+/-	304.1319	µg/mL	Stressed
13	tert-Amyl methyl ether (TAME) CAS # 994-05-8 Purity 99%	(Lot HMBG6382V)	5,021.0	µg/mL	+/-	29.3991	µg/mL	Gravimetric
					+/-	302.9592	µg/mL	Unstressed
					+/-	303.6783	µg/mL	Stressed
14	n-Heptane (C7) CAS # 142-82-5 Purity 98%	(Lot SHBK8626)	5,044.1	µg/mL	+/-	29.5341	µg/mL	Gravimetric
					+/-	304.3506	µg/mL	Unstressed
					+/-	305.0730	µg/mL	Stressed
15	tert-Amyl ethyl ether (TAEE) CAS # 919-94-8 Purity 99%	(Lot IKVYB)	5,018.5	µg/mL	+/-	29.3844	µg/mL	Gravimetric
					+/-	302.8083	µg/mL	Unstressed
					+/-	303.5271	µg/mL	Stressed
16	Methyl methacrylate CAS # 80-62-6 Purity 99%	(Lot MKCG6589)	5,028.0	µg/mL	+/-	29.4400	µg/mL	Gravimetric
					+/-	303.3815	µg/mL	Unstressed
					+/-	304.1017	µg/mL	Stressed
17	Ethyl methacrylate CAS # 97-63-2 Purity 99%	(Lot SHBF9649V)	5,043.0	µg/mL	+/-	29.5279	µg/mL	Gravimetric
					+/-	304.2866	µg/mL	Unstressed
					+/-	305.0089	µg/mL	Stressed
18	Benzyl chloride CAS # 100-44-7 Purity 99%	(Lot SHBH2102V)	5,019.5	µg/mL	+/-	29.3903	µg/mL	Gravimetric
					+/-	302.8686	µg/mL	Unstressed
					+/-	303.5876	µg/mL	Stressed
Solvent: P&T Methanol								
CAS # 67-56-1								
Purity 99%								

Tech Tips:

Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

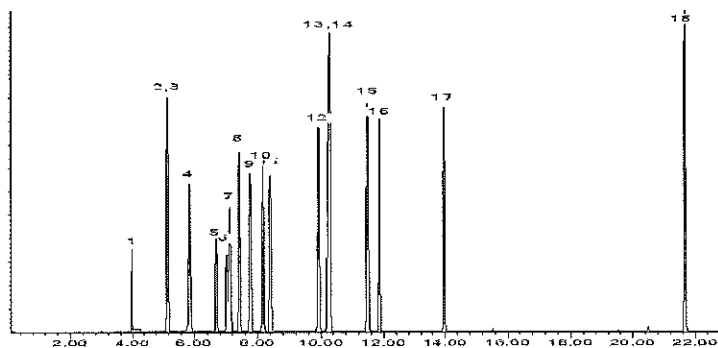
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

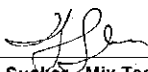
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Tom Suckar - Mix Technician

Date Mixed: 10-Mar-2020

Balance: B707717271


Fang-Yun Lu - QC Analyst

Date Passed: 25-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V#4C_00094



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 572312 **Lot No.:** A0158660

Description : Custom V #4C (Rev 3) Standard
Custom V #4C (Rev 3) Standard 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1,3-Butadiene CAS # 106-99-0 (Lot SHBK2299) Purity 99%	5,002.1 µg/mL	+/- 39.8717 µg/mL Gravimetric +/- 303.0271 µg/mL Unstressed +/- 303.7407 µg/mL Stressed
2	1,2-Dichloro-1,1,2-trifluoroethane (CFC-123a) CAS # 354-23-4 (Lot Q9B-64) Purity 99%	5,001.4 µg/mL	+/- 47.3932 µg/mL Gravimetric +/- 304.0702 µg/mL Unstressed +/- 304.7812 µg/mL Stressed
3	n-Pentane (C5) CAS # 109-66-0 (Lot SHBL0400) Purity 99%	5,025.0 µg/mL	+/- 29.4225 µg/mL Gravimetric +/- 303.2005 µg/mL Unstressed +/- 303.9203 µg/mL Stressed
4	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1 (Lot 00016133) Purity 99%	5,024.0 µg/mL	+/- 29.4166 µg/mL Gravimetric +/- 303.1402 µg/mL Unstressed +/- 303.8598 µg/mL Stressed
5	Iodomethane (methyl iodide) CAS # 74-88-4 (Lot D4406-0122JM) Purity 99%	5,035.0 µg/mL	+/- 29.4810 µg/mL Gravimetric +/- 303.8039 µg/mL Unstressed +/- 304.5251 µg/mL Stressed
6	Carbon disulfide CAS # 75-15-0 (Lot U22D706) Purity 99%	5,046.0 µg/mL	+/- 29.5454 µg/mL Gravimetric +/- 304.4676 µg/mL Unstressed +/- 305.1904 µg/mL Stressed
7	Methyl-tert-butyl ether (MTBE) CAS # 1634-04-4 (Lot SHBK4806) Purity 99%	5,025.0 µg/mL	+/- 29.4225 µg/mL Gravimetric +/- 303.2005 µg/mL Unstressed +/- 303.9203 µg/mL Stressed

8	n-Hexane (C6) CAS # 110-54-3 Purity 99%	(Lot SHBL0924)	5,025.5	µg/mL	+/-	29.4254	µg/mL	Gravimetric
					+/-	303.2307	µg/mL	Unstressed
					+/-	303.9505	µg/mL	Stressed
9	Diisopropyl ether (DIPE) CAS # 108-20-3 Purity 99%	(Lot SHBH1927V)	5,015.0	µg/mL	+/-	29.3639	µg/mL	Gravimetric
					+/-	302.5971	µg/mL	Unstressed
					+/-	303.3154	µg/mL	Stressed
10	Chloroprene (2-chloro-1,3-butadiene) CAS # 126-99-8 Purity 99%	(Lot 191204JLM)	5,046.5	µg/mL	+/-	29.5484	µg/mL	Gravimetric
					+/-	304.4978	µg/mL	Unstressed
					+/-	305.2206	µg/mL	Stressed
11	Ethyl-tert-butyl ether (ETBE) CAS # 637-92-3 Purity 99%	(Lot MKCJ3589)	5,026.5	µg/mL	+/-	29.4313	µg/mL	Gravimetric
					+/-	303.2910	µg/mL	Unstressed
					+/-	304.0110	µg/mL	Stressed
12	Cyclohexane CAS # 110-82-7 Purity 99%	(Lot MKCF5831)	5,028.5	µg/mL	+/-	29.4430	µg/mL	Gravimetric
					+/-	303.4117	µg/mL	Unstressed
					+/-	304.1319	µg/mL	Stressed
13	tert-Amyl methyl ether (TAME) CAS # 994-05-8 Purity 99%	(Lot HMBG6382V)	5,021.0	µg/mL	+/-	29.3991	µg/mL	Gravimetric
					+/-	302.9592	µg/mL	Unstressed
					+/-	303.6783	µg/mL	Stressed
14	n-Heptane (C7) CAS # 142-82-5 Purity 98%	(Lot SHBK8626)	5,044.1	µg/mL	+/-	29.5341	µg/mL	Gravimetric
					+/-	304.3506	µg/mL	Unstressed
					+/-	305.0730	µg/mL	Stressed
15	tert-Amyl ethyl ether (TAEE) CAS # 919-94-8 Purity 99%	(Lot IKVYB)	5,018.5	µg/mL	+/-	29.3844	µg/mL	Gravimetric
					+/-	302.8083	µg/mL	Unstressed
					+/-	303.5271	µg/mL	Stressed
16	Methyl methacrylate CAS # 80-62-6 Purity 99%	(Lot MKCG6589)	5,028.0	µg/mL	+/-	29.4400	µg/mL	Gravimetric
					+/-	303.3815	µg/mL	Unstressed
					+/-	304.1017	µg/mL	Stressed
17	Ethyl methacrylate CAS # 97-63-2 Purity 99%	(Lot SHBF9649V)	5,043.0	µg/mL	+/-	29.5279	µg/mL	Gravimetric
					+/-	304.2866	µg/mL	Unstressed
					+/-	305.0089	µg/mL	Stressed
18	Benzyl chloride CAS # 100-44-7 Purity 99%	(Lot SHBH2102V)	5,019.5	µg/mL	+/-	29.3903	µg/mL	Gravimetric
					+/-	302.8686	µg/mL	Unstressed
					+/-	303.5876	µg/mL	Stressed
Solvent: P&T Methanol								
CAS # 67-56-1								
Purity 99%								

Tech Tips:

Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

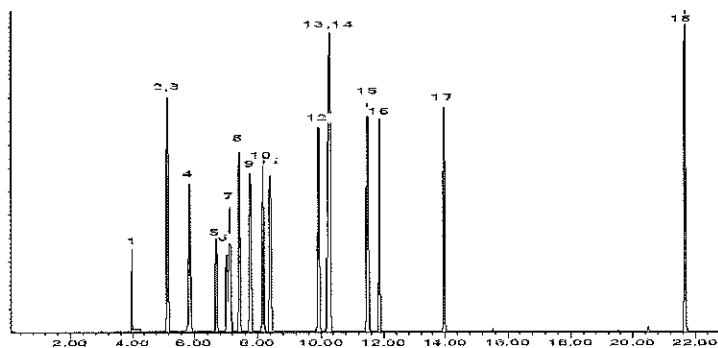
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

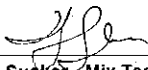
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

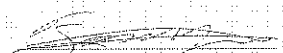


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Tom Suckar - Mix Technician

Date Mixed: 10-Mar-2020

Balance: B707717271


Pang-Yun Lo - QC Analyst

Date Passed: 25-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V#6_00034



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 558268 **Lot No.:** A0158625

Description : Custom CS#6 Standard

Custom CS#6 Standard 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Methyl acetate CAS # 79-20-9 (Lot SHBK5436) Purity 99%	5,039.0 µg/mL	+/- 29.5717 µg/mL Gravimetric +/- 304.0518 µg/mL Unstressed +/- 304.7735 µg/mL Stressed
2	Allyl chloride (3-chloropropene) CAS # 107-05-1 (Lot 191118KJ) Purity 99%	5,046.0 µg/mL	+/- 29.6128 µg/mL Gravimetric +/- 304.4742 µg/mL Unstressed +/- 305.1969 µg/mL Stressed
3	Bromochloromethane CAS # 74-97-5 (Lot 00008541) Purity 98%	5,040.1 µg/mL	+/- 29.5784 µg/mL Gravimetric +/- 304.1206 µg/mL Unstressed +/- 304.8425 µg/mL Stressed
4	Methylcyclohexane CAS # 108-87-2 (Lot SHBJ0457) Purity 99%	5,041.0 µg/mL	+/- 29.5834 µg/mL Gravimetric +/- 304.1725 µg/mL Unstressed +/- 304.8945 µg/mL Stressed
5	Pentachloroethane CAS # 76-01-7 (Lot 8866000) Purity 99%	5,035.0 µg/mL	+/- 29.5482 µg/mL Gravimetric +/- 303.8104 µg/mL Unstressed +/- 304.5316 µg/mL Stressed
6	1,2,3-Trimethylbenzene CAS # 526-73-8 (Lot 8766.05-14) Purity 99%	5,012.0 µg/mL	+/- 29.4132 µg/mL Gravimetric +/- 302.4226 µg/mL Unstressed +/- 303.1405 µg/mL Stressed
7	1,3-Diethylbenzene CAS # 141-93-5 (Lot BCBT8967) Purity 98%	5,041.1 µg/mL	+/- 29.5841 µg/mL Gravimetric +/- 304.1797 µg/mL Unstressed +/- 304.9017 µg/mL Stressed

8	1,4-Diethylbenzene CAS # 105-05-5 Purity 98%	(Lot RLHJK)	5,035.2 µg/mL	+/- 29.5496 +/- 303.8249 +/- 304.5461	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,2-Diethylbenzene CAS # 135-01-3 Purity 99%	(Lot ECH2970181)	5,011.0 µg/mL	+/- 29.4074 +/- 302.3623 +/- 303.0800	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	2-Methylnaphthalene CAS # 91-57-6 Purity 96%	(Lot STBG8884)	5,023.7 µg/mL	+/- 29.4818 +/- 303.1274 +/- 303.8469	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
Solvent: P&T Methanol CAS # 67-56-1 Purity 99%						

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

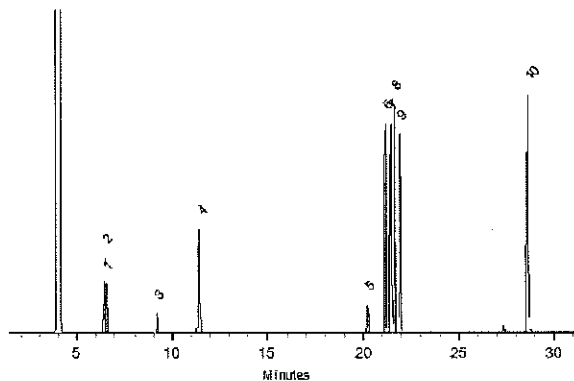
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

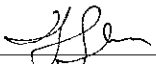
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

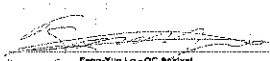


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Tom Suckar - Mix Technician

Date Mixed: 09-Mar-2020

Balance: B707717271


Feng-Yin Lin - QC Analyst

Date Passed: 12-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V_Acetate_00011



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 54590 Lot No.: A0155352
Description : Custom V Acetate Standard
Custom V Acetate Standard 2,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : May 31, 2021 Storage: 0°C or colder
Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)		
1	Vinyl acetate CAS # 108-05-4 Purity 99% (Lot 192709KJ)	2,002.0 µg/mL	+/- 11.8913	µg/mL	Gravimetric
			+/- 120.8140	µg/mL	Unstressed
			+/- 121.1007	µg/mL	Stressed
2	Ethyl acetate CAS # 141-78-6 Purity 99% (Lot SHBK2184)	2,004.0 µg/mL	+/- 11.9032	µg/mL	Gravimetric
			+/- 120.9347	µg/mL	Unstressed
			+/- 121.2217	µg/mL	Stressed
3	Isopropyl acetate CAS # 108-21-4 Purity 99% (Lot BCBT9845)	2,010.0 µg/mL	+/- 11.9388	µg/mL	Gravimetric
			+/- 121.2968	µg/mL	Unstressed
			+/- 121.5847	µg/mL	Stressed
4	Propyl acetate CAS # 109-60-4 Purity 99% (Lot MUZQD)	2,012.0 µg/mL	+/- 11.9507	µg/mL	Gravimetric
			+/- 121.4175	µg/mL	Unstressed
			+/- 121.7056	µg/mL	Stressed
5	Butyl acetate CAS # 123-86-4 Purity 99% (Lot SHBK5137)	2,016.0 µg/mL	+/- 11.9744	µg/mL	Gravimetric
			+/- 121.6589	µg/mL	Unstressed
			+/- 121.9476	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

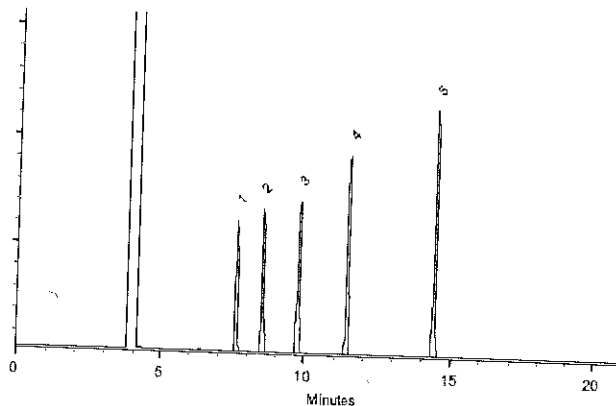
200°C

Det. Temp:

250°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cydney L. Crust
Cydney L. Crust - Mix Technician

Date Mixed: 25-Nov-2019

Balance: B251644995

Justin Albertson
Justin Albertson - Operations Tech-ARM QC

Date Passed: 03-Dec-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V_Gas_00144



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 55669 **Lot No.:** A0159812
Description : Custom 502.2 "V" Gas Mix
Custom 502.2 "V" Gas Mix 2,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : May 31, 2027 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12) CAS # 75-71-8 (Lot 00012554) Purity 99%	2,005.1 µg/mL	+/- 16.8576 µg/mL Gravimetric +/- 113.0809 µg/mL Unstressed +/- 115.6966 µg/mL Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3 (Lot SHBK6571) Purity 99%	2,003.5 µg/mL	+/- 19.3327 µg/mL Gravimetric +/- 113.3884 µg/mL Unstressed +/- 115.9929 µg/mL Stressed
3	Vinyl chloride CAS # 75-01-4 (Lot 00015559) Purity 99%	2,001.1 µg/mL	+/- 18.1213 µg/mL Gravimetric +/- 113.0560 µg/mL Unstressed +/- 115.6619 µg/mL Stressed
4	Bromomethane (methyl bromide) CAS # 74-83-9 (Lot 101604) Purity 99%	1,998.8 µg/mL	+/- 17.7535 µg/mL Gravimetric +/- 112.8737 µg/mL Unstressed +/- 115.4779 µg/mL Stressed
5	Chloroethane (ethyl chloride) CAS # 75-00-3 (Lot 107-401039114-1) Purity 99%	2,002.3 µg/mL	+/- 17.1357 µg/mL Gravimetric +/- 112.9711 µg/mL Unstressed +/- 115.5821 µg/mL Stressed
6	Trichlorofluoromethane (CFC-11) CAS # 75-69-4 (Lot 25931) Purity 99%	2,020.0 µg/mL	+/- 11.7716 µg/mL Gravimetric +/- 113.2622 µg/mL Unstressed +/- 115.9123 µg/mL Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

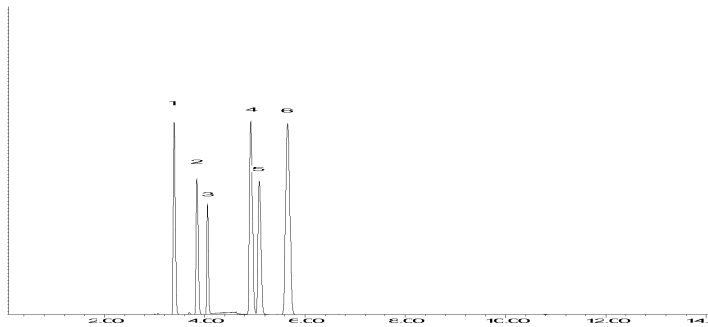
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

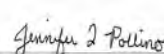


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Tom Suckar - Mix Technician

Date Mixed: 10-Apr-2020

Balance: B707717271


Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 06-May-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V_Gas_00160



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 55669 **Lot No.:** A0159812

Description : Custom 502.2 "V" Gas Mix
Custom 502.2 "V" Gas Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2027 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12) CAS # 75-71-8 (Lot 00012554) Purity 99%	2,005.1 µg/mL	+/- 16.8576 µg/mL Gravimetric +/- 113.0809 µg/mL Unstressed +/- 115.6966 µg/mL Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3 (Lot SHBK6571) Purity 99%	2,003.5 µg/mL	+/- 19.3327 µg/mL Gravimetric +/- 113.3884 µg/mL Unstressed +/- 115.9929 µg/mL Stressed
3	Vinyl chloride CAS # 75-01-4 (Lot 00015559) Purity 99%	2,001.1 µg/mL	+/- 18.1213 µg/mL Gravimetric +/- 113.0560 µg/mL Unstressed +/- 115.6619 µg/mL Stressed
4	Bromomethane (methyl bromide) CAS # 74-83-9 (Lot 101604) Purity 99%	1,998.8 µg/mL	+/- 17.7535 µg/mL Gravimetric +/- 112.8737 µg/mL Unstressed +/- 115.4779 µg/mL Stressed
5	Chloroethane (ethyl chloride) CAS # 75-00-3 (Lot 107-401039114-1) Purity 99%	2,002.3 µg/mL	+/- 17.1357 µg/mL Gravimetric +/- 112.9711 µg/mL Unstressed +/- 115.5821 µg/mL Stressed
6	Trichlorofluoromethane (CFC-11) CAS # 75-69-4 (Lot 25931) Purity 99%	2,020.0 µg/mL	+/- 11.7716 µg/mL Gravimetric +/- 113.2622 µg/mL Unstressed +/- 115.9123 µg/mL Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

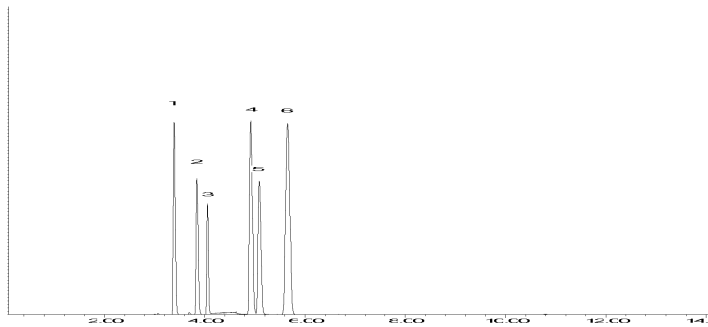
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

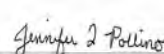


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Tom Suckar - Mix Technician

Date Mixed: 10-Apr-2020

Balance: B707717271


Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 06-May-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V1B_2CEVE_00075



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569936-2 Lot No.: A0158674
Description : Custom V # 1B 2-CEVE Standard
Custom V # 1B 2-CEVE Standard 5,000µg/mL, P&T Methanol,
1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : March 31, 2023 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)												
1	2-Chloroethyl vinyl ether CAS # 110-75-8 Purity 99% (Lot MKBS6526V)	5,000.0 µg/mL	<table><tr><td>+/-</td><td>29.2761</td><td>µg/mL</td><td>Gravimetric</td></tr><tr><td>+/-</td><td>107.1066</td><td>µg/mL</td><td>Unstressed</td></tr><tr><td>+/-</td><td>110.2172</td><td>µg/mL</td><td>Stressed</td></tr></table>	+/-	29.2761	µg/mL	Gravimetric	+/-	107.1066	µg/mL	Unstressed	+/-	110.2172	µg/mL	Stressed
+/-	29.2761	µg/mL	Gravimetric												
+/-	107.1066	µg/mL	Unstressed												
+/-	110.2172	µg/mL	Stressed												

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

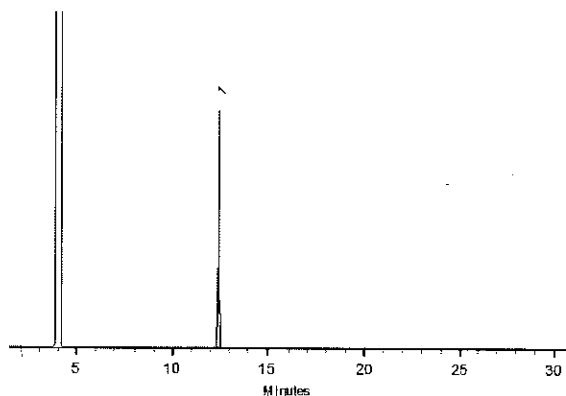
200°C

Det. Temp:

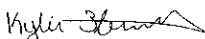
250°C

Det. Type:

FID

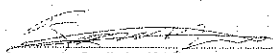


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Kylie Struble - Operations Technician I

Date Mixed: 10-Mar-2020

Balance: B251644995


Fang-Yun Lu - QC Analyst

Date Passed: 12-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Method 8260C Low Level

Volatile Organic Compounds (GC/MS)
by Method 8260C Low Level

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-18116-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): R-624SilMS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
16C1	410-18116-1	114	115	95	95
16C1 DL	410-18116-1 DL	114	108	96	95
16MW8	410-18116-2	113	109	95	96
16MW9	410-18116-3	112	112	97	95
16MW9 DL	410-18116-3 DL	114	112	96	94
16WC1A	410-18116-4	112	110	95	94
16WDUP	410-18116-5	115	112	95	96
16WC1B	410-18116-6	115	114	95	95
16-2	410-18116-7	114	111	95	95
16-3	410-18116-8	115	111	95	95
16-5	410-18116-9	116	113	94	94
16WC2B	410-18116-10	116	120	94	93
16SPRING	410-18116-11	114	110	96	94
Trip Blank1	410-18116-12	116	112	94	94
Trip Blank2	410-18116-13	113	117	95	95
	MB 410-59437/8	111	110	97	96
	LCS 410-59437/5	105	105	98	100
	LCS 410-59437/6	109	107	96	98
16WC1A MS	410-18116-4 MS	107	107	97	99
16WC1A MS	410-18116-4 MS	110	109	95	100
16WC1A MSD	410-18116-4 MSD	106	104	97	99
16WC1A MSD	410-18116-4 MSD	110	110	94	100

	<u>QC LIMITS</u>
DBFM = Dibromofluoromethane (Surr)	80-120
DCA = 1,2-Dichloroethane-d4 (Surr)	80-120
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	80-120

Column to be used to flag recovery values

FORM II 8260C LL

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-18116-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: HC26L01.D
 Lab ID: LCS 410-59437/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	5.00	5.21	104	78-126	
1,1-Dichloroethane	5.00	5.01	100	74-120	
1,1-Dichloroethene	5.00	5.10	102	80-131	
2-Butanone	37.5	35.0	93	59-141	
Benzene	5.00	5.01	100	80-120	
Carbon tetrachloride	5.00	5.26	105	64-141	
Chloroethane	5.00	4.89	98	63-120	
Chloromethane	5.00	4.71	94	56-124	
Dichlorodifluoromethane	5.00	5.22	104	43-123	
Ethyl ether	5.01	5.12 J	102	72-121	
Ethylbenzene	5.00	4.82	96	80-120	
Freon 113	5.00	4.68	94	75-133	
Methylene Chloride	5.00	5.28	106	80-120	
Tetrachloroethene	5.00	4.85	97	80-120	
Tetrahydrofuran	25.0	24.7 J	99	67-137	
Toluene	5.00	4.76	95	80-120	
Trichloroethene	5.00	5.06	101	80-120	
Trichlorofluoromethane	5.00	5.03	101	62-136	
Vinyl chloride	5.00	4.94	99	60-125	
Xylenes, Total	15.0	15.2	101	80-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-18116-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: HC26L03.D
Lab ID: LCS 410-59437/6 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methoxymethane	5.00	5.02 J	100	70-130	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-18116-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: HC28S10.D
 Lab ID: 410-18116-4 MS Client ID: 16WC1A MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	5.00	ND	5.59	112	78-126	
1,1-Dichloroethane	5.00	4.3	9.41	101	74-120	
1,1-Dichloroethene	5.00	ND	5.60	109	80-131	
2-Butanone	37.5	ND	34.6	92	59-141	
Benzene	5.00	ND	5.56	105	80-120	
Carbon tetrachloride	5.00	ND	5.70	114	64-141	
Chloroethane	5.00	1.8	7.05	105	63-120	
Chloromethane	5.00	ND	5.34	107	80-120	
Dichlorodifluoromethane	5.00	ND	5.63	110	43-123	
Ethyl ether	5.01	20	23.8	78	72-121	
Ethylbenzene	5.00	ND	5.07	101	80-120	
Freon 113	5.00	ND	5.11	102	75-133	
Methylene Chloride	5.00	ND	5.53	110	80-120	
Tetrachloroethene	5.00	ND	5.19	101	80-120	
Tetrahydrofuran	25.0	ND	26.6	96	67-137	
Toluene	5.00	ND	5.01	100	80-120	
Trichloroethene	5.00	ND	5.54	107	80-120	
Trichlorofluoromethane	5.00	ND	5.61	112	62-136	
Vinyl chloride	5.00	ND	5.70	110	60-125	
Xylenes, Total	15.0	ND	15.7	105	80-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-18116-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: HC28S12.D

Lab ID: 410-18116-4 MS Client ID: 16WC1A MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Methoxymethane	5.00	ND	ND	125	70-130	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-18116-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: HC28S11.D
 Lab ID: 410-18116-4 MSD Client ID: 16WC1A MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,1-Trichloroethane	5.00	5.54	111	1	30	78-126	
1,1-Dichloroethane	5.00	9.42	101	0	30	74-120	
1,1-Dichloroethene	5.00	5.64	110	1	30	80-131	
2-Butanone	37.5	33.1	88	4	30	59-141	
Benzene	5.00	5.51	104	1	30	80-120	
Carbon tetrachloride	5.00	5.76	115	1	30	64-141	
Chloroethane	5.00	7.47	113	6	30	63-120	
Chloromethane	5.00	5.63	112	5	30	80-120	
Dichlorodifluoromethane	5.00	6.18	121	9	30	43-123	
Ethyl ether	5.01	24.1	83	1	30	72-121	
Ethylbenzene	5.00	4.99	100	2	30	80-120	
Freon 113	5.00	5.23	104	2	30	75-133	
Methylene Chloride	5.00	5.56	111	1	30	80-120	
Tetrachloroethene	5.00	5.25	102	1	30	80-120	
Tetrahydrofuran	25.0	26.8	96	1	30	67-137	
Toluene	5.00	5.02	100	0	30	80-120	
Trichloroethene	5.00	5.59	108	1	30	80-120	
Trichlorofluoromethane	5.00	6.07	121	8	30	62-136	
Vinyl chloride	5.00	6.22	120	9	30	60-125	
Xylenes, Total	15.0	15.7	104	0	30	80-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-18116-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: HC28S13.D
Lab ID: 410-18116-4 MSD Client ID: 16WC1A MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Methoxymethane	5.00	ND	133	6	30	70-130	F1

Column to be used to flag recovery and RPD values

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-18116-1
SDG No.: _____
Lab File ID: HC20B32.D Lab Sample ID: MB 410-59437/8
Matrix: Water Heated Purge: (Y/N) N
Instrument ID: 19094 Date Analyzed: 10/28/2020 11:15
GC Column: R-624SilMS 30m ID: 0.25 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 410-59437/5	HC26L01.D	10/28/2020 10:10
	LCS 410-59437/6	HC26L03.D	10/28/2020 10:32
Trip Blank1	410-18116-12	HC28S01.D	10/28/2020 11:37
Trip Blank2	410-18116-13	HC28S02.D	10/28/2020 11:59
16C1	410-18116-1	HC28S04.D	10/28/2020 12:43
16C1 DL	410-18116-1 DL	HC28S05.D	10/28/2020 13:04
16MW8	410-18116-2	HC28S06.D	10/28/2020 13:26
16MW9	410-18116-3	HC28S07.D	10/28/2020 13:47
16MW9 DL	410-18116-3 DL	HC28S08.D	10/28/2020 14:09
16WC1A	410-18116-4	HC28S09.D	10/28/2020 14:31
16WC1A MS	410-18116-4 MS	HC28S10.D	10/28/2020 14:52
16WC1A MSD	410-18116-4 MSD	HC28S11.D	10/28/2020 15:14
16WC1A MS	410-18116-4 MS	HC28S12.D	10/28/2020 15:36
16WC1A MSD	410-18116-4 MSD	HC28S13.D	10/28/2020 15:58
16WDUP	410-18116-5	HC28S14.D	10/28/2020 16:20
16WC1B	410-18116-6	HC28S15.D	10/28/2020 16:42
16-2	410-18116-7	HC28S16.D	10/28/2020 17:03
16-3	410-18116-8	HC28S17.D	10/28/2020 17:25
16-5	410-18116-9	HC28S18.D	10/28/2020 17:47
16WC2B	410-18116-10	HC28S19.D	10/28/2020 18:08
16SPRING	410-18116-11	HC28S20.D	10/28/2020 18:30

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1

SDG No.: _____

Lab File ID: hs15t01.D BFB Injection Date: 09/15/2020

Instrument ID: 19094 BFB Injection Time: 14:32

Analysis Batch No.: 44043

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	18.1
75	30.0 - 60.0 % of mass 95	49.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.7
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	Greater than 50% of mass 95	85.9
175	5.0 - 9.0 % of mass 174	6.5 (7.6) 1
176	95.0 - 101.0 % of mass 174	83.2 (96.9) 1
177	5.0 - 9.0 % of mass 176	5.4 (6.5) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 410-44043/3	hs15i11.D	09/15/2020	15:07
	IC 410-44043/4	hs15i12.D	09/15/2020	15:29
	IC 410-44043/5	hs15i13.D	09/15/2020	15:50
	IC 410-44043/6	hs15i14.D	09/15/2020	16:12
	IC 410-44043/7	hs15i15.D	09/15/2020	16:34
	IC 410-44043/8	hs15i16.D	09/15/2020	16:56
	IC 410-44043/9	hs15i17.D	09/15/2020	17:18
	ICV 410-44043/10	hs15v11.D	09/15/2020	17:39
	IC 410-44043/12	hs15i01.D	09/15/2020	18:23
	ICIS 410-44043/13	hs15i02.D	09/15/2020	18:44
	IC 410-44043/14	hs15i03.D	09/15/2020	19:06
	IC 410-44043/15	hs15i04.D	09/15/2020	19:28
	IC 410-44043/16	hs15i05.D	09/15/2020	19:50
	IC 410-44043/17	hs15i06.D	09/15/2020	20:12
	IC 410-44043/18	hs15i07.D	09/15/2020	20:33
	ICV 410-44043/19	hu08v01.D	09/15/2020	20:55

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1

SDG No.: _____

Lab File ID: HC28T01.D

BFB Injection Date: 10/28/2020

Instrument ID: 19094

BFB Injection Time: 08:50

Analysis Batch No.: 59437

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	19.5
75	30.0 - 60.0 % of mass 95	50.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.3
173	Less than 2.0 % of mass 174	1.4 (1.7) 1
174	Greater than 50% of mass 95	82.2
175	5.0 - 9.0 % of mass 174	5.7 (6.9) 1
176	95.0 - 101.0 % of mass 174	82.0 (99.8) 1
177	5.0 - 9.0 % of mass 176	5.0 (6.0) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-59437/3	HC26C01.D	10/28/2020	9:27
	CCV 410-59437/4	HC26C02.D	10/28/2020	9:48
	LCS 410-59437/5	HC26L01.D	10/28/2020	10:10
	LCS 410-59437/6	HC26L03.D	10/28/2020	10:32
	MB 410-59437/8	HC20B32.D	10/28/2020	11:15
Trip Blank1	410-18116-12	HC28S01.D	10/28/2020	11:37
Trip Blank2	410-18116-13	HC28S02.D	10/28/2020	11:59
16C1	410-18116-1	HC28S04.D	10/28/2020	12:43
16C1 DL	410-18116-1 DL	HC28S05.D	10/28/2020	13:04
16MW8	410-18116-2	HC28S06.D	10/28/2020	13:26
16MW9	410-18116-3	HC28S07.D	10/28/2020	13:47
16MW9 DL	410-18116-3 DL	HC28S08.D	10/28/2020	14:09
16WC1A	410-18116-4	HC28S09.D	10/28/2020	14:31
16WC1A MS	410-18116-4 MS	HC28S10.D	10/28/2020	14:52
16WC1A MSD	410-18116-4 MSD	HC28S11.D	10/28/2020	15:14
16WC1A MS	410-18116-4 MS	HC28S12.D	10/28/2020	15:36
16WC1A MSD	410-18116-4 MSD	HC28S13.D	10/28/2020	15:58
16WDUP	410-18116-5	HC28S14.D	10/28/2020	16:20
16WC1B	410-18116-6	HC28S15.D	10/28/2020	16:42
16-2	410-18116-7	HC28S16.D	10/28/2020	17:03
16-3	410-18116-8	HC28S17.D	10/28/2020	17:25
16-5	410-18116-9	HC28S18.D	10/28/2020	17:47
16WC2B	410-18116-10	HC28S19.D	10/28/2020	18:08
16SPRING	410-18116-11	HC28S20.D	10/28/2020	18:30

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Sample No.: ICIS 410-44043/13 Date Analyzed: 09/15/2020 18:44
 Instrument ID: 19094 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): hs15i02.D Heated Purge: (Y/N) N
 Calibration ID: 10991

	TBAd10		FB		CBZd5		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
INITIAL CALIBRATION MID-POINT	137845	4.48	2194930	7.96	1597709	11.35	
UPPER LIMIT	275690	4.98	4389860	8.46	3195418	11.85	
LOWER LIMIT	68923	3.98	1097465	7.46	798855	10.85	
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-44043/19		127032	4.47	2159479	7.96	1584986	11.35
CCVIS 410-59437/3		142631	4.51	2196810	7.96	1707967	11.35

TBAd10 = t-Butyl alcohol-d10 (IS)

FB = Fluorobenzene (IS)

CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 50%-200% of internal standard area

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
SDG No.: _____
Sample No.: ICIS 410-44043/13 Date Analyzed: 09/15/2020 18:44
Instrument ID: 19094 GC Column: R-624SilMS 30m ID: 0.25 (mm)
Lab File ID (Standard): hs15i02.D Heated Purge: (Y/N) N
Calibration ID: 10991

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		840517	13.21				
UPPER LIMIT		1681034	13.71				
LOWER LIMIT		420259	12.71				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-44043/19		820309	13.21				
CCVIS 410-59437/3		961321	13.21				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Sample No.: CCVIS 410-59437/3 Date Analyzed: 10/28/2020 09:27
 Instrument ID: 19094 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): HC26C01.D Heated Purge: (Y/N) N
 Calibration ID: 10991

		TBAd10		FB		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		142631	4.51	2196810	7.96	1707967	11.35
UPPER LIMIT		285262	5.01	4393620	8.46	3415934	11.85
LOWER LIMIT		71316	4.01	1098405	7.46	853984	10.85
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 410-59437/4		148049	4.50	1972545	7.96	1559766	11.35
LCS 410-59437/5		139963	4.49	2025486	7.96	1567515	11.35
LCS 410-59437/6		132528	4.51	2007203	7.96	1576714	11.35
MB 410-59437/8		132606	4.51	2003720	7.96	1573544	11.35
410-18116-12	Trip Blank1	135536	4.50	1945465	7.96	1557440	11.35
410-18116-13	Trip Blank2	138802	4.52	1908089	7.96	1515273	11.35
410-18116-1	16C1	131210	4.51	1683566	7.96	1328923	11.35
410-18116-1 DL	16C1 DL	136560	4.53	1981881	7.96	1566160	11.35
410-18116-2	16MW8	135267	4.50	1963438	7.96	1549016	11.35
410-18116-3	16MW9	124097	4.50	1966492	7.96	1545416	11.35
410-18116-3 DL	16MW9 DL	138793	4.51	1958487	7.96	1565027	11.35
410-18116-4	16WC1A	133564	4.49	1978559	7.96	1569025	11.35
410-18116-4 MS	16WC1A MS	144216	4.52	2138269	7.96	1664637	11.35
410-18116-4 MSD	16WC1A MSD	149224	4.52	2152316	7.96	1669419	11.35
410-18116-4 MS	16WC1A MS	149842	4.50	2070350	7.96	1608904	11.35
410-18116-4 MSD	16WC1A MSD	142810	4.50	1888302	7.96	1478846	11.35
410-18116-5	16WDUP	132041	4.50	1839082	7.96	1466796	11.35
410-18116-6	16WC1B	138493	4.50	1867194	7.96	1501491	11.35
410-18116-7	16-2	136227	4.50	1856347	7.96	1479626	11.35
410-18116-8	16-3	135760	4.50	1891379	7.96	1521005	11.35
410-18116-9	16-5	113748	4.50	1717606	7.96	1396288	11.35
410-18116-10	16WC2B	131954	4.51	1625206	7.96	1309969	11.35
410-18116-11	16SPRING	135065	4.49	1879559	7.96	1512043	11.35

TBAd10 = t-Butyl alcohol-d10 (IS)

FB = Fluorobenzene (IS)

CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 50%-200% of internal standard area

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Sample No.: CCVIS 410-59437/3 Date Analyzed: 10/28/2020 09:27
 Instrument ID: 19094 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): HC26C01.D Heated Purge: (Y/N) N
 Calibration ID: 10991

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		961321	13.21				
UPPER LIMIT		1922642	13.71				
LOWER LIMIT		480661	12.71				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 410-59437/4		819863	13.21				
LCS 410-59437/5		855994	13.21				
LCS 410-59437/6		821927	13.21				
MB 410-59437/8		832401	13.21				
410-18116-12	Trip Blank1	813439	13.21				
410-18116-13	Trip Blank2	797612	13.21				
410-18116-1	16C1	700633	13.21				
410-18116-1 DL	16C1 DL	812407	13.21				
410-18116-2	16MW8	800085	13.21				
410-18116-3	16MW9	811836	13.21				
410-18116-3 DL	16MW9 DL	813464	13.21				
410-18116-4	16WC1A	824497	13.21				
410-18116-4 MS	16WC1A MS	910105	13.21				
410-18116-4 MSD	16WC1A MSD	920702	13.21				
410-18116-4 MS	16WC1A MS	846298	13.21				
410-18116-4 MSD	16WC1A MSD	775809	13.21				
410-18116-5	16WDUP	767751	13.21				
410-18116-6	16WC1B	783138	13.21				
410-18116-7	16-2	780932	13.21				
410-18116-8	16-3	798886	13.21				
410-18116-9	16-5	716688	13.21				
410-18116-10	16WC2B	685383	13.21				
410-18116-11	16SPRING	788752	13.21				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
 RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16C1 Lab Sample ID: 410-18116-1
 Matrix: Ground Water Lab File ID: HC28S04.D
 Analysis Method: 8260C LL Date Collected: 10/22/2020 10:55
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 12:43
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	6.3		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-93-3	2-Butanone	ND		10	
71-43-2	Benzene	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
75-00-3	Chloroethane	4.6		1.0	
74-87-3	Chloromethane	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
115-10-6	Methoxymethane	14		13	
100-41-4	Ethylbenzene	ND		1.0	
76-13-1	Freon 113	ND		1.0	
75-09-2	Methylene Chloride	1.3		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
109-99-9	Tetrahydrofuran	ND		25	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		3.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		80-120
1868-53-7	Dibromofluoromethane (Surr)	114		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S04.D
 Lims ID: 410-18116-C-1
 Client ID: 16C1
 Sample Type: Client
 Inject. Date: 28-Oct-2020 12:43:30 ALS Bottle#: 11 Worklist Smp#: 12
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-012
 Misc. Info.: 410-18116-C-1
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: howej

Date: 28-Oct-2020 13:28:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85		2.081				ND	U
4 Dimethyl ether	45	2.166	2.166	0.000	100	760392	14.4	
6 Chloromethane	50		2.288				ND	7
7 Vinyl chloride	62	2.404	2.410	-0.006	95	6855	0.1139	
10 Chloroethane	64	2.861	2.855	0.006	98	176608	4.56	
13 Trichlorofluoromethane	101	3.105	3.166	-0.061	32	2563	0.0328	
15 Ethyl ether	59	3.452	3.446	0.006	93	1743486	49.4	E
18 1,1-Dichloroethene	96	3.782	3.781	0.001	96	9825	0.2466	
20 112TCTFE	101		3.812				ND	
29 Methylene Chloride	84	4.495	4.495	0.000	95	57489	1.29	
* 28 t-Butyl alcohol-d10 (IS)	65	4.513	4.507	0.006	0	131210	50.0	
35 1,1-Dichloroethane	63	5.574	5.568	0.006	97	555602	6.28	
41 2-Butanone (MEK)	43		6.342				ND	
49 Tetrahydrofuran	71	6.726	6.726	0.000	90	57189	15.6	
\$ 51 Dibromofluoromethane (Surr)	113	7.080	7.080	0.000	94	471679	11.4	
52 1,1,1-Trichloroethane	97	7.086	7.092	-0.006	37	32509	0.4631	
56 Carbon tetrachloride	117		7.305				ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.537	7.531	0.006	0	97487	11.5	
59 Benzene	78	7.574	7.567	0.007	93	71418	0.3670	
* 65 Fluorobenzene (IS)	96	7.964	7.964	0.000	99	1683566	10.0	
67 Trichloroethene	95	8.439	8.439	0.000	91	10931	0.2234	
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	1673542	9.46	
83 Toluene	92		10.000				ND	7
88 Tetrachloroethene	166	10.536	10.536	0.000	90	11494	0.1950	
S 95 Xylenes, Total	106		11.245				ND	7
* 97 Chlorobenzene-d5 (IS)	117	11.347	11.347	0.000	86	1328923	10.0	
100 Ethylbenzene	91		11.457				ND	7
101 m-Xylene & p-Xylene	106		11.567				ND	7
102 o-Xylene	106		11.896				ND	7
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	91	606898	9.47	
* 124 1,4-Dichlorobenzene-d4	152	13.207	13.206	0.001	95	700633	10.0	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 28-Oct-2020 18:19:36

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurolins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S04.D

Injection Date: 28-Oct-2020 12:43:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-18116-C-1

Lab Sample ID: 410-18116-1

Worklist Smp#: 12

Client ID: 16C1

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

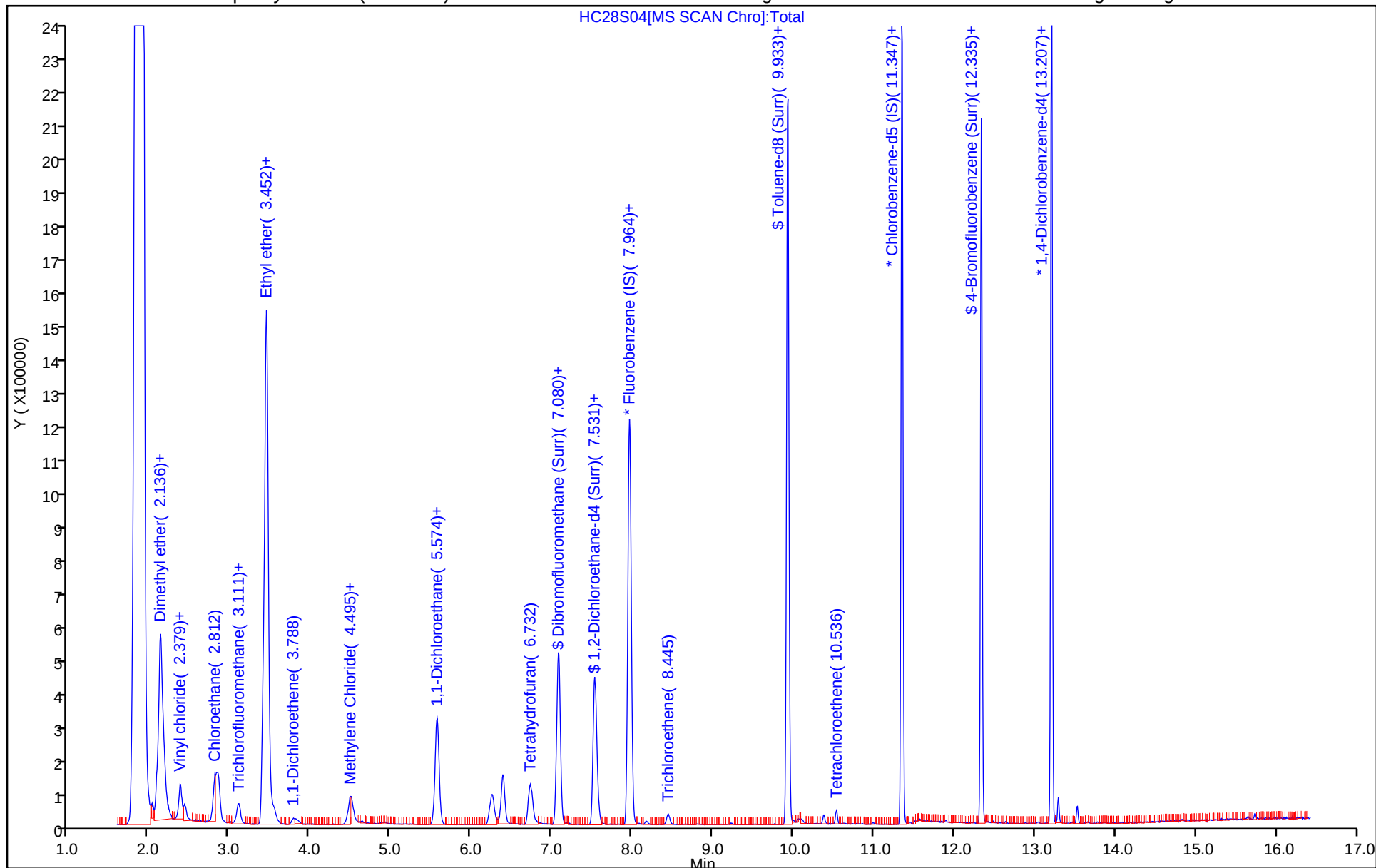
ALS Bottle#: 11

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S04.D
 Lims ID: 410-18116-C-1
 Client ID: 16C1
 Sample Type: Client
 Inject. Date: 28-Oct-2020 12:43:30 ALS Bottle#: 11 Worklist Smp#: 12
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-012
 Misc. Info.: 410-18116-C-1
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: howej

Date: 28-Oct-2020 13:28:57

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	11.4	114.32
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	11.5	115.33
\$ 82 Toluene-d8 (Surr)	10.0	9.46	94.55
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.47	94.71

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S04.D

Injection Date: 28-Oct-2020 12:43:30

Instrument ID: 19094

Lims ID: 410-18116-C-1

Lab Sample ID: 410-18116-1

Client ID: 16C1

Operator ID: jkh09052

ALS Bottle#: 11

Worklist Smp#: 12

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

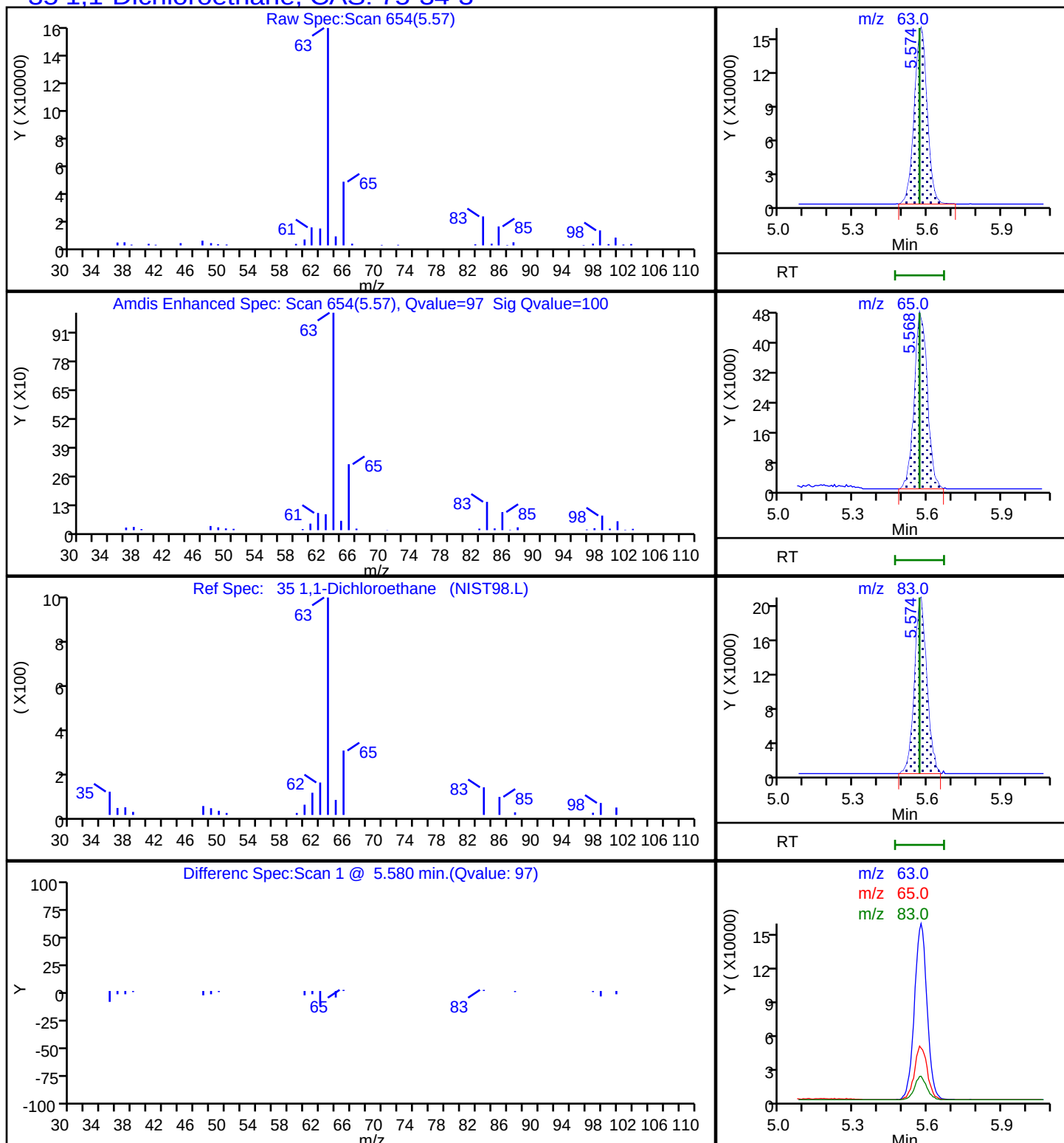
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector:

MS Quad

35 1,1-Dichloroethane, CAS: 75-34-3



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S04.D

Injection Date: 28-Oct-2020 12:43:30

Instrument ID: 19094

Lims ID: 410-18116-C-1

Lab Sample ID: 410-18116-1

Client ID: 16C1

Operator ID: jkh09052

ALS Bottle#: 11

Worklist Smp#: 12

Purge Vol: 25.000 mL

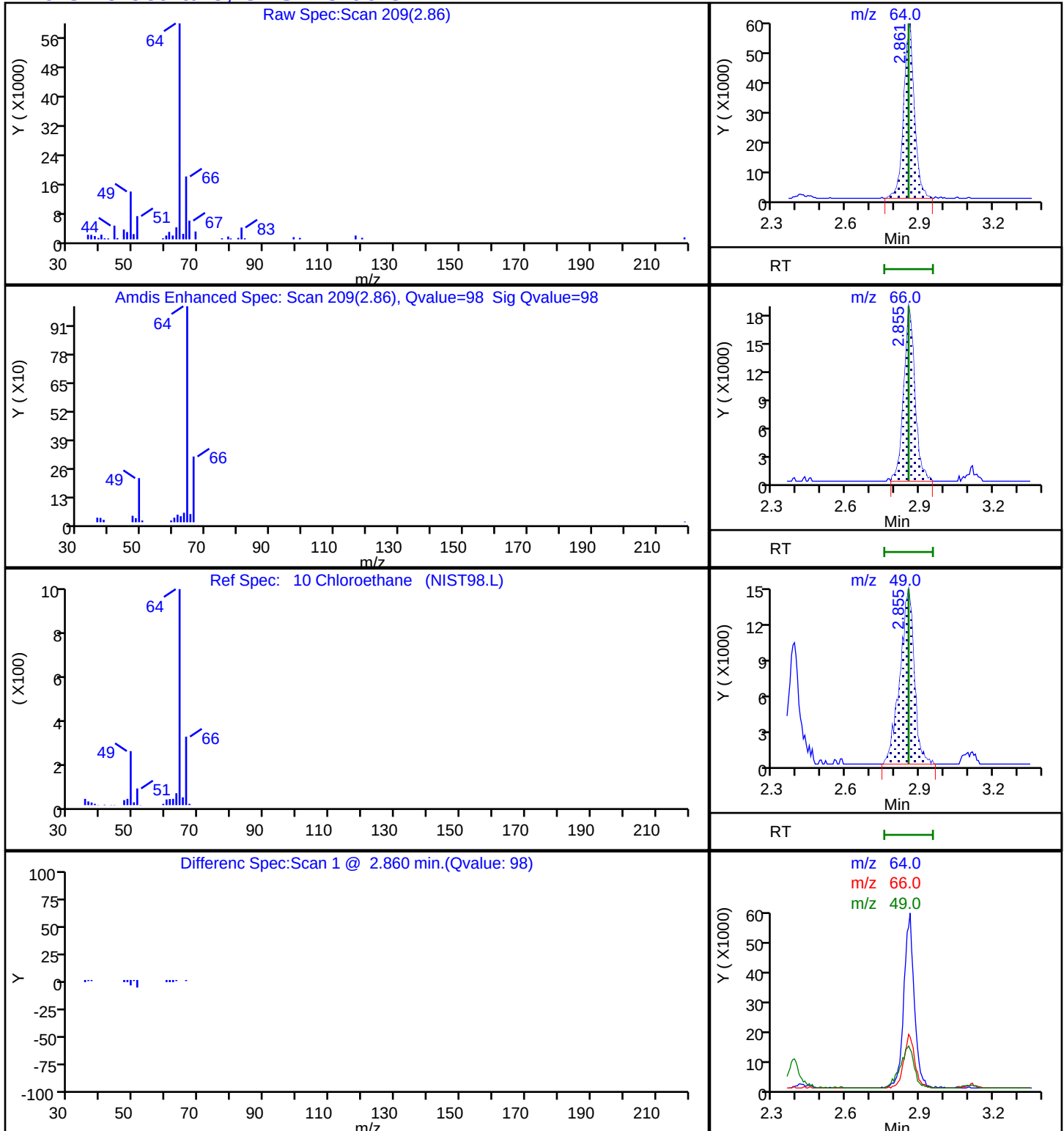
Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

10 Chloroethane, CAS: 75-00-3

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S04.D

Injection Date: 28-Oct-2020 12:43:30

Instrument ID: 19094

Lims ID: 410-18116-C-1

Lab Sample ID: 410-18116-1

Client ID: 16C1

Operator ID: jkh09052

ALS Bottle#: 11

Worklist Smp#: 12

Purge Vol: 25.000 mL

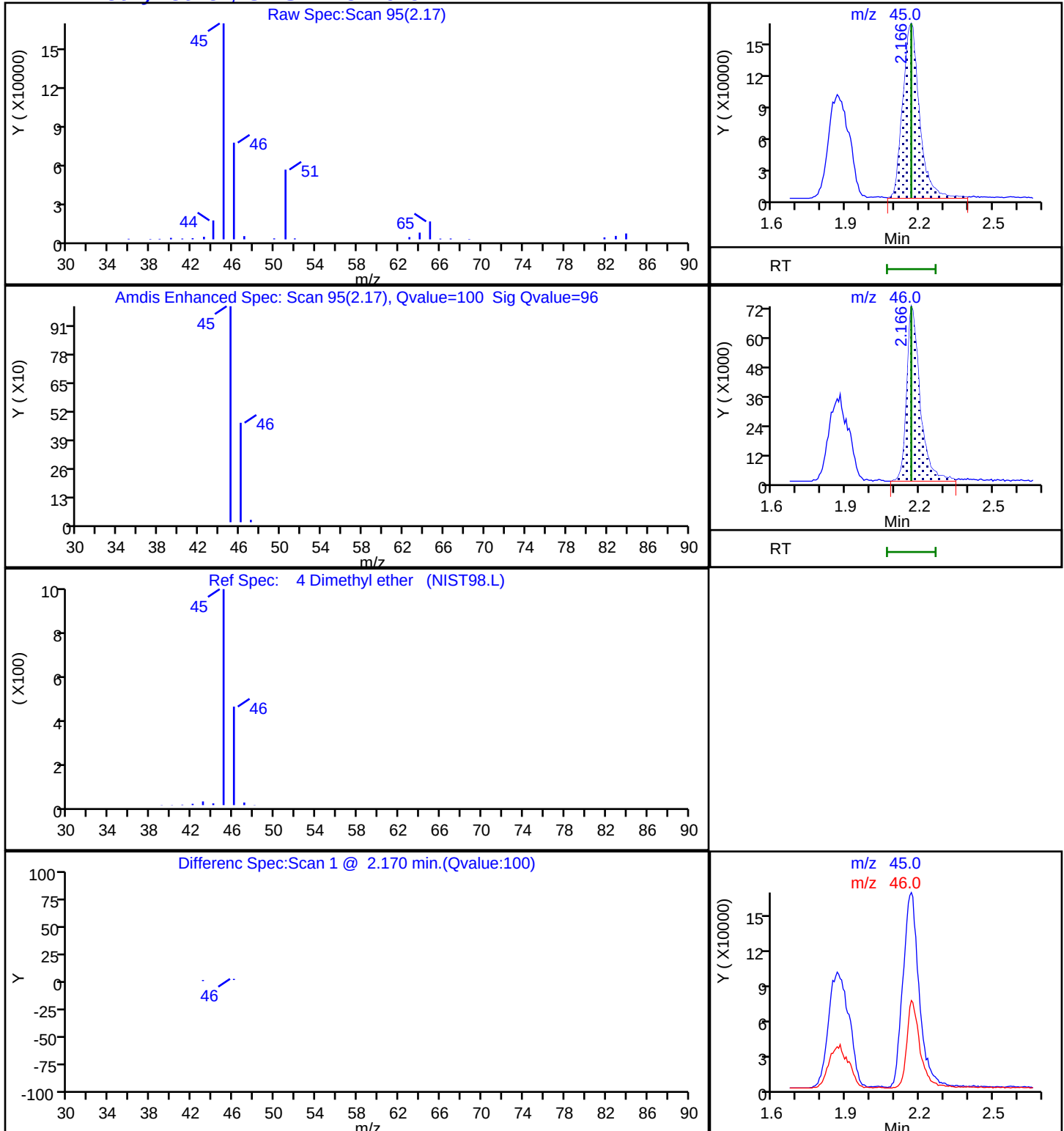
Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

4 Dimethyl ether, CAS: 115-10-6

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S04.D

Injection Date: 28-Oct-2020 12:43:30

Instrument ID: 19094

Lims ID: 410-18116-C-1

Lab Sample ID: 410-18116-1

Client ID: 16C1

Operator ID: jkh09052

ALS Bottle#: 11

Worklist Smp#: 12

Purge Vol: 25.000 mL

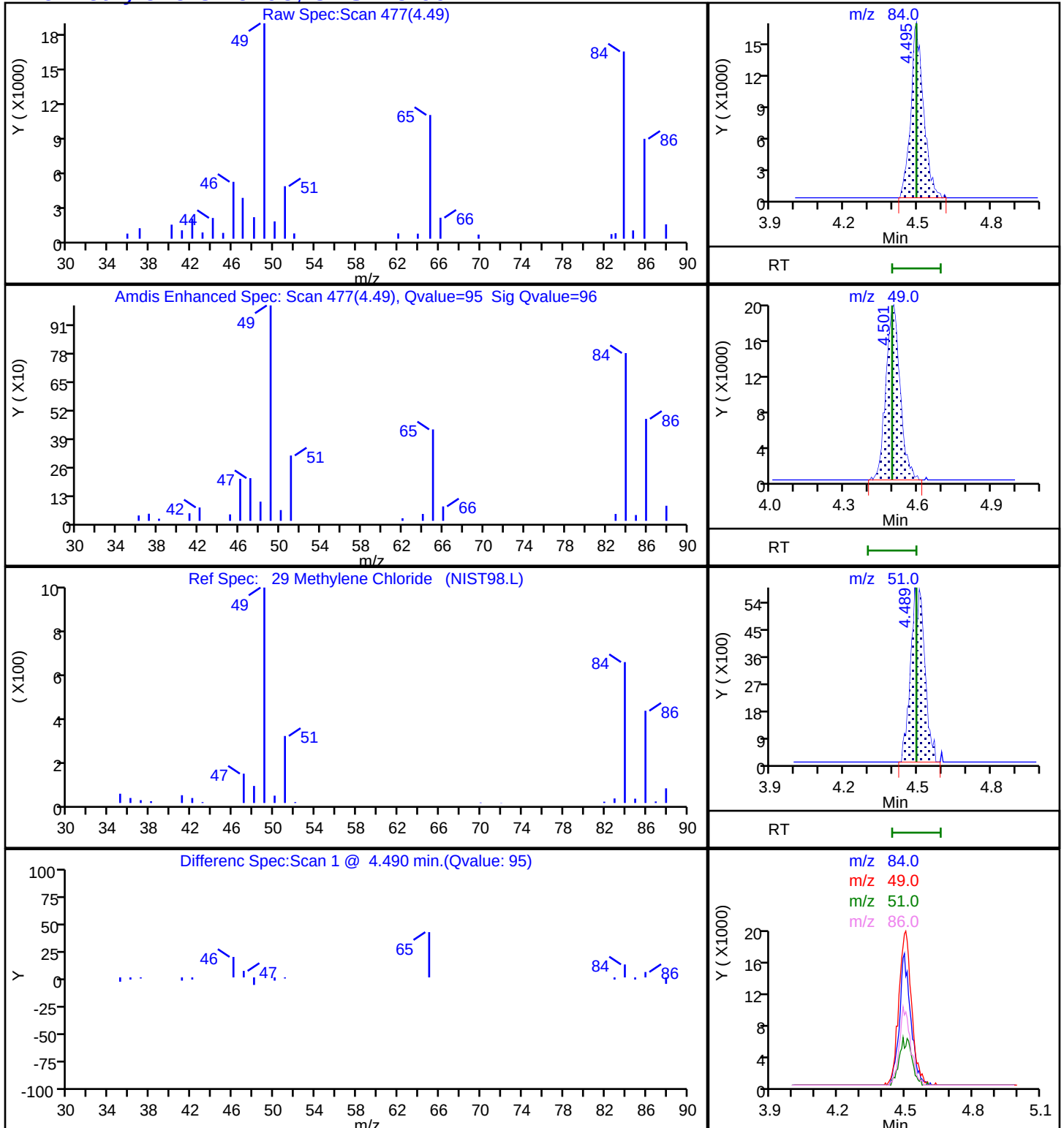
Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

29 Methylene Chloride, CAS: 75-09-2

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S04.D

Injection Date: 28-Oct-2020 12:43:30

Instrument ID: 19094

Lims ID: 410-18116-C-1

Lab Sample ID: 410-18116-1

Client ID: 16C1

Operator ID: jkh09052

ALS Bottle#:

11

Worklist Smp#: 12

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

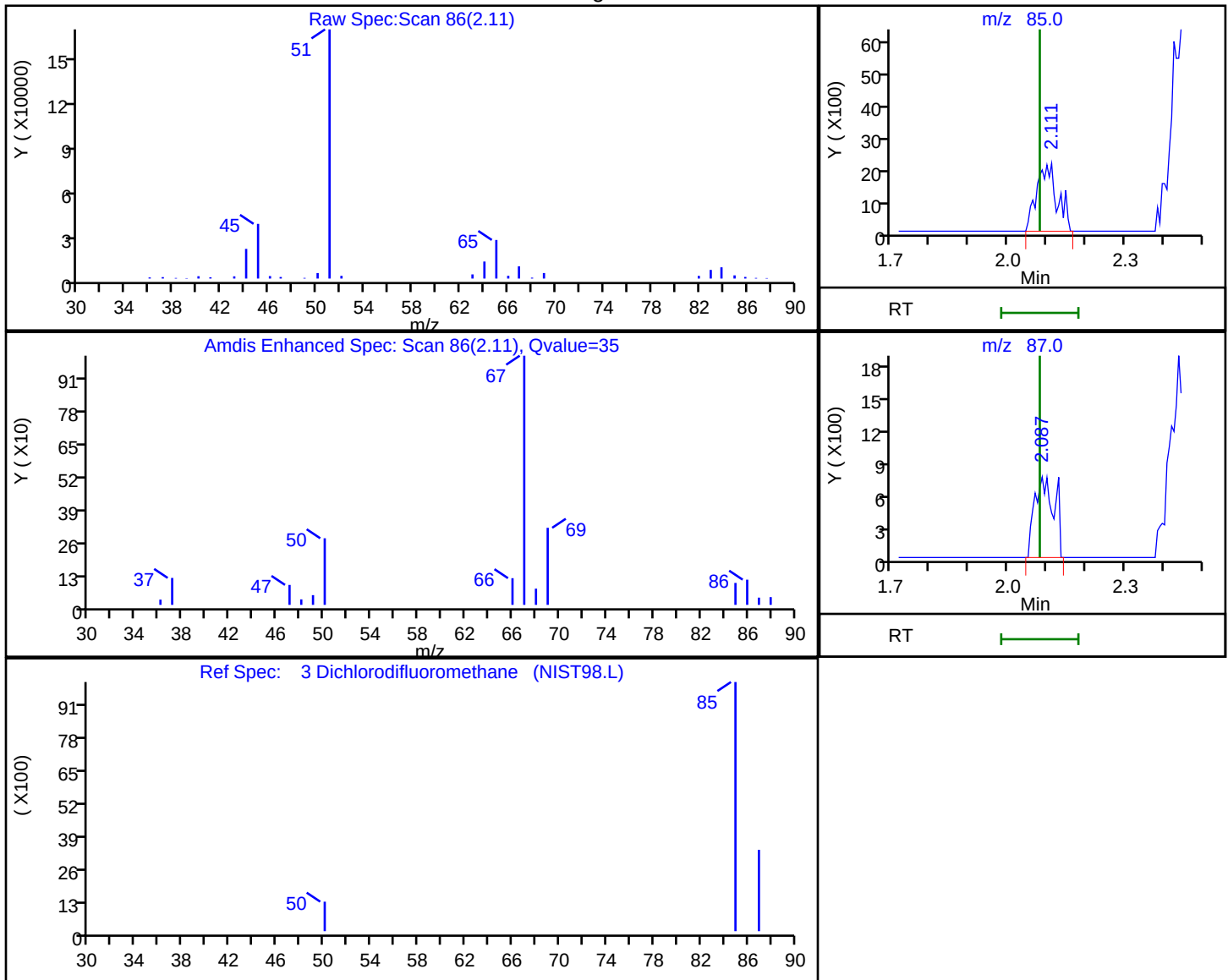
Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

Detector

MS Quad

3 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results



RT	Mass	Response	Amount
2.11	85.00	7786	0.159607
2.09	87.00	2626	

Reviewer: howej, 28-Oct-2020 13:28:39

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16C1 DL Lab Sample ID: 410-18116-1 DL
 Matrix: Ground Water Lab File ID: HC28S05.D
 Analysis Method: 8260C LL Date Collected: 10/22/2020 10:55
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 13:04
 Soil Aliquot Vol: _____ Dilution Factor: 2.5
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
60-29-7	Ethyl ether	43		31	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		80-120
1868-53-7	Dibromofluoromethane (Surr)	114		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S05.D
 Lims ID: 410-18116-D-1 DL
 Client ID: 16C1
 Sample Type: Client
 Inject. Date: 28-Oct-2020 13:04:30 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 2.5000
 Sample Info: 410-0014060-013
 Misc. Info.: 410-18116-D-1
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: howej

Date: 28-Oct-2020 13:29:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.093	2.081	0.012	38	2475	0.0431	
4 Dimethyl ether	45	2.166	2.166	0.000	100	308876	4.98	
6 Chloromethane	50		2.288				ND	7
7 Vinyl chloride	62		2.410				ND	7
10 Chloroethane	64	2.855	2.855	0.000	99	69981	1.54	
13 Trichlorofluoromethane	101		3.166				ND	7
15 Ethyl ether	59	3.452	3.446	0.006	93	707985	17.0	
18 1,1-Dichloroethene	96	3.788	3.781	0.007	93	3350	0.0714	
20 112TCTFE	101		3.812				ND	
29 Methylene Chloride	84	4.507	4.495	0.012	95	23956	0.4554	
* 28 t-Butyl alcohol-d10 (IS)	65	4.525	4.507	0.018	0	136560	50.0	
35 1,1-Dichloroethane	63	5.574	5.568	0.006	96	226492	2.18	
41 2-Butanone (MEK)	43		6.342				ND	
49 Tetrahydrofuran	71	6.732	6.726	0.006	86	22111	5.81	
\$ 51 Dibromofluoromethane (Surr)	113	7.086	7.080	0.006	94	552568	11.4	
52 1,1,1-Trichloroethane	97	7.092	7.092	0.000	36	13298	0.1609	
56 Carbon tetrachloride	117		7.305				ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.531	7.531	0.000	0	107633	10.8	
59 Benzene	78	7.567	7.567	0.000	93	29393	0.1283	
* 65 Fluorobenzene (IS)	96	7.964	7.964	0.000	99	1981881	10.0	
67 Trichloroethene	95	8.433	8.439	-0.006	87	4271	0.0741	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.927	0.006	94	1994783	9.56	
83 Toluene	92	10.006	10.000	0.006	59	4146	0.0273	
88 Tetrachloroethene	166	10.536	10.536	0.000	96	8018	0.1154	
S 95 Xylenes, Total	106		11.245				ND	7
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.347	0.006	86	1566160	10.0	
100 Ethylbenzene	91		11.457				ND	
101 m-Xylene & p-Xylene	106		11.567				ND	7
102 o-Xylene	106		11.896				ND	7
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	97	713987	9.45	
* 124 1,4-Dichlorobenzene-d4	152	13.207	13.206	0.000	95	812407	10.0	

[QC Flag Legend](#)

Processing Flags

7 - Failed Limit of Detection

[Reagents:](#)

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S05.D

Injection Date: 28-Oct-2020 13:04:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-18116-D-1 DL

Lab Sample ID: 410-18116-1

Worklist Smp#: 13

Client ID: 16C1

Purge Vol: 25.000 mL

Dil. Factor: 2.5000

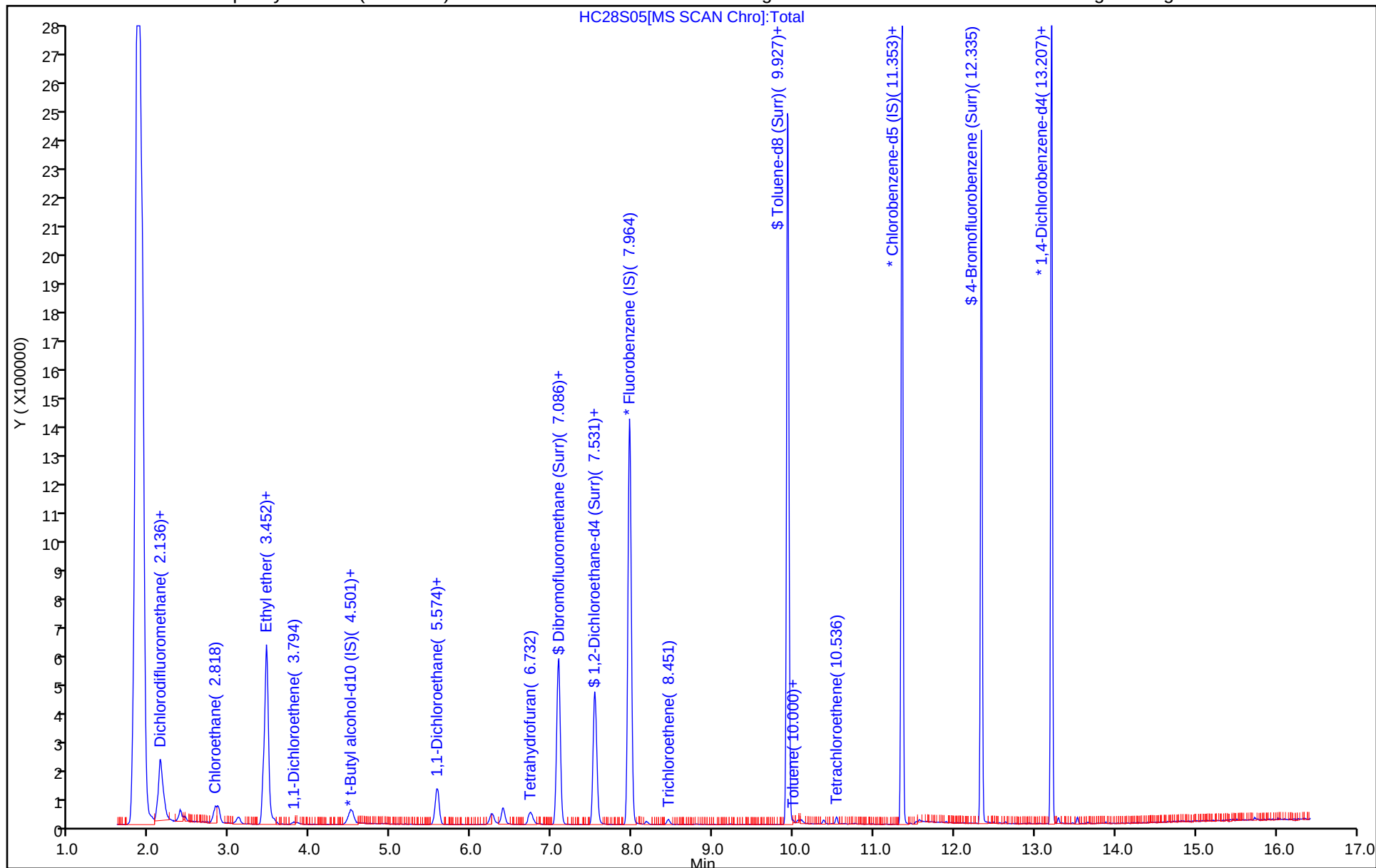
ALS Bottle#: 12

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S05.D
 Lims ID: 410-18116-D-1 DL
 Client ID: 16C1
 Sample Type: Client
 Inject. Date: 28-Oct-2020 13:04:30 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 2.5000
 Sample Info: 410-0014060-013
 Misc. Info.: 410-18116-D-1
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: howej

Date: 28-Oct-2020 13:29:18

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	11.4	113.77
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.8	108.16
\$ 82 Toluene-d8 (Surr)	10.0	9.56	95.63
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.45	94.54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S05.D

Injection Date: 28-Oct-2020 13:04:30

Instrument ID: 19094

Lims ID: 410-18116-D-1 DL

Lab Sample ID: 410-18116-1

Client ID: 16C1

Operator ID: jkh09052

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 25.000 mL

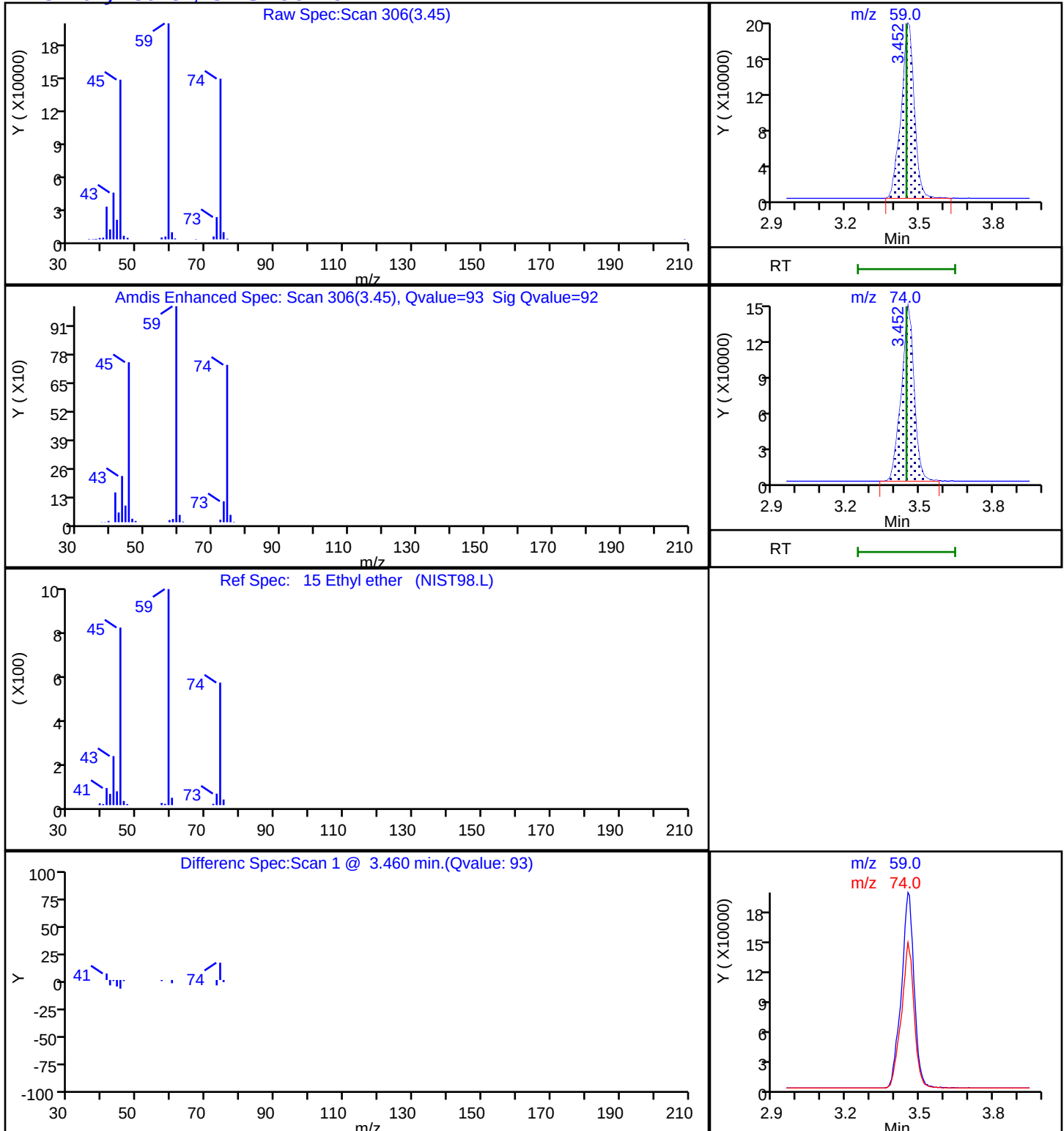
Dil. Factor: 2.5000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

15 Ethyl ether, CAS: 60-29-7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16MW8 Lab Sample ID: 410-18116-2
 Matrix: Ground Water Lab File ID: HC28S06.D
 Analysis Method: 8260C LL Date Collected: 10/21/2020 10:35
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 13:26
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-93-3	2-Butanone	ND		10	
71-43-2	Benzene	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
115-10-6	Methoxymethane	ND		13	
60-29-7	Ethyl ether	15		13	
100-41-4	Ethylbenzene	ND		1.0	
76-13-1	Freon 113	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
109-99-9	Tetrahydrofuran	ND		25	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		3.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		80-120
1868-53-7	Dibromofluoromethane (Surr)	113		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S06.D
 Lims ID: 410-18116-C-2
 Client ID: 16MW8
 Sample Type: Client
 Inject. Date: 28-Oct-2020 13:26:30 ALS Bottle#: 13 Worklist Smp#: 14
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-014
 Misc. Info.: 410-18116-C-2
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: howej

Date: 28-Oct-2020 13:49:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85		2.081				ND	7
4 Dimethyl ether	45	2.160	2.166	-0.006	98	44193	0.7185	
6 Chloromethane	50		2.288				ND	
7 Vinyl chloride	62		2.410				ND	7
10 Chloroethane	64	2.831	2.855	-0.025	30	3907	0.0865	
13 Trichlorofluoromethane	101		3.166				ND	
15 Ethyl ether	59	3.446	3.446	0.000	92	621264	15.1	
18 1,1-Dichloroethene	96		3.781				ND	7
20 112TCTFE	101		3.812				ND	
29 Methylene Chloride	84	4.489	4.495	-0.006	32	2318	0.0445	
* 28 t-Butyl alcohol-d10 (IS)	65	4.501	4.507	-0.006	0	135267	50.0	
35 1,1-Dichloroethane	63		5.568				ND	
41 2-Butanone (MEK)	43		6.342				ND	
49 Tetrahydrofuran	71	6.732	6.726	0.006	85	9112	2.42	
\$ 51 Dibromofluoromethane (Surr)	113	7.080	7.080	0.000	94	543309	11.3	
52 1,1,1-Trichloroethane	97		7.092				ND	
56 Carbon tetrachloride	117		7.305				ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.531	7.531	0.000	0	107252	10.9	
59 Benzene	78	7.567	7.567	0.000	92	12029	0.0530	
* 65 Fluorobenzene (IS)	96	7.964	7.964	0.000	99	1963438	10.0	
67 Trichloroethene	95		8.439				ND	
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	1961775	9.51	
83 Toluene	92		10.000				ND	7
88 Tetrachloroethene	166	10.536	10.536	0.000	87	3141	0.0457	
S 95 Xylenes, Total	106		11.245				ND	7
* 97 Chlorobenzene-d5 (IS)	117	11.347	11.347	0.000	86	1549016	10.0	
100 Ethylbenzene	91		11.457				ND	7
101 m-Xylene & p-Xylene	106		11.567				ND	7
102 o-Xylene	106		11.896				ND	7
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	90	716967	9.60	
* 124 1,4-Dichlorobenzene-d4	152	13.207	13.206	0.001	95	800085	10.0	

[QC Flag Legend](#)

Processing Flags

7 - Failed Limit of Detection

[Reagents:](#)

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S06.D

Injection Date: 28-Oct-2020 13:26:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-18116-C-2

Lab Sample ID: 410-18116-2

Worklist Smp#: 14

Client ID: 16MW8

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

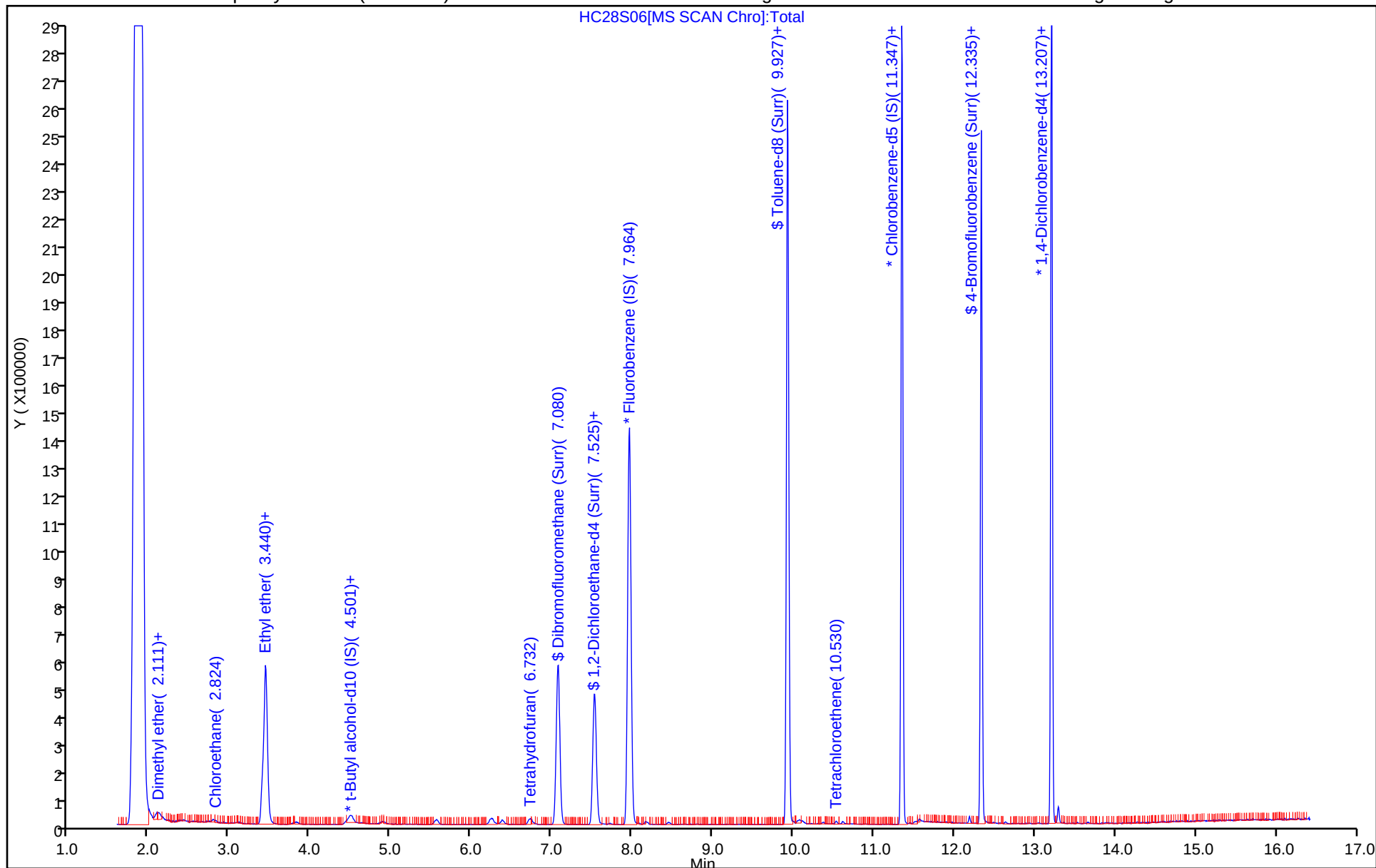
ALS Bottle#: 13

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S06.D
 Lims ID: 410-18116-C-2
 Client ID: 16MW8
 Sample Type: Client
 Inject. Date: 28-Oct-2020 13:26:30 ALS Bottle#: 13 Worklist Smp#: 14
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-014
 Misc. Info.: 410-18116-C-2
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: howej

Date: 28-Oct-2020 13:49:39

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	11.3	112.91
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.9	108.79
\$ 82 Toluene-d8 (Surr)	10.0	9.51	95.09
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.60	95.99

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S06.D

Injection Date: 28-Oct-2020 13:26:30

Instrument ID: 19094

Lims ID: 410-18116-C-2

Lab Sample ID: 410-18116-2

Client ID: 16MW8

Operator ID: jkh09052

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 25.000 mL

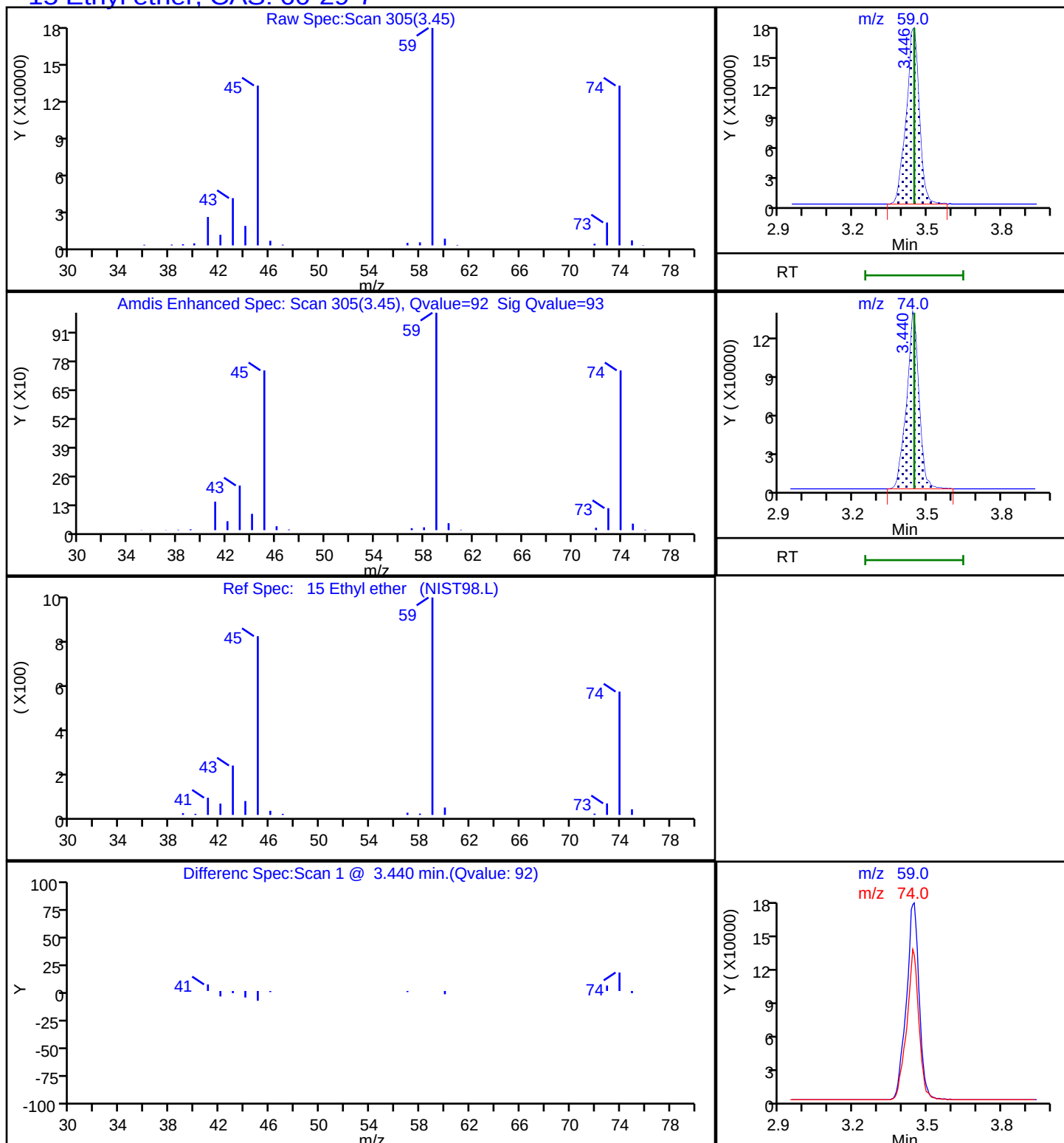
Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

15 Ethyl ether, CAS: 60-29-7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16MW9 Lab Sample ID: 410-18116-3
 Matrix: Ground Water Lab File ID: HC28S07.D
 Analysis Method: 8260C LL Date Collected: 10/22/2020 10:20
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 13:47
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	6.5		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-93-3	2-Butanone	ND		10	
71-43-2	Benzene	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
75-00-3	Chloroethane	2.2		1.0	
74-87-3	Chloromethane	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
115-10-6	Methoxymethane	ND		13	
100-41-4	Ethylbenzene	ND		1.0	
76-13-1	Freon 113	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
109-99-9	Tetrahydrofuran	ND		25	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		3.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		80-120
1868-53-7	Dibromofluoromethane (Surr)	112		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S07.D
 Lims ID: 410-18116-C-3
 Client ID: 16MW9
 Sample Type: Client
 Inject. Date: 28-Oct-2020 13:47:30 ALS Bottle#: 14 Worklist Smp#: 15
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-015
 Misc. Info.: 410-18116-C-3
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:05:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.081	2.081	0.000	36	5381	0.0944	
4 Dimethyl ether	45		2.166				ND	U
6 Chloromethane	50		2.288				ND	
7 Vinyl chloride	62	2.398	2.410	-0.012	96	9076	0.1291	
10 Chloroethane	64	2.849	2.855	-0.006	99	101086	2.24	
13 Trichlorofluoromethane	101		3.166				ND	
15 Ethyl ether	59	3.446	3.446	0.000	93	3663991	88.9	E
18 1,1-Dichloroethene	96	3.769	3.781	-0.012	95	10283	0.2210	
20 112TCTFE	101		3.812				ND	
29 Methylene Chloride	84	4.507	4.495	0.012	37	4481	0.0858	
* 28 t-Butyl alcohol-d10 (IS)	65	4.495	4.507	-0.012	0	124097	50.0	
35 1,1-Dichloroethane	63	5.568	5.568	0.000	96	670404	6.49	
41 2-Butanone (MEK)	43		6.342				ND	
49 Tetrahydrofuran	71		6.726				ND	
\$ 51 Dibromofluoromethane (Surr)	113	7.080	7.080	0.000	93	541941	11.2	
52 1,1,1-Trichloroethane	97		7.092				ND	
56 Carbon tetrachloride	117		7.305				ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.525	7.531	-0.006	0	110180	11.2	
59 Benzene	78	7.567	7.567	0.000	93	103237	0.4542	
* 65 Fluorobenzene (IS)	96	7.958	7.964	-0.006	99	1966492	10.0	
67 Trichloroethene	95		8.439				ND	
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	1986323	9.65	
83 Toluene	92	10.000	10.000	0.000	92	4324	0.0288	
88 Tetrachloroethene	166	10.536	10.536	0.000	93	4391	0.0640	
S 95 Xylenes, Total	106		11.245				ND	7
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.347	0.006	86	1545416	10.0	
100 Ethylbenzene	91		11.457				ND	
101 m-Xylene & p-Xylene	106		11.567				ND	7
102 o-Xylene	106		11.896				ND	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	91	709801	9.53	
* 124 1,4-Dichlorobenzene-d4	152	13.206	13.206	0.000	96	811836	10.0	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 28-Oct-2020 18:19:42

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S07.D

Injection Date: 28-Oct-2020 13:47:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-18116-C-3

Lab Sample ID: 410-18116-3

Worklist Smp#: 15

Client ID: 16MW9

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

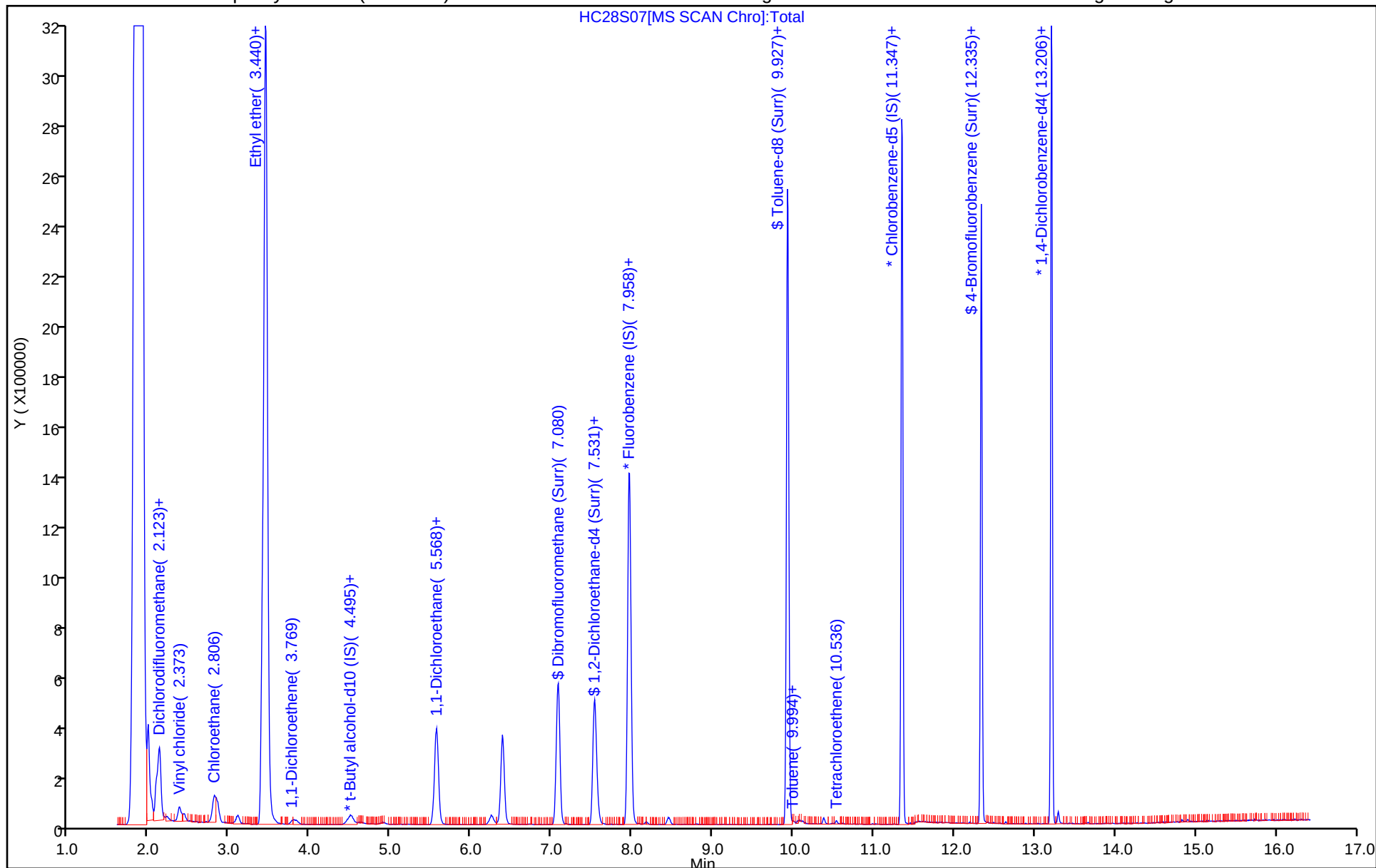
ALS Bottle#: 14

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S07.D
 Lims ID: 410-18116-C-3
 Client ID: 16MW9
 Sample Type: Client
 Inject. Date: 28-Oct-2020 13:47:30 ALS Bottle#: 14 Worklist Smp#: 15
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-015
 Misc. Info.: 410-18116-C-3
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:05:41

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	11.2	112.46
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	11.2	111.59
\$ 82 Toluene-d8 (Surr)	10.0	9.65	96.51
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.53	95.25

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S07.D

Injection Date: 28-Oct-2020 13:47:30

Instrument ID: 19094

Lims ID: 410-18116-C-3

Lab Sample ID: 410-18116-3

Client ID: 16MW9

Operator ID: jkh09052

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 25.000 mL

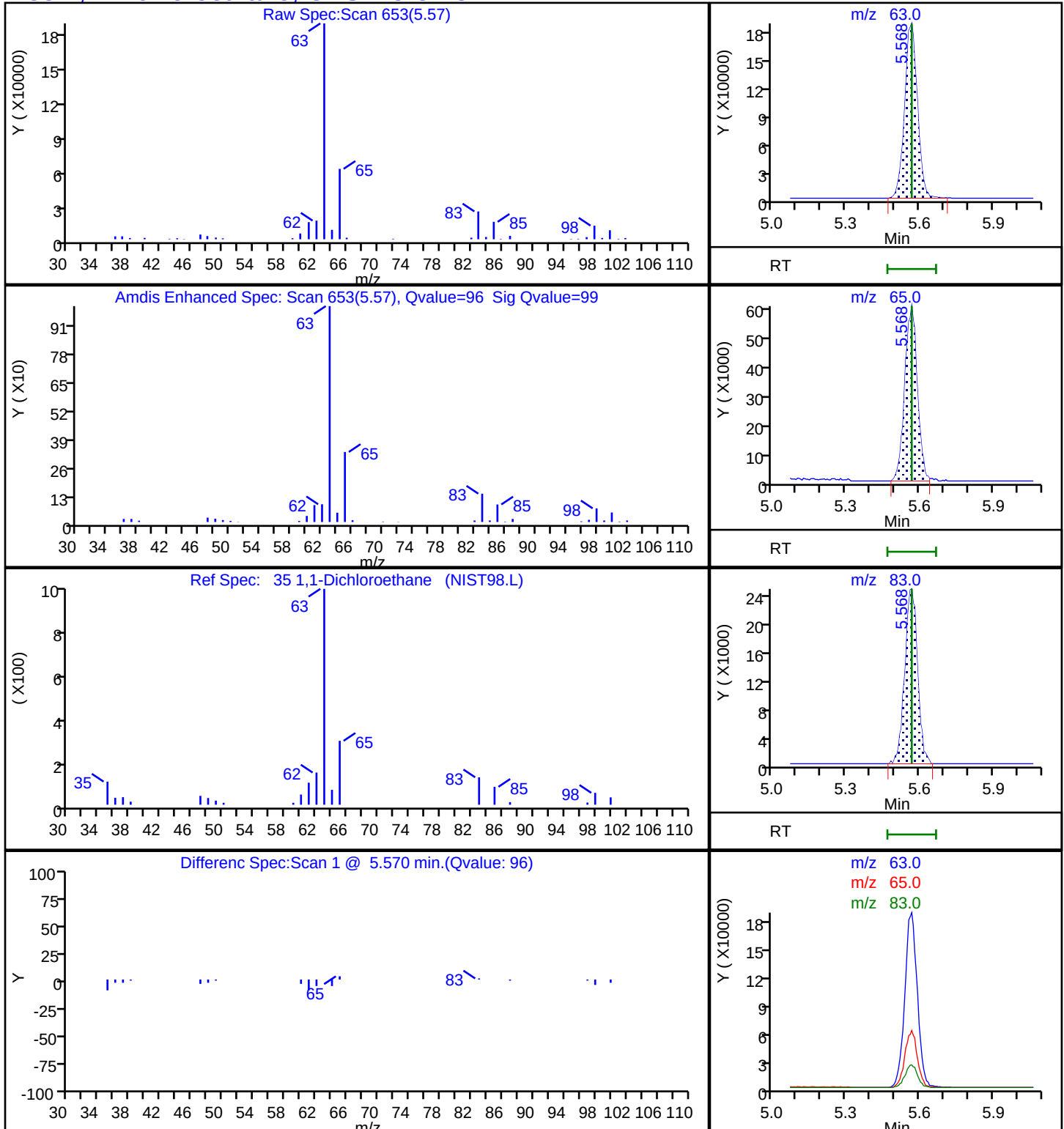
Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

35 1,1-Dichloroethane, CAS: 75-34-3

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S07.D

Injection Date: 28-Oct-2020 13:47:30

Instrument ID: 19094

Lims ID: 410-18116-C-3

Lab Sample ID: 410-18116-3

Client ID: 16MW9

Operator ID: jkh09052

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 25.000 mL

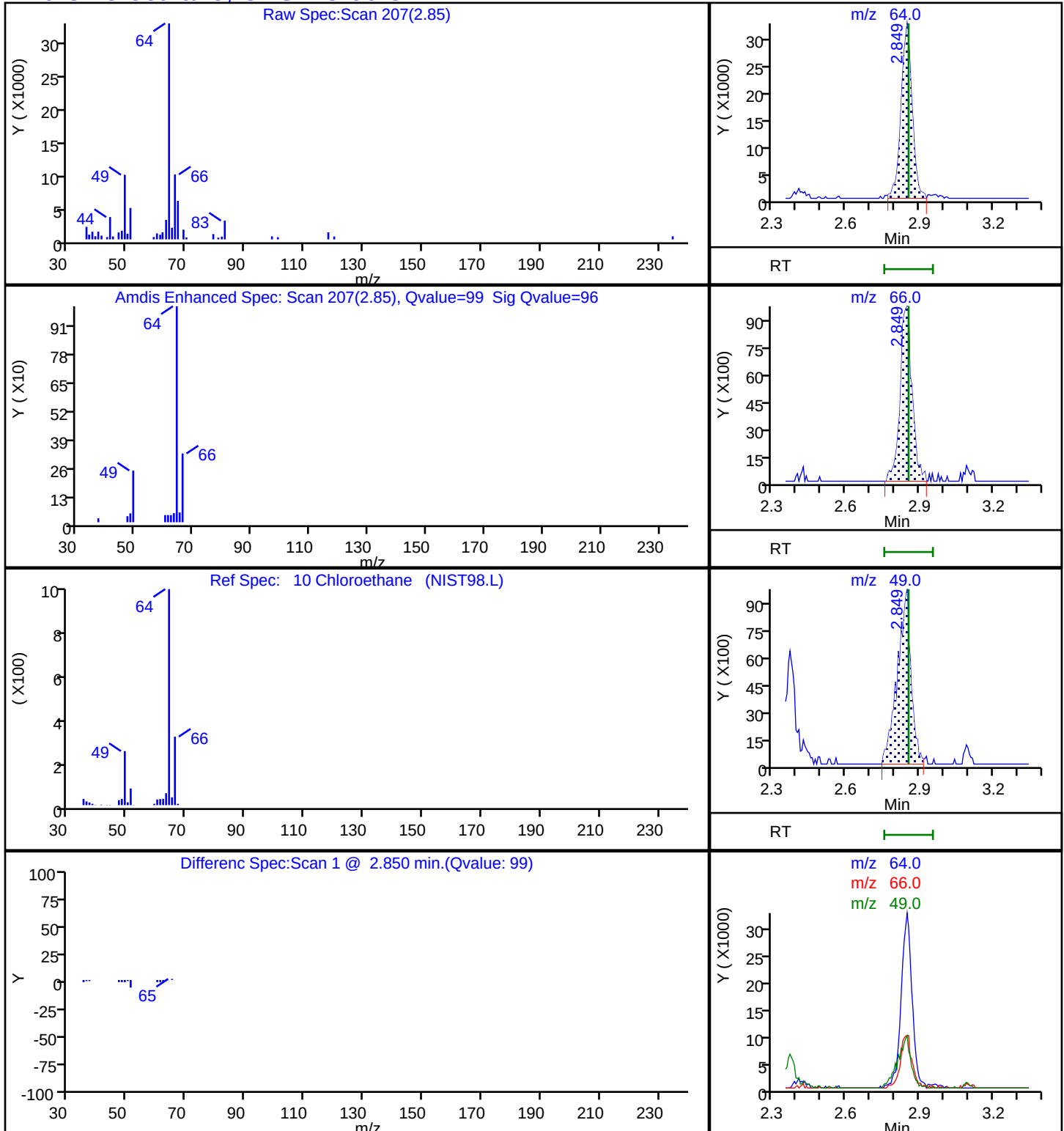
Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

10 Chloroethane, CAS: 75-00-3

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S07.D

Injection Date: 28-Oct-2020 13:47:30

Instrument ID: 19094

Lims ID: 410-18116-C-3

Lab Sample ID: 410-18116-3

Client ID: 16MW9

Operator ID: jkh09052

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

Method: MSV_19094_25mL

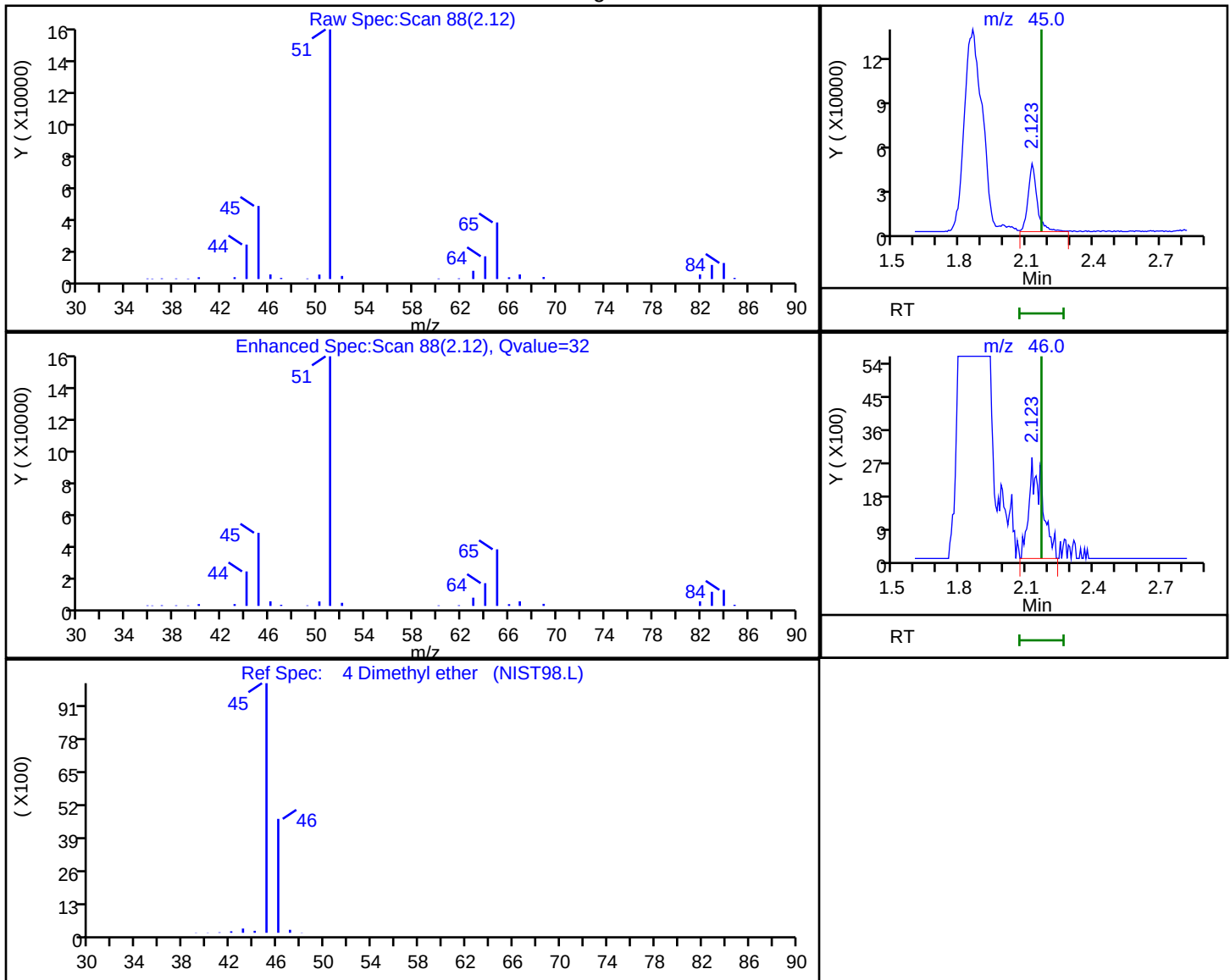
Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm i.d.)

MS Quad

4 Dimethyl ether, CAS: 115-10-6

Processing Results



RT	Mass	Response	Amount
2.12	45.00	125154	2.031739
2.12	46.00	11916	

Reviewer: campbellme, 28-Oct-2020 18:05:29

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16MW9 DL Lab Sample ID: 410-18116-3 DL
 Matrix: Ground Water Lab File ID: HC28S08.D
 Analysis Method: 8260C LL Date Collected: 10/22/2020 10:20
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 14:09
 Soil Aliquot Vol: _____ Dilution Factor: 4
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
60-29-7	Ethyl ether	84		50	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		80-120
1868-53-7	Dibromofluoromethane (Surr)	114		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S08.D
 Lims ID: 410-18116-D-3 DL
 Client ID: 16MW9
 Sample Type: Client
 Inject. Date: 28-Oct-2020 14:09:30 ALS Bottle#: 15 Worklist Smp#: 16
 Purge Vol: 25.000 mL Dil. Factor: 4.0000
 Sample Info: 410-0014060-016
 Misc. Info.: 410-18116-D-3
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:06:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85		2.081				ND	7
4 Dimethyl ether	45		2.166				ND	7
6 Chloromethane	50		2.288				ND	
7 Vinyl chloride	62		2.410				ND	7
10 Chloroethane	64	2.843	2.855	-0.012	98	23743	0.5272	
13 Trichlorofluoromethane	101		3.166				ND	
15 Ethyl ether	59	3.440	3.446	-0.006	93	860665	21.0	
18 1,1-Dichloroethene	96	3.782	3.781	0.001	23	1767	0.0381	
20 112TCTFE	101		3.812				ND	
29 Methylene Chloride	84	4.507	4.495	0.012	33	1917	0.0369	
* 28 t-Butyl alcohol-d10 (IS)	65	4.507	4.507	0.000	0	138793	50.0	
35 1,1-Dichloroethane	63	5.568	5.568	0.000	96	155700	1.51	a
41 2-Butanone (MEK)	43		6.342				ND	
49 Tetrahydrofuran	71		6.726				ND	
\$ 51 Dibromofluoromethane (Surr)	113	7.080	7.080	0.000	93	545179	11.4	
52 1,1,1-Trichloroethane	97		7.092				ND	
56 Carbon tetrachloride	117		7.305				ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.525	7.531	-0.006	0	109976	11.2	
59 Benzene	78	7.555	7.567	-0.012	94	23854	0.1054	
* 65 Fluorobenzene (IS)	96	7.958	7.964	-0.006	98	1958487	10.0	
67 Trichloroethene	95		8.439				ND	
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	1996904	9.58	
83 Toluene	92		10.000				ND	7
88 Tetrachloroethene	166	10.536	10.536	0.000	92	2412	0.0347	
S 95 Xylenes, Total	106		11.245				ND	7
* 97 Chlorobenzene-d5 (IS)	117	11.347	11.347	0.000	86	1565027	10.0	
100 Ethylbenzene	91		11.457				ND	7
101 m-Xylene & p-Xylene	106		11.567				ND	7
102 o-Xylene	106		11.896				ND	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	91	711535	9.43	
* 124 1,4-Dichlorobenzene-d4	152	13.207	13.206	0.001	95	813464	10.0	

[QC Flag Legend](#)

Processing Flags

7 - Failed Limit of Detection

Review Flags

a - User Assigned ID

[Reagents:](#)

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S08.D

Injection Date: 28-Oct-2020 14:09:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-18116-D-3 DL

Lab Sample ID: 410-18116-3

Worklist Smp#: 16

Client ID: 16MW9

Purge Vol: 25.000 mL

Dil. Factor: 4.0000

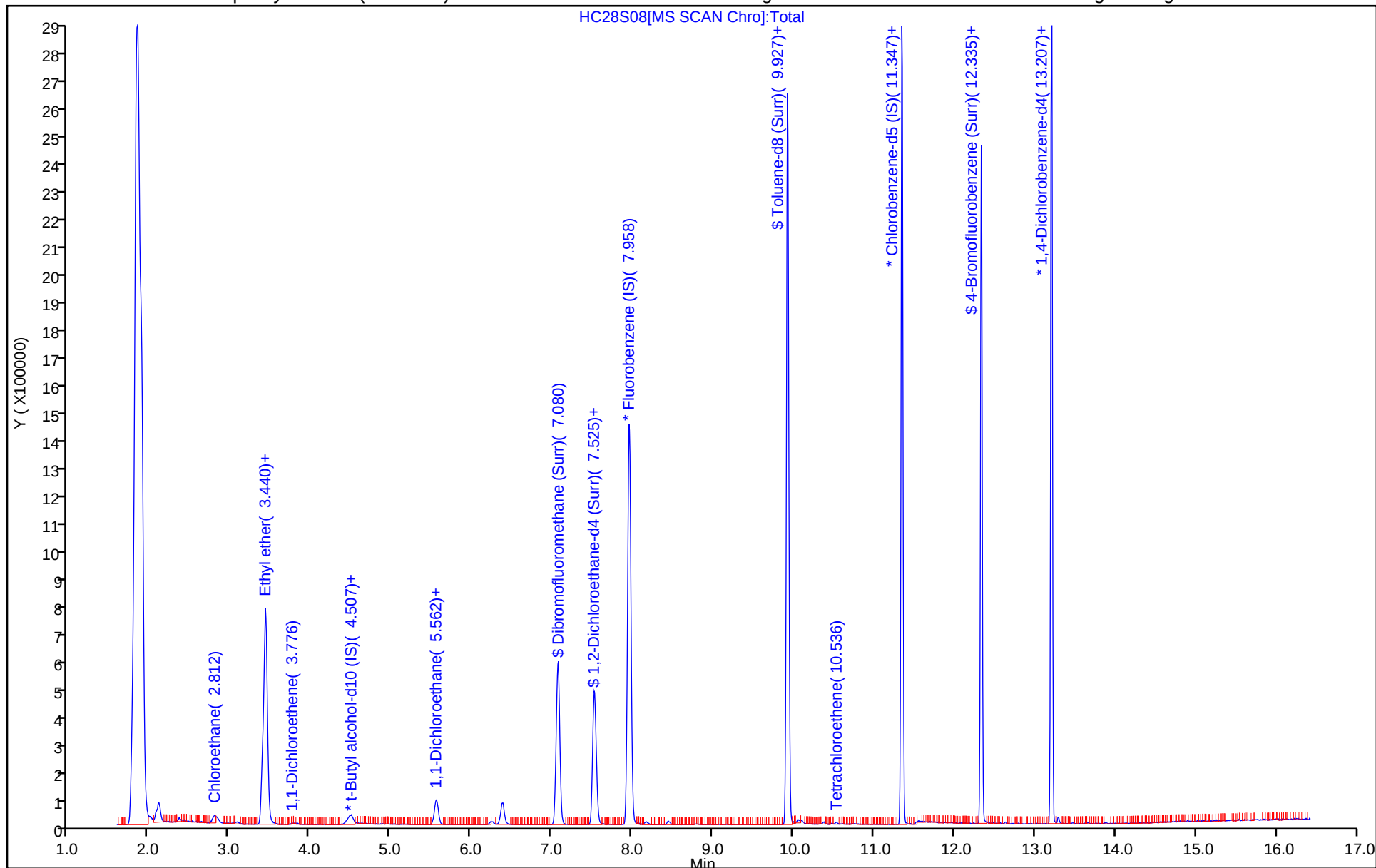
ALS Bottle#: 15

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S08.D
 Lims ID: 410-18116-D-3 DL
 Client ID: 16MW9
 Sample Type: Client
 Inject. Date: 28-Oct-2020 14:09:30 ALS Bottle#: 15 Worklist Smp#: 16
 Purge Vol: 25.000 mL Dil. Factor: 4.0000
 Sample Info: 410-0014060-016
 Misc. Info.: 410-18116-D-3
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:06:03

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	11.4	113.59
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	11.2	111.84
\$ 82 Toluene-d8 (Surr)	10.0	9.58	95.80
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.43	94.29

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S08.D

Injection Date: 28-Oct-2020 14:09:30

Instrument ID: 19094

Lims ID: 410-18116-D-3 DL

Lab Sample ID: 410-18116-3

Client ID: 16MW9

Operator ID: jkh09052

ALS Bottle#: 15

Worklist Smp#: 16

Purge Vol: 25.000 mL

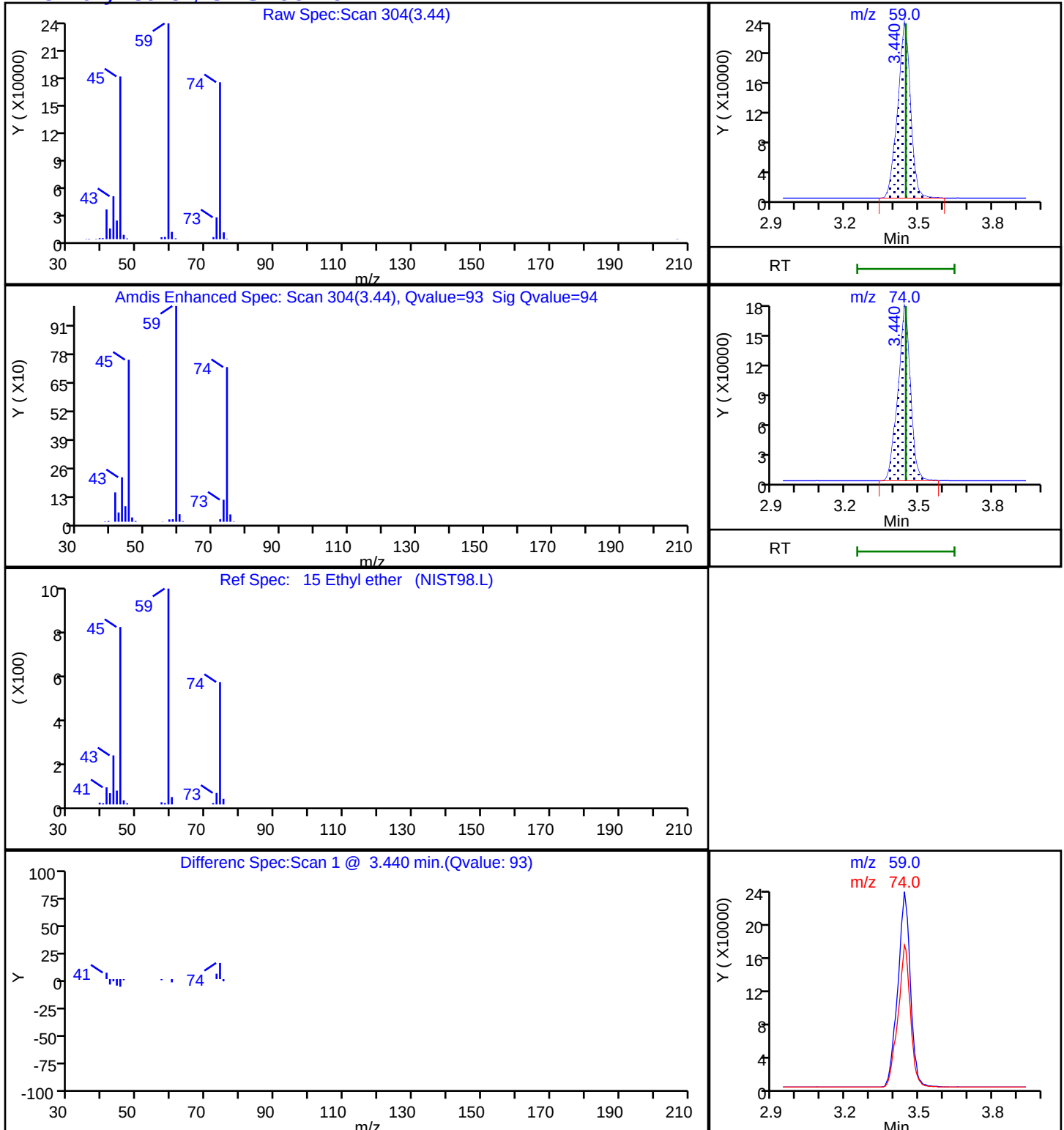
Dil. Factor: 4.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

15 Ethyl ether, CAS: 60-29-7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16WC1A Lab Sample ID: 410-18116-4
 Matrix: Ground Water Lab File ID: HC28S09.D
 Analysis Method: 8260C LL Date Collected: 10/22/2020 09:25
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 14:31
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	4.3		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-93-3	2-Butanone	ND		10	
71-43-2	Benzene	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
75-00-3	Chloroethane	1.8		1.0	
74-87-3	Chloromethane	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
115-10-6	Methoxymethane	ND	F1	13	
60-29-7	Ethyl ether	20		13	
100-41-4	Ethylbenzene	ND		1.0	
76-13-1	Freon 113	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
109-99-9	Tetrahydrofuran	ND		25	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		3.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		80-120
1868-53-7	Dibromofluoromethane (Surr)	112		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S09.D
 Lims ID: 410-18116-C-4
 Client ID: 16WC1A
 Sample Type: Client
 Inject. Date: 28-Oct-2020 14:31:30 ALS Bottle#: 16 Worklist Smp#: 17
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-017
 Misc. Info.: 410-18116-C-4
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Oct-2020 09:08:20 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:08:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.885				ND	
3 Dichlorodifluoromethane	85	2.081	2.081	0.000	32	6403	0.1117	
2 Chlorodifluoromethane	51	2.087	2.093	-0.006	97	506075	8.59	
4 Dimethyl ether	45		2.166				ND	
5 2-Chloro-1,1,1-Trifluoroethane	118		2.233				ND	
6 Chloromethane	50		2.288				ND	7
8 Butadiene	39		2.410				ND	7
7 Vinyl chloride	62	2.398	2.410	-0.012	96	13725	0.1940	
9 Bromomethane	94		2.757				ND	
10 Chloroethane	64	2.843	2.855	-0.012	99	81687	1.80	
11 Dichlorofluoromethane	67	3.093	3.105	-0.012	96	71553	0.7649	
12 Ethanol	45	3.093	3.111	-0.018	1	93	NC	
13 Trichlorofluoromethane	101		3.166				ND	
T 184 Ethanol TIC	45		3.440				ND	U
15 Ethyl ether	59	3.440	3.446	-0.006	93	824353	19.9	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.538	3.531	0.007	3	6788	0.1045	
17 Acrolein	56		3.635				ND	
18 1,1-Dichloroethene	96	3.776	3.781	-0.005	94	6932	0.1480	
19 Acetone	43	3.849	3.806	0.043	44	4661	0.5098	
20 112TCTFE	101		3.812				ND	
21 Isopropyl alcohol	45		3.989				ND	U
22 Iodomethane	142		3.995				ND	
23 Ethyl bromide	108		4.025				ND	
24 Carbon disulfide	76		4.105				ND	7
T 185 Acetonitrile TIC	41		4.214				ND	
25 Acetonitrile	41		4.214				ND	
26 Methyl acetate	43		4.263				ND	
27 3-Chloro-1-propene	41		4.287				ND	
29 Methylene Chloride	84	4.470	4.495	-0.025	34	2524	0.0481	
* 28 t-Butyl alcohol-d10 (IS)	65	4.489	4.507	-0.018	0	133564	50.0	
30 2-Methyl-2-propanol	59	4.623	4.629	-0.006	64	9293	3.33	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
31 Acrylonitrile	53		4.836				ND	
32 Methyl tert-butyl ether	73	4.879	4.903	-0.024	47	5484	0.0476	M
33 trans-1,2-Dichloroethene	96	4.903	4.915	-0.012	1	2024	0.0388	a
34 Hexane	57		5.330				ND	
T 187 Vinyl acetate (TIC)	43		5.537				ND	U
36 Vinyl acetate	43		5.537				ND	7
35 1,1-Dichloroethane	63	5.568	5.568	0.000	96	451921	4.35	
37 Isopropyl ether	45		5.616				ND	7
38 2-Chloro-1,3-butadiene	53		5.671				ND	
39 Tert-butyl ethyl ether	59		6.147				ND	7
S 40 1,2-Dichloroethene, Total	100				0		2.56	
41 2-Butanone (MEK)	43		6.342				ND	
42 cis-1,2-Dichloroethene	96	6.385	6.391	-0.006	80	149084	2.52	
43 2,2-Dichloropropane	77		6.403				ND	
44 Ethyl acetate	43		6.409				ND	7
45 Propionitrile	54		6.439				ND	
46 Methyl acrylate	55		6.470				ND	
47 Methacrylonitrile	67		6.659				ND	
48 Chlorobromomethane	128		6.720				ND	
49 Tetrahydrofuran	71	6.732	6.726	0.006	79	9946	2.67	
50 Chloroform	83		6.866				ND	
\$ 51 Dibromofluoromethane (Surr)	113	7.074	7.080	-0.006	94	541734	11.2	
52 1,1,1-Trichloroethane	97		7.092				ND	
53 Cyclohexane	56		7.189				ND	
54 1-Chlorobutane	56		7.238				ND	
55 1,1-Dichloropropene	75		7.305				ND	
56 Carbon tetrachloride	117		7.305				ND	
57 Isobutyl alcohol	41		7.433				ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.531	7.531	0.000	0	108946	11.0	
59 Benzene	78	7.567	7.567	0.000	92	70236	0.3071	
61 Isopropyl acetate	43		7.628				ND	
60 1,2-Dichloroethane	62		7.640				ND	
62 Tert-amyl methyl ether	73		7.744				ND	
63 t-Amyl alcohol	73		7.842				ND	
* 65 Fluorobenzene (IS)	96	7.964	7.964	0.000	99	1978559	10.0	
64 n-Heptane	43		7.970				ND	7
66 n-Butanol	56		8.299				ND	
67 Trichloroethene	95	8.433	8.439	-0.006	92	9568	0.1664	Ma
68 Methylcyclohexane	83		8.750				ND	
69 2-ethoxy-2-methyl butane	87		8.768				ND	
70 1,2-Dichloropropane	63		8.768				ND	
71 Methyl methacrylate	69		8.835				ND	
72 1,4-Dioxane	88		8.854				ND	
73 Dibromomethane	93		8.878				ND	
74 n-Propyl acetate	61		8.921				ND	
75 Dichlorobromomethane	83		9.110				ND	
76 2-Nitropropane	41		9.366				ND	
77 Chloroacetonitrile	75		9.433				ND	
78 2-Chloroethyl vinyl ether	63		9.451				ND	
79 1-Bromo-2-chloroethane	63		9.488				ND	
80 cis-1,3-Dichloropropene	75		9.628				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.786				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	1995043	9.55	
83 Toluene	92		10.000				ND	7
T 181 Ethylene oxide TIC	44		10.000				ND	U
T 179 Epichlorohydrin TIC	57		10.000				ND	
T 175 2-Chloroethanol TIC	44		10.000				ND	U
T 182 2,3-Dibromopropene TIC	119		10.000				ND	U
T 173 2-Bromoethanol TIC	45		10.000				ND	U
T 180 2-Bromo-3-chloropropene TIC	75		10.000				ND	U
T 176 Epibromohydrin TIC	57		10.000				ND	
T 183 3-Chloro-1,2-propanediol TIC	44		10.000				ND	
T 177 Chloroacetaldehyde TIC	50		10.000				ND	
T 178 Vinyl bromide TIC	106		10.000				ND	U
T 174 Monochloroacetic acid TIC	50		10.000				ND	
T 172 2,3-Dibromo-1-propanol TIC	57		10.000				ND	U
S 84 1,3-Dichloropropene, Total	100		10.060				ND	7
85 trans-1,3-Dichloropropene	75		10.244				ND	
86 Ethyl methacrylate	69		10.298				ND	
87 1,1,2-Trichloroethane	97		10.445				ND	
88 Tetrachloroethene	166	10.530	10.536	-0.006	93	10013	0.1438	
89 1,3-Dichloropropane	76		10.603				ND	
91 2-Hexanone	43		10.646				ND	7
92 n-Butyl acetate	43		10.768				ND	
93 Chlorodibromomethane	129		10.817				ND	
94 Ethylene Dibromide	107		10.932				ND	
S 95 Xylenes, Total	106		11.245				ND	7
* 97 Chlorobenzene-d5 (IS)	117	11.347	11.347	0.000	86	1569025	10.0	
96 1-Chlorohexane	91		11.353				ND	7
98 Chlorobenzene	112		11.378				ND	
99 1,1,1,2-Tetrachloroethane	131		11.457				ND	
100 Ethylbenzene	91		11.457				ND	
101 m-Xylene & p-Xylene	106		11.567				ND	7
102 o-Xylene	106		11.896				ND	
103 Styrene	104		11.908				ND	
104 Bromoform	173		12.066				ND	
105 Isopropylbenzene	105		12.188				ND	
106 cis-1,4-Dichloro-2-butene	88		12.237				ND	U
107 Cyclohexanone	55		12.280				ND	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	91	707957	9.36	
109 1,1,2,2-Tetrachloroethane	83		12.426				ND	
111 Bromobenzene	156		12.450				ND	
110 trans-1,4-Dichloro-2-butene	53		12.450				ND	
112 1,2,3-Trichloropropane	110		12.475				ND	
113 N-Propylbenzene	91		12.511				ND	
114 2-Chlorotoluene	126		12.591				ND	
115 1,3,5-Trimethylbenzene	105		12.646				ND	
116 4-Chlorotoluene	126		12.682				ND	
118 tert-Butylbenzene	134		12.889				ND	
119 Pentachloroethane	167		12.926				ND	
120 1,2,4-Trimethylbenzene	105		12.932				ND	
121 sec-Butylbenzene	105		13.048				ND	
122 1,3-Dichlorobenzene	146		13.152				ND	
123 4-Isopropyltoluene	119		13.158				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 124 1,4-Dichlorobenzene-d4	152	13.207	13.206	0.001	95	824497	10.0	
125 1,4-Dichlorobenzene	146		13.225				ND	
126 1,2,3-Trimethylbenzene	120		13.231				ND	7
127 Benzyl chloride	126		13.298				ND	7
129 p-Diethylbenzene	119		13.426				ND	
130 n-Butylbenzene	92		13.444				ND	
131 1,2-Dichlorobenzene	146		13.487				ND	
133 Hexachloroethane	201		13.694				ND	
134 1,2-Dibromo-3-Chloropropane	155		14.023				ND	
135 1,3,5-Trichlorobenzene	180		14.151				ND	
136 1,2,4-Trichlorobenzene	180		14.572				ND	
137 Hexachlorobutadiene	225		14.651				ND	
138 Naphthalene	128		14.755				ND	7
139 1,2,3-Trichlorobenzene	180		14.901				ND	
140 2-Methylnaphthalene	142		15.554				ND	
151 tert-Butyl Formate	1		0.000				ND	
152 Dodecane	57		0.000				ND	
157 Methylal	1		0.000				ND	
142 1,1-Dichloro-1-fluoroethane	1		0.000				ND	
150 Propene oxide	1		0.000				ND	
162 1-Chloropropane	1		0.000				ND	
163 1-Bromo-3-Chloropropane	1		0.000				ND	
160 n-Decane	57		0.000				ND	
161 2-Bromo-1-chloropropane	1		0.000				ND	
186 Isopropyl alcohol TIC	1		0.000				ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S09.D

Injection Date: 28-Oct-2020 14:31:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-18116-C-4

Lab Sample ID: 410-18116-4

Worklist Smp#: 17

Client ID: 16WC1A

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

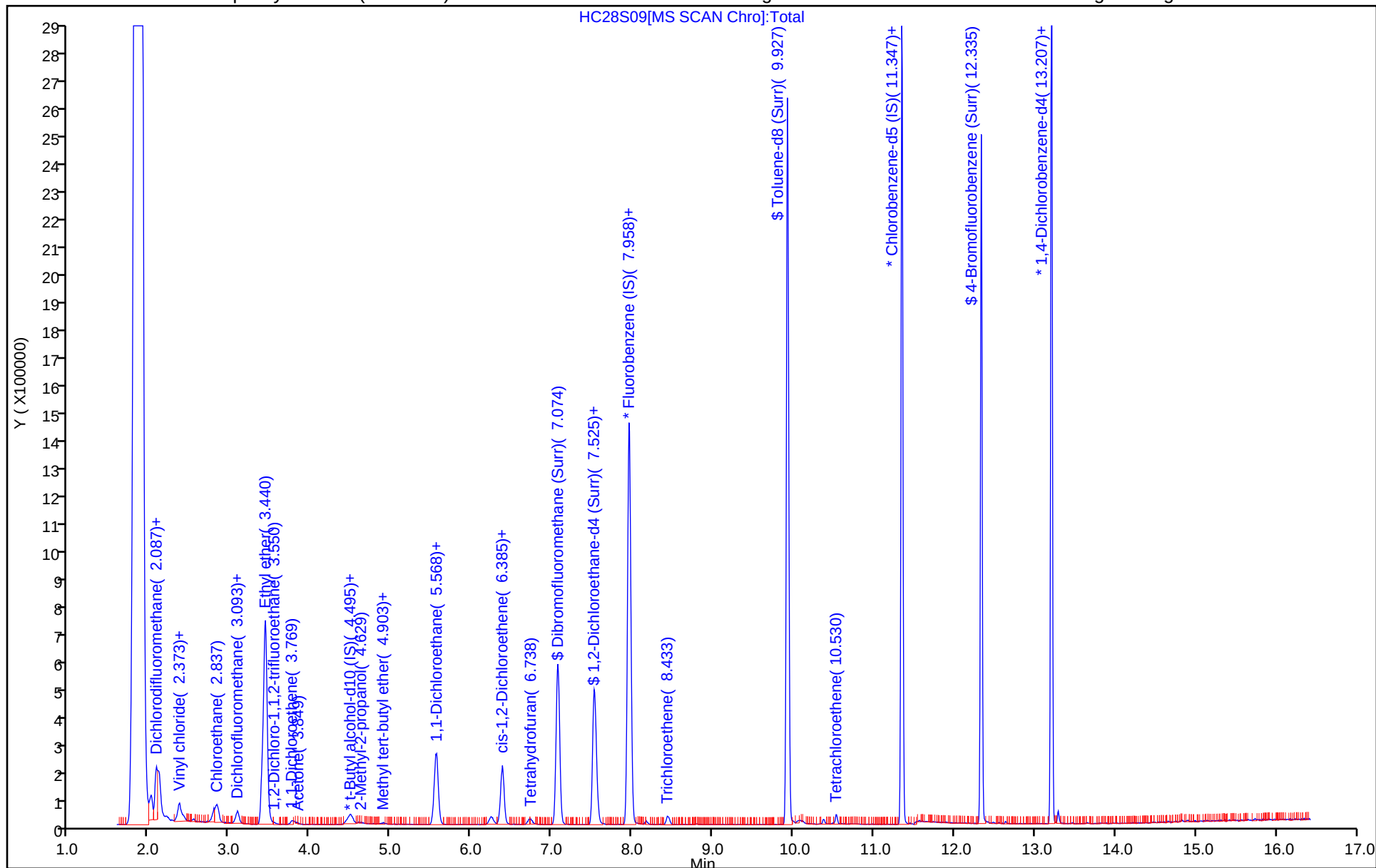
ALS Bottle#: 16

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S09.D
 Lims ID: 410-18116-C-4
 Client ID: 16WC1A
 Sample Type: Client
 Inject. Date: 28-Oct-2020 14:31:30 ALS Bottle#: 16 Worklist Smp#: 17
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-017
 Misc. Info.: 410-18116-C-4
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Oct-2020 09:08:20 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:08:17

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	11.2	111.73
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	11.0	109.67
\$ 82 Toluene-d8 (Surr)	10.0	9.55	95.47
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.36	93.58

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S09.D

Injection Date: 28-Oct-2020 14:31:30

Instrument ID: 19094

Lims ID: 410-18116-C-4

Lab Sample ID: 410-18116-4

Client ID: 16WC1A

Operator ID: jkh09052

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 25.000 mL

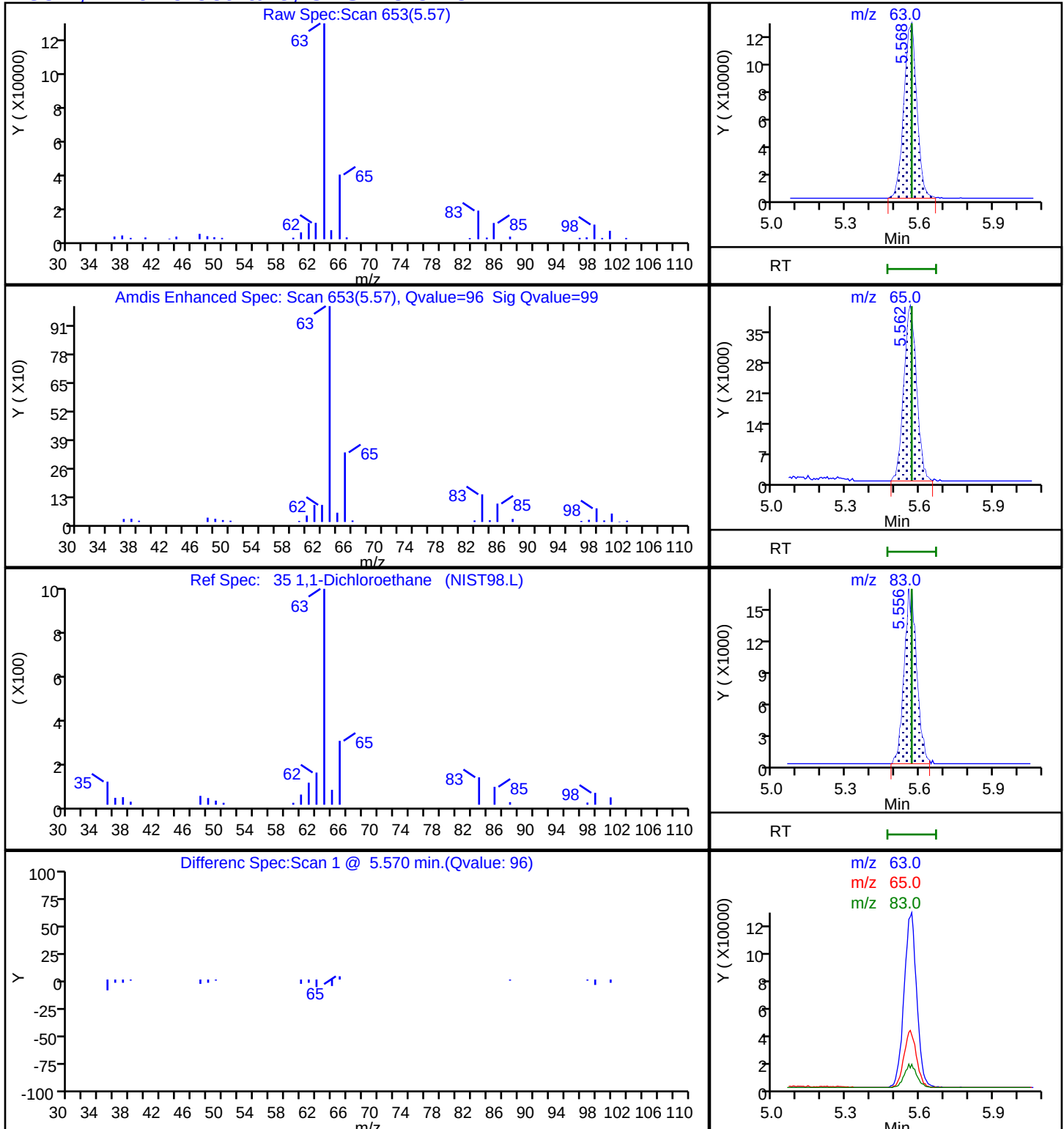
Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

35 1,1-Dichloroethane, CAS: 75-34-3

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S09.D

Injection Date: 28-Oct-2020 14:31:30

Instrument ID: 19094

Lims ID: 410-18116-C-4

Lab Sample ID: 410-18116-4

Client ID: 16WC1A

Operator ID: jkh09052

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 25.000 mL

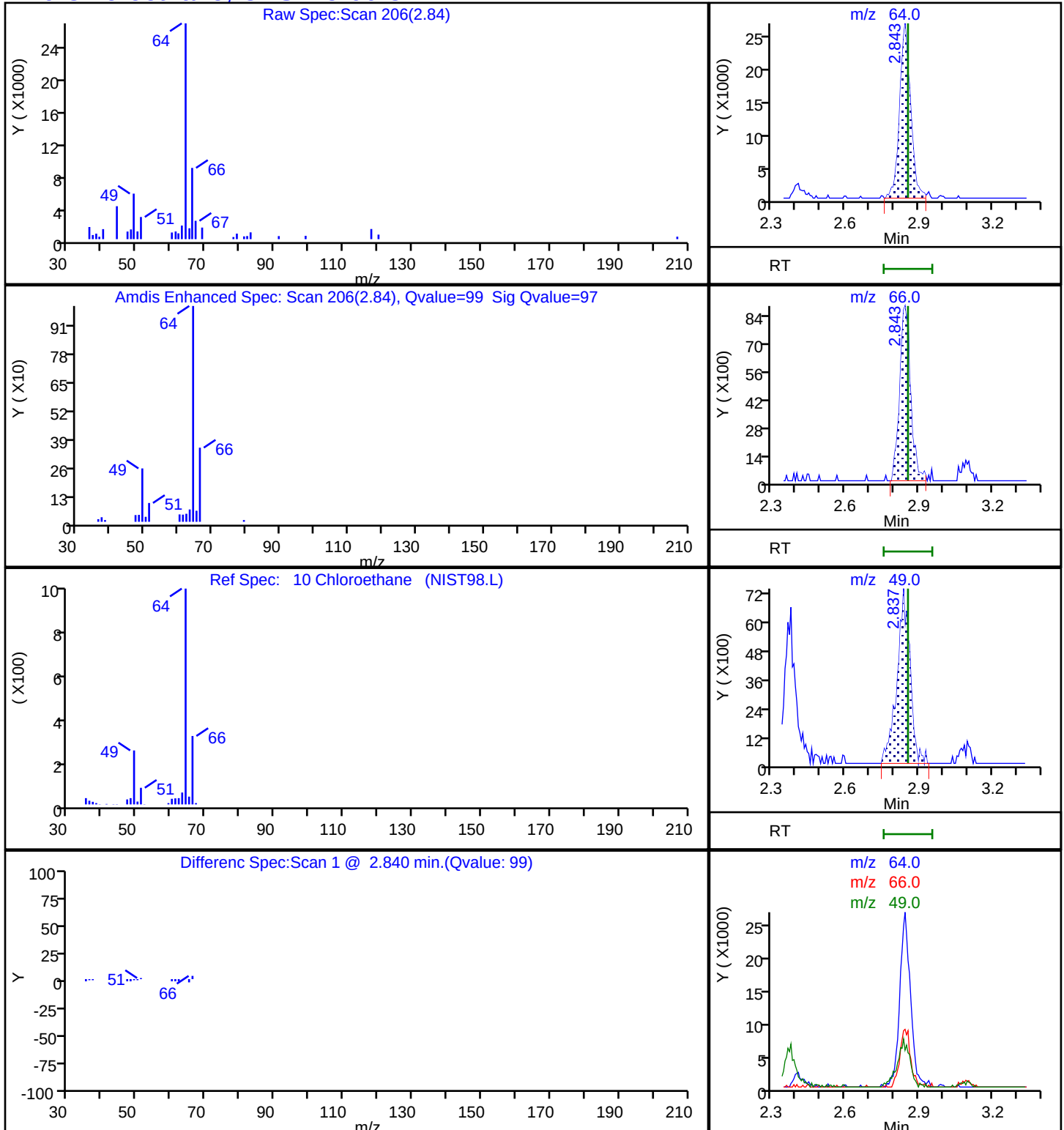
Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

10 Chloroethane, CAS: 75-00-3

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S09.D

Injection Date: 28-Oct-2020 14:31:30

Instrument ID: 19094

Lims ID: 410-18116-C-4

Lab Sample ID: 410-18116-4

Client ID: 16WC1A

Operator ID: jkh09052

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 25.000 mL

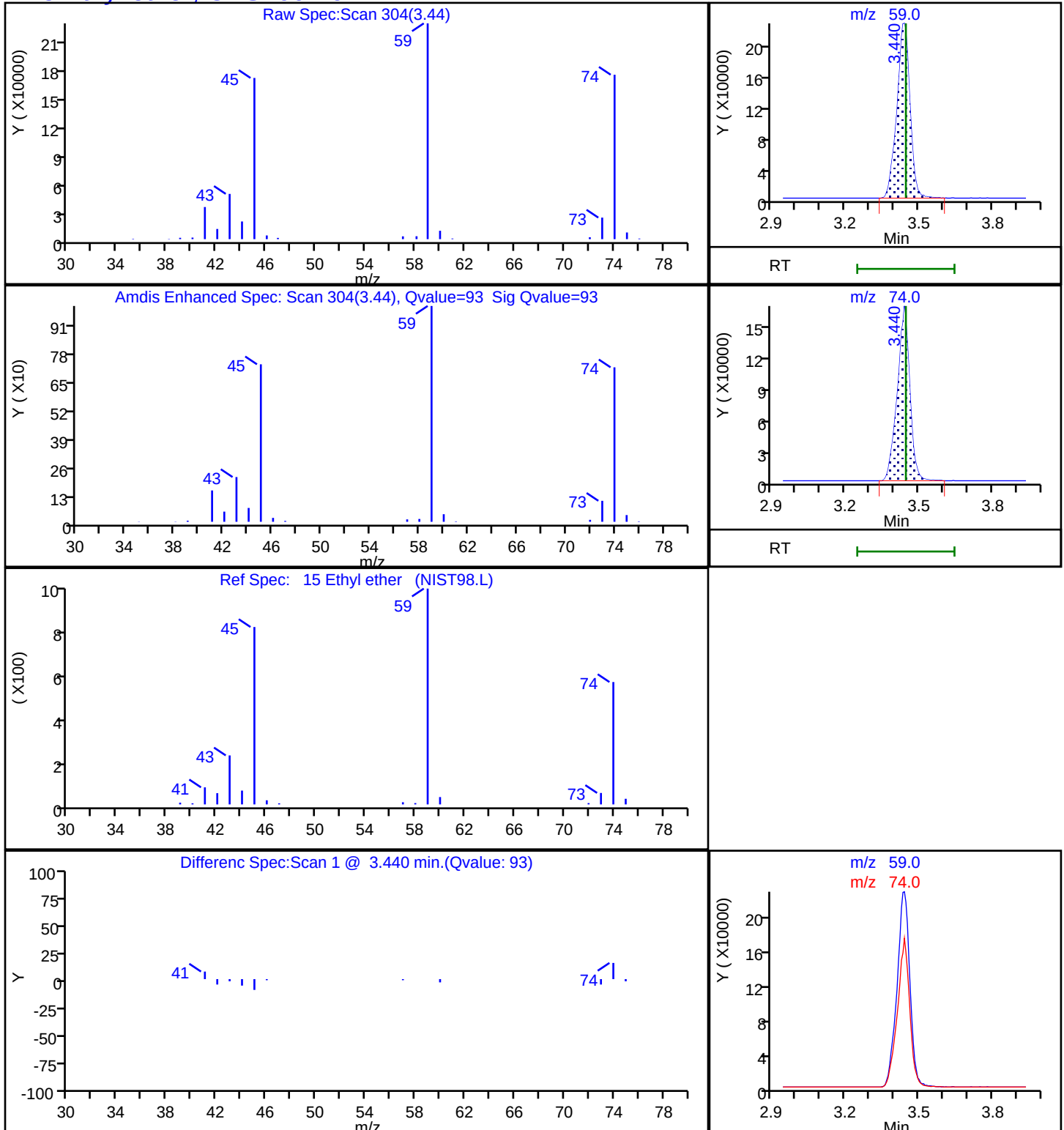
Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

15 Ethyl ether, CAS: 60-29-7

Eurofins Lancaster Laboratories Env, LLC

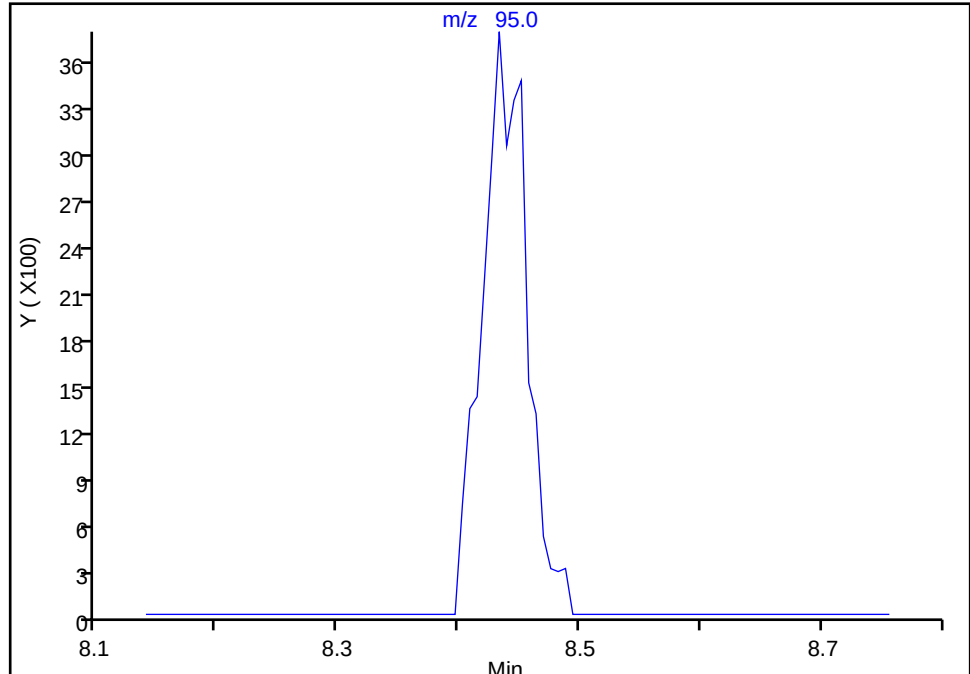
Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S09.D
Injection Date: 28-Oct-2020 14:31:30 Instrument ID: 19094
Lims ID: 410-18116-C-4 Lab Sample ID: 410-18116-4
Client ID: 16WC1A
Operator ID: jkh09052 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

67 Trichloroethene, CAS: 79-01-6

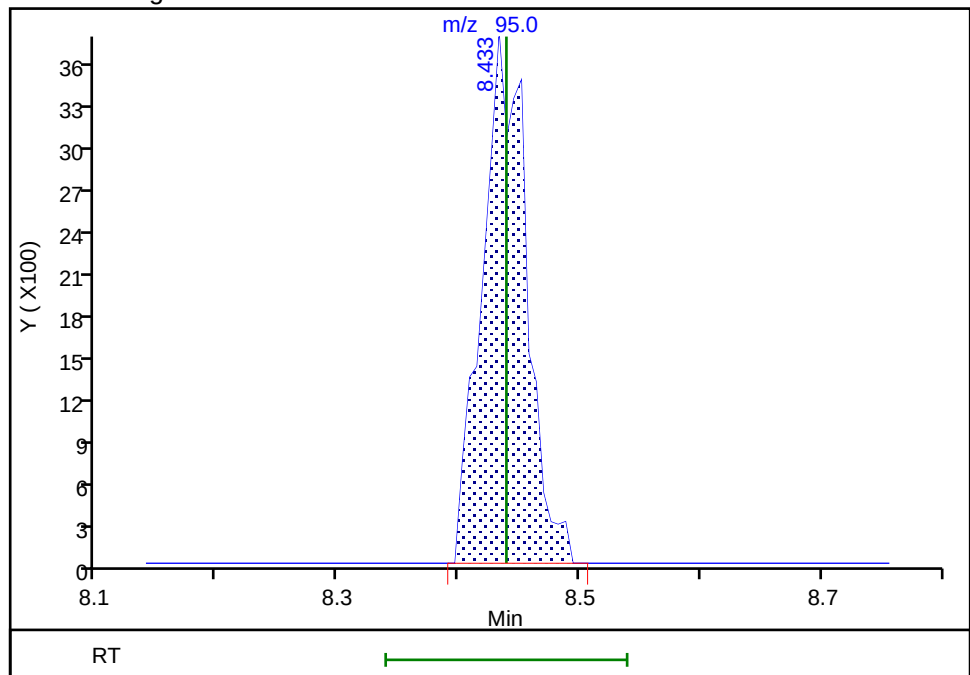
Signal: 1

Not Detected
Expected RT: 8.44

Processing Integration Results



Manual Integration Results



RT: 8.43
Area: 9568
Amount: 0.166387
Amount Units: ug/l

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16WDUP Lab Sample ID: 410-18116-5
 Matrix: Ground Water Lab File ID: HC28S14.D
 Analysis Method: 8260C LL Date Collected: 10/22/2020 09:35
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 16:20
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	4.4		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-93-3	2-Butanone	ND		10	
71-43-2	Benzene	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
75-00-3	Chloroethane	1.9		1.0	
74-87-3	Chloromethane	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
115-10-6	Methoxymethane	ND		13	
60-29-7	Ethyl ether	21		13	
100-41-4	Ethylbenzene	ND		1.0	
76-13-1	Freon 113	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
109-99-9	Tetrahydrofuran	ND		25	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		3.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		80-120
1868-53-7	Dibromofluoromethane (Surr)	115		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S14.D
 Lims ID: 410-18116-C-5
 Client ID: 16WDUP
 Sample Type: Client
 Inject. Date: 28-Oct-2020 16:20:30 ALS Bottle#: 21 Worklist Smp#: 22
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-022
 Misc. Info.: 410-18116-C-5
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:13:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.087	2.081	0.006	32	5960	0.1118	
4 Dimethyl ether	45		2.166				ND	
6 Chloromethane	50		2.288				ND	7
7 Vinyl chloride	62	2.410	2.410	0.000	91	14657	0.2229	M
10 Chloroethane	64	2.843	2.855	-0.012	100	79534	1.88	
13 Trichlorofluoromethane	101		3.166				ND	7
15 Ethyl ether	59	3.446	3.446	0.000	93	804864	20.9	
18 1,1-Dichloroethene	96	3.781	3.781	0.000	97	7196	0.1653	
20 112TCTFE	101		3.812				ND	
29 Methylene Chloride	84	4.489	4.495	-0.006	35	1938	0.0397	
* 28 t-Butyl alcohol-d10 (IS)	65	4.501	4.507	-0.006	0	132041	50.0	
35 1,1-Dichloroethane	63	5.556	5.568	-0.012	96	427625	4.43	
41 2-Butanone (MEK)	43		6.342				ND	
49 Tetrahydrofuran	71	6.726	6.726	0.000	88	9338	2.54	
\$ 51 Dibromofluoromethane (Surr)	113	7.074	7.080	-0.006	93	516777	11.5	
52 1,1,1-Trichloroethane	97		7.092				ND	
56 Carbon tetrachloride	117		7.305				ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.531	7.531	0.000	0	103612	11.2	
59 Benzene	78	7.567	7.567	0.000	94	68041	0.3201	
* 65 Fluorobenzene (IS)	96	7.964	7.964	0.000	99	1839082	10.0	
67 Trichloroethene	95	8.439	8.439	0.000	92	9713	0.1817	a
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	1855253	9.50	
83 Toluene	92	10.012	10.000	0.012	94	3707	0.0260	
88 Tetrachloroethene	166	10.542	10.536	0.006	91	10091	0.1551	
S 95 Xylenes, Total	106		11.245				ND	7
* 97 Chlorobenzene-d5 (IS)	117	11.347	11.347	0.000	86	1466796	10.0	
100 Ethylbenzene	91	11.463	11.457	0.006	1	1672	0.006168	a
101 m-Xylene & p-Xylene	106	11.573	11.567	0.007	55	1191	0.0117	7M
102 o-Xylene	106	11.896	11.896	0.000	1	415	0.004227	a
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	90	675916	9.56	
* 124 1,4-Dichlorobenzene-d4	152	13.206	13.206	0.000	95	767751	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 28-Oct-2020 18:20:00

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S14.D

Injection Date: 28-Oct-2020 16:20:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-18116-C-5

Lab Sample ID: 410-18116-5

Worklist Smp#: 22

Client ID: 16WDUP

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 21

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S14.D
 Lims ID: 410-18116-C-5
 Client ID: 16WDUP
 Sample Type: Client
 Inject. Date: 28-Oct-2020 16:20:30 ALS Bottle#: 21 Worklist Smp#: 22
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-022
 Misc. Info.: 410-18116-C-5
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:13:18

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	11.5	114.66
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	11.2	112.21
\$ 82 Toluene-d8 (Surr)	10.0	9.50	94.97
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.56	95.57

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S14.D

Injection Date: 28-Oct-2020 16:20:30

Instrument ID: 19094

Lims ID: 410-18116-C-5

Lab Sample ID: 410-18116-5

Client ID: 16WDUP

Operator ID: jkh09052

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 25.000 mL

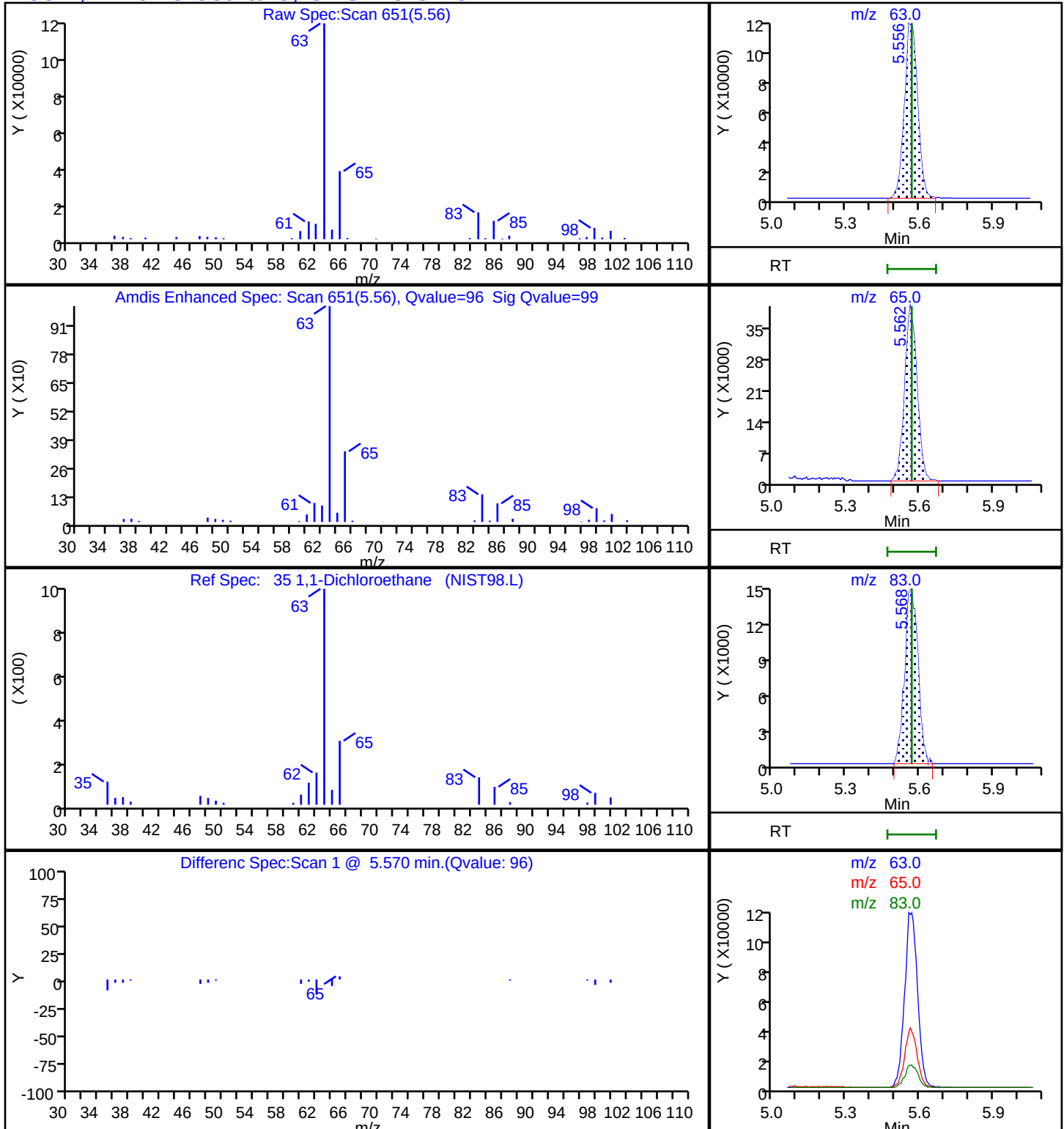
Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

35 1,1-Dichloroethane, CAS: 75-34-3

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S14.D

Injection Date: 28-Oct-2020 16:20:30

Instrument ID: 19094

Lims ID: 410-18116-C-5

Lab Sample ID: 410-18116-5

Client ID: 16WDUP

Operator ID: jkh09052

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 25.000 mL

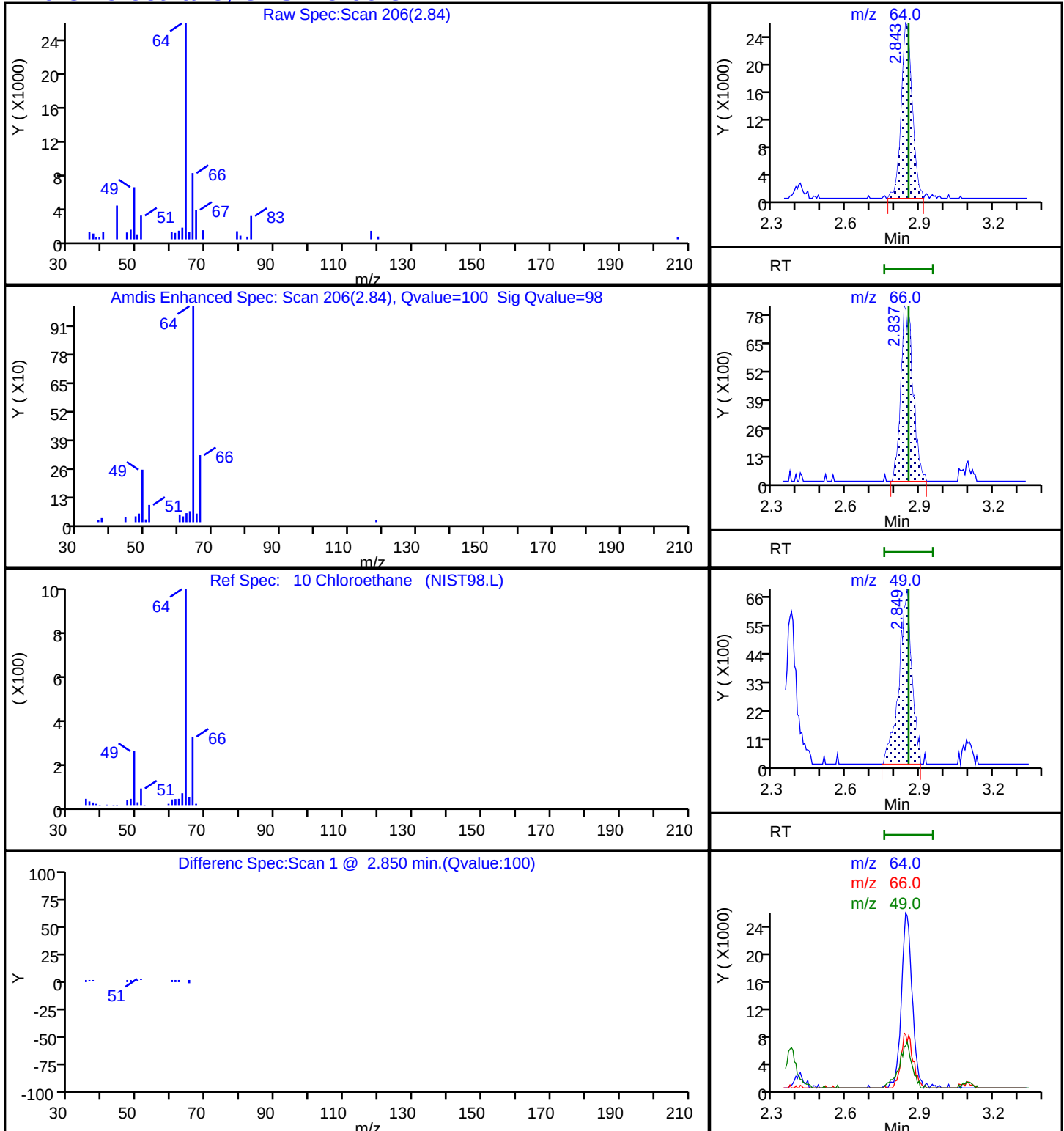
Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

10 Chloroethane, CAS: 75-00-3

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S14.D

Injection Date: 28-Oct-2020 16:20:30

Instrument ID: 19094

Lims ID: 410-18116-C-5

Lab Sample ID: 410-18116-5

Client ID: 16WDUP

Operator ID: jkh09052

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 25.000 mL

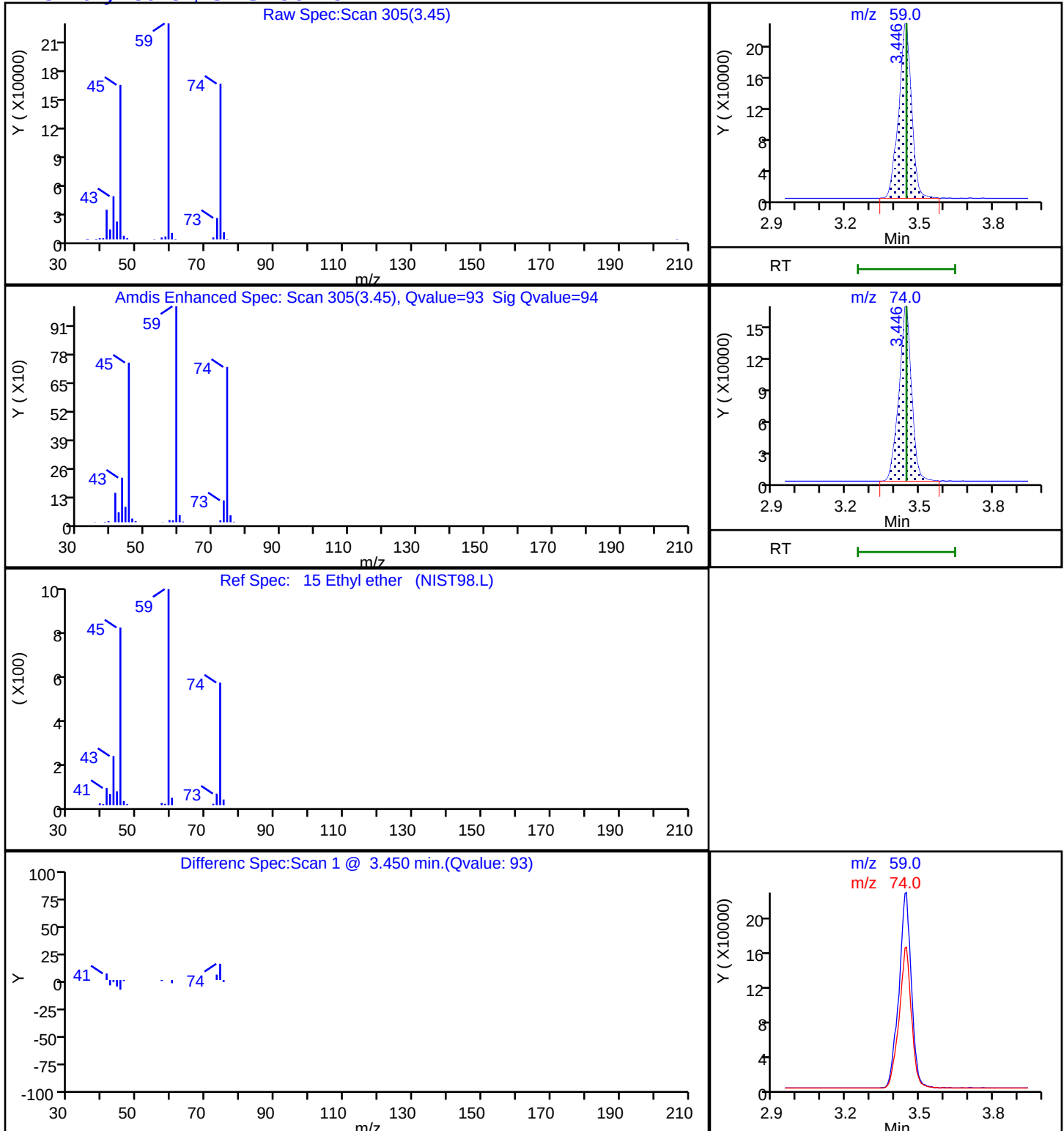
Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

15 Ethyl ether, CAS: 60-29-7

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S14.D

Injection Date: 28-Oct-2020 16:20:30

Instrument ID: 19094

Lims ID: 410-18116-C-5

Lab Sample ID: 410-18116-5

Client ID: 16WDUP

Operator ID: jkh09052

ALS Bottle#: 21 Worklist Smp#: 22

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

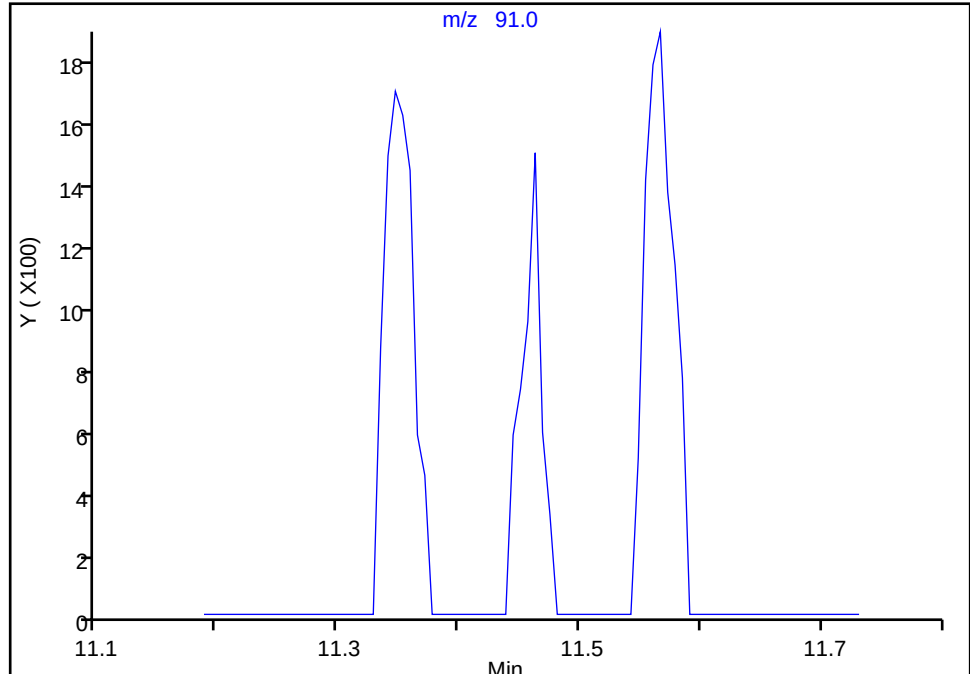
100 Ethylbenzene, CAS: 100-41-4

Signal: 1

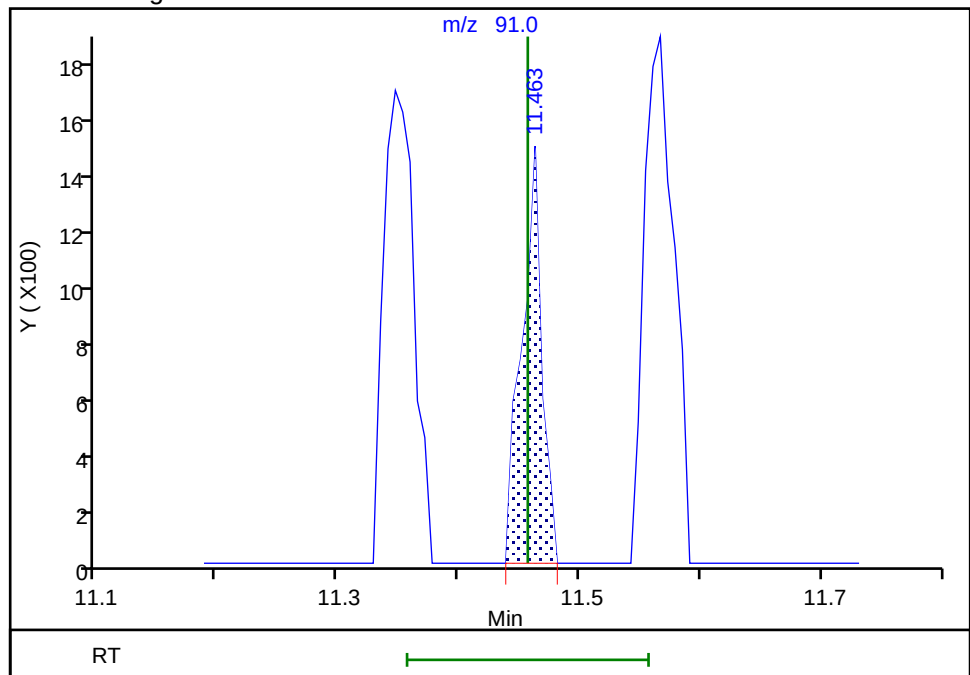
Not Detected

Expected RT: 11.46

Processing Integration Results



Manual Integration Results



RT: 11.46

Area: 1672

Amount: 0.006168

Amount Units: ug/l

Reviewer: campbellme, 28-Oct-2020 18:13:07

Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

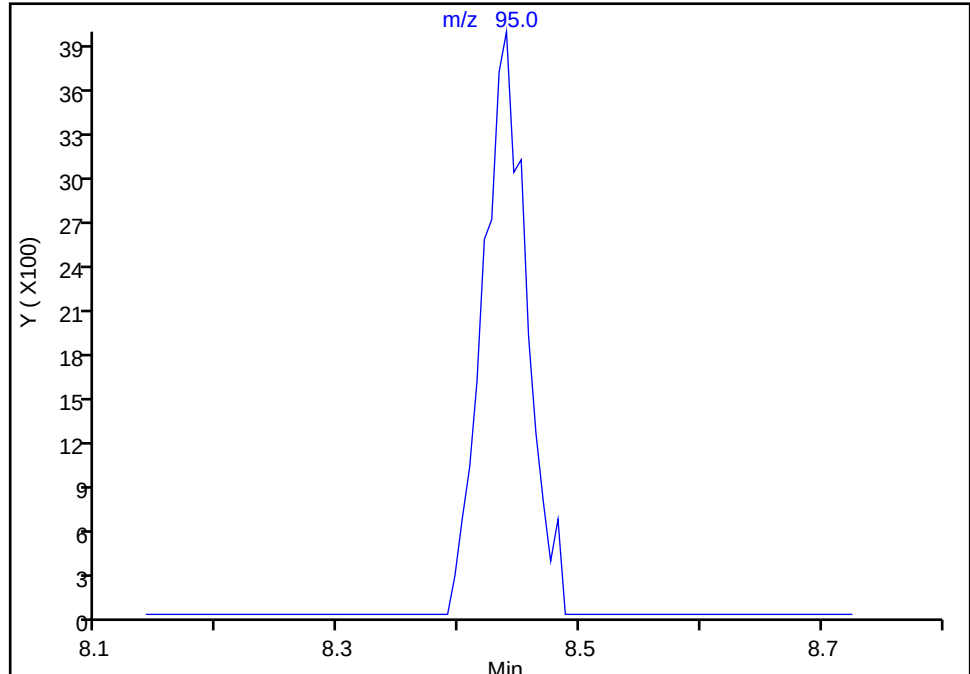
Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S14.D
Injection Date: 28-Oct-2020 16:20:30 Instrument ID: 19094
Lims ID: 410-18116-C-5 Lab Sample ID: 410-18116-5
Client ID: 16WDUP
Operator ID: jkh09052 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

67 Trichloroethene, CAS: 79-01-6

Signal: 1

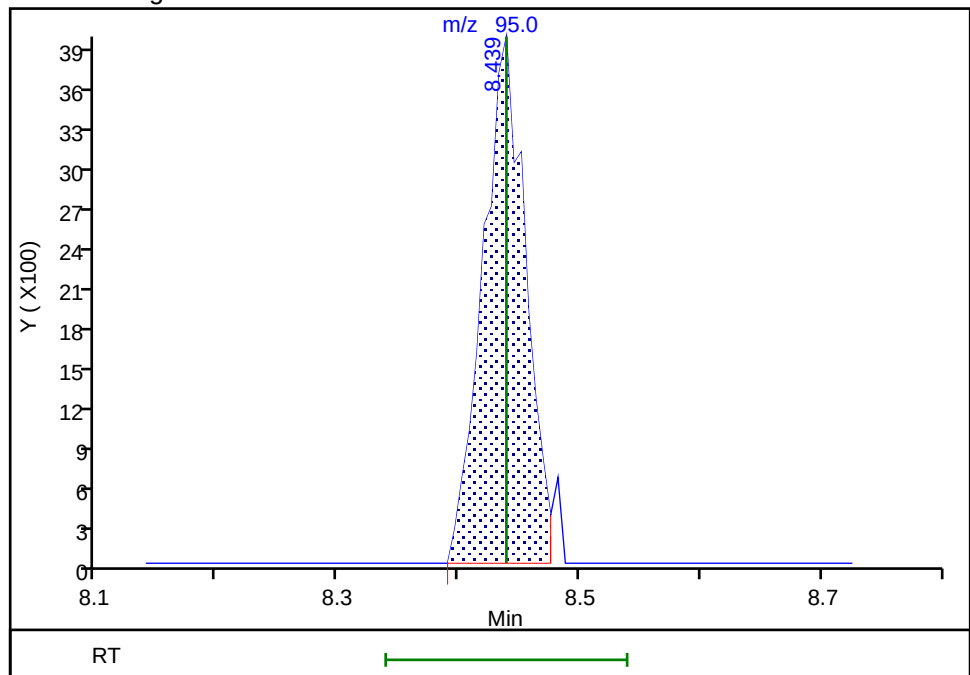
Not Detected
Expected RT: 8.44

Processing Integration Results



RT: 8.44
Area: 9713
Amount: 0.181718
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 28-Oct-2020 18:13:01
Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

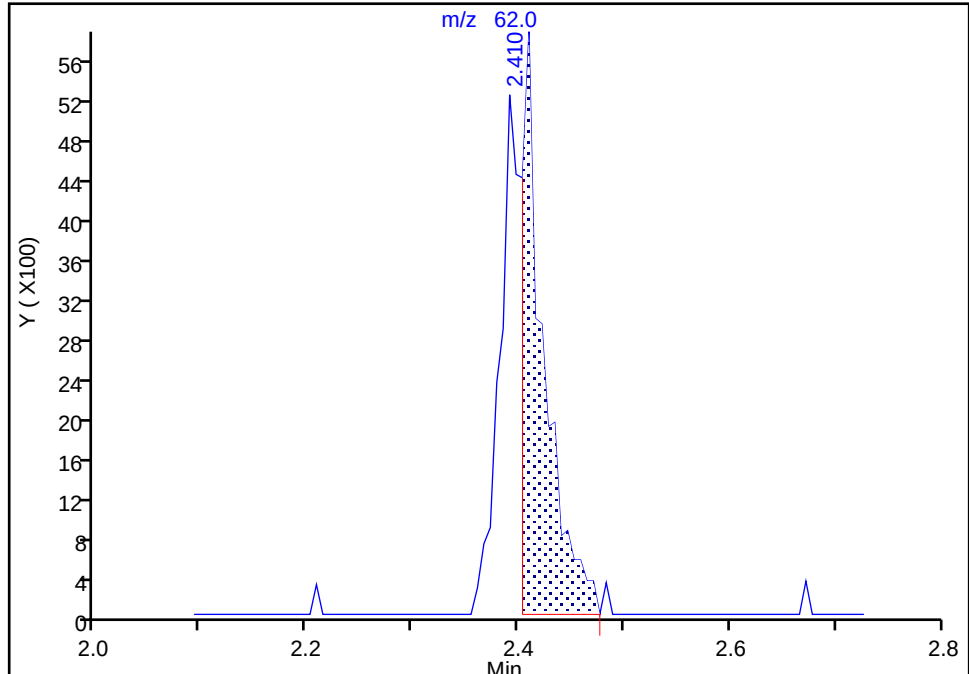
Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S14.D
Injection Date: 28-Oct-2020 16:20:30 Instrument ID: 19094
Lims ID: 410-18116-C-5 Lab Sample ID: 410-18116-5
Client ID: 16WDUP
Operator ID: jkh09052 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

7 Vinyl chloride, CAS: 75-01-4

Signal: 1

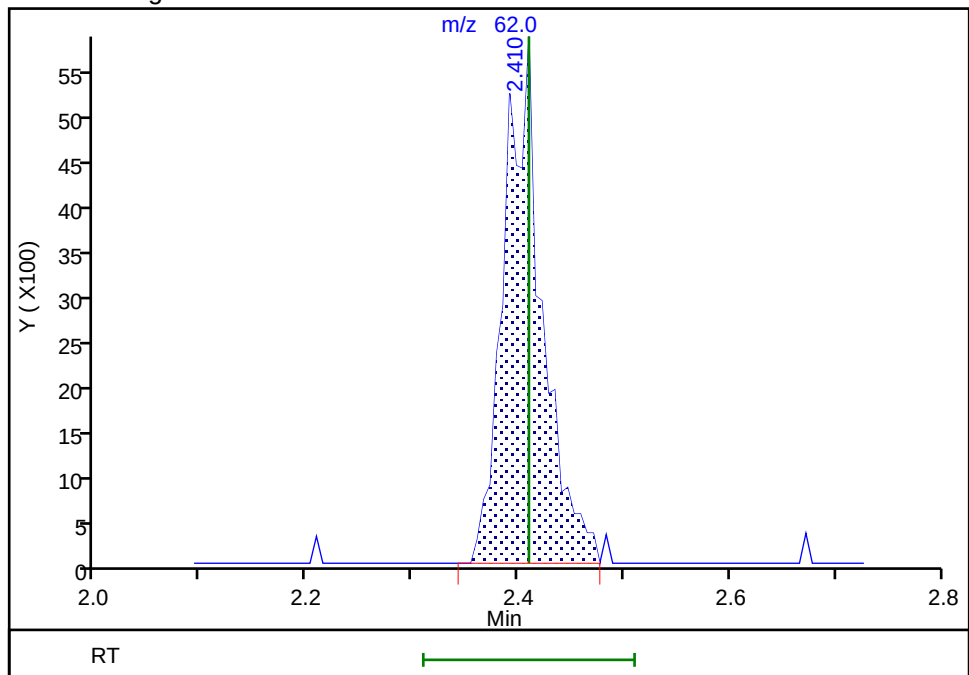
RT: 2.41
Area: 8542
Amount: 0.129876
Amount Units: ug/l

Processing Integration Results



RT: 2.41
Area: 14657
Amount: 0.222851
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 28-Oct-2020 18:12:51
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

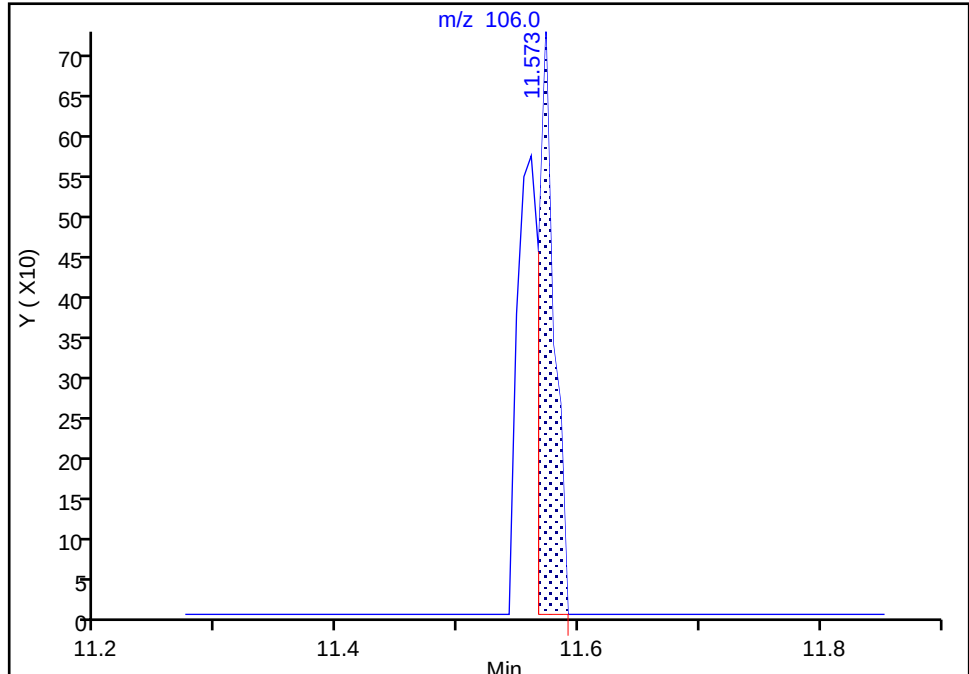
Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S14.D
Injection Date: 28-Oct-2020 16:20:30 Instrument ID: 19094
Lims ID: 410-18116-C-5 Lab Sample ID: 410-18116-5
Client ID: 16WDUP
Operator ID: jkh09052 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

101 m-Xylene & p-Xylene, CAS: 179601-23-1
Signal: 1

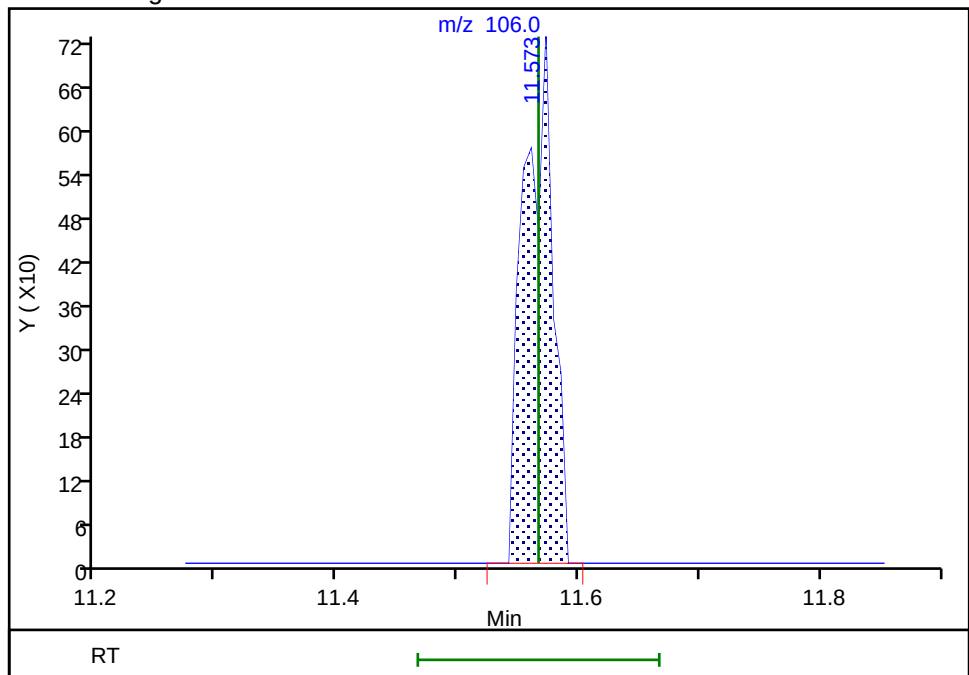
RT: 11.57
Area: 647
Amount: 0.006360
Amount Units: ug/l

Processing Integration Results



RT: 11.57
Area: 1191
Amount: 0.011708
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 28-Oct-2020 18:13:11
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

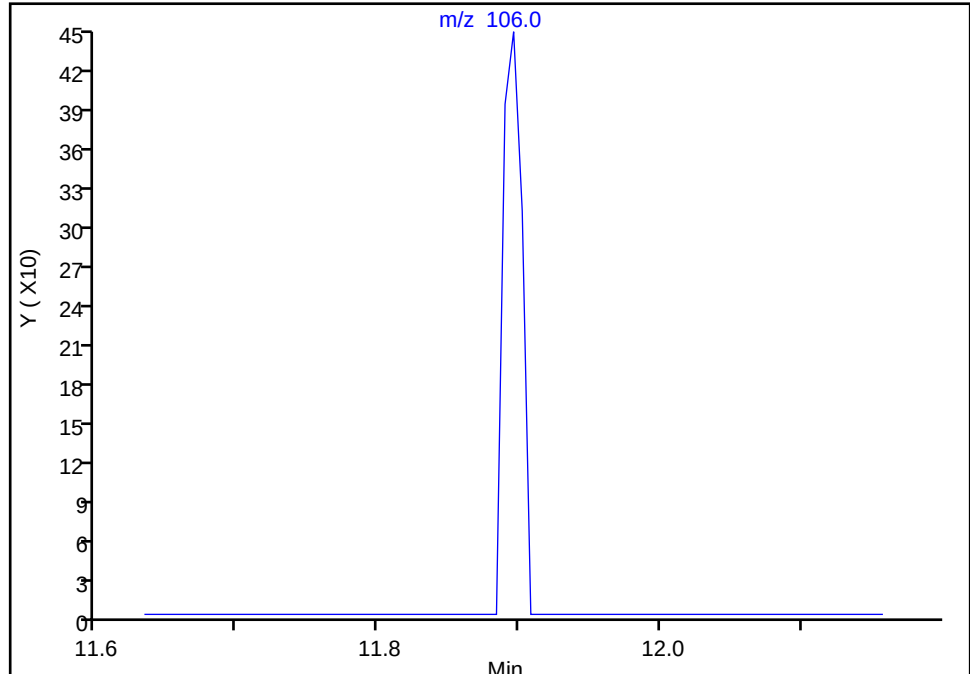
Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S14.D
Injection Date: 28-Oct-2020 16:20:30 Instrument ID: 19094
Lims ID: 410-18116-C-5 Lab Sample ID: 410-18116-5
Client ID: 16WDUP
Operator ID: jkh09052 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

102 o-Xylene, CAS: 95-47-6

Signal: 1

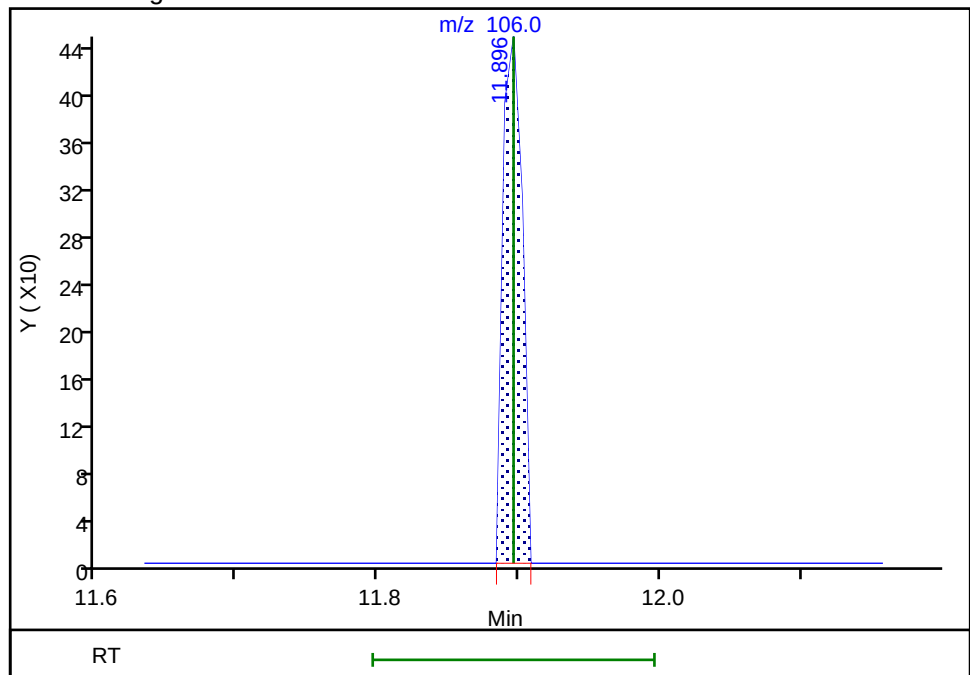
Not Detected
Expected RT: 11.90

Processing Integration Results



RT: 11.90
Area: 415
Amount: 0.004227
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 28-Oct-2020 18:13:15
Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16WC1B Lab Sample ID: 410-18116-6
 Matrix: Ground Water Lab File ID: HC28S15.D
 Analysis Method: 8260C LL Date Collected: 10/22/2020 08:40
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 16:42
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-93-3	2-Butanone	ND		10	
71-43-2	Benzene	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
115-10-6	Methoxymethane	ND		13	
60-29-7	Ethyl ether	ND		13	
100-41-4	Ethylbenzene	ND		1.0	
76-13-1	Freon 113	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
109-99-9	Tetrahydrofuran	ND		25	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		3.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		80-120
1868-53-7	Dibromofluoromethane (Surr)	115		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S15.D
 Lims ID: 410-18116-C-6
 Client ID: 16WC1B
 Sample Type: Client
 Inject. Date: 28-Oct-2020 16:42:30 ALS Bottle#: 22 Worklist Smp#: 23
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-023
 Misc. Info.: 410-18116-C-6
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:13:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.075	2.081	-0.007	32	1865	0.0345	
4 Dimethyl ether	45	2.154	2.166	-0.012	94	29651	0.5070	
6 Chloromethane	50		2.288				ND	
7 Vinyl chloride	62		2.410				ND	7
10 Chloroethane	64	2.837	2.855	-0.018	27	3774	0.0879	
13 Trichlorofluoromethane	101		3.166				ND	
15 Ethyl ether	59	3.440	3.446	-0.006	93	72658	1.86	
18 1,1-Dichloroethene	96		3.781				ND	7
20 112TCTFE	101		3.812				ND	
29 Methylene Chloride	84	4.476	4.495	-0.019	35	3510	0.0708	
* 28 t-Butyl alcohol-d10 (IS)	65	4.501	4.507	-0.006	0	138493	50.0	
35 1,1-Dichloroethane	63	5.562	5.568	-0.006	89	10712	0.1092	
41 2-Butanone (MEK)	43		6.342				ND	
49 Tetrahydrofuran	71		6.726				ND	
\$ 51 Dibromofluoromethane (Surr)	113	7.074	7.080	-0.006	93	524951	11.5	
52 1,1,1-Trichloroethane	97		7.092				ND	
56 Carbon tetrachloride	117		7.305				ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.531	7.531	0.000	0	106739	11.4	
59 Benzene	78	7.549	7.567	-0.018	84	10127	0.0469	
* 65 Fluorobenzene (IS)	96	7.958	7.964	-0.006	98	1867194	10.0	
67 Trichloroethene	95		8.439				ND	7
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	1901424	9.51	
83 Toluene	92		10.000				ND	7
88 Tetrachloroethene	166		10.536				ND	7
S 95 Xylenes, Total	106		11.245				ND	7
* 97 Chlorobenzene-d5 (IS)	117	11.347	11.347	0.000	86	1501491	10.0	
100 Ethylbenzene	91		11.457				ND	
101 m-Xylene & p-Xylene	106		11.567				ND	7
102 o-Xylene	106		11.896				ND	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	91	687325	9.49	
* 124 1,4-Dichlorobenzene-d4	152	13.206	13.206	0.000	96	783138	10.0	

[QC Flag Legend](#)

Processing Flags

7 - Failed Limit of Detection

[Reagents:](#)

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 28-Oct-2020 18:20:02

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S15.D

Injection Date: 28-Oct-2020 16:42:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-18116-C-6

Lab Sample ID: 410-18116-6

Worklist Smp#: 23

Client ID: 16WC1B

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

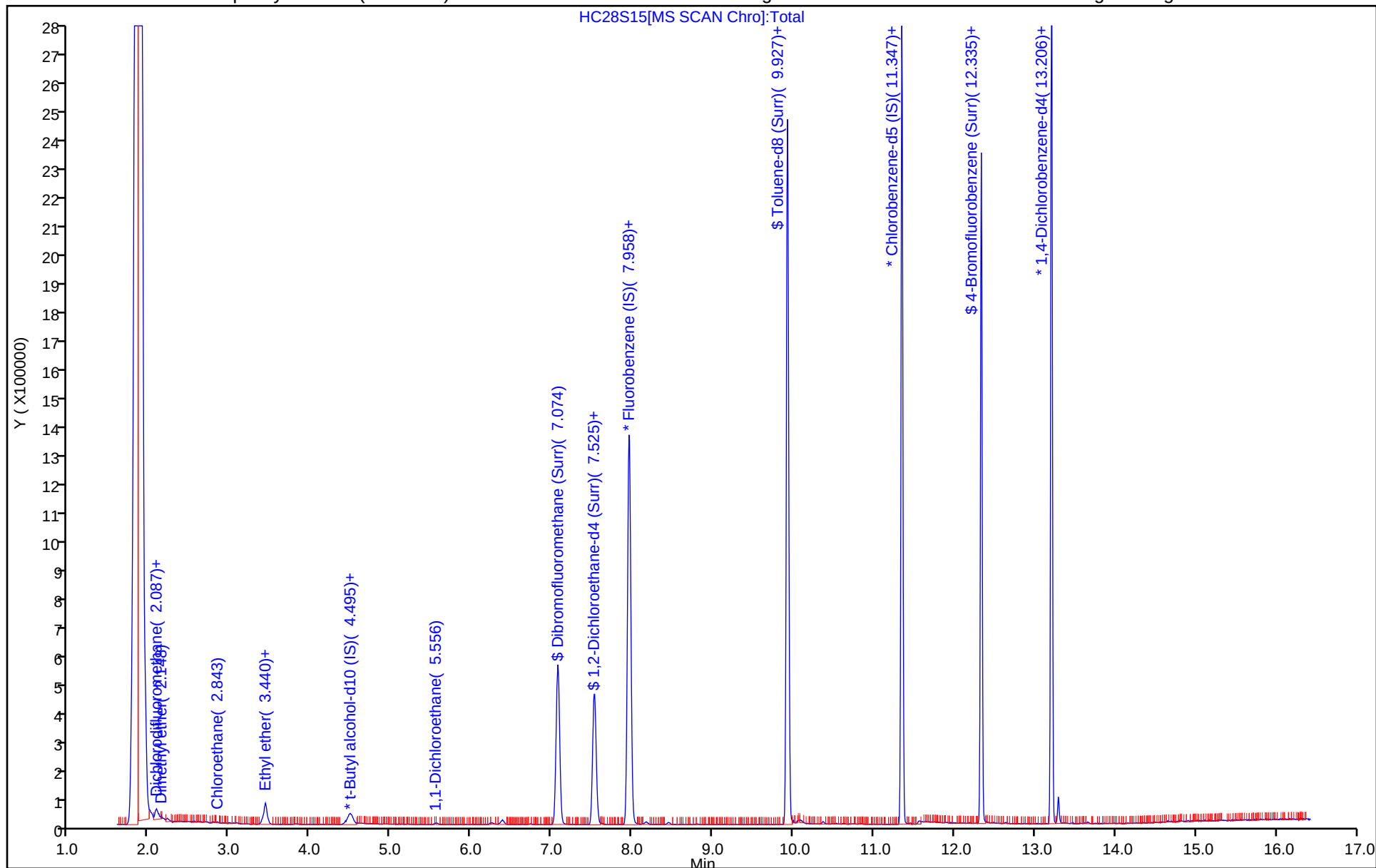
ALS Bottle#: 22

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S15.D
 Lims ID: 410-18116-C-6
 Client ID: 16WC1B
 Sample Type: Client
 Inject. Date: 28-Oct-2020 16:42:30 ALS Bottle#: 22 Worklist Smp#: 23
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-023
 Misc. Info.: 410-18116-C-6
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:13:37

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	11.5	114.72
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	11.4	113.85
\$ 82 Toluene-d8 (Surr)	10.0	9.51	95.08
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.49	94.93

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16-2 Lab Sample ID: 410-18116-7
 Matrix: Ground Water Lab File ID: HC28S16.D
 Analysis Method: 8260C LL Date Collected: 10/21/2020 09:55
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 17:03
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-93-3	2-Butanone	ND		10	
71-43-2	Benzene	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
115-10-6	Methoxymethane	ND		13	
60-29-7	Ethyl ether	ND		13	
100-41-4	Ethylbenzene	ND		1.0	
76-13-1	Freon 113	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
109-99-9	Tetrahydrofuran	ND		25	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		3.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		80-120
1868-53-7	Dibromofluoromethane (Surr)	114		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S16.D
 Lims ID: 410-18116-C-7
 Client ID: 16-2
 Sample Type: Client
 Inject. Date: 28-Oct-2020 17:03:30 ALS Bottle#: 23 Worklist Smp#: 24
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-024
 Misc. Info.: 410-18116-C-7
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:14:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85		2.081				ND	7
4 Dimethyl ether	45		2.166				ND	
6 Chloromethane	50		2.288				ND	
7 Vinyl chloride	62		2.410				ND	
10 Chloroethane	64		2.855				ND	
13 Trichlorofluoromethane	101		3.166				ND	
15 Ethyl ether	59		3.446				ND	
18 1,1-Dichloroethene	96		3.781				ND	
20 112TCTFE	101		3.812				ND	
29 Methylene Chloride	84		4.495				ND	
* 28 t-Butyl alcohol-d10 (IS)	65	4.501	4.507	-0.006	0	136227	50.0	
35 1,1-Dichloroethane	63	5.574	5.568	0.006	1	3452	0.0354	Ma
41 2-Butanone (MEK)	43		6.342				ND	
49 Tetrahydrofuran	71		6.726				ND	
\$ 51 Dibromofluoromethane (Surr)	113	7.080	7.080	0.000	93	520377	11.4	
52 1,1,1-Trichloroethane	97		7.092				ND	
56 Carbon tetrachloride	117		7.305				ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.531	7.531	0.000	0	103577	11.1	
59 Benzene	78		7.567				ND	
* 65 Fluorobenzene (IS)	96	7.964	7.964	0.000	99	1856347	10.0	
67 Trichloroethene	95		8.439				ND	
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	1862697	9.45	
83 Toluene	92		10.000				ND	7
88 Tetrachloroethene	166	10.536	10.536	0.000	1	689	0.0105	a
S 95 Xylenes, Total	106		11.245				ND	7
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.347	0.006	86	1479626	10.0	
100 Ethylbenzene	91		11.457				ND	
101 m-Xylene & p-Xylene	106		11.567				ND	7
102 o-Xylene	106		11.896				ND	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	90	675076	9.46	
* 124 1,4-Dichlorobenzene-d4	152	13.207	13.206	0.001	95	780932	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 28-Oct-2020 18:20:04

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S16.D

Injection Date: 28-Oct-2020 17:03:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-18116-C-7

Lab Sample ID: 410-18116-7

Worklist Smp#: 24

Client ID: 16-2

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

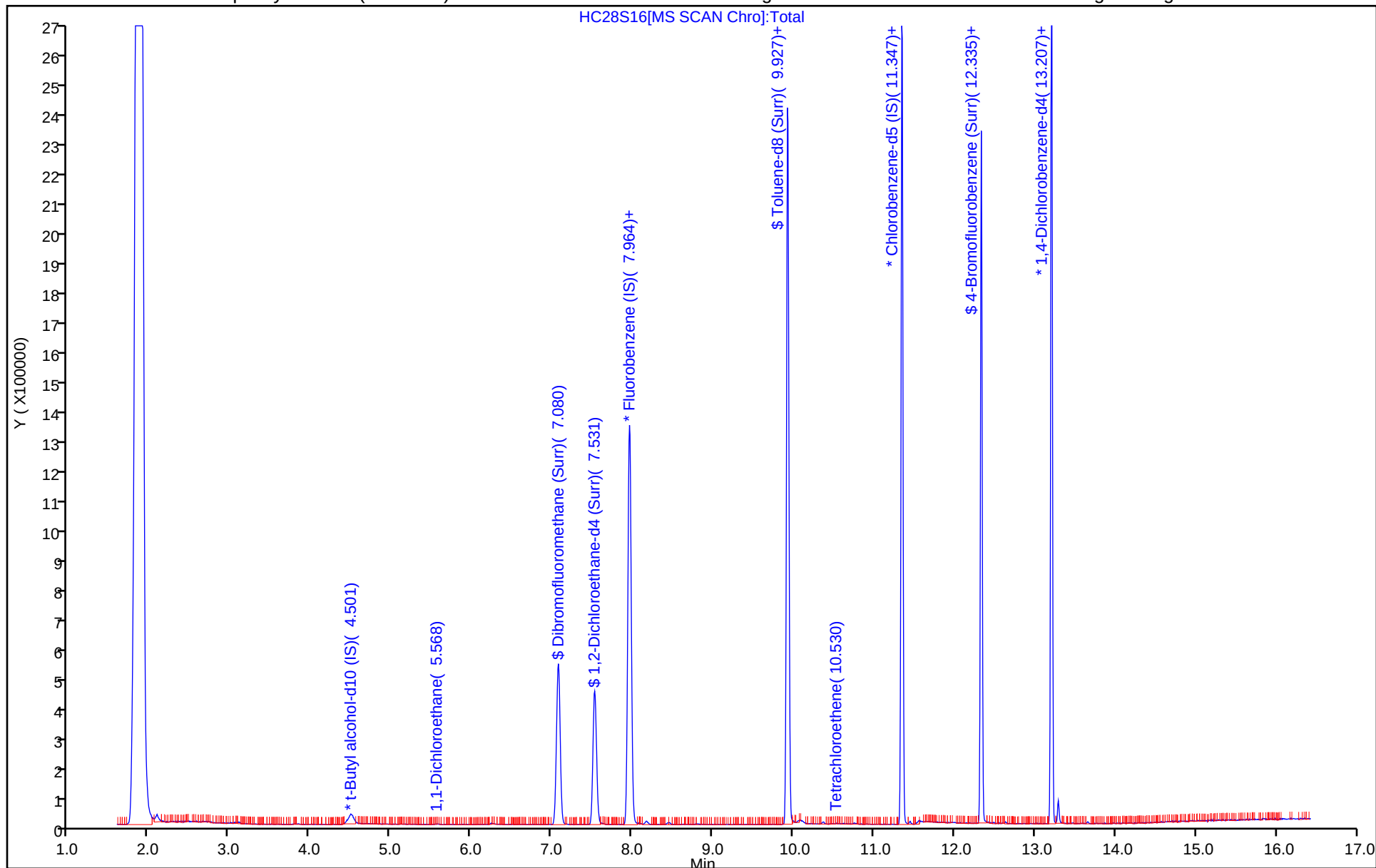
ALS Bottle#: 23

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S16.D
 Lims ID: 410-18116-C-7
 Client ID: 16-2
 Sample Type: Client
 Inject. Date: 28-Oct-2020 17:03:30 ALS Bottle#: 23 Worklist Smp#: 24
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-024
 Misc. Info.: 410-18116-C-7
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:14:04

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	11.4	114.39
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	11.1	111.13
\$ 82 Toluene-d8 (Surr)	10.0	9.45	94.52
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.46	94.62

Eurofins Lancaster Laboratories Env, LLC

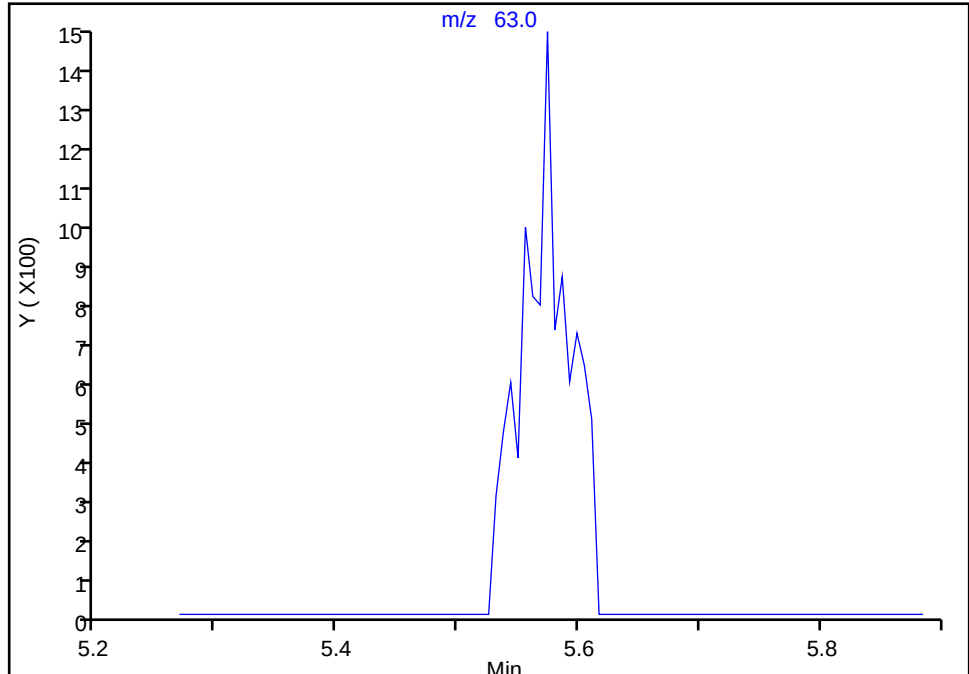
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Injection Date: 28-Oct-2020 17:03:30 Instrument ID: 19094
Lims ID: 410-18116-C-7 Lab Sample ID: 410-18116-7
Client ID: 16-2
Operator ID: jkh09052 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

35 1,1-Dichloroethane, CAS: 75-34-3

Signal: 1

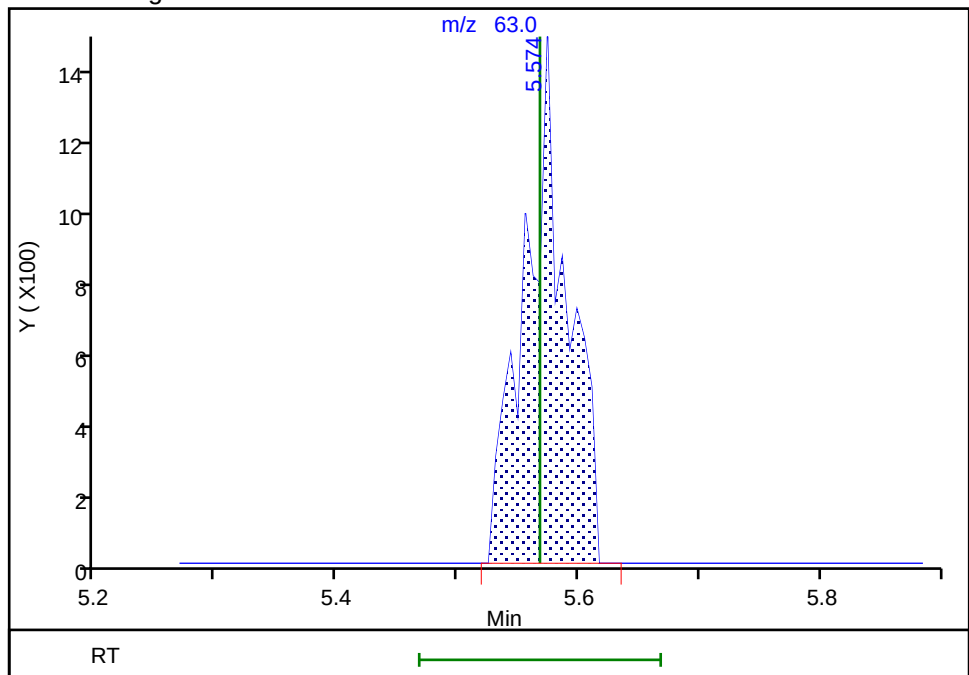
Not Detected
Expected RT: 5.57

Processing Integration Results



RT: 5.57
Area: 3452
Amount: 0.035406
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 28-Oct-2020 18:13:52
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

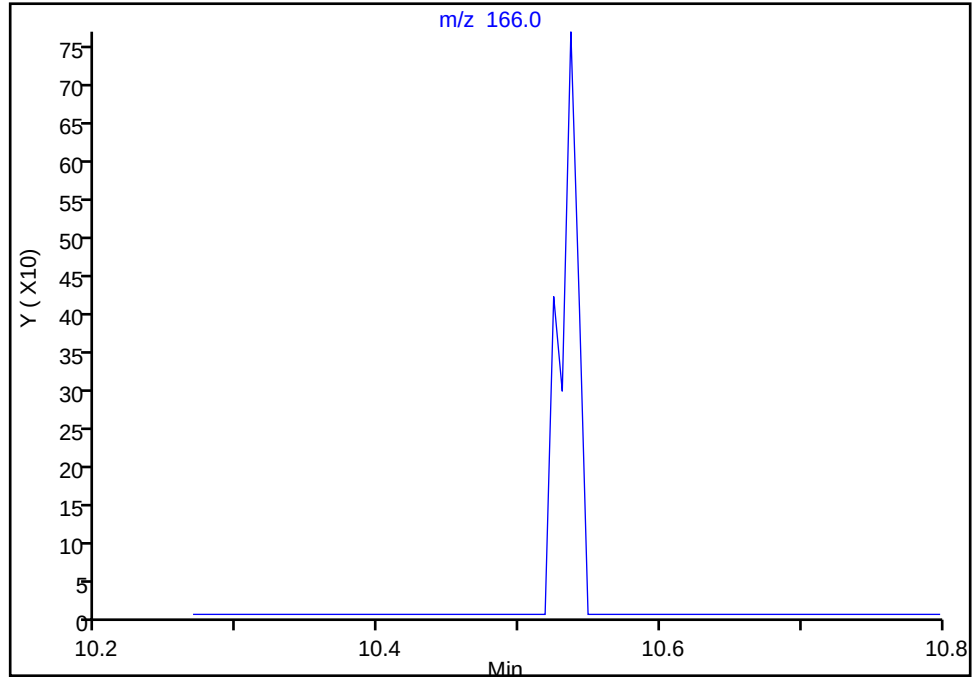
Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S16.D
Injection Date: 28-Oct-2020 17:03:30 Instrument ID: 19094
Lims ID: 410-18116-C-7 Lab Sample ID: 410-18116-7
Client ID: 16-2
Operator ID: jkh09052 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

88 Tetrachloroethene, CAS: 127-18-4

Signal: 1

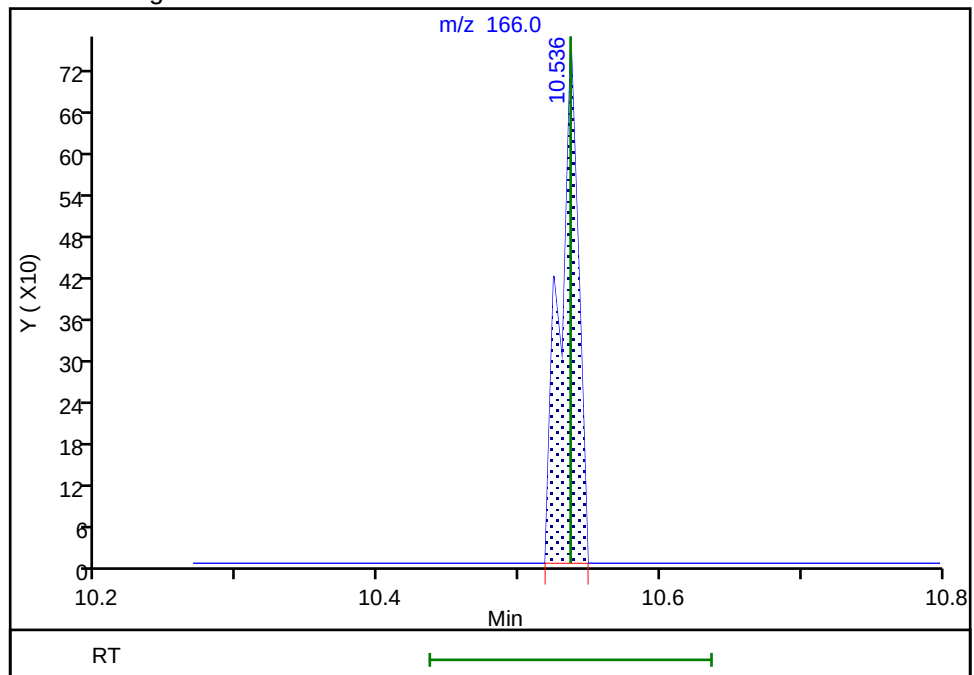
Not Detected
Expected RT: 10.54

Processing Integration Results



RT: 10.54
Area: 689
Amount: 0.010496
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 28-Oct-2020 18:13:59

Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16-3 Lab Sample ID: 410-18116-8
 Matrix: Ground Water Lab File ID: HC28S17.D
 Analysis Method: 8260C LL Date Collected: 10/21/2020 11:15
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 17:25
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-93-3	2-Butanone	ND		10	
71-43-2	Benzene	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
115-10-6	Methoxymethane	ND		13	
60-29-7	Ethyl ether	ND		13	
100-41-4	Ethylbenzene	ND		1.0	
76-13-1	Freon 113	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
109-99-9	Tetrahydrofuran	ND		25	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		3.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		80-120
1868-53-7	Dibromofluoromethane (Surr)	115		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S17.D
 Lims ID: 410-18116-C-8
 Client ID: 16-3
 Sample Type: Client
 Inject. Date: 28-Oct-2020 17:25:30 ALS Bottle#: 24 Worklist Smp#: 25
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-025
 Misc. Info.: 410-18116-C-8
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:14:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.062	2.081	-0.019	95	15168	0.2768	
4 Dimethyl ether	45		2.166				ND	7
6 Chloromethane	50		2.288				ND	
7 Vinyl chloride	62		2.410				ND	
10 Chloroethane	64		2.855				ND	
13 Trichlorofluoromethane	101	3.129	3.166	-0.037	1	4817	0.0548	
15 Ethyl ether	59	3.440	3.446	-0.006	30	2763	0.0697	
18 1,1-Dichloroethene	96		3.781				ND	
20 112TCTFE	101		3.812				ND	
29 Methylene Chloride	84		4.495				ND	
* 28 t-Butyl alcohol-d10 (IS)	65	4.501	4.507	-0.006	0	135760	50.0	
35 1,1-Dichloroethane	63		5.568				ND	
41 2-Butanone (MEK)	43		6.342				ND	
49 Tetrahydrofuran	71		6.726				ND	
\$ 51 Dibromofluoromethane (Surr)	113	7.073	7.080	-0.007	93	534987	11.5	
52 1,1,1-Trichloroethane	97		7.092				ND	
56 Carbon tetrachloride	117		7.305				ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.518	7.531	-0.013	0	105185	11.1	
59 Benzene	78		7.567				ND	
* 65 Fluorobenzene (IS)	96	7.957	7.964	-0.007	98	1891379	10.0	
67 Trichloroethene	95		8.439				ND	
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	1931325	9.53	
83 Toluene	92		10.000				ND	7
88 Tetrachloroethene	166		10.536				ND	
S 95 Xylenes, Total	106		11.245				ND	7
* 97 Chlorobenzene-d5 (IS)	117	11.347	11.347	0.000	86	1521005	10.0	
100 Ethylbenzene	91		11.457				ND	7
101 m-Xylene & p-Xylene	106		11.567				ND	7
102 o-Xylene	106		11.896				ND	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	91	693350	9.45	
* 124 1,4-Dichlorobenzene-d4	152	13.206	13.206	0.000	96	798886	10.0	

[QC Flag Legend](#)

Processing Flags

7 - Failed Limit of Detection

[Reagents:](#)

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 28-Oct-2020 18:20:05

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S17.D

Injection Date: 28-Oct-2020 17:25:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-18116-C-8

Lab Sample ID: 410-18116-8

Worklist Smp#: 25

Client ID: 16-3

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

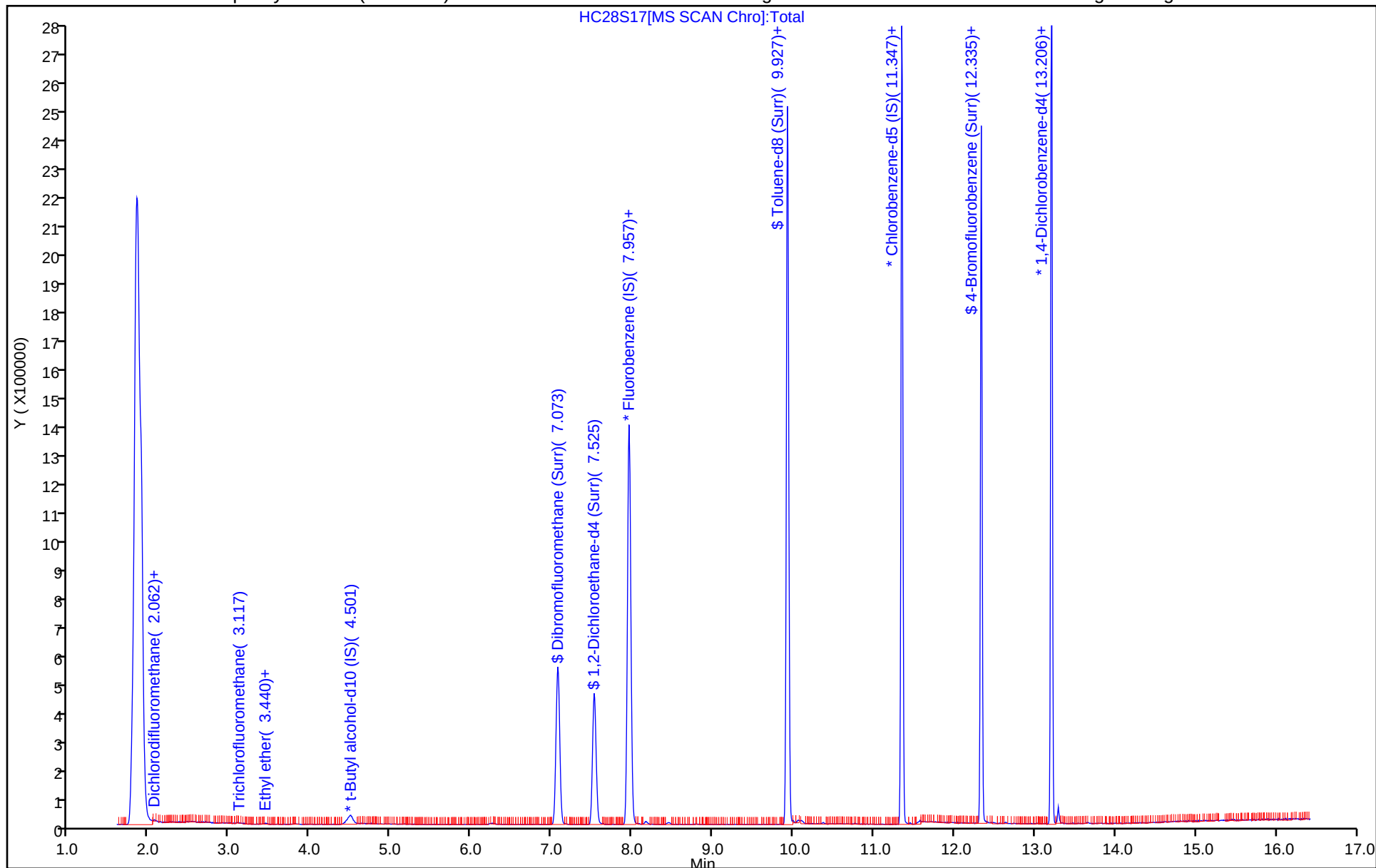
ALS Bottle#: 24

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S17.D
 Lims ID: 410-18116-C-8
 Client ID: 16-3
 Sample Type: Client
 Inject. Date: 28-Oct-2020 17:25:30 ALS Bottle#: 24 Worklist Smp#: 25
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-025
 Misc. Info.: 410-18116-C-8
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:14:20

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	11.5	115.42
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	11.1	110.76
\$ 82 Toluene-d8 (Surr)	10.0	9.53	95.34
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.45	94.54

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16-5 Lab Sample ID: 410-18116-9
 Matrix: Ground Water Lab File ID: HC28S18.D
 Analysis Method: 8260C LL Date Collected: 10/21/2020 08:30
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 17:47
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-93-3	2-Butanone	ND		10	
71-43-2	Benzene	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
115-10-6	Methoxymethane	ND		13	
60-29-7	Ethyl ether	ND		13	
100-41-4	Ethylbenzene	ND		1.0	
76-13-1	Freon 113	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
109-99-9	Tetrahydrofuran	ND		25	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		3.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		80-120
1868-53-7	Dibromofluoromethane (Surr)	116		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S18.D
 Lims ID: 410-18116-C-9
 Client ID: 16-5
 Sample Type: Client
 Inject. Date: 28-Oct-2020 17:47:30 ALS Bottle#: 25 Worklist Smp#: 26
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-026
 Misc. Info.: 410-18116-C-9
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:14:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85		2.081				ND	
4 Dimethyl ether	45		2.166				ND	
6 Chloromethane	50		2.288				ND	
7 Vinyl chloride	62		2.410				ND	
10 Chloroethane	64		2.855				ND	
13 Trichlorofluoromethane	101	3.135	3.166	-0.031	94	13003	0.1629	
15 Ethyl ether	59	3.434	3.446	-0.012	26	2164	0.0601	
18 1,1-Dichloroethene	96		3.781				ND	
20 112TCTFE	101		3.812				ND	
29 Methylene Chloride	84		4.495				ND	
* 28 t-Butyl alcohol-d10 (IS)	65	4.501	4.507	-0.006	0	113748	50.0	
35 1,1-Dichloroethane	63	5.549	5.568	-0.019	94	12532	0.1389	a
41 2-Butanone (MEK)	43		6.342				ND	
49 Tetrahydrofuran	71		6.726				ND	
\$ 51 Dibromofluoromethane (Surr)	113	7.080	7.080	0.000	94	486535	11.6	
52 1,1,1-Trichloroethane	97	7.092	7.092	0.000	35	3474	0.0485	M
56 Carbon tetrachloride	117		7.305				ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.525	7.531	-0.006	0	97087	11.3	
59 Benzene	78		7.567				ND	
* 65 Fluorobenzene (IS)	96	7.964	7.964	0.000	98	1717606	10.0	
67 Trichloroethene	95		8.439				ND	
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	1749358	9.41	
83 Toluene	92	10.006	10.000	0.006	95	4331	0.0319	
88 Tetrachloroethene	166		10.536				ND	
S 95 Xylenes, Total	106		11.245				ND	7
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.347	0.006	86	1396288	10.0	
100 Ethylbenzene	91		11.457				ND	7
101 m-Xylene & p-Xylene	106		11.567				ND	7
102 o-Xylene	106		11.896				ND	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	90	631791	9.38	
* 124 1,4-Dichlorobenzene-d4	152	13.206	13.206	0.000	96	716688	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 28-Oct-2020 18:20:07

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Euofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S18.D

Injection Date: 28-Oct-2020 17:47:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-18116-C-9

Lab Sample ID: 410-18116-9

Worklist Smp#: 26

Client ID: 16-5

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

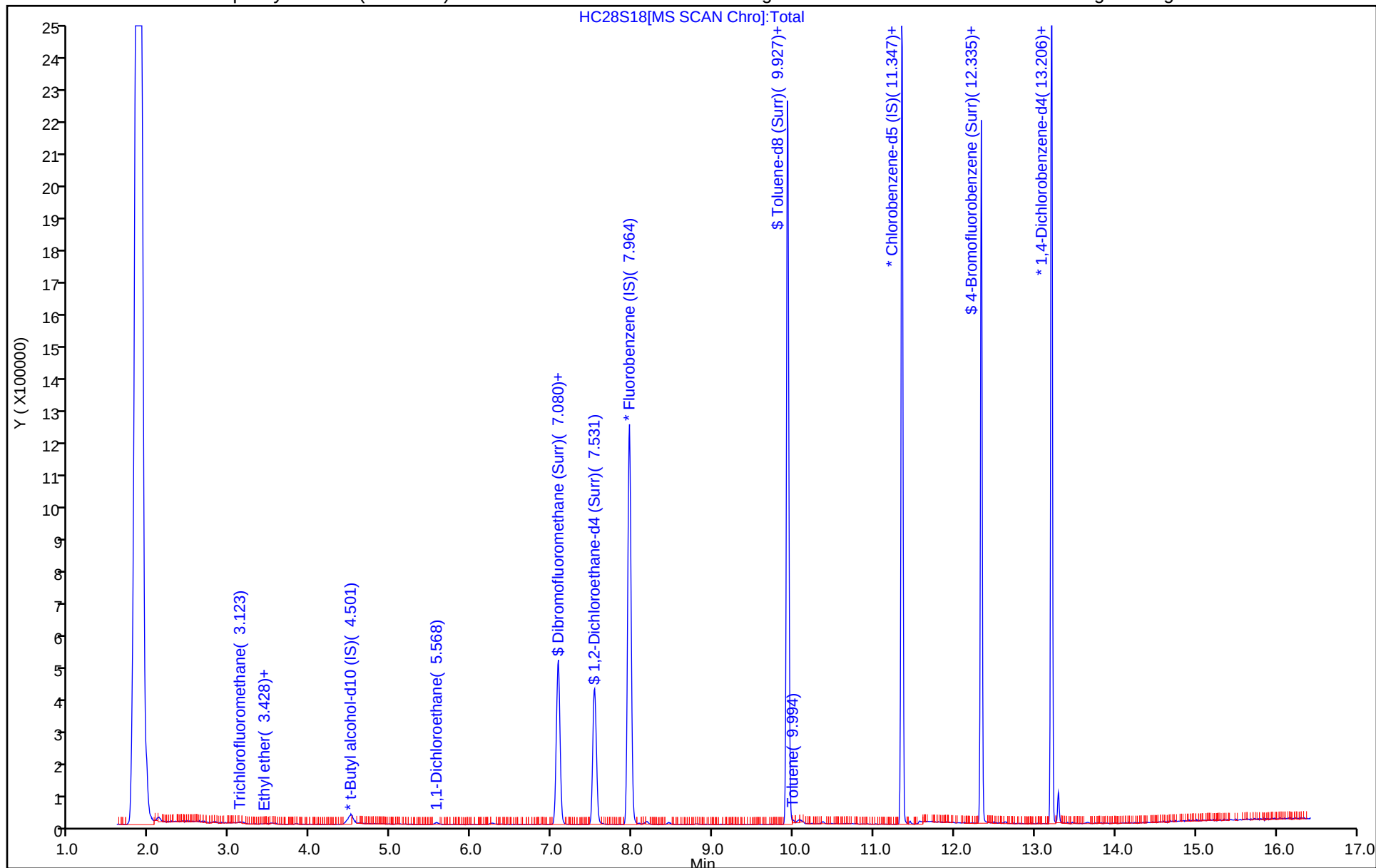
ALS Bottle#: 25

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S18.D
 Lims ID: 410-18116-C-9
 Client ID: 16-5
 Sample Type: Client
 Inject. Date: 28-Oct-2020 17:47:30 ALS Bottle#: 25 Worklist Smp#: 26
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-026
 Misc. Info.: 410-18116-C-9
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:14:50

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	11.6	115.59
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	11.3	112.58
\$ 82 Toluene-d8 (Surr)	10.0	9.41	94.07
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.38	93.84

Eurofins Lancaster Laboratories Env, LLC

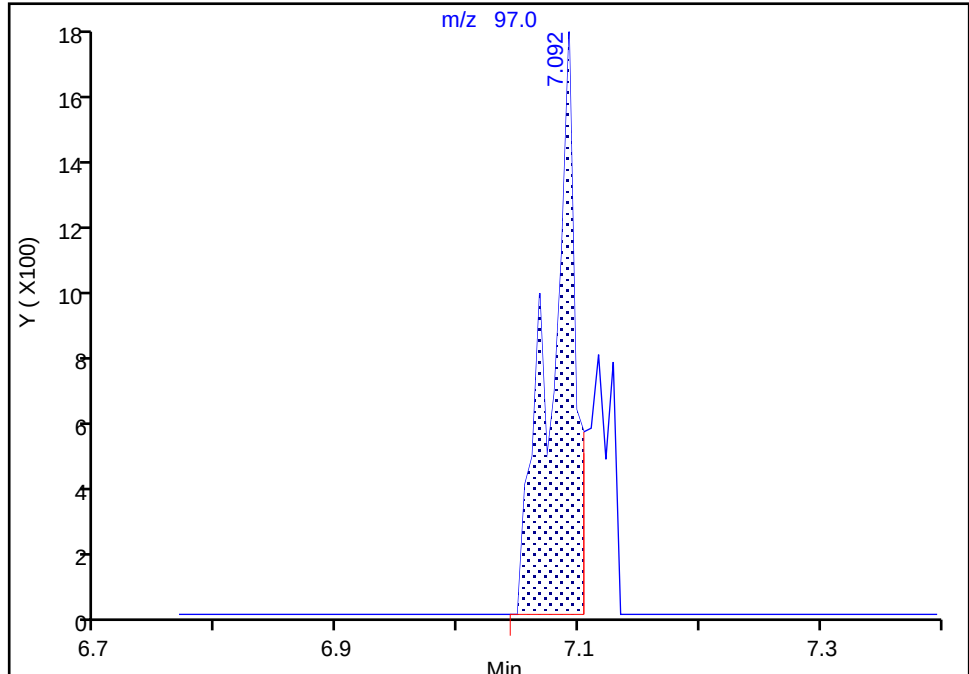
Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S18.D
Injection Date: 28-Oct-2020 17:47:30 Instrument ID: 19094
Lims ID: 410-18116-C-9 Lab Sample ID: 410-18116-9
Client ID: 16-5
Operator ID: jkh09052 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

52 1,1,1-Trichloroethane, CAS: 71-55-6

Signal: 1

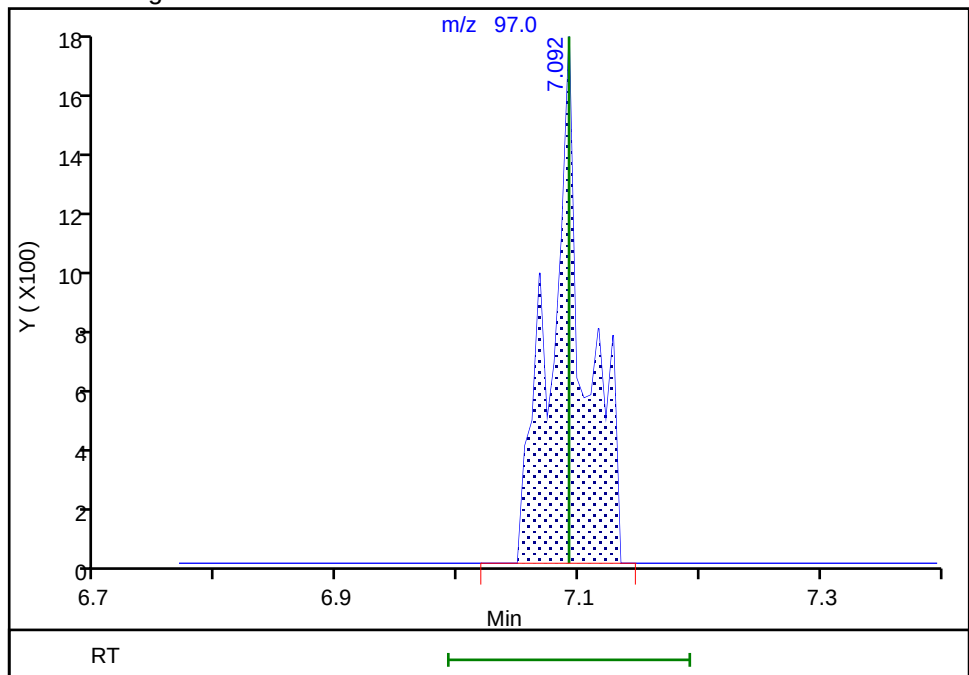
RT: 7.09
Area: 2540
Amount: 0.035467
Amount Units: ug/l

Processing Integration Results



RT: 7.09
Area: 3474
Amount: 0.048509
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 28-Oct-2020 18:14:38
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

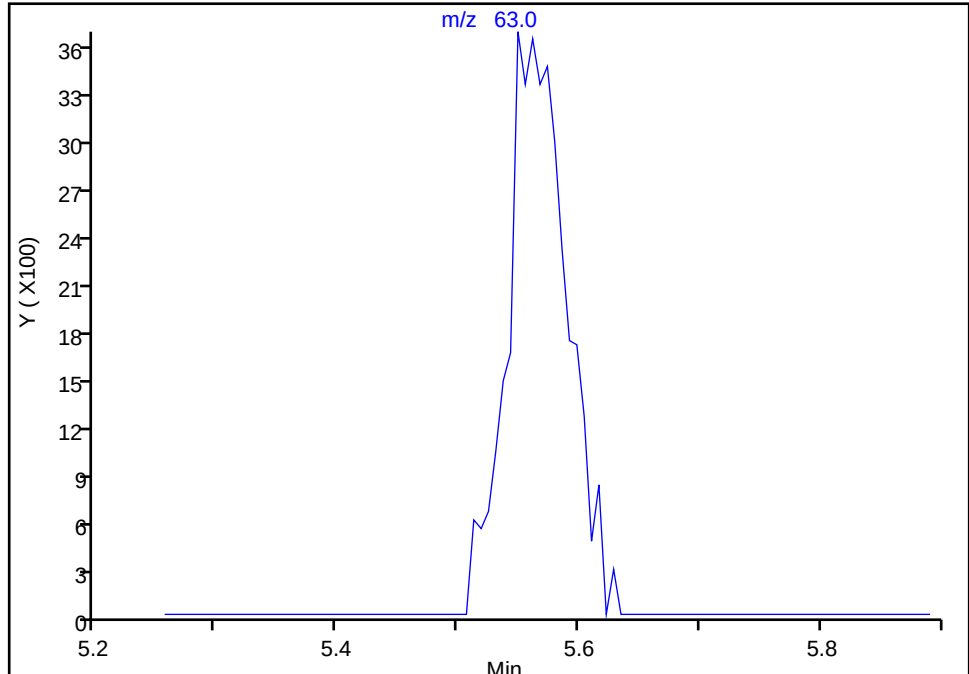
Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S18.D
Injection Date: 28-Oct-2020 17:47:30 Instrument ID: 19094
Lims ID: 410-18116-C-9 Lab Sample ID: 410-18116-9
Client ID: 16-5
Operator ID: jkh09052 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

35 1,1-Dichloroethane, CAS: 75-34-3

Signal: 1

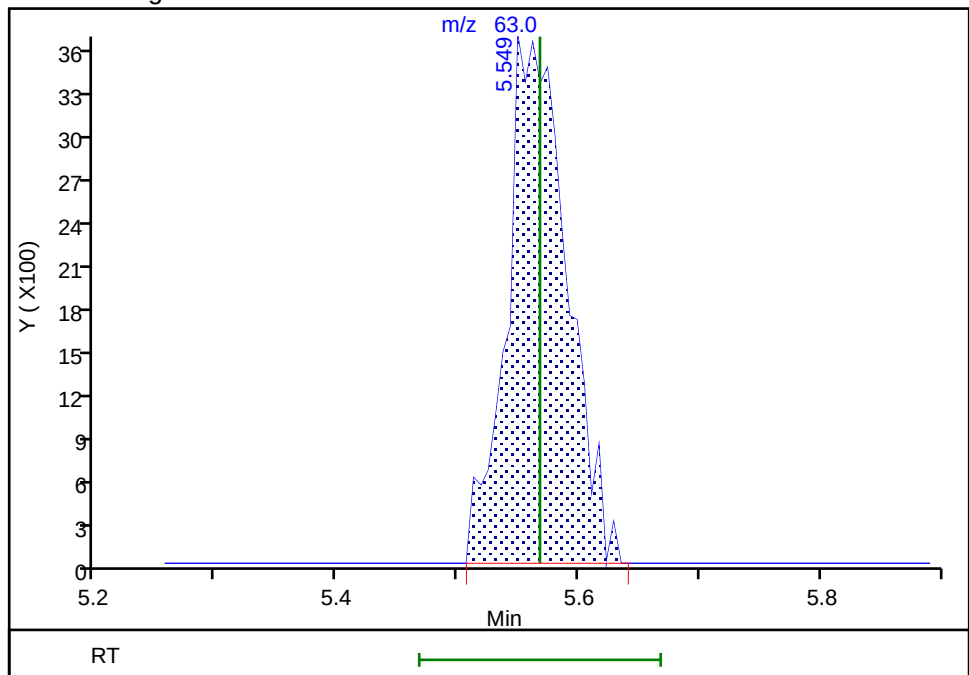
Not Detected
Expected RT: 5.57

Processing Integration Results



RT: 5.55
Area: 12532
Amount: 0.138920
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 28-Oct-2020 18:14:28
Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16WC2B Lab Sample ID: 410-18116-10
 Matrix: Ground Water Lab File ID: HC28S19.D
 Analysis Method: 8260C LL Date Collected: 10/21/2020 09:20
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 18:08
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-93-3	2-Butanone	ND		10	
71-43-2	Benzene	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
115-10-6	Methoxymethane	ND		13	
60-29-7	Ethyl ether	ND		13	
100-41-4	Ethylbenzene	ND		1.0	
76-13-1	Freon 113	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
109-99-9	Tetrahydrofuran	ND		25	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		3.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	120		80-120
1868-53-7	Dibromofluoromethane (Surr)	116		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S19.D
 Lims ID: 410-18116-C-10
 Client ID: 16WC2B
 Sample Type: Client
 Inject. Date: 28-Oct-2020 18:08:30 ALS Bottle#: 26 Worklist Smp#: 27
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-027
 Misc. Info.: 410-18116-C-10
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 16:31:22 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:47:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85		2.081				ND	
4 Dimethyl ether	45		2.166				ND	
6 Chloromethane	50		2.288				ND	
7 Vinyl chloride	62		2.410				ND	
10 Chloroethane	64		2.855				ND	
13 Trichlorofluoromethane	101		3.166				ND	
15 Ethyl ether	59		3.446				ND	
18 1,1-Dichloroethene	96		3.781				ND	
20 112TCTFE	101		3.812				ND	
29 Methylene Chloride	84		4.495				ND	
* 28 t-Butyl alcohol-d10 (IS)	65	4.507	4.507	0.000	0	131954	50.0	
35 1,1-Dichloroethane	63		5.568				ND	
41 2-Butanone (MEK)	43		6.342				ND	
49 Tetrahydrofuran	71		6.726				ND	
\$ 51 Dibromofluoromethane (Surr)	113	7.074	7.080	-0.006	93	460979	11.6	
52 1,1,1-Trichloroethane	97	7.104	7.092	0.012	36	13739	0.2028	
56 Carbon tetrachloride	117		7.305				ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.531	7.531	0.000	0	97706	12.0	
59 Benzene	78		7.567				ND	
* 65 Fluorobenzene (IS)	96	7.964	7.964	0.000	99	1625206	10.0	
67 Trichloroethene	95		8.439				ND	
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	1638692	9.39	
83 Toluene	92		10.000				ND	7
88 Tetrachloroethene	166		10.536				ND	
S 95 Xylenes, Total	106		11.245				ND	7
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.347	0.006	86	1309969	10.0	
100 Ethylbenzene	91		11.457				ND	7
101 m-Xylene & p-Xylene	106		11.567				ND	7
102 o-Xylene	106		11.896				ND	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	91	590539	9.35	
* 124 1,4-Dichlorobenzene-d4	152	13.207	13.206	0.000	95	685383	10.0	

[QC Flag Legend](#)

Processing Flags

7 - Failed Limit of Detection

[Reagents:](#)

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 28-Oct-2020 18:47:42

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S19.D

Injection Date: 28-Oct-2020 18:08:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-18116-C-10

Lab Sample ID: 410-18116-10

Worklist Smp#: 27

Client ID: 16WC2B

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

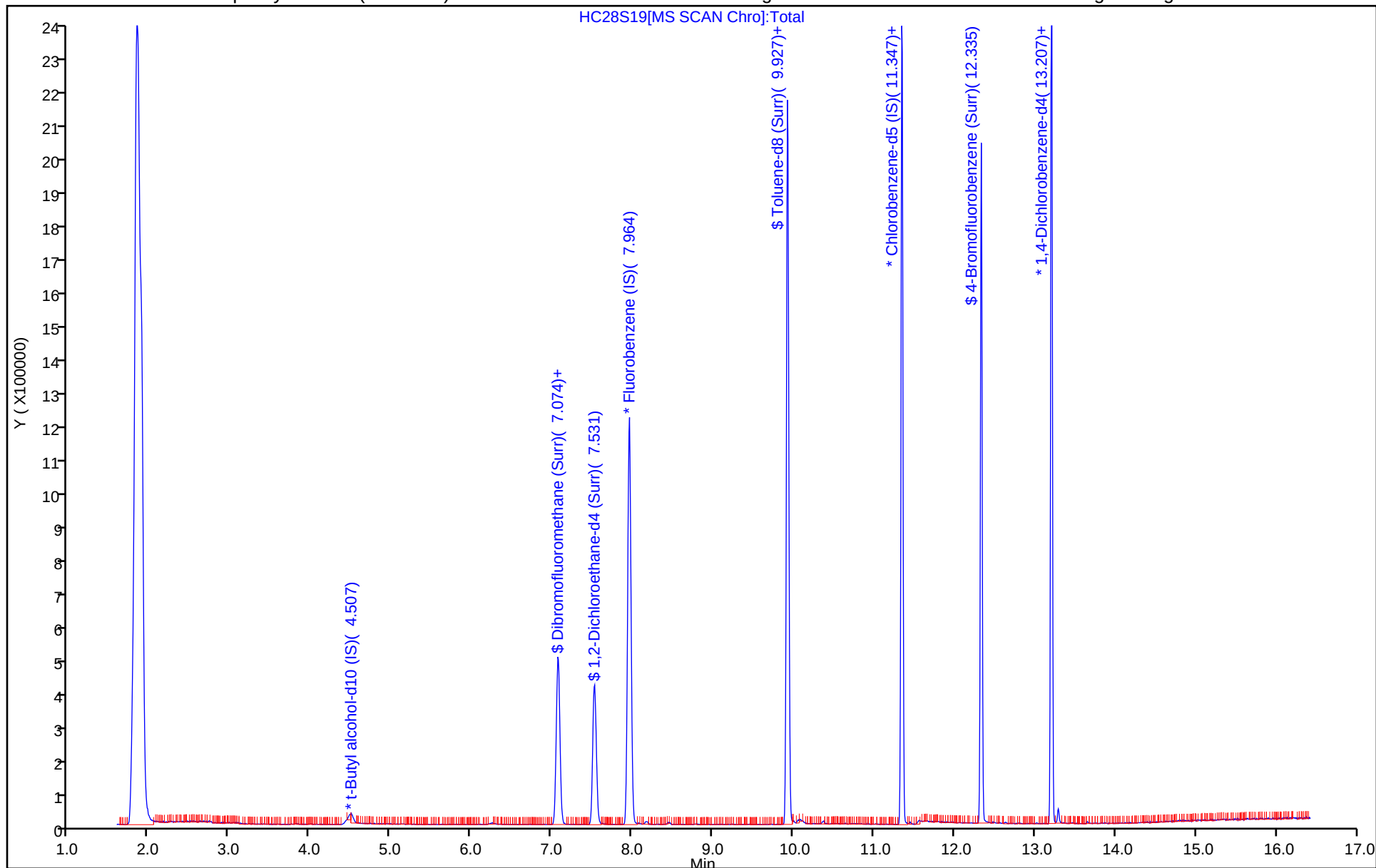
ALS Bottle#: 26

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S19.D
 Lims ID: 410-18116-C-10
 Client ID: 16WC2B
 Sample Type: Client
 Inject. Date: 28-Oct-2020 18:08:30 ALS Bottle#: 26 Worklist Smp#: 27
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-027
 Misc. Info.: 410-18116-C-10
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 16:31:22 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:47:37

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	11.6	115.74
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	12.0	119.73
\$ 82 Toluene-d8 (Surr)	10.0	9.39	93.93
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.35	93.49

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16SPRING Lab Sample ID: 410-18116-11
 Matrix: Ground Water Lab File ID: HC28S20.D
 Analysis Method: 8260C LL Date Collected: 10/21/2020 08:40
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 18:30
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-93-3	2-Butanone	ND		10	
71-43-2	Benzene	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
115-10-6	Methoxymethane	ND		13	
60-29-7	Ethyl ether	ND		13	
100-41-4	Ethylbenzene	ND		1.0	
76-13-1	Freon 113	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
109-99-9	Tetrahydrofuran	ND		25	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		3.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		80-120
1868-53-7	Dibromofluoromethane (Surr)	114		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S20.D
 Lims ID: 410-18116-C-11
 Client ID: 16SPRING
 Sample Type: Client
 Inject. Date: 28-Oct-2020 18:30:30 ALS Bottle#: 27 Worklist Smp#: 28
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-028
 Misc. Info.: 410-18116-C-11
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 19:17:59 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: campbellme

Date: 28-Oct-2020 19:17:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85		2.081				ND	
4 Dimethyl ether	45		2.166				ND	
6 Chloromethane	50		2.288				ND	
7 Vinyl chloride	62		2.410				ND	
10 Chloroethane	64		2.855				ND	7
13 Trichlorofluoromethane	101	3.160	3.166	-0.006	35	8109	0.0928	
15 Ethyl ether	59	3.446	3.446	0.000	93	23080	0.5857	
18 1,1-Dichloroethene	96		3.781				ND	
20 112TCTFE	101		3.812				ND	
29 Methylene Chloride	84		4.495				ND	
* 28 t-Butyl alcohol-d10 (IS)	65	4.489	4.507	-0.018	0	135065	50.0	
35 1,1-Dichloroethane	63	5.555	5.568	-0.013	96	33554	0.3399	
41 2-Butanone (MEK)	43		6.342				ND	
49 Tetrahydrofuran	71		6.726				ND	
\$ 51 Dibromofluoromethane (Surr)	113	7.073	7.080	-0.007	93	524704	11.4	
52 1,1,1-Trichloroethane	97	7.098	7.092	0.006	35	1759	0.0224	7M
56 Carbon tetrachloride	117		7.305				ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.531	7.531	0.000	0	103512	11.0	
59 Benzene	78		7.567				ND	
* 65 Fluorobenzene (IS)	96	7.957	7.964	-0.007	99	1879559	10.0	
67 Trichloroethene	95		8.439				ND	
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	1932794	9.60	
83 Toluene	92		10.000				ND	7
88 Tetrachloroethene	166	10.530	10.536	-0.006	78	1762	0.0263	
S 95 Xylenes, Total	106		11.245				ND	7
* 97 Chlorobenzene-d5 (IS)	117	11.347	11.347	0.000	86	1512043	10.0	
100 Ethylbenzene	91		11.457				ND	7
101 m-Xylene & p-Xylene	106		11.567				ND	7
102 o-Xylene	106		11.896				ND	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	91	688477	9.44	
* 124 1,4-Dichlorobenzene-d4	152	13.206	13.206	0.000	96	788752	10.0	

[QC Flag Legend](#)

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

[Reagents:](#)

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 28-Oct-2020 19:19:05

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S20.D

Injection Date: 28-Oct-2020 18:30:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-18116-C-11

Lab Sample ID: 410-18116-11

Worklist Smp#: 28

Client ID: 16SPRING

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

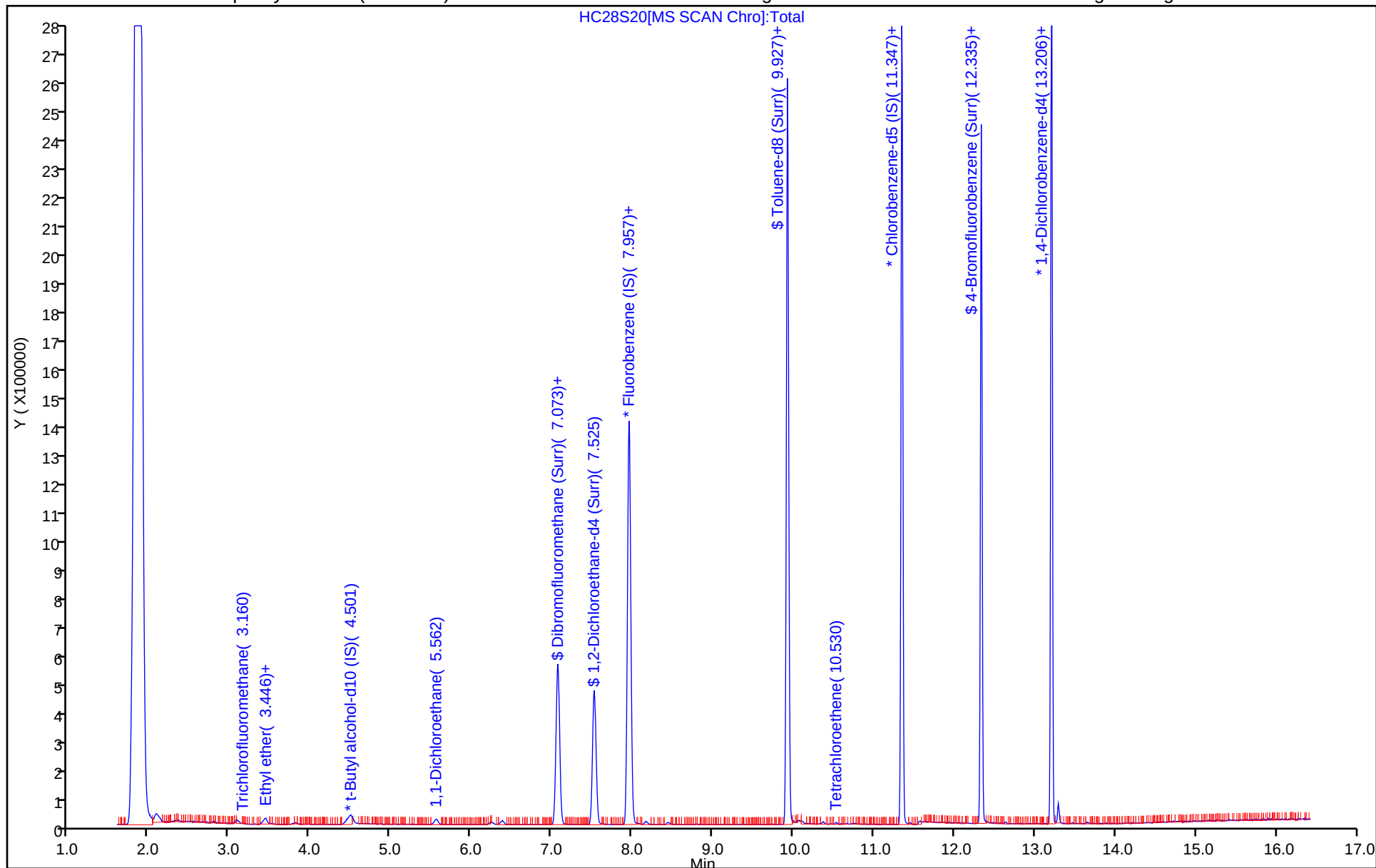
ALS Bottle#: 27

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S20.D
 Lims ID: 410-18116-C-11
 Client ID: 16SPRING
 Sample Type: Client
 Inject. Date: 28-Oct-2020 18:30:30 ALS Bottle#: 27 Worklist Smp#: 28
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-028
 Misc. Info.: 410-18116-C-11
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 19:17:59 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: campbellme

Date: 28-Oct-2020 19:17:59

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	11.4	113.91
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	11.0	109.68
\$ 82 Toluene-d8 (Surr)	10.0	9.60	95.98
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.44	94.43

Eurofins Lancaster Laboratories Env, LLC

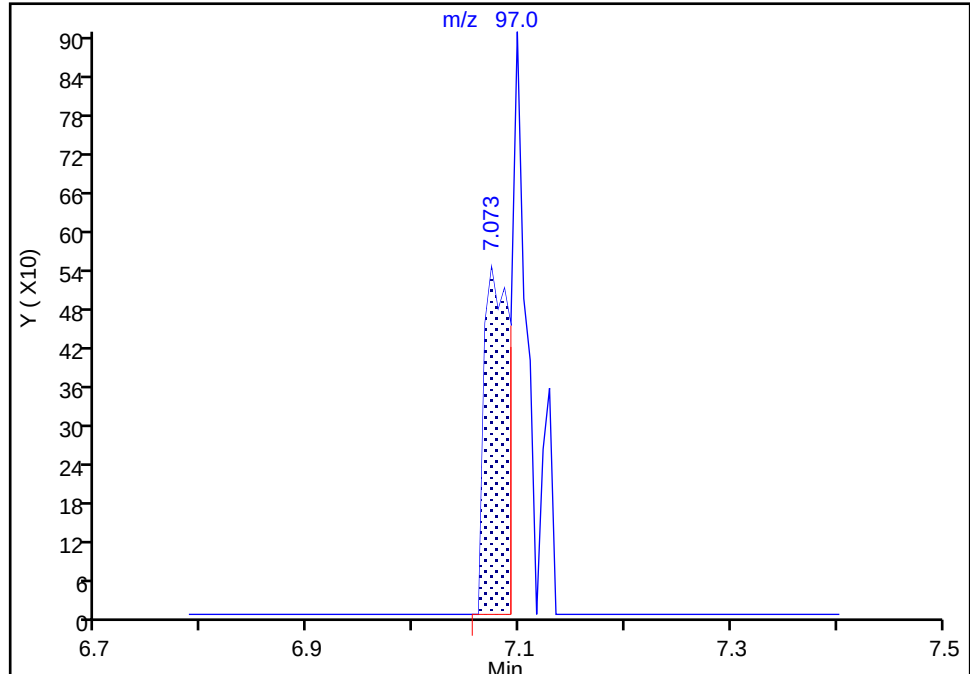
Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S20.D
Injection Date: 28-Oct-2020 18:30:30 Instrument ID: 19094
Lims ID: 410-18116-C-11 Lab Sample ID: 410-18116-11
Client ID: 16SPRING
Operator ID: jkh09052 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

52 1,1,1-Trichloroethane, CAS: 71-55-6

Signal: 1

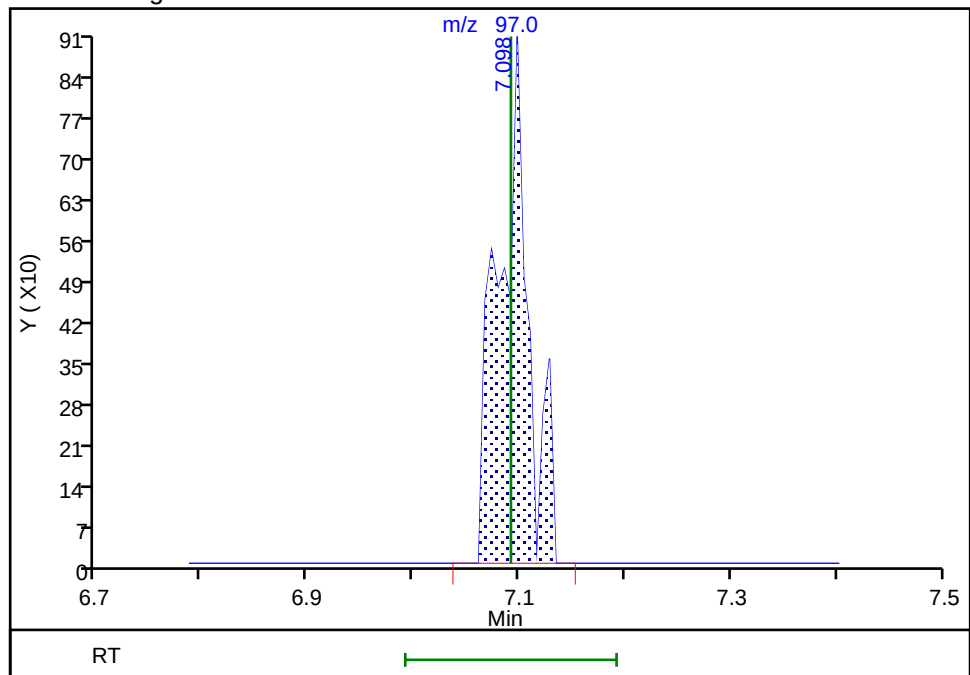
RT: 7.07
Area: 882
Amount: 0.011255
Amount Units: ug/l

Processing Integration Results



RT: 7.10
Area: 1759
Amount: 0.022445
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 28-Oct-2020 19:17:50
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: Trip Blank1 Lab Sample ID: 410-18116-12
 Matrix: Water Lab File ID: HC28S01.D
 Analysis Method: 8260C LL Date Collected: 10/21/2020 00:00
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 11:37
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-93-3	2-Butanone	ND		10	
71-43-2	Benzene	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
115-10-6	Methoxymethane	ND		13	
60-29-7	Ethyl ether	ND		13	
100-41-4	Ethylbenzene	ND		1.0	
76-13-1	Freon 113	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
109-99-9	Tetrahydrofuran	ND		25	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		3.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		80-120
1868-53-7	Dibromofluoromethane (Surr)	116		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S01.D
 Lims ID: 410-18116-A-12
 Client ID: Trip Blank1
 Sample Type: Client
 Inject. Date: 28-Oct-2020 11:37:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-009
 Misc. Info.: 410-18116-A-12
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: howej

Date: 28-Oct-2020 12:05:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85		2.081				ND	
4 Dimethyl ether	45		2.166				ND	
6 Chloromethane	50		2.288				ND	
7 Vinyl chloride	62		2.410				ND	
10 Chloroethane	64		2.855				ND	
13 Trichlorofluoromethane	101		3.166				ND	
15 Ethyl ether	59		3.446				ND	
18 1,1-Dichloroethene	96		3.781				ND	
20 112TCTFE	101		3.812				ND	
29 Methylene Chloride	84		4.495				ND	
* 28 t-Butyl alcohol-d10 (IS)	65	4.501	4.507	-0.006	0	135536	50.0	
35 1,1-Dichloroethane	63		5.568				ND	
41 2-Butanone (MEK)	43		6.342				ND	
49 Tetrahydrofuran	71		6.726				ND	
\$ 51 Dibromofluoromethane (Surr)	113	7.073	7.080	-0.007	93	550714	11.6	
52 1,1,1-Trichloroethane	97		7.092				ND	
56 Carbon tetrachloride	117		7.305				ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.531	7.531	0.000	0	109817	11.2	
59 Benzene	78		7.567				ND	
* 65 Fluorobenzene (IS)	96	7.964	7.964	0.000	99	1945465	10.0	
67 Trichloroethene	95		8.439				ND	
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	1958100	9.44	
83 Toluene	92	10.000	10.000	0.000	94	8783	0.0581	
88 Tetrachloroethene	166		10.536				ND	
S 95 Xylenes, Total	106		11.245				ND	7
* 97 Chlorobenzene-d5 (IS)	117	11.347	11.347	0.000	86	1557440	10.0	
100 Ethylbenzene	91		11.457				ND	7
101 m-Xylene & p-Xylene	106		11.567				ND	7
102 o-Xylene	106		11.896				ND	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	91	703869	9.37	
* 124 1,4-Dichlorobenzene-d4	152	13.206	13.206	0.000	95	813439	10.0	

[QC Flag Legend](#)

Processing Flags

7 - Failed Limit of Detection

[Reagents:](#)

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 28-Oct-2020 18:19:32

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S01.D

Injection Date: 28-Oct-2020 11:37:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-18116-A-12

Lab Sample ID: 410-18116-12

Worklist Smp#: 9

Client ID: Trip Blank1

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

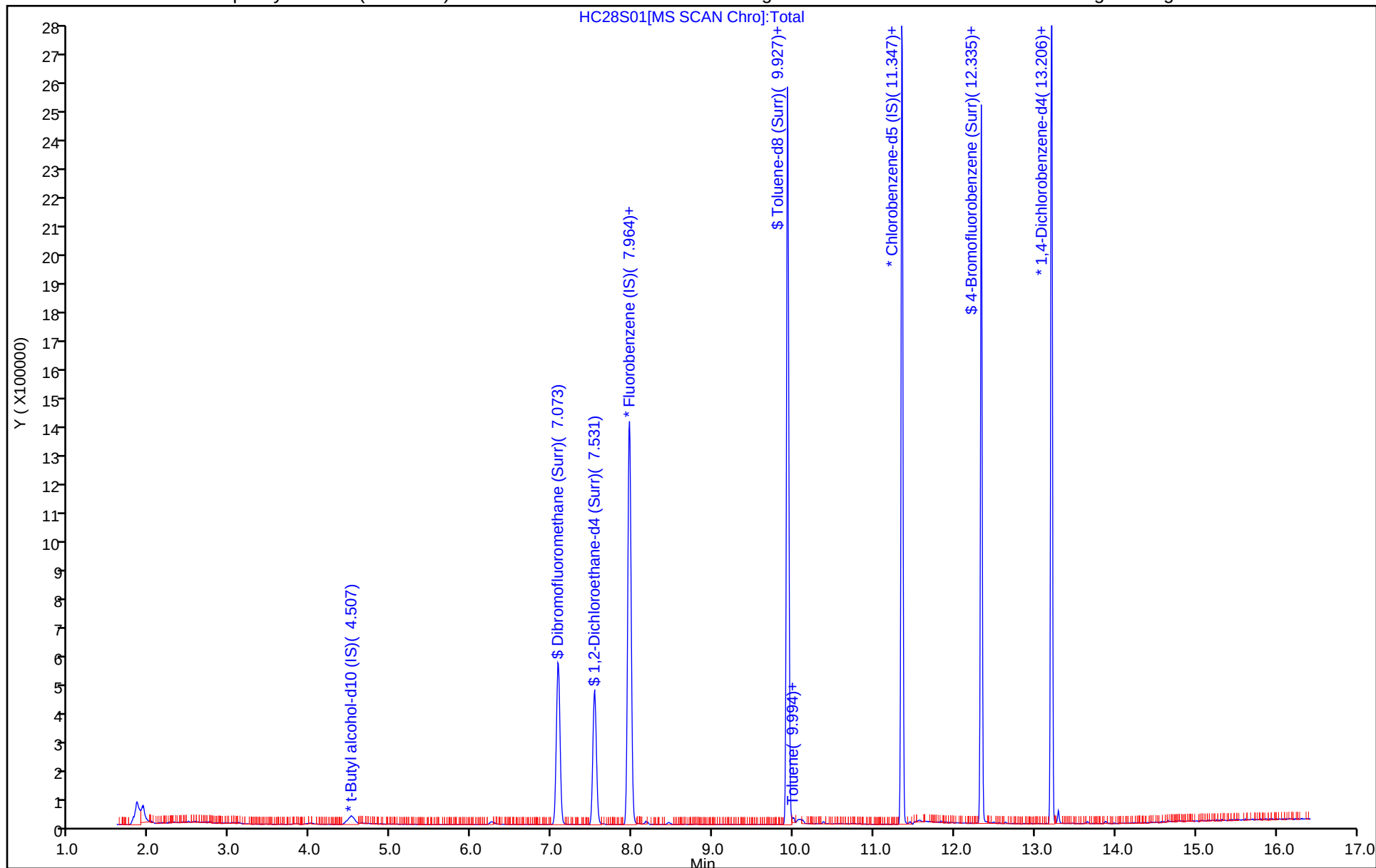
ALS Bottle#: 8

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S01.D
 Lims ID: 410-18116-A-12
 Client ID: Trip Blank1
 Sample Type: Client
 Inject. Date: 28-Oct-2020 11:37:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-009
 Misc. Info.: 410-18116-A-12
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: howej

Date: 28-Oct-2020 12:05:20

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	11.6	115.51
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	11.2	112.42
\$ 82 Toluene-d8 (Surr)	10.0	9.44	94.40
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.37	93.73

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: Trip Blank2 Lab Sample ID: 410-18116-13
 Matrix: Water Lab File ID: HC28S02.D
 Analysis Method: 8260C LL Date Collected: 10/21/2020 00:00
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 11:59
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-93-3	2-Butanone	ND		10	
71-43-2	Benzene	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
115-10-6	Methoxymethane	ND		13	
60-29-7	Ethyl ether	ND		13	
100-41-4	Ethylbenzene	ND		1.0	
76-13-1	Freon 113	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
109-99-9	Tetrahydrofuran	ND		25	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		3.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		80-120
1868-53-7	Dibromofluoromethane (Surr)	113		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S02.D
 Lims ID: 410-18116-A-13
 Client ID: Trip Blank2
 Sample Type: Client
 Inject. Date: 28-Oct-2020 11:59:30 ALS Bottle#: 9 Worklist Smp#: 10
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-010
 Misc. Info.: 410-18116-A-13
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: howej

Date: 28-Oct-2020 13:27:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85		2.081				ND	
4 Dimethyl ether	45		2.166				ND	
6 Chloromethane	50		2.288				ND	
7 Vinyl chloride	62		2.410				ND	
10 Chloroethane	64		2.855				ND	
13 Trichlorofluoromethane	101		3.166				ND	
15 Ethyl ether	59		3.446				ND	
18 1,1-Dichloroethene	96		3.781				ND	
20 112TCTFE	101		3.812				ND	
29 Methylene Chloride	84		4.495				ND	
* 28 t-Butyl alcohol-d10 (IS)	65	4.519	4.507	0.012	0	138802	50.0	
35 1,1-Dichloroethane	63		5.568				ND	
41 2-Butanone (MEK)	43		6.342				ND	
49 Tetrahydrofuran	71		6.726				ND	
\$ 51 Dibromofluoromethane (Surr)	113	7.080	7.080	0.000	93	529724	11.3	
52 1,1,1-Trichloroethane	97		7.092				ND	
56 Carbon tetrachloride	117		7.305				ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.525	7.531	-0.006	0	112032	11.7	
59 Benzene	78		7.567				ND	
* 65 Fluorobenzene (IS)	96	7.964	7.964	0.000	98	1908089	10.0	
67 Trichloroethene	95		8.439				ND	
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	1908765	9.46	
83 Toluene	92	10.006	10.000	0.006	98	8369	0.0569	
88 Tetrachloroethene	166		10.536				ND	
S 95 Xylenes, Total	106		11.245				ND	7
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.347	0.006	86	1515273	10.0	
100 Ethylbenzene	91		11.457				ND	
101 m-Xylene & p-Xylene	106		11.567				ND	7
102 o-Xylene	106		11.896				ND	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	92	690722	9.45	
* 124 1,4-Dichlorobenzene-d4	152	13.206	13.206	0.000	95	797612	10.0	

[QC Flag Legend](#)

Processing Flags

7 - Failed Limit of Detection

[Reagents:](#)

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 28-Oct-2020 18:19:33

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S02.D

Injection Date: 28-Oct-2020 11:59:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-18116-A-13

Lab Sample ID: 410-18116-13

Worklist Smp#: 10

Client ID: Trip Blank2

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

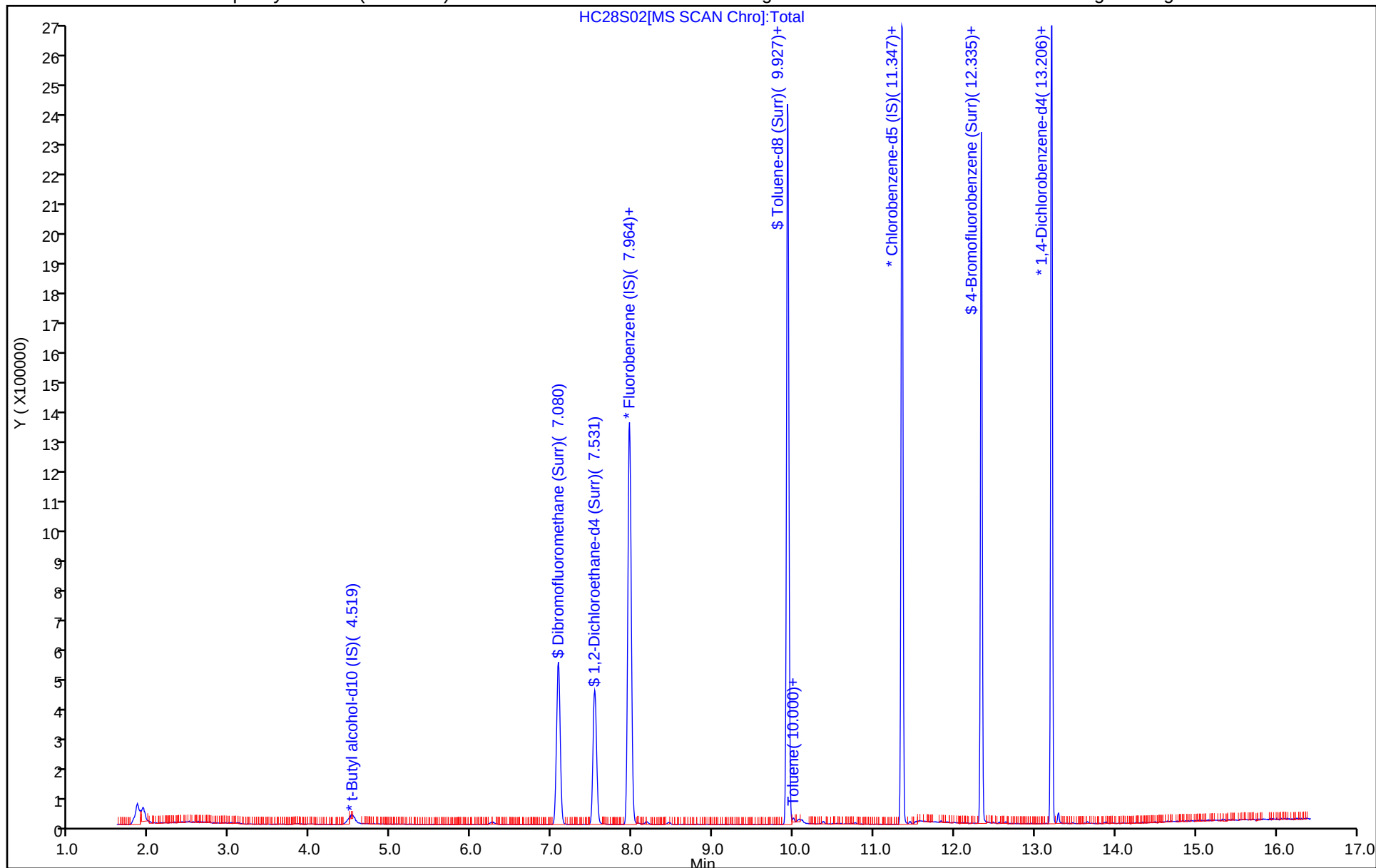
ALS Bottle#: 9

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S02.D
 Lims ID: 410-18116-A-13
 Client ID: Trip Blank2
 Sample Type: Client
 Inject. Date: 28-Oct-2020 11:59:30 ALS Bottle#: 9 Worklist Smp#: 10
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-010
 Misc. Info.: 410-18116-A-13
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: howej

Date: 28-Oct-2020 13:27:58

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	11.3	113.28
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	11.7	116.94
\$ 82 Toluene-d8 (Surr)	10.0	9.46	94.58
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.45	94.54

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 44043

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2020 15:07 Calibration End Date: 09/15/2020 17:18 Calibration ID: 10997

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-44043/9	hs15i17.D
Level 2	IC 410-44043/8	hs15i16.D
Level 3	IC 410-44043/7	hs15i15.D
Level 4	IC 410-44043/6	hs15i14.D
Level 5	IC 410-44043/5	hs15i13.D
Level 6	IC 410-44043/4	hs15i12.D
Level 7	IC 410-44043/3	hs15i11.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorodifluoromethane	0.3348 0.2791	0.2835 0.3015	0.3133	0.2946	0.2771	Ave		0.2977				7.0		20.0			
Methoxymethane	0.3956 0.2608	0.3199 0.3022	0.3067	0.3194	0.2882	Ave		0.3132				13.3		20.0			
Acetonitrile	0.0121 0.0162	0.0154 0.0160	0.0141	0.0152	0.0157	Ave		0.0150				9.5		20.0			
Vinyl acetate	0.3478 0.3661	0.3205 0.3932	0.3346	0.3678	0.3542	Ave		0.3549				6.7		20.0			
Ethyl acetate	0.1809 0.1730	0.1738 0.1764	0.1690	0.1817	0.1757	Ave		0.1758				2.5		20.0			
Methyl acrylate	0.1259 0.1399	0.1283 0.1433	0.1267	0.1379	0.1398	Ave		0.1345				5.4		20.0			
1-Chlorobutane	0.4889 0.5172	0.4753 0.5278	0.5126	0.5238	0.5208	Ave		0.5095				3.9		20.0			
Chloroacetonitrile	0.0054 0.0071	0.0060 0.0069	0.0058	0.0066	0.0068	Ave		0.0064				10.0		20.0			
2-Chloroethyl vinyl ether	0.1099 0.1239	0.1167 0.1231	0.1119	0.1260	0.1247	Ave		0.1194				5.5		20.0			
cis-1,4-Dichloro-2-butene	0.0670 0.0971	0.0827 0.1050	0.0761	0.0856	0.0920	Ave		0.0865				14.8		20.0			
Cyclohexanone	0.2575 0.4076	0.3016 0.3257	0.2933	0.3400	0.3385	Ave		0.3235				14.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 44043

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2020 15:07 Calibration End Date: 09/15/2020 17:18 Calibration ID: 10997

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-44043/9	hs15i17.D
Level 2	IC 410-44043/8	hs15i16.D
Level 3	IC 410-44043/7	hs15i15.D
Level 4	IC 410-44043/6	hs15i14.D
Level 5	IC 410-44043/5	hs15i13.D
Level 6	IC 410-44043/4	hs15i12.D
Level 7	IC 410-44043/3	hs15i11.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chlorodifluoromethane	FB	Ave	13457 667646	28220 1758555	71700	130640	315990	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methoxymethane	FB	Ave	15901 623963	31844 1762650	70200	141625	328607	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acetonitrile	FB	Ave	19501 1548172	61264 3727192	128845	270163	718166	8.00 400	20.0 1000	40.0	80.0	200
Vinyl acetate	FB	Ave	13983 875839	31907 2293707	76579	163063	403937	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl acetate	FB	Ave	7271 413933	17305 1029086	38673	80555	200359	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl acrylate	FB	Ave	25313 1673454	63858 4178262	145004	305688	797001	1.00 50.0	2.50 125	5.00	10.0	25.0
1-Chlorobutane	FB	Ave	19654 1237349	47321 3078609	117310	232237	593907	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloroacetonitrile	FB	Ave	10937 854206	29902 1998120	65890	145542	389068	10.0 500	25.0 1250	50.0	100	250
2-Chloroethyl vinyl ether	FB	Ave	4418 296493	11614 717821	25602	55873	142203	0.200 10.0	0.500 25.0	1.00	2.00	5.00
cis-1,4-Dichloro-2-butene	CBZd 5	Ave	3918 339856	12083 908587	25202	54937	153677	0.400 20.0	1.000 50.0	2.00	4.00	10.00
Cyclohexanone	TBAd 10	Ave	4901 562891	14848 1107702	31153	81216	220389	10.00 500	25.0 1250	50.0	100.0	250

Curve Type Legend:

Ave = Average ISTD

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i11.D
 Lims ID: IC std7 25
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 15-Sep-2020 15:07:30 ALS Bottle#: 3 Worklist Smp#: 3
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0010497-003
 Misc. Info.: IC STD7 25
 Operator ID: kas02648 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub19
 Method: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 15-Sep-2020 23:43:47 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1035

First Level Reviewer: campbellme

Date: 15-Sep-2020 22:10:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Chlorodifluoromethane	51	2.093	2.093	0.000	97	1758555	25.0	25.3	M
4 Dimethyl ether	45	2.166	2.166	0.000	99	1762650	25.0	24.1	
25 Acetonitrile	41	4.196	4.214	-0.018	99	3727192	1000.1	1068.0	
* 28 t-Butyl alcohol-d10 (IS)	65	4.476	4.501	-0.025	0	136033	50.0	50.0	
36 Vinyl acetate	43	5.537	5.537	0.000	97	2293707	25.0	27.7	
44 Ethyl acetate	43	6.409	6.409	0.000	99	1029086	25.0	25.1	
46 Methyl acrylate	55	6.470	6.470	0.000	100	4178262	125.0	133.1	
54 1-Chlorobutane	56	7.238	7.238	0.000	95	3078609	25.0	25.9	
61 Isopropyl acetate	43	7.628	7.628	0.000	98	1949977	25.0	26.0	
* 65 Fluorobenzene (IS)	96	7.957	7.957	0.000	98	2333199	10.0	10.0	
74 n-Propyl acetate	61	8.915	8.921	-0.006	99	399790	25.0	27.6	
77 Chloroacetonitrile	75	9.421	9.433	-0.012	88	1998120	1250.0	1344.5	
78 2-Chloroethyl vinyl ether	63	9.451	9.451	0.000	90	717821	25.0	25.8	
92 n-Butyl acetate	43	10.768	10.768	0.000	98	1814897	25.0	26.3	
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.353	0.000	86	1730466	10.0	10.0	
106 cis-1,4-Dichloro-2-butene	88	12.237	12.237	0.000	0	908587	50.0	60.7	
107 Cyclohexanone	55	12.274	12.280	-0.006	93	1107702	1249.9	1258.7	
* 124 1,4-Dichlorobenzene-d4	152	13.213	13.213	0.001	96	898597	10.0	10.0	
133 Hexachloroethane	201	13.694	13.694	0.000	97	1301851	25.0	27.5	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_V_VOA5_00013	Amount Added: 12.50	Units: uL
MSV_VAcet_00005	Amount Added: 20.00	Units: uL
MSV_VCYC_00005	Amount Added: 20.00	Units: uL
MSV_V_SMRV4_00013	Amount Added: 12.50	Units: uL
MSV_DME_00022	Amount Added: 2.50	Units: uL
MSV_CDFM_00010	Amount Added: 2.50	Units: uL
MSV_30_826ISO_00003	Amount Added: 5.00	Units: uL
MSV_V_REV4_25_00013	Amount Added: 50.00	Units: uL

Report Date: 15-Sep-2020 23:43:48

Chrom Revision: 2.3 11-Sep-2020 20:57:08

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i11.D

Injection Date: 15-Sep-2020 15:07:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std7 25

Worklist Smp#: 3

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

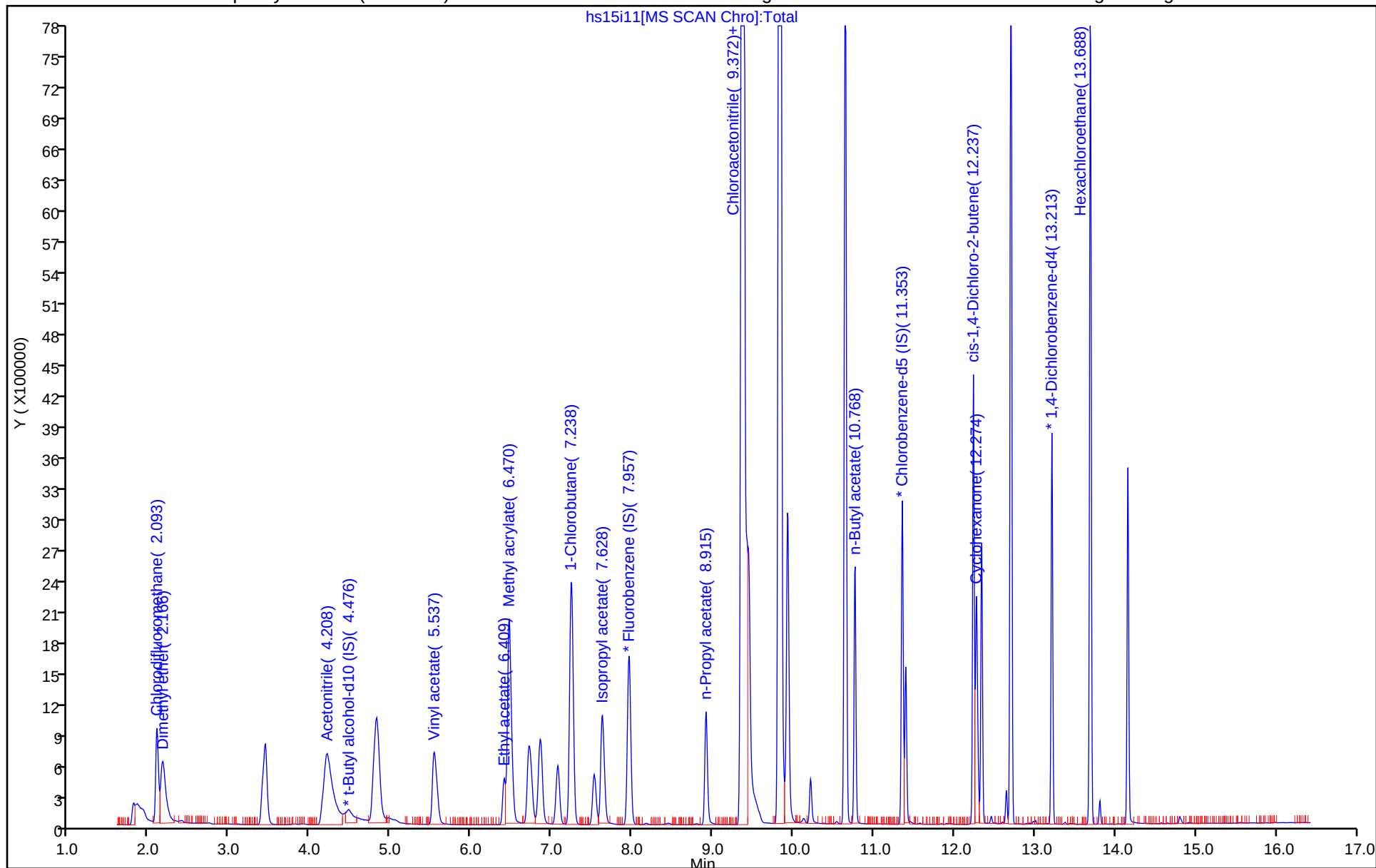
ALS Bottle#: 3

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

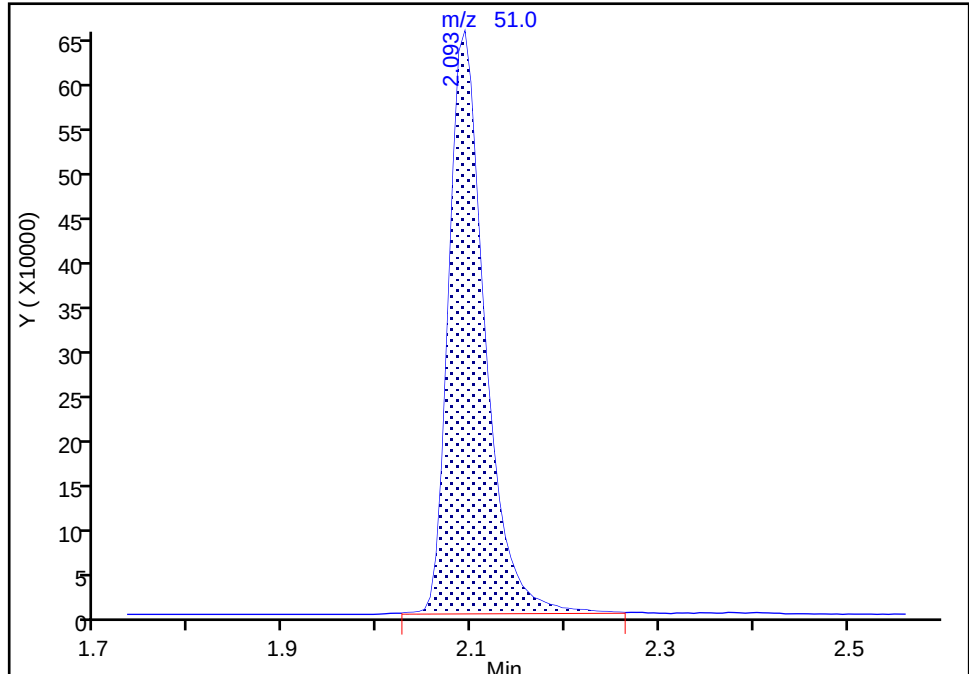
Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i11.D
Injection Date: 15-Sep-2020 15:07:30 Instrument ID: 19094
Lims ID: IC std7 25
Client ID:
Operator ID: kas02648 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

2 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

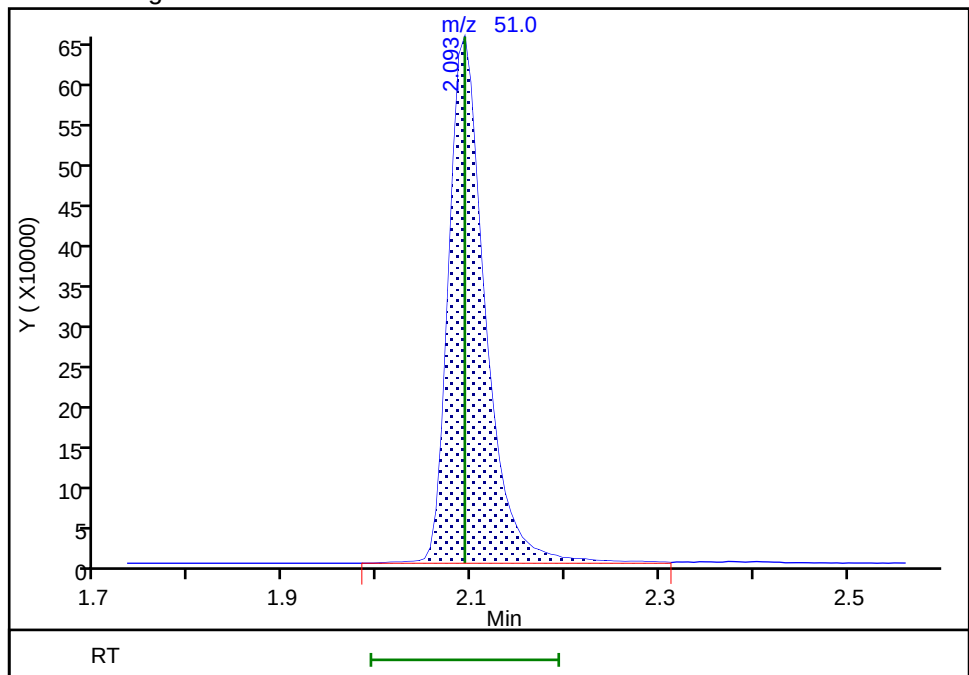
RT: 2.09
Area: 1741325
Amount: 25.662895
Amount Units: ug/l

Processing Integration Results



RT: 2.09
Area: 1758555
Amount: 25.319118
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:14:01

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i12.D
 Lims ID: IC std6 10
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 15-Sep-2020 15:29:30 ALS Bottle#: 4 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0010497-004
 Misc. Info.: ICIS 10
 Operator ID: kas02648 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub19
 Method: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 15-Sep-2020 23:43:50 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1035

First Level Reviewer: campbellme

Date: 15-Sep-2020 22:14:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Chlorodifluoromethane	51	2.087	2.087	0.000	97	667646	10.0	9.37	M
4 Dimethyl ether	45	2.160	2.160	0.000	99	623963	10.0	8.33	
25 Acetonitrile	41	4.190	4.190	0.000	100	1548172	400.0	432.6	
* 28 t-Butyl alcohol-d10 (IS)	65	4.470	4.470	0.000	0	138114	50.0	50.0	
36 Vinyl acetate	43	5.531	5.531	0.000	97	875839	10.0	10.3	
44 Ethyl acetate	43	6.409	6.409	0.000	99	413933	10.0	9.84	
46 Methyl acrylate	55	6.470	6.470	0.000	100	1673454	50.0	52.0	
54 1-Chlorobutane	56	7.238	7.238	0.000	95	1237349	10.0	10.2	
61 Isopropyl acetate	43	7.628	7.628	0.000	98	766619	10.0	9.95	
* 65 Fluorobenzene (IS)	96	7.957	7.957	0.000	98	2392454	10.0	10.0	
74 n-Propyl acetate	61	8.921	8.921	0.000	99	159034	10.0	10.7	
77 Chloroacetonitrile	75	9.427	9.427	0.000	80	854206	500.0	560.5	
78 2-Chloroethyl vinyl ether	63	9.451	9.451	0.000	88	296493	10.0	10.4	
92 n-Butyl acetate	43	10.768	10.768	0.000	98	717654	10.0	10.3	
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.353	0.000	86	1750429	10.0	10.0	
106 cis-1,4-Dichloro-2-butene	88	12.237	12.237	0.000	0	339856	20.0	22.4	
107 Cyclohexanone	55	12.280	12.280	0.000	93	562891	500.0	630.0	
* 124 1,4-Dichlorobenzene-d4	152	13.213	13.213	0.000	96	906791	10.0	10.0	
133 Hexachloroethane	201	13.694	13.694	0.000	96	494184	10.0	10.4	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_V_VOA5_00013	Amount Added: 5.00	Units: uL
MSV_VAcet_00005	Amount Added: 8.00	Units: uL
MSV_VCYC_00005	Amount Added: 8.00	Units: uL
MSV_V_SMRV4_00013	Amount Added: 5.00	Units: uL
MSV_DME_00022	Amount Added: 1.00	Units: uL
MSV_CDFM_00010	Amount Added: 1.00	Units: uL
MSV_30_826ISO_00003	Amount Added: 5.00	Units: uL
MSV_V_REV4_25_00013	Amount Added: 20.00	Units: uL

Report Date: 15-Sep-2020 23:43:51

Chrom Revision: 2.3 11-Sep-2020 20:57:08

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i12.D

Injection Date: 15-Sep-2020 15:29:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std6 10

Worklist Smp#: 4

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

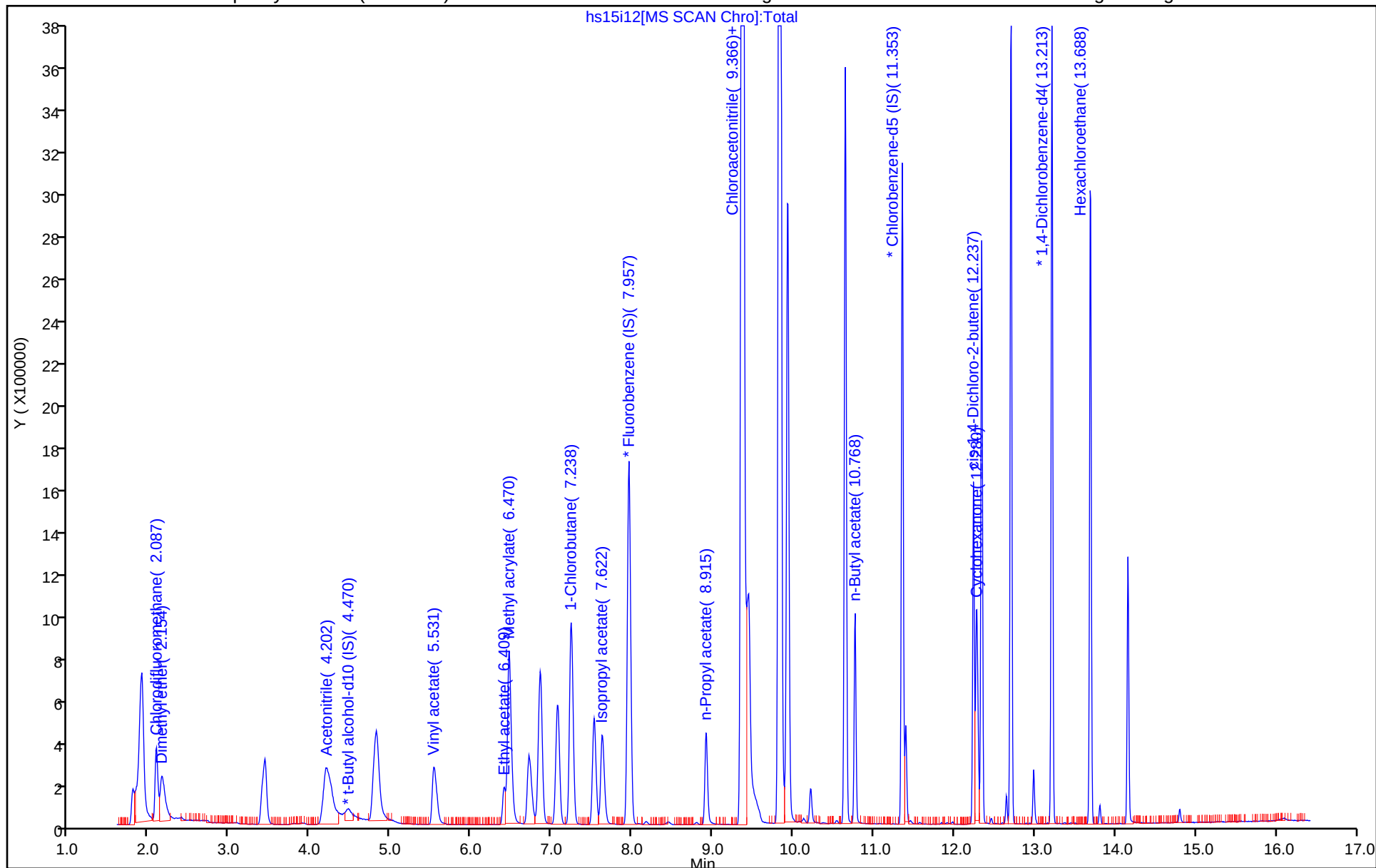
ALS Bottle#: 4

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i12.D

Injection Date: 15-Sep-2020 15:29:30

Instrument ID: 19094

Lims ID: IC std6 10

Client ID:

Operator ID: kas02648

ALS Bottle#:

4

Worklist Smp#: 4

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

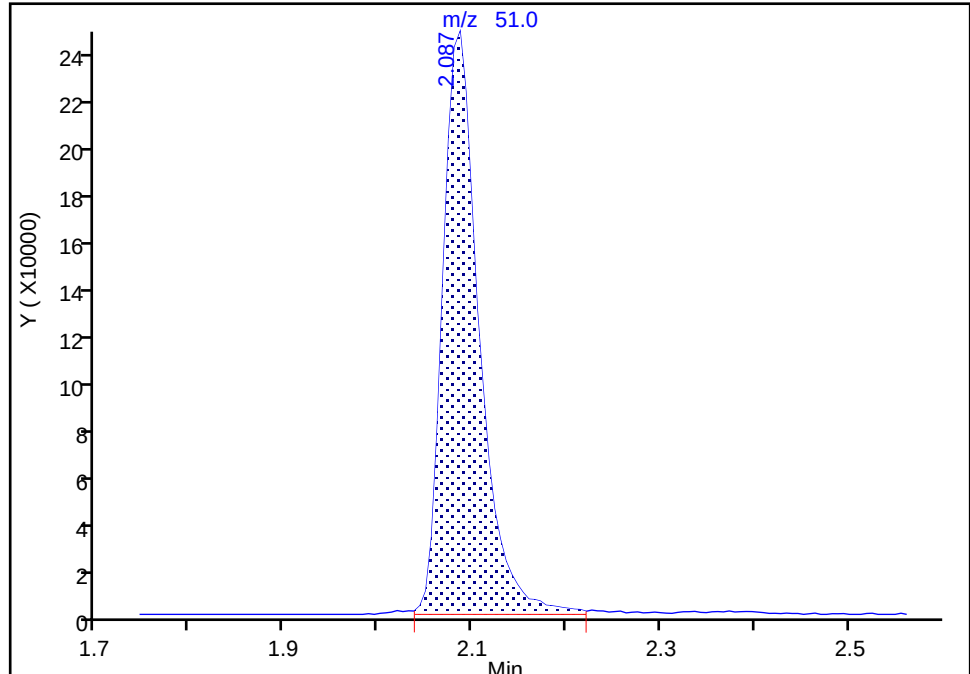
MS Quad

2 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

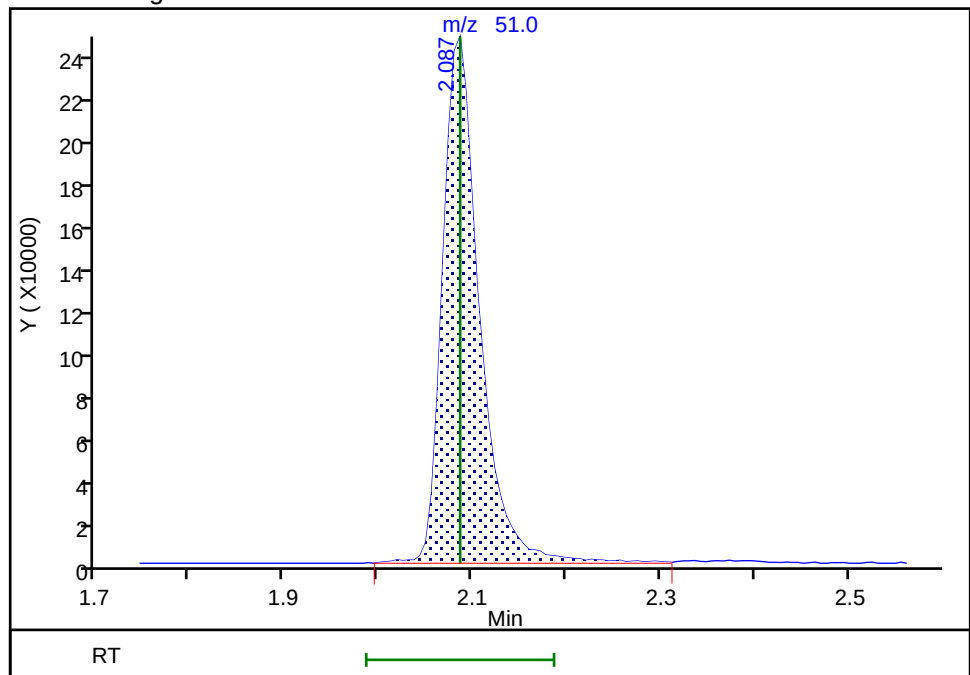
RT: 2.09
Area: 659973
Amount: 9.471755
Amount Units: ug/l

Processing Integration Results



RT: 2.09
Area: 667646
Amount: 9.374477
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:14:37

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i13.D
 Lims ID: IC std5 5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 15-Sep-2020 15:50:30 ALS Bottle#: 5 Worklist Smp#: 5
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0010497-005
 Misc. Info.: IC STD5 5
 Operator ID: kas02648 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub19
 Method: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 15-Sep-2020 23:43:52 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1035

First Level Reviewer: campbellme

Date: 15-Sep-2020 22:15:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Chlorodifluoromethane	51	2.081	2.087	-0.006	98	315990	5.00	4.65	M
4 Dimethyl ether	45	2.154	2.160	-0.006	99	328607	5.00	4.60	
25 Acetonitrile	41	4.196	4.190	0.006	100	718166	200.0	210.5	
* 28 t-Butyl alcohol-d10 (IS)	65	4.476	4.470	0.006	0	130233	50.0	50.0	
36 Vinyl acetate	43	5.531	5.531	0.000	97	403937	5.00	4.99	
44 Ethyl acetate	43	6.409	6.409	0.000	99	200359	5.00	5.00	
46 Methyl acrylate	55	6.470	6.470	0.000	99	797001	25.0	26.0	
54 1-Chlorobutane	56	7.238	7.238	0.000	95	593907	5.00	5.11	
61 Isopropyl acetate	43	7.628	7.628	0.000	98	368629	5.00	5.02	
* 65 Fluorobenzene (IS)	96	7.957	7.957	0.000	98	2280797	10.0	10.0	
74 n-Propyl acetate	61	8.915	8.921	-0.006	99	74071	5.00	5.23	
77 Chloroacetonitrile	75	9.427	9.427	0.000	86	389068	250.0	267.8	
78 2-Chloroethyl vinyl ether	63	9.451	9.451	0.000	93	142203	5.00	5.22	
92 n-Butyl acetate	43	10.768	10.768	0.000	97	334929	5.00	5.03	
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.353	0.000	86	1670635	10.0	10.0	
106 cis-1,4-Dichloro-2-butene	88	12.237	12.237	0.000	0	153677	10.0	10.6	
107 Cyclohexanone	55	12.280	12.280	0.000	93	220389	250.0	261.6	
* 124 1,4-Dichlorobenzene-d4	152	13.213	13.213	0.000	96	865382	10.0	10.0	
133 Hexachloroethane	201	13.694	13.694	0.000	95	232518	5.00	5.10	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_V_VOA5_00013	Amount Added: 5.00	Units: uL
MSV_VAcet_00005	Amount Added: 8.00	Units: uL
MSV_VCYC_00005	Amount Added: 8.00	Units: uL
MSV_V_SMRV4_00013	Amount Added: 5.00	Units: uL
MSV_DME_00022	Amount Added: 1.00	Units: uL
MSV_CDFM_00010	Amount Added: 1.00	Units: uL
MSV_30_826ISO_00003	Amount Added: 5.00	Units: uL
MSV_V_REV4_25_00013	Amount Added: 20.00	Units: uL

Report Date: 15-Sep-2020 23:43:53

Chrom Revision: 2.3 11-Sep-2020 20:57:08

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i13.D

Injection Date: 15-Sep-2020 15:50:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std5 5

Worklist Smp#: 5

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

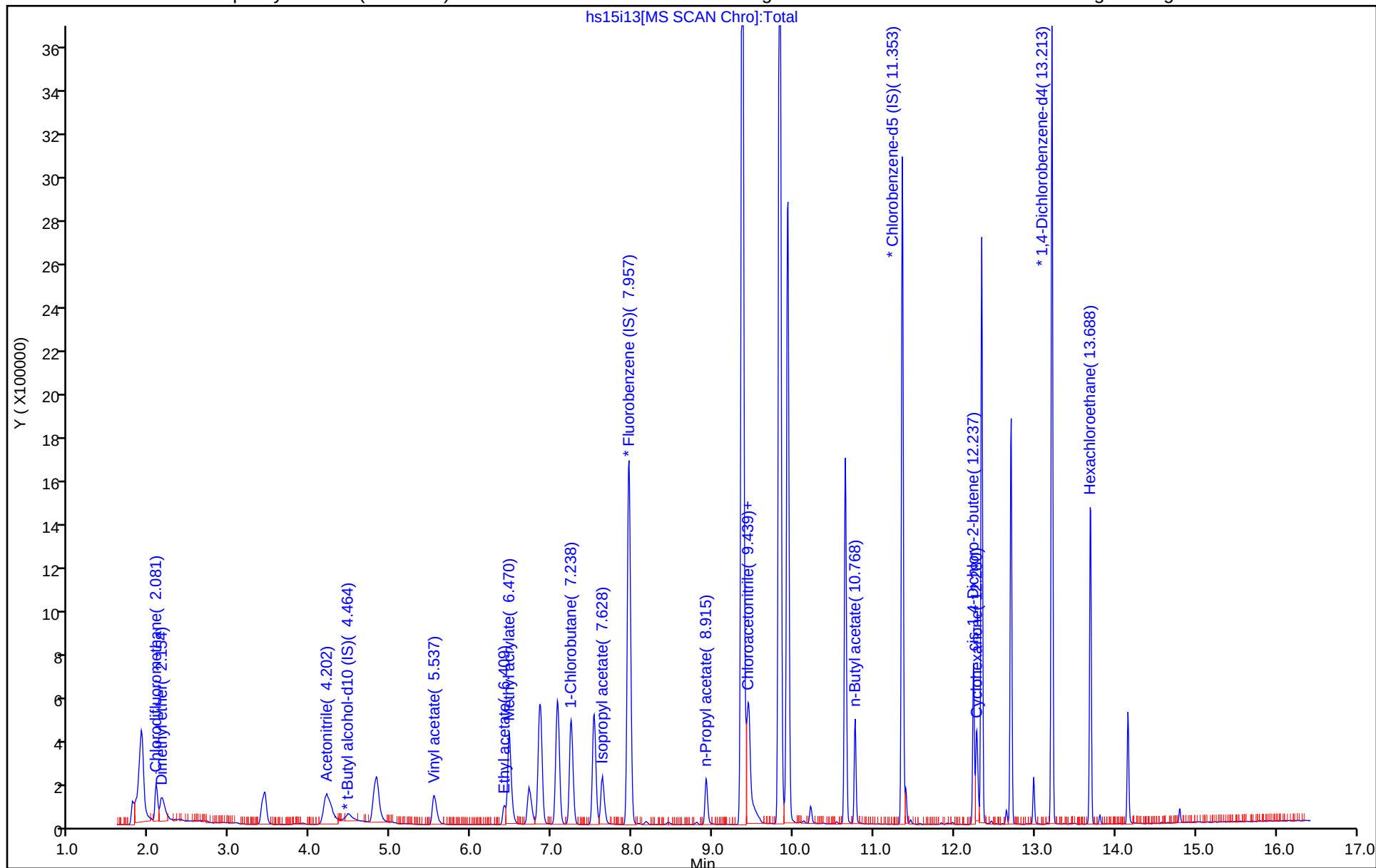
ALS Bottle#: 5

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i13.D

Injection Date: 15-Sep-2020 15:50:30

Instrument ID: 19094

Lims ID: IC std5 5

Client ID:

Operator ID: kas02648

ALS Bottle#:

5

Worklist Smp#: 5

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

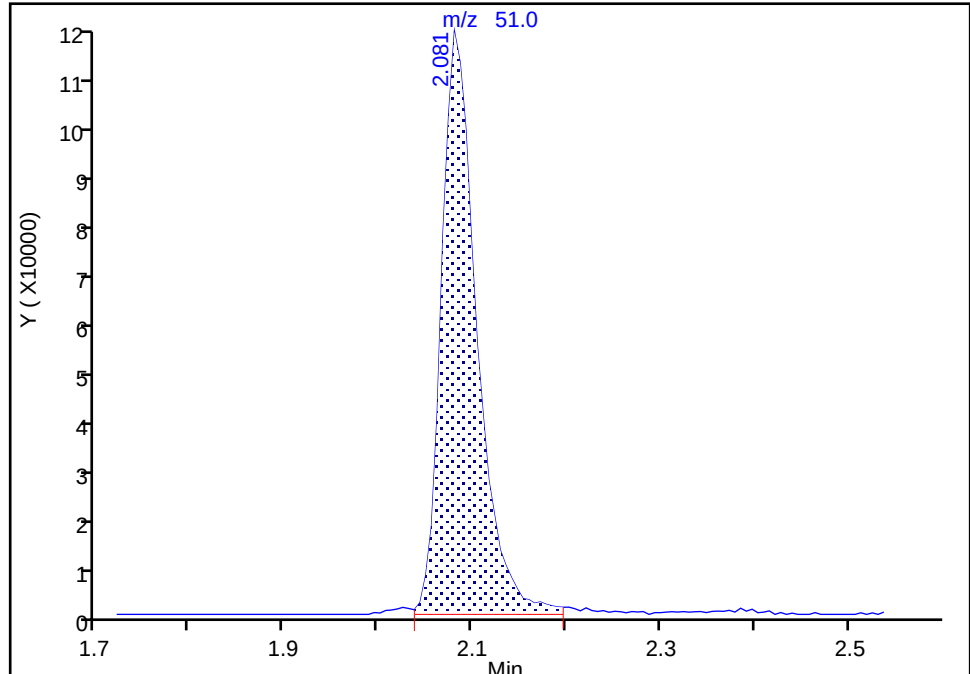
MS Quad

2 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

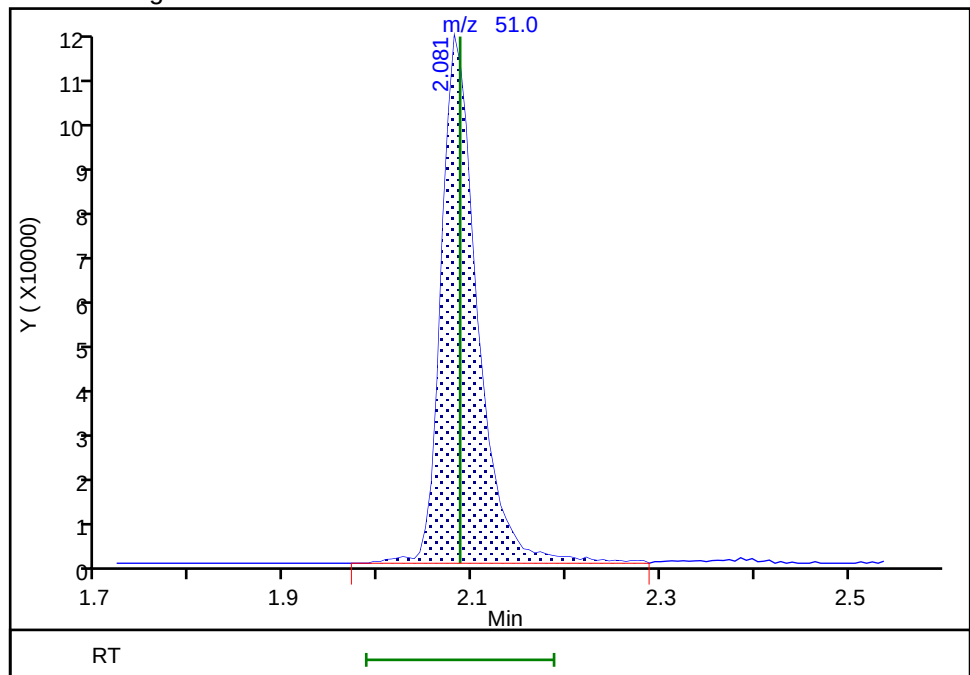
RT: 2.08
Area: 310021
Amount: 4.659826
Amount Units: ug/l

Processing Integration Results



RT: 2.08
Area: 315990
Amount: 4.654051
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:15:05

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i14.D
 Lims ID: IC std4 2
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 15-Sep-2020 16:12:30 ALS Bottle#: 6 Worklist Smp#: 6
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0010497-006
 Misc. Info.: IC STD4 2
 Operator ID: kas02648 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub19
 Method: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 15-Sep-2020 23:43:55 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1035

First Level Reviewer: campbellme

Date: 15-Sep-2020 22:15:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Chlorodifluoromethane	51	2.093	2.093	0.000	98	130640	2.00	1.98	M
4 Dimethyl ether	45	2.166	2.166	0.000	99	141625	2.00	2.04	
25 Acetonitrile	41	4.214	4.214	0.000	99	270163	80.0	81.5	
* 28 t-Butyl alcohol-d10 (IS)	65	4.501	4.501	0.000	0	119438	50.0	50.0	
36 Vinyl acetate	43	5.537	5.537	0.000	97	163063	2.00	2.07	
44 Ethyl acetate	43	6.409	6.409	0.000	98	80555	2.00	2.07	
46 Methyl acrylate	55	6.470	6.470	0.000	100	305688	10.0	10.2	
54 1-Chlorobutane	56	7.238	7.238	0.000	96	232237	2.00	2.06	
61 Isopropyl acetate	43	7.628	7.628	0.000	98	144173	2.00	2.02	
* 65 Fluorobenzene (IS)	96	7.957	7.957	0.000	98	2216903	10.0	10.0	
74 n-Propyl acetate	61	8.921	8.921	0.000	99	29121	2.00	2.12	
77 Chloroacetonitrile	75	9.433	9.433	0.000	85	145542	100.0	103.1	
78 2-Chloroethyl vinyl ether	63	9.451	9.451	0.000	90	55873	2.00	2.11	
92 n-Butyl acetate	43	10.768	10.768	0.000	97	129295	2.00	2.02	
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.353	0.000	86	1604114	10.0	10.0	
106 cis-1,4-Dichloro-2-butene	88	12.237	12.237	0.000	0	54937	4.00	3.96	
107 Cyclohexanone	55	12.280	12.280	0.000	92	81216	100.0	105.1	
* 124 1,4-Dichlorobenzene-d4	152	13.213	13.213	0.000	96	835860	10.0	10.0	
133 Hexachloroethane	201	13.694	13.694	0.000	95	90696	2.00	2.06	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_V_VOA5_00013	Amount Added: 5.00	Units: uL
MSV_VAcet_00005	Amount Added: 8.00	Units: uL
MSV_VCYC_00005	Amount Added: 8.00	Units: uL
MSV_V_SMRV4_00013	Amount Added: 5.00	Units: uL
MSV_DME_00022	Amount Added: 1.00	Units: uL
MSV_CDFM_00010	Amount Added: 1.00	Units: uL
MSV_30_826ISO_00003	Amount Added: 5.00	Units: uL
MSV_V_REV4_25_00013	Amount Added: 20.00	Units: uL

Report Date: 15-Sep-2020 23:43:56

Chrom Revision: 2.3 11-Sep-2020 20:57:08

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i14.D

Injection Date: 15-Sep-2020 16:12:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std4 2

Worklist Smp#: 6

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

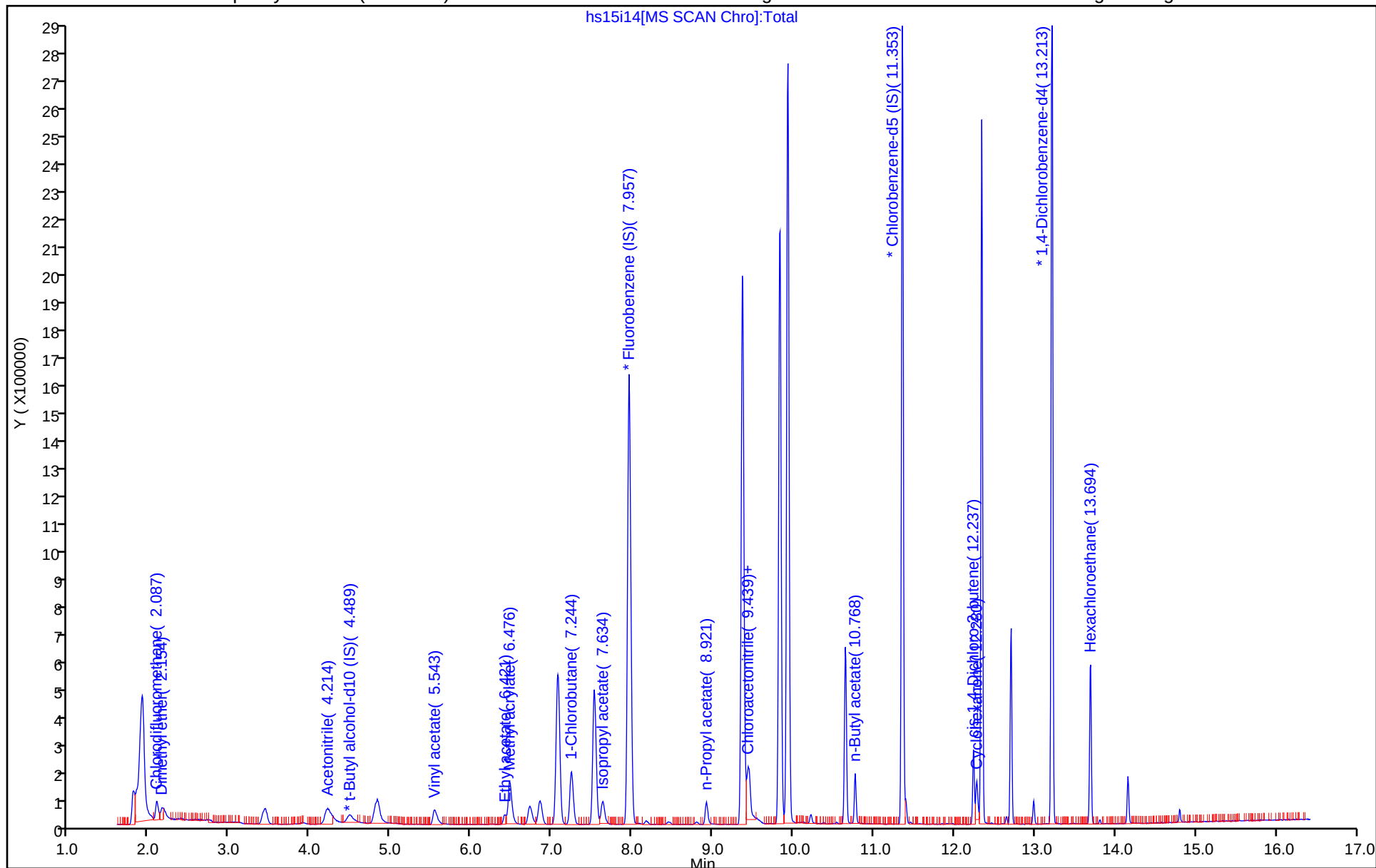
ALS Bottle#: 6

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

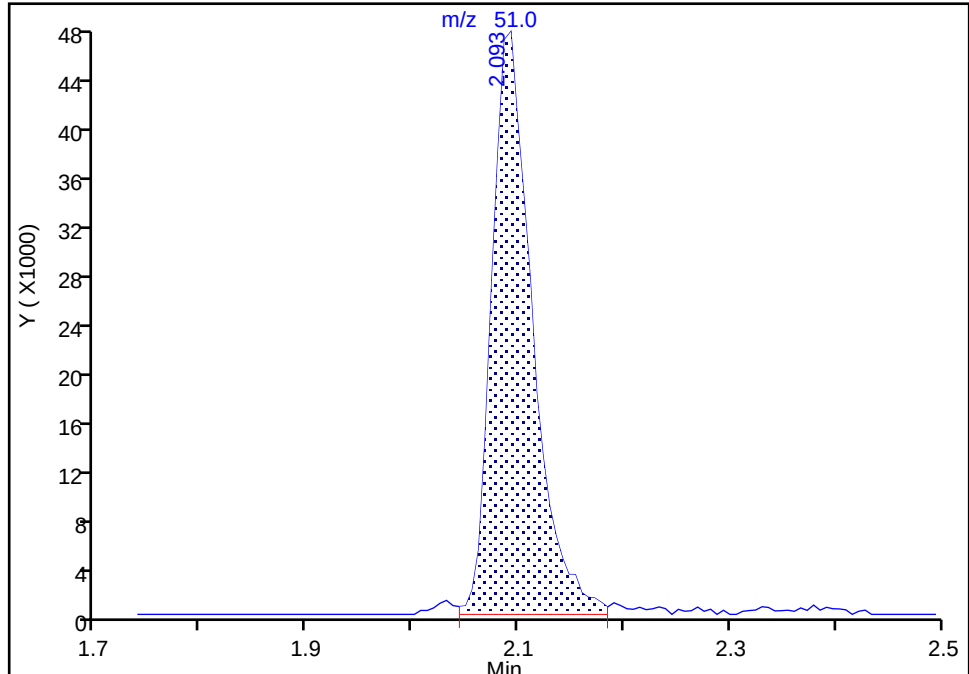
Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i14.D
Injection Date: 15-Sep-2020 16:12:30 Instrument ID: 19094
Lims ID: IC std4 2
Client ID:
Operator ID: kas02648 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

2 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

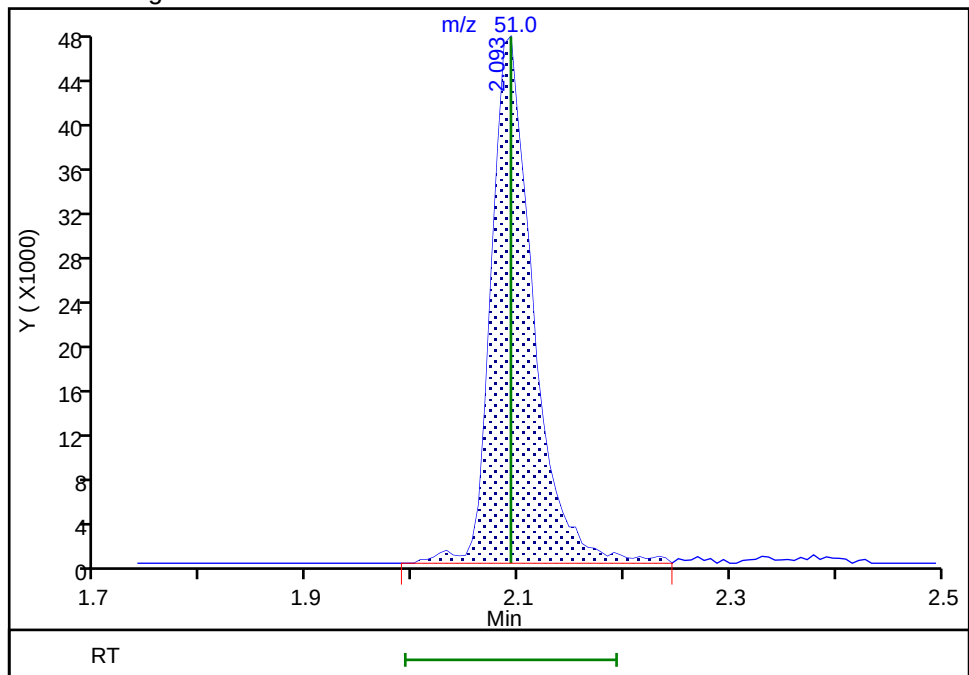
RT: 2.09
Area: 127345
Amount: 1.964213
Amount Units: ug/l

Processing Integration Results



RT: 2.09
Area: 130640
Amount: 1.979584
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:15:26

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i15.D
 Lims ID: IC std3 1
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 15-Sep-2020 16:34:30 ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0010497-007
 Misc. Info.: IC STD3 1
 Operator ID: kas02648 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub19
 Method: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 15-Sep-2020 23:43:57 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1035

First Level Reviewer: campbellme

Date: 15-Sep-2020 22:16:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Chlorodifluoromethane	51	2.087	2.093	-0.006	98	71700	1.00	1.05	M
4 Dimethyl ether	45	2.166	2.166	0.000	99	70200	1.00	0.9792	
25 Acetonitrile	41	4.220	4.214	0.006	100	128845	40.0	37.6	M
* 28 t-Butyl alcohol-d10 (IS)	65	4.513	4.501	0.012	0	106227	50.0	50.0	
36 Vinyl acetate	43	5.543	5.537	0.006	97	76579	1.00	0.9428	
44 Ethyl acetate	43	6.415	6.409	0.006	97	38673	1.00	0.9613	
46 Methyl acrylate	55	6.482	6.470	0.012	99	145004	5.00	4.71	
54 1-Chlorobutane	56	7.244	7.238	0.006	96	117310	1.00	1.01	
61 Isopropyl acetate	43	7.628	7.628	0.000	98	70782	1.00	0.9604	
* 65 Fluorobenzene (IS)	96	7.958	7.957	0.001	99	2288702	10.0	10.0	
74 n-Propyl acetate	61	8.927	8.921	0.006	99	13930	1.00	0.9803	
77 Chloroacetonitrile	75	9.445	9.433	0.012	76	65890	50.0	45.2	
78 2-Chloroethyl vinyl ether	63	9.451	9.451	0.000	89	25602	1.00	0.9365	
92 n-Butyl acetate	43	10.768	10.768	0.000	98	61419	1.00	0.9311	
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.353	0.000	87	1656397	10.0	10.0	
106 cis-1,4-Dichloro-2-butene	88	12.237	12.237	0.000	0	25202	2.00	1.76	
107 Cyclohexanone	55	12.280	12.280	0.000	92	31153	50.0	45.3	
* 124 1,4-Dichlorobenzene-d4	152	13.213	13.213	0.001	96	856671	10.0	10.0	
133 Hexachloroethane	201	13.694	13.694	0.000	93	44028	1.00	0.9764	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_V_VOA5_00013	Amount Added: 5.00	Units: uL
MSV_VAcet_00005	Amount Added: 8.00	Units: uL
MSV_VCYC_00005	Amount Added: 8.00	Units: uL
MSV_V_SMRV4_00013	Amount Added: 5.00	Units: uL
MSV_CDFM_00010	Amount Added: 1.00	Units: uL
MSV_DME_00022	Amount Added: 1.00	Units: uL
MSV_30_826ISO_00003	Amount Added: 5.00	Units: uL
MSV_V_REV4_25_00013	Amount Added: 20.00	Units: uL

Report Date: 15-Sep-2020 23:43:59

Chrom Revision: 2.3 11-Sep-2020 20:57:08

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i15.D

Injection Date: 15-Sep-2020 16:34:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std3 1

Worklist Smp#: 7

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

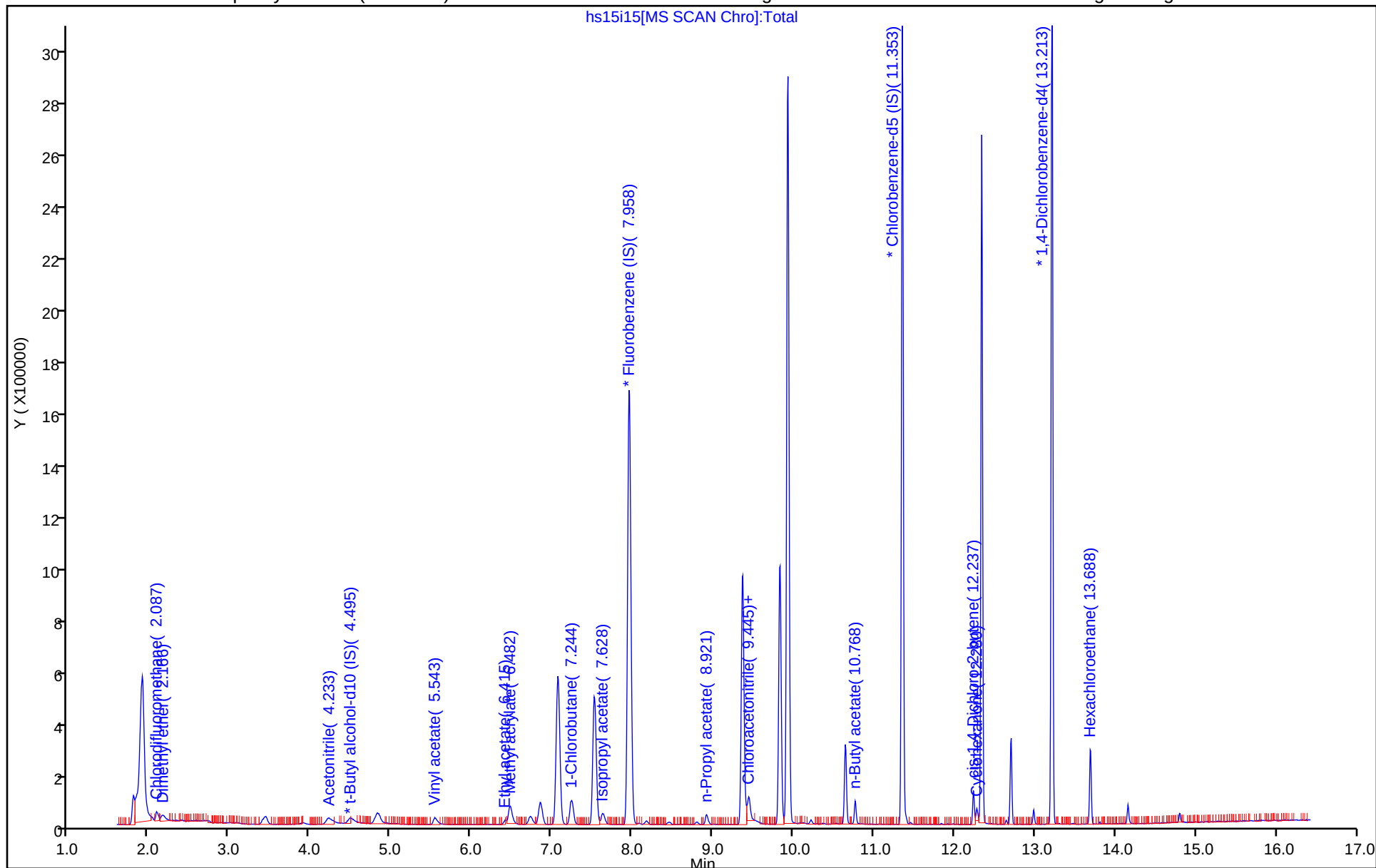
ALS Bottle#: 7

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

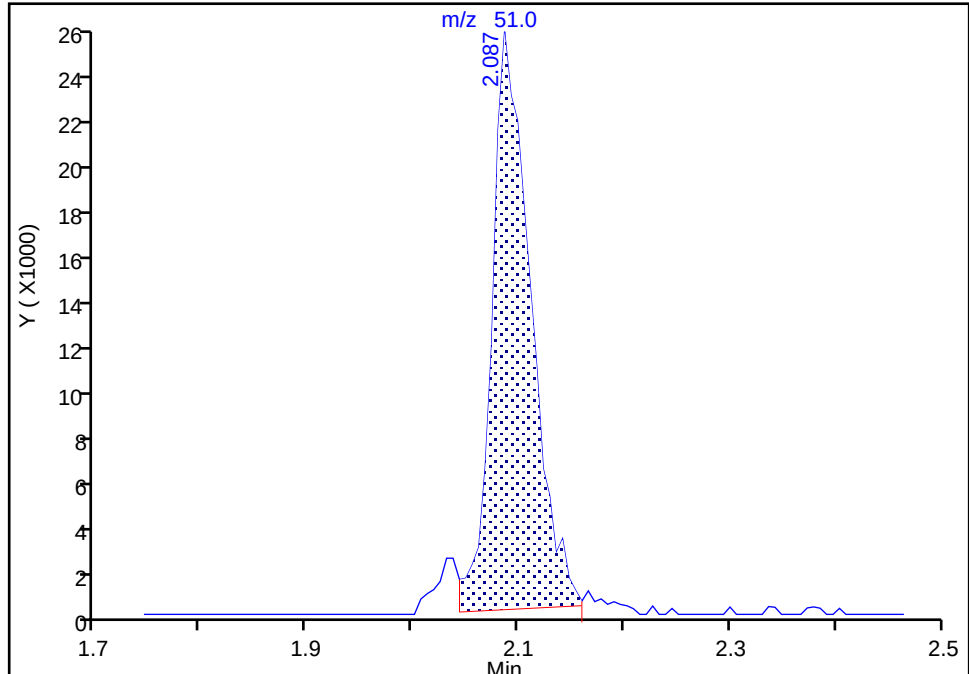
Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i15.D
Injection Date: 15-Sep-2020 16:34:30 Instrument ID: 19094
Lims ID: IC std3 1
Client ID:
Operator ID: kas02648 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

2 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

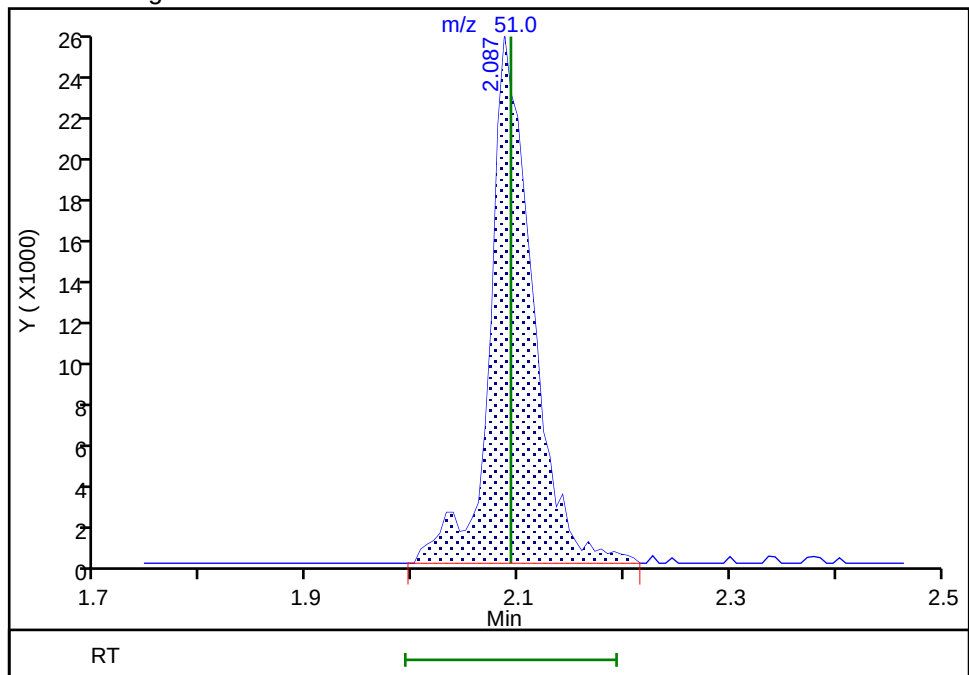
RT: 2.09
Area: 65010
Amount: 0.967766
Amount Units: ug/l

Processing Integration Results



RT: 2.09
Area: 71700
Amount: 1.052384
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:15:46

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

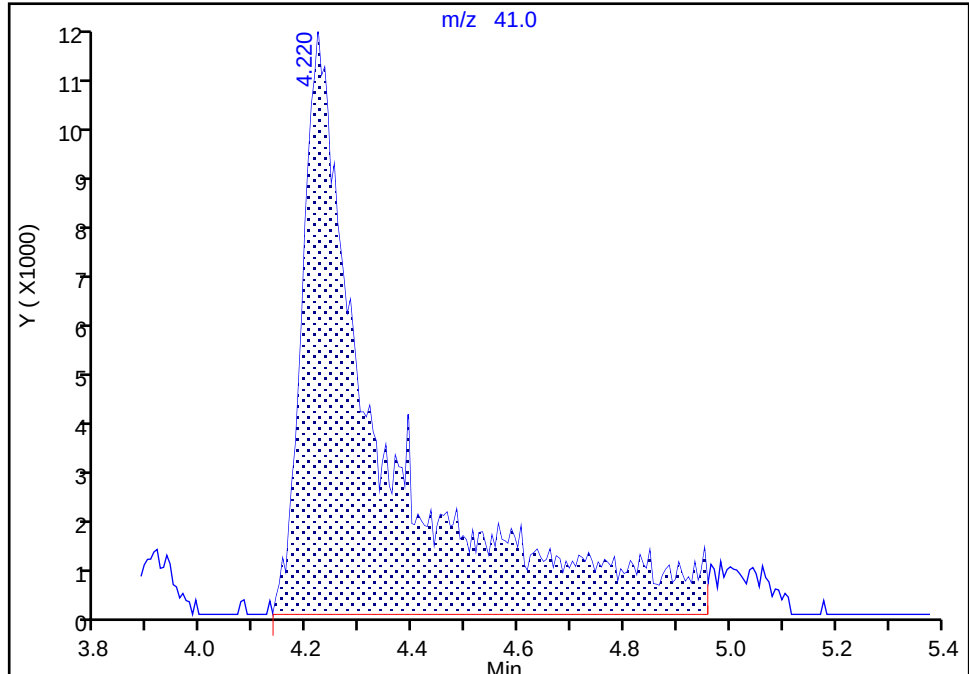
Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i15.D
Injection Date: 15-Sep-2020 16:34:30 Instrument ID: 19094
Lims ID: IC std3 1
Client ID:
Operator ID: kas02648 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

25 Acetonitrile, CAS: 75-05-8

Signal: 1

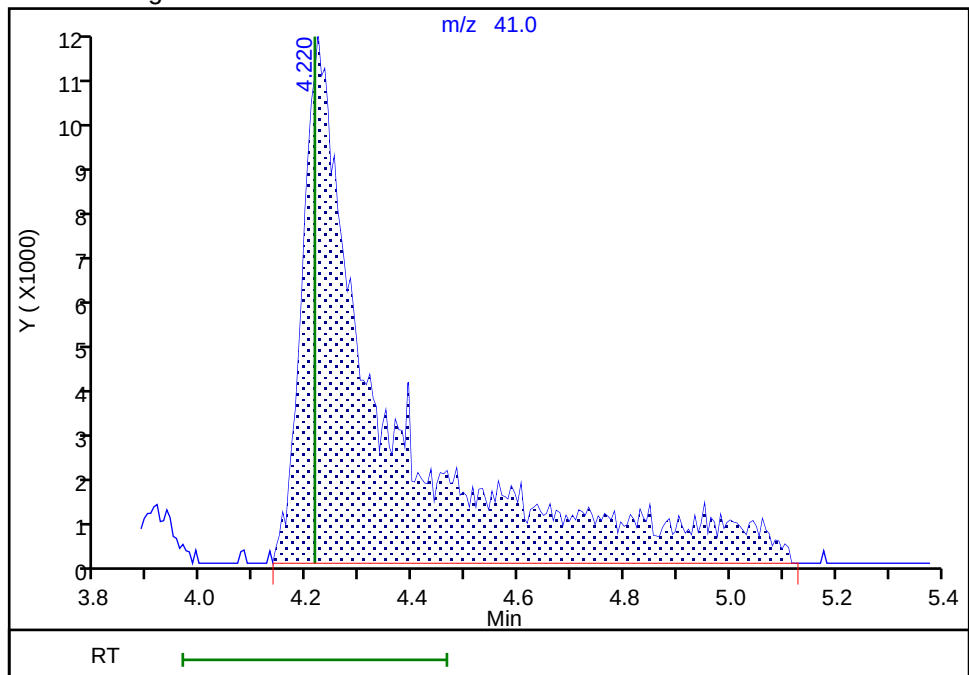
RT: 4.22
Area: 122185
Amount: 36.988942
Amount Units: ug/l

Processing Integration Results



RT: 4.22
Area: 128845
Amount: 37.636640
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:15:56

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i16.D
 Lims ID: IC std2 0.5
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 15-Sep-2020 16:56:30 ALS Bottle#: 8 Worklist Smp#: 8
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0010497-008
 Misc. Info.: IC STD2 0.5
 Operator ID: kas02648 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub19
 Method: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 15-Sep-2020 23:44:01 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1035

First Level Reviewer: campbellme

Date: 15-Sep-2020 22:16:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Chlorodifluoromethane	51	2.087	2.093	-0.006	97	28220	0.5000	0.4761	
4 Dimethyl ether	45	2.178	2.166	0.012	100	31844	0.5000	0.5106	M
25 Acetonitrile	41	4.227	4.214	0.013	95	61264	20.0	20.6	M
* 28 t-Butyl alcohol-d10 (IS)	65	4.495	4.501	-0.006	0	98464	50.0	50.0	
36 Vinyl acetate	43	5.550	5.537	0.013	96	31907	0.5000	0.4516	
44 Ethyl acetate	43	6.415	6.409	0.006	97	17305	0.5000	0.4944	
46 Methyl acrylate	55	6.476	6.470	0.006	99	63858	2.50	2.38	
54 1-Chlorobutane	56	7.238	7.238	0.000	95	47321	0.5000	0.4665	
61 Isopropyl acetate	43	7.635	7.628	0.007	99	30852	0.5000	0.4812	
* 65 Fluorobenzene (IS)	96	7.958	7.957	0.001	98	1991027	10.0	10.0	
74 n-Propyl acetate	61	8.921	8.921	0.000	99	5132	0.5000	0.4152	
77 Chloroacetonitrile	75	9.433	9.433	0.000	82	29902	25.0	23.6	
78 2-Chloroethyl vinyl ether	63	9.451	9.451	0.000	90	11614	0.5000	0.4883	
92 n-Butyl acetate	43	10.768	10.768	0.000	97	27929	0.5000	0.4800	
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.353	0.000	87	1461211	10.0	10.0	
106 cis-1,4-Dichloro-2-butene	88	12.237	12.237	0.000	0	12083	1.00	0.9557	
107 Cyclohexanone	55	12.280	12.280	0.000	91	14848	25.0	23.3	
* 124 1,4-Dichlorobenzene-d4	152	13.213	13.213	0.001	96	764641	10.0	10.0	
133 Hexachloroethane	201	13.694	13.694	0.000	91	18434	0.5000	0.4580	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_V_VOA5_00013	Amount Added: 2.50	Units: uL
MSV_VAcet_00005	Amount Added: 4.00	Units: uL
MSV_VCYC_00005	Amount Added: 4.00	Units: uL
MSV_V_SMRV4_00013	Amount Added: 2.50	Units: uL
MSV_DME_00022	Amount Added: 0.50	Units: uL
MSV_CDFM_00010	Amount Added: 0.50	Units: uL
MSV_30_826ISO_00003	Amount Added: 5.00	Units: uL
MSV_V_REV4_25_00013	Amount Added: 10.00	Units: uL

Report Date: 15-Sep-2020 23:44:02

Chrom Revision: 2.3 11-Sep-2020 20:57:08

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i16.D

Injection Date: 15-Sep-2020 16:56:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std2 0.5

Worklist Smp#: 8

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

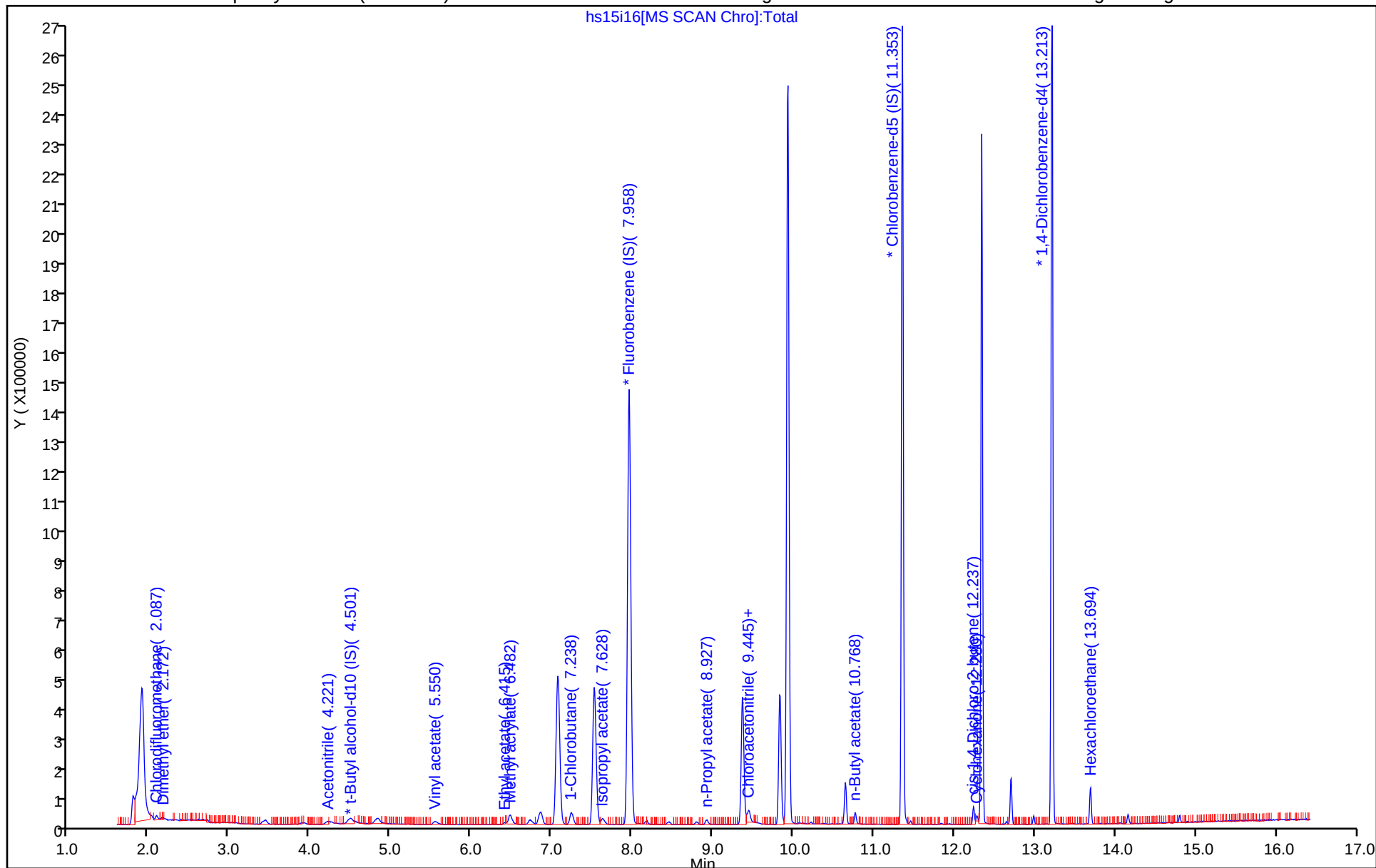
ALS Bottle#: 8

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

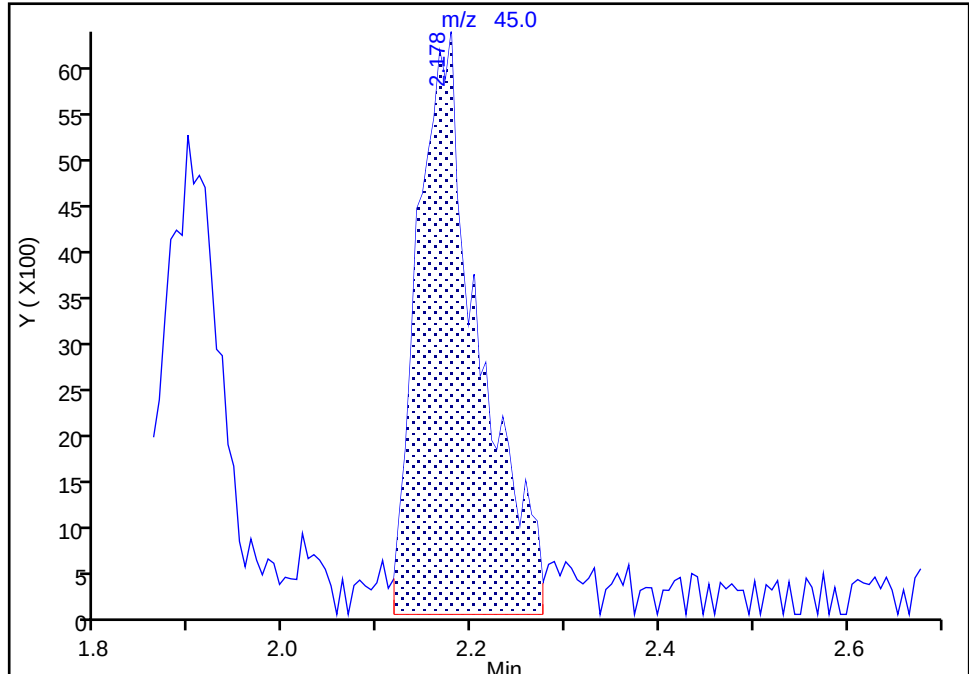
Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i16.D
Injection Date: 15-Sep-2020 16:56:30 Instrument ID: 19094
Lims ID: IC std2 0.5
Client ID:
Operator ID: kas02648 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

4 Dimethyl ether, CAS: 115-10-6

Signal: 1

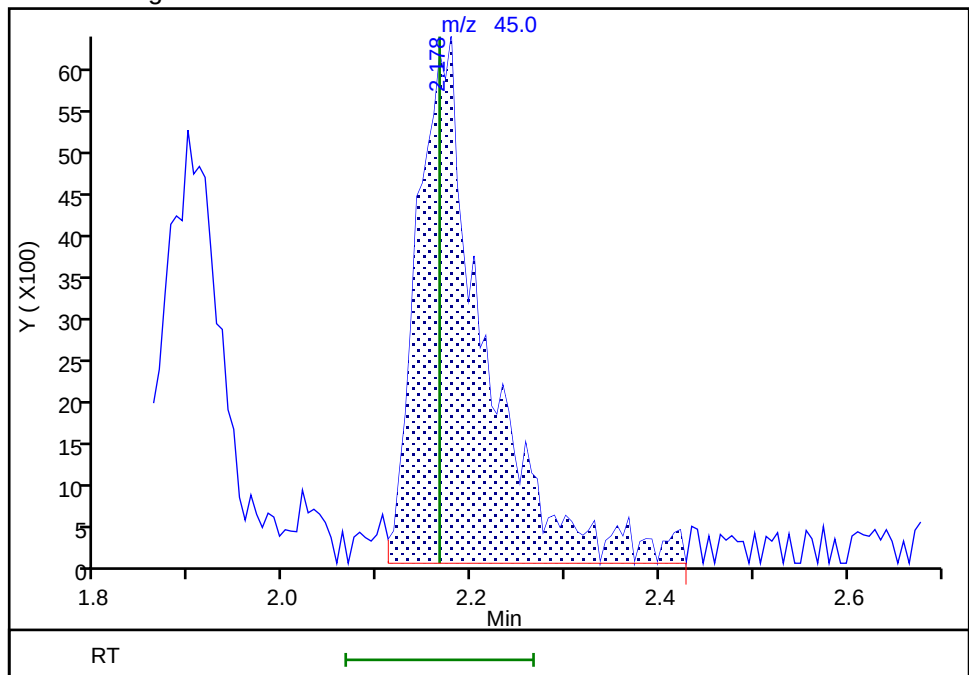
RT: 2.18
Area: 28707
Amount: 0.466995
Amount Units: ug/l

Processing Integration Results



RT: 2.18
Area: 31844
Amount: 0.510582
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:16:29
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

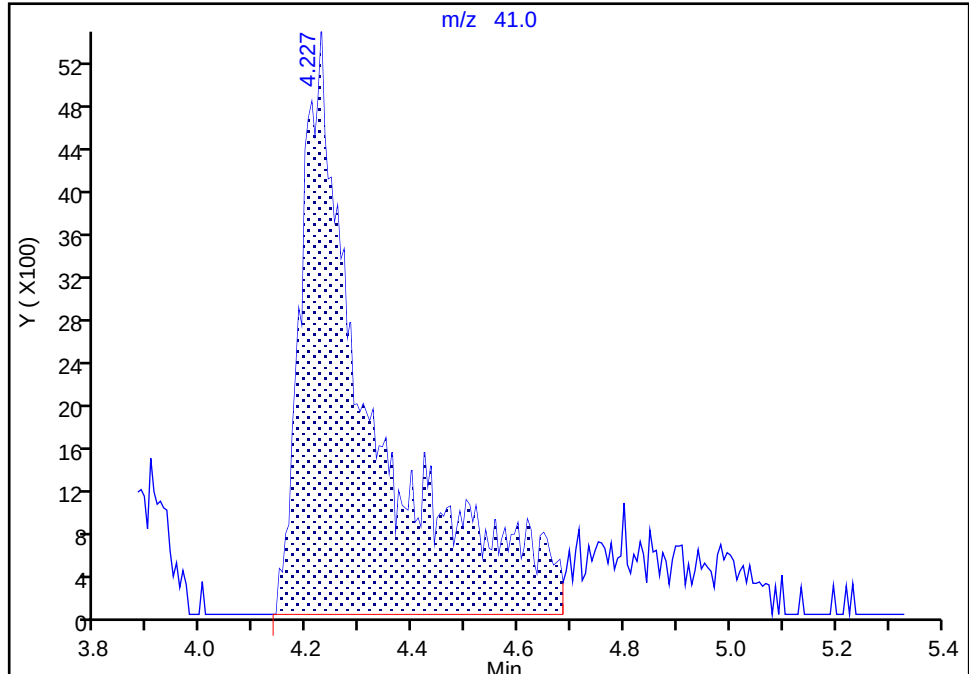
Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i16.D
Injection Date: 15-Sep-2020 16:56:30 Instrument ID: 19094
Lims ID: IC std2 0.5
Client ID:
Operator ID: kas02648 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm i.d.) Detector: MS Quad

25 Acetonitrile, CAS: 75-05-8

Signal: 1

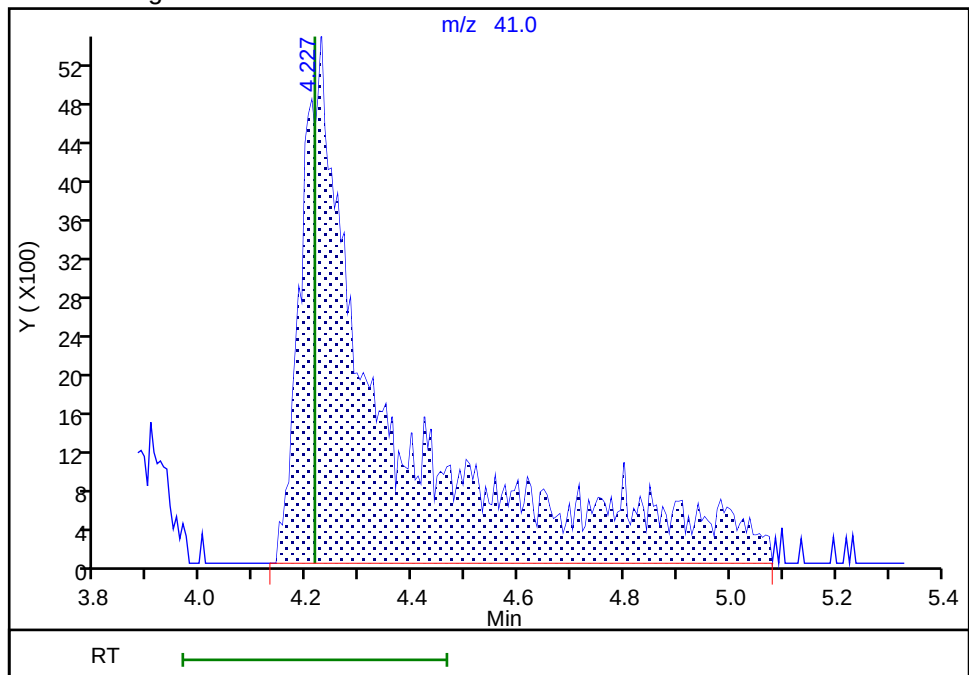
RT: 4.23
Area: 49853
Amount: 18.977758
Amount Units: ug/l

Processing Integration Results



RT: 4.23
Area: 61264
Amount: 20.571252
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:16:44

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i17.D
 Lims ID: IC std 0.2
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 15-Sep-2020 17:18:30 ALS Bottle#: 9 Worklist Smp#: 9
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0010497-009
 Misc. Info.: IC STD1 0.2
 Operator ID: kas02648 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub19
 Method: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 15-Sep-2020 23:44:04 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1035

First Level Reviewer: campbellme

Date: 15-Sep-2020 22:11:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Chlorodifluoromethane	51	2.087	2.093	-0.006	97	13457	0.2000	0.2249	
4 Dimethyl ether	45	2.172	2.166	0.006	32	15901	0.2000	0.2526	
25 Acetonitrile	41	4.263	4.214	0.049	20	19501	8.00	6.49	M
* 28 t-Butyl alcohol-d10 (IS)	65	4.519	4.501	0.018	0	95177	50.0	50.0	
36 Vinyl acetate	43	5.556	5.537	0.019	96	13983	0.2000	0.1960	
44 Ethyl acetate	43	6.427	6.409	0.018	97	7271	0.2000	0.2058	
46 Methyl acrylate	55	6.488	6.470	0.018	98	25313	1.00	0.9361	
54 1-Chlorobutane	56	7.250	7.238	0.012	97	19654	0.2000	0.1919	
61 Isopropyl acetate	43	7.634	7.628	0.006	97	13340	0.2000	0.2061	
* 65 Fluorobenzene (IS)	96	7.958	7.957	0.001	98	2009954	10.0	10.0	
74 n-Propyl acetate	61	8.927	8.921	0.006	99	2273	0.2000	0.1821	M
77 Chloroacetonitrile	75	9.439	9.433	0.006	88	10937	10.0	8.54	M
78 2-Chloroethyl vinyl ether	63	9.451	9.451	0.000	79	4418	0.2000	0.1840	
92 n-Butyl acetate	43	10.768	10.768	0.000	95	11731	0.2000	0.2014	
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.353	0.000	87	1462311	10.0	10.0	
106 cis-1,4-Dichloro-2-butene	88	12.243	12.237	0.006	0	3918	0.3999	0.3097	
107 Cyclohexanone	55	12.280	12.280	0.000	92	4901	10.0	7.96	
* 124 1,4-Dichlorobenzene-d4	152	13.213	13.213	0.001	96	761913	10.0	10.0	
133 Hexachloroethane	201	13.694	13.694	0.000	91	7379	0.2000	0.1840	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_V_VOA5_00013	Amount Added: 1.00	Units: uL
MSV_VAcet_00005	Amount Added: 1.60	Units: uL
MSV_VCYC_00005	Amount Added: 1.60	Units: uL
MSV_V_SMRV4_00013	Amount Added: 1.00	Units: uL
MSV_CDFM_00010	Amount Added: 0.20	Units: uL
MSV_DME_00022	Amount Added: 0.20	Units: uL
MSV_30_826ISO_00003	Amount Added: 5.00	Units: uL
MSV_V_REV4_25_00013	Amount Added: 4.00	Units: uL

Report Date: 15-Sep-2020 23:44:05

Chrom Revision: 2.3 11-Sep-2020 20:57:08

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i17.D

Injection Date: 15-Sep-2020 17:18:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std 0.2

Worklist Smp#: 9

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

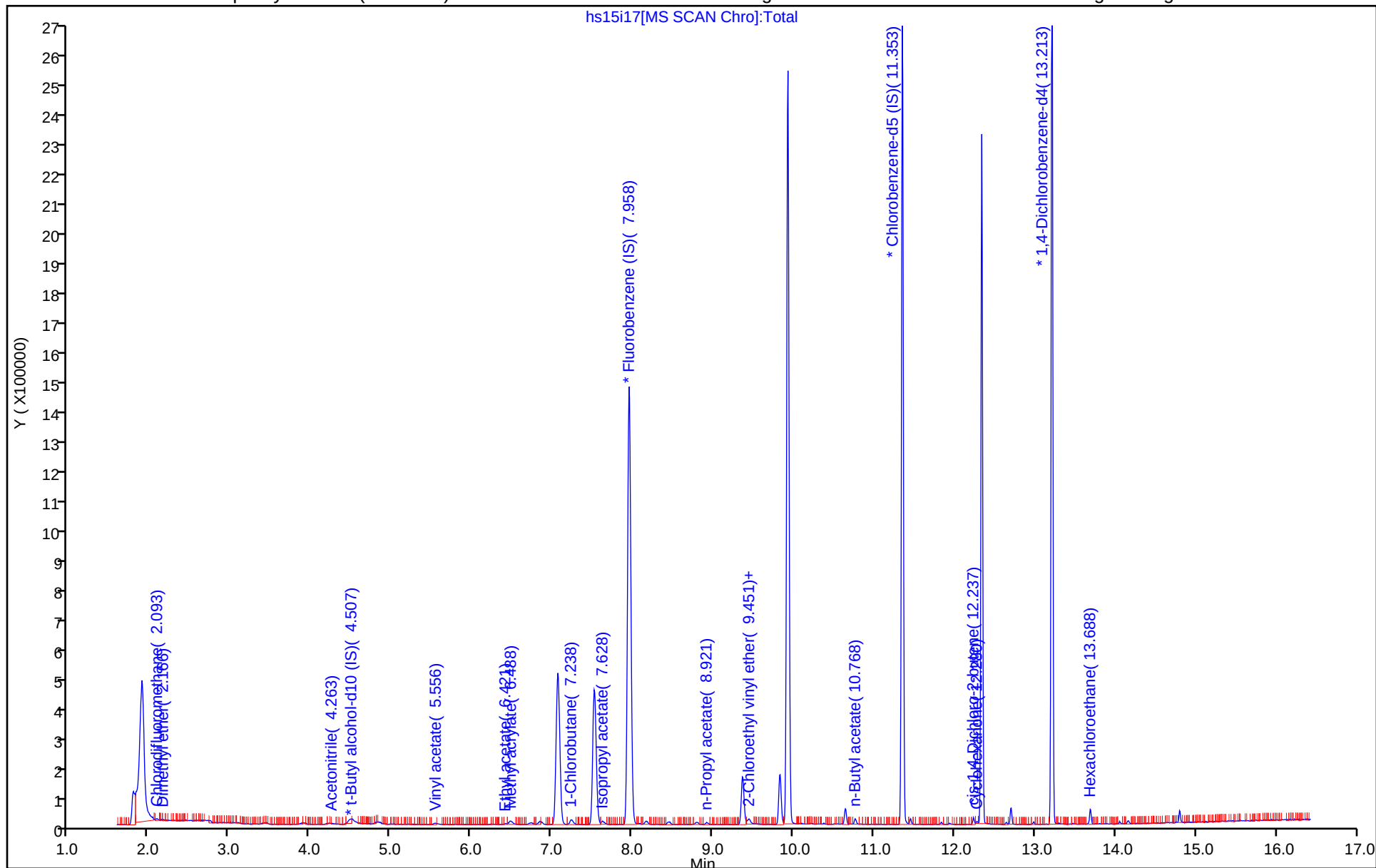
ALS Bottle#: 9

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i17.D

Injection Date: 15-Sep-2020 17:18:30

Instrument ID: 19094

Lims ID: IC std 0.2

Client ID:

Operator ID: kas02648

ALS Bottle#:

9

Worklist Smp#: 9

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

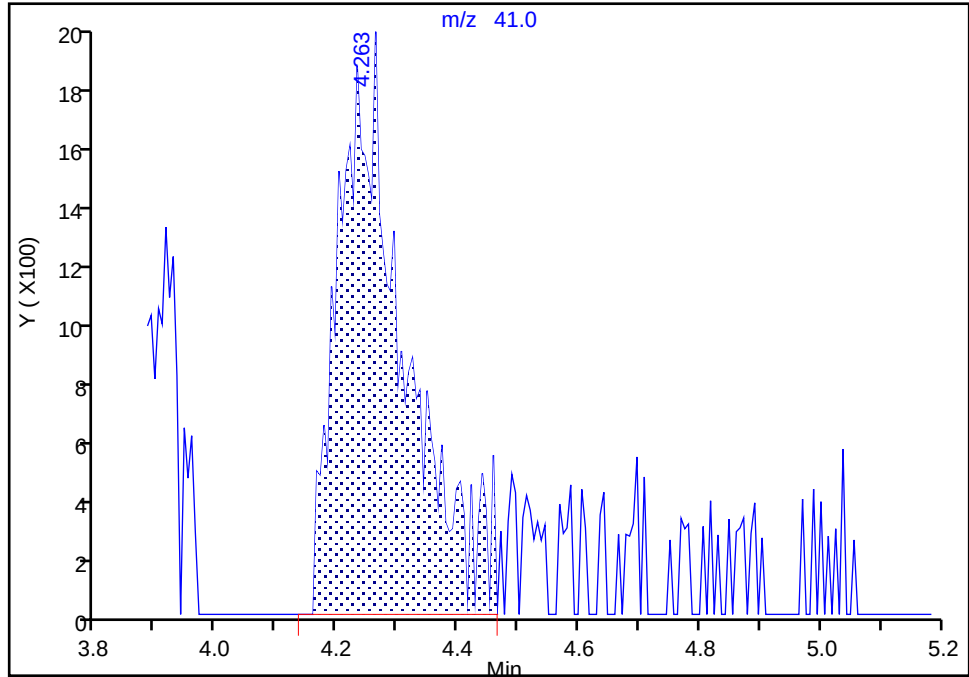
MS Quad

25 Acetonitrile, CAS: 75-05-8

Signal: 1

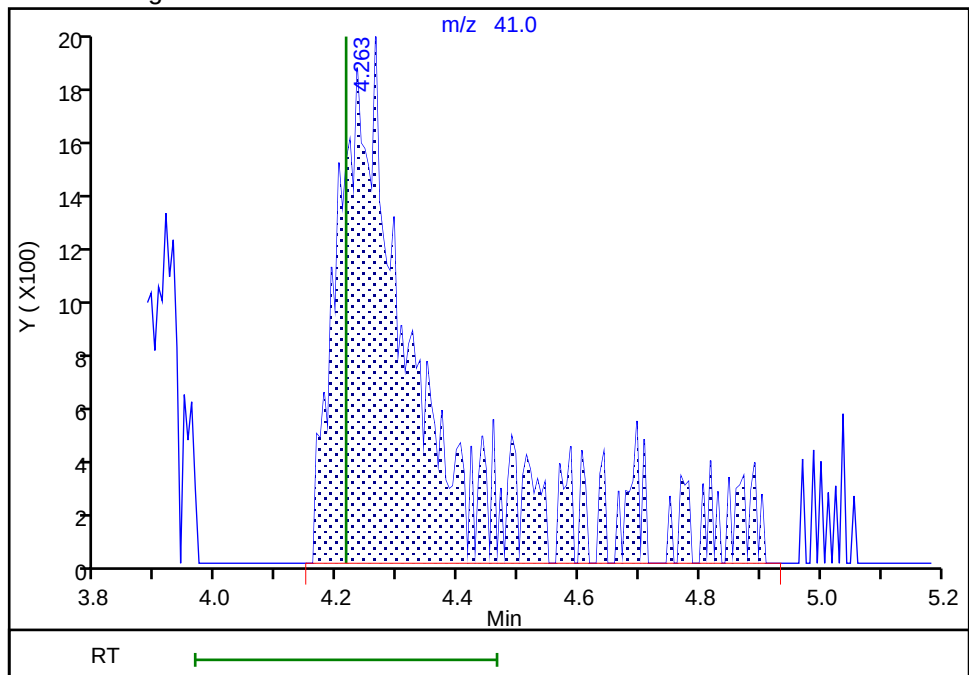
RT: 4.26
Area: 14765
Amount: 7.195801
Amount Units: ug/l

Processing Integration Results



RT: 4.26
Area: 19501
Amount: 6.486393
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:21:59

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

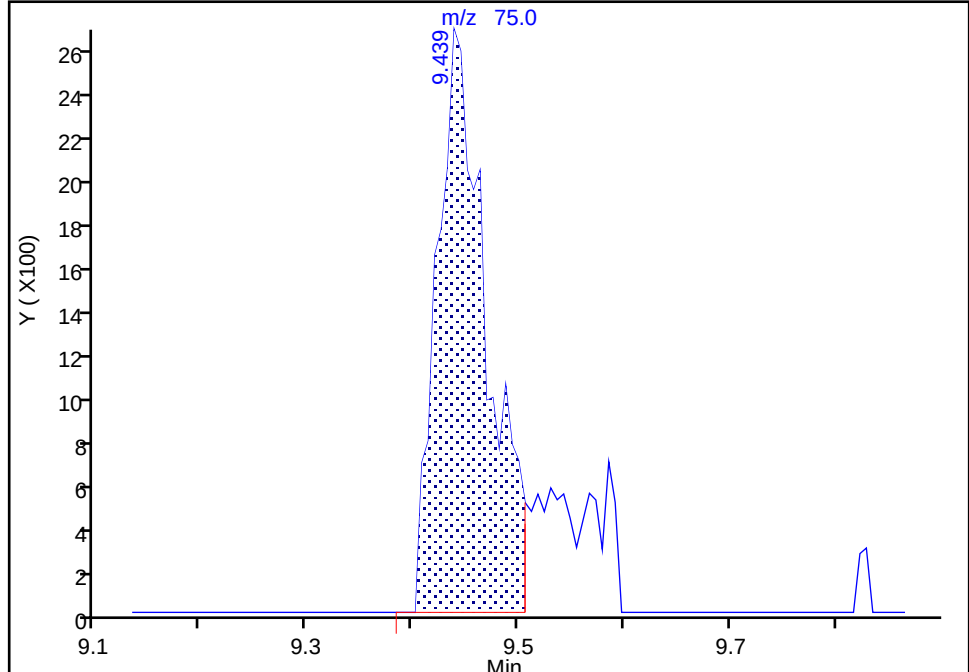
Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i17.D
Injection Date: 15-Sep-2020 17:18:30 Instrument ID: 19094
Lims ID: IC std 0.2
Client ID:
Operator ID: kas02648 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

77 Chloroacetonitrile, CAS: 107-14-2

Signal: 1

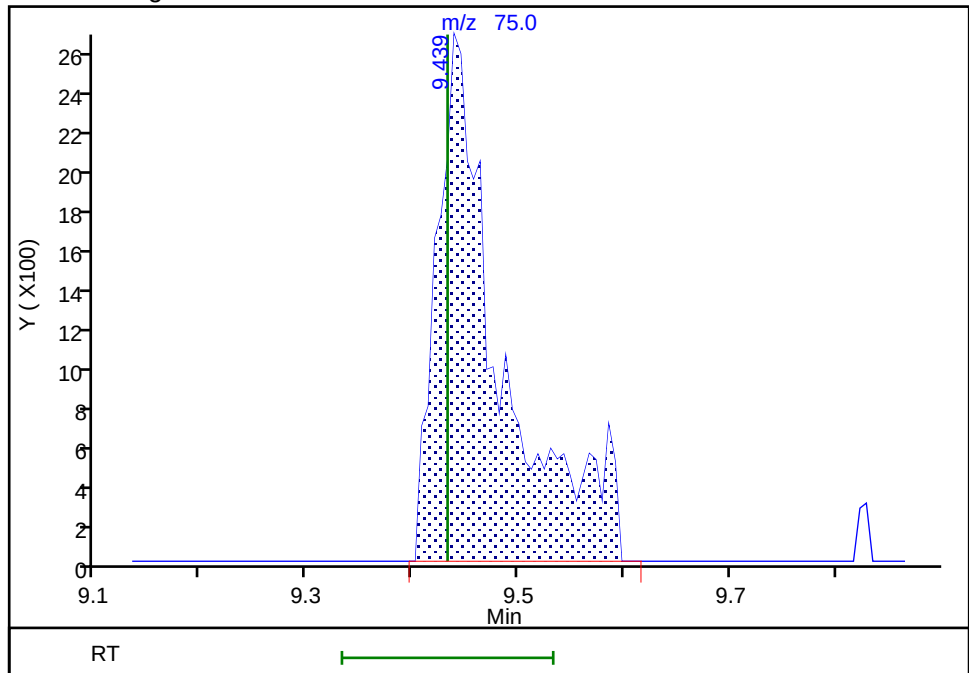
RT: 9.44
Area: 8512
Amount: 8.306269
Amount Units: ug/l

Processing Integration Results



RT: 9.44
Area: 10937
Amount: 8.542829
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:17:21
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 44043

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2020 18:23 Calibration End Date: 09/15/2020 20:33 Calibration ID: 10991

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-44043/18	hs15i07.D
Level 2	IC 410-44043/17	hs15i06.D
Level 3	IC 410-44043/16	hs15i05.D
Level 4	IC 410-44043/15	hs15i04.D
Level 5	IC 410-44043/14	hs15i03.D
Level 6	ICIS 410-44043/13	hs15i02.D
Level 7	IC 410-44043/12	hs15i01.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2552 0.3107	0.2604 0.3104	0.2820	0.3009	0.3086	Ave		0.2898			0.1000	8.3		20.0			
Chloromethane	0.4382 0.4033	0.3907 0.4005	0.3812	0.4004	0.4108	Ave		0.4036			0.1000	4.5		20.0			
1,3-Butadiene	0.3816 0.3639	0.3561 0.3538	0.3519	0.3313	0.3345	Ave		0.3533				4.8		20.0			
Vinyl chloride	0.3528 0.3721	0.3342 0.3615	0.3468	0.3593	0.3765	Ave		0.3576			0.1000	4.1		20.0			
Bromomethane	0.2518 0.2487	0.2357 0.2383	0.2340	0.2448	0.2547	Ave		0.2440			0.1000	3.3		20.0			
Chloroethane	0.2419 0.2330	0.2278 0.2240	0.2148	0.2319	0.2364	Ave		0.2300			0.1000	3.8		20.0			
Dichlorofluoromethane	0.4976 0.4782	0.4530 0.4593	0.4621	0.4689	0.4908	Ave		0.4728			0.1000	3.5		20.0			
Trichlorofluoromethane	0.4743 0.4809	0.4386 0.4643	0.4427	0.4667	0.4857	Ave		0.4647			0.1000	3.9		20.0			
Ethyl ether	0.2011 0.2137	0.1946 0.2150	0.1910	0.2300	0.2224	Ave		0.2097				6.9		20.0			
Freon 123a	0.3292 0.3439	0.3120 0.3340	0.3330	0.3159	0.3291	Ave		0.3282				3.3		20.0			
Acrolein	2.5460 2.7193	2.8258 2.7340	2.6886	2.3644	2.5114	Ave		2.6271				6.1		20.0			
1,1-Dichloroethene	0.2424 0.2463	0.2263 0.2393	0.2315	0.2330	0.2378	Ave		0.2367			0.1000	2.9		20.0			
Freon 113	0.2360 0.2821	0.2434 0.2715	0.2594	0.2635	0.2695	Ave		0.2608			0.1000	6.2		20.0			
Acetone	4.1074 3.2615	3.9074 3.1907	3.5207	2.9560	3.0132	Ave		3.4224			0.1000	12.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 44043

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2020 18:23 Calibration End Date: 09/15/2020 20:33 Calibration ID: 10991

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methyl iodide	0.4399 0.4706	0.4277 0.4579	0.4228	0.4279	0.4537	Ave		0.4429				4.1		20.0			
Ethyl bromide	0.1992 0.2042	0.1898 0.2041	0.1840	0.2140	0.2107	Ave		0.2009				5.4		20.0			
Carbon disulfide	0.8429 0.8284	0.7505 0.8137	0.7643	0.7699	0.8031	Ave		0.7961			0.1000	4.4		20.0			
Methyl acetate	9.3338 9.0978	11.240 10.260	10.131	9.5409	10.682	Ave		10.041			0.1000	7.7		20.0			
Allyl chloride	0.4382 0.4572	0.4302 0.4568	0.4188	0.4716	0.4596	Ave		0.4475				4.2		20.0			
Methylene Chloride	0.2732 0.2756	0.2636 0.2672	0.2555	0.2555	0.2676	Ave		0.2654			0.1000	3.0		20.0			
t-Butyl alcohol	0.9421 1.0995	1.2047 1.0734	1.0590	0.9598	0.9823	Ave		1.0458				8.8		20.0			
Acrylonitrile	3.6575 4.5195	4.6881 4.5662	4.3032	3.8751	4.1749	Ave		4.2549				8.9		20.0			
Methyl tertiary butyl ether	0.5521 0.6270	0.5362 0.6198	0.5508	0.5798	0.6143	Ave		0.5829			0.1000	6.4		20.0			
trans-1,2-Dichloroethene	0.2825 0.2795	0.2454 0.2715	0.2510	0.2492	0.2673	Ave		0.2638			0.1000	5.8		20.0			
n-Hexane	0.3753 0.4568	0.3738 0.4531	0.4050	0.4062	0.4278	Ave		0.4140				8.1		20.0			
1,1-Dichloroethane	0.5312 0.5495	0.5047 0.5401	0.5161	0.5107	0.5242	Ave		0.5252			0.2000	3.1		20.0			
di-Isopropyl ether	0.8443 0.9762	0.8699 0.9726	0.8628	0.8736	0.9332	Ave		0.9046				6.1		20.0			
2-Chloro-1,3-butadiene	0.4145 0.4727	0.4058 0.4736	0.4233	0.4191	0.4448	Ave		0.4362				6.4		20.0			
Ethyl t-butyl ether	0.7080 0.8123	0.6964 0.8098	0.7194	0.7187	0.7887	Ave		0.7505				6.8		20.0			
2-Butanone	5.1445 5.8403	5.8431 6.0649	5.7583	4.9558	5.4161	Ave		5.5747			0.1000	7.4		20.0			
cis-1,2-Dichloroethene	0.2915 0.3151	0.2938 0.3103	0.2847	0.2936	0.3043	Ave		0.2990			0.1000	3.7		20.0			
2,2-Dichloropropane	0.3770 0.4153	0.3620 0.4133	0.3800	0.3697	0.3976	Ave		0.3879				5.4		20.0			
Propionitrile	1.5429 1.5802	1.7142 1.5943	1.5380	1.3854	1.4507	Ave		1.5437				6.8		20.0			
Methacrylonitrile	4.9815 5.5793	5.5902 5.8515	5.5712	4.7355	5.2050	Ave		5.3592				7.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 44043

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2020 18:23 Calibration End Date: 09/15/2020 20:33 Calibration ID: 10991

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Bromochloromethane	0.1264 0.1286	0.1185 0.1318	0.1198	0.1401	0.1372	Ave		0.1289				6.3		20.0			
Tetrahydrofuran	1.3039 1.4725	1.4418 1.4979	1.4459	1.2425	1.3509	Ave		1.3936				6.9		20.0			
Chloroform	0.5406 0.5092	0.4875 0.5071	0.4838	0.4634	0.4915	Ave		0.4976			0.2000	4.9		20.0			
1,1,1-Trichloroethane	0.4013 0.4409	0.4028 0.4435	0.4033	0.4075	0.4193	Ave		0.4170			0.1000	4.4		20.0			
Cyclohexane	0.5020 0.5543	0.4661 0.5555	0.4957	0.4898	0.5260	Ave		0.5128			0.1000	6.6		20.0			
1,1-Dichloropropene	0.3661 0.4151	0.3592 0.4150	0.3697	0.3733	0.3948	Ave		0.3848				6.1		20.0			
Carbon tetrachloride	0.3664 0.3879	0.3473 0.3877	0.3561	0.3457	0.3710	Ave		0.3660			0.1000	4.8		20.0			
Isobutyl alcohol	0.4075 0.3991	0.4286 0.3979	0.4112	0.3372	0.3528	Ave		0.3906				8.5		20.0			
Benzene	1.1480 1.2061	1.1439 1.1995	1.1337	1.0869	1.1723	Ave		1.1558			0.5000	3.6		20.0			
1,2-Dichloroethane	0.3256 0.2937	0.2875 0.3049	0.2855	0.2889	0.3048	Ave		0.2987			0.1000	4.8		20.0			
t-Amyl methyl ether	0.5570 0.6809	0.5654 0.6859	0.5843	0.6024	0.6622	Ave		0.6197				8.9		20.0			
n-Heptane	0.4582 0.5407	0.4600 0.5385	0.4720	0.4943	0.5174	Ave		0.4973				7.1		20.0			
n-Butanol	0.2587 0.3555	0.3074 0.3525	0.3156	0.2884	0.3186	Ave		0.3138				10.9		20.0			
Trichloroethene	0.2888 0.3057	0.2775 0.3044	0.2897	0.2759	0.2924	Ave		0.2906			0.2000	4.0		20.0			
Methylcyclohexane	0.4698 0.5497	0.4471 0.5595	0.4731	0.5515	0.5328	Ave		0.5119			0.1000	9.2		20.0			
1,2-Dichloropropane	0.2838 0.3139	0.2933 0.3119	0.2953	0.2886	0.3111	Ave		0.2997			0.1000	4.1		20.0			
Methyl methacrylate	7.8240 10.090	9.8578 11.113	10.139	8.2928	9.5682	Ave		9.5549				11.9		20.0			
1,4-Dioxane	0.0421 0.0798	0.0559 0.0679	0.0650	0.0719	0.0755	Ave		0.0654			0.0050	19.6		20.0			
Dibromomethane	0.1336 0.1326	0.1192 0.1359	0.1266	0.1295	0.1330	Ave		0.1301				4.4		20.0			
Bromodichloromethane	0.3200 0.3585	0.3095 0.3622	0.3244	0.3171	0.3475	Ave		0.3342			0.2000	6.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 44043

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2020 18:23 Calibration End Date: 09/15/2020 20:33 Calibration ID: 10991

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Nitropropane	2.4743 2.9194	2.9329 3.1867	2.7139	2.3777	2.6669	Ave		2.7531				10.2		20.0			
1-Bromo-2-chloroethane	0.1697 0.1775	0.1629 0.1831	0.1563	0.1832	0.1882	Ave		0.1744				6.8		20.0			
cis-1,3-Dichloropropene	0.3629 0.4414	0.3605 0.4479	0.3676	0.3852	0.4189	Ave		0.3978			0.2000	9.5		20.0			
4-Methyl-2-pentanone	12.155 14.607	14.090 15.241	14.048	12.210	13.788	Ave		13.734			0.1000	8.4		20.0			
Toluene	0.9856 1.0160	0.9288 1.0063	0.9576	0.9218	0.9832	Ave		0.9713			0.4000	3.8		20.0			
trans-1,3-Dichloropropene	0.3753 0.4725	0.4124 0.4897	0.4131	0.4259	0.4619	Ave		0.4358			0.1000	9.2		20.0			
Ethyl methacrylate	0.3059 0.3850	0.2966 0.3890	0.3077	0.3292	0.3695	Ave		0.3404				11.7		20.0			
1,1,2-Trichloroethane	0.2494 0.2614	0.2339 0.2576	0.2317	0.2381	0.2587	Ave		0.2472			0.1000	5.1		20.0			
Tetrachloroethene	0.4582 0.4636	0.4454 0.4542	0.4247	0.4189	0.4405	Ave		0.4436			0.2000	3.8		20.0			
1,3-Dichloropropane	0.4378 0.4751	0.4399 0.4707	0.4336	0.4468	0.4703	Ave		0.4535				3.9		20.0			
2-Hexanone	7.9582 10.066	9.4008 10.538	9.3765	8.3082	9.4606	Ave		9.3012			0.1000	9.8		20.0			
Dibromochloromethane	0.2728 0.3184	0.2635 0.3269	0.2720	0.2850	0.3094	Ave		0.2926				8.7		20.0			
1,2-Dibromoethane	0.2190 0.2528	0.2342 0.2533	0.2207	0.2338	0.2499	Ave		0.2377			0.1000	6.2		20.0			
1-Chlorohexane	0.5894 0.6031	0.5368 0.6028	0.5376	0.5341	0.5680	Ave		0.5674				5.5		20.0			
Chlorobenzene	1.0175 1.0996	1.0143 1.0822	1.0173	0.9842	1.0588	Ave		1.0391			0.5000	4.0		20.0			
1,1,1,2-Tetrachloroethane	0.3560 0.3831	0.3492 0.3825	0.3311	0.3499	0.3668	Ave		0.3598				5.3		20.0			
Ethylbenzene	1.7799 1.9917	1.7136 1.9705	1.8085	1.7535	1.9191	Ave		1.8481			0.1000	6.0		20.0			
m&p-Xylene	0.6500 0.7508	0.6596 0.7408	0.6753	0.6621	0.7162	Ave		0.6935			0.1000	6.0		20.0			
o-Xylene	0.6319 0.7315	0.6087 0.7305	0.6510	0.6368	0.6954	Ave		0.6694			0.3000	7.4		20.0			
Styrene	0.9192 1.2224	0.9685 1.2167	1.0387	1.0391	1.1597	Ave		1.0806			0.3000	11.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 44043

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2020 18:23 Calibration End Date: 09/15/2020 20:33 Calibration ID: 10991

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Bromoform	0.1329 0.1858	0.1482 0.1899	0.1518	0.1563	0.1763	Ave		0.1630			0.1000	13.1		20.0			
Isopropylbenzene	1.6293 1.9942	1.6658 1.9816	1.7309	1.7050	1.9036	Ave		1.8015			0.1000	8.6		20.0			
1,1,2,2-Tetrachloroethane	0.5931 0.6106	0.5354 0.6213	0.5284	0.5736	0.6237	Ave		0.5837			0.3000	6.8		20.0			
Bromobenzene	0.7756 0.8462	0.7560 0.8492	0.7774	0.7714	0.8275	Ave		0.8005				4.9		20.0			
trans-1,4-Dichloro-2-butene	4.5378 5.3042	5.0961 5.6608	4.9660	4.3241	4.8824	Ave		4.9673				9.1		20.0			
1,2,3-Trichloropropane	0.1338 0.1572	0.1339 0.1569	0.1400	0.1613	0.1599	Ave		0.1490				8.4		20.0			
N-Propylbenzene	4.0316 4.6273	3.9664 4.5548	4.1383	4.1347	4.4051	Ave		4.2655				6.1		20.0			
2-Chlorotoluene	0.7683 0.8737	0.7598 0.8845	0.7909	0.7944	0.8484	Ave		0.8171				6.2		20.0			
1,3,5-Trimethylbenzene	2.6452 3.1981	2.6654 3.2214	2.8211	2.7898	3.0693	Ave		2.9157				8.4		20.0			
4-Chlorotoluene	0.7566 0.8860	0.7975 0.8903	0.7948	0.7953	0.8538	Ave		0.8249				6.3		20.0			
tert-Butylbenzene	0.6131 0.6990	0.5490 0.7081	0.5969	0.6020	0.6674	Ave		0.6336				9.3		20.0			
Pentachloroethane	0.4541 0.5244	0.4670 0.5451	0.4461	0.5253	0.5307	Ave		0.4990				8.3		20.0			
1,2,4-Trimethylbenzene	2.5245 3.2597	2.6702 3.2794	2.8445	2.8287	3.1101	Ave		2.9310				10.0		20.0			
sec-Butylbenzene	3.5029 4.4138	3.6001 4.4213	3.7857	3.8981	4.1713	Ave		3.9705				9.4		20.0			
1,3-Dichlorobenzene	1.5996 1.6921	1.5448 1.6909	1.5353	1.5358	1.6195	Ave		1.6026			0.6000	4.3		20.0			
p-Isopropyltoluene	2.7696 3.7123	2.9169 3.7149	3.1164	3.2034	3.5273	Ave		3.2801				11.6		20.0			
1,4-Dichlorobenzene	1.6459 1.6464	1.5411 1.6660	1.5335	1.5124	1.5937	Ave		1.5913			0.5000	3.9		20.0			
1,2,3-Trimethylbenzene	1.2139 1.3633	1.2127 1.3870	1.1978	1.3876	1.3665	Ave		1.3041				6.9		20.0			
Benzyl chloride	0.1596 0.2244	0.1644 0.2415	0.1780	0.1831	0.2190	Ave		0.1957				16.5		20.0			
n-Butylbenzene	1.5468 1.9635	1.5883 1.9650	1.7134	1.7829	1.8911	Ave		1.7787				9.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 44043

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2020 18:23 Calibration End Date: 09/15/2020 20:33 Calibration ID: 10991

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.4401 1.5137	1.4124 1.5116	1.4044	1.3764	1.4607	Ave		1.4456			0.4000	3.7		20.0			
1,2-Dibromo-3-Chloropropane	0.0742 0.0839	0.0720 0.0887	0.0682	0.0803	0.0856	Ave		0.0790			0.0500	9.7		20.0			
1,3,5-Trichlorobenzene	1.1609 1.3875	1.1595 1.4227	1.1925	1.1911	1.2911	Ave		1.2579				8.8		20.0			
1,2,4-Trichlorobenzene	0.9261 1.1624	0.9416 1.2032	0.9905	0.9890	1.0745	Ave		1.0410			0.2000	10.4		20.0			
Hexachlorobutadiene	0.5821 0.6649	0.5384 0.6930	0.5586	0.5930	0.6476	Ave		0.6111				9.5		20.0			
Naphthalene	1.5674 2.0129	1.4709 2.0435	1.5374	1.6977	1.9651	Ave		1.7564				14.0		20.0			
1,2,3-Trichlorobenzene	0.8568 1.0311	0.8354 1.0336	0.8684	0.8947	0.9911	Ave		0.9302				9.2		20.0			
Dibromofluoromethane (Surr)	0.2460 0.2436	0.2451 0.2427	0.2439	0.2467	0.2474	Ave		0.2451				0.7		20.0			
1,2-Dichloroethane-d4 (Surr)	0.0501 0.0499	0.0489 0.0486	0.0484	0.0523	0.0533	Ave		0.0502				3.8		20.0			
Toluene-d8 (Surr)	1.3318 1.3364	1.3361 1.3131	1.3465	1.3279	1.3312	Ave		1.3318				0.8		20.0			
4-Bromofluorobenzene (Surr)	0.4803 0.4832	0.4739 0.4799	0.4829	0.4892	0.4858	Ave		0.4822				1.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 44043

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2020 18:23 Calibration End Date: 09/15/2020 20:33 Calibration ID: 10991

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-44043/18	hs15i07.D
Level 2	IC 410-44043/17	hs15i06.D
Level 3	IC 410-44043/16	hs15i05.D
Level 4	IC 410-44043/15	hs15i04.D
Level 5	IC 410-44043/14	hs15i03.D
Level 6	ICIS 410-44043/13	hs15i02.D
Level 7	IC 410-44043/12	hs15i01.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	10825 681868	29600 1652457	63865	117329	313665	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloromethane	FB	Ave	18586 885122	44401 2132415	86326	156122	417494	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Butadiene	FB	Ave	16184 798712	40472 1883842	79699	129149	339954	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Vinyl chloride	FB	Ave	14964 816760	37985 1924840	78541	140095	382674	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromomethane	FB	Ave	10678 545938	26793 1268788	52984	95459	258837	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloroethane	FB	Ave	10259 511355	25886 1192491	48650	90426	240262	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dichlorofluoromethane	FB	Ave	21104 1049556	51482 2445195	104634	182826	498790	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Trichlorofluoromethane	FB	Ave	20116 1055509	49848 2471955	100247	181966	493555	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl ether	FB	Ave	8526 468896	22116 1144523	43241	89645	225958	0.200 10.0	0.500 25.0	1.000	2.00	5.00
Freon 123a	FB	Ave	13964 754771	35462 1778146	75413	123169	334449	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acrolein	TBAd 10	Ave	67746 3755426	171798 8814164	343549	663640	1775058	10.0 501	25.0 1252	50.1	100	250
1,1-Dichloroethene	FB	Ave	10280 540721	25717 1274023	52421	90851	241672	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Freon 113	FB	Ave	10009 619247	27660 1445450	58733	102748	273927	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acetone	TBAd 10	Ave	21818 899172	47423 2053495	89805	165632	425154	2.00 100	5.00 250	10.0	20.0	50.0
Methyl iodide	FB	Ave	18657 1032916	48609 2437909	95735	166819	461076	0.200 10.0	0.500 25.0	1.00	2.00	5.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

Analy Batch No.: 44043

SDG No.: _____

Instrument ID: 19094

GC Column: R-624SilMS ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2020 18:23

Calibration End Date: 09/15/2020 20:33

Calibration ID: 10991

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Ethyl bromide	FB	Ave	8454 448350	21583 1087410	41697	83461	214272	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon disulfide	FB	Ave	35749 1818283	85301 4332118	173087	300163	816182	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl acetate	TBAd 10	Ave	4958 250816	13641 660336	25843	53459	150724	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Allyl chloride	FB	Ave	18587 1003573	48892 2432285	94847	183860	467062	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylene Chloride	FB	Ave	11588 604838	29957 1422467	57855	99619	271949	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Butyl alcohol	TBAd 10	Ave	10009 606250	29243 1381586	54024	107555	277208	4.00 200	10.0 500	20.0	40.0	100
Acrylonitrile	TBAd 10	Ave	9714 622989	28449 1469350	54883	108565	294528	1.00 50.0	2.50 125	5.00	10.0	25.0
Methyl tertiary butyl ether	FB	Ave	23417 1376165	60941 3300089	124727	226042	624274	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,2-Dichloroethene	FB	Ave	11982 613532	27887 1445773	56831	97153	271678	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Hexane	FB	Ave	15917 1002600	42484 2412251	91713	158369	434776	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloroethane	FB	Ave	22530 1206058	57365 2875401	116879	199112	532687	0.200 10.0	0.500 25.0	1.00	2.00	5.00
di-Isopropyl ether	FB	Ave	35809 2142632	98865 5178376	195373	340597	948371	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chloro-1,3-butadiene	FB	Ave	17579 1037491	46119 2521586	95859	163390	452046	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl t-butyl ether	FB	Ave	30027 1782918	79151 4311312	162911	280220	801522	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Butanone	TBAd 10	Ave	27327 1610122	70915 3903221	146882	277681	764188	2.00 100	5.00 250	10.0	20.0	50.0
cis-1,2-Dichloroethene	FB	Ave	12362 691625	33388 1652191	64464	114457	309277	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2,2-Dichloropropane	FB	Ave	15988 911533	41145 2200630	86058	144151	404090	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Propionitrile	TBAd 10	Ave	16391 871305	41609 2052098	78462	155249	409385	4.00 200	10.0 500	20.0	40.0	100
Methacrylonitrile	TBAd 10	Ave	26461 1538168	67846 3765900	142111	265340	734405	2.00 100	5.00 250	10.0	20.0	50.0
Bromochloromethane	FB	Ave	5360 282168	13466 701664	27137	54632	139457	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrahydrofuran	TBAd 10	Ave	6926 405961	17499 964026	36881	69620	190611	2.00 100	5.00 250	10.0	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

Analy Batch No.: 44043

SDG No.: _____

Instrument ID: 19094

GC Column: R-624SilMS ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2020 18:23

Calibration End Date: 09/15/2020 20:33

Calibration ID: 10991

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chloroform	FB	Ave	22926 1117552	55408 2699778	109552	180653	499454	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1-Trichloroethane	FB	Ave	17022 967682	45781 2361331	91337	158861	426144	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Cyclohexane	FB	Ave	21289 1216693	52977 2957503	112258	190947	534531	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloropropene	FB	Ave	15526 911190	40831 2209703	83716	145558	401212	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon tetrachloride	FB	Ave	15538 851398	39470 2064175	80651	134797	377086	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isobutyl alcohol	TBAd 10	Ave	10822 550090	26011 1280396	52444	94472	248914	10.0 500	25.0 1250	50.0	100	250
Benzene	FB	Ave	48689 2647245	130011 6386187	256726	423740	1191387	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloroethane	FB	Ave	13808 644639	32675 1623519	64645	112638	309754	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Amyl methyl ether	FB	Ave	23623 1494588	64261 3652109	132322	234854	672979	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Heptane	FB	Ave	19434 1186734	52278 2867140	106888	192733	525812	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Butanol	TBAd 10	Ave	13743 979995	37307 2268481	80512	161595	449596	20.0 1000	50.0 2500	100	200	500
Trichloroethene	FB	Ave	12249 670938	31545 1620493	65610	107578	297179	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylcyclohexane	FB	Ave	19925 1206511	50811 2978852	107137	215033	541420	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloropropane	FB	Ave	12036 688938	33331 1660423	66872	112503	316193	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl methacrylate	TBAd 10	Ave	4156 278168	11964 715186	25862	46466	135003	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dioxane	TBAd 10	Ave	1119 109985	3394 218359	8284	20136	53251	10.0 500	25.0 1250	50.0	100	250
Dibromomethane	FB	Ave	5667 291068	13546 723822	28663	50480	135187	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromodichloromethane	FB	Ave	13573 786970	35180 1928617	73452	123629	353129	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Nitropropane	TBAd 10	Ave	13143 804862	35595 2050891	69227	133224	376289	2.00 100	5.00 250	10.0	20.0	50.0
1-Bromo-2-chloroethane	FB	Ave	7197 389574	18518 974803	35394	71431	191278	0.200 10.0	0.500 25.0	1.00	2.00	5.00
cis-1,3-Dichloropropene	FB	Ave	15392 968922	40971 2384635	83234	150175	425722	0.200 10.0	0.500 25.0	1.00	2.00	5.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

Analy Batch No.: 44043

SDG No.: _____

Instrument ID: 19094

GC Column: R-624SilMS ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2020 18:23

Calibration End Date: 09/15/2020 20:33

Calibration ID: 10991

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
4-Methyl-2-pentanone	TBA 10	Ave	64565 4027057	171000 9809023	358328	684164	1945422	2.00 100	5.00 250	10.0	20.0	50.0
Toluene	CBZ 5	Ave	30209 1623281	76403 3946231	156250	262939	731940	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,3-Dichloropropene	CBZ 5	Ave	11504 754879	33924 1920146	67406	121485	343829	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl methacrylate	CBZ 5	Ave	9377 615131	24397 1525260	50212	93897	275085	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,2-Trichloroethane	CBZ 5	Ave	7643 417684	19242 1010070	37799	67913	192575	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrachloroethene	CBZ 5	Ave	14044 740663	36639 1780975	69294	119501	327900	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichloropropane	CBZ 5	Ave	13419 759084	36188 1845950	70746	127443	350079	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Hexanone	TBA 10	Ave	42273 2775067	114094 6782143	239177	465521	1334847	2.00 100	5.00 250	10.0	20.0	50.0
Dibromochloromethane	CBZ 5	Ave	8361 508721	21676 1281876	44389	81298	230335	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromoethane	CBZ 5	Ave	6713 403954	19269 993120	36016	66693	186047	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1-Chlorohexane	CBZ 5	Ave	18063 963581	44159 2363708	87714	152345	422839	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chlorobenzene	CBZ 5	Ave	31186 1756764	83440 4243609	165992	280738	788190	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1,2-Tetrachloroethane	CBZ 5	Ave	10910 612122	28729 1500006	54030	99811	273048	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethylbenzene	CBZ 5	Ave	54551 3182143	140963 7726888	295087	500197	1428664	0.200 10.0	0.500 25.0	1.00	2.00	5.00
m&p-Xylene	CBZ 5	Ave	39842 2399213	108526 5810071	220364	377756	1066281	0.400 20.0	1.00 50.0	2.00	4.00	10.0
o-Xylene	CBZ 5	Ave	19366 1168664	50075 2864604	106215	181650	517672	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Styrene	CBZ 5	Ave	28173 1953012	79671 4771018	169489	296403	863346	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromoform	CBZ 5	Ave	4072 296928	12192 744782	24775	44575	131216	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isopropylbenzene	CBZ 5	Ave	49936 3186126	137035 7770534	282422	486357	1417087	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,2,2-Tetrachloroethane	DCB 4	Ave	9599 513178	23224 1271757	45362	85788	244158	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromobenzene	DCB 4	Ave	12553 711236	32789 1738314	66738	115375	323955	0.200 10.0	0.500 25.0	1.00	2.00	5.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

Analy Batch No.: 44043

SDG No.: _____

Instrument ID: 19094

GC Column: R-624SilMS ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2020 18:23

Calibration End Date: 09/15/2020 20:33

Calibration ID: 10991

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
trans-1,4-Dichloro-2-butene	TBA 10	Ave	24104 1462317	61849 3643208	126672	242285	688888	2.00 100	5.00 250	10.0	20.0	50.0
1,2,3-Trichloropropane	DCBd 4	Ave	2166 132121	5809 321109	12018	24122	62613	0.200 10.0	0.500 25.0	1.00	2.00	5.00
N-Propylbenzene	DCBd 4	Ave	65253 3889320	172040 9323319	355280	618419	1724476	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chlorotoluene	DCBd 4	Ave	12435 734368	32957 1810571	67897	118819	332124	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trimethylbenzene	DCBd 4	Ave	42814 2688029	115611 6593909	242198	417261	1201528	0.200 10.0	0.500 25.0	1.00	2.00	5.00
4-Chlorotoluene	DCBd 4	Ave	12246 744697	34593 1822461	68233	118948	334251	0.200 10.0	0.500 25.0	1.00	2.00	5.00
tert-Butylbenzene	DCBd 4	Ave	9923 587509	23813 1449421	51247	90044	261251	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Pentachloroethane	DCBd 4	Ave	7350 440778	20258 1115717	38299	78563	207757	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,4-Trimethylbenzene	DCBd 4	Ave	40860 2739838	115818 6712710	244200	423084	1217506	0.200 10.0	0.500 25.0	1.00	2.00	5.00
sec-Butylbenzene	DCBd 4	Ave	56697 3709908	156151 9049957	325005	583032	1632951	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichlorobenzene	DCBd 4	Ave	25891 1422227	67004 3461063	131809	229712	633996	0.200 10.0	0.500 25.0	1.00	2.00	5.00
p-Isopropyltoluene	DCBd 4	Ave	44828 3120286	126520 7604065	267544	479126	1380845	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dichlorobenzene	DCBd 4	Ave	26640 1383817	66845 3410073	131652	226212	623893	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trimethylbenzene	DCBd 4	Ave	19647 1145863	52599 2839055	102830	207537	534963	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Benzyl chloride	DCBd 4	Ave	2583 188603	7131 494401	15279	27390	85735	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Butylbenzene	DCBd 4	Ave	25035 1650362	68891 4022150	147096	266669	740319	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichlorobenzene	DCBd 4	Ave	23309 1272321	61263 3094148	120566	205871	571836	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1201 70536	3121 181558	5857	12003	33502	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trichlorobenzene	DCBd 4	Ave	18790 1166179	50293 2912164	102380	178151	505440	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,4-Trichlorobenzene	DCBd 4	Ave	14989 977028	40841 2462792	85035	147930	420632	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Hexachlorobutadiene	DCBd 4	Ave	9421 558865	23352 1418554	47955	88688	253535	0.200 10.0	0.500 25.0	1.00	2.00	5.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 44043

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/15/2020 18:23 Calibration End Date: 09/15/2020 20:33 Calibration ID: 10991

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Naphthalene	DCBd 4	Ave	25369 1691862	63800 4182810	131986	253921	769299	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trichlorobenzene	DCBd 4	Ave	13868 866688	36236 2115767	74555	133824	387969	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dibromofluoromethane (Surr)	FB	Ave	521726 534607	557236 516884	552395	480819	502918	10.0 10.0	10.0 10.0	10.0	10.0	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	106301 109528	111213 103434	109523	101954	108305	10.0 10.0	10.0 10.0	10.0	10.0	10.0
Toluene-d8 (Surr)	CBZd 5	Ave	2040946 2135156	2198171 2059629	2197007	1893965	1981940	10.0 10.0	10.0 10.0	10.0	10.0	10.0
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	736022 772084	779756 752779	787882	697804	723297	10.0 10.0	10.0 10.0	10.0	10.0	10.0

Curve Type Legend:

Ave = Average ISTD

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i01.D
 Lims ID: IC std7 25
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 15-Sep-2020 18:23:30 ALS Bottle#: 12 Worklist Smp#: 12
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0010497-012
 Misc. Info.: IC STD7 25
 Operator ID: kas02648 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 15-Sep-2020 23:44:08 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1035

First Level Reviewer: campbellme

Date: 15-Sep-2020 22:27:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.069	2.075	-0.006	99	1652457	25.0	26.8	
6 Chloromethane	50	2.282	2.282	0.000	99	2132415	25.0	24.8	
8 Butadiene	39	2.404	2.404	0.000	93	1883842	25.0	25.0	
7 Vinyl chloride	62	2.410	2.404	0.006	98	1924840	25.0	25.3	
9 Bromomethane	94	2.745	2.745	0.000	91	1268788	25.0	24.4	
10 Chloroethane	64	2.837	2.843	-0.006	100	1192491	25.0	24.3	
11 Dichlorofluoromethane	67	3.093	3.087	0.006	97	2445195	25.0	24.3	
13 Trichlorofluoromethane	101	3.166	3.166	0.000	98	2471955	25.0	25.0	
15 Ethyl ether	59	3.434	3.440	-0.006	94	1144523	25.0	25.6	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.519	3.519	0.000	95	1778146	25.0	25.4	
17 Acrolein	56	3.617	3.617	0.000	100	8814164	1252.3	1303.3	
18 1,1-Dichloroethene	96	3.763	3.769	-0.006	97	1274023	25.0	25.3	
20 112TCTFE	101	3.800	3.800	0.000	93	1445450	25.0	26.0	
19 Acetone	43	3.800	3.800	0.000	100	2053495	250.0	233.1	
22 Iodomethane	142	3.971	3.977	-0.006	99	2437909	25.0	25.8	
21 Isopropyl alcohol	45	3.983	3.977	0.006	97	785656	500.0	474.4	
23 Ethyl bromide	108	4.007	4.007	0.000	99	1087410	25.0	25.4	
24 Carbon disulfide	76	4.086	4.092	-0.006	99	4332118	25.0	25.6	
26 Methyl acetate	43	4.245	4.245	0.000	98	660336	25.0	25.5	M
27 3-Chloro-1-propene	41	4.275	4.275	0.000	92	2432285	25.0	25.5	
29 Methylene Chloride	84	4.477	4.477	0.000	95	1422467	25.0	25.2	
* 28 t-Butyl alcohol-d10 (IS)	65	4.483	4.501	-0.018	0	128716	50.0	50.0	M
30 2-Methyl-2-propanol	59	4.617	4.629	-0.012	99	1381586	500.0	513.2	
31 Acrylonitrile	53	4.824	4.818	0.006	99	1469350	125.0	134.1	
32 Methyl tert-butyl ether	73	4.891	4.891	0.000	96	3300089	25.0	26.6	
33 trans-1,2-Dichloroethene	96	4.903	4.903	0.000	98	1445773	25.0	25.7	
34 Hexane	57	5.324	5.324	0.000	94	2412251	25.0	27.4	
35 1,1-Dichloroethane	63	5.562	5.562	0.000	96	2875401	25.0	25.7	
37 Isopropyl ether	45	5.611	5.604	0.007	96	5178376	25.0	26.9	
38 2-Chloro-1,3-butadiene	53	5.665	5.665	0.000	91	2521586	25.0	27.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	6.141	6.141	0.000	99	4311312	25.0	27.0	
S 40 1,2-Dichloroethene, Total	100				0			51.7	
41 2-Butanone (MEK)	43	6.342	6.336	0.006	100	3903221	250.0	272.0	
42 cis-1,2-Dichloroethene	96	6.385	6.379	0.006	84	1652191	25.0	25.9	
43 2,2-Dichloropropane	77	6.403	6.403	0.000	89	2200630	25.0	26.6	
45 Propionitrile	54	6.434	6.433	0.001	99	2052098	500.0	516.4	
47 Methacrylonitrile	67	6.647	6.647	0.000	93	3765900	250.0	273.0	
49 Tetrahydrofuran	71	6.726	6.714	0.012	88	964026	250.0	268.7	
48 Chlorobromomethane	128	6.720	6.720	0.000	94	701664	25.0	25.6	
50 Chloroform	83	6.860	6.866	-0.006	94	2699778	25.0	25.5	
\$ 51 Dibromofluoromethane (Surr)	113	7.080	7.074	0.006	93	516884	10.0	9.90	
52 1,1,1-Trichloroethane	97	7.092	7.092	0.000	99	2361331	25.0	26.6	
53 Cyclohexane	56	7.190	7.196	-0.006	92	2957503	25.0	27.1	
55 1,1-Dichloropropene	75	7.299	7.299	0.000	97	2209703	25.0	27.0	
56 Carbon tetrachloride	117	7.305	7.305	0.000	97	2064175	25.0	26.5	
57 Isobutyl alcohol	41	7.433	7.433	0.000	95	1280396	1250.0	1273.3	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.531	7.525	0.006	0	103434	10.0	9.67	
59 Benzene	78	7.561	7.561	0.000	97	6386187	25.0	25.9	
60 1,2-Dichloroethane	62	7.635	7.628	0.007	97	1623519	25.0	25.5	
62 Tert-amyl methyl ether	73	7.744	7.738	0.006	98	3652109	25.0	27.7	
* 65 Fluorobenzene (IS)	96	7.964	7.957	0.007	99	2129677	10.0	10.0	
64 n-Heptane	43	7.964	7.964	0.000	93	2867140	25.0	27.1	
66 n-Butanol	56	8.299	8.305	-0.006	90	2268481	2500.0	2808.0	
67 Trichloroethene	95	8.439	8.433	0.006	99	1620493	25.0	26.2	
68 Methylcyclohexane	83	8.750	8.744	0.006	96	2978852	25.0	27.3	
69 2-ethoxy-2-methyl butane	87	8.768	8.762	0.006	91	2142612	25.0	27.5	
70 1,2-Dichloropropane	63	8.768	8.768	0.000	86	1660423	25.0	26.0	
71 Methyl methacrylate	69	8.842	8.842	0.000	94	715186	25.0	29.1	
72 1,4-Dioxane	88	8.860	8.854	0.006	94	218359	1250.0	1296.4	M
73 Dibromomethane	93	8.884	8.878	0.006	96	723822	25.0	26.1	
75 Dichlorobromomethane	83	9.110	9.110	0.000	99	1928617	25.0	27.1	
76 2-Nitropropane	41	9.366	9.366	0.000	97	2050891	250.0	289.4	
79 1-Bromo-2-chloroethane	63	9.494	9.488	0.006	99	974803	25.0	26.2	
80 cis-1,3-Dichloropropene	75	9.634	9.628	0.006	95	2384635	25.0	28.2	
81 4-Methyl-2-pentanone (MIBK)	43	9.793	9.793	0.000	97	9809023	250.0	277.4	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	2059629	10.0	9.86	
83 Toluene	92	10.006	10.006	0.000	98	3946231	25.0	25.9	
S 84 1,3-Dichloropropene, Total	100				0			56.2	
85 trans-1,3-Dichloropropene	75	10.250	10.250	0.000	93	1920146	25.0	28.1	
86 Ethyl methacrylate	69	10.305	10.299	0.006	91	1525260	25.0	28.6	
87 1,1,2-Trichloroethane	97	10.451	10.451	0.000	91	1010070	25.0	26.0	
88 Tetrachloroethene	166	10.543	10.536	0.006	97	1780975	25.0	25.6	
89 1,3-Dichloropropane	76	10.610	10.609	0.001	92	1845950	25.0	26.0	
91 2-Hexanone	43	10.652	10.652	0.000	98	6782143	250.0	283.2	
93 Chlorodibromomethane	129	10.823	10.823	0.000	90	1281876	25.0	27.9	
94 Ethylene Dibromide	107	10.939	10.939	0.000	99	993120	25.0	26.6	
S 95 Xylenes, Total	106				0			80.7	
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.353	0.000	66	1568537	10.0	10.0	
96 1-Chlorohexane	91	11.359	11.353	0.006	98	2363708	25.0	26.6	
98 Chlorobenzene	112	11.384	11.384	0.000	94	4243609	25.0	26.0	
99 1,1,1,2-Tetrachloroethane	131	11.463	11.457	0.006	94	1500006	25.0	26.6	
100 Ethylbenzene	91	11.463	11.463	0.000	99	7726888	25.0	26.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 m-Xylene & p-Xylene	106	11.573	11.573	0.000	0	5810071	50.0	53.4	
102 o-Xylene	106	11.902	11.902	0.000	97	2864604	25.0	27.3	
103 Styrene	104	11.914	11.914	0.000	95	4771018	25.0	28.1	
104 Bromoform	173	12.079	12.073	0.006	98	744782	25.0	29.1	
105 Isopropylbenzene	105	12.195	12.195	0.000	96	7770534	25.0	27.5	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.341	12.341	0.000	91	752779	10.0	9.95	
109 1,1,2,2-Tetrachloroethane	83	12.438	12.432	0.006	94	1271757	25.0	26.6	
111 Bromobenzene	156	12.457	12.457	0.000	91	1738314	25.0	26.5	
110 trans-1,4-Dichloro-2-butene	53	12.463	12.457	0.006	93	3643208	250.0	284.9	
112 1,2,3-Trichloropropane	110	12.487	12.481	0.006	84	321109	25.0	26.3	
113 N-Propylbenzene	91	12.524	12.518	0.006	99	9323319	25.0	26.7	
114 2-Chlorotoluene	126	12.597	12.597	0.000	96	1810571	25.0	27.1	
115 1,3,5-Trimethylbenzene	105	12.652	12.652	0.000	94	6593909	25.0	27.6	
116 4-Chlorotoluene	126	12.688	12.688	0.000	98	1822461	25.0	27.0	
118 tert-Butylbenzene	134	12.896	12.896	0.000	93	1449421	25.0	27.9	
119 Pentachloroethane	167	12.932	12.932	0.000	94	1115717	25.0	27.3	
120 1,2,4-Trimethylbenzene	105	12.938	12.932	0.006	97	6712710	25.0	28.0	
121 sec-Butylbenzene	105	13.054	13.054	0.000	95	9049957	25.0	27.8	
122 1,3-Dichlorobenzene	146	13.158	13.158	0.000	97	3461063	25.0	26.4	
123 4-Isopropyltoluene	119	13.164	13.164	0.000	97	7604065	25.0	28.3	
* 124 1,4-Dichlorobenzene-d4	152	13.213	13.213	0.001	95	818763	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.231	13.231	0.000	94	3410073	25.0	26.2	
126 1,2,3-Trimethylbenzene	120	13.237	13.237	0.000	99	2839055	25.0	26.6	
127 Benzyl chloride	126	13.304	13.304	0.000	99	494401	25.0	30.9	
129 p-Diethylbenzene	119	13.432	13.432	0.000	94	4891099	25.0	27.7	
130 n-Butylbenzene	92	13.450	13.450	0.000	97	4022150	25.0	27.6	
131 1,2-Dichlorobenzene	146	13.493	13.487	0.006	98	3094148	25.0	26.1	
134 1,2-Dibromo-3-Chloropropane	155	14.030	14.030	0.000	86	181558	25.0	28.1	
135 1,3,5-Trichlorobenzene	180	14.152	14.151	0.001	98	2912164	25.0	28.3	
136 1,2,4-Trichlorobenzene	180	14.572	14.572	0.000	94	2462792	25.0	28.9	
137 Hexachlorobutadiene	225	14.658	14.651	0.007	97	1418554	25.0	28.4	
138 Naphthalene	128	14.755	14.755	0.000	97	4182810	25.0	29.1	
139 1,2,3-Trichlorobenzene	180	14.901	14.901	0.000	95	2115767	25.0	27.8	
140 2-Methylnaphthalene	142	15.548	15.548	0.000	92	2820172	25.0	25.6	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_RV4_826_00026

Amount Added: 25.00

Units: uL

MSV_RV1_826_00024

Amount Added: 25.00

Units: uL

MSV_RV4GAS826_00077

Amount Added: 25.00

Units: uL

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 15-Sep-2020 23:44:09

Chrom Revision: 2.3 11-Sep-2020 20:57:08

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i01.D

Injection Date: 15-Sep-2020 18:23:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std7 25

Worklist Smp#: 12

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

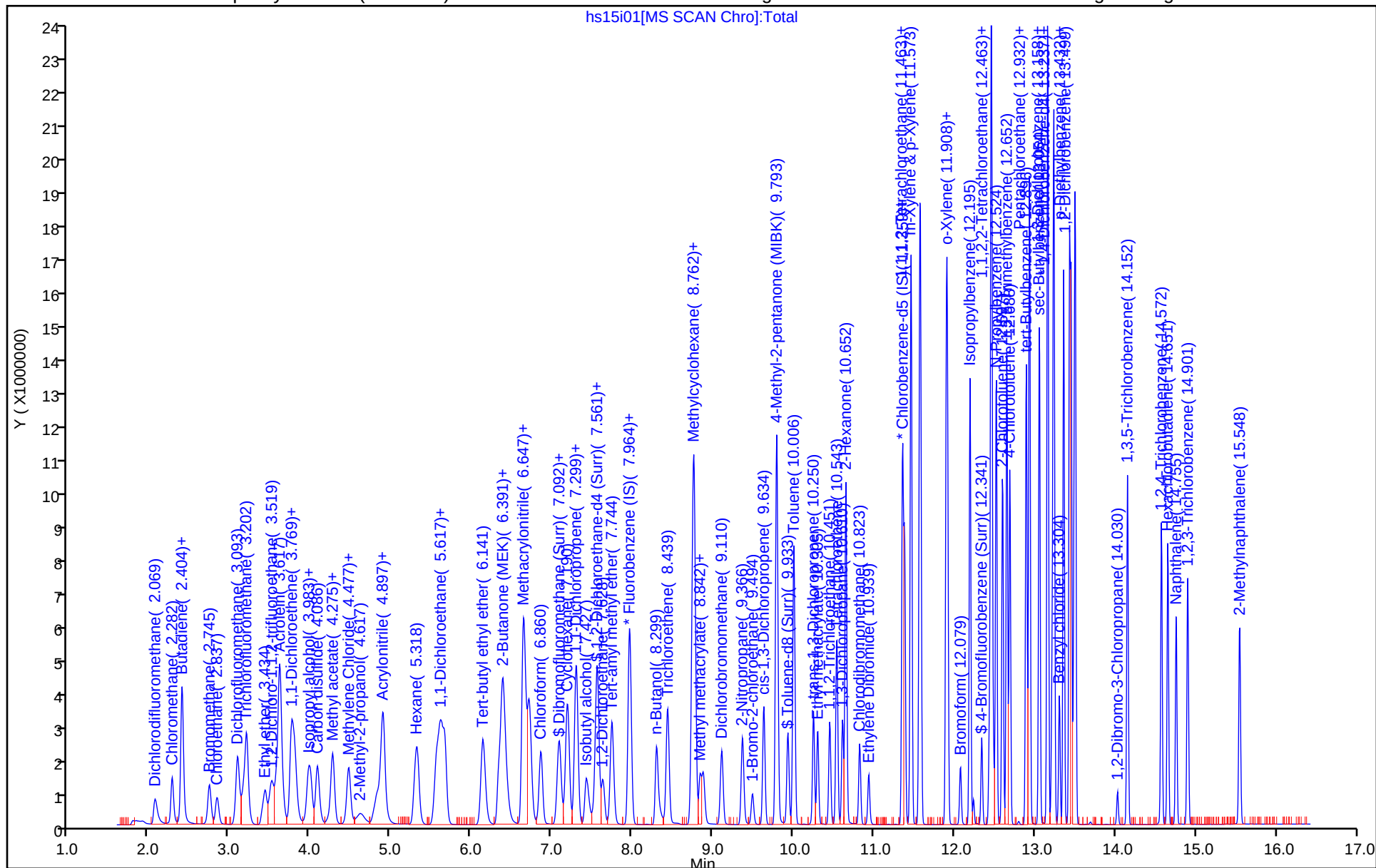
ALS Bottle#: 12

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

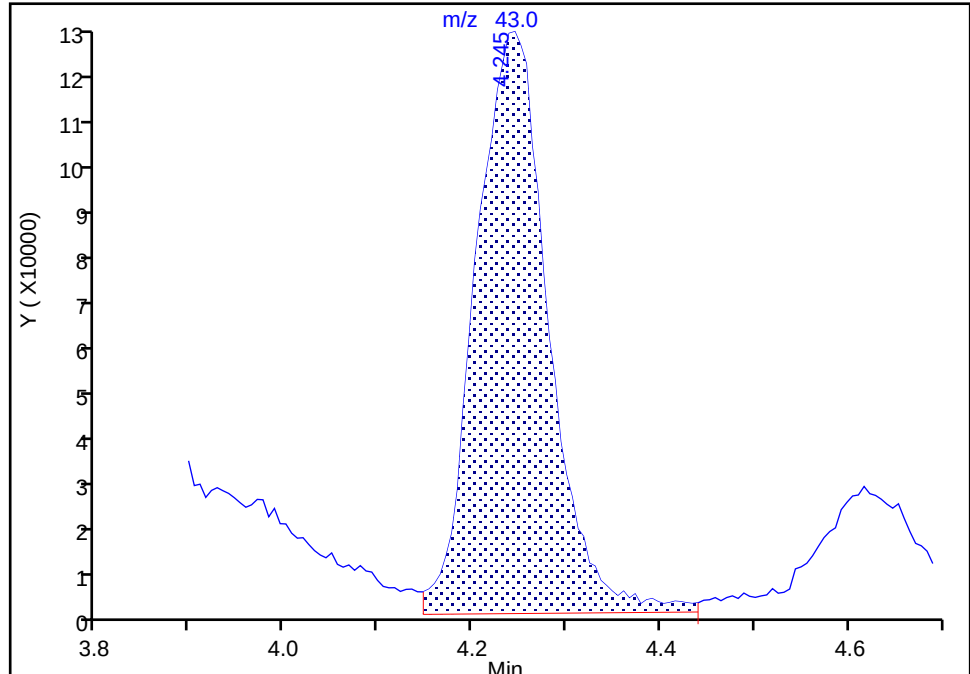
Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i01.D
Injection Date: 15-Sep-2020 18:23:30 Instrument ID: 19094
Lims ID: IC std7 25
Client ID:
Operator ID: kas02648 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

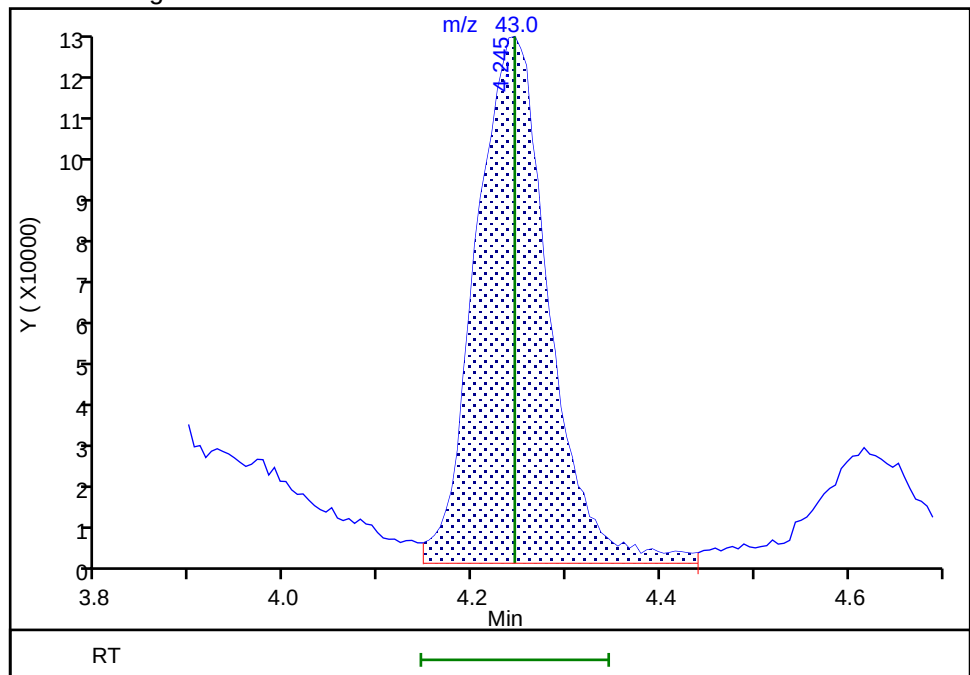
RT: 4.24
Area: 655864
Amount: 27.084802
Amount Units: ug/l

Processing Integration Results



RT: 4.24
Area: 660336
Amount: 25.546475
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:36:09

Audit Action: Assigned New Baseline

Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC

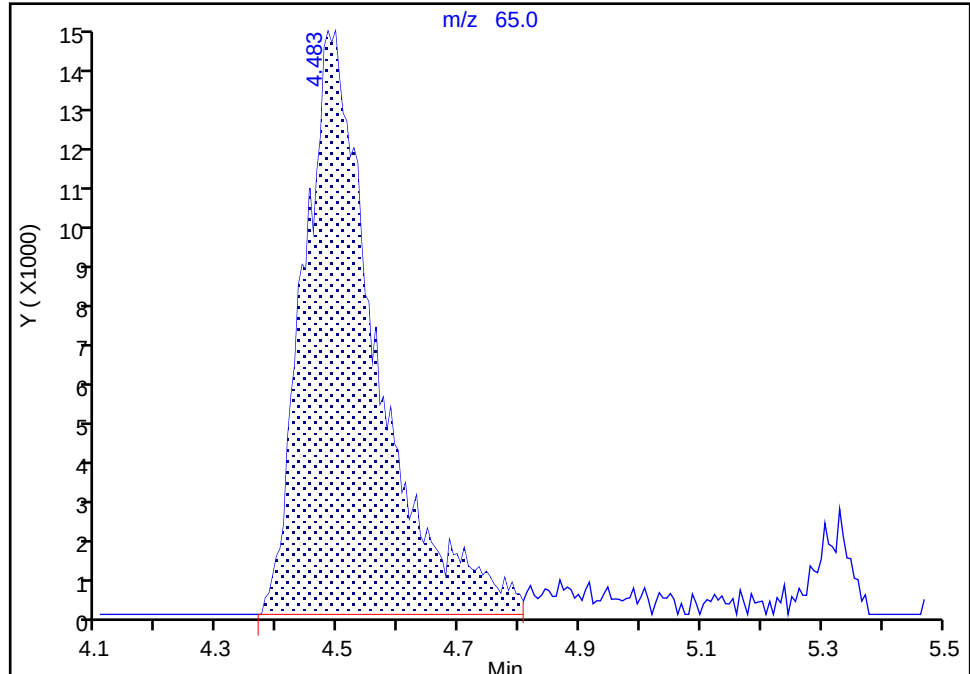
Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i01.D
Injection Date: 15-Sep-2020 18:23:30 Instrument ID: 19094
Lims ID: IC std7 25
Client ID:
Operator ID: kas02648 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

* 28 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

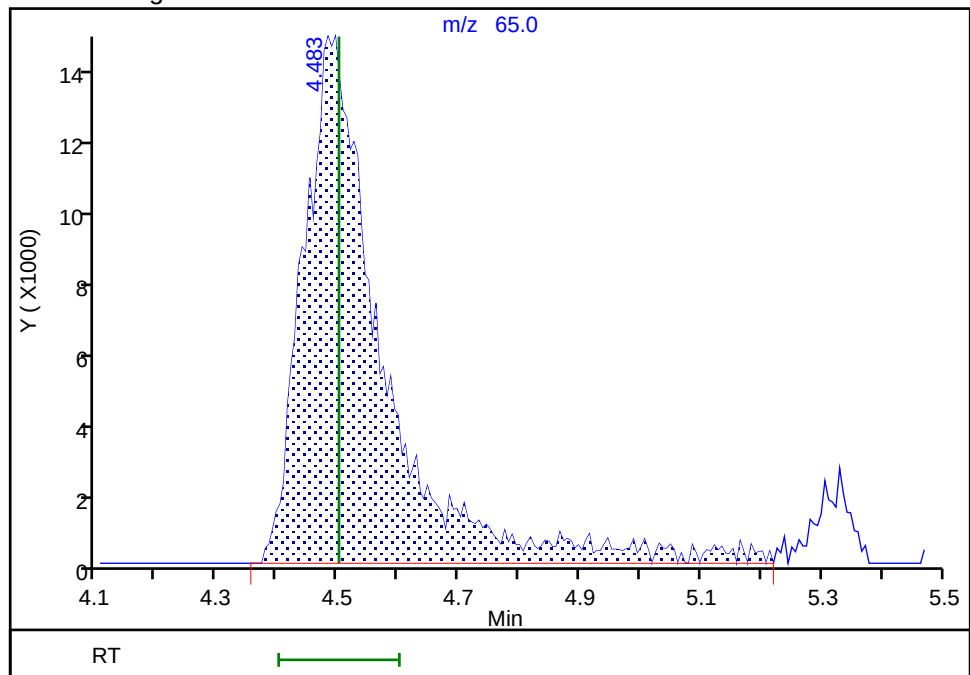
RT: 4.48
Area: 119342
Amount: 50.000000
Amount Units: ug/l

Processing Integration Results



RT: 4.48
Area: 128716
Amount: 50.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:36:51

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

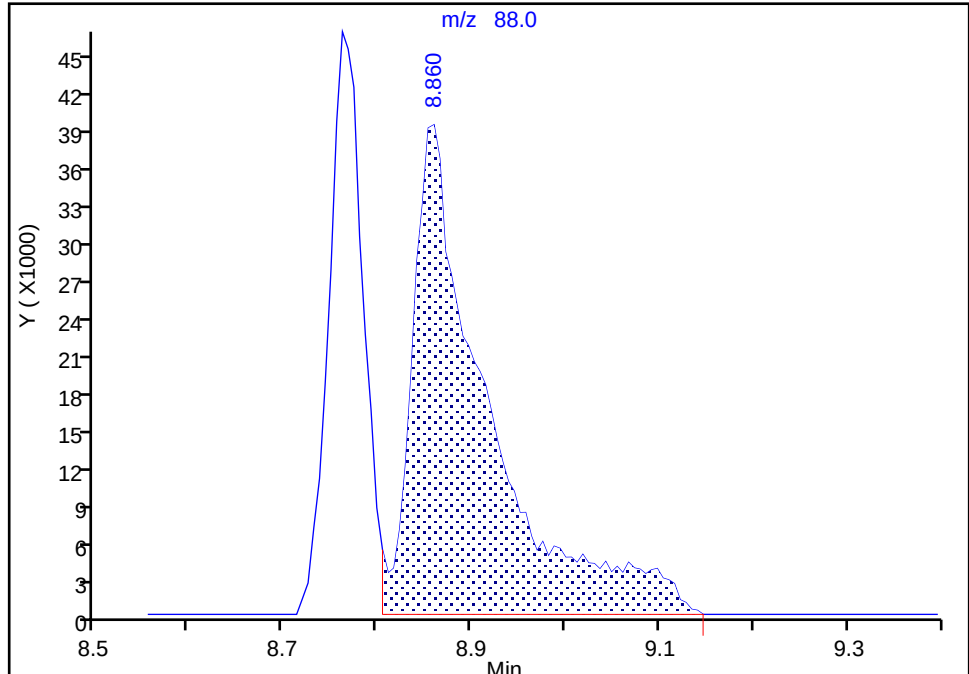
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Injection Date: 15-Sep-2020 18:23:30 Instrument ID: 19094
Lims ID: IC std7 25
Client ID:
Operator ID: kas02648 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

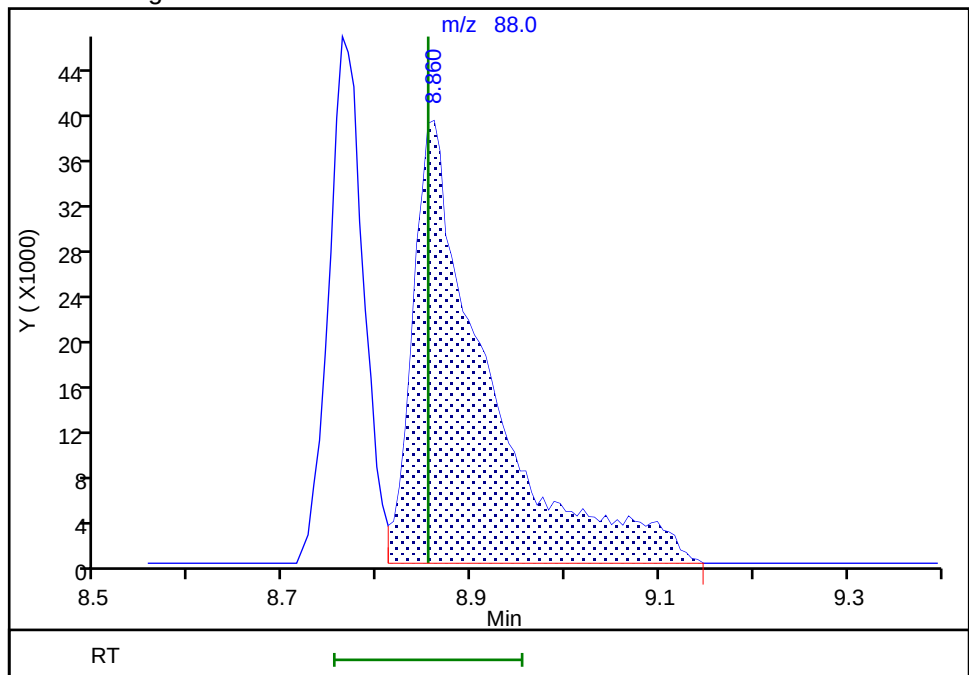
RT: 8.86
Area: 220270
Amount: 1169.4984
Amount Units: ug/l

Processing Integration Results



RT: 8.86
Area: 218359
Amount: 1296.3586
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:37:13

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i02.D
 Lims ID: ICIS 10
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 15-Sep-2020 18:44:30 ALS Bottle#: 13 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0010497-013
 Misc. Info.: ICIS 10
 Operator ID: kas02648 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 15-Sep-2020 23:44:20 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1035

First Level Reviewer: campbellme

Date: 15-Sep-2020 22:38:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.068	2.068	0.000	99	681868	10.0	10.7	
6 Chloromethane	50	2.276	2.276	0.000	99	885122	10.0	10.0	
8 Butadiene	39	2.398	2.398	0.000	94	798712	10.0	10.3	
7 Vinyl chloride	62	2.404	2.404	0.000	97	816760	10.0	10.4	
9 Bromomethane	94	2.739	2.739	0.000	91	545938	10.0	10.2	
10 Chloroethane	64	2.837	2.837	0.000	100	511355	10.0	10.1	
11 Dichlorofluoromethane	67	3.086	3.086	0.000	97	1049556	10.0	10.1	
13 Trichlorofluoromethane	101	3.160	3.160	0.000	98	1055509	10.0	10.3	
15 Ethyl ether	59	3.434	3.434	0.000	94	468896	10.0	10.2	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.513	3.513	0.000	95	754771	10.0	10.5	
17 Acrolein	56	3.617	3.617	0.000	100	3755426	500.9	518.5	
18 1,1-Dichloroethene	96	3.763	3.763	0.000	97	540721	10.0	10.4	
20 112TCTFE	101	3.794	3.794	0.000	93	619247	10.0	10.8	
19 Acetone	43	3.794	3.794	0.000	99	899172	100.0	95.3	
22 Iodomethane	142	3.970	3.970	0.000	99	1032916	10.0	10.6	
21 Isopropyl alcohol	45	3.977	3.977	0.000	96	348678	200.0	204.3	
23 Ethyl bromide	108	4.001	4.001	0.000	98	448350	10.0	10.2	
24 Carbon disulfide	76	4.086	4.086	0.000	99	1818283	10.0	10.4	
26 Methyl acetate	43	4.239	4.239	0.000	98	250816	10.0	9.06	
27 3-Chloro-1-propene	41	4.275	4.275	0.000	92	1003573	10.0	10.2	
29 Methylene Chloride	84	4.470	4.470	0.000	95	604838	10.0	10.4	
* 28 t-Butyl alcohol-d10 (IS)	65	4.483	4.483	0.000	0	137845	50.0	50.0	
30 2-Methyl-2-propanol	59	4.623	4.623	0.000	99	606250	200.0	210.3	
31 Acrylonitrile	53	4.818	4.818	0.000	98	622989	50.0	53.1	
32 Methyl tert-butyl ether	73	4.879	4.879	0.000	96	1376165	10.0	10.8	
33 trans-1,2-Dichloroethene	96	4.903	4.903	0.000	99	613532	10.0	10.6	
34 Hexane	57	5.312	5.312	0.000	94	1002600	10.0	11.0	
35 1,1-Dichloroethane	63	5.562	5.562	0.000	96	1206058	10.0	10.5	
37 Isopropyl ether	45	5.610	5.610	0.000	95	2142632	10.0	10.8	
38 2-Chloro-1,3-butadiene	53	5.665	5.665	0.000	91	1037491	10.0	10.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	6.141	6.141	0.000	99	1782918	10.0	10.8	
41 2-Butanone (MEK)	43	6.336	6.336	0.000	100	1610122	100.0	104.8	
42 cis-1,2-Dichloroethene	96	6.379	6.379	0.000	83	691625	10.0	10.5	
43 2,2-Dichloropropane	77	6.397	6.397	0.000	89	911533	10.0	10.7	
45 Propionitrile	54	6.433	6.433	0.000	99	871305	200.0	204.7	
47 Methacrylonitrile	67	6.647	6.647	0.000	93	1538168	100.0	104.1	
49 Tetrahydrofuran	71	6.714	6.714	0.000	89	405961	100.0	105.7	
48 Chlorobromomethane	128	6.714	6.714	0.000	93	282168	10.0	9.97	
50 Chloroform	83	6.860	6.860	0.000	93	1117552	10.0	10.2	
\$ 51 Dibromofluoromethane (Surr)	113	7.073	7.073	0.000	94	534607	10.0	9.94	
52 1,1,1-Trichloroethane	97	7.092	7.092	0.000	98	967682	10.0	10.6	
53 Cyclohexane	56	7.189	7.189	0.000	92	1216693	10.0	10.8	
55 1,1-Dichloropropene	75	7.293	7.293	0.000	98	911190	10.0	10.8	
56 Carbon tetrachloride	117	7.299	7.299	0.000	96	851398	10.0	10.6	
57 Isobutyl alcohol	41	7.427	7.427	0.000	95	550090	500.0	510.8	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.531	7.531	0.000	0	109528	10.0	9.94	
59 Benzene	78	7.561	7.561	0.000	97	2647245	10.0	10.4	
60 1,2-Dichloroethane	62	7.628	7.628	0.000	97	644639	10.0	9.83	
62 Tert-amyl methyl ether	73	7.744	7.744	0.000	98	1494588	10.0	11.0	
* 65 Fluorobenzene (IS)	96	7.957	7.957	0.000	98	2194930	10.0	10.0	
64 n-Heptane	43	7.964	7.964	0.000	94	1186734	10.0	10.9	
66 n-Butanol	56	8.299	8.299	0.000	90	979995	1000.0	1132.7	
67 Trichloroethene	95	8.433	8.433	0.000	99	670938	10.0	10.5	
68 Methylcyclohexane	83	8.744	8.744	0.000	96	1206511	10.0	10.7	
69 2-ethoxy-2-methyl butane	87	8.762	8.762	0.000	90	881441	10.0	11.0	
70 1,2-Dichloropropane	63	8.768	8.768	0.000	87	688938	10.0	10.5	
71 Methyl methacrylate	69	8.835	8.835	0.000	91	278168	10.0	10.6	
72 1,4-Dioxane	88	8.860	8.860	0.000	94	109985	500.0	609.7	M
73 Dibromomethane	93	8.878	8.878	0.000	97	291068	10.0	10.2	
75 Dichlorobromomethane	83	9.110	9.110	0.000	99	786970	10.0	10.7	
76 2-Nitropropane	41	9.366	9.366	0.000	99	804862	100.0	106.0	
79 1-Bromo-2-chloroethane	63	9.488	9.488	0.000	98	389574	10.0	10.2	
80 cis-1,3-Dichloropropene	75	9.634	9.634	0.000	95	968922	10.0	11.1	
81 4-Methyl-2-pentanone (MIBK)	43	9.792	9.792	0.000	97	4027057	100.0	106.4	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	2135156	10.0	10.0	
83 Toluene	92	10.006	10.006	0.000	98	1623281	10.0	10.5	
85 trans-1,3-Dichloropropene	75	10.250	10.250	0.000	94	754879	10.0	10.8	
86 Ethyl methacrylate	69	10.305	10.305	0.000	90	615131	10.0	11.3	
87 1,1,2-Trichloroethane	97	10.451	10.451	0.000	90	417684	10.0	10.6	
88 Tetrachloroethene	166	10.542	10.542	0.000	98	740663	10.0	10.4	
89 1,3-Dichloropropane	76	10.609	10.609	0.000	92	759084	10.0	10.5	
91 2-Hexanone	43	10.652	10.652	0.000	98	2775067	100.0	108.2	
93 Chlorodibromomethane	129	10.823	10.823	0.000	90	508721	10.0	10.9	
94 Ethylene Dibromide	107	10.939	10.939	0.000	98	403954	10.0	10.6	
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.353	0.000	86	1597709	10.0	10.0	
96 1-Chlorohexane	91	11.359	11.359	0.000	79	963581	10.0	10.6	
98 Chlorobenzene	112	11.384	11.384	0.000	94	1756764	10.0	10.6	
99 1,1,1,2-Tetrachloroethane	131	11.463	11.463	0.000	44	612122	10.0	10.6	
100 Ethylbenzene	91	11.463	11.463	0.000	99	3182143	10.0	10.8	
101 m-Xylene & p-Xylene	106	11.573	11.573	0.000	0	2399213	20.0	21.7	
102 o-Xylene	106	11.902	11.902	0.000	97	1168664	10.0	10.9	
103 Styrene	104	11.914	11.914	0.000	95	1953012	10.0	11.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 Bromoform	173	12.079	12.079	0.000	97	296928	10.0	11.4	
105 Isopropylbenzene	105	12.194	12.194	0.000	96	3186126	10.0	11.1	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.341	12.341	0.000	90	772084	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.432	12.432	0.000	93	513178	10.0	10.5	
111 Bromobenzene	156	12.457	12.457	0.000	91	711236	10.0	10.6	
110 trans-1,4-Dichloro-2-butene	53	12.457	12.457	0.000	93	1462317	100.0	106.8	
112 1,2,3-Trichloropropane	110	12.487	12.487	0.000	85	132121	10.0	10.5	
113 N-Propylbenzene	91	12.518	12.518	0.000	99	3889320	10.0	10.8	
114 2-Chlorotoluene	126	12.597	12.597	0.000	96	734368	10.0	10.7	
115 1,3,5-Trimethylbenzene	105	12.652	12.652	0.000	94	2688029	10.0	11.0	
116 4-Chlorotoluene	126	12.688	12.688	0.000	98	744697	10.0	10.7	
118 tert-Butylbenzene	134	12.896	12.896	0.000	93	587509	10.0	11.0	
119 Pentachloroethane	167	12.932	12.932	0.000	93	440778	10.0	10.5	
120 1,2,4-Trimethylbenzene	105	12.938	12.938	0.000	97	2739838	10.0	11.1	
121 sec-Butylbenzene	105	13.054	13.054	0.000	95	3709908	10.0	11.1	
122 1,3-Dichlorobenzene	146	13.158	13.158	0.000	97	1422227	10.0	10.6	
123 4-Isopropyltoluene	119	13.164	13.164	0.000	97	3120286	10.0	11.3	
* 124 1,4-Dichlorobenzene-d4	152	13.213	13.213	0.000	94	840517	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.231	13.231	0.000	92	1383817	10.0	10.3	
126 1,2,3-Trimethylbenzene	120	13.237	13.237	0.000	98	1145863	10.0	10.5	
127 Benzyl chloride	126	13.304	13.304	0.000	99	188603	10.0	11.5	
129 p-Diethylbenzene	119	13.432	13.432	0.000	94	1946532	10.0	10.7	
130 n-Butylbenzene	92	13.450	13.450	0.000	98	1650362	10.0	11.0	
131 1,2-Dichlorobenzene	146	13.493	13.493	0.000	97	1272321	10.0	10.5	
134 1,2-Dibromo-3-Chloropropane	155	14.029	14.029	0.000	85	70536	10.0	10.6	
135 1,3,5-Trichlorobenzene	180	14.151	14.151	0.000	97	1166179	10.0	11.0	
136 1,2,4-Trichlorobenzene	180	14.572	14.572	0.000	94	977028	10.0	11.2	
137 Hexachlorobutadiene	225	14.651	14.651	0.000	97	558865	10.0	10.9	
138 Naphthalene	128	14.755	14.755	0.000	97	1691862	10.0	11.5	
139 1,2,3-Trichlorobenzene	180	14.901	14.901	0.000	95	866688	10.0	11.1	
140 2-Methylnaphthalene	142	15.547	15.547	0.000	92	1102785	10.0	9.87	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00024

Amount Added: 10.00

Units: uL

MSV_RV4_826_00026

Amount Added: 10.00

Units: uL

MSV_RV4GAS826_00077

Amount Added: 10.00

Units: uL

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 15-Sep-2020 23:44:21

Chrom Revision: 2.3 11-Sep-2020 20:57:08

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i02.D

Injection Date: 15-Sep-2020 18:44:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: ICIS 10

Worklist Smp#: 13

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

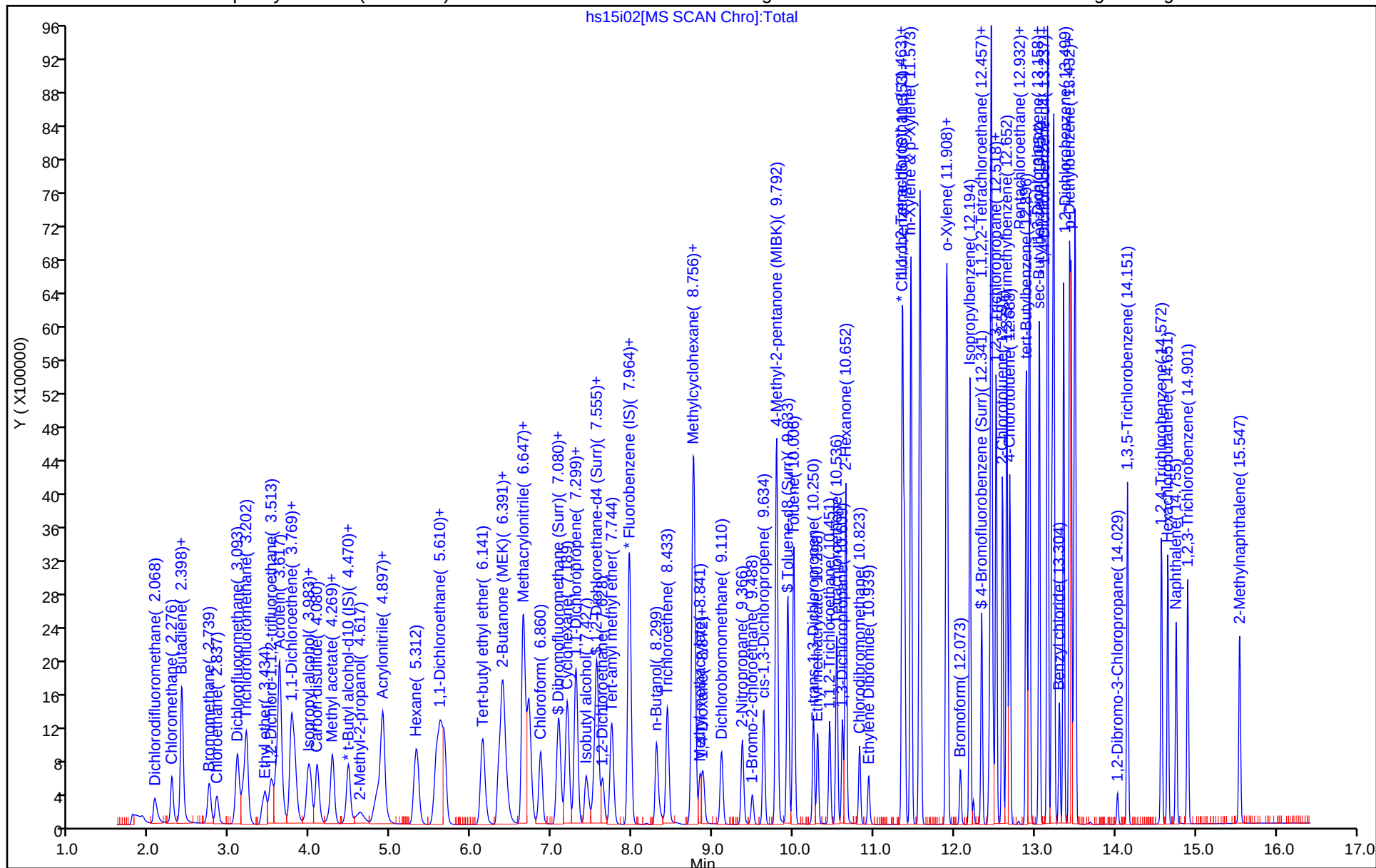
ALS Bottle#: 13

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

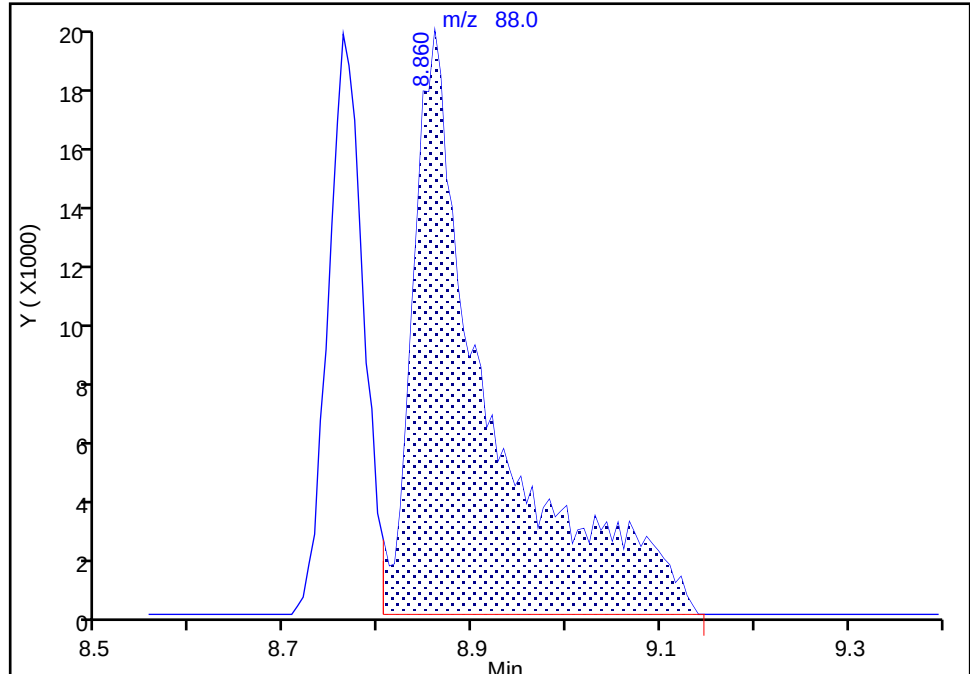
Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i02.D
Injection Date: 15-Sep-2020 18:44:30 Instrument ID: 19094
Lims ID: ICIS 10
Client ID:
Operator ID: kas02648 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

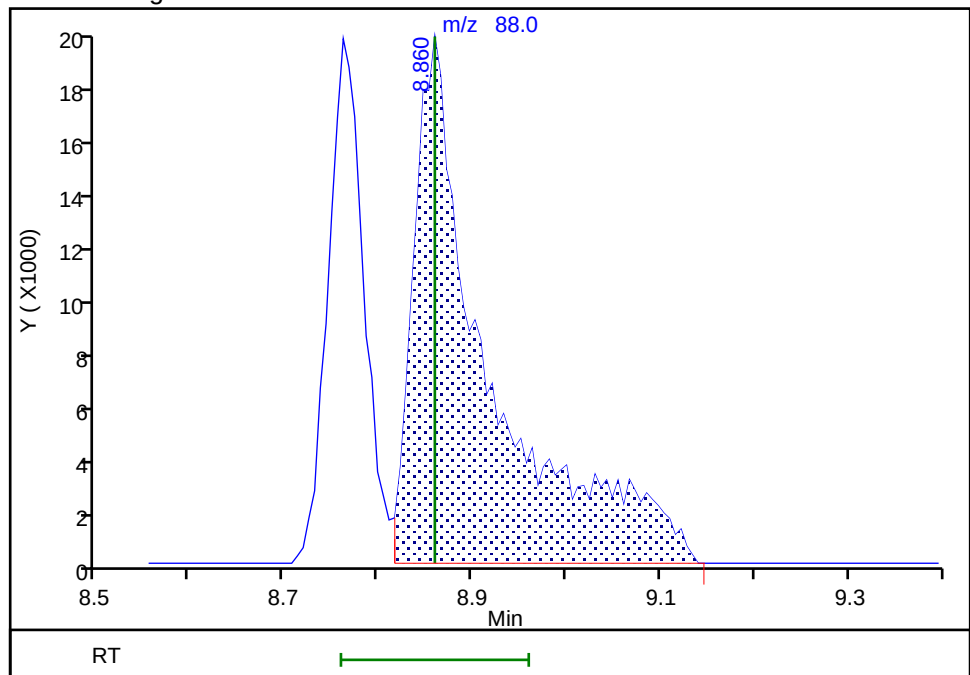
RT: 8.86
Area: 111507
Amount: 556.2388
Amount Units: ug/l

Processing Integration Results



RT: 8.86
Area: 109985
Amount: 609.7180
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:38:19

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i03.D
 Lims ID: IC std5 5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 15-Sep-2020 19:06:30 ALS Bottle#: 14 Worklist Smp#: 14
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0010497-014
 Misc. Info.: IC STD5 5
 Operator ID: kas02648 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 15-Sep-2020 23:44:31 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1035

First Level Reviewer: campbellme

Date: 15-Sep-2020 22:40:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.068	2.068	0.000	99	313665	5.00	5.33	M
6 Chloromethane	50	2.288	2.276	0.012	99	417494	5.00	5.09	
8 Butadiene	39	2.410	2.398	0.012	93	339954	5.00	4.73	
7 Vinyl chloride	62	2.416	2.404	0.012	98	382674	5.00	5.26	
9 Bromomethane	94	2.751	2.739	0.012	92	258837	5.00	5.22	
10 Chloroethane	64	2.849	2.837	0.013	100	240262	5.00	5.14	
11 Dichlorofluoromethane	67	3.099	3.086	0.013	97	498790	5.00	5.19	
13 Trichlorofluoromethane	101	3.178	3.160	0.018	97	493555	5.00	5.23	
15 Ethyl ether	59	3.446	3.434	0.012	93	225958	5.00	5.30	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.519	3.513	0.006	94	334449	5.00	5.01	
17 Acrolein	56	3.623	3.617	0.006	99	1775058	250.5	239.4	
18 1,1-Dichloroethene	96	3.769	3.763	0.006	97	241672	5.00	5.02	
20 112TCTFE	101	3.806	3.794	0.012	92	273927	5.00	5.17	
19 Acetone	43	3.806	3.794	0.012	99	425154	50.0	44.0	
22 Iodomethane	142	3.977	3.970	0.006	99	461076	5.00	5.12	
21 Isopropyl alcohol	45	3.977	3.977	-0.001	35	146337	100.0	92.6	
23 Ethyl bromide	108	4.013	4.001	0.012	99	214272	5.00	5.25	
24 Carbon disulfide	76	4.092	4.086	0.006	99	816182	5.00	5.04	
26 Methyl acetate	43	4.251	4.239	0.012	99	150724	5.00	5.32	
27 3-Chloro-1-propene	41	4.281	4.275	0.006	92	467062	5.00	5.14	
29 Methylene Chloride	84	4.483	4.470	0.012	96	271949	5.00	5.04	
* 28 t-Butyl alcohol-d10 (IS)	65	4.489	4.483	0.006	0	141095	50.0	50.0	
30 2-Methyl-2-propanol	59	4.617	4.623	-0.006	98	277208	100.0	93.9	
31 Acrylonitrile	53	4.830	4.818	0.012	97	294528	25.0	24.5	
32 Methyl tert-butyl ether	73	4.891	4.879	0.012	96	624274	5.00	5.27	
33 trans-1,2-Dichloroethene	96	4.903	4.903	0.000	99	271678	5.00	5.07	
34 Hexane	57	5.318	5.312	0.006	94	434776	5.00	5.17	
35 1,1-Dichloroethane	63	5.562	5.562	0.000	96	532687	5.00	4.99	
37 Isopropyl ether	45	5.616	5.610	0.006	95	948371	5.00	5.16	
38 2-Chloro-1,3-butadiene	53	5.671	5.665	0.006	91	452046	5.00	5.10	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	6.141	6.141	0.000	98	801522	5.00	5.25	
S 40 1,2-Dichloroethene, Total	100				0			10.2	
41 2-Butanone (MEK)	43	6.342	6.336	0.006	100	764188	50.0	48.6	
42 cis-1,2-Dichloroethene	96	6.391	6.379	0.013	83	309277	5.00	5.09	
43 2,2-Dichloropropane	77	6.403	6.397	0.006	87	404090	5.00	5.13	
45 Propionitrile	54	6.433	6.433	0.000	99	409385	100.0	94.0	
47 Methacrylonitrile	67	6.647	6.647	0.000	93	734405	50.0	48.6	
49 Tetrahydrofuran	71	6.720	6.714	0.006	85	190611	50.0	48.5	
48 Chlorobromomethane	128	6.720	6.714	0.006	77	139457	5.00	5.32	
50 Chloroform	83	6.866	6.860	0.006	93	499454	5.00	4.94	
\$ 51 Dibromofluoromethane (Surr)	113	7.080	7.073	0.007	94	502918	10.0	10.1	
52 1,1,1-Trichloroethane	97	7.092	7.092	0.000	99	426144	5.00	5.03	
53 Cyclohexane	56	7.195	7.189	0.006	92	534531	5.00	5.13	
55 1,1-Dichloropropene	75	7.305	7.293	0.012	95	401212	5.00	5.13	
56 Carbon tetrachloride	117	7.305	7.299	0.006	96	377086	5.00	5.07	
57 Isobutyl alcohol	41	7.427	7.427	0.000	94	248914	250.0	225.8	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.525	7.531	-0.006	0	108305	10.0	10.6	
59 Benzene	78	7.561	7.561	0.000	97	1191387	5.00	5.07	
60 1,2-Dichloroethane	62	7.634	7.628	0.006	97	309754	5.00	5.10	
62 Tert-amyl methyl ether	73	7.744	7.744	0.000	98	672979	5.00	5.34	
* 65 Fluorobenzene (IS)	96	7.964	7.957	0.007	99	2032542	10.0	10.0	
64 n-Heptane	43	7.964	7.964	0.000	94	525812	5.00	5.20	
66 n-Butanol	56	8.299	8.299	0.000	90	449596	500.0	507.7	M
67 Trichloroethene	95	8.439	8.433	0.006	99	297179	5.00	5.03	
68 Methylcyclohexane	83	8.750	8.744	0.006	96	541420	5.00	5.20	
69 2-ethoxy-2-methyl butane	87	8.768	8.762	0.006	89	397083	5.00	5.34	
70 1,2-Dichloropropane	63	8.768	8.768	0.000	85	316193	5.00	5.19	
71 Methyl methacrylate	69	8.841	8.835	0.006	91	135003	5.00	5.01	
72 1,4-Dioxane	88	8.860	8.860	0.000	91	53251	250.0	288.4	
73 Dibromomethane	93	8.884	8.878	0.006	96	135187	5.00	5.11	
75 Dichlorobromomethane	83	9.110	9.110	0.000	99	353129	5.00	5.20	
76 2-Nitropropane	41	9.366	9.366	0.000	98	376289	50.0	48.4	
79 1-Bromo-2-chloroethane	63	9.488	9.488	0.000	99	191278	5.00	5.40	
80 cis-1,3-Dichloropropene	75	9.634	9.634	0.000	95	425722	5.00	5.27	
81 4-Methyl-2-pentanone (MIBK)	43	9.792	9.792	0.000	97	1945422	50.0	50.2	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	1981940	10.0	10.0	
83 Toluene	92	10.006	10.006	0.000	97	731940	5.00	5.06	
S 84 1,3-Dichloropropene, Total	100				0			10.6	
85 trans-1,3-Dichloropropene	75	10.250	10.250	0.000	93	343829	5.00	5.30	
86 Ethyl methacrylate	69	10.305	10.305	0.000	90	275085	5.00	5.43	
87 1,1,2-Trichloroethane	97	10.451	10.451	0.000	90	192575	5.00	5.23	
88 Tetrachloroethene	166	10.542	10.542	0.000	98	327900	5.00	4.96	
89 1,3-Dichloropropane	76	10.609	10.609	0.000	91	350079	5.00	5.19	
91 2-Hexanone	43	10.652	10.652	0.000	98	1334847	50.0	50.9	
93 Chlorodibromomethane	129	10.823	10.823	0.000	90	230335	5.00	5.29	
94 Ethylene Dibromide	107	10.939	10.939	0.000	98	186047	5.00	5.26	
S 95 Xylenes, Total	106				0			15.5	
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.353	0.000	87	1488855	10.0	10.0	
96 1-Chlorohexane	91	11.353	11.359	-0.006	96	422839	5.00	5.01	
98 Chlorobenzene	112	11.384	11.384	0.000	94	788190	5.00	5.09	
99 1,1,1,2-Tetrachloroethane	131	11.463	11.463	0.000	43	273048	5.00	5.10	
100 Ethylbenzene	91	11.463	11.463	0.000	99	1428664	5.00	5.19	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 m-Xylene & p-Xylene	106	11.573	11.573	0.000	0	1066281	10.0	10.3	
102 o-Xylene	106	11.902	11.902	0.000	98	517672	5.00	5.19	
103 Styrene	104	11.914	11.914	0.000	95	863346	5.00	5.37	
104 Bromoform	173	12.072	12.079	-0.007	97	131216	5.00	5.41	
105 Isopropylbenzene	105	12.194	12.194	0.000	96	1417087	5.00	5.28	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.341	12.341	0.000	90	723297	10.0	10.1	
109 1,1,2,2-Tetrachloroethane	83	12.432	12.432	0.000	93	244158	5.00	5.34	
111 Bromobenzene	156	12.457	12.457	0.000	91	323955	5.00	5.17	
110 trans-1,4-Dichloro-2-butene	53	12.457	12.457	0.000	90	688888	50.0	49.1	
112 1,2,3-Trichloropropane	110	12.481	12.487	-0.006	80	62613	5.00	5.37	
113 N-Propylbenzene	91	12.518	12.518	0.000	99	1724476	5.00	5.16	
114 2-Chlorotoluene	126	12.597	12.597	0.000	96	332124	5.00	5.19	
115 1,3,5-Trimethylbenzene	105	12.652	12.652	0.000	94	1201528	5.00	5.26	
116 4-Chlorotoluene	126	12.688	12.688	0.000	98	334251	5.00	5.18	
118 tert-Butylbenzene	134	12.895	12.896	-0.001	94	261251	5.00	5.27	
119 Pentachloroethane	167	12.932	12.932	0.000	89	207757	5.00	5.32	
120 1,2,4-Trimethylbenzene	105	12.932	12.938	-0.006	97	1217506	5.00	5.31	
121 sec-Butylbenzene	105	13.054	13.054	0.000	95	1632951	5.00	5.25	
122 1,3-Dichlorobenzene	146	13.158	13.158	0.000	98	633996	5.00	5.05	
123 4-Isopropyltoluene	119	13.164	13.164	0.000	97	1380845	5.00	5.38	
* 124 1,4-Dichlorobenzene-d4	152	13.213	13.213	-0.001	95	782943	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.231	13.231	0.000	94	623893	5.00	5.01	
126 1,2,3-Trimethylbenzene	120	13.237	13.237	0.000	99	534963	5.00	5.24	
127 Benzyl chloride	126	13.304	13.304	0.000	98	85735	5.00	5.59	
129 p-Diethylbenzene	119	13.432	13.432	0.000	94	909228	5.00	5.39	
130 n-Butylbenzene	92	13.450	13.450	0.000	98	740319	5.00	5.32	
131 1,2-Dichlorobenzene	146	13.487	13.493	-0.006	97	571836	5.00	5.05	
134 1,2-Dibromo-3-Chloropropane	155	14.029	14.029	0.000	84	33502	5.00	5.42	
135 1,3,5-Trichlorobenzene	180	14.151	14.151	0.000	97	505440	5.00	5.13	
136 1,2,4-Trichlorobenzene	180	14.572	14.572	0.000	95	420632	5.00	5.16	
137 Hexachlorobutadiene	225	14.651	14.651	0.000	97	253535	5.00	5.30	
138 Naphthalene	128	14.755	14.755	0.000	97	769299	5.00	5.59	
139 1,2,3-Trichlorobenzene	180	14.901	14.901	0.000	96	387969	5.00	5.33	
140 2-Methylnaphthalene	142	15.547	15.547	0.000	93	499911	5.00	4.89	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00024

Amount Added: 5.00

Units: uL

MSV_RV4_826_00026

Amount Added: 5.00

Units: uL

MSV_RV4GAS826_00077

Amount Added: 5.00

Units: uL

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 15-Sep-2020 23:44:32

Chrom Revision: 2.3 11-Sep-2020 20:57:08

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i03.D

Injection Date: 15-Sep-2020 19:06:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std5 5

Worklist Smp#: 14

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

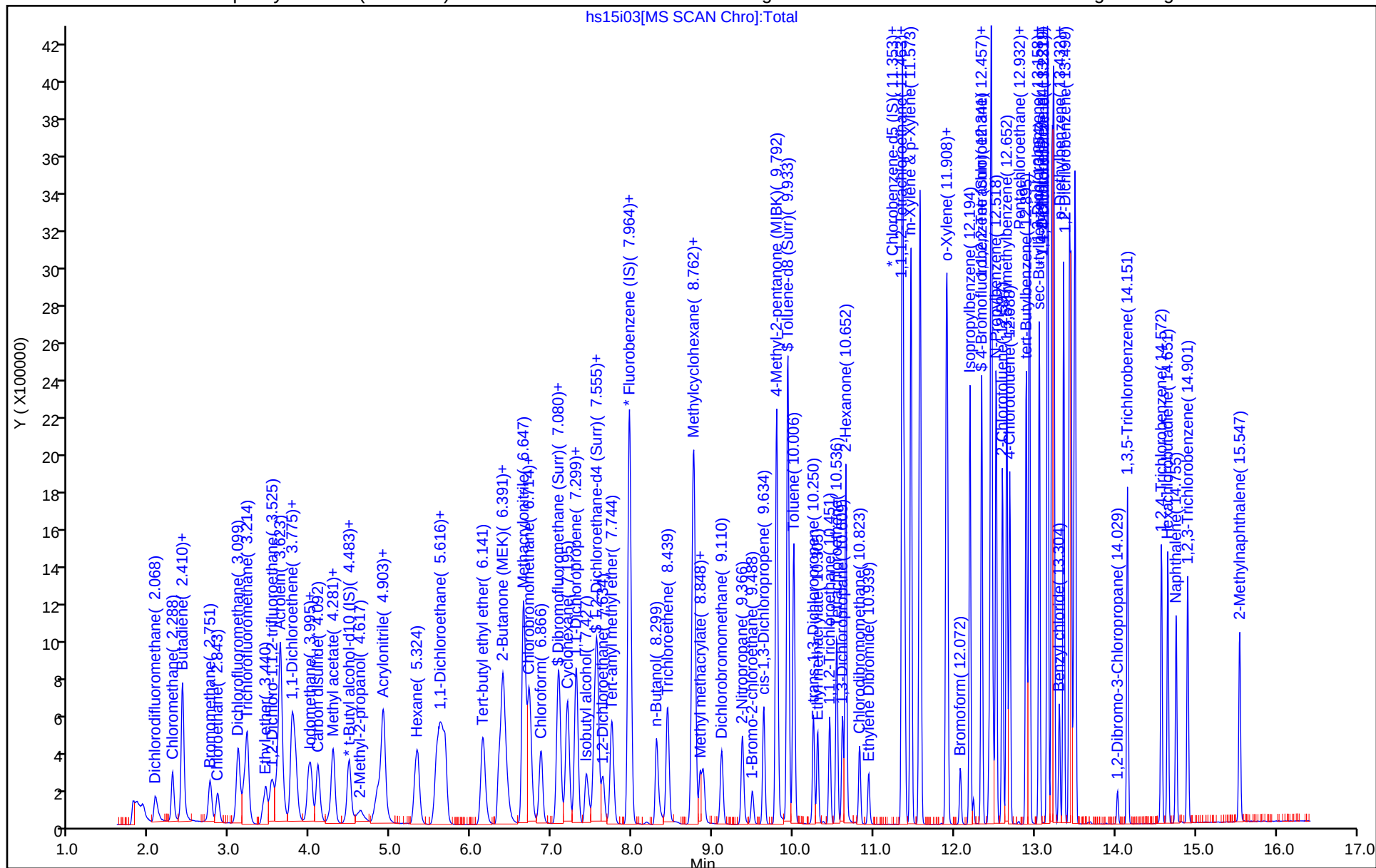
ALS Bottle#: 14

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

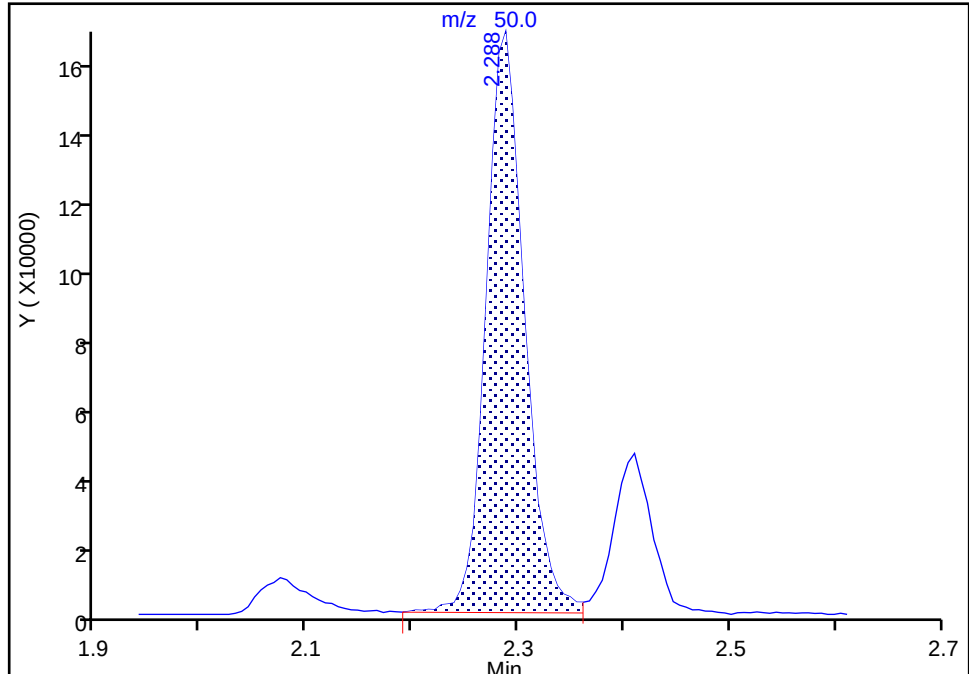
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Injection Date: 15-Sep-2020 19:06:30 Instrument ID: 19094
Lims ID: IC std5 5
Client ID:
Operator ID: kas02648 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

6 Chloromethane, CAS: 74-87-3

Signal: 1

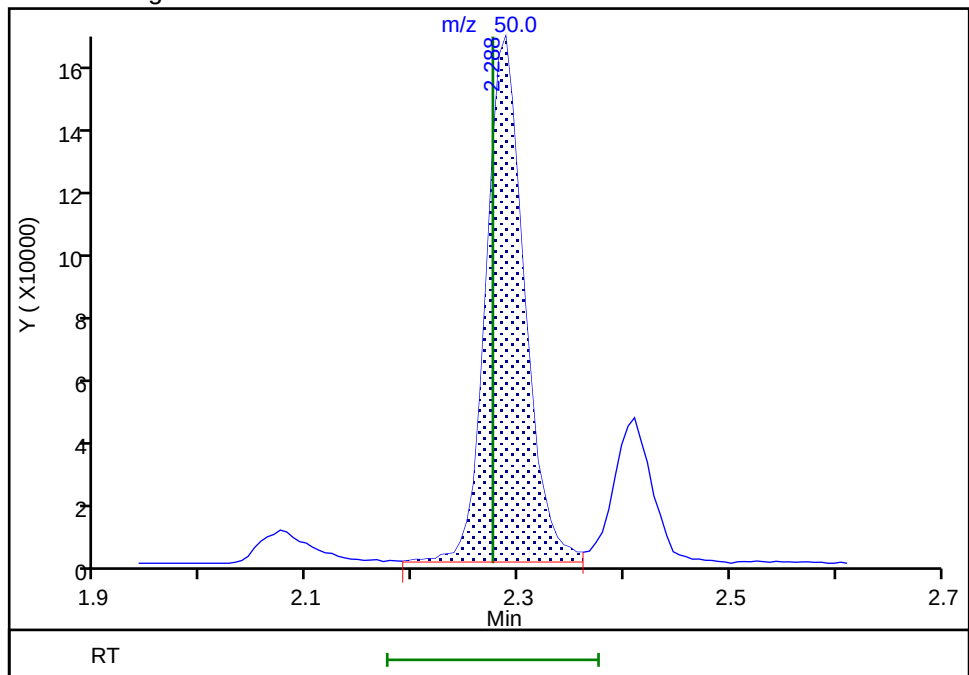
RT: 2.29
Area: 416083
Amount: 5.074771
Amount Units: ug/l

Processing Integration Results



RT: 2.29
Area: 417494
Amount: 5.089478
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:39:01

Audit Action: Assigned New Baseline

Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC

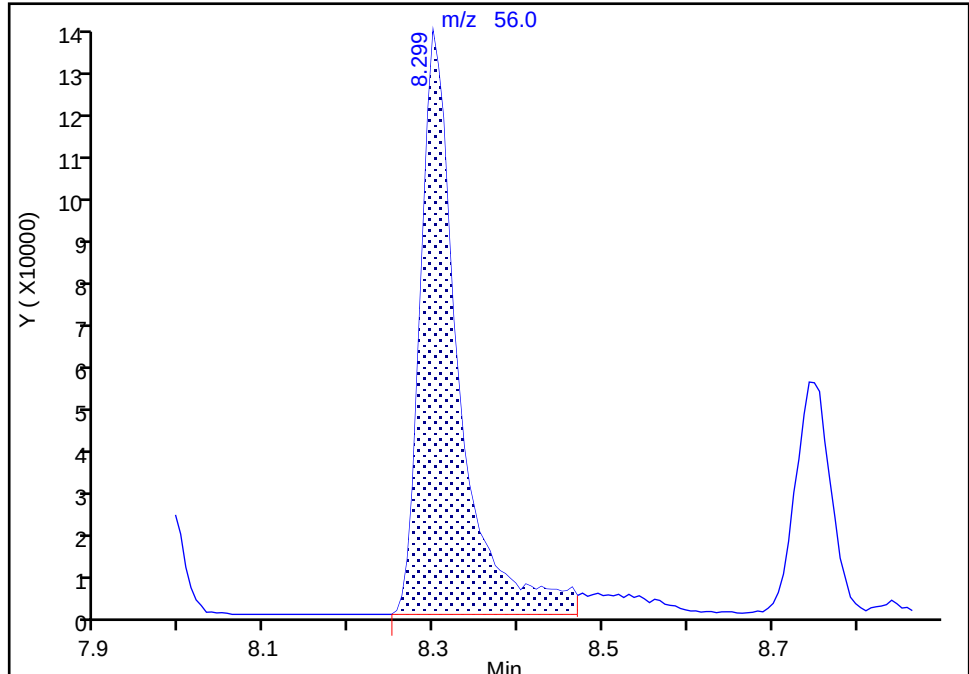
Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i03.D
Injection Date: 15-Sep-2020 19:06:30 Instrument ID: 19094
Lims ID: IC std5 5
Client ID:
Operator ID: kas02648 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

66 n-Butanol, CAS: 71-36-3

Signal: 1

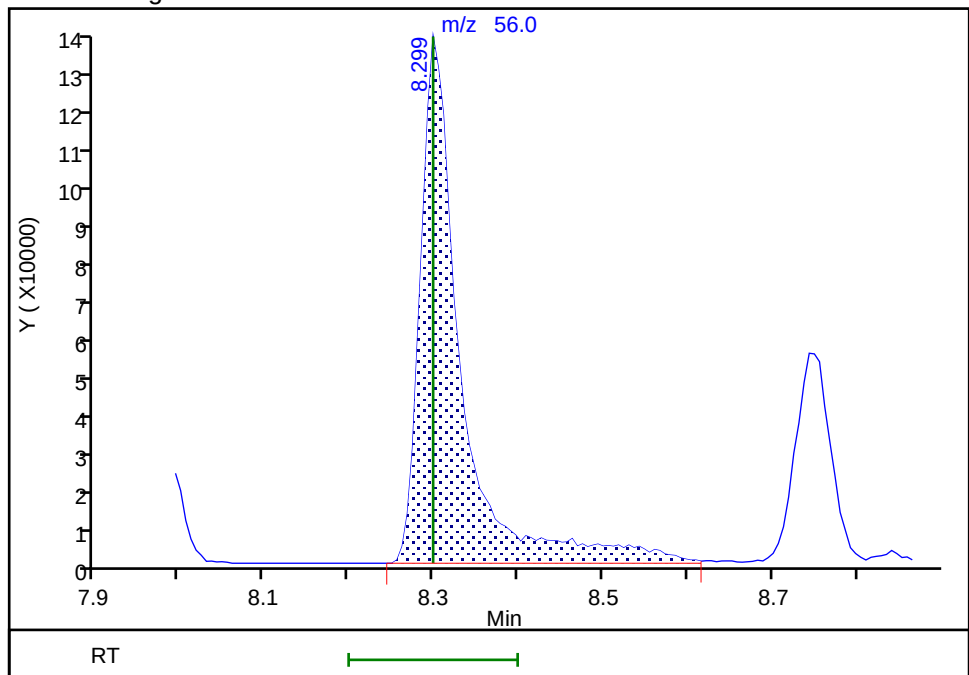
RT: 8.30
Area: 421627
Amount: 496.8033
Amount Units: ug/l

Processing Integration Results



RT: 8.30
Area: 449596
Amount: 507.6908
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:39:50

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i04.D
 Lims ID: IC std4 2
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 15-Sep-2020 19:28:30 ALS Bottle#: 15 Worklist Smp#: 15
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0010497-015
 Misc. Info.: IC STD4 2
 Operator ID: kas02648 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 15-Sep-2020 23:44:42 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1035

First Level Reviewer: campbellme

Date: 15-Sep-2020 22:41:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.075	2.075	0.000	99	117329	2.00	2.08	M
6 Chloromethane	50	2.282	2.282	0.000	99	156122	2.00	1.98	
8 Butadiene	39	2.404	2.404	0.000	96	129149	2.00	1.88	
7 Vinyl chloride	62	2.404	2.404	0.000	97	140095	2.00	2.01	
9 Bromomethane	94	2.745	2.745	0.000	91	95459	2.00	2.01	
10 Chloroethane	64	2.843	2.843	0.000	100	90426	2.00	2.02	
11 Dichlorofluoromethane	67	3.087	3.087	0.000	97	182826	2.00	1.98	
13 Trichlorofluoromethane	101	3.166	3.166	0.000	96	181966	2.00	2.01	
15 Ethyl ether	59	3.440	3.440	0.000	95	89645	2.00	2.19	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.519	3.519	0.000	94	123169	2.00	1.93	
17 Acrolein	56	3.617	3.617	0.000	99	663640	100.2	90.2	
18 1,1-Dichloroethene	96	3.769	3.769	0.000	97	90851	2.00	1.97	
20 1,1,2,2-Tetrafluoroethane	101	3.800	3.800	0.000	94	102748	2.00	2.02	
19 Acetone	43	3.800	3.800	0.000	99	165632	20.0	17.3	
22 Iodomethane	142	3.977	3.977	0.000	99	166819	2.00	1.93	
21 Isopropyl alcohol	45	3.977	3.977	0.000	44	60488	40.0	39.9	
23 Ethyl bromide	108	4.007	4.007	0.000	98	83461	2.00	2.13	
24 Carbon disulfide	76	4.092	4.092	0.000	100	300163	2.00	1.93	
26 Methyl acetate	43	4.245	4.245	0.000	59	53459	2.00	1.90	
27 3-Chloro-1-propene	41	4.275	4.275	0.000	92	183860	2.00	2.11	
29 Methylene Chloride	84	4.477	4.477	0.000	95	99619	2.00	1.93	
* 28 t-Butyl alcohol-d10 (IS)	65	4.489	4.489	0.000	0	140079	50.0	50.0	
30 2-Methyl-2-propanol	59	4.629	4.629	0.000	98	107555	40.0	36.7	
31 Acrylonitrile	53	4.818	4.818	0.000	99	108565	10.0	9.11	
32 Methyl tert-butyl ether	73	4.891	4.891	0.000	97	226042	2.00	1.99	
33 trans-1,2-Dichloroethene	96	4.903	4.903	0.000	98	97153	2.00	1.89	
34 Hexane	57	5.324	5.324	0.000	93	158369	2.00	1.96	
35 1,1-Dichloroethane	63	5.562	5.562	0.000	96	199112	2.00	1.94	
37 Isopropyl ether	45	5.604	5.604	0.000	96	340597	2.00	1.93	
38 2-Chloro-1,3-butadiene	53	5.665	5.665	0.000	92	163390	2.00	1.92	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	6.141	6.141	0.000	98	280220	2.00	1.92	
S 40 1,2-Dichloroethene, Total	100				0			3.85	
41 2-Butanone (MEK)	43	6.336	6.336	0.000	100	277681	20.0	17.8	
42 cis-1,2-Dichloroethene	96	6.379	6.379	0.000	83	114457	2.00	1.96	
43 2,2-Dichloropropane	77	6.403	6.403	0.000	88	144151	2.00	1.91	
45 Propionitrile	54	6.433	6.433	0.000	99	155249	40.0	35.9	
47 Methacrylonitrile	67	6.647	6.647	0.000	93	265340	20.0	17.7	
49 Tetrahydrofuran	71	6.714	6.714	0.000	90	69620	20.0	17.8	
48 Chlorobromomethane	128	6.720	6.720	0.000	75	54632	2.00	2.17	
50 Chloroform	83	6.866	6.866	0.000	94	180653	2.00	1.86	
\$ 51 Dibromofluoromethane (Surr)	113	7.074	7.074	0.000	93	480819	10.0	10.1	
52 1,1,1-Trichloroethane	97	7.092	7.092	0.000	98	158861	2.00	1.95	
53 Cyclohexane	56	7.196	7.196	0.000	93	190947	2.00	1.91	
55 1,1-Dichloropropene	75	7.299	7.299	0.000	95	145558	2.00	1.94	
56 Carbon tetrachloride	117	7.305	7.305	0.000	82	134797	2.00	1.89	
57 Isobutyl alcohol	41	7.433	7.433	0.000	95	94472	100.0	86.3	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.525	7.525	0.000	0	101954	10.0	10.4	
59 Benzene	78	7.561	7.561	0.000	95	423740	2.00	1.88	
60 1,2-Dichloroethane	62	7.628	7.628	0.000	97	112638	2.00	1.93	
62 Tert-amyl methyl ether	73	7.738	7.738	0.000	97	234854	2.00	1.94	
* 65 Fluorobenzene (IS)	96	7.958	7.958	0.000	98	1949394	10.0	10.0	
64 n-Heptane	43	7.964	7.964	0.000	83	192733	2.00	1.99	
66 n-Butanol	56	8.305	8.305	0.000	90	161595	200.0	183.8	M
67 Trichloroethene	95	8.433	8.433	0.000	99	107578	2.00	1.90	
68 Methylcyclohexane	83	8.744	8.744	0.000	95	215033	2.00	2.15	
69 2-ethoxy-2-methyl butane	87	8.762	8.762	0.000	90	133777	2.00	1.88	
70 1,2-Dichloropropane	63	8.768	8.768	0.000	83	112503	2.00	1.93	
71 Methyl methacrylate	69	8.842	8.842	0.000	94	46466	2.00	1.74	
72 1,4-Dioxane	88	8.854	8.854	0.000	92	20136	100.0	109.8	
73 Dibromomethane	93	8.878	8.878	0.000	96	50480	2.00	1.99	
75 Dichlorobromomethane	83	9.110	9.110	0.000	99	123629	2.00	1.90	
76 2-Nitropropane	41	9.366	9.366	0.000	98	133224	20.0	17.3	
79 1-Bromo-2-chloroethane	63	9.488	9.488	0.000	99	71431	2.00	2.10	
80 cis-1,3-Dichloropropene	75	9.628	9.628	0.000	95	150175	2.00	1.94	
81 4-Methyl-2-pentanone (MIBK)	43	9.793	9.793	0.000	98	684164	20.0	17.8	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	1893965	10.0	9.97	
83 Toluene	92	10.006	10.006	0.000	98	262939	2.00	1.90	
S 84 1,3-Dichloropropene, Total	100				0			3.89	
85 trans-1,3-Dichloropropene	75	10.250	10.250	0.000	93	121485	2.00	1.95	
86 Ethyl methacrylate	69	10.299	10.299	0.000	91	93897	2.00	1.93	
87 1,1,2-Trichloroethane	97	10.451	10.451	0.000	90	67913	2.00	1.93	
88 Tetrachloroethene	166	10.536	10.536	0.000	98	119501	2.00	1.89	
89 1,3-Dichloropropane	76	10.609	10.609	0.000	91	127443	2.00	1.97	
91 2-Hexanone	43	10.652	10.652	0.000	98	465521	20.0	17.9	
93 Chlorodibromomethane	129	10.823	10.823	0.000	90	81298	2.00	1.95	
94 Ethylene Dibromide	107	10.939	10.939	0.000	98	66693	2.00	1.97	
S 95 Xylenes, Total	106				0			5.72	
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.353	0.000	86	1426286	10.0	10.0	
96 1-Chlorohexane	91	11.353	11.353	0.000	41	152345	2.00	1.88	
98 Chlorobenzene	112	11.384	11.384	0.000	95	280738	2.00	1.89	
99 1,1,1,2-Tetrachloroethane	131	11.457	11.457	0.000	91	99811	2.00	1.94	
100 Ethylbenzene	91	11.463	11.463	0.000	99	500197	2.00	1.90	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 m-Xylene & p-Xylene	106	11.573	11.573	0.000	0	377756	4.00	3.82	
102 o-Xylene	106	11.902	11.902	0.000	97	181650	2.00	1.90	
103 Styrene	104	11.914	11.914	0.000	95	296403	2.00	1.92	
104 Bromoform	173	12.073	12.073	0.000	96	44575	2.00	1.92	
105 Isopropylbenzene	105	12.195	12.195	0.000	96	486357	2.00	1.89	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.341	12.341	0.000	90	697804	10.0	10.1	
109 1,1,2,2-Tetrachloroethane	83	12.432	12.432	0.000	92	85788	2.00	1.97	
111 Bromobenzene	156	12.457	12.457	0.000	77	115375	2.00	1.93	
110 trans-1,4-Dichloro-2-butene	53	12.457	12.457	0.000	92	242285	20.0	17.4	
112 1,2,3-Trichloropropane	110	12.481	12.481	0.000	82	24122	2.00	2.16	
113 N-Propylbenzene	91	12.518	12.518	0.000	99	618419	2.00	1.94	
114 2-Chlorotoluene	126	12.597	12.597	0.000	96	118819	2.00	1.94	
115 1,3,5-Trimethylbenzene	105	12.652	12.652	0.000	94	417261	2.00	1.91	
116 4-Chlorotoluene	126	12.688	12.688	0.000	98	118948	2.00	1.93	
118 tert-Butylbenzene	134	12.896	12.896	0.000	94	90044	2.00	1.90	
119 Pentachloroethane	167	12.932	12.932	0.000	80	78563	2.00	2.11	
120 1,2,4-Trimethylbenzene	105	12.932	12.932	0.000	97	423084	2.00	1.93	
121 sec-Butylbenzene	105	13.054	13.054	0.000	95	583032	2.00	1.96	
122 1,3-Dichlorobenzene	146	13.158	13.158	0.000	97	229712	2.00	1.92	
123 4-Isopropyltoluene	119	13.164	13.164	0.000	97	479126	2.00	1.95	
* 124 1,4-Dichlorobenzene-d4	152	13.213	13.213	0.000	96	747846	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.231	13.231	0.000	96	226212	2.00	1.90	
126 1,2,3-Trimethylbenzene	120	13.237	13.237	0.000	99	207537	2.00	2.13	
127 Benzyl chloride	126	13.304	13.304	0.000	98	27390	2.00	1.87	
129 p-Diethylbenzene	119	13.432	13.432	0.000	95	350479	2.00	2.17	
130 n-Butylbenzene	92	13.450	13.450	0.000	98	266669	2.00	2.00	
131 1,2-Dichlorobenzene	146	13.487	13.487	0.000	97	205871	2.00	1.90	
134 1,2-Dibromo-3-Chloropropane	155	14.030	14.030	0.000	83	12003	2.00	2.03	
135 1,3,5-Trichlorobenzene	180	14.151	14.151	0.000	97	178151	2.00	1.89	
136 1,2,4-Trichlorobenzene	180	14.572	14.572	0.000	94	147930	2.00	1.90	
137 Hexachlorobutadiene	225	14.651	14.651	0.000	96	88688	2.00	1.94	
138 Naphthalene	128	14.755	14.755	0.000	97	253921	2.00	1.93	
139 1,2,3-Trichlorobenzene	180	14.901	14.901	0.000	95	133824	2.00	1.92	
140 2-Methylnaphthalene	142	15.548	15.548	0.000	93	163713	2.00	1.79	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00024

Amount Added: 2.00

Units: uL

MSV_RV4_826_00026

Amount Added: 2.00

Units: uL

MSV_RV4GAS826_00077

Amount Added: 2.00

Units: uL

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 15-Sep-2020 23:44:44

Chrom Revision: 2.3 11-Sep-2020 20:57:08

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i04.D

Injection Date: 15-Sep-2020 19:28:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std4 2

Worklist Smp#: 15

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

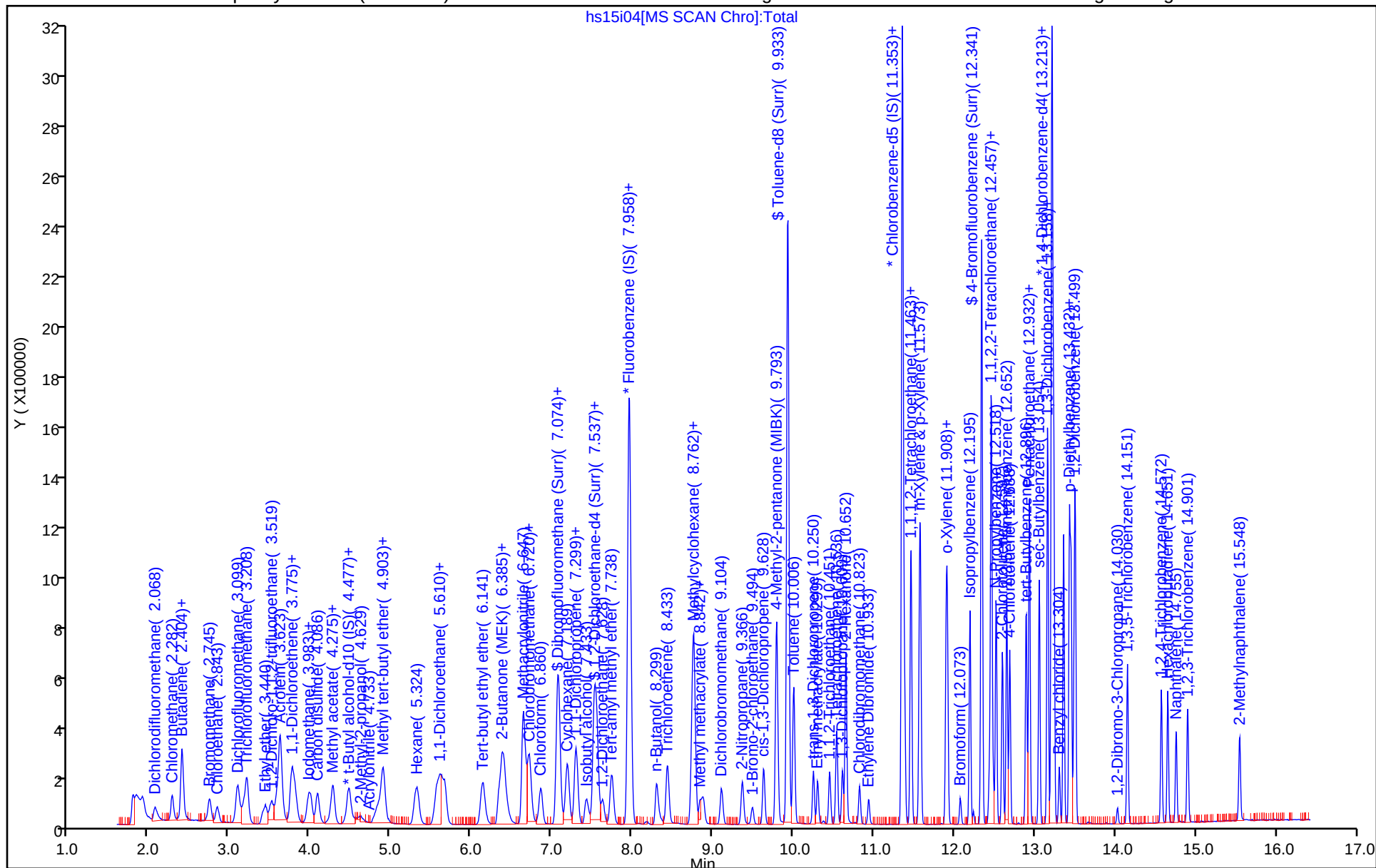
ALS Bottle#: 15

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

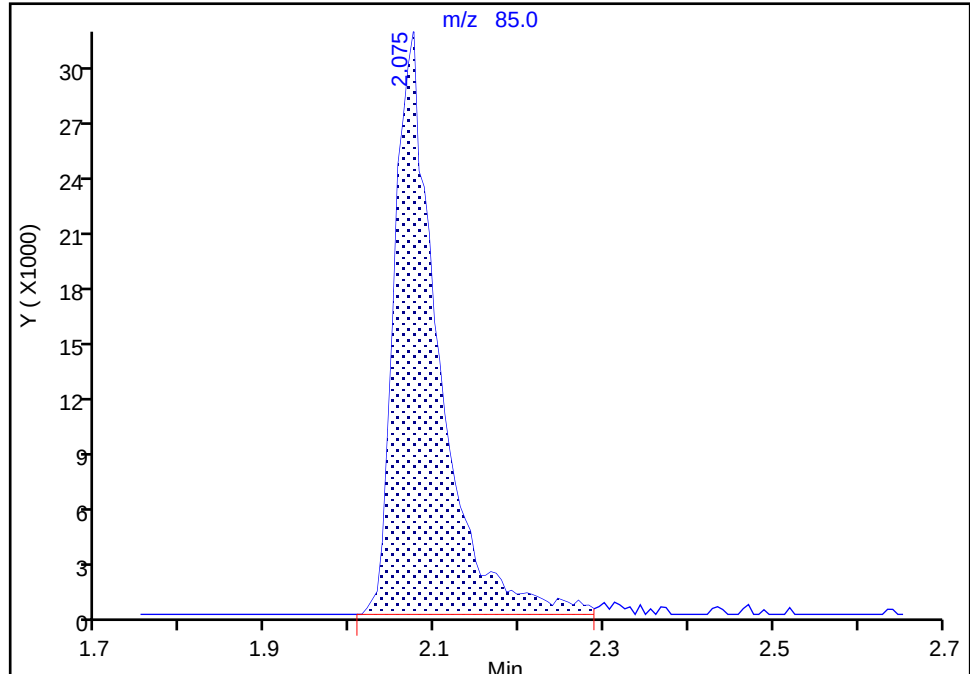
Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i04.D
Injection Date: 15-Sep-2020 19:28:30 Instrument ID: 19094
Lims ID: IC std4 2
Client ID:
Operator ID: kas02648 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

3 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

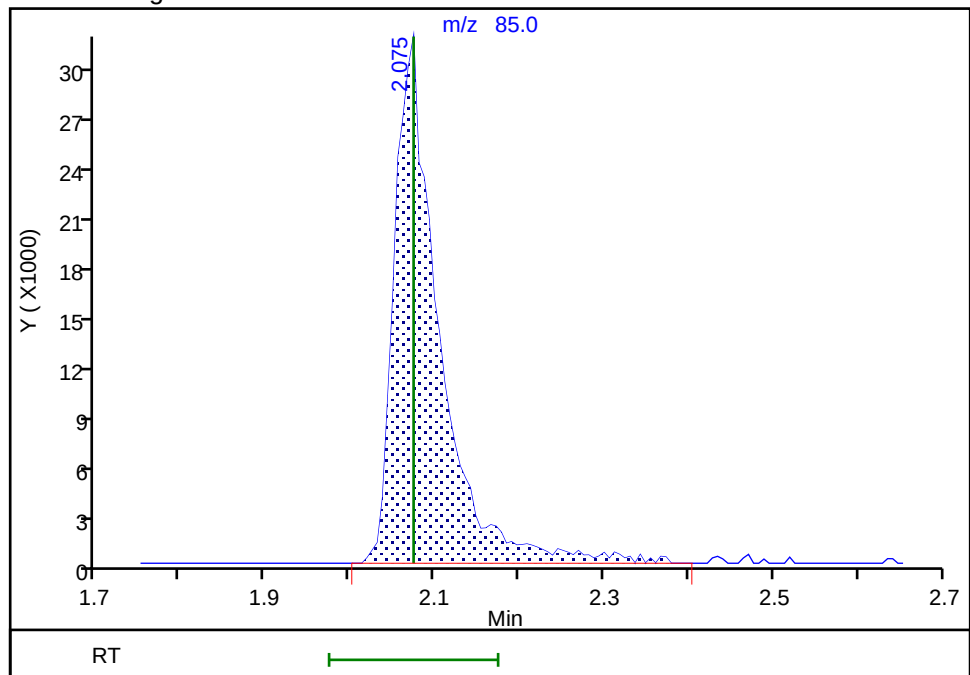
RT: 2.07
Area: 115544
Amount: 2.050201
Amount Units: ug/l

Processing Integration Results



RT: 2.07
Area: 117329
Amount: 2.077174
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:40:41
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

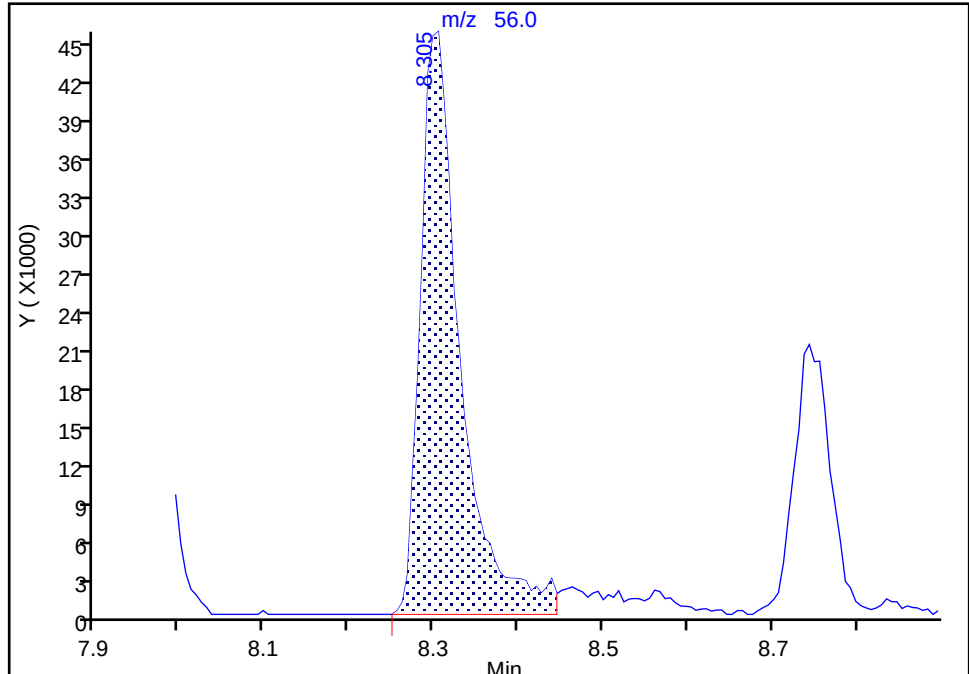
Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i04.D
Injection Date: 15-Sep-2020 19:28:30 Instrument ID: 19094
Lims ID: IC std4 2
Client ID:
Operator ID: kas02648 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

66 n-Butanol, CAS: 71-36-3

Signal: 1

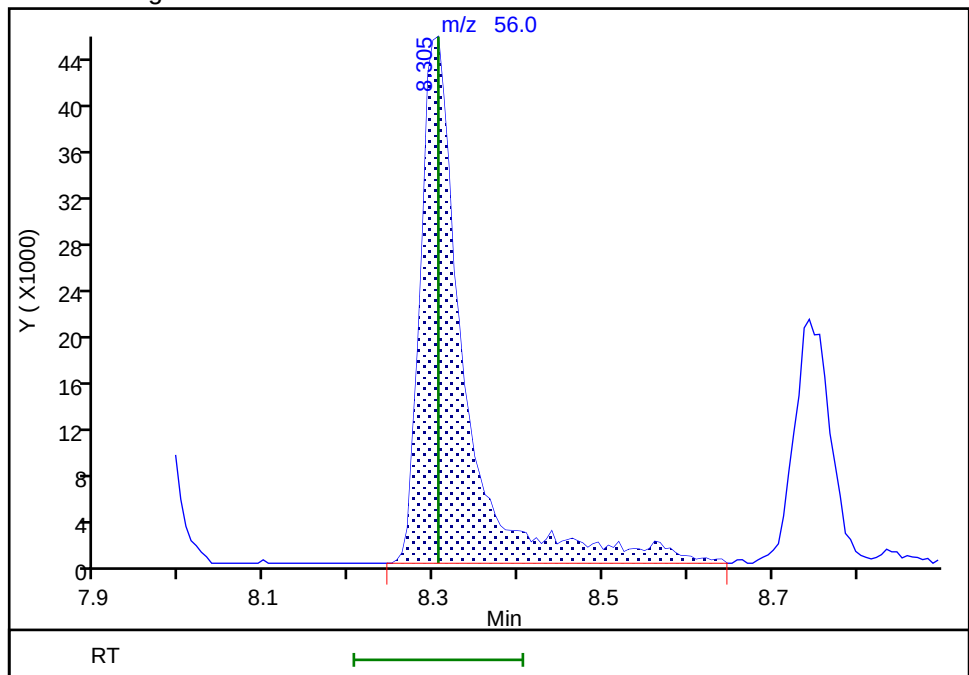
RT: 8.31
Area: 147662
Amount: 173.6174
Amount Units: ug/l

Processing Integration Results



RT: 8.31
Area: 161595
Amount: 183.7991
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:41:11

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i05.D
 Lims ID: IC std3 1
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 15-Sep-2020 19:50:30 ALS Bottle#: 16 Worklist Smp#: 16
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0010497-016
 Misc. Info.: IC STD3 1
 Operator ID: kas02648 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 15-Sep-2020 23:44:54 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1035

First Level Reviewer: campbellme

Date: 15-Sep-2020 22:42:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.056	2.075	-0.019	99	63865	1.00	0.9733	
6 Chloromethane	50	2.282	2.282	0.000	99	86326	1.00	0.9446	
8 Butadiene	39	2.398	2.404	-0.006	98	79699	1.00	1.00	
7 Vinyl chloride	62	2.404	2.404	0.000	87	78541	1.00	0.9698	
9 Bromomethane	94	2.733	2.745	-0.012	91	52984	1.00	0.9589	
10 Chloroethane	64	2.836	2.843	-0.007	100	48650	1.00	0.9342	
11 Dichlorofluoromethane	67	3.086	3.087	-0.001	97	104634	1.00	0.9772	
13 Trichlorofluoromethane	101	3.172	3.166	0.006	95	100247	1.00	0.9526	
15 Ethyl ether	59	3.434	3.440	-0.006	93	43241	1.00	0.9107	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.513	3.519	-0.006	94	75413	1.00	1.01	
17 Acrolein	56	3.617	3.617	0.000	100	343549	50.1	51.3	
18 1,1-Dichloroethene	96	3.757	3.769	-0.012	98	52421	1.00	0.9782	
20 112TCTFE	101	3.800	3.800	0.000	93	58733	1.00	0.99	
19 Acetone	43	3.788	3.800	-0.012	94	89805	10.0	10.3	
22 Iodomethane	142	3.970	3.977	-0.007	100	95735	1.00	0.9545	
21 Isopropyl alcohol	45	3.952	3.977	-0.025	30	31633	20.0	18.0	
23 Ethyl bromide	108	4.001	4.007	-0.006	96	41697	1.00	0.9167	
24 Carbon disulfide	76	4.080	4.092	-0.012	99	173087	1.00	0.9601	
26 Methyl acetate	43	4.263	4.245	0.018	33	25843	1.00	1.01	
27 3-Chloro-1-propene	41	4.275	4.275	0.000	92	94847	1.00	0.9360	
29 Methylene Chloride	84	4.470	4.477	-0.007	96	57855	1.00	0.9625	
* 28 t-Butyl alcohol-d10 (IS)	65	4.495	4.489	0.006	0	127540	50.0	50.0	
30 2-Methyl-2-propanol	59	4.611	4.629	-0.018	91	54024	20.0	20.3	
31 Acrylonitrile	53	4.824	4.818	0.006	97	54883	5.00	5.06	
32 Methyl tert-butyl ether	73	4.891	4.891	0.000	96	124727	1.00	0.9450	
33 trans-1,2-Dichloroethene	96	4.897	4.903	-0.006	97	56831	1.00	0.9514	
34 Hexane	57	5.318	5.324	-0.006	94	91713	1.00	0.9783	
35 1,1-Dichloroethane	63	5.555	5.562	-0.007	96	116879	1.00	0.9827	
37 Isopropyl ether	45	5.604	5.604	0.000	96	195373	1.00	0.9537	
38 2-Chloro-1,3-butadiene	53	5.665	5.665	0.000	91	95859	1.00	0.9703	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	6.135	6.141	-0.006	98	162911	1.00	0.9586	
S 40 1,2-Dichloroethene, Total	100				0			1.90	
41 2-Butanone (MEK)	43	6.336	6.336	0.000	100	146882	10.0	10.3	
42 cis-1,2-Dichloroethene	96	6.378	6.379	-0.001	83	64464	1.00	0.9520	
43 2,2-Dichloropropane	77	6.397	6.403	-0.006	78	86058	1.00	0.9798	
45 Propionitrile	54	6.427	6.433	-0.006	99	78462	20.0	19.9	
47 Methacrylonitrile	67	6.641	6.647	-0.006	92	142111	10.0	10.4	
49 Tetrahydrofuran	71	6.720	6.714	0.006	87	36881	10.0	10.4	
48 Chlorobromomethane	128	6.708	6.720	-0.012	71	27137	1.00	0.9296	
50 Chloroform	83	6.860	6.866	-0.006	93	109552	1.00	0.9723	
\$ 51 Dibromofluoromethane (Surr)	113	7.067	7.074	-0.007	94	552395	10.0	9.95	
52 1,1,1-Trichloroethane	97	7.086	7.092	-0.006	98	91337	1.00	0.9674	
53 Cyclohexane	56	7.195	7.196	-0.001	93	112258	1.00	0.9668	
55 1,1-Dichloropropene	75	7.305	7.299	0.006	95	83716	1.00	0.9608	
56 Carbon tetrachloride	117	7.305	7.305	0.000	88	80651	1.00	0.9730	
57 Isobutyl alcohol	41	7.427	7.433	-0.006	92	52444	50.0	52.6	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.531	7.525	0.006	0	109523	10.0	9.63	
59 Benzene	78	7.561	7.561	0.000	95	256726	1.00	0.9809	
60 1,2-Dichloroethane	62	7.628	7.628	0.000	97	64645	1.00	0.9557	
62 Tert-amyl methyl ether	73	7.732	7.738	-0.006	97	132322	1.00	0.9429	
* 65 Fluorobenzene (IS)	96	7.957	7.958	-0.001	98	2264531	10.0	10.0	
64 n-Heptane	43	7.957	7.964	-0.007	39	106888	1.00	0.9491	
66 n-Butanol	56	8.299	8.305	-0.006	92	80512	100.0	100.6	M
67 Trichloroethene	95	8.439	8.433	0.006	99	65610	1.00	1.00	
68 Methylcyclohexane	83	8.744	8.744	0.000	94	107137	1.00	0.9242	
69 2-ethoxy-2-methyl butane	87	8.762	8.762	0.000	89	76718	1.00	0.9259	
70 1,2-Dichloropropane	63	8.774	8.768	0.006	84	66872	1.00	0.9854	
71 Methyl methacrylate	69	8.848	8.842	0.006	89	25862	1.00	1.06	
72 1,4-Dioxane	88	8.848	8.854	-0.006	37	8284	50.0	49.6	M
73 Dibromomethane	93	8.878	8.878	0.000	96	28663	1.00	0.9732	
75 Dichlorobromomethane	83	9.110	9.110	0.000	99	73452	1.00	0.9706	
76 2-Nitropropane	41	9.366	9.366	0.000	98	69227	10.0	9.86	
79 1-Bromo-2-chloroethane	63	9.488	9.488	0.000	98	35394	1.00	0.8961	
80 cis-1,3-Dichloropropene	75	9.634	9.628	0.006	96	83234	1.00	0.9240	
81 4-Methyl-2-pentanone (MIBK)	43	9.792	9.793	-0.001	98	358328	10.0	10.2	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	2197007	10.0	10.1	
83 Toluene	92	10.006	10.006	0.000	98	156250	1.00	0.9859	
S 84 1,3-Dichloropropene, Total	100				0			1.87	
85 trans-1,3-Dichloropropene	75	10.250	10.250	0.000	94	67406	1.00	0.9479	
86 Ethyl methacrylate	69	10.298	10.299	-0.001	90	50212	1.00	0.9040	
87 1,1,2-Trichloroethane	97	10.451	10.451	0.000	90	37799	1.00	0.9370	
88 Tetrachloroethene	166	10.536	10.536	0.000	97	69294	1.00	0.9573	
89 1,3-Dichloropropane	76	10.609	10.609	0.000	90	70746	1.00	0.9562	
91 2-Hexanone	43	10.652	10.652	0.000	98	239177	10.0	10.1	
93 Chlorodibromomethane	129	10.823	10.823	0.000	91	44389	1.00	0.9298	
94 Ethylene Dibromide	107	10.939	10.939	0.000	100	36016	1.00	0.9287	
S 95 Xylenes, Total	106				0			2.92	
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.353	0.000	89	1631685	10.0	10.0	
96 1-Chlorohexane	91	11.359	11.353	0.006	88	87714	1.00	0.9475	
98 Chlorobenzene	112	11.384	11.384	0.000	95	165992	1.00	0.9790	
99 1,1,1,2-Tetrachloroethane	131	11.463	11.457	0.006	95	54030	1.00	0.9203	
100 Ethylbenzene	91	11.463	11.463	0.000	99	295087	1.00	0.9786	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 m-Xylene & p-Xylene	106	11.573	11.573	0.000	0	220364	2.00	1.95	
102 o-Xylene	106	11.902	11.902	0.000	96	106215	1.00	0.9725	
103 Styrene	104	11.914	11.914	0.000	95	169489	1.00	0.9612	
104 Bromoform	173	12.079	12.073	0.006	96	24775	1.00	0.9313	
105 Isopropylbenzene	105	12.194	12.195	-0.001	96	282422	1.00	0.9608	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.341	12.341	0.000	90	787882	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.432	12.432	0.000	92	45362	1.00	0.9052	
111 Bromobenzene	156	12.457	12.457	0.000	81	66738	1.00	0.9711	
110 trans-1,4-Dichloro-2-butene	53	12.457	12.457	0.000	89	126672	10.0	10.0	
112 1,2,3-Trichloropropane	110	12.481	12.481	0.000	80	12018	1.00	0.9395	
113 N-Propylbenzene	91	12.518	12.518	0.000	99	355280	1.00	0.9702	
114 2-Chlorotoluene	126	12.597	12.597	0.000	96	67897	1.00	0.9678	
115 1,3,5-Trimethylbenzene	105	12.652	12.652	0.000	96	242198	1.00	0.9676	
116 4-Chlorotoluene	126	12.688	12.688	0.000	98	68233	1.00	0.9635	
118 tert-Butylbenzene	134	12.895	12.896	-0.001	94	51247	1.00	0.9421	
119 Pentachloroethane	167	12.932	12.932	0.000	87	38299	1.00	0.8941	
120 1,2,4-Trimethylbenzene	105	12.932	12.932	0.000	97	244200	1.00	0.9705	
121 sec-Butylbenzene	105	13.054	13.054	0.000	95	325005	1.00	0.9535	
122 1,3-Dichlorobenzene	146	13.158	13.158	0.000	97	131809	1.00	0.9580	
123 4-Isopropyltoluene	119	13.164	13.164	0.000	97	267544	1.00	0.9501	
* 124 1,4-Dichlorobenzene-d4	152	13.213	13.213	-0.001	96	858513	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.231	13.231	0.000	91	131652	1.00	0.9637	
126 1,2,3-Trimethylbenzene	120	13.237	13.237	0.000	98	102830	1.00	0.9185	
127 Benzyl chloride	126	13.304	13.304	0.000	99	15279	1.00	0.9093	
129 p-Diethylbenzene	119	13.432	13.432	0.000	93	169839	1.00	0.9176	
130 n-Butylbenzene	92	13.450	13.450	0.000	98	147096	1.00	0.9633	
131 1,2-Dichlorobenzene	146	13.493	13.487	0.006	97	120566	1.00	0.9715	
134 1,2-Dibromo-3-Chloropropane	155	14.029	14.030	-0.001	82	5857	1.00	0.8638	
135 1,3,5-Trichlorobenzene	180	14.151	14.151	0.000	97	102380	1.00	0.9480	
136 1,2,4-Trichlorobenzene	180	14.572	14.572	0.000	94	85035	1.00	0.9514	
137 Hexachlorobutadiene	225	14.651	14.651	0.000	95	47955	1.00	0.9141	
138 Naphthalene	128	14.755	14.755	0.000	97	131986	1.00	0.8753	
139 1,2,3-Trichlorobenzene	180	14.901	14.901	0.000	96	74555	1.00	0.9336	
140 2-Methylnaphthalene	142	15.547	15.548	-0.001	92	69196	1.00	0.7696	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00024

Amount Added: 2.00

Units: uL

MSV_RV4_826_00026

Amount Added: 2.00

Units: uL

MSV_RV4GAS826_00077

Amount Added: 2.00

Units: uL

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 15-Sep-2020 23:44:56

Chrom Revision: 2.3 11-Sep-2020 20:57:08

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i05.D

Injection Date: 15-Sep-2020 19:50:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std3 1

Worklist Smp#: 16

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

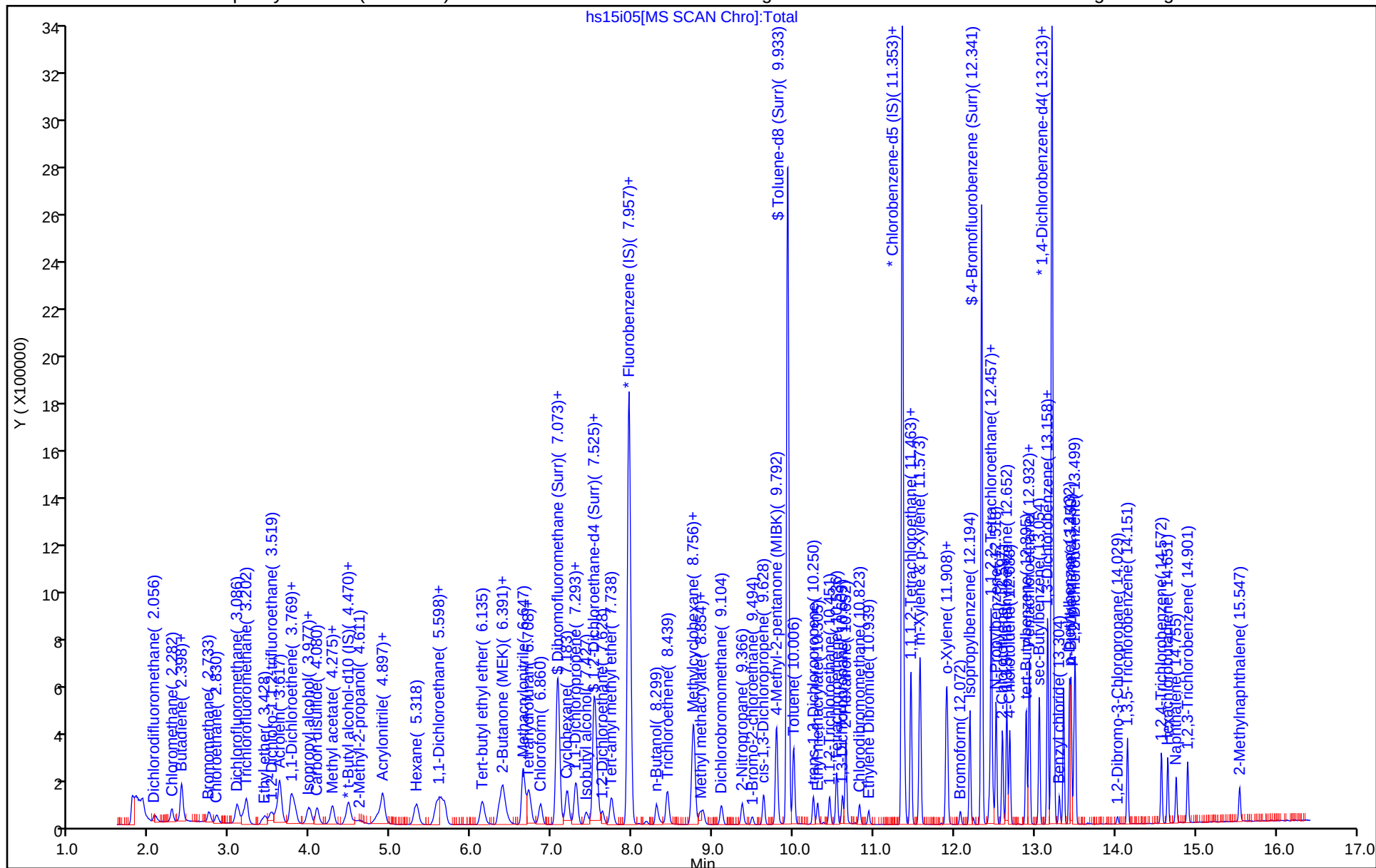
ALS Bottle#: 16

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

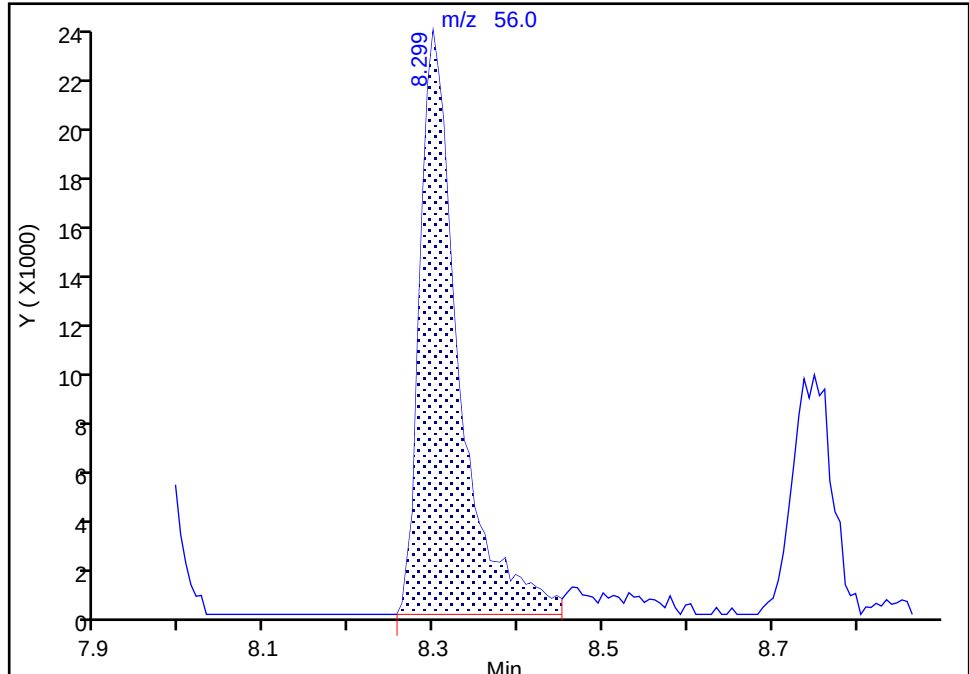
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Injection Date: 15-Sep-2020 19:50:30 Instrument ID: 19094
Lims ID: IC std3 1
Client ID:
Operator ID: kas02648 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

66 n-Butanol, CAS: 71-36-3

Signal: 1

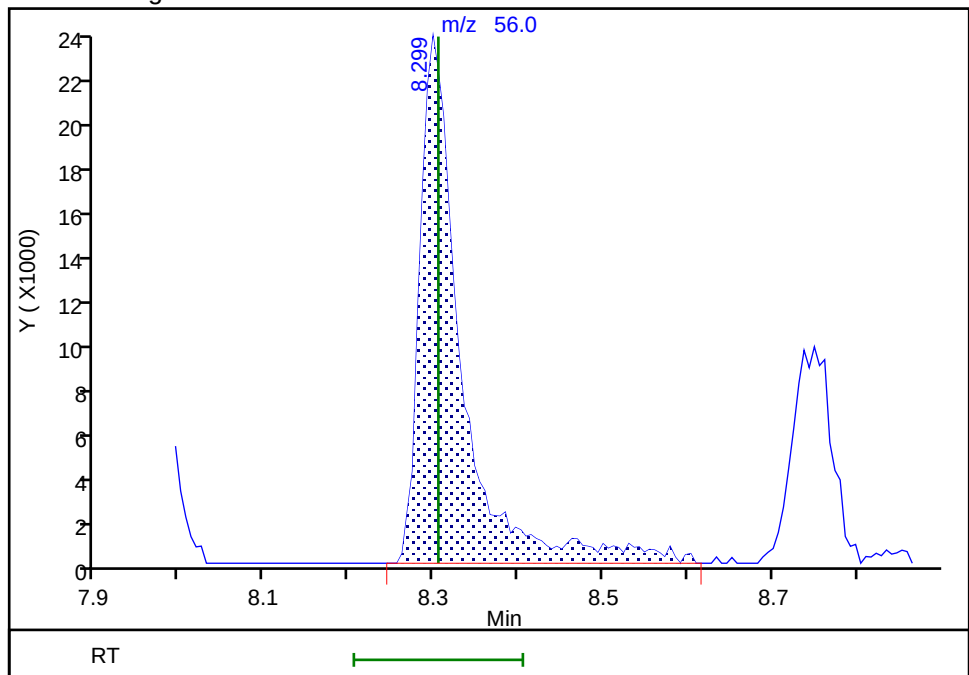
RT: 8.30
Area: 74771
Amount: 95.440321
Amount Units: ug/l

Processing Integration Results



RT: 8.30
Area: 80512
Amount: 100.5779
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:42:11
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

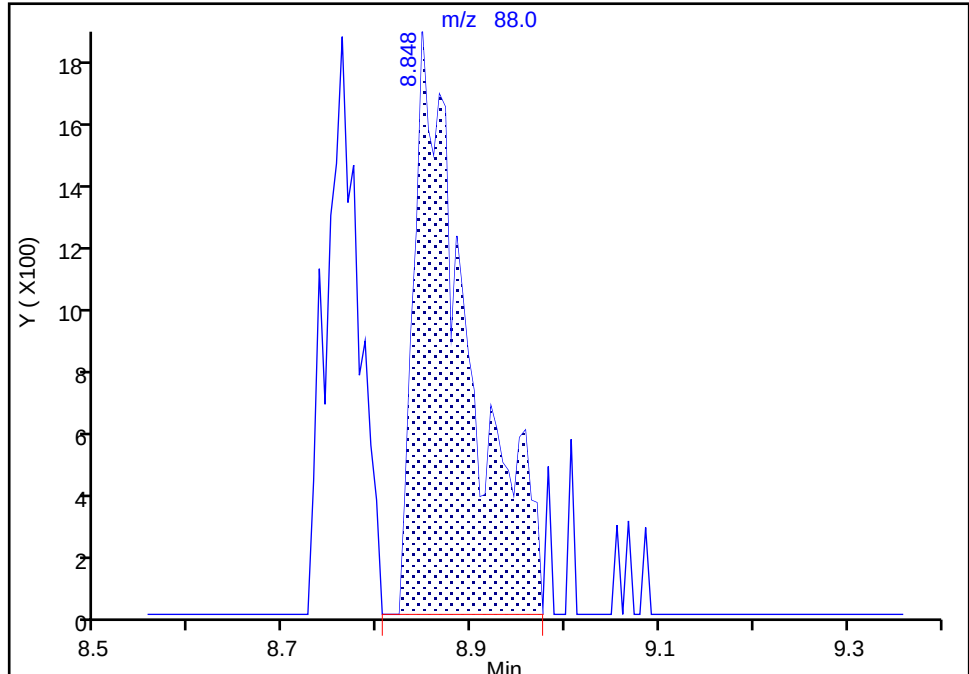
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Injection Date: 15-Sep-2020 19:50:30 Instrument ID: 19094
Lims ID: IC std3 1
Client ID:
Operator ID: kas02648 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

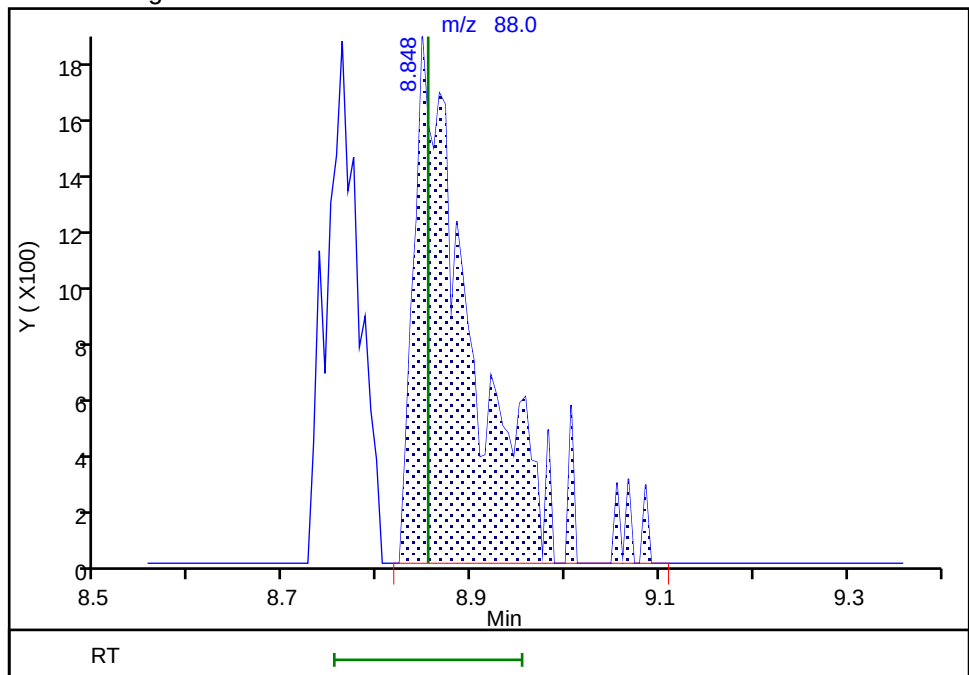
RT: 8.85
Area: 7584
Amount: 45.252949
Amount Units: ug/l

Processing Integration Results



RT: 8.85
Area: 8284
Amount: 49.634113
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:42:21
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i06.D
 Lims ID: IC std2 0.5
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 15-Sep-2020 20:12:30 ALS Bottle#: 17 Worklist Smp#: 17
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0010497-017
 Misc. Info.: IC STD2 0.5
 Operator ID: kas02648 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 15-Sep-2020 23:45:05 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1035

First Level Reviewer: campbellme

Date: 15-Sep-2020 22:43:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.062	2.075	-0.013	97	29600	0.5000	0.4494	
6 Chloromethane	50	2.282	2.282	0.000	99	44401	0.5000	0.4840	
8 Butadiene	39	2.398	2.404	-0.006	93	40472	0.5000	0.5039	M
7 Vinyl chloride	62	2.404	2.404	0.000	92	37985	0.5000	0.4673	
9 Bromomethane	94	2.745	2.745	0.000	91	26793	0.5000	0.4831	
10 Chloroethane	64	2.830	2.843	-0.013	98	25886	0.5000	0.4952	
11 Dichlorofluoromethane	67	3.087	3.087	-0.001	98	51482	0.5000	0.4790	
13 Trichlorofluoromethane	101	3.160	3.166	-0.006	98	49848	0.5000	0.4719	
15 Ethyl ether	59	3.434	3.440	-0.006	94	22116	0.4999	0.4640	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.525	3.519	0.006	92	35462	0.5000	0.4754	
17 Acrolein	56	3.623	3.617	0.006	99	171798	25.0	26.9	
18 1,1-Dichloroethene	96	3.763	3.769	-0.006	97	25717	0.5000	0.4780	
20 1,1,2,2-Tetrafluoroethane	101	3.794	3.800	-0.006	90	27660	0.5000	0.4666	
19 Acetone	43	3.812	3.800	0.012	100	47423	5.00	5.71	
22 Iodomethane	142	3.970	3.977	-0.007	100	48609	0.5000	0.4828	
21 Isopropyl alcohol	45	3.952	3.977	-0.025	33	17896	10.0	10.1	
23 Ethyl bromide	108	3.995	4.007	-0.012	95	21583	0.5003	0.4727	
24 Carbon disulfide	76	4.086	4.092	-0.006	99	85301	0.5000	0.4714	
26 Methyl acetate	43	4.251	4.245	0.006	27	13641	0.5000	0.5597	
27 3-Chloro-1-propene	41	4.275	4.275	0.000	92	48892	0.5000	0.4806	
29 Methylene Chloride	84	4.470	4.477	-0.007	96	29957	0.5000	0.4965	
* 28 t-Butyl alcohol-d10 (IS)	65	4.476	4.489	-0.013	0	121366	50.0	50.0	
30 2-Methyl-2-propanol	59	4.611	4.629	-0.018	70	29243	10.0	11.5	
31 Acrylonitrile	53	4.836	4.818	0.018	98	28449	2.50	2.75	
32 Methyl tert-butyl ether	73	4.885	4.891	-0.006	96	60941	0.5000	0.4600	
33 trans-1,2-Dichloroethene	96	4.903	4.903	0.000	97	27887	0.5000	0.4651	
34 Hexane	57	5.324	5.324	0.000	94	42484	0.5000	0.4514	
35 1,1-Dichloroethane	63	5.556	5.562	-0.006	96	57365	0.5000	0.4805	
37 Isopropyl ether	45	5.610	5.604	0.006	96	98865	0.5000	0.4808	
38 2-Chloro-1,3-butadiene	53	5.665	5.665	0.000	90	46119	0.5000	0.4651	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	6.135	6.141	-0.006	97	79151	0.5000	0.4640	
S 40 1,2-Dichloroethene, Total	100				0			0.9563	
41 2-Butanone (MEK)	43	6.336	6.336	0.000	99	70915	5.00	5.24	
42 cis-1,2-Dichloroethene	96	6.379	6.379	0.000	83	33388	0.5000	0.4912	
43 2,2-Dichloropropane	77	6.403	6.403	0.000	74	41145	0.5000	0.4667	
45 Propionitrile	54	6.427	6.433	-0.006	99	41609	10.0	11.1	
47 Methacrylonitrile	67	6.647	6.647	0.000	93	67846	5.00	5.22	
49 Tetrahydrofuran	71	6.720	6.714	0.006	95	17499	5.00	5.17	
48 Chlorobromomethane	128	6.714	6.720	-0.006	76	13466	0.5000	0.4595	
50 Chloroform	83	6.854	6.866	-0.012	93	55408	0.5000	0.4899	
\$ 51 Dibromofluoromethane (Surr)	113	7.074	7.074	0.000	94	557236	10.0	10.0	
52 1,1,1-Trichloroethane	97	7.092	7.092	0.000	92	45781	0.5000	0.4830	
53 Cyclohexane	56	7.189	7.196	-0.007	92	52977	0.5000	0.4545	
55 1,1-Dichloropropene	75	7.299	7.299	0.000	93	40831	0.5000	0.4668	
56 Carbon tetrachloride	117	7.305	7.305	0.000	86	39470	0.5000	0.4744	
57 Isobutyl alcohol	41	7.433	7.433	0.000	93	26011	25.0	27.4	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.525	7.525	0.000	0	111213	10.0	9.74	
59 Benzene	78	7.561	7.561	0.000	92	130011	0.5000	0.4949	
60 1,2-Dichloroethane	62	7.634	7.628	0.006	96	32675	0.5000	0.4812	
62 Tert-amyl methyl ether	73	7.738	7.738	0.000	96	64261	0.5000	0.4562	
* 65 Fluorobenzene (IS)	96	7.958	7.958	0.000	98	2273141	10.0	10.0	
64 n-Heptane	43	7.964	7.964	0.000	38	52278	0.5000	0.4625	
66 n-Butanol	56	8.305	8.305	0.000	93	37307	50.0	49.0	M
67 Trichloroethene	95	8.439	8.433	0.006	98	31545	0.5000	0.4775	
68 Methylcyclohexane	83	8.750	8.744	0.006	95	50811	0.5000	0.4366	
69 2-ethoxy-2-methyl butane	87	8.756	8.762	-0.006	88	38206	0.5000	0.4594	
70 1,2-Dichloropropane	63	8.768	8.768	0.000	81	33331	0.5000	0.4893	
71 Methyl methacrylate	69	8.841	8.842	-0.001	89	11964	0.5000	0.5159	
72 1,4-Dioxane	88	8.866	8.854	0.012	40	3394	25.0	21.4	
73 Dibromomethane	93	8.872	8.878	-0.006	94	13546	0.5000	0.4582	
75 Dichlorobromomethane	83	9.110	9.110	0.000	97	35180	0.5000	0.4631	
76 2-Nitropropane	41	9.366	9.366	0.000	96	35595	5.00	5.33	
79 1-Bromo-2-chloroethane	63	9.494	9.488	0.006	97	18518	0.5000	0.4671	
80 cis-1,3-Dichloropropene	75	9.628	9.628	0.000	94	40971	0.5000	0.4531	
81 4-Methyl-2-pentanone (MIBK)	43	9.793	9.793	0.000	98	171000	5.00	5.13	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	2198171	10.0	10.0	
83 Toluene	92	10.000	10.006	-0.006	98	76403	0.5000	0.4781	
S 84 1,3-Dichloropropene, Total	100				0			0.9262	
85 trans-1,3-Dichloropropene	75	10.250	10.250	0.000	92	33924	0.5000	0.4731	
86 Ethyl methacrylate	69	10.305	10.299	0.006	90	24397	0.5000	0.4356	
87 1,1,2-Trichloroethane	97	10.451	10.451	0.000	91	19242	0.5000	0.4730	
88 Tetrachloroethene	166	10.542	10.536	0.006	98	36639	0.5000	0.5020	
89 1,3-Dichloropropane	76	10.609	10.609	0.000	87	36188	0.5000	0.4851	
91 2-Hexanone	43	10.652	10.652	0.000	99	114094	5.00	5.05	
93 Chlorodibromomethane	129	10.823	10.823	0.000	90	21676	0.5000	0.4503	
94 Ethylene Dibromide	107	10.933	10.939	-0.006	99	19269	0.5000	0.4927	
S 95 Xylenes, Total	106				0			1.41	
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.353	0.000	87	1645263	10.0	10.0	
96 1-Chlorohexane	91	11.353	11.353	0.000	35	44159	0.5000	0.4731	
98 Chlorobenzene	112	11.378	11.384	-0.006	94	83440	0.5000	0.4881	
99 1,1,1,2-Tetrachloroethane	131	11.457	11.457	0.000	44	28729	0.5000	0.4853	
100 Ethylbenzene	91	11.463	11.463	0.000	99	140963	0.5000	0.4636	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 m-Xylene & p-Xylene	106	11.573	11.573	0.000	0	108526	1.00	0.9511	
102 o-Xylene	106	11.902	11.902	0.000	97	50075	0.5000	0.4547	
103 Styrene	104	11.914	11.914	0.000	94	79671	0.5000	0.4481	
104 Bromoform	173	12.079	12.073	0.006	95	12192	0.5000	0.4545	
105 Isopropylbenzene	105	12.194	12.195	-0.001	96	137035	0.5000	0.4623	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.341	12.341	0.000	90	779756	10.0	9.83	
109 1,1,2,2-Tetrachloroethane	83	12.432	12.432	0.000	93	23224	0.5000	0.4586	
111 Bromobenzene	156	12.457	12.457	0.000	91	32789	0.5000	0.4722	
110 trans-1,4-Dichloro-2-butene	53	12.457	12.457	0.000	87	61849	5.00	5.13	
112 1,2,3-Trichloropropane	110	12.487	12.481	0.006	84	5809	0.5000	0.4494	
113 N-Propylbenzene	91	12.518	12.518	0.000	99	172040	0.5000	0.4649	
114 2-Chlorotoluene	126	12.597	12.597	0.000	96	32957	0.5000	0.4649	
115 1,3,5-Trimethylbenzene	105	12.652	12.652	0.000	95	115611	0.5000	0.4571	
116 4-Chlorotoluene	126	12.688	12.688	0.000	98	34593	0.5000	0.4834	
118 tert-Butylbenzene	134	12.896	12.896	0.000	93	23813	0.5000	0.4332	
119 Pentachloroethane	167	12.926	12.932	-0.006	92	20258	0.5000	0.4680	
120 1,2,4-Trimethylbenzene	105	12.932	12.932	0.000	96	115818	0.5000	0.4555	
121 sec-Butylbenzene	105	13.054	13.054	0.000	95	156151	0.5000	0.4534	
122 1,3-Dichlorobenzene	146	13.158	13.158	0.000	97	67004	0.5000	0.4820	
123 4-Isopropyltoluene	119	13.158	13.164	-0.006	97	126520	0.5000	0.4446	
* 124 1,4-Dichlorobenzene-d4	152	13.213	13.213	0.000	96	867491	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.231	13.231	0.000	93	66845	0.5000	0.4842	
126 1,2,3-Trimethylbenzene	120	13.237	13.237	0.000	97	52599	0.5000	0.4649	
127 Benzyl chloride	126	13.310	13.304	0.006	98	7131	0.5000	0.4200	
129 p-Diethylbenzene	119	13.432	13.432	0.000	94	82272	0.5000	0.4399	
130 n-Butylbenzene	92	13.450	13.450	0.000	98	68891	0.5000	0.4465	
131 1,2-Dichlorobenzene	146	13.493	13.487	0.006	98	61263	0.5000	0.4885	
134 1,2-Dibromo-3-Chloropropane	155	14.029	14.030	-0.001	86	3121	0.5000	0.4556	
135 1,3,5-Trichlorobenzene	180	14.151	14.151	0.000	97	50293	0.5000	0.4609	
136 1,2,4-Trichlorobenzene	180	14.572	14.572	0.000	94	40841	0.5000	0.4522	
137 Hexachlorobutadiene	225	14.651	14.651	0.000	96	23352	0.5000	0.4405	
138 Naphthalene	128	14.755	14.755	0.000	97	63800	0.5000	0.4187	
139 1,2,3-Trichlorobenzene	180	14.901	14.901	0.000	95	36236	0.5000	0.4491	
140 2-Methylnaphthalene	142	15.541	15.548	-0.007	95	33384	0.5000	0.4584	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00024

Amount Added: 2.00

Units: uL

MSV_RV4_826_00026

Amount Added: 2.00

Units: uL

MSV_RV4GAS826_00077

Amount Added: 2.00

Units: uL

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 15-Sep-2020 23:45:07

Chrom Revision: 2.3 11-Sep-2020 20:57:08

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i06.D

Injection Date: 15-Sep-2020 20:12:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std2 0.5

Worklist Smp#: 17

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

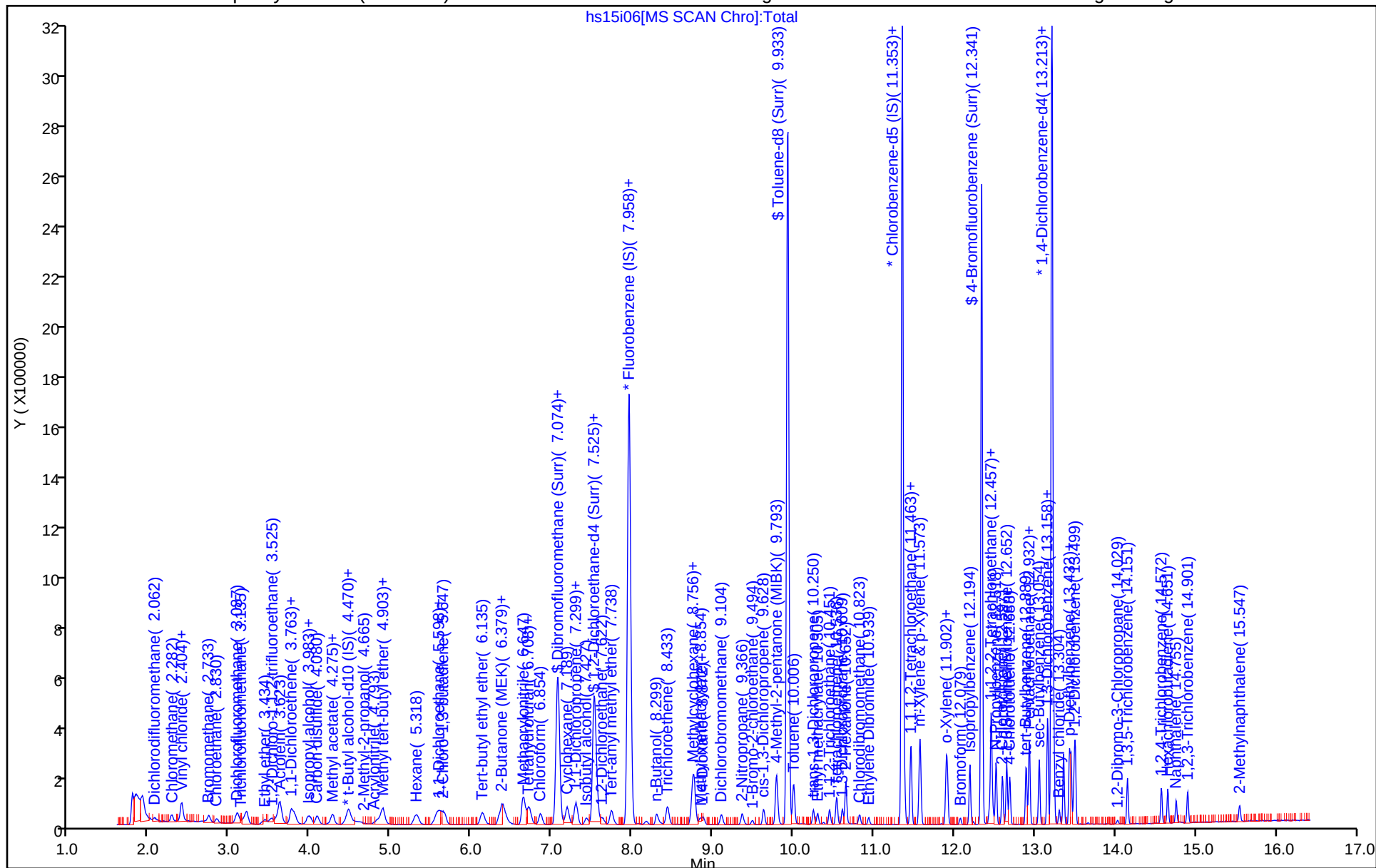
ALS Bottle#: 17

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

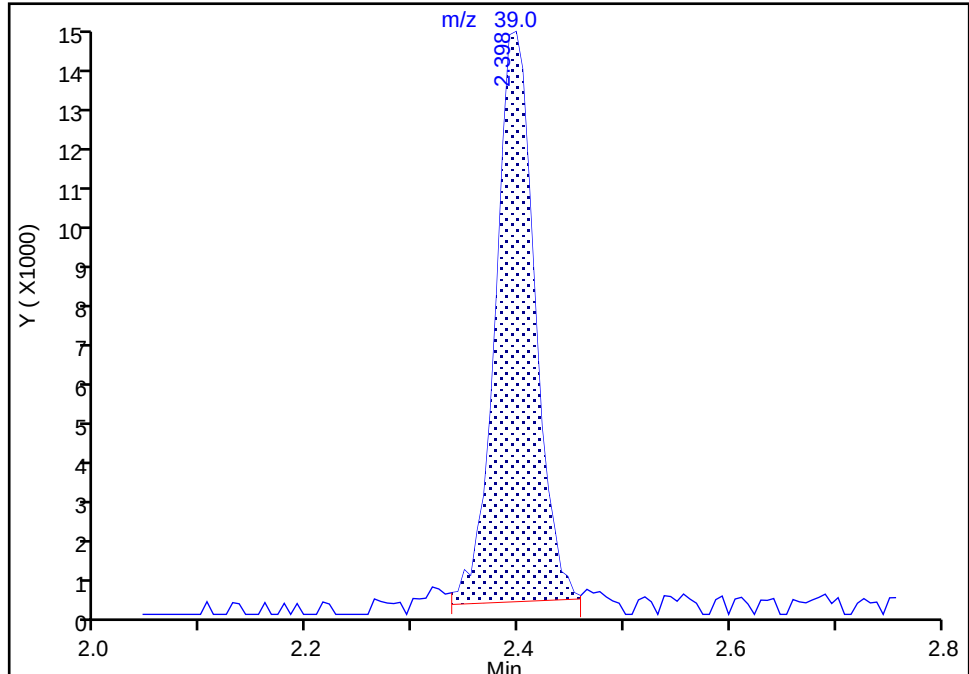
Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i06.D
Injection Date: 15-Sep-2020 20:12:30 Instrument ID: 19094
Lims ID: IC std2 0.5
Client ID:
Operator ID: kas02648 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

8 Butadiene, CAS: 106-99-0

Signal: 1

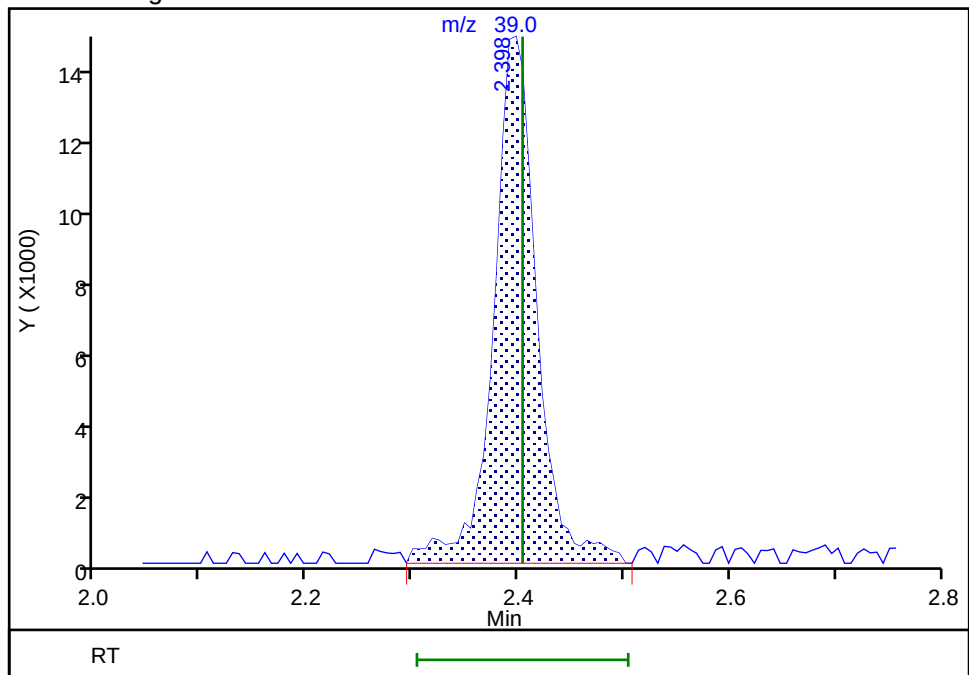
RT: 2.40
Area: 36021
Amount: 0.455740
Amount Units: ug/l

Processing Integration Results



RT: 2.40
Area: 40472
Amount: 0.503946
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:43:05

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

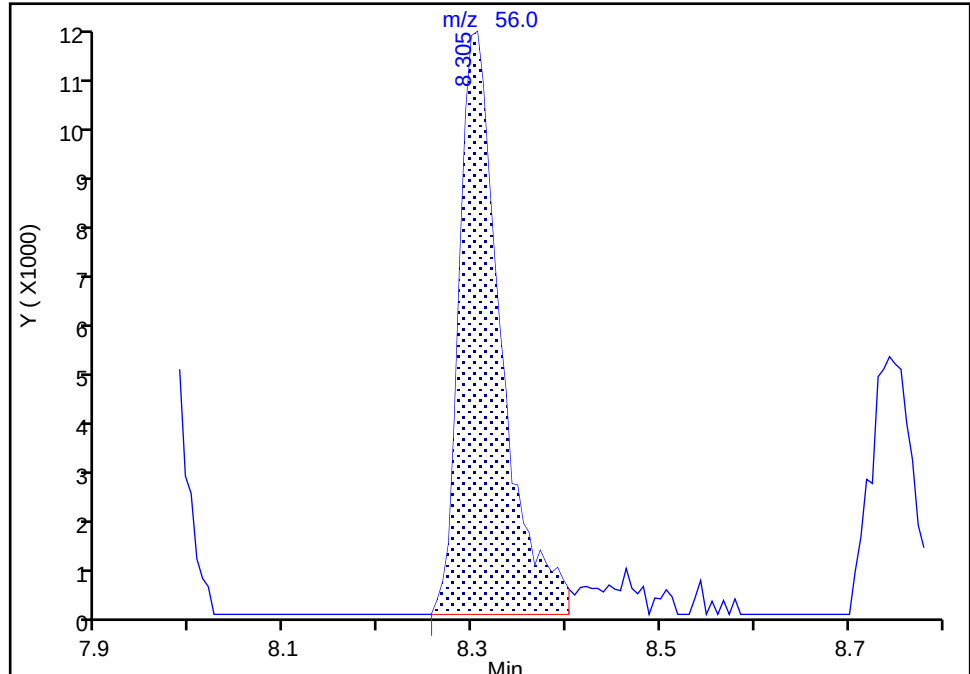
Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i06.D
Injection Date: 15-Sep-2020 20:12:30 Instrument ID: 19094
Lims ID: IC std2 0.5
Client ID:
Operator ID: kas02648 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

66 n-Butanol, CAS: 71-36-3

Signal: 1

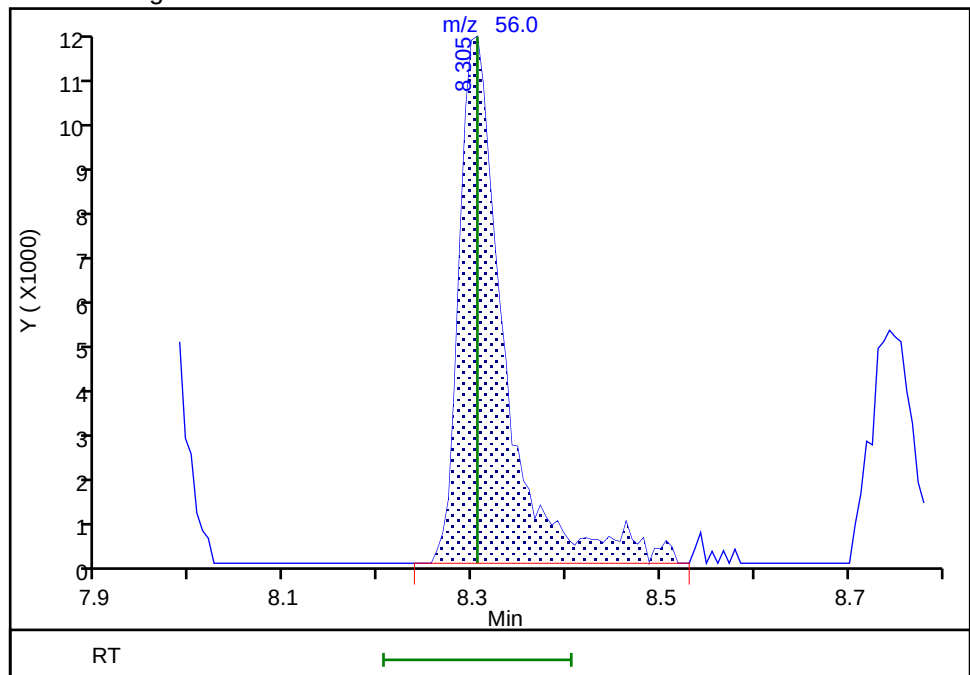
RT: 8.31
Area: 34356
Amount: 45.606616
Amount Units: ug/l

Processing Integration Results



RT: 8.31
Area: 37307
Amount: 48.975824
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:43:44
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Lims ID: IC std1 0.2
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 15-Sep-2020 20:33:30 ALS Bottle#: 18 Worklist Smp#: 18
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0010497-018
 Misc. Info.: IC STD1 0.2
 Operator ID: kas02648 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 15-Sep-2020 23:45:16 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1035

First Level Reviewer: campbellme

Date: 15-Sep-2020 22:31:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.069	2.075	-0.007	96	10825	0.2000	0.1762	
6 Chloromethane	50	2.282	2.282	0.000	99	18586	0.2000	0.2172	
8 Butadiene	39	2.410	2.404	0.006	93	16184	0.2000	0.2160	
7 Vinyl chloride	62	2.410	2.404	0.006	89	14964	0.2000	0.1973	
9 Bromomethane	94	2.751	2.745	0.006	92	10678	0.2000	0.2064	
10 Chloroethane	64	2.837	2.843	-0.006	97	10259	0.2000	0.2104	
11 Dichlorofluoromethane	67	3.093	3.087	0.006	95	21104	0.2000	0.2105	
13 Trichlorofluoromethane	101	3.172	3.166	0.006	94	20116	0.2000	0.2041	
15 Ethyl ether	59	3.458	3.440	0.018	55	8526	0.2000	0.1918	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.532	3.519	0.013	92	13964	0.2000	0.2007	
17 Acrolein	56	3.629	3.617	0.012	98	67746	10.0	9.71	
18 1,1-Dichloroethene	96	3.769	3.769	0.000	94	10280	0.2000	0.2048	
20 112TCTFE	101	3.806	3.800	0.006	90	10009	0.2000	0.1810	
19 Acetone	43	3.812	3.800	0.012	96	21818	2.00	2.40	
22 Iodomethane	142	3.983	3.977	0.006	98	18657	0.2000	0.1986	
21 Isopropyl alcohol	45	3.977	3.977	0.000	30	7889	4.00	4.78	
23 Ethyl bromide	108	4.007	4.007	0.000	96	8454	0.2001	0.1985	
24 Carbon disulfide	76	4.093	4.092	0.001	99	35749	0.2000	0.2118	
26 Methyl acetate	43	4.245	4.245	0.000	24	4958	0.2000	0.1859	
27 3-Chloro-1-propene	41	4.288	4.275	0.013	89	18587	0.2000	0.1959	
29 Methylene Chloride	84	4.489	4.477	0.012	85	11588	0.2000	0.2059	
* 28 t-Butyl alcohol-d10 (IS)	65	4.501	4.489	0.012	0	132797	50.0	50.0	
30 2-Methyl-2-propanol	59	4.623	4.629	-0.006	48	10009	4.00	3.60	
31 Acrylonitrile	53	4.848	4.818	0.030	91	9714	1.00	0.8596	
32 Methyl tert-butyl ether	73	4.897	4.891	0.006	95	23417	0.2000	0.1895	
33 trans-1,2-Dichloroethene	96	4.909	4.903	0.006	97	11982	0.2000	0.2142	
34 Hexane	57	5.324	5.324	0.000	80	15917	0.2000	0.1813	
35 1,1-Dichloroethane	63	5.562	5.562	0.000	97	22530	0.2000	0.2023	
37 Isopropyl ether	45	5.629	5.604	0.025	94	35809	0.2000	0.1867	
38 2-Chloro-1,3-butadiene	53	5.665	5.665	0.000	90	17579	0.2000	0.1900	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	6.147	6.141	0.006	97	30027	0.2000	0.1887	
S 40 1,2-Dichloroethene, Total	100				0			0.4092	
41 2-Butanone (MEK)	43	6.360	6.336	0.024	94	27327	2.00	1.85	
42 cis-1,2-Dichloroethene	96	6.391	6.379	0.012	84	12362	0.2000	0.1949	
43 2,2-Dichloropropane	77	6.421	6.403	0.018	85	15988	0.2000	0.1944	
45 Propionitrile	54	6.446	6.433	0.013	98	16391	4.00	4.00	
47 Methacrylonitrile	67	6.653	6.647	0.006	90	26461	2.00	1.86	
49 Tetrahydrofuran	71	6.726	6.714	0.012	95	6926	2.00	1.87	
48 Chlorobromomethane	128	6.714	6.720	-0.006	93	5360	0.2000	0.1961	
50 Chloroform	83	6.872	6.866	0.006	92	22926	0.2000	0.2173	
\$ 51 Dibromofluoromethane (Surr)	113	7.074	7.074	0.000	93	521726	10.0	10.0	
52 1,1,1-Trichloroethane	97	7.104	7.092	0.012	97	17022	0.2000	0.1925	
53 Cyclohexane	56	7.189	7.196	-0.007	90	21289	0.2000	0.1958	
55 1,1-Dichloropropene	75	7.305	7.299	0.006	94	15526	0.2000	0.1903	
56 Carbon tetrachloride	117	7.305	7.305	0.000	90	15538	0.2000	0.2002	
57 Isobutyl alcohol	41	7.433	7.433	0.000	89	10822	10.0	10.4	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.531	7.525	0.006	0	106301	10.0	9.98	
59 Benzene	78	7.555	7.561	-0.006	93	48689	0.2000	0.1987	
60 1,2-Dichloroethane	62	7.628	7.628	0.000	88	13808	0.2000	0.2180	
62 Tert-amyl methyl ether	73	7.744	7.738	0.006	95	23623	0.2000	0.1797	
* 65 Fluorobenzene (IS)	96	7.958	7.958	0.000	98	2120599	10.0	10.0	
64 n-Heptane	43	7.970	7.964	0.006	37	19434	0.2000	0.1843	
66 n-Butanol	56	8.305	8.305	0.000	95	13743	20.0	16.5	
67 Trichloroethene	95	8.445	8.433	0.012	96	12249	0.2000	0.1987	
68 Methylcyclohexane	83	8.750	8.744	0.006	93	19925	0.2000	0.1835	
69 2-ethoxy-2-methyl butane	87	8.762	8.762	0.000	92	14775	0.2000	0.1904	
70 1,2-Dichloropropane	63	8.762	8.768	-0.006	75	12036	0.2000	0.1894	
71 Methyl methacrylate	69	8.835	8.842	-0.007	83	4156	0.2000	0.1638	
72 1,4-Dioxane	88	8.866	8.854	0.012	35	1119	10.0	6.44	
73 Dibromomethane	93	8.878	8.878	0.000	95	5667	0.2000	0.2055	
75 Dichlorobromomethane	83	9.116	9.110	0.006	96	13573	0.2000	0.1915	
76 2-Nitropropane	41	9.372	9.366	0.006	96	13143	2.00	1.80	
79 1-Bromo-2-chloroethane	63	9.488	9.488	0.000	95	7197	0.2000	0.1946	
80 cis-1,3-Dichloropropene	75	9.634	9.628	0.006	94	15392	0.2000	0.1825	
81 4-Methyl-2-pentanone (MIBK)	43	9.793	9.793	0.000	98	64565	2.00	1.77	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	2040946	10.0	10.0	
83 Toluene	92	10.012	10.006	0.006	97	30209	0.2000	0.2029	
S 84 1,3-Dichloropropene, Total	100				0			0.3547	
85 trans-1,3-Dichloropropene	75	10.250	10.250	0.000	93	11504	0.2000	0.1722	
86 Ethyl methacrylate	69	10.305	10.299	0.006	90	9377	0.2000	0.1797	
87 1,1,2-Trichloroethane	97	10.451	10.451	0.000	88	7643	0.2000	0.2017	
88 Tetrachloroethene	166	10.542	10.536	0.006	95	14044	0.2000	0.2066	
89 1,3-Dichloropropane	76	10.610	10.609	0.001	92	13419	0.2000	0.1931	
91 2-Hexanone	43	10.652	10.652	0.000	99	42273	2.00	1.71	
93 Chlorodibromomethane	129	10.823	10.823	0.000	88	8361	0.2000	0.1865	
94 Ethylene Dibromide	107	10.933	10.939	-0.006	93	6713	0.2000	0.1843	
S 95 Xylenes, Total	106				0			0.5637	
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.353	0.000	87	1532448	10.0	10.0	
96 1-Chlorohexane	91	11.359	11.353	0.006	34	18063	0.2000	0.2077	
98 Chlorobenzene	112	11.384	11.384	0.000	96	31186	0.2000	0.1958	
99 1,1,1,2-Tetrachloroethane	131	11.457	11.457	0.000	45	10910	0.2000	0.1979	
100 Ethylbenzene	91	11.463	11.463	0.000	98	54551	0.2000	0.1926	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 m-Xylene & p-Xylene	106	11.573	11.573	0.000	0	39842	0.4000	0.3749	
102 o-Xylene	106	11.896	11.902	-0.006	97	19366	0.2000	0.1888	
103 Styrene	104	11.914	11.914	0.000	93	28173	0.2000	0.1701	
104 Bromoform	173	12.073	12.073	0.000	89	4072	0.2000	0.1630	
105 Isopropylbenzene	105	12.195	12.195	0.000	96	49936	0.2000	0.1809	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.341	12.341	0.000	90	736022	10.0	9.96	
109 1,1,2,2-Tetrachloroethane	83	12.432	12.432	0.000	91	9599	0.2000	0.2032	
111 Bromobenzene	156	12.457	12.457	0.000	81	12553	0.2000	0.1938	
110 trans-1,4-Dichloro-2-butene	53	12.457	12.457	0.000	87	24104	2.00	1.83	
112 1,2,3-Trichloropropane	110	12.487	12.481	0.006	75	2166	0.2000	0.1796	
113 N-Propylbenzene	91	12.518	12.518	0.000	99	65253	0.2000	0.1890	
114 2-Chlorotoluene	126	12.597	12.597	0.000	96	12435	0.2000	0.1880	
115 1,3,5-Trimethylbenzene	105	12.652	12.652	0.000	95	42814	0.2000	0.1814	
116 4-Chlorotoluene	126	12.688	12.688	0.000	97	12246	0.2000	0.1834	
118 tert-Butylbenzene	134	12.890	12.896	-0.006	94	9923	0.2000	0.1935	
119 Pentachloroethane	167	12.926	12.932	-0.006	88	7350	0.2000	0.1820	
120 1,2,4-Trimethylbenzene	105	12.932	12.932	0.000	97	40860	0.2000	0.1723	
121 sec-Butylbenzene	105	13.054	13.054	0.000	94	56697	0.2000	0.1765	
122 1,3-Dichlorobenzene	146	13.158	13.158	0.000	98	25891	0.2000	0.1996	
123 4-Isopropyltoluene	119	13.164	13.164	0.000	97	44828	0.2000	0.1689	
* 124 1,4-Dichlorobenzene-d4	152	13.213	13.213	0.000	96	809276	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.231	13.231	0.000	93	26640	0.2000	0.2069	
126 1,2,3-Trimethylbenzene	120	13.237	13.237	0.000	95	19647	0.2000	0.1862	
127 Benzyl chloride	126	13.310	13.304	0.006	99	2583	0.2000	0.1631	
129 p-Diethylbenzene	119	13.432	13.432	0.000	94	29878	0.2000	0.1712	
130 n-Butylbenzene	92	13.450	13.450	0.000	97	25035	0.2000	0.1739	
131 1,2-Dichlorobenzene	146	13.487	13.487	0.000	98	23309	0.2000	0.1992	
134 1,2-Dibromo-3-Chloropropane	155	14.030	14.030	0.000	88	1201	0.2000	0.1879	
135 1,3,5-Trichlorobenzene	180	14.152	14.151	0.001	95	18790	0.2000	0.1846	
136 1,2,4-Trichlorobenzene	180	14.572	14.572	0.000	93	14989	0.2000	0.1779	
137 Hexachlorobutadiene	225	14.651	14.651	0.000	94	9421	0.2000	0.1905	
138 Naphthalene	128	14.755	14.755	0.000	97	25369	0.2000	0.1785	
139 1,2,3-Trichlorobenzene	180	14.901	14.901	0.000	93	13868	0.2000	0.1842	
140 2-Methylnaphthalene	142	15.548	15.548	0.000	92	12201	0.2000	0.2854	

QC Flag Legend

Processing Flags

Reagents:

MSV_RV1_826_00024	Amount Added: 2.00	Units: uL	
MSV_RV4_826_00026	Amount Added: 2.00	Units: uL	
MSV_RV4GAS826_00077	Amount Added: 2.00	Units: uL	
MSV_30_826ISS_00005	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 15-Sep-2020 23:45:17

Chrom Revision: 2.3 11-Sep-2020 20:57:08

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D

Injection Date: 15-Sep-2020 20:33:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std1 0.2

Worklist Smp#: 18

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

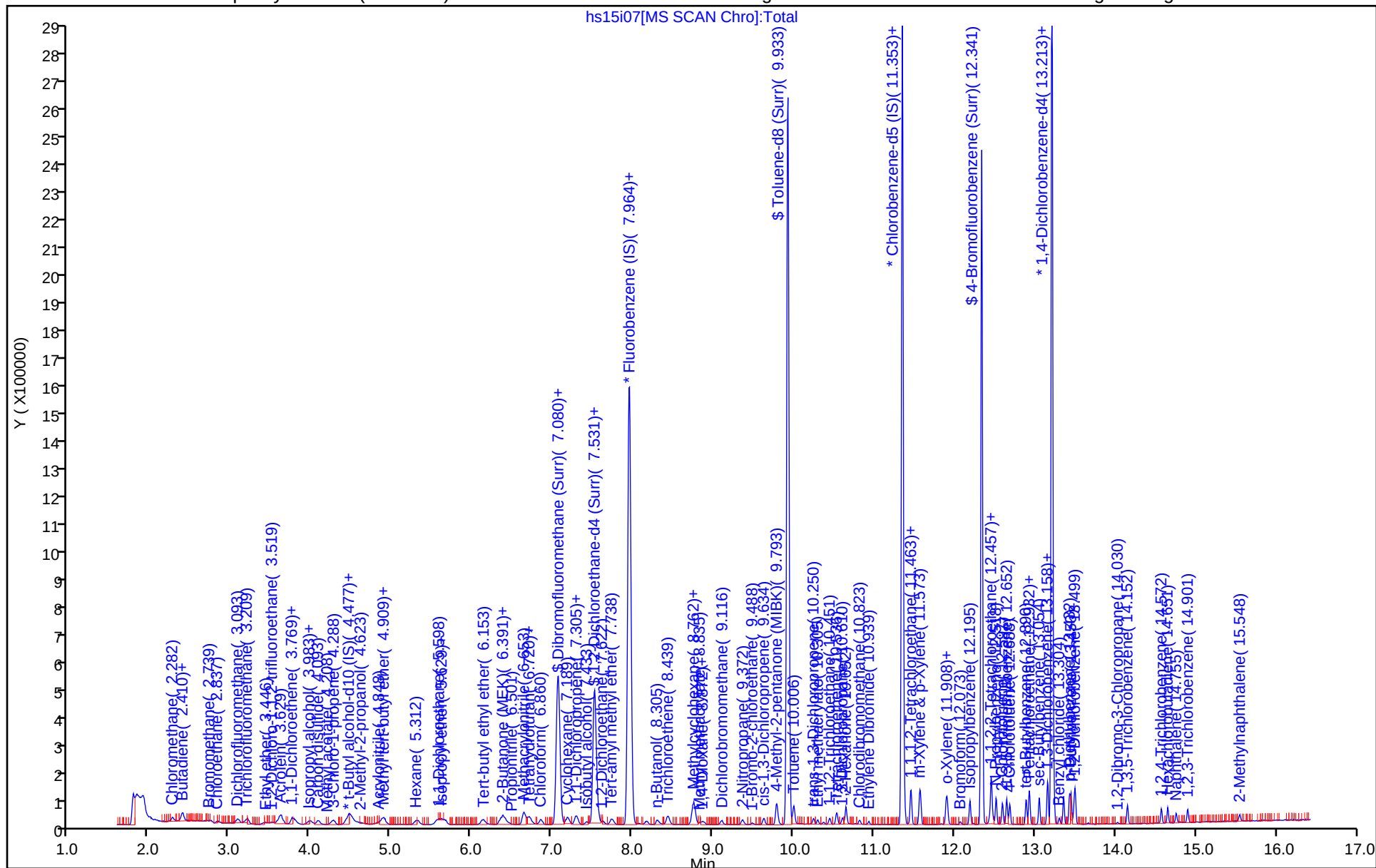
ALS Bottle#: 18

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1
 SDG No.: _____
 Lab Sample ID: ICV 410-44043/10 Calibration Date: 09/15/2020 17:39
 Instrument ID: 19094 Calib Start Date: 09/15/2020 15:07
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 09/15/2020 17:18
 Lab File ID: hs15v11.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	0.2977	0.3342		5.61	5.00	12.3	30.0
Methoxymethane	Ave	0.3132	0.3159		5.04	5.00	0.9	30.0
Acetonitrile	Ave	0.0150	0.0193		48.4	37.5	28.9	30.0
Vinyl acetate	Ave	0.3549	0.3092		10.9	12.5	-12.9	30.0
Ethyl acetate	Ave	0.1758	0.2164		3.08	2.50	23.1	30.0
Methyl acrylate	Ave	0.1345	0.1577		29.3	25.0	17.2	30.0
1-Chlorobutane	Ave	0.5095	0.5475		5.37	5.00	7.5	30.0
Chloroacetonitrile	Ave	0.0064	0.0078		305	250	22.0	30.0
2-Chloroethyl vinyl ether	Ave	0.1194	0.1340		5.61	5.00	12.2	30.0
cis-1,4-Dichloro-2-butene	Ave	0.0865	0.0955			12.5	10.4	30.0
Cyclohexanone	Ave	0.3235	0.3317		128	125	2.6	30.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15v11.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 15-Sep-2020 17:39:30 ALS Bottle#: 10 Worklist Smp#: 10
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0010497-010
 Misc. Info.: ICV
 Operator ID: kas02648 Instrument ID: 19094
 Sublist:
 Method: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 15-Sep-2020 23:49:16 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1035

First Level Reviewer: campbellme

Date: 15-Sep-2020 22:21:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Chlorodifluoromethane	51	2.087	2.093	-0.006	97	347301	5.00	5.61	M
4 Dimethyl ether	45	2.166	2.166	0.000	100	328311	5.00	5.04	M
17 Acrolein	56	3.629	3.617	0.012	100	243275	37.4	35.4	
25 Acetonitrile	41	4.208	4.214	-0.006	100	150321	37.5	48.4	
* 28 t-Butyl alcohol-d10 (IS)	65	4.489	4.489	0.000	0	130692	50.0	50.0	
36 Vinyl acetate	43	5.543	5.537	0.006	97	803347	12.5	10.9	
44 Ethyl acetate	43	6.415	6.409	0.006	97	112457	2.50	3.08	
46 Methyl acrylate	55	6.476	6.470	0.006	99	819353	25.0	29.3	
\$ 51 Dibromofluoromethane (Surr)	113	7.073	7.074	-0.001	93	517941	10.0	10.2	
54 1-Chlorobutane	56	7.244	7.238	0.006	96	569037	5.00	5.37	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.531	7.525	0.006	0	105099	10.0	10.1	
61 Isopropyl acetate	43	7.634	7.628	0.006	98	168759	2.50	2.52	
* 65 Fluorobenzene (IS)	96	7.964	7.958	0.006	99	2078507	10.0	10.0	
74 n-Propyl acetate	61	8.921	8.921	0.000	99	33142	2.50	2.57	
77 Chloroacetonitrile	75	9.427	9.433	-0.006	85	403840	250.0	305.0	
78 2-Chloroethyl vinyl ether	63	9.451	9.451	0.000	88	139287	5.00	5.61	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	2026021	10.0	10.0	
92 n-Butyl acetate	43	10.768	10.768	0.000	98	157764	2.50	2.61	
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.353	0.000	87	1516222	10.0	10.0	
106 cis-1,4-Dichloro-2-butene	88	12.237	12.237	0.000	0	181148	12.5	13.8	
107 Cyclohexanone	55	12.280	12.280	0.000	91	108389	125.0	128.2	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.341	12.341	0.000	90	744745	10.0	10.2	
* 124 1,4-Dichlorobenzene-d4	152	13.212	13.213	-0.001	96	793445	10.0	10.0	
133 Hexachloroethane	201	13.694	13.694	0.000	94	204704	5.00	4.90	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_VOA5_00013	Amount Added: 25.00	Units: uL	
MSV_QCYC_00004	Amount Added: 12.50	Units: uL	
MSV_Q_QARC_00045	Amount Added: 12.50	Units: uL	
MSV_QAcet_00006	Amount Added: 7.50	Units: uL	
MSV_Q_CDFM_25_00006	Amount Added: 5.00	Units: uL	
MSV_Q_QDME_00008	Amount Added: 5.00	Units: uL	
MSV_QLKB_00003	Amount Added: 25.00	Units: uL	
MSV_QREV4_25_00010	Amount Added: 12.50	Units: uL	
MSV_30_826ISS_00005	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 15-Sep-2020 23:49:18

Chrom Revision: 2.3 11-Sep-2020 20:57:08

Euofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15v11.D

Injection Date: 15-Sep-2020 17:39:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: ICV

Worklist Smp#: 10

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

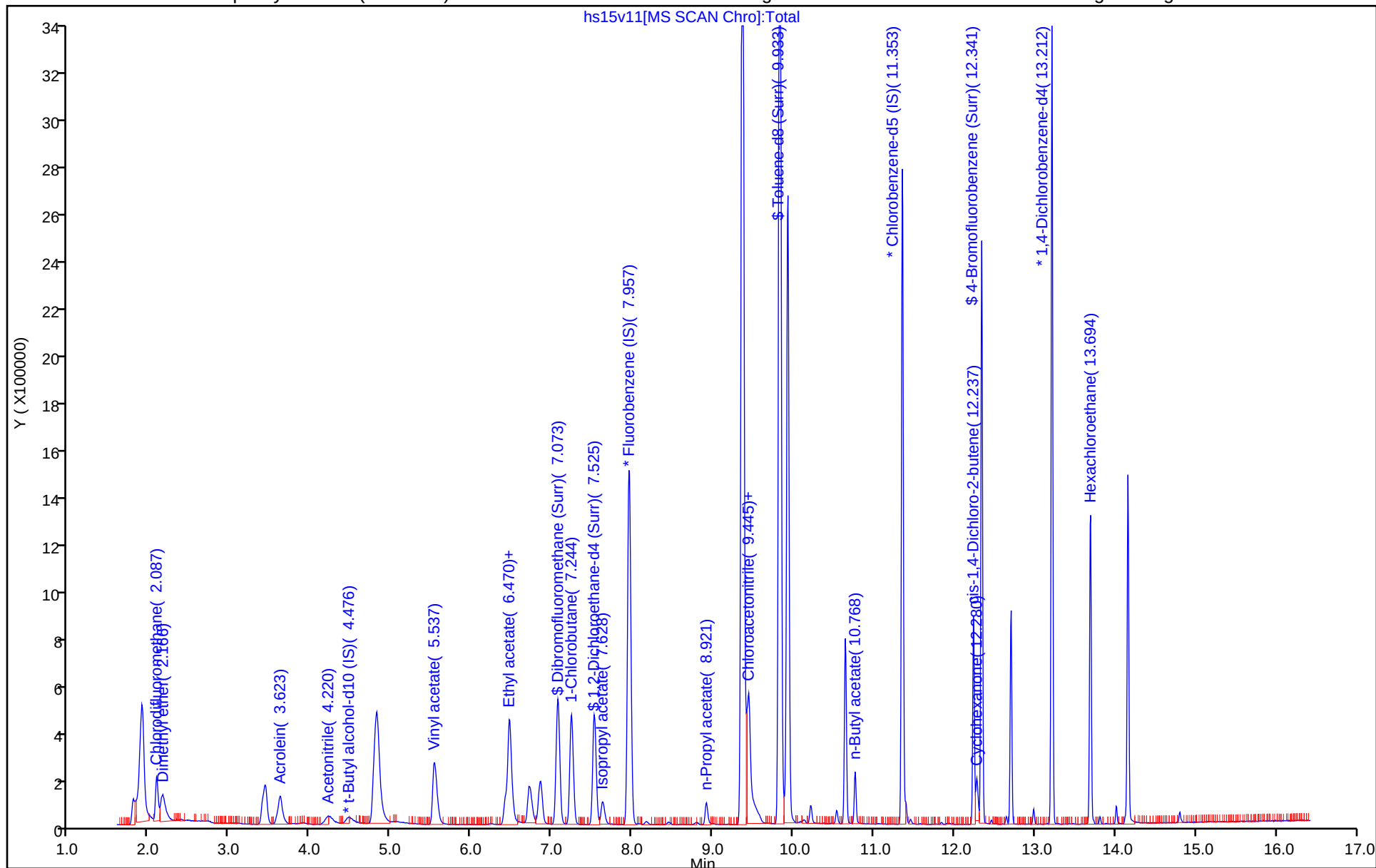
ALS Bottle#: 10

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

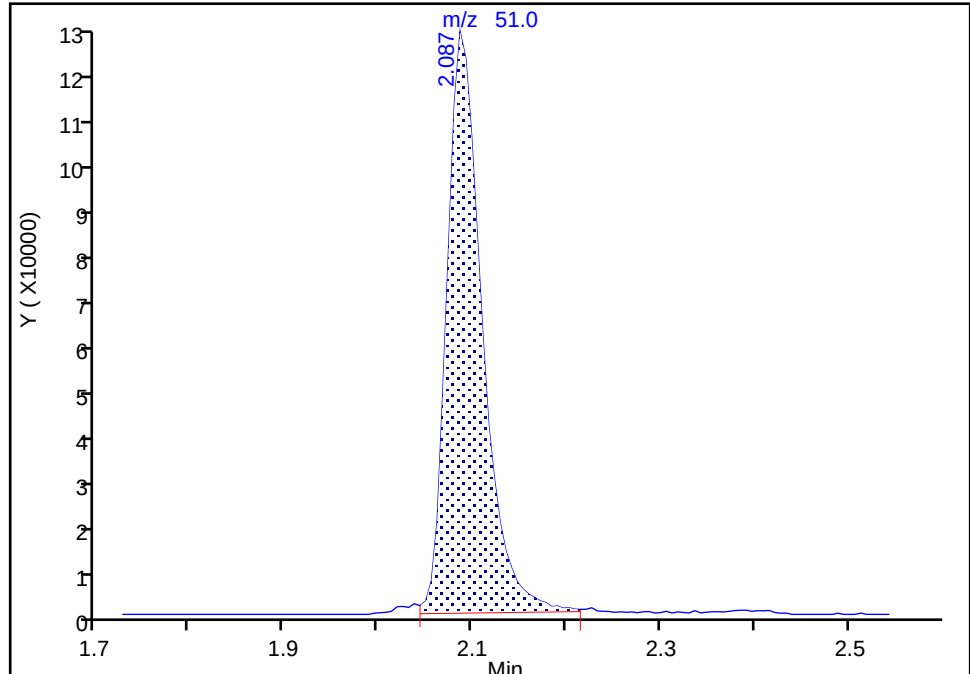
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Injection Date: 15-Sep-2020 17:39:30 Instrument ID: 19094
Lims ID: ICV
Client ID:
Operator ID: kas02648 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

2 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

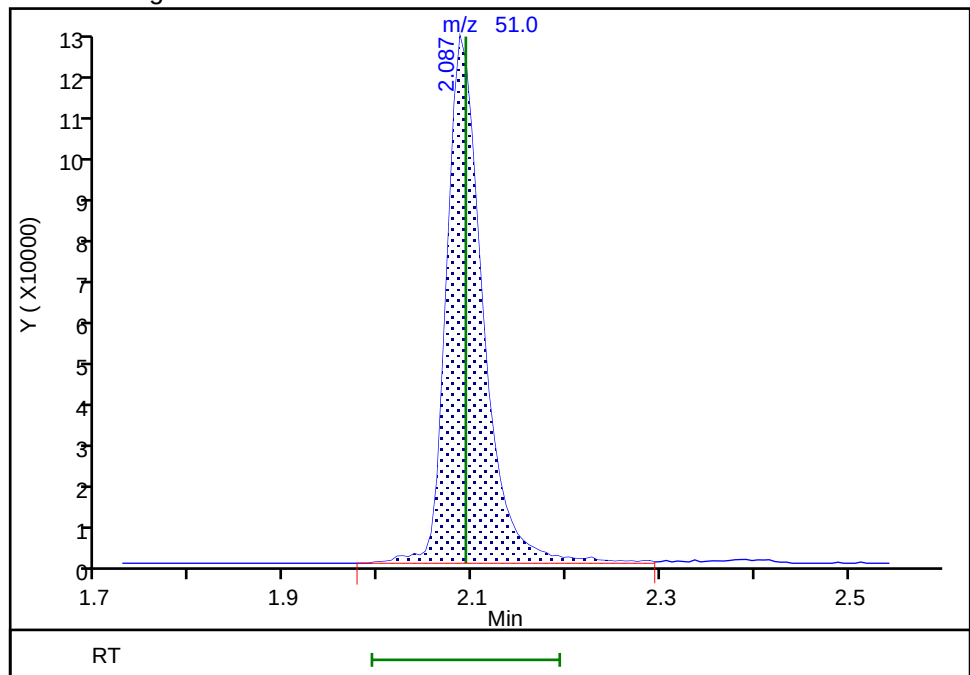
RT: 2.09
Area: 336811
Amount: 5.443512
Amount Units: ug/l

Processing Integration Results



RT: 2.09
Area: 347301
Amount: 5.613050
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:19:30

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

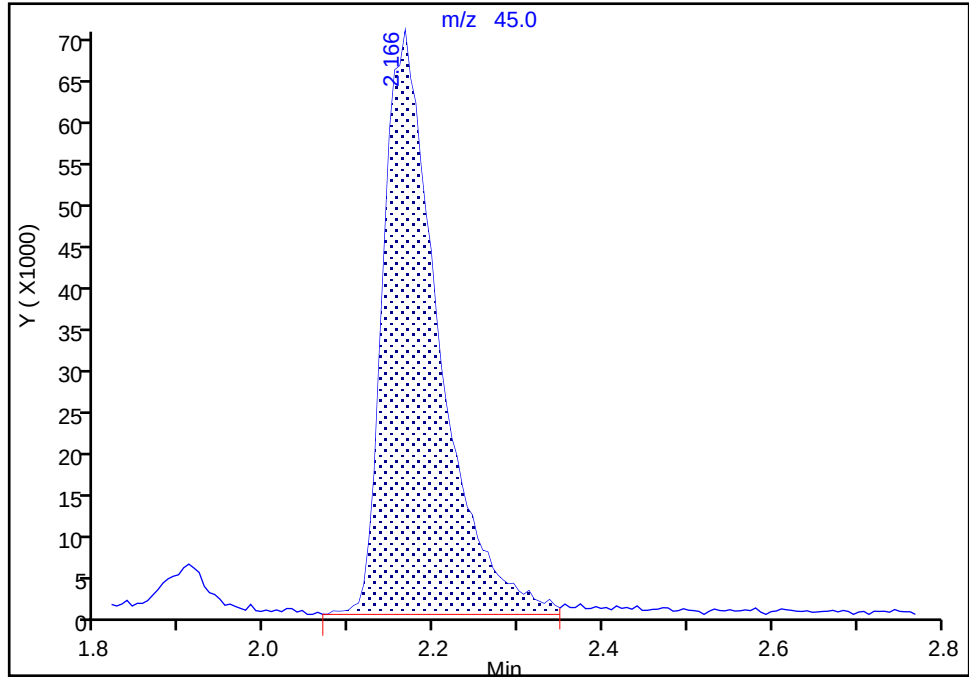
Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15v11.D
Injection Date: 15-Sep-2020 17:39:30 Instrument ID: 19094
Lims ID: ICV
Client ID:
Operator ID: kas02648 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

4 Dimethyl ether, CAS: 115-10-6

Signal: 1

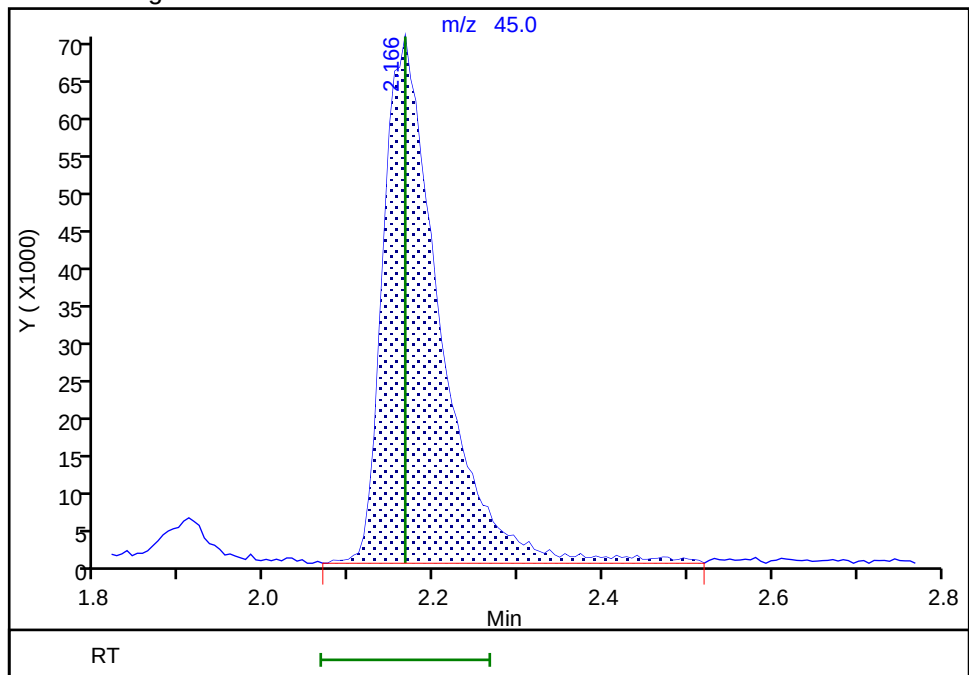
RT: 2.17
Area: 321202
Amount: 4.933351
Amount Units: ug/l

Processing Integration Results



RT: 2.17
Area: 328311
Amount: 5.042538
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:19:40

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1
 SDG No.: _____
 Lab Sample ID: ICV 410-44043/19 Calibration Date: 09/15/2020 20:55
 Instrument ID: 19094 Calib Start Date: 09/15/2020 18:23
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 09/15/2020 20:33
 Lab File ID: hu08v01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2898	0.2575	0.1000	4.44	5.00	-11.1	30.0
Chloromethane	Ave	0.4036	0.3680	0.1000	4.56	5.00	-8.8	30.0
1,3-Butadiene	Ave	0.3533	0.3569		5.05	5.00	1.0	30.0
Vinyl chloride	Ave	0.3576	0.3506	0.1000	4.90	5.00	-2.0	30.0
Bromomethane	Ave	0.2440	0.2343	0.1000	4.80	5.00	-4.0	30.0
Chloroethane	Ave	0.2300	0.2107	0.1000	4.58	5.00	-8.4	30.0
Dichlorofluoromethane	Ave	0.4728	0.4642		4.91	5.00	-1.8	30.0
Trichlorofluoromethane	Ave	0.4647	0.4394	0.1000	4.73	5.00	-5.4	30.0
Ethyl ether	Ave	0.2097	0.2033		4.85	5.01	-3.1	30.0
Freon 123a	Ave	0.3282	0.3450		5.26	5.00	5.1	30.0
Acrolein	Ave	2.627	2.624		37.4	37.4	-0.1	30.0
1,1-Dichloroethene	Ave	0.2367	0.2459	0.1000	5.19	5.00	3.9	30.0
Acetone	Ave	3.422	3.394	0.1000	37.2	37.5	-0.8	30.0
Freon 113	Ave	0.2608	0.2551	0.1000	4.89	5.00	-2.2	30.0
Methyl iodide	Ave	0.4429	0.4488		5.07	5.00	1.3	30.0
Ethyl bromide	Ave	0.2009	0.1840		4.52	4.93	-8.4	30.0
Carbon disulfide	Ave	0.7961	0.8140	0.1000	5.11	5.00	2.3	30.0
Methyl acetate	Ave	10.04	10.09	0.1000	5.03	5.00	0.5	30.0
Allyl chloride	Ave	0.4475	0.4138		4.62	5.00	-7.5	30.0
Methylene Chloride	Ave	0.2654	0.2799	0.1000	5.27	5.00	5.4	30.0
t-Butyl alcohol	Ave	1.046	1.013		48.5	50.0	-3.1	30.0
Acrylonitrile	Ave	4.255	4.812		28.3	25.0	13.1	30.0
Methyl tertiary butyl ether	Ave	0.5829	0.6020	0.1000	5.16	5.00	3.3	30.0
trans-1,2-Dichloroethene	Ave	0.2638	0.2740	0.1000	5.19	5.00	3.9	30.0
n-Hexane	Ave	0.4140	0.4177		5.04	5.00	0.9	30.0
1,1-Dichloroethane	Ave	0.5252	0.5438	0.2000	5.18	5.00	3.5	30.0
di-Isopropyl ether	Ave	0.9046	0.9603		5.31	5.00	6.1	30.0
2-Chloro-1,3-butadiene	Ave	0.4362	0.4559		5.23	5.00	4.5	30.0
Ethyl t-butyl ether	Ave	0.7505	0.7902		5.26	5.00	5.3	30.0
2-Butanone	Ave	5.575	6.230	0.1000	41.9	37.5	11.8	30.0
cis-1,2-Dichloroethene	Ave	0.2990	0.3225	0.1000	5.39	5.00	7.8	30.0
2,2-Dichloropropane	Ave	0.3879	0.3948		5.09	5.00	1.8	30.0
Propionitrile	Ave	1.544	1.658		40.3	37.5	7.4	30.0
Methacrylonitrile	Ave	5.359	5.926		41.5	37.5	10.6	30.0
Bromochloromethane	Ave	0.1289	0.1209		4.69	5.00	-6.2	30.0
Tetrahydrofuran	Ave	1.394	1.555		27.9	25.0	11.6	30.0
Chloroform	Ave	0.4976	0.5110	0.2000	5.14	5.00	2.7	30.0
1,1,1-Trichloroethane	Ave	0.4170	0.4204	0.1000	5.04	5.00	0.8	30.0
Cyclohexane	Ave	0.5128	0.5307	0.1000	5.17	5.00	3.5	30.0
1,1-Dichloropropene	Ave	0.3848	0.3973		5.16	5.00	3.3	30.0
Carbon tetrachloride	Ave	0.3660	0.3714	0.1000	5.07	5.00	1.5	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Lab Sample ID: ICV 410-44043/19 Calibration Date: 09/15/2020 20:55

Instrument ID: 19094 Calib Start Date: 09/15/2020 18:23

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 09/15/2020 20:33

Lab File ID: hu08v01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isobutyl alcohol	Ave	0.3906	0.3784		121	125	-3.1	30.0
Benzene	Ave	1.156	1.170	0.5000	5.06	5.00	1.3	30.0
1,2-Dichloroethane	Ave	0.2987	0.3016	0.1000	5.05	5.00	1.0	30.0
t-Amyl methyl ether	Ave	0.6197	0.6668		5.38	5.00	7.6	30.0
n-Heptane	Ave	0.4973	0.4942		4.97	5.00	-0.6	30.0
n-Butanol	Ave	0.3138	0.3100		247	250	-1.2	30.0
Trichloroethene	Ave	0.2906	0.2992	0.2000	5.15	5.00	2.9	30.0
Methylcyclohexane	Ave	0.5119	0.4818	0.1000	4.71	5.00	-5.9	30.0
1,2-Dichloropropane	Ave	0.2997	0.3125	0.1000	5.21	5.00	4.3	30.0
Methyl methacrylate	Ave	9.555	11.15		5.83	5.00	16.7	30.0
1,4-Dioxane	Ave	0.0654	0.0653	0.0050	125	125	-0.3	30.0
Dibromomethane	Ave	0.1301	0.1346		5.17	5.00	3.5	30.0
Bromodichloromethane	Ave	0.3342	0.3545	0.2000	5.30	5.00	6.1	30.0
2-Nitropropane	Ave	2.753	2.928		5.32	5.00	6.3	30.0
1-Bromo-2-chloroethane	Ave	0.1744	0.2891		8.29	5.00	65.8*	30.0
cis-1,3-Dichloropropene	Ave	0.3978	0.4144	0.2000	5.21	5.00	4.2	30.0
4-Methyl-2-pentanone	Ave	13.73	15.24	0.1000	27.7	25.0	11.0	30.0
Toluene	Ave	0.9713	0.9840	0.4000	5.07	5.00	1.3	30.0
trans-1,3-Dichloropropene	Ave	0.4358	0.4528	0.1000	5.20	5.00	3.9	30.0
Ethyl methacrylate	Ave	0.3404	0.3700		5.43	5.00	8.7	30.0
1,1,2-Trichloroethane	Ave	0.2472	0.2570	0.1000	5.20	5.00	4.0	30.0
Tetrachloroethene	Ave	0.4436	0.4446	0.2000	5.01	5.00	0.2	30.0
1,3-Dichloropropane	Ave	0.4535	0.4590		5.06	5.00	1.2	30.0
2-Hexanone	Ave	9.301	10.67	0.1000	28.7	25.0	14.8	30.0
Dibromochloromethane	Ave	0.2926	0.3095		5.29	5.00	5.8	30.0
1,2-Dibromoethane	Ave	0.2377	0.2421	0.1000	5.09	5.00	1.8	30.0
1-Chlorohexane	Ave	0.5674	0.5491		4.84	5.00	-3.2	30.0
Chlorobenzene	Ave	1.039	1.081	0.5000	5.20	5.00	4.0	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3598	0.3673		5.10	5.00	2.1	30.0
Ethylbenzene	Ave	1.848	1.902	0.1000	5.15	5.00	2.9	30.0
m&p-Xylene	Ave	0.6935	0.7203	0.1000	10.4	10.0	3.9	30.0
o-Xylene	Ave	0.6694	0.7029	0.3000	5.25	5.00	5.0	30.0
Styrene	Ave	1.081	1.172	0.3000	5.42	5.00	8.5	30.0
Bromoform	Ave	0.1630	0.1723	0.1000	5.29	5.00	5.7	30.0
Isopropylbenzene	Ave	1.801	1.918	0.1000	5.32	5.00	6.5	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5837	0.6103	0.3000	5.23	5.00	4.6	30.0
Bromobenzene	Ave	0.8005	0.8368		5.23	5.00	4.5	30.0
trans-1,4-Dichloro-2-butene	Ave	4.967	5.487		27.6	25.0	10.5	30.0
1,2,3-Trichloropropane	Ave	0.1490	0.1595		5.35	5.00	7.1	30.0
N-Propylbenzene	Ave	4.265	4.559		5.34	5.00	6.9	30.0
2-Chlorotoluene	Ave	0.8171	0.8680		5.31	5.00	6.2	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1
 SDG No.: _____
 Lab Sample ID: ICV 410-44043/19 Calibration Date: 09/15/2020 20:55
 Instrument ID: 19094 Calib Start Date: 09/15/2020 18:23
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 09/15/2020 20:33
 Lab File ID: hu08v01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	2.916	3.115		5.34	5.00	6.8	30.0
4-Chlorotoluene	Ave	0.8249	0.8686		5.26	5.00	5.3	30.0
tert-Butylbenzene	Ave	0.6336	0.6833		5.39	5.00	7.8	30.0
Pentachloroethane	Ave	0.4990	0.5105		5.12	5.00	2.3	30.0
1,2,4-Trimethylbenzene	Ave	2.931	3.170		5.41	5.00	8.2	30.0
sec-Butylbenzene	Ave	3.970	4.240		5.34	5.00	6.8	30.0
1,3-Dichlorobenzene	Ave	1.603	1.640	0.6000	5.12	5.00	2.3	30.0
p-Isopropyltoluene	Ave	3.280	3.577		5.45	5.00	9.1	30.0
1,4-Dichlorobenzene	Ave	1.591	1.658	0.5000	5.21	5.00	4.2	30.0
1,2,3-Trimethylbenzene	Ave	1.304	1.420		5.45	5.00	8.9	30.0
Benzyl chloride	Ave	0.1957	0.2100		5.36	5.00	7.3	30.0
n-Butylbenzene	Ave	1.779	1.905		5.36	5.00	7.1	30.0
1,2-Dichlorobenzene	Ave	1.446	1.541	0.4000	5.33	5.00	6.6	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.0790	0.0860	0.0500	5.45	5.00	8.9	30.0
1,3,5-Trichlorobenzene	Ave	1.258	1.372		5.46	5.00	9.1	30.0
1,2,4-Trichlorobenzene	Ave	1.041	1.164	0.2000	5.59	5.00	11.8	30.0
Hexachlorobutadiene	Ave	0.6111	0.6729		5.51	5.00	10.1	30.0
Naphthalene	Ave	1.756	1.939		5.52	5.00	10.4	30.0
1,2,3-Trichlorobenzene	Ave	0.9302	1.035		5.56	5.00	11.2	30.0
Dibromofluoromethane (Surr)	Ave	0.2451	0.2440		9.96	10.0	-0.4	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0502	0.0508		10.1	10.0	1.1	30.0
Toluene-d8 (Surr)	Ave	1.332	1.329		9.98	10.0	-0.2	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4822	0.4836		10.0	10.0	0.3	30.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hu08v01.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 15-Sep-2020 20:55:30 ALS Bottle#: 19 Worklist Smp#: 19
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0010497-019
 Misc. Info.: ICV
 Operator ID: kas02648 Instrument ID: 19094
 Sublist:
 Method: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 15-Sep-2020 23:49:16 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1035

First Level Reviewer: campbellme

Date: 15-Sep-2020 22:57:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.062	2.075	-0.013	99	278046	5.00	4.44	M
6 Chloromethane	50	2.276	2.282	-0.006	99	397333	5.00	4.56	
8 Butadiene	39	2.398	2.404	-0.006	96	385407	5.00	5.05	
7 Vinyl chloride	62	2.404	2.404	0.000	97	378567	5.00	4.90	
9 Bromomethane	94	2.739	2.745	-0.006	91	253026	5.00	4.80	
10 Chloroethane	64	2.837	2.843	-0.006	100	227553	5.00	4.58	
11 Dichlorofluoromethane	67	3.087	3.087	-0.001	97	501222	5.00	4.91	
13 Trichlorofluoromethane	101	3.166	3.166	0.000	97	474477	5.00	4.73	
15 Ethyl ether	59	3.428	3.440	-0.012	93	219679	5.01	4.85	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.513	3.519	-0.006	94	372543	5.00	5.26	
17 Acrolein	56	3.611	3.617	-0.006	98	249488	37.4	37.4	
18 1,1-Dichloroethene	96	3.757	3.769	-0.012	97	265492	5.00	5.19	
20 112TCTFE	101	3.794	3.800	-0.006	93	275494	5.00	4.89	
19 Acetone	43	3.788	3.800	-0.012	92	323355	37.5	37.2	
22 Iodomethane	142	3.964	3.977	-0.013	99	484580	5.00	5.07	
21 Isopropyl alcohol	45	3.958	3.977	-0.019	26	54899	37.5	32.7	M
23 Ethyl bromide	108	3.995	4.007	-0.012	98	196032	4.93	4.52	
24 Carbon disulfide	76	4.080	4.092	-0.012	99	878949	5.00	5.11	
26 Methyl acetate	43	4.239	4.245	-0.006	98	128197	5.00	5.03	
27 3-Chloro-1-propene	41	4.269	4.275	-0.006	92	446766	5.00	4.62	
29 Methylene Chloride	84	4.470	4.477	-0.007	95	302196	5.00	5.27	
* 28 t-Butyl alcohol-d10 (IS)	65	4.470	4.489	-0.019	0	127032	50.0	50.0	
30 2-Methyl-2-propanol	59	4.611	4.629	-0.018	99	128736	50.0	48.5	
31 Acrylonitrile	53	4.818	4.818	0.000	98	305621	25.0	28.3	
32 Methyl tert-butyl ether	73	4.879	4.891	-0.012	97	650024	5.00	5.16	
33 trans-1,2-Dichloroethene	96	4.891	4.903	-0.012	97	295870	5.00	5.19	
34 Hexane	57	5.318	5.324	-0.006	94	451027	5.00	5.04	
35 1,1-Dichloroethane	63	5.556	5.562	-0.006	96	587154	5.00	5.18	
37 Isopropyl ether	45	5.610	5.604	0.006	95	1036820	5.00	5.31	
38 2-Chloro-1,3-butadiene	53	5.659	5.665	-0.006	91	492262	5.00	5.23	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	6.135	6.141	-0.006	98	853167	5.00	5.26	
41 2-Butanone (MEK)	43	6.342	6.336	0.006	99	593555	37.5	41.9	
42 cis-1,2-Dichloroethene	96	6.385	6.379	0.006	83	348220	5.00	5.39	
43 2,2-Dichloropropane	77	6.397	6.403	-0.006	89	426322	5.00	5.09	
45 Propionitrile	54	6.433	6.433	0.000	98	158008	37.5	40.3	
47 Methacrylonitrile	67	6.647	6.647	0.000	94	564594	37.5	41.5	
49 Tetrahydrofuran	71	6.720	6.714	0.006	84	98743	25.0	27.9	
48 Chlorobromomethane	128	6.714	6.720	-0.006	95	130570	5.00	4.69	
50 Chloroform	83	6.860	6.866	-0.006	94	551758	5.00	5.14	
\$ 51 Dibromofluoromethane (Surr)	113	7.074	7.074	0.000	93	526873	10.0	9.96	
52 1,1,1-Trichloroethane	97	7.092	7.092	0.000	99	453966	5.00	5.04	
53 Cyclohexane	56	7.189	7.196	-0.007	92	573023	5.00	5.17	
55 1,1-Dichloropropene	75	7.293	7.299	-0.006	95	429025	5.00	5.16	
56 Carbon tetrachloride	117	7.299	7.305	-0.006	86	401043	5.00	5.07	
57 Isobutyl alcohol	41	7.421	7.433	-0.012	93	120179	125.0	121.1	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.525	7.525	0.000	0	109638	10.0	10.1	
59 Benzene	78	7.561	7.561	0.000	97	1263671	5.00	5.06	
60 1,2-Dichloroethane	62	7.628	7.628	0.000	97	325617	5.00	5.05	
62 Tert-amyl methyl ether	73	7.744	7.738	0.006	98	719931	5.00	5.38	
* 65 Fluorobenzene (IS)	96	7.958	7.958	0.000	98	2159479	10.0	10.0	
64 n-Heptane	43	7.964	7.964	0.000	94	533621	5.00	4.97	
66 n-Butanol	56	8.299	8.305	-0.006	90	196872	250.0	246.9	M
67 Trichloroethene	95	8.433	8.433	0.000	98	323063	5.00	5.15	
68 Methylcyclohexane	83	8.744	8.744	0.000	96	520201	5.00	4.71	
69 2-ethoxy-2-methyl butane	87	8.768	8.762	0.006	91	428437	5.00	5.42	
70 1,2-Dichloropropane	63	8.768	8.768	0.000	85	337413	5.00	5.21	
71 Methyl methacrylate	69	8.841	8.842	-0.001	92	141594	5.00	5.83	
72 1,4-Dioxane	88	8.854	8.854	0.000	31	20726	125.0	124.7	M
73 Dibromomethane	93	8.878	8.878	0.000	96	145317	5.00	5.17	
75 Dichlorobromomethane	83	9.110	9.110	0.000	99	382786	5.00	5.30	
76 2-Nitropropane	41	9.360	9.366	-0.006	98	37191	5.00	5.32	
78 2-Chloroethyl vinyl ether	63		9.451				ND	ND	
79 1-Bromo-2-chloroethane	63	9.488	9.488	0.000	99	312158	5.00	8.29	
80 cis-1,3-Dichloropropene	75	9.628	9.628	0.000	95	447410	5.00	5.21	
81 4-Methyl-2-pentanone (MIBK)	43	9.793	9.793	0.000	98	968140	25.0	27.7	
\$ 82 Toluene-d8 (Surr)	98	9.927	9.933	-0.006	94	2106642	10.0	9.98	
83 Toluene	92	10.006	10.006	0.000	98	779851	5.00	5.07	
85 trans-1,3-Dichloropropene	75	10.250	10.250	0.000	93	358857	5.00	5.20	
86 Ethyl methacrylate	69	10.299	10.299	0.000	91	293220	5.00	5.43	
87 1,1,2-Trichloroethane	97	10.451	10.451	0.000	91	203696	5.00	5.20	
88 Tetrachloroethene	166	10.536	10.536	0.000	98	352341	5.00	5.01	
89 1,3-Dichloropropane	76	10.609	10.609	0.000	91	363727	5.00	5.06	
91 2-Hexanone	43	10.652	10.652	0.000	98	677962	25.0	28.7	
93 Chlorodibromomethane	129	10.823	10.823	0.000	90	245299	5.00	5.29	
94 Ethylene Dibromide	107	10.933	10.939	-0.006	98	191824	5.00	5.09	
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.353	0.000	89	1584986	10.0	10.0	
96 1-Chlorohexane	91	11.353	11.353	0.000	96	435173	5.00	4.84	
98 Chlorobenzene	112	11.378	11.384	-0.006	94	856812	5.00	5.20	
99 1,1,1,2-Tetrachloroethane	131	11.457	11.457	0.000	94	291058	5.00	5.10	
100 Ethylbenzene	91	11.463	11.463	0.000	99	1507413	5.00	5.15	
101 m-Xylene & p-Xylene	106	11.573	11.573	0.000	0	1141670	10.0	10.4	
102 o-Xylene	106	11.902	11.902	0.000	97	557069	5.00	5.25	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
103 Styrene	104	11.914	11.914	0.000	95	929046	5.00	5.42	
104 Bromoform	173	12.079	12.073	0.006	97	136586	5.00	5.29	
105 Isopropylbenzene	105	12.194	12.195	-0.001	96	1519998	5.00	5.32	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.341	12.341	0.000	90	766560	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.432	12.432	0.000	94	250310	5.00	5.23	
111 Bromobenzene	156	12.457	12.457	0.000	95	343231	5.00	5.23	
110 trans-1,4-Dichloro-2-butene	53	12.457	12.457	0.000	87	348502	25.0	27.6	
112 1,2,3-Trichloropropane	110	12.481	12.481	0.000	83	65439	5.00	5.35	
113 N-Propylbenzene	91	12.518	12.518	0.000	99	1870022	5.00	5.34	
114 2-Chlorotoluene	126	12.597	12.597	0.000	96	356008	5.00	5.31	
115 1,3,5-Trimethylbenzene	105	12.652	12.652	0.000	94	1277725	5.00	5.34	
116 4-Chlorotoluene	126	12.688	12.688	0.000	98	356272	5.00	5.26	
118 tert-Butylbenzene	134	12.896	12.896	0.000	94	280261	5.00	5.39	
119 Pentachloroethane	167	12.926	12.932	-0.006	90	209383	5.00	5.12	
120 1,2,4-Trimethylbenzene	105	12.932	12.932	0.000	97	1300159	5.00	5.41	
121 sec-Butylbenzene	105	13.054	13.054	0.000	95	1739075	5.00	5.34	
122 1,3-Dichlorobenzene	146	13.158	13.158	0.000	98	672538	5.00	5.12	
123 4-Isopropyltoluene	119	13.158	13.164	-0.006	97	1467303	5.00	5.45	
* 124 1,4-Dichlorobenzene-d4	152	13.213	13.213	0.000	97	820309	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.231	13.231	0.000	94	680004	5.00	5.21	
126 1,2,3-Trimethylbenzene	120	13.237	13.237	0.000	99	582575	5.00	5.45	
127 Benzyl chloride	126	13.304	13.304	0.000	99	86117	5.00	5.36	
129 p-Diethylbenzene	119	13.432	13.432	0.000	94	934424	5.00	5.28	
130 n-Butylbenzene	92	13.450	13.450	0.000	96	781396	5.00	5.36	
131 1,2-Dichlorobenzene	146	13.487	13.487	0.000	98	631973	5.00	5.33	
134 1,2-Dibromo-3-Chloropropane	155	14.029	14.030	-0.001	84	35278	5.00	5.45	
135 1,3,5-Trichlorobenzene	180	14.151	14.151	0.000	97	562907	5.00	5.46	
136 1,2,4-Trichlorobenzene	180	14.572	14.572	0.000	94	477404	5.00	5.59	
137 Hexachlorobutadiene	225	14.651	14.651	0.000	96	275999	5.00	5.51	
138 Naphthalene	128	14.755	14.755	0.000	97	795486	5.00	5.52	
139 1,2,3-Trichlorobenzene	180	14.901	14.901	0.000	96	424351	5.00	5.56	
140 2-Methylnaphthalene	142	15.547	15.548	-0.001	97	474407	5.00	4.45	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_QVOA1_00046	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA6_00043	Amount Added: 12.50	Units: uL	
MSV_Q_QARC_00045	Amount Added: 12.50	Units: uL	
MSV_QGAS_826_00073	Amount Added: 12.50	Units: uL	
MSV_Q_EE_00002	Amount Added: 12.50	Units: uL	
MSV_Q_ETBR_00003	Amount Added: 12.50	Units: uL	
MSV_30_826ISS_00005	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 15-Sep-2020 23:49:22

Chrom Revision: 2.3 11-Sep-2020 20:57:08

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hu08v01.D

Injection Date: 15-Sep-2020 20:55:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: ICV

Worklist Smp#: 19

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

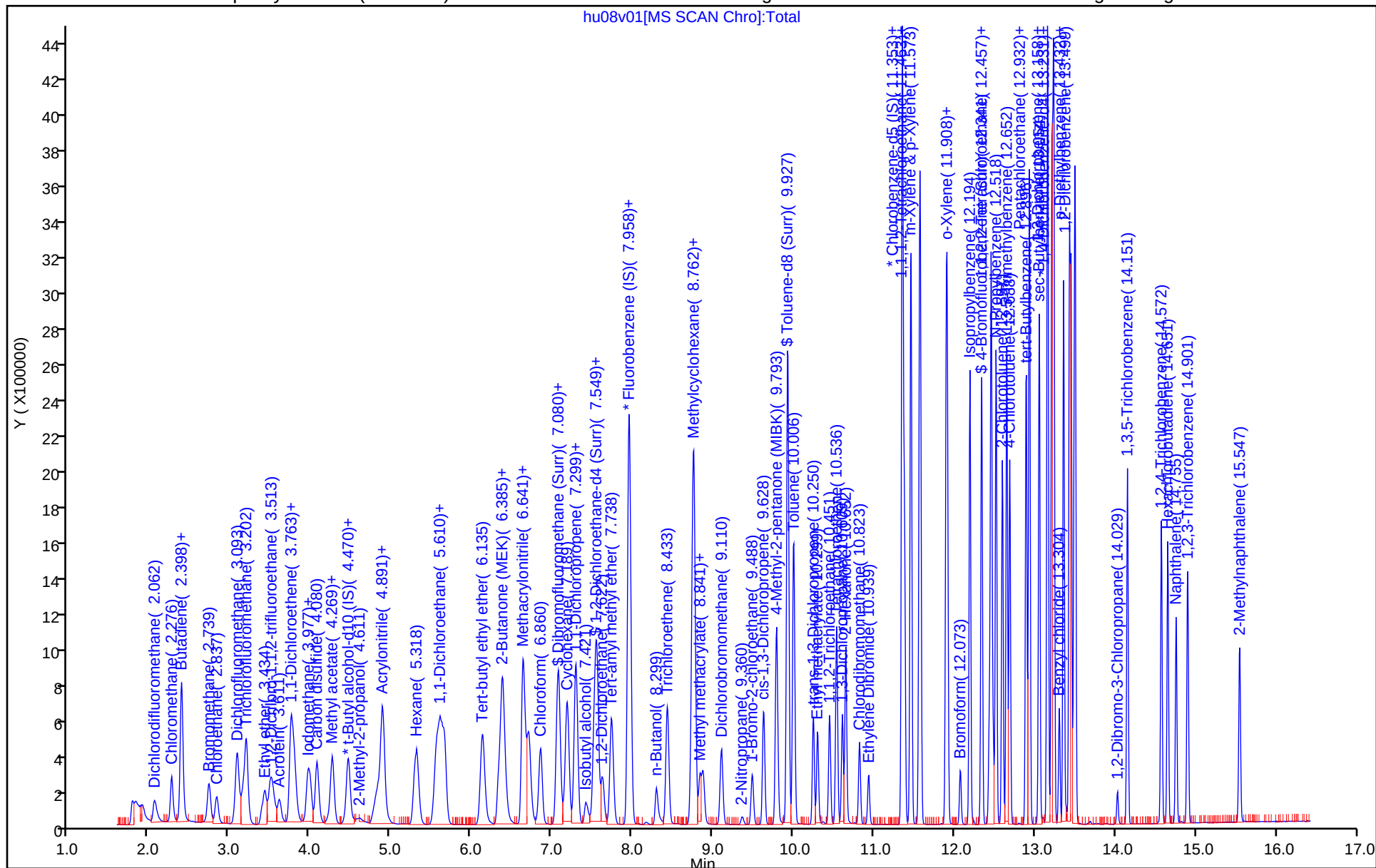
ALS Bottle#: 19

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hu08v01.D

Injection Date: 15-Sep-2020 20:55:30

Instrument ID: 19094

Lims ID: ICV

Client ID:

Operator ID: kas02648

ALS Bottle#:

19

Worklist Smp#: 19

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

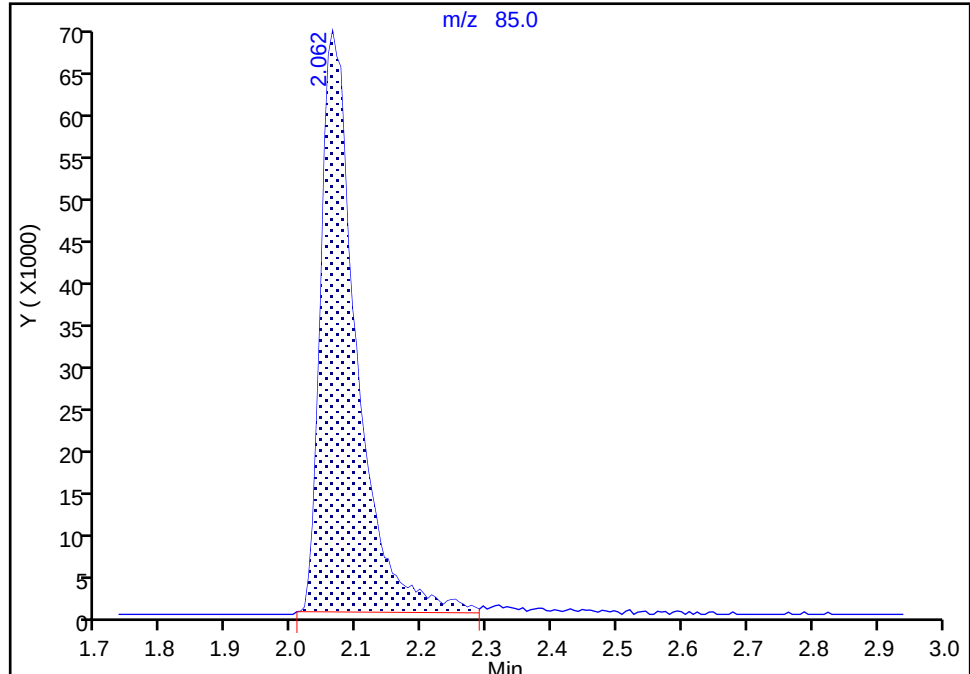
MS Quad

3 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

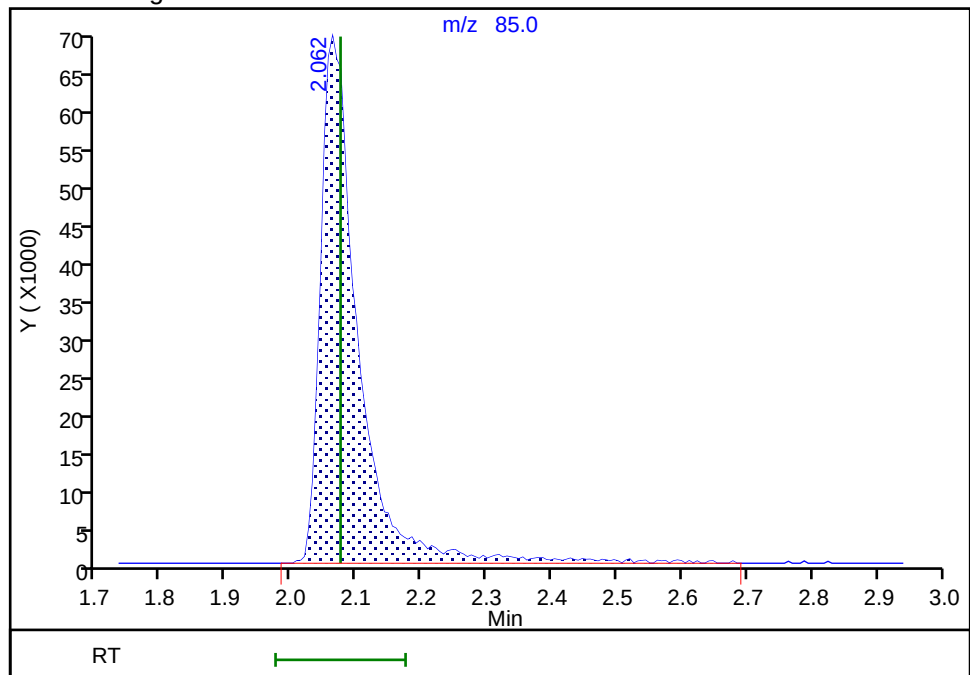
RT: 2.06
Area: 264190
Amount: 4.222159
Amount Units: ug/l

Processing Integration Results



RT: 2.06
Area: 278046
Amount: 4.443599
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:52:24

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

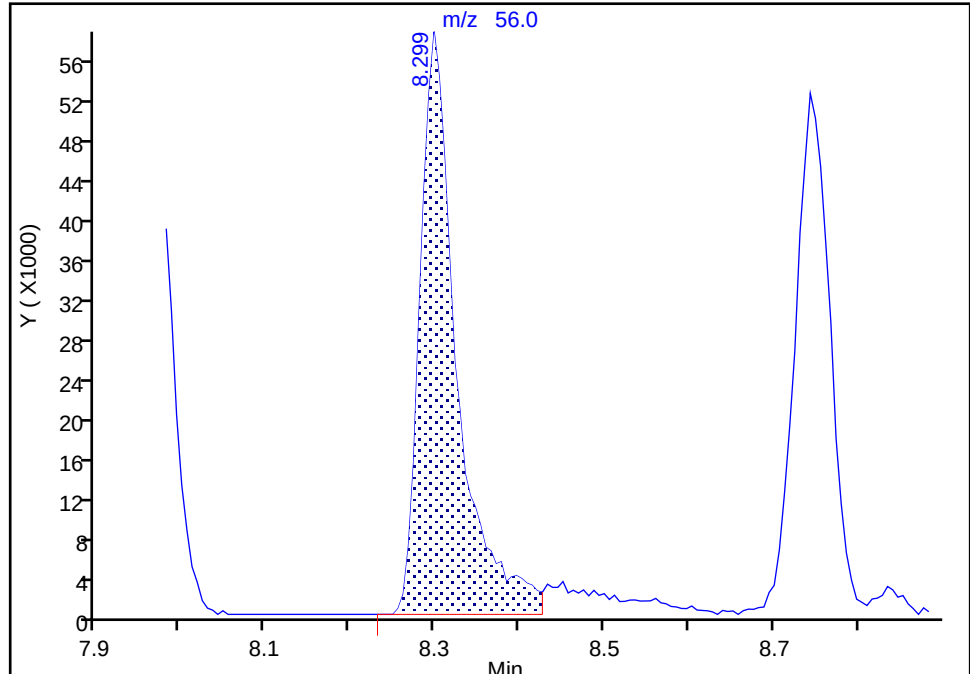
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Injection Date: 15-Sep-2020 20:55:30 Instrument ID: 19094
Lims ID: ICV
Client ID:
Operator ID: kas02648 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

66 n-Butanol, CAS: 71-36-3

Signal: 1

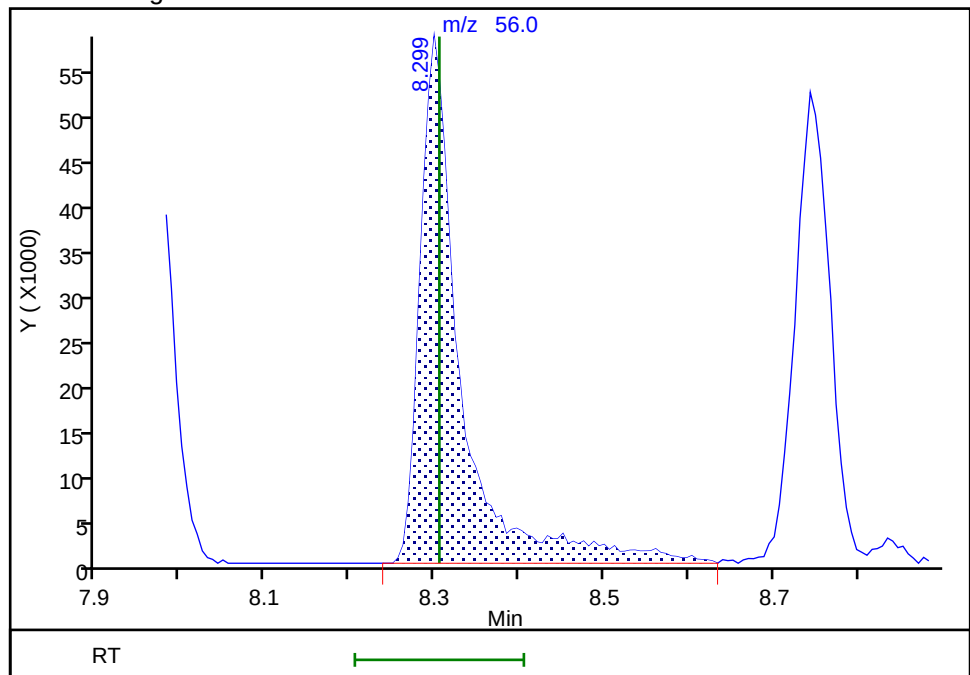
RT: 8.30
Area: 178080
Amount: 223.3523
Amount Units: ug/l

Processing Integration Results



RT: 8.30
Area: 196872
Amount: 246.9217
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:53:19

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

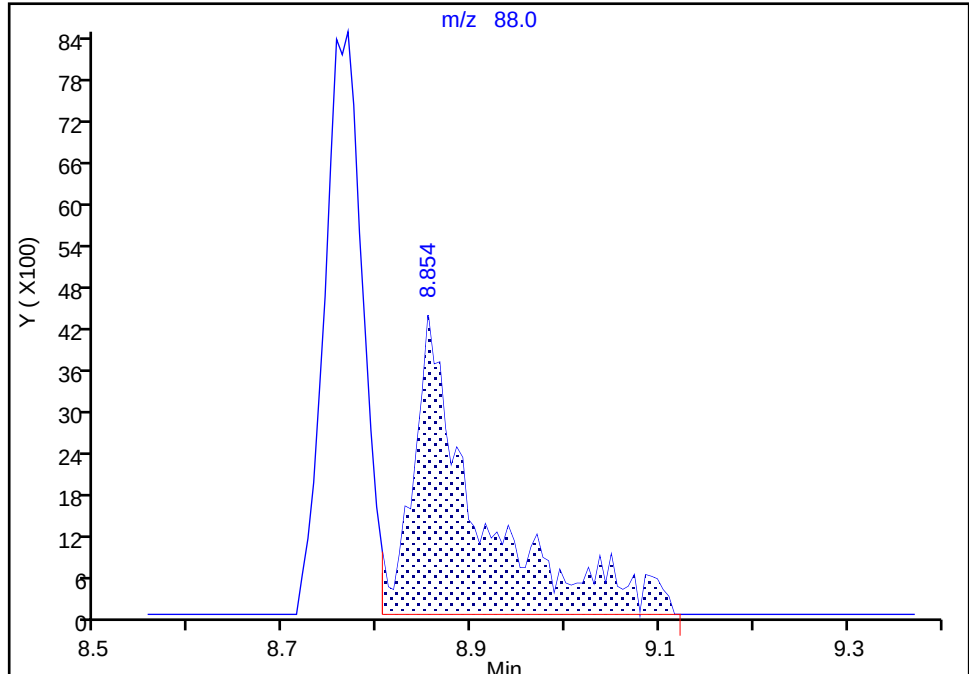
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Injection Date: 15-Sep-2020 20:55:30 Instrument ID: 19094
Lims ID: ICV
Client ID:
Operator ID: kas02648 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

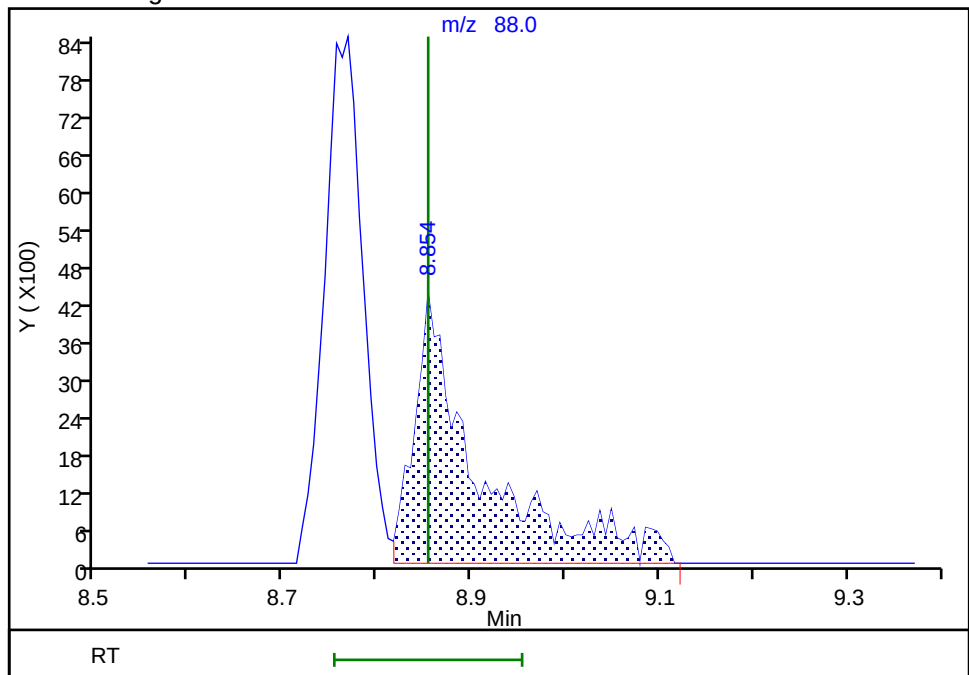
RT: 8.85
Area: 21205
Amount: 127.5592
Amount Units: ug/l

Processing Integration Results



RT: 8.85
Area: 20726
Amount: 124.6777
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 15-Sep-2020 22:53:31

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Lab Sample ID: CCVIS 410-59437/3 Calibration Date: 10/28/2020 09:27

Instrument ID: 19094 Calib Start Date: 09/15/2020 18:23

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 09/15/2020 20:33

Lab File ID: HC26C01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2898	0.3124	0.1000	13.5	12.5	7.8	20.0
Chloromethane	Ave	0.4036	0.3799	0.1000	11.8	12.5	-5.9	20.0
1,3-Butadiene	Ave	0.3533	0.5392		19.1	12.5	52.6*	20.0
Vinyl chloride	Ave	0.3576	0.3305	0.1000	11.6	12.5	-7.6	20.0
Bromomethane	Ave	0.2440	0.2362	0.1000	12.1	12.5	-3.2	20.0
Chloroethane	Ave	0.2300	0.2158	0.1000	11.7	12.5	-6.2	20.0
Dichlorofluoromethane	Ave	0.4728	0.5017		13.3	12.5	6.1	20.0
Trichlorofluoromethane	Ave	0.4647	0.4540	0.1000	12.2	12.5	-2.3	20.0
Ethyl ether	Ave	0.2097	0.2056		12.3	12.5	-1.9	20.0
Freon 123a	Ave	0.3282	0.3230		12.3	12.5	-1.6	20.0
Acrolein	Ave	2.627	2.369		565	626	-9.8	20.0
1,1-Dichloroethene	Ave	0.2367	0.2371	0.1000	12.5	12.5	0.2	20.0
Acetone	Ave	3.422	3.031	0.1000	111	125	-11.4	20.0
Freon 113	Ave	0.2608	0.2696	0.1000	12.9	12.5	3.4	20.0
Methyl iodide	Ave	0.4429	0.4558		12.9	12.5	2.9	20.0
Ethyl bromide	Ave	0.2009	0.2136		13.3	12.5	6.4	20.0
Carbon disulfide	Ave	0.7961	0.7995	0.1000	12.6	12.5	0.4	20.0
Methyl acetate	Ave	10.04	8.610	0.1000	10.7	12.5	-14.3	20.0
Allyl chloride	Ave	0.4475	0.4251		11.9	12.5	-5.0	20.0
Methylene Chloride	Ave	0.2654	0.2700	0.1000	12.7	12.5	1.7	20.0
t-Butyl alcohol	Ave	1.046	0.7284		174	250	-30.4*	20.0
Acrylonitrile	Ave	4.255	4.536		66.6	62.5	6.6	20.0
Methyl tertiary butyl ether	Ave	0.5829	0.5864	0.1000	12.6	12.5	0.6	20.0
trans-1,2-Dichloroethene	Ave	0.2638	0.2683	0.1000	12.7	12.5	1.7	20.0
n-Hexane	Ave	0.4140	0.4124		12.5	12.5	-0.4	20.0
1,1-Dichloroethane	Ave	0.5252	0.5228	0.2000	12.4	12.5	-0.5	20.0
di-Isopropyl ether	Ave	0.9046	0.8722		12.1	12.5	-3.6	20.0
2-Chloro-1,3-butadiene	Ave	0.4362	0.4506		12.9	12.5	3.3	20.0
Ethyl t-butyl ether	Ave	0.7505	0.7431		12.4	12.5	-1.0	20.0
2-Butanone	Ave	5.575	5.661	0.1000	127	125	1.5	20.0
cis-1,2-Dichloroethene	Ave	0.2990	0.3070	0.1000	12.8	12.5	2.6	20.0
2,2-Dichloropropane	Ave	0.3879	0.4155		13.4	12.5	7.1	20.0
Propionitrile	Ave	1.544	1.626		263	250	5.3	20.0
Methacrylonitrile	Ave	5.359	5.500		128	125	2.6	20.0
Bromochloromethane	Ave	0.1289	0.1360		13.2	12.5	5.5	20.0
Tetrahydrofuran	Ave	1.394	1.495		134	125	7.3	20.0
Chloroform	Ave	0.4976	0.5043	0.2000	12.7	12.5	1.3	20.0
1,1,1-Trichloroethane	Ave	0.4170	0.4318	0.1000	12.9	12.5	3.6	20.0
Cyclohexane	Ave	0.5128	0.4778	0.1000	11.6	12.5	-6.8	20.0
1,1-Dichloropropene	Ave	0.3848	0.3957		12.9	12.5	2.8	20.0
Carbon tetrachloride	Ave	0.3660	0.3833	0.1000	13.1	12.5	4.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Lab Sample ID: CCVIS 410-59437/3 Calibration Date: 10/28/2020 09:27

Instrument ID: 19094 Calib Start Date: 09/15/2020 18:23

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 09/15/2020 20:33

Lab File ID: HC26C01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isobutyl alcohol	Ave	0.3906	0.3529		565	625	-9.7	20.0
Benzene	Ave	1.156	1.162	0.5000	12.6	12.5	0.6	20.0
1,2-Dichloroethane	Ave	0.2987	0.3198	0.1000	13.4	12.5	7.1	20.0
t-Amyl methyl ether	Ave	0.6197	0.6565		13.2	12.5	5.9	20.0
n-Heptane	Ave	0.4973	0.4766		12.0	12.5	-4.2	20.0
n-Butanol	Ave	0.3138	0.3363		1340	1250	7.2	20.0
Trichloroethene	Ave	0.2906	0.3020	0.2000	13.0	12.5	3.9	20.0
Methylcyclohexane	Ave	0.5119	0.5201	0.1000	12.7	12.5	1.6	20.0
1,2-Dichloropropane	Ave	0.2997	0.3103	0.1000	12.9	12.5	3.5	20.0
Methyl methacrylate	Ave	9.555	10.13		13.2	12.5	6.0	20.0
1,4-Dioxane	Ave	0.0654	0.0738	0.0050	705	625	12.7	20.0
Dibromomethane	Ave	0.1301	0.1392		13.4	12.5	7.0	20.0
Bromodichloromethane	Ave	0.3342	0.3667	0.2000	13.7	12.5	9.7	20.0
2-Nitropropane	Ave	2.753	3.225		146	125	17.1	20.0
1-Bromo-2-chloroethane	Ave	0.1744	0.3129		22.4	12.5	79.4*	20.0
cis-1,3-Dichloropropene	Ave	0.3978	0.4267	0.2000	13.4	12.5	7.3	20.0
4-Methyl-2-pentanone	Ave	13.73	14.75	0.1000	134	125	7.4	20.0
Toluene	Ave	0.9713	0.9273	0.4000	11.9	12.5	-4.5	20.0
trans-1,3-Dichloropropene	Ave	0.4358	0.4523	0.1000	13.0	12.5	3.8	20.0
Ethyl methacrylate	Ave	0.3404	0.3533		13.0	12.5	3.8	20.0
1,1,2-Trichloroethane	Ave	0.2472	0.2526	0.1000	12.8	12.5	2.2	20.0
Tetrachloroethene	Ave	0.4436	0.4238	0.2000	11.9	12.5	-4.5	20.0
1,3-Dichloropropane	Ave	0.4535	0.4463		12.3	12.5	-1.6	20.0
2-Hexanone	Ave	9.301	10.26	0.1000	138	125	10.3	20.0
Dibromochloromethane	Ave	0.2926	0.3227		13.8	12.5	10.3	20.0
1,2-Dibromoethane	Ave	0.2377	0.2448	0.1000	12.9	12.5	3.0	20.0
1-Chlorohexane	Ave	0.5674	0.5328		11.7	12.5	-6.1	20.0
Chlorobenzene	Ave	1.039	1.049	0.5000	12.6	12.5	1.0	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3598	0.3708		12.9	12.5	3.0	20.0
Ethylbenzene	Ave	1.848	1.830	0.1000	12.4	12.5	-1.0	20.0
m&p-Xylene	Ave	0.6935	0.7188	0.1000	25.9	25.0	3.6	20.0
o-Xylene	Ave	0.6694	0.6907	0.3000	12.9	12.5	3.2	20.0
Styrene	Ave	1.081	1.176	0.3000	13.6	12.5	8.8	20.0
Bromoform	Ave	0.1630	0.1940	0.1000	14.9	12.5	19.0	20.0
Isopropylbenzene	Ave	1.801	1.820	0.1000	12.6	12.5	1.0	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5837	0.5752	0.3000	12.3	12.5	-1.5	20.0
Bromobenzene	Ave	0.8005	0.7918		12.4	12.5	-1.1	20.0
trans-1,4-Dichloro-2-butene	Ave	4.967	3.267		82.2	125	-34.2*	20.0
1,2,3-Trichloropropane	Ave	0.1490	0.1530		12.8	12.5	2.7	20.0
N-Propylbenzene	Ave	4.265	4.067		11.9	12.5	-4.7	20.0
2-Chlorotoluene	Ave	0.8171	0.7934		12.1	12.5	-2.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-59437/3 Calibration Date: 10/28/2020 09:27
 Instrument ID: 19094 Calib Start Date: 09/15/2020 18:23
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 09/15/2020 20:33
 Lab File ID: HC26C01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	2.916	2.822		12.1	12.5	-3.2	20.0
4-Chlorotoluene	Ave	0.8249	0.8258		12.5	12.5	0.1	20.0
tert-Butylbenzene	Ave	0.6336	0.6187		12.2	12.5	-2.4	20.0
Pentachloroethane	Ave	0.4990	0.5206		13.0	12.5	4.3	20.0
1,2,4-Trimethylbenzene	Ave	2.931	2.928		12.5	12.5	-0.1	20.0
sec-Butylbenzene	Ave	3.970	3.784		11.9	12.5	-4.7	20.0
1,3-Dichlorobenzene	Ave	1.603	1.593	0.6000	12.4	12.5	-0.6	20.0
p-Isopropyltoluene	Ave	3.280	3.267		12.5	12.5	-0.4	20.0
1,4-Dichlorobenzene	Ave	1.591	1.593	0.5000	12.5	12.5	0.1	20.0
1,2,3-Trimethylbenzene	Ave	1.304	1.281		12.3	12.5	-1.8	20.0
Benzyl chloride	Ave	0.1957	0.2447		15.6	12.5	25.0*	20.0
n-Butylbenzene	Ave	1.779	1.723		12.1	12.5	-3.1	20.0
1,2-Dichlorobenzene	Ave	1.446	1.448	0.4000	12.5	12.5	0.2	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0790	0.0806	0.0500	12.8	12.5	2.0	20.0
1,3,5-Trichlorobenzene	Ave	1.258	1.247		12.4	12.5	-0.9	20.0
1,2,4-Trichlorobenzene	Ave	1.041	1.019	0.2000	12.2	12.5	-2.2	20.0
Hexachlorobutadiene	Ave	0.6111	0.5827		11.9	12.5	-4.6	20.0
Naphthalene	Ave	1.756	1.768		12.6	12.5	0.7	20.0
1,2,3-Trichlorobenzene	Ave	0.9302	0.8946		12.0	12.5	-3.8	20.0
Dibromofluoromethane (Surr)	Ave	0.2451	0.2534		10.3	10.0	3.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0502	0.0507		10.1	10.0	1.0	20.0
Toluene-d8 (Surr)	Ave	1.332	1.294		9.72	10.0	-2.8	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4822	0.4895		10.2	10.0	1.5	20.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC26C01.D
 Lims ID: CCVIS VSTD010
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 28-Oct-2020 09:27:30 ALS Bottle#: 2 Worklist Smp#: 3
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-003
 Misc. Info.: CCVIS VSTD010
 Operator ID: jkh09052 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:18:56 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: howej

Date: 28-Oct-2020 10:31:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.081	2.081	0.000	99	857903	12.5	13.5	
6 Chloromethane	50	2.288	2.288	0.000	99	1043106	12.5	11.8	
8 Butadiene	39	2.410	2.410	0.000	94	1480753	12.5	19.1	M
7 Vinyl chloride	62	2.410	2.410	0.000	97	907658	12.5	11.6	
9 Bromomethane	94	2.757	2.757	0.000	91	648682	12.5	12.1	
10 Chloroethane	64	2.855	2.855	0.000	100	592546	12.5	11.7	
11 Dichlorofluoromethane	67	3.105	3.105	0.000	98	1377699	12.5	13.3	
13 Trichlorofluoromethane	101	3.166	3.166	0.000	97	1246617	12.5	12.2	
15 Ethyl ether	59	3.446	3.446	0.000	93	564512	12.5	12.3	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.531	3.531	0.000	95	887030	12.5	12.3	
17 Acrolein	56	3.635	3.635	0.000	99	4232285	626.2	564.8	
18 1,1-Dichloroethene	96	3.781	3.781	0.000	97	651195	12.5	12.5	
19 Acetone	43	3.806	3.806	0.000	99	1080907	125.0	110.7	
20 112TCTFE	101	3.812	3.812	0.000	93	740369	12.5	12.9	
21 Isopropyl alcohol	45	3.989	3.989	0.000	36	271114	250.0	158.7	
22 Iodomethane	142	3.995	3.995	0.000	100	1251698	12.5	12.9	
23 Ethyl bromide	108	4.025	4.025	0.000	99	586620	12.5	13.3	
24 Carbon disulfide	76	4.105	4.105	0.000	99	2195362	12.5	12.6	
26 Methyl acetate	43	4.263	4.263	0.000	98	306999	12.5	10.7	
27 3-Chloro-1-propene	41	4.287	4.287	0.000	92	1167199	12.5	11.9	
29 Methylene Chloride	84	4.495	4.495	0.000	94	741440	12.5	12.7	
* 28 t-Butyl alcohol-d10 (IS)	65	4.507	4.507	0.000	0	142631	50.0	50.0	M
30 2-Methyl-2-propanol	59	4.629	4.629	0.000	99	519429	250.0	174.1	
31 Acrylonitrile	53	4.836	4.836	0.000	99	808729	62.5	66.6	
32 Methyl tert-butyl ether	73	4.903	4.903	0.000	96	1610292	12.5	12.6	
33 trans-1,2-Dichloroethene	96	4.915	4.915	0.000	99	736879	12.5	12.7	
34 Hexane	57	5.330	5.330	0.000	94	1132528	12.5	12.5	
35 1,1-Dichloroethane	63	5.568	5.568	0.000	97	1435618	12.5	12.4	
37 Isopropyl ether	45	5.616	5.616	0.000	94	2394981	12.5	12.1	
38 2-Chloro-1,3-butadiene	53	5.671	5.671	0.000	91	1237429	12.5	12.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	6.147	6.147	0.000	98	2040495	12.5	12.4	
41 2-Butanone (MEK)	43	6.342	6.342	0.000	100	2018619	125.0	126.9	
42 cis-1,2-Dichloroethene	96	6.391	6.391	0.000	83	842892	12.5	12.8	
43 2,2-Dichloropropane	77	6.403	6.403	0.000	88	1141043	12.5	13.4	
45 Propionitrile	54	6.439	6.439	0.000	99	1159581	250.0	263.3	
47 Methacrylonitrile	67	6.659	6.659	0.000	92	1961270	125.0	128.3	
48 Chlorobromomethane	128	6.720	6.720	0.000	94	373502	12.5	13.2	
49 Tetrahydrofuran	71	6.726	6.726	0.000	83	533103	125.0	134.1	
50 Chloroform	83	6.866	6.866	0.000	94	1384684	12.5	12.7	
\$ 51 Dibromofluoromethane (Surr)	113	7.080	7.080	0.000	93	556755	10.0	10.3	
52 1,1,1-Trichloroethane	97	7.092	7.092	0.000	99	1185831	12.5	12.9	
53 Cyclohexane	56	7.189	7.189	0.000	92	1312126	12.5	11.6	
55 1,1-Dichloropropene	75	7.305	7.305	0.000	95	1086574	12.5	12.9	
56 Carbon tetrachloride	117	7.305	7.305	0.000	86	1052416	12.5	13.1	
57 Isobutyl alcohol	41	7.433	7.433	0.000	94	629101	625.0	564.6	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.531	7.531	0.000	0	111424	10.0	10.1	
59 Benzene	78	7.567	7.567	0.000	96	3192023	12.5	12.6	
60 1,2-Dichloroethane	62	7.640	7.640	0.000	97	878200	12.5	13.4	
62 Tert-amyl methyl ether	73	7.744	7.744	0.000	97	1802665	12.5	13.2	
* 65 Fluorobenzene (IS)	96	7.964	7.964	0.000	98	2196810	10.0	10.0	
64 n-Heptane	43	7.970	7.970	0.000	92	1308636	12.5	12.0	
66 n-Butanol	56	8.299	8.299	0.000	91	1199165	1250.0	1339.5	
67 Trichloroethene	95	8.439	8.439	0.000	99	829284	12.5	13.0	
68 Methylcyclohexane	83	8.750	8.750	0.000	96	1428317	12.5	12.7	
69 2-ethoxy-2-methyl butane	87	8.768	8.768	0.000	91	1107291	12.5	13.8	
70 1,2-Dichloropropane	63	8.768	8.768	0.000	85	852000	12.5	12.9	
71 Methyl methacrylate	69	8.835	8.835	0.000	92	361110	12.5	13.2	
72 1,4-Dioxane	88	8.854	8.854	0.000	87	131508	625.0	704.6	
73 Dibromomethane	93	8.878	8.878	0.000	96	382306	12.5	13.4	
75 Dichlorobromomethane	83	9.110	9.110	0.000	99	1006905	12.5	13.7	
76 2-Nitropropane	41	9.366	9.366	0.000	98	1149851	125.0	146.4	
79 1-Bromo-2-chloroethane	63	9.488	9.488	0.000	99	859204	12.5	22.4	
80 cis-1,3-Dichloropropene	75	9.628	9.628	0.000	96	1171794	12.5	13.4	
81 4-Methyl-2-pentanone (MIBK)	43	9.786	9.786	0.000	97	5258580	125.0	134.2	
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	2209937	10.0	9.72	
83 Toluene	92	10.000	10.000	0.000	97	1979730	12.5	11.9	
85 trans-1,3-Dichloropropene	75	10.244	10.244	0.000	93	965746	12.5	13.0	
86 Ethyl methacrylate	69	10.298	10.298	0.000	91	754212	12.5	13.0	
87 1,1,2-Trichloroethane	97	10.445	10.445	0.000	91	539373	12.5	12.8	
88 Tetrachloroethene	166	10.536	10.536	0.000	98	904695	12.5	11.9	
89 1,3-Dichloropropane	76	10.603	10.603	0.000	91	952764	12.5	12.3	
91 2-Hexanone	43	10.646	10.646	0.000	99	3656786	125.0	137.8	
93 Chlorodibromomethane	129	10.817	10.817	0.000	92	689001	12.5	13.8	
94 Ethylene Dibromide	107	10.932	10.932	0.000	98	522677	12.5	12.9	
* 97 Chlorobenzene-d5 (IS)	117	11.347	11.347	0.000	85	1707967	10.0	10.0	
96 1-Chlorohexane	91	11.353	11.353	0.000	82	1137559	12.5	11.7	
98 Chlorobenzene	112	11.378	11.378	0.000	95	2240627	12.5	12.6	
99 1,1,1,2-Tetrachloroethane	131	11.457	11.457	0.000	44	791591	12.5	12.9	
100 Ethylbenzene	91	11.457	11.457	0.000	99	3906066	12.5	12.4	
101 m-Xylene & p-Xylene	106	11.567	11.567	0.000	99	3069395	25.0	25.9	
102 o-Xylene	106	11.896	11.896	0.000	97	1474708	12.5	12.9	
103 Styrene	104	11.908	11.908	0.000	95	2509827	12.5	13.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 Bromoform	173	12.066	12.066	0.000	97	414120	12.5	14.9	
105 Isopropylbenzene	105	12.188	12.188	0.000	96	3884657	12.5	12.6	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	90	836011	10.0	10.2	
109 1,1,2,2-Tetrachloroethane	83	12.426	12.426	0.000	93	691191	12.5	12.3	
111 Bromobenzene	156	12.450	12.450	0.000	95	951498	12.5	12.4	
110 trans-1,4-Dichloro-2-butene	53	12.450	12.450	0.000	86	1164877	125.0	82.2	
112 1,2,3-Trichloropropane	110	12.475	12.475	0.000	81	183863	12.5	12.8	
113 N-Propylbenzene	91	12.511	12.511	0.000	99	4886557	12.5	11.9	
114 2-Chlorotoluene	126	12.591	12.591	0.000	96	953424	12.5	12.1	
115 1,3,5-Trimethylbenzene	105	12.646	12.646	0.000	94	3391625	12.5	12.1	
116 4-Chlorotoluene	126	12.682	12.682	0.000	98	992297	12.5	12.5	
118 tert-Butylbenzene	134	12.889	12.889	0.000	94	743501	12.5	12.2	
119 Pentachloroethane	167	12.926	12.926	0.000	94	625543	12.5	13.0	
120 1,2,4-Trimethylbenzene	105	12.932	12.932	0.000	97	3518490	12.5	12.5	
121 sec-Butylbenzene	105	13.048	13.048	0.000	94	4547114	12.5	11.9	
122 1,3-Dichlorobenzene	146	13.152	13.152	0.000	97	1914223	12.5	12.4	
123 4-Isopropyltoluene	119	13.158	13.158	0.000	97	3925882	12.5	12.5	
* 124 1,4-Dichlorobenzene-d4	152	13.206	13.206	0.000	95	961321	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.225	13.225	0.000	94	1914196	12.5	12.5	
126 1,2,3-Trimethylbenzene	120	13.231	13.231	0.000	98	1539238	12.5	12.3	
127 Benzyl chloride	126	13.298	13.298	0.000	99	294076	12.5	15.6	
129 p-Diethylbenzene	119	13.426	13.426	0.000	94	2549446	12.5	12.3	
130 n-Butylbenzene	92	13.444	13.444	0.000	97	2070748	12.5	12.1	
131 1,2-Dichlorobenzene	146	13.487	13.487	0.000	98	1740050	12.5	12.5	
134 1,2-Dibromo-3-Chloropropane	155	14.023	14.023	0.000	85	96838	12.5	12.8	
135 1,3,5-Trichlorobenzene	180	14.151	14.151	0.000	97	1498352	12.5	12.4	
136 1,2,4-Trichlorobenzene	180	14.572	14.572	0.000	94	1224050	12.5	12.2	
137 Hexachlorobutadiene	225	14.651	14.651	0.000	96	700219	12.5	11.9	
138 Naphthalene	128	14.755	14.755	0.000	97	2125031	12.5	12.6	
139 1,2,3-Trichlorobenzene	180	14.901	14.901	0.000	95	1074971	12.5	12.0	
140 2-Methylnaphthalene	142	15.554	15.554	0.000	93	1288173	12.5	10.1	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00026

Amount Added: 25.00

Units: uL

MSV_RV4_826_00030

Amount Added: 25.00

Units: uL

MSV_RV4GAS826_00087

Amount Added: 25.00

Units: uL

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 28-Oct-2020 18:18:58

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC26C01.D

Injection Date: 28-Oct-2020 09:27:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: CCVIS VSTD010

Worklist Smp#: 3

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

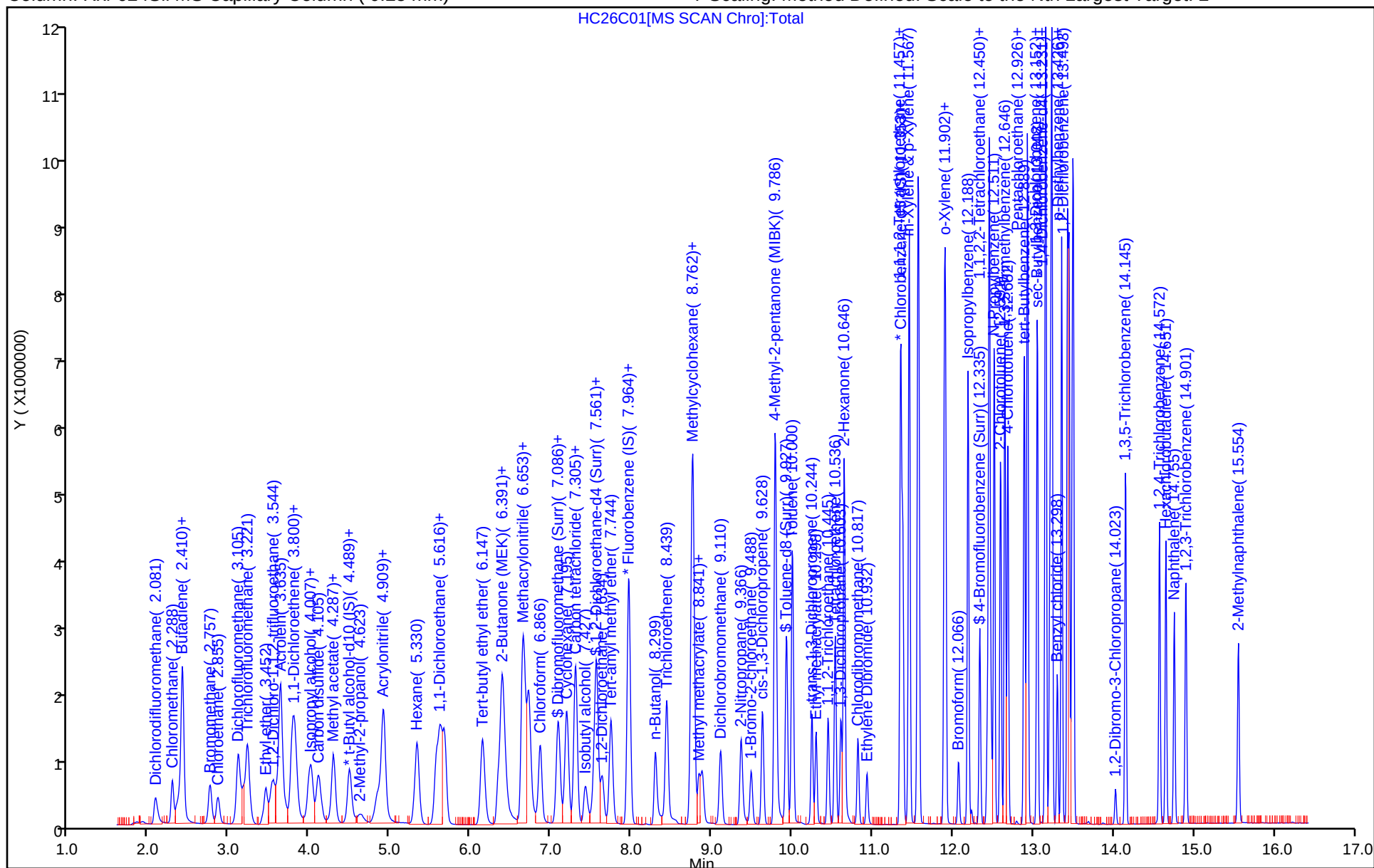
ALS Bottle#: 2

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC26C01.D

Injection Date: 28-Oct-2020 09:27:30

Instrument ID: 19094

Lims ID: CCVIS VSTD010

Client ID:

Operator ID: jkh09052

ALS Bottle#:

2

Worklist Smp#: 3

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

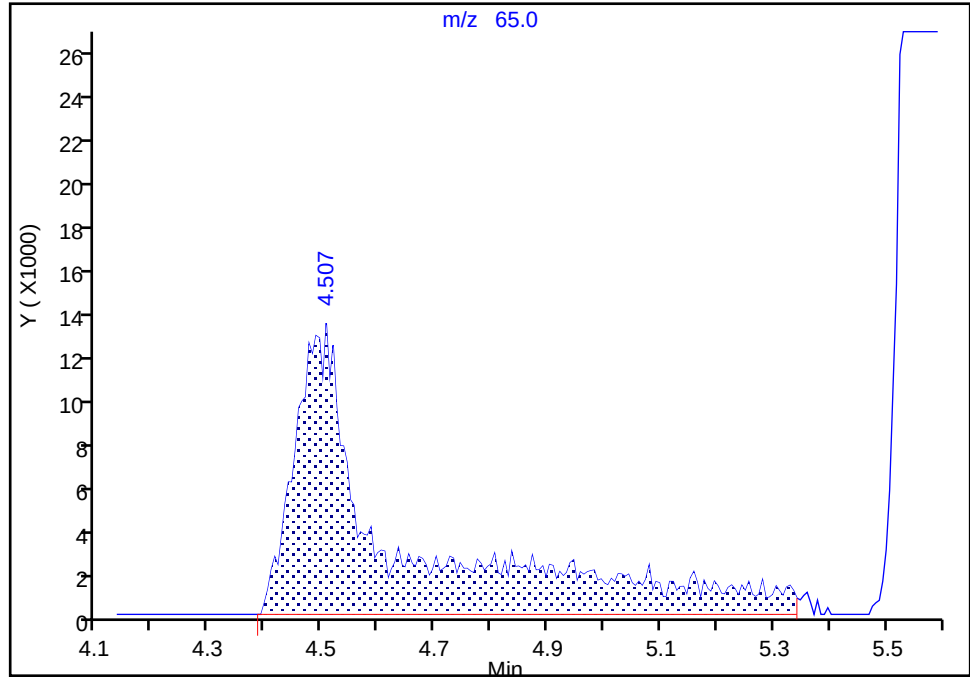
MS Quad

* 28 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

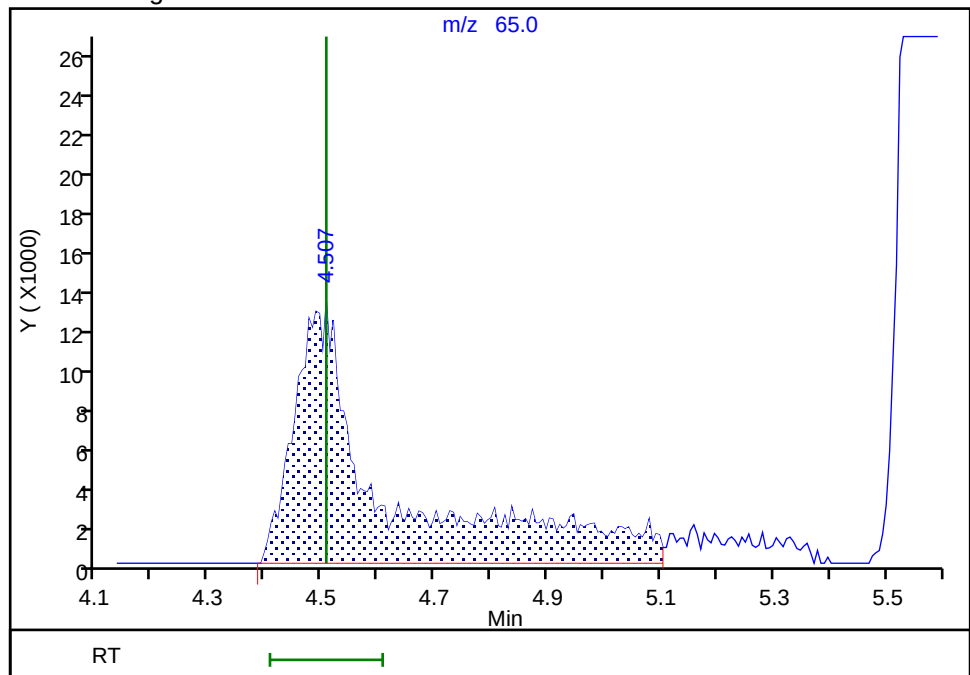
RT: 4.51
Area: 158886
Amount: 50.000000
Amount Units: ug/l

Processing Integration Results



RT: 4.51
Area: 142631
Amount: 50.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 28-Oct-2020 10:03:23

Audit Action: Split an Integrated Peak

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC26C01.D

Injection Date: 28-Oct-2020 09:27:30

Instrument ID: 19094

Lims ID: CCVIS VSTD010

Client ID:

Operator ID: jkh09052

ALS Bottle#:

2

Worklist Smp#: 3

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

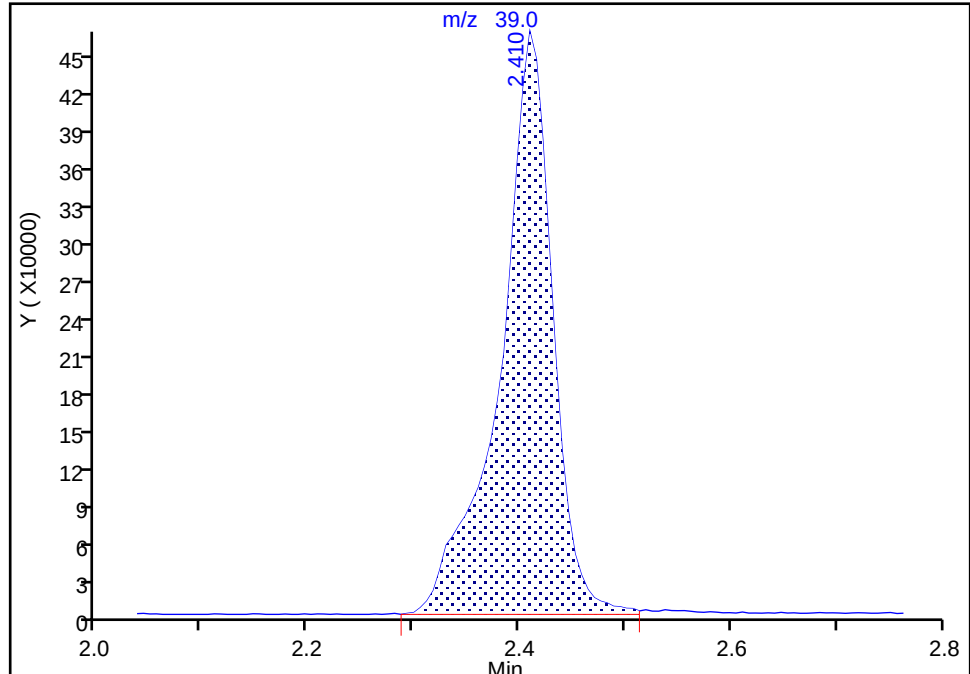
MS Quad

8 Butadiene, CAS: 106-99-0

Signal: 1

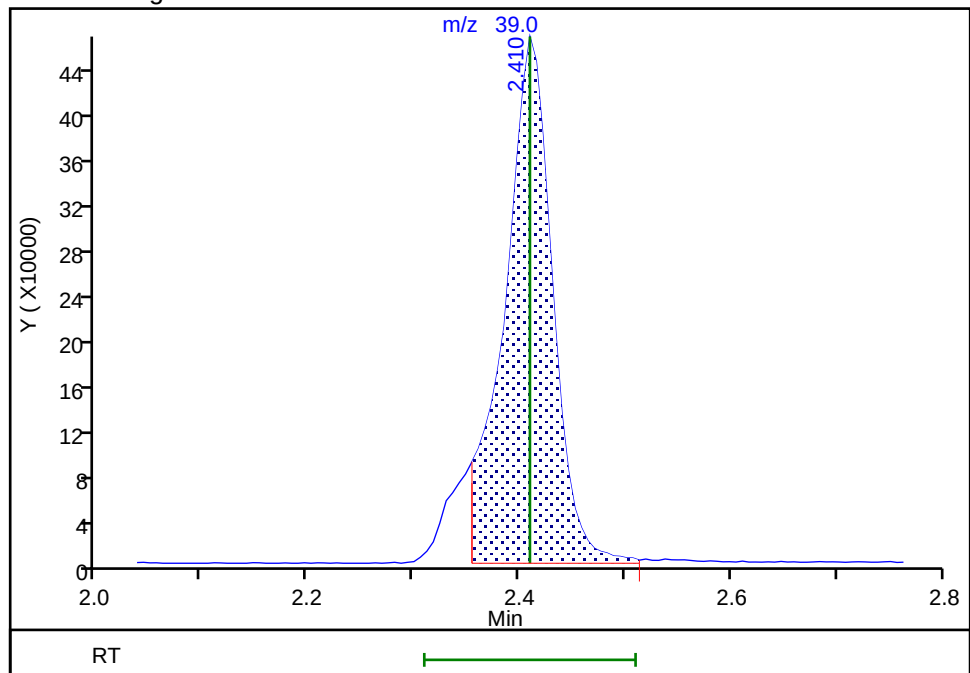
RT: 2.41
Area: 1605049
Amount: 20.680030
Amount Units: ug/l

Processing Integration Results



RT: 2.41
Area: 1480753
Amount: 19.078556
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 28-Oct-2020 10:03:04

Audit Action: Split an Integrated Peak

Audit Reason: Other

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1
 SDG No.: _____
 Lab Sample ID: CCV 410-59437/4 Calibration Date: 10/28/2020 09:48
 Instrument ID: 19094 Calib Start Date: 09/15/2020 15:07
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 09/15/2020 17:18
 Lab File ID: HC26C02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methoxymethane	Ave	0.3132	0.3716		14.8	12.5	18.6	20.0
Acetonitrile	Ave	0.0150	0.0193		646	500	29.3*	20.0
Vinyl acetate	Ave	0.3549	0.3828		13.5	12.5	7.9	20.0
Ethyl acetate	Ave	0.1758	0.1708		12.1	12.5	-2.8	20.0
2-Chloroethyl vinyl ether	Ave	0.1194	0.1209		12.7	12.5	1.2	20.0
cis-1,4-Dichloro-2-butene	Ave	0.0865	0.0229			25.0	-73.6*	20.0
Cyclohexanone	Ave	0.3235	0.3167		612	625	-2.1	20.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC26C02.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 28-Oct-2020 09:48:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-004
 Misc. Info.: CCV
 Operator ID: jkh09052 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub32
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: howej

Date: 28-Oct-2020 10:32:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
4 Dimethyl ether	45	2.154	2.166	-0.012	99	916164	12.5	14.8	
25 Acetonitrile	41	4.202	4.214	-0.012	100	1906809	499.9	646.3	
* 28 t-Butyl alcohol-d10 (IS)	65	4.495	4.507	-0.012	0	148049	50.0	50.0	
36 Vinyl acetate	43	5.543	5.537	0.006	97	943894	12.5	13.5	
44 Ethyl acetate	43	6.409	6.409	0.000	99	421242	12.5	12.1	
\$ 51 Dibromofluoromethane (Surr)	113	7.080	7.080	0.000	93	529299	10.0	10.9	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.531	7.531	0.000	0	107619	10.0	10.9	
61 Isopropyl acetate	43	7.628	7.628	0.000	98	866888	12.5	13.6	
* 65 Fluorobenzene (IS)	96	7.964	7.964	0.000	99	1972545	10.0	10.0	
74 n-Propyl acetate	61	8.915	8.921	-0.006	99	176404	12.5	14.4	
78 2-Chloroethyl vinyl ether	63	9.445	9.451	-0.006	92	298110	12.5	12.7	
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	2014128	10.0	9.70	
92 n-Butyl acetate	43	10.762	10.768	-0.006	98	810636	12.5	13.1	
* 97 Chlorobenzene-d5 (IS)	117	11.347	11.347	0.000	86	1559766	10.0	10.0	
106 cis-1,4-Dichloro-2-butene	88	12.231	12.237	-0.006	0	89194	25.0	6.61	
107 Cyclohexanone	55	12.268	12.280	-0.012	92	586044	625.0	611.9	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	90	779154	10.0	10.4	
* 124 1,4-Dichlorobenzene-d4	152	13.207	13.206	0.001	95	819863	10.0	10.0	

QC Flag Legend

Processing Flags

Reagents:

MSV_V_SMRV4_00014	Amount Added: 6.25	Units: uL	
MSV_V_VOA5_00015	Amount Added: 6.25	Units: uL	
MSV_VAcet_00006	Amount Added: 10.00	Units: uL	
MSV_VCYC_00005	Amount Added: 10.00	Units: uL	
MSV_DME_00023	Amount Added: 1.25	Units: uL	
MSV_30_826ISS_00005	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 28-Oct-2020 18:19:07

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC26C02.D

Injection Date: 28-Oct-2020 09:48:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: CCV

Worklist Smp#: 4

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

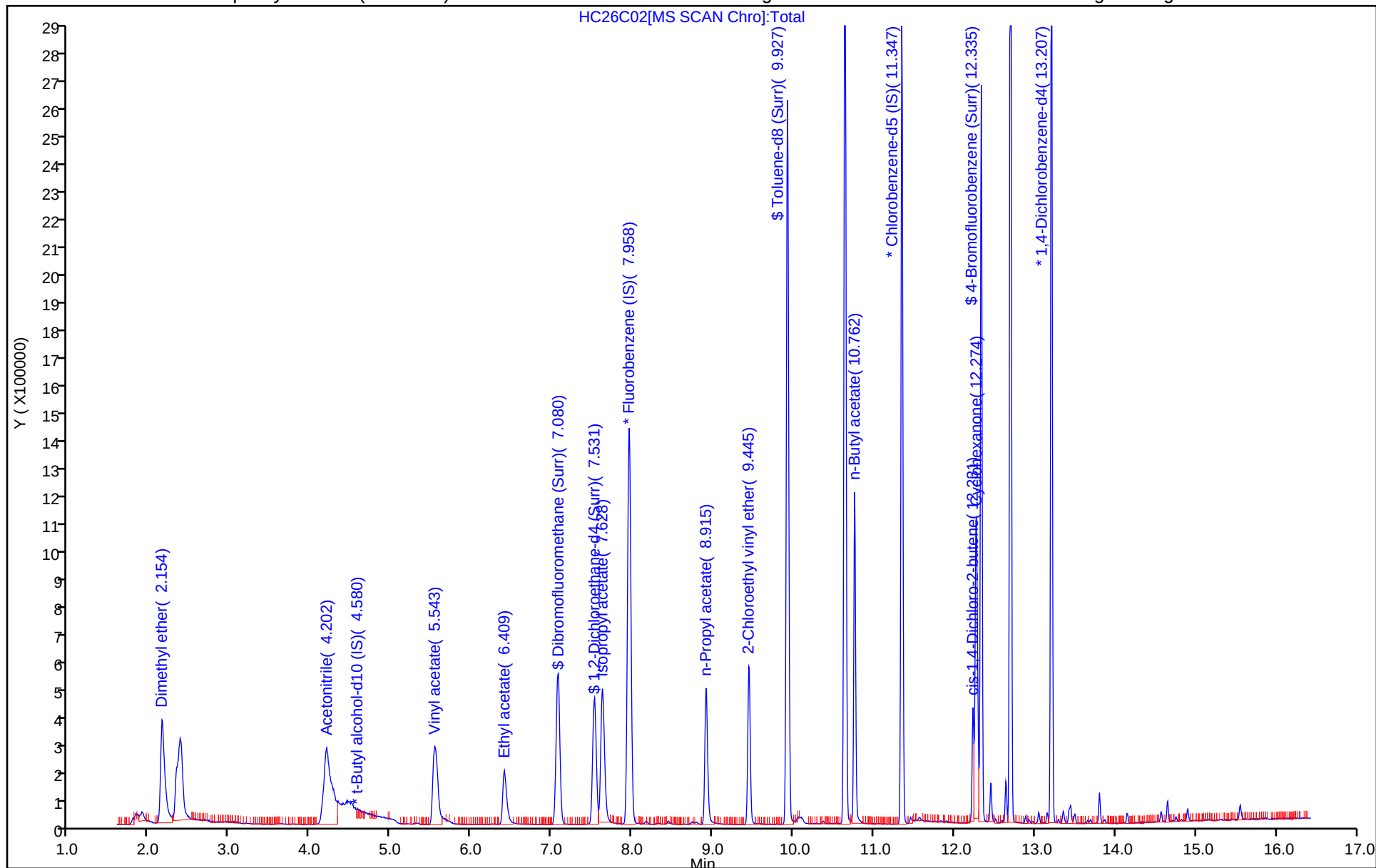
ALS Bottle#: 3

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15t01.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 15-Sep-2020 14:32:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 410-0010497-001
 Operator ID: kas02648 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 15-Sep-2020 23:49:16 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1035

First Level Reviewer: spositok

Date: 15-Sep-2020 14:46:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 165 BFB	95	5.318	5.318	0.000	91	207003	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

MSV_V_BFB_00003

Amount Added: 1.00

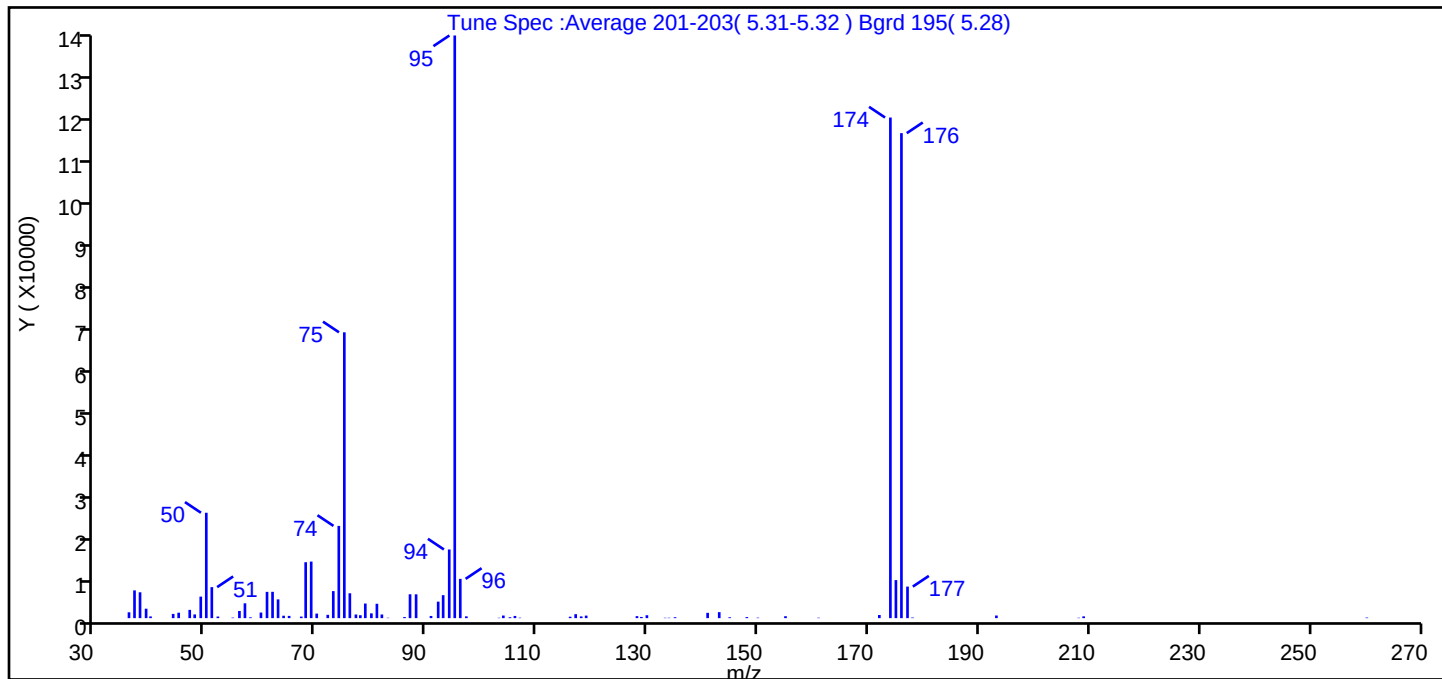
Units: uL

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15t01.D
Injection Date: 15-Sep-2020 14:32:30 Instrument ID: 19094
Lims ID: bfb
Client ID:
Operator ID: kas02648
Injection Vol: 1.0 uL
Method: MSV_19094_25mL
Tune Method: BFB Method 8260

ALS Bottle#: 1 Worklist Smp#: 1
Dil. Factor: 1.0000
Limit Group: MSV - 8260C_D

\$ 165 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.1
75	30 to 60% of m/z 95	49.1
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	85.9
175	5 to 9% of m/z 174	6.5 (7.6)
176	Greater than 95% but less than 101% of m/z 174	83.2 (96.9)
177	5 to 9% of m/z 176	5.4 (6.5)

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15t01.D\MSV_19094_25mL.rslt\spectra.d
Injection Date: 15-Sep-2020 14:32:30
Spectrum: Tune Spec :Average 201-203(5.31-5.32) Bgrd 195(5.28)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 81

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1327	64.00	549	91.00	494	135.00	209
37.00	6295	65.00	512	92.00	3742	141.00	1203
38.00	5866	67.00	354	93.00	5213	143.00	1359
39.00	2139	68.00	12686	94.00	15575	145.00	192
40.00	387	69.00	12832	95.00	132160	148.00	236
44.00	957	70.00	1032	96.00	8909	150.00	111
45.00	1233	72.00	750	97.00	405	155.00	434
47.00	1876	73.00	6132	103.00	84	161.00	98
48.00	843	74.00	20920	104.00	591	172.00	712
49.00	4885	75.00	64832	105.00	203	174.00	113552
50.00	23904	76.00	5643	106.00	498	175.00	8631
51.00	7035	77.00	828	107.00	98	176.00	110008
52.00	364	78.00	663	116.00	322	177.00	7157
55.00	118	79.00	3311	117.00	898	178.00	137
56.00	1627	80.00	1086	118.00	394	193.00	597
57.00	3366	81.00	3259	119.00	577	208.00	89
58.00	182	82.00	828	128.00	454	209.00	400
60.00	1269	83.00	83	129.00	270	260.00	132
61.00	5960	86.00	244	130.00	660		
62.00	5970	87.00	5418	133.00	83		
63.00	4254	88.00	5405	134.00	89		

Report Date: 15-Sep-2020 23:49:16

Chrom Revision: 2.3 11-Sep-2020 20:57:08

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15t01.D

Injection Date: 15-Sep-2020 14:32:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

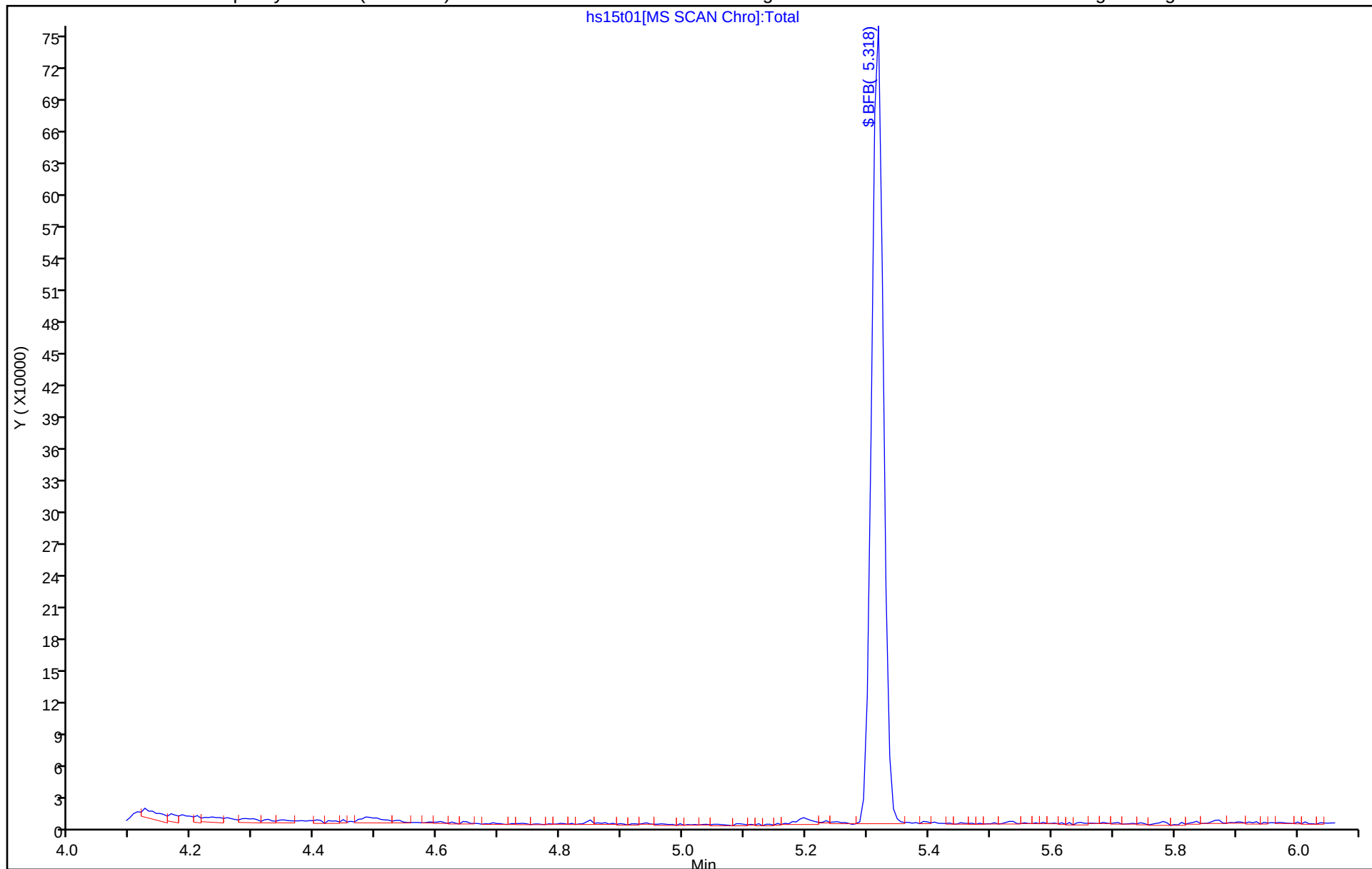
ALS Bottle#: 1

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28T01.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 28-Oct-2020 08:50:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 410-0014060-001
 Misc. Info.: BFB
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:20:08 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 165 BFB	95	5.306	5.306	0.000	87	131355	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

MSV_V_BFB_00003

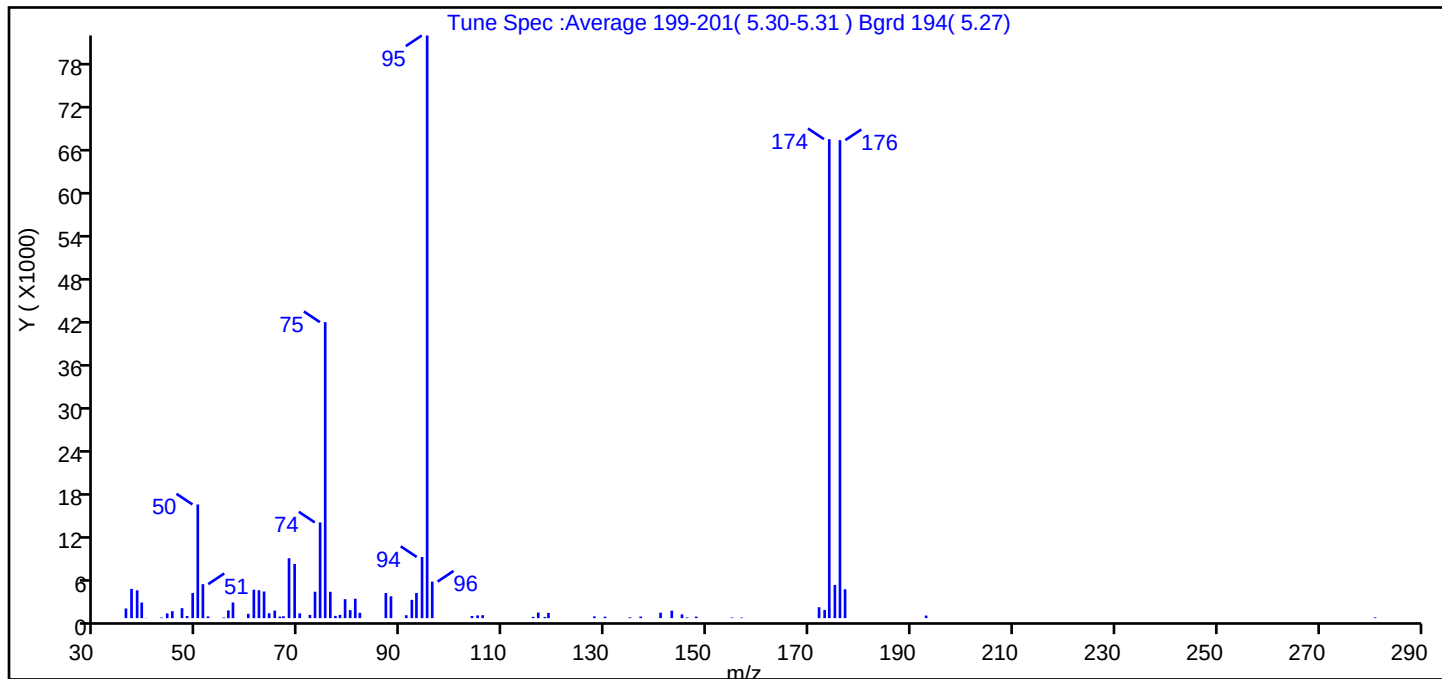
Amount Added: 1.00

Units: uL

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28T01.D
Injection Date: 28-Oct-2020 08:50:30 Instrument ID: 19094
Lims ID: bfb
Client ID:
Operator ID: jkh09052 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Tune Method: BFB Method 8260

\$ 165 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.5
75	30 to 60% of m/z 95	50.8
96	5 to 9% of m/z 95	6.3
173	Less than 2% of m/z 174	1.4 (1.7)
174	50 to 120% of m/z 95	82.2
175	5 to 9% of m/z 174	5.7 (6.9)
176	Greater than 95% but less than 101% of m/z 174	82.0 (99.8)
177	5 to 9% of m/z 176	5.0 (6.0)

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28T01.D\MSV_19094_25mL.rslt\spectra.d
Injection Date: 28-Oct-2020 08:50:30
Spectrum: Tune Spec :Average 199-201(5.30-5.31) Bgrd 194(5.27)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 73

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1348	62.00	3900	82.00	747	137.00	223
37.00	4087	63.00	3718	87.00	3511	141.00	763
38.00	3889	64.00	687	88.00	3055	143.00	1040
39.00	2180	65.00	1064	91.00	409	145.00	525
40.00	27	66.00	215	92.00	2555	146.00	98
43.00	94	67.00	266	93.00	3517	148.00	214
44.00	663	68.00	8371	94.00	8547	155.00	89
45.00	970	69.00	7585	95.00	81432	157.00	84
47.00	1395	70.00	670	96.00	5106	172.00	1524
48.00	296	72.00	452	104.00	303	173.00	1143
49.00	3507	73.00	3693	105.00	385	174.00	66944
50.00	15888	74.00	13376	106.00	414	175.00	4644
51.00	4751	75.00	41368	116.00	178	176.00	66808
52.00	246	76.00	3683	117.00	777	177.00	4038
55.00	88	77.00	318	118.00	166	193.00	362
56.00	1079	78.00	457	119.00	731	281.00	102
57.00	2197	79.00	2652	128.00	246		
60.00	607	80.00	1124	130.00	204		
61.00	3974	81.00	2714	135.00	119		

Report Date: 28-Oct-2020 18:20:09

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28T01.D

Injection Date: 28-Oct-2020 08:50:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

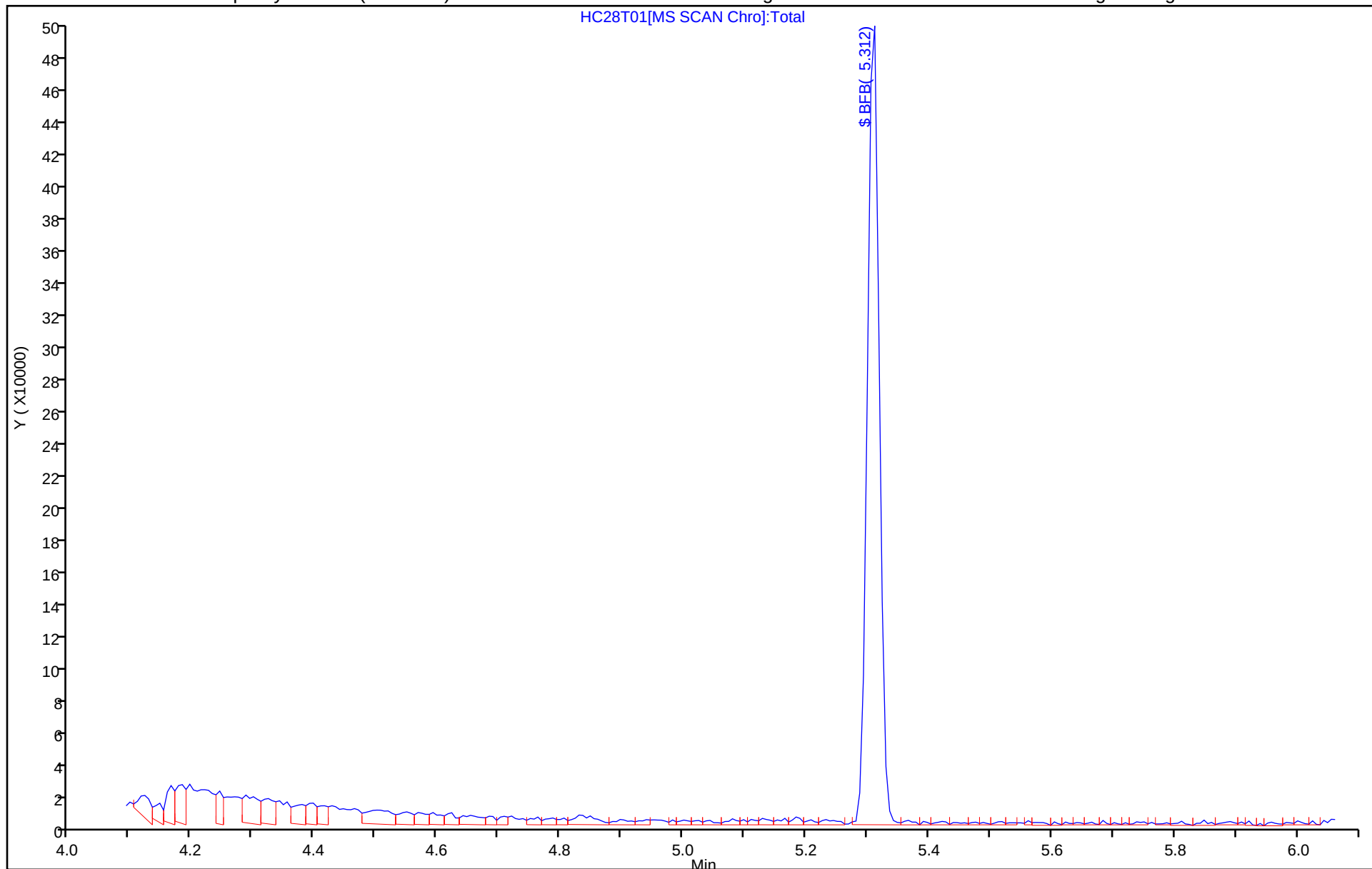
ALS Bottle#: 1

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 410-59437/8
 Matrix: Water Lab File ID: HC20B32.D
 Analysis Method: 8260C LL Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 11:15
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-93-3	2-Butanone	ND		10	
71-43-2	Benzene	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
115-10-6	Methoxymethane	ND		13	
60-29-7	Ethyl ether	ND		13	
100-41-4	Ethylbenzene	ND		1.0	
76-13-1	Freon 113	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
109-99-9	Tetrahydrofuran	ND		25	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		3.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		80-120
1868-53-7	Dibromofluoromethane (Surr)	111		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC20B32.D
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 28-Oct-2020 11:15:30 ALS Bottle#: 7 Worklist Smp#: 8
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-008
 Misc. Info.: MB
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: howej

Date: 28-Oct-2020 12:03:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.885					ND	
3 Dichlorodifluoromethane	85		2.081					ND	
2 Chlorodifluoromethane	51		2.093					ND	
4 Dimethyl ether	45		2.166					ND	
5 2-Chloro-1,1,1-Trifluoroethane	118		2.233					ND	
6 Chloromethane	50		2.288					ND	
8 Butadiene	39		2.410					ND	7
7 Vinyl chloride	62		2.410					ND	
9 Bromomethane	94		2.757					ND	7
10 Chloroethane	64		2.855					ND	
11 Dichlorofluoromethane	67		3.105					ND	
12 Ethanol	45	3.123	3.111	0.012	1	119		NC	
13 Trichlorofluoromethane	101		3.166					ND	
15 Ethyl ether	59		3.446					ND	
16 1,2-Dichloro-1,1,2-trifluoroetha	67		3.531					ND	
17 Acrolein	56		3.635					ND	7
18 1,1-Dichloroethene	96		3.781					ND	
19 Acetone	43		3.806					ND	
20 112TCTFE	101		3.812					ND	
21 Isopropyl alcohol	45		3.989					ND	
22 Iodomethane	142		3.995					ND	
23 Ethyl bromide	108		4.025					ND	
24 Carbon disulfide	76		4.105					ND	7
25 Acetonitrile	41		4.214					ND	
26 Methyl acetate	43		4.263					ND	
27 3-Chloro-1-propene	41		4.287					ND	
29 Methylene Chloride	84		4.495					ND	
* 28 t-Butyl alcohol-d10 (IS)	65	4.507	4.507	0.000	0	132606	50.0	50.0	
30 2-Methyl-2-propanol	59		4.629					ND	
31 Acrylonitrile	53		4.836					ND	
32 Methyl tert-butyl ether	73		4.903					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 trans-1,2-Dichloroethene	96		4.915					ND	
34 Hexane	57		5.330					ND	
36 Vinyl acetate	43		5.537					ND	
35 1,1-Dichloroethane	63		5.568					ND	
37 Isopropyl ether	45		5.616					ND	
38 2-Chloro-1,3-butadiene	53		5.671					ND	
39 Tert-butyl ethyl ether	59		6.147					ND	
S 40 1,2-Dichloroethene, Total	100		6.155					ND	7
41 2-Butanone (MEK)	43		6.342					ND	
42 cis-1,2-Dichloroethene	96		6.391					ND	
43 2,2-Dichloropropane	77		6.403					ND	
44 Ethyl acetate	43		6.409					ND	7
45 Propionitrile	54		6.439					ND	
46 Methyl acrylate	55		6.470					ND	
47 Methacrylonitrile	67		6.659					ND	
48 Chlorobromomethane	128		6.720					ND	
49 Tetrahydrofuran	71		6.726					ND	
50 Chloroform	83		6.866					ND	
\$ 51 Dibromofluoromethane (Surr)	113	7.074	7.080	-0.006	94	545964	10.0	11.1	
52 1,1,1-Trichloroethane	97		7.092					ND	
53 Cyclohexane	56		7.189					ND	
54 1-Chlorobutane	56		7.238					ND	
55 1,1-Dichloropropene	75		7.305					ND	
56 Carbon tetrachloride	117		7.305					ND	
57 Isobutyl alcohol	41		7.433					ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.531	7.531	0.000	0	110502	10.0	11.0	
59 Benzene	78		7.567					ND	
61 Isopropyl acetate	43		7.628					ND	
60 1,2-Dichloroethane	62		7.640					ND	
62 Tert-amyl methyl ether	73		7.744					ND	
63 t-Amyl alcohol	73		7.842					ND	
* 65 Fluorobenzene (IS)	96	7.964	7.964	0.000	98	2003720	10.0	10.0	
64 n-Heptane	43		7.970					ND	7
66 n-Butanol	56		8.299					ND	
67 Trichloroethene	95		8.439					ND	
68 Methylcyclohexane	83		8.750					ND	
69 2-ethoxy-2-methyl butane	87		8.768					ND	
70 1,2-Dichloropropane	63		8.768					ND	
71 Methyl methacrylate	69		8.835					ND	
72 1,4-Dioxane	88		8.854					ND	
73 Dibromomethane	93		8.878					ND	
74 n-Propyl acetate	61		8.921					ND	
75 Dichlorobromomethane	83		9.110					ND	
76 2-Nitropropane	41		9.366					ND	
77 Chloroacetonitrile	75		9.433					ND	
78 2-Chloroethyl vinyl ether	63		9.451					ND	
79 1-Bromo-2-chloroethane	63		9.488					ND	
80 cis-1,3-Dichloropropene	75		9.628					ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.786					ND	
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	2034309	10.0	9.71	
83 Toluene	92		10.000					ND	
S 84 1,3-Dichloropropene, Total	100		10.060					ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 trans-1,3-Dichloropropene	75		10.244					ND	
86 Ethyl methacrylate	69		10.298					ND	
87 1,1,2-Trichloroethane	97		10.445					ND	
88 Tetrachloroethene	166		10.536					ND	
89 1,3-Dichloropropane	76		10.603					ND	
91 2-Hexanone	43		10.646					ND	7
92 n-Butyl acetate	43		10.768					ND	U
93 Chlorodibromomethane	129		10.817					ND	
94 Ethylene Dibromide	107		10.932					ND	
S 95 Xylenes, Total	106		11.245					ND	7
* 97 Chlorobenzene-d5 (IS)	117	11.347	11.347	0.000	86	1573544	10.0	10.0	
96 1-Chlorohexane	91		11.353					ND	7
98 Chlorobenzene	112		11.378					ND	
99 1,1,1,2-Tetrachloroethane	131		11.457					ND	
100 Ethylbenzene	91		11.457					ND	7
101 m-Xylene & p-Xylene	106		11.567					ND	7
102 o-Xylene	106		11.896					ND	
103 Styrene	104		11.908					ND	
104 Bromoform	173		12.066					ND	
105 Isopropylbenzene	105		12.188					ND	
106 cis-1,4-Dichloro-2-butene	88		12.237					ND	U
107 Cyclohexanone	55		12.280					ND	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	91	726549	10.0	9.58	
109 1,1,2,2-Tetrachloroethane	83		12.426					ND	
111 Bromobenzene	156		12.450					ND	
110 trans-1,4-Dichloro-2-butene	53		12.450					ND	
112 1,2,3-Trichloropropane	110		12.475					ND	
113 N-Propylbenzene	91		12.511					ND	
114 2-Chlorotoluene	126		12.591					ND	
115 1,3,5-Trimethylbenzene	105		12.646					ND	
116 4-Chlorotoluene	126		12.682					ND	
118 tert-Butylbenzene	134		12.889					ND	
119 Pentachloroethane	167		12.926					ND	
120 1,2,4-Trimethylbenzene	105		12.932					ND	
121 sec-Butylbenzene	105		13.048					ND	
122 1,3-Dichlorobenzene	146		13.152					ND	
123 4-Isopropyltoluene	119		13.158					ND	7
* 124 1,4-Dichlorobenzene-d4	152	13.206	13.206	0.000	96	832401	10.0	10.0	
125 1,4-Dichlorobenzene	146		13.225					ND	
126 1,2,3-Trimethylbenzene	120		13.231					ND	7
127 Benzyl chloride	126		13.298					ND	
129 p-Diethylbenzene	119		13.426					ND	U
130 n-Butylbenzene	92		13.444					ND	
131 1,2-Dichlorobenzene	146		13.487					ND	
133 Hexachloroethane	201		13.694					ND	
134 1,2-Dibromo-3-Chloropropane	155		14.023					ND	
135 1,3,5-Trichlorobenzene	180		14.151					ND	
136 1,2,4-Trichlorobenzene	180		14.572					ND	
137 Hexachlorobutadiene	225		14.651					ND	U
138 Naphthalene	128		14.755					ND	7
139 1,2,3-Trichlorobenzene	180		14.901					ND	
140 2-Methylnaphthalene	142		15.554					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
151 tert-Butyl Formate	1		0.000						ND
152 Dodecane	57		0.000						ND
157 Methylal	1		0.000						ND
142 1,1-Dichloro-1-fluoroethane	1		0.000						ND
150 Propene oxide	1		0.000						ND
162 1-Chloropropane	1		0.000						ND
163 1-Bromo-3-Chloropropane	1		0.000						ND
160 n-Decane	57		0.000						ND
161 2-Bromo-1-chloropropane	1		0.000						ND
186 Isopropyl alcohol TIC	1		0.000						ND

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_30_826ISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 28-Oct-2020 18:19:30

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC20B32.D

Injection Date: 28-Oct-2020 11:15:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: mb

Worklist Smp#: 8

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

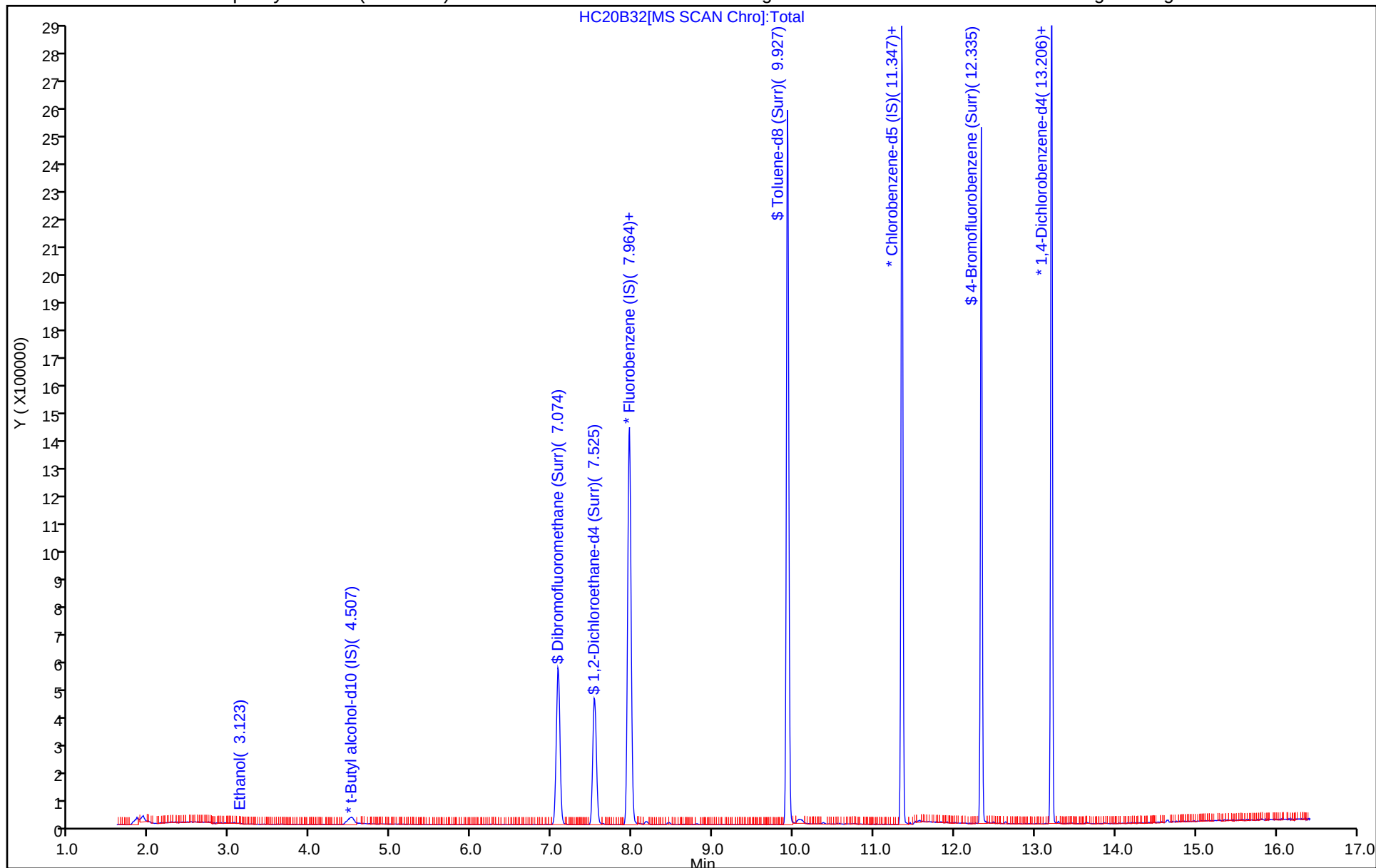
ALS Bottle#: 7

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC20B32.D
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 28-Oct-2020 11:15:30 ALS Bottle#: 7 Worklist Smp#: 8
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-008
 Misc. Info.: MB
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: howej

Date: 28-Oct-2020 12:03:59

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	11.1	111.19
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	11.0	109.84
\$ 82 Toluene-d8 (Surr)	10.0	9.71	97.07
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.58	95.76

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 410-59437/5
 Matrix: Water Lab File ID: HC26L01.D
 Analysis Method: 8260C LL Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 10:10
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	5.21		1.0	
75-34-3	1,1-Dichloroethane	5.01		1.0	
75-35-4	1,1-Dichloroethene	5.10		1.0	
78-93-3	2-Butanone	35.0		10	
71-43-2	Benzene	5.01		1.0	
56-23-5	Carbon tetrachloride	5.26		1.0	
75-00-3	Chloroethane	4.89		1.0	
74-87-3	Chloromethane	4.71		1.0	
75-71-8	Dichlorodifluoromethane	5.22		1.0	
60-29-7	Ethyl ether	5.12	J	13	
100-41-4	Ethylbenzene	4.82		1.0	
76-13-1	Freon 113	4.68		1.0	
75-09-2	Methylene Chloride	5.28		1.0	
127-18-4	Tetrachloroethene	4.85		1.0	
109-99-9	Tetrahydrofuran	24.7	J	25	
108-88-3	Toluene	4.76		1.0	
79-01-6	Trichloroethene	5.06		1.0	
75-69-4	Trichlorofluoromethane	5.03		1.0	
75-01-4	Vinyl chloride	4.94		1.0	
1330-20-7	Xylenes, Total	15.2		3.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC26L01.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 28-Oct-2020 10:10:30 ALS Bottle#: 4 Worklist Smp#: 5
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-005
 Misc. Info.: LCS
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: howej

Date: 28-Oct-2020 10:33:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.062	2.081	-0.019	100	306211	5.00	5.22	
6 Chloromethane	50	2.270	2.288	-0.018	99	384928	5.00	4.71	
8 Butadiene	39	2.398	2.410	-0.012	93	503165	5.00	7.03	
7 Vinyl chloride	62	2.398	2.410	-0.012	94	357726	5.00	4.94	
9 Bromomethane	94	2.739	2.757	-0.018	92	261383	5.00	5.29	
10 Chloroethane	64	2.849	2.855	-0.006	100	227574	5.00	4.89	
11 Dichlorofluoromethane	67	3.093	3.105	-0.012	97	518878	5.00	5.42	
13 Trichlorofluoromethane	101	3.154	3.166	-0.012	96	473301	5.00	5.03	
15 Ethyl ether	59	3.440	3.446	-0.006	92	217487	5.01	5.12	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.525	3.531	-0.006	93	329739	5.00	4.96	
17 Acrolein	56	3.617	3.635	-0.018	99	215366	37.4	29.3	
18 1,1-Dichloroethene	96	3.769	3.781	-0.012	98	244330	5.00	5.10	
19 Acetone	43	3.806	3.806	0.000	97	315118	37.5	32.9	
20 112TCTFE	101	3.806	3.812	-0.006	92	247313	5.00	4.68	
21 Isopropyl alcohol	45	3.983	3.989	-0.006	27	32623	37.5	20.7	
22 Iodomethane	142	3.989	3.995	-0.006	99	439022	5.00	4.89	
23 Ethyl bromide	108	4.007	4.025	-0.018	98	217604	5.01	5.35	
24 Carbon disulfide	76	4.092	4.105	-0.013	99	798428	5.00	4.95	
26 Methyl acetate	43	4.257	4.263	-0.006	99	130529	5.00	4.64	
27 3-Chloro-1-propene	41	4.281	4.287	-0.006	92	378112	5.00	4.17	
29 Methylene Chloride	84	4.483	4.495	-0.012	95	283951	5.00	5.28	
* 28 t-Butyl alcohol-d10 (IS)	65	4.489	4.507	-0.018	0	139963	50.0	50.0	
30 2-Methyl-2-propanol	59	4.623	4.629	-0.006	98	91020	50.0	31.1	
31 Acrylonitrile	53	4.830	4.836	-0.006	99	280969	25.0	23.6	
32 Methyl tert-butyl ether	73	4.891	4.903	-0.012	97	577342	5.00	4.89	
33 trans-1,2-Dichloroethene	96	4.915	4.915	0.000	97	274274	5.00	5.13	
34 Hexane	57	5.318	5.330	-0.012	95	375111	5.00	4.47	
35 1,1-Dichloroethane	63	5.556	5.568	-0.012	96	532686	5.00	5.01	
37 Isopropyl ether	45	5.616	5.616	0.000	94	847541	5.00	4.63	
38 2-Chloro-1,3-butadiene	53	5.671	5.671	0.000	91	430715	5.00	4.87	
39 Tert-butyl ethyl ether	59	6.141	6.147	-0.006	97	727939	5.00	4.79	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	6.342	6.342	0.000	100	546106	37.5	35.0	
42 cis-1,2-Dichloroethene	96	6.379	6.391	-0.012	83	326938	5.00	5.40	
43 2,2-Dichloropropane	77	6.397	6.403	-0.006	89	426583	5.00	5.43	
45 Propionitrile	54	6.427	6.439	-0.012	98	129510	37.5	30.0	
47 Methacrylonitrile	67	6.653	6.659	-0.006	92	541528	37.5	36.1	
48 Chlorobromomethane	128	6.720	6.720	0.000	93	128824	5.00	4.93	
49 Tetrahydrofuran	71	6.720	6.726	-0.006	78	96405	25.0	24.7	
50 Chloroform	83	6.860	6.866	-0.006	94	525967	5.00	5.22	
\$ 51 Dibromofluoromethane (Surr)	113	7.074	7.080	-0.006	93	521691	10.0	10.5	
52 1,1,1-Trichloroethane	97	7.086	7.092	-0.006	98	439794	5.00	5.21	
53 Cyclohexane	56	7.195	7.189	0.006	92	458506	5.00	4.41	
55 1,1-Dichloropropene	75	7.299	7.305	-0.006	95	390999	5.00	5.02	
56 Carbon tetrachloride	117	7.299	7.305	-0.006	88	390067	5.00	5.26	
57 Isobutyl alcohol	41	7.427	7.433	-0.006	93	94985	125.0	86.9	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.531	7.531	0.000	0	106713	10.0	10.5	
59 Benzene	78	7.561	7.567	-0.006	97	1173777	5.00	5.01	
60 1,2-Dichloroethane	62	7.634	7.640	-0.006	97	329830	5.00	5.45	
62 Tert-amyl methyl ether	73	7.738	7.744	-0.006	97	651226	5.00	5.19	
* 65 Fluorobenzene (IS)	96	7.964	7.964	0.000	98	2025486	10.0	10.0	
64 n-Heptane	43	7.964	7.970	-0.006	91	460797	5.00	4.57	
66 n-Butanol	56	8.299	8.299	0.000	94	203772	250.0	232.0	
67 Trichloroethene	95	8.433	8.439	-0.006	98	297743	5.00	5.06	
68 Methylcyclohexane	83	8.750	8.750	0.000	96	459305	5.00	4.43	
69 2-ethoxy-2-methyl butane	87	8.762	8.768	-0.006	87	397424	5.00	5.36	
70 1,2-Dichloropropane	63	8.768	8.768	0.000	82	319881	5.00	5.27	
71 Methyl methacrylate	69	8.835	8.835	0.000	94	135770	5.00	5.08	
72 1,4-Dioxane	88	8.860	8.854	0.006	29	27790	125.0	151.7	M
73 Dibromomethane	93	8.878	8.878	0.000	95	146810	5.00	5.57	
75 Dichlorobromomethane	83	9.110	9.110	0.000	99	375174	5.00	5.54	
76 2-Nitropropane	41	9.372	9.366	0.006	99	37099	5.00	4.81	
78 2-Chloroethyl vinyl ether	63		9.451				ND	ND	
79 1-Bromo-2-chloroethane	63	9.488	9.488	0.000	99	319858	5.00	9.05	
80 cis-1,3-Dichloropropene	75	9.628	9.628	0.000	95	402318	5.00	4.99	
81 4-Methyl-2-pentanone (MIBK)	43	9.786	9.786	0.000	98	901719	25.0	23.5	
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	2043411	10.0	9.79	
83 Toluene	92	10.000	10.000	0.000	97	724232	5.00	4.76	
85 trans-1,3-Dichloropropene	75	10.244	10.244	0.000	94	334601	5.00	4.90	
86 Ethyl methacrylate	69	10.298	10.298	0.000	90	262191	5.00	4.91	
87 1,1,2-Trichloroethane	97	10.451	10.445	0.006	91	206826	5.00	5.34	
88 Tetrachloroethene	166	10.536	10.536	0.000	98	337276	5.00	4.85	
89 1,3-Dichloropropane	76	10.603	10.603	0.000	90	357318	5.00	5.03	
91 2-Hexanone	43	10.646	10.646	0.000	98	651580	25.0	25.0	
93 Chlorodibromomethane	129	10.817	10.817	0.000	91	248074	5.00	5.41	
94 Ethylene Dibromide	107	10.933	10.932	0.000	99	191831	5.00	5.15	
* 97 Chlorobenzene-d5 (IS)	117	11.347	11.347	0.000	86	1567515	10.0	10.0	
96 1-Chlorohexane	91	11.353	11.353	0.000	98	393339	5.00	4.42	
98 Chlorobenzene	112	11.378	11.378	0.000	94	831502	5.00	5.10	
99 1,1,1,2-Tetrachloroethane	131	11.457	11.457	0.000	95	287525	5.00	5.10	
100 Ethylbenzene	91	11.457	11.457	0.000	99	1397450	5.00	4.82	
101 m-Xylene & p-Xylene	106	11.567	11.567	0.001	98	1121650	10.0	10.3	
102 o-Xylene	106	11.896	11.896	0.000	95	515285	5.00	4.91	
103 Styrene	104	11.908	11.908	0.000	95	887576	5.00	5.24	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 Bromoform	173	12.073	12.066	0.007	97	142260	5.00	5.57	
105 Isopropylbenzene	105	12.188	12.188	0.000	96	1349890	5.00	4.78	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	91	756887	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.426	12.426	0.000	93	254354	5.00	5.09	
111 Bromobenzene	156	12.451	12.450	0.000	96	342593	5.00	5.00	
110 trans-1,4-Dichloro-2-butene	53	12.457	12.450	0.007	80	141353	25.0	10.2	
112 1,2,3-Trichloropropane	110	12.475	12.475	0.000	84	66856	5.00	5.24	
113 N-Propylbenzene	91	12.511	12.511	0.000	99	1727395	5.00	4.73	
114 2-Chlorotoluene	126	12.591	12.591	0.000	96	338507	5.00	4.84	
115 1,3,5-Trimethylbenzene	105	12.646	12.646	0.000	94	1186033	5.00	4.75	
116 4-Chlorotoluene	126	12.682	12.682	0.000	98	353818	5.00	5.01	
118 tert-Butylbenzene	134	12.889	12.889	0.000	93	253257	5.00	4.67	
119 Pentachloroethane	167	12.926	12.926	0.000	66	216703	5.00	5.07	
120 1,2,4-Trimethylbenzene	105	12.932	12.932	0.000	97	1225680	5.00	4.89	
121 sec-Butylbenzene	105	13.048	13.048	0.000	95	1576262	5.00	4.64	
122 1,3-Dichlorobenzene	146	13.152	13.152	0.000	98	683029	5.00	4.98	
123 4-Isopropyltoluene	119	13.158	13.158	0.000	97	1373267	5.00	4.89	
* 124 1,4-Dichlorobenzene-d4	152	13.206	13.206	0.000	98	855994	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.225	13.225	0.000	93	690417	5.00	5.07	
126 1,2,3-Trimethylbenzene	120	13.231	13.231	0.000	98	560025	5.00	5.02	
127 Benzyl chloride	126	13.298	13.298	0.000	99	97180	5.00	5.80	
129 p-Diethylbenzene	119	13.426	13.426	0.000	94	874371	5.00	4.74	
130 n-Butylbenzene	92	13.444	13.444	0.000	96	731278	5.00	4.80	
131 1,2-Dichlorobenzene	146	13.487	13.487	0.000	97	622376	5.00	5.03	
134 1,2-Dibromo-3-Chloropropane	155	14.023	14.023	0.000	85	35759	5.00	5.29	
135 1,3,5-Trichlorobenzene	180	14.151	14.151	0.000	97	511719	5.00	4.75	
136 1,2,4-Trichlorobenzene	180	14.572	14.572	0.000	94	422453	5.00	4.74	
137 Hexachlorobutadiene	225	14.651	14.651	0.000	96	258225	5.00	4.94	
138 Naphthalene	128	14.755	14.755	0.000	97	706574	5.00	4.70	
139 1,2,3-Trichlorobenzene	180	14.901	14.901	0.000	95	380728	5.00	4.78	
140 2-Methylnaphthalene	142	15.554	15.554	0.000	93	366649	5.00	3.34	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_QVOA1_00052	Amount Added: 12.50	Units: uL	
MSV_Q_QARC_00051	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA6_00049	Amount Added: 12.50	Units: uL	
MSV_Q_EE_00002	Amount Added: 12.50	Units: uL	
MSV_Q_ETBR_00005	Amount Added: 12.50	Units: uL	
MSV_QGAS_826_00083	Amount Added: 12.50	Units: uL	
MSV_30_826ISS_00005	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 28-Oct-2020 18:19:11

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC26L01.D

Injection Date: 28-Oct-2020 10:10:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: LCS

Worklist Smp#: 5

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

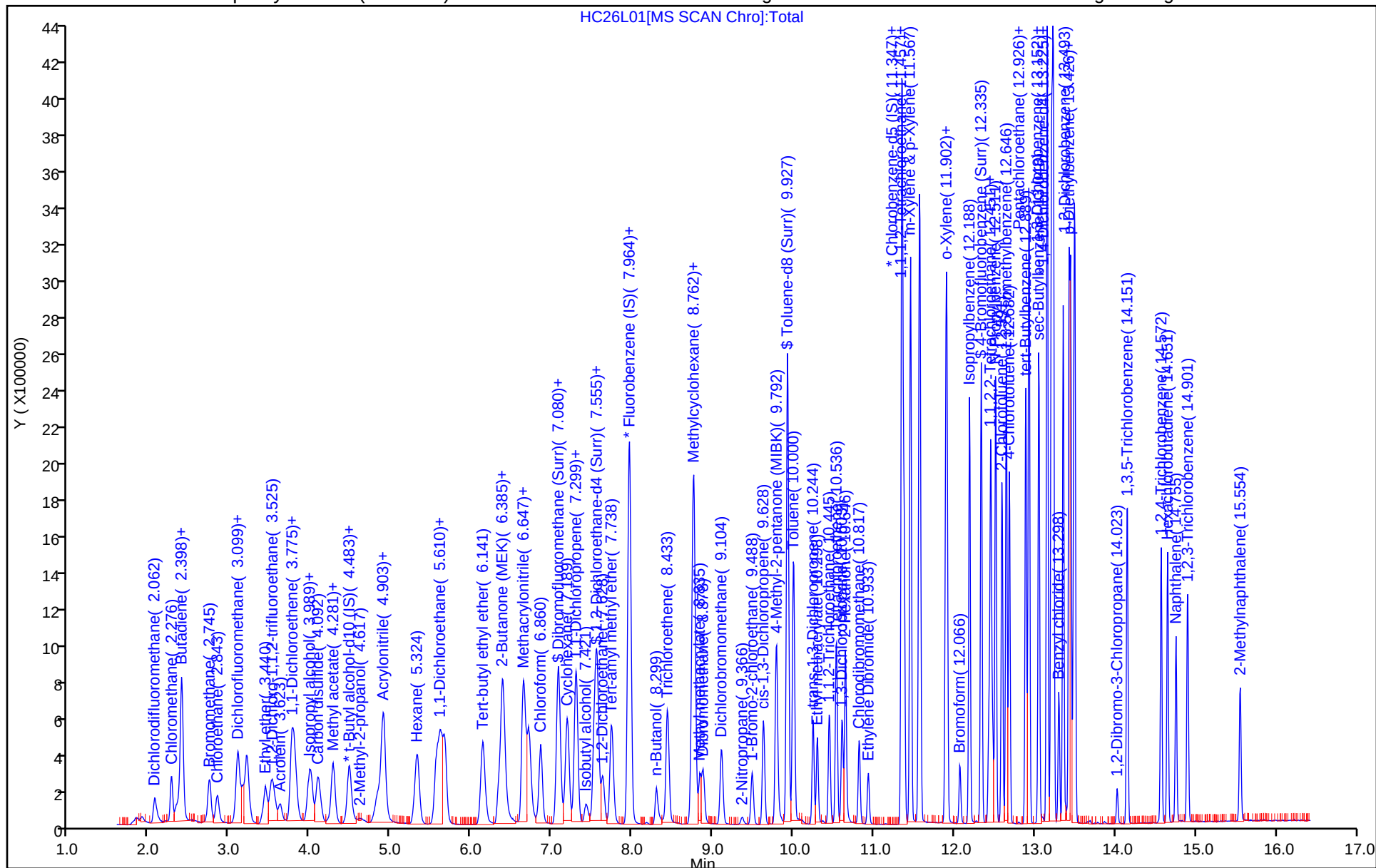
ALS Bottle#: 4

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC26L01.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 28-Oct-2020 10:10:30 ALS Bottle#: 4 Worklist Smp#: 5
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-005
 Misc. Info.: LCS
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: howej

Date: 28-Oct-2020 10:33:37

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	10.5	105.10
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	104.93
\$ 82 Toluene-d8 (Surr)	10.0	9.79	97.88
\$ 108 4-Bromofluorobenzene (Surr)	10.0	10.0	100.14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 410-59437/6
 Matrix: Water Lab File ID: HC26L03.D
 Analysis Method: 8260C LL Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 10:32
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
115-10-6	Methoxymethane	5.02	J	13	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		80-120
1868-53-7	Dibromofluoromethane (Surr)	109		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC26L03.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 28-Oct-2020 10:32:30 ALS Bottle#: 5 Worklist Smp#: 6
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-006
 Misc. Info.: LCS
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: howej

Date: 28-Oct-2020 10:57:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
4 Dimethyl ether	45	2.172	2.166	0.006	100	315437	5.00	5.02	
17 Acrolein	56	3.629	3.635	-0.006	98	226369	37.4	32.5	
25 Acetonitrile	41	4.214	4.214	0.000	99	114967	37.5	38.3	
* 28 t-Butyl alcohol-d10 (IS)	65	4.507	4.507	0.000	0	132528	50.0	50.0	
36 Vinyl acetate	43	5.549	5.537	0.012	98	933666	12.5	13.1	
44 Ethyl acetate	43	6.415	6.409	0.006	99	74068	2.50	2.10	
\$ 51 Dibromofluoromethane (Surr)	113	7.080	7.080	0.000	93	537590	10.0	10.9	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.537	7.531	0.006	0	107837	10.0	10.7	
61 Isopropyl acetate	43	7.640	7.628	0.012	97	157053	2.50	2.43	a
* 65 Fluorobenzene (IS)	96	7.964	7.964	0.000	99	2007203	10.0	10.0	
74 n-Propyl acetate	61	8.921	8.921	0.000	99	32113	2.50	2.58	
78 2-Chloroethyl vinyl ether	63	9.451	9.451	0.000	92	101243	5.00	4.22	
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	2024620	10.0	9.64	
92 n-Butyl acetate	43	10.762	10.768	-0.006	98	125796	2.50	2.00	
* 97 Chlorobenzene-d5 (IS)	117	11.347	11.347	0.000	86	1576714	10.0	10.0	
107 Cyclohexanone	55	12.268	12.280	-0.012	93	86687	125.0	101.1	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	90	748704	10.0	9.85	
* 124 1,4-Dichlorobenzene-d4	152	13.206	13.206	0.000	95	821927	10.0	10.0	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

MSV_Q_VOA5_00017	Amount Added: 25.00	Units: uL	
MSV_QAcet_00012	Amount Added: 7.50	Units: uL	
MSV_QCYC_00004	Amount Added: 12.50	Units: uL	
MSV_Q_QARC_00051	Amount Added: 12.50	Units: uL	
MSV_Q_QDME_00009	Amount Added: 5.00	Units: uL	
MSV_30_826ISS_00005	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 28-Oct-2020 18:19:20

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC26L03.D

Injection Date: 28-Oct-2020 10:32:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: LCS

Worklist Smp#: 6

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

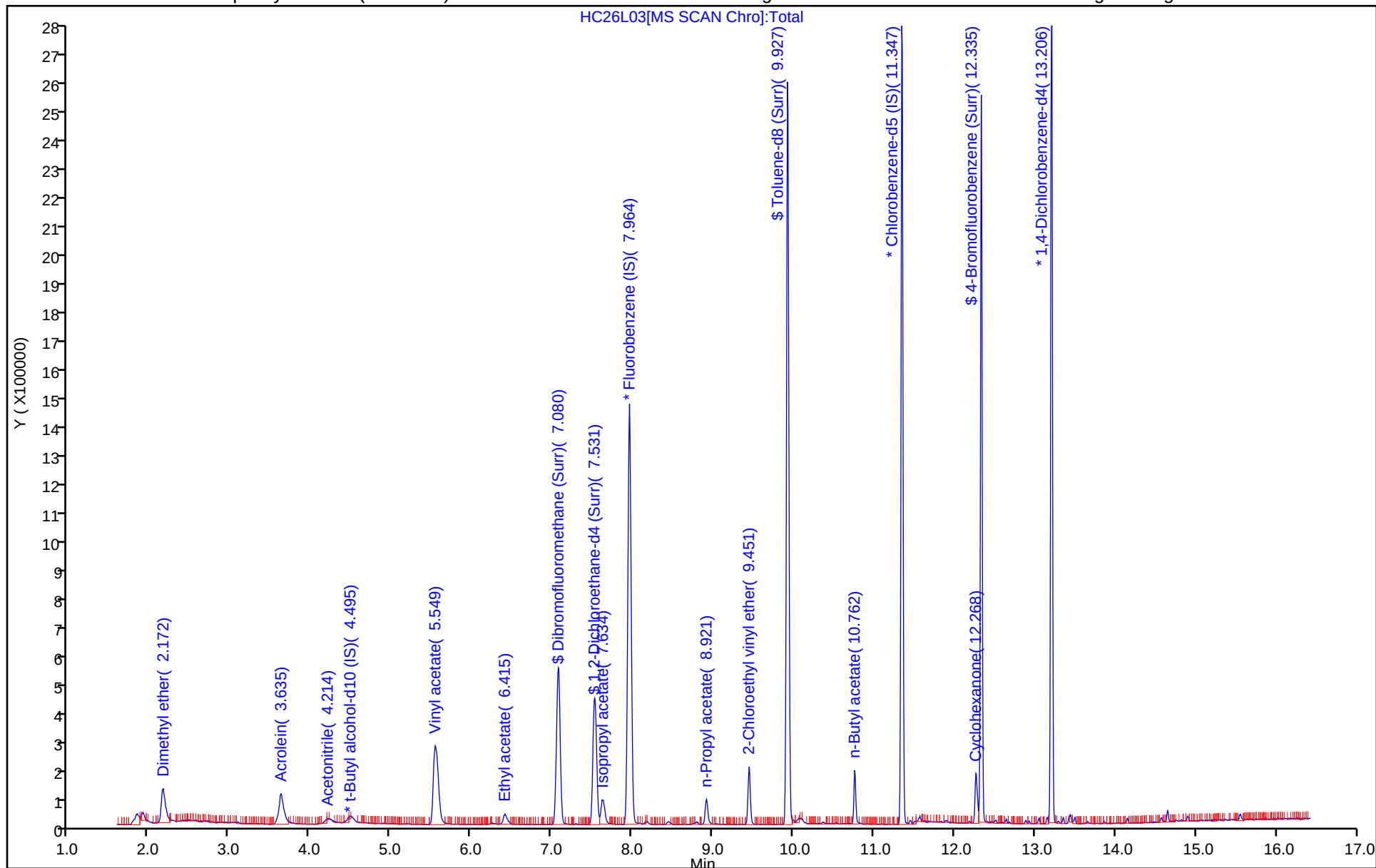
ALS Bottle#: 5

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC26L03.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 28-Oct-2020 10:32:30 ALS Bottle#: 5 Worklist Smp#: 6
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-006
 Misc. Info.: LCS
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Oct-2020 18:19:06 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1004

First Level Reviewer: howej

Date: 28-Oct-2020 10:57:27

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	10.9	109.29
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.7	107.00
\$ 82 Toluene-d8 (Surr)	10.0	9.64	96.41
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.85	98.48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16WC1A MS Lab Sample ID: 410-18116-4 MS
 Matrix: Ground Water Lab File ID: HC28S10.D
 Analysis Method: 8260C LL Date Collected: 10/22/2020 09:25
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 14:52
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	5.59		1.0	
75-34-3	1,1-Dichloroethane	9.41		1.0	
75-35-4	1,1-Dichloroethene	5.60		1.0	
78-93-3	2-Butanone	34.6		10	
71-43-2	Benzene	5.56		1.0	
56-23-5	Carbon tetrachloride	5.70		1.0	
75-00-3	Chloroethane	7.05		1.0	
74-87-3	Chloromethane	5.34		1.0	
75-71-8	Dichlorodifluoromethane	5.63		1.0	
60-29-7	Ethyl ether	23.8		13	
100-41-4	Ethylbenzene	5.07		1.0	
76-13-1	Freon 113	5.11		1.0	
75-09-2	Methylene Chloride	5.53		1.0	
127-18-4	Tetrachloroethene	5.19		1.0	
109-99-9	Tetrahydrofuran	26.6		25	
108-88-3	Toluene	5.01		1.0	
79-01-6	Trichloroethene	5.54		1.0	
75-69-4	Trichlorofluoromethane	5.61		1.0	
75-01-4	Vinyl chloride	5.70		1.0	
1330-20-7	Xylenes, Total	15.7		3.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		80-120
1868-53-7	Dibromofluoromethane (Surr)	107		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S10.D
 Lims ID: 410-18116-C-4 MS
 Client ID: 16WC1A
 Sample Type: MS
 Inject. Date: 28-Oct-2020 14:52:30 ALS Bottle#: 17 Worklist Smp#: 18
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-018
 Misc. Info.: 410-18116-C-4 MS
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Oct-2020 09:08:20 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:09:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.080	2.081	-0.001	95	348677	5.00	5.63	
6 Chloromethane	50	2.282	2.288	-0.006	99	460921	5.00	5.34	
8 Butadiene	39	2.410	2.410	0.000	94	523469	5.00	6.93	
7 Vinyl chloride	62	2.410	2.410	0.000	97	435714	5.00	5.70	
9 Bromomethane	94	2.751	2.757	-0.006	91	294473	5.00	5.64	
10 Chloroethane	64	2.855	2.855	0.000	100	346574	5.00	7.05	
11 Dichlorofluoromethane	67	3.099	3.105	-0.006	98	670202	5.00	6.63	
13 Trichlorofluoromethane	101	3.166	3.166	0.000	98	557329	5.00	5.61	
15 Ethyl ether	59	3.452	3.446	0.006	93	1067050	5.01	23.8	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.531	3.531	0.000	93	393596	5.00	5.61	
17 Acrolein	56	3.641	3.635	0.006	99	221841	37.5	29.3	
18 1,1-Dichloroethene	96	3.781	3.781	0.000	97	283485	5.00	5.60	
19 Acetone	43	3.818	3.806	0.012	99	323782	37.5	32.8	
20 112TCTFE	101	3.806	3.812	-0.006	93	285119	5.00	5.11	
21 Isopropyl alcohol	45	4.007	3.989	0.018	27	44806	37.5	26.9	
22 Iodomethane	142	3.989	3.995	-0.006	99	482532	5.00	5.10	
23 Ethyl bromide	108	4.025	4.025	0.000	99	244842	5.01	5.70	
24 Carbon disulfide	76	4.104	4.105	-0.001	99	895617	5.00	5.26	
26 Methyl acetate	43	4.263	4.263	0.000	98	126902	5.00	4.38	
27 3-Chloro-1-propene	41	4.287	4.287	0.000	92	427011	5.00	4.46	
29 Methylene Chloride	84	4.495	4.495	0.000	94	313649	5.00	5.53	
* 28 t-Butyl alcohol-d10 (IS)	65	4.519	4.507	0.012	0	144216	50.0	50.0	
30 2-Methyl-2-propanol	59	4.641	4.629	0.012	98	109795	50.0	36.4	
31 Acrylonitrile	53	4.842	4.836	0.006	96	296235	25.0	24.1	
32 Methyl tert-butyl ether	73	4.897	4.903	-0.006	91	591261	5.00	4.74	
33 trans-1,2-Dichloroethene	96	4.915	4.915	0.000	97	303530	5.00	5.38	
34 Hexane	57	5.342	5.330	0.012	94	433340	5.00	4.90	
35 1,1-Dichloroethane	63	5.568	5.568	0.000	96	1056857	5.00	9.41	
37 Isopropyl ether	45	5.629	5.616	0.013	94	901878	5.00	4.66	
38 2-Chloro-1,3-butadiene	53	5.677	5.671	0.006	91	489495	5.00	5.25	
39 Tert-butyl ethyl ether	59	6.153	6.147	0.006	97	764033	5.00	4.76	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	6.354	6.342	0.012	100	556621	37.5	34.6	
42 cis-1,2-Dichloroethene	96	6.385	6.391	-0.006	82	523443	5.00	8.19	
43 2,2-Dichloropropane	77	6.409	6.403	0.006	87	474526	5.00	5.72	
45 Propionitrile	54	6.445	6.439	0.006	98	145713	37.5	32.7	
47 Methacrylonitrile	67	6.653	6.659	-0.006	92	550867	37.5	35.6	
48 Chlorobromomethane	128	6.726	6.720	0.006	97	143615	5.00	5.21	
49 Tetrahydrofuran	71	6.738	6.726	0.012	83	106974	25.0	26.6	
50 Chloroform	83	6.866	6.866	0.000	93	578844	5.00	5.44	
\$ 51 Dibromofluoromethane (Surr)	113	7.080	7.080	0.000	93	558174	10.0	10.7	
52 1,1,1-Trichloroethane	97	7.092	7.092	0.000	98	498243	5.00	5.59	
53 Cyclohexane	56	7.195	7.189	0.006	92	515094	5.00	4.70	
55 1,1-Dichloropropene	75	7.305	7.305	0.000	95	446940	5.00	5.43	
56 Carbon tetrachloride	117	7.305	7.305	0.000	90	446456	5.00	5.70	
57 Isobutyl alcohol	41	7.433	7.433	0.000	93	115739	125.1	102.7	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.525	7.531	-0.006	0	114753	10.0	10.7	M
59 Benzene	78	7.567	7.567	0.000	97	1374565	5.00	5.56	
60 1,2-Dichloroethane	62	7.628	7.640	-0.012	97	356353	5.00	5.58	
62 Tert-amyl methyl ether	73	7.750	7.744	0.006	97	664104	5.00	5.01	
* 65 Fluorobenzene (IS)	96	7.963	7.964	-0.001	99	2138269	10.0	10.0	
64 n-Heptane	43	7.970	7.970	0.000	93	523205	5.00	4.92	
66 n-Butanol	56	8.305	8.299	0.006	93	187013	250.2	206.6	
67 Trichloroethene	95	8.439	8.439	0.000	98	344598	5.00	5.54	
68 Methylcyclohexane	83	8.750	8.750	0.000	95	531594	5.00	4.86	
69 2-ethoxy-2-methyl butane	87	8.768	8.768	0.000	87	428699	5.00	5.48	
70 1,2-Dichloropropane	63	8.774	8.768	0.006	73	349554	5.00	5.45	
71 Methyl methacrylate	69	8.841	8.835	0.006	89	137611	5.00	4.99	
72 1,4-Dioxane	88	8.860	8.854	0.006	88	25566	125.1	135.5	M
73 Dibromomethane	93	8.884	8.878	0.006	95	154388	5.00	5.55	
75 Dichlorobromomethane	83	9.110	9.110	0.000	99	406276	5.00	5.69	
76 2-Nitropropane	41	9.366	9.366	0.000	98	37148	5.00	4.68	
78 2-Chloroethyl vinyl ether	63		9.451				ND	ND	
79 1-Bromo-2-chloroethane	63	9.488	9.488	0.000	98	331472	5.00	8.89	
80 cis-1,3-Dichloropropene	75	9.628	9.628	0.000	95	432001	5.00	5.08	
81 4-Methyl-2-pentanone (MIBK)	43	9.792	9.786	0.006	97	909652	25.0	23.0	
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	2150934	10.0	9.70	
83 Toluene	92	10.006	10.000	0.006	98	810515	5.00	5.01	
85 trans-1,3-Dichloropropene	75	10.250	10.244	0.006	93	348149	5.00	4.80	
86 Ethyl methacrylate	69	10.298	10.298	0.000	90	273722	5.00	4.83	
87 1,1,2-Trichloroethane	97	10.445	10.445	0.000	91	221658	5.00	5.39	
88 Tetrachloroethene	166	10.536	10.536	0.000	98	383361	5.00	5.19	
89 1,3-Dichloropropane	76	10.609	10.603	0.006	90	369714	5.00	4.90	
91 2-Hexanone	43	10.646	10.646	0.000	98	648252	25.0	24.2	
93 Chlorodibromomethane	129	10.817	10.817	0.000	90	266307	5.00	5.47	
94 Ethylene Dibromide	107	10.932	10.932	0.000	100	198337	5.00	5.01	
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.347	0.006	86	1664637	10.0	10.0	
96 1-Chlorohexane	91	11.353	11.353	0.000	54	432279	5.00	4.58	
98 Chlorobenzene	112	11.377	11.378	-0.001	94	920251	5.00	5.32	
99 1,1,1,2-Tetrachloroethane	131	11.457	11.457	0.000	95	317549	5.00	5.30	
100 Ethylbenzene	91	11.457	11.457	0.000	99	1560348	5.00	5.07	
101 m-Xylene & p-Xylene	106	11.566	11.567	0.000	98	1218890	10.0	10.6	
102 o-Xylene	106	11.896	11.896	0.000	97	566696	5.00	5.09	
103 Styrene	104	11.908	11.908	0.000	94	980492	5.00	5.45	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 Bromoform	173	12.072	12.066	0.006	96	140843	5.00	5.19	
105 Isopropylbenzene	105	12.188	12.188	0.000	96	1492437	5.00	4.98	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	90	795530	10.0	9.91	
109 1,1,2,2-Tetrachloroethane	83	12.426	12.426	0.000	93	270679	5.00	5.10	
111 Bromobenzene	156	12.450	12.450	0.000	97	366013	5.00	5.02	
110 trans-1,4-Dichloro-2-butene	53	12.450	12.450	0.000	87	158947	25.0	11.1	
112 1,2,3-Trichloropropane	110	12.481	12.475	0.006	85	71928	5.00	5.30	
113 N-Propylbenzene	91	12.511	12.511	0.000	99	1922710	5.00	4.95	
114 2-Chlorotoluene	126	12.591	12.591	0.000	97	373988	5.00	5.03	
115 1,3,5-Trimethylbenzene	105	12.646	12.646	0.000	94	1316530	5.00	4.96	
116 4-Chlorotoluene	126	12.682	12.682	0.000	98	387722	5.00	5.16	
118 tert-Butylbenzene	134	12.889	12.889	0.000	93	277258	5.00	4.81	
119 Pentachloroethane	167	12.926	12.926	0.000	85	227371	5.00	5.01	
120 1,2,4-Trimethylbenzene	105	12.932	12.932	0.000	97	1338093	5.00	5.02	
121 sec-Butylbenzene	105	13.048	13.048	0.000	95	1765313	5.00	4.89	
122 1,3-Dichlorobenzene	146	13.152	13.152	0.000	98	752275	5.00	5.16	
123 4-Isopropyltoluene	119	13.158	13.158	0.000	97	1507113	5.00	5.05	
* 124 1,4-Dichlorobenzene-d4	152	13.206	13.206	0.000	95	910105	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.225	13.225	0.000	94	754375	5.00	5.21	
126 1,2,3-Trimethylbenzene	120	13.231	13.231	0.000	98	601626	5.00	5.07	
127 Benzyl chloride	126	13.298	13.298	0.000	99	95850	5.00	5.38	
129 p-Diethylbenzene	119	13.426	13.426	0.000	94	958791	5.00	4.89	
130 n-Butylbenzene	92	13.444	13.444	0.000	98	811557	5.00	5.01	
131 1,2-Dichlorobenzene	146	13.487	13.487	0.000	97	675021	5.00	5.13	
134 1,2-Dibromo-3-Chloropropane	155	14.023	14.023	0.000	84	35604	5.00	4.95	
135 1,3,5-Trichlorobenzene	180	14.151	14.151	0.000	97	560454	5.00	4.90	
136 1,2,4-Trichlorobenzene	180	14.572	14.572	0.000	94	454890	5.00	4.80	
137 Hexachlorobutadiene	225	14.651	14.651	0.000	96	280213	5.00	5.04	
138 Naphthalene	128	14.755	14.755	0.000	97	709116	5.00	4.44	
139 1,2,3-Trichlorobenzene	180	14.901	14.901	0.000	95	405745	5.00	4.79	
140 2-Methylnaphthalene	142	15.553	15.554	-0.001	92	351718	5.00	3.03	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_ETBR_00005	Amount Added: 5.38	Units: uL	
MSV_Q_QARC_00051	Amount Added: 5.38	Units: uL	
MSV_Q_QVOA1_00052	Amount Added: 5.38	Units: uL	
MSV_Q_QVOA6_00049	Amount Added: 5.38	Units: uL	
MSV_QGAS_826_00083	Amount Added: 5.38	Units: uL	
MSV_Q_EE_00002	Amount Added: 5.38	Units: uL	
MSV_30_826ISS_00005	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 30-Oct-2020 09:09:06

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S10.D

Injection Date: 28-Oct-2020 14:52:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-18116-C-4 MS

Worklist Smp#: 18

Client ID: 16WC1A

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

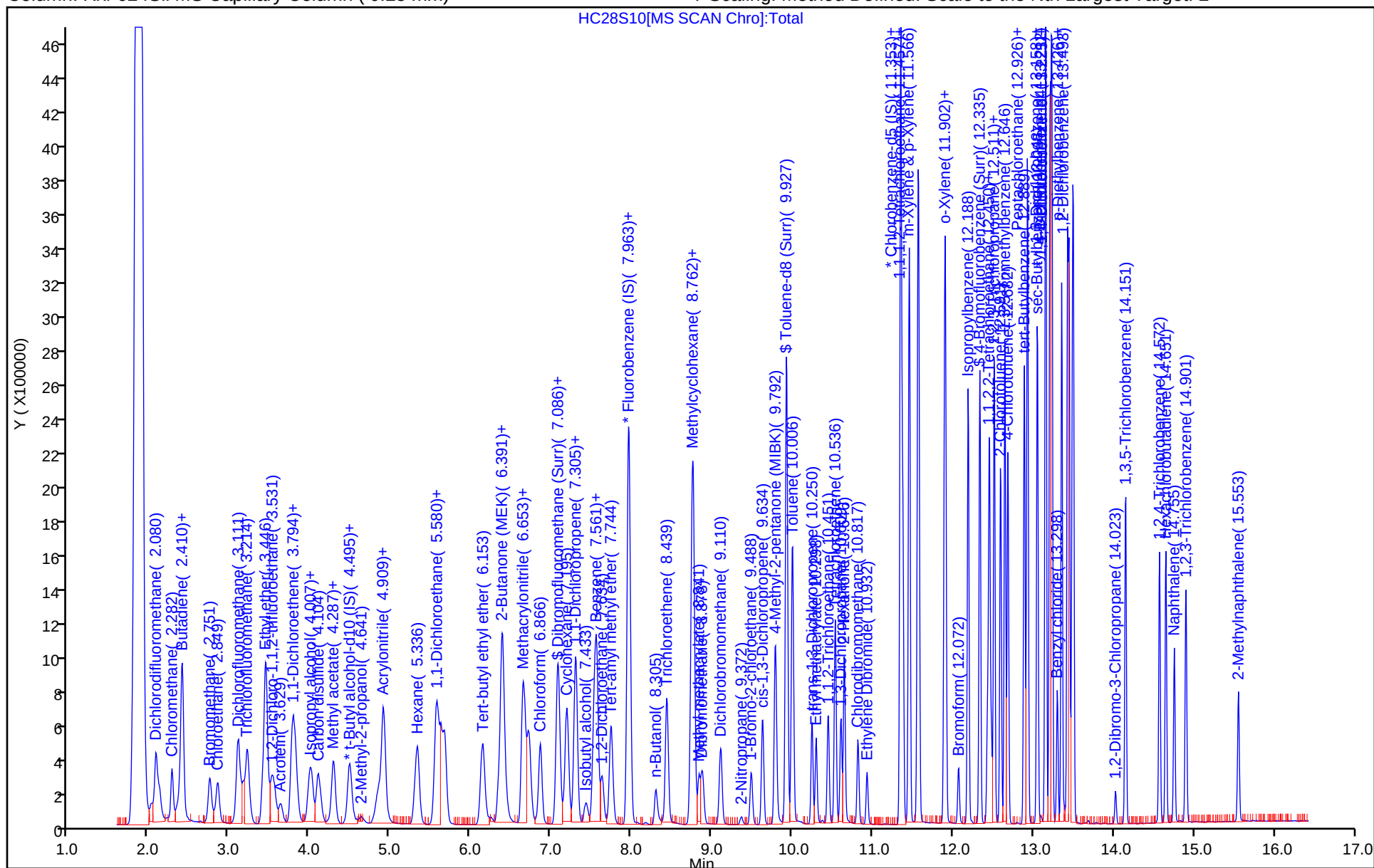
ALS Bottle#: 17

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S10.D
 Lims ID: 410-18116-C-4 MS
 Client ID: 16WC1A
 Sample Type: MS
 Inject. Date: 28-Oct-2020 14:52:30 ALS Bottle#: 17 Worklist Smp#: 18
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-018
 Misc. Info.: 410-18116-C-4 MS
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Oct-2020 09:08:20 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:09:21

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	10.7	106.52
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.7	106.88
\$ 82 Toluene-d8 (Surr)	10.0	9.70	97.02
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.91	99.11

Eurofins Lancaster Laboratories Env, LLC

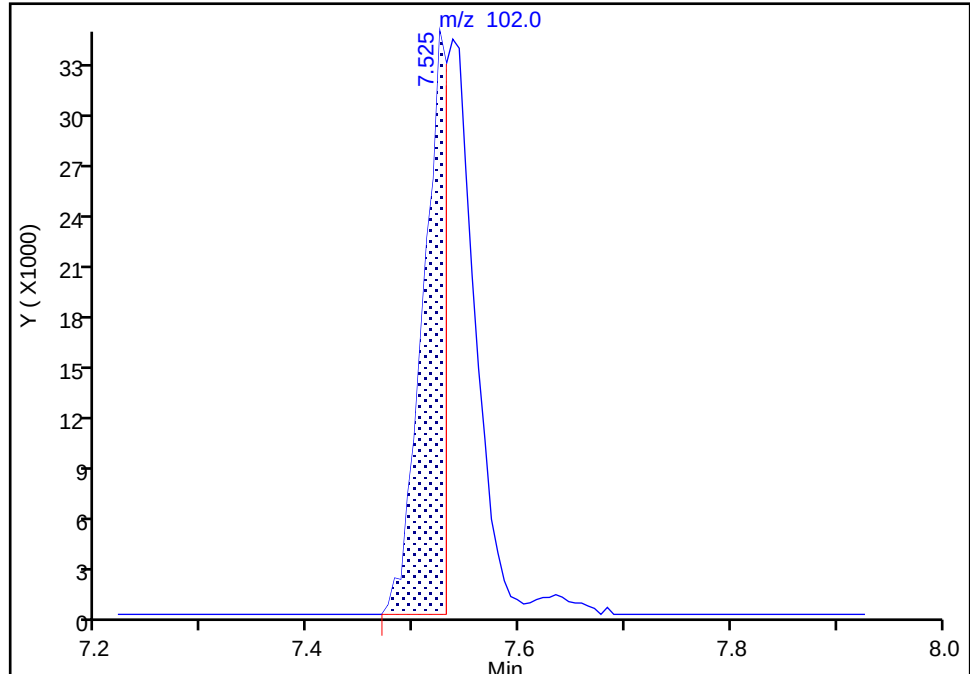
Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S10.D
Injection Date: 28-Oct-2020 14:52:30 Instrument ID: 19094
Lims ID: 410-18116-C-4 MS
Client ID: 16WC1A
Operator ID: jkh09052 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

\$ 58 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

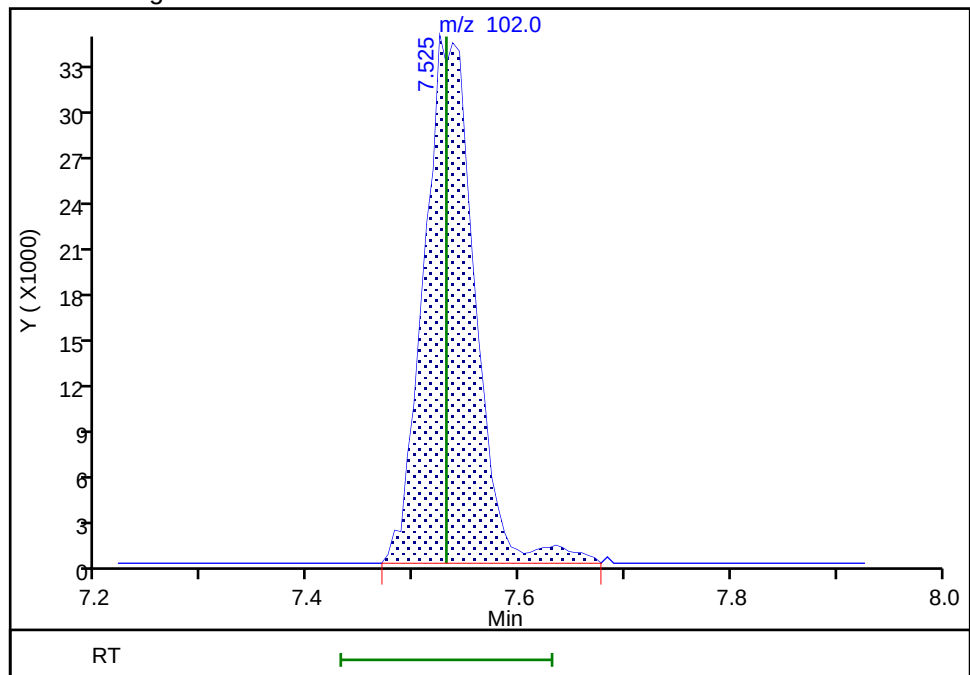
RT: 7.52
Area: 55944
Amount: 5.210738
Amount Units: ug/l

Processing Integration Results



RT: 7.52
Area: 114753
Amount: 10.688328
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 28-Oct-2020 18:08:47

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16WC1A MS Lab Sample ID: 410-18116-4 MS
 Matrix: Ground Water Lab File ID: HC28S12.D
 Analysis Method: 8260C LL Date Collected: 10/22/2020 09:25
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 15:36
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
115-10-6	Methoxymethane	ND		13	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		80-120
1868-53-7	Dibromofluoromethane (Surr)	110		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S12.D
 Lims ID: 410-18116-D-4 MS
 Client ID: 16WC1A
 Sample Type: MS
 Inject. Date: 28-Oct-2020 15:36:30 ALS Bottle#: 19 Worklist Smp#: 20
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-020
 Misc. Info.: 410-18116-C-4 MS
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Oct-2020 09:08:20 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:10:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
4 Dimethyl ether	45	2.160	2.166	-0.006	99	406469	5.00	6.27	
25 Acetonitrile	41	4.227	4.214	0.013	98	132202	37.5	42.7	
* 28 t-Butyl alcohol-d10 (IS)	65	4.501	4.507	-0.006	0	149842	50.0	50.0	
36 Vinyl acetate	43	5.556	5.537	0.019	97	975203	12.5	13.3	
44 Ethyl acetate	43	6.415	6.409	0.006	97	83002	2.50	2.28	
\$ 51 Dibromofluoromethane (Surr)	113	7.080	7.080	0.000	93	556531	10.0	11.0	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.525	7.531	-0.006	0	112943	10.0	10.9	
61 Isopropyl acetate	43	7.635	7.628	0.007	98	160858	2.50	2.41	
* 65 Fluorobenzene (IS)	96	7.964	7.964	0.000	99	2070350	10.0	10.0	
74 n-Propyl acetate	61	8.921	8.921	0.000	99	32285	2.50	2.51	
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	2044724	10.0	9.54	
92 n-Butyl acetate	43	10.762	10.768	-0.006	98	125899	2.50	1.96	
* 97 Chlorobenzene-d5 (IS)	117	11.347	11.347	0.000	86	1608904	10.0	10.0	
107 Cyclohexanone	55	12.268	12.280	-0.012	93	88264	125.0	91.1	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	90	775710	10.0	10.0	
* 124 1,4-Dichlorobenzene-d4	152	13.207	13.206	0.001	95	846298	10.0	10.0	

QC Flag Legend

Processing Flags

Reagents:

MSV_Q_QDME_00009	Amount Added: 2.15	Units: uL	
MSV_QCYC_00004	Amount Added: 5.38	Units: uL	
MSV_QAcet_00012	Amount Added: 3.23	Units: uL	
MSV_Q_VOA5_00017	Amount Added: 10.75	Units: uL	
MSV_30_826ISS_00005	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 30-Oct-2020 09:09:14

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Euofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S12.D

Injection Date: 28-Oct-2020 15:36:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-18116-D-4 MS

Worklist Smp#: 20

Client ID: 16WC1A

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

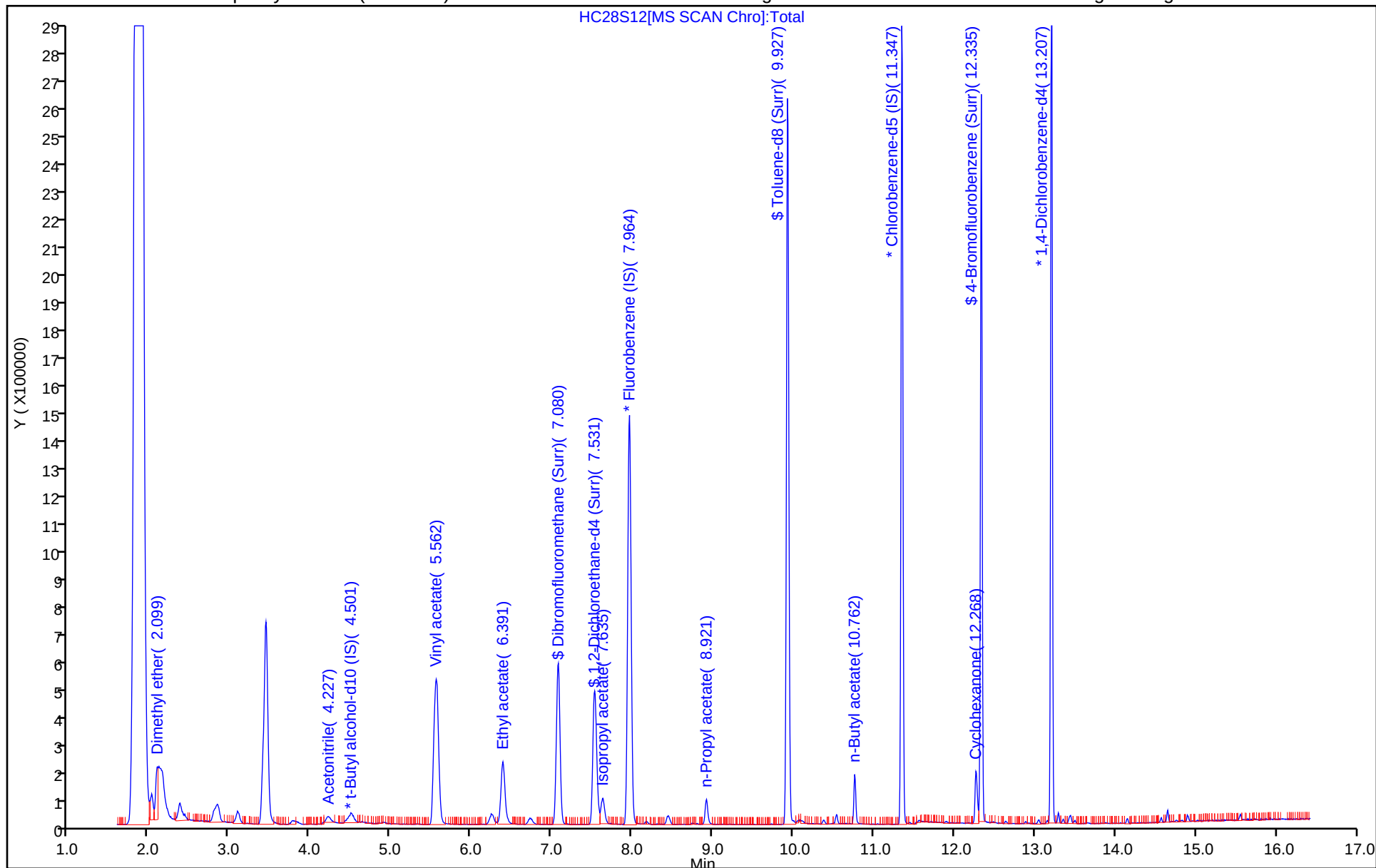
ALS Bottle#: 19

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S12.D
 Lims ID: 410-18116-D-4 MS
 Client ID: 16WC1A
 Sample Type: MS
 Inject. Date: 28-Oct-2020 15:36:30 ALS Bottle#: 19 Worklist Smp#: 20
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-020
 Misc. Info.: 410-18116-C-4 MS
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Oct-2020 09:08:20 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:10:19

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	11.0	109.69
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.9	108.65
\$ 82 Toluene-d8 (Surr)	10.0	9.54	95.42
\$ 108 4-Bromofluorobenzene (Surr)	10.0	10.0	99.99

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16WC1A MSD Lab Sample ID: 410-18116-4 MSD
 Matrix: Ground Water Lab File ID: HC28S11.D
 Analysis Method: 8260C LL Date Collected: 10/22/2020 09:25
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 15:14
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	5.54		1.0	
75-34-3	1,1-Dichloroethane	9.42		1.0	
75-35-4	1,1-Dichloroethene	5.64		1.0	
78-93-3	2-Butanone	33.1		10	
71-43-2	Benzene	5.51		1.0	
56-23-5	Carbon tetrachloride	5.76		1.0	
75-00-3	Chloroethane	7.47		1.0	
74-87-3	Chloromethane	5.63		1.0	
75-71-8	Dichlorodifluoromethane	6.18		1.0	
60-29-7	Ethyl ether	24.1		13	
100-41-4	Ethylbenzene	4.99		1.0	
76-13-1	Freon 113	5.23		1.0	
75-09-2	Methylene Chloride	5.56		1.0	
127-18-4	Tetrachloroethene	5.25		1.0	
109-99-9	Tetrahydrofuran	26.8		25	
108-88-3	Toluene	5.02		1.0	
79-01-6	Trichloroethene	5.59		1.0	
75-69-4	Trichlorofluoromethane	6.07		1.0	
75-01-4	Vinyl chloride	6.22		1.0	
1330-20-7	Xylenes, Total	15.7		3.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		80-120
1868-53-7	Dibromofluoromethane (Surr)	106		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S11.D
 Lims ID: 410-18116-C-4 MSD
 Client ID: 16WC1A
 Sample Type: MSD
 Inject. Date: 28-Oct-2020 15:14:30 ALS Bottle#: 18 Worklist Smp#: 19
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-019
 Misc. Info.: 410-18116-D-4 MSD
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Oct-2020 09:08:20 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:09:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.075	2.081	-0.006	99	385184	5.00	6.18	
6 Chloromethane	50	2.282	2.288	-0.006	99	488925	5.00	5.63	
8 Butadiene	39	2.404	2.410	-0.006	95	533604	5.00	7.02	
7 Vinyl chloride	62	2.410	2.410	0.000	97	478524	5.00	6.22	
9 Bromomethane	94	2.751	2.757	-0.006	91	318359	5.00	6.06	
10 Chloroethane	64	2.855	2.855	0.000	100	369641	5.00	7.47	
11 Dichlorofluoromethane	67	3.105	3.105	0.000	97	723024	5.00	7.10	
13 Trichlorofluoromethane	101	3.160	3.166	-0.006	98	606837	5.00	6.07	
15 Ethyl ether	59	3.446	3.446	0.000	93	1085303	5.01	24.1	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.538	3.531	0.007	94	395609	5.00	5.60	
17 Acrolein	56	3.635	3.635	0.000	98	216891	37.5	27.7	
18 1,1-Dichloroethene	96	3.782	3.781	0.001	98	287077	5.00	5.64	
19 Acetone	43	3.818	3.806	0.012	98	337326	37.5	33.0	
20 112TCTFE	101	3.812	3.812	0.000	93	293306	5.00	5.23	
21 Isopropyl alcohol	45	4.007	3.989	0.018	28	43779	37.5	26.2	
22 Iodomethane	142	3.995	3.995	0.000	99	484396	5.00	5.08	
23 Ethyl bromide	108	4.019	4.025	-0.006	98	243447	5.01	5.63	
24 Carbon disulfide	76	4.105	4.105	0.000	99	900513	5.00	5.26	
26 Methyl acetate	43	4.275	4.263	0.012	97	122987	5.00	4.10	
27 3-Chloro-1-propene	41	4.294	4.287	0.007	92	449504	5.00	4.67	
29 Methylene Chloride	84	4.489	4.495	-0.006	94	317809	5.00	5.56	
* 28 t-Butyl alcohol-d10 (IS)	65	4.519	4.507	0.012	0	149224	50.0	50.0	
30 2-Methyl-2-propanol	59	4.635	4.629	0.006	98	120433	50.0	38.6	
31 Acrylonitrile	53	4.855	4.836	0.019	98	290890	25.0	22.9	
32 Methyl tert-butyl ether	73	4.903	4.903	0.000	96	597469	5.00	4.76	
33 trans-1,2-Dichloroethene	96	4.922	4.915	0.007	97	307674	5.00	5.42	
34 Hexane	57	5.330	5.330	0.000	95	443453	5.00	4.98	
35 1,1-Dichloroethane	63	5.568	5.568	0.000	96	1064645	5.00	9.42	
37 Isopropyl ether	45	5.623	5.616	0.007	98	921504	5.00	4.73	
38 2-Chloro-1,3-butadiene	53	5.671	5.671	0.000	91	496855	5.00	5.29	
39 Tert-butyl ethyl ether	59	6.147	6.147	0.000	97	770923	5.00	4.77	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	6.354	6.342	0.012	100	551267	37.5	33.1	
42 cis-1,2-Dichloroethene	96	6.391	6.391	0.000	82	529712	5.00	8.23	
43 2,2-Dichloropropane	77	6.403	6.403	0.000	88	482053	5.00	5.77	
45 Propionitrile	54	6.446	6.439	0.007	98	160694	37.5	34.9	
47 Methacrylonitrile	67	6.653	6.659	-0.006	94	551697	37.5	34.5	
48 Chlorobromomethane	128	6.720	6.720	0.000	93	145428	5.00	5.24	
49 Tetrahydrofuran	71	6.726	6.726	0.000	85	111428	25.0	26.8	
50 Chloroform	83	6.866	6.866	0.000	93	582616	5.00	5.44	
\$ 51 Dibromofluoromethane (Surr)	113	7.080	7.080	0.000	93	557171	10.0	10.6	
52 1,1,1-Trichloroethane	97	7.092	7.092	0.000	99	497607	5.00	5.54	
53 Cyclohexane	56	7.196	7.189	0.007	91	530895	5.00	4.81	
55 1,1-Dichloropropene	75	7.305	7.305	0.000	96	452501	5.00	5.46	
56 Carbon tetrachloride	117	7.305	7.305	0.000	87	453589	5.00	5.76	
57 Isobutyl alcohol	41	7.439	7.433	0.006	95	122991	125.1	105.5	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.531	7.531	0.000	0	112836	10.0	10.4	
59 Benzene	78	7.567	7.567	0.000	97	1370372	5.00	5.51	
60 1,2-Dichloroethane	62	7.635	7.640	-0.006	98	346254	5.00	5.39	
62 Tert-amyl methyl ether	73	7.744	7.744	0.000	98	686261	5.00	5.14	
* 65 Fluorobenzene (IS)	96	7.964	7.964	0.000	98	2152316	10.0	10.0	
64 n-Heptane	43	7.970	7.970	0.000	90	534367	5.00	4.99	
66 n-Butanol	56	8.305	8.299	0.006	91	188073	250.2	200.8	
67 Trichloroethene	95	8.439	8.439	0.000	98	349562	5.00	5.59	
68 Methylcyclohexane	83	8.750	8.750	0.000	96	548305	5.00	4.98	
69 2-ethoxy-2-methyl butane	87	8.768	8.768	0.000	87	429847	5.00	5.46	
70 1,2-Dichloropropane	63	8.768	8.768	0.000	88	342926	5.00	5.32	
71 Methyl methacrylate	69	8.842	8.835	0.007	91	133796	5.00	4.69	
72 1,4-Dioxane	88	8.848	8.854	-0.006	32	27647	125.1	141.6	
73 Dibromomethane	93	8.884	8.878	0.006	96	151250	5.00	5.40	
75 Dichlorobromomethane	83	9.110	9.110	0.000	99	398552	5.00	5.54	
76 2-Nitropropane	41	9.366	9.366	0.000	97	37588	5.00	4.57	
78 2-Chloroethyl vinyl ether	63		9.451				ND	ND	
79 1-Bromo-2-chloroethane	63	9.488	9.488	0.000	99	363815	5.00	9.69	
80 cis-1,3-Dichloropropene	75	9.628	9.628	0.000	95	436093	5.00	5.09	
81 4-Methyl-2-pentanone (MIBK)	43	9.793	9.786	0.007	98	907013	25.0	22.1	
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	2147254	10.0	9.66	
83 Toluene	92	10.000	10.000	0.000	98	814250	5.00	5.02	
85 trans-1,3-Dichloropropene	75	10.244	10.244	0.000	93	359010	5.00	4.93	
86 Ethyl methacrylate	69	10.299	10.298	0.001	91	271801	5.00	4.78	
87 1,1,2-Trichloroethane	97	10.445	10.445	0.000	91	217279	5.00	5.26	
88 Tetrachloroethene	166	10.536	10.536	0.000	98	388689	5.00	5.25	
89 1,3-Dichloropropane	76	10.610	10.603	0.007	90	370211	5.00	4.89	
91 2-Hexanone	43	10.646	10.646	0.000	99	659735	25.0	23.8	
93 Chlorodibromomethane	129	10.817	10.817	0.000	90	262584	5.00	5.38	
94 Ethylene Dibromide	107	10.933	10.932	0.001	99	198347	5.00	5.00	
* 97 Chlorobenzene-d5 (IS)	117	11.353	11.347	0.006	86	1669419	10.0	10.0	
96 1-Chlorohexane	91	11.353	11.353	0.000	53	442510	5.00	4.67	
98 Chlorobenzene	112	11.378	11.378	0.000	94	921648	5.00	5.31	
99 1,1,1,2-Tetrachloroethane	131	11.457	11.457	0.000	94	315011	5.00	5.24	
100 Ethylbenzene	91	11.457	11.457	0.000	99	1540376	5.00	4.99	
101 m-Xylene & p-Xylene	106	11.573	11.567	0.007	98	1223561	10.0	10.6	
102 o-Xylene	106	11.896	11.896	0.000	97	565652	5.00	5.06	
103 Styrene	104	11.908	11.908	0.000	94	979296	5.00	5.43	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 Bromoform	173	12.073	12.066	0.007	97	142952	5.00	5.25	
105 Isopropylbenzene	105	12.188	12.188	0.000	96	1492811	5.00	4.96	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	90	797966	10.0	9.91	
109 1,1,2,2-Tetrachloroethane	83	12.426	12.426	0.000	94	257990	5.00	4.80	
111 Bromobenzene	156	12.451	12.450	0.001	97	367918	5.00	4.99	
110 trans-1,4-Dichloro-2-butene	53	12.457	12.450	0.007	78	157640	25.0	10.6	
112 1,2,3-Trichloropropane	110	12.475	12.475	0.000	84	68047	5.00	4.96	
113 N-Propylbenzene	91	12.512	12.511	0.001	99	1927511	5.00	4.91	
114 2-Chlorotoluene	126	12.597	12.591	0.006	97	374245	5.00	4.97	
115 1,3,5-Trimethylbenzene	105	12.646	12.646	0.000	94	1311108	5.00	4.88	
116 4-Chlorotoluene	126	12.688	12.682	0.006	97	385480	5.00	5.08	
118 tert-Butylbenzene	134	12.890	12.889	0.001	93	283089	5.00	4.85	
119 Pentachloroethane	167	12.926	12.926	0.000	89	228640	5.00	4.98	
120 1,2,4-Trimethylbenzene	105	12.932	12.932	0.000	97	1346600	5.00	4.99	
121 sec-Butylbenzene	105	13.054	13.048	0.006	94	1769284	5.00	4.84	
122 1,3-Dichlorobenzene	146	13.152	13.152	0.000	97	745172	5.00	5.05	
123 4-Isopropyltoluene	119	13.158	13.158	0.000	97	1530617	5.00	5.07	
* 124 1,4-Dichlorobenzene-d4	152	13.207	13.206	0.001	95	920702	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.225	13.225	0.000	94	751178	5.00	5.13	
126 1,2,3-Trimethylbenzene	120	13.231	13.231	0.000	98	603180	5.00	5.02	
127 Benzyl chloride	126	13.298	13.298	0.000	99	96582	5.00	5.36	
129 p-Diethylbenzene	119	13.426	13.426	0.000	94	978153	5.00	4.93	
130 n-Butylbenzene	92	13.444	13.444	0.000	98	819853	5.00	5.01	
131 1,2-Dichlorobenzene	146	13.487	13.487	0.000	97	671171	5.00	5.04	
134 1,2-Dibromo-3-Chloropropane	155	14.024	14.023	0.001	80	36532	5.00	5.02	
135 1,3,5-Trichlorobenzene	180	14.152	14.151	0.001	98	574182	5.00	4.96	
136 1,2,4-Trichlorobenzene	180	14.572	14.572	0.000	94	471853	5.00	4.92	
137 Hexachlorobutadiene	225	14.651	14.651	0.000	96	286313	5.00	5.09	
138 Naphthalene	128	14.755	14.755	0.000	97	732087	5.00	4.53	
139 1,2,3-Trichlorobenzene	180	14.901	14.901	0.000	95	411458	5.00	4.80	
140 2-Methylnaphthalene	142	15.554	15.554	0.000	92	386529	5.00	3.28	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MSV_Q_ETBR_00005	Amount Added: 5.38	Units: uL	
MSV_Q_QVOA1_00052	Amount Added: 5.38	Units: uL	
MSV_Q_QVOA6_00049	Amount Added: 5.38	Units: uL	
MSV_Q_EE_00002	Amount Added: 5.38	Units: uL	
MSV_Q_QARC_00051	Amount Added: 5.38	Units: uL	
MSV_QGAS_826_00083	Amount Added: 5.38	Units: uL	
MSV_30_826ISS_00005	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 30-Oct-2020 09:09:11

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S11.D

Injection Date: 28-Oct-2020 15:14:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-18116-C-4 MSD

Worklist Smp#: 19

Client ID: 16WC1A

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

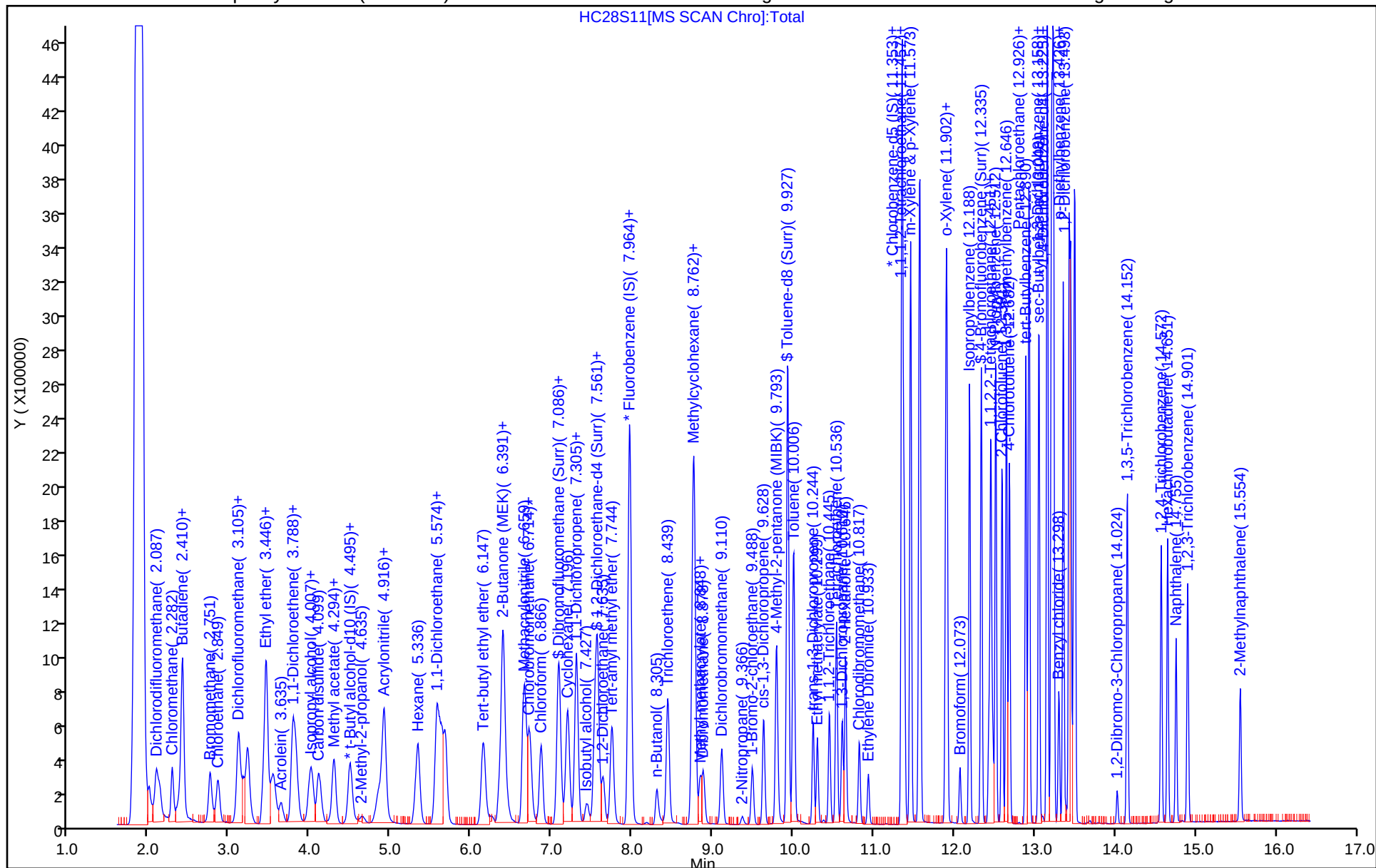
ALS Bottle#: 18

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S11.D
 Lims ID: 410-18116-C-4 MSD
 Client ID: 16WC1A
 Sample Type: MSD
 Inject. Date: 28-Oct-2020 15:14:30 ALS Bottle#: 18 Worklist Smp#: 19
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-019
 Misc. Info.: 410-18116-D-4 MSD
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Oct-2020 09:08:20 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:09:58

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	10.6	105.63
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	104.41
\$ 82 Toluene-d8 (Surr)	10.0	9.66	96.58
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.91	99.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16WC1A MSD Lab Sample ID: 410-18116-4 MSD
 Matrix: Ground Water Lab File ID: HC28S13.D
 Analysis Method: 8260C LL Date Collected: 10/22/2020 09:25
 Sample wt/vol: 25 (mL) Date Analyzed: 10/28/2020 15:58
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 59437 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
115-10-6	Methoxymethane	ND		13	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		80-120
1868-53-7	Dibromofluoromethane (Surr)	110		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S13.D
 Lims ID: 410-18116-D-4 MSD
 Client ID: 16WC1A
 Sample Type: MSD
 Inject. Date: 28-Oct-2020 15:58:30 ALS Bottle#: 20 Worklist Smp#: 21
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-021
 Misc. Info.: 410-11816-D-4 MSD
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Oct-2020 09:08:20 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:12:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
4 Dimethyl ether	45	2.154	2.166	-0.012	99	392792	5.00	6.64	
25 Acetonitrile	41	4.208	4.214	-0.006	98	111106	37.5	39.3	
* 28 t-Butyl alcohol-d10 (IS)	65	4.495	4.507	-0.012	0	142810	50.0	50.0	
36 Vinyl acetate	43	5.543	5.537	0.006	97	951073	12.5	14.2	
44 Ethyl acetate	43	6.409	6.409	0.000	97	83636	2.50	2.52	
\$ 51 Dibromofluoromethane (Surr)	113	7.074	7.080	-0.006	93	511152	10.0	11.0	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.525	7.531	-0.006	0	104137	10.0	11.0	
61 Isopropyl acetate	43	7.628	7.628	0.000	98	159403	2.50	2.62	
* 65 Fluorobenzene (IS)	96	7.958	7.964	-0.006	99	1888302	10.0	10.0	
74 n-Propyl acetate	61	8.921	8.921	0.000	99	29698	2.50	2.53	
\$ 82 Toluene-d8 (Surr)	98	9.927	9.927	0.000	94	1854508	10.0	9.42	
92 n-Butyl acetate	43	10.762	10.768	-0.006	97	127144	2.50	2.16	
* 97 Chlorobenzene-d5 (IS)	117	11.347	11.347	0.000	86	1478846	10.0	10.0	
107 Cyclohexanone	55	12.268	12.280	-0.012	92	86051	125.0	93.1	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.335	12.335	0.000	91	709616	10.0	9.95	
* 124 1,4-Dichlorobenzene-d4	152	13.207	13.206	0.001	95	775809	10.0	10.0	

QC Flag Legend

Processing Flags

Reagents:

MSV_Q_QDME_00009	Amount Added: 2.15	Units: uL	
MSV_QAcet_00012	Amount Added: 3.23	Units: uL	
MSV_Q_VOA5_00017	Amount Added: 10.75	Units: uL	
MSV_QCYC_00004	Amount Added: 5.38	Units: uL	
MSV_30_826ISS_00005	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 30-Oct-2020 09:09:15

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Euofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S13.D

Injection Date: 28-Oct-2020 15:58:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-18116-D-4 MSD

Worklist Smp#: 21

Client ID: 16WC1A

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

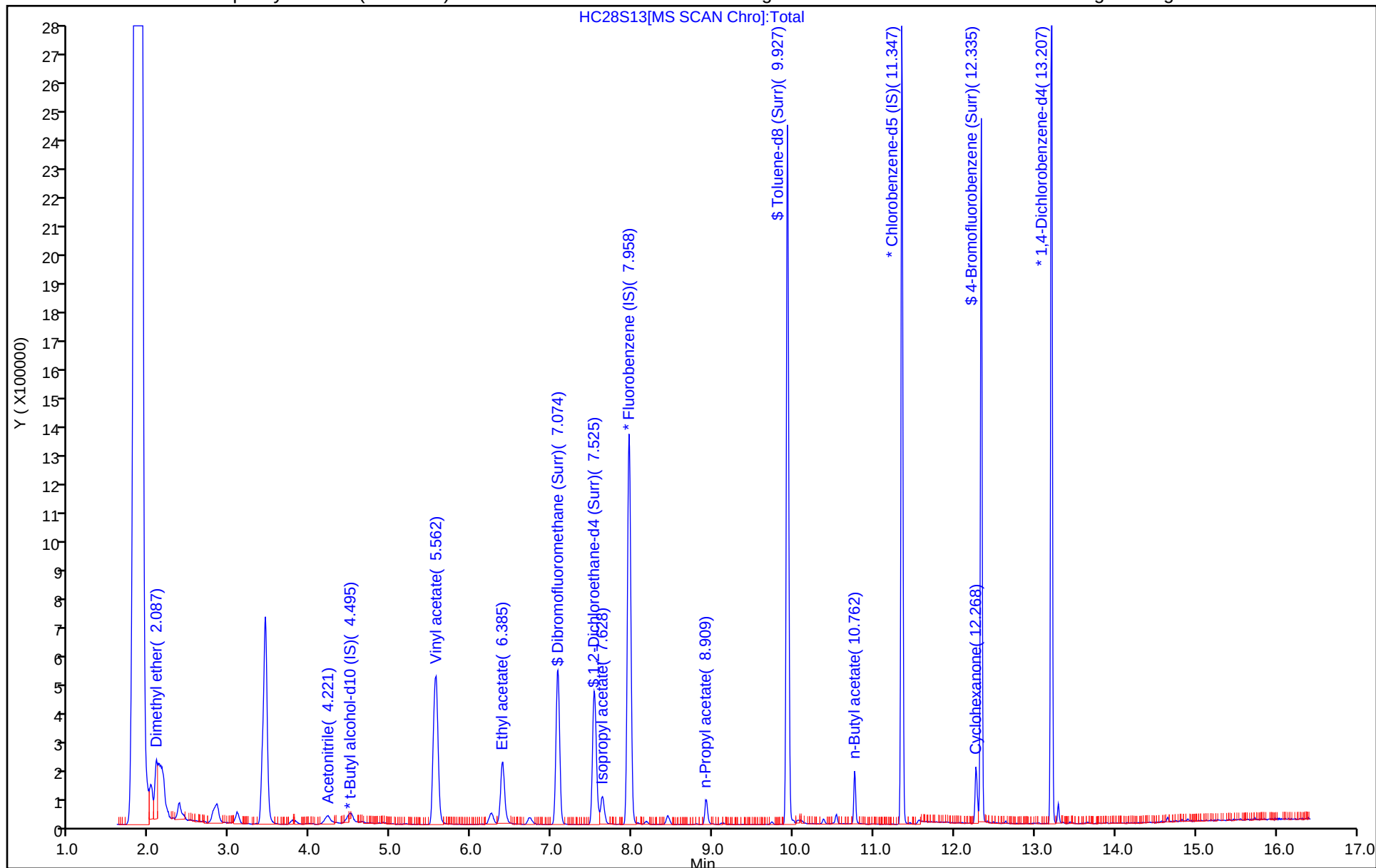
ALS Bottle#: 20

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\HC28S13.D
 Lims ID: 410-18116-D-4 MSD
 Client ID: 16WC1A
 Sample Type: MSD
 Inject. Date: 28-Oct-2020 15:58:30 ALS Bottle#: 20 Worklist Smp#: 21
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0014060-021
 Misc. Info.: 410-11816-D-4 MSD
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20201028-14060.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Oct-2020 09:08:20 Calib Date: 15-Sep-2020 20:33:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20200915-10497.b\hs15i07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1002

First Level Reviewer: campbellme

Date: 28-Oct-2020 18:12:36

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	11.0	110.46
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	11.0	109.84
\$ 82 Toluene-d8 (Surr)	10.0	9.42	94.16
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.95	99.51

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Instrument ID: 19094Start Date: 09/15/2020 14:32Analysis Batch Number: 44043End Date: 09/15/2020 20:55

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-44043/1		09/15/2020 14:32	1	hs15t01.D	R-624SilMS 30m 0.25 (mm)
IC 410-44043/3		09/15/2020 15:07	1	hs15i11.D	R-624SilMS 30m 0.25 (mm)
IC 410-44043/4		09/15/2020 15:29	1	hs15i12.D	R-624SilMS 30m 0.25 (mm)
IC 410-44043/5		09/15/2020 15:50	1	hs15i13.D	R-624SilMS 30m 0.25 (mm)
IC 410-44043/6		09/15/2020 16:12	1	hs15i14.D	R-624SilMS 30m 0.25 (mm)
IC 410-44043/7		09/15/2020 16:34	1	hs15i15.D	R-624SilMS 30m 0.25 (mm)
IC 410-44043/8		09/15/2020 16:56	1	hs15i16.D	R-624SilMS 30m 0.25 (mm)
IC 410-44043/9		09/15/2020 17:18	1	hs15i17.D	R-624SilMS 30m 0.25 (mm)
ICV 410-44043/10		09/15/2020 17:39	1	hs15v11.D	R-624SilMS 30m 0.25 (mm)
IC 410-44043/12		09/15/2020 18:23	1	hs15i01.D	R-624SilMS 30m 0.25 (mm)
ICIS 410-44043/13		09/15/2020 18:44	1	hs15i02.D	R-624SilMS 30m 0.25 (mm)
IC 410-44043/14		09/15/2020 19:06	1	hs15i03.D	R-624SilMS 30m 0.25 (mm)
IC 410-44043/15		09/15/2020 19:28	1	hs15i04.D	R-624SilMS 30m 0.25 (mm)
IC 410-44043/16		09/15/2020 19:50	1	hs15i05.D	R-624SilMS 30m 0.25 (mm)
IC 410-44043/17		09/15/2020 20:12	1	hs15i06.D	R-624SilMS 30m 0.25 (mm)
IC 410-44043/18		09/15/2020 20:33	1	hs15i07.D	R-624SilMS 30m 0.25 (mm)
ICV 410-44043/19		09/15/2020 20:55	1	hu08v01.D	R-624SilMS 30m 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Instrument ID: 19094 Start Date: 10/28/2020 08:50Analysis Batch Number: 59437 End Date: 10/28/2020 20:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-59437/1		10/28/2020 08:50	1	HC28T01.D	R-624SilMS 30m 0.25 (mm)
CCVIS 410-59437/3		10/28/2020 09:27	1	HC26C01.D	R-624SilMS 30m 0.25 (mm)
CCV 410-59437/4		10/28/2020 09:48	1	HC26C02.D	R-624SilMS 30m 0.25 (mm)
LCS 410-59437/5		10/28/2020 10:10	1	HC26L01.D	R-624SilMS 30m 0.25 (mm)
LCS 410-59437/6		10/28/2020 10:32	1	HC26L03.D	R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/28/2020 10:53	1		R-624SilMS 30m 0.25 (mm)
MB 410-59437/8		10/28/2020 11:15	1	HC20B32.D	R-624SilMS 30m 0.25 (mm)
410-18116-12	Trip Blank1	10/28/2020 11:37	1	HC28S01.D	R-624SilMS 30m 0.25 (mm)
410-18116-13	Trip Blank2	10/28/2020 11:59	1	HC28S02.D	R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/28/2020 12:21	1		R-624SilMS 30m 0.25 (mm)
410-18116-1	16C1	10/28/2020 12:43	1	HC28S04.D	R-624SilMS 30m 0.25 (mm)
410-18116-1 DL	16C1 DL	10/28/2020 13:04	2.5	HC28S05.D	R-624SilMS 30m 0.25 (mm)
410-18116-2	16MW8	10/28/2020 13:26	1	HC28S06.D	R-624SilMS 30m 0.25 (mm)
410-18116-3	16MW9	10/28/2020 13:47	1	HC28S07.D	R-624SilMS 30m 0.25 (mm)
410-18116-3 DL	16MW9 DL	10/28/2020 14:09	4	HC28S08.D	R-624SilMS 30m 0.25 (mm)
410-18116-4	16WC1A	10/28/2020 14:31	1	HC28S09.D	R-624SilMS 30m 0.25 (mm)
410-18116-4 MS	16WC1A MS	10/28/2020 14:52	1	HC28S10.D	R-624SilMS 30m 0.25 (mm)
410-18116-4 MSD	16WC1A MSD	10/28/2020 15:14	1	HC28S11.D	R-624SilMS 30m 0.25 (mm)
410-18116-4 MS	16WC1A MS	10/28/2020 15:36	1	HC28S12.D	R-624SilMS 30m 0.25 (mm)
410-18116-4 MSD	16WC1A MSD	10/28/2020 15:58	1	HC28S13.D	R-624SilMS 30m 0.25 (mm)
410-18116-5	16WDUP	10/28/2020 16:20	1	HC28S14.D	R-624SilMS 30m 0.25 (mm)
410-18116-6	16WC1B	10/28/2020 16:42	1	HC28S15.D	R-624SilMS 30m 0.25 (mm)
410-18116-7	16-2	10/28/2020 17:03	1	HC28S16.D	R-624SilMS 30m 0.25 (mm)
410-18116-8	16-3	10/28/2020 17:25	1	HC28S17.D	R-624SilMS 30m 0.25 (mm)
410-18116-9	16-5	10/28/2020 17:47	1	HC28S18.D	R-624SilMS 30m 0.25 (mm)
410-18116-10	16WC2B	10/28/2020 18:08	1	HC28S19.D	R-624SilMS 30m 0.25 (mm)
410-18116-11	16SPRING	10/28/2020 18:30	1	HC28S20.D	R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/28/2020 18:52	10		R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/28/2020 19:14	10		R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/28/2020 19:35	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/28/2020 19:57	5		R-624SilMS 30m 0.25 (mm)
ZZZZZ		10/28/2020 20:19	50		R-624SilMS 30m 0.25 (mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-18116-1

SDG No.: _____

Batch Number: 44043 Batch Start Date: 09/15/20 14:32 Batch Analyst: Campbell, Miranda EBatch Method: 8260C LL Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MSV_30_826ISO 00003	MSV_30_826ISS 00005	MSV_CDFM 00010	MSV_DME 00022
BFB 410-44043/1		8260C LL		1 uL	1 uL				
IC 410-44043/3		8260C LL		25 mL	25 mL	5 uL		2.5 uL	2.5 uL
IC 410-44043/4		8260C LL		25 mL	25 mL	5 uL		1 uL	1 uL
IC 410-44043/5		8260C LL		25 mL	25 mL	5 uL		1 uL	1 uL
IC 410-44043/6		8260C LL		25 mL	25 mL	5 uL		1 uL	1 uL
IC 410-44043/7		8260C LL		25 mL	25 mL	5 uL		1 uL	1 uL
IC 410-44043/8		8260C LL		25 mL	25 mL	5 uL		0.5 uL	0.5 uL
IC 410-44043/9		8260C LL		25 mL	25 mL	5 uL		0.2 uL	0.2 uL
ICV 410-44043/10		8260C LL		25 mL	25 mL		5 uL		
IC 410-44043/12		8260C LL		25 mL	25 mL		5 uL		
ICIS 410-44043/13		8260C LL		25 mL	25 mL		5 uL		
IC 410-44043/14		8260C LL		25 mL	25 mL		5 uL		
IC 410-44043/15		8260C LL		25 mL	25 mL		5 uL		
IC 410-44043/16		8260C LL		25 mL	25 mL		5 uL		
IC 410-44043/17		8260C LL		25 mL	25 mL		5 uL		
IC 410-44043/18		8260C LL		25 mL	25 mL		5 uL		
ICV 410-44043/19		8260C LL		25 mL	25 mL		5 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_CDFM_25 00006	MSV_Q_EE 00002	MSV_Q_ETBR 00003	MSV_Q_QARC 00045	MSV_Q_QDME 00008	MSV_Q_QVOA1 00046
BFB 410-44043/1		8260C LL							
IC 410-44043/3		8260C LL							
IC 410-44043/4		8260C LL							
IC 410-44043/5		8260C LL							
IC 410-44043/6		8260C LL							
IC 410-44043/7		8260C LL							
IC 410-44043/8		8260C LL							
IC 410-44043/9		8260C LL							
ICV 410-44043/10		8260C LL		5 uL			12.5 uL	5 uL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8260C LL

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GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-18116-1

SDG No.: _____

Batch Number: 44043 Batch Start Date: 09/15/20 14:32 Batch Analyst: Campbell, Miranda EBatch Method: 8260C LL Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_CDFM_25 00006	MSV_Q_EE 00002	MSV_Q_ETBR 00003	MSV_Q_QARC 00045	MSV_Q_QDME 00008	MSV_Q_QVOA1 00046
IC 410-44043/12		8260C LL							
ICIS 410-44043/13		8260C LL							
IC 410-44043/14		8260C LL							
IC 410-44043/15		8260C LL							
IC 410-44043/16		8260C LL							
IC 410-44043/17		8260C LL							
IC 410-44043/18		8260C LL							
ICV 410-44043/19		8260C LL			12.5 uL	12.5 uL	12.5 uL		12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_QVOA6 00043	MSV_Q_VOA5 00013	MSV_QAcet 00006	MSV_QCYC 00004	MSV_QGAS_826 00073	MSV_QLKB 00003
BFB 410-44043/1		8260C LL							
IC 410-44043/3		8260C LL							
IC 410-44043/4		8260C LL							
IC 410-44043/5		8260C LL							
IC 410-44043/6		8260C LL							
IC 410-44043/7		8260C LL							
IC 410-44043/8		8260C LL							
IC 410-44043/9		8260C LL							
ICV 410-44043/10		8260C LL			25 uL	7.5 uL	12.5 uL		25 uL
IC 410-44043/12		8260C LL							
ICIS 410-44043/13		8260C LL							
IC 410-44043/14		8260C LL							
IC 410-44043/15		8260C LL							
IC 410-44043/16		8260C LL							
IC 410-44043/17		8260C LL							
IC 410-44043/18		8260C LL							
ICV 410-44043/19		8260C LL		12.5 uL				12.5 uL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8260C LL

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GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-18116-1

SDG No.: _____

Batch Number: 44043 Batch Start Date: 09/15/20 14:32 Batch Analyst: Campbell, Miranda EBatch Method: 8260C LL Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QREV4_25 00010	MSV_RV1_826 00024	MSV_RV4_826 00026	MSV_RV4GAS826 00077	MSV_V_BFB 00003	MSV_V_REV4_25 00013
BFB 410-44043/1		8260C LL						1 uL	
IC 410-44043/3		8260C LL							50 uL
IC 410-44043/4		8260C LL							20 uL
IC 410-44043/5		8260C LL							20 uL
IC 410-44043/6		8260C LL							20 uL
IC 410-44043/7		8260C LL							20 uL
IC 410-44043/8		8260C LL							10 uL
IC 410-44043/9		8260C LL							4 uL
ICV 410-44043/10		8260C LL		12.5 uL					
IC 410-44043/12		8260C LL			25 uL	25 uL	25 uL		
ICIS 410-44043/13		8260C LL			10 uL	10 uL	10 uL		
IC 410-44043/14		8260C LL			5 uL	5 uL	5 uL		
IC 410-44043/15		8260C LL			2 uL	2 uL	2 uL		
IC 410-44043/16		8260C LL			2 uL	2 uL	2 uL		
IC 410-44043/17		8260C LL			2 uL	2 uL	2 uL		
IC 410-44043/18		8260C LL			2 uL	2 uL	2 uL		
ICV 410-44043/19		8260C LL							

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_V_SMRV4 00013	MSV_V_VOA5 00013	MSV_VAcet 00005	MSV_VCYC 00005		
BFB 410-44043/1		8260C LL							
IC 410-44043/3		8260C LL		12.5 uL	12.5 uL	20 uL	20 uL		
IC 410-44043/4		8260C LL		5 uL	5 uL	8 uL	8 uL		
IC 410-44043/5		8260C LL		5 uL	5 uL	8 uL	8 uL		
IC 410-44043/6		8260C LL		5 uL	5 uL	8 uL	8 uL		
IC 410-44043/7		8260C LL		5 uL	5 uL	8 uL	8 uL		
IC 410-44043/8		8260C LL		2.5 uL	2.5 uL	4 uL	4 uL		
IC 410-44043/9		8260C LL		1 uL	1 uL	1.6 uL	1.6 uL		
ICV 410-44043/10		8260C LL							

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8260C LL

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GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-18116-1

SDG No.: _____

Batch Number: 44043 Batch Start Date: 09/15/20 14:32 Batch Analyst: Campbell, Miranda EBatch Method: 8260C LL Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_V_SMRV4 00013	MSV_V_VOA5 00013	MSV_VAcet 00005	MSV_VCYC 00005		
IC 410-44043/12		8260C LL							
ICIS 410-44043/13		8260C LL							
IC 410-44043/14		8260C LL							
IC 410-44043/15		8260C LL							
IC 410-44043/16		8260C LL							
IC 410-44043/17		8260C LL							
IC 410-44043/18		8260C LL							
ICV 410-44043/19		8260C LL							

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-18116-1

SDG No.: _____

Batch Number: 59437Batch Start Date: 10/28/20 08:50Batch Analyst: Campbell, Miranda EBatch Method: 8260C LL

Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloChe ck	Headspace	MSV_30_826ISS _00005
BFB 410-59437/1		8260C LL		1 uL	1 uL				
CCVIS 410-59437/3		8260C LL		25 mL	25 mL				5 uL
CCV 410-59437/4		8260C LL		25 mL	25 mL				5 uL
LCS 410-59437/5		8260C LL		25 mL	25 mL				5 uL
LCS 410-59437/6		8260C LL		25 mL	25 mL				5 uL
MB 410-59437/8		8260C LL		25 mL	25 mL				5 uL
410-18116-A-12	Trip Blank1	8260C LL	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-18116-A-13	Trip Blank2	8260C LL	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-18116-C-1	16C1	8260C LL	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-18116-D-1	16C1	8260C LL	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-18116-C-2	16MW8	8260C LL	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-18116-C-3	16MW9	8260C LL	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-18116-D-3	16MW9	8260C LL	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-18116-C-4	16WC1A	8260C LL	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-18116-C-4 MS	16WC1A	8260C LL	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-18116-C-4 MSD	16WC1A	8260C LL	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-18116-D-4 MS	16WC1A	8260C LL	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-18116-D-4 MSD	16WC1A	8260C LL	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-18116-C-5	16WDUP	8260C LL	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-18116-C-6	16WC1B	8260C LL	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-18116-C-7	16-2	8260C LL	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-18116-C-8	16-3	8260C LL	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-18116-C-9	16-5	8260C LL	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-18116-C-10	16WC2B	8260C LL	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-18116-C-11	16SPRING	8260C LL	T	25 mL	25 mL	<2 SU	N	N	5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_DME 00023	MSV_Q_EE 00002	MSV_Q_ETBR 00005	MSV_Q_QARC 00051	MSV_Q_QDME 00009	MSV_Q_QVOA1 00052
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The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8260C LL

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GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-18116-1

SDG No.: _____

Batch Number: 59437 Batch Start Date: 10/28/20 08:50 Batch Analyst: Campbell, Miranda EBatch Method: 8260C LL Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_DME 00023	MSV_Q_EE 00002	MSV_Q_ETBR 00005	MSV_Q_QARC 00051	MSV_Q_QDME 00009	MSV_Q_QVOA1 00052
BFB 410-59437/1		8260C LL							
CCVIS		8260C LL							
410-59437/3									
CCV 410-59437/4		8260C LL		1.25 uL					
LCS 410-59437/5		8260C LL			12.5 uL	12.5 uL	12.5 uL		12.5 uL
LCS 410-59437/6		8260C LL					12.5 uL	5 uL	
MB 410-59437/8		8260C LL							
410-18116-A-12	Trip Blank1	8260C LL	T						
410-18116-A-13	Trip Blank2	8260C LL	T						
410-18116-C-1	16C1	8260C LL	T						
410-18116-D-1	16C1	8260C LL	T						
410-18116-C-2	16MW8	8260C LL	T						
410-18116-C-3	16MW9	8260C LL	T						
410-18116-D-3	16MW9	8260C LL	T						
410-18116-C-4	16WC1A	8260C LL	T						
410-18116-C-4	16WC1A	8260C LL	T		5.38 uL	5.38 uL	5.38 uL		5.38 uL
MS									
410-18116-C-4	16WC1A	8260C LL	T		5.38 uL	5.38 uL	5.38 uL		5.38 uL
MSD									
410-18116-D-4	16WC1A	8260C LL	T					2.15 uL	
MS									
410-18116-D-4	16WC1A	8260C LL	T					2.15 uL	
MSD									
410-18116-C-5	16WDUP	8260C LL	T						
410-18116-C-6	16WC1B	8260C LL	T						
410-18116-C-7	16-2	8260C LL	T						
410-18116-C-8	16-3	8260C LL	T						
410-18116-C-9	16-5	8260C LL	T						
410-18116-C-10	16WC2B	8260C LL	T						
410-18116-C-11	16SPRING	8260C LL	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_QVOA6 00049	MSV_Q_VOA5 00017	MSV_QAcet 00012	MSV_QCYC 00004	MSV_QGAS_826 00083	MSV_RV1_826 00026
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The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8260C LL

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GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-18116-1

SDG No.: _____

Batch Number: 59437 Batch Start Date: 10/28/20 08:50 Batch Analyst: Campbell, Miranda EBatch Method: 8260C LL Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_QVOA6 00049	MSV_Q_VOA5 00017	MSV_QAcet 00012	MSV_QCYC 00004	MSV_QGAS 826 00083	MSV_RV1 826 00026
BFB 410-59437/1		8260C LL							
CCVIS 410-59437/3		8260C LL							25 uL
CCV 410-59437/4		8260C LL							
LCS 410-59437/5		8260C LL		12.5 uL				12.5 uL	
LCS 410-59437/6		8260C LL			25 uL	7.5 uL	12.5 uL		
MB 410-59437/8		8260C LL							
410-18116-A-12	Trip Blank1	8260C LL	T						
410-18116-A-13	Trip Blank2	8260C LL	T						
410-18116-C-1	16C1	8260C LL	T						
410-18116-D-1	16C1	8260C LL	T						
410-18116-C-2	16MW8	8260C LL	T						
410-18116-C-3	16MW9	8260C LL	T						
410-18116-D-3	16MW9	8260C LL	T						
410-18116-C-4	16WC1A	8260C LL	T						
410-18116-C-4 MS	16WC1A	8260C LL	T	5.38 uL				5.38 uL	
410-18116-C-4 MSD	16WC1A	8260C LL	T	5.38 uL				5.38 uL	
410-18116-D-4 MS	16WC1A	8260C LL	T		10.75 uL	3.225 uL	5.375 uL		
410-18116-D-4 MSD	16WC1A	8260C LL	T		10.75 uL	3.225 uL	5.375 uL		
410-18116-C-5	16WDUP	8260C LL	T						
410-18116-C-6	16WC1B	8260C LL	T						
410-18116-C-7	16-2	8260C LL	T						
410-18116-C-8	16-3	8260C LL	T						
410-18116-C-9	16-5	8260C LL	T						
410-18116-C-10	16WC2B	8260C LL	T						
410-18116-C-11	16SPRING	8260C LL	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_RV4 826 00030	MSV_RV4GAS826 00087	MSV_V_BFB 00003	MSV_V_SMRV4 00014	MSV_V_VOA5 00015	MSV_VAcet 00006
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The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8260C LL

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GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-18116-1

SDG No.: _____

Batch Number: 59437 Batch Start Date: 10/28/20 08:50 Batch Analyst: Campbell, Miranda EBatch Method: 8260C LL Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_RV4_826 00030	MSV_RV4GAS826 00087	MSV_V_BFB 00003	MSV_V_SMRV4 00014	MSV_V_VOA5 00015	MSV_VAcet 00006
BFB 410-59437/1		8260C LL				1 uL			
CCVIS 410-59437/3		8260C LL		25 uL	25 uL				
CCV 410-59437/4		8260C LL					6.25 uL	6.25 uL	10 uL
LCS 410-59437/5		8260C LL							
LCS 410-59437/6		8260C LL							
MB 410-59437/8		8260C LL							
410-18116-A-12	Trip Blank1	8260C LL	T						
410-18116-A-13	Trip Blank2	8260C LL	T						
410-18116-C-1	16C1	8260C LL	T						
410-18116-D-1	16C1	8260C LL	T						
410-18116-C-2	16MW8	8260C LL	T						
410-18116-C-3	16MW9	8260C LL	T						
410-18116-D-3	16MW9	8260C LL	T						
410-18116-C-4	16WC1A	8260C LL	T						
410-18116-C-4 MS	16WC1A	8260C LL	T						
410-18116-C-4 MSD	16WC1A	8260C LL	T						
410-18116-D-4 MS	16WC1A	8260C LL	T						
410-18116-D-4 MSD	16WC1A	8260C LL	T						
410-18116-C-5	16WDUP	8260C LL	T						
410-18116-C-6	16WC1B	8260C LL	T						
410-18116-C-7	16-2	8260C LL	T						
410-18116-C-8	16-3	8260C LL	T						
410-18116-C-9	16-5	8260C LL	T						
410-18116-C-10	16WC2B	8260C LL	T						
410-18116-C-11	16SPRING	8260C LL	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_VCYC 00005					
BFB 410-59437/1		8260C LL							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8260C LL

Page 4 of 6

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-18116-1

SDG No.: _____

Batch Number: 59437 Batch Start Date: 10/28/20 08:50 Batch Analyst: Campbell, Miranda EBatch Method: 8260C LL Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_VCYC 00005					
CCVIS 410-59437/3		8260C LL							
CCV 410-59437/4		8260C LL		10 uL					
LCS 410-59437/5		8260C LL							
LCS 410-59437/6		8260C LL							
MB 410-59437/8		8260C LL							
410-18116-A-12	Trip Blank1	8260C LL	T						
410-18116-A-13	Trip Blank2	8260C LL	T						
410-18116-C-1	16C1	8260C LL	T						
410-18116-D-1	16C1	8260C LL	T						
410-18116-C-2	16MW8	8260C LL	T						
410-18116-C-3	16MW9	8260C LL	T						
410-18116-D-3	16MW9	8260C LL	T						
410-18116-C-4	16WC1A	8260C LL	T						
410-18116-C-4	16WC1A	8260C LL	T						
MS 410-18116-C-4	16WC1A	8260C LL	T						
MSD 410-18116-D-4	16WC1A	8260C LL	T						
MS 410-18116-D-4	16WC1A	8260C LL	T						
MSD 410-18116-C-5	16WDUP	8260C LL	T						
410-18116-C-6	16WC1B	8260C LL	T						
410-18116-C-7	16-2	8260C LL	T						
410-18116-C-8	16-3	8260C LL	T						
410-18116-C-9	16-5	8260C LL	T						
410-18116-C-10	16WC2B	8260C LL	T						
410-18116-C-11	16SPRING	8260C LL	T						

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-18116-1

SDG No.: _____

Batch Number: 59437 Batch Start Date: 10/28/20 08:50 Batch Analyst: Campbell, Miranda EBatch Method: 8260C LL Batch End Date: _____

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8260C LL

Method 8270D

Semivolatile Organic Compounds
(GC/MS) by Method 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-18116-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): DB-5MS 30m ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	NBZ #	FBP #	TPHd14 #
16C1	410-18116-1	71	79	96
16MW8	410-18116-2	85	80	50
16MW9	410-18116-3	77	72	85
16WC1A	410-18116-4	66	65	46
16WDUP	410-18116-5	76	72	54
16WC1B	410-18116-6	75	76	36
16-2	410-18116-7	74	67	87
16-3	410-18116-8	84	77	86
16-5	410-18116-9	84	75	90
16WC2B	410-18116-10	78	73	89
16SPRING	410-18116-11	82	77	91
	MB 410-59339/1-A	88	84	83
	MB 410-59818/1-A	88	92	91
	LCS 410-59339/2-A	82	72	78
	LCS 410-59818/2-A	86	84	98
	LCSD 410-59339/3-A	73	69	69
16WC1A MS	410-18116-4 MS	77	83	89
16WC1A MSD	410-18116-4 MSD	82	85	86

	<u>QC LIMITS</u>
NBZ = Nitrobenzene-d5 (Surr)	38-113
FBP = 2-Fluorobiphenyl (Surr)	44-102
TPHd14 = p-Terphenyl-d14 (Surr)	34-128

Column to be used to flag recovery values

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-18116-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: LJ1003.D

Lab ID: LCS 410-59339/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
2,4-Dinitrotoluene	50.0	40.7	81	66-122	
2,6-Dinitrotoluene	50.0	43.6	87	71-120	
Diethyl phthalate	50.0	39.1	78	41-126	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-18116-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: JJ1304.D

Lab ID: LCS 410-59818/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
2,4-Dinitrotoluene	50.0	44.1	88	66-122	
2,6-Dinitrotoluene	50.0	48.2	96	71-120	
Diethyl phthalate	50.0	42.5	85	41-126	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-18116-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: LJ1004.D
 Lab ID: LCSD 410-59339/3-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
2,4-Dinitrotoluene	50.0	39.4	79	3	30	66-122	
2,6-Dinitrotoluene	50.0	41.6	83	5	30	71-120	
Diethyl phthalate	50.0	36.2	72	8	30	41-126	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-18116-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: JJ1308.D
Lab ID: 410-18116-4 MS Client ID: 16WC1A MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
2,4-Dinitrotoluene	50.7	ND	46.1	91	66-122	
2,6-Dinitrotoluene	50.7	ND	49.2	97	71-120	
Diethyl phthalate	50.7	ND	46.7	92	41-126	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-18116-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: JJ1309.D
Lab ID: 410-18116-4 MSD Client ID: 16WC1A MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
2,4-Dinitrotoluene	50.1	44.3	88	4	30	66-122	
2,6-Dinitrotoluene	50.1	48.3	96	2	30	71-120	
Diethyl phthalate	50.1	46.6	93	0	30	41-126	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-18116-1
SDG No.: _____
Lab File ID: LJ1002.D Lab Sample ID: MB 410-59339/1-A
Matrix: Water Date Extracted: 10/28/2020 09:30
Instrument ID: HP20296 Date Analyzed: 10/28/2020 17:35
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 410-59339/2-A	LJ1003.D	10/28/2020 18:04
	LCSD 410-59339/3-A	LJ1004.D	10/28/2020 18:33
16MW8	410-18116-2	LJ1006.D	10/28/2020 19:32
16-2	410-18116-7	LJ1007.D	10/28/2020 20:01
16-3	410-18116-8	LJ1008.D	10/28/2020 20:30
16-5	410-18116-9	LJ1009.D	10/28/2020 20:59
16WC2B	410-18116-10	LJ1010.D	10/28/2020 21:28
16SPRING	410-18116-11	LJ1011.D	10/28/2020 21:57

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-18116-1
SDG No.: _____
Lab File ID: JJ1303.D Lab Sample ID: MB 410-59818/1-A
Matrix: Water Date Extracted: 10/29/2020 09:00
Instrument ID: HP23264 Date Analyzed: 10/30/2020 02:03
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 410-59818/2-A	JJ1304.D	10/30/2020 02:33
16WC1A	410-18116-4	JJ1307.D	10/30/2020 04:04
16WC1A MS	410-18116-4 MS	JJ1308.D	10/30/2020 04:34
16WC1A MSD	410-18116-4 MSD	JJ1309.D	10/30/2020 05:05
16C1	410-18116-1	JJ1331.D	10/30/2020 16:26
16MW9	410-18116-3	JJ1332.D	10/30/2020 16:56
16WDUP	410-18116-5	JJ1333.D	10/30/2020 17:26
16WC1B	410-18116-6	JJ1334.D	10/30/2020 17:56

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1

SDG No.: _____

Lab File ID: LJ0700a.D DFTPP Injection Date: 10/19/2020

Instrument ID: HP20296 DFTPP Injection Time: 16:58

Analysis Batch No.: 55998

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10-80% of Base Peak	50.2
68	Less than 2% of mass 69	1.2 (1.9) 1
69	Mass 69 Relative abundance	66.3
70	Less than 2% of mass 69	0.4 (0.6) 1
127	10-80% of Base Peak	54.9
197	Less than 2% of mass 198	0.0
198	Base peak	100.0
199	5-9% of mass 198	6.7
275	10-60% of Base Peak	23.9
365	Greater than 1% of mass 198	3.7
441	present but less than 24% of mass 442	13.1 (14.7) 2
442	Greater than 50% of mass 198	88.9
443	15-24% of mass 442	17.2 (19.3) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICIS 410-55998/2	LJ0701.D	10/19/2020	17:17
	IC 410-55998/3	LJ0702.D	10/19/2020	18:09
	IC 410-55998/4	LJ0703.D	10/19/2020	18:38
	IC 410-55998/5	LJ0704.D	10/19/2020	19:07
	IC 410-55998/6	LJ0705.D	10/19/2020	19:36
	IC 410-55998/7	LJ0706.D	10/19/2020	20:05
	IC 410-55998/8	LJ0707.D	10/19/2020	20:34
	IC 410-55998/9	LJ0708.D	10/19/2020	21:03
	ICV 410-55998/12	LJ0711.D	10/19/2020	22:31
	ICV 410-55998/13	LJ0712.D	10/19/2020	23:00

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1

SDG No.: _____

Lab File ID: LJ1000a.D DFTPP Injection Date: 10/28/2020

Instrument ID: HP20296 DFTPP Injection Time: 16:36

Analysis Batch No.: 59610

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10-80% of Base Peak	50.2
68	Less than 2% of mass 69	1.3 (1.8) 1
69	Mass 69 Relative abundance	69.6
70	Less than 2% of mass 69	0.6 (0.8) 1
127	10-80% of Base Peak	55.4
197	Less than 2% of mass 198	0.9
198	Base peak	100.0
199	5-9% of mass 198	6.9
275	10-60% of Base Peak	24.0
365	Greater than 1% of mass 198	3.5
441	present but less than 24% of mass 442	13.6 (16.1) 2
442	Greater than 50% of mass 198	84.1
443	15-24% of mass 442	16.3 (19.4) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-59610/2	LJ1001.D	10/28/2020	16:54
	MB 410-59339/1-A	LJ1002.D	10/28/2020	17:35
	LCS 410-59339/2-A	LJ1003.D	10/28/2020	18:04
	LCSD 410-59339/3-A	LJ1004.D	10/28/2020	18:33
16MW8	410-18116-2	LJ1006.D	10/28/2020	19:32
16-2	410-18116-7	LJ1007.D	10/28/2020	20:01
16-3	410-18116-8	LJ1008.D	10/28/2020	20:30
16-5	410-18116-9	LJ1009.D	10/28/2020	20:59
16WC2B	410-18116-10	LJ1010.D	10/28/2020	21:28
16SPRING	410-18116-11	LJ1011.D	10/28/2020	21:57

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1

SDG No.: _____

Lab File ID: JI1150c.D DFTPP Injection Date: 09/29/2020

Instrument ID: HP23264 DFTPP Injection Time: 18:37

Analysis Batch No.: 48994

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10-80% of Base Peak	51.0
68	Less than 2% of mass 69	0.8 (1.2) 1
69	Mass 69 Relative abundance	63.1
70	Less than 2% of mass 69	0.3 (0.5) 1
127	10-80% of Base Peak	56.5
197	Less than 2% of mass 198	1.0
198	Base peak	100.0
199	5-9% of mass 198	6.1
275	10-60% of Base Peak	23.2
365	Greater than 1% of mass 198	3.4
441	present but less than 24% of mass 442	7.8 (14.5) 2
442	Greater than 50% of mass 198	53.6
443	15-24% of mass 442	10.8 (20.1) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICIS 410-48994/2	JI1151a.D	09/29/2020	19:00
	IC 410-48994/3	JI1152.D	09/29/2020	19:37
	IC 410-48994/4	JI1153.D	09/29/2020	20:08
	IC 410-48994/5	JI1154.D	09/29/2020	20:38
	IC 410-48994/6	JI1155.D	09/29/2020	21:08
	IC 410-48994/7	JI1156.D	09/29/2020	21:39
	IC 410-48994/8	JI1157.D	09/29/2020	22:09
	IC 410-48994/9	JI1158a.D	09/29/2020	22:52
	ICV 410-48994/12	JI1161.D	09/30/2020	0:23
	ICV 410-48994/13	JI1162.D	09/30/2020	0:53
	ICV 410-48994/14	JI1163.D	09/30/2020	1:23
	ICV 410-48994/15	JI1164.D	09/30/2020	1:53

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1

SDG No.: _____

Lab File ID: JJ1300.D DFTPP Injection Date: 10/29/2020

Instrument ID: HP23264 DFTPP Injection Time: 23:26

Analysis Batch No.: 60208

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10-80% of Base Peak	51.3
68	Less than 2% of mass 69	0.8 (1.2) 1
69	Mass 69 Relative abundance	69.7
70	Less than 2% of mass 69	0.3 (0.5) 1
127	10-80% of Base Peak	59.8
197	Less than 2% of mass 198	1.4
198	Base peak	100.0
199	5-9% of mass 198	5.9
275	10-60% of Base Peak	22.7
365	Greater than 1% of mass 198	3.3
441	present but less than 24% of mass 442	8.8 (15.9) 2
442	Greater than 50% of mass 198	55.4
443	15-24% of mass 442	10.8 (19.4) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-60208/2	JJ1301.D	10/29/2020	23:51
	MB 410-59818/1-A	JJ1303.D	10/30/2020	2:03
	LCS 410-59818/2-A	JJ1304.D	10/30/2020	2:33
16WC1A	410-18116-4	JJ1307.D	10/30/2020	4:04
16WC1A MS	410-18116-4 MS	JJ1308.D	10/30/2020	4:34
16WC1A MSD	410-18116-4 MSD	JJ1309.D	10/30/2020	5:05

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1

SDG No.: _____

Lab File ID: JJ1320.D DFTPP Injection Date: 10/30/2020

Instrument ID: HP23264 DFTPP Injection Time: 09:55

Analysis Batch No.: 60388

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10-80% of Base Peak	43.9
68	Less than 2% of mass 69	0.9 (1.6) 1
69	Mass 69 Relative abundance	54.8
70	Less than 2% of mass 69	0.2 (0.4) 1
127	10-80% of Base Peak	53.7
197	Less than 2% of mass 198	0.0
198	Base peak	100.0
199	5-9% of mass 198	6.9
275	10-60% of Base Peak	22.7
365	Greater than 1% of mass 198	3.7
441	present but less than 24% of mass 442	9.6 (15.3) 2
442	Greater than 50% of mass 198	63.0
443	15-24% of mass 442	12.2 (19.4) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-60388/2	JJ1321.D	10/30/2020	10:15
16C1	410-18116-1	JJ1331.D	10/30/2020	16:26
16MW9	410-18116-3	JJ1332.D	10/30/2020	16:56
16WDUP	410-18116-5	JJ1333.D	10/30/2020	17:26
16WC1B	410-18116-6	JJ1334.D	10/30/2020	17:56

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Sample No.: ICIS 410-55998/2 Date Analyzed: 10/19/2020 17:17
 Instrument ID: HP20296 GC Column: DB-5MS 20m 0.18 ID: 0.18 (mm)
 Lab File ID (Standard): LJ0701.D Heated Purge: (Y/N) N
 Calibration ID: 13801

	DCBd4		NPT		ANT	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	174799	6.97	679758	8.96	327173	11.79
UPPER LIMIT	349598	7.47	1359516	9.46	654346	12.29
LOWER LIMIT	87400	6.47	339879	8.46	163587	11.29
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 410-55998/12		182085	6.97	687575	8.96	332957
ICV 410-55998/13		190034	6.97	688076	8.96	320592
CCVIS 410-59610/2		210946	6.94	808351	8.92	411716

DCBd4 = 1,4-Dichlorobenzene-d4

NPT = Naphthalene-d8

ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Sample No.: ICIS 410-55998/2 Date Analyzed: 10/19/2020 17:17
 Instrument ID: HP20296 GC Column: DB-5MS 20m 0.18 ID: 0.18 (mm)
 Lab File ID (Standard): LJ0701.D Heated Purge: (Y/N) N
 Calibration ID: 13801

	PHN		PYR10		PRY	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	643613	13.72	665539	15.77	691658	20.36
UPPER LIMIT	1287226	14.22	1331078	16.27	1383316	20.86
LOWER LIMIT	321807	13.22	332770	15.27	345829	19.86
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 410-55998/12		666195 13.72	668327 15.77		710767 20.36	
ICV 410-55998/13		611101 13.71	630029 15.77		620222 20.36	
CCVIS 410-59610/2		833641 13.68	867160 15.72		939284 20.31	

PHN = Phenanthrene-d10
 PYR10 = Pyrene-d10 (IS)
 PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
 RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Sample No.: CCVIS 410-59610/2 Date Analyzed: 10/28/2020 16:54
 Instrument ID: HP20296 GC Column: DB-5MS 20m 0.18 ID: 0.18 (mm)
 Lab File ID (Standard): LJ1001.D Heated Purge: (Y/N) N
 Calibration ID: 13801

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		210946	6.94	808351	8.92	411716	11.76
UPPER LIMIT		421892	7.44	1616702	9.42	823432	12.26
LOWER LIMIT		105473	6.44	404176	8.42	205858	11.26
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 410-59339/1-A		153570	6.94	565477	8.92	271166	11.75
LCS 410-59339/2-A		163928	6.94	611544	8.92	303700	11.75
LCSD 410-59339/3-A		158982	6.94	609424	8.92	292332	11.75
410-18116-2	16MW8	178869	6.93	675625	8.92	319799	11.75
410-18116-7	16-2	177041	6.93	654599	8.92	321632	11.75
410-18116-8	16-3	173803	6.93	658644	8.92	313394	11.75
410-18116-9	16-5	160373	6.93	614391	8.92	302702	11.75
410-18116-10	16WC2B	161297	6.93	615299	8.92	297954	11.75
410-18116-11	16SPRING	168510	6.93	632040	8.92	297714	11.75

DCBd4 = 1,4-Dichlorobenzene-d4

NPT = Naphthalene-d8

ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Sample No.: CCVIS 410-59610/2 Date Analyzed: 10/28/2020 16:54
 Instrument ID: HP20296 GC Column: DB-5MS 20m 0.18 ID: 0.18 (mm)
 Lab File ID (Standard): LJ1001.D Heated Purge: (Y/N) N
 Calibration ID: 13801

	PHN		PYR10		PRY	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	833641	13.68	867160	15.72	939284	20.31
UPPER LIMIT	1667282	14.18	1734320	16.22	1878568	20.81
LOWER LIMIT	416821	13.18	433580	15.22	469642	19.81
LAB SAMPLE ID	CLIENT SAMPLE ID					
MB 410-59339/1-A		528240	13.68	525333	15.72	555798 20.31
LCS 410-59339/2-A		586991	13.68	629412	15.72	666895 20.31
LCSD 410-59339/3-A		578912	13.68	615356	15.72	648057 20.31
410-18116-2	16MW8	628120	13.67	637761	15.72	675385 20.30
410-18116-7	16-2	617118	13.68	622319	15.72	659189 20.30
410-18116-8	16-3	609569	13.68	618005	15.72	643840 20.30
410-18116-9	16-5	578227	13.67	586506	15.72	603566 20.31
410-18116-10	16WC2B	566938	13.67	586155	15.72	617317 20.30
410-18116-11	16SPRING	584910	13.67	582458	15.72	606107 20.30

PHN = Phenanthrene-d10
 PYR10 = Pyrene-d10 (IS)
 PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
 RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Sample No.: ICIS 410-48994/2 Date Analyzed: 09/29/2020 19:00
 Instrument ID: HP23264 GC Column: DB-5MS 30m 0.25 ID: 0.25 (mm)
 Lab File ID (Standard): J11151a.D Heated Purge: (Y/N) N
 Calibration ID: 11873

	DCBd4		NPT		ANT		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
INITIAL CALIBRATION MID-POINT	191372	6.90	758776	8.83	388422	11.62	
UPPER LIMIT	382744	7.40	1517552	9.33	776844	12.12	
LOWER LIMIT	95686	6.40	379388	8.33	194211	11.12	
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-48994/12		193641	6.90	742519	8.83	401313	11.62
ICV 410-48994/13		224828	6.90	882649	8.83	432667	11.62
ICV 410-48994/14		271368	6.90	1018853	8.83	511505	11.62
ICV 410-48994/15		187144	6.90	723165	8.83	383733	11.62
CCVIS 410-60208/2		154243	6.72	604651	8.66	347029	11.44
CCVIS 410-60388/2		217753	6.73	827032	8.66	474545	11.45

DCBd4 = 1,4-Dichlorobenzene-d4

NPT = Naphthalene-d8

ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Sample No.: ICIS 410-48994/2 Date Analyzed: 09/29/2020 19:00
 Instrument ID: HP23264 GC Column: DB-5MS 30m 0.25 ID: 0.25 (mm)
 Lab File ID (Standard): J11151a.D Heated Purge: (Y/N) N
 Calibration ID: 11873

	PHN		PYR10		PRY		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
INITIAL CALIBRATION MID-POINT	651128	13.50	676988	15.49	674689	20.00	
UPPER LIMIT	1302256	14.00	1353976	15.99	1349378	20.50	
LOWER LIMIT	325564	13.00	338494	14.99	337345	19.50	
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-48994/12		693812	13.50	725952	15.49	682422	20.00
ICV 410-48994/13		729095	13.49	764880	15.49	724470	20.00
ICV 410-48994/14		884825	13.49	882869	15.49	840470	20.00
ICV 410-48994/15		616054	13.49	628739	15.49	612469	19.99
CCVIS 410-60208/2		637395	13.33	669818	15.28	647612	19.76
CCVIS 410-60388/2		876740	13.33	931290	15.28	922181	19.77

PHN = Phenanthrene-d10
 PYR10 = Pyrene-d10 (IS)
 PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
 RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Sample No.: CCVIS 410-60208/2 Date Analyzed: 10/29/2020 23:51
 Instrument ID: HP23264 GC Column: DB-5MS 30m 0.25 ID: 0.25 (mm)
 Lab File ID (Standard): JJ1301.D Heated Purge: (Y/N) N
 Calibration ID: 12462

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		154243	6.72	604651	8.66	347029	11.44
UPPER LIMIT		308486	7.22	1209302	9.16	694058	11.94
LOWER LIMIT		77122	6.22	302326	8.16	173515	10.94
LAB SAMPLE ID		CLIENT SAMPLE ID					
MB 410-59818/1-A		121913	6.72	464744	8.66	243117	11.44
LCS 410-59818/2-A		122639	6.73	440834	8.66	251605	11.44
410-18116-4		16WC1A	144561	6.73	565770	8.66	295784
410-18116-4 MS		16WC1A MS	132794	6.73	519535	8.66	291657
410-18116-4 MSD		16WC1A MSD	136390	6.73	521909	8.66	290226

DCBd4 = 1,4-Dichlorobenzene-d4

NPT = Naphthalene-d8

ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Sample No.: CCVIS 410-60208/2 Date Analyzed: 10/29/2020 23:51
 Instrument ID: HP23264 GC Column: DB-5MS 30m 0.25 ID: 0.25 (mm)
 Lab File ID (Standard): JJ1301.D Heated Purge: (Y/N) N
 Calibration ID: 12462

		PHN		PYR10		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		637395	13.33	669818	15.28	647612	19.76
UPPER LIMIT		1274790	13.83	1339636	15.78	1295224	20.26
LOWER LIMIT		318698	12.83	334909	14.78	323806	19.26
LAB SAMPLE ID		CLIENT SAMPLE ID					
MB 410-59818/1-A		446622	13.33	454712	15.28	429995	19.76
LCS 410-59818/2-A		422449	13.33	465599	15.28	460192	19.76
410-18116-4		16WC1A	547395	13.33	566762	15.28	524749
410-18116-4 MS		16WC1A MS	503368	13.33	528029	15.28	524647
410-18116-4 MSD		16WC1A MSD	495894	13.33	546057	15.28	498641

PHN = Phenanthrene-d10
 PYR10 = Pyrene-d10 (IS)
 PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
 RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Sample No.: CCVIS 410-60388/2 Date Analyzed: 10/30/2020 10:15
 Instrument ID: HP23264 GC Column: DB-5MS 30m 0.25 ID: 0.25 (mm)
 Lab File ID (Standard): JJ1321.D Heated Purge: (Y/N) N
 Calibration ID: 12462

	DCBd4		NPT		ANT	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	217753	6.73	827032	8.66	474545	11.45
UPPER LIMIT	435506	7.23	1654064	9.16	949090	11.95
LOWER LIMIT	108877	6.23	413516	8.16	237273	10.95
LAB SAMPLE ID	CLIENT SAMPLE ID					
410-18116-1	16C1	120538	6.73	500600	8.66	256176 11.44
410-18116-3	16MW9	132031	6.73	494061	8.66	273319 11.44
410-18116-5	16WDUP	135093	6.72	537628	8.66	286847 11.44
410-18116-6	16WC1B	131364	6.73	499401	8.66	269134 11.44

DCBd4 = 1,4-Dichlorobenzene-d4

NPT = Naphthalene-d8

ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Sample No.: CCVIS 410-60388/2 Date Analyzed: 10/30/2020 10:15
 Instrument ID: HP23264 GC Column: DB-5MS 30m 0.25 ID: 0.25 (mm)
 Lab File ID (Standard): JJ1321.D Heated Purge: (Y/N) N
 Calibration ID: 12462

	PHN		PYR10		PRY	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	876740	13.33	931290	15.28	922181	19.77
UPPER LIMIT	1753480	13.83	1862580	15.78	1844362	20.27
LOWER LIMIT	438370	12.83	465645	14.78	461091	19.27
LAB SAMPLE ID	CLIENT SAMPLE ID					
410-18116-1	16C1	459793	13.33	475143	15.28	446939*3 19.76
410-18116-3	16MW9	478326	13.33	492606	15.28	457595*3 19.76
410-18116-5	16WDUP	508512	13.33	529217	15.28	496300 19.76
410-18116-6	16WC1B	458990	13.33	474854	15.28	453514*3 19.76

PHN = Phenanthrene-d10
 PYR10 = Pyrene-d10 (IS)
 PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
 RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16C1 Lab Sample ID: 410-18116-1
 Matrix: Ground Water Lab File ID: JJ1331.D
 Analysis Method: 8270D Date Collected: 10/22/2020 10:55
 Extract. Method: 3510C Date Extracted: 10/29/2020 09:00
 Sample wt/vol: 249(mL) Date Analyzed: 10/30/2020 16:26
 Con. Extract Vol.: 1(mL) Dilution Factor: 1
 Injection Volume: 1(uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 60388 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
121-14-2	2,4-Dinitrotoluene	ND		10	
606-20-2	2,6-Dinitrotoluene	ND		10	
84-66-2	Diethyl phthalate	ND		5.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	79		44-102
4165-60-0	Nitrobenzene-d5 (Surr)	71		38-113
1718-51-0	p-Terphenyl-d14 (Surr)	96		34-128

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1331.D
 Lims ID: 410-18116-A-1-A
 Client ID: 16C1
 Sample Type: Client
 Inject. Date: 30-Oct-2020 16:26:30 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-1-A
 Misc. Info.: 410-0014287-012
 Operator ID: knb25316 Instrument ID: HP23264
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 02-Nov-2020 12:10:59 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1009

First Level Reviewer: hartenstine

Date: 02-Nov-2020 12:10:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
\$ 12 2-Fluorophenol	112	4.925	4.925	0.000	92	836143	23.0	
\$ 20 Phenol-d5	99	6.309	6.297	0.012	93	974366	19.7	
* 28 1,4-Dichlorobenzene-d4	152	6.728	6.728	0.000	97	120538	5.00	
\$ 43 Nitrobenzene-d5	82	7.556	7.568	-0.012	89	1009218	17.7	
* 56 Naphthalene-d8	136	8.657	8.657	0.000	99	500600	5.00	
\$ 77 2-Fluorobiphenyl (Surr)	172	10.404	10.404	0.000	99	1528799	19.8	
90 2,6-Dinitrotoluene	165		11.164				ND	U
* 93 Acenaphthene-d10	164	11.436	11.448	-0.012	95	256176	5.00	
100 2,4-Dinitrotoluene	165		11.777				ND	
105 Diethyl phthalate	149		12.128				ND	7
\$ 114 2,4,6-Tribromophenol	330	12.502	12.502	-0.001	90	452509	46.4	
* 128 Phenanthrene-d10	188	13.331	13.331	0.000	97	459793	5.00	
* 141 Pyrene-d10 (IS)	212	15.282	15.282	0.000	99	475143	5.00	
\$ 143 p-Terphenyl-d14	244	15.599	15.611	-0.012	98	2110664	24.1	
* 160 Perylene-d12	264	19.763	19.774	-0.011	98	446939	5.00	s

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

s - Failed ISTD Recovery Test

Review Flags

U - Marked Undetected

Reagents:

MSS_RV8270_IS_00015

Amount Added: 20.00

Units: uL

Run Reagent

Report Date: 02-Nov-2020 12:13:05

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1331.D

Injection Date: 30-Oct-2020 16:26:30

Instrument ID: HP23264

Operator ID: knb25316

Lims ID: 410-18116-A-1-A

Lab Sample ID: 410-18116-1

Worklist Smp#: 12

Client ID: 16C1

Injection Vol: 1.0 ul

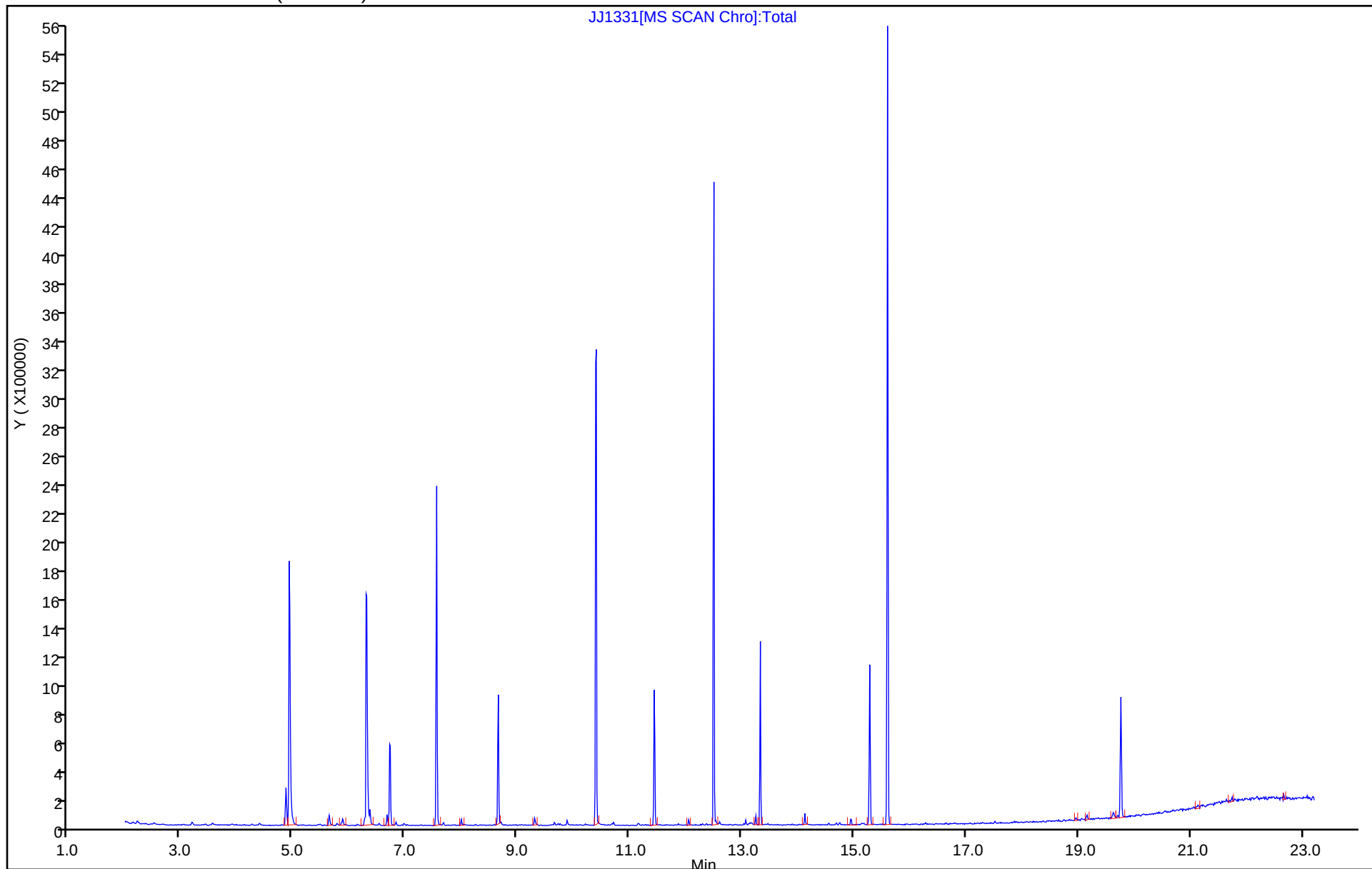
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1331.D
 Lims ID: 410-18116-A-1-A
 Client ID: 16C1
 Sample Type: Client
 Inject. Date: 30-Oct-2020 16:26:30 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-1-A
 Misc. Info.: 410-0014287-012
 Operator ID: knb25316 Instrument ID: HP23264
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 02-Nov-2020 12:10:59 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1009

First Level Reviewer: hartenstinel

Date: 02-Nov-2020 12:10:59

Compound	Amount Added	Amount Recovered	% Rec.
\$ 12 2-Fluorophenol	50.2	23.0	45.81
\$ 20 Phenol-d5	50.2	19.7	39.24
\$ 43 Nitrobenzene-d5	25.0	17.7	70.88
\$ 77 2-Fluorobiphenyl (Surr)	25.1	19.8	78.77
\$ 114 2,4,6-Tribromophenol	50.2	46.4	92.50
\$ 143 p-Terphenyl-d14	25.1	24.1	95.98

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1331.D

Injection Date: 30-Oct-2020 16:26:30

Instrument ID: HP23264

Lims ID: 410-18116-A-1-A

Lab Sample ID: 410-18116-1

Client ID: 16C1

Operator ID: knb25316

ALS Bottle#: 12 Worklist Smp#: 12

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: MSSemi_HP23264

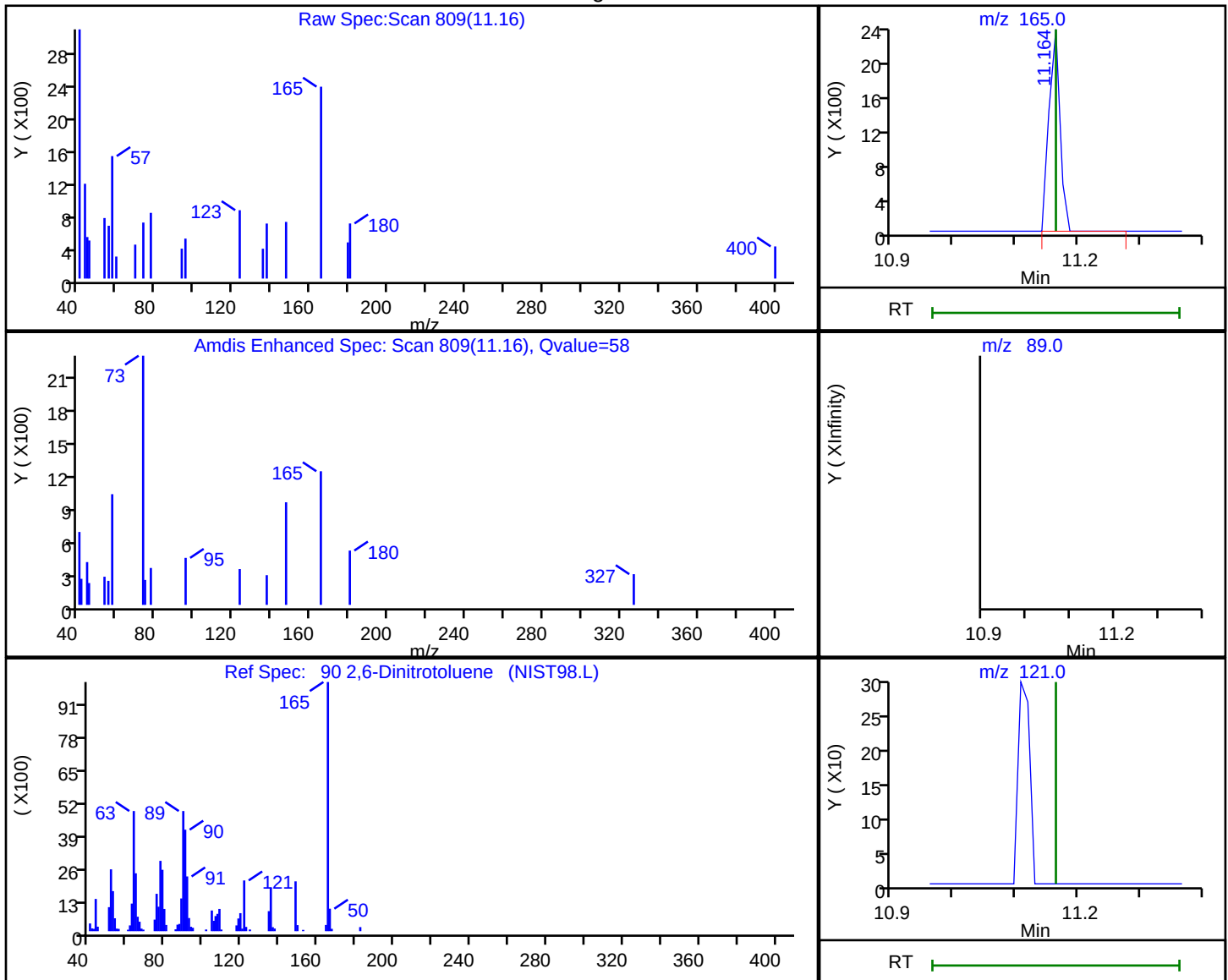
Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector: MS SCAN

90 2,6-Dinitrotoluene, CAS: 606-20-2

Processing Results



RT	Mass	Response	Amount
11.16	165.00	2898	0.167410
11.16	89.00	0	
11.16	121.00	0	
11.16	63.00	0	

Reviewer: hartenstinel, 02-Nov-2020 12:10:46

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16MW8 Lab Sample ID: 410-18116-2
 Matrix: Ground Water Lab File ID: LJ1006.D
 Analysis Method: 8270D Date Collected: 10/21/2020 10:35
 Extract. Method: 3510C Date Extracted: 10/28/2020 09:30
 Sample wt/vol: 248.2 (mL) Date Analyzed: 10/28/2020 19:32
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 59610 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
121-14-2	2,4-Dinitrotoluene	ND		10	
606-20-2	2,6-Dinitrotoluene	ND		10	
84-66-2	Diethyl phthalate	ND		5.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	80		44-102
4165-60-0	Nitrobenzene-d5 (Surr)	85		38-113
1718-51-0	p-Terphenyl-d14 (Surr)	50		34-128

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1006.D
 Lims ID: 410-18116-A-2-A
 Client ID: 16MW8
 Sample Type: Client
 Inject. Date: 28-Oct-2020 19:32:19 ALS Bottle#: 0 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-2-A
 Misc. Info.: 410-0014101-007
 Operator ID: kel10217 Instrument ID: HP20296
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 28-Oct-2020 23:23:55 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: luttek

Date: 28-Oct-2020 20:42:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
\$ 10 2-Fluorophenol	112	5.054	5.050	0.000	93	1468871	25.5	
\$ 16 Phenol-d5	99	6.450	6.445	0.000	98	1436044	20.4	
* 24 1,4-Dichlorobenzene-d4	152	6.931	6.937	-0.006	97	178869	5.00	
\$ 41 Nitrobenzene-d5	82	7.787	7.787	-0.005	87	1515385	21.2	
* 55 Naphthalene-d8	136	8.916	8.921	-0.005	99	675625	5.00	
\$ 76 2-Fluorobiphenyl (Surr)	172	10.702	10.702	-0.005	99	2092267	20.0	
88 2,6-Dinitrotoluene	165		11.472				ND	7
* 92 Acenaphthene-d10	164	11.745	11.756	-0.011	98	319799	5.00	
99 2,4-Dinitrotoluene	165		12.050				ND	
104 Diethyl phthalate	149		12.398				ND	7
\$ 113 2,4,6-Tribromophenol	330	12.788	12.787	-0.005	95	637644	44.7	
* 127 Phenanthrene-d10	188	13.671	13.681	-0.010	97	628120	5.00	
* 140 Pyrene-d10 (IS)	212	15.719	15.724	-0.005	98	637761	5.00	
\$ 142 p-Terphenyl-d14	244	16.035	16.034	-0.005	98	1584851	12.4	
* 159 Perylene-d12	264	20.303	20.314	-0.011	97	675385	5.00	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSS_RV8270_IS_00015

Amount Added: 20.00

Units: uL

Run Reagent

Report Date: 28-Oct-2020 23:24:16

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1006.D

Injection Date: 28-Oct-2020 19:32:19

Instrument ID: HP20296

Operator ID: kel10217

Lims ID: 410-18116-A-2-A

Lab Sample ID: 410-18116-2

Worklist Smp#: 7

Client ID: 16MW8

Injection Vol: 1.0 ul

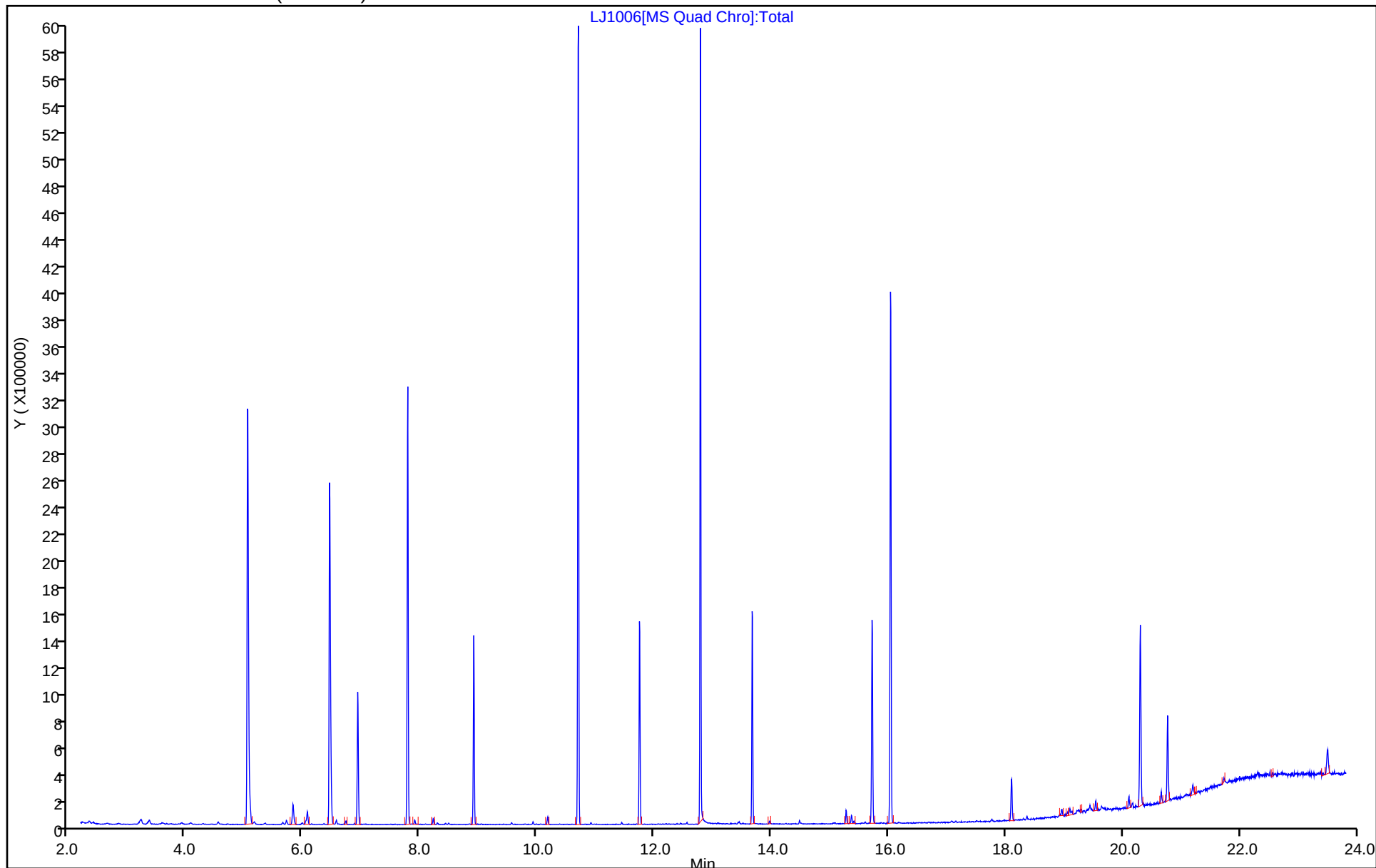
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1006.D
 Lims ID: 410-18116-A-2-A
 Client ID: 16MW8
 Sample Type: Client
 Inject. Date: 28-Oct-2020 19:32:19 ALS Bottle#: 0 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-2-A
 Misc. Info.: 410-0014101-007
 Operator ID: kel10217 Instrument ID: HP20296
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 28-Oct-2020 23:23:55 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: luttek

Date: 28-Oct-2020 20:42:37

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 2-Fluorophenol	50.2	25.5	50.83
\$ 16 Phenol-d5	50.2	20.4	40.75
\$ 41 Nitrobenzene-d5	25.0	21.2	84.67
\$ 76 2-Fluorobiphenyl (Surr)	25.1	20.0	79.61
\$ 113 2,4,6-Tribromophenol	50.2	44.7	89.07
\$ 142 p-Terphenyl-d14	25.1	12.4	49.54

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16MW9 Lab Sample ID: 410-18116-3
 Matrix: Ground Water Lab File ID: JJ1332.D
 Analysis Method: 8270D Date Collected: 10/22/2020 10:20
 Extract. Method: 3510C Date Extracted: 10/29/2020 09:00
 Sample wt/vol: 249.7(mL) Date Analyzed: 10/30/2020 16:56
 Con. Extract Vol.: 1(mL) Dilution Factor: 1
 Injection Volume: 1(uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 60388 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
121-14-2	2,4-Dinitrotoluene	ND		10	
606-20-2	2,6-Dinitrotoluene	ND		10	
84-66-2	Diethyl phthalate	ND		5.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	72		44-102
4165-60-0	Nitrobenzene-d5 (Surr)	77		38-113
1718-51-0	p-Terphenyl-d14 (Surr)	85		34-128

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1332.D
 Lims ID: 410-18116-A-3-A
 Client ID: 16MW9
 Sample Type: Client
 Inject. Date: 30-Oct-2020 16:56:30 ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-3-A
 Misc. Info.: 410-0014287-013
 Operator ID: knb25316 Instrument ID: HP23264
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 02-Nov-2020 12:10:59 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1009

First Level Reviewer: hartenstine

Date: 02-Nov-2020 12:11:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
\$ 12 2-Fluorophenol	112	4.925	4.925	0.000	93	853408	21.4	
\$ 20 Phenol-d5	99	6.309	6.297	0.012	93	994721	18.3	
* 28 1,4-Dichlorobenzene-d4	152	6.728	6.728	0.000	97	132031	5.00	
\$ 43 Nitrobenzene-d5	82	7.557	7.568	-0.012	90	1080470	19.2	
* 56 Naphthalene-d8	136	8.657	8.657	0.000	99	494061	5.00	
\$ 77 2-Fluorobiphenyl (Surr)	172	10.404	10.404	0.000	100	1488425	18.0	
90 2,6-Dinitrotoluene	165		11.164				ND	
* 93 Acenaphthene-d10	164	11.436	11.448	-0.012	95	273319	5.00	
100 2,4-Dinitrotoluene	165		11.777				ND	
105 Diethyl phthalate	149		12.128				ND	7
\$ 114 2,4,6-Tribromophenol	330	12.503	12.502	0.000	90	435598	41.9	
* 128 Phenanthrene-d10	188	13.331	13.331	0.000	97	478326	5.00	
* 141 Pyrene-d10 (IS)	212	15.282	15.282	0.000	98	492606	5.00	
\$ 143 p-Terphenyl-d14	244	15.599	15.611	-0.012	98	1943240	21.4	
* 160 Perylene-d12	264	19.763	19.774	-0.011	99	457595	5.00	s

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

s - Failed ISTD Recovery Test

Reagents:

MSS_RV8270_IS_00015

Amount Added: 20.00

Units: uL

Run Reagent

Report Date: 02-Nov-2020 12:13:07

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1332.D

Injection Date: 30-Oct-2020 16:56:30

Instrument ID: HP23264

Operator ID: knb25316

Lims ID: 410-18116-A-3-A

Lab Sample ID: 410-18116-3

Worklist Smp#: 13

Client ID: 16MW9

Injection Vol: 1.0 ul

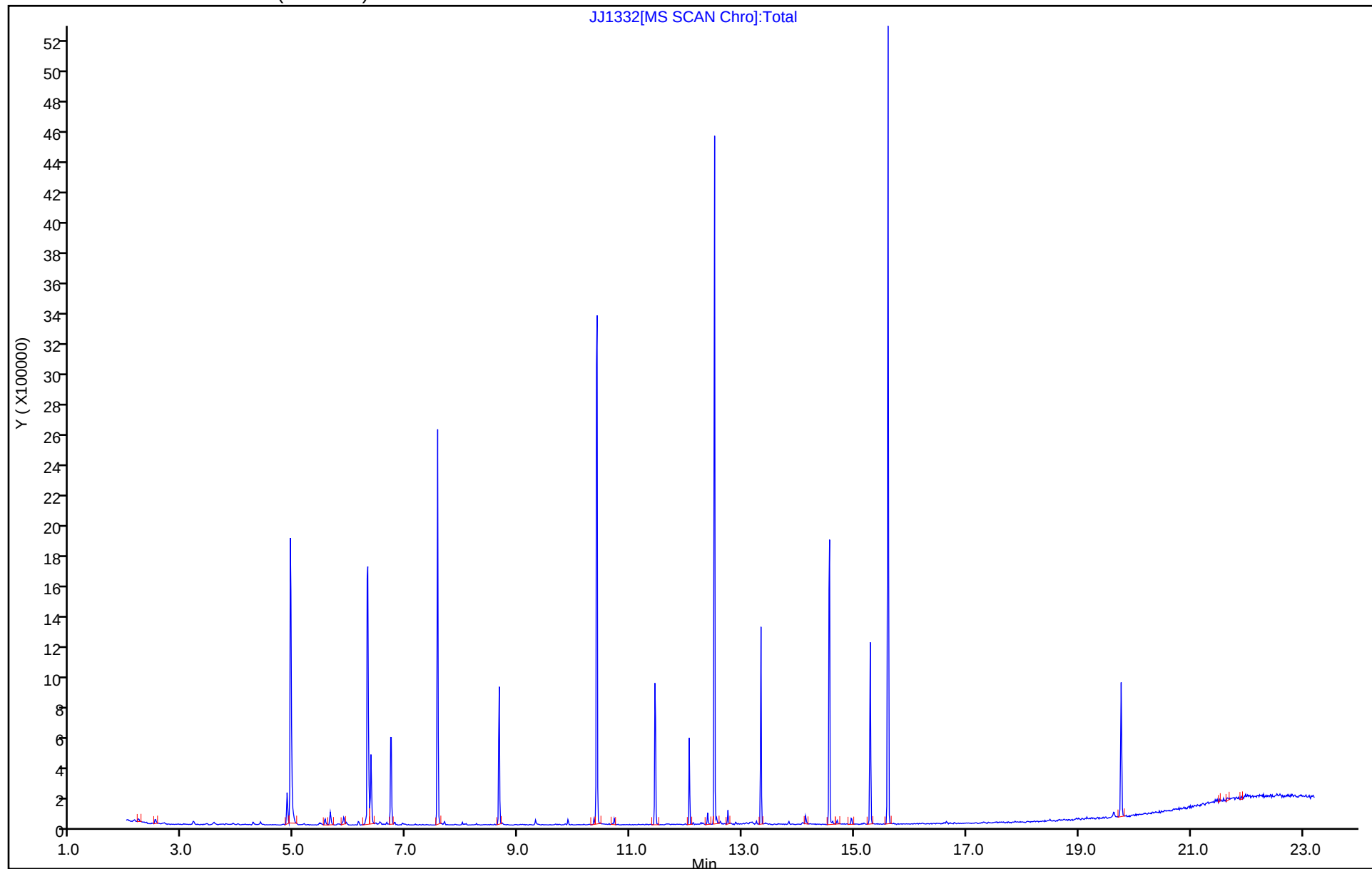
Dil. Factor: 1.0000

ALS Bottle#: 13

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1332.D
 Lims ID: 410-18116-A-3-A
 Client ID: 16MW9
 Sample Type: Client
 Inject. Date: 30-Oct-2020 16:56:30 ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-3-A
 Misc. Info.: 410-0014287-013
 Operator ID: knb25316 Instrument ID: HP23264
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 02-Nov-2020 12:10:59 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1009

First Level Reviewer: hartenstinel

Date: 02-Nov-2020 12:11:38

Compound	Amount Added	Amount Recovered	% Rec.
\$ 12 2-Fluorophenol	50.2	21.4	42.68
\$ 20 Phenol-d5	50.2	18.3	36.57
\$ 43 Nitrobenzene-d5	25.0	19.2	76.89
\$ 77 2-Fluorobiphenyl (Surr)	25.1	18.0	71.88
\$ 114 2,4,6-Tribromophenol	50.2	41.9	83.46
\$ 143 p-Terphenyl-d14	25.1	21.4	85.23

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16WC1A Lab Sample ID: 410-18116-4
 Matrix: Ground Water Lab File ID: JJ1307.D
 Analysis Method: 8270D Date Collected: 10/22/2020 09:25
 Extract. Method: 3510C Date Extracted: 10/29/2020 09:00
 Sample wt/vol: 235.7(mL) Date Analyzed: 10/30/2020 04:04
 Con. Extract Vol.: 1(mL) Dilution Factor: 1
 Injection Volume: 1(uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 60208 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
121-14-2	2,4-Dinitrotoluene	ND		11	
606-20-2	2,6-Dinitrotoluene	ND		11	
84-66-2	Diethyl phthalate	ND		5.3	

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	65		44-102
4165-60-0	Nitrobenzene-d5 (Surr)	66		38-113
1718-51-0	p-Terphenyl-d14 (Surr)	46		34-128

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1307.D
 Lims ID: 410-18116-A-4-C
 Client ID: 16WC1A
 Sample Type: Client
 Inject. Date: 30-Oct-2020 04:04:30 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-4-C
 Misc. Info.: 410-0014245-008
 Operator ID: sw30417 Instrument ID: HP23264
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 30-Oct-2020 10:54:59 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1008

First Level Reviewer: bekk

Date: 30-Oct-2020 10:16:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
\$ 12 2-Fluorophenol	112	4.936	4.933	0.011	93	546974	12.5	
\$ 20 Phenol-d5	99	6.309	6.308	0.012	94	591216	9.96	
* 28 1,4-Dichlorobenzene-d4	152	6.728	6.717	0.011	97	144561	5.00	
\$ 43 Nitrobenzene-d5	82	7.557	7.557	0.001	89	1061828	16.5	
* 56 Naphthalene-d8	136	8.657	8.657	0.000	99	565770	5.00	
\$ 77 2-Fluorobiphenyl (Surr)	172	10.404	10.404	0.000	100	1451440	16.2	
90 2,6-Dinitrotoluene	165		11.153				ND	
* 93 Acenaphthene-d10	164	11.436	11.436	0.000	95	295784	5.00	
100 2,4-Dinitrotoluene	165		11.765				ND	
105 Diethyl phthalate	149		12.128				ND	7
\$ 114 2,4,6-Tribromophenol	330	12.503	12.503	0.000	92	192521	17.1	
* 128 Phenanthrene-d10	188	13.331	13.331	0.000	97	547395	5.00	
* 141 Pyrene-d10 (IS)	212	15.282	15.282	0.000	98	566762	5.00	
\$ 143 p-Terphenyl-d14	244	15.600	15.599	0.001	97	1219251	11.7	
* 160 Perylene-d12	264	19.763	19.763	0.000	99	524749	5.00	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSS_RV8270_IS_00015

Amount Added: 20.00

Units: uL

Run Reagent

Report Date: 30-Oct-2020 10:56:03

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1307.D

Injection Date: 30-Oct-2020 04:04:30

Instrument ID: HP23264

Operator ID: sw30417

Lims ID: 410-18116-A-4-C

Lab Sample ID: 410-18116-4

Worklist Smp#: 8

Client ID: 16WC1A

Injection Vol: 1.0 ul

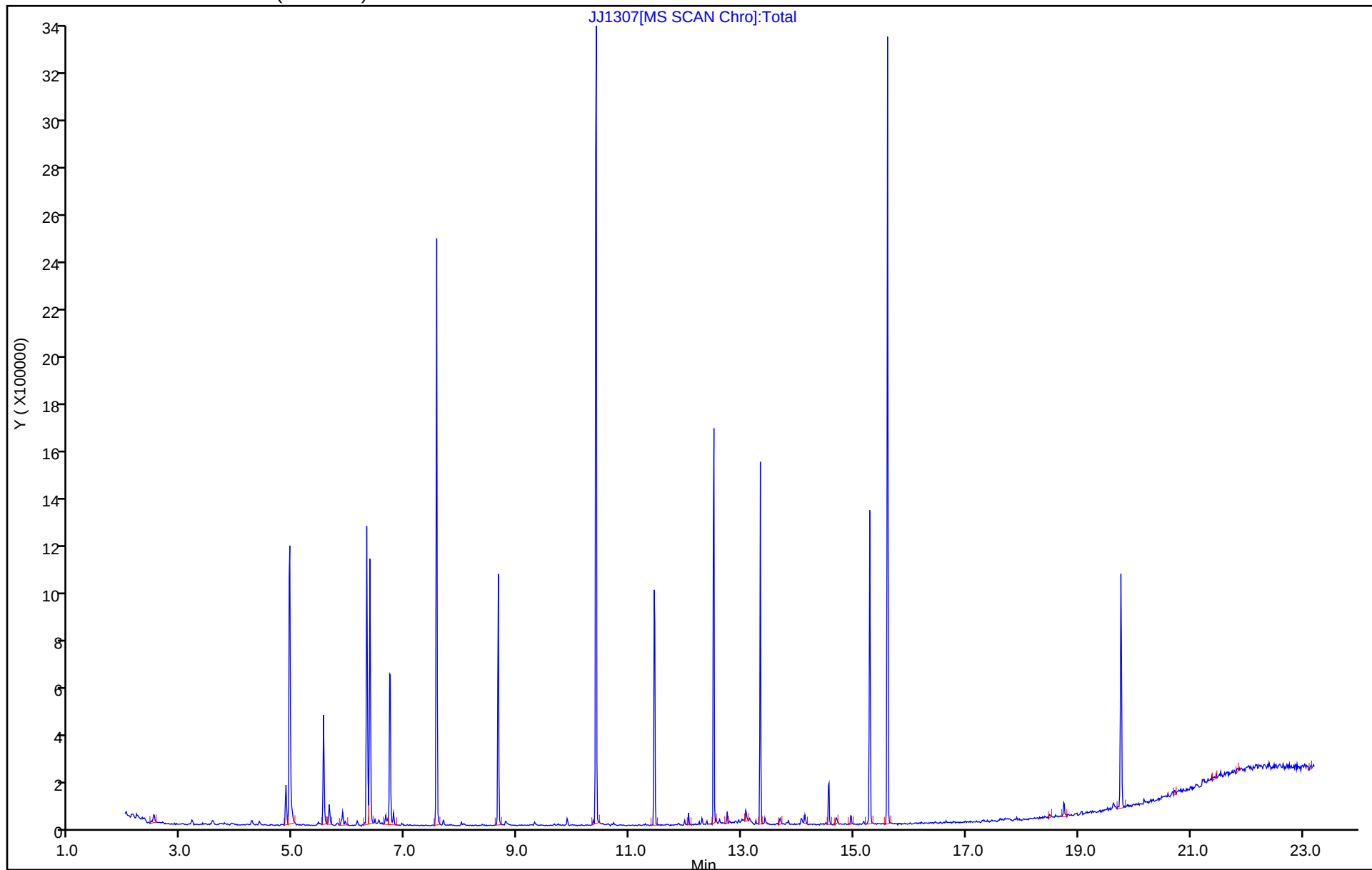
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1307.D
 Lims ID: 410-18116-A-4-C
 Client ID: 16WC1A
 Sample Type: Client
 Inject. Date: 30-Oct-2020 04:04:30 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-4-C
 Misc. Info.: 410-0014245-008
 Operator ID: sw30417 Instrument ID: HP23264
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 30-Oct-2020 10:54:59 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1008

First Level Reviewer: bekk

Date: 30-Oct-2020 10:16:00

Compound	Amount Added	Amount Recovered	% Rec.
\$ 12 2-Fluorophenol	50.2	12.5	24.98
\$ 20 Phenol-d5	50.2	9.96	19.85
\$ 43 Nitrobenzene-d5	25.0	16.5	65.98
\$ 77 2-Fluorobiphenyl (Surr)	25.1	16.2	64.77
\$ 114 2,4,6-Tribromophenol	50.2	17.1	34.09
\$ 143 p-Terphenyl-d14	25.1	11.7	46.48

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16WDUP Lab Sample ID: 410-18116-5
 Matrix: Ground Water Lab File ID: JJ1333.D
 Analysis Method: 8270D Date Collected: 10/22/2020 09:35
 Extract. Method: 3510C Date Extracted: 10/29/2020 09:00
 Sample wt/vol: 249.1 (mL) Date Analyzed: 10/30/2020 17:26
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 60388 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
121-14-2	2,4-Dinitrotoluene	ND		10	
606-20-2	2,6-Dinitrotoluene	ND		10	
84-66-2	Diethyl phthalate	ND		5.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	72		44-102
4165-60-0	Nitrobenzene-d5 (Surr)	76		38-113
1718-51-0	p-Terphenyl-d14 (Surr)	54		34-128

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1333.D
 Lims ID: 410-18116-A-5-A
 Client ID: 16WDUP
 Sample Type: Client
 Inject. Date: 30-Oct-2020 17:26:30 ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-5-A
 Misc. Info.: 410-0014287-014
 Operator ID: knb25316 Instrument ID: HP23264
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 31-Oct-2020 08:24:57 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1002

First Level Reviewer: hartenstine

Date: 31-Oct-2020 08:24:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
\$ 12 2-Fluorophenol	112	4.936	4.925	0.011	93	548439	13.5	
\$ 20 Phenol-d5	99	6.309	6.297	0.012	94	573308	10.3	
* 28 1,4-Dichlorobenzene-d4	152	6.717	6.728	-0.011	98	135093	5.00	
\$ 43 Nitrobenzene-d5	82	7.557	7.568	-0.011	89	1155870	18.9	
* 56 Naphthalene-d8	136	8.657	8.657	0.000	99	537628	5.00	
\$ 77 2-Fluorobiphenyl (Surr)	172	10.404	10.404	0.000	100	1567549	18.1	
90 2,6-Dinitrotoluene	165		11.164				ND	
* 93 Acenaphthene-d10	164	11.437	11.448	-0.011	95	286847	5.00	
100 2,4-Dinitrotoluene	165		11.777				ND	
105 Diethyl phthalate	149		12.128				ND	7
\$ 114 2,4,6-Tribromophenol	330	12.503	12.502	0.000	91	345508	31.6	
* 128 Phenanthrene-d10	188	13.331	13.331	0.000	97	508512	5.00	
* 141 Pyrene-d10 (IS)	212	15.282	15.282	0.000	98	529217	5.00	
\$ 143 p-Terphenyl-d14	244	15.600	15.611	-0.011	97	1323421	13.6	
* 160 Perylene-d12	264	19.763	19.774	-0.011	99	496300	5.00	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSS_RV8270_IS_00015

Amount Added: 20.00

Units: uL

Run Reagent

Report Date: 31-Oct-2020 08:25:35

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1333.D

Injection Date: 30-Oct-2020 17:26:30

Instrument ID: HP23264

Operator ID: knb25316

Lims ID: 410-18116-A-5-A

Lab Sample ID: 410-18116-5

Worklist Smp#: 14

Client ID: 16WDUP

Injection Vol: 1.0 ul

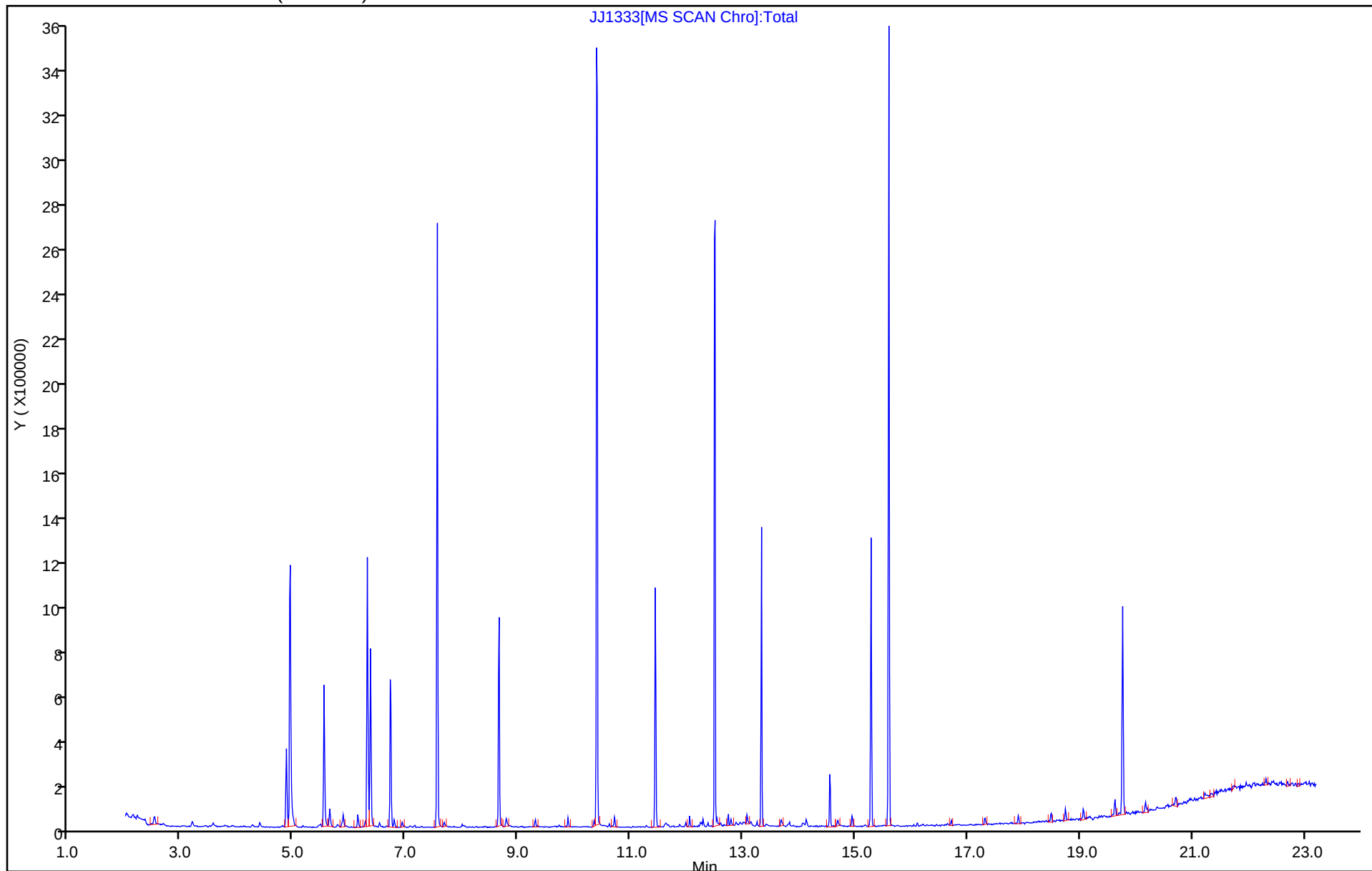
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1333.D
 Lims ID: 410-18116-A-5-A
 Client ID: 16WDUP
 Sample Type: Client
 Inject. Date: 30-Oct-2020 17:26:30 ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-5-A
 Misc. Info.: 410-0014287-014
 Operator ID: knb25316 Instrument ID: HP23264
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 31-Oct-2020 08:24:57 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1002

First Level Reviewer: hartenstinel

Date: 31-Oct-2020 08:24:57

Compound	Amount Added	Amount Recovered	% Rec.
\$ 12 2-Fluorophenol	50.2	13.5	26.81
\$ 20 Phenol-d5	50.2	10.3	20.60
\$ 43 Nitrobenzene-d5	25.0	18.9	75.59
\$ 77 2-Fluorobiphenyl (Surr)	25.1	18.1	72.13
\$ 114 2,4,6-Tribromophenol	50.2	31.6	63.08
\$ 143 p-Terphenyl-d14	25.1	13.6	54.03

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16WC1B Lab Sample ID: 410-18116-6
 Matrix: Ground Water Lab File ID: JJ1334.D
 Analysis Method: 8270D Date Collected: 10/22/2020 08:40
 Extract. Method: 3510C Date Extracted: 10/29/2020 09:00
 Sample wt/vol: 250.1 (mL) Date Analyzed: 10/30/2020 17:56
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 60388 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
121-14-2	2,4-Dinitrotoluene	ND		10	
606-20-2	2,6-Dinitrotoluene	ND		10	
84-66-2	Diethyl phthalate	ND		5.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	76		44-102
4165-60-0	Nitrobenzene-d5 (Surr)	75		38-113
1718-51-0	p-Terphenyl-d14 (Surr)	36		34-128

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1334.D
 Lims ID: 410-18116-A-6-A
 Client ID: 16WC1B
 Sample Type: Client
 Inject. Date: 30-Oct-2020 17:56:30 ALS Bottle#: 15 Worklist Smp#: 15
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-6-A
 Misc. Info.: 410-0014287-015
 Operator ID: knb25316 Instrument ID: HP23264
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 02-Nov-2020 12:10:59 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1009

First Level Reviewer: hartenstine

Date: 02-Nov-2020 12:12:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
\$ 12 2-Fluorophenol	112	4.936	4.925	0.011	92	194038	4.89	
\$ 20 Phenol-d5	99	6.320	6.297	0.023	94	174954	3.24	
* 28 1,4-Dichlorobenzene-d4	152	6.728	6.728	0.000	95	131364	5.00	
\$ 43 Nitrobenzene-d5	82	7.556	7.568	-0.012	91	1061159	18.7	
* 56 Naphthalene-d8	136	8.657	8.657	0.000	99	499401	5.00	
\$ 77 2-Fluorobiphenyl (Surr)	172	10.404	10.404	0.000	99	1540205	18.9	
90 2,6-Dinitrotoluene	165		11.164				ND	
* 93 Acenaphthene-d10	164	11.436	11.448	-0.012	93	269134	5.00	
100 2,4-Dinitrotoluene	165		11.777				ND	
105 Diethyl phthalate	149		12.128				ND	
\$ 114 2,4,6-Tribromophenol	330	12.502	12.502	-0.001	83	56937	5.56	
* 128 Phenanthrene-d10	188	13.331	13.331	0.000	97	458990	5.00	
* 141 Pyrene-d10 (IS)	212	15.282	15.282	0.000	98	474854	5.00	
\$ 143 p-Terphenyl-d14	244	15.599	15.611	-0.012	98	799908	9.14	
* 160 Perylene-d12	264	19.763	19.774	-0.011	99	453514	5.00	s

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

Reagents:

MSS_RV8270_IS_00015

Amount Added: 20.00

Units: uL

Run Reagent

Report Date: 02-Nov-2020 12:13:08

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1334.D

Injection Date: 30-Oct-2020 17:56:30

Instrument ID: HP23264

Operator ID: knb25316

Lims ID: 410-18116-A-6-A

Lab Sample ID: 410-18116-6

Worklist Smp#: 15

Client ID: 16WC1B

Injection Vol: 1.0 ul

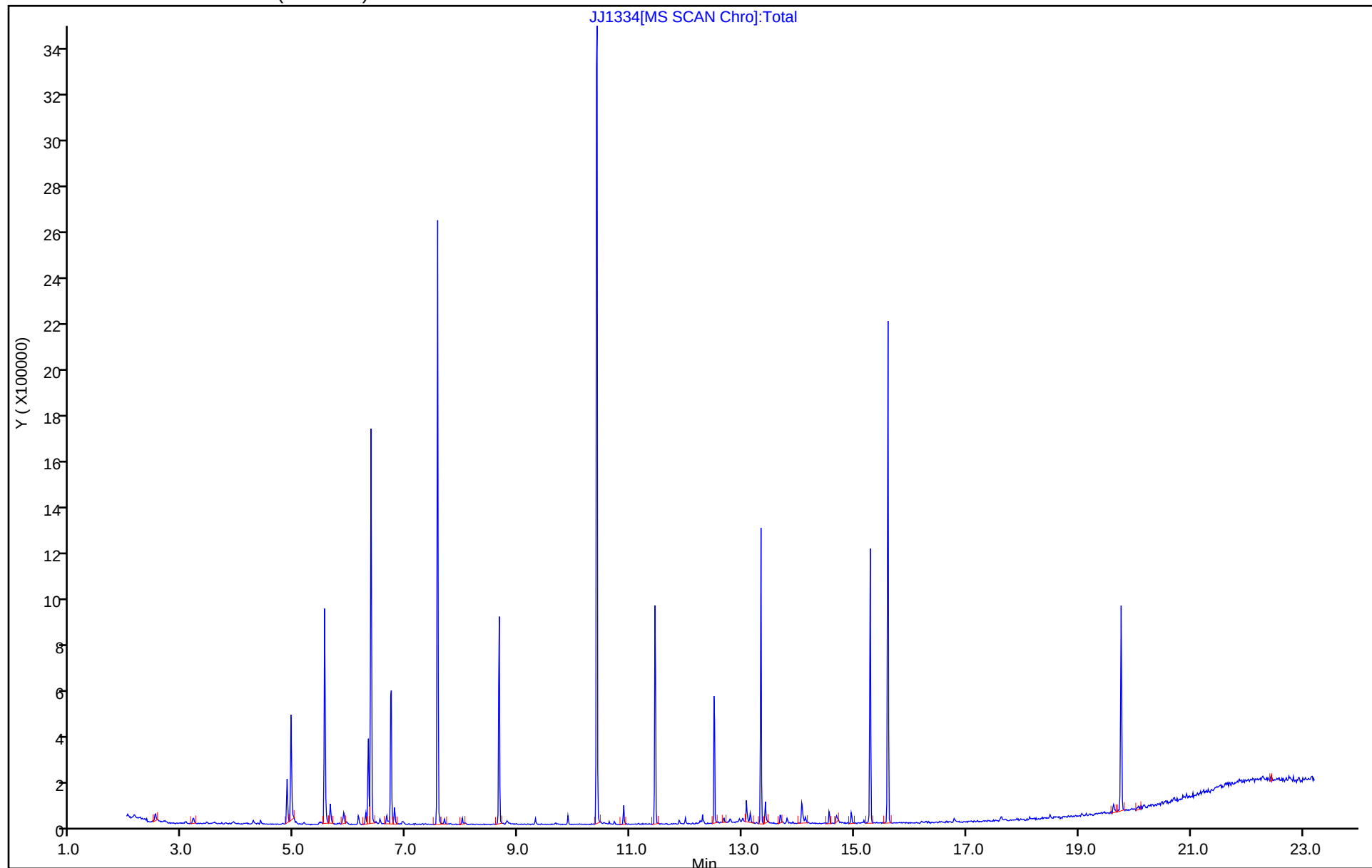
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1334.D
 Lims ID: 410-18116-A-6-A
 Client ID: 16WC1B
 Sample Type: Client
 Inject. Date: 30-Oct-2020 17:56:30 ALS Bottle#: 15 Worklist Smp#: 15
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-6-A
 Misc. Info.: 410-0014287-015
 Operator ID: knb25316 Instrument ID: HP23264
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 02-Nov-2020 12:10:59 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1009

First Level Reviewer: hartenstinel

Date: 02-Nov-2020 12:12:22

Compound	Amount Added	Amount Recovered	% Rec.
\$ 12 2-Fluorophenol	50.2	4.89	9.75
\$ 20 Phenol-d5	50.2	3.24	6.46
\$ 43 Nitrobenzene-d5	25.0	18.7	74.71
\$ 77 2-Fluorobiphenyl (Surr)	25.1	18.9	75.54
\$ 114 2,4,6-Tribromophenol	50.2	5.56	11.08
\$ 143 p-Terphenyl-d14	25.1	9.14	36.40

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16-2 Lab Sample ID: 410-18116-7
 Matrix: Ground Water Lab File ID: LJ1007.D
 Analysis Method: 8270D Date Collected: 10/21/2020 09:55
 Extract. Method: 3510C Date Extracted: 10/28/2020 09:30
 Sample wt/vol: 248.7(mL) Date Analyzed: 10/28/2020 20:01
 Con. Extract Vol.: 1(mL) Dilution Factor: 1
 Injection Volume: 1(uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 59610 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
121-14-2	2,4-Dinitrotoluene	ND		10	
606-20-2	2,6-Dinitrotoluene	ND		10	
84-66-2	Diethyl phthalate	ND		5.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	67		44-102
4165-60-0	Nitrobenzene-d5 (Surr)	74		38-113
1718-51-0	p-Terphenyl-d14 (Surr)	87		34-128

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1007.D
 Lims ID: 410-18116-A-7-A
 Client ID: 16-2
 Sample Type: Client
 Inject. Date: 28-Oct-2020 20:01:23 ALS Bottle#: 0 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-7-A
 Misc. Info.: 410-0014101-008
 Operator ID: kel10217 Instrument ID: HP20296
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 28-Oct-2020 23:23:55 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: luttek

Date: 28-Oct-2020 20:43:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
\$ 10 2-Fluorophenol	112	5.054	5.050	0.000	93	1354795	23.8	
\$ 16 Phenol-d5	99	6.455	6.445	0.005	98	1343315	19.3	
* 24 1,4-Dichlorobenzene-d4	152	6.931	6.937	-0.006	97	177041	5.00	
\$ 41 Nitrobenzene-d5	82	7.787	7.787	-0.005	86	1277684	18.4	
* 55 Naphthalene-d8	136	8.915	8.921	-0.006	99	654599	5.00	
\$ 76 2-Fluorobiphenyl (Surr)	172	10.702	10.702	-0.005	99	1767605	16.8	
88 2,6-Dinitrotoluene	165		11.472				ND	7
* 92 Acenaphthene-d10	164	11.745	11.756	-0.011	97	321632	5.00	
99 2,4-Dinitrotoluene	165		12.050				ND	
104 Diethyl phthalate	149		12.398				ND	7
\$ 113 2,4,6-Tribromophenol	330	12.788	12.787	-0.005	94	670201	46.7	
* 127 Phenanthrene-d10	188	13.676	13.681	-0.005	98	617118	5.00	
* 140 Pyrene-d10 (IS)	212	15.719	15.724	-0.005	98	622319	5.00	
\$ 142 p-Terphenyl-d14	244	16.040	16.034	0.000	98	2730819	22.0	
* 159 Perylene-d12	264	20.303	20.314	-0.011	97	659189	5.00	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSS_RV8270_IS_00015

Amount Added: 20.00

Units: uL

Run Reagent

Report Date: 28-Oct-2020 23:24:18

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1007.D

Injection Date: 28-Oct-2020 20:01:23

Instrument ID: HP20296

Operator ID: kel10217

Lims ID: 410-18116-A-7-A

Lab Sample ID: 410-18116-7

Worklist Smp#: 8

Client ID: 16-2

Injection Vol: 1.0 ul

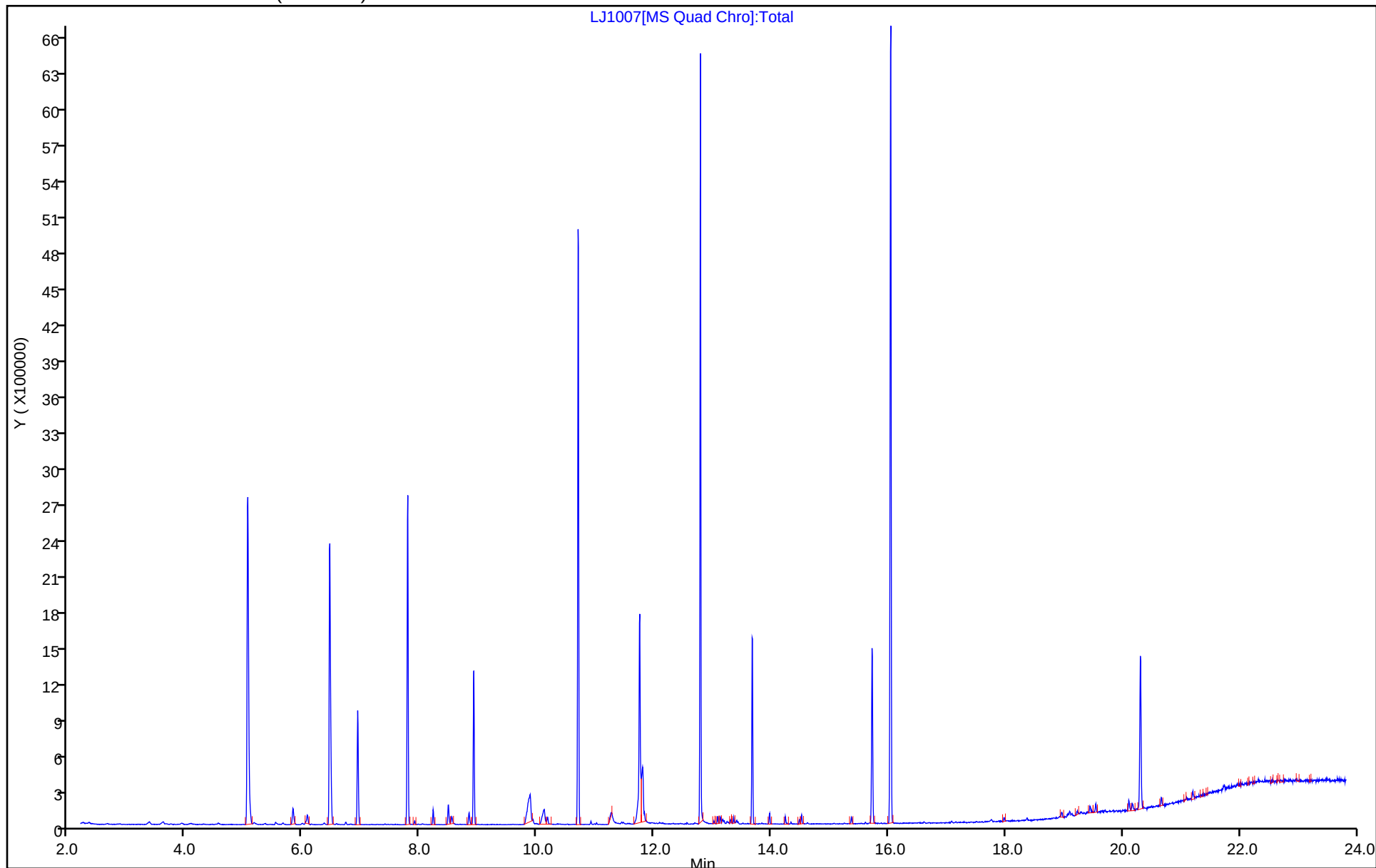
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1007.D
 Lims ID: 410-18116-A-7-A
 Client ID: 16-2
 Sample Type: Client
 Inject. Date: 28-Oct-2020 20:01:23 ALS Bottle#: 0 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-7-A
 Misc. Info.: 410-0014101-008
 Operator ID: kel10217 Instrument ID: HP20296
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 28-Oct-2020 23:23:55 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: luttek

Date: 28-Oct-2020 20:43:00

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 2-Fluorophenol	50.2	23.8	47.36
\$ 16 Phenol-d5	50.2	19.3	38.51
\$ 41 Nitrobenzene-d5	25.0	18.4	73.68
\$ 76 2-Fluorobiphenyl (Surr)	25.1	16.8	66.87
\$ 113 2,4,6-Tribromophenol	50.2	46.7	93.09
\$ 142 p-Terphenyl-d14	25.1	22.0	87.48

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16-3 Lab Sample ID: 410-18116-8
 Matrix: Ground Water Lab File ID: LJ1008.D
 Analysis Method: 8270D Date Collected: 10/21/2020 11:15
 Extract. Method: 3510C Date Extracted: 10/28/2020 09:30
 Sample wt/vol: 250.3(mL) Date Analyzed: 10/28/2020 20:30
 Con. Extract Vol.: 1(mL) Dilution Factor: 1
 Injection Volume: 1(uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 59610 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
121-14-2	2,4-Dinitrotoluene	ND		10	
606-20-2	2,6-Dinitrotoluene	ND		10	
84-66-2	Diethyl phthalate	ND		5.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	77		44-102
4165-60-0	Nitrobenzene-d5 (Surr)	84		38-113
1718-51-0	p-Terphenyl-d14 (Surr)	86		34-128

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1008.D
 Lims ID: 410-18116-A-8-A
 Client ID: 16-3
 Sample Type: Client
 Inject. Date: 28-Oct-2020 20:30:36 ALS Bottle#: 0 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-8-A
 Misc. Info.: 410-0014101-009
 Operator ID: kel10217 Instrument ID: HP20296
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 28-Oct-2020 23:23:55 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: luttek

Date: 28-Oct-2020 22:20:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
\$ 10 2-Fluorophenol	112	5.048	5.050	-0.006	94	1437548	25.7	
\$ 16 Phenol-d5	99	6.450	6.445	0.000	98	1350123	19.8	
* 24 1,4-Dichlorobenzene-d4	152	6.931	6.937	-0.006	97	173803	5.00	
\$ 41 Nitrobenzene-d5	82	7.787	7.787	-0.005	86	1461231	21.0	
* 55 Naphthalene-d8	136	8.915	8.921	-0.006	99	658644	5.00	
\$ 76 2-Fluorobiphenyl (Surr)	172	10.702	10.702	-0.005	99	1982122	19.3	
88 2,6-Dinitrotoluene	165		11.472				ND	7
* 92 Acenaphthene-d10	164	11.745	11.756	-0.011	98	313394	5.00	
99 2,4-Dinitrotoluene	165		12.050				ND	
104 Diethyl phthalate	149		12.398				ND	7
\$ 113 2,4,6-Tribromophenol	330	12.788	12.787	-0.005	93	676944	48.4	
* 127 Phenanthrene-d10	188	13.676	13.681	-0.005	98	609569	5.00	
* 140 Pyrene-d10 (IS)	212	15.719	15.724	-0.005	98	618005	5.00	
\$ 142 p-Terphenyl-d14	244	16.040	16.034	0.000	98	2669189	21.6	
* 159 Perylene-d12	264	20.303	20.314	-0.011	97	643840	5.00	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSS_RV8270_IS_00015

Amount Added: 20.00

Units: uL

Run Reagent

Report Date: 28-Oct-2020 23:24:23

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1008.D

Injection Date: 28-Oct-2020 20:30:36

Instrument ID: HP20296

Operator ID: kel10217

Lims ID: 410-18116-A-8-A

Lab Sample ID: 410-18116-8

Worklist Smp#: 9

Client ID: 16-3

Injection Vol: 1.0 ul

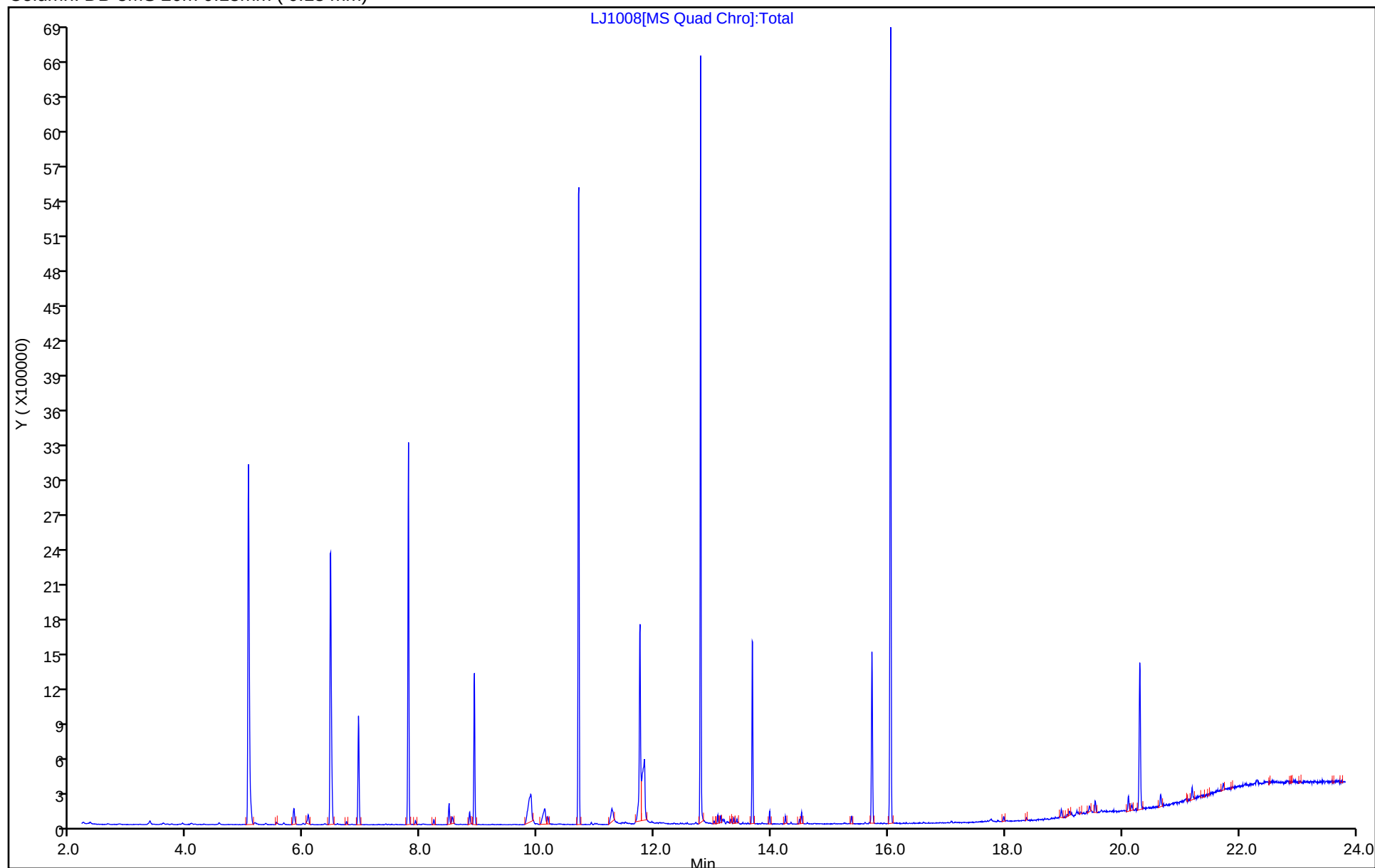
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1008.D
 Lims ID: 410-18116-A-8-A
 Client ID: 16-3
 Sample Type: Client
 Inject. Date: 28-Oct-2020 20:30:36 ALS Bottle#: 0 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-8-A
 Misc. Info.: 410-0014101-009
 Operator ID: kel10217 Instrument ID: HP20296
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 28-Oct-2020 23:23:55 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: luttek

Date: 28-Oct-2020 22:20:07

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 2-Fluorophenol	50.2	25.7	51.19
\$ 16 Phenol-d5	50.2	19.8	39.43
\$ 41 Nitrobenzene-d5	25.0	21.0	83.75
\$ 76 2-Fluorobiphenyl (Surr)	25.1	19.3	76.96
\$ 113 2,4,6-Tribromophenol	50.2	48.4	96.50
\$ 142 p-Terphenyl-d14	25.1	21.6	86.10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16-5 Lab Sample ID: 410-18116-9
 Matrix: Ground Water Lab File ID: LJ1009.D
 Analysis Method: 8270D Date Collected: 10/21/2020 08:30
 Extract. Method: 3510C Date Extracted: 10/28/2020 09:30
 Sample wt/vol: 248.9(mL) Date Analyzed: 10/28/2020 20:59
 Con. Extract Vol.: 1(mL) Dilution Factor: 1
 Injection Volume: 1(uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 59610 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
121-14-2	2,4-Dinitrotoluene	ND		10	
606-20-2	2,6-Dinitrotoluene	ND		10	
84-66-2	Diethyl phthalate	ND		5.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	75		44-102
4165-60-0	Nitrobenzene-d5 (Surr)	84		38-113
1718-51-0	p-Terphenyl-d14 (Surr)	90		34-128

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1009.D
 Lims ID: 410-18116-A-9-A
 Client ID: 16-5
 Sample Type: Client
 Inject. Date: 28-Oct-2020 20:59:45 ALS Bottle#: 0 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-9-A
 Misc. Info.: 410-0014101-010
 Operator ID: kel10217 Instrument ID: HP20296
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 28-Oct-2020 23:23:55 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: luttek

Date: 28-Oct-2020 22:20:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
\$ 10 2-Fluorophenol	112	5.048	5.050	-0.006	93	1322470	25.6	
\$ 16 Phenol-d5	99	6.450	6.445	0.000	98	1300005	20.6	
* 24 1,4-Dichlorobenzene-d4	152	6.931	6.937	-0.006	96	160373	5.00	
\$ 41 Nitrobenzene-d5	82	7.787	7.787	-0.005	86	1369263	21.1	
* 55 Naphthalene-d8	136	8.915	8.921	-0.006	99	614391	5.00	
\$ 76 2-Fluorobiphenyl (Surr)	172	10.702	10.702	-0.005	99	1869310	18.8	
88 2,6-Dinitrotoluene	165		11.472				ND	
* 92 Acenaphthene-d10	164	11.745	11.756	-0.011	97	302702	5.00	
99 2,4-Dinitrotoluene	165		12.050				ND	
104 Diethyl phthalate	149		12.398				ND	7
\$ 113 2,4,6-Tribromophenol	330	12.788	12.787	-0.005	94	646584	47.9	
* 127 Phenanthrene-d10	188	13.670	13.681	-0.011	97	578227	5.00	
* 140 Pyrene-d10 (IS)	212	15.719	15.724	-0.005	99	586506	5.00	
\$ 142 p-Terphenyl-d14	244	16.040	16.034	0.000	98	2662216	22.7	
* 159 Perylene-d12	264	20.308	20.314	-0.006	98	603566	5.00	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSS_RV8270_IS_00015

Amount Added: 20.00

Units: uL

Run Reagent

Report Date: 28-Oct-2020 23:24:27

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1009.D

Injection Date: 28-Oct-2020 20:59:45

Instrument ID: HP20296

Operator ID: kel10217

Lims ID: 410-18116-A-9-A

Lab Sample ID: 410-18116-9

Worklist Smp#: 10

Client ID: 16-5

Injection Vol: 1.0 ul

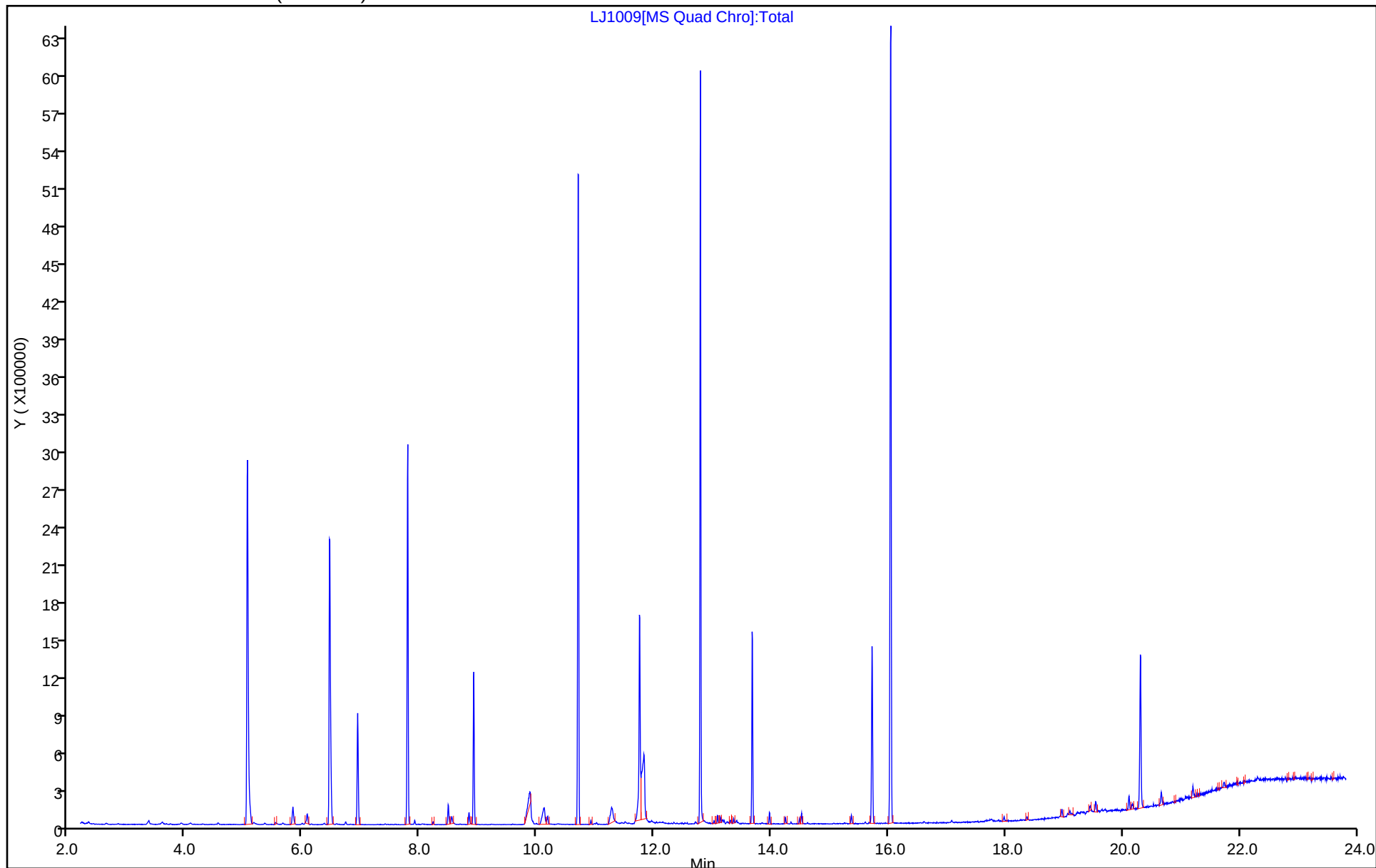
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1009.D
 Lims ID: 410-18116-A-9-A
 Client ID: 16-5
 Sample Type: Client
 Inject. Date: 28-Oct-2020 20:59:45 ALS Bottle#: 0 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-9-A
 Misc. Info.: 410-0014101-010
 Operator ID: kel10217 Instrument ID: HP20296
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 28-Oct-2020 23:23:55 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: luttek

Date: 28-Oct-2020 22:20:29

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 2-Fluorophenol	50.2	25.6	51.04
\$ 16 Phenol-d5	50.2	20.6	41.15
\$ 41 Nitrobenzene-d5	25.0	21.1	84.13
\$ 76 2-Fluorobiphenyl (Surr)	25.1	18.8	75.14
\$ 113 2,4,6-Tribromophenol	50.2	47.9	95.42
\$ 142 p-Terphenyl-d14	25.1	22.7	90.49

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16WC2B Lab Sample ID: 410-18116-10
 Matrix: Ground Water Lab File ID: LJ1010.D
 Analysis Method: 8270D Date Collected: 10/21/2020 09:20
 Extract. Method: 3510C Date Extracted: 10/28/2020 09:30
 Sample wt/vol: 249(mL) Date Analyzed: 10/28/2020 21:28
 Con. Extract Vol.: 1(mL) Dilution Factor: 1
 Injection Volume: 1(uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 59610 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
121-14-2	2,4-Dinitrotoluene	ND		10	
606-20-2	2,6-Dinitrotoluene	ND		10	
84-66-2	Diethyl phthalate	ND		5.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	73		44-102
4165-60-0	Nitrobenzene-d5 (Surr)	78		38-113
1718-51-0	p-Terphenyl-d14 (Surr)	89		34-128

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1010.D
 Lims ID: 410-18116-A-10-A
 Client ID: 16WC2B
 Sample Type: Client
 Inject. Date: 28-Oct-2020 21:28:47 ALS Bottle#: 0 Worklist Smp#: 11
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-10-A
 Misc. Info.: 410-0014101-011
 Operator ID: kel10217 Instrument ID: HP20296
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 28-Oct-2020 23:23:55 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: luttek

Date: 28-Oct-2020 22:21:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
\$ 10 2-Fluorophenol	112	5.048	5.050	-0.006	94	1276134	24.6	
\$ 16 Phenol-d5	99	6.455	6.445	0.005	98	1242413	19.6	
* 24 1,4-Dichlorobenzene-d4	152	6.931	6.937	-0.006	96	161297	5.00	
\$ 41 Nitrobenzene-d5	82	7.787	7.787	-0.005	87	1264556	19.4	
* 55 Naphthalene-d8	136	8.916	8.921	-0.005	99	615299	5.00	
\$ 76 2-Fluorobiphenyl (Surr)	172	10.702	10.702	-0.005	99	1798875	18.4	
88 2,6-Dinitrotoluene	165		11.472				ND	U
* 92 Acenaphthene-d10	164	11.750	11.756	-0.006	98	297954	5.00	
99 2,4-Dinitrotoluene	165		12.050				ND	7
104 Diethyl phthalate	149		12.398				ND	7
\$ 113 2,4,6-Tribromophenol	330	12.788	12.787	-0.005	93	644194	48.5	
* 127 Phenanthrene-d10	188	13.670	13.681	-0.011	98	566938	5.00	
* 140 Pyrene-d10 (IS)	212	15.719	15.724	-0.005	98	586155	5.00	
\$ 142 p-Terphenyl-d14	244	16.040	16.034	0.000	98	2612155	22.3	
* 159 Perylene-d12	264	20.303	20.314	-0.011	97	617317	5.00	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSS_RV8270_IS_00015

Amount Added: 20.00

Units: uL

Run Reagent

Report Date: 28-Oct-2020 23:24:32

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1010.D

Injection Date: 28-Oct-2020 21:28:47

Instrument ID: HP20296

Operator ID: kel10217

Lims ID: 410-18116-A-10-A

Lab Sample ID: 410-18116-10

Worklist Smp#: 11

Client ID: 16WC2B

Injection Vol: 1.0 ul

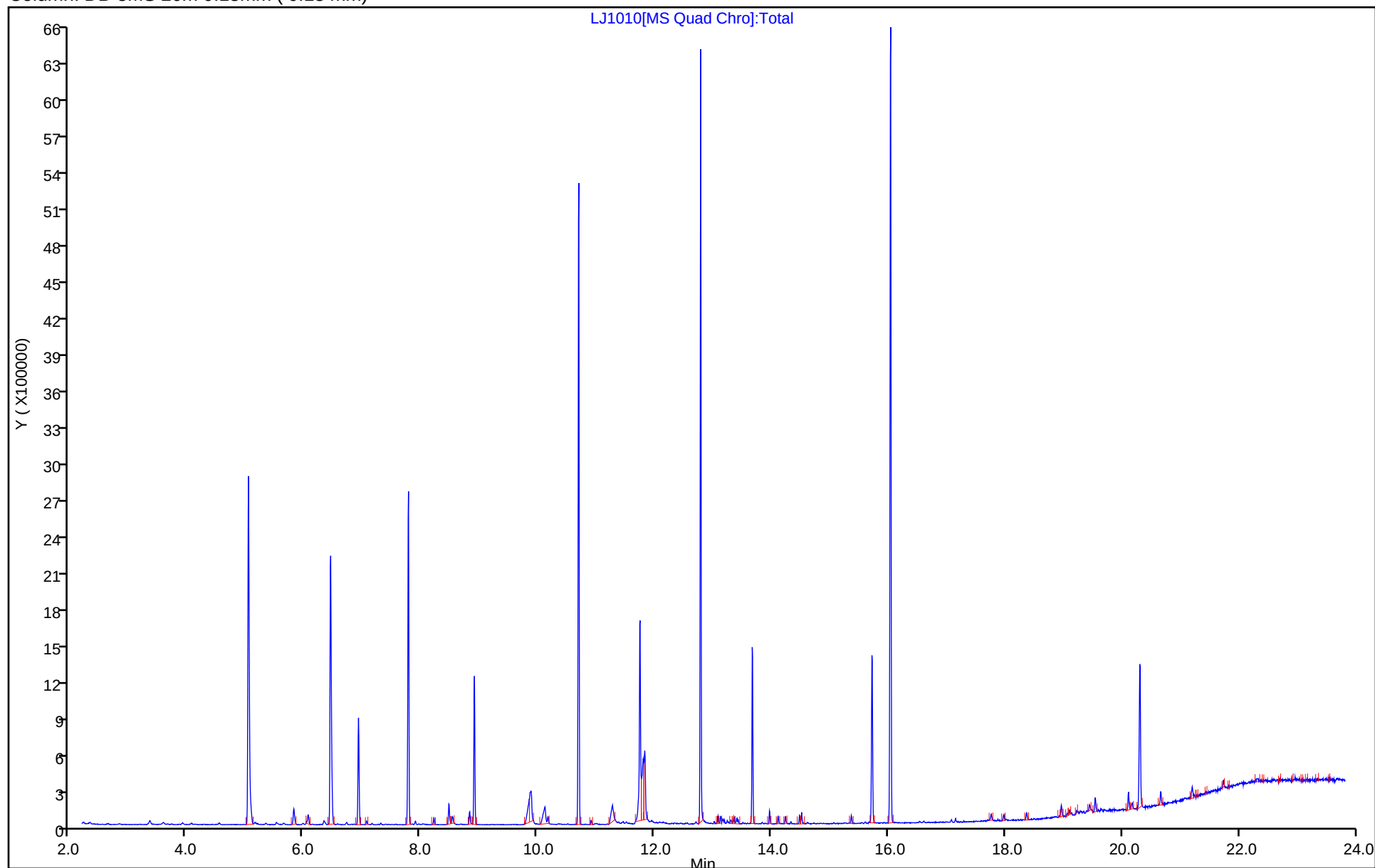
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1010.D
 Lims ID: 410-18116-A-10-A
 Client ID: 16WC2B
 Sample Type: Client
 Inject. Date: 28-Oct-2020 21:28:47 ALS Bottle#: 0 Worklist Smp#: 11
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-10-A
 Misc. Info.: 410-0014101-011
 Operator ID: kel10217 Instrument ID: HP20296
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 28-Oct-2020 23:23:55 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: luttek

Date: 28-Oct-2020 22:21:02

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 2-Fluorophenol	50.2	24.6	48.97
\$ 16 Phenol-d5	50.2	19.6	39.10
\$ 41 Nitrobenzene-d5	25.0	19.4	77.58
\$ 76 2-Fluorobiphenyl (Surr)	25.1	18.4	73.46
\$ 113 2,4,6-Tribromophenol	50.2	48.5	96.59
\$ 142 p-Terphenyl-d14	25.1	22.3	88.84

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1010.D

Injection Date: 28-Oct-2020 21:28:47

Instrument ID: HP20296

Lims ID: 410-18116-A-10-A

Lab Sample ID: 410-18116-10

Client ID: 16WC2B

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 11

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

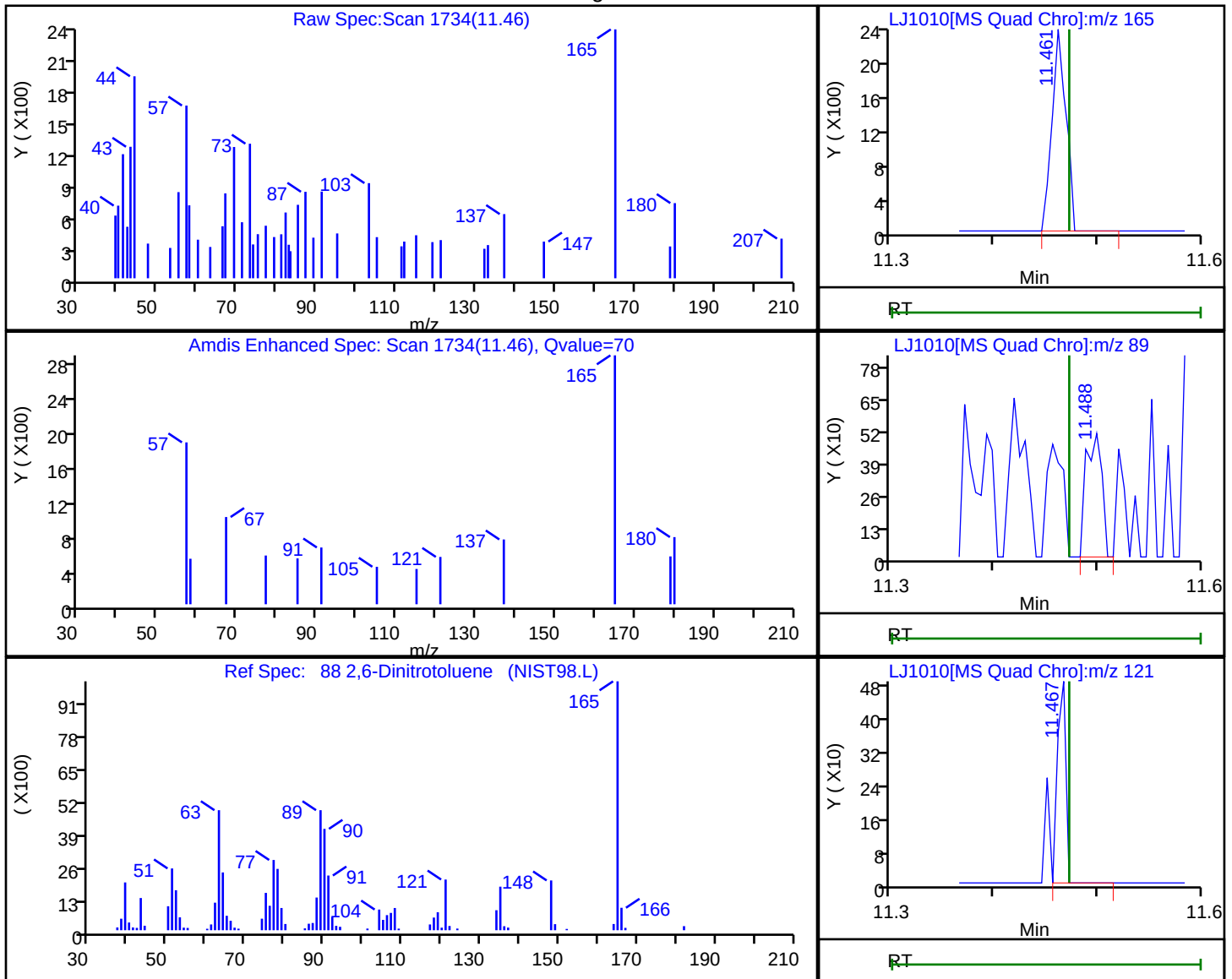
Column: DB-5MS 20m 0.18mm (0.18 mm)

Detector

MS SCAN

88 2,6-Dinitrotoluene, CAS: 606-20-2

Processing Results



RT	Mass	Response	Amount
11.46	165.00	2220	0.118468
11.49	89.00	536	
11.47	121.00	270	
11.47	63.00	0	

Reviewer: luttek, 28-Oct-2020 22:20:51

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: 16SPRING Lab Sample ID: 410-18116-11
 Matrix: Ground Water Lab File ID: LJ1011.D
 Analysis Method: 8270D Date Collected: 10/21/2020 08:40
 Extract. Method: 3510C Date Extracted: 10/28/2020 09:30
 Sample wt/vol: 246(mL) Date Analyzed: 10/28/2020 21:57
 Con. Extract Vol.: 1(mL) Dilution Factor: 1
 Injection Volume: 1(uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 59610 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
121-14-2	2,4-Dinitrotoluene	ND		10	
606-20-2	2,6-Dinitrotoluene	ND		10	
84-66-2	Diethyl phthalate	ND		5.1	

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	77		44-102
4165-60-0	Nitrobenzene-d5 (Surr)	82		38-113
1718-51-0	p-Terphenyl-d14 (Surr)	91		34-128

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1011.D
 Lims ID: 410-18116-A-11-A
 Client ID: 16SPRING
 Sample Type: Client
 Inject. Date: 28-Oct-2020 21:57:59 ALS Bottle#: 0 Worklist Smp#: 12
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-11-A
 Misc. Info.: 410-0014101-012
 Operator ID: kel10217 Instrument ID: HP20296
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 28-Oct-2020 23:23:55 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: luttek

Date: 28-Oct-2020 23:23:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/ml	Flags
\$ 10 2-Fluorophenol	112	5.054	5.050	0.000	93	1377419	25.4	
\$ 16 Phenol-d5	99	6.455	6.445	0.005	98	1314065	19.9	
* 24 1,4-Dichlorobenzene-d4	152	6.931	6.937	-0.006	97	168510	5.00	
\$ 41 Nitrobenzene-d5	82	7.787	7.787	-0.005	86	1379030	20.6	
* 55 Naphthalene-d8	136	8.916	8.921	-0.005	99	632040	5.00	
\$ 76 2-Fluorobiphenyl (Surr)	172	10.702	10.702	-0.005	99	1873758	19.2	
88 2,6-Dinitrotoluene	165		11.472				ND	
* 92 Acenaphthene-d10	164	11.750	11.756	-0.006	97	297714	5.00	
99 2,4-Dinitrotoluene	165		12.050				ND	7
104 Diethyl phthalate	149		12.398				ND	7
\$ 113 2,4,6-Tribromophenol	330	12.788	12.787	-0.005	94	618631	46.6	
* 127 Phenanthrene-d10	188	13.671	13.681	-0.011	97	584910	5.00	
* 140 Pyrene-d10 (IS)	212	15.719	15.724	-0.005	98	582458	5.00	
\$ 142 p-Terphenyl-d14	244	16.040	16.034	0.000	98	2662682	22.9	
* 159 Perylene-d12	264	20.303	20.314	-0.011	98	606107	5.00	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSS_RV8270_IS_00015

Amount Added: 20.00

Units: uL

Run Reagent

Report Date: 28-Oct-2020 23:24:33

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1011.D

Injection Date: 28-Oct-2020 21:57:59

Instrument ID: HP20296

Operator ID: kel10217

Lims ID: 410-18116-A-11-A

Lab Sample ID: 410-18116-11

Worklist Smp#: 12

Client ID: 16SPRING

Injection Vol: 1.0 ul

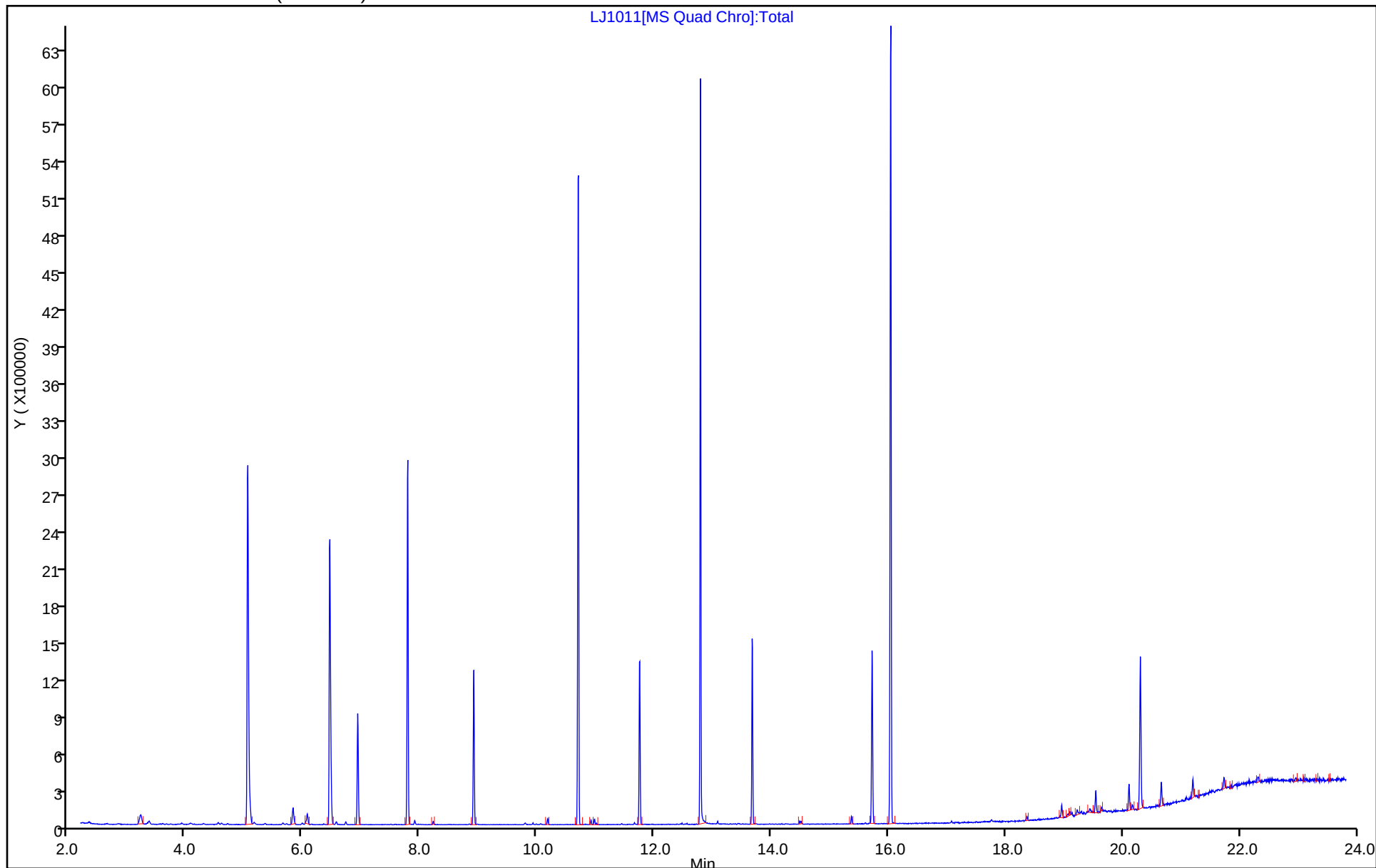
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1011.D
 Lims ID: 410-18116-A-11-A
 Client ID: 16SPRING
 Sample Type: Client
 Inject. Date: 28-Oct-2020 21:57:59 ALS Bottle#: 0 Worklist Smp#: 12
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-11-A
 Misc. Info.: 410-0014101-012
 Operator ID: kel10217 Instrument ID: HP20296
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 28-Oct-2020 23:23:55 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: luttek

Date: 28-Oct-2020 23:23:26

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 2-Fluorophenol	50.2	25.4	50.59
\$ 16 Phenol-d5	50.2	19.9	39.58
\$ 41 Nitrobenzene-d5	25.0	20.6	82.36
\$ 76 2-Fluorobiphenyl (Surr)	25.1	19.2	76.58
\$ 113 2,4,6-Tribromophenol	50.2	46.6	92.83
\$ 142 p-Terphenyl-d14	25.1	22.9	91.13

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 55998

SDG No.: _____

Instrument ID: HP20296 GC Column: DB-5MS 20m ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2020 17:17 Calibration End Date: 10/19/2020 21:03 Calibration ID: 13801

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-55998/3	LJ0702.D
Level 2	IC 410-55998/9	LJ0708.D
Level 3	IC 410-55998/8	LJ0707.D
Level 4	IC 410-55998/7	LJ0706.D
Level 5	ICIS 410-55998/2	LJ0701.D
Level 6	IC 410-55998/6	LJ0705.D
Level 7	IC 410-55998/5	LJ0704.D
Level 8	IC 410-55998/4	LJ0703.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	++++ 0.7110	++++ 0.7500	0.6993 0.7521	0.6684	0.6761	Ave		0.7095				5.0		20.0			
N-Nitrosodimethylamine	++++ 1.1766	++++ 1.1772	1.0964 1.1754	1.1175	1.0869	Ave		1.1383				3.8		20.0			
Pyridine	++++ 2.0810	++++ 2.0331	2.0462 2.0803	1.8625	1.9070	Ave		2.0017				4.7		20.0			
2-Picoline	++++ 2.0469	++++ 2.0643	2.0561 2.0727	2.0652	1.9645	Ave		2.0450				2.0		20.0			
N-Nitrosomethylethylamine	++++ 0.8400	++++ 0.8249	0.8236 0.8455	0.8302	0.7910	Ave		0.8259				2.3		20.0			
Methyl methanesulfonate	++++ 0.9833	++++ 0.9639	0.9743 0.9891	0.9829	0.9415	Ave		0.9725				1.8		20.0			
N-Nitrosodiethylamine	++++ 0.7999	0.5778 0.8022	0.7529 0.8139	0.7720	0.7425	Ave		0.7516			10.8			20.0			
Ethyl methanesulfonate	++++ 0.8441	0.6856 0.8724	0.8356 0.8804	0.8738	0.8427	Ave		0.8335				8.1		20.0			
Benzaldehyde	++++ 1.6033	1.3251 1.4562	1.7357 1.3076	1.5861	1.6151	Ave		1.5184		0.0100	10.6			20.0			
Phenol	++++ 2.5509	2.4486 2.5057	2.5045 2.5374	2.5482	2.4331	Ave		2.5040		0.8000	1.9			20.0			
Aniline	++++ 3.0049	2.8231 2.9081	2.9405 2.9775	2.9311	2.8209	Ave		2.9152			2.4			20.0			
Bis(2-chloroethyl)ether	++++ 1.9294	1.8152 1.8784	1.9180 1.9311	1.9004	1.8333	Ave		1.8865		0.7000	2.5			20.0			
2-Chlorophenol	++++ 1.4912	1.1890 1.4963	1.4108 1.5455	1.4612	1.4200	Ave		1.4306		0.8000	8.1			20.0			
1,3-Dichlorobenzene	++++ 1.6080	1.5397 1.5803	1.6064 1.6062	1.6145	1.5656	Ave		1.5887			1.8			20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 55998

SDG No.: _____

Instrument ID: HP20296 GC Column: DB-5MS 20m ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2020 17:17 Calibration End Date: 10/19/2020 21:03 Calibration ID: 13801

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dichlorobenzene	++++ 1.6297	1.5450 1.5914	1.6277 1.6305	1.6280	1.6070	Ave		1.6085				2.0		20.0			
Benzyl alcohol	++++ 1.1497	1.1492	1.0635 1.1599	1.0942	1.1242	Ave		1.1234				3.4		20.0			
1,2-Dichlorobenzene	++++ 1.5483	1.5027 1.5290	1.6327 1.5572	1.5337	1.5070	Ave		1.5444				2.8		20.0			
Indene	++++ 2.4648	2.3369 2.4949	2.3867 2.5011	2.3867	2.4625	Ave		2.4411				2.7		20.0			
2-Methylphenol	++++ 1.5686	1.3415 1.5484	1.5306 1.6078	1.5180	1.5451	Ave		1.5229			0.7000	5.6		20.0			
2,2'-oxybis[1-chloropropane]	++++ 1.6226	1.6134 1.5936	1.6845 1.6494	1.6283	1.5925	Ave		1.6263			0.0100	2.0		20.0			
N-Nitrosopyrrolidine	++++ 0.8583	0.7457 0.8675	0.7648 0.8941	0.8250	0.8069	Ave		0.8232				6.6		20.0			
Acetophenone	++++ 2.6231	1.9790 2.6124	2.8087 2.6422	2.5813	2.6367	Ave		2.5548			0.0100	10.3		20.0			
4-Methylphenol (and/or 3-Methylphenol)	++++ 1.8510	1.4762 1.7790	1.5725 1.8243	1.7819	1.7426	Ave		1.7182			0.6000	8.1		20.0			
N-Nitrosodi-n-propylamine	++++ 1.4237	1.1604 1.4118	1.4435 1.4378	1.4479	1.3491	Ave		1.3820			0.5000	7.5		20.0			
N-Nitrosomorpholine	++++ 0.9199	0.9369 0.8918	0.8899 0.8972	0.8899	0.8562	Ave		0.8987				3.1		20.0			
o-Toluidine	++++ 2.8363	2.6000 2.7326	2.7875 2.7795	2.7373	2.6909	Ave		2.7377				2.8		20.0			
Hexachloroethane	++++ 0.7953	0.7922	0.7833 0.8005	0.7772	0.7788	Ave		0.7879			0.3000	1.2		20.0			
Nitrobenzene	++++ 0.5704	0.4770 0.5579	0.5546 0.5617	0.5601	0.5429	Ave		0.5463			0.2000	5.8		20.0			
N-Nitrosopiperidine	++++ 0.2064	0.2008 0.2039	0.1895 0.2072	0.2026	0.1938	Ave		0.2006				3.3		20.0			
Isophorone	++++ 0.9804	0.8263 0.9699	0.9268 0.9833	0.9508	0.9296	Ave		0.9382			0.4000	5.8		20.0			
2-Nitrophenol	0.0906 0.1593	0.0993 0.1619	0.1233 0.1580	0.1419	0.1290	Lin1	-0.014	0.1562			0.1000				0.9960		0.9900
2,4-Dimethylphenol	++++ 0.4691	0.3935 0.4664	0.4299 0.4693	0.4525	0.4422	Ave		0.4461			0.2000	6.2		20.0			
o,o',o''-Triethylphosphorothioate	++++ 0.1832	0.1840 0.1869	0.1756 0.1884	0.1737	0.1736	Ave		0.1808				3.5		20.0			
Benzoic acid	++++ 0.2239	0.1097 0.2302	0.1097 0.2392	0.1647	0.1908	Lin	-0.612	0.2603							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 55998

SDG No.: _____

Instrument ID: HP20296 GC Column: DB-5MS 20m ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2020 17:17 Calibration End Date: 10/19/2020 21:03 Calibration ID: 13801

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Bis(2-chloroethoxy)methane	++++ 0.6207	0.5689 0.6206	0.6139 0.5979	0.6231	0.5967	Ave		0.6060			0.3000	3.2		20.0			
2,4-Dichlorophenol	++++ 0.3151	0.1957 0.3084	0.2795 0.3156	0.2943	0.2846	Ave		0.2848			0.2000	14.7		20.0			
1,2,4-Trichlorobenzene	++++ 0.3481	0.3474 0.3441	0.3394 0.3444	0.3508	0.3323	Ave		0.3438				1.8		20.0			
Naphthalene	1.1276 1.1189	1.0481 1.0927	1.1184 1.1102	1.1239	1.0739	Ave		1.1017			0.7000	2.6		20.0			
4-Chloroaniline	++++ 0.4734	0.4063 0.4592	0.4399 0.4653	0.4739	0.4375	Ave		0.4508			0.0100	5.4		20.0			
2,6-Dichlorophenol	++++ 0.2936	0.2333 0.2933	0.2655 0.2972	0.2806	0.2768	Ave		0.2772				8.1		20.0			
Hexachloropropene	++++ 0.2141	++++ 0.2161	0.1952 0.2154	0.2045	0.1930	Ave		0.2064				5.0		20.0			
Hexachlorobutadiene	++++ 0.2042	0.1999 0.2049	0.2101 0.2062	0.2103	0.1994	Ave		0.2050			0.0100	2.1		20.0			
Quinoline	++++ 0.6882	++++ 0.6742	0.6341 0.6764	0.6559	0.6520	Ave		0.6635				3.0		20.0			
Caprolactam	++++ 0.1170	++++ 0.1201	0.1090 0.1175	0.1124	0.1164	Ave		0.1154			0.0100	3.5		20.0			
N-Nitrosodi-n-butylamine	++++ 0.4349	0.2728 0.4296	0.3211 0.4337	0.3302	0.3296	Ave		0.3646				18.3		20.0			
4-Chloro-3-methylphenol	++++ 0.3963	0.2355 0.3917	0.3202 0.3915	0.3722	0.3727	Ave		0.3543			0.2000	16.5		20.0			
Safrole, Total	++++ 0.2774	++++ 0.2689	0.2565 0.2733	0.2685	0.2534	Ave		0.2663				3.6		20.0			
2-Methylnaphthalene	0.6597 0.7276	0.6465 0.7143	0.7166 0.7240	0.7308	0.6917	Ave		0.7014			0.4000	4.6		20.0			
1-Methylnaphthalene	0.6907 0.6850	0.6188 0.6851	0.6644 0.6916	0.6832	0.6579	Ave		0.6721				3.7		20.0			
Hexachlorocyclopentadiene	++++ 0.3727	++++ 0.3788	0.3361 0.3758	0.3432	0.3340	Ave		0.3568			0.0500	5.9		20.0			
1,2,4,5-Tetrachlorobenzene	++++ 0.7337	0.6925 0.7079	0.7737 0.7259	0.7268	0.6995	Ave		0.7229			0.0100	3.8		20.0			
Isosafrole Peak 1	++++ 0.6553	++++ 0.6200	0.5922 0.6419	0.6493	0.6163	Ave		0.6292				3.8		20.0			
2,4,6-Trichlorophenol	++++ 0.4350	0.2475 0.4220	0.3433 0.4447	0.3975	0.3785	Ave		0.3812			0.2000	18.0		20.0			
2,4,5-Trichlorophenol	++++ 0.4944	0.2472 0.4842	0.3928 0.4862	0.4687	0.4648	Lin	-0.086	0.4897			0.2000				1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 55998

SDG No.: _____

Instrument ID: HP20296 GC Column: DB-5MS 20m ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2020 17:17 Calibration End Date: 10/19/2020 21:03 Calibration ID: 13801

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Isosafrole Peak 2	++++ 0.6887	0.5864 0.6783	0.6497 0.6902	0.6841	0.6563	Ave		0.6620				5.6		20.0			
1,1'-Biphenyl	++++ 1.8409	1.6666 1.8247	1.9973 1.8265	1.8182	1.8659	Ave		1.8343			0.0100	5.3		20.0			
2-Chloronaphthalene	++++ 1.5051	1.6108 1.4133	1.5275 1.4956	1.4988	1.3626	Ave		1.4877			0.8000	5.4		20.0			
1-Chloronaphthalene	++++ 1.3062	1.4486 1.3158	1.3378 1.2743	1.3476	1.3326	Ave		1.3376				4.1		20.0			
Diphenyl ether	++++ 0.9428	0.8877 0.9395	0.9638 0.9461	0.9825	0.9187	Ave		0.9402				3.3		20.0			
2-Nitroaniline	++++ 0.4370	++++ 0.4344	0.3358 0.4436	0.3983	0.3996	Ave		0.4081			0.0100	9.9		20.0			
1,4-Naphthoquinone	++++ 0.5864	++++ 0.5706	0.4517 0.5721	0.5558	0.5374	Ave		0.5457				9.0		20.0			
1,4-Dinitrobenzene	++++ 0.1885	++++ 0.1927	0.1289 0.1927	0.1614	0.1607	Ave		0.1708				14.8		20.0			
Dimethyl phthalate	++++ 1.6127	++++ 1.5840	1.6127 1.5647	1.6416	1.5702	Ave		1.5976			0.0100	1.9		20.0			
1,3-Dinitrobenzene	++++ 0.2232	++++ 0.2301	0.1699 0.2267	0.1986	0.1911	Ave		0.2066				11.6		20.0			
2,6-Dinitrotoluene	++++ 0.3508	0.1998 0.3432	0.3034 0.3529	0.3343	0.3168	Ave		0.3145			0.2000	17.1		20.0			
Acenaphthylene	1.6522 1.9971	1.6358 1.9724	1.9537 1.9924	1.9641	1.9318	Ave		1.8874			0.9000	8.0		20.0			
3-Nitroaniline	++++ 0.3632	++++ 0.3684	0.2838 0.3791	0.3299	0.3316	Ave		0.3427			0.0100	10.2		20.0			
Acenaphthene	1.4806 1.4847	1.5020 1.4606	1.5252 1.4723	1.4884	1.4446	Ave		1.4823			0.9000	1.7		20.0			
2,4-Dinitrophenol	++++ 0.1146	++++ 0.1223	++++ 0.1258	0.0941	0.0958	Ave		0.1105			0.0100	13.4		20.0			
4-Nitrophenol	++++ 0.3187	++++ 0.3178	++++ 0.3186	0.2704	0.2845	Ave		0.3020			0.0100	7.6		20.0			
Pentachlorobenzene	++++ 0.6210	0.6574 0.6066	0.5960 0.6059	0.6313	0.5913	Ave		0.6156				3.7		20.0			
Dibenzofuran	++++ 1.9244	1.8535 1.8914	1.9548 1.8902	2.0030	1.8680	Ave		1.9122			0.8000	2.7		20.0			
2,4-Dinitrotoluene	++++ 0.4529	++++ 0.4586	0.3699 0.4611	0.4177	0.3940	Ave		0.4257			0.2000	8.9		20.0			
1-Naphthylamine	++++ 1.4199	++++ 1.4296	++++ 1.4484	1.4002	1.3275	Ave		1.4051				3.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 55998

SDG No.: _____

Instrument ID: HP20296 GC Column: DB-5MS 20m ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2020 17:17 Calibration End Date: 10/19/2020 21:03 Calibration ID: 13801

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2,3,4,6-Tetrachlorophenol	++++ 0.3241	0.1663 0.3304	0.2627 0.3397	0.2903	0.2830	Lin1	-0.059	0.3301			0.0100				0.9970		0.9900
2-Naphthylamine	++++ 1.4021	++++ 1.4341	++++ 1.4512	1.4532	1.3209	Ave		1.4123				3.9		20.0			
Diethyl phthalate	++++ 1.6672	++++ 1.6693	1.6070 1.6269	1.6310	1.5935	Ave		1.6325			0.0100	1.9		20.0			
Fluorene	1.4349 1.5772	1.4613 1.5450	1.5354 1.5844	1.5600	1.5300	Ave		1.5285			0.9000	3.5		20.0			
Thionazin	++++ 0.3604	++++ 0.3422	0.3314 0.3484	0.3461	0.3434	Ave		0.3453				2.7		20.0			
5-Nitro-o-toluidine	++++ 0.4254	++++ 0.4293	0.3765 0.4247	0.4091	0.3902	Ave		0.3861				16.6		20.0			
4-Chlorophenyl-phenyl ether	++++ 0.7729	0.7538 0.7643	0.7858 0.7725	0.7936	0.7319	Ave		0.7678			0.4000	2.7		20.0			
4-Nitroaniline	0.2136 0.3947	0.1815 0.3894	0.3330 0.3913	0.3758	0.3611	Lin1	-0.036	0.3894			0.0100				0.9990		0.9900
4,6-Dinitro-2-methylphenol	++++ 0.0861	++++ 0.0931	0.0580 0.0919	0.0686	0.0732	Ave		0.0785			0.0100	18.0		20.0			
N-Nitrosodiphenylamine	++++ 0.6777	0.6163 0.6777	0.6755 0.6530	0.6723	0.6600	Ave		0.6618			0.0100	3.4		20.0			
1,2-Diphenylhydrazine	++++ 1.1836	1.0408 1.1757	1.1762 1.1527	1.2060	1.1493	Ave		1.1549				4.7		20.0			
Sulfotepp	++++ 0.1943	++++ 0.1952	0.1807 0.1901	0.1901	0.1881	Ave		0.1898				2.7		20.0			
cis-Diallate	++++ 0.4440	++++ 0.4392	0.4159 0.4321	0.4327	0.4218	Ave		0.4310				2.4		20.0			
Phorate	++++ 0.6992	0.5326 0.6902	0.6291 0.6904	0.6726	0.6776	Ave		0.6560				9.0		20.0			
Phenacetin	++++ 0.5296	0.3252 0.5320	0.4411 0.5215	0.5057	0.4888	Ave		0.4777				15.5		20.0			
4-Bromophenyl-phenylether	0.1933 0.2247	0.2020 0.2283	0.2031 0.2294	0.2173	0.2214	Ave		0.2149			0.1000	6.4		20.0			
trans-Diallate	++++ 0.4618	++++ 0.4596	0.4702 0.4545	0.4379	0.4332	Ave		0.4529				3.2		20.0			
Hexachlorobenzene	0.2896 0.2635	0.2538 0.2639	0.2750 0.2639	0.2592	0.2559	Ave		0.2656			0.1000	4.4		20.0			
Dimethoate	++++ 0.4376	++++ 0.4432	0.3484 0.4234	0.4054	0.4071	Ave		0.4108				8.3		20.0			
Atrazine	++++ 0.2204	++++ 0.2233	0.2402 0.1933	0.2298	0.2283	Ave		0.2226			0.0100	7.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 55998

SDG No.: _____

Instrument ID: HP20296 GC Column: DB-5MS 20m ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2020 17:17 Calibration End Date: 10/19/2020 21:03 Calibration ID: 13801

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Pentachlorophenol	++++ 0.1220	++++ 0.1322	0.0834 0.1368	0.0987	0.1068	Ave		0.1133			0.0500	18.2		20.0			
4-Aminobiphenyl	++++ 0.6287	0.5315 0.6382	0.6033 0.5963	0.6209	0.5939	Ave		0.6018				5.9		20.0			
Pentachloronitrobenzene	++++ 0.1088	++++ 0.1097	0.0965 0.1089	0.0968	0.1000	Ave		0.1034				6.1		20.0			
Pronamide	++++ 0.4037	0.2994 0.4012	0.3533 0.3908	0.3784	0.3755	Ave		0.3718				9.7		20.0			
Dinoseb	++++ 0.1275	++++ 0.1368	++++ 0.1391	0.0938	0.1006	Ave		0.1196				17.6		20.0			
Phenanthrene	1.1111 1.1723	1.2329 1.1731	1.2009 1.1784	1.1751	1.1374	Ave		1.1727			0.7000	3.1		20.0			
Anthracene	1.0493 1.2121	1.0168 1.2230	1.1570 1.2323	1.1909	1.1621	Ave		1.1554			0.7000	7.0		20.0			
Carbazole	++++ 1.0827	0.8844 1.1053	1.0588 1.1013	1.0744	1.0702	Ave		1.0538			0.0100	7.3		20.0			
Methyl parathion	++++ 0.3256	++++ 0.3320	0.2267 0.3317	0.2792	0.2789	Ave		0.2957				14.2		20.0			
Di-n-butyl phthalate	++++ 1.4898	++++ 1.5081	1.2973 1.4847	1.4201	1.4010	Ave		1.4335			0.0100	5.5		20.0			
Parathion	++++ 0.1989	++++ 0.2108	0.1454 0.2122	0.1664	0.1772	Ave		0.1851				14.4		20.0			
4-Nitroquinoline-1-oxide	++++ 0.1048	++++ 0.1202	0.0445 0.1194	0.0617	0.0696	Qua1	-0.077	0.0885	0.0012651						0.9910		0.9900
Octachlorostyrene	++++ 0.1155	++++ 0.1153	0.1250 0.1209	0.1062	0.1148	Ave		0.1163				5.5		20.0			
Isodrin	++++ 0.1486	0.1516 0.1463	0.1424 0.1431	0.1398	0.1367	Ave		0.1441				3.6		20.0			
Fluoranthene	1.2929 1.3456	1.1629 1.3662	1.2776 1.3679	1.2785	1.2761	Ave		1.2960			0.6000	5.2		20.0			
Benzidine	++++ 0.8482	++++ 0.8485	0.7010 0.8396	0.7963	0.7178	Ave		0.7919				8.5		20.0			
Pyrene	1.3404 1.3980	1.3123 1.3668	1.3727 1.3726	1.3644	1.3046	Ave		1.3540			0.6000	2.4		20.0			
p-Dimethylamino azobenzene	++++ 0.2435	++++ 0.2411	0.1831 0.2464	0.1993	0.2111	Ave		0.2207				12.1		20.0			
Chlorobenzilate	++++ 0.4521	++++ 0.4536	0.3724 0.4511	0.4277	0.4012	Ave		0.4264				7.8		20.0			
3,3'-Dimethylbenzidine	++++ 0.8693	++++ 0.8953	0.6405 0.9104	0.7564	0.7044	Ave		0.7960				14.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 55998

SDG No.: _____

Instrument ID: HP20296 GC Column: DB-5MS 20m ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2020 17:17 Calibration End Date: 10/19/2020 21:03 Calibration ID: 13801

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Butylbenzylphthalate	++++ 0.6719	0.3844 0.6745	0.5419 0.6778	0.6307	0.6099	Ave		0.5987			0.0100	17.7		20.0			
2-Acetylaminofluorene	++++ 0.5449	0.3129 0.5606	0.4312 0.5722	0.4412		Lin	-0.644	0.5916							0.9980		0.9900
3,3'-Dichlorobenzidine	++++ 0.5185	0.3967 0.5278	0.4610 0.5410	0.4566		Ave		0.4836			0.0100	11.4		20.0			
Benzo[a]anthracene	0.9816 1.3331	0.9977 1.3324	1.1465 1.3854	1.2577	1.2082	Ave		1.2053			0.8000	12.7		20.0			
4,4'-Methylene bis(2-chloroaniline)	++++ 0.2685	0.2268 0.2714	0.2394 0.2801	0.2384		Ave		0.2541				8.6		20.0			
Chrysene	1.0759 1.3208	1.0579 1.3075	1.2615 1.3358	1.2787	1.2158	Ave		1.2317			0.7000	8.8		20.0			
Bis(2-ethylhexyl) phthalate	++++ 1.0134	0.7605 1.0037	0.8829 1.0173	0.9021		Ave		0.9300			0.0100	10.9		20.0			
6-Methylchrysene	++++ 0.9296	0.8005 0.9251	0.8389 0.9520	0.8348		Ave		0.8802				7.1		20.0			
Di-n-octyl phthalate	++++ 1.6381	1.1495 1.6421	1.4271 1.6478	1.4695		Ave		1.4957			0.0100	13.0		20.0			
Benzo[b]fluoranthene	1.0924 1.3609	1.0518 1.3756	1.2339 1.3823	1.2780	1.2263	Ave		1.2502			0.7000	10.1		20.0			
7,12-Dimethylbenz(a)anthracene	++++ 0.5717	0.3670 0.5843	0.4742 0.5885	0.5179	0.5160	Ave		0.5171				15.2		20.0			
Benzo[k]fluoranthene	1.1465 1.2901	1.0792 1.2937	1.2542 1.3094	1.3053	1.2463	Ave		1.2406			0.7000	6.8		20.0			
Benzo[a]pyrene	0.9064 1.2450	0.9052 1.2541	1.1353 1.2744	1.1873	1.1691	Ave		1.1346			0.7000	13.1		20.0			
3-Methylcholanthrene	++++ 0.6328	0.4014 0.6379	0.5055 0.6470	0.5735	0.5876	Ave		0.5694				15.6		20.0			
Dibenz[a,h]acridine	++++ 0.9848	0.8105 0.9710	0.8908 0.9681	0.9014		Ave		0.9211				7.2		20.0			
Dibenz[a,j]acridine	++++ 0.9958	0.8201 0.9939	0.9517 0.9880	0.9119		Ave		0.9436				7.3		20.0			
Indeno[1,2,3-cd]pyrene	0.8069 1.1839	0.7663 1.1820	0.9377 1.1794	1.0582	1.0612	Ave		1.0220			0.5000	16.5		20.0			
Dibenz(a,h)anthracene	0.9078 1.2356	0.8137 1.2327	1.0111 1.2092	1.1332	1.1607	Ave		1.0880			0.4000	14.7		20.0			
Benzo[g,h,i]perylene	1.0488 1.0827	0.8810 1.0955	0.9895 1.0673	1.0607	1.0393	Ave		1.0331			0.5000	6.7		20.0			
2-Fluorophenol (Surr)	++++ 1.6531	1.5651 1.6322	1.5955 1.6631	1.5511		Ave		1.6100				2.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 55998

SDG No.: _____

Instrument ID: HP20296 GC Column: DB-5MS 20m ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2020 17:17 Calibration End Date: 10/19/2020 21:03 Calibration ID: 13801

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
Phenol-d5 (Surr)	1.7198 2.0999	1.7605 2.0555	1.9508 2.1068	2.0307	1.9815	Ave		1.9632				7.5		20.0			
Nitrobenzene-d5 (Surr)	++++ 0.5469	++++ 0.5417	0.5070 0.5420	0.5355	0.5026	Ave		0.5293				3.7		20.0			
2-Fluorobiphenyl (Surr)	++++ 1.6514	++++ 1.6174	1.6809 1.6256	1.6695	1.5880	Ave		1.6388				2.1		20.0			
2,4,6-Tribromophenol (Surr)	++++ 0.2466	0.1779 0.2519	0.1980 0.2605	0.2122	0.2144	Ave		0.2231				13.7		20.0			
p-Terphenyl-d14 (Surr)	++++ 1.0329	++++ 1.0249	0.9543 1.0392	0.9880	0.9564	Ave		0.9993				3.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

Analy Batch No.: 55998

SDG No.: _____

Instrument ID: HP20296

GC Column: DB-5MS 20m ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2020 17:17

Calibration End Date: 10/19/2020 21:03

Calibration ID: 13801

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-55998/3	LJ0702.D
Level 2	IC 410-55998/9	LJ0708.D
Level 3	IC 410-55998/8	LJ0707.D
Level 4	IC 410-55998/7	LJ0706.D
Level 5	ICIS 410-55998/2	LJ0701.D
Level 6	IC 410-55998/6	LJ0705.D
Level 7	IC 410-55998/5	LJ0704.D
Level 8	IC 410-55998/4	LJ0703.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	DCBd 4	Ave	++++ 318089	++++ 506870	30944 726272	74647	177274	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
N-Nitrosodimethylamine	DCBd 4	Ave	++++ 526428	++++ 795553	48517 1135074	124811	284976	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Pyridine	DCBd 4	Ave	++++ 931019	++++ 1373966	90543 2008860	208019	500022	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
2-Picoline	DCBd 4	Ave	++++ 915798	++++ 1395066	90981 2001592	230652	515099	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
N-Nitrosomethylethylamine	DCBd 4	Ave	++++ 375811	++++ 557460	36445 816524	92725	207392	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Methyl methanesulfonate	DCBd 4	Ave	++++ 439933	++++ 651409	43113 955180	109774	246850	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
N-Nitrosodiethylamine	DCBd 4	Ave	++++ 357862	4569 542097	33315 785932	86219	194676	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Ethyl methanesulfonate	DCBd 4	Ave	++++ 377660	5422 589578	36977 850217	97591	220956	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzaldehyde	DCBd 4	Ave	++++ 717333	10479 984096	76806 1262697	177151	423467	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Phenol	DCBd 4	Ave	++++ 1141293	19364 1693323	110822 2450261	284601	637954	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Aniline	DCBd 4	Ave	++++ 1344380	22326 1965289	130115 2875326	327363	739632	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Bis(2-chloroethyl)ether	DCBd 4	Ave	++++ 863218	14355 1269407	84871 1864778	212253	480677	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Chlorophenol	DCBd 4	Ave	++++ 667162	9403 1011192	62429 1492427	163195	372323	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,3-Dichlorobenzene	DCBd 4	Ave	++++ 719440	12176 1067985	71082 1551072	180317	410498	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,4-Dichlorobenzene	DCBd 4	Ave	++++ 729118	12218 1075469	72024 1574518	181823	421350	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

Analy Batch No.: 55998

SDG No.: _____

Instrument ID: HP20296

GC Column: DB-5MS 20m ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2020 17:17

Calibration End Date: 10/19/2020 21:03

Calibration ID: 13801

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Benzyl alcohol	DCBd 4	Ave	++++ 514358	++++ 776631	47059 1120090	122207	294762	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
1,2-Dichlorobenzene	DCBd 4	Ave	++++ 692719	++++ 1033285	72246 1503755	171293	395121	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Indene	DCBd 4	Ave	++++ 1102744	++++ 1686055	103407 2415256	266561	645663	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Methylphenol	DCBd 4	Ave	++++ 701774	++++ 1046429	67727 1552603	169541	405124	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,2'-oxybis[1-chloropropane]	DCBd 4	Ave	++++ 725939	++++ 1076923	12759 1592747	181859	417550	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosopyrrolidine	DCBd 4	Ave	++++ 384002	++++ 586271	5897 863410	92138	211555	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Acetophenone	DCBd 4	Ave	++++ 1173585	++++ 1765454	15650 2551556	288299	691329	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Methylphenol (and/or 3-Methylphenol)	DCBd 4	Ave	++++ 828149	++++ 1202232	11674 1761668	199009	456913	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosodi-n-propylamine	DCBd 4	Ave	++++ 636951	++++ 954095	9177 1388444	161716	353732	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosomorpholine	DCBd 4	Ave	++++ 411582	++++ 602708	41459 866431	99386	224507	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
o-Toluidine	DCBd 4	Ave	++++ 1268979	++++ 1846684	20561 2684126	305718	705558	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachloroethane	DCBd 4	Ave	++++ 355795	++++ 535337	34662 772985	86804	204205	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Nitrobenzene	NPT	Ave	++++ 982754	++++ 1442071	14185 2119533	237389	553511	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosopiperidine	NPT	Ave	++++ 355591	++++ 527135	5972 781777	85856	197634	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isophorone	NPT	Ave	++++ 1689183	++++ 2507011	24575 3710631	403010	947840	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Nitrophenol	NPT	Lin1	1578 274398	2954 418621	21193 596397	60123	131524	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dimethylphenol	NPT	Ave	++++ 808300	++++ 1205520	11704 1770794	191771	450833	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
o,o',o''-Triethylphosphorothioate	NPT	Ave	++++ 315587	++++ 483154	5473 711044	73615	177007	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzoic acid	NPT	Lin	++++ 385745	++++ 594948	56573 902539	139626	259363	++++ 12.5	0.250 20.0	3.75 30.0	7.50	10.0
Bis(2-chloroethoxy)methane	NPT	Ave	++++ 1069445	++++ 1604125	16918 2256383	264099	608468	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dichlorophenol	NPT	Ave	++++ 543013	++++ 797136	5821 1190974	124738	290162	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

Analy Batch No.: 55998

SDG No.: _____

Instrument ID: HP20296

GC Column: DB-5MS 20m ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2020 17:17

Calibration End Date: 10/19/2020 21:03

Calibration ID: 13801

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trichlorobenzene	NPT	Ave	++++ 599707	10333 889457	58359 1299524	148694	338874	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Naphthalene	NPT	Ave	19633 1927948	31172 2824523	192292 4189267	476343	1094949	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Chloroaniline	NPT	Ave	++++ 815626	12082 1187091	75632 1755778	200840	446132	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,6-Dichlorophenol	NPT	Ave	++++ 505878	6939 758263	45642 1121553	118922	282195	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachloropropene	NPT	Ave	++++ 368839	++++ 558501	33560 812856	86676	196813	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Hexachlorobutadiene	NPT	Ave	++++ 351907	5945 529568	36118 777992	89137	203316	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Quinoline	NPT	Ave	++++ 1185872	++++ 1742640	109033 2552435	278019	664826	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Caprolactam	NPT	Ave	++++ 201532	++++ 310569	18736 443514	47639	118674	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
N-Nitrosodi-n-butylamine	NPT	Ave	++++ 749422	8113 1110514	55203 1636502	139956	336102	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Chloro-3-methylphenol	NPT	Ave	++++ 682867	7003 1012435	55062 1477488	157748	380035	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Safrole, Total	NPT	Ave	++++ 478043	++++ 695043	44104 1031375	113823	258352	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
2-Methylnaphthalene	NPT	Ave	11487 1253628	19228 1846456	123217 2732016	309739	705318	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1-Methylnaphthalene	NPT	Ave	12026 1180223	18402 1770813	114234 2609637	289580	670864	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachlorocyclopentadiene	ANT	Ave	++++ 310552	++++ 479387	27244 695554	69156	163938	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
1,2,4,5-Tetrachlorobenzene	ANT	Ave	++++ 611404	9000 895787	62710 1343394	146441	343274	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isosafrole Peak 1	ANT	Ave	++++ 87369	++++ 125521	7680 190065	20931	48395	++++ 2.00	++++ 3.20	0.200 4.80	0.600	1.20
2,4,6-Trichlorophenol	ANT	Ave	++++ 362508	3217 533987	27827 823066	80085	185750	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4,5-Trichlorophenol	ANT	Lin	++++ 411992	3213 612761	31838 899822	94431	228113	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isosafrole Peak 2	ANT	Ave	++++ 482111	6401 720981	44235 1072937	115786	270571	++++ 10.5	0.210 16.8	1.05 25.2	3.15	6.30
1,1'-Biphenyl	ANT	Ave	++++ 1534134	21658 2308891	161885 3380363	366335	915728	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Chloronaphthalene	ANT	Ave	++++ 1254260	20933 1788340	123810 2767944	301985	668714	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

Analy Batch No.: 55998

SDG No.: _____

Instrument ID: HP20296

GC Column: DB-5MS 20m ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2020 17:17

Calibration End Date: 10/19/2020 21:03

Calibration ID: 13801

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1-Chloronaphthalene	ANT	Ave	++++ 1088545	18826 1665003	108434 2358426	271510	653989	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Diphenyl ether	ANT	Ave	++++ 785644	11536 1188878	78116 1750932	197958	450861	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Nitroaniline	ANT	Ave	++++ 364185	++++ 549713	27221 821030	80251	196105	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
1,4-Naphthoquinone	ANT	Ave	++++ 488701	++++ 722090	36612 1058711	111991	263745	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
1,4-Dinitrobenzene	ANT	Ave	++++ 157119	++++ 243874	10451 356662	32524	78887	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Dimethyl phthalate	ANT	Ave	++++ 1343898	++++ 2004430	130709 2895859	330748	770574	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
1,3-Dinitrobenzene	ANT	Ave	++++ 186019	++++ 291201	13774 419538	40008	93797	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
2,6-Dinitrotoluene	ANT	Ave	++++ 292376	2596 434227	24593 653103	67364	155485	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Acenaphthylene	ANT	Ave	13168 1664289	21258 2495914	158353 3687269	395715	948049	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3-Nitroaniline	ANT	Ave	++++ 302701	++++ 466130	23003 701547	66461	162759	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Acenaphthene	ANT	Ave	11800 1237229	19519 1848264	123622 2724871	299881	708956	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dinitrophenol	ANT	Ave	++++ 95529	++++ 154722	++++ 232911	37907	62708	++++ 12.5	++++ 20.0	++++ 30.0	7.50	10.0
4-Nitrophenol	ANT	Ave	++++ 265604	++++ 402116	++++ 589691	54489	139606	++++ 12.5	++++ 20.0	++++ 30.0	3.75	7.50
Pentachlorobenzene	ANT	Ave	++++ 517491	8543 767587	48304 1121312	127186	290205	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dibenzofuran	ANT	Ave	++++ 1603705	24087 2393371	158438 3498261	403563	916718	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dinitrotoluene	ANT	Ave	++++ 377447	++++ 580318	29981 853308	84148	193380	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
1-Naphthylamine	ANT	Ave	++++ 1183279	++++ 1808941	++++ 2680511	282119	651461	++++ 12.5	++++ 20.0	++++ 30.0	3.75	7.50
2,3,4,6-Tetrachlorophenol	ANT	Lin1	++++ 270122	2161 418074	21292 628720	58486	138898	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Naphthylamine	ANT	Ave	++++ 1168402	++++ 1814631	++++ 2685838	292798	648266	++++ 12.5	++++ 20.0	++++ 30.0	3.75	7.50
Diethyl phthalate	ANT	Ave	++++ 1389312	++++ 2112291	130254 3010843	328615	782019	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Fluorene	ANT	Ave	11436 1314329	18991 1954989	124449 2932324	314310	750877	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

Analy Batch No.: 55998

SDG No.: _____

Instrument ID: HP20296

GC Column: DB-5MS 20m ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2020 17:17

Calibration End Date: 10/19/2020 21:03

Calibration ID: 13801

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Thionazin	ANT	Ave	++++ 300329	++++ 433043	26858 644803	69725	168507	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
5-Nitro-o-toluidine	ANT	Ave	++++ 354463	++++ 543185	3220 786038	82416	191472	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Chlorophenyl-phenyl ether	ANT	Ave	++++ 644101	9796 967140	63688 1429664	159895	359211	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Nitroaniline	ANT	Lin1	1702 328924	2359 492773	26988 724210	75706	177219	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4,6-Dinitro-2-methylphenol	PHN	Ave	++++ 142724	++++ 231721	18252 345676	27269	70707	++++ 12.5	++++ 20.0	2.50 30.0	3.75	7.50
N-Nitrosodiphenylamine	PHN	Ave	++++ 1123706	16095 1687004	106371 2456700	267168	637211	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,2-Diphenylhydrazine	PHN	Ave	++++ 1962515	27181 2926583	185221 4336873	479225	1109579	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Sulfotepp	PHN	Ave	++++ 322161	++++ 485969	28457 715396	75536	181609	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
cis-Diallate	PHN	Ave	++++ 544790	++++ 809090	48469 1202900	127246	301328	++++ 9.25	++++ 14.8	0.925 22.2	2.78	5.55
Phorate	PHN	Ave	++++ 1159346	13909 1718088	99060 2597664	267299	654158	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Phenacetin	PHN	Ave	++++ 878169	8493 1324350	69461 1962254	200945	471907	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Bromophenyl-phenylether	PHN	Ave	3201 372511	5274 568188	31989 863225	86365	213740	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
trans-Diallate	PHN	Ave	++++ 199093	++++ 297456	19251 444609	45243	108742	++++ 3.25	++++ 5.20	0.325 7.80	0.975	1.95
Hexachlorobenzene	PHN	Ave	4795 436873	6629 656967	43299 992962	103005	247037	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dimethoate	PHN	Ave	++++ 725524	++++ 1103164	54856 1593055	161106	393042	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Atrazine	PHN	Ave	++++ 365446	++++ 555808	37825 727433	91318	220437	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Pentachlorophenol	PHN	Ave	++++ 202222	++++ 329021	13136 514517	39231	103153	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
4-Aminobiphenyl	PHN	Ave	++++ 1042374	13880 1588565	95005 2243470	246717	573391	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pentachloronitrobenzene	PHN	Ave	++++ 180381	++++ 272982	15198 409584	38465	96495	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Pronamide	PHN	Ave	++++ 669337	7819 998697	55640 1470272	150383	362526	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dinoseb	PHN	Ave	++++ 211443	++++ 340471	++++ 523232	37278	97119	++++ 12.5	++++ 20.0	++++ 30.0	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

Analy Batch No.: 55998

SDG No.: _____

Instrument ID: HP20296

GC Column: DB-5MS 20m ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2020 17:17

Calibration End Date: 10/19/2020 21:03

Calibration ID: 13801

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Phenanthrene	PHN	Ave	18399 1943813	32198 2920060	189111 4433577	466976	1098058	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Anthracene	PHN	Ave	17376 2009804	26555 3044264	182188 4636207	473236	1121890	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Carbazole	PHN	Ave	++++ 1795165	23095 2751332	166722 4143395	426941	1033227	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Methyl parathion	PHN	Ave	++++ 539879	++++ 826313	35696 1247988	110947	269238	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Di-n-butyl phthalate	PHN	Ave	++++ 2470206	++++ 3754167	204287 5585956	564319	1352573	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Parathion	PHN	Ave	++++ 329743	++++ 524787	22893 798209	66118	171099	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
4-Nitroquinoline-1-oxide	PHN	Qual	++++ 173752	++++ 299169	7000 449187	24537	67223	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Octachlorostyrene	PHN	Ave	++++ 191557	++++ 287045	19676 454697	42185	110791	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Isodrin	PHN	Ave	++++ 246456	3959 364078	22428 538319	55552	132013	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Fluoranthene	PHN	Ave	21409 2231226	30370 3400749	201182 5146600	508047	1231966	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzidine	PYR1 0	Ave	++++ 4270219	++++ 6643120	339020 9993648	956602	2149819	++++ 37.5	++++ 60.0	3.75 90.0	11.3	22.5
Pyrene	PYR1 0	Ave	22595 2345972	35986 3566843	221292 5445844	546384	1302425	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
p-Dimethylamino azobenzene	PYR1 0	Ave	++++ 408543	++++ 629085	29515 977561	79803	210785	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Chlorobenzilate	PYR1 0	Ave	++++ 758749	++++ 1183838	60041 1789834	171292	400474	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
3,3'-Dimethylbenzidine	PYR1 0	Ave	++++ 1458760	++++ 2336520	103256 3612111	302900	703185	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Butylbenzylphthalate	PYR1 0	Ave	++++ 1127509	10542 1760237	87368 2689084	252568	608908	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Acetylaminofluorene	PYR1 0	Lin	++++ 914430	++++ 1462907	50440 2270197	172672	440458	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
3,3'-Dichlorobenzidine	PYR1 0	Ave	++++ 870022	++++ 1377476	63951 2146611	184625	455867	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Benzo[a]anthracene	PYR1 0	Ave	16546 2237070	27357 3477158	184824 5496734	503638	1206132	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4,4'-Methylene bis(2-chloroaniline)	PYR1 0	Ave	++++ 450524	++++ 708181	36561 1111282	95864	237970	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Chrysene	PYR1 0	Ave	18136 2216496	29009 3412211	203366 5299862	512054	1213772	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

Analy Batch No.: 55998

SDG No.:

Instrument ID: HP20296

GC Column: DB-5MS 20m ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2020 17:17

Calibration End Date: 10/19/2020 21:03

Calibration ID: 13801

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Bis(2-ethylhexyl) phthalate	PYR10	Ave	++++ 1700627	++++ 2619245	122605 4036062	353561	900552	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
6-Methylchrysene	PYR10	Ave	++++ 1560021	++++ 2414236	129048 3777327	335958	833386	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Di-n-octyl phthalate	PRY	Ave	++++ 2973749	++++ 4632227	187775 7140301	583744	1524567	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Benzo[b]fluoranthene	PRY	Ave	17776 2470585	27635 3880396	201560 5990012	522752	1272317	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
7,12-Dimethylbenz(a)anthracene	PRY	Ave	++++ 1037764	9643 1648142	77459 2550226	211834	535392	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[k]fluoranthene	PRY	Ave	18656 2341999	28355 3649477	204865 5674004	533900	1293070	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[a]pyrene	PRY	Ave	14749 2260039	23785 3537696	185455 5522484	485645	1212898	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3-Methylcholanthrene	PRY	Ave	++++ 1148722	10548 1799539	82578 2803623	234593	609640	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dibenz[a,h]acridine	PRY	Ave	++++ 1787814	++++ 2739019	132398 4195254	364381	935177	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Dibenz[a,j]acridine	PRY	Ave	++++ 1807679	++++ 2803668	133963 4281212	389286	946049	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Indeno[1,2,3-cd]pyrene	PRY	Ave	13130 2149195	20134 3334199	153173 5110795	432848	1101026	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dibenz(a,h)anthracene	PRY	Ave	14772 2243113	21380 3477249	165154 5239913	463514	1204254	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[g,h,i]perylene	PRY	Ave	17065 1965453	23149 3090266	161637 4624955	433842	1078288	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Fluorophenol (Surr)	DCBd4	Ave	++++ 1479234	++++ 2206049	138514 3212021	356388	813389	++++ 25.0	++++ 40.0	2.50 60.0	7.50	15.0
Phenol-d5 (Surr)	DCBd4	Ave	15985 1878947	27845 2778182	172649 4068928	453605	1039091	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
Nitrobenzene-d5 (Surr)	NPT	Ave	++++ 1884514	++++ 2800716	174352 4090897	453925	1024899	++++ 25.0	++++ 40.0	2.50 60.0	7.50	15.0
2-Fluorobiphenyl (Surr)	ANT	Ave	++++ 2752365	++++ 4093330	272478 6017046	672733	1558681	++++ 25.0	++++ 40.0	2.50 60.0	7.50	15.0
2,4,6-Tribromophenol (Surr)	ANT	Ave	++++ 410986	4625 637392	32098 964102	85495	210477	++++ 25.0	0.500 40.0	2.50 60.0	7.50	15.0
p-Terphenyl-d14 (Surr)	PYR10	Ave	++++ 3466776	++++ 5349427	307687 8245948	791290	1909479	++++ 25.0	++++ 40.0	2.50 60.0	7.50	15.0

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 55998

SDG No.: _____

Instrument ID: HP20296 GC Column: DB-5MS 20m ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2020 17:17 Calibration End Date: 10/19/2020 21:03 Calibration ID: 13801

Curve Type Legend:

Ave = Average ISTD Lin = Linear ISTD Lin1 = Linear 1/conc ISTD Qual = Quadratic 1/conc ISTD
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FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 55998

SDG No.: _____

Instrument ID: HP20296 GC Column: DB-5MS 20m ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/19/2020 17:17 Calibration End Date: 10/19/2020 21:03 Calibration ID: 13801

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-55998/3	LJ0702.D
Level 2	IC 410-55998/9	LJ0708.D
Level 3	IC 410-55998/8	LJ0707.D
Level 4	IC 410-55998/7	LJ0706.D
Level 5	ICIS 410-55998/2	LJ0701.D
Level 6	IC 410-55998/6	LJ0705.D
Level 7	IC 410-55998/5	LJ0704.D
Level 8	IC 410-55998/4	LJ0703.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
2-Nitrophenol	29.4 4.1	-0.7 1.5	-13.9	-6.8	-16.2	2.7	50 30	30 30	30	30	30	30
Benzoic acid	++++ 0.2	++++ -0.3	4.8	-5.4	-3.2	4.8	30	30	50	30	30	30
2,4,5-Trichlorophenol	++++ -0.2	21.0 -0.1	-5.7	0.4	-2.7	2.4	30	50 30	30	30	30	30
2,3,4,6-Tetrachlorophenol	++++ 1.0	21.4 3.5	-6.2	-7.3	-11.9	-0.4	30	50 30	30	30	30	30
4-Nitroaniline	27.9 0.5	-16.9 0.8	-7.2	-1.1	-6.0	2.1	50 30	30 30	30	30	30	30
4-Nitroquinoline-1-oxide	++++ 7.3	++++ -2.7	17.8	-11.1	-17.0	5.5	30	30	50	30	30	30
2-Acetylaminofluorene	++++ 0.2	++++ 0.4	39.9	1.9	-10.9	0.8	30	30	50	30	30	30

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0701.D
 Lims ID: ICIS L5
 Client ID:
 Sample Type: ICIS Calib Level: 5
 Inject. Date: 19-Oct-2020 17:17:25 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: ICIS L5
 Misc. Info.: 410-0013268-002
 Operator ID: kel10217 Instrument ID: HP20296
 Sublist: chrom-MSSemi_HP20296*sub6
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 20-Oct-2020 19:09:09 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1014

First Level Reviewer: luttek

Date: 20-Oct-2020 18:49:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 1,4-Dioxane	88	2.444	2.444	0.000	89	177274	7.50	7.15	
2 N-Nitrosodimethylamine	74	2.973	2.973	0.000	91	284976	7.50	7.16	
3 Pyridine	79	3.005	3.005	0.000	95	500022	7.50	7.15	
5 2-Picoline	93	4.161	4.161	0.000	93	515099	7.50	7.21	
6 N-Nitrosomethylethylamine	88	4.353	4.353	0.000	86	207392	7.50	7.18	
9 Methyl methanesulfonate	80	4.808	4.808	0.000	86	246850	7.50	7.26	
\$ 10 2-Fluorophenol	112	5.043	5.043	0.000	93	813389	15.0	14.5	
11 N-Nitrosodiethylamine	102	5.391	5.391	0.000	89	194676	7.50	7.41	
13 Ethyl methanesulfonate	109	5.845	5.845	0.000	97	220956	7.50	7.58	
15 Benzaldehyde	77	6.316	6.316	0.000	95	423467	7.50	7.98	
\$ 16 Phenol-d5	99	6.439	6.439	0.000	97	1039091	15.0	15.1	
17 Phenol	94	6.455	6.455	0.000	97	637954	7.50	7.29	
18 Aniline	93	6.482	6.482	0.000	97	739632	7.50	7.26	
19 Bis(2-chloroethyl)ether	93	6.600	6.600	0.000	97	480677	7.50	7.29	
20 2-Chlorophenol	128	6.648	6.648	0.000	94	372323	7.50	7.44	
22 1,3-Dichlorobenzene	146	6.883	6.883	0.000	92	410498	7.50	7.39	
* 24 1,4-Dichlorobenzene-d4	152	6.974	6.974	0.000	96	174799	5.00	5.00	
25 1,4-Dichlorobenzene	146	7.001	7.001	0.000	88	421350	7.50	7.49	
27 Benzyl alcohol	108	7.193	7.193	0.000	90	294762	7.50	7.51	
29 1,2-Dichlorobenzene	146	7.225	7.225	0.000	91	395121	7.50	7.32	
30 Indene	115	7.364	7.364	0.000	88	645663	7.50	7.57	
31 2-Methylphenol	108	7.380	7.380	0.000	96	405124	7.50	7.61	
32 2,2'-oxybis[1-chloropropane]	45	7.429	7.429	0.000	89	417550	7.50	7.34	
34 N-Nitrosopyrrolidine	100	7.562	7.562	0.000	94	211555	7.50	7.35	
35 Acetophenone	105	7.600	7.600	0.000	95	691329	7.50	7.74	
36 4-Methylphenol	108	7.621	7.621	0.000	95	456913	7.50	7.61	
37 N-Nitrosodi-n-propylamine	70	7.621	7.621	0.000	77	353732	7.50	7.32	
38 N-Nitrosomorpholine	56	7.632	7.632	0.000	89	224507	7.50	7.15	
39 2-Toluidine	106	7.653	7.653	0.000	94	705558	7.50	7.37	
40 Hexachloroethane	117	7.750	7.750	0.000	94	204205	7.50	7.41	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
\$ 41 Nitrobenzene-d5	82	7.830	7.830	0.000	87	1024899	15.0	14.2	
42 Nitrobenzene	77	7.857	7.857	0.000	83	553511	7.50	7.45	
44 N-Nitrosopiperidine	114	8.092	8.092	0.000	88	197634	7.50	7.25	
46 Isophorone	82	8.247	8.247	0.000	98	947840	7.50	7.43	
47 2-Nitrophenol	139	8.359	8.359	0.000	94	131524	7.50	6.28	
48 2,4-Dimethylphenol	107	8.456	8.456	0.000	98	450833	7.50	7.43	
50 Benzoic acid	105	8.605	8.605	0.000	87	259363	10.0	9.68	M
49 o,o',o"-Triethylphosphorothioat	198	8.584	8.584	0.000	91	177007	7.50	7.20	
51 Bis(2-chloroethoxy)methane	93	8.621	8.621	0.000	97	608468	7.50	7.39	
52 2,4-Dichlorophenol	162	8.744	8.744	0.000	95	290162	7.50	7.50	
54 1,2,4-Trichlorobenzene	180	8.878	8.878	0.000	92	338874	7.50	7.25	
* 55 Naphthalene-d8	136	8.958	8.958	0.000	99	679758	5.00	5.00	
S 53 Dinitrotoluene	165				0		15.0	14.5	
56 Naphthalene	128	8.996	8.996	0.000	99	1094949	7.50	7.31	
57 4-Chloroaniline	127	9.097	9.097	0.000	94	446132	7.50	7.28	
58 2,6-Dichlorophenol	162	9.108	9.108	0.000	93	282195	7.50	7.49	
59 Hexachloropropene	213	9.146	9.146	0.000	92	196813	7.50	7.01	
60 Hexachlorobutadiene	225	9.220	9.220	0.000	96	203316	7.50	7.30	
62 Quinoline	129	9.531	9.531	0.000	93	664826	7.50	7.37	
64 Caprolactam	113	9.638	9.638	0.000	85	118674	7.50	7.56	
S 63 Diallate	86				0		7.50	7.30	
65 N-Nitrosodi-n-butylamine	84	9.680	9.680	0.000	88	336102	7.50	6.78	
66 4-Chloro-3-methylphenol	107	9.910	9.910	0.000	91	380035	7.50	7.89	
67 Safrole, Total	162	10.007	10.007	0.000	84	258352	7.50	7.13	
69 2-Methylnaphthalene	142	10.124	10.124	0.000	90	705318	7.50	7.40	
70 1-Methylnaphthalene	142	10.279	10.279	0.000	92	670864	7.50	7.34	
71 Hexachlorocyclopentadiene	237	10.392	10.392	0.000	97	163938	7.50	7.02	
72 1,2,4,5-Tetrachlorobenzene	216	10.397	10.397	0.000	97	343274	7.50	7.26	
73 Isosafrole Peak 1	162	10.488	10.488	0.000	84	48395	1.20	1.18	
74 2,4,6-Trichlorophenol	196	10.590	10.590	0.000	93	185750	7.50	7.45	
75 2,4,5-Trichlorophenol	196	10.643	10.643	0.000	91	228113	7.50	7.29	
\$ 76 2-Fluorobiphenyl (Surr)	172	10.745	10.745	0.000	99	1558681	15.0	14.5	
77 Isosafrole Peak 2	162	10.857	10.857	0.000	85	270571	6.30	6.25	
79 1,1'-Biphenyl	154	10.900	10.900	0.000	96	915728	7.50	7.63	
80 2-Chloronaphthalene	162	10.911	10.911	0.000	99	668714	7.50	6.87	
81 1-Chloronaphthalene	162	10.948	10.948	0.000	96	653989	7.50	7.47	
82 Phenyl ether	170	11.082	11.082	0.000	87	450861	7.50	7.33	
83 2-Nitroaniline	138	11.092	11.092	0.000	82	196105	7.50	7.34	
84 1,4-Naphthoquinone	158	11.210	11.210	0.000	73	263745	7.50	7.39	
85 1,4-Dinitrobenzene	168	11.333	11.333	0.000	83	78887	7.50	7.06	
86 Dimethyl phthalate	163	11.429	11.429	0.000	96	770574	7.50	7.37	
87 1,3-Dinitrobenzene	168	11.445	11.445	0.000	81	93797	7.50	6.94	
88 2,6-Dinitrotoluene	165	11.504	11.504	0.000	83	155485	7.50	7.56	a
90 Acenaphthylene	152	11.579	11.579	0.000	99	948049	7.50	7.68	
91 3-Nitroaniline	138	11.740	11.740	0.000	90	162759	7.50	7.26	
* 92 Acenaphthene-d10	164	11.793	11.793	0.000	98	327173	5.00	5.00	
93 Acenaphthene	153	11.836	11.836	0.000	97	708956	7.50	7.31	
94 2,4-Dinitrophenol	184	11.895	11.895	0.000	76	62708	10.0	8.67	
96 4-Nitrophenol	109	12.002	12.002	0.000	90	139606	7.50	7.06	
98 Pentachlorobenzene	250	12.023	12.023	0.000	96	290205	7.50	7.20	
99 2,4-Dinitrotoluene	165	12.082	12.082	0.000	66	193380	7.50	6.94	
100 Dibenzofuran	168	12.082	12.082	0.000	94	916718	7.50	7.33	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
101 1-Naphthylamine	143	12.184	12.184	0.000	97	651461	7.50	7.09	
102 2,3,4,6-Tetrachlorophenol	232	12.253	12.253	0.000	78	138898	7.50	6.61	
103 2-Naphthylamine	143	12.291	12.291	0.000	94	648266	7.50	7.01	
104 Diethyl phthalate	149	12.430	12.430	0.000	96	782019	7.50	7.32	
106 Thionazin	107	12.521	12.521	0.000	56	168507	7.50	7.46	
105 Fluorene	166	12.521	12.521	0.000	93	750877	7.50	7.51	
107 N-Nitro-o-toluidine	152	12.542	12.542	0.000	70	191472	7.50	7.58	
109 4-Nitroaniline	138	12.553	12.553	0.000	78	177219	7.50	7.05	
108 4-Chlorophenyl phenyl ether	204	12.542	12.542	0.000	83	359211	7.50	7.15	
110 4,6-Dinitro-2-methylphenol	198	12.595	12.595	0.000	76	70707	7.50	7.00	
111 N-Nitrosodiphenylamine	169	12.692	12.692	0.000	99	637211	7.50	7.48	
112 1,2-Diphenylhydrazine	77	12.740	12.740	0.000	99	1109579	7.50	7.46	a
\$ 113 2,4,6-Tribromophenol	330	12.825	12.825	0.000	96	210477	15.0	14.4	
114 Sulfotepp	97	12.922	12.922	0.000	82	181609	7.50	7.43	
115 cis-Diallate	86	13.071	13.071	0.000	92	301328	5.55	5.43	
116 Phorate	75	13.077	13.077	0.000	95	654158	7.50	7.75	
117 Phenacetin	108	13.093	13.093	0.000	90	471907	7.50	7.67	
118 4-Bromophenyl phenyl ether	248	13.157	13.157	0.000	74	213740	7.50	7.73	
119 trans-Diallate	86	13.178	13.178	0.000	91	108742	1.95	1.87	
120 Hexachlorobenzene	284	13.210	13.210	0.000	93	247037	7.50	7.23	
121 Dimethoate	87	13.280	13.280	0.000	95	393042	7.50	7.43	
122 Atrazine	200	13.387	13.387	0.000	89	220437	7.50	7.69	
123 Pentachlorophenol	266	13.473	13.473	0.000	90	103153	7.50	7.07	
125 Pentachloronitrobenzene	237	13.489	13.489	0.000	84	96495	7.50	7.25	
124 4-Aminobiphenyl	169	13.483	13.483	0.000	92	573391	7.50	7.40	
126 Pronamide	173	13.585	13.585	0.000	91	362526	7.50	7.58	
* 127 Phenanthrene-d10	188	13.719	13.719	0.000	97	643613	5.00	5.00	
128 Dinoseb	211	13.729	13.729	0.000	91	97119	7.50	6.31	
129 Phenanthrene	178	13.751	13.751	0.000	99	1098058	7.50	7.27	
130 Anthracene	178	13.815	13.815	0.000	99	1121890	7.50	7.54	
131 Carbazole	167	14.040	14.040	0.000	96	1033227	7.50	7.62	
132 Methyl parathion	109	14.248	14.248	0.000	90	269238	7.50	7.07	
133 Di-n-butyl phthalate	149	14.558	14.558	0.000	100	1352573	7.50	7.33	
134 Ethyl Parathion	109	14.804	14.804	0.000	82	171099	7.50	7.18	
135 4-Nitroquinoline-1-oxide	190	14.826	14.826	0.000	81	67223	7.50	6.22	
136 Octachlorostyrene	308	15.168	15.168	0.000	93	110791	7.50	7.40	
137 Isodrin	193	15.222	15.222	0.000	86	132013	7.50	7.12	
138 Fluoranthene	202	15.446	15.446	0.000	99	1231966	7.50	7.39	
139 Benzidine	184	15.682	15.682	0.000	99	2149819	22.5	20.4	
* 140 Pyrene-d10 (IS)	212	15.772	15.772	0.000	98	665539	5.00	5.00	
141 Pyrene	202	15.799	15.799	0.000	96	1302425	7.50	7.23	
\$ 142 p-Terphenyl-d14	244	16.088	16.088	0.000	98	1909479	15.0	14.4	
143 p-Dimethylamino azobenzene	225	16.318	16.318	0.000	89	210785	7.50	7.17	
144 Chlorobenzilate	139	16.414	16.414	0.000	82	400474	7.50	7.06	
145 3,3'-Dimethylbenzidine	212	16.890	16.890	0.000	99	703185	7.50	6.64	
146 Butyl benzyl phthalate	149	16.949	16.949	0.000	92	608908	7.50	7.64	
147 2-Acetylaminofluorene	181	17.324	17.324	0.000	94	440458	7.50	6.68	
148 3,3'-Dichlorobenzidine	252	17.842	17.842	0.000	77	455867	7.50	7.08	
150 4,4'-Methylene bis(2-chloroaniline)	231	17.858	17.858	0.000	95	237970	7.50	7.04	
149 Benzo[a]anthracene	228	17.853	17.853	0.000	100	1206132	7.50	7.52	
151 Chrysene	228	17.917	17.917	0.000	97	1213772	7.50	7.40	
152 Bis(2-ethylhexyl) phthalate	149	18.035	18.035	0.000	97	900552	7.50	7.28	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
153 6-Methylchrysene	242	18.730	18.730	0.000	99	833386	7.50	7.11	
154 Di-n-octyl phthalate	149	19.206	19.206	0.000	99	1524567	7.50	7.37	
155 Benzo[b]fluoranthene	252	19.736	19.736	0.000	98	1272317	7.50	7.36	
156 7,12-Dimethylbenz(a)anthracene	256	19.741	19.741	0.000	90	535392	7.50	7.48	
157 Benzo[k]fluoranthene	252	19.784	19.784	0.000	99	1293070	7.50	7.53	
158 Benzo[a]pyrene	252	20.271	20.271	0.000	79	1212898	7.50	7.73	
* 159 Perylene-d12	264	20.362	20.362	0.000	98	691658	5.00	5.00	
160 3-Methylcholanthrene	268	20.848	20.848	0.000	92	609640	7.50	7.74	
161 Dibenz[a,h]acridine	279	21.667	21.667	0.000	91	935177	7.50	7.34	
162 Dibenz[a,j]acridine	279	21.742	21.742	0.000	95	946049	7.50	7.25	
163 Indeno[1,2,3-cd]pyrene	276	22.009	22.009	0.000	99	1101026	7.50	7.79	
164 Dibenz(a,h)anthracene	278	22.052	22.052	0.000	93	1204254	7.50	8.00	
165 Benzo[g,h,i]perylene	276	22.432	22.432	0.000	97	1078288	7.50	7.55	
S 166 Isosafrole	162				0		7.50	7.42	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_5_00008

Amount Added: 1.00

Units: mL

Report Date: 20-Oct-2020 19:09:11

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0701.D

Injection Date: 19-Oct-2020 17:17:25

Instrument ID: HP20296

Operator ID: kel10217

Lims ID: ICIS L5

Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 ul

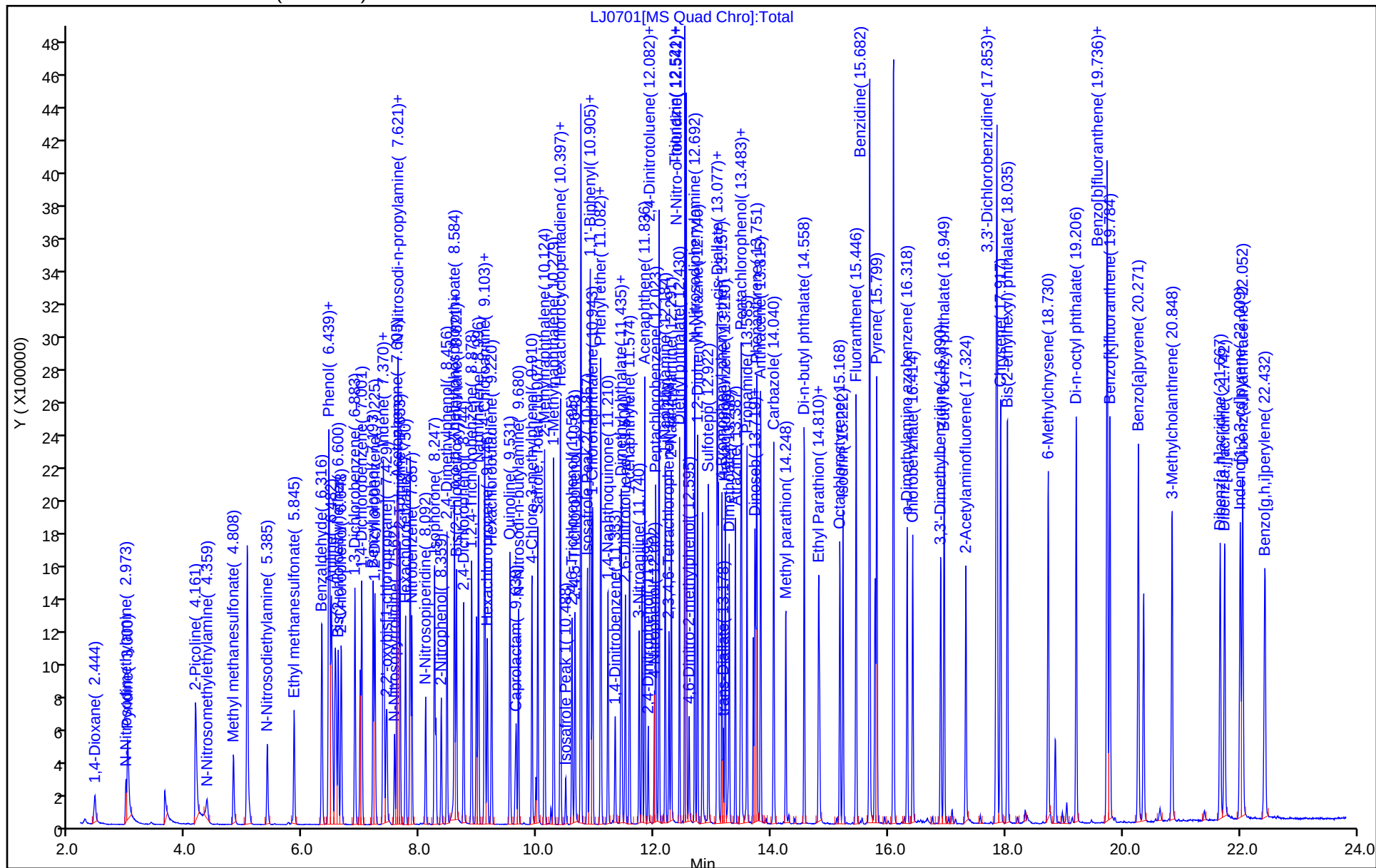
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0701.D

Injection Date: 19-Oct-2020 17:17:25

Instrument ID: HP20296

Lims ID: ICIS L5

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 2

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP20296

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

Detector

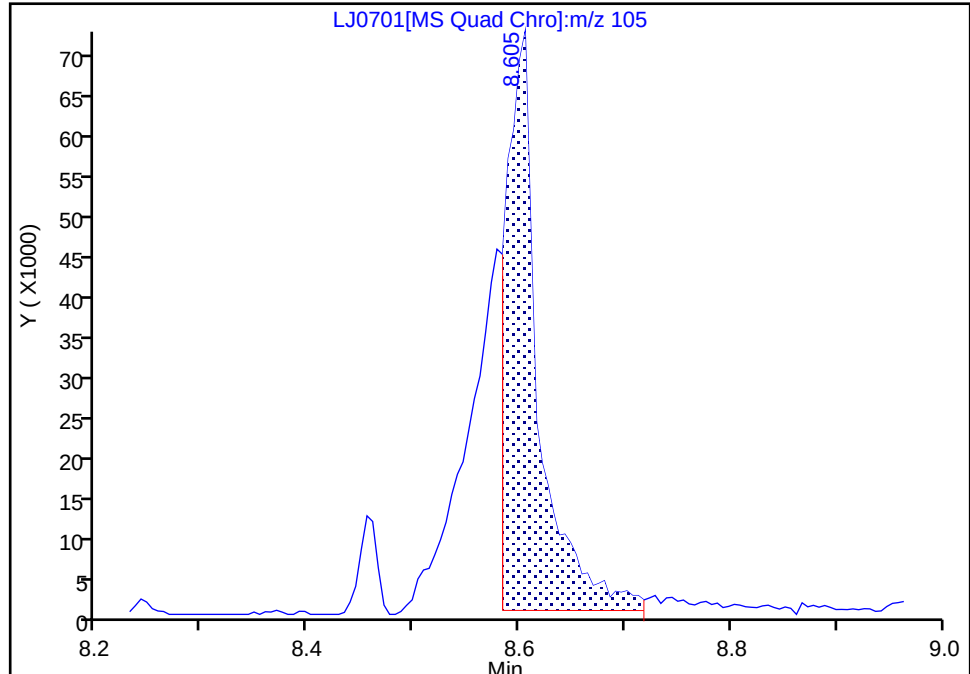
MS SCAN

50 Benzoic acid, CAS: 65-85-0

Signal: 1

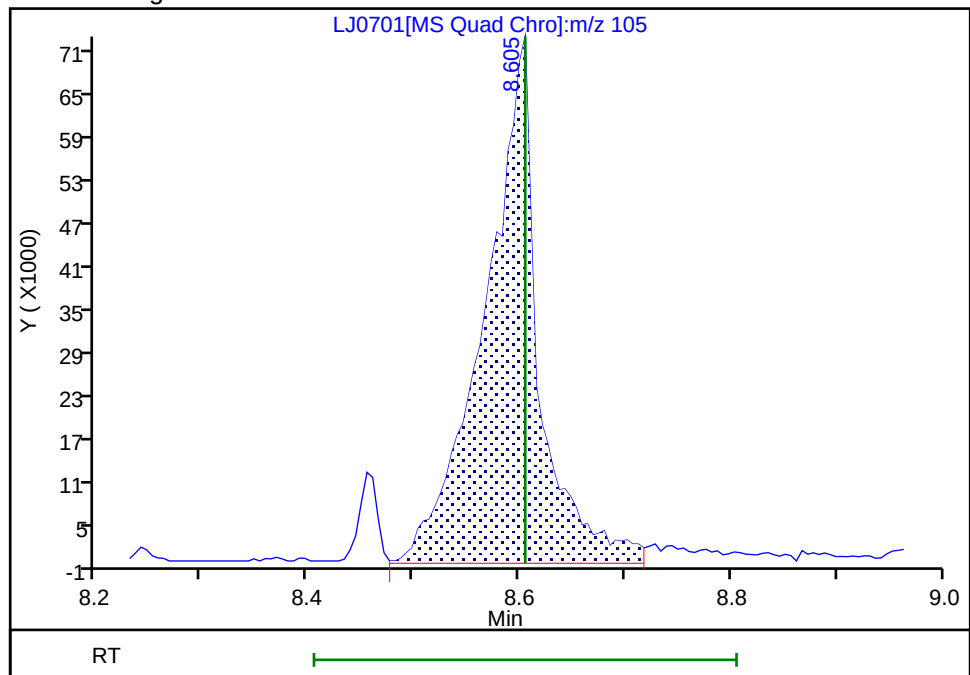
RT: 8.61
Area: 147808
Amount: 10.000000
Amount Units: ug/ml

Processing Integration Results



RT: 8.61
Area: 259363
Amount: 9.678318
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 19-Oct-2020 18:01:17

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

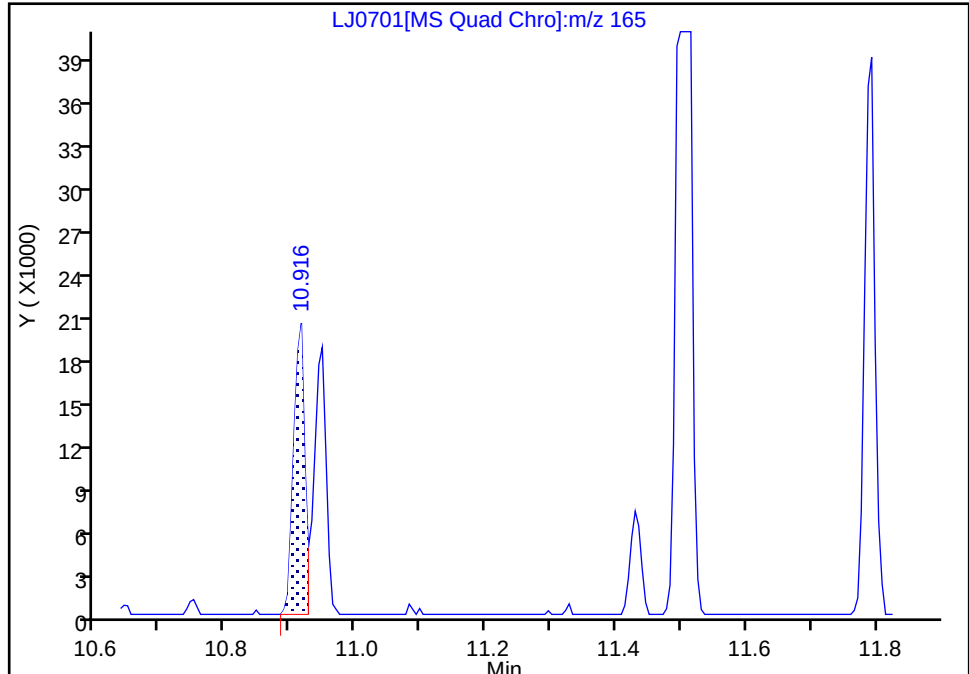
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Injection Date: 19-Oct-2020 17:17:25 Instrument ID: HP20296
Lims ID: ICIS L5
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP20296 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.18mm (0.18 mm) Detector MS SCAN

88 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

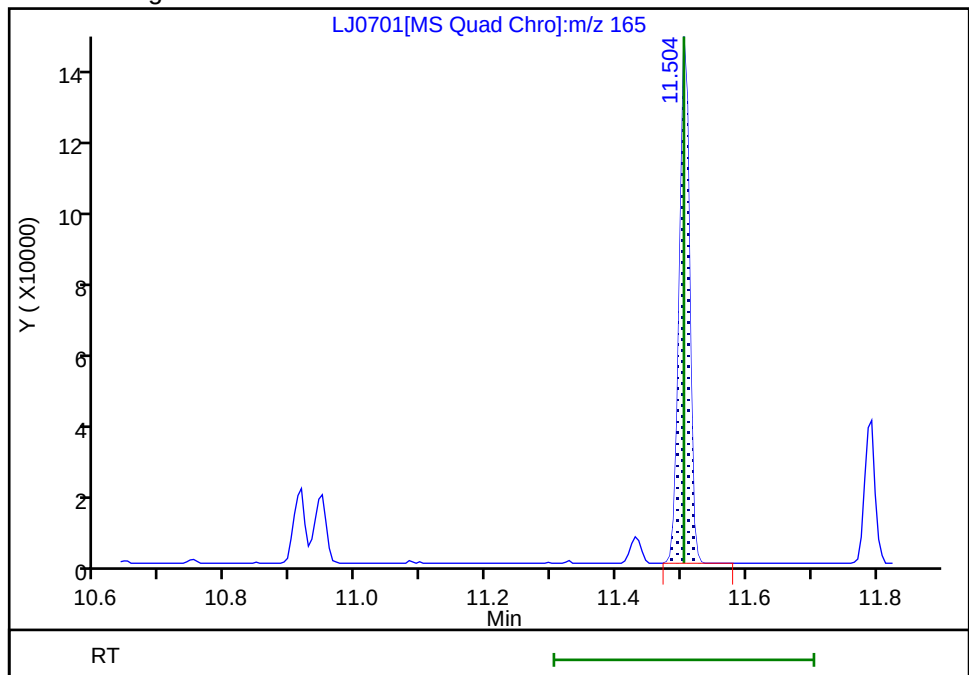
RT: 10.92
Area: 23501
Amount: 6.863379
Amount Units: ug/ml

Processing Integration Results



RT: 11.50
Area: 155485
Amount: 7.556294
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 20-Oct-2020 18:38:04
Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Lancaster Laboratories Env, LLC

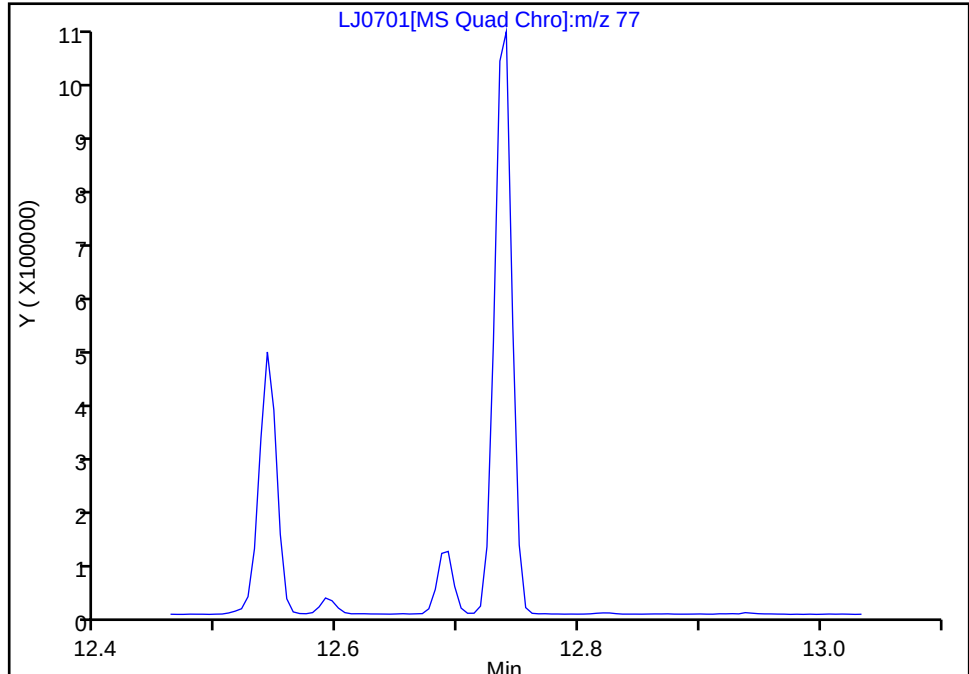
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Injection Date: 19-Oct-2020 17:17:25 Instrument ID: HP20296
Lims ID: ICIS L5
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP20296 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.18mm (0.18 mm) Detector: MS SCAN

112 1,2-Diphenylhydrazine, CAS: 122-66-7

Signal: 1

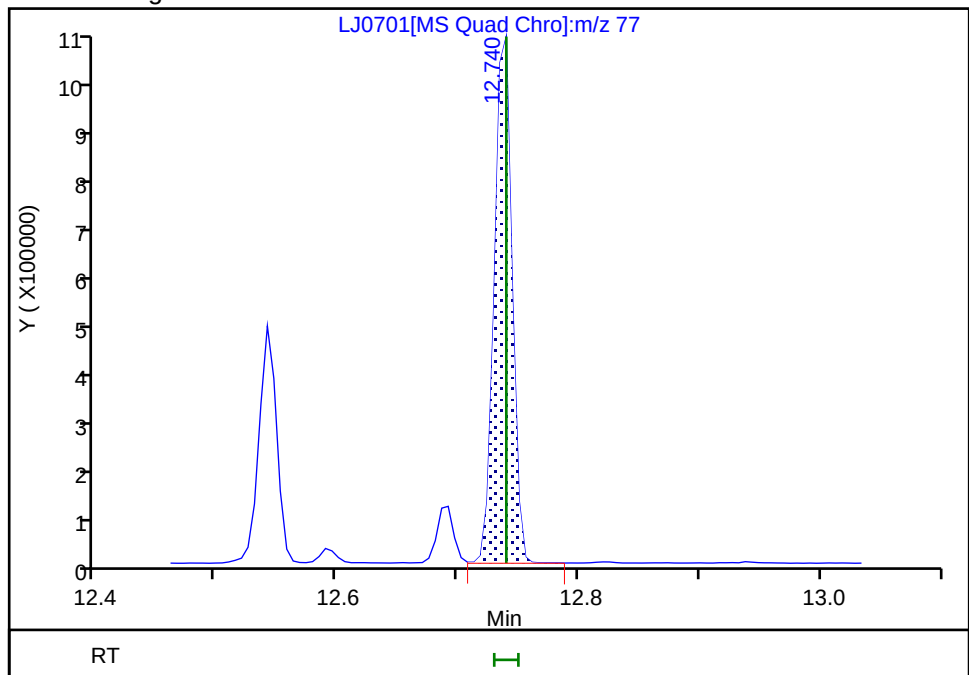
Not Detected
Expected RT: 12.74

Processing Integration Results



RT: 12.74
Area: 1109579
Amount: 7.463803
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 19-Oct-2020 18:01:45
Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0702.D
 Lims ID: IC L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 19-Oct-2020 18:09:10 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: IC L1
 Misc. Info.: 410-0013268-003
 Operator ID: kel10217 Instrument ID: HP20296
 Sublist: chrom-MSSemi_HP20296*sub6
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 20-Oct-2020 19:06:52 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1014

First Level Reviewer: luttek

Date: 19-Oct-2020 23:07:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 1,4-Dioxane	88	2.449	2.449	0.000	77	3394	0.1250	0.1287	
2 N-Nitrosodimethylamine	74	3.005	3.005	0.000	20	4706	0.1250	0.1112	
3 Pyridine	79	3.059	3.059	0.000	95	10402	0.1250	0.1398	
5 2-Picoline	93	4.193	4.193	0.000	70	9210	0.1250	0.1211	
6 N-Nitrosomethylethylamine	88	4.369	4.369	0.000	26	2929	0.1250	0.0954	
9 Methyl methanesulfonate	80	4.818	4.818	0.000	83	4012	0.1250	0.1110	M
\$ 10 2-Fluorophenol	112	5.038	5.038	0.000	90	12621	0.2500	0.2109	
11 N-Nitrosodiethylamine	102	5.391	5.391	0.000	92	2857	0.1250	0.1022	
13 Ethyl methanesulfonate	109	5.845	5.845	0.000	98	3828	0.1250	0.1235	
15 Benzaldehyde	77	6.311	6.311	0.000	93	6601	0.1250	0.1169	
\$ 16 Phenol-d5	99	6.434	6.434	0.000	95	15985	0.2500	0.2190	Ma
17 Phenol	94	6.450	6.450	0.000	64	11586	0.1250	0.1245	
18 Aniline	93	6.476	6.476	0.000	53	14360	0.1250	0.1325	
19 Bis(2-chloroethyl)ether	93	6.594	6.594	0.000	94	8857	0.1250	0.1263	
20 2-Chlorophenol	128	6.642	6.642	0.000	95	5613	0.1250	0.1055	
22 1,3-Dichlorobenzene	146	6.888	6.888	0.000	90	7820	0.1250	0.1324	
* 24 1,4-Dichlorobenzene-d4	152	6.974	6.974	0.000	97	185889	5.00	5.00	
25 1,4-Dichlorobenzene	146	7.001	7.001	0.000	86	7972	0.1250	0.1333	
27 Benzyl alcohol	108	7.193	7.193	0.000	86	4176	0.1250	0.1000	
29 1,2-Dichlorobenzene	146	7.225	7.225	0.000	80	6242	0.1250	0.1087	
30 Indene	115	7.359	7.359	0.000	91	10701	0.1250	0.1179	
31 2-Methylphenol	108	7.375	7.375	0.000	69	6588	0.1250	0.1164	a
32 2,2'-oxybis[1-chloropropane]	45	7.423	7.423	0.000	82	7186	0.1250	0.1188	
34 N-Nitrosopyrrolidine	100	7.546	7.546	0.000	88	3323	0.1250	0.1086	
35 Acetophenone	105	7.600	7.600	0.000	95	9340	0.1250	0.0983	
36 4-Methylphenol	108	7.621	7.621	0.000	84	7355	0.1250	0.1151	
37 N-Nitrosodi-n-propylamine	70	7.610	7.610	0.000	77	6032	0.1250	0.1174	
38 N-Nitrosomorpholine	56	7.626	7.626	0.000	51	3436	0.1250	0.1028	
39 2-Toluidine	106	7.653	7.653	0.000	95	12454	0.1250	0.1224	
40 Hexachloroethane	117	7.749	7.749	0.000	86	3450	0.1250	0.1178	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
\$ 41 Nitrobenzene-d5	82	7.819	7.819	0.000	85	17027	0.2500	0.2309	
42 Nitrobenzene	77	7.851	7.851	0.000	82	8020	0.1250	0.1054	
44 N-Nitrosopiperidine	114	8.092	8.092	0.000	87	3111	0.1250	0.1113	
46 Isophorone	82	8.241	8.241	0.000	97	15491	0.1250	0.1185	
47 2-Nitrophenol	139	8.359	8.359	0.000	81	1578	0.1250	0.1617	
48 2,4-Dimethylphenol	107	8.455	8.455	0.000	93	5761	0.1250	0.0927	
49 o,o',o"-Triethylphosphorothioat	198	8.584	8.584	0.000	85	2954	0.1250	0.1173	
50 Benzoic acid	105	8.520	8.520	0.000	85	11335	1.25	2.66	M
51 Bis(2-chloroethoxy)methane	93	8.616	8.616	0.000	95	9837	0.1250	0.1165	
52 2,4-Dichlorophenol	162	8.739	8.739	0.000	90	4087	0.1250	0.1030	
54 1,2,4-Trichlorobenzene	180	8.878	8.878	0.000	89	6385	0.1250	0.1333	
* 55 Naphthalene-d8	136	8.958	8.958	0.000	99	696466	5.00	5.00	
S 53 Dinitrotoluene	165				0		0.2500	0.1681	
56 Naphthalene	128	8.990	8.990	0.000	24	19633	0.1250	0.1279	
57 4-Chloroaniline	127	9.092	9.092	0.000	85	7673	0.1250	0.1222	
58 2,6-Dichlorophenol	162	9.103	9.103	0.000	73	3613	0.1250	0.0936	
59 Hexachloropropene	213	9.145	9.145	0.000	92	2931	0.1250	0.1020	
60 Hexachlorobutadiene	225	9.210	9.210	0.000	87	3654	0.1250	0.1280	
62 Quinoline	129	9.530	9.530	0.000	96	12189	0.1250	0.1319	
64 Caprolactam	113	9.595	9.595	0.000	77	979	0.1250	0.0609	
S 63 Diallate	86				0		0.1250	0.1045	
65 N-Nitrosodi-n-butylamine	84	9.675	9.675	0.000	85	4893	0.1250	0.0964	
66 4-Chloro-3-methylphenol	107	9.900	9.900	0.000	91	4156	0.1250	0.0842	
67 Safrole, Total	162	10.006	10.006	0.000	78	3835	0.1250	0.1034	
69 2-Methylnaphthalene	142	10.124	10.124	0.000	89	11487	0.1250	0.1176	
70 1-Methylnaphthalene	142	10.279	10.279	0.000	91	12026	0.1250	0.1285	
71 Hexachlorocyclopentadiene	237	10.376	10.376	0.000	64	1884	0.1250	0.0828	
72 1,2,4,5-Tetrachlorobenzene	216	10.397	10.397	0.000	93	5733	0.1250	0.1244	
73 Isosafrole Peak 1	162	10.483	10.483	0.000	1	650	0.0200	0.0162	a
74 2,4,6-Trichlorophenol	196	10.589	10.589	0.000	84	2068	0.1250	0.0851	
75 2,4,5-Trichlorophenol	196	10.638	10.638	0.000	85	2034	0.1250	0.2415	
\$ 76 2-Fluorobiphenyl (Surr)	172	10.739	10.739	0.000	98	26008	0.2500	0.2489	
77 Isosafrole Peak 2	162	10.846	10.846	0.000	85	3976	0.1050	0.0942	
79 1,1'-Biphenyl	154	10.894	10.894	0.000	95	12495	0.1250	0.1068	
80 2-Chloronaphthalene	162	10.910	10.910	0.000	86	11882	0.1250	0.1253	
81 1-Chloronaphthalene	162	10.937	10.937	0.000	89	9810	0.1250	0.1150	
82 Phenyl ether	170	11.082	11.082	0.000	81	6790	0.1250	0.1133	
83 2-Nitroaniline	138	11.087	11.087	0.000	57	1756	0.1250	0.0675	
84 1,4-Naphthoquinone	158	11.205	11.205	0.000	74	2581	0.1250	0.0742	
85 1,4-Dinitrobenzene	168	11.322	11.322	0.000	73	510	0.1250	0.0468	
86 Dimethyl phthalate	163	11.424	11.424	0.000	96	12166	0.1250	0.1194	
87 1,3-Dinitrobenzene	168	11.440	11.440	0.000	1	565	0.1250	0.0429	
88 2,6-Dinitrotoluene	165	11.499	11.499	0.000	52	1290	0.1250	0.0643	a
90 Acenaphthylene	152	11.574	11.574	0.000	98	13168	0.1250	0.1094	
91 3-Nitroaniline	138	11.734	11.734	0.000	82	1536	0.1250	0.0703	
* 92 Acenaphthene-d10	164	11.788	11.788	0.000	97	318800	5.00	5.00	
93 Acenaphthene	153	11.836	11.836	0.000	95	11800	0.1250	0.1249	
94 2,4-Dinitrophenol	184	11.889	11.889	0.000	69	2985	1.13	0.4236	
96 4-Nitrophenol	109	12.002	12.002	0.000	89	5552	0.6250	0.2883	
98 Pentachlorobenzene	250	12.018	12.018	0.000	85	4710	0.1250	0.1200	
99 2,4-Dinitrotoluene	165	12.082	12.082	0.000	61	2816	0.1250	0.1037	
100 Dibenzofuran	168	12.082	12.082	0.000	94	16449	0.1250	0.1349	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
101 1-Naphthylamine	143	12.178	12.178	0.000	94	9229	0.1250	0.1030	
102 2,3,4,6-Tetrachlorophenol	232	12.248	12.248	0.000	64	1488	0.1250	0.2483	
103 2-Naphthylamine	143	12.285	12.285	0.000	94	10949	0.1250	0.1216	
104 Diethyl phthalate	149	12.424	12.424	0.000	96	11122	0.1250	0.1069	
106 Thionazin	107	12.515	12.515	0.000	52	2196	0.1250	0.0997	
105 Fluorene	166	12.520	12.520	0.000	94	11436	0.1250	0.1173	
108 4-Chlorophenyl phenyl ether	204	12.542	12.542	0.000	85	5932	0.1250	0.1212	
107 N-Nitro-o-toluidine	152	12.536	12.536	0.000	63	2168	0.1250	0.0881	
109 4-Nitroaniline	138	12.542	12.542	0.000	68	1702	0.1250	0.1598	
110 4,6-Dinitro-2-methylphenol	198	12.585	12.585	0.000	55	2686	0.6250	0.2584	
111 N-Nitrosodiphenylamine	169	12.692	12.692	0.000	95	9261	0.1250	0.1056	
112 1,2-Diphenylhydrazine	77	12.734	12.734	0.000	97	15766	0.1250	0.1031	
\$ 113 2,4,6-Tribromophenol	330	12.820	12.820	0.000	85	2054	0.2500	0.1444	
114 Sulfotepp	97	12.921	12.921	0.000	70	2401	0.1250	0.0955	
115 cis-Diallate	86	13.071	13.071	0.000	78	4239	0.0925	0.0743	
116 Phorate	75	13.077	13.077	0.000	93	8112	0.1250	0.0934	
117 Phenacetin	108	13.087	13.087	0.000	44	4302	0.1250	0.0680	
118 4-Bromophenyl phenyl ether	248	13.151	13.151	0.000	72	3201	0.1250	0.1124	Ma
119 trans-Diallate	86	13.178	13.178	0.000	90	1816	0.0325	0.0303	
120 Hexachlorobenzene	284	13.210	13.210	0.000	90	4795	0.1250	0.1363	
121 Dimethoate	87	13.269	13.269	0.000	93	4468	0.1250	0.0821	
122 Atrazine	200	13.381	13.381	0.000	84	2772	0.1250	0.0940	
123 Pentachlorophenol	266	13.467	13.467	0.000	56	1099	0.1250	0.0732	
124 4-Aminobiphenyl	169	13.483	13.483	0.000	81	9620	0.1250	0.1207	
125 Pentachloronitrobenzene	237	13.488	13.488	0.000	46	1240	0.1250	0.0905	
126 Pronamide	173	13.579	13.579	0.000	88	4197	0.1250	0.0852	
* 127 Phenanthrene-d10	188	13.713	13.713	0.000	97	662353	5.00	5.00	
128 Dinoseb	211	13.729	13.729	0.000	60	1423	0.1250	0.0899	
129 Phenanthrene	178	13.745	13.745	0.000	96	18399	0.1250	0.1184	
130 Anthracene	178	13.815	13.815	0.000	98	17376	0.1250	0.1135	
131 Carbazole	167	14.034	14.034	0.000	96	16059	0.1250	0.1150	
132 Methyl parathion	109	14.243	14.243	0.000	87	2704	0.1250	0.0690	
133 Di-n-butyl phthalate	149	14.558	14.558	0.000	99	17344	0.1250	0.0913	
134 Ethyl Parathion	109	14.799	14.799	0.000	69	1490	0.1250	0.0608	
135 4-Nitroquinoline-1-oxide	190	14.815	14.815	0.000	59	168	0.1250	0.8784	
136 Octachlorostyrene	308	15.168	15.168	0.000	75	1911	0.1250	0.1241	
137 Isodrin	193	15.221	15.221	0.000	83	2980	0.1250	0.1561	
138 Fluoranthene	202	15.446	15.446	0.000	98	21409	0.1250	0.1247	
139 Benzidine	184	15.671	15.671	0.000	99	70827	1.00	0.6632	
* 140 Pyrene-d10 (IS)	212	15.767	15.767	0.000	98	674267	5.00	5.00	
141 Pyrene	202	15.799	15.799	0.000	96	22595	0.1250	0.1237	
\$ 142 p-Terphenyl-d14	244	16.083	16.083	0.000	97	30426	0.2500	0.2258	
143 p-Dimethylamino azobenzene	225	16.318	16.318	0.000	81	2023	0.1250	0.0680	
144 Chlorobenzilate	139	16.414	16.414	0.000	79	3602	0.1250	0.0626	
145 3,3'-Dimethylbenzidine	212	16.896	16.896	0.000	95	8235	0.1250	0.0767	
146 Butyl benzyl phthalate	149	16.944	16.944	0.000	88	6009	0.1250	0.0744	
147 2-Acetylaminofluorene	181	17.318	17.318	0.000	91	3237	0.1250	1.13	
148 3,3'-Dichlorobenzidine	252	17.832	17.832	0.000	53	3957	0.1250	0.0607	M
149 Benzo[a]anthracene	228	17.848	17.848	0.000	97	16546	0.1250	0.1018	
150 4,4'-Methylene bis(2-chloroani	231	17.853	17.853	0.000	59	1907	0.1250	0.0557	
151 Chrysene	228	17.912	17.912	0.000	96	18136	0.1250	0.1092	
152 Bis(2-ethylhexyl) phthalate	149	18.035	18.035	0.000	93	7291	0.1250	0.0581	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
153 6-Methylchrysene	242	18.719	18.719	0.000	97	11448	0.1250	0.0965	
154 Di-n-octyl phthalate	149	19.206	19.206	0.000	97	10554	0.1250	0.0542	
155 Benzo[b]fluoranthene	252	19.730	19.730	0.000	97	17776	0.1250	0.1092	
156 7,12-Dimethylbenz(a)anthracene	256	19.736	19.736	0.000	67	6225	0.1250	0.0925	
157 Benzo[k]fluoranthene	252	19.773	19.773	0.000	97	18656	0.1250	0.1155	
158 Benzo[a]pyrene	252	20.265	20.265	0.000	80	14749	0.1250	0.0999	
* 159 Perylene-d12	264	20.361	20.361	0.000	97	650868	5.00	5.00	
160 3-Methylcholanthrene	268	20.832	20.832	0.000	90	6538	0.1250	0.0882	
161 Dibenz[a,h]acridine	279	21.667	21.667	0.000	91	10832	0.1250	0.0903	
162 Dibenz[a,j]acridine	279	21.736	21.736	0.000	94	11701	0.1250	0.0953	
163 Indeno[1,2,3-cd]pyrene	276	21.998	21.998	0.000	91	13130	0.1250	0.0987	M
164 Dibenz(a,h)anthracene	278	22.052	22.052	0.000	89	14772	0.1250	0.1043	
165 Benzo[g,h,i]perylene	276	22.421	22.421	0.000	97	17065	0.1250	0.1269	
S 166 Isosafrole	162				0		0.1250	0.1104	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_1_00009

Amount Added: 1.00

Units: mL

Report Date: 20-Oct-2020 19:06:53

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0702.D

Injection Date: 19-Oct-2020 18:09:10

Instrument ID: HP20296

Operator ID: kel10217

Lims ID: IC L1

Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 ul

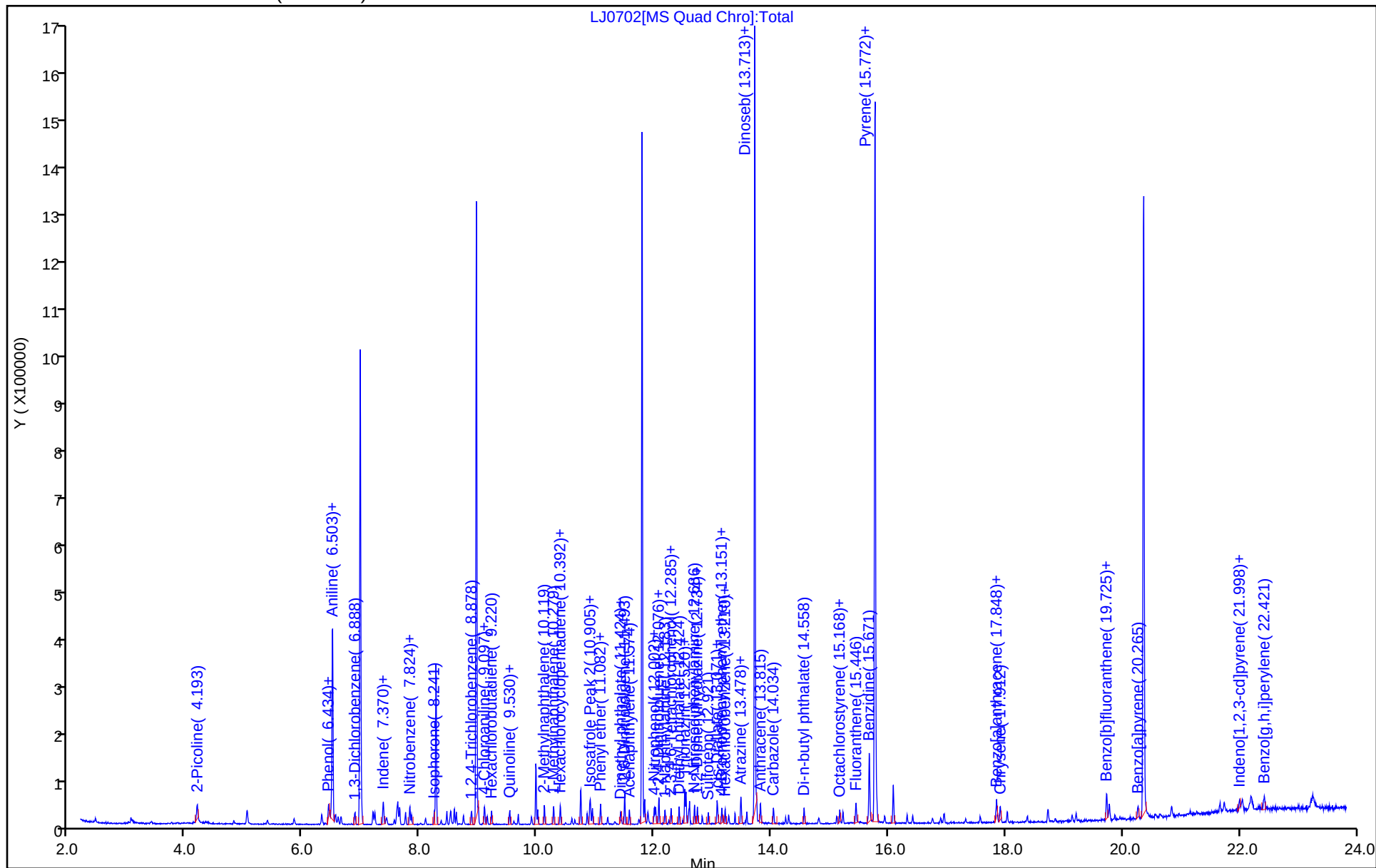
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0702.D

Injection Date: 19-Oct-2020 18:09:10

Instrument ID: HP20296

Lims ID: IC L1

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 3

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP20296

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

Detector

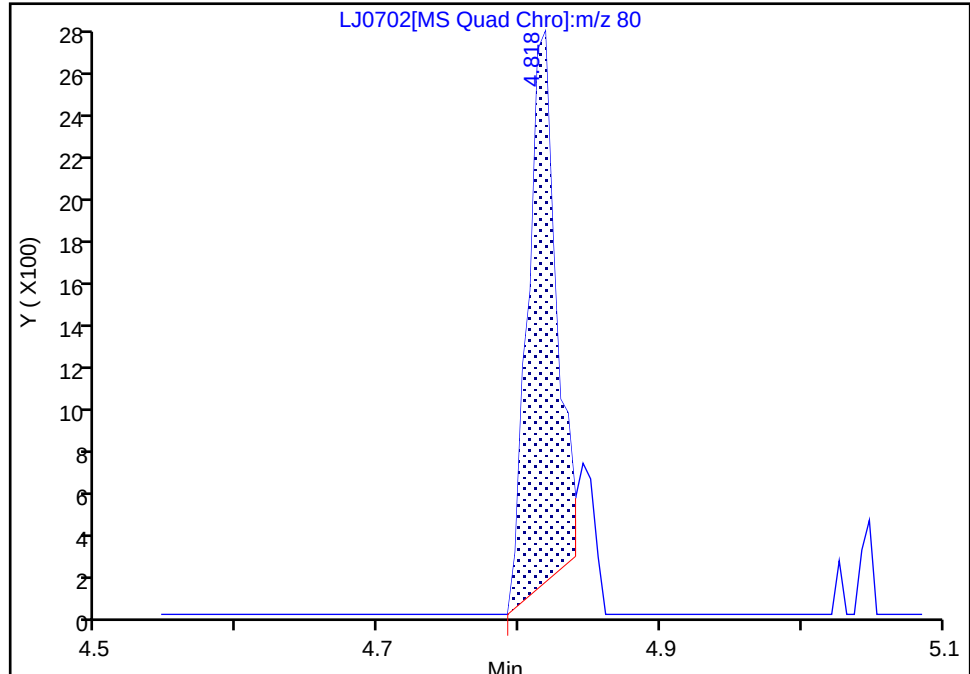
MS SCAN

9 Methyl methanesulfonate, CAS: 66-27-3

Signal: 1

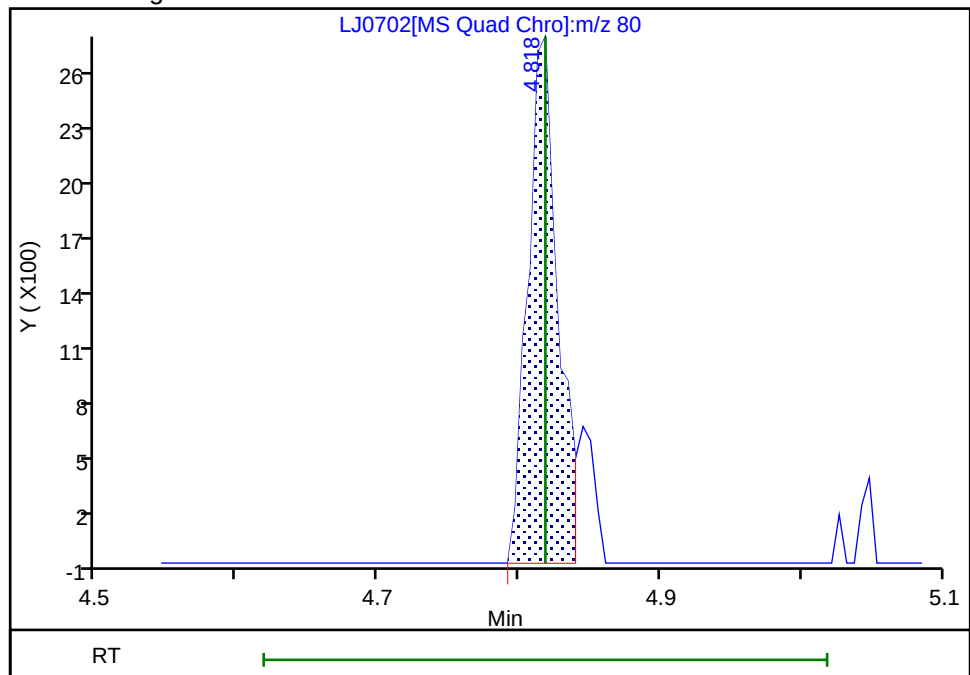
RT: 4.82
Area: 3612
Amount: 0.099902
Amount Units: ug/ml

Processing Integration Results



RT: 4.82
Area: 4012
Amount: 0.110966
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 19-Oct-2020 23:04:42

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

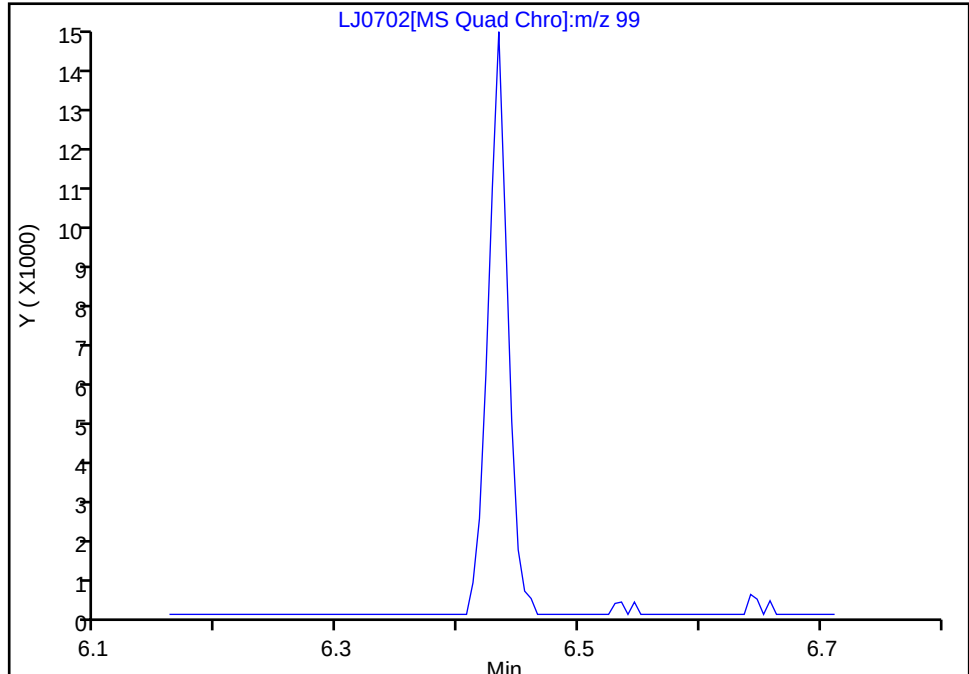
Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0702.D
Injection Date: 19-Oct-2020 18:09:10 Instrument ID: HP20296
Lims ID: IC L1
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP20296 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.18mm (0.18 mm) Detector MS SCAN

\$ 16 Phenol-d5, CAS: 4165-62-2

Signal: 1

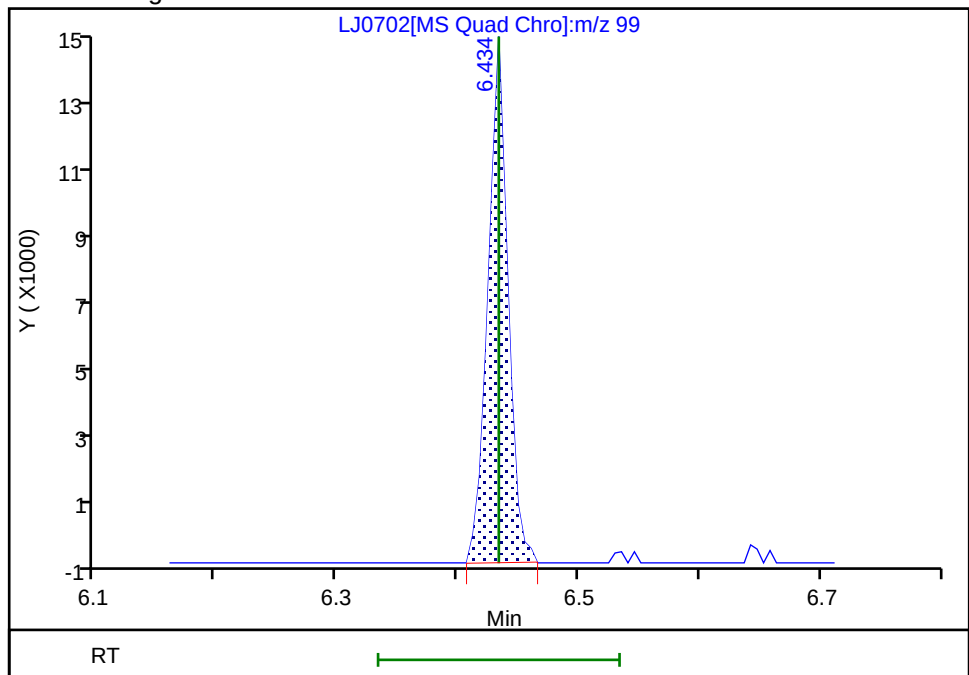
Not Detected
Expected RT: 6.43

Processing Integration Results



RT: 6.43
Area: 15985
Amount: 0.219012
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 19-Oct-2020 23:04:27
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0702.D

Injection Date: 19-Oct-2020 18:09:10

Instrument ID: HP20296

Lims ID: IC L1

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 3

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP20296

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

Detector

MS SCAN

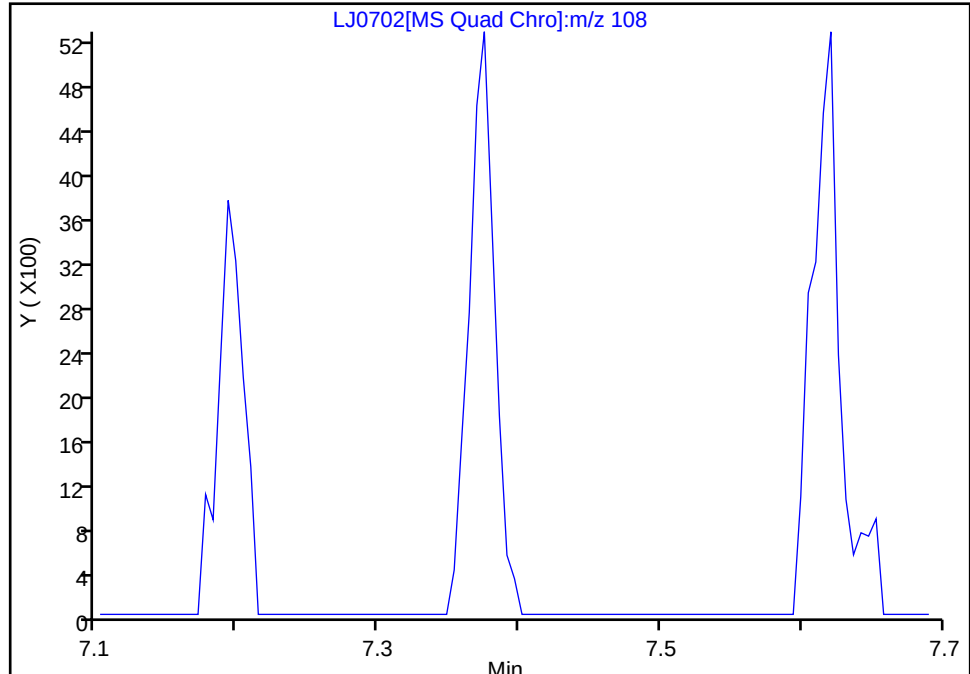
31 2-Methylphenol, CAS: 95-48-7

Signal: 1

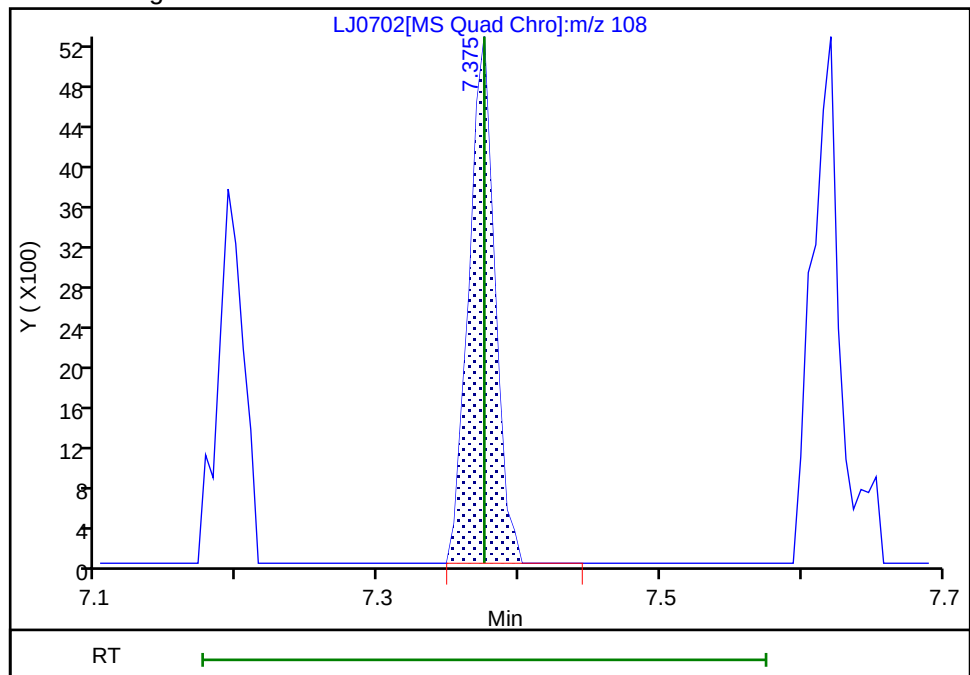
Not Detected

Expected RT: 7.37

Processing Integration Results



Manual Integration Results



RT: 7.37

Area: 6588

Amount: 0.116362

Amount Units: ug/ml

Reviewer: luttek, 19-Oct-2020 23:04:51

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0702.D

Injection Date: 19-Oct-2020 18:09:10

Instrument ID: HP20296

Lims ID: IC L1

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 3

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP20296

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

Detector

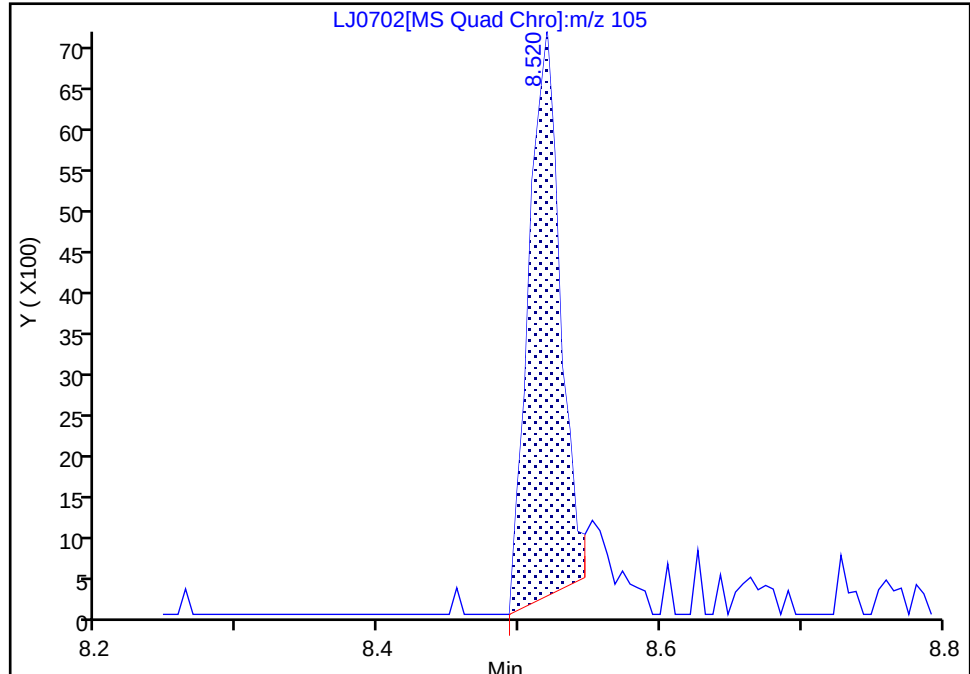
MS SCAN

50 Benzoic acid, CAS: 65-85-0

Signal: 1

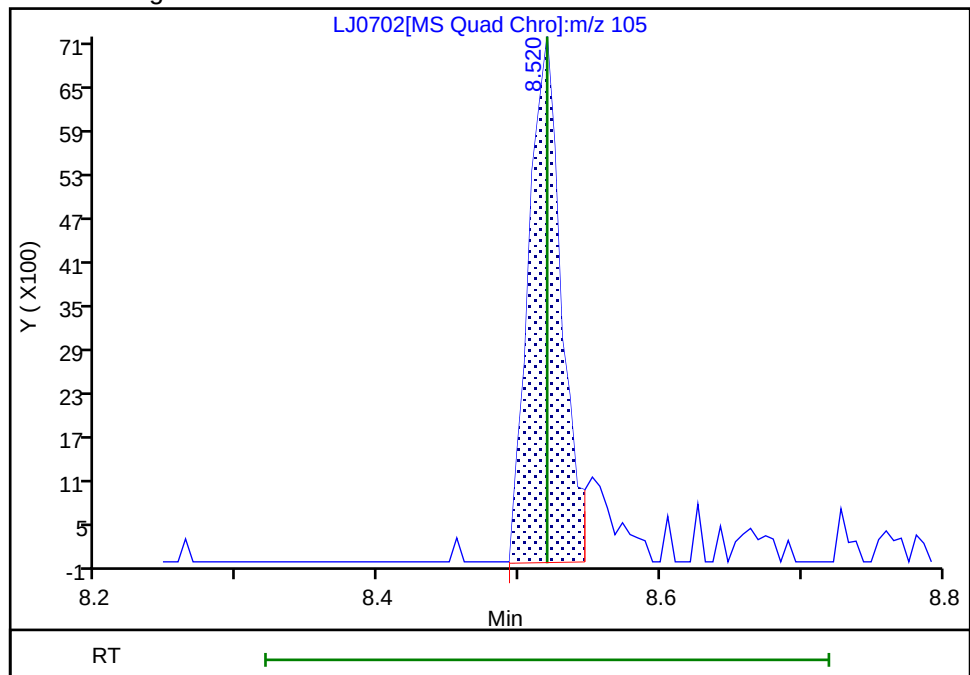
RT: 8.52
Area: 10581
Amount: 0.454502
Amount Units: ug/ml

Processing Integration Results



RT: 8.52
Area: 11335
Amount: 2.662058
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 19-Oct-2020 23:05:12

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

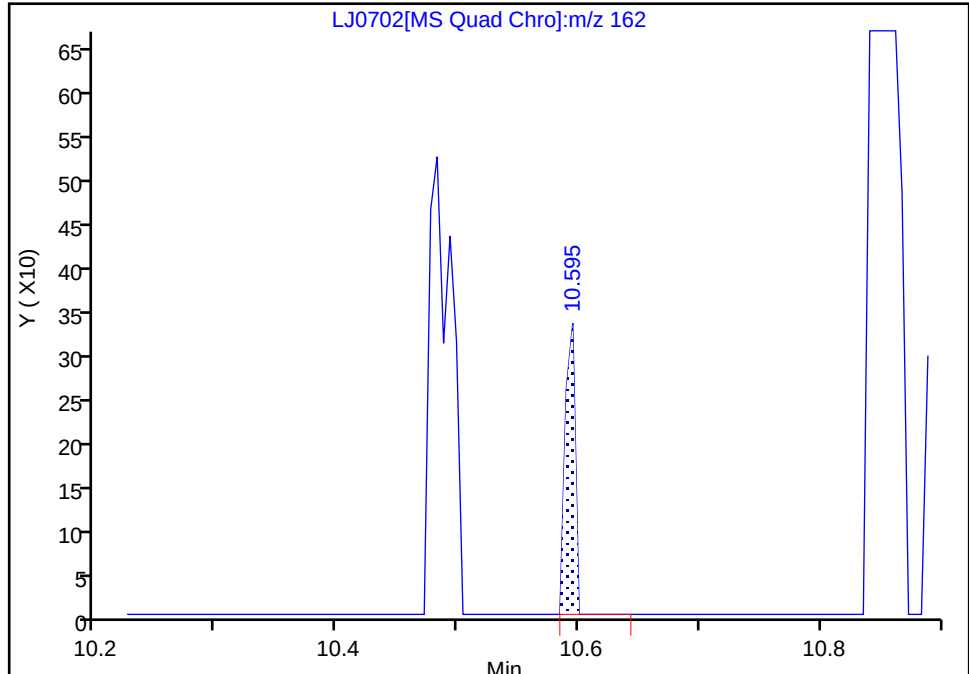
Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0702.D
Injection Date: 19-Oct-2020 18:09:10 Instrument ID: HP20296
Lims ID: IC L1
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP20296 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.18mm (0.18 mm) Detector: MS SCAN

73 Isosafrole Peak 1, CAS: 120-58-1

Signal: 1

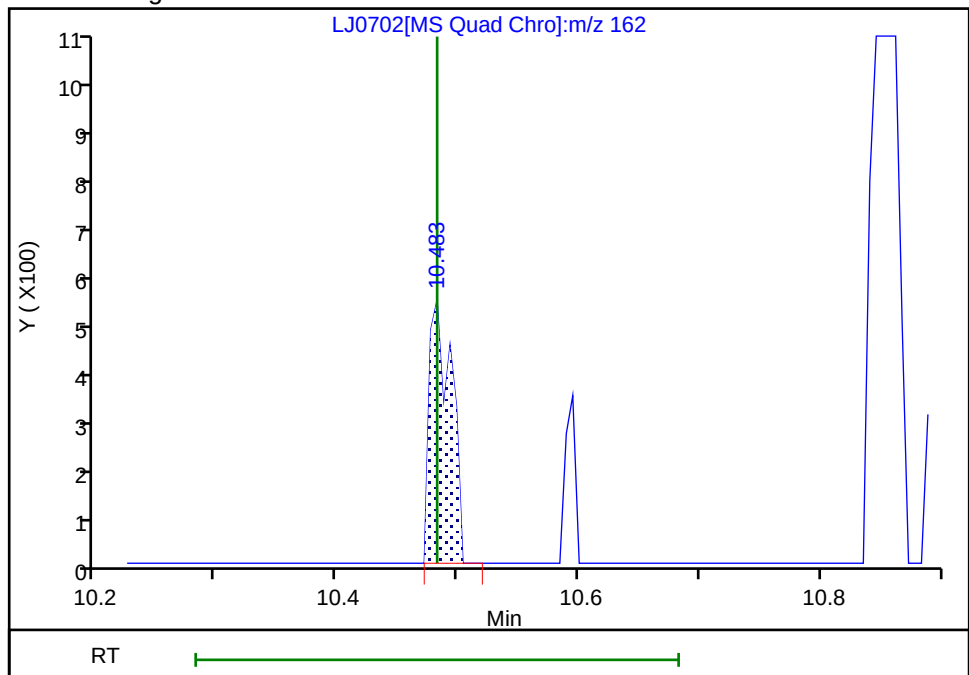
RT: 10.59
Area: 188
Amount: 0.004687
Amount Units: ug/ml

Processing Integration Results



RT: 10.48
Area: 650
Amount: 0.016203
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 19-Oct-2020 23:05:25
Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0702.D

Injection Date: 19-Oct-2020 18:09:10

Instrument ID: HP20296

Lims ID: IC L1

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 3

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP20296

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

Detector

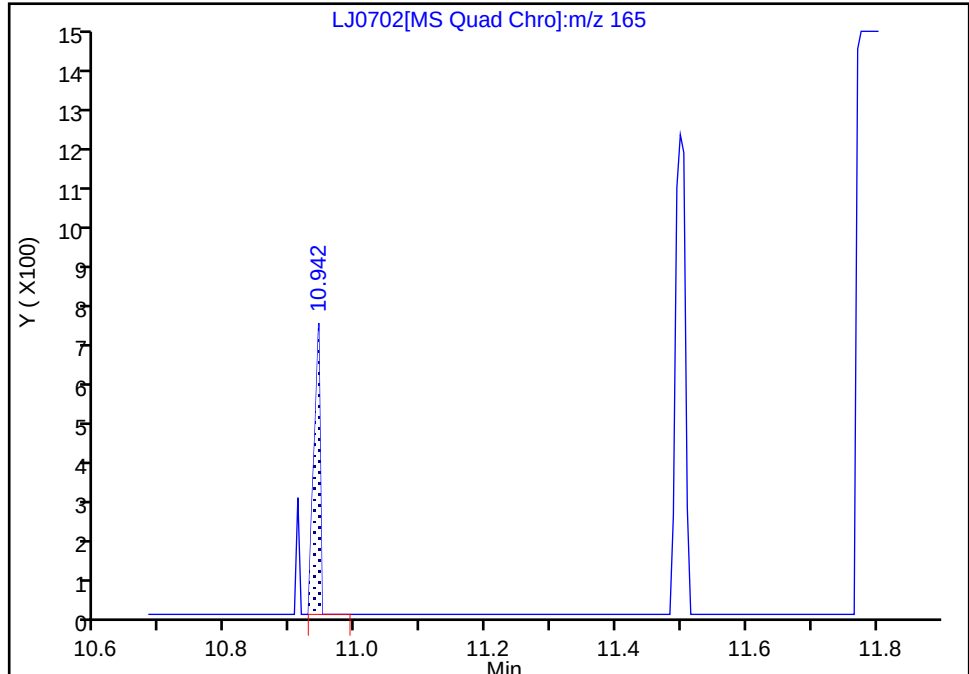
MS SCAN

88 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

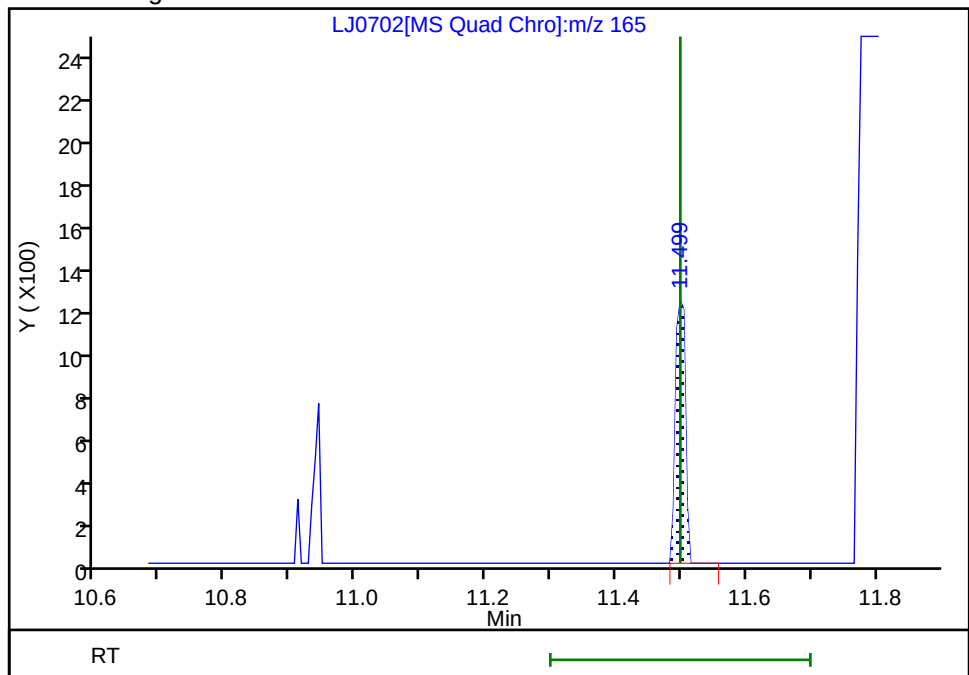
RT: 10.94
Area: 480
Amount: 0.143864
Amount Units: ug/ml

Processing Integration Results



RT: 11.50
Area: 1290
Amount: 0.064338
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 20-Oct-2020 18:57:07

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Lancaster Laboratories Env, LLC

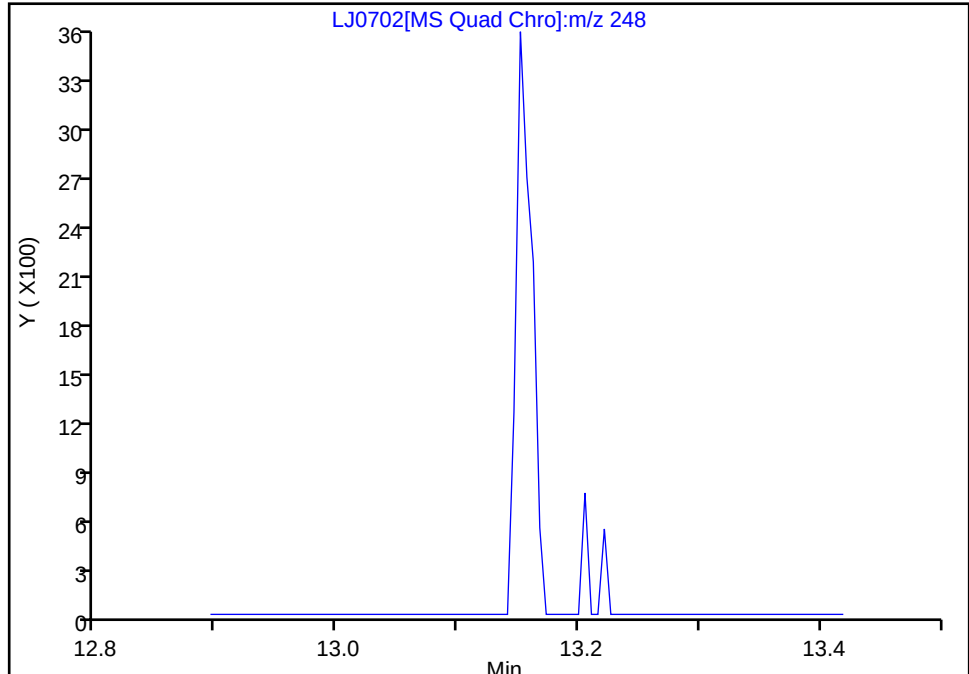
Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0702.D
Injection Date: 19-Oct-2020 18:09:10 Instrument ID: HP20296
Lims ID: IC L1
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP20296 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.18mm (0.18 mm) Detector MS SCAN

118 4-Bromophenyl phenyl ether, CAS: 101-55-3

Signal: 1

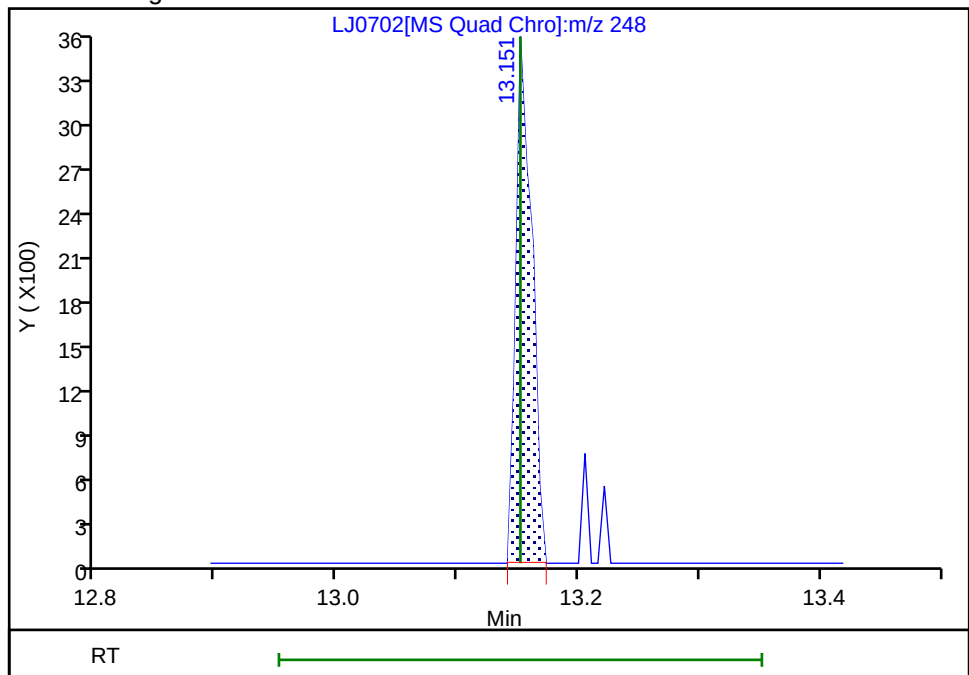
Not Detected
Expected RT: 13.15

Processing Integration Results



Manual Integration Results

RT: 13.15
Area: 3201
Amount: 0.112424
Amount Units: ug/ml



Reviewer: luttek, 19-Oct-2020 23:05:57

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

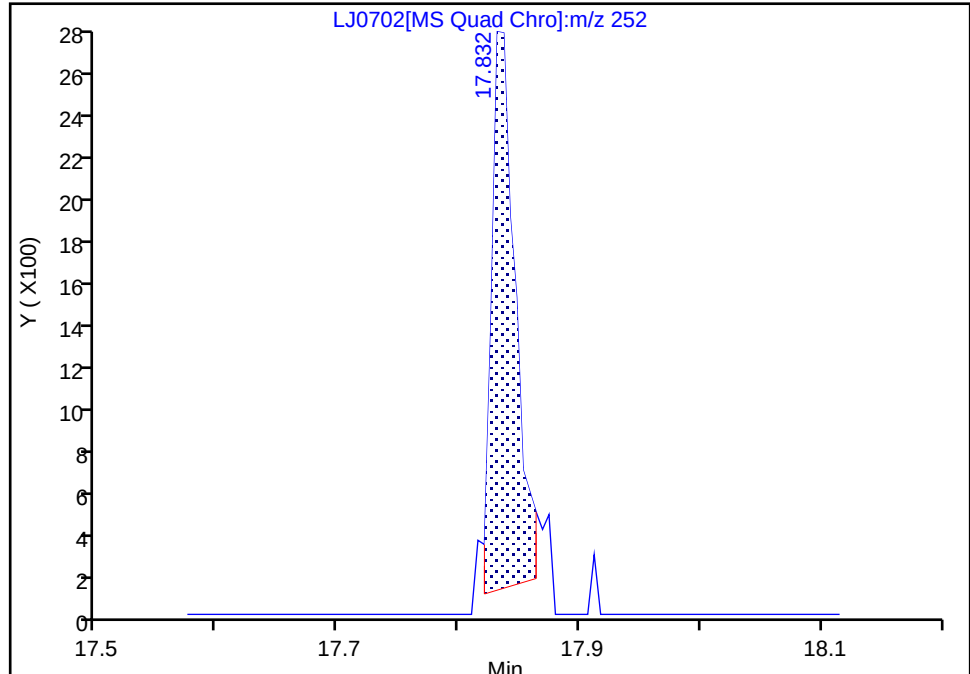
Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0702.D
Injection Date: 19-Oct-2020 18:09:10 Instrument ID: HP20296
Lims ID: IC L1
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP20296 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.18mm (0.18 mm) Detector MS SCAN

148 3,3'-Dichlorobenzidine, CAS: 91-94-1

Signal: 1

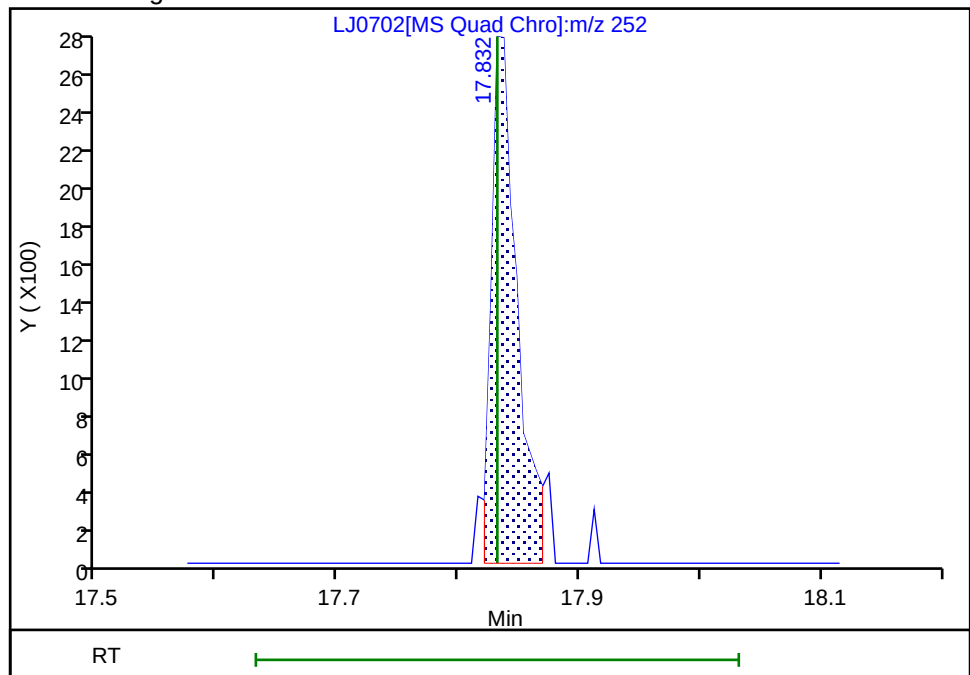
RT: 17.83
Area: 3475
Amount: 0.053284
Amount Units: ug/ml

Processing Integration Results



RT: 17.83
Area: 3957
Amount: 0.060675
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 19-Oct-2020 23:06:27

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

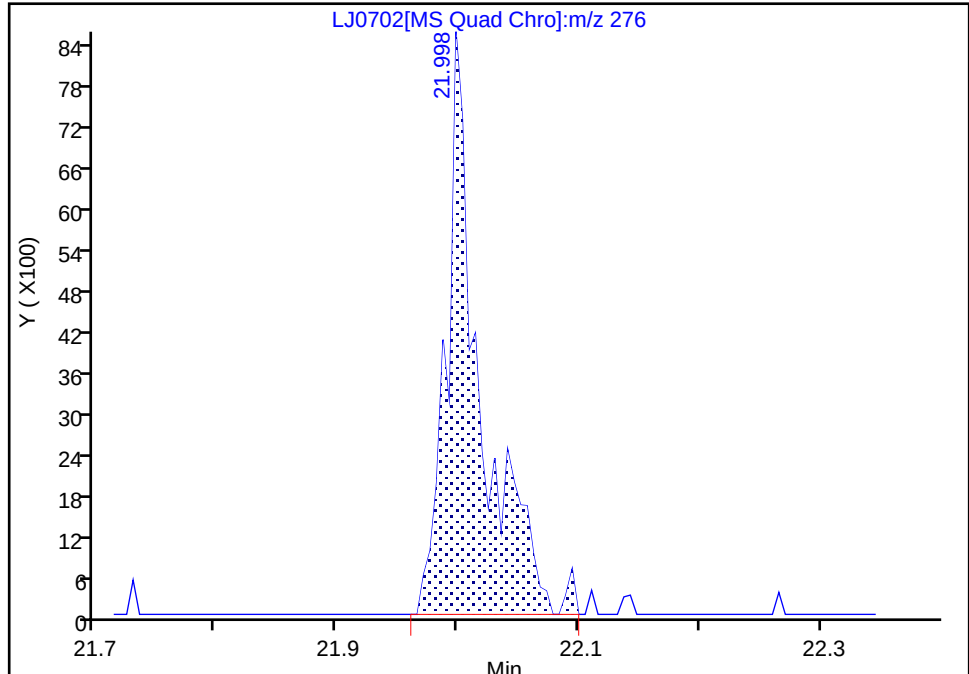
Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0702.D
Injection Date: 19-Oct-2020 18:09:10 Instrument ID: HP20296
Lims ID: IC L1
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP20296 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.18mm (0.18 mm) Detector MS SCAN

163 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

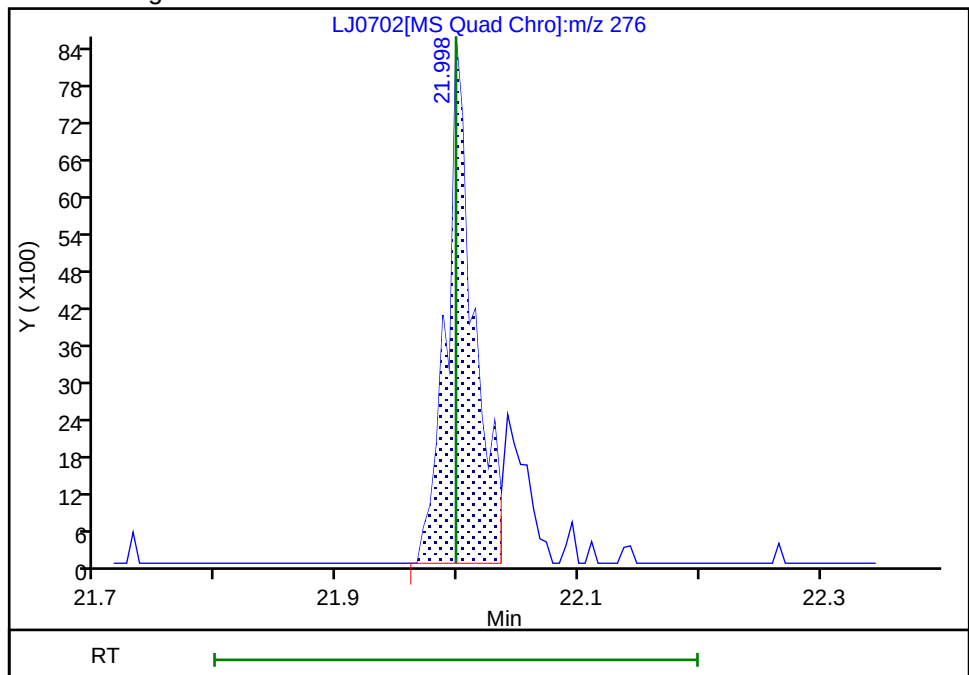
RT: 22.00
Area: 16553
Amount: 0.107382
Amount Units: ug/ml

Processing Integration Results



RT: 22.00
Area: 13130
Amount: 0.098698
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 19-Oct-2020 23:07:09
Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0703.D
 Lims ID: IC L8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 19-Oct-2020 18:38:12 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: IC L8
 Misc. Info.: 410-0013268-004
 Operator ID: kel10217 Instrument ID: HP20296
 Sublist: chrom-MSSemi_HP20296*sub6
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 20-Oct-2020 19:06:58 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1014

First Level Reviewer: luttek

Date: 19-Oct-2020 23:09:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 1,4-Dioxane	88	2.433	2.433	0.000	89	726272	30.0	31.8	
2 N-Nitrosodimethylamine	74	2.973	2.973	0.000	90	1135074	30.0	31.0	
3 Pyridine	79	2.994	2.994	0.000	94	2008860	30.0	31.2	
5 2-Picoline	93	4.160	4.160	0.000	93	2001592	30.0	30.4	
6 N-Nitrosomethylethylamine	88	4.358	4.358	0.000	86	816524	30.0	30.7	
9 Methyl methanesulfonate	80	4.818	4.818	0.000	85	955180	30.0	30.5	
\$ 10 2-Fluorophenol	112	5.054	5.054	0.000	93	3212021	60.0	62.0	
11 N-Nitrosodiethylamine	102	5.396	5.396	0.000	88	785932	30.0	32.5	
13 Ethyl methanesulfonate	109	5.861	5.861	0.000	97	850217	30.0	31.7	
15 Benzaldehyde	77	6.321	6.321	0.000	94	1262697	30.0	25.8	
\$ 16 Phenol-d5	99	6.455	6.455	0.000	97	4068928	60.0	64.4	
17 Phenol	94	6.471	6.471	0.000	97	2450261	30.0	30.4	
18 Aniline	93	6.487	6.487	0.000	98	2875326	30.0	30.6	
19 Bis(2-chloroethyl)ether	93	6.610	6.610	0.000	99	1864778	30.0	30.7	
20 2-Chlorophenol	128	6.653	6.653	0.000	95	1492427	30.0	32.4	
22 1,3-Dichlorobenzene	146	6.888	6.888	0.000	92	1551072	30.0	30.3	
* 24 1,4-Dichlorobenzene-d4	152	6.974	6.974	0.000	96	160946	5.00	5.00	
25 1,4-Dichlorobenzene	146	7.001	7.001	0.000	88	1574518	30.0	30.4	
27 Benzyl alcohol	108	7.209	7.209	0.000	88	1120090	30.0	31.0	
29 1,2-Dichlorobenzene	146	7.225	7.225	0.000	92	1503755	30.0	30.2	
30 Indene	115	7.370	7.370	0.000	87	2415256	30.0	30.7	
31 2-Methylphenol	108	7.386	7.386	0.000	96	1552603	30.0	31.7	
32 2,2'-oxybis[1-chloropropane]	45	7.428	7.428	0.000	91	1592747	30.0	30.4	
34 N-Nitrosopyrrolidine	100	7.594	7.594	0.000	95	863410	30.0	32.6	
35 Acetophenone	105	7.616	7.616	0.000	95	2551556	30.0	31.0	
37 N-Nitrosodi-n-propylamine	70	7.648	7.648	0.000	75	1388444	30.0	31.2	
36 4-Methylphenol	108	7.637	7.637	0.000	96	1761668	30.0	31.9	
38 N-Nitrosomorpholine	56	7.658	7.658	0.000	85	866431	30.0	30.0	
39 2-Toluidine	106	7.664	7.664	0.000	92	2684126	30.0	30.5	
40 Hexachloroethane	117	7.749	7.749	0.000	95	772985	30.0	30.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
\$ 41 Nitrobenzene-d5	82	7.840	7.840	0.000	86	4090897	60.0	61.4	
42 Nitrobenzene	77	7.872	7.872	0.000	83	2119533	30.0	30.8	
44 N-Nitrosopiperidine	114	8.108	8.108	0.000	88	781777	30.0	31.0	
46 Isophorone	82	8.258	8.258	0.000	98	3710631	30.0	31.4	
47 2-Nitrophenol	139	8.364	8.364	0.000	93	596397	30.0	30.4	
48 2,4-Dimethylphenol	107	8.466	8.466	0.000	99	1770794	30.0	31.6	
50 Benzoic acid	105	8.680	8.680	0.000	89	902539	30.0	29.9	M
49 o,o',o"-Triethylphosphorothioat	198	8.594	8.594	0.000	92	711044	30.0	31.3	
51 Bis(2-chloroethoxy)methane	93	8.627	8.627	0.000	98	2256383	30.0	29.6	
52 2,4-Dichlorophenol	162	8.750	8.750	0.000	97	1190974	30.0	33.3	
54 1,2,4-Trichlorobenzene	180	8.883	8.883	0.000	92	1299524	30.0	30.1	
* 55 Naphthalene-d8	136	8.964	8.964	0.000	99	628926	5.00	5.00	
S 53 Dinitrotoluene	165				0		60.0	66.2	
56 Naphthalene	128	9.001	9.001	0.000	99	4189267	30.0	30.2	
57 4-Chloroaniline	127	9.108	9.108	0.000	94	1755778	30.0	31.0	
58 2,6-Dichlorophenol	162	9.113	9.113	0.000	92	1121553	30.0	32.2	
59 Hexachloropropene	213	9.151	9.151	0.000	90	812856	30.0	31.3	
60 Hexachlorobutadiene	225	9.220	9.220	0.000	96	777992	30.0	30.2	
62 Quinoline	129	9.541	9.541	0.000	93	2552435	30.0	30.6	
64 Caprolactam	113	9.702	9.702	0.000	78	443514	30.0	30.6	a
S 63 Diallate	86				0		30.0	30.1	
65 N-Nitrosodi-n-butylamine	84	9.686	9.686	0.000	88	1636502	30.0	35.7	
66 4-Chloro-3-methylphenol	107	9.926	9.926	0.000	91	1477488	30.0	33.2	
67 Safrole, Total	162	10.012	10.012	0.000	81	1031375	30.0	30.8	
69 2-Methylnaphthalene	142	10.130	10.130	0.000	90	2732016	30.0	31.0	
70 1-Methylnaphthalene	142	10.285	10.285	0.000	91	2609637	30.0	30.9	
71 Hexachlorocyclopentadiene	237	10.397	10.397	0.000	96	695554	30.0	31.6	
72 1,2,4,5-Tetrachlorobenzene	216	10.402	10.402	0.000	98	1343394	30.0	30.1	
73 Isosafrole Peak 1	162	10.488	10.488	0.000	82	190065	4.80	4.90	
74 2,4,6-Trichlorophenol	196	10.600	10.600	0.000	94	823066	30.0	35.0	
75 2,4,5-Trichlorophenol	196	10.659	10.659	0.000	92	899822	30.0	30.0	
\$ 76 2-Fluorobiphenyl (Surr)	172	10.755	10.755	0.000	100	6017046	60.0	59.5	
77 Isosafrole Peak 2	162	10.862	10.862	0.000	85	1072937	25.2	26.3	
79 1,1'-Biphenyl	154	10.910	10.910	0.000	96	3380363	30.0	29.9	
80 2-Chloronaphthalene	162	10.921	10.921	0.000	98	2767944	30.0	30.2	
81 1-Chloronaphthalene	162	10.953	10.953	0.000	96	2358426	30.0	28.6	
82 Phenyl ether	170	11.087	11.087	0.000	88	1750932	30.0	30.2	
83 2-Nitroaniline	138	11.103	11.103	0.000	75	821030	30.0	32.6	
84 1,4-Naphthoquinone	158	11.215	11.215	0.000	74	1058711	30.0	31.4	
85 1,4-Dinitrobenzene	168	11.344	11.344	0.000	83	356662	30.0	33.8	
86 Dimethyl phthalate	163	11.445	11.445	0.000	96	2895859	30.0	29.4	
87 1,3-Dinitrobenzene	168	11.461	11.461	0.000	80	419538	30.0	32.9	
88 2,6-Dinitrotoluene	165	11.515	11.515	0.000	85	653103	30.0	33.7	a
90 Acenaphthylene	152	11.584	11.584	0.000	99	3687269	30.0	31.7	
91 3-Nitroaniline	138	11.756	11.756	0.000	90	701547	30.0	33.2	
* 92 Acenaphthene-d10	164	11.793	11.793	0.000	98	308452	5.00	5.00	
93 Acenaphthene	153	11.841	11.841	0.000	98	2724871	30.0	29.8	
94 2,4-Dinitrophenol	184	11.905	11.905	0.000	76	232911	30.0	34.2	
96 4-Nitrophenol	109	12.023	12.023	0.000	89	589691	30.0	31.7	
98 Pentachlorobenzene	250	12.028	12.028	0.000	96	1121312	30.0	29.5	
99 2,4-Dinitrotoluene	165	12.098	12.098	0.000	84	853308	30.0	32.5	
100 Dibenzofuran	168	12.087	12.087	0.000	96	3498261	30.0	29.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
101 1-Naphthylamine	143	12.194	12.194	0.000	97	2680511	30.0	30.9	
102 2,3,4,6-Tetrachlorophenol	232	12.258	12.258	0.000	77	628720	30.0	31.0	
103 2-Naphthylamine	143	12.301	12.301	0.000	94	2685838	30.0	30.8	
104 Diethyl phthalate	149	12.440	12.440	0.000	96	3010843	30.0	29.9	
106 Thionazin	107	12.536	12.536	0.000	75	644803	30.0	30.3	
105 Fluorene	166	12.526	12.526	0.000	93	2932324	30.0	31.1	
107 N-Nitro-o-toluidine	152	12.558	12.558	0.000	86	786038	30.0	33.0	
108 4-Chlorophenyl phenyl ether	204	12.547	12.547	0.000	92	1429664	30.0	30.2	
109 4-Nitroaniline	138	12.574	12.574	0.000	77	724210	30.0	30.2	
110 4,6-Dinitro-2-methylphenol	198	12.611	12.611	0.000	84	345676	30.0	35.1	
111 N-Nitrosodiphenylamine	169	12.702	12.702	0.000	99	2456700	30.0	29.6	
112 1,2-Diphenylhydrazine	77	12.745	12.745	0.000	100	4336873	30.0	29.9	
\$ 113 2,4,6-Tribromophenol	330	12.831	12.831	0.000	95	964102	60.0	70.1	
114 Sulfotepp	97	12.927	12.927	0.000	83	715396	30.0	30.1	
115 cis-Diallate	86	13.077	13.077	0.000	94	1202900	22.2	22.3	
116 Phorate	75	13.082	13.082	0.000	95	2597664	30.0	31.6	
117 Phenacetin	108	13.119	13.119	0.000	90	1962254	30.0	32.8	
118 4-Bromophenyl phenyl ether	248	13.162	13.162	0.000	72	863225	30.0	32.0	
119 trans-Diallate	86	13.178	13.178	0.000	90	444609	7.80	7.83	
120 Hexachlorobenzene	284	13.216	13.216	0.000	94	992962	30.0	29.8	
121 Dimethoate	87	13.301	13.301	0.000	96	1593055	30.0	30.9	
122 Atrazine	200	13.398	13.398	0.000	90	727433	30.0	26.1	
123 Pentachlorophenol	266	13.483	13.483	0.000	91	514517	30.0	36.2	
124 4-Aminobiphenyl	169	13.494	13.494	0.000	92	2243470	30.0	29.7	
125 Pentachloronitrobenzene	237	13.499	13.499	0.000	85	409584	30.0	31.6	
126 Pronamide	173	13.595	13.595	0.000	91	1470272	30.0	31.5	
* 127 Phenanthrene-d10	188	13.724	13.724	0.000	97	627062	5.00	5.00	
128 Dinoseb	211	13.740	13.740	0.000	93	523232	30.0	34.9	
129 Phenanthrene	178	13.756	13.756	0.000	99	4433577	30.0	30.1	
130 Anthracene	178	13.825	13.825	0.000	99	4636207	30.0	32.0	
131 Carbazole	167	14.050	14.050	0.000	96	4143395	30.0	31.4	
132 Methyl parathion	109	14.253	14.253	0.000	90	1247988	30.0	33.7	
133 Di-n-butyl phthalate	149	14.569	14.569	0.000	100	5585956	30.0	31.1	
134 Ethyl Parathion	109	14.815	14.815	0.000	83	798209	30.0	34.4	
135 4-Nitroquinoline-1-oxide	190	14.836	14.836	0.000	89	449187	30.0	29.2	
136 Octachlorostyrene	308	15.173	15.173	0.000	93	454697	30.0	31.2	
137 Isodrin	193	15.227	15.227	0.000	88	538319	30.0	29.8	
138 Fluoranthene	202	15.457	15.457	0.000	99	5146600	30.0	31.7	
139 Benzidine	184	15.703	15.703	0.000	99	9993648	90.0	95.4	
* 140 Pyrene-d10 (IS)	212	15.778	15.778	0.000	98	661270	5.00	5.00	
141 Pyrene	202	15.810	15.810	0.000	96	5445844	30.0	30.4	
\$ 142 p-Terphenyl-d14	244	16.099	16.099	0.000	98	8245948	60.0	62.4	
143 p-Dimethylamino azobenzene	225	16.329	16.329	0.000	89	977561	30.0	33.5	
144 Chlorobenzilate	139	16.420	16.420	0.000	85	1789834	30.0	31.7	
145 3,3'-Dimethylbenzidine	212	16.906	16.906	0.000	99	3612111	30.0	34.3	
146 Butyl benzyl phthalate	149	16.960	16.960	0.000	93	2689084	30.0	34.0	
147 2-Acetylaminofluorene	181	17.345	17.345	0.000	95	2270197	30.0	30.1	
148 3,3'-Dichlorobenzidine	252	17.853	17.853	0.000	77	2146611	30.0	33.6	
149 Benzo[a]anthracene	228	17.864	17.864	0.000	99	5496734	30.0	34.5	
150 4,4'-Methylene bis(2-chloroaniline)	231	17.869	17.869	0.000	95	1111282	30.0	33.1	
151 Chrysene	228	17.933	17.933	0.000	98	5299862	30.0	32.5	
152 Bis(2-ethylhexyl) phthalate	149	18.040	18.040	0.000	97	4036062	30.0	32.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
153 6-Methylchrysene	242	18.746	18.746	0.000	99	3777327	30.0	32.4	
154 Di-n-octyl phthalate	149	19.217	19.217	0.000	99	7140301	30.0	33.1	
155 Benzo[b]fluoranthene	252	19.762	19.762	0.000	96	5990012	30.0	33.2	
156 7,12-Dimethylbenz(a)anthracene	256	19.762	19.762	0.000	85	2550226	30.0	34.1	
157 Benzo[k]fluoranthene	252	19.811	19.811	0.000	99	5674004	30.0	31.7	
158 Benzo[a]pyrene	252	20.292	20.292	0.000	80	5522484	30.0	33.7	
* 159 Perylene-d12	264	20.367	20.367	0.000	98	722219	5.00	5.00	
160 3-Methylcholanthrene	268	20.864	20.864	0.000	91	2803623	30.0	34.1	
161 Dibenz[a,h]acridine	279	21.688	21.688	0.000	91	4195254	30.0	31.5	
162 Dibenz[a,j]acridine	279	21.763	21.763	0.000	96	4281212	30.0	31.4	
163 Indeno[1,2,3-cd]pyrene	276	22.041	22.041	0.000	99	5110795	30.0	34.6	
164 Dibenz(a,h)anthracene	278	22.078	22.078	0.000	94	5239913	30.0	33.3	
165 Benzo[g,h,i]perylene	276	22.463	22.463	0.000	98	4624955	30.0	31.0	
S 166 Isosafrole	162				0		30.0	31.2	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_8_00008

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0703.D

Injection Date: 19-Oct-2020 18:38:12

Instrument ID: HP20296

Operator ID: kel10217

Lims ID: IC L8

Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul

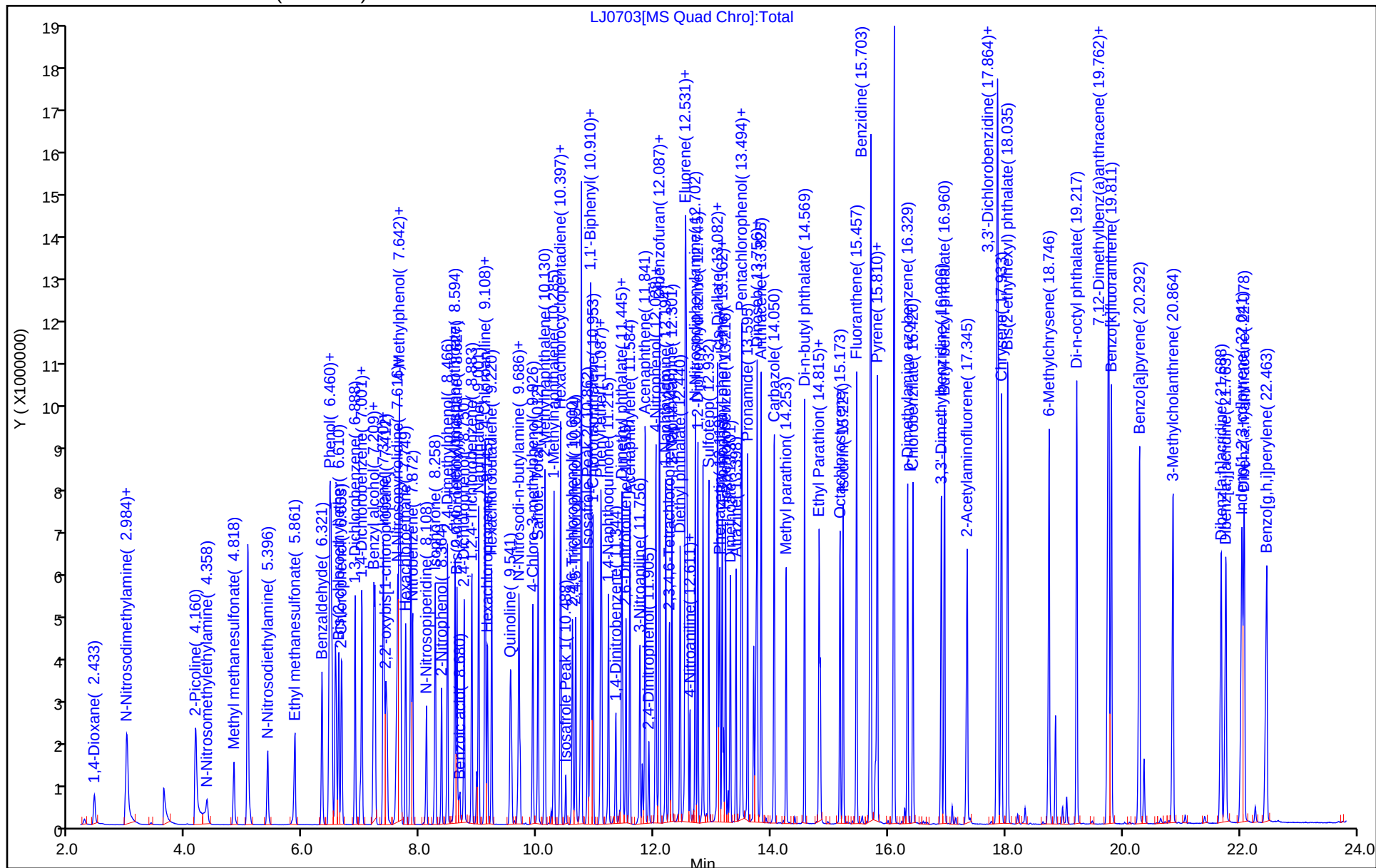
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0703.D

Injection Date: 19-Oct-2020 18:38:12

Instrument ID: HP20296

Lims ID: IC L8

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 4

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP20296

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

Detector

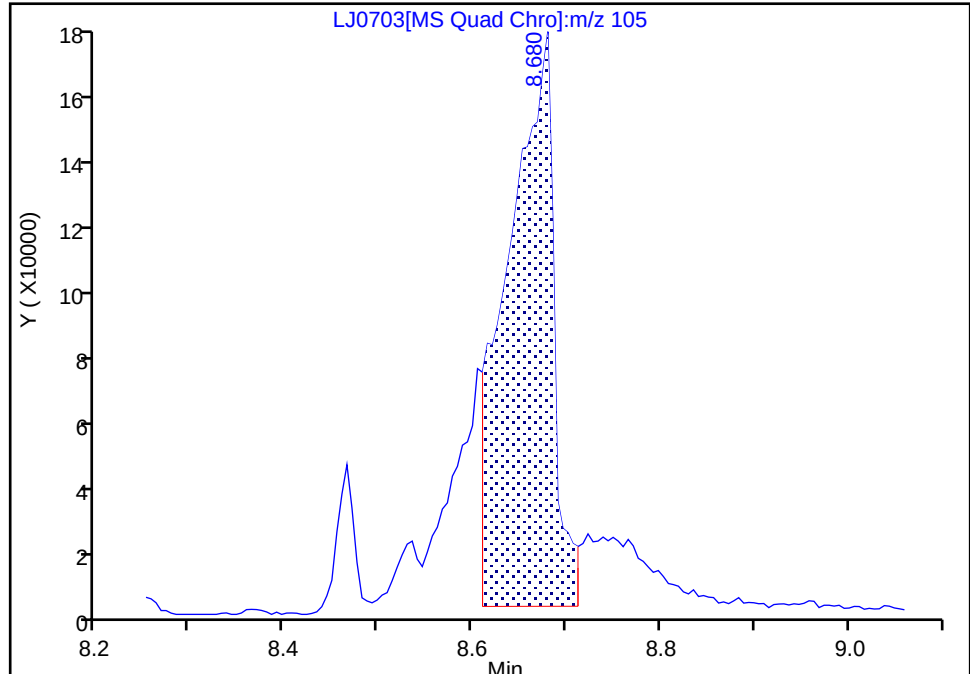
MS SCAN

50 Benzoic acid, CAS: 65-85-0

Signal: 1

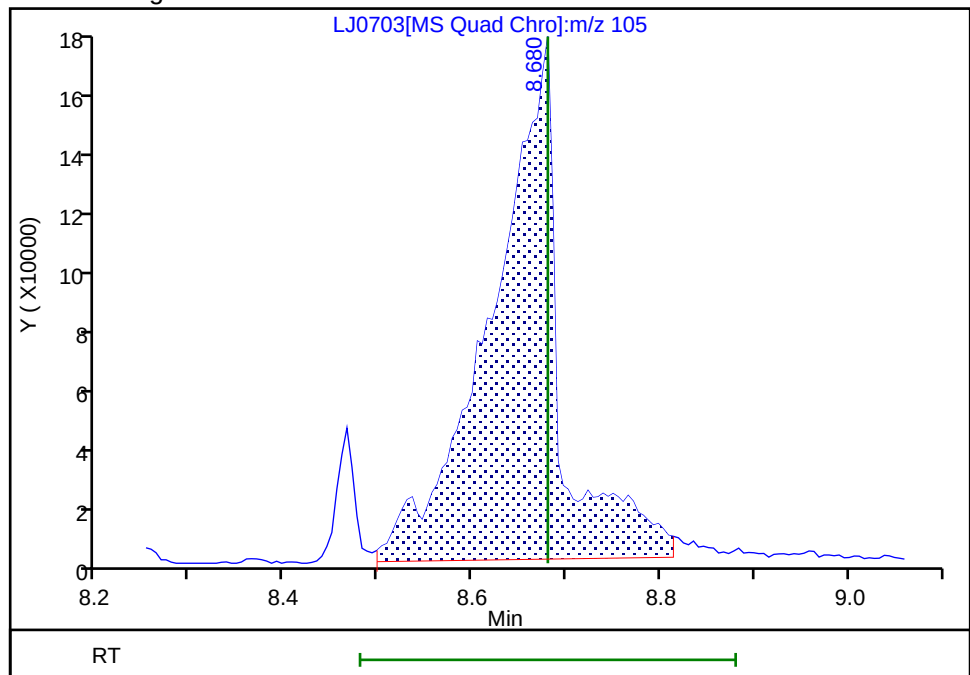
RT: 8.68
Area: 595464
Amount: 28.324650
Amount Units: ug/ml

Processing Integration Results



RT: 8.68
Area: 902539
Amount: 29.913929
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 19-Oct-2020 23:08:25

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0703.D

Injection Date: 19-Oct-2020 18:38:12

Instrument ID: HP20296

Lims ID: IC L8

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 4

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP20296

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

Detector

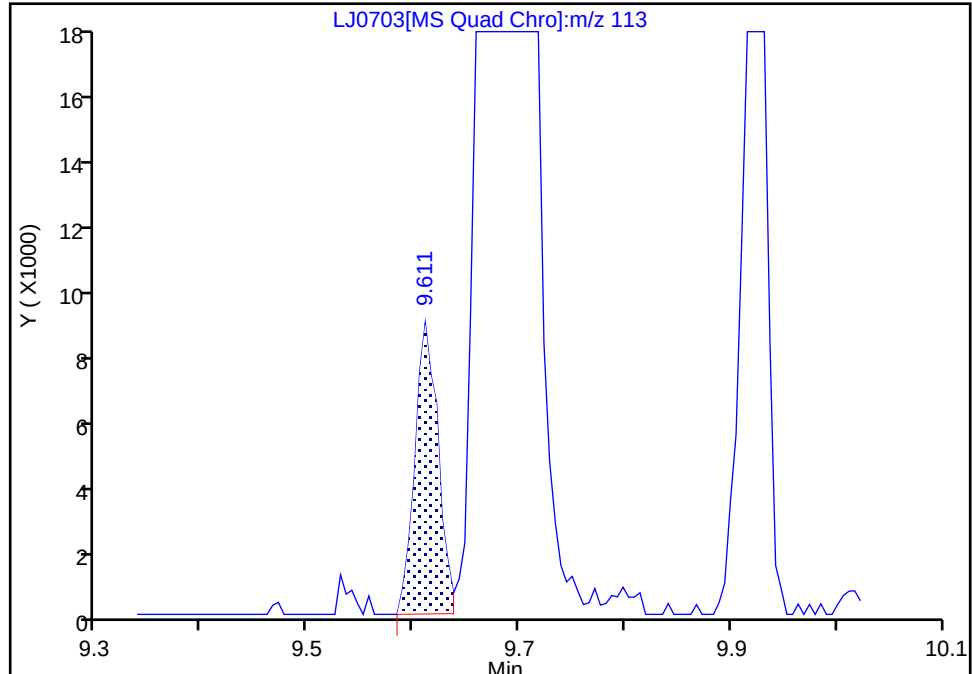
MS SCAN

64 Caprolactam, CAS: 105-60-2

Signal: 1

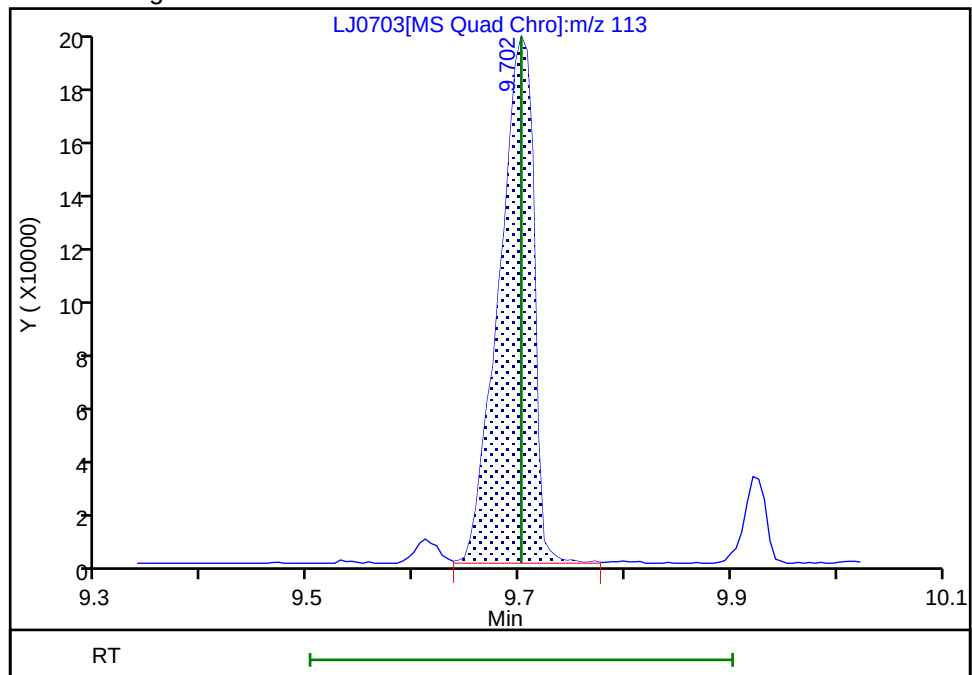
RT: 9.61
Area: 13497
Amount: 1.398894
Amount Units: ug/ml

Processing Integration Results



RT: 9.70
Area: 443514
Amount: 30.554371
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 19-Oct-2020 23:08:38

Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

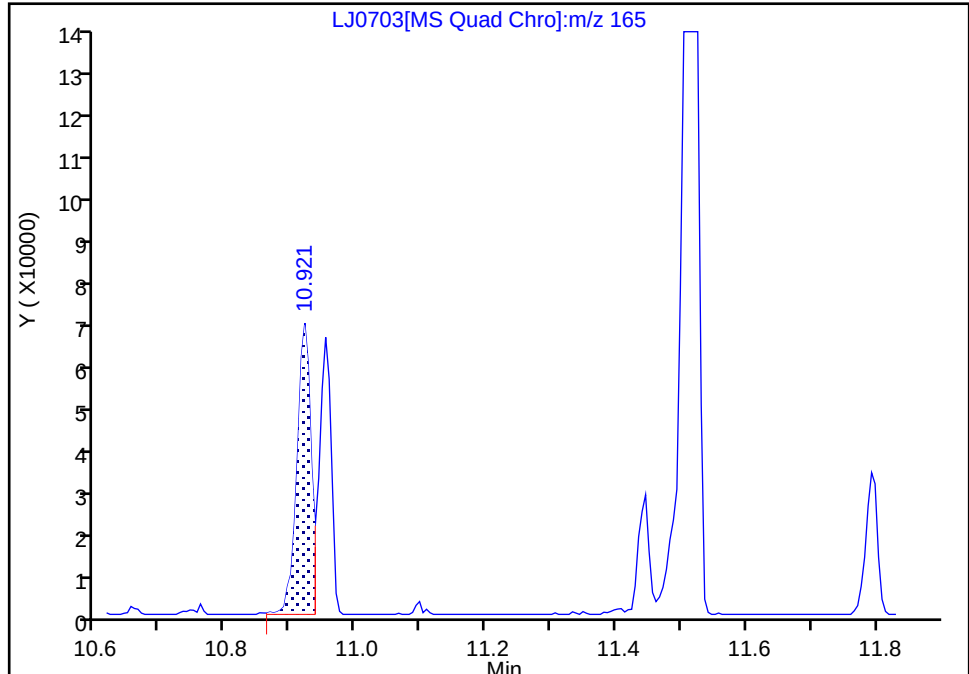
Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0703.D
Injection Date: 19-Oct-2020 18:38:12 Instrument ID: HP20296
Lims ID: IC L8
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP20296 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.18mm (0.18 mm) Detector MS SCAN

88 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

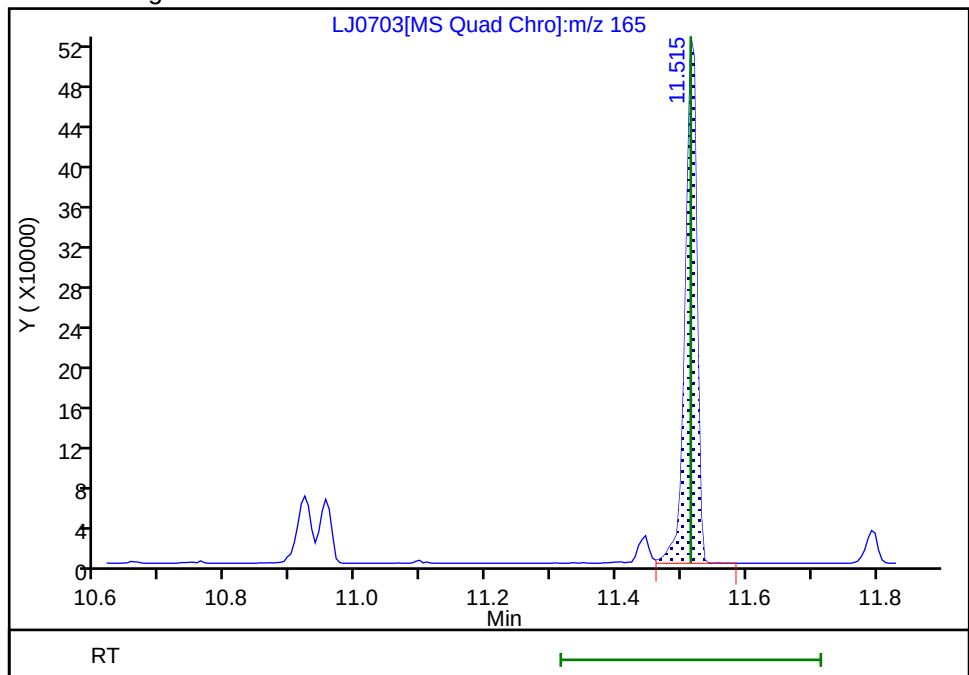
RT: 10.92
Area: 98992
Amount: 30.664905
Amount Units: ug/ml

Processing Integration Results



RT: 11.51
Area: 653103
Amount: 33.666031
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 20-Oct-2020 18:51:14
Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0704.D
 Lims ID: IC L7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 19-Oct-2020 19:07:08 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: IC L7
 Misc. Info.: 410-0013268-005
 Operator ID: kel10217 Instrument ID: HP20296
 Sublist: chrom-MSSemi_HP20296*sub6
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 20-Oct-2020 19:07:03 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1014

First Level Reviewer: luttek

Date: 19-Oct-2020 23:11:40

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 1,4-Dioxane	88	2.433	2.433	0.000	88	506870	20.0	21.1	
2 N-Nitrosodimethylamine	74	2.968	2.968	0.000	89	795553	20.0	20.7	
3 Pyridine	79	2.994	2.994	0.000	94	1373966	20.0	20.3	
5 2-Picoline	93	4.160	4.160	0.000	93	1395066	20.0	20.2	
6 N-Nitrosomethylethylamine	88	4.353	4.353	0.000	84	557460	20.0	20.0	
9 Methyl methanesulfonate	80	4.813	4.813	0.000	85	651409	20.0	19.8	
\$ 10 2-Fluorophenol	112	5.054	5.054	0.000	93	2206049	40.0	40.6	
11 N-Nitrosodiethylamine	102	5.391	5.391	0.000	89	542097	20.0	21.3	
13 Ethyl methanesulfonate	109	5.851	5.851	0.000	97	589578	20.0	20.9	
15 Benzaldehyde	77	6.321	6.321	0.000	96	984096	20.0	19.2	
\$ 16 Phenol-d5	99	6.444	6.444	0.000	98	2778182	40.0	41.9	
17 Phenol	94	6.466	6.466	0.000	96	1693323	20.0	20.0	
18 Aniline	93	6.482	6.482	0.000	95	1965289	20.0	20.0	
19 Bis(2-chloroethyl)ether	93	6.605	6.605	0.000	98	1269407	20.0	19.9	
20 2-Chlorophenol	128	6.653	6.653	0.000	95	1011192	20.0	20.9	
22 1,3-Dichlorobenzene	146	6.883	6.883	0.000	92	1067985	20.0	19.9	
* 24 1,4-Dichlorobenzene-d4	152	6.974	6.974	0.000	96	168950	5.00	5.00	
25 1,4-Dichlorobenzene	146	7.001	7.001	0.000	88	1075469	20.0	19.8	
27 Benzyl alcohol	108	7.204	7.204	0.000	88	776631	20.0	20.5	
29 1,2-Dichlorobenzene	146	7.225	7.225	0.000	92	1033285	20.0	19.8	
30 Indene	115	7.364	7.364	0.000	87	1686055	20.0	20.4	
31 2-Methylphenol	108	7.380	7.380	0.000	95	1046429	20.0	20.3	
32 2,2'-oxybis[1-chloropropane]	45	7.423	7.423	0.000	90	1076923	20.0	19.6	
34 N-Nitrosopyrrolidine	100	7.578	7.578	0.000	94	586271	20.0	21.1	
35 Acetophenone	105	7.605	7.605	0.000	94	1765454	20.0	20.5	
36 4-Methylphenol	108	7.632	7.632	0.000	96	1202232	20.0	20.7	
37 N-Nitrosodi-n-propylamine	70	7.637	7.637	0.000	75	954095	20.0	20.4	
38 N-Nitrosomorpholine	56	7.648	7.648	0.000	89	602708	20.0	19.8	
39 2-Toluidine	106	7.658	7.658	0.000	94	1846684	20.0	20.0	
40 Hexachloroethane	117	7.749	7.749	0.000	95	535337	20.0	20.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
\$ 41 Nitrobenzene-d5	82	7.835	7.835	0.000	86	2800716	40.0	40.9	
42 Nitrobenzene	77	7.862	7.862	0.000	83	1442071	20.0	20.4	
44 N-Nitrosopiperidine	114	8.102	8.102	0.000	88	527135	20.0	20.3	
46 Isophorone	82	8.252	8.252	0.000	98	2507011	20.0	20.7	
47 2-Nitrophenol	139	8.359	8.359	0.000	93	418621	20.0	20.8	
48 2,4-Dimethylphenol	107	8.461	8.461	0.000	98	1205520	20.0	20.9	
49 o,o',o"-Triethylphosphorothioat	198	8.589	8.589	0.000	92	483154	20.0	20.7	
51 Bis(2-chloroethoxy)methane	93	8.621	8.621	0.000	97	1604125	20.0	20.5	
50 Benzoic acid	105	8.648	8.648	0.000	88	594948	20.0	20.0	M
52 2,4-Dichlorophenol	162	8.744	8.744	0.000	96	797136	20.0	21.7	
54 1,2,4-Trichlorobenzene	180	8.878	8.878	0.000	92	889457	20.0	20.0	
* 55 Naphthalene-d8	136	8.964	8.964	0.000	99	646234	5.00	5.00	
S 53 Dinitrotoluene	165				0		40.0	43.4	
56 Naphthalene	128	8.996	8.996	0.000	99	2824523	20.0	19.8	
57 4-Chloroaniline	127	9.103	9.103	0.000	95	1187091	20.0	20.4	
58 2,6-Dichlorophenol	162	9.113	9.113	0.000	93	758263	20.0	21.2	
59 Hexachloropropene	213	9.145	9.145	0.000	91	558501	20.0	20.9	
60 Hexachlorobutadiene	225	9.220	9.220	0.000	97	529568	20.0	20.0	
62 Quinoline	129	9.541	9.541	0.000	94	1742640	20.0	20.3	
S 63 Diallate	86				0		20.0	20.4	
65 N-Nitrosodi-n-butylamine	84	9.686	9.686	0.000	87	1110514	20.0	23.6	
64 Caprolactam	113	9.680	9.680	0.000	49	310569	20.0	20.8	a
66 4-Chloro-3-methylphenol	107	9.916	9.916	0.000	91	1012435	20.0	22.1	
67 Safrole, Total	162	10.012	10.012	0.000	81	695043	20.0	20.2	
69 2-Methylnaphthalene	142	10.124	10.124	0.000	90	1846456	20.0	20.4	
70 1-Methylnaphthalene	142	10.285	10.285	0.000	92	1770813	20.0	20.4	
71 Hexachlorocyclopentadiene	237	10.392	10.392	0.000	97	479387	20.0	21.2	
72 1,2,4,5-Tetrachlorobenzene	216	10.397	10.397	0.000	98	895787	20.0	19.6	
73 Isosafrole Peak 1	162	10.488	10.488	0.000	81	125521	3.20	3.15	
74 2,4,6-Trichlorophenol	196	10.595	10.595	0.000	93	533987	20.0	22.1	
75 2,4,5-Trichlorophenol	196	10.654	10.654	0.000	92	612761	20.0	20.0	
\$ 76 2-Fluorobiphenyl (Surr)	172	10.750	10.750	0.000	99	4093330	40.0	39.5	
77 Isosafrole Peak 2	162	10.857	10.857	0.000	85	720981	16.8	17.2	
79 1,1'-Biphenyl	154	10.905	10.905	0.000	98	2308891	20.0	19.9	
80 2-Chloronaphthalene	162	10.916	10.916	0.000	98	1788340	20.0	19.0	
81 1-Chloronaphthalene	162	10.948	10.948	0.000	96	1665003	20.0	19.7	
82 Phenyl ether	170	11.087	11.087	0.000	88	1188878	20.0	20.0	
83 2-Nitroaniline	138	11.098	11.098	0.000	77	549713	20.0	21.3	
84 1,4-Naphthoquinone	158	11.215	11.215	0.000	74	722090	20.0	20.9	
85 1,4-Dinitrobenzene	168	11.338	11.338	0.000	83	243874	20.0	22.6	
86 Dimethyl phthalate	163	11.440	11.440	0.000	97	2004430	20.0	19.8	
87 1,3-Dinitrobenzene	168	11.451	11.451	0.000	81	291201	20.0	22.3	
88 2,6-Dinitrotoluene	165	11.509	11.509	0.000	84	434227	20.0	21.8	a
90 Acenaphthylene	152	11.579	11.579	0.000	99	2495914	20.0	20.9	
91 3-Nitroaniline	138	11.750	11.750	0.000	90	466130	20.0	21.5	
* 92 Acenaphthene-d10	164	11.793	11.793	0.000	97	316347	5.00	5.00	
93 Acenaphthene	153	11.841	11.841	0.000	97	1848264	20.0	19.7	
94 2,4-Dinitrophenol	184	11.900	11.900	0.000	81	154722	20.0	22.1	
96 4-Nitrophenol	109	12.012	12.012	0.000	91	402116	20.0	21.0	
98 Pentachlorobenzene	250	12.028	12.028	0.000	97	767587	20.0	19.7	
100 Dibenzofuran	168	12.082	12.082	0.000	96	2393371	20.0	19.8	
99 2,4-Dinitrotoluene	165	12.087	12.087	0.000	84	580318	20.0	21.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
101 1-Naphthylamine	143	12.189	12.189	0.000	97	1808941	20.0	20.3	
102 2,3,4,6-Tetrachlorophenol	232	12.253	12.253	0.000	78	418074	20.0	20.2	
103 2-Naphthylamine	143	12.296	12.296	0.000	93	1814631	20.0	20.3	
104 Diethyl phthalate	149	12.435	12.435	0.000	96	2112291	20.0	20.5	
105 Fluorene	166	12.526	12.526	0.000	93	1954989	20.0	20.2	
106 Thionazin	107	12.531	12.531	0.000	73	433043	20.0	19.8	
108 4-Chlorophenyl phenyl ether	204	12.547	12.547	0.000	91	967140	20.0	19.9	
107 N-Nitro-o-toluidine	152	12.552	12.552	0.000	83	543185	20.0	22.2	
109 4-Nitroaniline	138	12.563	12.563	0.000	80	492773	20.0	20.1	
110 4,6-Dinitro-2-methylphenol	198	12.601	12.601	0.000	75	231721	20.0	23.7	
111 N-Nitrosodiphenylamine	169	12.697	12.697	0.000	99	1687004	20.0	20.5	
112 1,2-Diphenylhydrazine	77	12.740	12.740	0.000	100	2926583	20.0	20.4	
\$ 113 2,4,6-Tribromophenol	330	12.825	12.825	0.000	94	637392	40.0	45.2	
114 Sulfotepp	97	12.927	12.927	0.000	82	485969	20.0	20.6	
115 cis-Diallate	86	13.071	13.071	0.000	90	809090	14.8	15.1	
116 Phorate	75	13.082	13.082	0.000	95	1718088	20.0	21.0	
117 Phenacetin	108	13.109	13.109	0.000	90	1324350	20.0	22.3	
118 4-Bromophenyl phenyl ether	248	13.157	13.157	0.000	73	568188	20.0	21.2	
119 trans-Diallate	86	13.178	13.178	0.000	91	297456	5.20	5.28	
120 Hexachlorobenzene	284	13.216	13.216	0.000	93	656967	20.0	19.9	
121 Dimethoate	87	13.291	13.291	0.000	96	1103164	20.0	21.6	
122 Atrazine	200	13.392	13.392	0.000	90	555808	20.0	20.1	
123 Pentachlorophenol	266	13.478	13.478	0.000	91	329021	20.0	23.3	
124 4-Aminobiphenyl	169	13.488	13.488	0.000	92	1588565	20.0	21.2	
125 Pentachloronitrobenzene	237	13.494	13.494	0.000	85	272982	20.0	21.2	
126 Pronamide	173	13.590	13.590	0.000	91	998697	20.0	21.6	
* 127 Phenanthrene-d10	188	13.718	13.718	0.000	98	622314	5.00	5.00	
128 Dinoseb	211	13.735	13.735	0.000	92	340471	20.0	22.9	
129 Phenanthrene	178	13.751	13.751	0.000	99	2920060	20.0	20.0	
130 Anthracene	178	13.820	13.820	0.000	99	3044264	20.0	21.2	
131 Carbazole	167	14.045	14.045	0.000	96	2751332	20.0	21.0	
132 Methyl parathion	109	14.248	14.248	0.000	90	826313	20.0	22.5	
133 Di-n-butyl phthalate	149	14.564	14.564	0.000	100	3754167	20.0	21.0	
134 Ethyl Parathion	109	14.810	14.810	0.000	83	524787	20.0	22.8	
135 4-Nitroquinoline-1-oxide	190	14.831	14.831	0.000	90	299169	20.0	21.5	
136 Octachlorostyrene	308	15.173	15.173	0.000	94	287045	20.0	19.8	
137 Isodrin	193	15.221	15.221	0.000	88	364078	20.0	20.3	
138 Fluoranthene	202	15.451	15.451	0.000	99	3400749	20.0	21.1	
139 Benzidine	184	15.692	15.692	0.000	99	6643120	60.0	64.3	
* 140 Pyrene-d10 (IS)	212	15.772	15.772	0.000	98	652429	5.00	5.00	
141 Pyrene	202	15.804	15.804	0.000	96	3566843	20.0	20.2	
\$ 142 p-Terphenyl-d14	244	16.093	16.093	0.000	98	5349427	40.0	41.0	
143 p-Dimethylamino azobenzene	225	16.323	16.323	0.000	89	629085	20.0	21.8	
144 Chlorobenzilate	139	16.414	16.414	0.000	84	1183838	20.0	21.3	
145 3,3'-Dimethylbenzidine	212	16.901	16.901	0.000	99	2336520	20.0	22.5	
146 Butyl benzyl phthalate	149	16.954	16.954	0.000	93	1760237	20.0	22.5	
147 2-Acetylaminofluorene	181	17.334	17.334	0.000	94	1462907	20.0	20.0	
148 3,3'-Dichlorobenzidine	252	17.848	17.848	0.000	78	1377476	20.0	21.8	
149 Benzo[a]anthracene	228	17.858	17.858	0.000	100	3477158	20.0	22.1	
150 4,4'-Methylene bis(2-chloroaniline)	231	17.864	17.864	0.000	94	708181	20.0	21.4	
151 Chrysene	228	17.928	17.928	0.000	97	3412211	20.0	21.2	
152 Bis(2-ethylhexyl) phthalate	149	18.035	18.035	0.000	97	2619245	20.0	21.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
153 6-Methylchrysene	242	18.735	18.735	0.000	99	2414236	20.0	21.0	
154 Di-n-octyl phthalate	149	19.212	19.212	0.000	99	4632227	20.0	22.0	
155 Benzo[b]fluoranthene	252	19.746	19.746	0.000	97	3880396	20.0	22.0	
156 7,12-Dimethylbenz(a)anthracene	256	19.752	19.752	0.000	88	1648142	20.0	22.6	
157 Benzo[k]fluoranthene	252	19.800	19.800	0.000	100	3649477	20.0	20.9	
158 Benzo[a]pyrene	252	20.281	20.281	0.000	79	3537696	20.0	22.1	
* 159 Perylene-d12	264	20.361	20.361	0.000	98	705220	5.00	5.00	
160 3-Methylcholanthrene	268	20.854	20.854	0.000	92	1799539	20.0	22.4	
161 Dibenz[a,h]acridine	279	21.677	21.677	0.000	91	2739019	20.0	21.1	
162 Dibenz[a,j]acridine	279	21.757	21.757	0.000	96	2803668	20.0	21.1	
163 Indeno[1,2,3-cd]pyrene	276	22.025	22.025	0.000	99	3334199	20.0	23.1	M
164 Dibenz(a,h)anthracene	278	22.068	22.068	0.000	93	3477249	20.0	22.7	
165 Benzo[g,h,i]perylene	276	22.453	22.453	0.000	98	3090266	20.0	21.2	
S 166 Isosafrole	162				0		20.0	20.4	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_7_00008

Amount Added: 1.00

Units: mL

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0704.D

Instrument ID: HP20296

Operator ID: kel10217

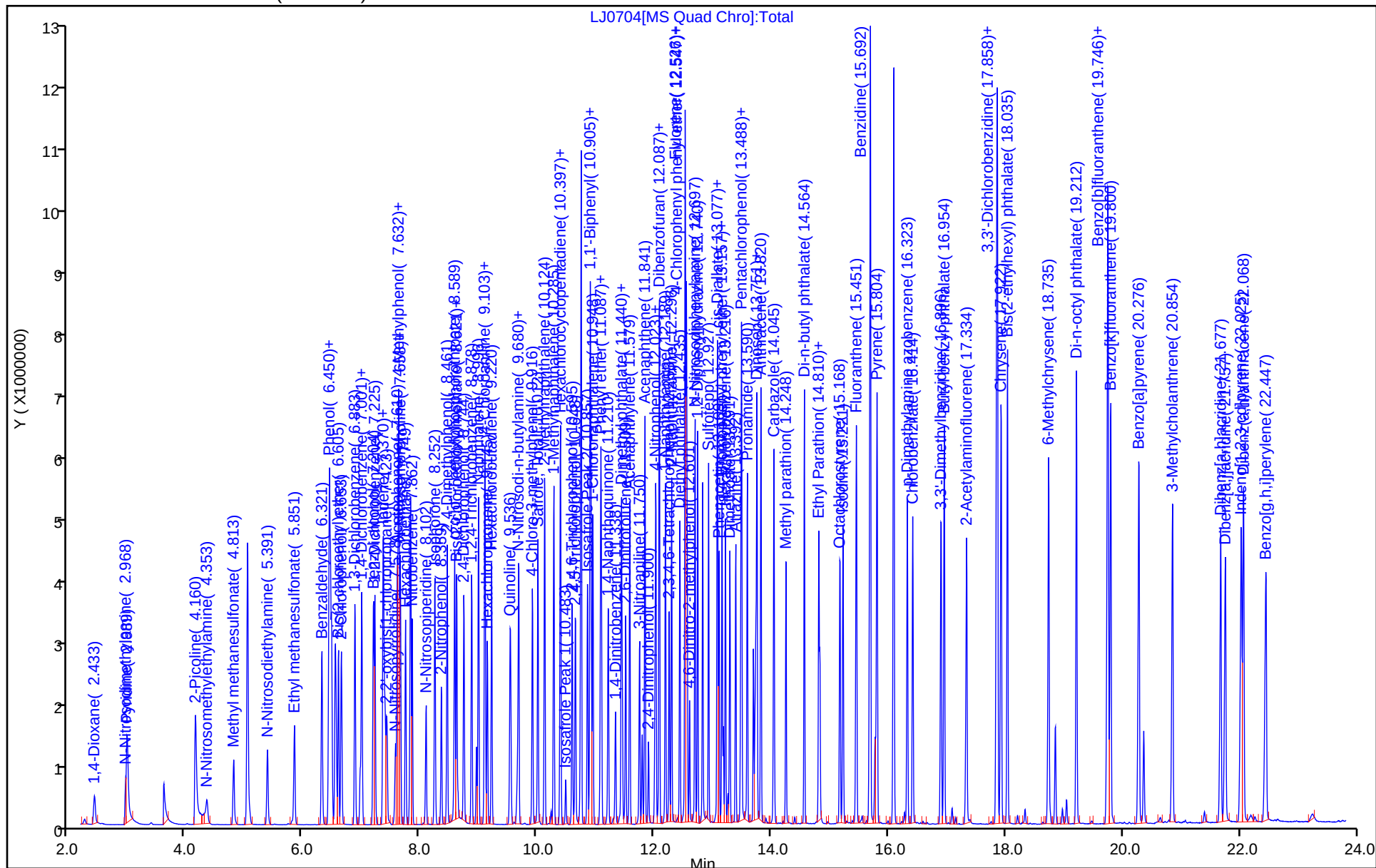
Worklist Smp#: 5

ALS Bottle#: 0

Dil. Factor: 1.0000

Limit Group: MSSV - 8270D E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0704.D

Injection Date: 19-Oct-2020 19:07:08

Instrument ID: HP20296

Lims ID: IC L7

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 5

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

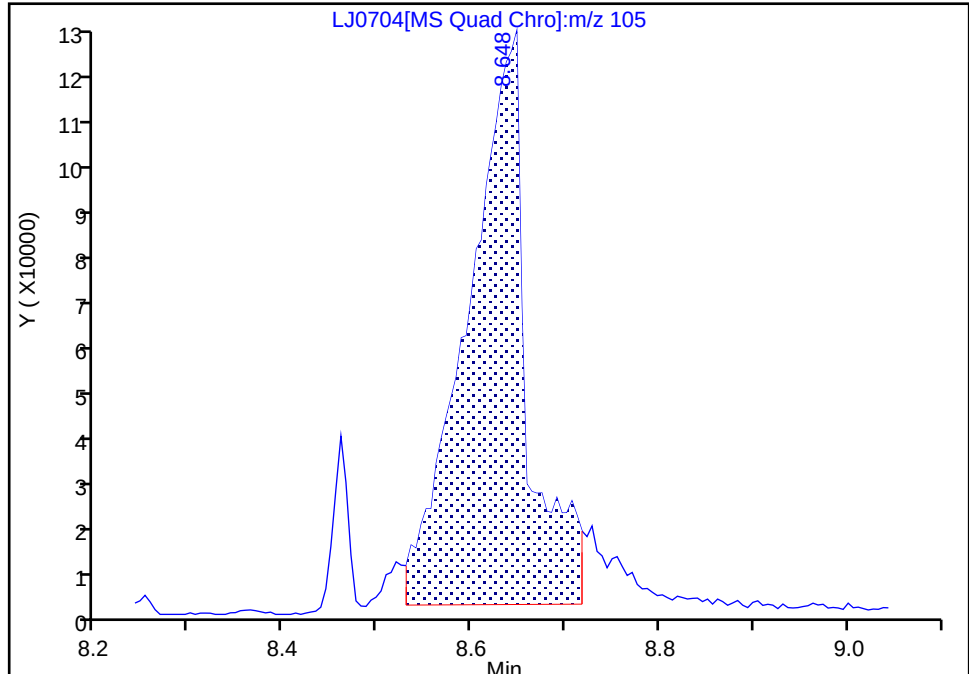
Detector: MS SCAN

50 Benzoic acid, CAS: 65-85-0

Signal: 1

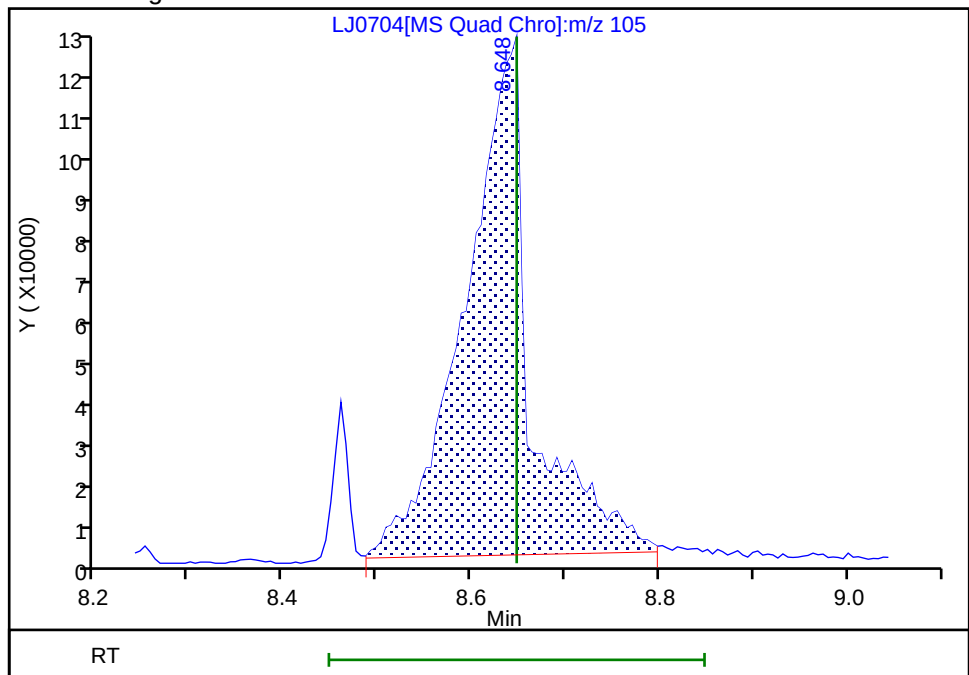
RT: 8.65
Area: 539721
Amount: 19.158763
Amount Units: ug/ml

Processing Integration Results



RT: 8.65
Area: 594948
Amount: 20.033126
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 19-Oct-2020 23:10:20

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0704.D

Injection Date: 19-Oct-2020 19:07:08

Instrument ID: HP20296

Lims ID: IC L7

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 5

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP20296

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

Detector

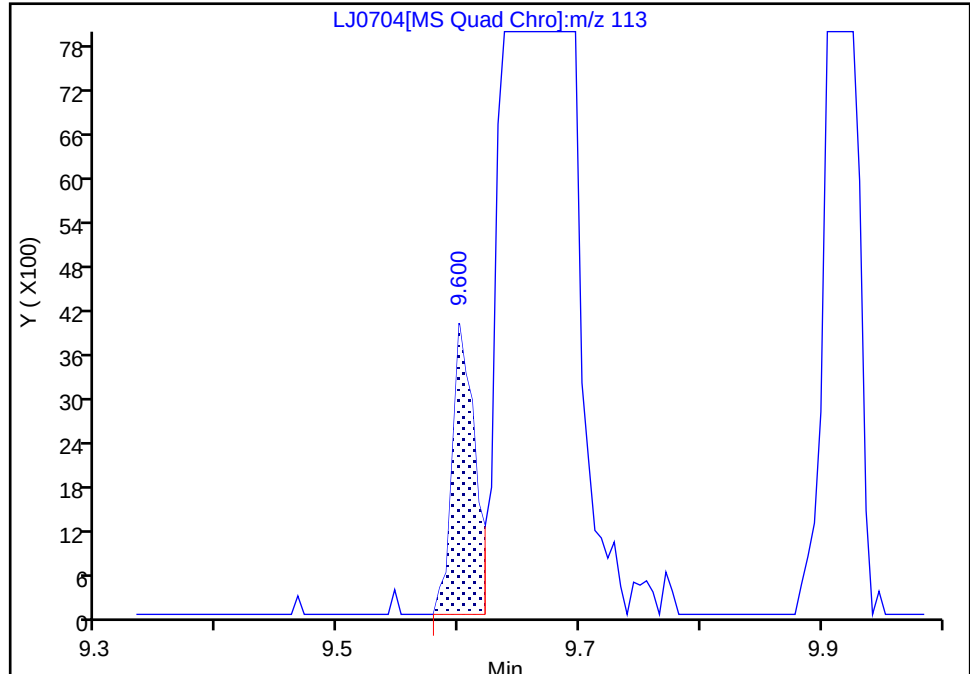
MS SCAN

64 Caprolactam, CAS: 105-60-2

Signal: 1

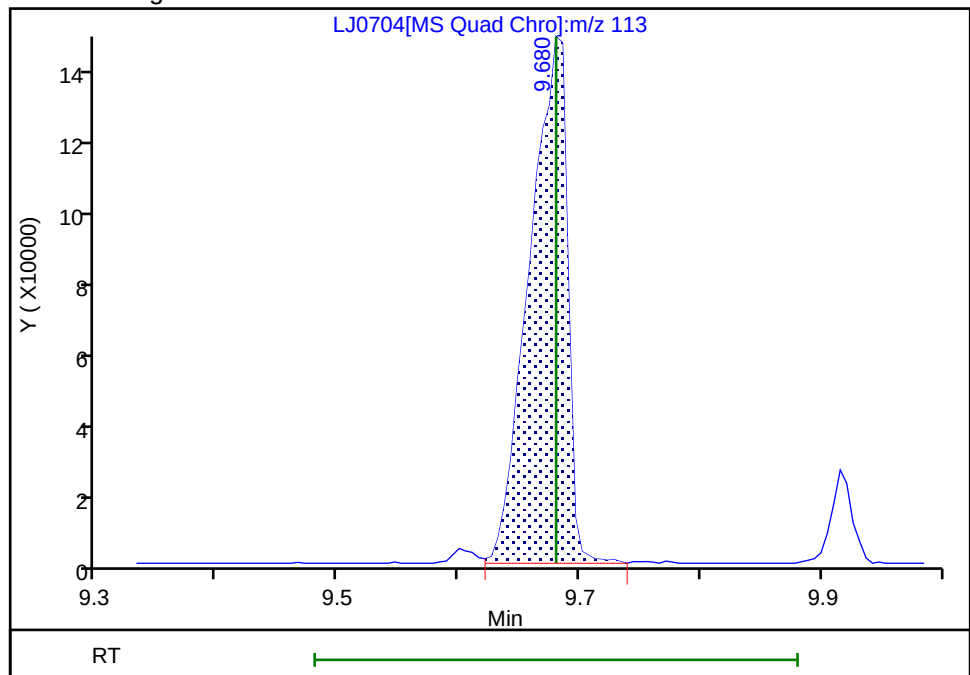
RT: 9.60
Area: 4995
Amount: 0.403846
Amount Units: ug/ml

Processing Integration Results



RT: 9.68
Area: 310569
Amount: 20.822548
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 19-Oct-2020 23:10:30

Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

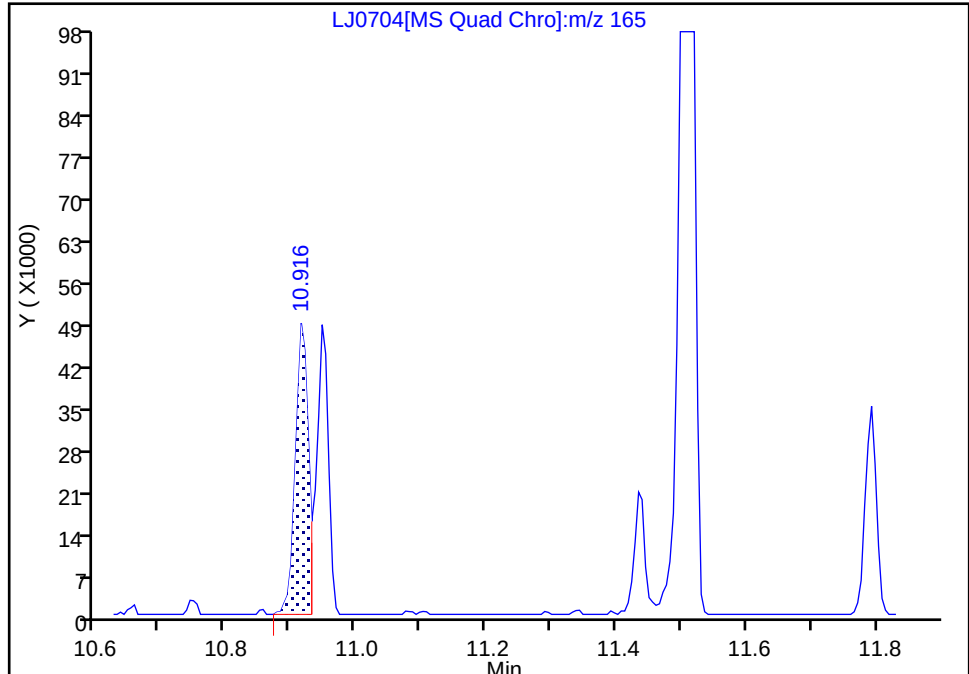
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Injection Date: 19-Oct-2020 19:07:08 Instrument ID: HP20296
Lims ID: IC L7
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP20296 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.18mm (0.18 mm) Detector: MS SCAN

88 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

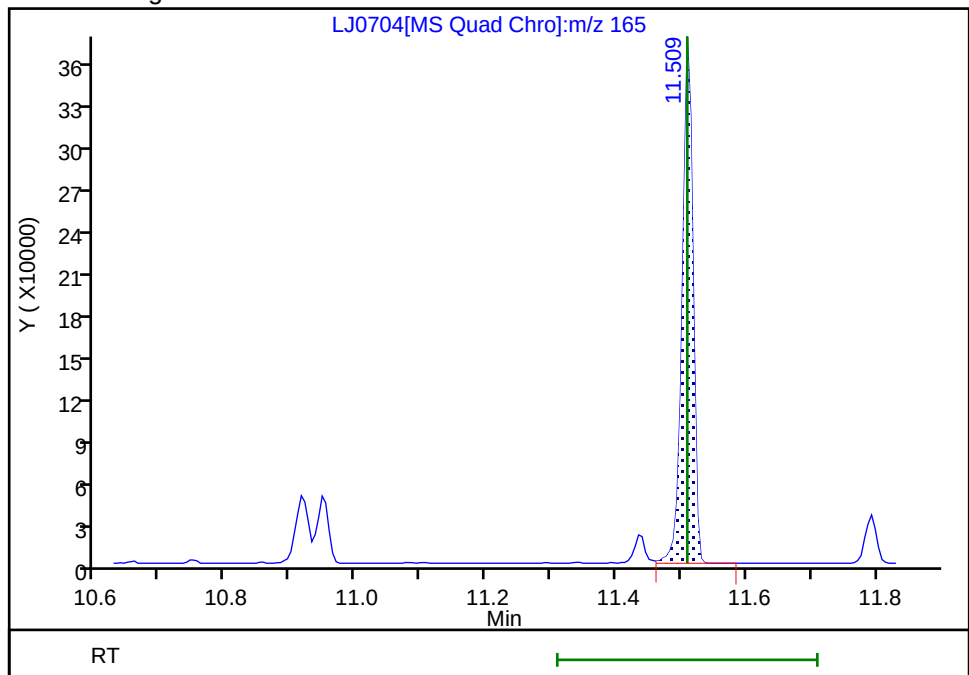
RT: 10.92
Area: 64871
Amount: 10.781334
Amount Units: ug/ml

Processing Integration Results



RT: 11.51
Area: 434227
Amount: 21.824833
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 20-Oct-2020 18:51:31
Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0704.D

Injection Date: 19-Oct-2020 19:07:08

Instrument ID: HP20296

Lims ID: IC L7

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 5

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP20296

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

Detector

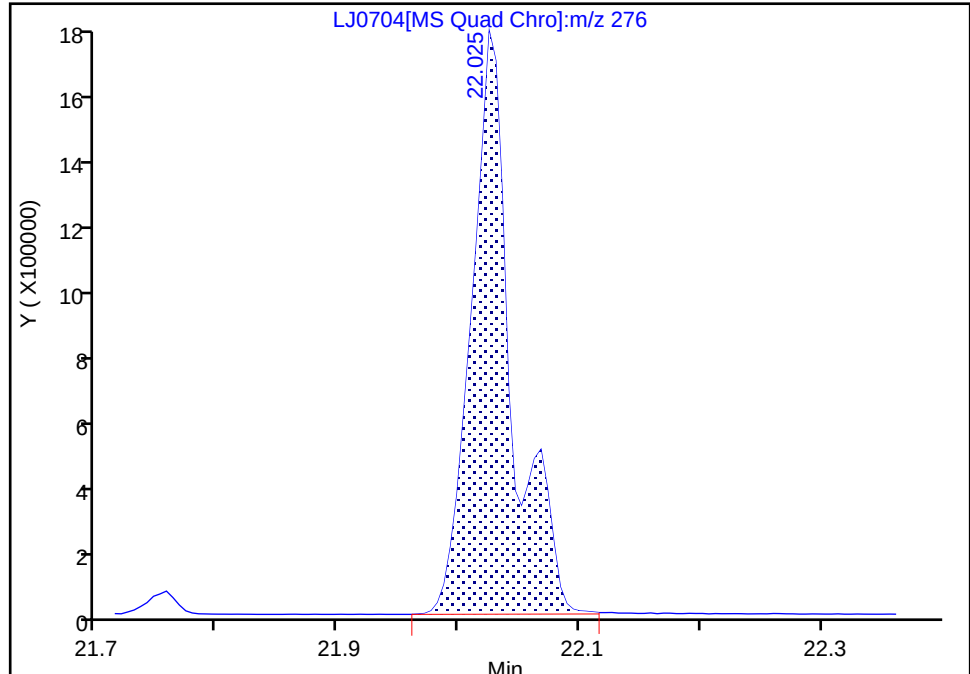
MS SCAN

163 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

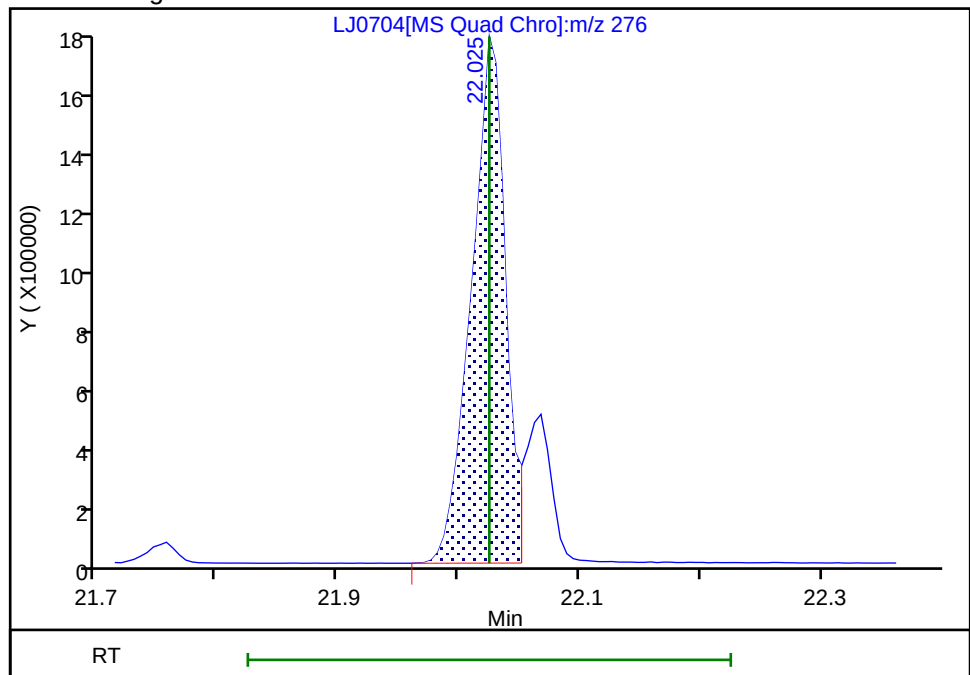
RT: 22.02
Area: 4045532
Amount: 24.771532
Amount Units: ug/ml

Processing Integration Results



RT: 22.02
Area: 3334199
Amount: 23.131478
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 19-Oct-2020 23:11:34

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0705.D
 Lims ID: IC L6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 19-Oct-2020 19:36:19 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: IC L6
 Misc. Info.: 410-0013268-006
 Operator ID: kel10217 Instrument ID: HP20296
 Sublist: chrom-MSSemi_HP20296*sub6
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 20-Oct-2020 19:07:09 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1014

First Level Reviewer: luttek

Date: 19-Oct-2020 23:13:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 1,4-Dioxane	88	2.438	2.438	0.000	90	318089	12.5	12.5	
2 N-Nitrosodimethylamine	74	2.968	2.968	0.000	89	526428	12.5	12.9	
3 Pyridine	79	3.000	3.000	0.000	94	931019	12.5	13.0	
5 2-Picoline	93	4.161	4.161	0.000	93	915798	12.5	12.5	
6 N-Nitrosomethylethylamine	88	4.353	4.353	0.000	86	375811	12.5	12.7	
9 Methyl methanesulfonate	80	4.808	4.808	0.000	85	439933	12.5	12.6	
\$ 10 2-Fluorophenol	112	5.049	5.049	0.000	93	1479234	25.0	25.7	
11 N-Nitrosodiethylamine	102	5.386	5.386	0.000	88	357862	12.5	13.3	
13 Ethyl methanesulfonate	109	5.851	5.851	0.000	97	377660	12.5	12.7	
15 Benzaldehyde	77	6.316	6.316	0.000	94	717333	12.5	13.2	
\$ 16 Phenol-d5	99	6.439	6.439	0.000	97	1878947	25.0	26.7	
17 Phenol	94	6.461	6.461	0.000	96	1141293	12.5	12.7	
18 Aniline	93	6.482	6.482	0.000	97	1344380	12.5	12.9	
19 Bis(2-chloroethyl)ether	93	6.600	6.600	0.000	98	863218	12.5	12.8	
20 2-Chlorophenol	128	6.648	6.648	0.000	94	667162	12.5	13.0	
22 1,3-Dichlorobenzene	146	6.883	6.883	0.000	92	719440	12.5	12.7	
* 24 1,4-Dichlorobenzene-d4	152	6.974	6.974	0.000	96	178960	5.00	5.00	
25 1,4-Dichlorobenzene	146	7.001	7.001	0.000	88	729118	12.5	12.7	
27 Benzyl alcohol	108	7.199	7.199	0.000	89	514358	12.5	12.8	
29 1,2-Dichlorobenzene	146	7.225	7.225	0.000	91	692719	12.5	12.5	
30 Indene	115	7.365	7.365	0.000	89	1102744	12.5	12.6	
31 2-Methylphenol	108	7.386	7.386	0.000	96	701774	12.5	12.9	
32 2,2'-oxybis[1-chloropropane]	45	7.429	7.429	0.000	90	725939	12.5	12.5	
34 N-Nitrosopyrrolidine	100	7.568	7.568	0.000	94	384002	12.5	13.0	
35 Acetophenone	105	7.605	7.605	0.000	94	1173585	12.5	12.8	
36 4-Methylphenol	108	7.627	7.627	0.000	96	828149	12.5	13.5	
37 N-Nitrosodi-n-propylamine	70	7.627	7.627	0.000	75	636951	12.5	12.9	
38 N-Nitrosomorpholine	56	7.637	7.637	0.000	89	411582	12.5	12.8	
39 2-Toluidine	106	7.653	7.653	0.000	94	1268979	12.5	13.0	
40 Hexachloroethane	117	7.750	7.750	0.000	95	355795	12.5	12.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
\$ 41 Nitrobenzene-d5	82	7.830	7.830	0.000	86	1884514	25.0	25.8	
42 Nitrobenzene	77	7.862	7.862	0.000	83	982754	12.5	13.0	
44 N-Nitrosopiperidine	114	8.097	8.097	0.000	88	355591	12.5	12.9	
46 Isophorone	82	8.247	8.247	0.000	98	1689183	12.5	13.1	
47 2-Nitrophenol	139	8.359	8.359	0.000	93	274398	12.5	12.8	
48 2,4-Dimethylphenol	107	8.461	8.461	0.000	99	808300	12.5	13.1	
49 o,o',o"-Triethylphosphorothioat	198	8.584	8.584	0.000	91	315587	12.5	12.7	
51 Bis(2-chloroethoxy)methane	93	8.621	8.621	0.000	98	1069445	12.5	12.8	
50 Benzoic acid	105	8.616	8.616	0.000	91	385745	12.5	13.1	M
52 2,4-Dichlorophenol	162	8.744	8.744	0.000	97	543013	12.5	13.8	
54 1,2,4-Trichlorobenzene	180	8.878	8.878	0.000	92	599707	12.5	12.7	
* 55 Naphthalene-d8	136	8.958	8.958	0.000	100	689215	5.00	5.00	
S 53 Dinitrotoluene	165				0		25.0	27.2	
56 Naphthalene	128	8.996	8.996	0.000	99	1927948	12.5	12.7	
57 4-Chloroaniline	127	9.097	9.097	0.000	93	815626	12.5	13.1	
58 2,6-Dichlorophenol	162	9.108	9.108	0.000	93	505878	12.5	13.2	
59 Hexachloropropene	213	9.146	9.146	0.000	90	368839	12.5	13.0	
60 Hexachlorobutadiene	225	9.220	9.220	0.000	97	351907	12.5	12.5	
62 Quinoline	129	9.536	9.536	0.000	94	1185872	12.5	13.0	
S 63 Diallate	86				0		12.5	12.8	
64 Caprolactam	113	9.659	9.659	0.000	81	201532	12.5	12.7	
65 N-Nitrosodi-n-butylamine	84	9.680	9.680	0.000	87	749422	12.5	14.9	
66 4-Chloro-3-methylphenol	107	9.910	9.910	0.000	91	682867	12.5	14.0	
67 Safrole, Total	162	10.007	10.007	0.000	85	478043	12.5	13.0	
69 2-Methylnaphthalene	142	10.124	10.124	0.000	90	1253628	12.5	13.0	
70 1-Methylnaphthalene	142	10.280	10.280	0.000	91	1180223	12.5	12.7	
71 Hexachlorocyclopentadiene	237	10.392	10.392	0.000	96	310552	12.5	13.1	
72 1,2,4,5-Tetrachlorobenzene	216	10.397	10.397	0.000	98	611404	12.5	12.7	
73 Isosafrole Peak 1	162	10.483	10.483	0.000	84	87369	2.00	2.08	
74 2,4,6-Trichlorophenol	196	10.595	10.595	0.000	94	362508	12.5	14.3	
75 2,4,5-Trichlorophenol	196	10.649	10.649	0.000	91	411992	12.5	12.8	
\$ 76 2-Fluorobiphenyl (Surr)	172	10.745	10.745	0.000	99	2752365	25.0	25.2	
77 Isosafrole Peak 2	162	10.857	10.857	0.000	84	482111	10.5	10.9	
79 1,1'-Biphenyl	154	10.900	10.900	0.000	96	1534134	12.5	12.5	
80 2-Chloronaphthalene	162	10.916	10.916	0.000	98	1254260	12.5	12.6	
81 1-Chloronaphthalene	162	10.948	10.948	0.000	96	1088545	12.5	12.2	
82 Phenyl ether	170	11.082	11.082	0.000	87	785644	12.5	12.5	
83 2-Nitroaniline	138	11.093	11.093	0.000	74	364185	12.5	13.4	
84 1,4-Naphthoquinone	158	11.210	11.210	0.000	74	488701	12.5	13.4	
85 1,4-Dinitrobenzene	168	11.333	11.333	0.000	83	157119	12.5	13.8	
86 Dimethyl phthalate	163	11.435	11.435	0.000	95	1343898	12.5	12.6	
87 1,3-Dinitrobenzene	168	11.446	11.446	0.000	81	186019	12.5	13.5	
88 2,6-Dinitrotoluene	165	11.510	11.510	0.000	85	292376	12.5	13.9	a
90 Acenaphthylene	152	11.579	11.579	0.000	99	1664289	12.5	13.2	
91 3-Nitroaniline	138	11.745	11.745	0.000	89	302701	12.5	13.3	
* 92 Acenaphthene-d10	164	11.793	11.793	0.000	97	333337	5.00	5.00	
93 Acenaphthene	153	11.836	11.836	0.000	97	1237229	12.5	12.5	
94 2,4-Dinitrophenol	184	11.900	11.900	0.000	77	95529	12.5	13.0	
96 4-Nitrophenol	109	12.007	12.007	0.000	90	265604	12.5	13.2	
98 Pentachlorobenzene	250	12.023	12.023	0.000	96	517491	12.5	12.6	
100 Dibenzofuran	168	12.082	12.082	0.000	96	1603705	12.5	12.6	
99 2,4-Dinitrotoluene	165	12.082	12.082	0.000	81	377447	12.5	13.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
101 1-Naphthylamine	143	12.189	12.189	0.000	97	1183279	12.5	12.6	
102 2,3,4,6-Tetrachlorophenol	232	12.253	12.253	0.000	77	270122	12.5	12.5	
103 2-Naphthylamine	143	12.291	12.291	0.000	93	1168402	12.5	12.4	
104 Diethyl phthalate	149	12.435	12.435	0.000	96	1389312	12.5	12.8	
105 Fluorene	166	12.521	12.521	0.000	93	1314329	12.5	12.9	
106 Thionazin	107	12.526	12.526	0.000	71	300329	12.5	13.0	
108 4-Chlorophenyl phenyl ether	204	12.547	12.547	0.000	94	644101	12.5	12.6	
107 N-Nitro-o-toluidine	152	12.547	12.547	0.000	77	354463	12.5	13.8	
109 4-Nitroaniline	138	12.558	12.558	0.000	79	328924	12.5	12.8	
110 4,6-Dinitro-2-methylphenol	198	12.595	12.595	0.000	79	142724	12.5	13.7	
111 N-Nitrosodiphenylamine	169	12.692	12.692	0.000	99	1123706	12.5	12.8	
112 1,2-Diphenylhydrazine	77	12.740	12.740	0.000	100	1962515	12.5	12.8	
\$ 113 2,4,6-Tribromophenol	330	12.825	12.825	0.000	95	410986	25.0	27.6	
114 Sulfotepp	97	12.922	12.922	0.000	82	322161	12.5	12.8	
115 cis-Diallate	86	13.072	13.072	0.000	95	544790	9.25	9.53	
116 Phorate	75	13.077	13.077	0.000	95	1159346	12.5	13.3	
117 Phenacetin	108	13.098	13.098	0.000	90	878169	12.5	13.9	
118 4-Bromophenyl phenyl ether	248	13.157	13.157	0.000	73	372511	12.5	13.1	
119 trans-Diallate	86	13.178	13.178	0.000	92	199093	3.25	3.31	
120 Hexachlorobenzene	284	13.211	13.211	0.000	94	436873	12.5	12.4	
121 Dimethoate	87	13.285	13.285	0.000	95	725524	12.5	13.3	
122 Atrazine	200	13.387	13.387	0.000	90	365446	12.5	12.4	
123 Pentachlorophenol	266	13.473	13.473	0.000	90	202222	12.5	13.5	
124 4-Aminobiphenyl	169	13.489	13.489	0.000	91	1042374	12.5	13.1	
125 Pentachloronitrobenzene	237	13.489	13.489	0.000	84	180381	12.5	13.1	
126 Pronamide	173	13.585	13.585	0.000	91	669337	12.5	13.6	
* 127 Phenanthrene-d10	188	13.719	13.719	0.000	97	663245	5.00	5.00	
128 Dinoseb	211	13.729	13.729	0.000	92	211443	12.5	13.3	
129 Phenanthrene	178	13.751	13.751	0.000	99	1943813	12.5	12.5	
130 Anthracene	178	13.820	13.820	0.000	99	2009804	12.5	13.1	
131 Carbazole	167	14.040	14.040	0.000	97	1795165	12.5	12.8	
132 Methyl parathion	109	14.248	14.248	0.000	90	539879	12.5	13.8	
133 Di-n-butyl phthalate	149	14.558	14.558	0.000	100	2470206	12.5	13.0	
134 Ethyl Parathion	109	14.804	14.804	0.000	83	329743	12.5	13.4	
135 4-Nitroquinoline-1-oxide	190	14.826	14.826	0.000	88	173752	12.5	13.2	
136 Octachlorostyrene	308	15.168	15.168	0.000	93	191557	12.5	12.4	
137 Isodrin	193	15.222	15.222	0.000	88	246456	12.5	12.9	
138 Fluoranthene	202	15.446	15.446	0.000	99	2231226	12.5	13.0	
139 Benzidine	184	15.687	15.687	0.000	99	4270219	37.5	40.2	
* 140 Pyrene-d10 (IS)	212	15.773	15.773	0.000	98	671248	5.00	5.00	
141 Pyrene	202	15.805	15.805	0.000	96	2345972	12.5	12.9	
\$ 142 p-Terphenyl-d14	244	16.088	16.088	0.000	98	3466776	25.0	25.8	
143 p-Dimethylamino azobenzene	225	16.323	16.323	0.000	89	408543	12.5	13.8	
144 Chlorobenzilate	139	16.414	16.414	0.000	83	758749	12.5	13.3	
145 3,3'-Dimethylbenzidine	212	16.896	16.896	0.000	99	1458760	12.5	13.7	
146 Butyl benzyl phthalate	149	16.949	16.949	0.000	93	1127509	12.5	14.0	
147 2-Acetylaminofluorene	181	17.329	17.329	0.000	94	914430	12.5	12.6	
148 3,3'-Dichlorobenzidine	252	17.842	17.842	0.000	78	870022	12.5	13.4	
149 Benzo[a]anthracene	228	17.853	17.853	0.000	100	2237070	12.5	13.8	
150 4,4'-Methylene bis(2-chloroaniline)	231	17.859	17.859	0.000	94	450524	12.5	13.2	
151 Chrysene	228	17.917	17.917	0.000	97	2216496	12.5	13.4	
152 Bis(2-ethylhexyl) phthalate	149	18.030	18.030	0.000	97	1700627	12.5	13.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
153 6-Methylchrysene	242	18.730	18.730	0.000	99	1560021	12.5	13.2	
154 Di-n-octyl phthalate	149	19.212	19.212	0.000	99	2973749	12.5	13.7	
155 Benzo[b]fluoranthene	252	19.741	19.741	0.000	97	2470585	12.5	13.6	
156 7,12-Dimethylbenz(a)anthracene	256	19.747	19.747	0.000	87	1037764	12.5	13.8	
157 Benzo[k]fluoranthene	252	19.789	19.789	0.000	99	2341999	12.5	13.0	
158 Benzo[a]pyrene	252	20.276	20.276	0.000	79	2260039	12.5	13.7	
* 159 Perylene-d12	264	20.362	20.362	0.000	98	726140	5.00	5.00	
160 3-Methylcholanthrene	268	20.848	20.848	0.000	92	1148722	12.5	13.9	
161 Dibenz[a,h]acridine	279	21.672	21.672	0.000	91	1787814	12.5	13.4	
162 Dibenz[a,j]acridine	279	21.752	21.752	0.000	96	1807679	12.5	13.2	
163 Indeno[1,2,3-cd]pyrene	276	22.020	22.020	0.000	99	2149195	12.5	14.5	M
164 Dibenz(a,h)anthracene	278	22.063	22.063	0.000	94	2243113	12.5	14.2	
165 Benzo[g,h,i]perylene	276	22.442	22.442	0.000	97	1965453	12.5	13.1	
S 166 Isosafrole	162				0		12.5	13.0	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_6_00007

Amount Added: 1.00

Units: mL

Report Date: 20-Oct-2020 19:07:10

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0705.D

Injection Date: 19-Oct-2020 19:36:19

Instrument ID: HP20296

Operator ID: kel10217

Lims ID: IC L6

Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul

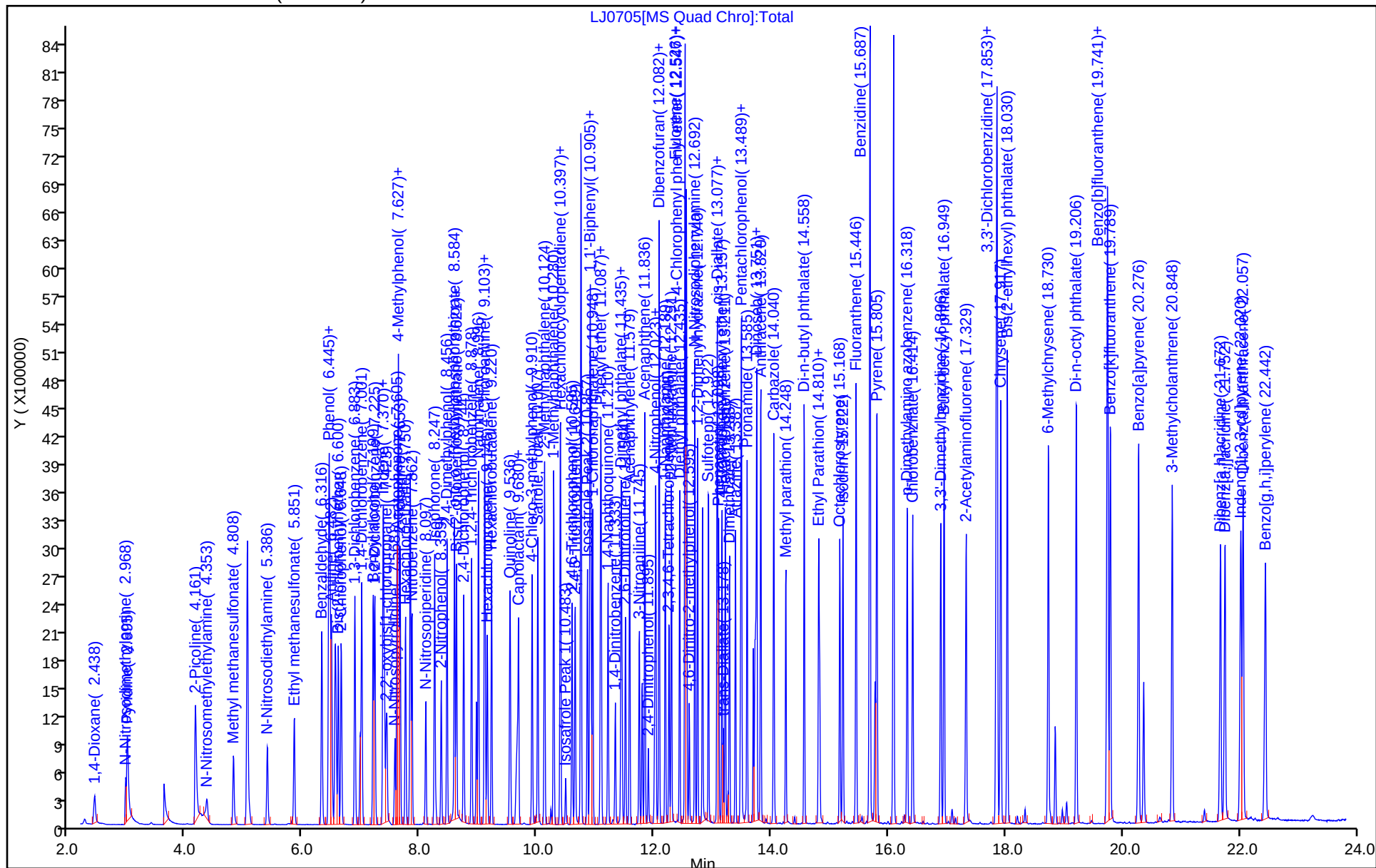
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0705.D

Injection Date: 19-Oct-2020 19:36:19

Instrument ID: HP20296

Lims ID: IC L6

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 6

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP20296

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

Detector

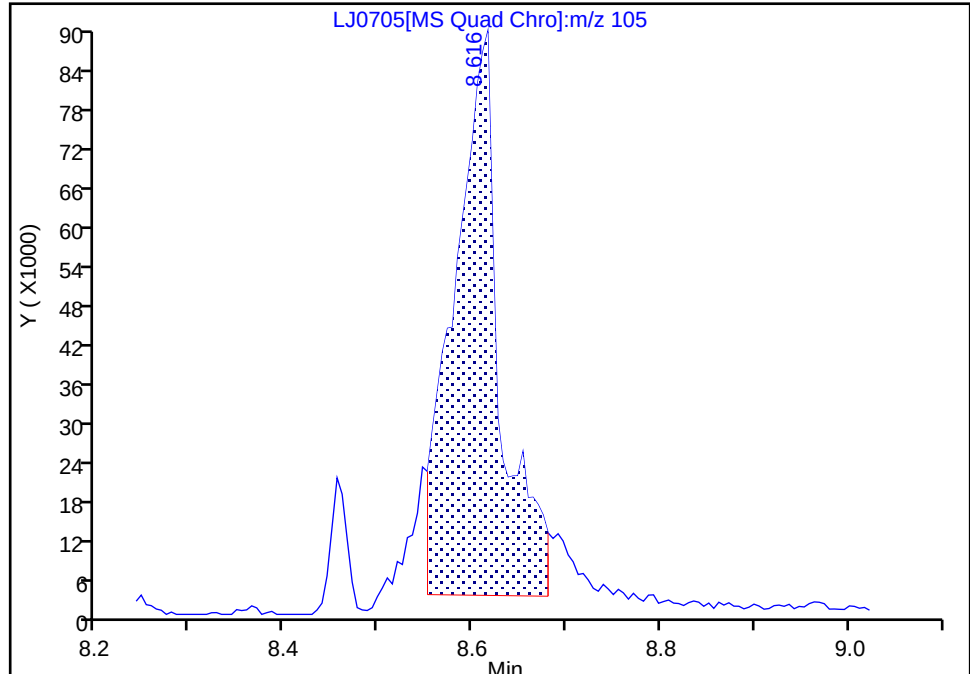
MS SCAN

50 Benzoic acid, CAS: 65-85-0

Signal: 1

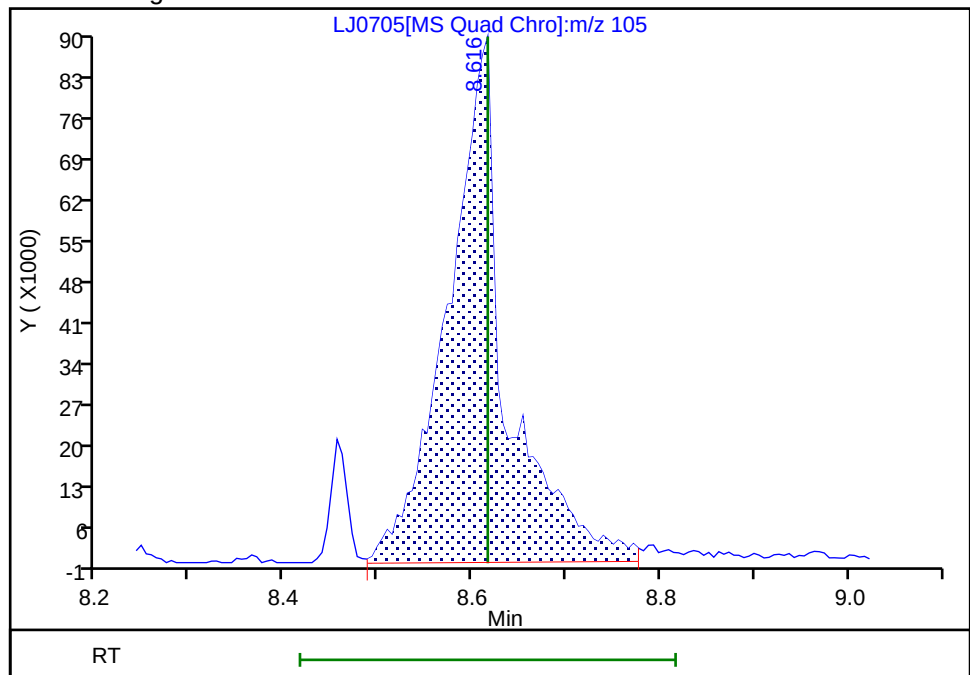
RT: 8.62
Area: 294698
Amount: 11.009279
Amount Units: ug/ml

Processing Integration Results



RT: 8.62
Area: 385745
Amount: 13.099955
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 19-Oct-2020 23:12:27

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

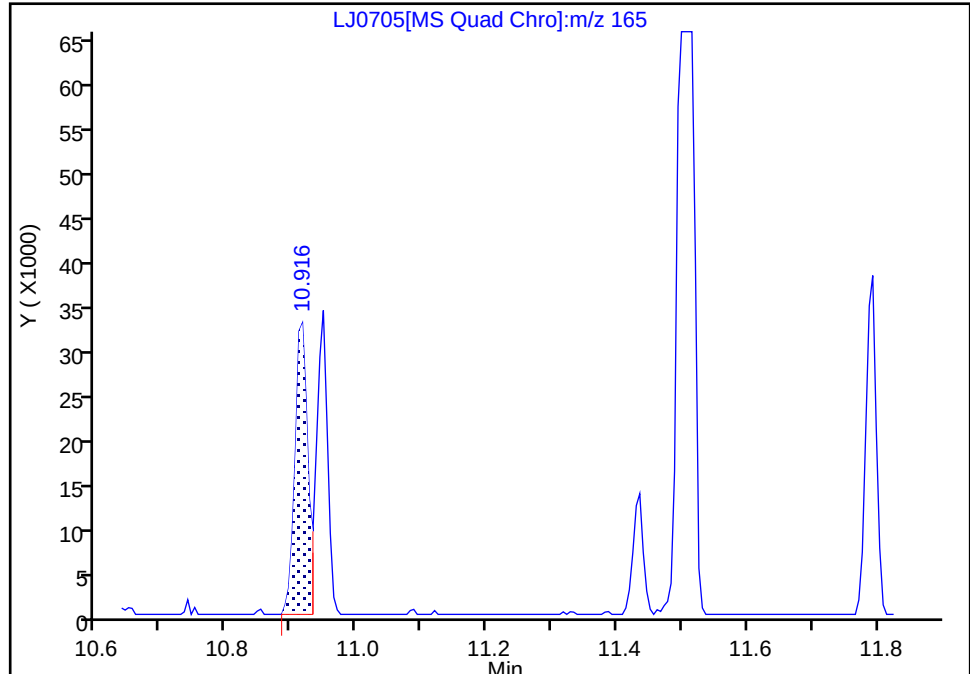
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Injection Date: 19-Oct-2020 19:36:19 Instrument ID: HP20296
Lims ID: IC L6
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP20296 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.18mm (0.18 mm) Detector: MS SCAN

88 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

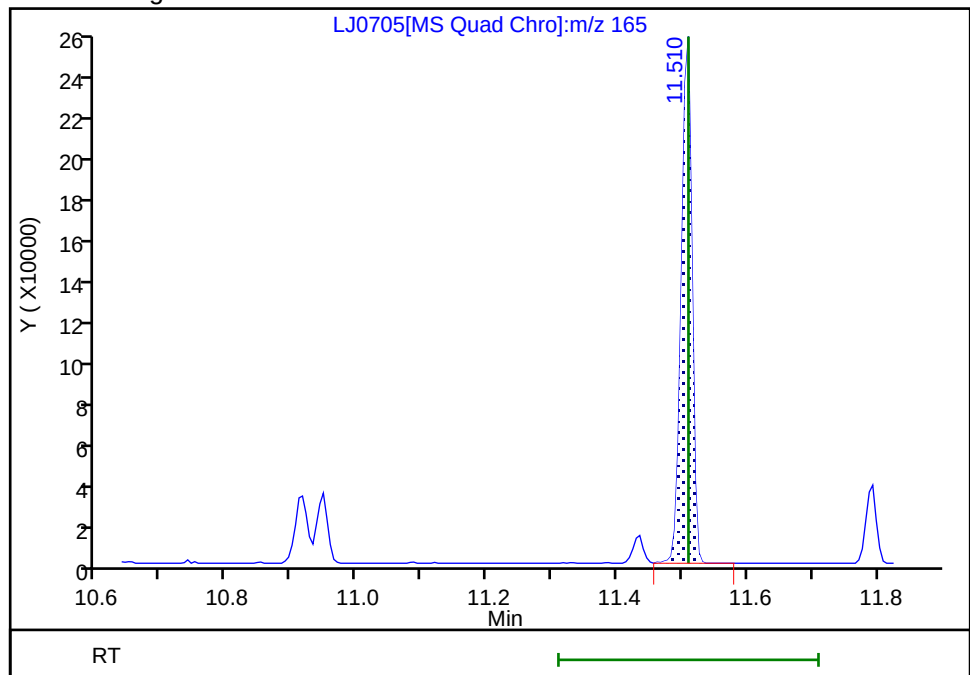
RT: 10.92
Area: 44306
Amount: 4.858074
Amount Units: ug/ml

Processing Integration Results



RT: 11.51
Area: 292376
Amount: 13.946204
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 20-Oct-2020 18:51:44
Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0705.D

Injection Date: 19-Oct-2020 19:36:19

Instrument ID: HP20296

Lims ID: IC L6

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 6

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP20296

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

Detector

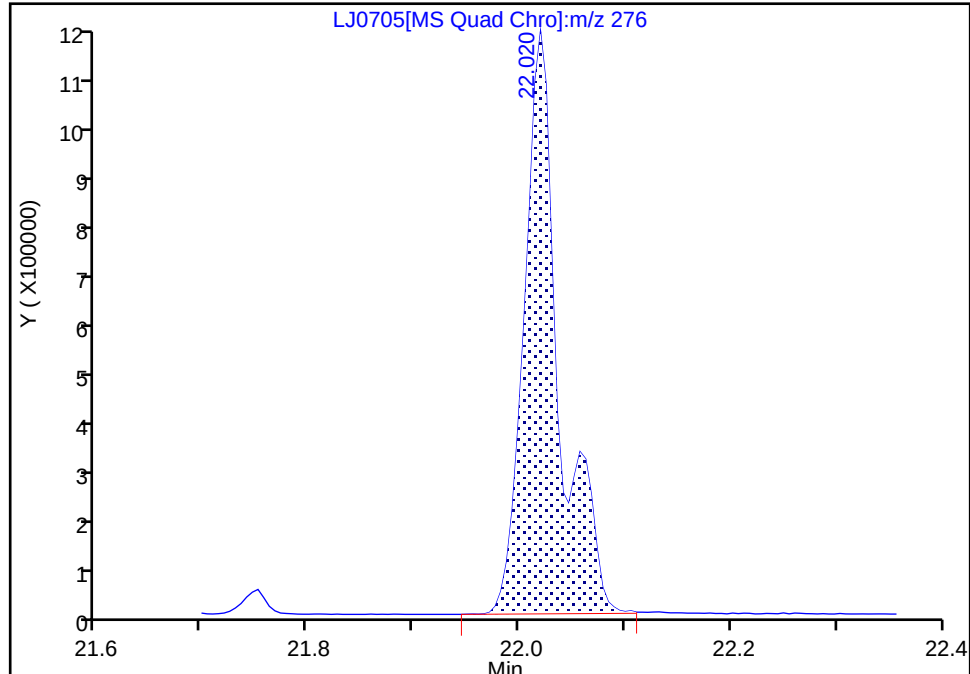
MS SCAN

163 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

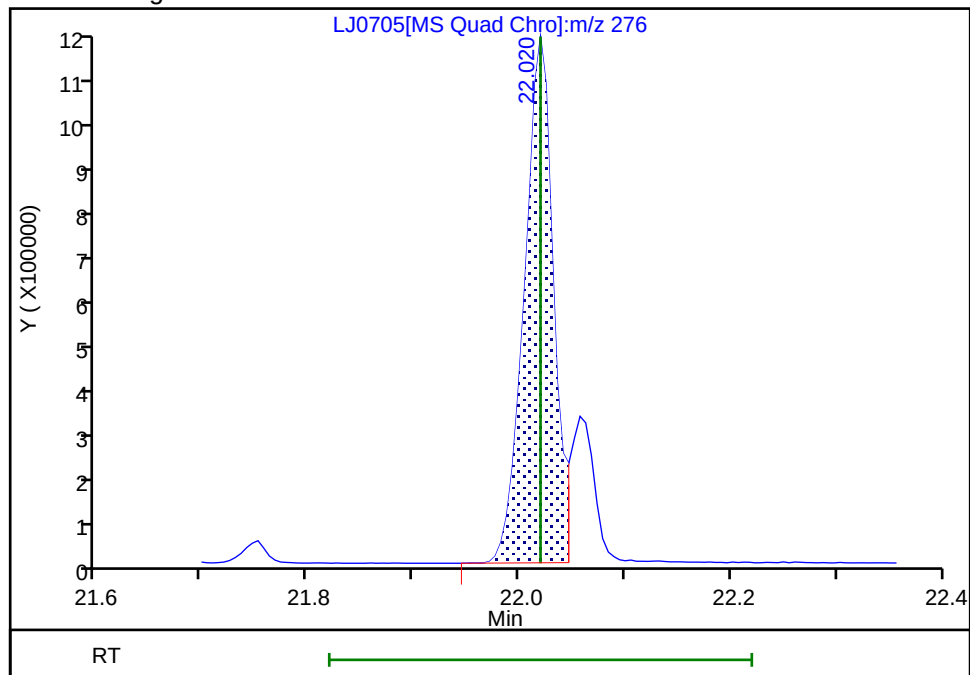
RT: 22.02
Area: 2616036
Amount: 14.754745
Amount Units: ug/ml

Processing Integration Results



RT: 22.02
Area: 2149195
Amount: 14.480780
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 19-Oct-2020 23:13:18

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0706.D
 Lims ID: IC L4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 19-Oct-2020 20:05:24 ALS Bottle#: 0 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: IC L4
 Misc. Info.: 410-0013268-007
 Operator ID: kel10217 Instrument ID: HP20296
 Sublist: chrom-MSSemi_HP20296*sub6
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 20-Oct-2020 19:07:14 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1014

First Level Reviewer: luttek

Date: 19-Oct-2020 23:15:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 1,4-Dioxane	88	2.444	2.444	0.000	89	74647	3.75	3.53	
2 N-Nitrosodimethylamine	74	2.973	2.973	0.000	89	124811	3.75	3.68	
3 Pyridine	79	3.011	3.011	0.000	95	208019	3.75	3.49	
5 2-Picoline	93	4.166	4.166	0.000	93	230652	3.75	3.79	
6 N-Nitrosomethylethylamine	88	4.358	4.358	0.000	84	92725	3.75	3.77	
9 Methyl methanesulfonate	80	4.808	4.808	0.000	85	109774	3.75	3.79	
\$ 10 2-Fluorophenol	112	5.043	5.043	0.000	93	356388	7.50	7.43	
11 N-Nitrosodiethylamine	102	5.385	5.385	0.000	88	86219	3.75	3.85	
13 Ethyl methanesulfonate	109	5.840	5.840	0.000	98	97591	3.75	3.93	
15 Benzaldehyde	77	6.316	6.316	0.000	94	177151	3.75	3.92	
\$ 16 Phenol-d5	99	6.434	6.434	0.000	97	453605	7.50	7.76	
17 Phenol	94	6.450	6.450	0.000	97	284601	3.75	3.82	
18 Aniline	93	6.477	6.477	0.000	96	327363	3.75	3.77	
19 Bis(2-chloroethyl)ether	93	6.600	6.600	0.000	97	212253	3.75	3.78	
20 2-Chlorophenol	128	6.648	6.648	0.000	94	163195	3.75	3.83	
22 1,3-Dichlorobenzene	146	6.883	6.883	0.000	91	180317	3.75	3.81	
* 24 1,4-Dichlorobenzene-d4	152	6.974	6.974	0.000	96	148915	5.00	5.00	
25 1,4-Dichlorobenzene	146	7.001	7.001	0.000	88	181823	3.75	3.80	
27 Benzyl alcohol	108	7.193	7.193	0.000	90	122207	3.75	3.65	
29 1,2-Dichlorobenzene	146	7.225	7.225	0.000	90	171293	3.75	3.72	
30 Indene	115	7.364	7.364	0.000	88	266561	3.75	3.67	
31 2-Methylphenol	108	7.375	7.375	0.000	96	169541	3.75	3.74	
32 2,2'-oxybis[1-chloropropane]	45	7.418	7.418	0.000	89	181859	3.75	3.75	
34 N-Nitrosopyrrolidine	100	7.552	7.552	0.000	95	92138	3.75	3.76	
35 Acetophenone	105	7.594	7.594	0.000	93	288299	3.75	3.79	
36 4-Methylphenol	108	7.616	7.616	0.000	93	199009	3.75	3.89	
37 N-Nitrosodi-n-propylamine	70	7.616	7.616	0.000	77	161716	3.75	3.93	
38 N-Nitrosomorpholine	56	7.626	7.626	0.000	90	99386	3.75	3.71	
39 2-Toluidine	106	7.648	7.648	0.000	93	305718	3.75	3.75	
40 Hexachloroethane	117	7.744	7.744	0.000	93	86804	3.75	3.70	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
\$ 41 Nitrobenzene-d5	82	7.824	7.824	0.000	86	453925	7.50	7.59	
42 Nitrobenzene	77	7.851	7.851	0.000	83	237389	3.75	3.84	
44 N-Nitrosopiperidine	114	8.092	8.092	0.000	88	85856	3.75	3.79	
46 Isophorone	82	8.242	8.242	0.000	98	403010	3.75	3.80	
47 2-Nitrophenol	139	8.354	8.354	0.000	91	60123	3.75	3.50	
48 2,4-Dimethylphenol	107	8.456	8.456	0.000	98	191771	3.75	3.80	
49 o,o',o"-Triethylphosphorothioat	198	8.584	8.584	0.000	92	73615	3.75	3.60	
50 Benzoic acid	105	8.573	8.573	0.000	86	139626	7.50	7.10	
51 Bis(2-chloroethoxy)methane	93	8.616	8.616	0.000	98	264099	3.75	3.86	
52 2,4-Dichlorophenol	162	8.739	8.739	0.000	95	124738	3.75	3.88	
54 1,2,4-Trichlorobenzene	180	8.878	8.878	0.000	92	148694	3.75	3.83	
* 55 Naphthalene-d8	136	8.958	8.958	0.000	100	565126	5.00	5.00	
S 53 Dinitrotoluene	165				0		7.50	7.67	
56 Naphthalene	128	8.990	8.990	0.000	99	476343	3.75	3.83	
57 4-Chloroaniline	127	9.092	9.092	0.000	94	200840	3.75	3.94	
58 2,6-Dichlorophenol	162	9.103	9.103	0.000	91	118922	3.75	3.80	
59 Hexachloropropene	213	9.145	9.145	0.000	91	86676	3.75	3.72	
60 Hexachlorobutadiene	225	9.215	9.215	0.000	97	89137	3.75	3.85	
62 Quinoline	129	9.525	9.525	0.000	93	278019	3.75	3.71	
S 63 Diallate	86				0		3.75	3.73	
64 Caprolactam	113	9.611	9.611	0.000	83	47639	3.75	3.65	
65 N-Nitrosodi-n-butylamine	84	9.675	9.675	0.000	87	139956	3.75	3.40	
66 4-Chloro-3-methylphenol	107	9.905	9.905	0.000	91	157748	3.75	3.94	
67 Safrole, Total	162	10.007	10.007	0.000	81	113823	3.75	3.78	
69 2-Methylnaphthalene	142	10.124	10.124	0.000	91	309739	3.75	3.91	
70 1-Methylnaphthalene	142	10.279	10.279	0.000	92	289580	3.75	3.81	
71 Hexachlorocyclopentadiene	237	10.392	10.392	0.000	94	69156	3.75	3.61	
72 1,2,4,5-Tetrachlorobenzene	216	10.397	10.397	0.000	97	146441	3.75	3.77	
73 Isosafrole Peak 1	162	10.483	10.483	0.000	76	20931	0.6000	0.6192	
74 2,4,6-Trichlorophenol	196	10.590	10.590	0.000	94	80085	3.75	3.91	
75 2,4,5-Trichlorophenol	196	10.638	10.638	0.000	92	94431	3.75	3.77	
\$ 76 2-Fluorobiphenyl (Surr)	172	10.745	10.745	0.000	99	672733	7.50	7.64	
77 Isosafrole Peak 2	162	10.852	10.852	0.000	85	115786	3.15	3.26	
79 1,1'-Biphenyl	154	10.894	10.894	0.000	98	366335	3.75	3.72	
80 2-Chloronaphthalene	162	10.911	10.911	0.000	98	301985	3.75	3.78	
81 1-Chloronaphthalene	162	10.943	10.943	0.000	95	271510	3.75	3.78	
82 Phenyl ether	170	11.082	11.082	0.000	88	197958	3.75	3.92	
83 2-Nitroaniline	138	11.087	11.087	0.000	77	80251	3.75	3.66	
84 1,4-Naphthoquinone	158	11.205	11.205	0.000	75	111991	3.75	3.82	
85 1,4-Dinitrobenzene	168	11.328	11.328	0.000	83	32524	3.75	3.54	
86 Dimethyl phthalate	163	11.424	11.424	0.000	96	330748	3.75	3.85	
87 1,3-Dinitrobenzene	168	11.440	11.440	0.000	81	40008	3.75	3.60	
88 2,6-Dinitrotoluene	165	11.499	11.499	0.000	82	67364	3.75	3.99	a
90 Acenaphthylene	152	11.574	11.574	0.000	99	395715	3.75	3.90	
91 3-Nitroaniline	138	11.734	11.734	0.000	89	66461	3.75	3.61	
* 92 Acenaphthene-d10	164	11.788	11.788	0.000	98	268638	5.00	5.00	
93 Acenaphthene	153	11.836	11.836	0.000	97	299881	3.75	3.77	
94 2,4-Dinitrophenol	184	11.895	11.895	0.000	77	37907	7.50	6.38	
96 4-Nitrophenol	109	11.996	11.996	0.000	91	54489	3.75	3.36	
98 Pentachlorobenzene	250	12.023	12.023	0.000	96	127186	3.75	3.85	
100 Dibenzofuran	168	12.077	12.077	0.000	96	403563	3.75	3.93	
99 2,4-Dinitrotoluene	165	12.077	12.077	0.000	79	84148	3.75	3.68	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
101 1-Naphthylamine	143	12.184	12.184	0.000	97	282119	3.75	3.74	
102 2,3,4,6-Tetrachlorophenol	232	12.248	12.248	0.000	78	58486	3.75	3.47	
103 2-Naphthylamine	143	12.285	12.285	0.000	94	292798	3.75	3.86	
104 Diethyl phthalate	149	12.424	12.424	0.000	96	328615	3.75	3.75	
105 Fluorene	166	12.520	12.520	0.000	92	314310	3.75	3.83	
106 Thionazin	107	12.520	12.520	0.000	55	69725	3.75	3.76	
108 4-Chlorophenyl phenyl ether	204	12.542	12.542	0.000	87	159895	3.75	3.88	
107 N-Nitro-o-toluidine	152	12.537	12.537	0.000	84	82416	3.75	3.97	
109 4-Nitroaniline	138	12.542	12.542	0.000	78	75706	3.75	3.71	
110 4,6-Dinitro-2-methylphenol	198	12.590	12.590	0.000	73	27269	3.75	3.28	
111 N-Nitrosodiphenylamine	169	12.686	12.686	0.000	99	267168	3.75	3.81	
112 1,2-Diphenylhydrazine	77	12.734	12.734	0.000	100	479225	3.75	3.92	
\$ 113 2,4,6-Tribromophenol	330	12.820	12.820	0.000	94	85495	7.50	7.13	
114 Sulfotepp	97	12.922	12.922	0.000	81	75536	3.75	3.76	
115 cis-Diallate	86	13.066	13.066	0.000	89	127246	2.78	2.79	
116 Phorate	75	13.077	13.077	0.000	95	267299	3.75	3.85	
117 Phenacetin	108	13.087	13.087	0.000	89	200945	3.75	3.97	
118 4-Bromophenyl phenyl ether	248	13.152	13.152	0.000	73	86365	3.75	3.79	
119 trans-Diallate	86	13.178	13.178	0.000	90	45243	0.9750	0.9427	
120 Hexachlorobenzene	284	13.210	13.210	0.000	92	103005	3.75	3.66	
121 Dimethoate	87	13.275	13.275	0.000	96	161106	3.75	3.70	
122 Atrazine	200	13.382	13.382	0.000	89	91318	3.75	3.87	
123 Pentachlorophenol	266	13.467	13.467	0.000	88	39231	3.75	3.27	
124 4-Aminobiphenyl	169	13.483	13.483	0.000	92	246717	3.75	3.87	
125 Pentachloronitrobenzene	237	13.483	13.483	0.000	51	38465	3.75	3.51	
126 Pronamide	173	13.580	13.580	0.000	91	150383	3.75	3.82	
* 127 Phenanthrene-d10	188	13.713	13.713	0.000	98	529845	5.00	5.00	
128 Dinoseb	211	13.729	13.729	0.000	93	37278	3.75	2.94	
129 Phenanthrene	178	13.745	13.745	0.000	99	466976	3.75	3.76	
130 Anthracene	178	13.815	13.815	0.000	99	473236	3.75	3.87	
131 Carbazole	167	14.034	14.034	0.000	97	426941	3.75	3.82	
132 Methyl parathion	109	14.243	14.243	0.000	90	110947	3.75	3.54	
133 Di-n-butyl phthalate	149	14.558	14.558	0.000	100	564319	3.75	3.71	
134 Ethyl Parathion	109	14.804	14.804	0.000	82	66118	3.75	3.37	
135 4-Nitroquinoline-1-oxide	190	14.815	14.815	0.000	80	24537	3.75	3.33	
136 Octachlorostyrene	308	15.168	15.168	0.000	93	42185	3.75	3.42	
137 Isodrin	193	15.222	15.222	0.000	86	55552	3.75	3.64	
138 Fluoranthene	202	15.446	15.446	0.000	100	508047	3.75	3.70	
139 Benzidine	184	15.671	15.671	0.000	99	956602	11.3	11.3	
* 140 Pyrene-d10 (IS)	212	15.767	15.767	0.000	98	533939	5.00	5.00	
141 Pyrene	202	15.799	15.799	0.000	96	546384	3.75	3.78	
\$ 142 p-Terphenyl-d14	244	16.083	16.083	0.000	98	791290	7.50	7.42	
143 p-Dimethylamino azobenzene	225	16.318	16.318	0.000	88	79803	3.75	3.39	
144 Chlorobenzilate	139	16.409	16.409	0.000	82	171292	3.75	3.76	
145 3,3'-Dimethylbenzidine	212	16.890	16.890	0.000	99	302900	3.75	3.56	
146 Butyl benzyl phthalate	149	16.949	16.949	0.000	92	252568	3.75	3.95	
147 2-Acetylaminofluorene	181	17.318	17.318	0.000	94	172672	3.75	3.82	
148 3,3'-Dichlorobenzidine	252	17.832	17.832	0.000	79	184625	3.75	3.57	
149 Benzo[a]anthracene	228	17.848	17.848	0.000	99	503638	3.75	3.91	
150 4,4'-Methylene bis(2-chloroani	231	17.853	17.853	0.000	93	95864	3.75	3.53	
151 Chrysene	228	17.912	17.912	0.000	97	512054	3.75	3.89	
152 Bis(2-ethylhexyl) phthalate	149	18.030	18.030	0.000	97	353561	3.75	3.56	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
153 6-Methylchrysene	242	18.725	18.725	0.000	100	335958	3.75	3.57	
154 Di-n-octyl phthalate	149	19.206	19.206	0.000	99	583744	3.75	3.58	
155 Benzo[b]fluoranthene	252	19.730	19.730	0.000	98	522752	3.75	3.83	
156 7,12-Dimethylbenz(a)anthracene	256	19.730	19.730	0.000	89	211834	3.75	3.76	
157 Benzo[k]fluoranthene	252	19.779	19.779	0.000	99	533900	3.75	3.95	
158 Benzo[a]pyrene	252	20.260	20.260	0.000	79	485645	3.75	3.92	
* 159 Perylene-d12	264	20.356	20.356	0.000	98	545378	5.00	5.00	
160 3-Methylcholanthrene	268	20.838	20.838	0.000	92	234593	3.75	3.78	
161 Dibenz[a,h]acridine	279	21.661	21.661	0.000	91	364381	3.75	3.63	
162 Dibenz[a,j]acridine	279	21.736	21.736	0.000	96	389286	3.75	3.78	
163 Indeno[1,2,3-cd]pyrene	276	22.004	22.004	0.000	99	432848	3.75	3.88	M
164 Dibenz(a,h)anthracene	278	22.046	22.046	0.000	92	463514	3.75	3.91	
165 Benzo[g,h,i]perylene	276	22.421	22.421	0.000	96	433842	3.75	3.85	
S 166 Isosafrole	162				0		3.75	3.87	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_4_00008

Amount Added: 1.00

Units: mL

Report Date: 20-Oct-2020 19:07:15

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0706.D

Injection Date: 19-Oct-2020 20:05:24

Instrument ID: HP20296

Operator ID: kel10217

Lims ID: IC L4

Worklist Smp#: 7

Client ID:

Injection Vol: 1.0 ul

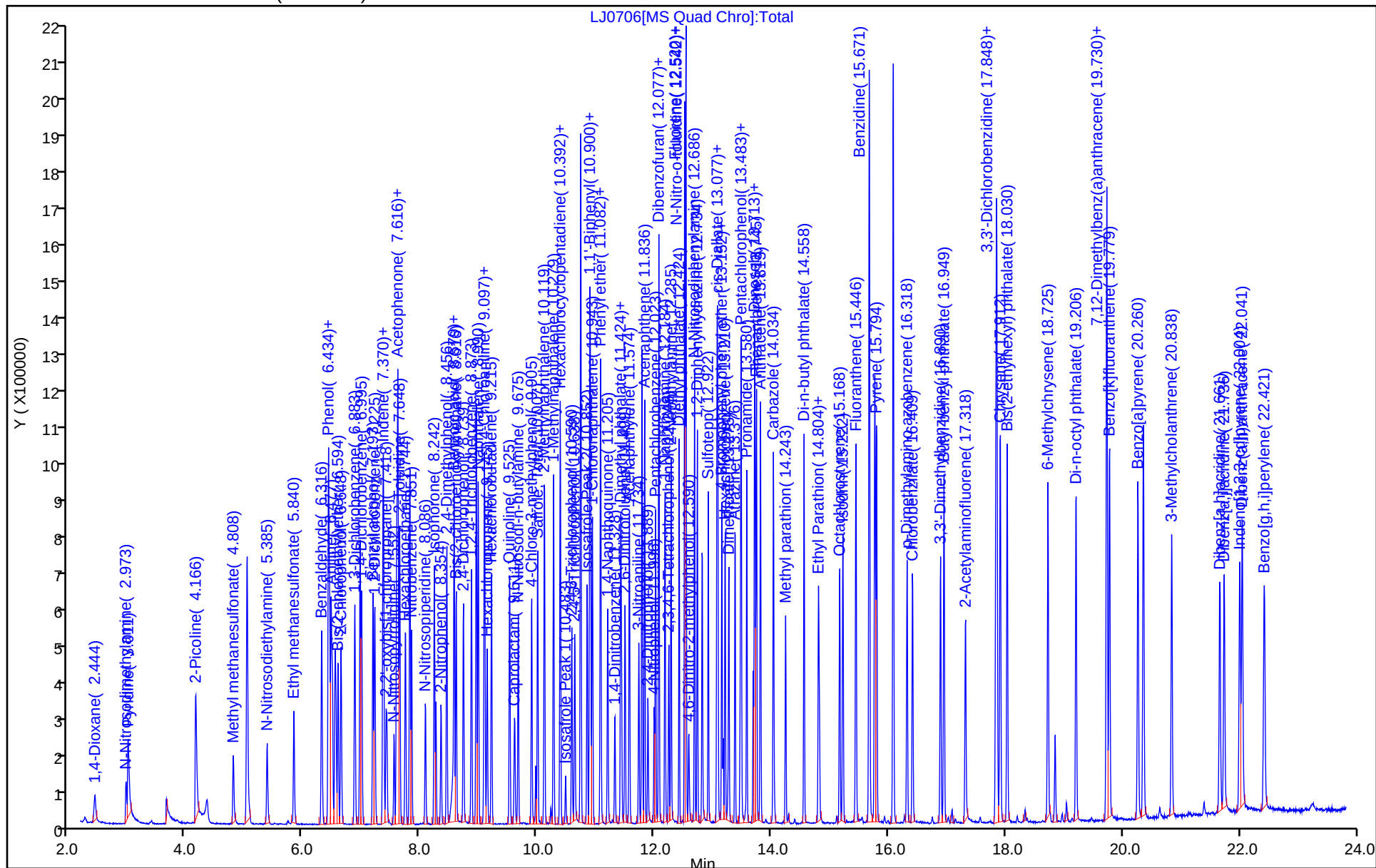
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0706.D

Injection Date: 19-Oct-2020 20:05:24

Instrument ID: HP20296

Lims ID: IC L4

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 7

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP20296

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

Detector

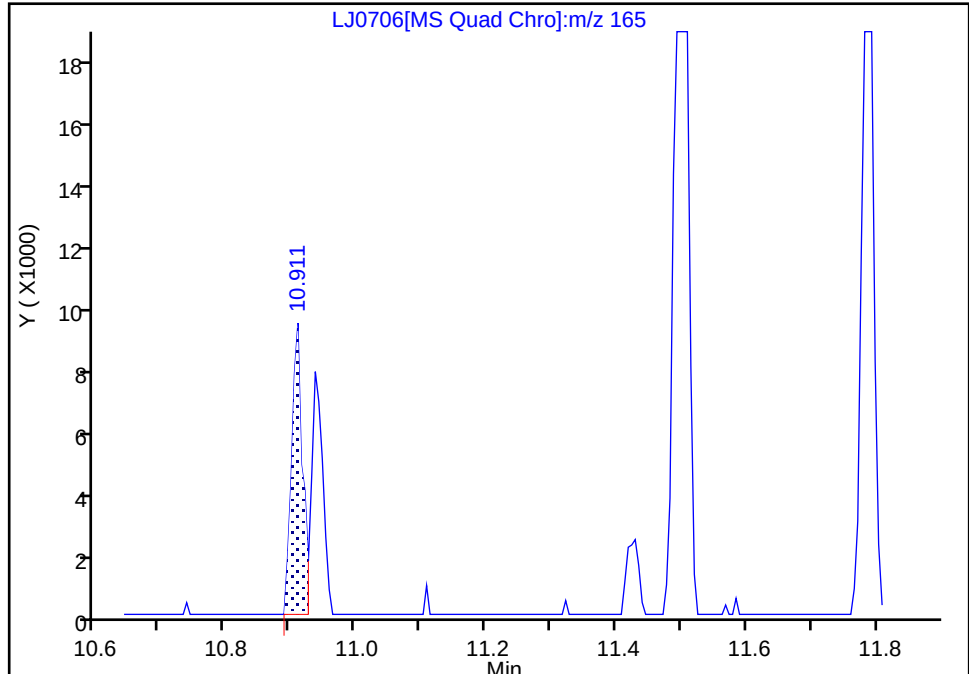
MS SCAN

88 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

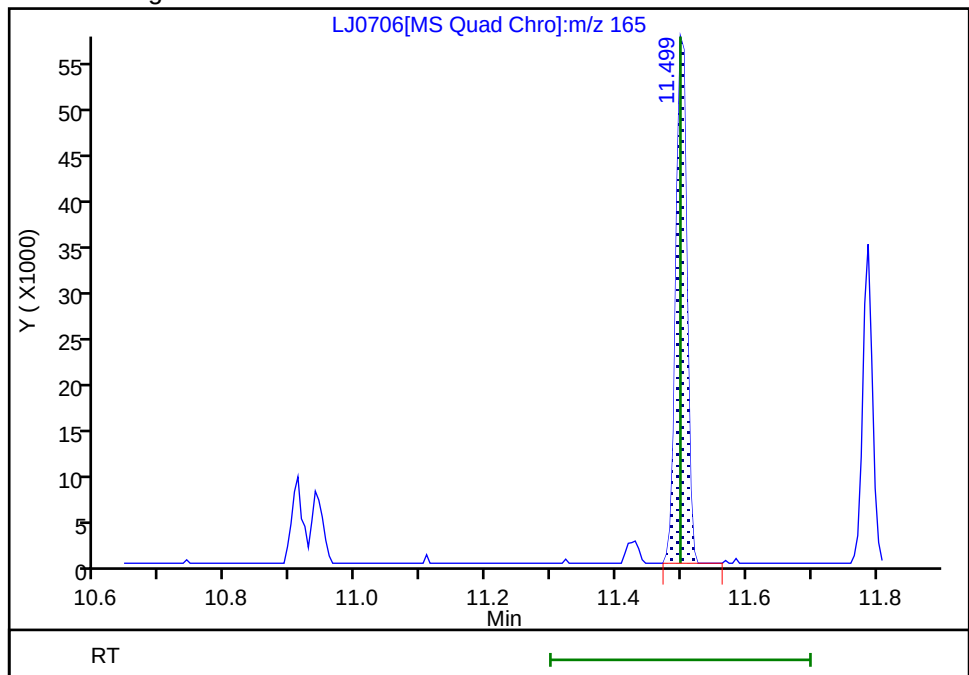
RT: 10.91
Area: 10543
Amount: 1.094271
Amount Units: ug/ml

Processing Integration Results



RT: 11.50
Area: 67364
Amount: 3.987110
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 20-Oct-2020 18:51:55

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0706.D

Injection Date: 19-Oct-2020 20:05:24

Instrument ID: HP20296

Lims ID: IC L4

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 7

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP20296

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

Detector

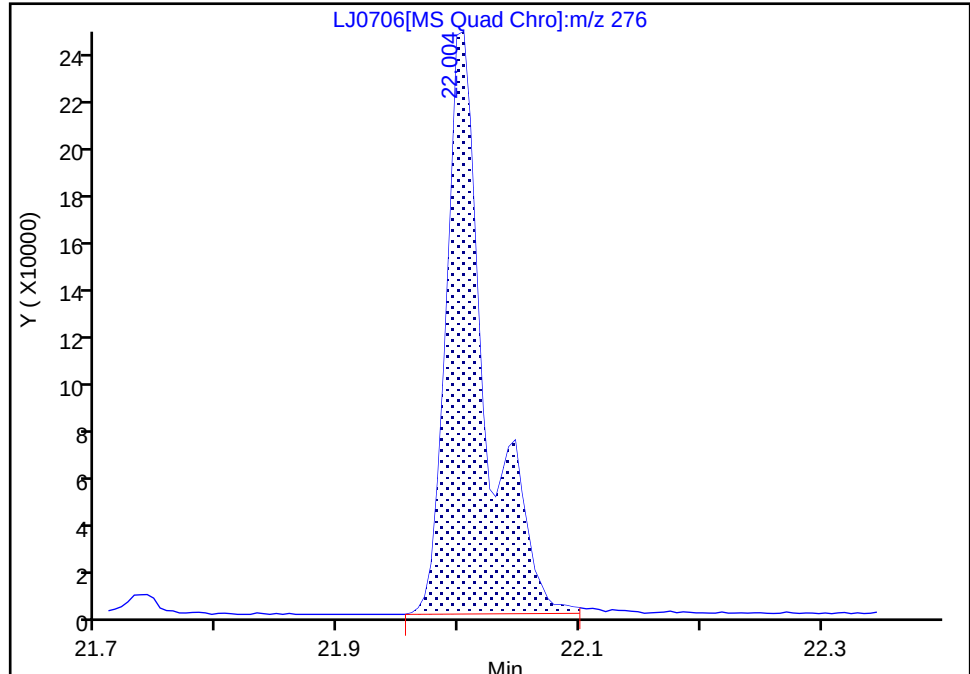
MS SCAN

163 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

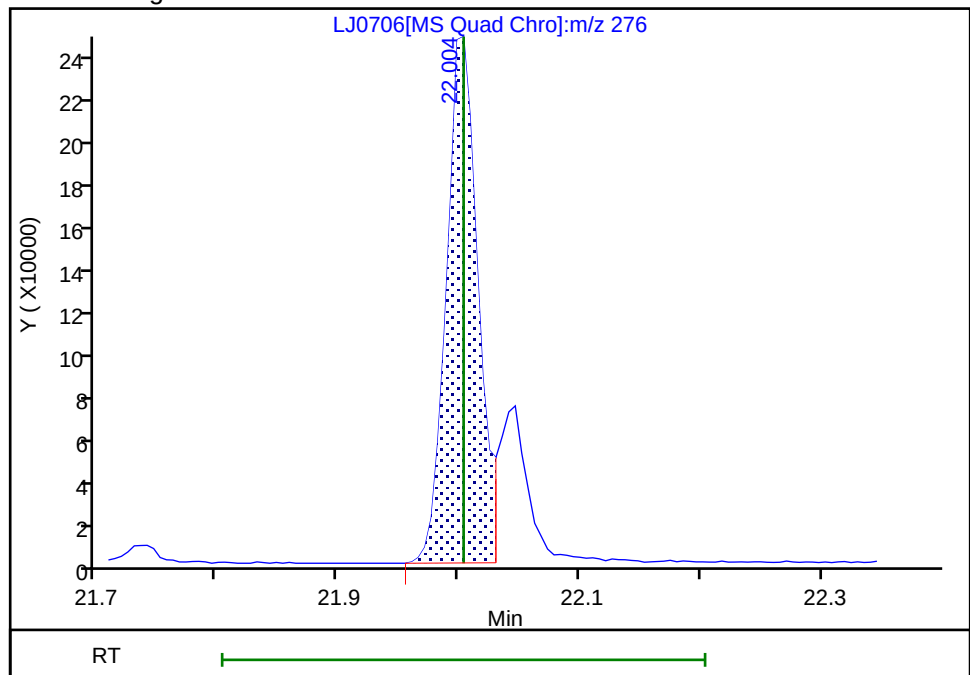
RT: 22.00
Area: 547502
Amount: 4.282825
Amount Units: ug/ml

Processing Integration Results



RT: 22.00
Area: 432848
Amount: 3.883062
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 19-Oct-2020 23:14:55

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0707.D
 Lims ID: IC L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 19-Oct-2020 20:34:30 ALS Bottle#: 0 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: IC L3
 Misc. Info.: 410-0013268-008
 Operator ID: kel10217 Instrument ID: HP20296
 Sublist: chrom-MSSemi_HP20296*sub6
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 20-Oct-2020 19:07:19 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1014

First Level Reviewer: luttek

Date: 19-Oct-2020 23:17:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 1,4-Dioxane	88	2.439	2.439	0.000	89	30944	1.25	1.23	
2 N-Nitrosodimethylamine	74	2.979	2.979	0.000	87	48517	1.25	1.20	
3 Pyridine	79	3.022	3.022	0.000	93	90543	1.25	1.28	
5 2-Picoline	93	4.171	4.171	0.000	93	90981	1.25	1.26	
6 N-Nitrosomethylethylamine	88	4.353	4.353	0.000	88	36445	1.25	1.25	M
9 Methyl methanesulfonate	80	4.808	4.808	0.000	86	43113	1.25	1.25	
\$ 10 2-Fluorophenol	112	5.038	5.038	0.000	93	138514	2.50	2.43	
11 N-Nitrosodiethylamine	102	5.380	5.380	0.000	89	33315	1.25	1.25	
13 Ethyl methanesulfonate	109	5.840	5.840	0.000	95	36977	1.25	1.25	
15 Benzaldehyde	77	6.316	6.316	0.000	94	76806	1.25	1.43	
\$ 16 Phenol-d5	99	6.429	6.429	0.000	97	172649	2.50	2.48	
17 Phenol	94	6.450	6.450	0.000	93	110822	1.25	1.25	
18 Aniline	93	6.477	6.477	0.000	98	130115	1.25	1.26	
19 Bis(2-chloroethyl)ether	93	6.594	6.594	0.000	98	84871	1.25	1.27	
20 2-Chlorophenol	128	6.648	6.648	0.000	94	62429	1.25	1.23	
22 1,3-Dichlorobenzene	146	6.883	6.883	0.000	92	71082	1.25	1.26	
* 24 1,4-Dichlorobenzene-d4	152	6.974	6.974	0.000	97	177000	5.00	5.00	
25 1,4-Dichlorobenzene	146	7.001	7.001	0.000	92	72024	1.25	1.26	
27 Benzyl alcohol	108	7.188	7.188	0.000	90	47059	1.25	1.18	
29 1,2-Dichlorobenzene	146	7.226	7.226	0.000	94	72246	1.25	1.32	
30 Indene	115	7.365	7.365	0.000	88	103407	1.25	1.20	
31 2-Methylphenol	108	7.375	7.375	0.000	95	67727	1.25	1.26	
32 2,2'-oxybis[1-chloropropane]	45	7.429	7.429	0.000	89	74541	1.25	1.29	
34 N-Nitrosopyrrolidine	100	7.552	7.552	0.000	93	33842	1.25	1.16	
35 Acetophenone	105	7.595	7.595	0.000	94	124283	1.25	1.37	
36 4-Methylphenol	108	7.616	7.616	0.000	93	69582	1.25	1.14	
37 N-Nitrosodi-n-propylamine	70	7.616	7.616	0.000	79	63874	1.25	1.31	
38 N-Nitrosomorpholine	56	7.627	7.627	0.000	88	41459	1.25	1.30	
39 2-Toluidine	106	7.648	7.648	0.000	92	123346	1.25	1.27	
40 Hexachloroethane	117	7.744	7.744	0.000	93	34662	1.25	1.24	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
\$ 41 Nitrobenzene-d5	82	7.819	7.819	0.000	86	174352	2.50	2.39	
42 Nitrobenzene	77	7.851	7.851	0.000	82	95351	1.25	1.27	
44 N-Nitrosopiperidine	114	8.087	8.087	0.000	88	32574	1.25	1.18	
46 Isophorone	82	8.242	8.242	0.000	98	159346	1.25	1.23	
47 2-Nitrophenol	139	8.359	8.359	0.000	96	21193	1.25	1.08	
48 2,4-Dimethylphenol	107	8.450	8.450	0.000	99	73910	1.25	1.20	
50 Benzoic acid	105	8.547	8.547	0.000	88	56573	3.75	3.93	
49 o,o',o"-Triethylphosphorothioat	198	8.579	8.579	0.000	92	30188	1.25	1.21	
51 Bis(2-chloroethoxy)methane	93	8.616	8.616	0.000	98	105545	1.25	1.27	
52 2,4-Dichlorophenol	162	8.739	8.739	0.000	96	48062	1.25	1.23	
54 1,2,4-Trichlorobenzene	180	8.878	8.878	0.000	91	58359	1.25	1.23	
* 55 Naphthalene-d8	136	8.959	8.959	0.000	99	687743	5.00	5.00	
S 53 Dinitrotoluene	165				0		2.50	2.29	
56 Naphthalene	128	8.991	8.991	0.000	99	192292	1.25	1.27	
57 4-Chloroaniline	127	9.092	9.092	0.000	92	75632	1.25	1.22	
58 2,6-Dichlorophenol	162	9.103	9.103	0.000	89	45642	1.25	1.20	
59 Hexachloropropene	213	9.146	9.146	0.000	90	33560	1.25	1.18	
60 Hexachlorobutadiene	225	9.215	9.215	0.000	96	36118	1.25	1.28	
62 Quinoline	129	9.525	9.525	0.000	94	109033	1.25	1.19	
64 Caprolactam	113	9.600	9.600	0.000	85	18736	1.25	1.18	
S 63 Diallate	86				0		1.25	1.23	
65 N-Nitrosodi-n-butylamine	84	9.675	9.675	0.000	88	55203	1.25	1.10	
66 4-Chloro-3-methylphenol	107	9.900	9.900	0.000	91	55062	1.25	1.13	
67 Safrole, Total	162	10.007	10.007	0.000	80	44104	1.25	1.20	
69 2-Methylnaphthalene	142	10.119	10.119	0.000	90	123217	1.25	1.28	
70 1-Methylnaphthalene	142	10.274	10.274	0.000	89	114234	1.25	1.24	
71 Hexachlorocyclopentadiene	237	10.387	10.387	0.000	93	27244	1.25	1.18	
72 1,2,4,5-Tetrachlorobenzene	216	10.392	10.392	0.000	95	62710	1.25	1.34	
73 Isosafrole Peak 1	162	10.488	10.488	0.000	78	7680	0.2000	0.1883	
74 2,4,6-Trichlorophenol	196	10.590	10.590	0.000	95	27827	1.25	1.13	
75 2,4,5-Trichlorophenol	196	10.638	10.638	0.000	88	31838	1.25	1.18	
\$ 76 2-Fluorobiphenyl (Surr)	172	10.740	10.740	0.000	99	272478	2.50	2.56	
77 Isosafrole Peak 2	162	10.852	10.852	0.000	85	44235	1.05	1.03	
79 1,1'-Biphenyl	154	10.895	10.895	0.000	96	161885	1.25	1.36	
80 2-Chloronaphthalene	162	10.911	10.911	0.000	99	123810	1.25	1.28	
81 1-Chloronaphthalene	162	10.943	10.943	0.000	96	108434	1.25	1.25	
82 Phenyl ether	170	11.077	11.077	0.000	86	78116	1.25	1.28	
83 2-Nitroaniline	138	11.082	11.082	0.000	78	27221	1.25	1.03	
84 1,4-Naphthoquinone	158	11.200	11.200	0.000	74	36612	1.25	1.03	
85 1,4-Dinitrobenzene	168	11.323	11.323	0.000	81	10451	1.25	0.9434	
86 Dimethyl phthalate	163	11.424	11.424	0.000	96	130709	1.25	1.26	
87 1,3-Dinitrobenzene	168	11.440	11.440	0.000	80	13774	1.25	1.03	
88 2,6-Dinitrotoluene	165	11.499	11.499	0.000	85	24593	1.25	1.21	a
90 Acenaphthylene	152	11.574	11.574	0.000	99	158353	1.25	1.29	
91 3-Nitroaniline	138	11.734	11.734	0.000	89	23003	1.25	1.04	
* 92 Acenaphthene-d10	164	11.788	11.788	0.000	98	324207	5.00	5.00	
93 Acenaphthene	153	11.836	11.836	0.000	97	123622	1.25	1.29	
94 2,4-Dinitrophenol	184	11.890	11.890	0.000	74	17582	3.75	2.45	
96 4-Nitrophenol	109	11.997	11.997	0.000	89	35562	2.50	1.82	
98 Pentachlorobenzene	250	12.018	12.018	0.000	94	48304	1.25	1.21	
100 Dibenzofuran	168	12.077	12.077	0.000	93	158438	1.25	1.28	
99 2,4-Dinitrotoluene	165	12.077	12.077	0.000	64	29981	1.25	1.09	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
101 1-Naphthylamine	143	12.178	12.178	0.000	97	109761	1.25	1.20	
102 2,3,4,6-Tetrachlorophenol	232	12.248	12.248	0.000	78	21292	1.25	1.17	
103 2-Naphthylamine	143	12.285	12.285	0.000	93	110313	1.25	1.20	
104 Diethyl phthalate	149	12.424	12.424	0.000	96	130254	1.25	1.23	
105 Fluorene	166	12.521	12.521	0.000	91	124449	1.25	1.26	
106 Thionazin	107	12.515	12.515	0.000	72	26858	1.25	1.20	
107 N-Nitro-o-toluidine	152	12.537	12.537	0.000	73	30517	1.25	1.22	
108 4-Chlorophenyl phenyl ether	204	12.542	12.542	0.000	86	63688	1.25	1.28	
109 4-Nitroaniline	138	12.542	12.542	0.000	72	26988	1.25	1.16	
110 4,6-Dinitro-2-methylphenol	198	12.585	12.585	0.000	70	18252	2.50	1.85	
111 N-Nitrosodiphenylamine	169	12.687	12.687	0.000	98	106371	1.25	1.28	
112 1,2-Diphenylhydrazine	77	12.735	12.735	0.000	99	185221	1.25	1.27	
\$ 113 2,4,6-Tribromophenol	330	12.815	12.815	0.000	90	32098	2.50	2.22	
114 Sulfotepp	97	12.917	12.917	0.000	80	28457	1.25	1.19	
115 cis-Diallate	86	13.066	13.066	0.000	93	48469	0.9250	0.8928	
116 Phorate	75	13.072	13.072	0.000	94	99060	1.25	1.20	
117 Phenacetin	108	13.082	13.082	0.000	89	69461	1.25	1.15	
118 4-Bromophenyl phenyl ether	248	13.152	13.152	0.000	73	31989	1.25	1.18	
119 trans-Diallate	86	13.179	13.179	0.000	90	19251	0.3250	0.3374	
120 Hexachlorobenzene	284	13.205	13.205	0.000	92	43299	1.25	1.29	
121 Dimethoate	87	13.270	13.270	0.000	95	54856	1.25	1.06	
122 Atrazine	200	13.377	13.377	0.000	89	37825	1.25	1.35	
123 Pentachlorophenol	266	13.467	13.467	0.000	89	13136	1.25	0.9202	
124 4-Aminobiphenyl	169	13.483	13.483	0.000	92	95005	1.25	1.25	
125 Pentachloronitrobenzene	237	13.483	13.483	0.000	50	15198	1.25	1.17	
126 Pronamide	173	13.580	13.580	0.000	91	55640	1.25	1.19	
* 127 Phenanthrene-d10	188	13.713	13.713	0.000	98	629882	5.00	5.00	
128 Dinoseb	211	13.730	13.730	0.000	88	11129	1.25	0.7389	
129 Phenanthrene	178	13.746	13.746	0.000	98	189111	1.25	1.28	
130 Anthracene	178	13.810	13.810	0.000	99	182188	1.25	1.25	
131 Carbazole	167	14.034	14.034	0.000	97	166722	1.25	1.26	
132 Methyl parathion	109	14.243	14.243	0.000	90	35696	1.25	0.9584	
133 Di-n-butyl phthalate	149	14.559	14.559	0.000	100	204287	1.25	1.13	
134 Ethyl Parathion	109	14.799	14.799	0.000	82	22893	1.25	0.9816	
135 4-Nitroquinoline-1-oxide	190	14.821	14.821	0.000	79	7000	1.25	1.47	
136 Octachlorostyrene	308	15.168	15.168	0.000	91	19676	1.25	1.34	
137 Isodrin	193	15.222	15.222	0.000	88	22428	1.25	1.24	
138 Fluoranthene	202	15.441	15.441	0.000	100	201182	1.25	1.23	
139 Benzidine	184	15.671	15.671	0.000	99	339020	3.75	3.32	
* 140 Pyrene-d10 (IS)	212	15.767	15.767	0.000	98	644855	5.00	5.00	
141 Pyrene	202	15.794	15.794	0.000	97	221292	1.25	1.27	
\$ 142 p-Terphenyl-d14	244	16.078	16.078	0.000	98	307687	2.50	2.39	
143 p-Dimethylamino azobenzene	225	16.318	16.318	0.000	89	29515	1.25	1.04	
144 Chlorobenzilate	139	16.409	16.409	0.000	82	60041	1.25	1.09	
145 3,3'-Dimethylbenzidine	212	16.885	16.885	0.000	98	103256	1.25	1.01	
146 Butyl benzyl phthalate	149	16.949	16.949	0.000	91	87368	1.25	1.13	
147 2-Acetylaminofluorene	181	17.313	17.313	0.000	95	50440	1.25	1.75	
148 3,3'-Dichlorobenzidine	252	17.832	17.832	0.000	73	63951	1.25	1.03	
149 Benzo[a]anthracene	228	17.848	17.848	0.000	99	184824	1.25	1.19	
150 4,4'-Methylene bis(2-chloroani	231	17.853	17.853	0.000	91	36561	1.25	1.12	
151 Chrysene	228	17.907	17.907	0.000	98	203366	1.25	1.28	
152 Bis(2-ethylhexyl) phthalate	149	18.030	18.030	0.000	97	122605	1.25	1.02	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
153 6-Methylchrysene	242	18.725	18.725	0.000	99	129048	1.25	1.14	
154 Di-n-octyl phthalate	149	19.201	19.201	0.000	99	187775	1.25	0.9607	
155 Benzo[b]fluoranthene	252	19.725	19.725	0.000	97	201560	1.25	1.23	
156 7,12-Dimethylbenz(a)anthracene	256	19.731	19.731	0.000	88	77459	1.25	1.15	
157 Benzo[k]fluoranthene	252	19.773	19.773	0.000	99	204865	1.25	1.26	
158 Benzo[a]pyrene	252	20.260	20.260	0.000	78	185455	1.25	1.25	
* 159 Perylene-d12	264	20.356	20.356	0.000	98	653391	5.00	5.00	
160 3-Methylcholanthrene	268	20.838	20.838	0.000	93	82578	1.25	1.11	
161 Dibenz[a,h]acridine	279	21.656	21.656	0.000	91	132398	1.25	1.10	
162 Dibenz[a,j]acridine	279	21.736	21.736	0.000	95	133963	1.25	1.09	
163 Indeno[1,2,3-cd]pyrene	276	21.999	21.999	0.000	99	153173	1.25	1.15	M
164 Dibenz(a,h)anthracene	278	22.047	22.047	0.000	93	165154	1.25	1.16	
165 Benzo[g,h,i]perylene	276	22.416	22.416	0.000	96	161637	1.25	1.20	
S 166 Isosafrole	162				0		1.25	1.22	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_3_00008

Amount Added: 1.00

Units: mL

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0707.D

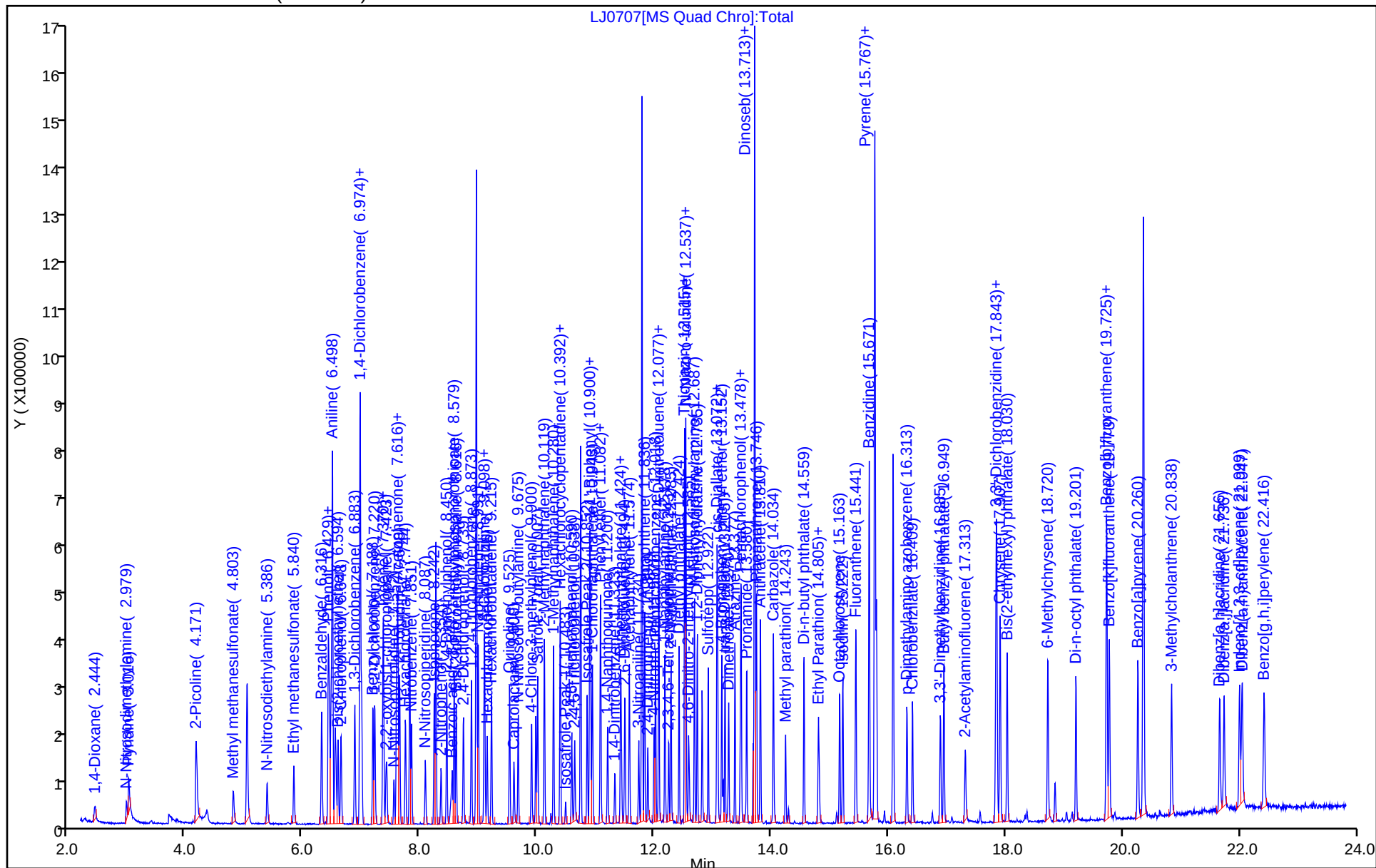
Operator ID: kel10217

Worklist Smp#: 8

ALS Bottle#: 0

Limit Group: MSSV - 8270D E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0707.D

Injection Date: 19-Oct-2020 20:34:30

Instrument ID: HP20296

Lims ID: IC L3

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 8

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP20296

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

Detector

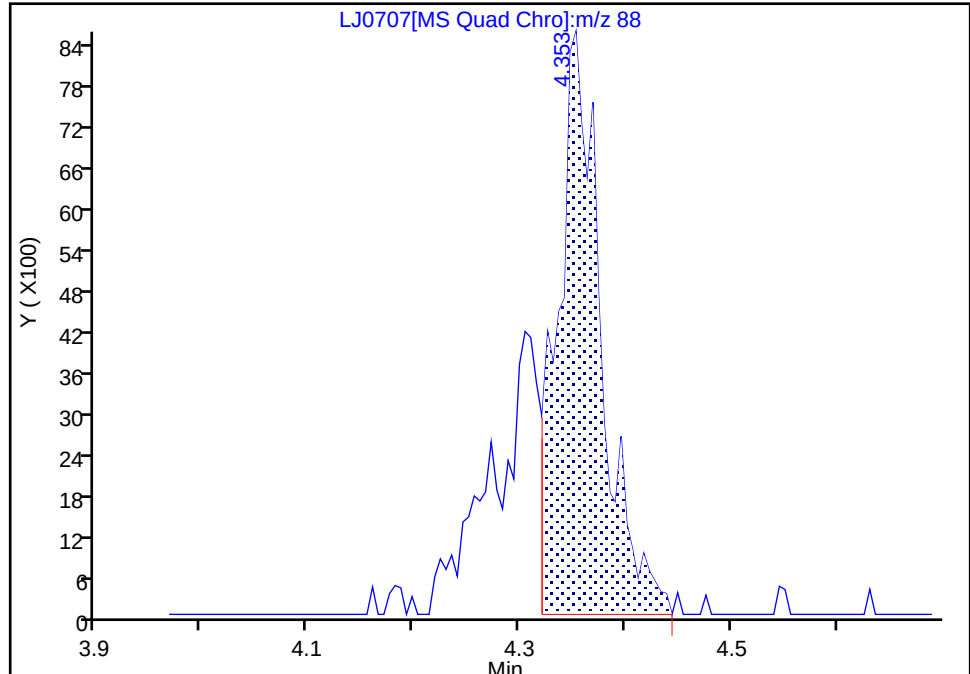
MS SCAN

6 N-Nitrosomethylethylamine, CAS: 10595-95-6

Signal: 1

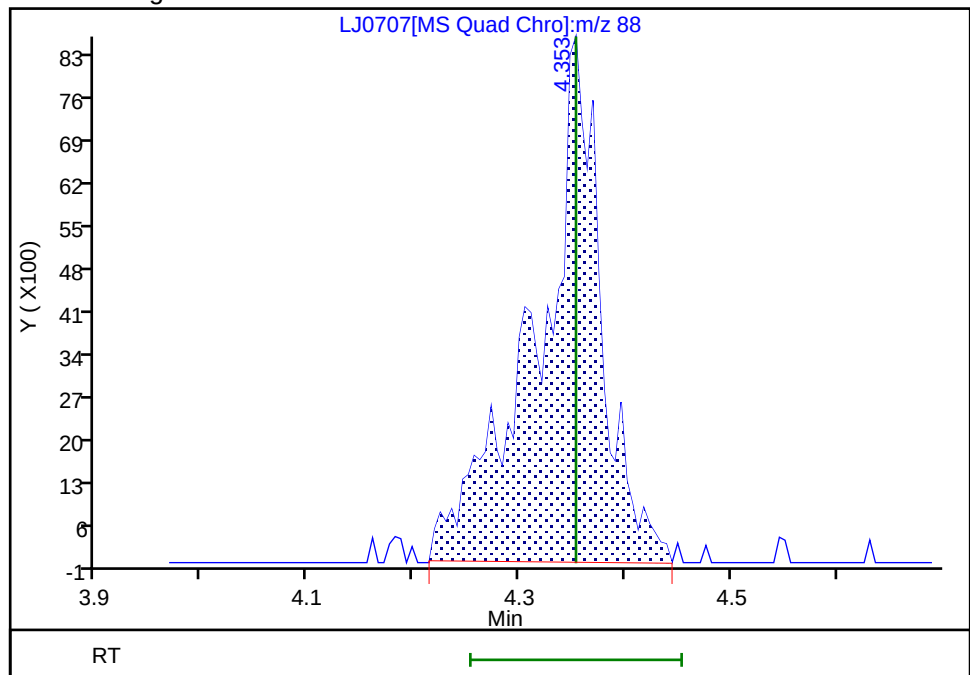
RT: 4.35
Area: 24234
Amount: 0.877796
Amount Units: ug/ml

Processing Integration Results



RT: 4.35
Area: 36445
Amount: 1.246583
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 19-Oct-2020 23:15:38

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0707.D

Injection Date: 19-Oct-2020 20:34:30

Instrument ID: HP20296

Lims ID: IC L3

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 8

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

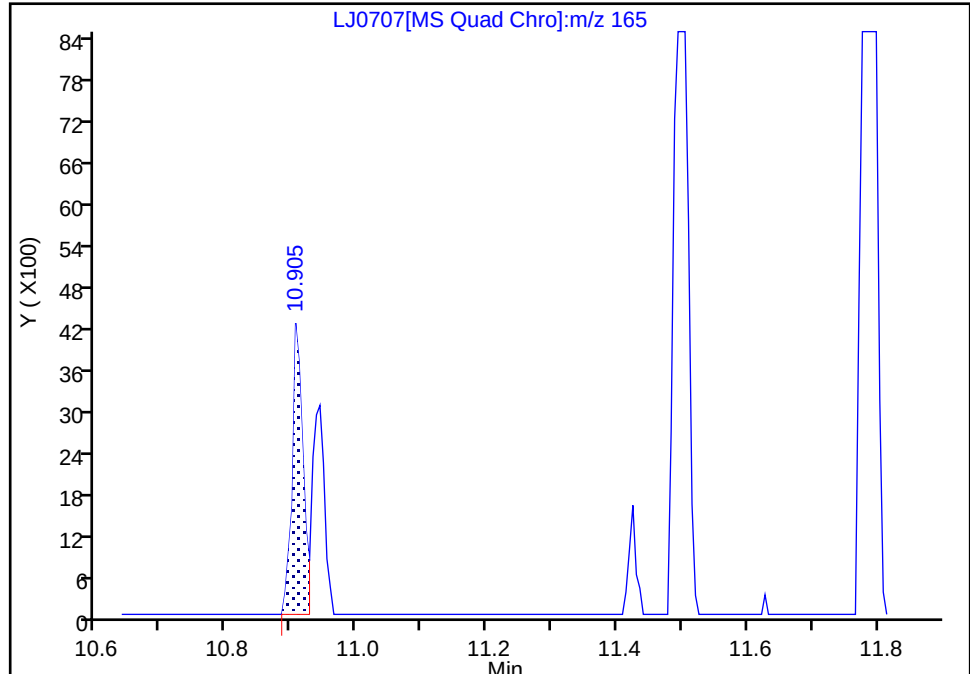
Detector: MS SCAN

88 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

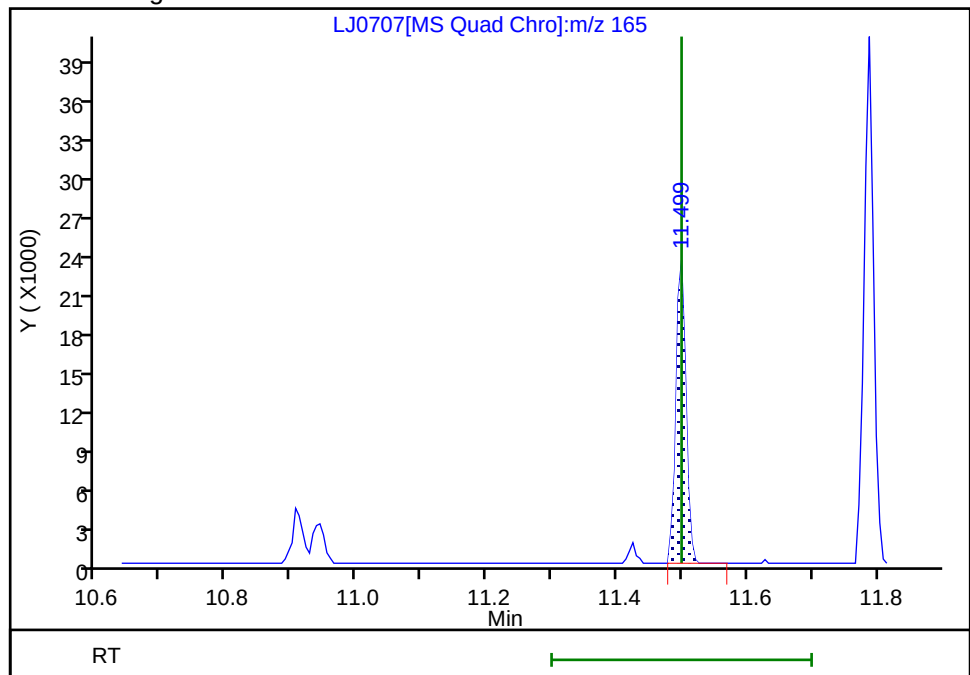
RT: 10.91
Area: 4738
Amount: 0.332723
Amount Units: ug/ml

Processing Integration Results



RT: 11.50
Area: 24593
Amount: 1.206110
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 20-Oct-2020 18:52:12

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Lancaster Laboratories Env, LLC

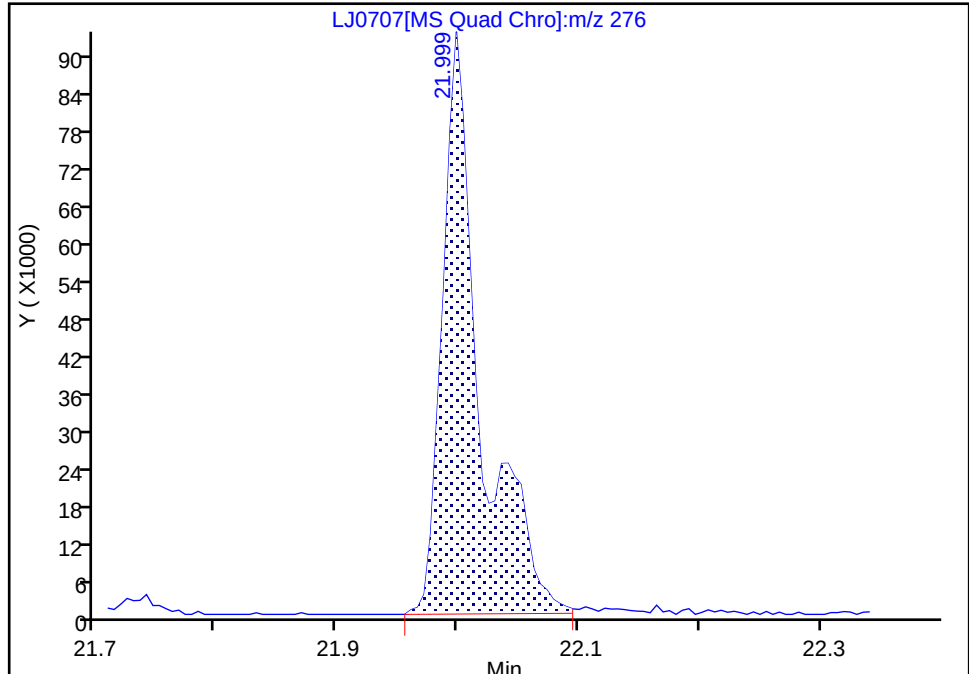
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Injection Date: 19-Oct-2020 20:34:30 Instrument ID: HP20296
Lims ID: IC L3
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP20296 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.18mm (0.18 mm) Detector MS SCAN

163 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

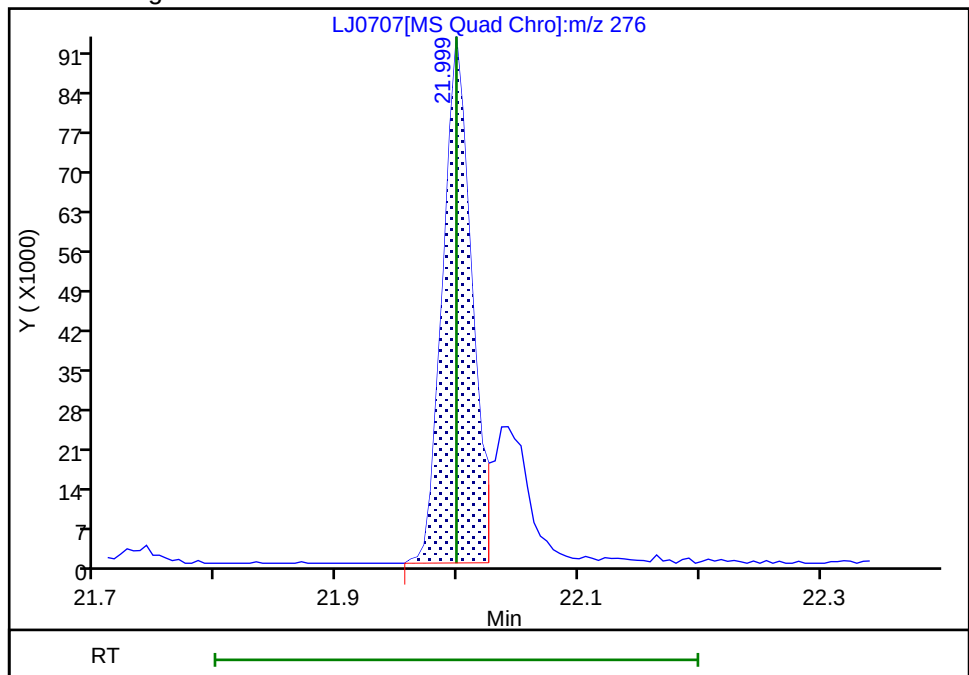
RT: 22.00
Area: 201823
Amount: 1.377409
Amount Units: ug/ml

Processing Integration Results



RT: 22.00
Area: 153173
Amount: 1.146953
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 19-Oct-2020 23:17:12
Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Lims ID: IC L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 19-Oct-2020 21:03:44 ALS Bottle#: 0 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: IC L2
 Misc. Info.: 410-0013268-009
 Operator ID: kel10217 Instrument ID: HP20296
 Sublist: chrom-MSSemi_HP20296*sub6
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 20-Oct-2020 19:07:24 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1014

First Level Reviewer: luttek

Date: 20-Oct-2020 19:05:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 1,4-Dioxane	88	2.449	2.449	0.000	79	5747	0.2500	0.2561	
2 N-Nitrosodimethylamine	74	3.000	3.000	0.000	47	6699	0.2500	0.1860	
3 Pyridine	79	3.054	3.054	0.000	96	16806	0.2500	0.2654	
5 2-Picoline	93	4.187	4.187	0.000	93	15698	0.2500	0.2427	
6 N-Nitrosomethylethylamine	88	4.369	4.369	0.000	41	5132	0.2500	0.1964	
9 Methyl methanesulfonate	80	4.808	4.808	0.000	88	6374	0.2500	0.2072	
\$ 10 2-Fluorophenol	112	5.038	5.038	0.000	93	21253	0.5000	0.4173	
11 N-Nitrosodiethylamine	102	5.386	5.386	0.000	92	4569	0.2500	0.1922	
13 Ethyl methanesulfonate	109	5.845	5.845	0.000	97	5422	0.2500	0.2056	
15 Benzaldehyde	77	6.316	6.316	0.000	90	10479	0.2500	0.2182	
\$ 16 Phenol-d5	99	6.434	6.434	0.000	97	27845	0.5000	0.4484	M
17 Phenol	94	6.450	6.450	0.000	93	19364	0.2500	0.2445	
18 Aniline	93	6.477	6.477	0.000	97	22326	0.2500	0.2421	
19 Bis(2-chloroethyl)ether	93	6.594	6.594	0.000	91	14355	0.2500	0.2405	
20 2-Chlorophenol	128	6.642	6.642	0.000	94	9403	0.2500	0.2078	
22 1,3-Dichlorobenzene	146	6.883	6.883	0.000	93	12176	0.2500	0.2423	
* 24 1,4-Dichlorobenzene-d4	152	6.974	6.974	0.000	96	158164	5.00	5.00	
25 1,4-Dichlorobenzene	146	7.001	7.001	0.000	90	12218	0.2500	0.2401	
27 Benzyl alcohol	108	7.188	7.188	0.000	88	8152	0.2500	0.2294	
29 1,2-Dichlorobenzene	146	7.220	7.220	0.000	90	11884	0.2500	0.2433	
30 Indene	115	7.365	7.365	0.000	84	19433	0.2500	0.2517	
31 2-Methylphenol	108	7.375	7.375	0.000	91	10609	0.2500	0.2202	
32 2,2'-oxybis[1-chloropropane]	45	7.429	7.429	0.000	60	12759	0.2500	0.2480	
34 N-Nitrosopyrrolidine	100	7.552	7.552	0.000	92	5897	0.2500	0.2265	
35 Acetophenone	105	7.594	7.594	0.000	95	15650	0.2500	0.1937	
36 4-Methylphenol	108	7.616	7.616	0.000	86	11674	0.2500	0.2148	
37 N-Nitrosodi-n-propylamine	70	7.616	7.616	0.000	79	9177	0.2500	0.2099	
38 N-Nitrosomorpholine	56	7.627	7.627	0.000	61	6881	0.2500	0.2421	
39 2-Toluidine	106	7.648	7.648	0.000	91	20561	0.2500	0.2374	
40 Hexachloroethane	117	7.744	7.744	0.000	88	5585	0.2500	0.2241	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
\$ 41 Nitrobenzene-d5	82	7.819	7.819	0.000	87	26772	0.5000	0.4252	
42 Nitrobenzene	77	7.851	7.851	0.000	80	14185	0.2500	0.2183	
44 N-Nitrosopiperidine	114	8.087	8.087	0.000	90	5972	0.2500	0.2503	
46 Isophorone	82	8.242	8.242	0.000	97	24575	0.2500	0.2202	
47 2-Nitrophenol	139	8.354	8.354	0.000	89	2954	0.2500	0.2482	
48 2,4-Dimethylphenol	107	8.450	8.450	0.000	95	11704	0.2500	0.2205	
50 Benzoic acid	105	8.520	8.520	0.000	85	17037	2.50	2.90	
49 o,o',o"-Triethylphosphorothioat	198	8.579	8.579	0.000	90	5473	0.2500	0.2545	
51 Bis(2-chloroethoxy)methane	93	8.611	8.611	0.000	98	16918	0.2500	0.2347	
52 2,4-Dichlorophenol	162	8.734	8.734	0.000	92	5821	0.2500	0.1718	
54 1,2,4-Trichlorobenzene	180	8.878	8.878	0.000	89	10333	0.2500	0.2527	
* 55 Naphthalene-d8	136	8.958	8.958	0.000	100	594804	5.00	5.00	
S 53 Dinitrotoluene	165				0		0.5000	0.3301	
56 Naphthalene	128	8.990	8.990	0.000	98	31172	0.2500	0.2378	
57 4-Chloroaniline	127	9.092	9.092	0.000	90	12082	0.2500	0.2253	
58 2,6-Dichlorophenol	162	9.103	9.103	0.000	93	6939	0.2500	0.2104	
59 Hexachloropropene	213	9.146	9.146	0.000	85	5282	0.2500	0.2151	
60 Hexachlorobutadiene	225	9.220	9.220	0.000	92	5945	0.2500	0.2438	
62 Quinoline	129	9.525	9.525	0.000	92	17039	0.2500	0.2159	
64 Caprolactam	113	9.595	9.595	0.000	85	1627	0.2500	0.1185	
S 63 Diallate	86				0		0.2500	0.2294	
65 N-Nitrosodi-n-butylamine	84	9.675	9.675	0.000	89	8113	0.2500	0.1871	
66 4-Chloro-3-methylphenol	107	9.900	9.900	0.000	88	7003	0.2500	0.1662	
67 Safrole, Total	162	10.007	10.007	0.000	85	7861	0.2500	0.2481	
69 2-Methylnaphthalene	142	10.119	10.119	0.000	89	19228	0.2500	0.2304	
70 1-Methylnaphthalene	142	10.280	10.280	0.000	94	18402	0.2500	0.2302	
71 Hexachlorocyclopentadiene	237	10.386	10.386	0.000	67	3727	0.2500	0.2009	
72 1,2,4,5-Tetrachlorobenzene	216	10.392	10.392	0.000	93	9000	0.2500	0.2395	
73 Isosafrole Peak 1	162	10.483	10.483	0.000	77	1303	0.0400	0.0398	
74 2,4,6-Trichlorophenol	196	10.590	10.590	0.000	90	3217	0.2500	0.1623	
75 2,4,5-Trichlorophenol	196	10.638	10.638	0.000	84	3213	0.2500	0.3026	
\$ 76 2-Fluorobiphenyl (Surr)	172	10.739	10.739	0.000	99	45139	0.5000	0.5299	
77 Isosafrole Peak 2	162	10.852	10.852	0.000	79	6401	0.2100	0.1860	
79 1,1'-Biphenyl	154	10.895	10.895	0.000	95	21658	0.2500	0.2271	
80 2-Chloronaphthalene	162	10.905	10.905	0.000	93	20933	0.2500	0.2707	
81 1-Chloronaphthalene	162	10.937	10.937	0.000	93	18826	0.2500	0.2708	
82 Phenyl ether	170	11.082	11.082	0.000	83	11536	0.2500	0.2360	
83 2-Nitroaniline	138	11.082	11.082	0.000	62	2868	0.2500	0.1352	
84 1,4-Naphthoquinone	158	11.199	11.199	0.000	84	4595	0.2500	0.1620	
85 1,4-Dinitrobenzene	168	11.322	11.322	0.000	78	1306	0.2500	0.1471	
86 Dimethyl phthalate	163	11.419	11.419	0.000	94	20520	0.2500	0.2471	
87 1,3-Dinitrobenzene	168	11.440	11.440	0.000	72	1376	0.2500	0.1281	
88 2,6-Dinitrotoluene	165	11.499	11.499	0.000	56	2596	0.2500	0.1588	a
90 Acenaphthylene	152	11.569	11.569	0.000	97	21258	0.2500	0.2167	
91 3-Nitroaniline	138	11.729	11.729	0.000	85	2608	0.2500	0.1464	
* 92 Acenaphthene-d10	164	11.788	11.788	0.000	98	259912	5.00	5.00	
93 Acenaphthene	153	11.831	11.831	0.000	95	19519	0.2500	0.2533	
94 2,4-Dinitrophenol	184	11.889	11.889	0.000	71	5468	2.25	0.9517	
96 4-Nitrophenol	109	11.996	11.996	0.000	90	9134	1.25	0.5818	
98 Pentachlorobenzene	250	12.018	12.018	0.000	94	8543	0.2500	0.2670	
100 Dibenzofuran	168	12.077	12.077	0.000	93	24087	0.2500	0.2423	
99 2,4-Dinitrotoluene	165	12.071	12.071	0.000	60	3790	0.2500	0.1713	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
101 1-Naphthylamine	143	12.178	12.178	0.000	97	14867	0.2500	0.2035	
102 2,3,4,6-Tetrachlorophenol	232	12.242	12.242	0.000	75	2161	0.2500	0.3035	
103 2-Naphthylamine	143	12.285	12.285	0.000	91	16423	0.2500	0.2237	
104 Diethyl phthalate	149	12.419	12.419	0.000	96	20497	0.2500	0.2415	
106 Thionazin	107	12.515	12.515	0.000	54	3891	0.2500	0.2168	
105 Fluorene	166	12.521	12.521	0.000	95	18991	0.2500	0.2390	
107 N-Nitro-o-toluidine	152	12.531	12.531	0.000	60	3220	0.2500	0.1604	
108 4-Chlorophenyl phenyl ether	204	12.542	12.542	0.000	87	9796	0.2500	0.2454	
109 4-Nitroaniline	138	12.537	12.537	0.000	64	2359	0.2500	0.2078	
110 4,6-Dinitro-2-methylphenol	198	12.585	12.585	0.000	72	5257	1.25	0.6413	
111 N-Nitrosodiphenylamine	169	12.686	12.686	0.000	98	16095	0.2500	0.2328	
112 1,2-Diphenylhydrazine	77	12.735	12.735	0.000	99	27181	0.2500	0.2253	
\$ 113 2,4,6-Tribromophenol	330	12.820	12.820	0.000	88	4625	0.5000	0.3989	
114 Sulfotepp	97	12.916	12.916	0.000	78	3772	0.2500	0.1903	
115 cis-Diallate	86	13.066	13.066	0.000	84	7481	0.1850	0.1662	
116 Phorate	75	13.072	13.072	0.000	94	13909	0.2500	0.2030	
117 Phenacetin	108	13.082	13.082	0.000	84	8493	0.2500	0.1702	
118 4-Bromophenyl phenyl ether	248	13.157	13.157	0.000	41	5274	0.2500	0.2349	M
119 trans-Diallate	86	13.178	13.178	0.000	94	2991	0.0650	0.0632	
120 Hexachlorobenzene	284	13.211	13.211	0.000	87	6629	0.2500	0.2389	
121 Dimethoate	87	13.269	13.269	0.000	93	6693	0.2500	0.1560	
122 Atrazine	200	13.376	13.376	0.000	87	4322	0.2500	0.1859	
123 Pentachlorophenol	266	13.467	13.467	0.000	56	1676	0.2500	0.1416	
124 4-Aminobiphenyl	169	13.478	13.478	0.000	90	13880	0.2500	0.2208	
125 Pentachloronitrobenzene	237	13.473	13.473	0.000	51	1431	0.2500	0.1324	
126 Pronamide	173	13.580	13.580	0.000	89	7819	0.2500	0.2013	
* 127 Phenanthrene-d10	188	13.713	13.713	0.000	97	522303	5.00	5.00	
128 Dinoseb	211	13.724	13.724	0.000	61	1420	0.2500	0.1137	
129 Phenanthrene	178	13.740	13.740	0.000	98	32198	0.2500	0.2628	
130 Anthracene	178	13.810	13.810	0.000	98	26555	0.2500	0.2200	
131 Carbazole	167	14.034	14.034	0.000	96	23095	0.2500	0.2098	
132 Methyl parathion	109	14.243	14.243	0.000	87	4449	0.2500	0.1440	
133 Di-n-butyl phthalate	149	14.558	14.558	0.000	99	28307	0.2500	0.1890	
134 Ethyl Parathion	109	14.799	14.799	0.000	72	3203	0.2500	0.1656	
135 4-Nitroquinoline-1-oxide	190	14.810	14.810	0.000	1	966	0.2500	0.9663	
136 Octachlorostyrene	308	15.168	15.168	0.000	83	3070	0.2500	0.2528	
137 Isodrin	193	15.222	15.222	0.000	80	3959	0.2500	0.2631	
138 Fluoranthene	202	15.441	15.441	0.000	98	30370	0.2500	0.2243	
139 Benzidine	184	15.671	15.671	0.000	99	125739	2.00	1.45	
* 140 Pyrene-d10 (IS)	212	15.767	15.767	0.000	98	548427	5.00	5.00	
141 Pyrene	202	15.794	15.794	0.000	96	35986	0.2500	0.2423	
\$ 142 p-Terphenyl-d14	244	16.077	16.077	0.000	98	48311	0.5000	0.4408	
143 p-Dimethylamino azobenzene	225	16.318	16.318	0.000	87	3510	0.2500	0.1450	
144 Chlorobenzilate	139	16.409	16.409	0.000	80	7480	0.2500	0.1599	
145 3,3'-Dimethylbenzidine	212	16.890	16.890	0.000	98	13391	0.2500	0.1534	
146 Butyl benzyl phthalate	149	16.949	16.949	0.000	91	10542	0.2500	0.1605	
147 2-Acetylaminofluorene	181	17.308	17.308	0.000	91	4530	0.2500	1.16	
148 3,3'-Dichlorobenzidine	252	17.837	17.837	0.000	56	7055	0.2500	0.1330	
149 Benzo[a]anthracene	228	17.848	17.848	0.000	99	27357	0.2500	0.2069	
150 4,4'-Methylene bis(2-chloroani	231	17.842	17.842	0.000	78	3772	0.2500	0.1353	
151 Chrysene	228	17.912	17.912	0.000	96	29009	0.2500	0.2147	
152 Bis(2-ethylhexyl) phthalate	149	18.030	18.030	0.000	95	14259	0.2500	0.1398	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
153 6-Methylchrysene	242	18.720	18.720	0.000	98	17358	0.2500	0.1798	
154 Di-n-octyl phthalate	149	19.201	19.201	0.000	99	18115	0.2500	0.1152	
155 Benzo[b]fluoranthene	252	19.725	19.725	0.000	96	27635	0.2500	0.2103	
156 7,12-Dimethylbenz(a)anthracene	256	19.731	19.731	0.000	67	9643	0.2500	0.1774	
157 Benzo[k]fluoranthene	252	19.773	19.773	0.000	99	28355	0.2500	0.2175	
158 Benzo[a]pyrene	252	20.260	20.260	0.000	82	23785	0.2500	0.1995	
* 159 Perylene-d12	264	20.356	20.356	0.000	98	525498	5.00	5.00	
160 3-Methylcholanthrene	268	20.838	20.838	0.000	90	10548	0.2500	0.1763	
161 Dibenz[a,h]acridine	279	21.661	21.661	0.000	90	16148	0.2500	0.1668	
162 Dibenz[a,j]acridine	279	21.731	21.731	0.000	94	16107	0.2500	0.1624	
163 Indeno[1,2,3-cd]pyrene	276	21.998	21.998	0.000	97	20134	0.2500	0.1875	
164 Dibenz(a,h)anthracene	278	22.036	22.036	0.000	93	21380	0.2500	0.1870	
165 Benzo[g,h,i]perylene	276	22.416	22.416	0.000	96	23149	0.2500	0.2132	
S 166 Isosafrole	162				0		0.2500	0.2259	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_2_00008

Amount Added: 1.00

Units: mL

Report Date: 20-Oct-2020 19:07:25

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Euofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D

Injection Date: 19-Oct-2020 21:03:44

Instrument ID: HP20296

Operator ID: kel10217

Lims ID: IC L2

Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 ul

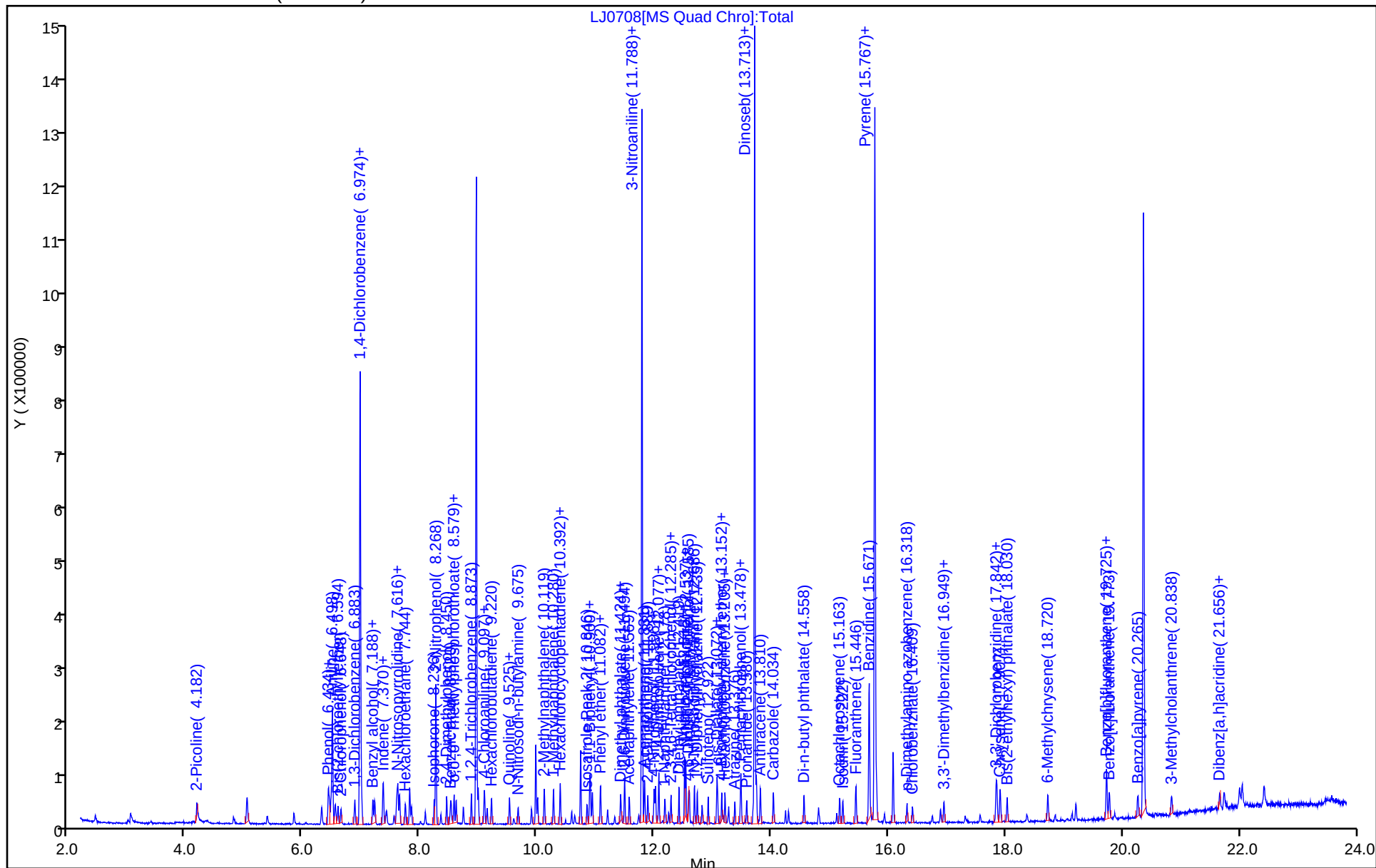
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: MSSeml_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D

Injection Date: 19-Oct-2020 21:03:44

Instrument ID: HP20296

Lims ID: IC L2

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 9

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP20296

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

Detector

MS SCAN

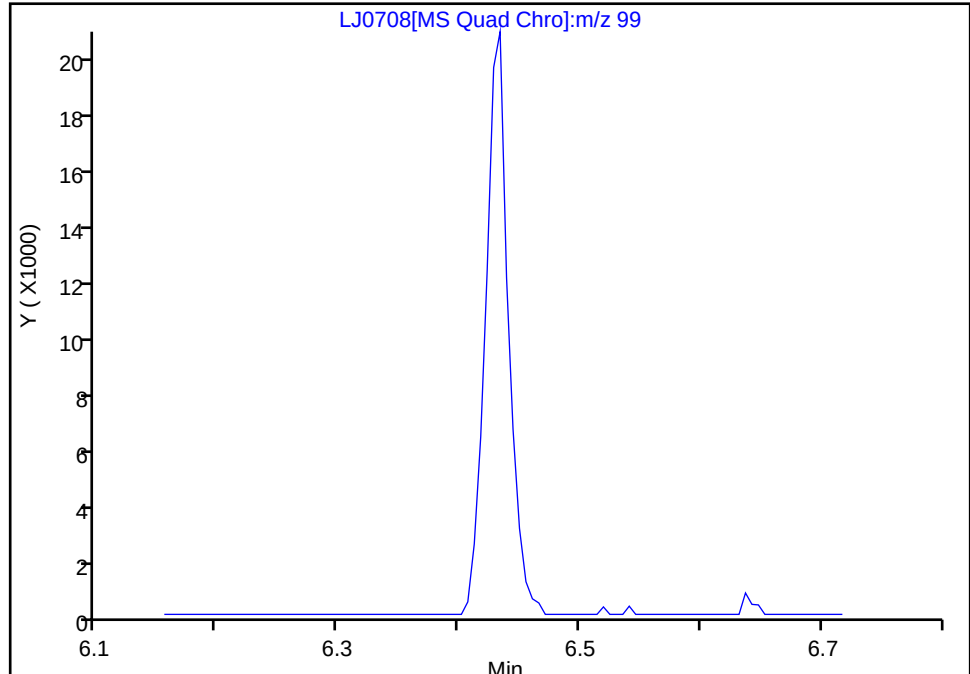
\$ 16 Phenol-d5, CAS: 4165-62-2

Signal: 1

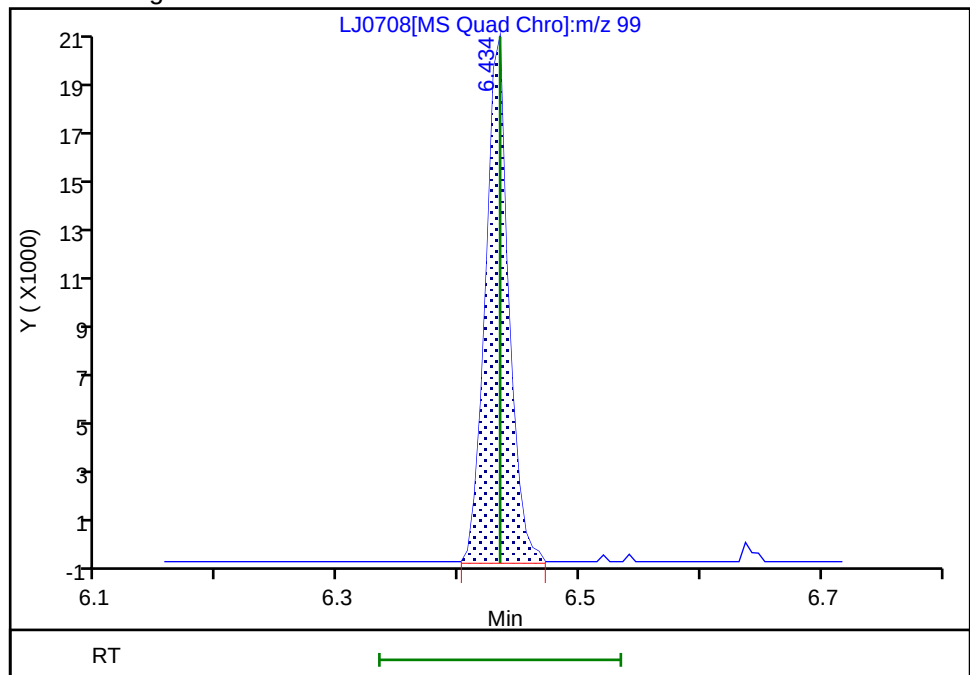
Not Detected

Expected RT: 6.43

Processing Integration Results



Manual Integration Results



RT: 6.43

Area: 27845

Amount: 0.448381

Amount Units: ug/ml

Reviewer: luttek, 19-Oct-2020 23:18:02

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

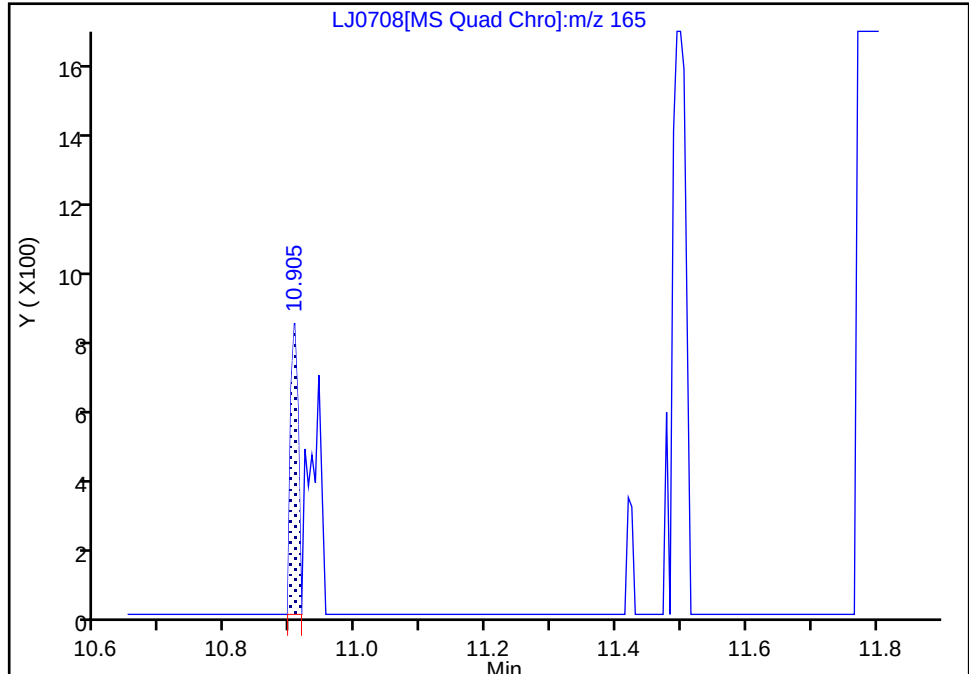
Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
Injection Date: 19-Oct-2020 21:03:44 Instrument ID: HP20296
Lims ID: IC L2
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP20296 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.18mm (0.18 mm) Detector MS SCAN

88 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

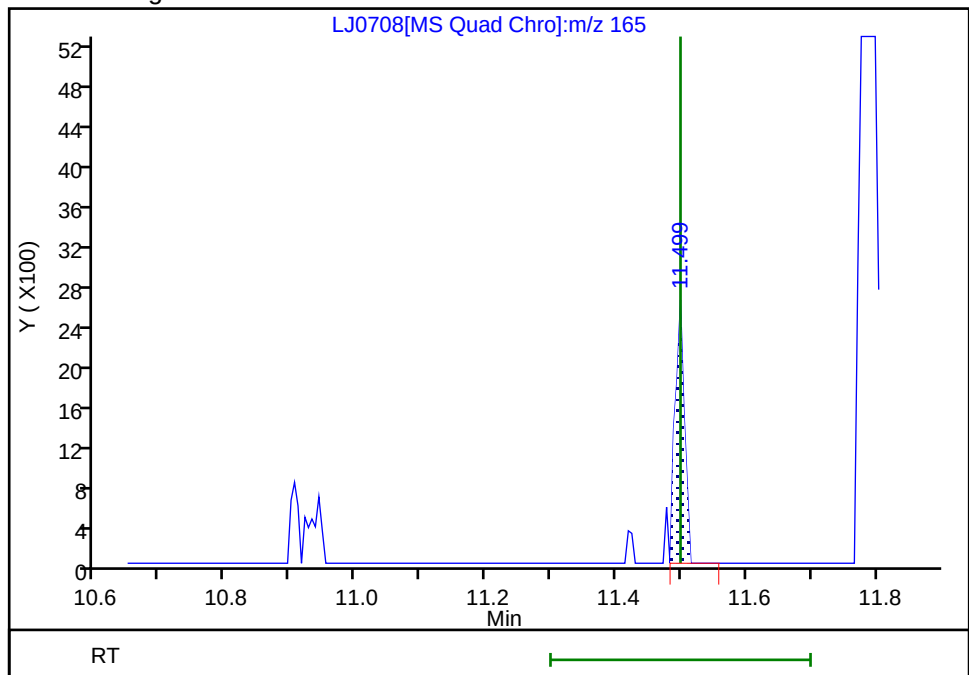
RT: 10.91
Area: 646
Amount: 0.048809
Amount Units: ug/ml

Processing Integration Results



RT: 11.50
Area: 2596
Amount: 0.158809
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 20-Oct-2020 18:52:24
Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D

Injection Date: 19-Oct-2020 21:03:44

Instrument ID: HP20296

Lims ID: IC L2

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 9

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP20296

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

Detector

MS SCAN

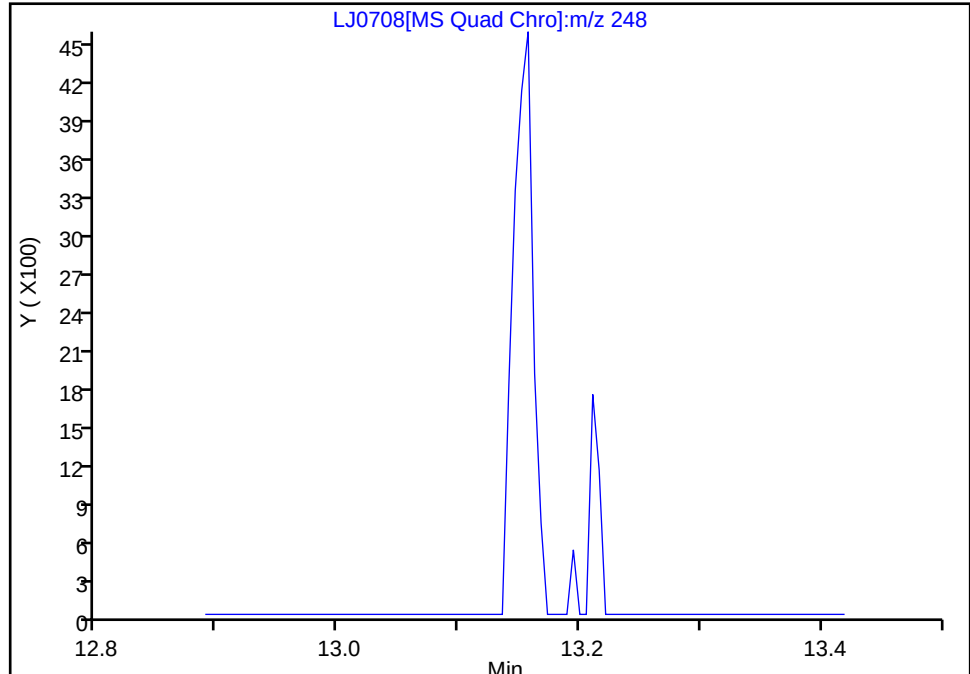
118 4-Bromophenyl phenyl ether, CAS: 101-55-3

Signal: 1

Not Detected

Expected RT: 13.16

Processing Integration Results



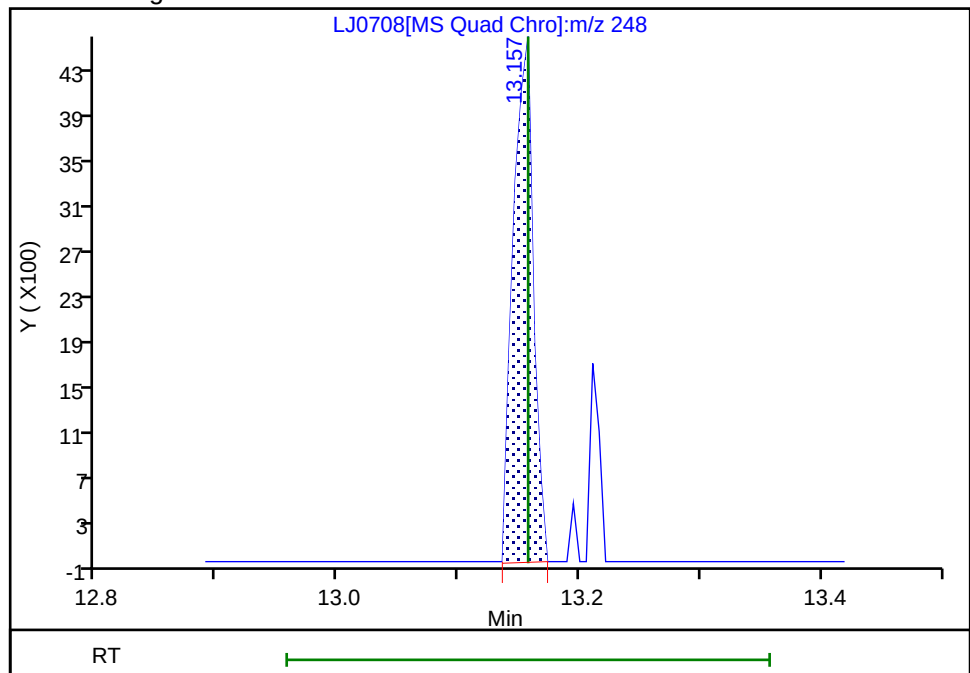
RT: 13.16

Area: 5274

Amount: 0.234898

Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 19-Oct-2020 23:19:05

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Calibration

/ 1,4-Dioxane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

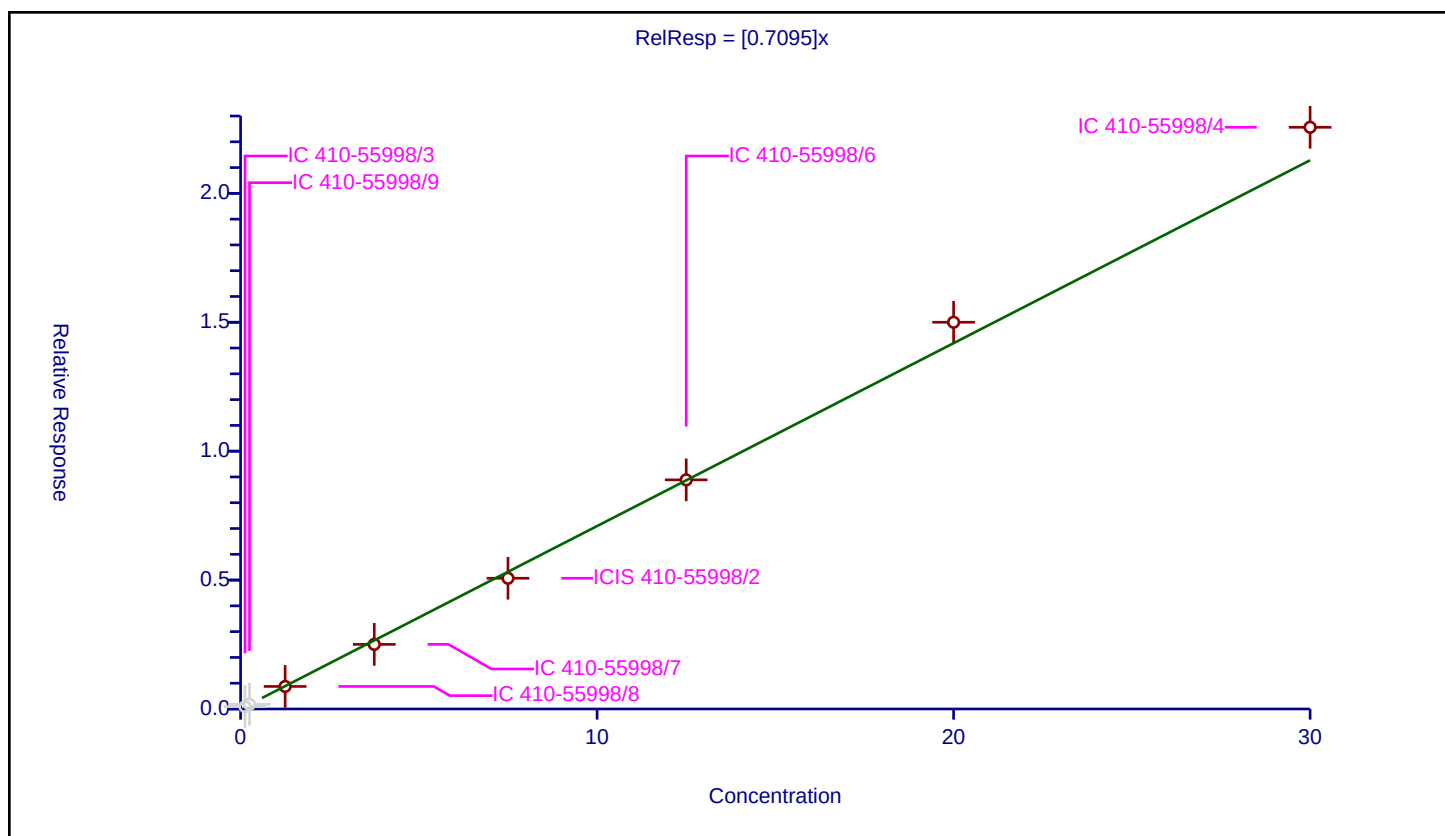
Curve Coefficients

Intercept: 0
Slope: 0.7095

Error Coefficients

Standard Error: 430000
Relative Standard Error: 5.0
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.091291	5.0	185889.0	0.730328	N
2	IC 410-55998/9	0.25	0.181679	5.0	158164.0	0.726714	N
3	IC 410-55998/8	1.25	0.874124	5.0	177000.0	0.699299	Y
4	IC 410-55998/7	3.75	2.506363	5.0	148915.0	0.668363	Y
5	ICIS 410-55998/2	7.5	5.070796	5.0	174799.0	0.676106	Y
6	IC 410-55998/6	12.5	8.887154	5.0	178960.0	0.710972	Y
7	IC 410-55998/5	20.0	15.000592	5.0	168950.0	0.75003	Y
8	IC 410-55998/4	30.0	22.562599	5.0	160946.0	0.752087	Y



Calibration

/ N-Nitrosodimethylamine

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

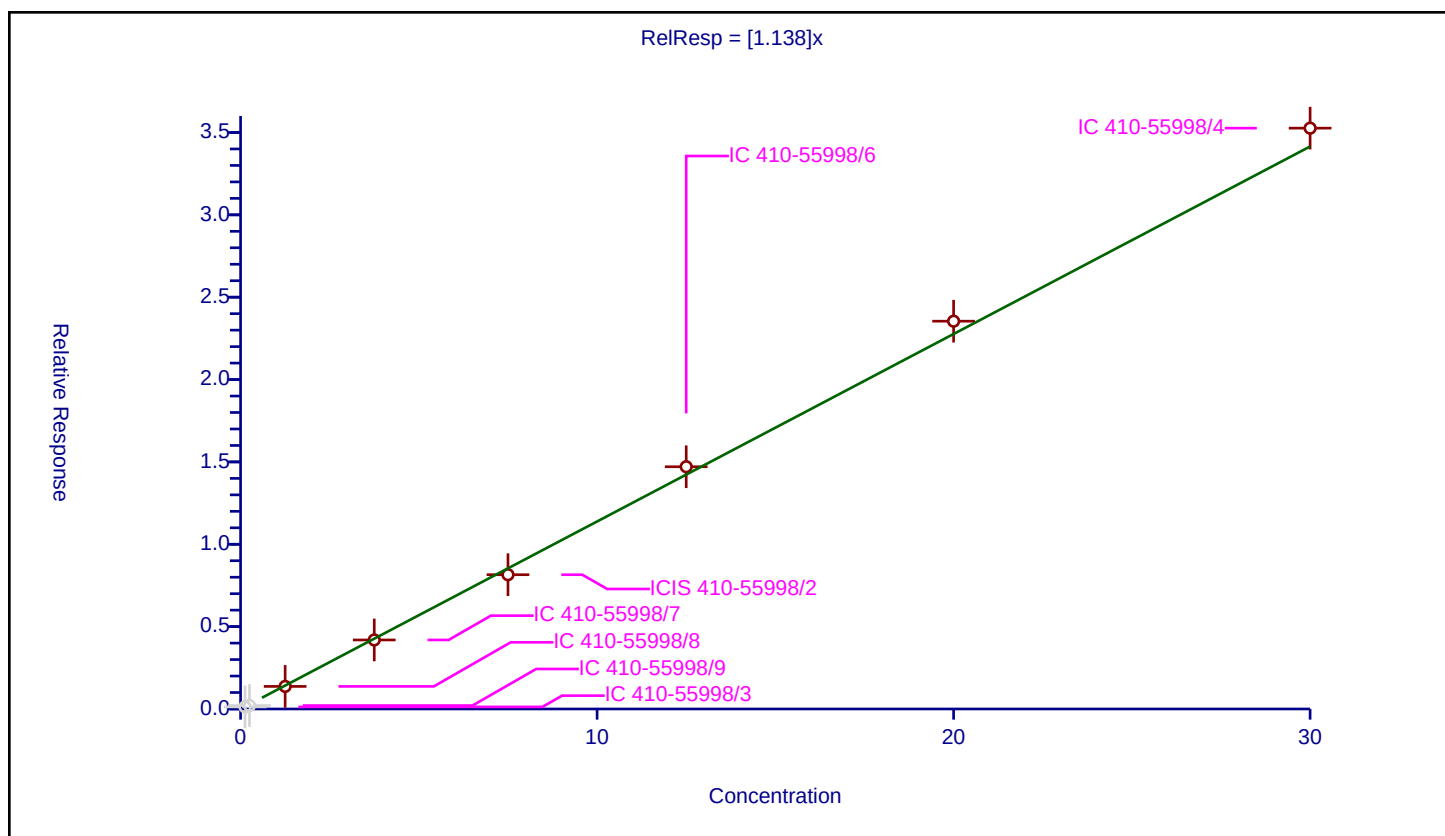
Curve Coefficients

Intercept: 0
 Slope: 1.138

Error Coefficients

Standard Error: 678000
 Relative Standard Error: 3.8
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.126581	5.0	185889.0	1.012647	N
2	IC 410-55998/9	0.25	0.211774	5.0	158164.0	0.847095	N
3	IC 410-55998/8	1.25	1.370537	5.0	177000.0	1.096429	Y
4	IC 410-55998/7	3.75	4.190679	5.0	148915.0	1.117514	Y
5	ICIS 410-55998/2	7.5	8.151534	5.0	174799.0	1.086871	Y
6	IC 410-55998/6	12.5	14.707979	5.0	178960.0	1.176638	Y
7	IC 410-55998/5	20.0	23.544037	5.0	168950.0	1.177202	Y
8	IC 410-55998/4	30.0	35.262573	5.0	160946.0	1.175419	Y



Calibration

/ Pyridine

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

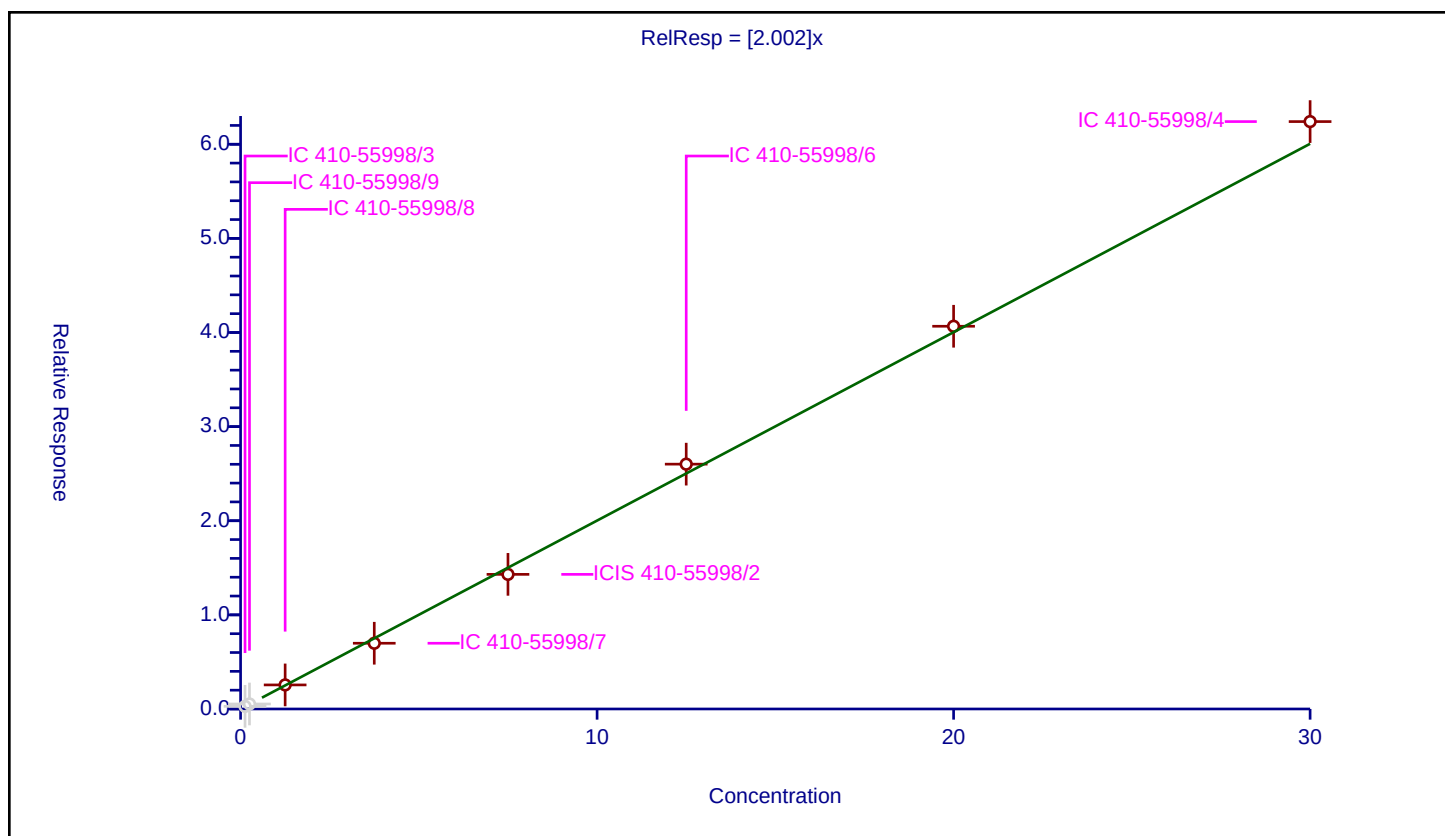
Curve Coefficients

Intercept: 0
Slope: 2.002

Error Coefficients

Standard Error: 1190000
Relative Standard Error: 4.7
Correlation Coefficient: 0.996
Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.279791	5.0	185889.0	2.238325	N
2	IC 410-55998/9	0.25	0.531284	5.0	158164.0	2.125136	N
3	IC 410-55998/8	1.25	2.557712	5.0	177000.0	2.046169	Y
4	IC 410-55998/7	3.75	6.984488	5.0	148915.0	1.86253	Y
5	ICIS 410-55998/2	7.5	14.302771	5.0	174799.0	1.907036	Y
6	IC 410-55998/6	12.5	26.01193	5.0	178960.0	2.080954	Y
7	IC 410-55998/5	20.0	40.661912	5.0	168950.0	2.033096	Y
8	IC 410-55998/4	30.0	62.407888	5.0	160946.0	2.080263	Y



Calibration

/ 2-Picoline

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

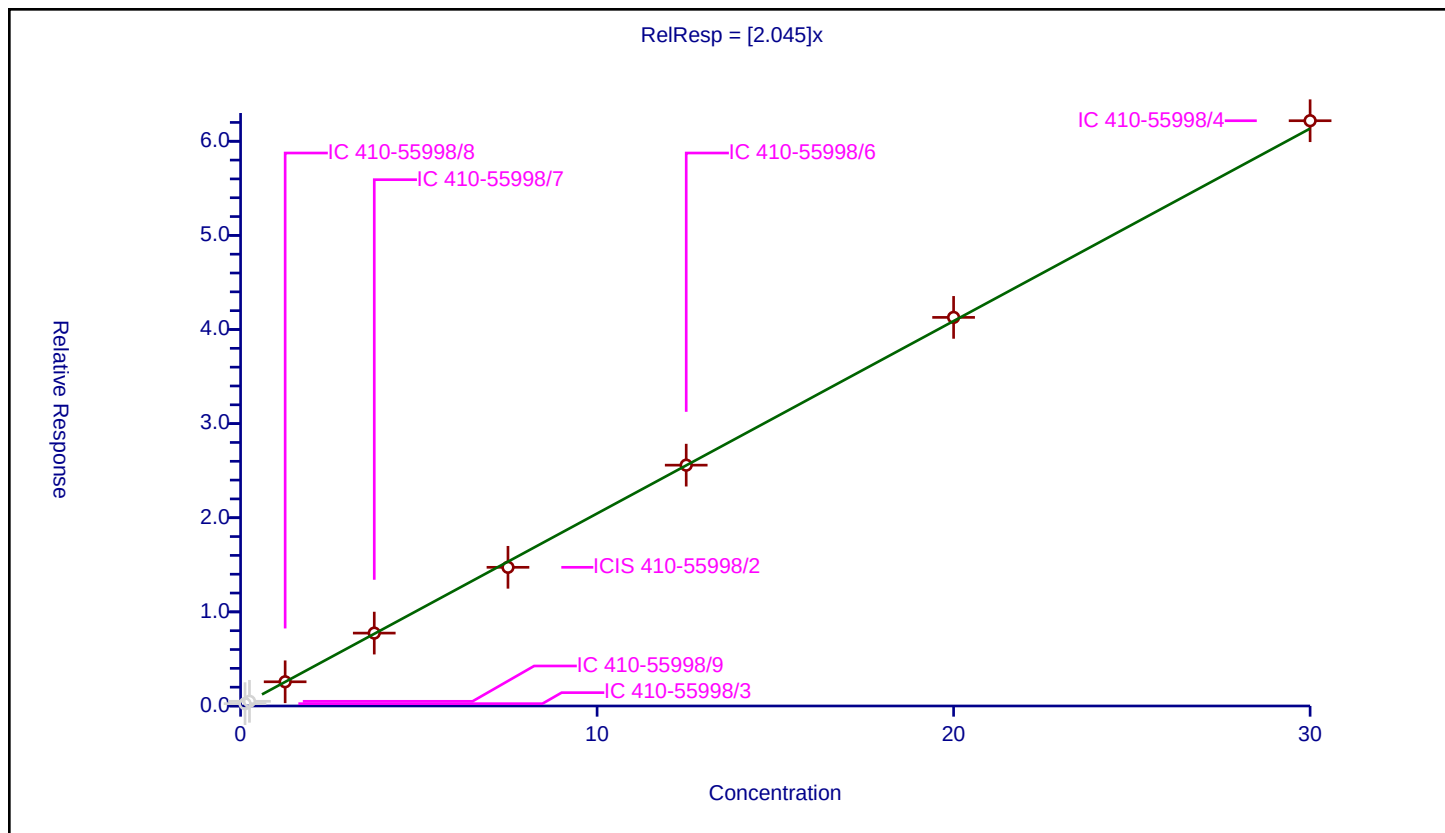
Curve Coefficients

Intercept: 0
 Slope: 2.045

Error Coefficients

Standard Error: 1190000
 Relative Standard Error: 2.0
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.247728	5.0	185889.0	1.981828	N
2	IC 410-55998/9	0.25	0.496257	5.0	158164.0	1.985028	N
3	IC 410-55998/8	1.25	2.570085	5.0	177000.0	2.056068	Y
4	IC 410-55998/7	3.75	7.744418	5.0	148915.0	2.065178	Y
5	ICIS 410-55998/2	7.5	14.734037	5.0	174799.0	1.964538	Y
6	IC 410-55998/6	12.5	25.586667	5.0	178960.0	2.046933	Y
7	IC 410-55998/5	20.0	41.286357	5.0	168950.0	2.064318	Y
8	IC 410-55998/4	30.0	62.182098	5.0	160946.0	2.072737	Y



Calibration

/ N-Nitrosomethylethylamine

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

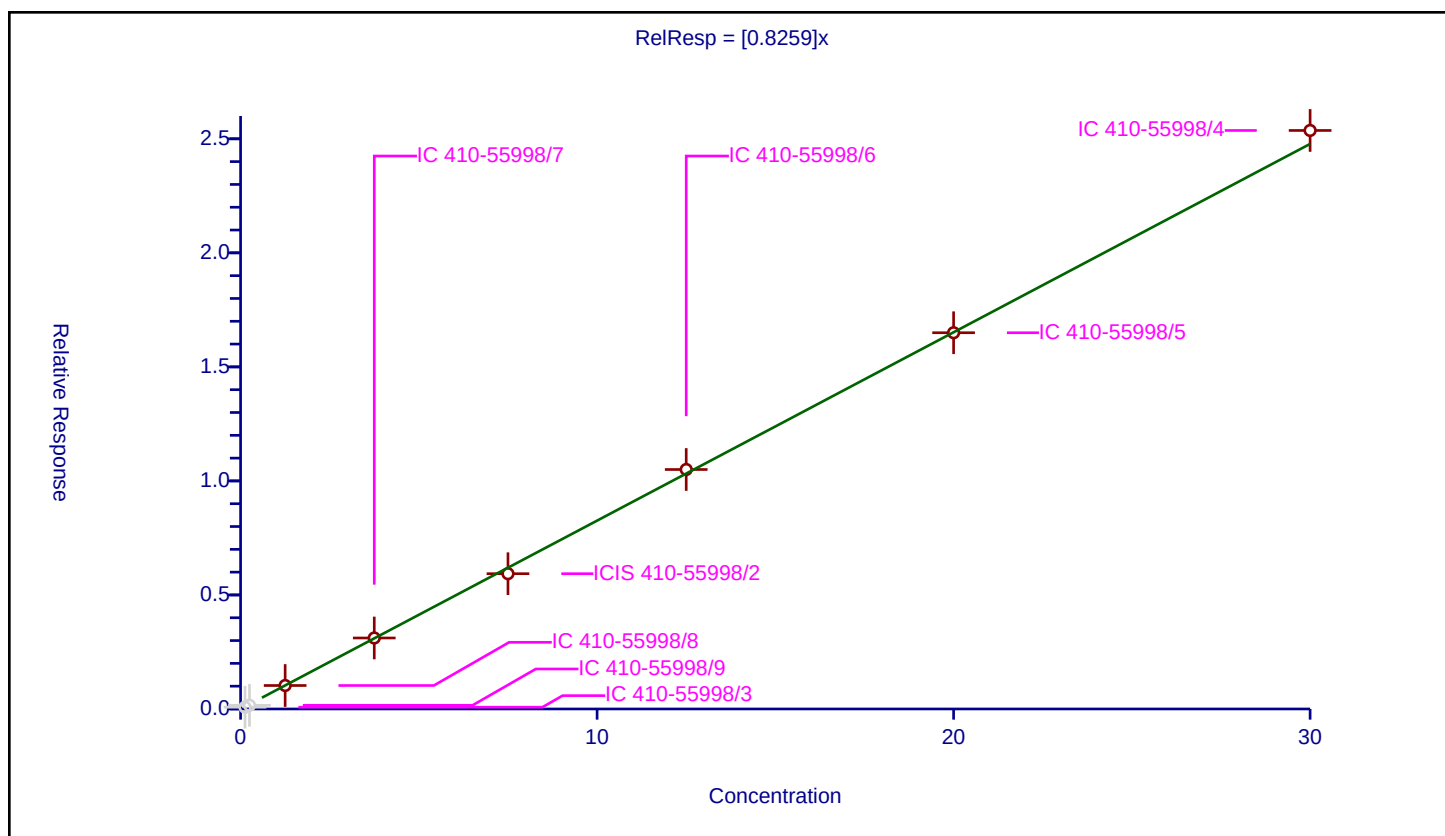
Curve Coefficients

Intercept: 0
 Slope: 0.8259

Error Coefficients

Standard Error: 484000
 Relative Standard Error: 2.3
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.078784	5.0	185889.0	0.630269	N
2	IC 410-55998/9	0.25	0.162237	5.0	158164.0	0.648947	N
3	IC 410-55998/8	1.25	1.02952	5.0	177000.0	0.823616	Y
4	IC 410-55998/7	3.75	3.113353	5.0	148915.0	0.830228	Y
5	ICIS 410-55998/2	7.5	5.932299	5.0	174799.0	0.790973	Y
6	IC 410-55998/6	12.5	10.49986	5.0	178960.0	0.839989	Y
7	IC 410-55998/5	20.0	16.49778	5.0	168950.0	0.824889	Y
8	IC 410-55998/4	30.0	25.366396	5.0	160946.0	0.845547	Y



Calibration

/ Methyl methanesulfonate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

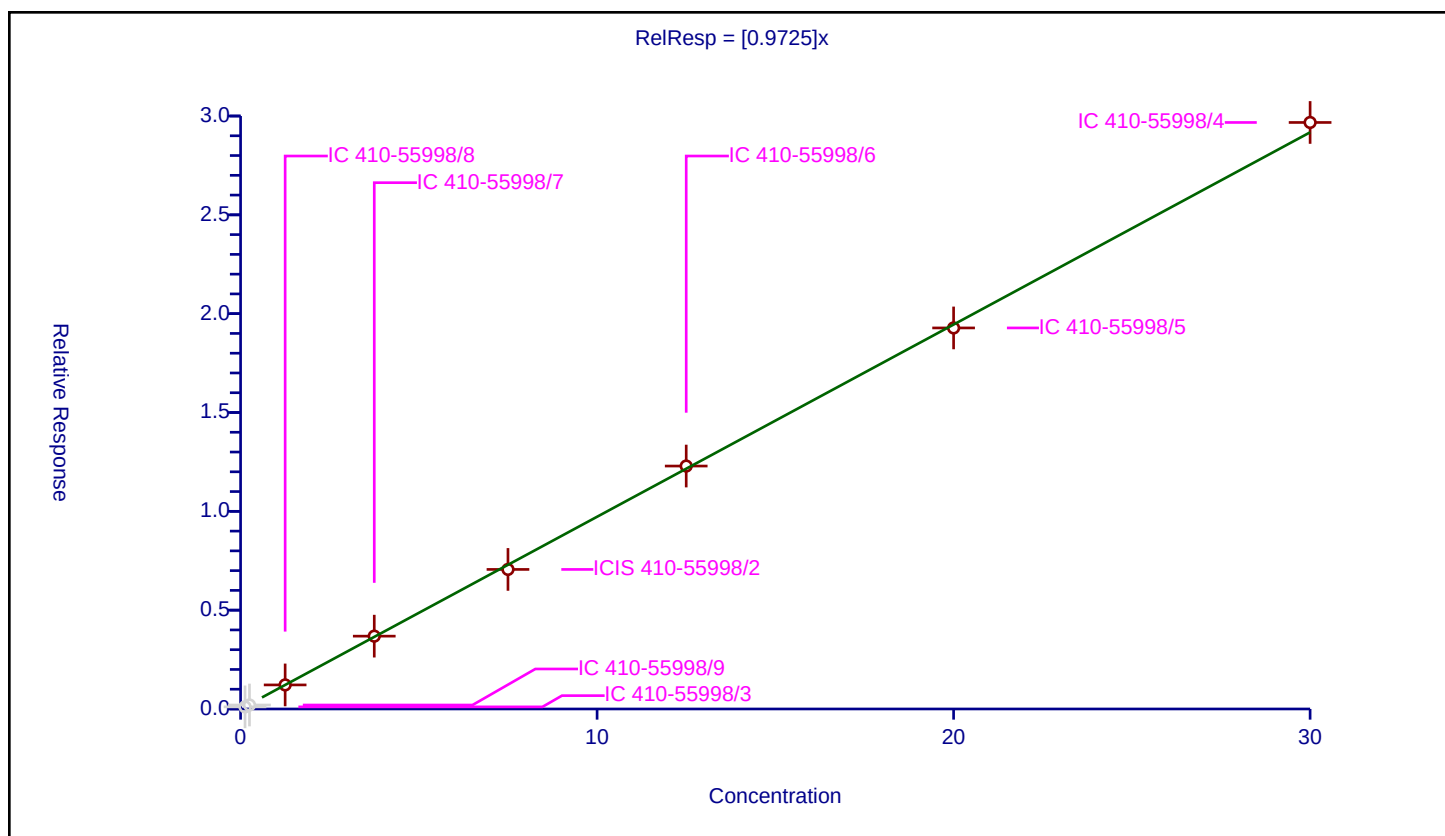
Curve Coefficients

Intercept: 0
 Slope: 0.9725

Error Coefficients

Standard Error: 567000
 Relative Standard Error: 1.8
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.107914	5.0	185889.0	0.863311	N
2	IC 410-55998/9	0.25	0.2015	5.0	158164.0	0.805999	N
3	IC 410-55998/8	1.25	1.217881	5.0	177000.0	0.974305	Y
4	IC 410-55998/7	3.75	3.685794	5.0	148915.0	0.982878	Y
5	ICIS 410-55998/2	7.5	7.060967	5.0	174799.0	0.941462	Y
6	IC 410-55998/6	12.5	12.291378	5.0	178960.0	0.98331	Y
7	IC 410-55998/5	20.0	19.278159	5.0	168950.0	0.963908	Y
8	IC 410-55998/4	30.0	29.673928	5.0	160946.0	0.989131	Y



Calibration

/ 2-Fluorophenol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

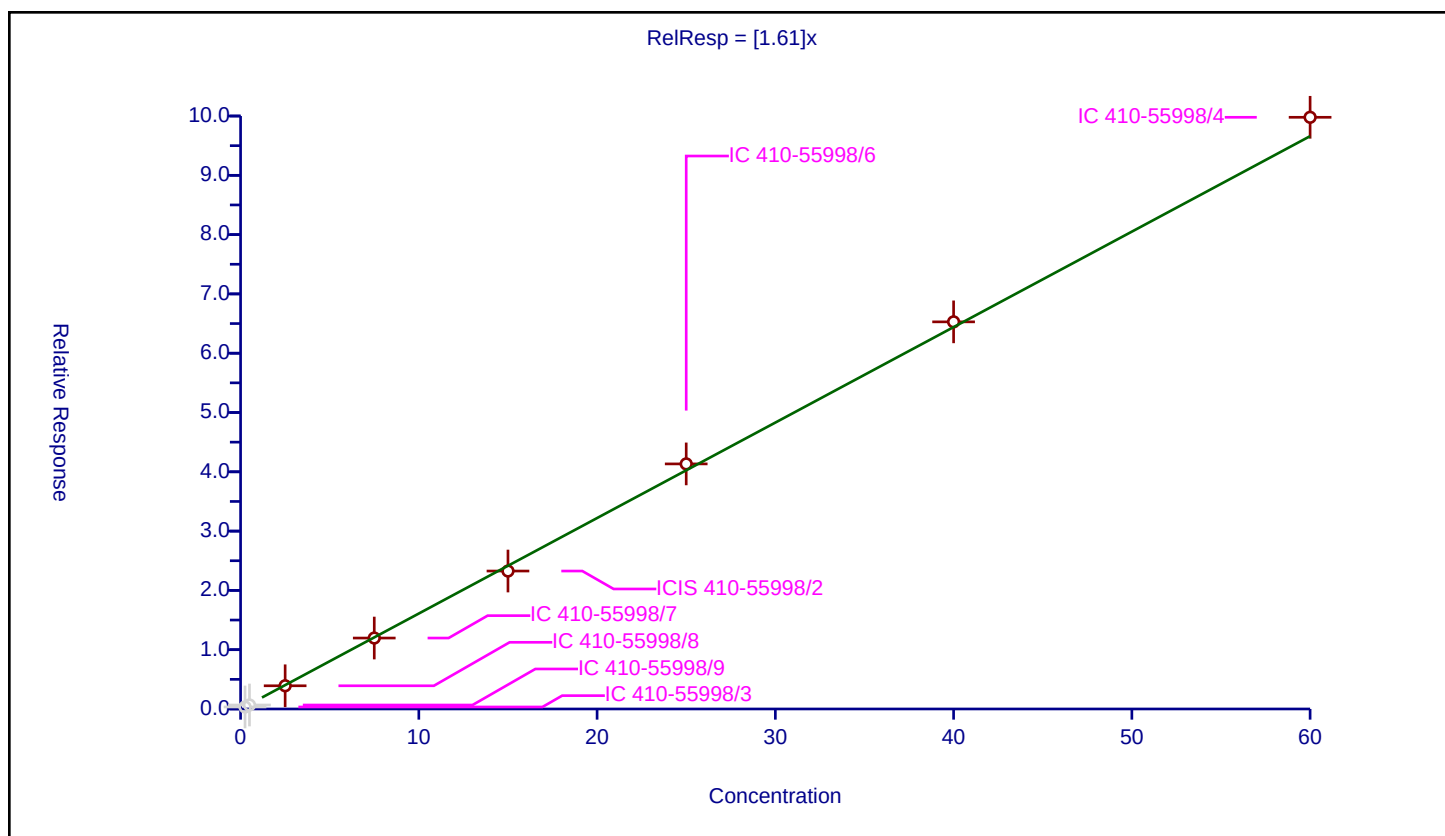
Curve Coefficients

Intercept: 0
 Slope: 1.61

Error Coefficients

Standard Error: 1910000
 Relative Standard Error: 2.9
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.25	0.339477	5.0	185889.0	1.357907	N
2	IC 410-55998/9	0.5	0.671866	5.0	158164.0	1.343732	N
3	IC 410-55998/8	2.5	3.912825	5.0	177000.0	1.56513	Y
4	IC 410-55998/7	7.5	11.966155	5.0	148915.0	1.595487	Y
5	ICIS 410-55998/2	15.0	23.266409	5.0	174799.0	1.551094	Y
6	IC 410-55998/6	25.0	41.328621	5.0	178960.0	1.653145	Y
7	IC 410-55998/5	40.0	65.287038	5.0	168950.0	1.632176	Y
8	IC 410-55998/4	60.0	99.785673	5.0	160946.0	1.663095	Y



Calibration

/ N-Nitrosodiethylamine

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

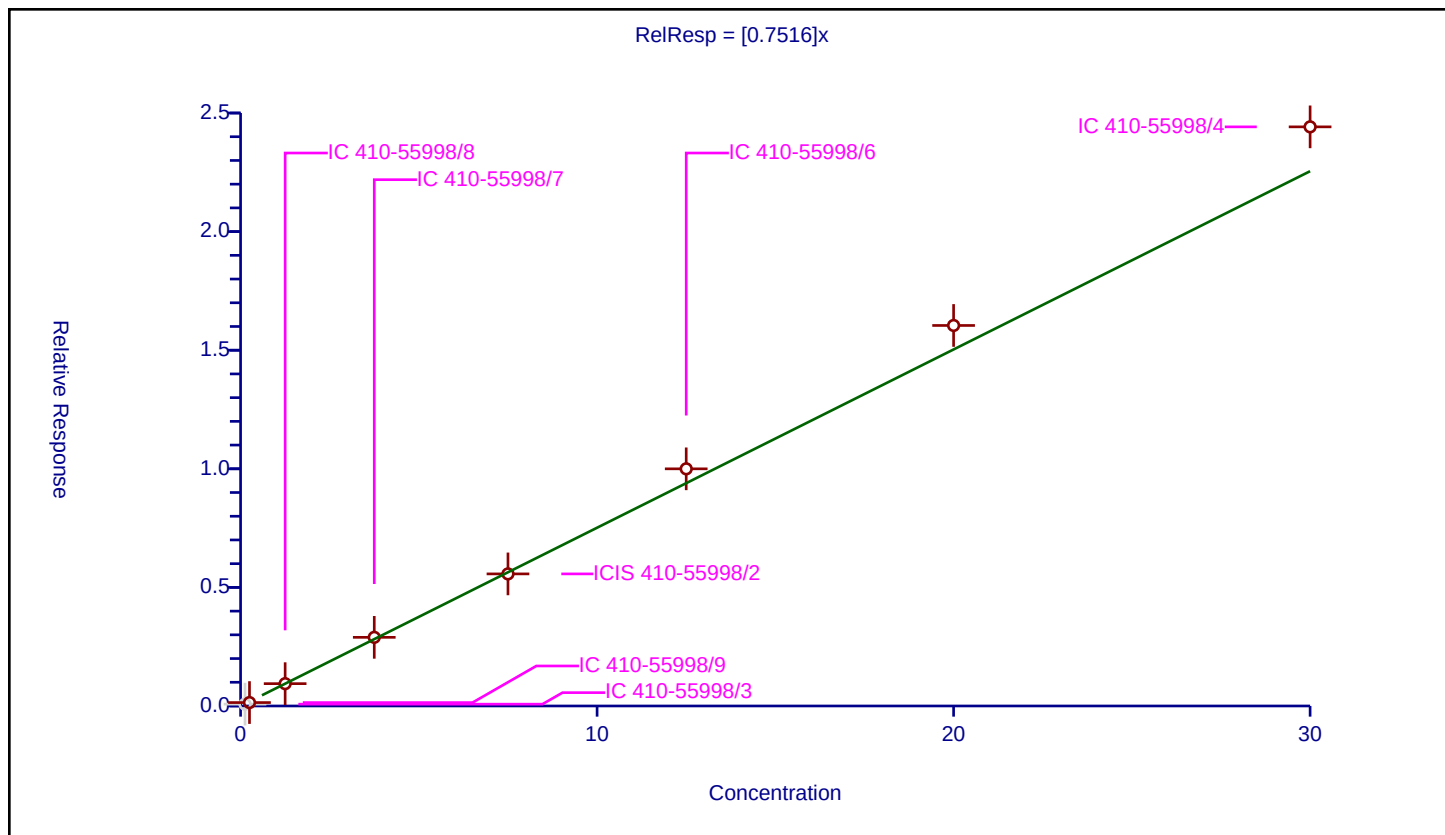
Curve Coefficients

Intercept: 0
Slope: 0.7516

Error Coefficients

Standard Error: 425000
Relative Standard Error: 10.8
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.076847	5.0	185889.0	0.614775	N
2	IC 410-55998/9	0.25	0.144439	5.0	158164.0	0.577755	Y
3	IC 410-55998/8	1.25	0.941102	5.0	177000.0	0.752881	Y
4	IC 410-55998/7	3.75	2.894906	5.0	148915.0	0.771975	Y
5	ICIS 410-55998/2	7.5	5.568567	5.0	174799.0	0.742476	Y
6	IC 410-55998/6	12.5	9.99838	5.0	178960.0	0.79987	Y
7	IC 410-55998/5	20.0	16.043119	5.0	168950.0	0.802156	Y
8	IC 410-55998/4	30.0	24.416015	5.0	160946.0	0.813867	Y



Calibration

/ Ethyl methanesulfonate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

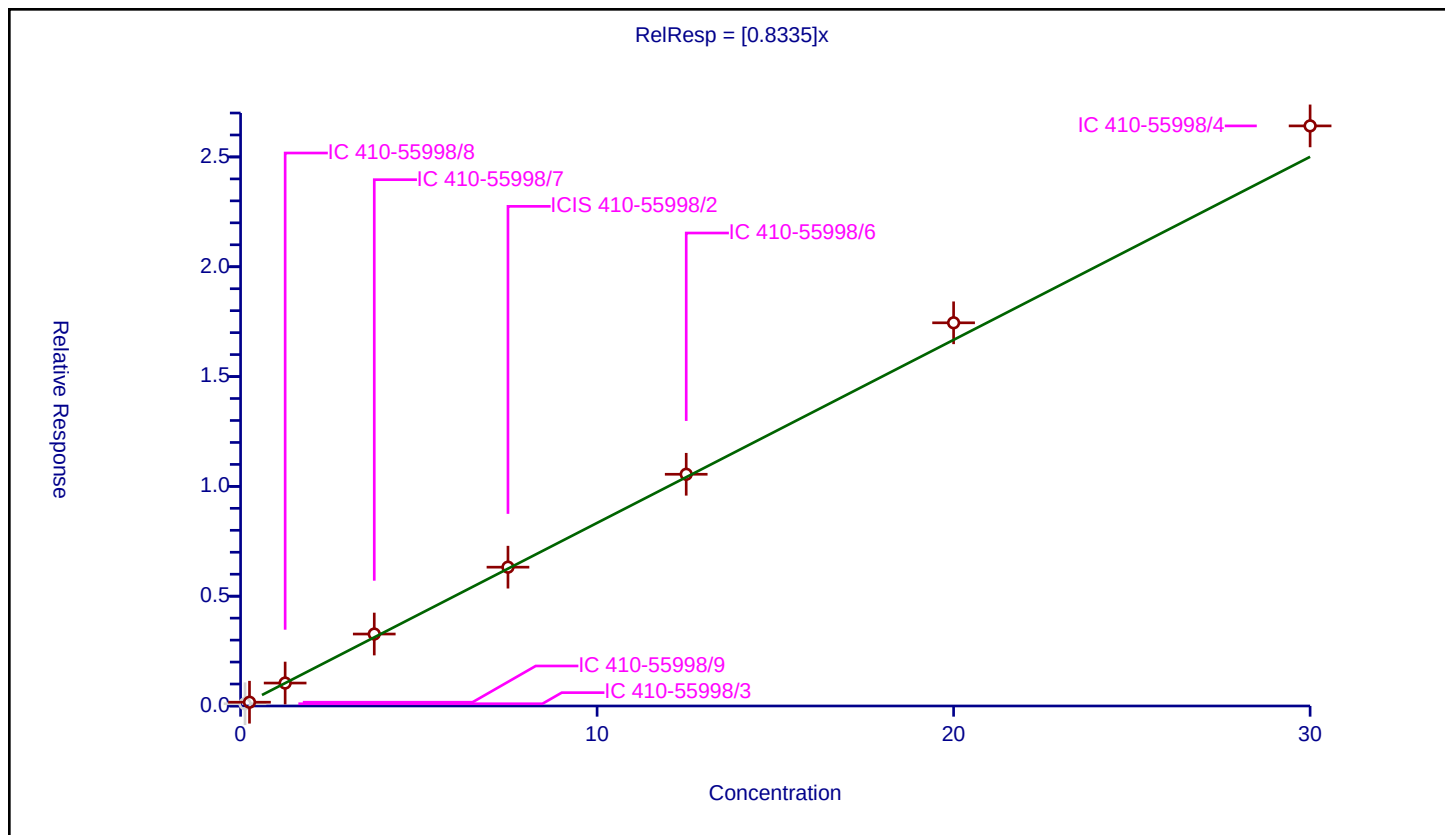
Curve Coefficients

Intercept: 0
 Slope: 0.8335

Error Coefficients

Standard Error: 461000
 Relative Standard Error: 8.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.102965	5.0	185889.0	0.823717	N
2	IC 410-55998/9	0.25	0.171404	5.0	158164.0	0.685617	Y
3	IC 410-55998/8	1.25	1.044548	5.0	177000.0	0.835638	Y
4	IC 410-55998/7	3.75	3.276735	5.0	148915.0	0.873796	Y
5	ICIS 410-55998/2	7.5	6.320288	5.0	174799.0	0.842705	Y
6	IC 410-55998/6	12.5	10.55152	5.0	178960.0	0.844122	Y
7	IC 410-55998/5	20.0	17.448298	5.0	168950.0	0.872415	Y
8	IC 410-55998/4	30.0	26.413114	5.0	160946.0	0.880437	Y



Calibration

/ Benzaldehyde

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

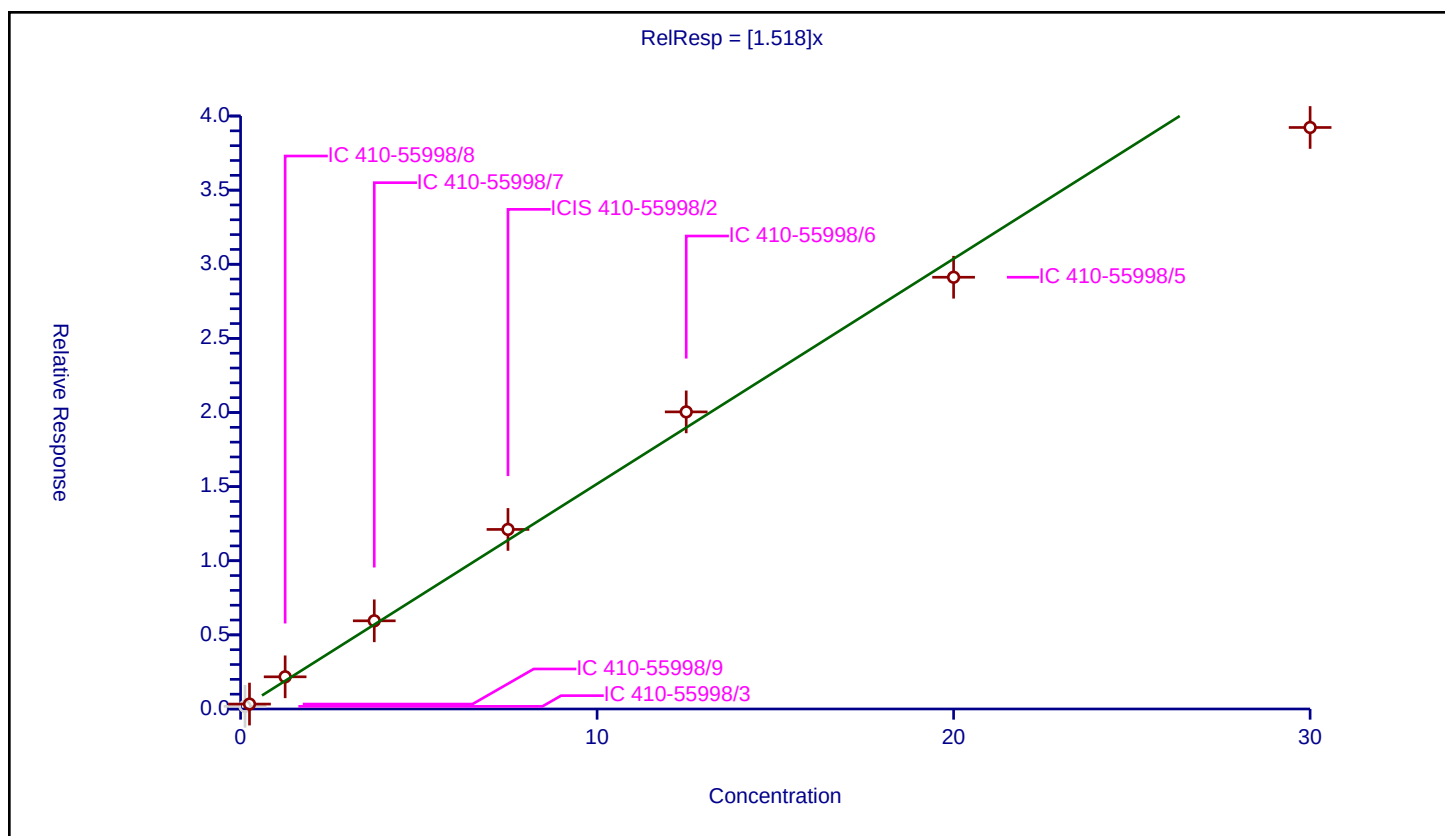
Curve Coefficients

Intercept: 0
Slope: 1.518

Error Coefficients

Standard Error: 741000
Relative Standard Error: 10.6
Correlation Coefficient: 0.975
Coefficient of Determination (Adjusted): 0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.177552	5.0	185889.0	1.420418	N
2	IC 410-55998/9	0.25	0.33127	5.0	158164.0	1.32508	Y
3	IC 410-55998/8	1.25	2.169661	5.0	177000.0	1.735729	Y
4	IC 410-55998/7	3.75	5.948058	5.0	148915.0	1.586149	Y
5	ICIS 410-55998/2	7.5	12.11297	5.0	174799.0	1.615063	Y
6	IC 410-55998/6	12.5	20.041713	5.0	178960.0	1.603337	Y
7	IC 410-55998/5	20.0	29.123883	5.0	168950.0	1.456194	Y
8	IC 410-55998/4	30.0	39.22735	5.0	160946.0	1.307578	Y



Calibration

/ Phenol-d5

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

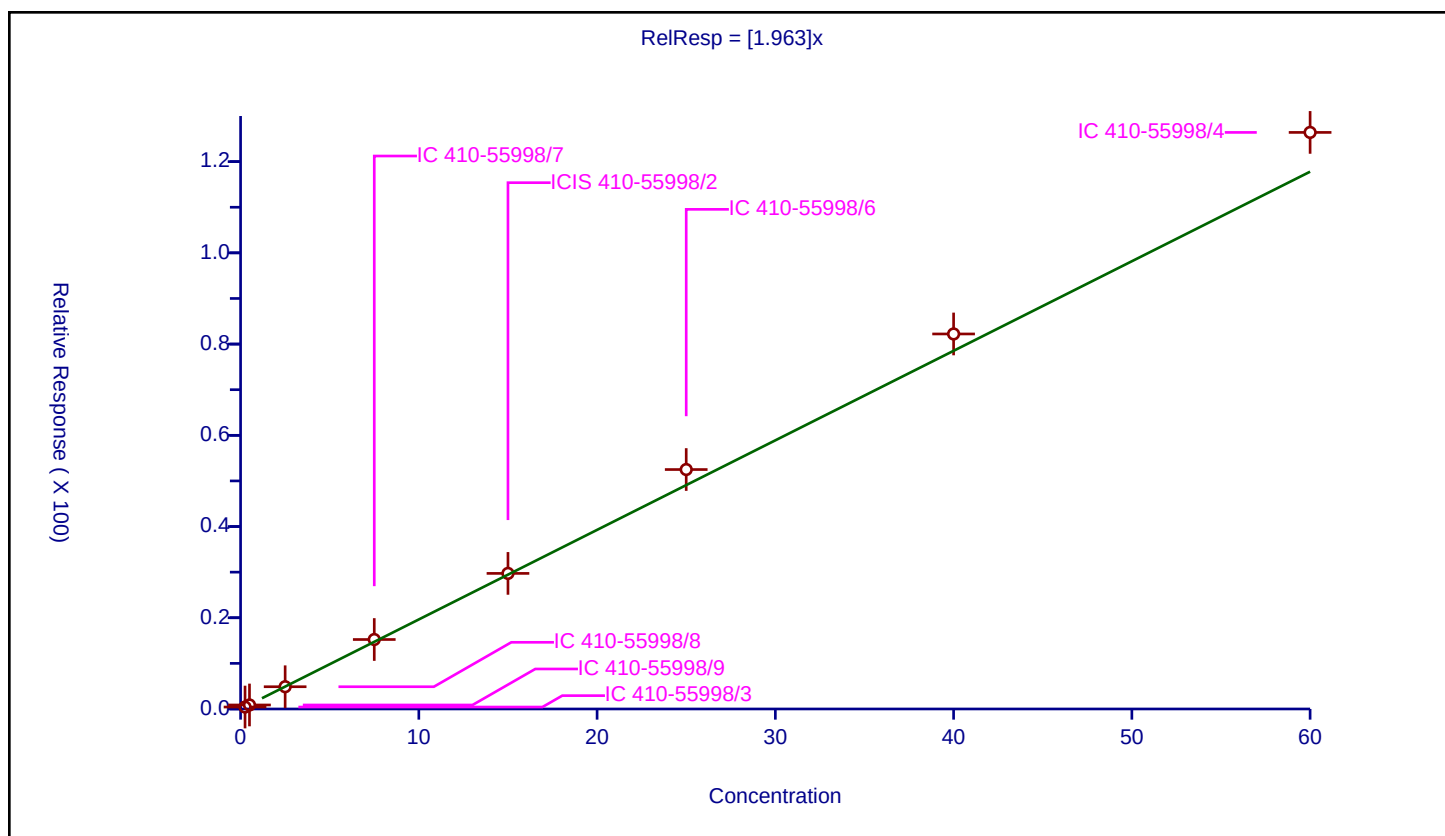
Curve Coefficients

Intercept: 0
Slope: 1.963

Error Coefficients

Standard Error: 2040000
Relative Standard Error: 7.5
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.25	0.429961	5.0	185889.0	1.719844	Y
2	IC 410-55998/9	0.5	0.880257	5.0	158164.0	1.760514	Y
3	IC 410-55998/8	2.5	4.87709	5.0	177000.0	1.950836	Y
4	IC 410-55998/7	7.5	15.230333	5.0	148915.0	2.030711	Y
5	ICIS 410-55998/2	15.0	29.722453	5.0	174799.0	1.981497	Y
6	IC 410-55998/6	25.0	52.496284	5.0	178960.0	2.099851	Y
7	IC 410-55998/5	40.0	82.219059	5.0	168950.0	2.055476	Y
8	IC 410-55998/4	60.0	126.406621	5.0	160946.0	2.106777	Y



Calibration

/ Phenol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

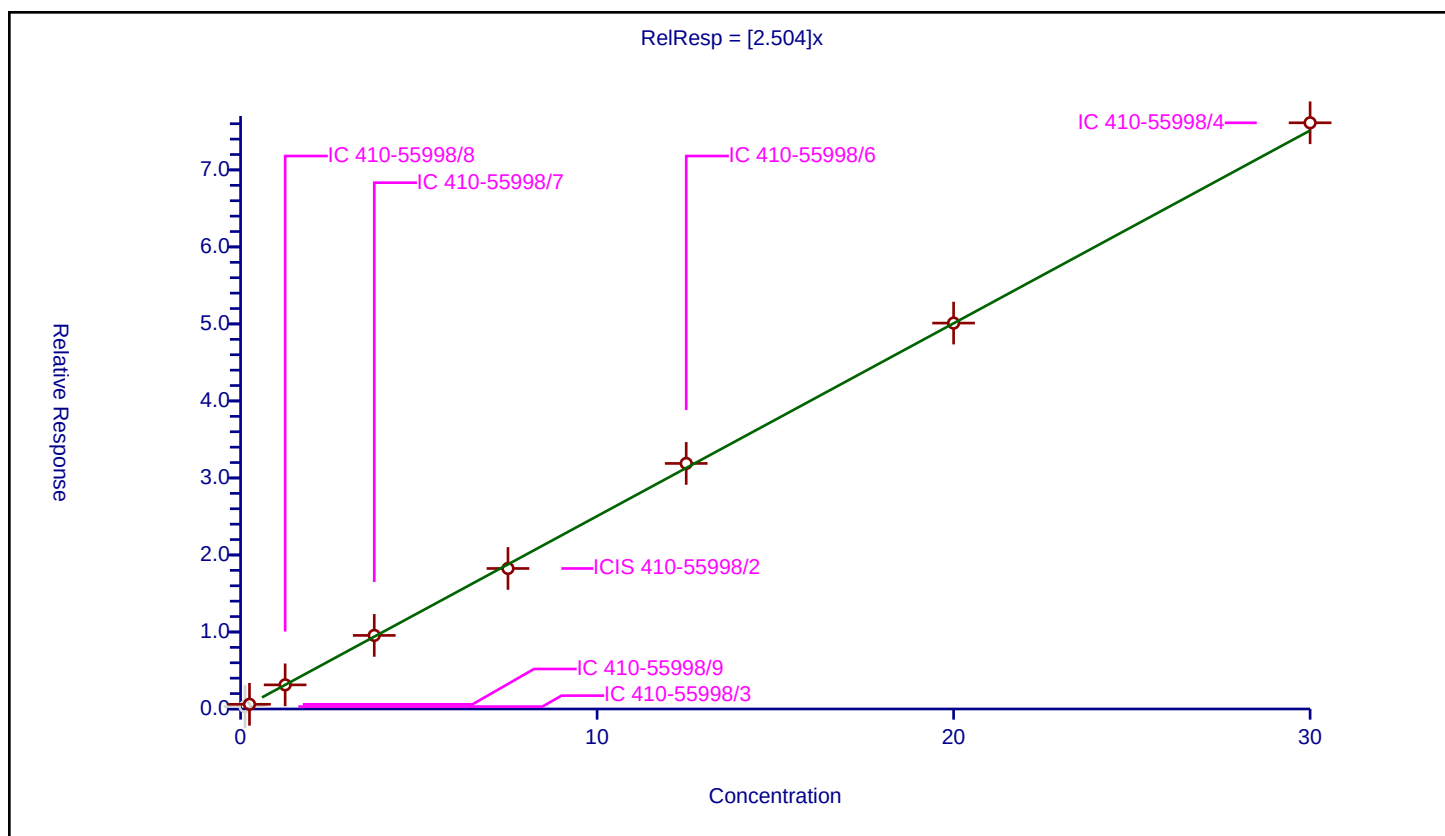
Curve Coefficients

Intercept: 0
 Slope: 2.504

Error Coefficients

Standard Error: 1330000
 Relative Standard Error: 1.9
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.311638	5.0	185889.0	2.493101	N
2	IC 410-55998/9	0.25	0.612149	5.0	158164.0	2.448598	Y
3	IC 410-55998/8	1.25	3.130565	5.0	177000.0	2.504452	Y
4	IC 410-55998/7	3.75	9.55582	5.0	148915.0	2.548219	Y
5	ICIS 410-55998/2	7.5	18.248217	5.0	174799.0	2.433096	Y
6	IC 410-55998/6	12.5	31.886818	5.0	178960.0	2.550945	Y
7	IC 410-55998/5	20.0	50.11314	5.0	168950.0	2.505657	Y
8	IC 410-55998/4	30.0	76.120593	5.0	160946.0	2.537353	Y



Calibration

/ Aniline

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

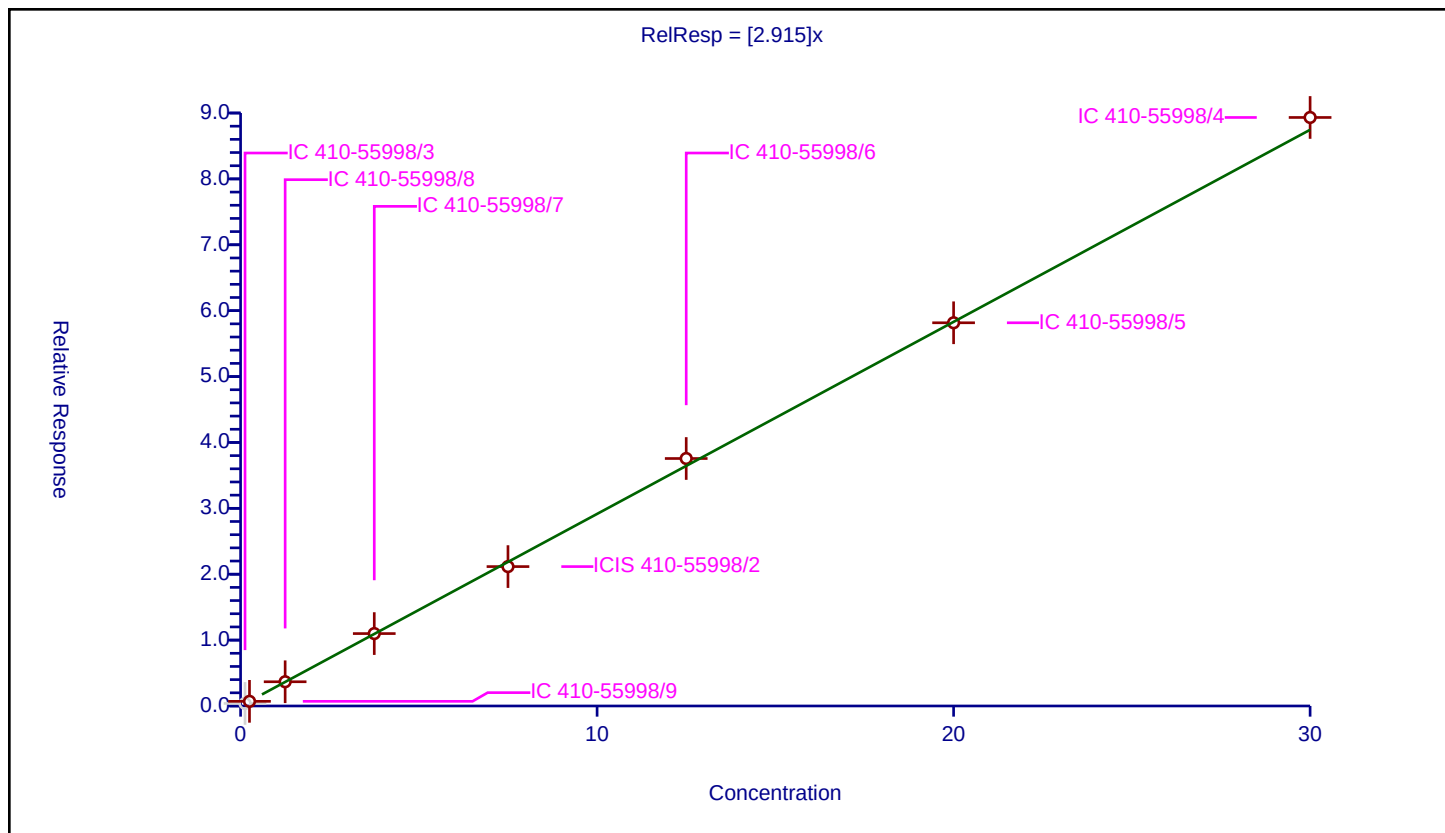
Curve Coefficients

Intercept: 0
 Slope: 2.915

Error Coefficients

Standard Error: 1560000
 Relative Standard Error: 2.4
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.386252	5.0	185889.0	3.090016	N
2	IC 410-55998/9	0.25	0.705786	5.0	158164.0	2.823146	Y
3	IC 410-55998/8	1.25	3.675565	5.0	177000.0	2.940452	Y
4	IC 410-55998/7	3.75	10.991606	5.0	148915.0	2.931095	Y
5	ICIS 410-55998/2	7.5	21.156643	5.0	174799.0	2.820886	Y
6	IC 410-55998/6	12.5	37.560907	5.0	178960.0	3.004873	Y
7	IC 410-55998/5	20.0	58.161853	5.0	168950.0	2.908093	Y
8	IC 410-55998/4	30.0	89.325799	5.0	160946.0	2.977527	Y



Calibration

/ Bis(2-chloroethyl)ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

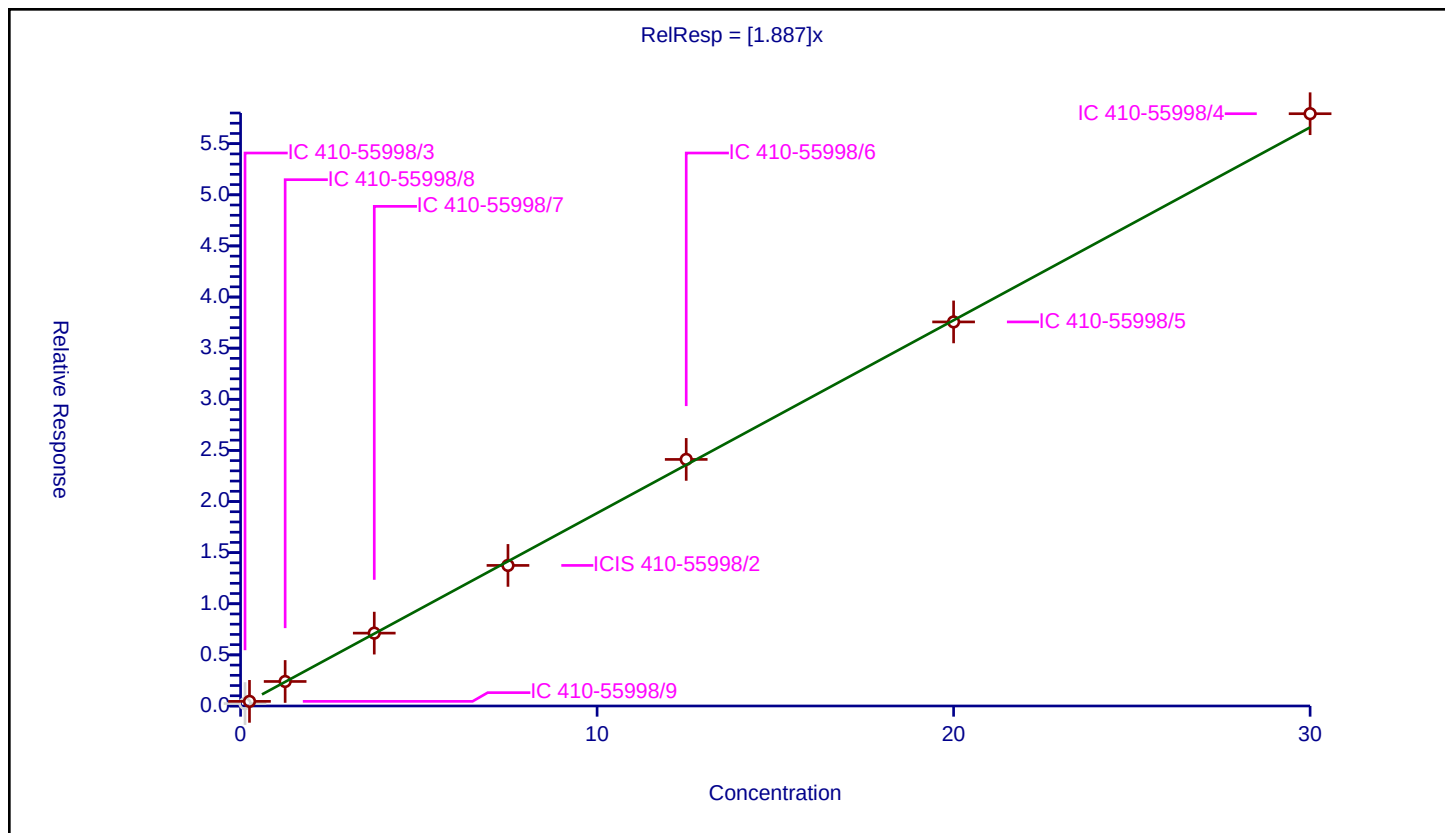
Curve Coefficients

Intercept: 0
 Slope: 1.887

Error Coefficients

Standard Error: 1010000
 Relative Standard Error: 2.5
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.238234	5.0	185889.0	1.905869	N
2	IC 410-55998/9	0.25	0.453801	5.0	158164.0	1.815204	Y
3	IC 410-55998/8	1.25	2.397486	5.0	177000.0	1.917989	Y
4	IC 410-55998/7	3.75	7.126649	5.0	148915.0	1.90044	Y
5	ICIS 410-55998/2	7.5	13.749421	5.0	174799.0	1.833256	Y
6	IC 410-55998/6	12.5	24.117624	5.0	178960.0	1.92941	Y
7	IC 410-55998/5	20.0	37.567535	5.0	168950.0	1.878377	Y
8	IC 410-55998/4	30.0	57.931791	5.0	160946.0	1.93106	Y



Calibration

/ 2-Chlorophenol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

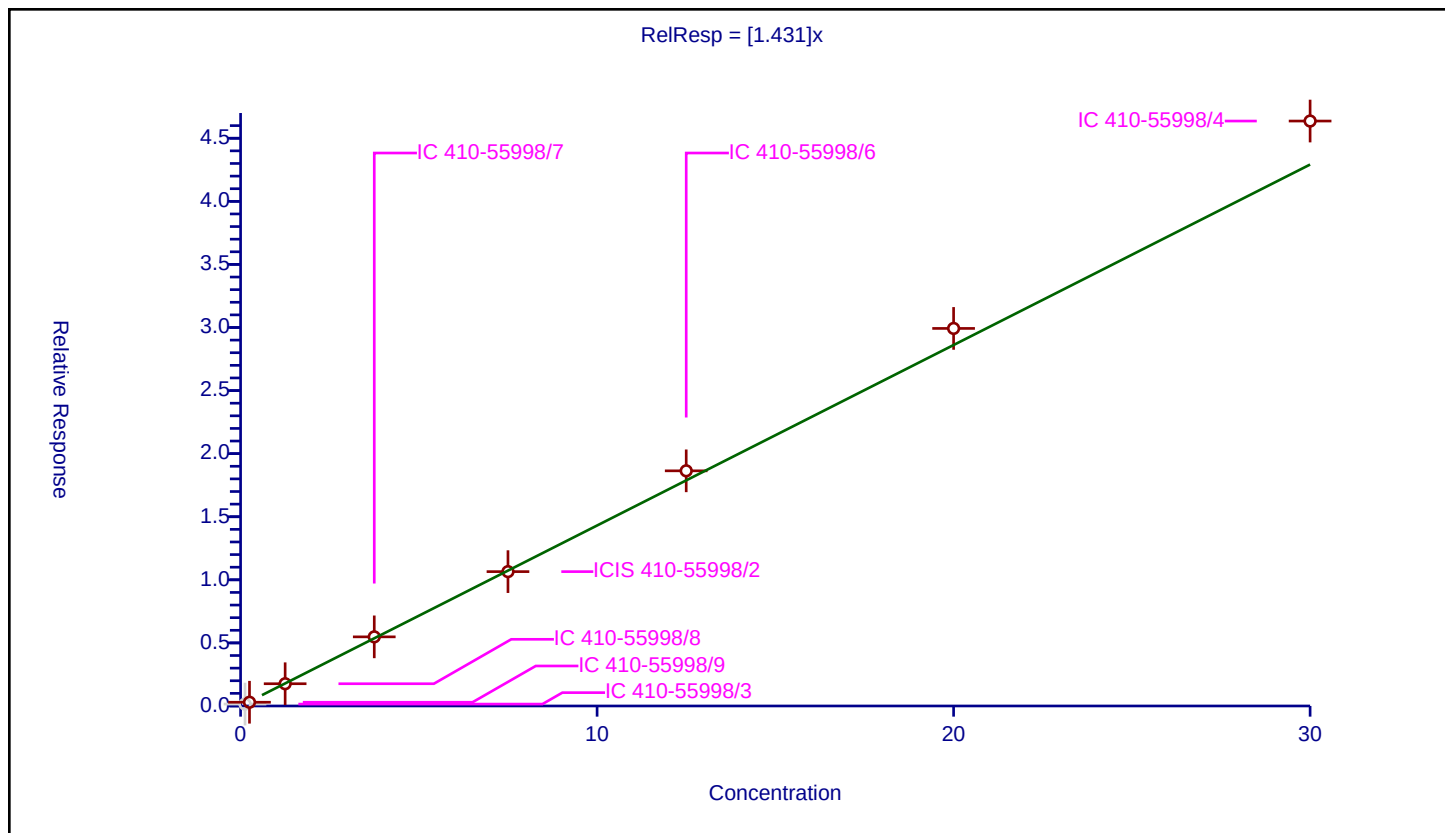
Curve Coefficients

Intercept: 0
 Slope: 1.431

Error Coefficients

Standard Error: 802000
 Relative Standard Error: 8.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.150977	5.0	185889.0	1.207818	N
2	IC 410-55998/9	0.25	0.297255	5.0	158164.0	1.189019	Y
3	IC 410-55998/8	1.25	1.763531	5.0	177000.0	1.410825	Y
4	IC 410-55998/7	3.75	5.479468	5.0	148915.0	1.461192	Y
5	ICIS 410-55998/2	7.5	10.650032	5.0	174799.0	1.420004	Y
6	IC 410-55998/6	12.5	18.639975	5.0	178960.0	1.491198	Y
7	IC 410-55998/5	20.0	29.925777	5.0	168950.0	1.496289	Y
8	IC 410-55998/4	30.0	46.364215	5.0	160946.0	1.545474	Y



Calibration

/ 1,3-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

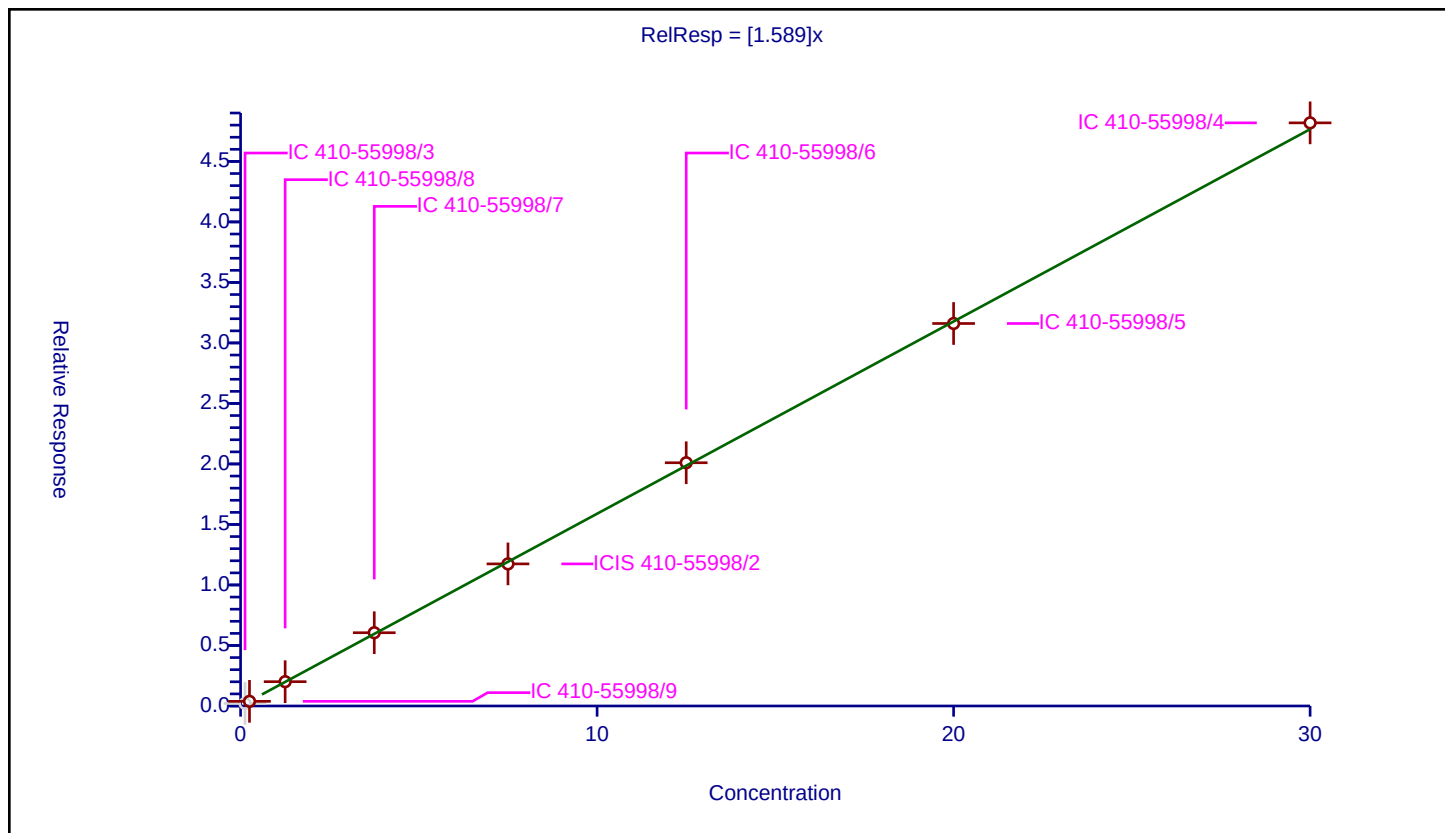
Curve Coefficients

Intercept: 0
 Slope: 1.589

Error Coefficients

Standard Error: 844000
 Relative Standard Error: 1.8
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.210341	5.0	185889.0	1.682725	N
2	IC 410-55998/9	0.25	0.384917	5.0	158164.0	1.539668	Y
3	IC 410-55998/8	1.25	2.007966	5.0	177000.0	1.606373	Y
4	IC 410-55998/7	3.75	6.05436	5.0	148915.0	1.614496	Y
5	ICIS 410-55998/2	7.5	11.742001	5.0	174799.0	1.5656	Y
6	IC 410-55998/6	12.5	20.100581	5.0	178960.0	1.608046	Y
7	IC 410-55998/5	20.0	31.60654	5.0	168950.0	1.580327	Y
8	IC 410-55998/4	30.0	48.1861	5.0	160946.0	1.606203	Y



Calibration

/ 1,4-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

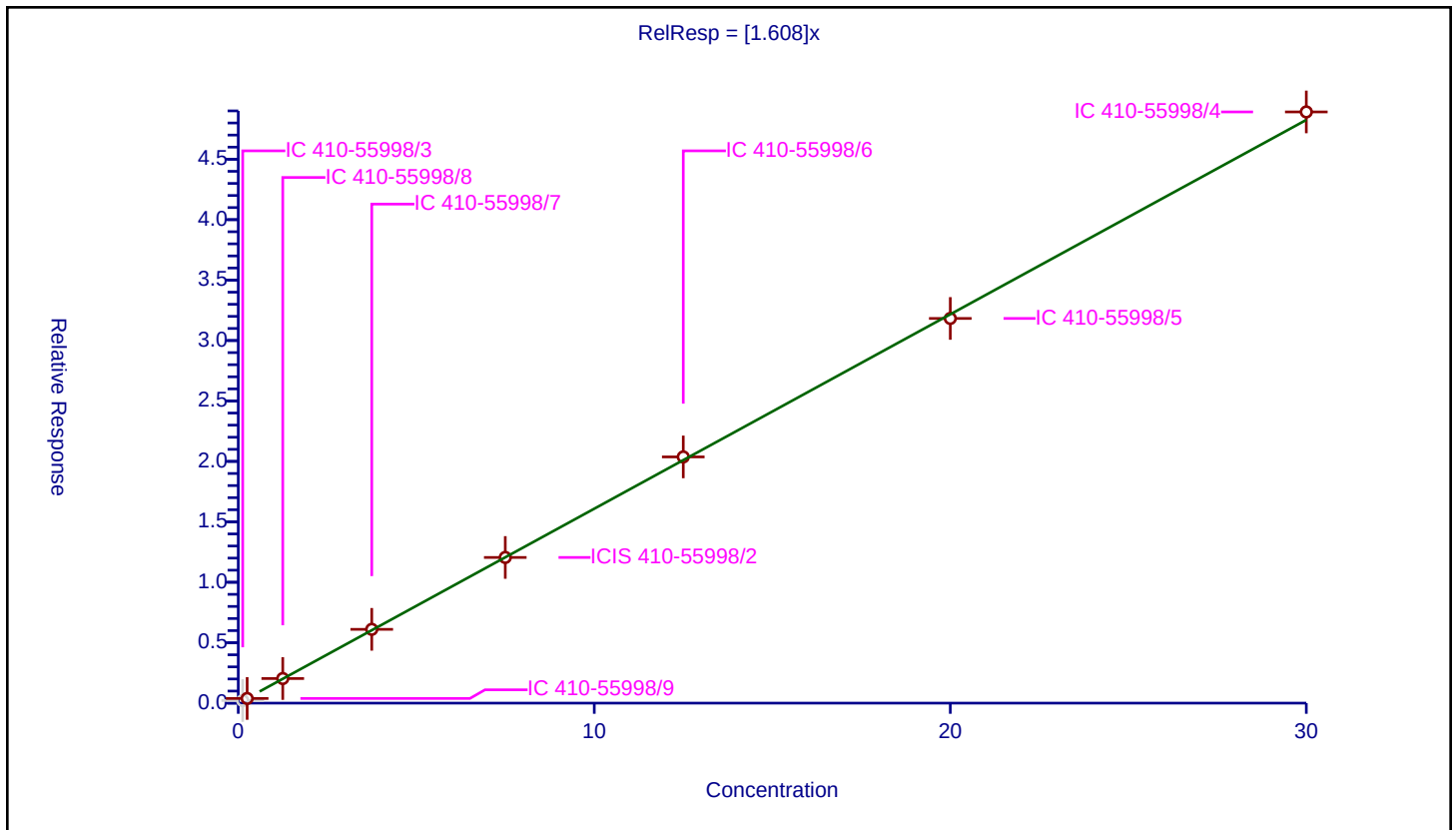
Curve Coefficients

Intercept: 0
 Slope: 1.608

Error Coefficients

Standard Error: 855000
 Relative Standard Error: 2.0
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.214429	5.0	185889.0	1.715432	N
2	IC 410-55998/9	0.25	0.386245	5.0	158164.0	1.544979	Y
3	IC 410-55998/8	1.25	2.034576	5.0	177000.0	1.627661	Y
4	IC 410-55998/7	3.75	6.104926	5.0	148915.0	1.62798	Y
5	ICIS 410-55998/2	7.5	12.052414	5.0	174799.0	1.606989	Y
6	IC 410-55998/6	12.5	20.370977	5.0	178960.0	1.629678	Y
7	IC 410-55998/5	20.0	31.828026	5.0	168950.0	1.591401	Y
8	IC 410-55998/4	30.0	48.914481	5.0	160946.0	1.630483	Y



Calibration

/ Benzyl alcohol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

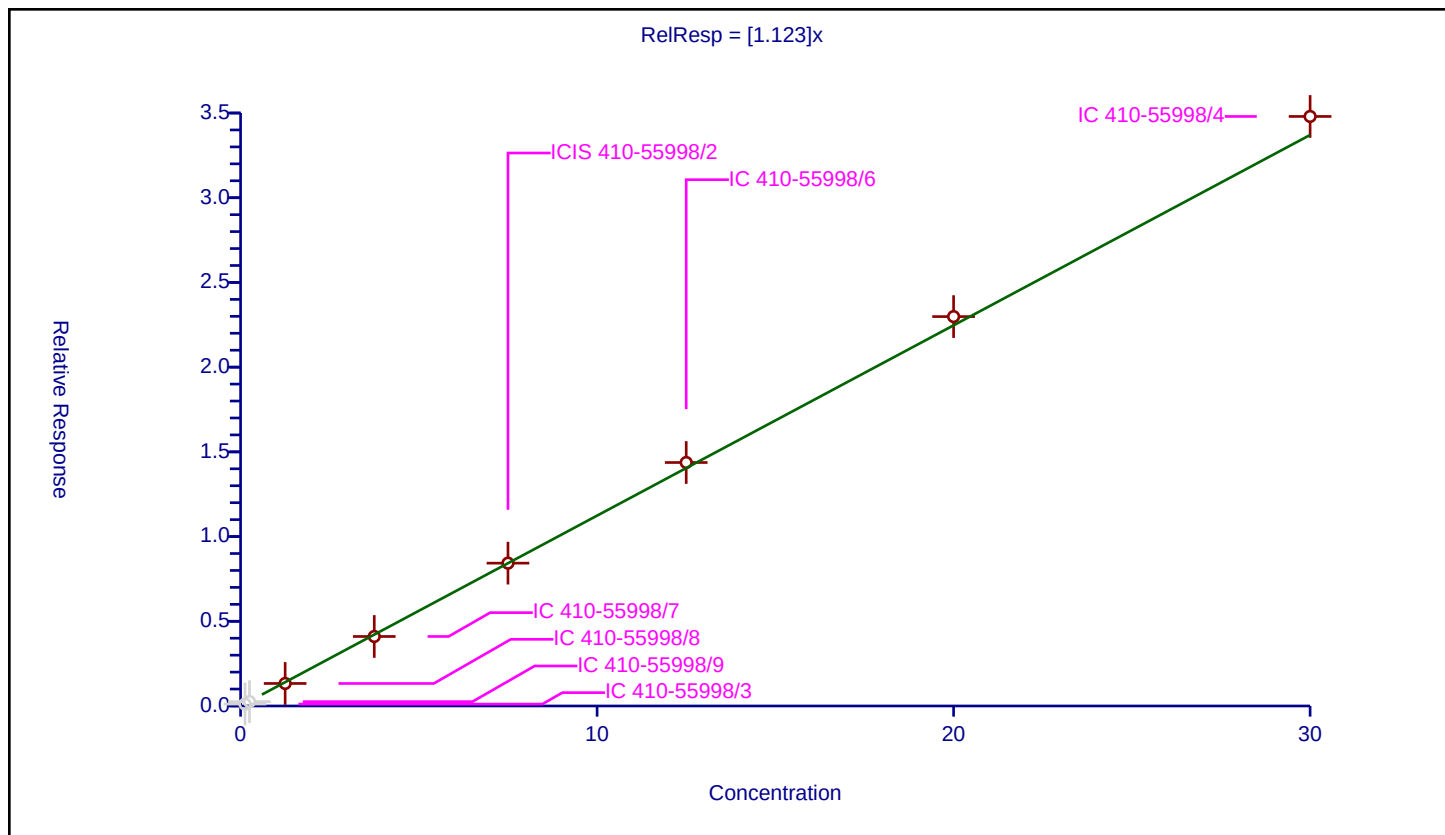
Curve Coefficients

Intercept: 0
 Slope: 1.123

Error Coefficients

Standard Error: 667000
 Relative Standard Error: 3.4
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.112325	5.0	185889.0	0.898601	N
2	IC 410-55998/9	0.25	0.257707	5.0	158164.0	1.030829	N
3	IC 410-55998/8	1.25	1.32935	5.0	177000.0	1.06348	Y
4	IC 410-55998/7	3.75	4.103247	5.0	148915.0	1.094199	Y
5	ICIS 410-55998/2	7.5	8.431456	5.0	174799.0	1.124194	Y
6	IC 410-55998/6	12.5	14.370753	5.0	178960.0	1.14966	Y
7	IC 410-55998/5	20.0	22.984049	5.0	168950.0	1.149202	Y
8	IC 410-55998/4	30.0	34.797075	5.0	160946.0	1.159902	Y



Calibration

/ 1,2-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

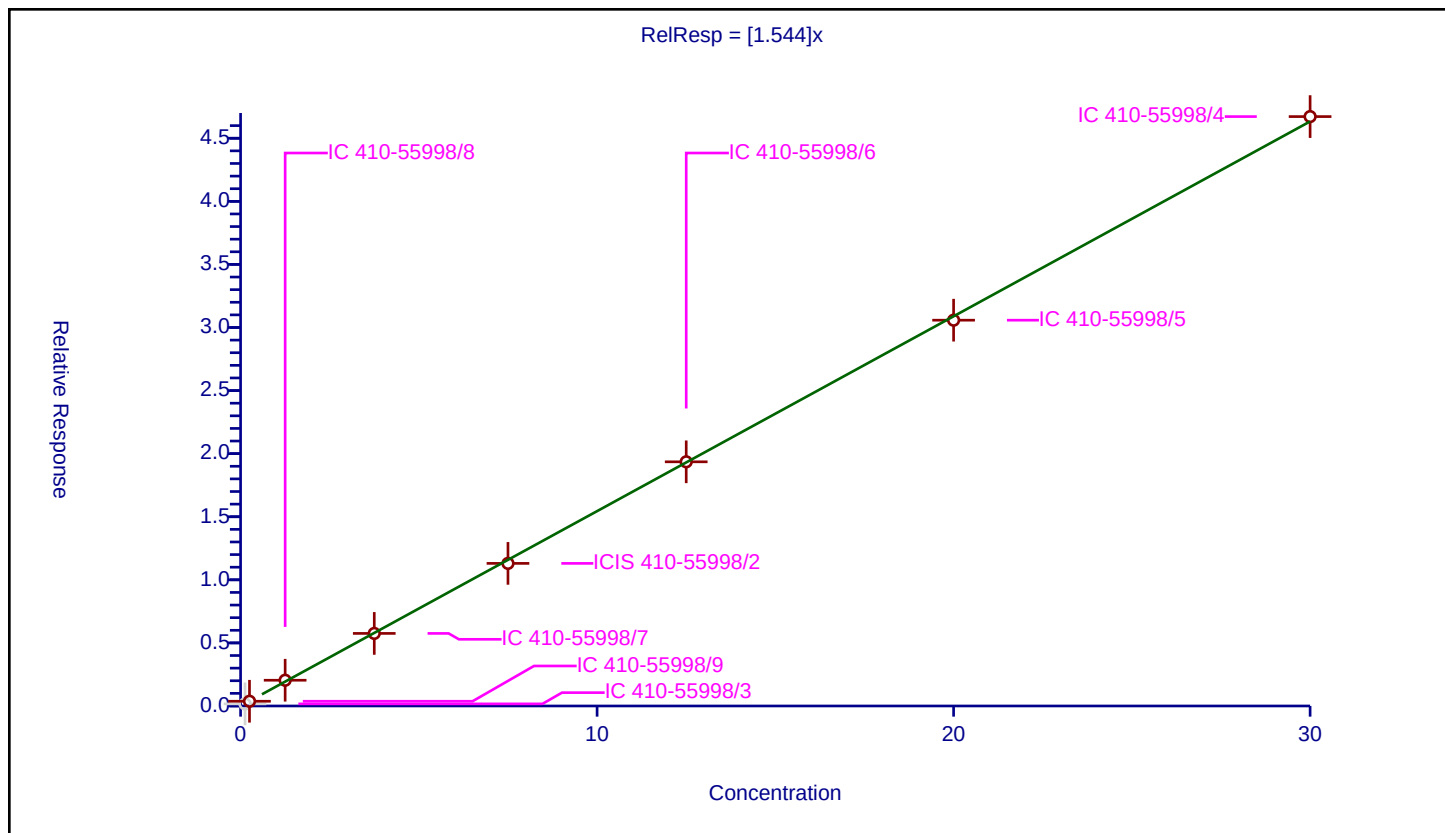
Curve Coefficients

Intercept: 0
 Slope: 1.544

Error Coefficients

Standard Error: 816000
 Relative Standard Error: 2.8
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.167896	5.0	185889.0	1.343167	N
2	IC 410-55998/9	0.25	0.375686	5.0	158164.0	1.502744	Y
3	IC 410-55998/8	1.25	2.040847	5.0	177000.0	1.632678	Y
4	IC 410-55998/7	3.75	5.751368	5.0	148915.0	1.533698	Y
5	ICIS 410-55998/2	7.5	11.302153	5.0	174799.0	1.506954	Y
6	IC 410-55998/6	12.5	19.354018	5.0	178960.0	1.548321	Y
7	IC 410-55998/5	20.0	30.579609	5.0	168950.0	1.52898	Y
8	IC 410-55998/4	30.0	46.716135	5.0	160946.0	1.557204	Y



Calibration

/ Indene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

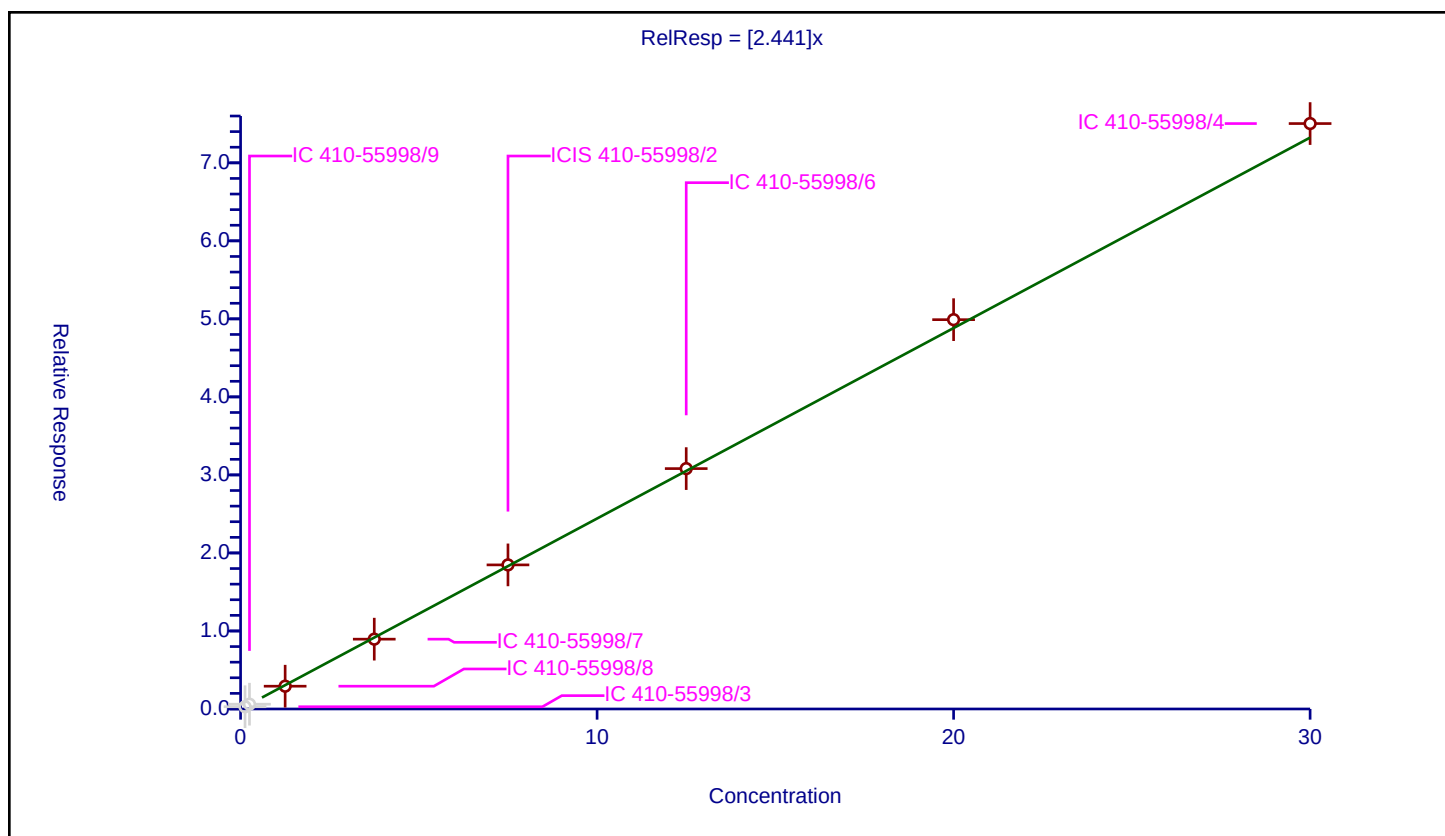
Curve Coefficients

Intercept: 0
 Slope: 2.441

Error Coefficients

Standard Error: 1440000
 Relative Standard Error: 2.7
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.287833	5.0	185889.0	2.302664	N
2	IC 410-55998/9	0.25	0.614331	5.0	158164.0	2.457323	N
3	IC 410-55998/8	1.25	2.921102	5.0	177000.0	2.336881	Y
4	IC 410-55998/7	3.75	8.950106	5.0	148915.0	2.386695	Y
5	ICIS 410-55998/2	7.5	18.468727	5.0	174799.0	2.462497	Y
6	IC 410-55998/6	12.5	30.80979	5.0	178960.0	2.464783	Y
7	IC 410-55998/5	20.0	49.898047	5.0	168950.0	2.494902	Y
8	IC 410-55998/4	30.0	75.033117	5.0	160946.0	2.501104	Y



Calibration

/ 2-Methylphenol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

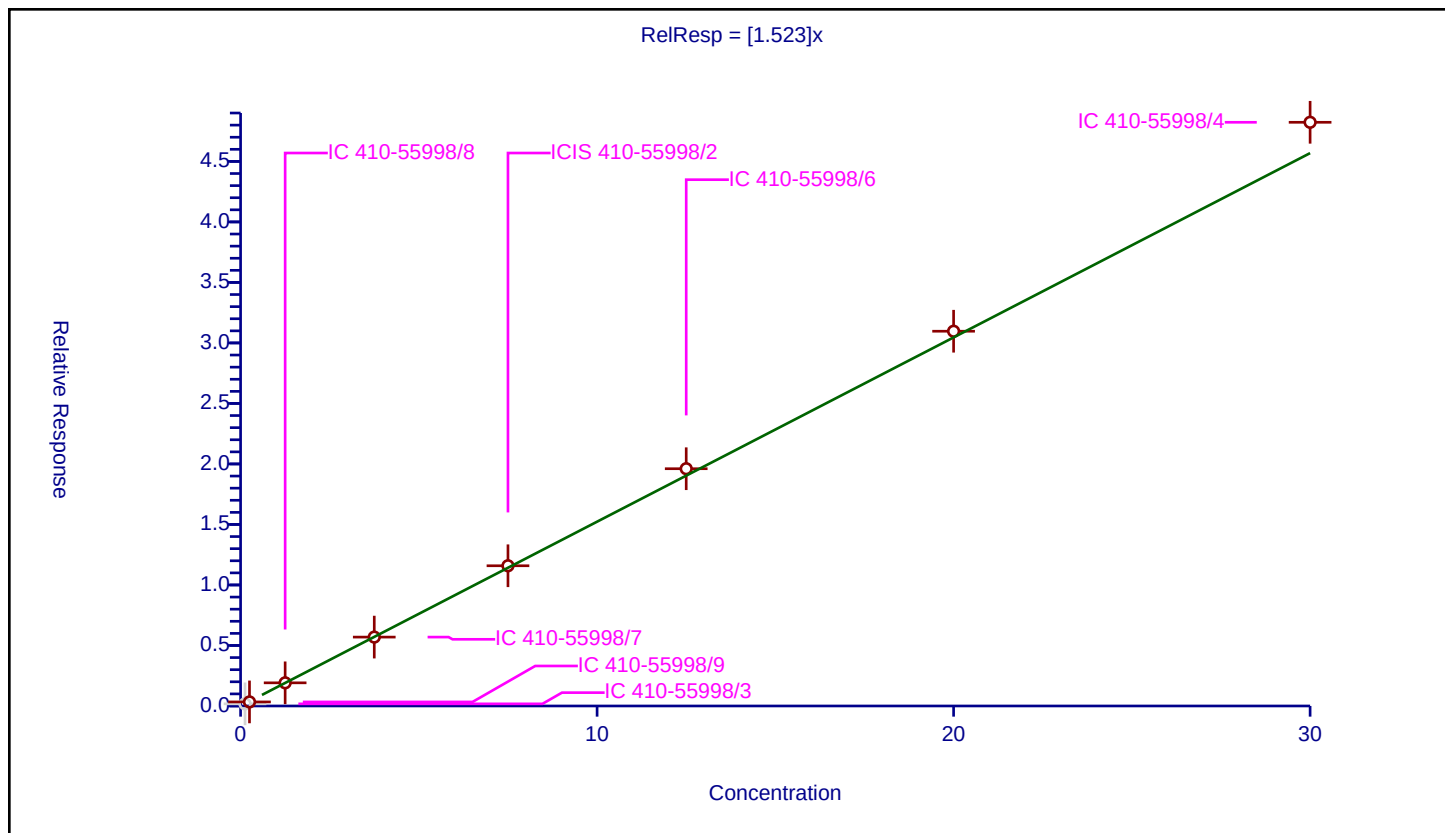
Curve Coefficients

Intercept: 0
 Slope: 1.523

Error Coefficients

Standard Error: 836000
 Relative Standard Error: 5.6
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.177203	5.0	185889.0	1.41762	N
2	IC 410-55998/9	0.25	0.33538	5.0	158164.0	1.341519	Y
3	IC 410-55998/8	1.25	1.913192	5.0	177000.0	1.530554	Y
4	IC 410-55998/7	3.75	5.692543	5.0	148915.0	1.518011	Y
5	ICIS 410-55998/2	7.5	11.588281	5.0	174799.0	1.545104	Y
6	IC 410-55998/6	12.5	19.607007	5.0	178960.0	1.568561	Y
7	IC 410-55998/5	20.0	30.9686	5.0	168950.0	1.54843	Y
8	IC 410-55998/4	30.0	48.233662	5.0	160946.0	1.607789	Y



Calibration

/ 2,2'-oxybis[1-chloropropane]

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

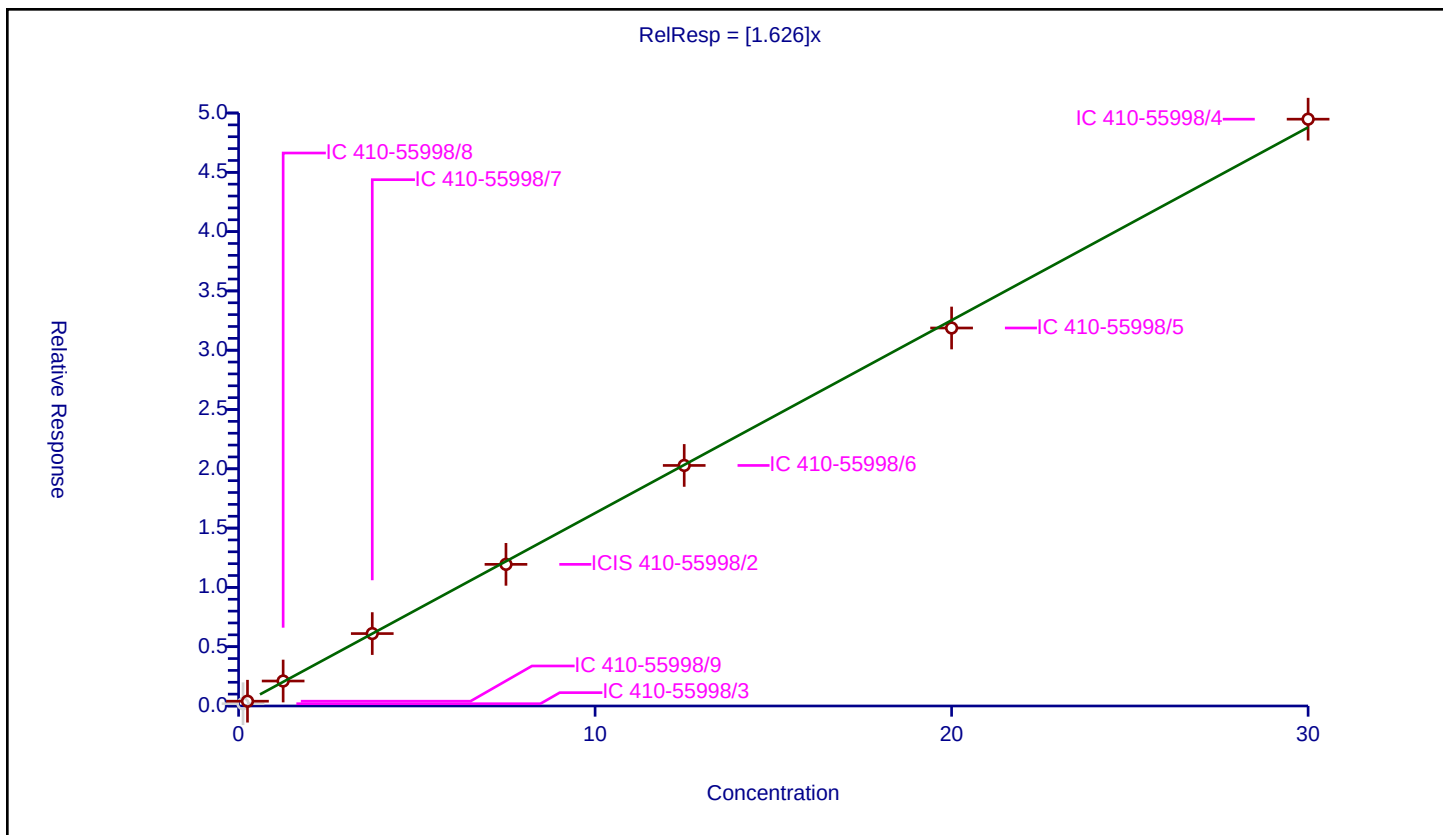
Curve Coefficients

Intercept: 0
 Slope: 1.626

Error Coefficients

Standard Error: 860000
 Relative Standard Error: 2.0
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.193287	5.0	185889.0	1.546299	N
2	IC 410-55998/9	0.25	0.403347	5.0	158164.0	1.613389	Y
3	IC 410-55998/8	1.25	2.105678	5.0	177000.0	1.684542	Y
4	IC 410-55998/7	3.75	6.106134	5.0	148915.0	1.628302	Y
5	ICIS 410-55998/2	7.5	11.943718	5.0	174799.0	1.592496	Y
6	IC 410-55998/6	12.5	20.282158	5.0	178960.0	1.622573	Y
7	IC 410-55998/5	20.0	31.871057	5.0	168950.0	1.593553	Y
8	IC 410-55998/4	30.0	49.480789	5.0	160946.0	1.64936	Y



Calibration

/ N-Nitrosopyrrolidine

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

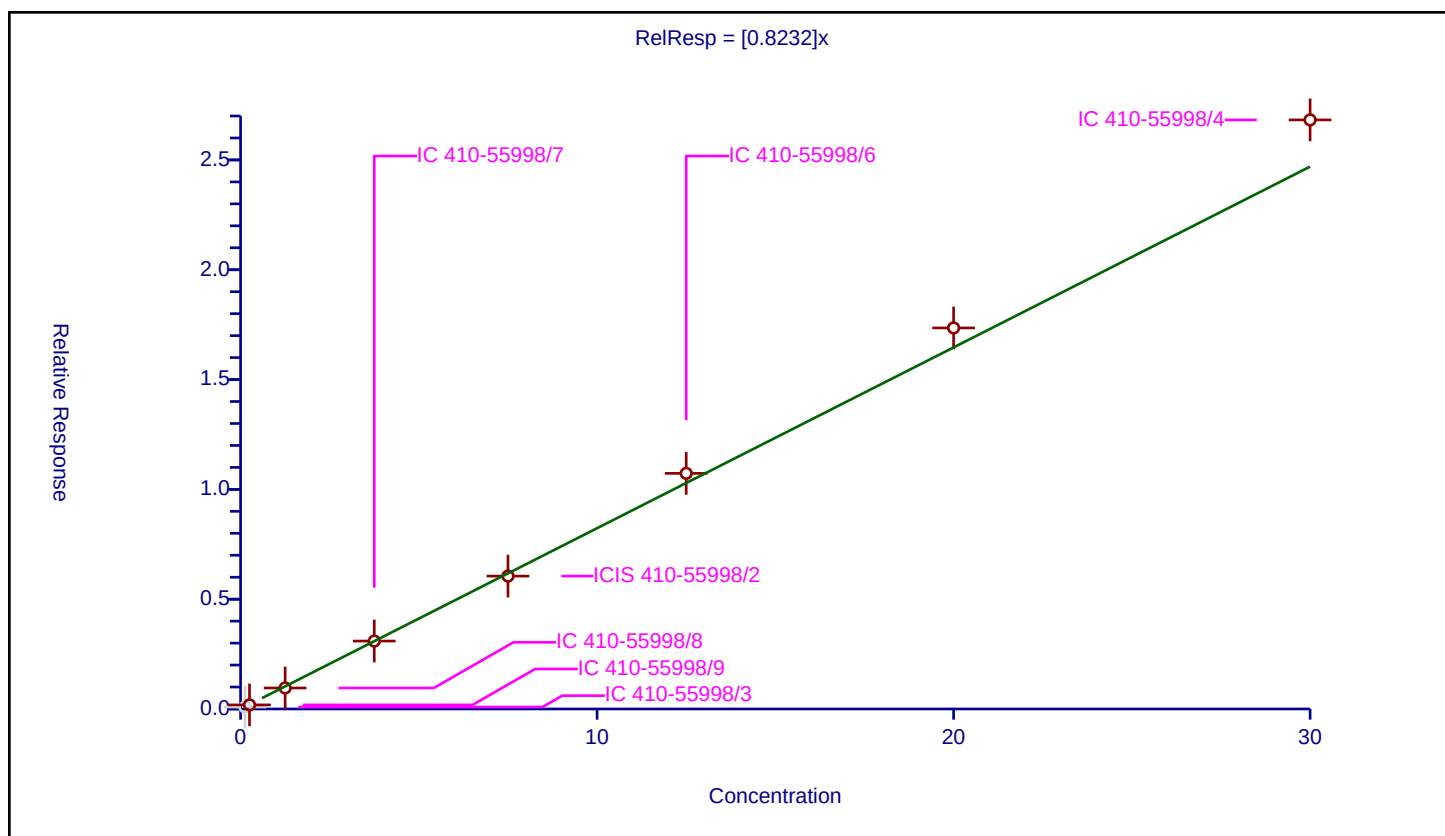
Curve Coefficients

Intercept: 0
 Slope: 0.8232

Error Coefficients

Standard Error: 464000
 Relative Standard Error: 6.6
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.089381	5.0	185889.0	0.71505	N
2	IC 410-55998/9	0.25	0.18642	5.0	158164.0	0.745682	Y
3	IC 410-55998/8	1.25	0.955989	5.0	177000.0	0.764791	Y
4	IC 410-55998/7	3.75	3.093644	5.0	148915.0	0.824972	Y
5	ICIS 410-55998/2	7.5	6.051379	5.0	174799.0	0.806851	Y
6	IC 410-55998/6	12.5	10.72871	5.0	178960.0	0.858297	Y
7	IC 410-55998/5	20.0	17.350429	5.0	168950.0	0.867521	Y
8	IC 410-55998/4	30.0	26.822972	5.0	160946.0	0.894099	Y



Calibration

/ Acetophenone

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

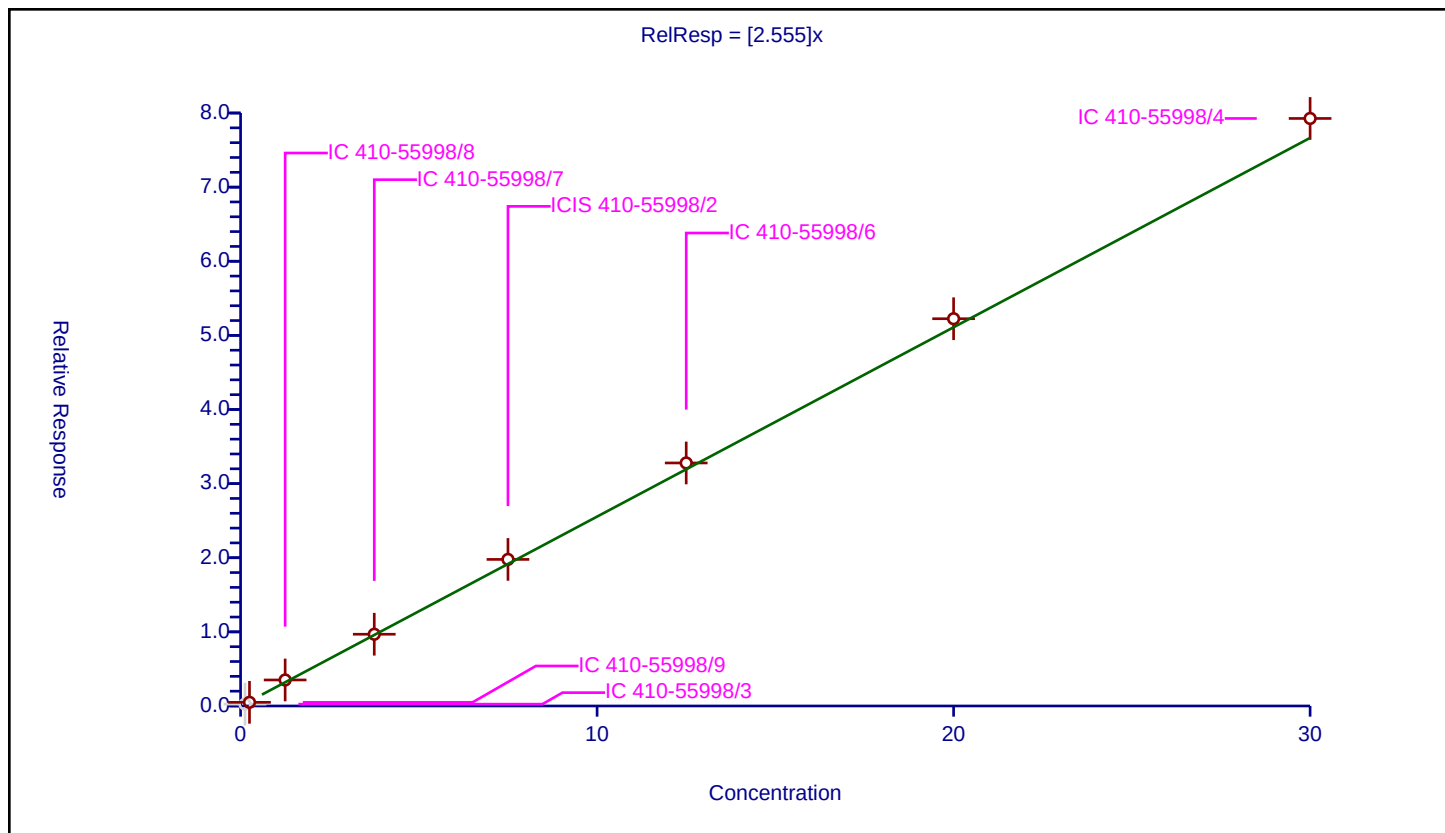
Curve Coefficients

Intercept: 0
Slope: 2.555

Error Coefficients

Standard Error: 1390000
Relative Standard Error: 10.3
Correlation Coefficient: 0.997
Coefficient of Determination (Adjusted): 0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.251225	5.0	185889.0	2.009802	N
2	IC 410-55998/9	0.25	0.49474	5.0	158164.0	1.978959	Y
3	IC 410-55998/8	1.25	3.510819	5.0	177000.0	2.808655	Y
4	IC 410-55998/7	3.75	9.679985	5.0	148915.0	2.581329	Y
5	ICIS 410-55998/2	7.5	19.77497	5.0	174799.0	2.636663	Y
6	IC 410-55998/6	12.5	32.789031	5.0	178960.0	2.623122	Y
7	IC 410-55998/5	20.0	52.247825	5.0	168950.0	2.612391	Y
8	IC 410-55998/4	30.0	79.267456	5.0	160946.0	2.642249	Y



Calibration

/ N-Nitrosodi-n-propylamine

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

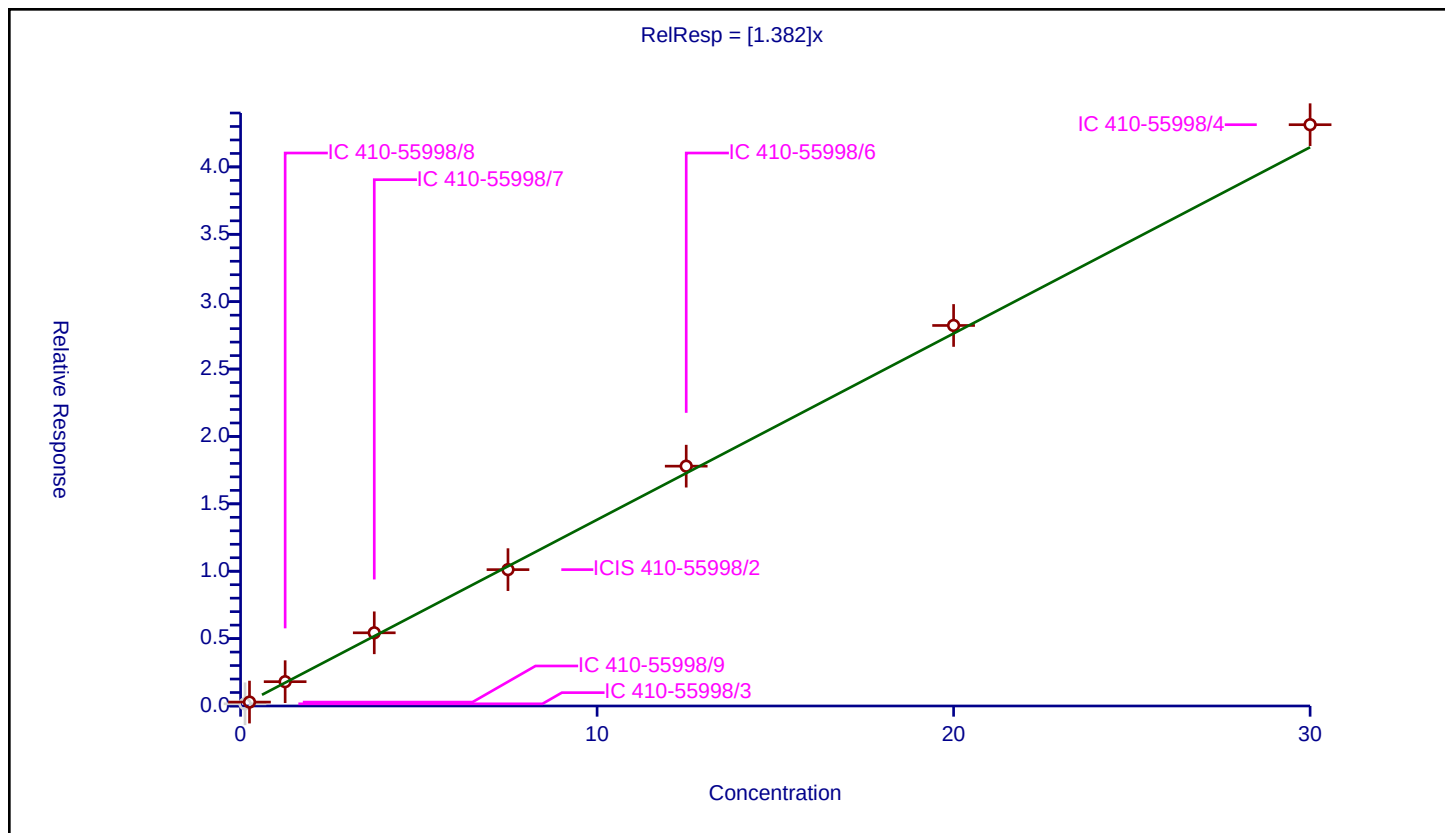
Curve Coefficients

Intercept: 0
 Slope: 1.382

Error Coefficients

Standard Error: 753000
 Relative Standard Error: 7.5
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.162247	5.0	185889.0	1.297979	N
2	IC 410-55998/9	0.25	0.29011	5.0	158164.0	1.160441	Y
3	IC 410-55998/8	1.25	1.80435	5.0	177000.0	1.44348	Y
4	IC 410-55998/7	3.75	5.429809	5.0	148915.0	1.447949	Y
5	ICIS 410-55998/2	7.5	10.11825	5.0	174799.0	1.3491	Y
6	IC 410-55998/6	12.5	17.795904	5.0	178960.0	1.423672	Y
7	IC 410-55998/5	20.0	28.236017	5.0	168950.0	1.411801	Y
8	IC 410-55998/4	30.0	43.133846	5.0	160946.0	1.437795	Y



Calibration

/ 4-Methylphenol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

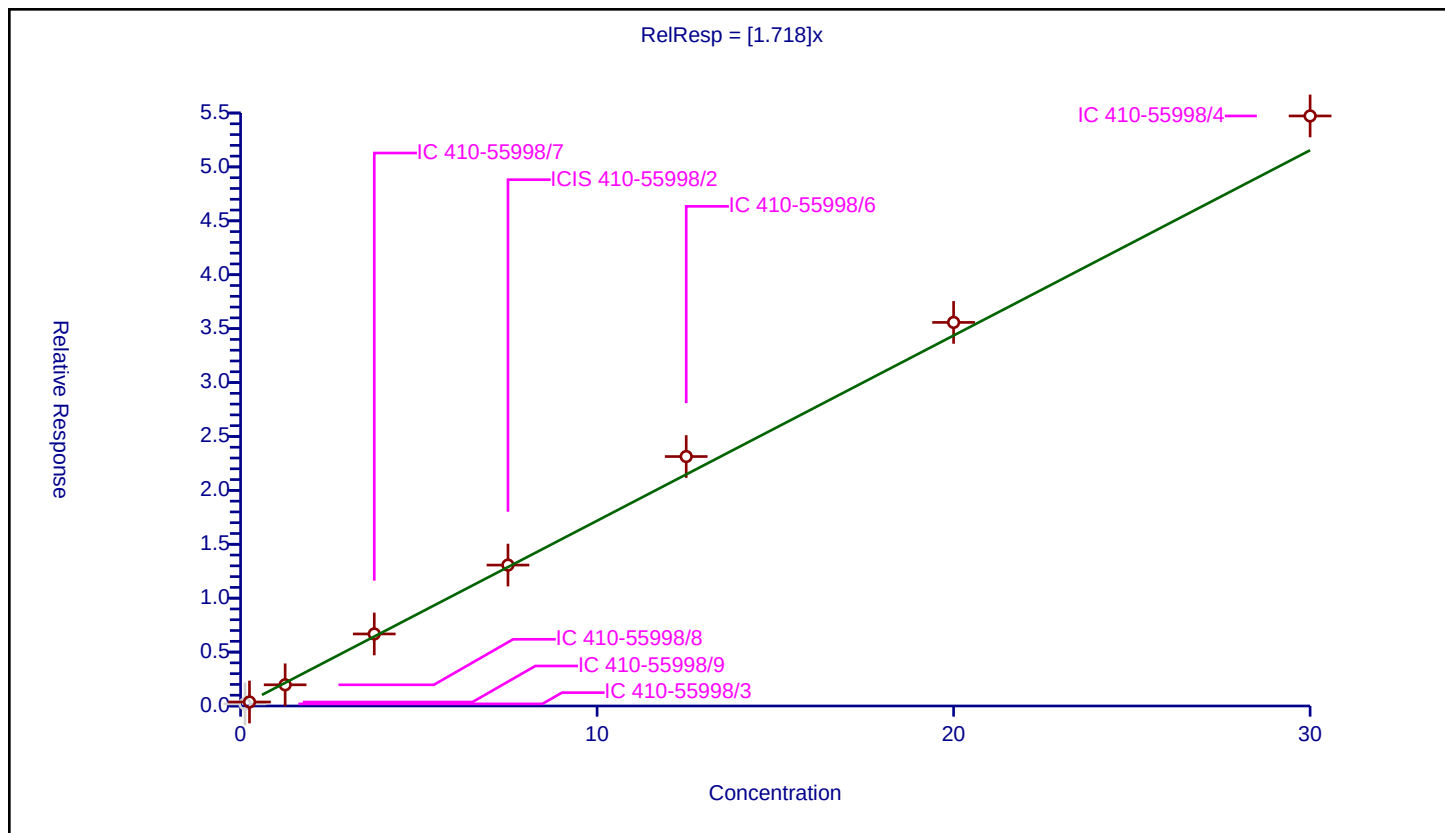
Curve Coefficients

Intercept: 0
 Slope: 1.718

Error Coefficients

Standard Error: 956000
 Relative Standard Error: 8.1
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.197833	5.0	185889.0	1.582665	N
2	IC 410-55998/9	0.25	0.369047	5.0	158164.0	1.476189	Y
3	IC 410-55998/8	1.25	1.965593	5.0	177000.0	1.572475	Y
4	IC 410-55998/7	3.75	6.681966	5.0	148915.0	1.781858	Y
5	ICIS 410-55998/2	7.5	13.069669	5.0	174799.0	1.742622	Y
6	IC 410-55998/6	12.5	23.137824	5.0	178960.0	1.851026	Y
7	IC 410-55998/5	20.0	35.579521	5.0	168950.0	1.778976	Y
8	IC 410-55998/4	30.0	54.728542	5.0	160946.0	1.824285	Y



Calibration

/ N-Nitrosomorpholine

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

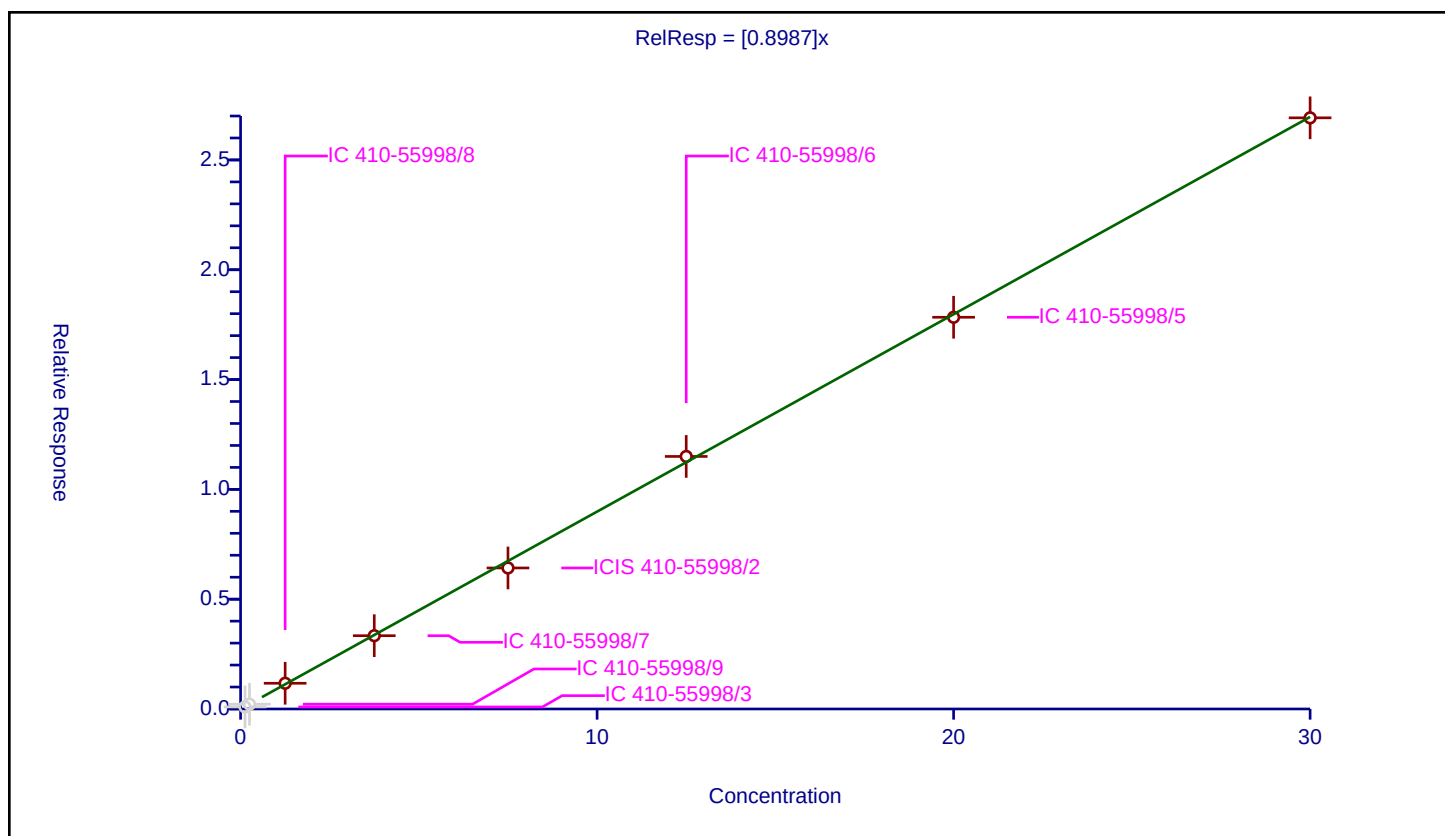
Curve Coefficients

Intercept: 0
 Slope: 0.8987

Error Coefficients

Standard Error: 519000
 Relative Standard Error: 3.1
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.092421	5.0	185889.0	0.739366	N
2	IC 410-55998/9	0.25	0.217527	5.0	158164.0	0.87011	N
3	IC 410-55998/8	1.25	1.171158	5.0	177000.0	0.936927	Y
4	IC 410-55998/7	3.75	3.337004	5.0	148915.0	0.889868	Y
5	ICIS 410-55998/2	7.5	6.421862	5.0	174799.0	0.856248	Y
6	IC 410-55998/6	12.5	11.499274	5.0	178960.0	0.919942	Y
7	IC 410-55998/5	20.0	17.836875	5.0	168950.0	0.891844	Y
8	IC 410-55998/4	30.0	26.916823	5.0	160946.0	0.897227	Y



Calibration

/ 2-Toluidine

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

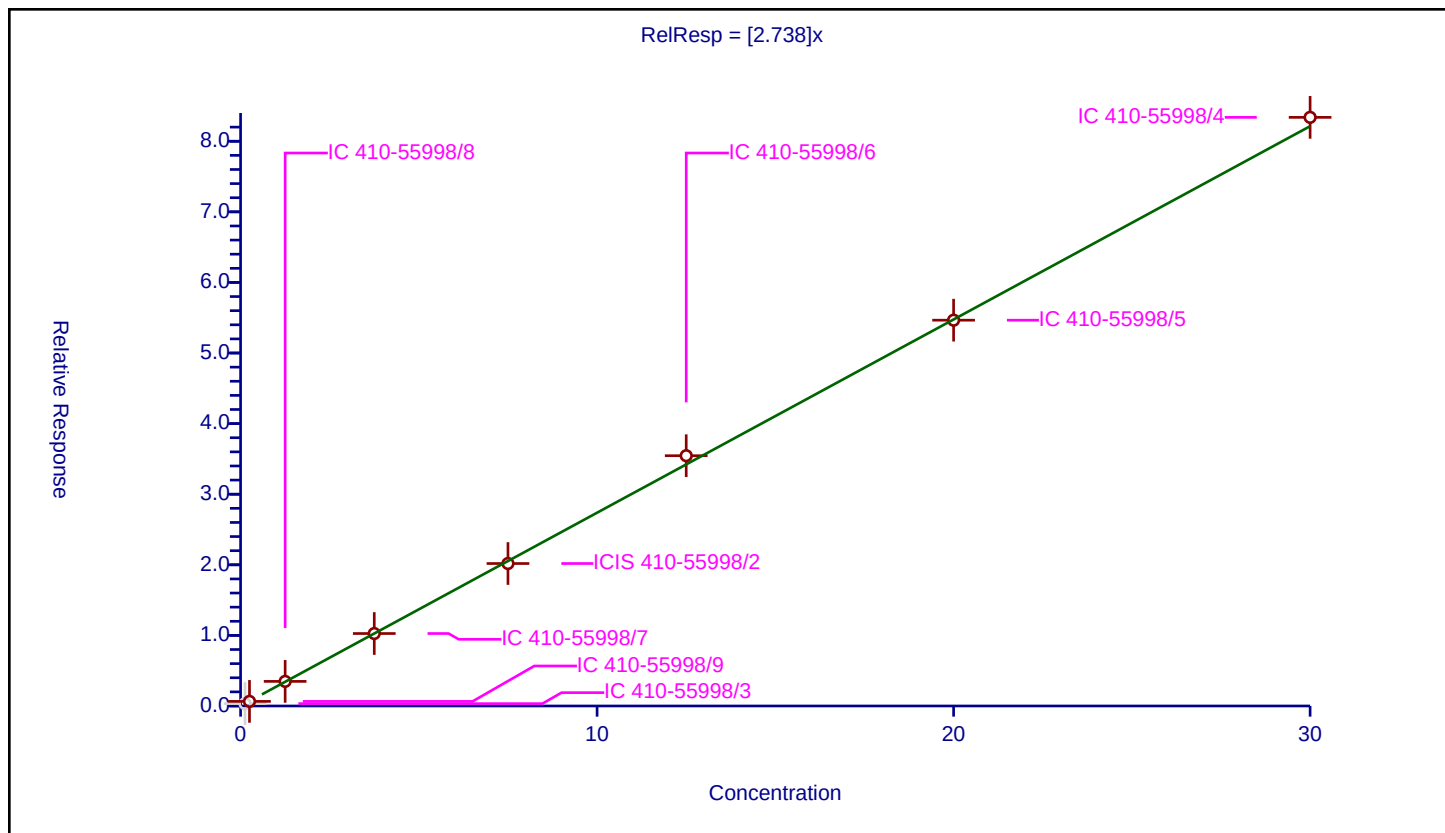
Curve Coefficients

Intercept: 0
 Slope: 2.738

Error Coefficients

Standard Error: 1460000
 Relative Standard Error: 2.8
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.334985	5.0	185889.0	2.679879	N
2	IC 410-55998/9	0.25	0.64999	5.0	158164.0	2.59996	Y
3	IC 410-55998/8	1.25	3.48435	5.0	177000.0	2.78748	Y
4	IC 410-55998/7	3.75	10.264849	5.0	148915.0	2.737293	Y
5	ICIS 410-55998/2	7.5	20.18198	5.0	174799.0	2.690931	Y
6	IC 410-55998/6	12.5	35.454264	5.0	178960.0	2.836341	Y
7	IC 410-55998/5	20.0	54.65179	5.0	168950.0	2.73259	Y
8	IC 410-55998/4	30.0	83.385918	5.0	160946.0	2.779531	Y



Calibration

/ Hexachloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

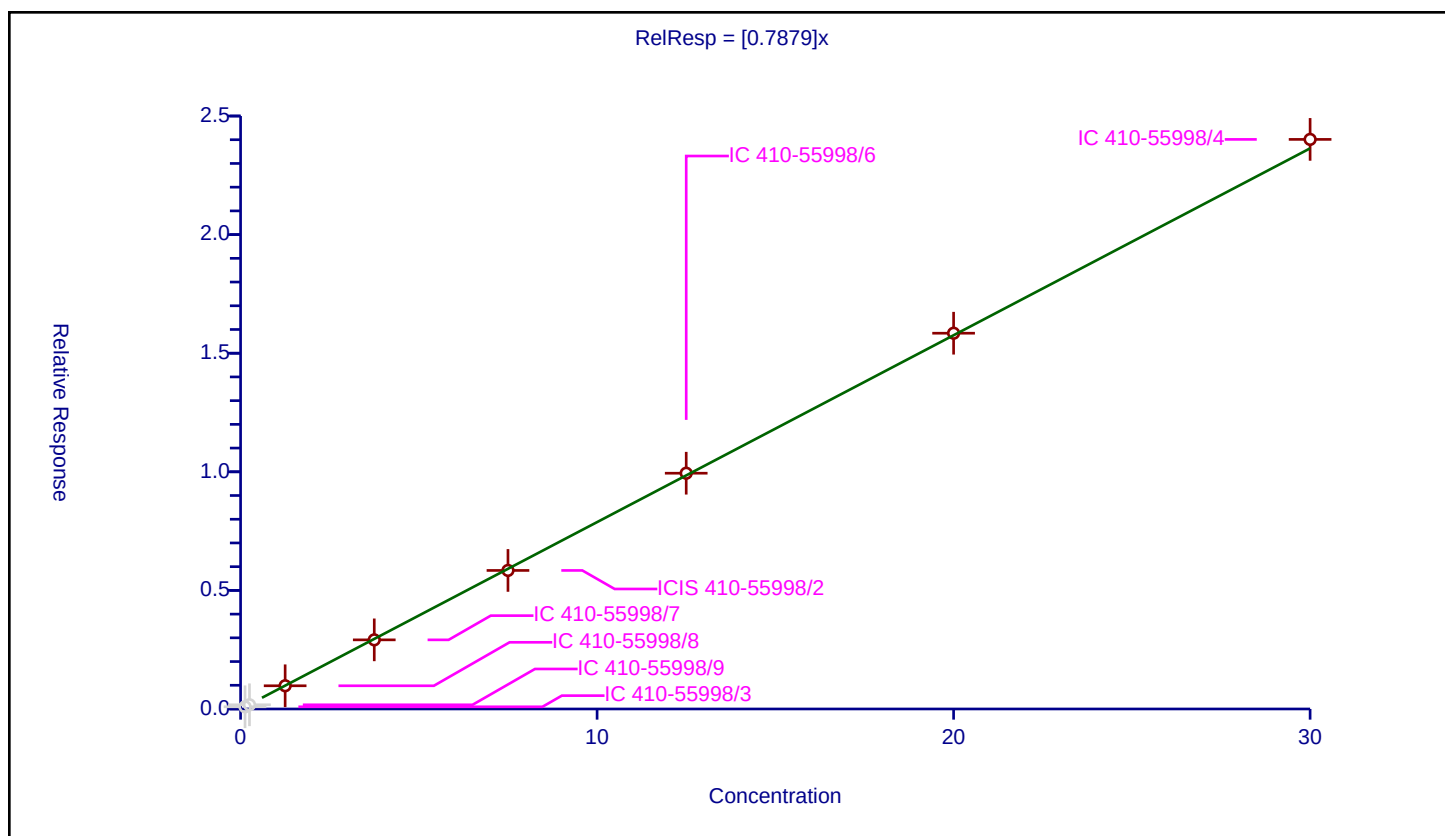
Curve Coefficients

Intercept: 0
 Slope: 0.7879

Error Coefficients

Standard Error: 461000
 Relative Standard Error: 1.2
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.092797	5.0	185889.0	0.742379	N
2	IC 410-55998/9	0.25	0.176557	5.0	158164.0	0.706229	N
3	IC 410-55998/8	1.25	0.979153	5.0	177000.0	0.783322	Y
4	IC 410-55998/7	3.75	2.914549	5.0	148915.0	0.777213	Y
5	ICIS 410-55998/2	7.5	5.841138	5.0	174799.0	0.778818	Y
6	IC 410-55998/6	12.5	9.940629	5.0	178960.0	0.79525	Y
7	IC 410-55998/5	20.0	15.84306	5.0	168950.0	0.792153	Y
8	IC 410-55998/4	30.0	24.0138	5.0	160946.0	0.80046	Y



Calibration

/ Nitrobenzene-d5

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

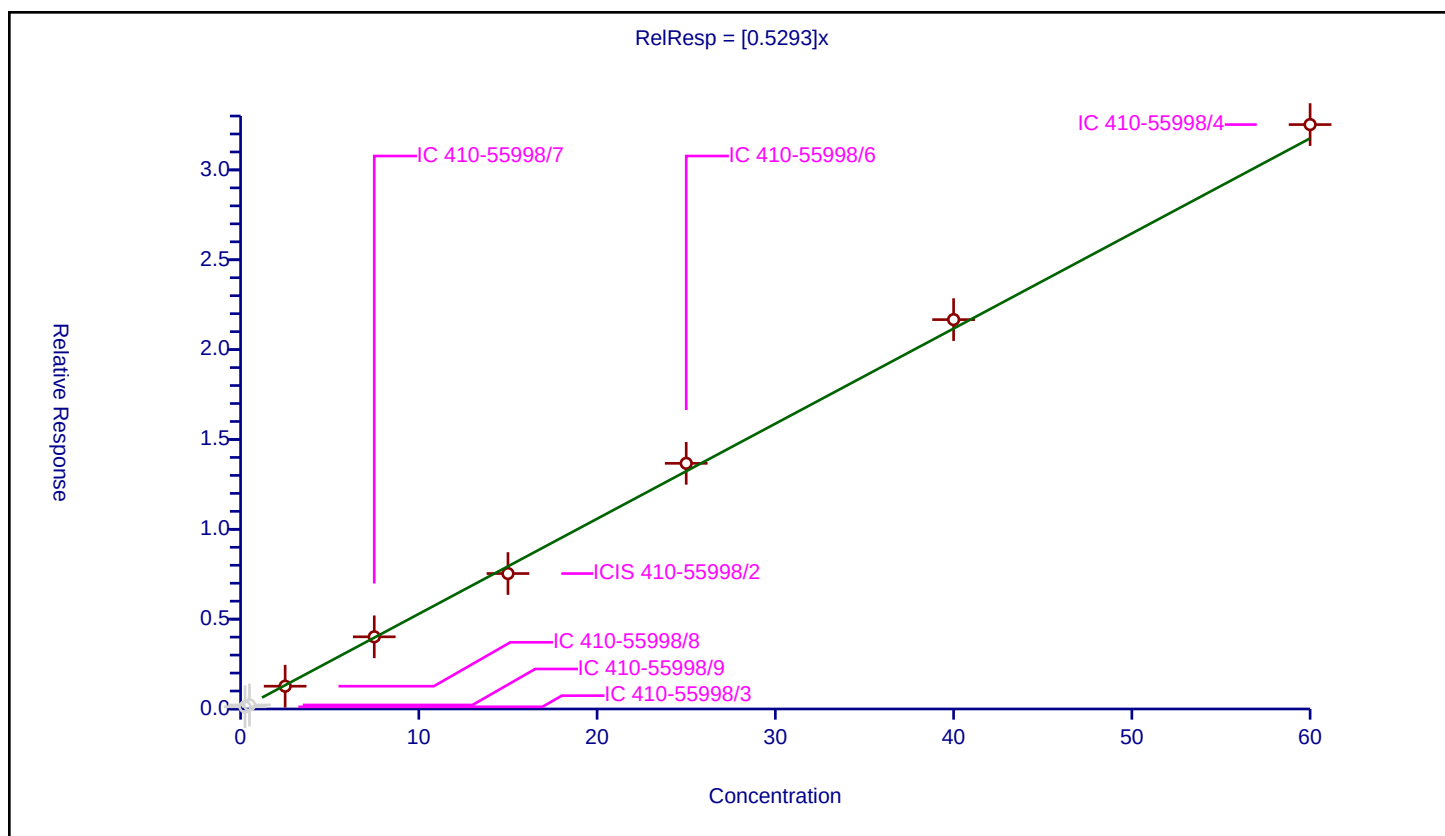
Curve Coefficients

Intercept: 0
 Slope: 0.5293

Error Coefficients

Standard Error: 2430000
 Relative Standard Error: 3.7
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.25	0.122239	5.0	696466.0	0.488954	N
2	IC 410-55998/9	0.5	0.225049	5.0	594804.0	0.450098	N
3	IC 410-55998/8	2.5	1.267567	5.0	687743.0	0.507027	Y
4	IC 410-55998/7	7.5	4.01614	5.0	565126.0	0.535485	Y
5	ICIS 410-55998/2	15.0	7.538705	5.0	679758.0	0.50258	Y
6	IC 410-55998/6	25.0	13.671452	5.0	689215.0	0.546858	Y
7	IC 410-55998/5	40.0	21.669519	5.0	646234.0	0.541738	Y
8	IC 410-55998/4	60.0	32.52288	5.0	628926.0	0.542048	Y



Calibration

/ Nitrobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

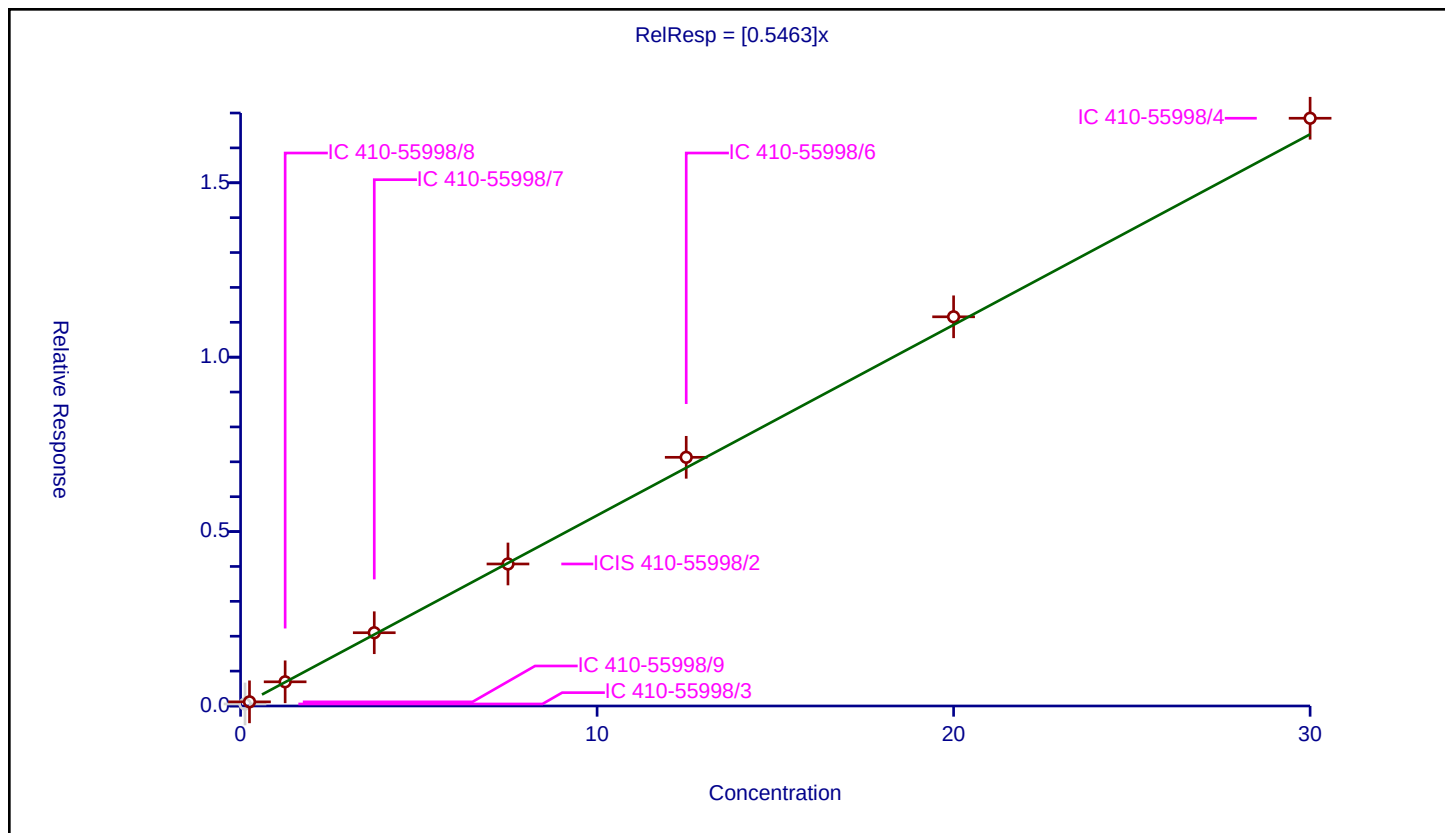
Curve Coefficients

Intercept: 0
 Slope: 0.5463

Error Coefficients

Standard Error: 1150000
 Relative Standard Error: 5.8
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.057576	5.0	696466.0	0.460611	N
2	IC 410-55998/9	0.25	0.119241	5.0	594804.0	0.476964	Y
3	IC 410-55998/8	1.25	0.693217	5.0	687743.0	0.554573	Y
4	IC 410-55998/7	3.75	2.100319	5.0	565126.0	0.560085	Y
5	ICIS 410-55998/2	7.5	4.071383	5.0	679758.0	0.542851	Y
6	IC 410-55998/6	12.5	7.129517	5.0	689215.0	0.570361	Y
7	IC 410-55998/5	20.0	11.157499	5.0	646234.0	0.557875	Y
8	IC 410-55998/4	30.0	16.850416	5.0	628926.0	0.561681	Y



Calibration

/ N-Nitrosopiperidine

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

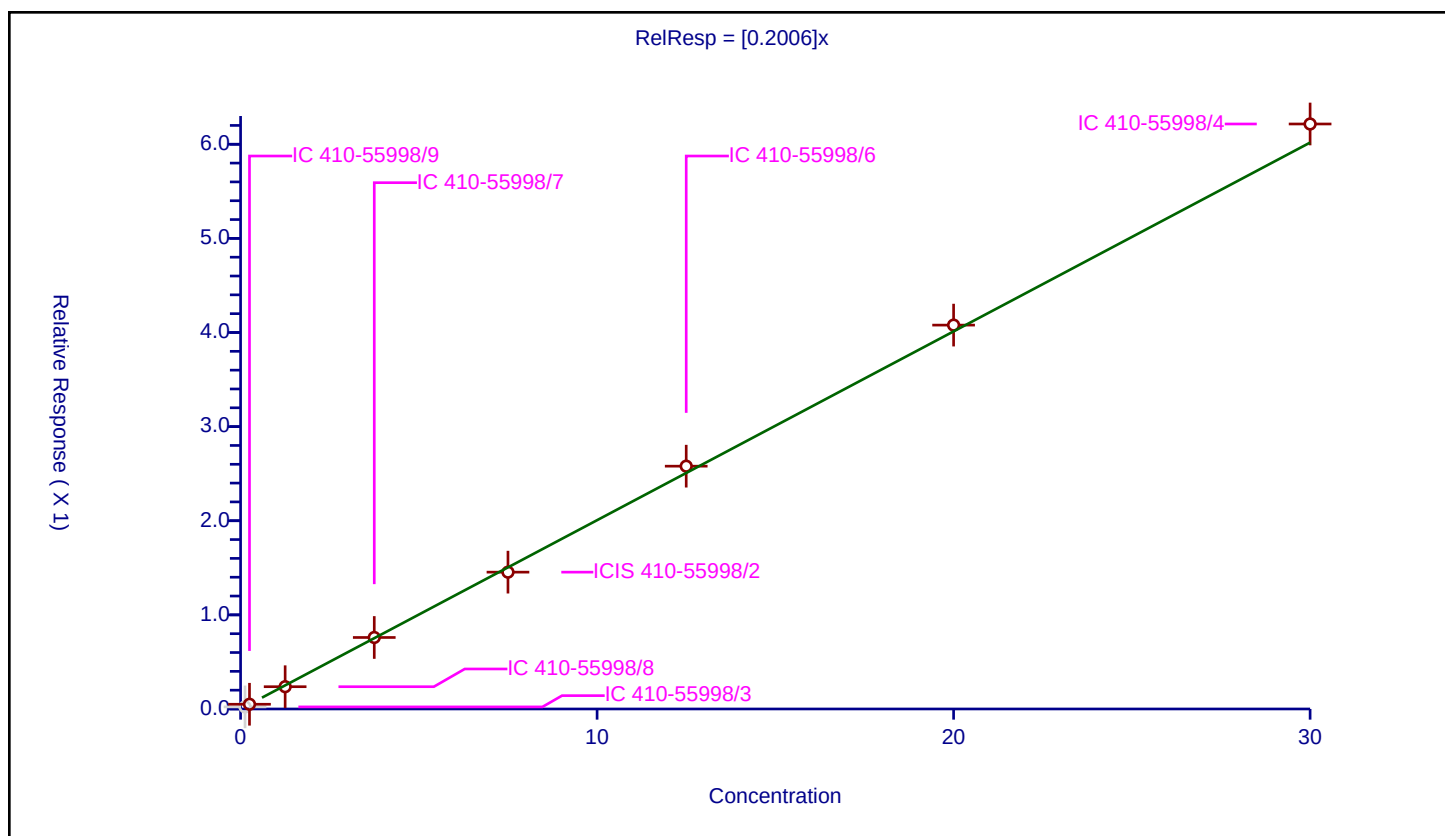
Curve Coefficients

Intercept: 0
 Slope: 0.2006

Error Coefficients

Standard Error: 421000
 Relative Standard Error: 3.3
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.022334	5.0	696466.0	0.178673	N
2	IC 410-55998/9	0.25	0.050201	5.0	594804.0	0.200806	Y
3	IC 410-55998/8	1.25	0.236818	5.0	687743.0	0.189454	Y
4	IC 410-55998/7	3.75	0.759618	5.0	565126.0	0.202565	Y
5	ICIS 410-55998/2	7.5	1.453709	5.0	679758.0	0.193828	Y
6	IC 410-55998/6	12.5	2.579681	5.0	689215.0	0.206374	Y
7	IC 410-55998/5	20.0	4.078515	5.0	646234.0	0.203926	Y
8	IC 410-55998/4	30.0	6.215175	5.0	628926.0	0.207172	Y



Calibration

/ Isophorone

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

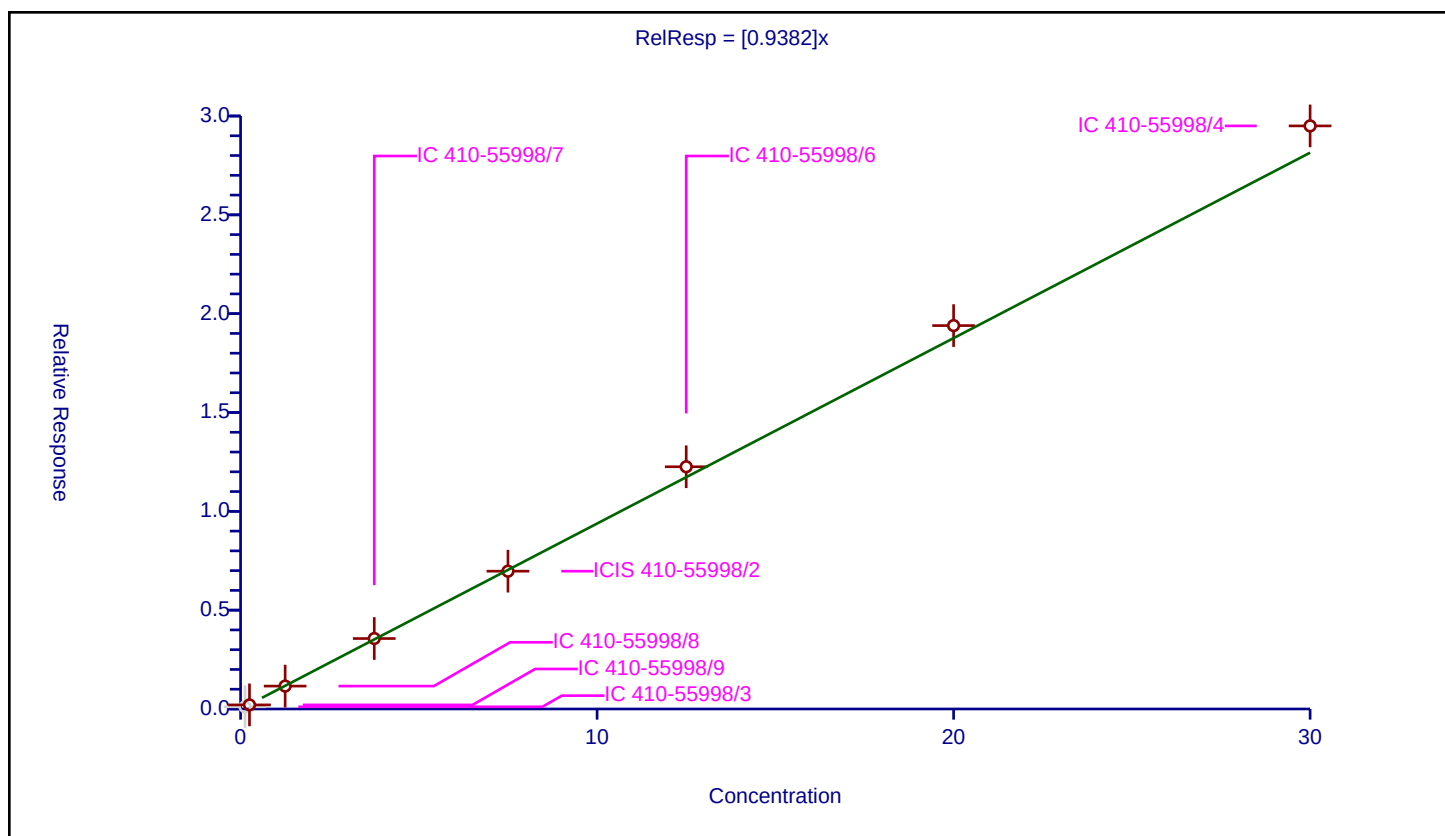
Curve Coefficients

Intercept: 0
 Slope: 0.9382

Error Coefficients

Standard Error: 2000000
 Relative Standard Error: 5.8
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.111211	5.0	696466.0	0.889692	N
2	IC 410-55998/9	0.25	0.206581	5.0	594804.0	0.826323	Y
3	IC 410-55998/8	1.25	1.158471	5.0	687743.0	0.926776	Y
4	IC 410-55998/7	3.75	3.565665	5.0	565126.0	0.950844	Y
5	ICIS 410-55998/2	7.5	6.971893	5.0	679758.0	0.929586	Y
6	IC 410-55998/6	12.5	12.254398	5.0	689215.0	0.980352	Y
7	IC 410-55998/5	20.0	19.397084	5.0	646234.0	0.969854	Y
8	IC 410-55998/4	30.0	29.499742	5.0	628926.0	0.983325	Y



Calibration

/ 2-Nitrophenol

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

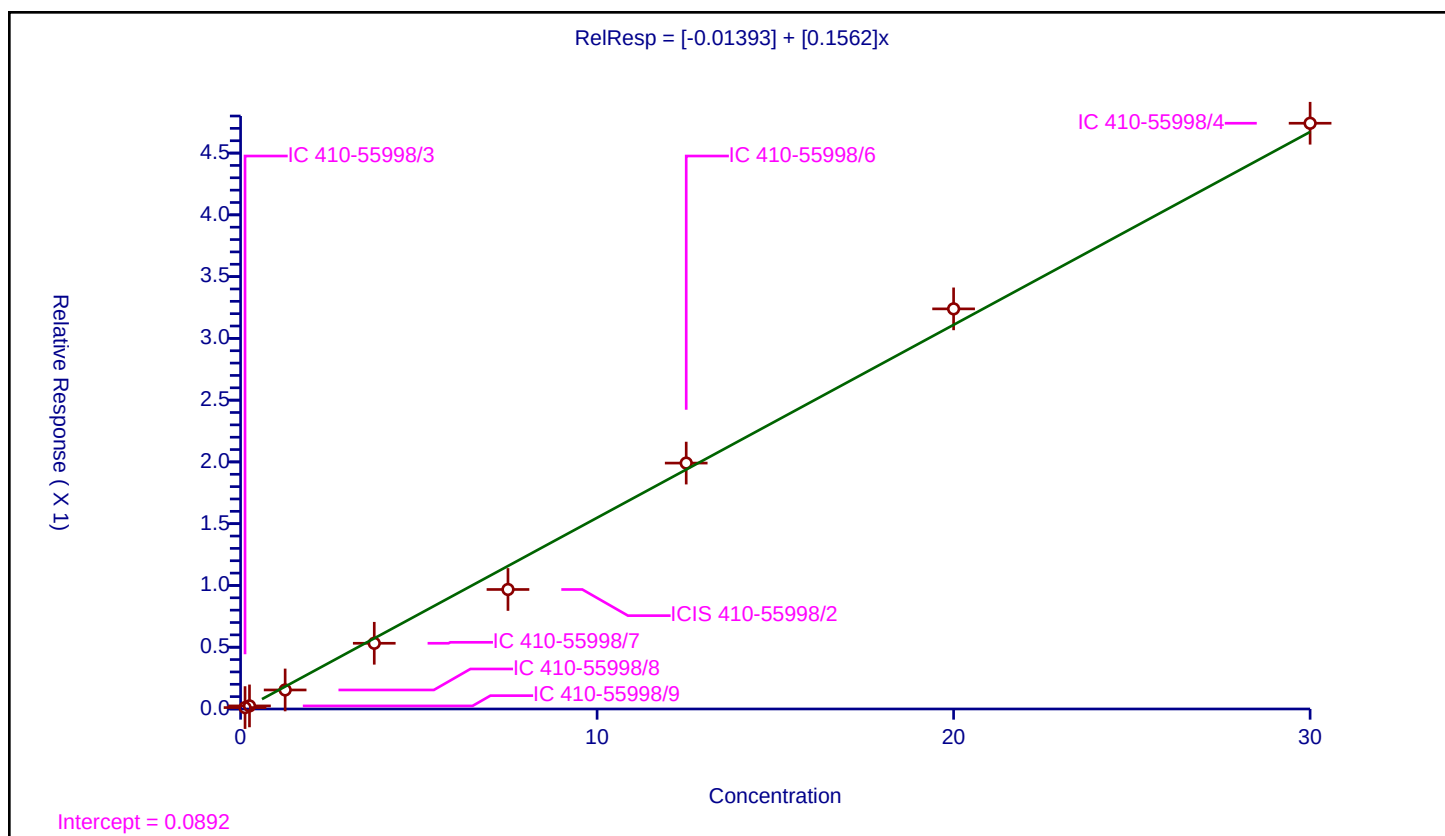
Curve Coefficients

Intercept: -0.01393
 Slope: 0.1562

Error Coefficients

Standard Error: 323000
 Relative Standard Error: 15.2
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.011329	5.0	696466.0	0.090629	Y
2	IC 410-55998/9	0.25	0.024832	5.0	594804.0	0.099327	Y
3	IC 410-55998/8	1.25	0.154076	5.0	687743.0	0.123261	Y
4	IC 410-55998/7	3.75	0.531943	5.0	565126.0	0.141852	Y
5	ICIS 410-55998/2	7.5	0.967433	5.0	679758.0	0.128991	Y
6	IC 410-55998/6	12.5	1.990656	5.0	689215.0	0.159252	Y
7	IC 410-55998/5	20.0	3.238927	5.0	646234.0	0.161946	Y
8	IC 410-55998/4	30.0	4.741392	5.0	628926.0	0.158046	Y



Calibration

/ 2,4-Dimethylphenol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

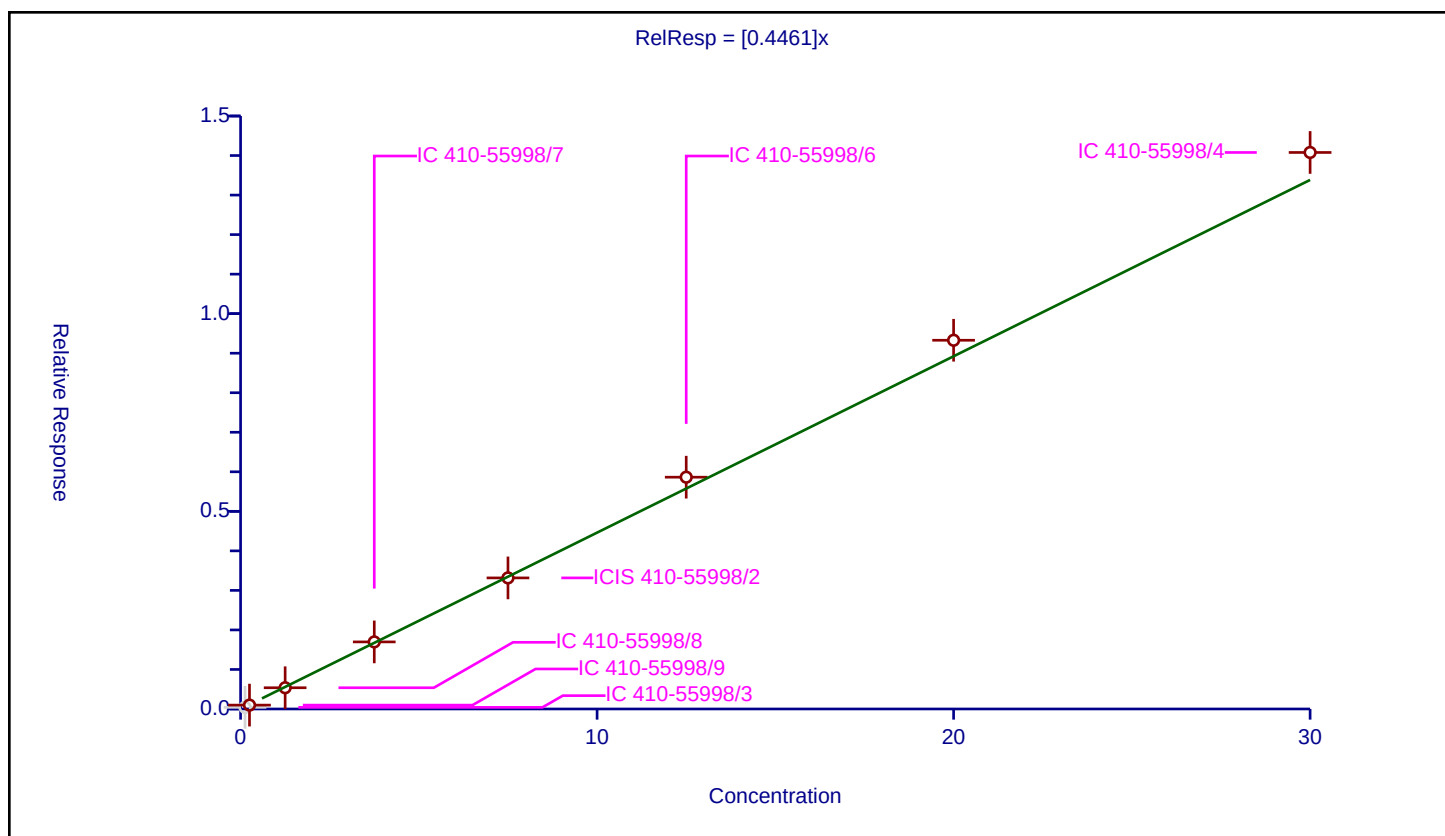
Curve Coefficients

Intercept: 0
 Slope: 0.4461

Error Coefficients

Standard Error: 956000
 Relative Standard Error: 6.2
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.041359	5.0	696466.0	0.33087	N
2	IC 410-55998/9	0.25	0.098385	5.0	594804.0	0.393541	Y
3	IC 410-55998/8	1.25	0.537337	5.0	687743.0	0.42987	Y
4	IC 410-55998/7	3.75	1.69671	5.0	565126.0	0.452456	Y
5	ICIS 410-55998/2	7.5	3.316129	5.0	679758.0	0.44215	Y
6	IC 410-55998/6	12.5	5.863918	5.0	689215.0	0.469113	Y
7	IC 410-55998/5	20.0	9.327272	5.0	646234.0	0.466364	Y
8	IC 410-55998/4	30.0	14.07792	5.0	628926.0	0.469264	Y



Calibration

/ Benzoic acid

Curve Type: Linear
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

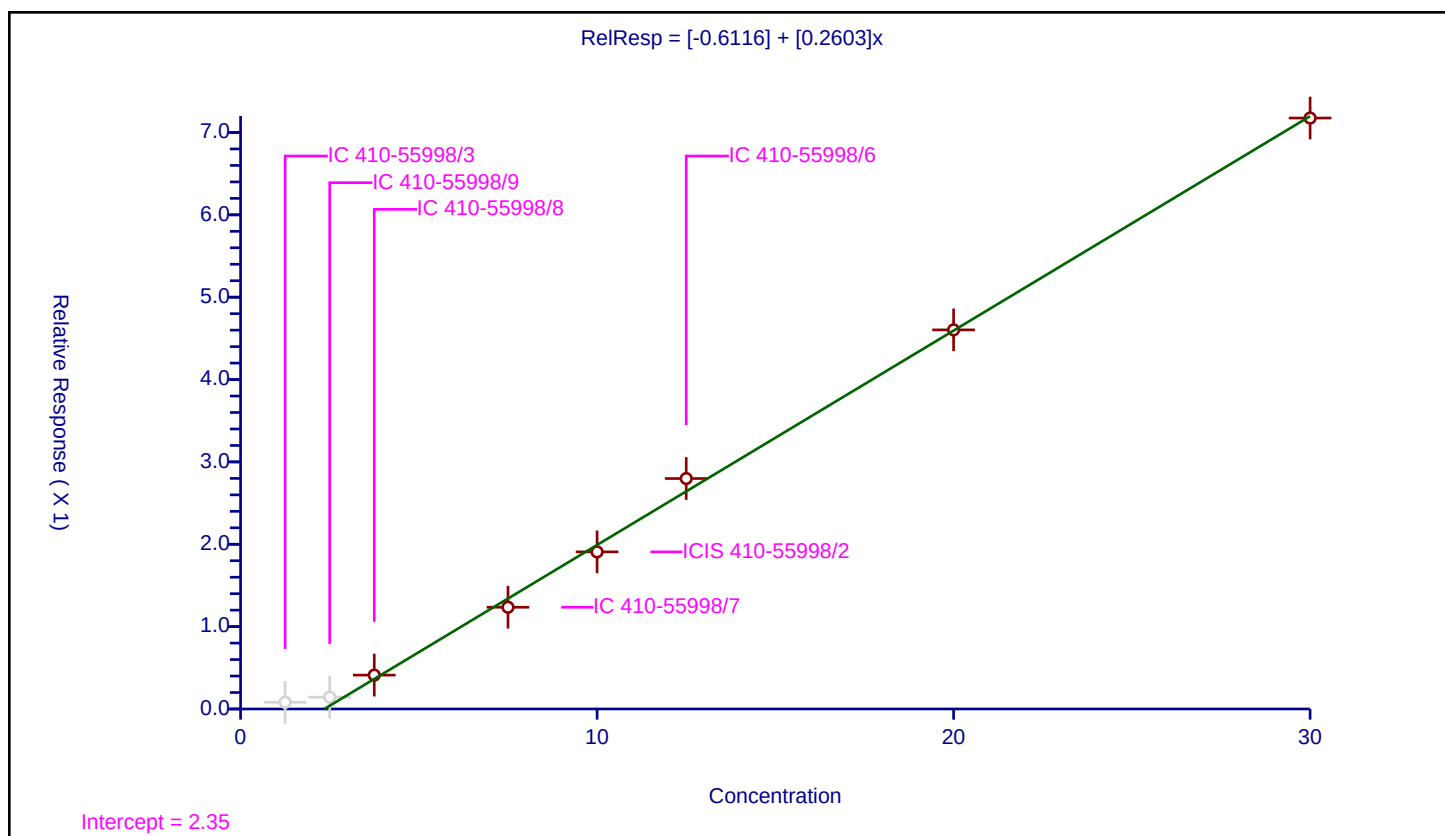
Curve Coefficients

Intercept: -0.6116
 Slope: 0.2603

Error Coefficients

Standard Error: 593000
 Relative Standard Error: 4.6
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	1.25	0.081375	5.0	696466.0	0.0651	N
2	IC 410-55998/9	2.5	0.143215	5.0	594804.0	0.057286	N
3	IC 410-55998/8	3.75	0.411295	5.0	687743.0	0.109679	Y
4	IC 410-55998/7	7.5	1.235353	5.0	565126.0	0.164714	Y
5	ICIS 410-55998/2	10.0	1.90776	5.0	679758.0	0.190776	Y
6	IC 410-55998/6	12.5	2.798437	5.0	689215.0	0.223875	Y
7	IC 410-55998/5	20.0	4.603193	5.0	646234.0	0.23016	Y
8	IC 410-55998/4	30.0	7.17524	5.0	628926.0	0.239175	Y



Calibration

/ o,o',o''-Triethylphosphorothioate

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

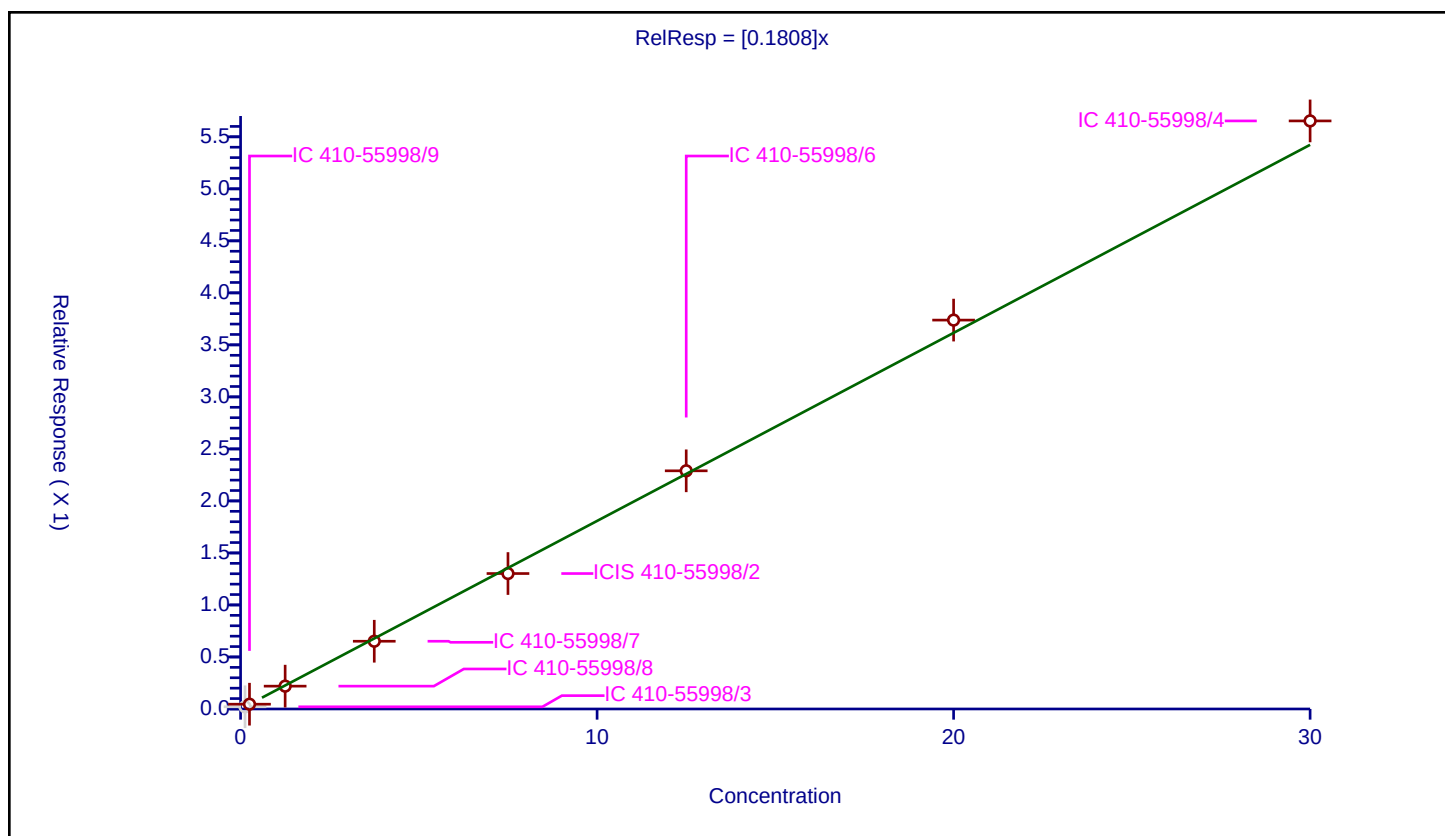
Curve Coefficients

Intercept: 0
Slope: 0.1808

Error Coefficients

Standard Error: 382000
Relative Standard Error: 3.5
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.021207	5.0	696466.0	0.169657	N
2	IC 410-55998/9	0.25	0.046007	5.0	594804.0	0.184027	Y
3	IC 410-55998/8	1.25	0.219472	5.0	687743.0	0.175577	Y
4	IC 410-55998/7	3.75	0.651315	5.0	565126.0	0.173684	Y
5	ICIS 410-55998/2	7.5	1.301985	5.0	679758.0	0.173598	Y
6	IC 410-55998/6	12.5	2.289467	5.0	689215.0	0.183157	Y
7	IC 410-55998/5	20.0	3.738228	5.0	646234.0	0.186911	Y
8	IC 410-55998/4	30.0	5.652843	5.0	628926.0	0.188428	Y



Calibration

/ Bis(2-chloroethoxy)methane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

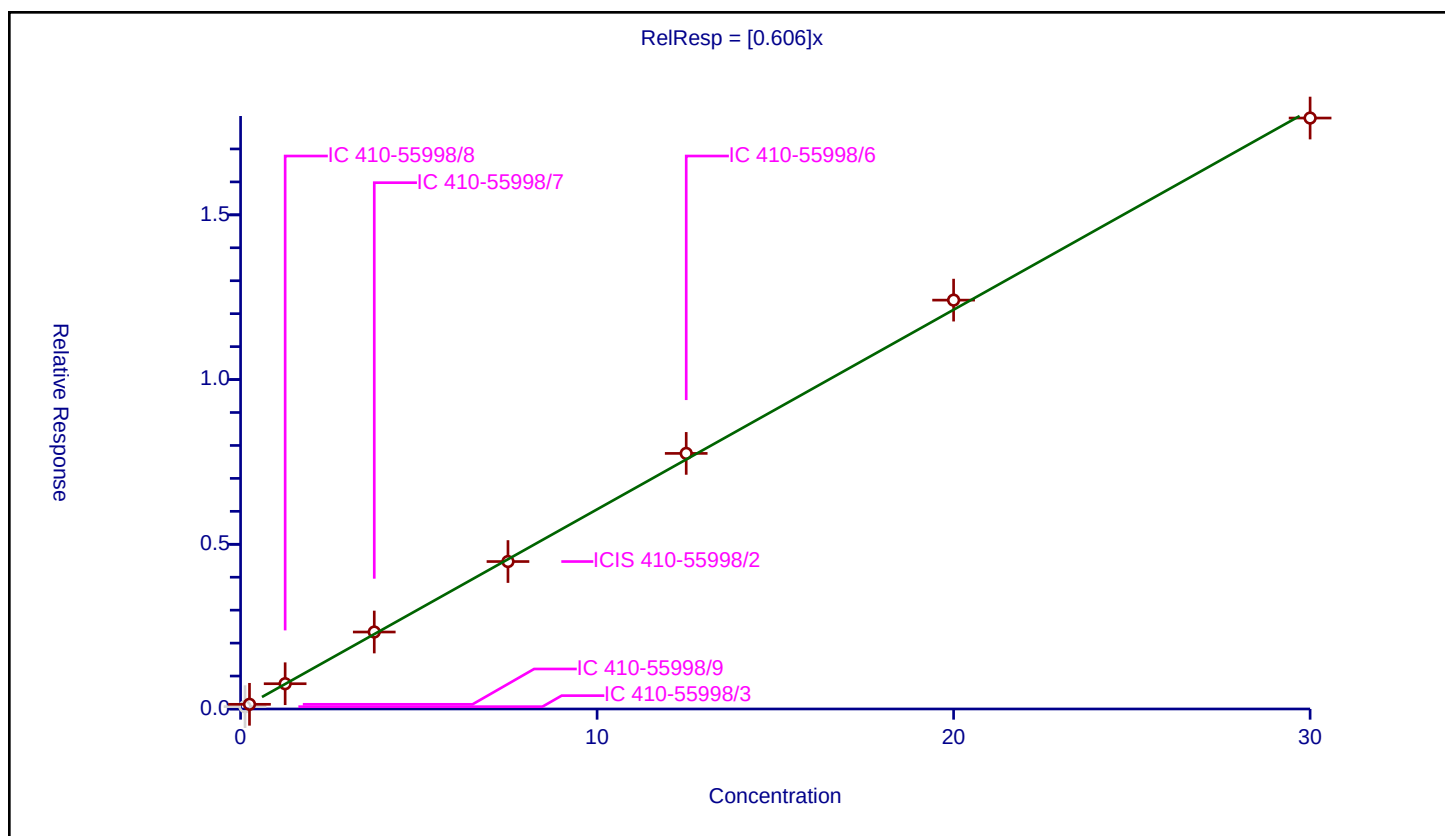
Curve Coefficients

Intercept: 0
 Slope: 0.606

Error Coefficients

Standard Error: 1240000
 Relative Standard Error: 3.2
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.070621	5.0	696466.0	0.564967	N
2	IC 410-55998/9	0.25	0.142215	5.0	594804.0	0.56886	Y
3	IC 410-55998/8	1.25	0.767329	5.0	687743.0	0.613863	Y
4	IC 410-55998/7	3.75	2.336638	5.0	565126.0	0.623104	Y
5	ICIS 410-55998/2	7.5	4.475622	5.0	679758.0	0.59675	Y
6	IC 410-55998/6	12.5	7.758428	5.0	689215.0	0.620674	Y
7	IC 410-55998/5	20.0	12.411332	5.0	646234.0	0.620567	Y
8	IC 410-55998/4	30.0	17.938382	5.0	628926.0	0.597946	Y



Calibration

/ 2,4-Dichlorophenol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

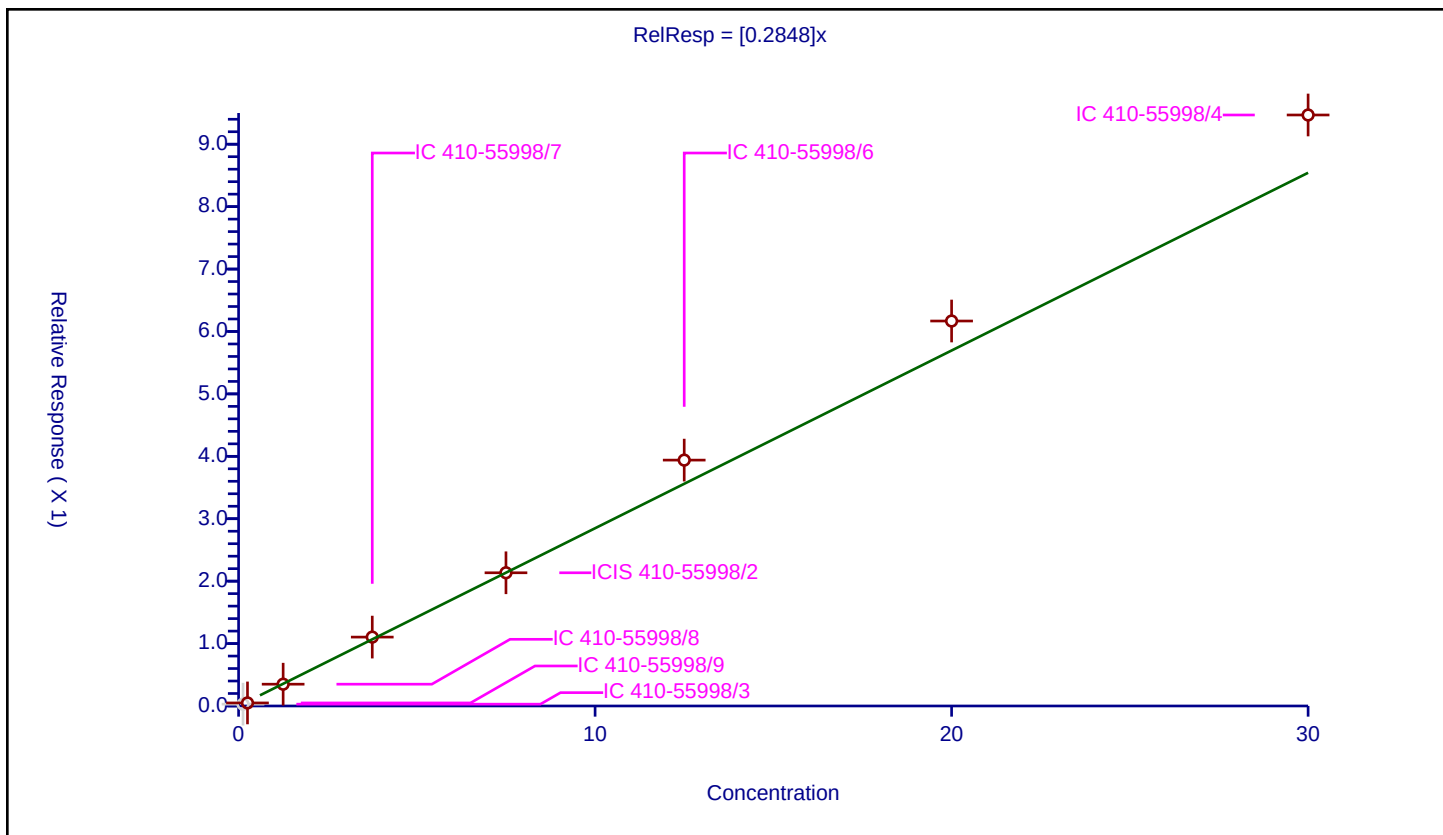
Curve Coefficients

Intercept: 0
 Slope: 0.2848

Error Coefficients

Standard Error: 639000
 Relative Standard Error: 14.7
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.029341	5.0	696466.0	0.234728	N
2	IC 410-55998/9	0.25	0.048932	5.0	594804.0	0.195728	Y
3	IC 410-55998/8	1.25	0.349418	5.0	687743.0	0.279535	Y
4	IC 410-55998/7	3.75	1.10363	5.0	565126.0	0.294301	Y
5	ICIS 410-55998/2	7.5	2.134304	5.0	679758.0	0.284574	Y
6	IC 410-55998/6	12.5	3.939359	5.0	689215.0	0.315149	Y
7	IC 410-55998/5	20.0	6.167549	5.0	646234.0	0.308377	Y
8	IC 410-55998/4	30.0	9.468316	5.0	628926.0	0.315611	Y



Calibration

/ 1,2,4-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

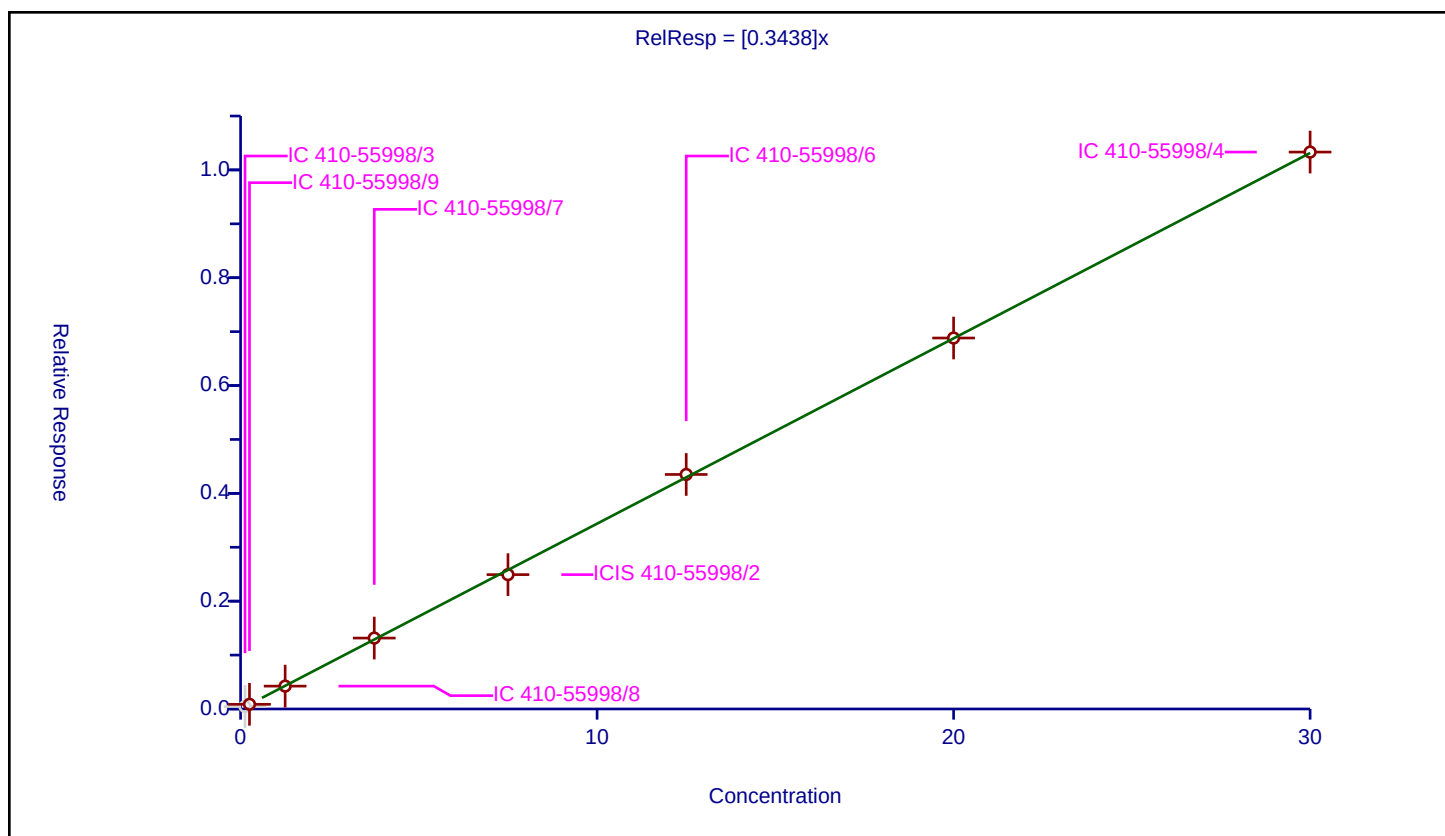
Curve Coefficients

Intercept: 0
 Slope: 0.3438

Error Coefficients

Standard Error: 705000
 Relative Standard Error: 1.8
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.045839	5.0	696466.0	0.366708	N
2	IC 410-55998/9	0.25	0.086861	5.0	594804.0	0.347442	Y
3	IC 410-55998/8	1.25	0.424279	5.0	687743.0	0.339423	Y
4	IC 410-55998/7	3.75	1.315583	5.0	565126.0	0.350822	Y
5	ICIS 410-55998/2	7.5	2.492608	5.0	679758.0	0.332348	Y
6	IC 410-55998/6	12.5	4.350653	5.0	689215.0	0.348052	Y
7	IC 410-55998/5	20.0	6.881849	5.0	646234.0	0.344092	Y
8	IC 410-55998/4	30.0	10.331295	5.0	628926.0	0.344376	Y



Calibration

/ Naphthalene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

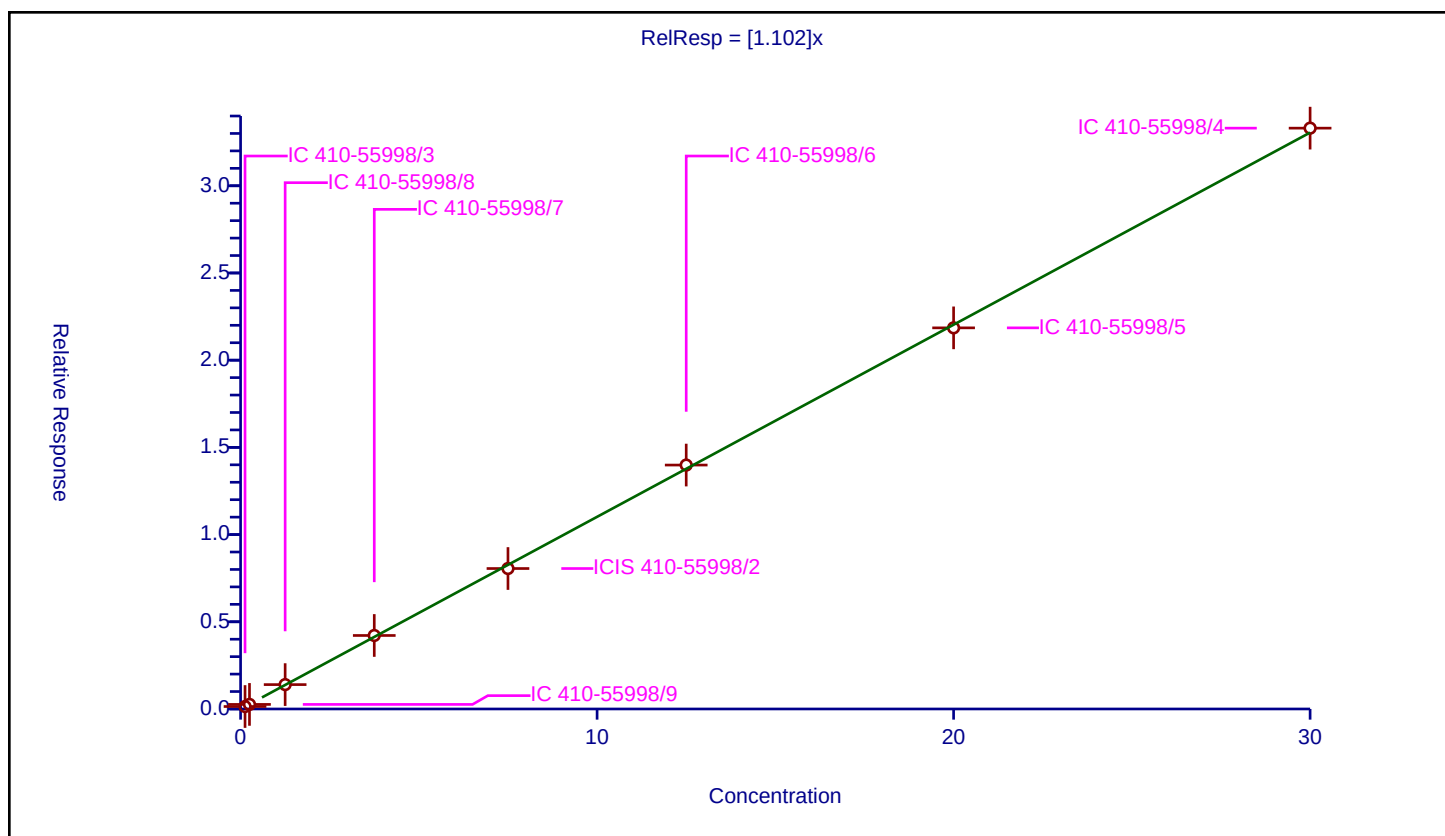
Curve Coefficients

Intercept: 0
Slope: 1.102

Error Coefficients

Standard Error: 2090000
Relative Standard Error: 2.6
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.140947	5.0	696466.0	1.127578	Y
2	IC 410-55998/9	0.25	0.262036	5.0	594804.0	1.048144	Y
3	IC 410-55998/8	1.25	1.397993	5.0	687743.0	1.118395	Y
4	IC 410-55998/7	3.75	4.214485	5.0	565126.0	1.123863	Y
5	ICIS 410-55998/2	7.5	8.053962	5.0	679758.0	1.073862	Y
6	IC 410-55998/6	12.5	13.98655	5.0	689215.0	1.118924	Y
7	IC 410-55998/5	20.0	21.853717	5.0	646234.0	1.092686	Y
8	IC 410-55998/4	30.0	33.304928	5.0	628926.0	1.110164	Y



Calibration

/ 4-Chloroaniline

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

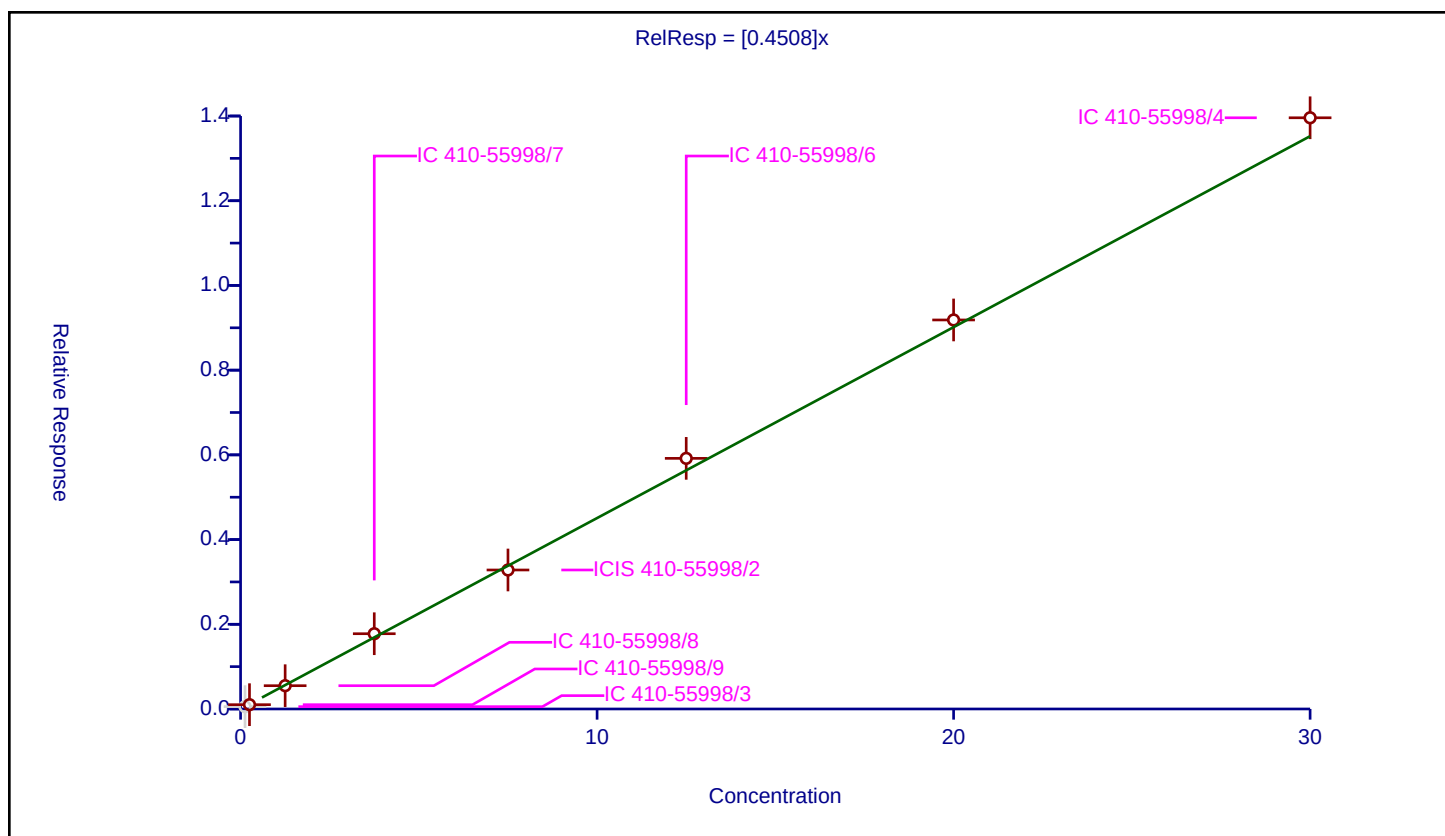
Curve Coefficients

Intercept: 0
 Slope: 0.4508

Error Coefficients

Standard Error: 949000
 Relative Standard Error: 5.4
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.055085	5.0	696466.0	0.440682	N
2	IC 410-55998/9	0.25	0.101563	5.0	594804.0	0.406251	Y
3	IC 410-55998/8	1.25	0.549857	5.0	687743.0	0.439885	Y
4	IC 410-55998/7	3.75	1.776949	5.0	565126.0	0.473853	Y
5	ICIS 410-55998/2	7.5	3.28155	5.0	679758.0	0.43754	Y
6	IC 410-55998/6	12.5	5.917065	5.0	689215.0	0.473365	Y
7	IC 410-55998/5	20.0	9.184684	5.0	646234.0	0.459234	Y
8	IC 410-55998/4	30.0	13.958542	5.0	628926.0	0.465285	Y



Calibration

/ 2,6-Dichlorophenol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

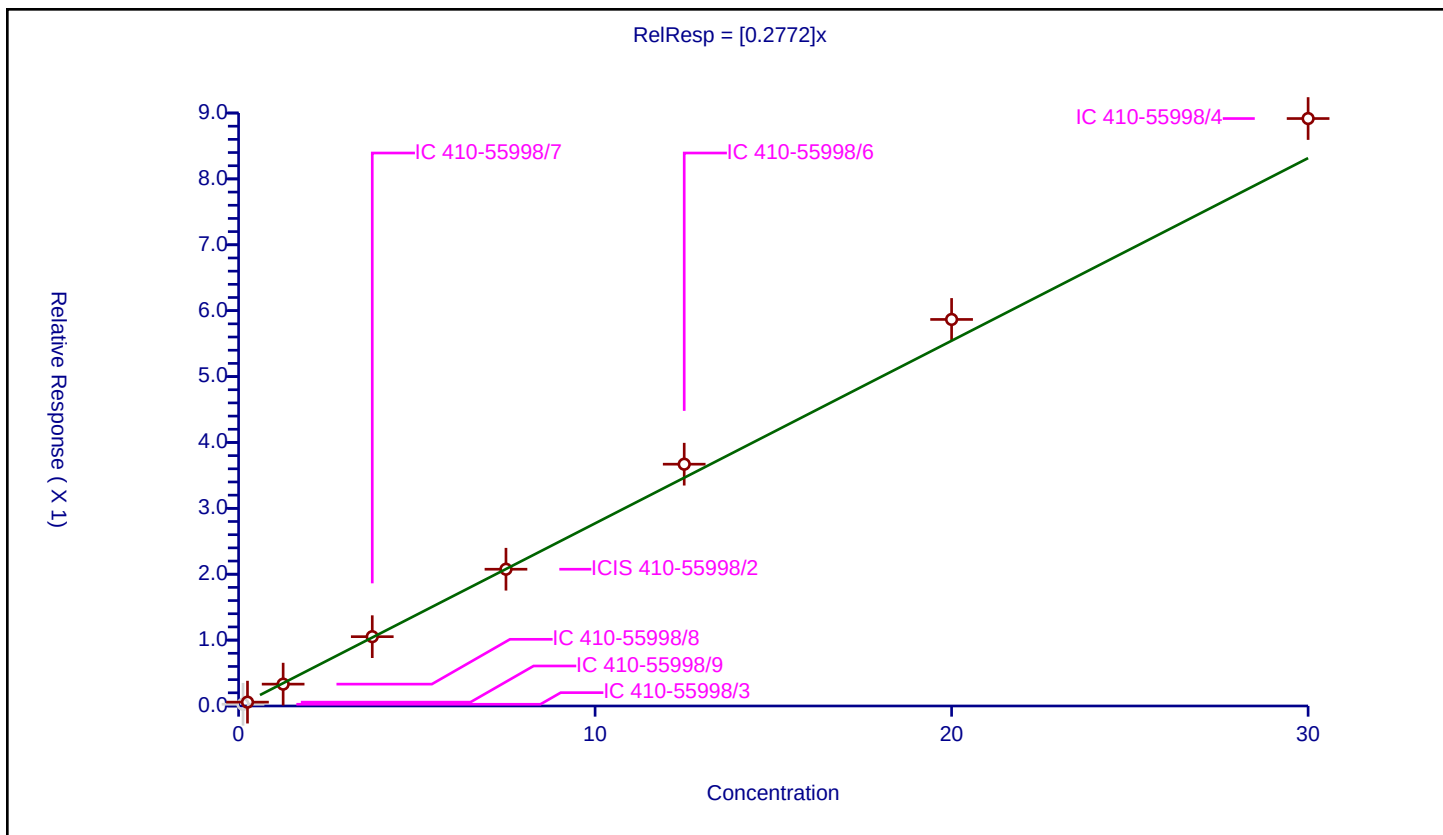
Curve Coefficients

Intercept: 0
 Slope: 0.2772

Error Coefficients

Standard Error: 603000
 Relative Standard Error: 8.1
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.025938	5.0	696466.0	0.207505	N
2	IC 410-55998/9	0.25	0.05833	5.0	594804.0	0.233321	Y
3	IC 410-55998/8	1.25	0.331825	5.0	687743.0	0.26546	Y
4	IC 410-55998/7	3.75	1.052172	5.0	565126.0	0.280579	Y
5	ICIS 410-55998/2	7.5	2.075702	5.0	679758.0	0.27676	Y
6	IC 410-55998/6	12.5	3.669958	5.0	689215.0	0.293597	Y
7	IC 410-55998/5	20.0	5.866784	5.0	646234.0	0.293339	Y
8	IC 410-55998/4	30.0	8.916415	5.0	628926.0	0.297214	Y



Calibration

/ Hexachloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

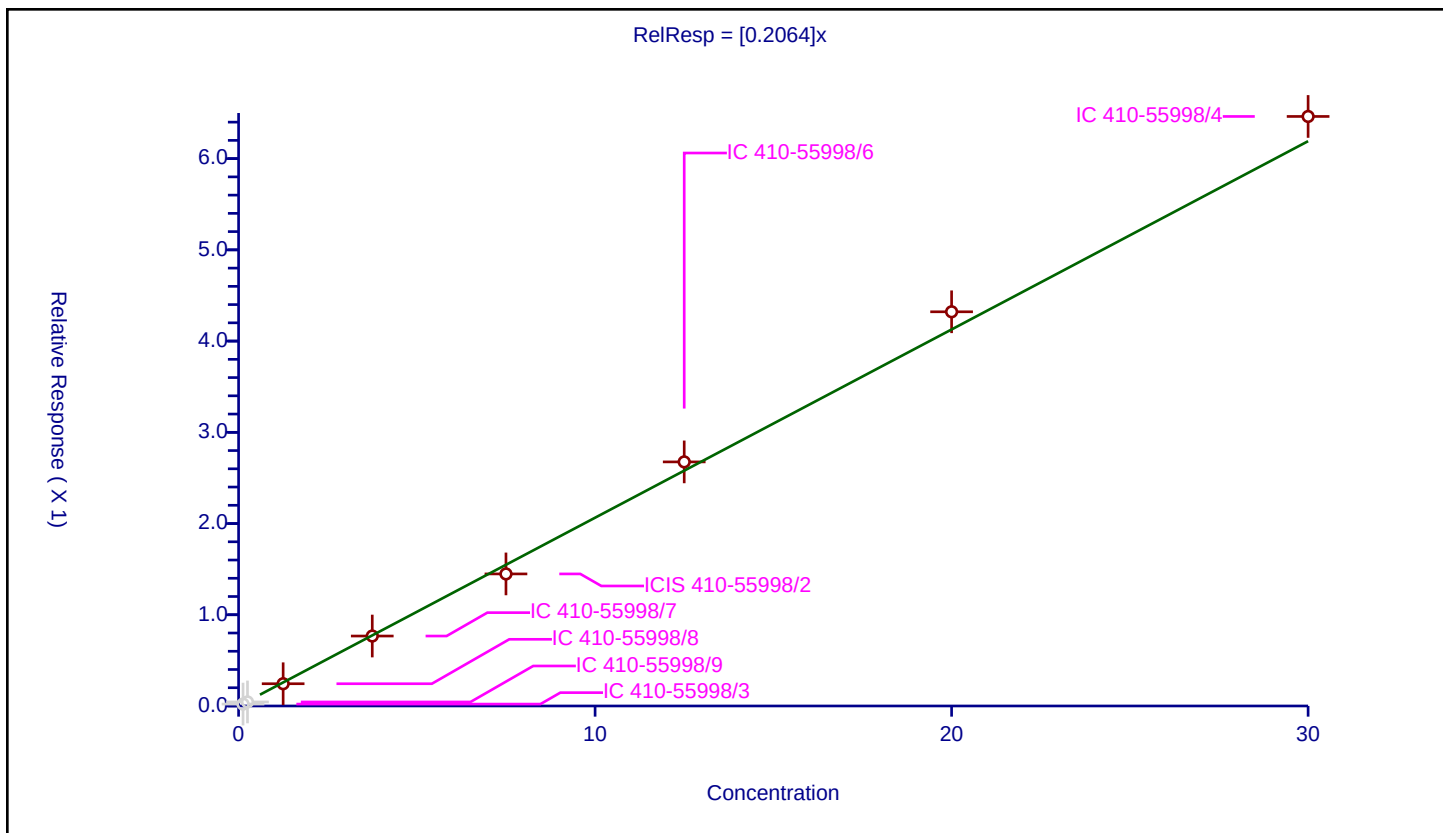
Curve Coefficients

Intercept: 0
 Slope: 0.2064

Error Coefficients

Standard Error: 481000
 Relative Standard Error: 5.0
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.021042	5.0	696466.0	0.168336	N
2	IC 410-55998/9	0.25	0.044401	5.0	594804.0	0.177605	N
3	IC 410-55998/8	1.25	0.243986	5.0	687743.0	0.195189	Y
4	IC 410-55998/7	3.75	0.766873	5.0	565126.0	0.2045	Y
5	ICIS 410-55998/2	7.5	1.44767	5.0	679758.0	0.193023	Y
6	IC 410-55998/6	12.5	2.675791	5.0	689215.0	0.214063	Y
7	IC 410-55998/5	20.0	4.321198	5.0	646234.0	0.21606	Y
8	IC 410-55998/4	30.0	6.462255	5.0	628926.0	0.215408	Y



Calibration

/ Hexachlorobutadiene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

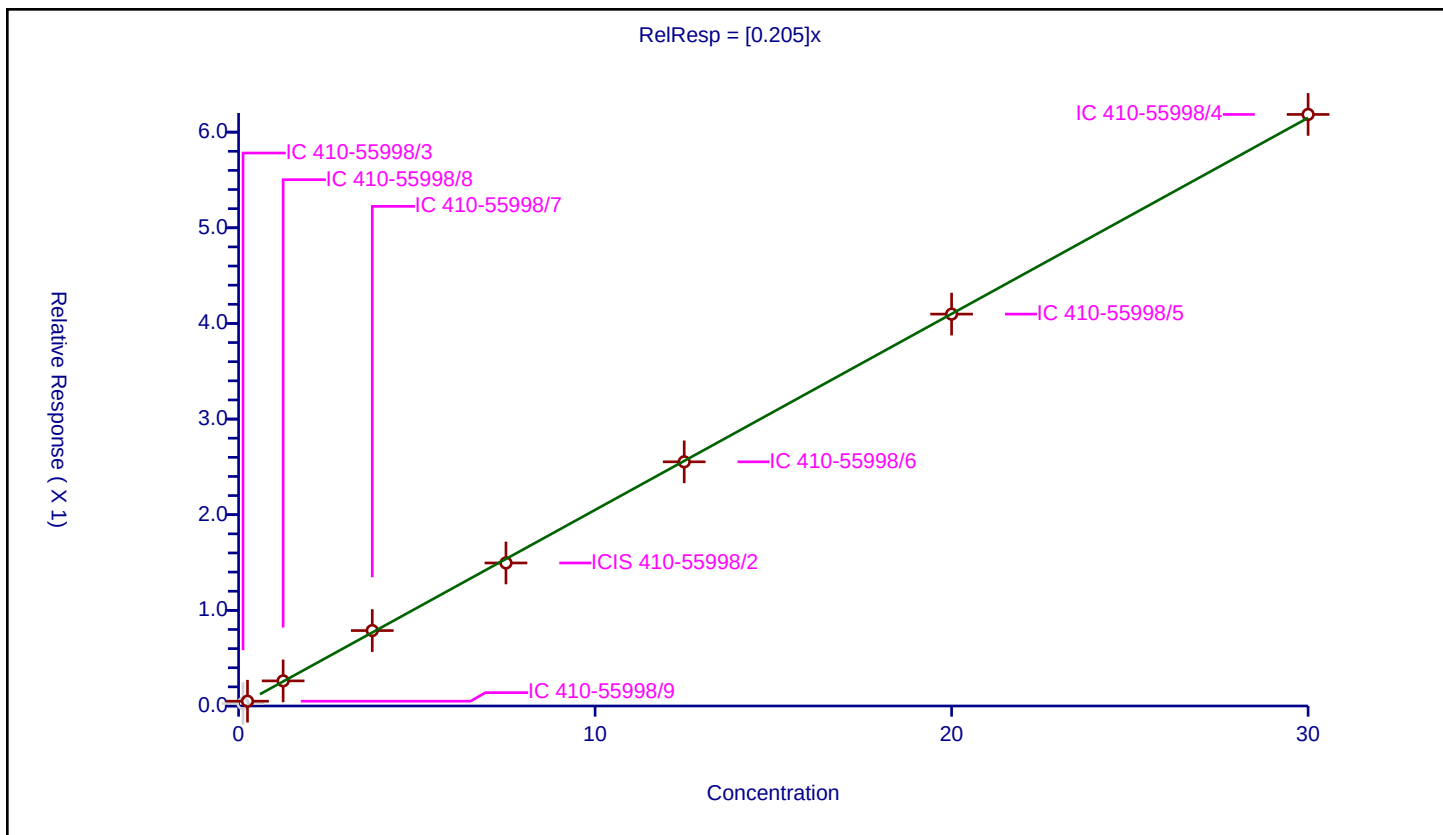
Curve Coefficients

Intercept: 0
 Slope: 0.205

Error Coefficients

Standard Error: 420000
 Relative Standard Error: 2.1
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.026232	5.0	696466.0	0.209859	N
2	IC 410-55998/9	0.25	0.049974	5.0	594804.0	0.199898	Y
3	IC 410-55998/8	1.25	0.262584	5.0	687743.0	0.210067	Y
4	IC 410-55998/7	3.75	0.788647	5.0	565126.0	0.210306	Y
5	ICIS 410-55998/2	7.5	1.495503	5.0	679758.0	0.1994	Y
6	IC 410-55998/6	12.5	2.552955	5.0	689215.0	0.204236	Y
7	IC 410-55998/5	20.0	4.097339	5.0	646234.0	0.204867	Y
8	IC 410-55998/4	30.0	6.185084	5.0	628926.0	0.206169	Y



Calibration

/ Quinoline

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

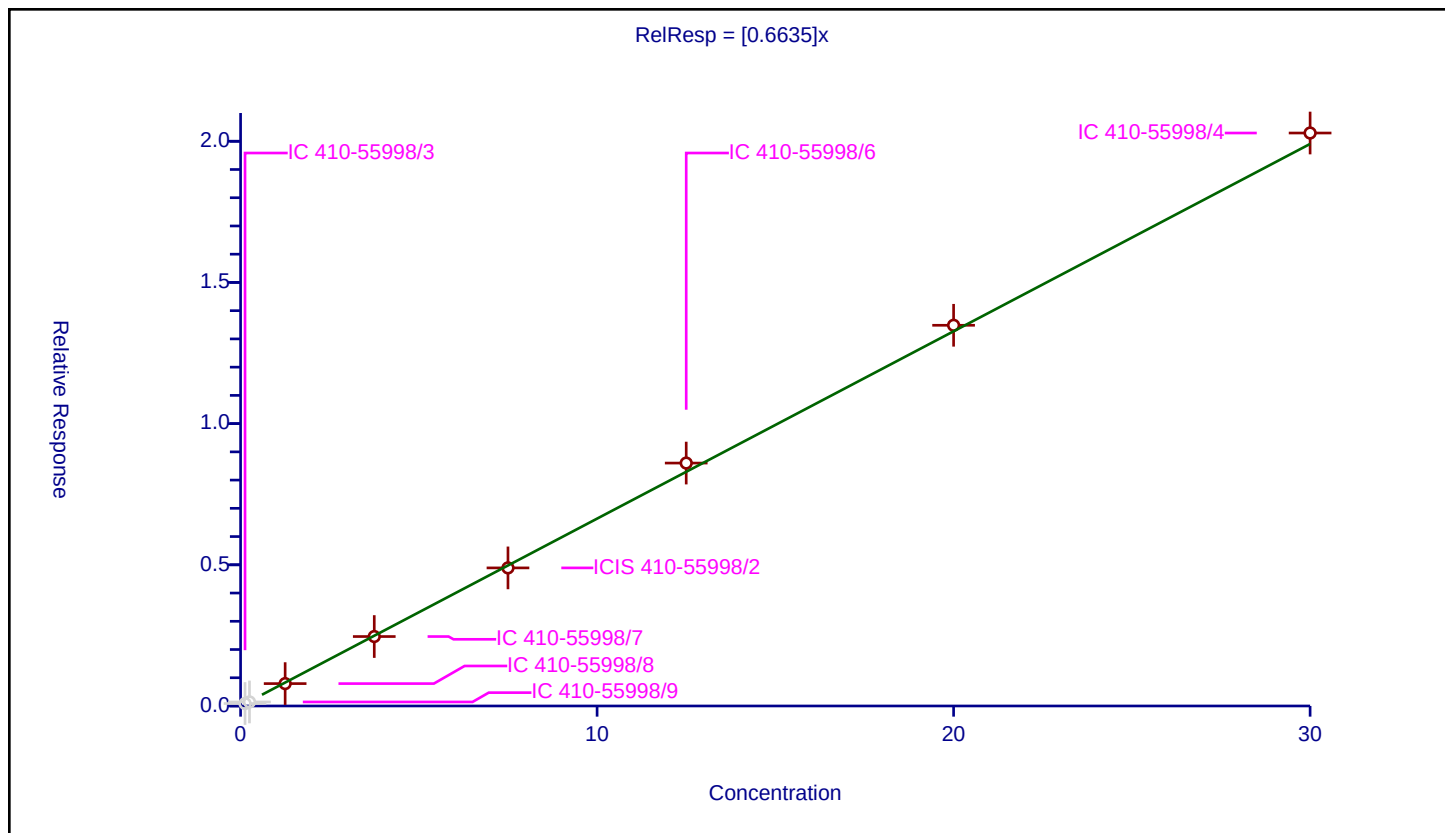
Curve Coefficients

Intercept: 0
Slope: 0.6635

Error Coefficients

Standard Error: 1520000
Relative Standard Error: 3.0
Correlation Coefficient: 0.997
Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.087506	5.0	696466.0	0.700049	N
2	IC 410-55998/9	0.25	0.143232	5.0	594804.0	0.572928	N
3	IC 410-55998/8	1.25	0.792687	5.0	687743.0	0.63415	Y
4	IC 410-55998/7	3.75	2.459797	5.0	565126.0	0.655946	Y
5	ICIS 410-55998/2	7.5	4.890167	5.0	679758.0	0.652022	Y
6	IC 410-55998/6	12.5	8.603063	5.0	689215.0	0.688245	Y
7	IC 410-55998/5	20.0	13.483042	5.0	646234.0	0.674152	Y
8	IC 410-55998/4	30.0	20.292014	5.0	628926.0	0.6764	Y



Calibration

/ Caprolactam

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

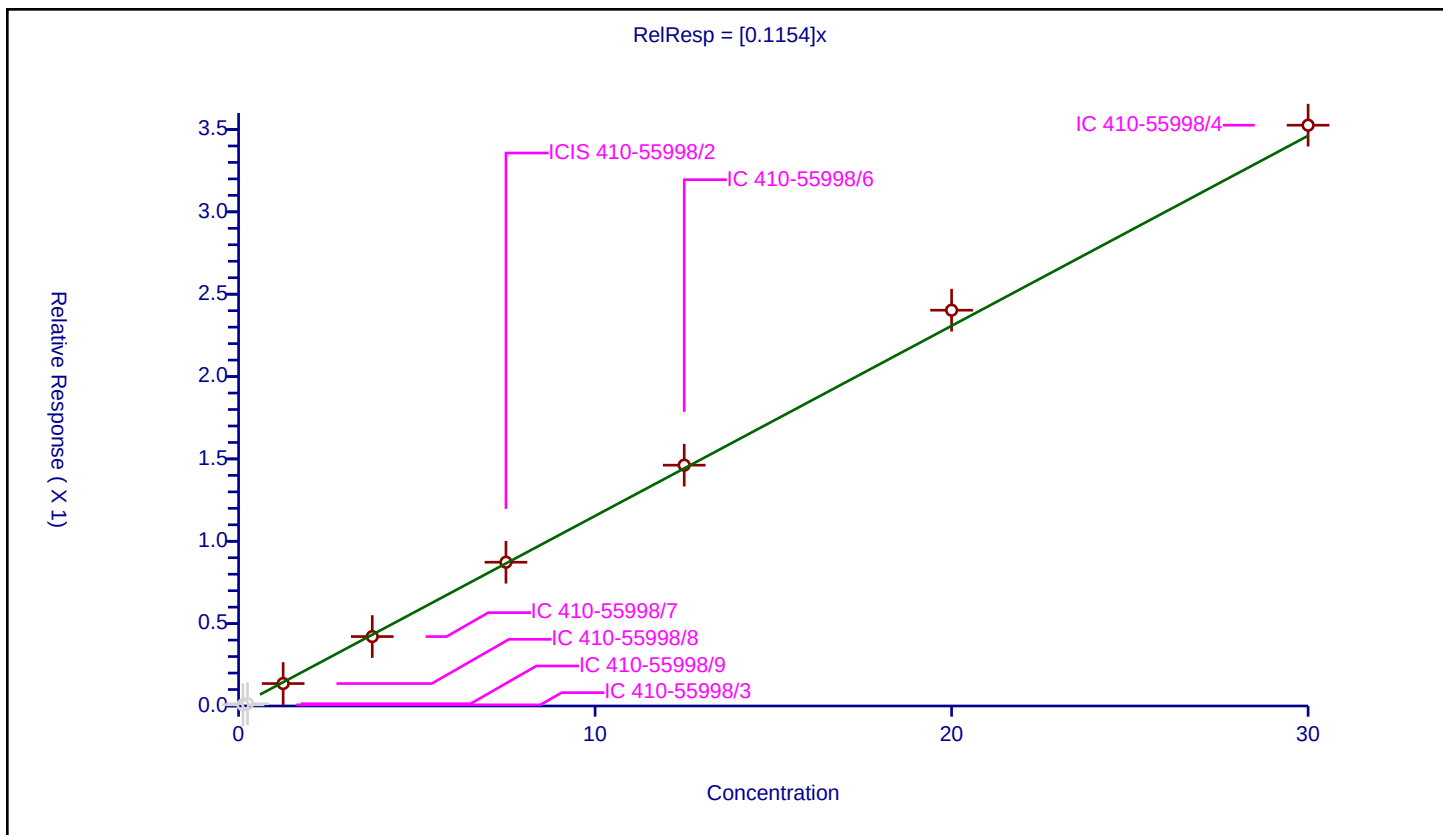
Curve Coefficients

Intercept: 0
Slope: 0.1154

Error Coefficients

Standard Error: 265000
Relative Standard Error: 3.5
Correlation Coefficient: 0.997
Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.007028	5.0	696466.0	0.056227	N
2	IC 410-55998/9	0.25	0.013677	5.0	594804.0	0.054707	N
3	IC 410-55998/8	1.25	0.136214	5.0	687743.0	0.108971	Y
4	IC 410-55998/7	3.75	0.42149	5.0	565126.0	0.112397	Y
5	ICIS 410-55998/2	7.5	0.872914	5.0	679758.0	0.116388	Y
6	IC 410-55998/6	12.5	1.46204	5.0	689215.0	0.116963	Y
7	IC 410-55998/5	20.0	2.402914	5.0	646234.0	0.120146	Y
8	IC 410-55998/4	30.0	3.525963	5.0	628926.0	0.117532	Y



Calibration

/ N-Nitrosodi-n-butylamine

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

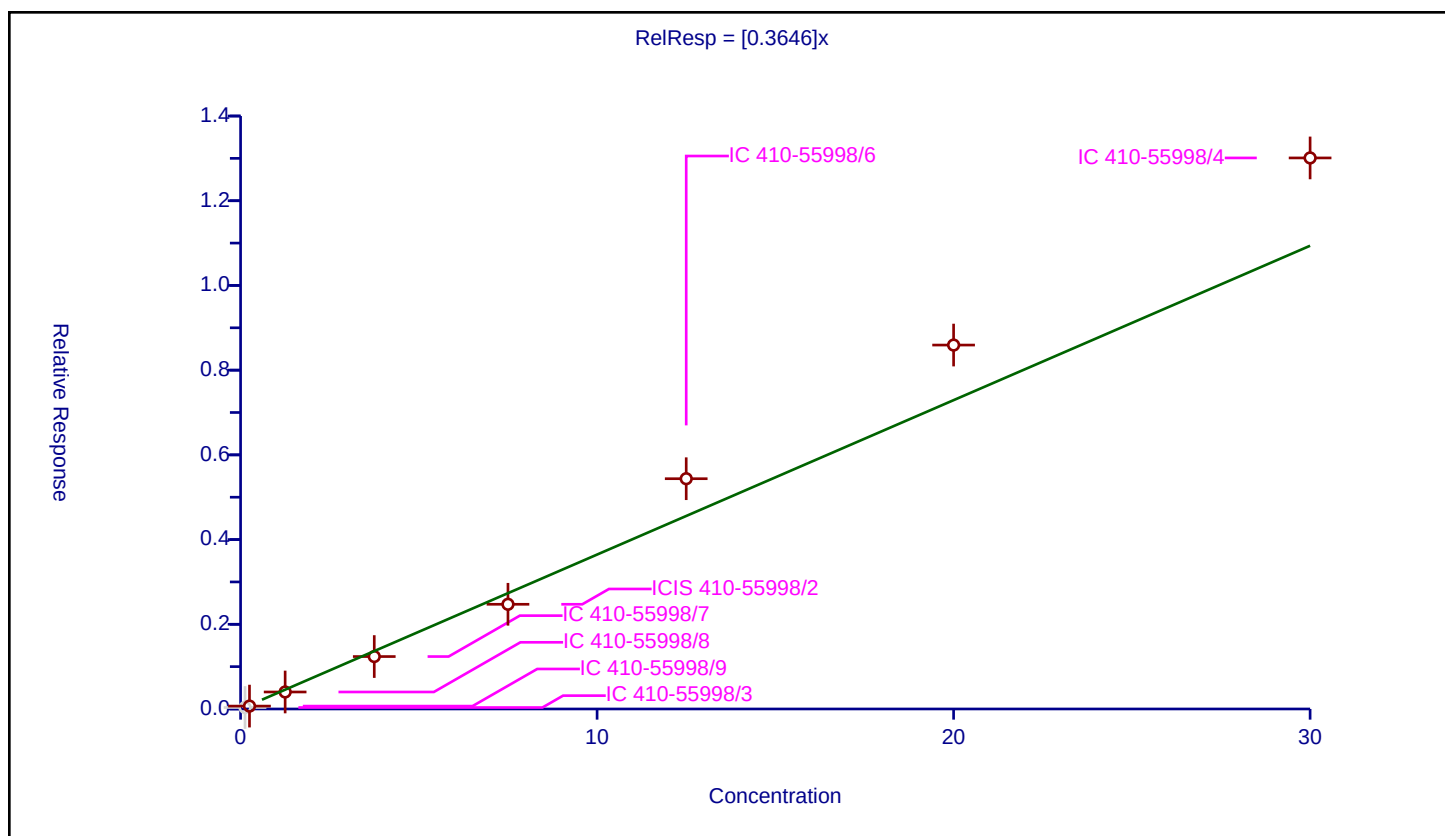
Curve Coefficients

Intercept: 0
 Slope: 0.3646

Error Coefficients

Standard Error: 876000
 Relative Standard Error: 18.3
 Correlation Coefficient: 0.995
 Coefficient of Determination (Adjusted): 0.967

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.035127	5.0	696466.0	0.281019	N
2	IC 410-55998/9	0.25	0.068199	5.0	594804.0	0.272796	Y
3	IC 410-55998/8	1.25	0.401335	5.0	687743.0	0.321068	Y
4	IC 410-55998/7	3.75	1.238273	5.0	565126.0	0.330206	Y
5	ICIS 410-55998/2	7.5	2.472218	5.0	679758.0	0.329629	Y
6	IC 410-55998/6	12.5	5.43678	5.0	689215.0	0.434942	Y
7	IC 410-55998/5	20.0	8.592197	5.0	646234.0	0.42961	Y
8	IC 410-55998/4	30.0	13.010291	5.0	628926.0	0.433676	Y



Calibration

/ 4-Chloro-3-methylphenol

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

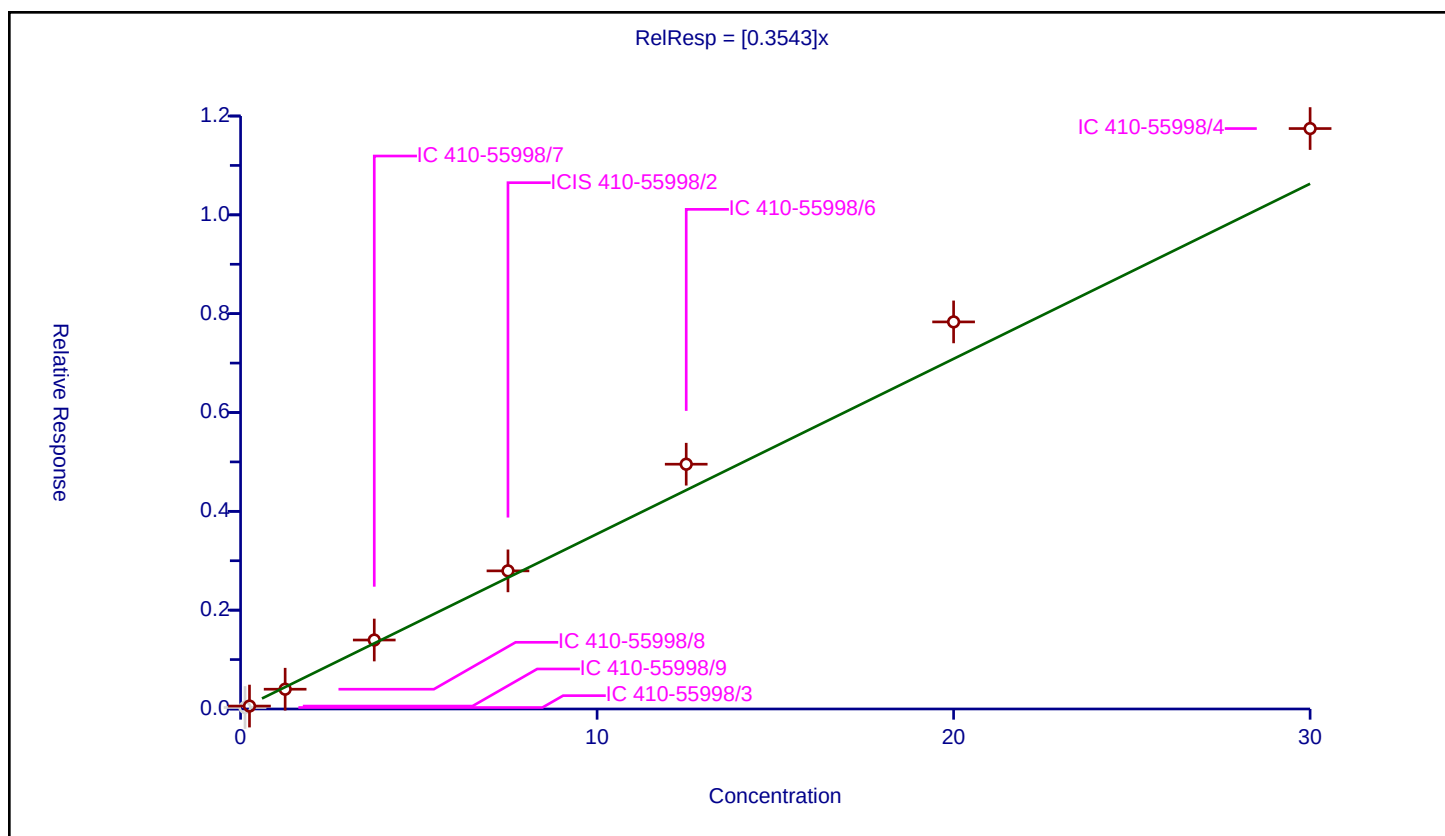
Curve Coefficients

Intercept: 0
Slope: 0.3543

Error Coefficients

Standard Error: 801000
Relative Standard Error: 16.5
Correlation Coefficient: 0.997
Coefficient of Determination (Adjusted): 0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.029836	5.0	696466.0	0.238691	N
2	IC 410-55998/9	0.25	0.058868	5.0	594804.0	0.235473	Y
3	IC 410-55998/8	1.25	0.400309	5.0	687743.0	0.320248	Y
4	IC 410-55998/7	3.75	1.395689	5.0	565126.0	0.372184	Y
5	ICIS 410-55998/2	7.5	2.79537	5.0	679758.0	0.372716	Y
6	IC 410-55998/6	12.5	4.953948	5.0	689215.0	0.396316	Y
7	IC 410-55998/5	20.0	7.833347	5.0	646234.0	0.391667	Y
8	IC 410-55998/4	30.0	11.74612	5.0	628926.0	0.391537	Y



Calibration

/ Safrole, Total

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

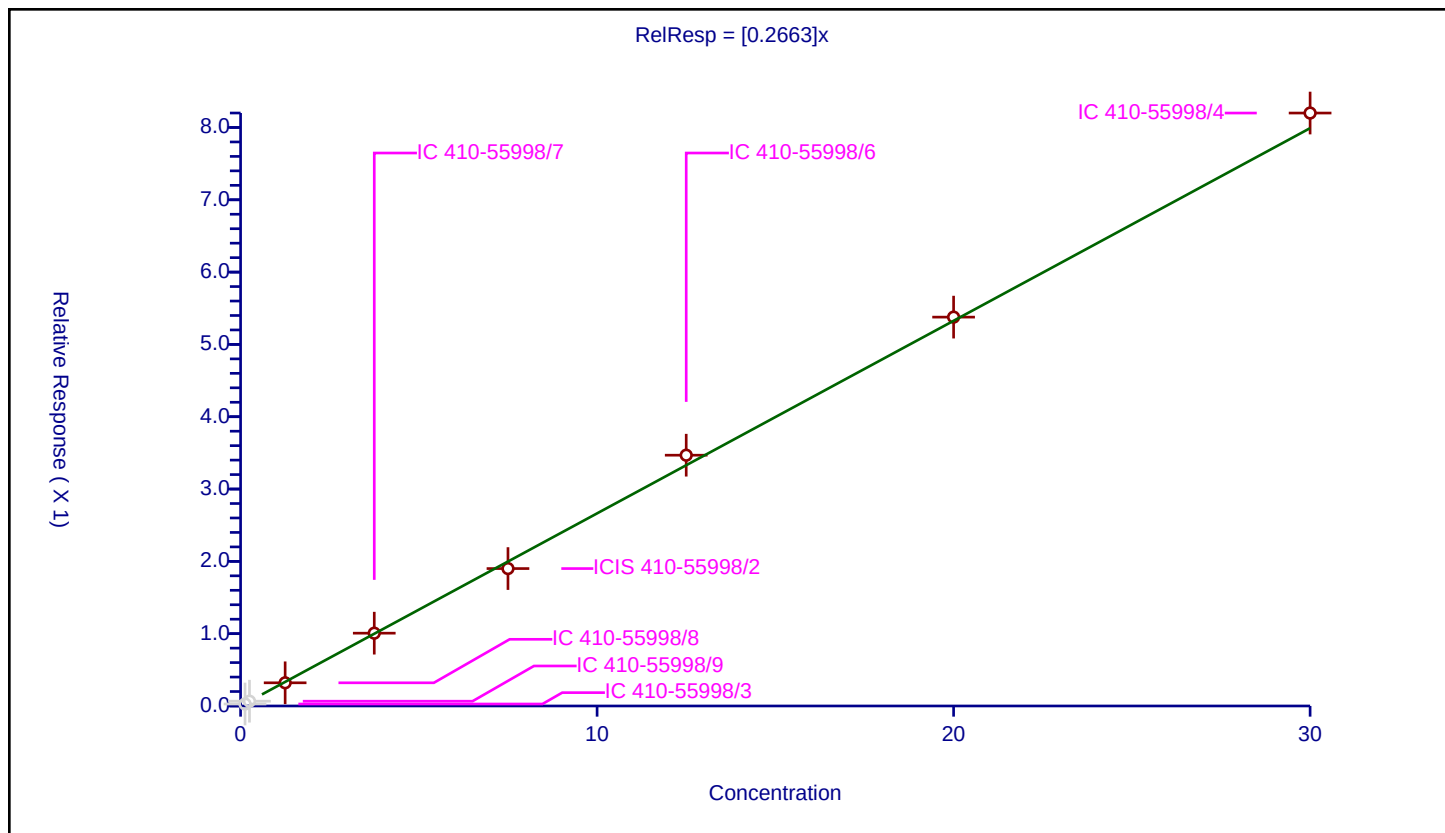
Curve Coefficients

Intercept: 0
 Slope: 0.2663

Error Coefficients

Standard Error: 609000
 Relative Standard Error: 3.6
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.027532	5.0	696466.0	0.220255	N
2	IC 410-55998/9	0.25	0.066081	5.0	594804.0	0.264322	N
3	IC 410-55998/8	1.25	0.320643	5.0	687743.0	0.256514	Y
4	IC 410-55998/7	3.75	1.007059	5.0	565126.0	0.268549	Y
5	ICIS 410-55998/2	7.5	1.900323	5.0	679758.0	0.253376	Y
6	IC 410-55998/6	12.5	3.468025	5.0	689215.0	0.277442	Y
7	IC 410-55998/5	20.0	5.377642	5.0	646234.0	0.268882	Y
8	IC 410-55998/4	30.0	8.199494	5.0	628926.0	0.273316	Y



Calibration

/ 2-Methylnaphthalene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

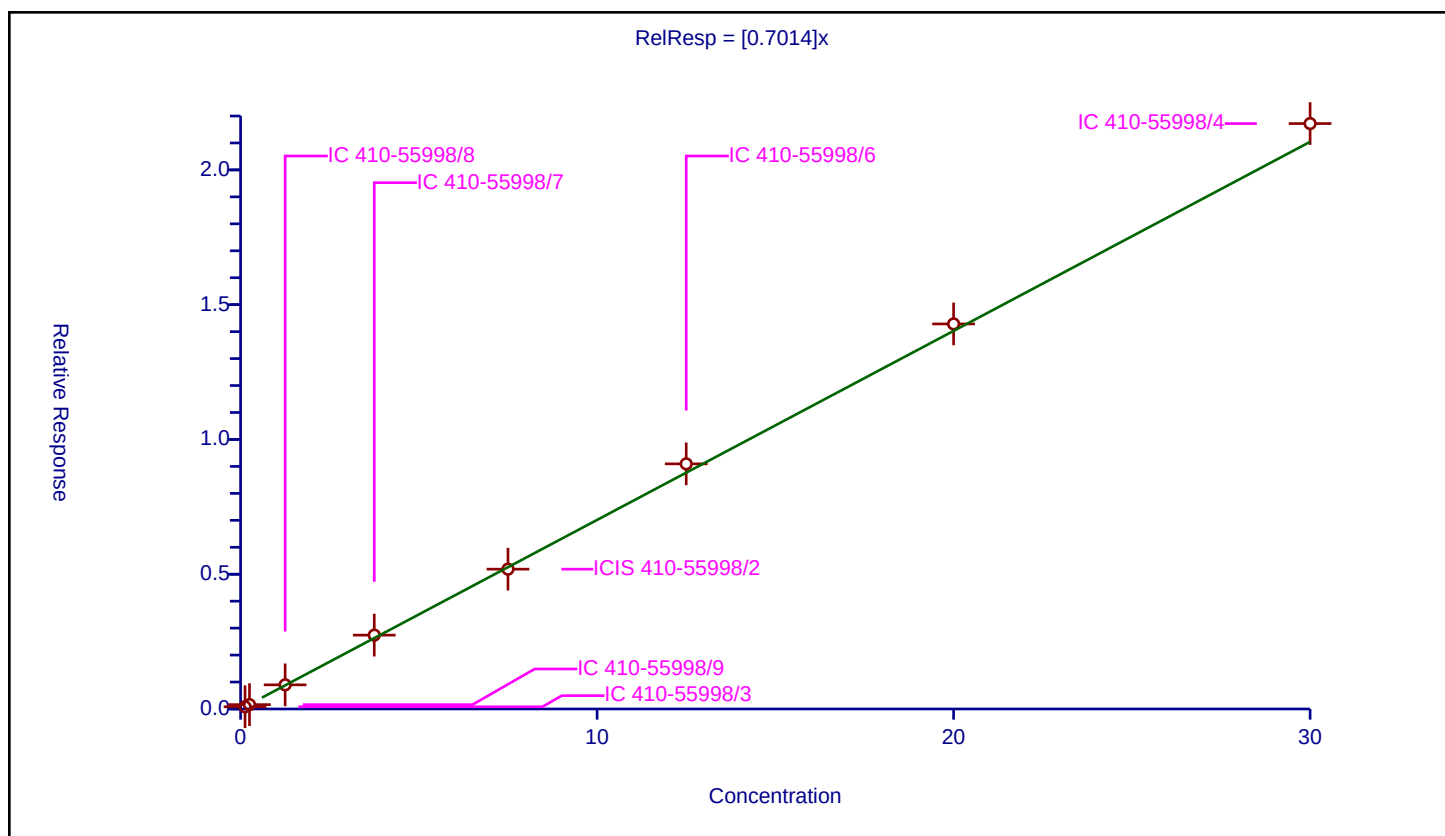
Curve Coefficients

Intercept: 0
Slope: 0.7014

Error Coefficients

Standard Error: 1370000
Relative Standard Error: 4.6
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.082466	5.0	696466.0	0.659731	Y
2	IC 410-55998/9	0.25	0.161633	5.0	594804.0	0.646532	Y
3	IC 410-55998/8	1.25	0.895807	5.0	687743.0	0.716646	Y
4	IC 410-55998/7	3.75	2.740442	5.0	565126.0	0.730785	Y
5	ICIS 410-55998/2	7.5	5.188008	5.0	679758.0	0.691734	Y
6	IC 410-55998/6	12.5	9.094608	5.0	689215.0	0.727569	Y
7	IC 410-55998/5	20.0	14.28628	5.0	646234.0	0.714314	Y
8	IC 410-55998/4	30.0	21.719694	5.0	628926.0	0.72399	Y



Calibration

/ 1-Methylnaphthalene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

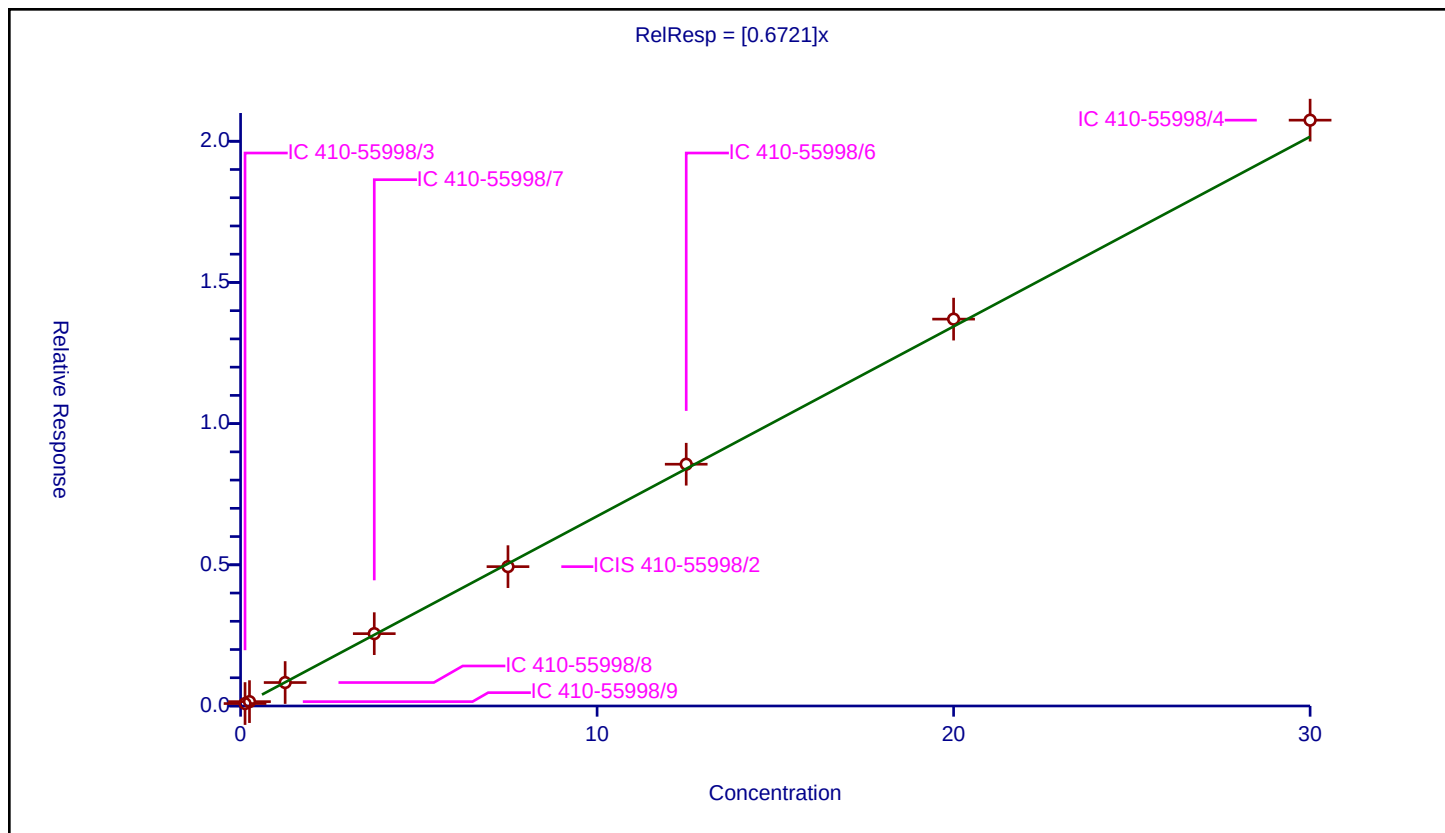
Curve Coefficients

Intercept: 0
Slope: 0.6721

Error Coefficients

Standard Error: 1300000
Relative Standard Error: 3.7
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.086336	5.0	696466.0	0.690687	Y
2	IC 410-55998/9	0.25	0.15469	5.0	594804.0	0.618758	Y
3	IC 410-55998/8	1.25	0.830499	5.0	687743.0	0.664399	Y
4	IC 410-55998/7	3.75	2.562083	5.0	565126.0	0.683222	Y
5	ICIS 410-55998/2	7.5	4.93458	5.0	679758.0	0.657944	Y
6	IC 410-55998/6	12.5	8.562081	5.0	689215.0	0.684967	Y
7	IC 410-55998/5	20.0	13.70102	5.0	646234.0	0.685051	Y
8	IC 410-55998/4	30.0	20.746773	5.0	628926.0	0.691559	Y



Calibration

/ Hexachlorocyclopentadiene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

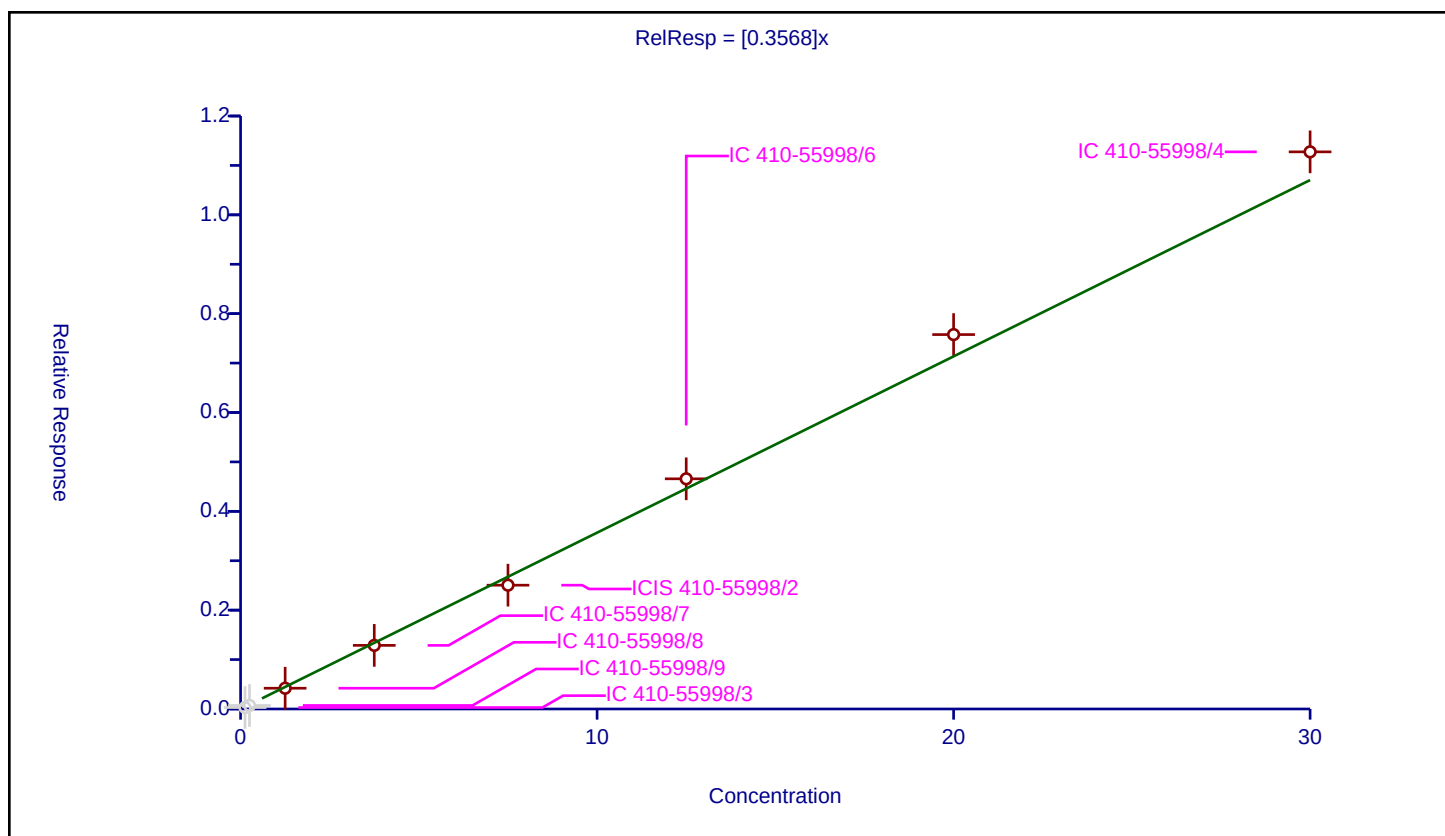
Curve Coefficients

Intercept: 0
 Slope: 0.3568

Error Coefficients

Standard Error: 410000
 Relative Standard Error: 5.9
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.029548	5.0	318800.0	0.236386	N
2	IC 410-55998/9	0.25	0.071697	5.0	259912.0	0.286789	N
3	IC 410-55998/8	1.25	0.420164	5.0	324207.0	0.336131	Y
4	IC 410-55998/7	3.75	1.28716	5.0	268638.0	0.343243	Y
5	ICIS 410-55998/2	7.5	2.505372	5.0	327173.0	0.33405	Y
6	IC 410-55998/6	12.5	4.658229	5.0	333337.0	0.372658	Y
7	IC 410-55998/5	20.0	7.576917	5.0	316347.0	0.378846	Y
8	IC 410-55998/4	30.0	11.274915	5.0	308452.0	0.37583	Y



Calibration

/ 1,2,4,5-Tetrachlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

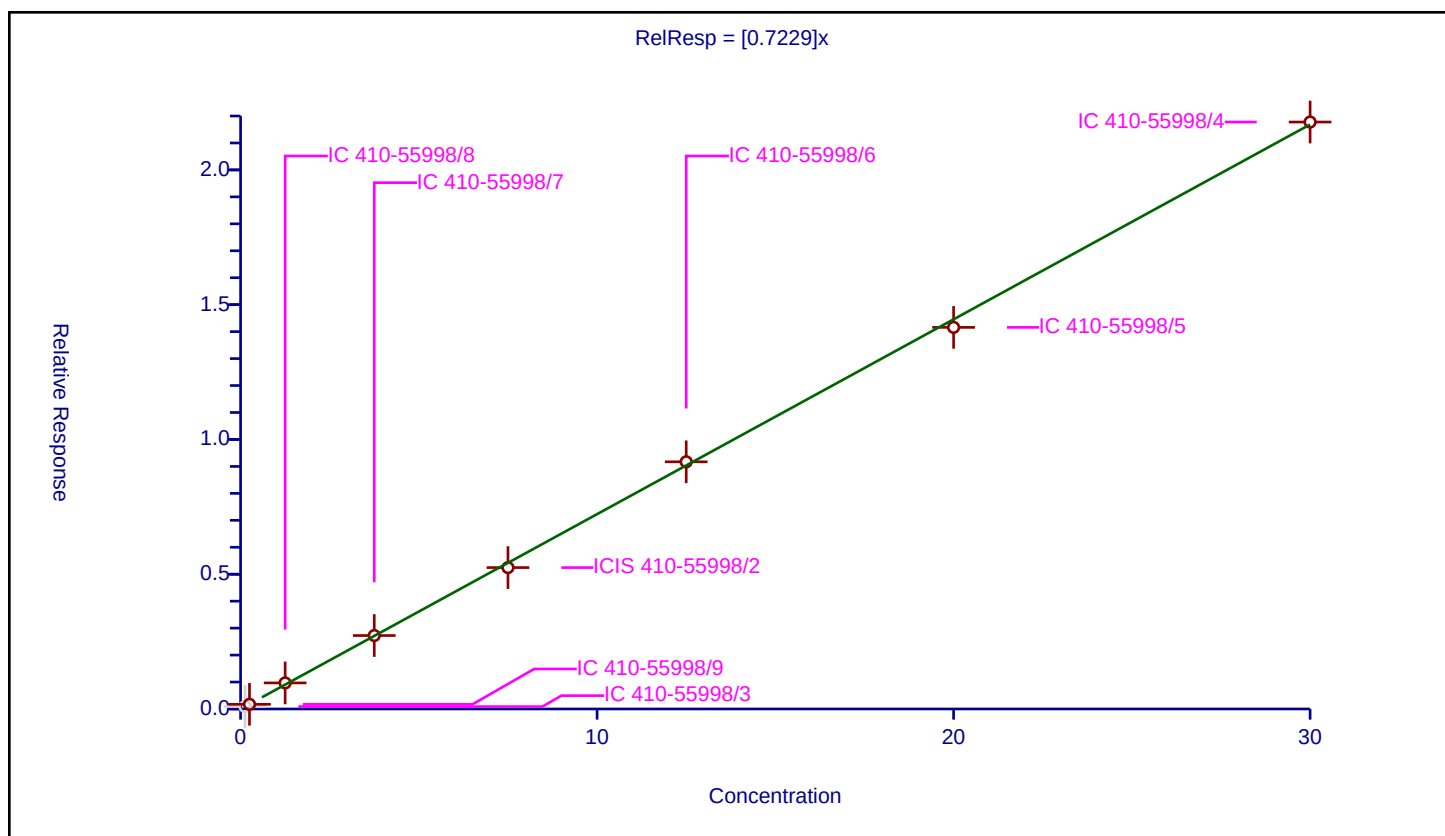
Curve Coefficients

Intercept: 0
 Slope: 0.7229

Error Coefficients

Standard Error: 722000
 Relative Standard Error: 3.8
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.089915	5.0	318800.0	0.719322	N
2	IC 410-55998/9	0.25	0.173136	5.0	259912.0	0.692542	Y
3	IC 410-55998/8	1.25	0.967129	5.0	324207.0	0.773703	Y
4	IC 410-55998/7	3.75	2.72562	5.0	268638.0	0.726832	Y
5	ICIS 410-55998/2	7.5	5.246062	5.0	327173.0	0.699475	Y
6	IC 410-55998/6	12.5	9.170959	5.0	333337.0	0.733677	Y
7	IC 410-55998/5	20.0	14.158298	5.0	316347.0	0.707915	Y
8	IC 410-55998/4	30.0	21.776387	5.0	308452.0	0.72588	Y



Calibration

/ Isosafrole Peak 1

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

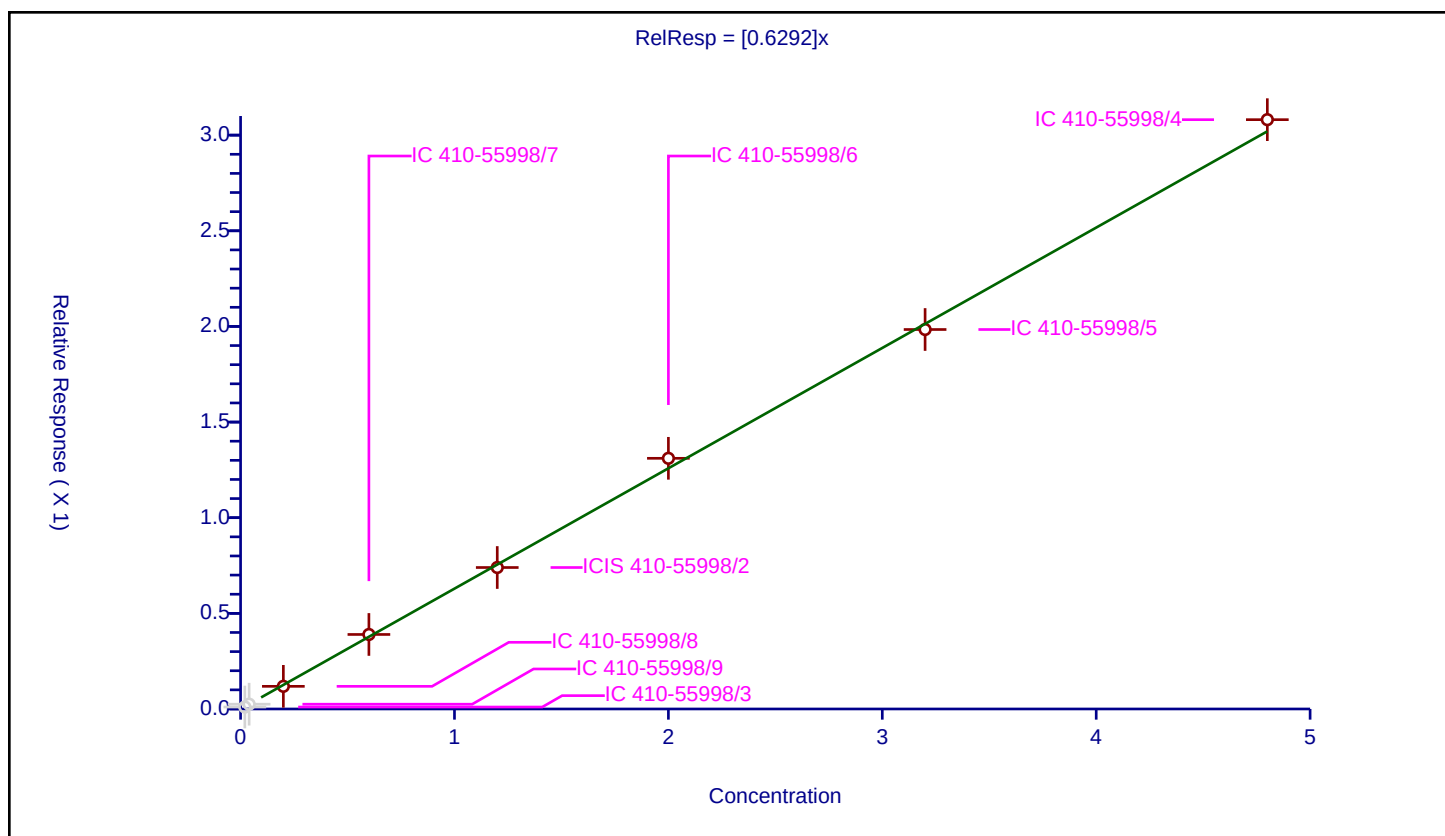
Curve Coefficients

Intercept: 0
 Slope: 0.6292

Error Coefficients

Standard Error: 112000
 Relative Standard Error: 3.8
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.02	0.010194	5.0	318800.0	0.509724	N
2	IC 410-55998/9	0.04	0.025066	5.0	259912.0	0.626654	N
3	IC 410-55998/8	0.2	0.118443	5.0	324207.0	0.592214	Y
4	IC 410-55998/7	0.6	0.389576	5.0	268638.0	0.649294	Y
5	ICIS 410-55998/2	1.2	0.739593	5.0	327173.0	0.616328	Y
6	IC 410-55998/6	2.0	1.310521	5.0	333337.0	0.65526	Y
7	IC 410-55998/5	3.2	1.983913	5.0	316347.0	0.619973	Y
8	IC 410-55998/4	4.8	3.080949	5.0	308452.0	0.641864	Y



Calibration

/ 2,4,6-Trichlorophenol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

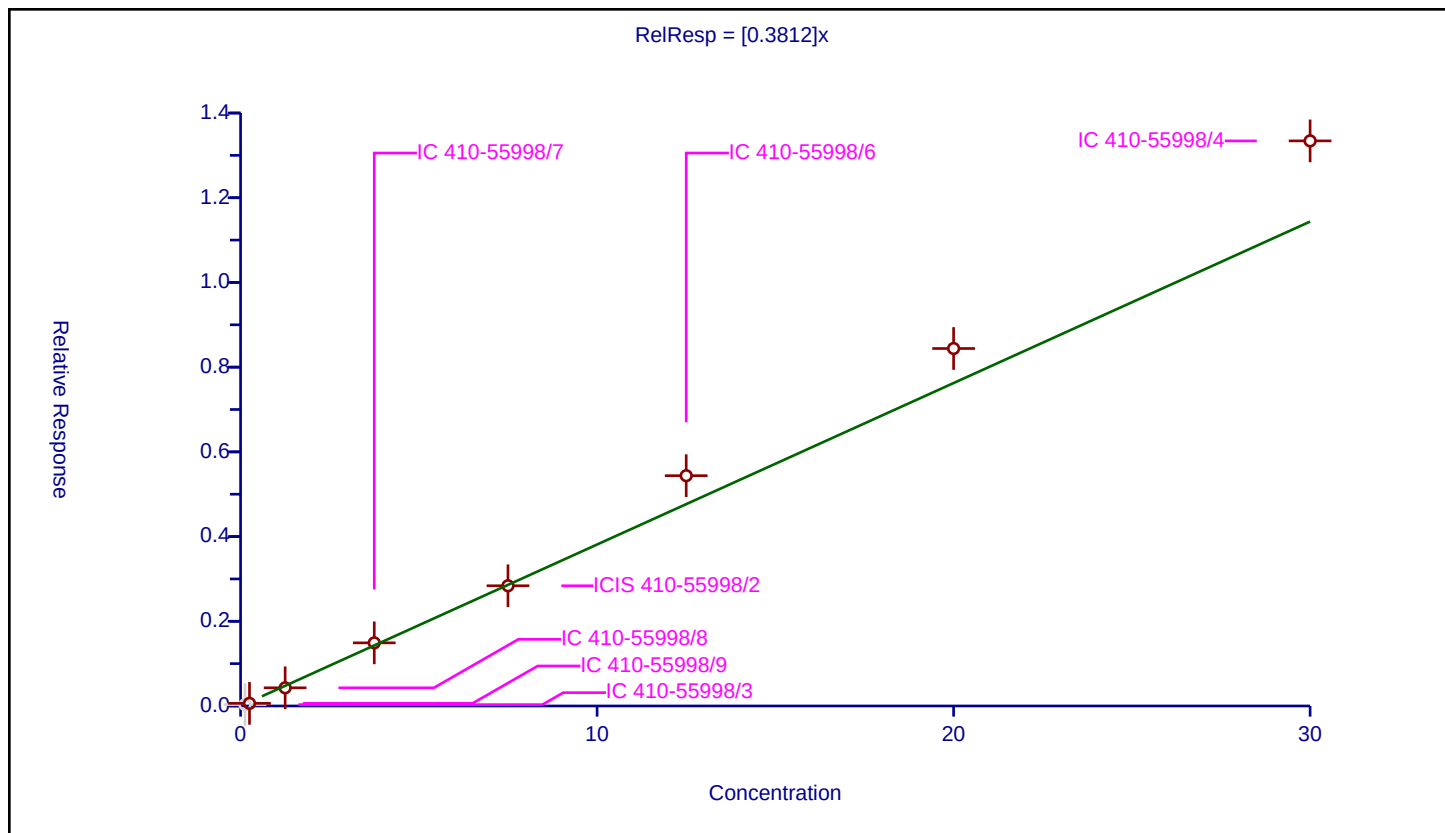
Curve Coefficients

Intercept: 0
 Slope: 0.3812

Error Coefficients

Standard Error: 435000
 Relative Standard Error: 18.0
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.969

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.032434	5.0	318800.0	0.259473	N
2	IC 410-55998/9	0.25	0.061886	5.0	259912.0	0.247545	Y
3	IC 410-55998/8	1.25	0.429155	5.0	324207.0	0.343324	Y
4	IC 410-55998/7	3.75	1.490575	5.0	268638.0	0.397487	Y
5	ICIS 410-55998/2	7.5	2.838712	5.0	327173.0	0.378495	Y
6	IC 410-55998/6	12.5	5.43756	5.0	333337.0	0.435005	Y
7	IC 410-55998/5	20.0	8.439894	5.0	316347.0	0.421995	Y
8	IC 410-55998/4	30.0	13.341881	5.0	308452.0	0.444729	Y



Calibration

/ 2,4,5-Trichlorophenol

Curve Type: Linear
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

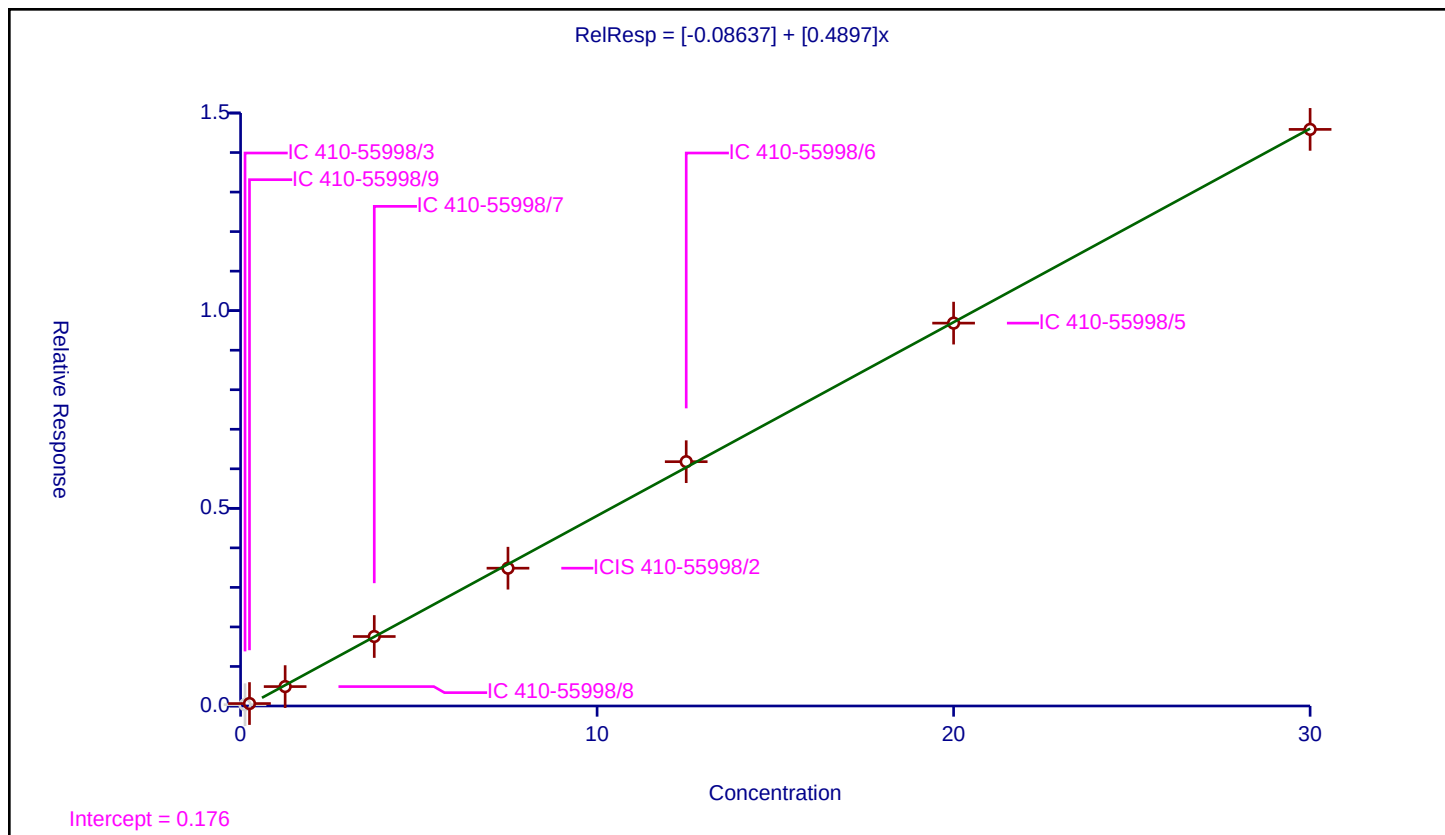
Curve Coefficients

Intercept: -0.08637
 Slope: 0.4897

Error Coefficients

Standard Error: 532000
 Relative Standard Error: 9.9
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.031901	5.0	318800.0	0.255207	N
2	IC 410-55998/9	0.25	0.061809	5.0	259912.0	0.247238	Y
3	IC 410-55998/8	1.25	0.491013	5.0	324207.0	0.392811	Y
4	IC 410-55998/7	3.75	1.757588	5.0	268638.0	0.46869	Y
5	ICIS 410-55998/2	7.5	3.486122	5.0	327173.0	0.464816	Y
6	IC 410-55998/6	12.5	6.179812	5.0	333337.0	0.494385	Y
7	IC 410-55998/5	20.0	9.68495	5.0	316347.0	0.484248	Y
8	IC 410-55998/4	30.0	14.586094	5.0	308452.0	0.486203	Y



Calibration

/ 2-Fluorobiphenyl (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

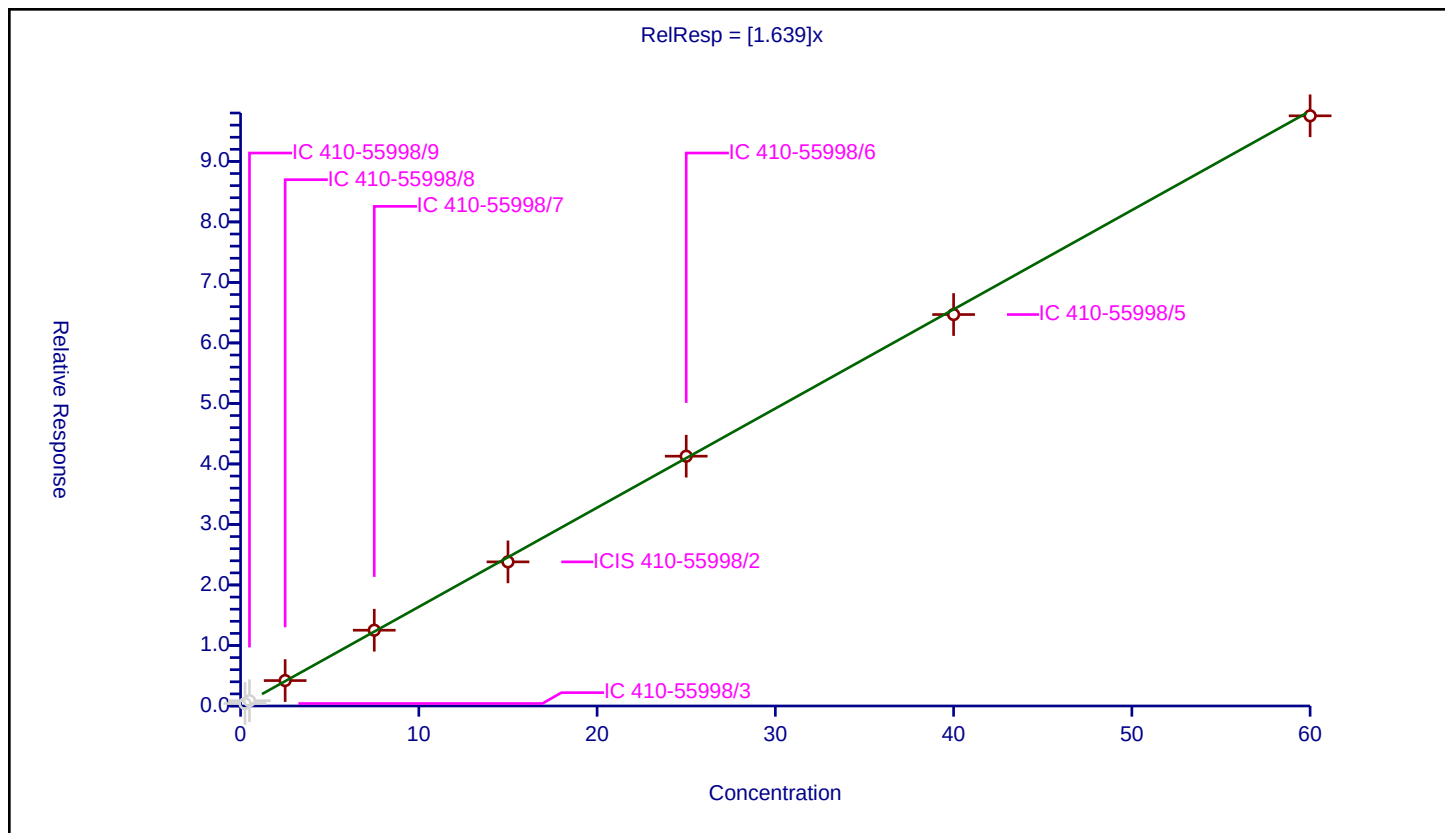
Curve Coefficients

Intercept: 0
 Slope: 1.639

Error Coefficients

Standard Error: 3560000
 Relative Standard Error: 2.1
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.25	0.407905	5.0	318800.0	1.631619	N
2	IC 410-55998/9	0.5	0.868352	5.0	259912.0	1.736703	N
3	IC 410-55998/8	2.5	4.202223	5.0	324207.0	1.680889	Y
4	IC 410-55998/7	7.5	12.521181	5.0	268638.0	1.669491	Y
5	ICIS 410-55998/2	15.0	23.820441	5.0	327173.0	1.588029	Y
6	IC 410-55998/6	25.0	41.285021	5.0	333337.0	1.651401	Y
7	IC 410-55998/5	40.0	64.696836	5.0	316347.0	1.617421	Y
8	IC 410-55998/4	60.0	97.536181	5.0	308452.0	1.625603	Y



Calibration

/ Isosafrole Peak 2

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

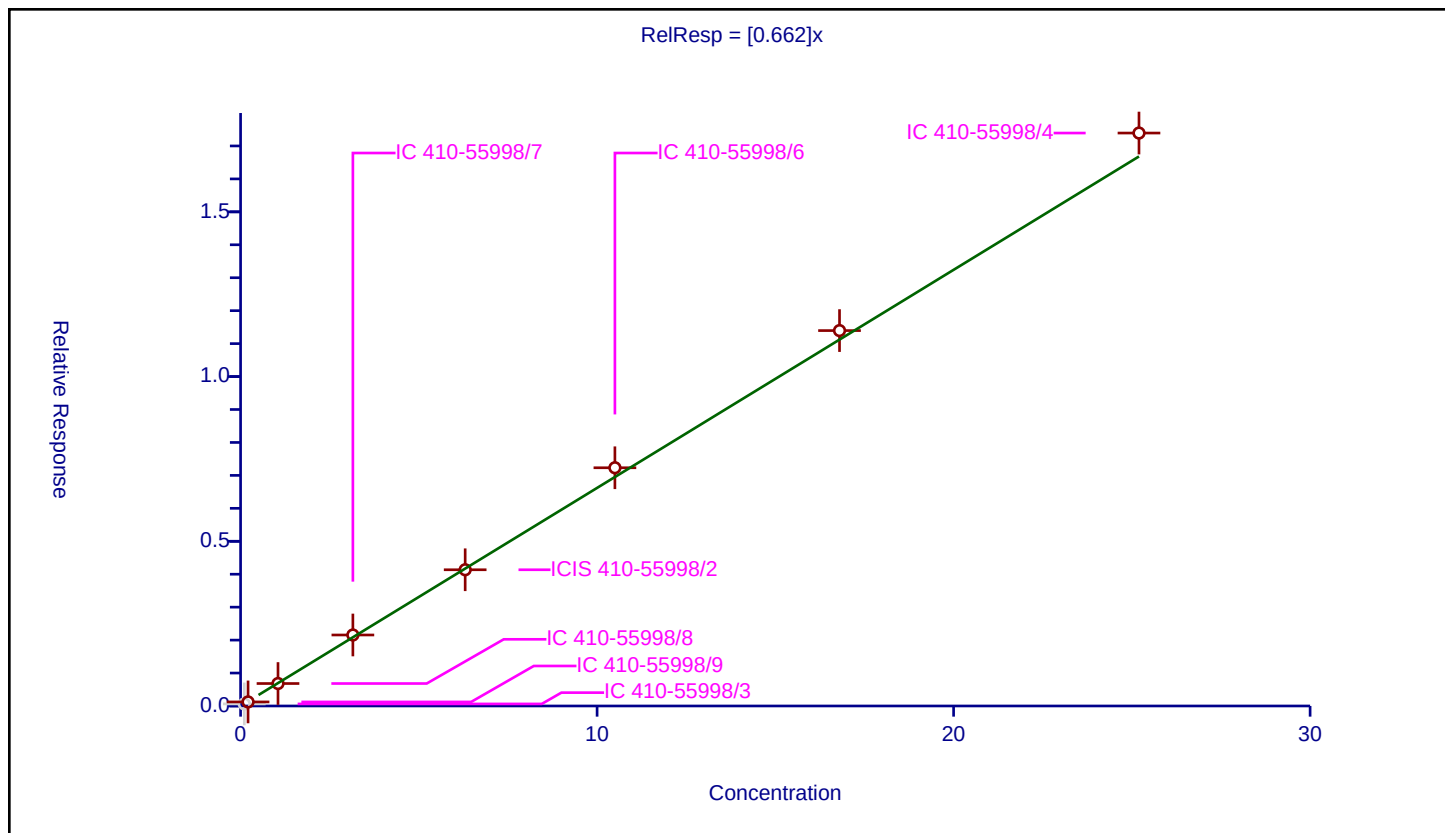
Curve Coefficients

Intercept: 0
 Slope: 0.662

Error Coefficients

Standard Error: 576000
 Relative Standard Error: 5.6
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.105	0.062359	5.0	318800.0	0.593894	N
2	IC 410-55998/9	0.21	0.123138	5.0	259912.0	0.586371	Y
3	IC 410-55998/8	1.05	0.682203	5.0	324207.0	0.649717	Y
4	IC 410-55998/7	3.15	2.155056	5.0	268638.0	0.684145	Y
5	ICIS 410-55998/2	6.3	4.134984	5.0	327173.0	0.656347	Y
6	IC 410-55998/6	10.5	7.231585	5.0	333337.0	0.688722	Y
7	IC 410-55998/5	16.8	11.395414	5.0	316347.0	0.678298	Y
8	IC 410-55998/4	25.2	17.392285	5.0	308452.0	0.69017	Y



Calibration

/ 1,1'-Biphenyl

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

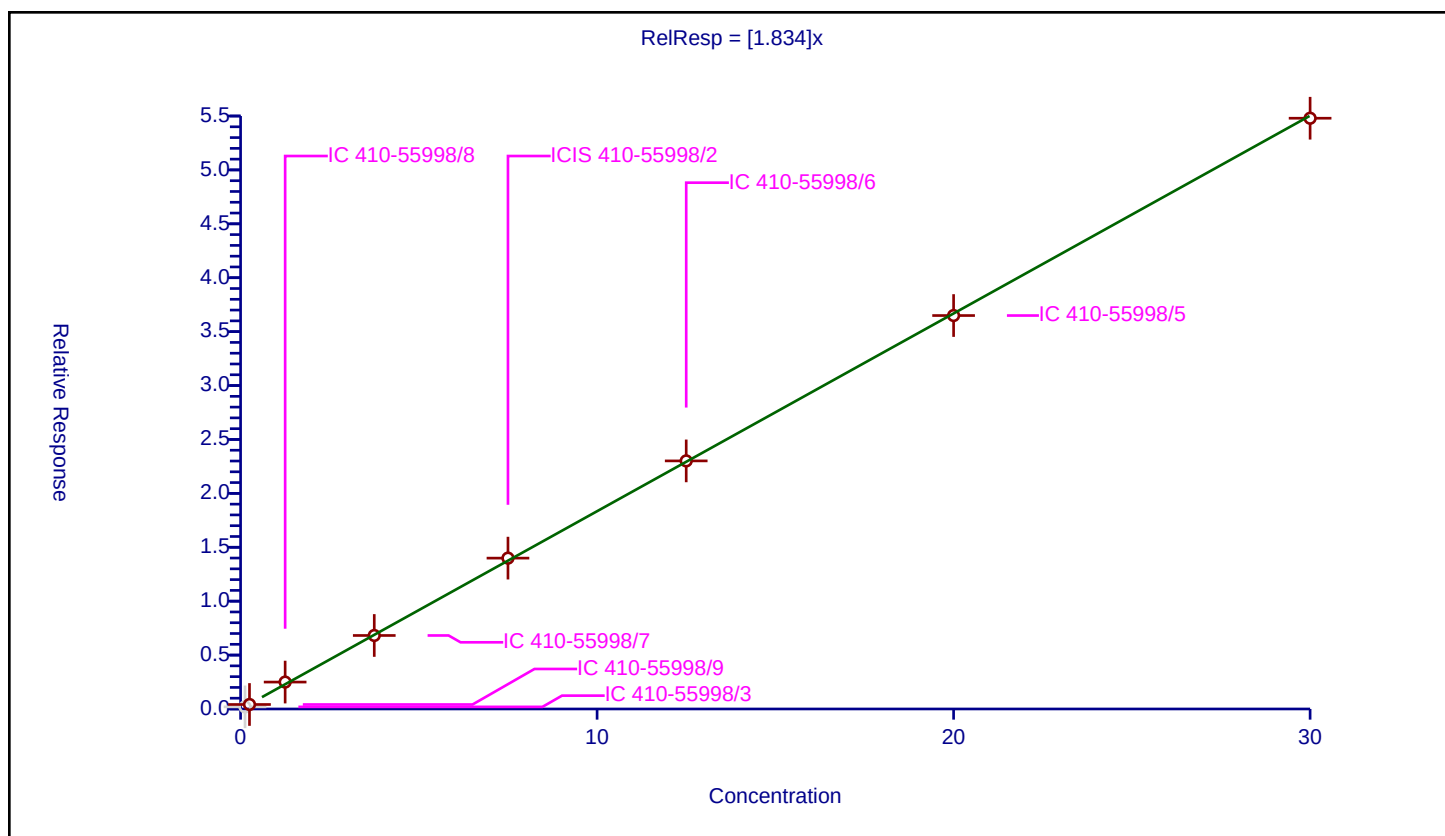
Curve Coefficients

Intercept: 0
 Slope: 1.834

Error Coefficients

Standard Error: 1830000
 Relative Standard Error: 5.3
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.195969	5.0	318800.0	1.567754	N
2	IC 410-55998/9	0.25	0.416641	5.0	259912.0	1.666564	Y
3	IC 410-55998/8	1.25	2.49663	5.0	324207.0	1.997304	Y
4	IC 410-55998/7	3.75	6.818376	5.0	268638.0	1.818234	Y
5	ICIS 410-55998/2	7.5	13.994553	5.0	327173.0	1.86594	Y
6	IC 410-55998/6	12.5	23.011757	5.0	333337.0	1.840941	Y
7	IC 410-55998/5	20.0	36.493012	5.0	316347.0	1.824651	Y
8	IC 410-55998/4	30.0	54.795608	5.0	308452.0	1.82652	Y



Calibration

/ 2-Chloronaphthalene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

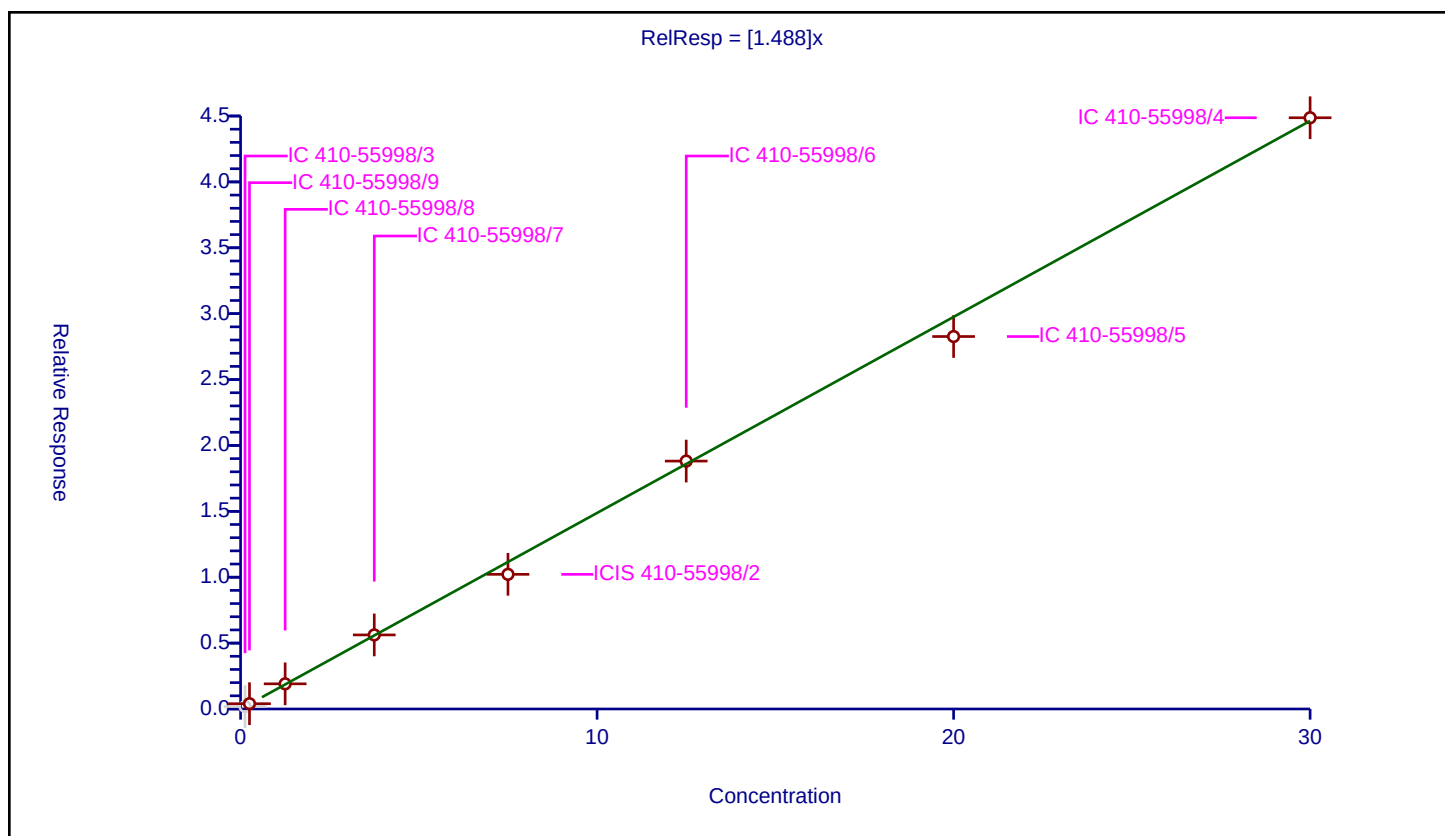
Curve Coefficients

Intercept: 0
Slope: 1.488

Error Coefficients

Standard Error: 1470000
Relative Standard Error: 5.4
Correlation Coefficient: 0.997
Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.186355	5.0	318800.0	1.490841	N
2	IC 410-55998/9	0.25	0.402694	5.0	259912.0	1.610776	Y
3	IC 410-55998/8	1.25	1.909428	5.0	324207.0	1.527543	Y
4	IC 410-55998/7	3.75	5.620668	5.0	268638.0	1.498845	Y
5	ICIS 410-55998/2	7.5	10.219578	5.0	327173.0	1.36261	Y
6	IC 410-55998/6	12.5	18.813693	5.0	333337.0	1.505095	Y
7	IC 410-55998/5	20.0	28.265481	5.0	316347.0	1.413274	Y
8	IC 410-55998/4	30.0	44.86831	5.0	308452.0	1.49561	Y



Calibration

/ 1-Chloronaphthalene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

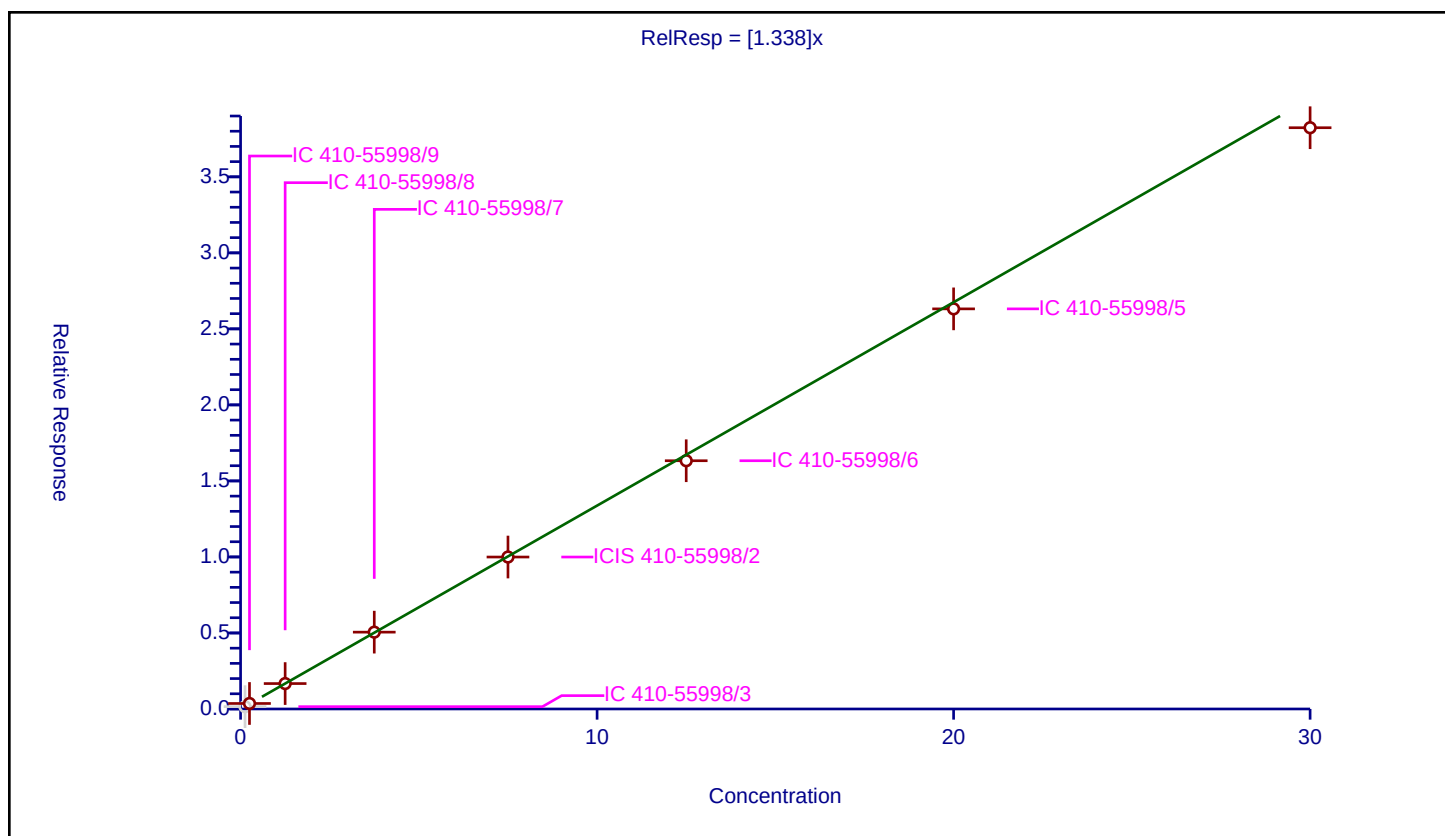
Curve Coefficients

Intercept: 0
 Slope: 1.338

Error Coefficients

Standard Error: 1290000
 Relative Standard Error: 4.1
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.153858	5.0	318800.0	1.230866	N
2	IC 410-55998/9	0.25	0.362161	5.0	259912.0	1.448644	Y
3	IC 410-55998/8	1.25	1.672296	5.0	324207.0	1.337837	Y
4	IC 410-55998/7	3.75	5.053455	5.0	268638.0	1.347588	Y
5	ICIS 410-55998/2	7.5	9.994544	5.0	327173.0	1.332606	Y
6	IC 410-55998/6	12.5	16.327995	5.0	333337.0	1.30624	Y
7	IC 410-55998/5	20.0	26.316086	5.0	316347.0	1.315804	Y
8	IC 410-55998/4	30.0	38.230033	5.0	308452.0	1.274334	Y



Calibration

/ Phenyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

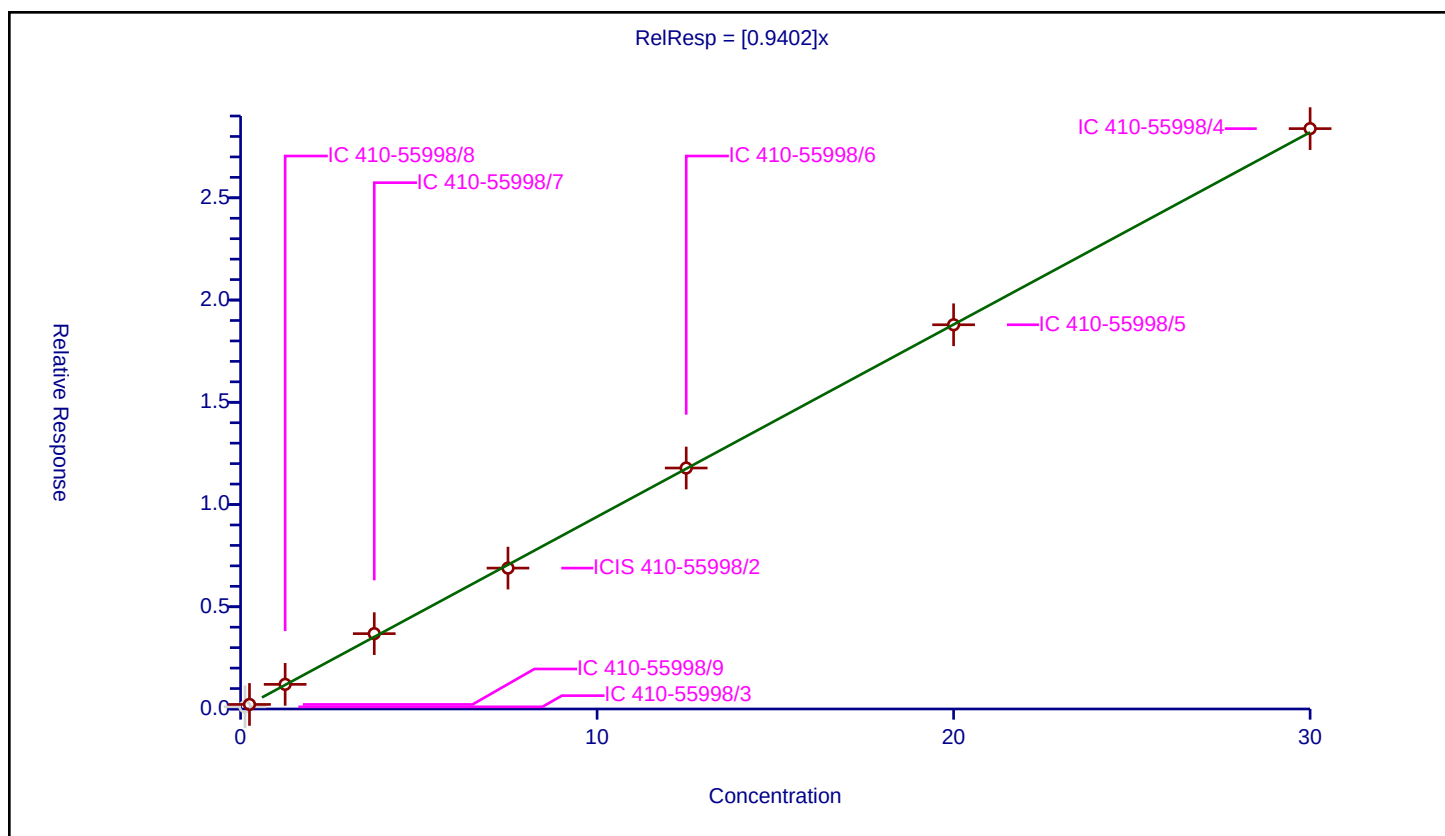
Curve Coefficients

Intercept: 0
 Slope: 0.9402

Error Coefficients

Standard Error: 944000
 Relative Standard Error: 3.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.106493	5.0	318800.0	0.851945	N
2	IC 410-55998/9	0.25	0.221921	5.0	259912.0	0.887685	Y
3	IC 410-55998/8	1.25	1.204724	5.0	324207.0	0.963779	Y
4	IC 410-55998/7	3.75	3.684475	5.0	268638.0	0.982527	Y
5	ICIS 410-55998/2	7.5	6.890254	5.0	327173.0	0.918701	Y
6	IC 410-55998/6	12.5	11.78453	5.0	333337.0	0.942762	Y
7	IC 410-55998/5	20.0	18.790727	5.0	316347.0	0.939536	Y
8	IC 410-55998/4	30.0	28.382568	5.0	308452.0	0.946086	Y



Calibration

/ 2-Nitroaniline

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

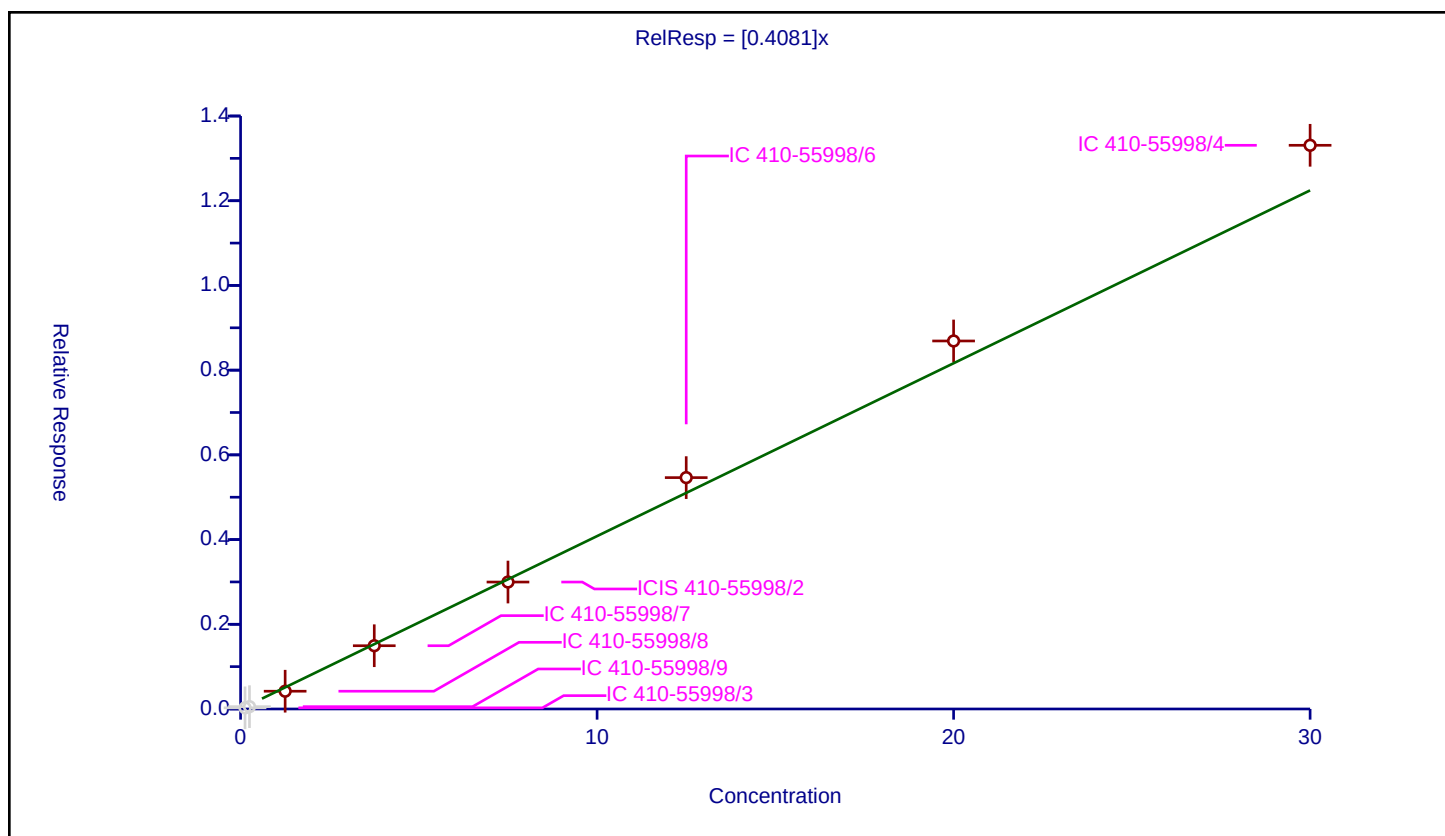
Curve Coefficients

Intercept: 0
Slope: 0.4081

Error Coefficients

Standard Error: 481000
Relative Standard Error: 9.9
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.027541	5.0	318800.0	0.220326	N
2	IC 410-55998/9	0.25	0.055173	5.0	259912.0	0.22069	N
3	IC 410-55998/8	1.25	0.419809	5.0	324207.0	0.335847	Y
4	IC 410-55998/7	3.75	1.493664	5.0	268638.0	0.39831	Y
5	ICIS 410-55998/2	7.5	2.996962	5.0	327173.0	0.399595	Y
6	IC 410-55998/6	12.5	5.462715	5.0	333337.0	0.437017	Y
7	IC 410-55998/5	20.0	8.68845	5.0	316347.0	0.434422	Y
8	IC 410-55998/4	30.0	13.308878	5.0	308452.0	0.443629	Y



Calibration

/ 1,4-Naphthoquinone

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

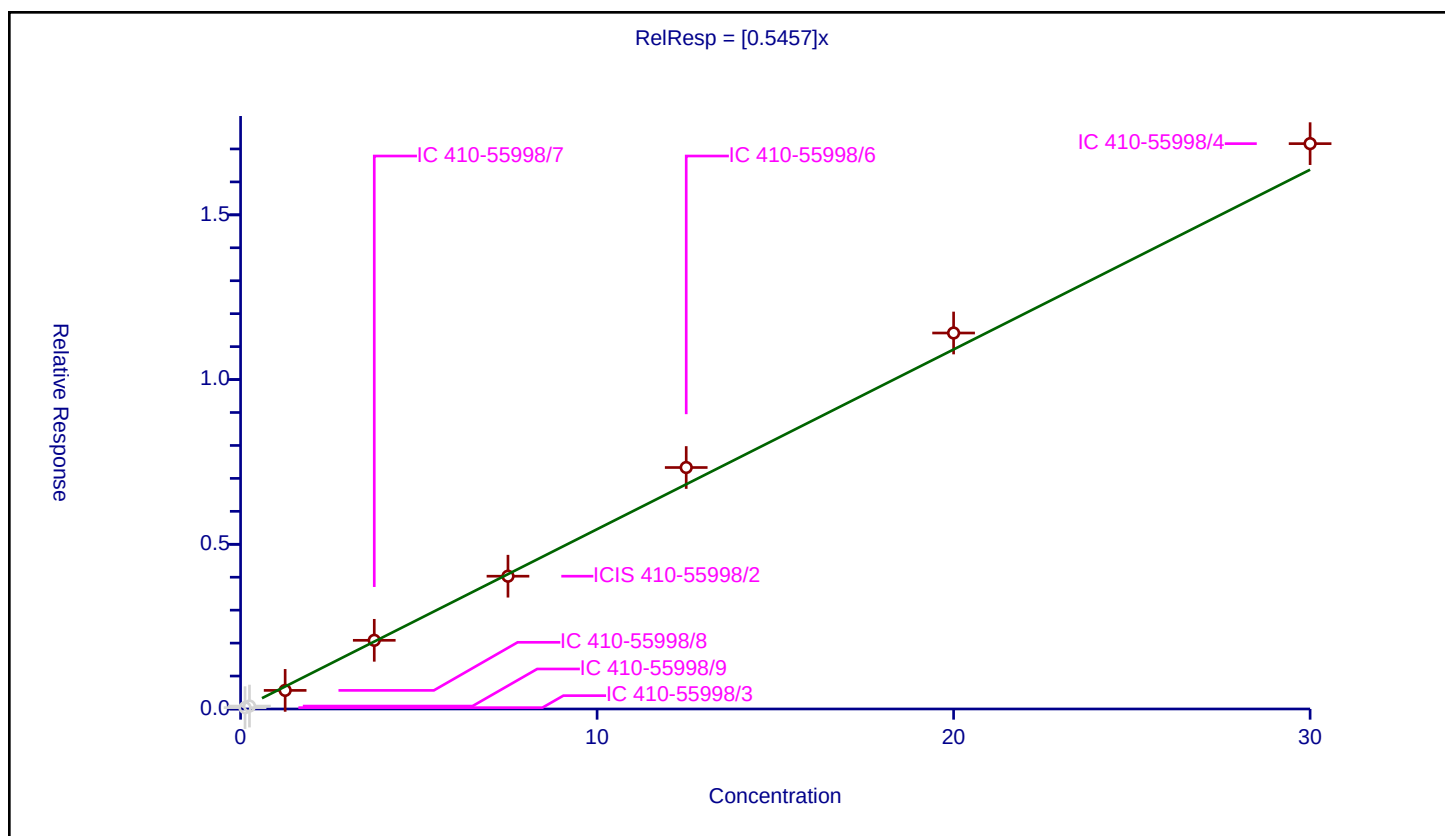
Curve Coefficients

Intercept: 0
 Slope: 0.5457

Error Coefficients

Standard Error: 627000
 Relative Standard Error: 9.0
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.04048	5.0	318800.0	0.323839	N
2	IC 410-55998/9	0.25	0.088395	5.0	259912.0	0.353581	N
3	IC 410-55998/8	1.25	0.564639	5.0	324207.0	0.451711	Y
4	IC 410-55998/7	3.75	2.084422	5.0	268638.0	0.555846	Y
5	ICIS 410-55998/2	7.5	4.030666	5.0	327173.0	0.537422	Y
6	IC 410-55998/6	12.5	7.330434	5.0	333337.0	0.586435	Y
7	IC 410-55998/5	20.0	11.412942	5.0	316347.0	0.570647	Y
8	IC 410-55998/4	30.0	17.161682	5.0	308452.0	0.572056	Y



Calibration

/ 1,4-Dinitrobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

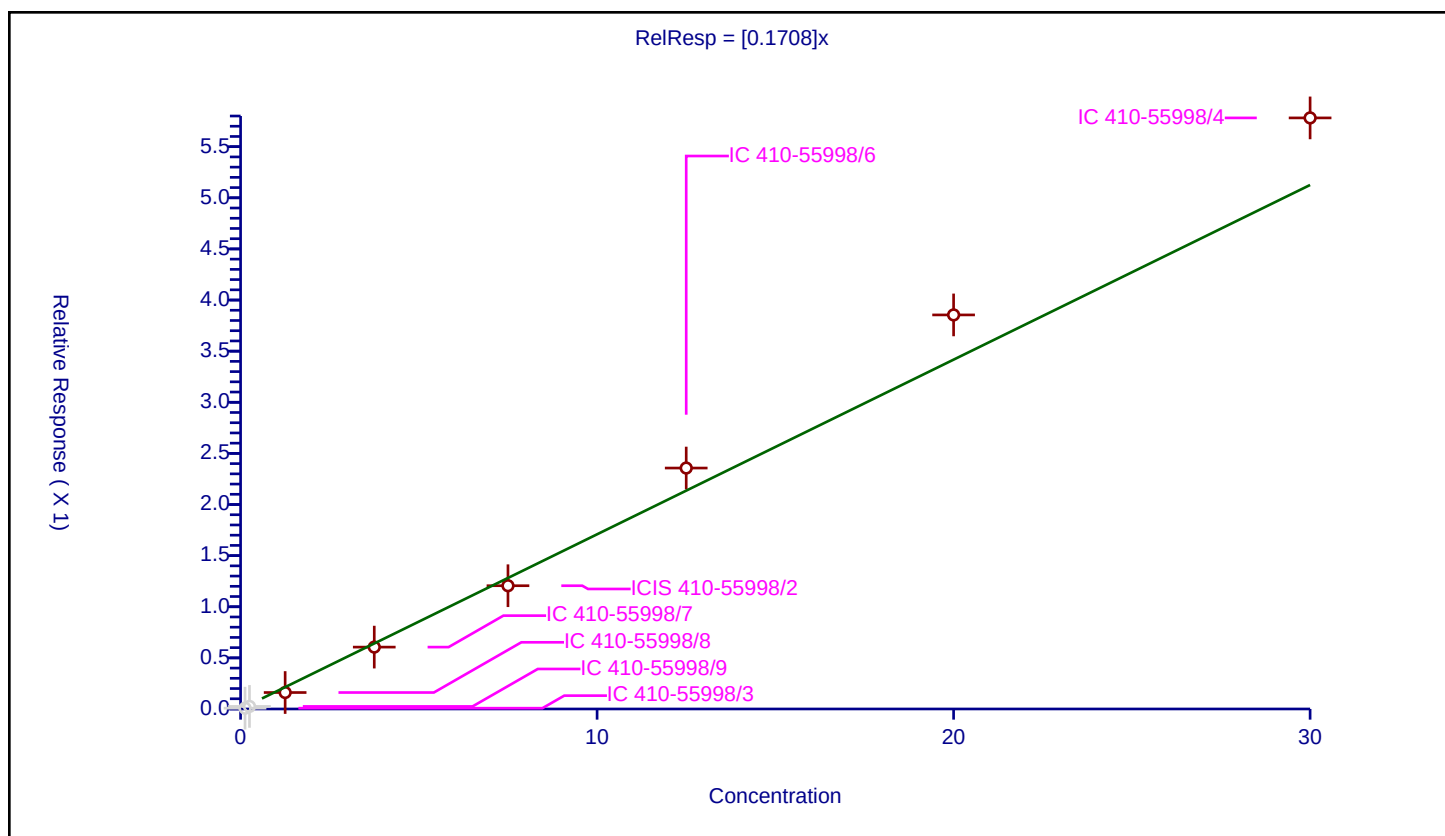
Curve Coefficients

Intercept: 0
 Slope: 0.1708

Error Coefficients

Standard Error: 209000
 Relative Standard Error: 14.8
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.007999	5.0	318800.0	0.06399	N
2	IC 410-55998/9	0.25	0.025124	5.0	259912.0	0.100496	N
3	IC 410-55998/8	1.25	0.161178	5.0	324207.0	0.128942	Y
4	IC 410-55998/7	3.75	0.60535	5.0	268638.0	0.161427	Y
5	ICIS 410-55998/2	7.5	1.205585	5.0	327173.0	0.160745	Y
6	IC 410-55998/6	12.5	2.356759	5.0	333337.0	0.188541	Y
7	IC 410-55998/5	20.0	3.854533	5.0	316347.0	0.192727	Y
8	IC 410-55998/4	30.0	5.781483	5.0	308452.0	0.192716	Y



Calibration

/ Dimethyl phthalate

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

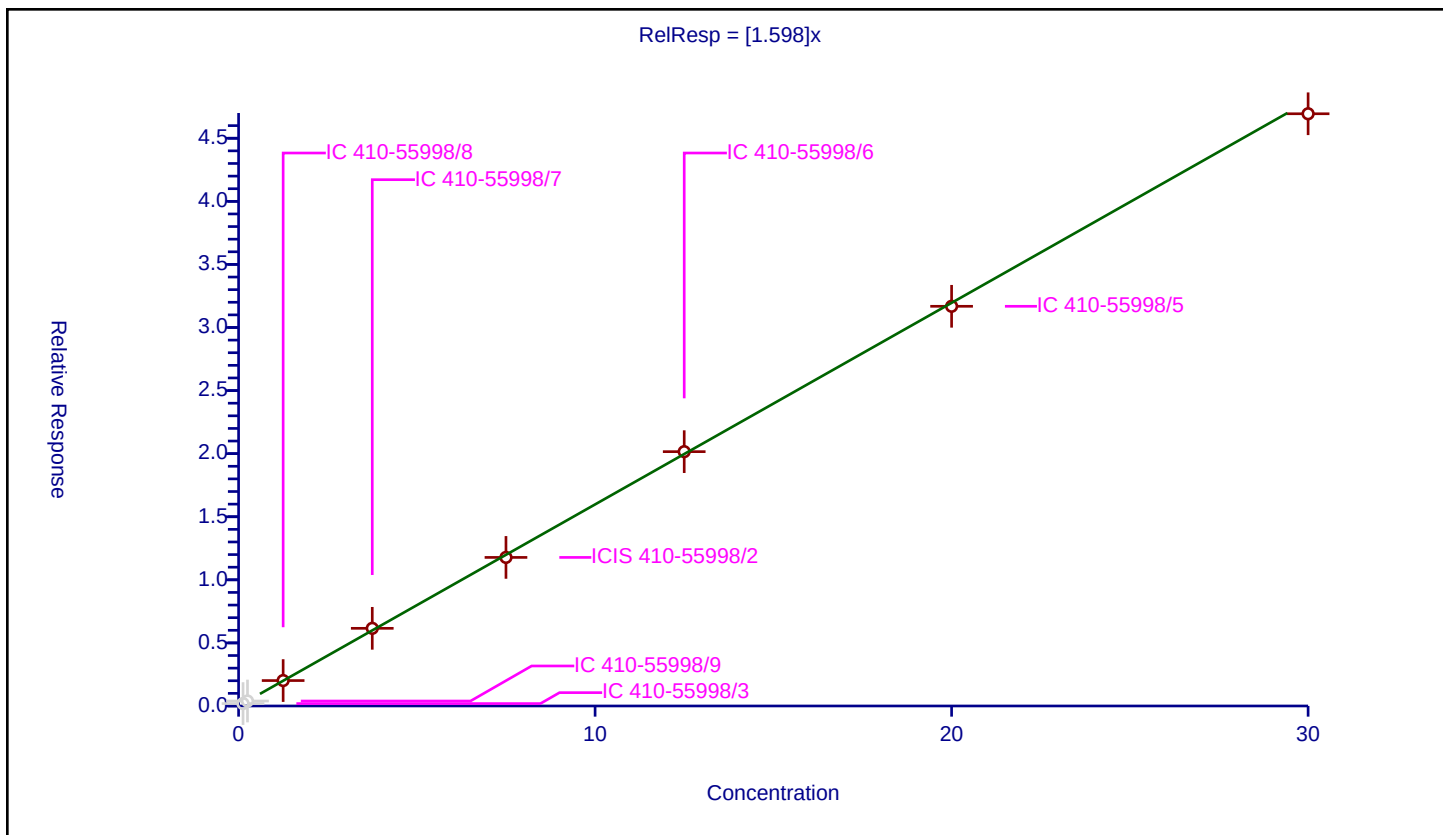
Curve Coefficients

Intercept: 0
Slope: 1.598

Error Coefficients

Standard Error: 1730000
Relative Standard Error: 1.9
Correlation Coefficient: 0.997
Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.190809	5.0	318800.0	1.526474	N
2	IC 410-55998/9	0.25	0.394749	5.0	259912.0	1.578996	N
3	IC 410-55998/8	1.25	2.015826	5.0	324207.0	1.612661	Y
4	IC 410-55998/7	3.75	6.156017	5.0	268638.0	1.641604	Y
5	ICIS 410-55998/2	7.5	11.776247	5.0	327173.0	1.570166	Y
6	IC 410-55998/6	12.5	20.158248	5.0	333337.0	1.61266	Y
7	IC 410-55998/5	20.0	31.680876	5.0	316347.0	1.584044	Y
8	IC 410-55998/4	30.0	46.941809	5.0	308452.0	1.564727	Y



Calibration

/ 1,3-Dinitrobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

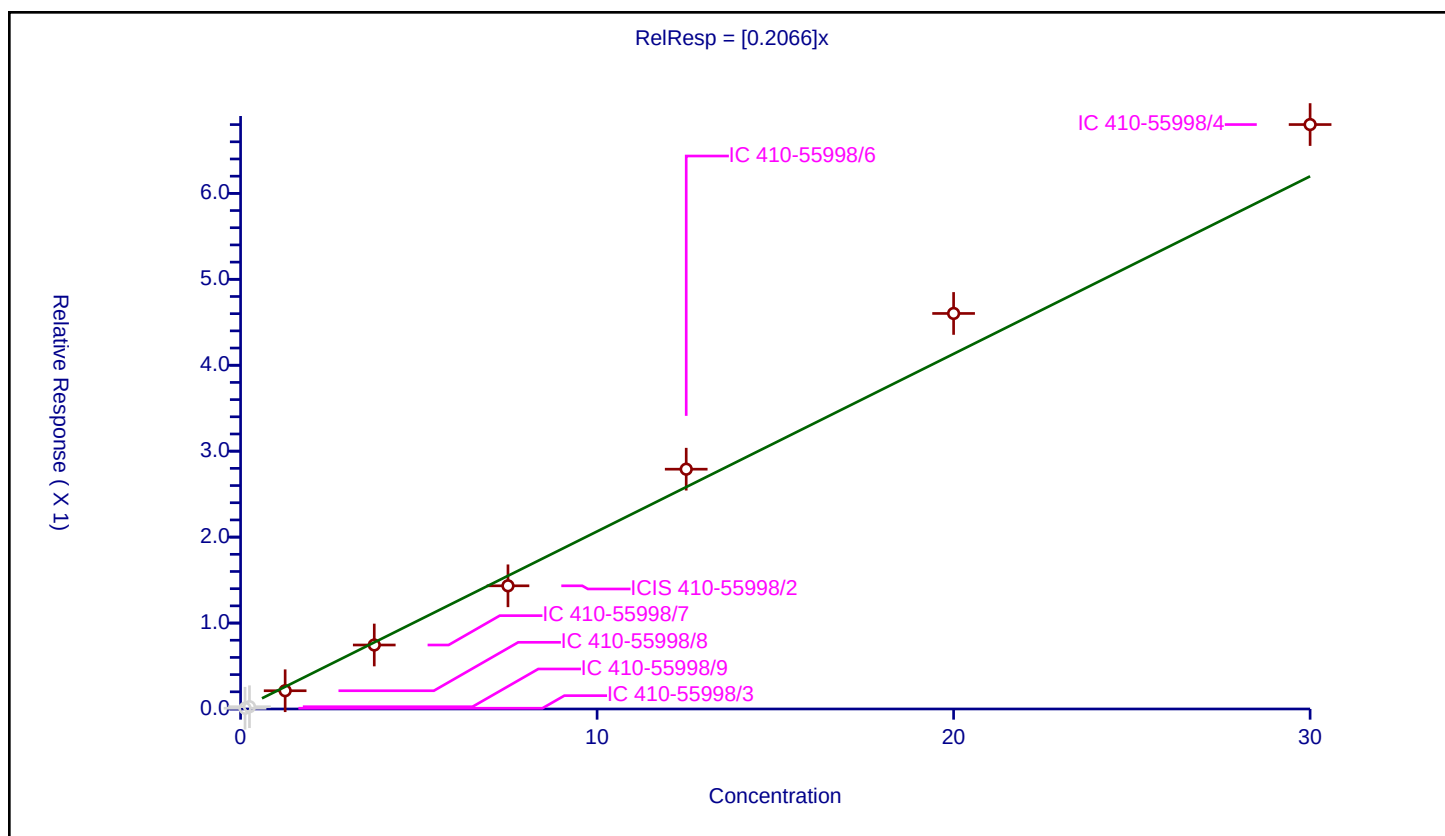
Curve Coefficients

Intercept: 0
 Slope: 0.2066

Error Coefficients

Standard Error: 247000
 Relative Standard Error: 11.6
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.008861	5.0	318800.0	0.070891	N
2	IC 410-55998/9	0.25	0.02647	5.0	259912.0	0.105882	N
3	IC 410-55998/8	1.25	0.212426	5.0	324207.0	0.169941	Y
4	IC 410-55998/7	3.75	0.744645	5.0	268638.0	0.198572	Y
5	ICIS 410-55998/2	7.5	1.433447	5.0	327173.0	0.191126	Y
6	IC 410-55998/6	12.5	2.790254	5.0	333337.0	0.22322	Y
7	IC 410-55998/5	20.0	4.602557	5.0	316347.0	0.230128	Y
8	IC 410-55998/4	30.0	6.800702	5.0	308452.0	0.22669	Y



Calibration

/ 2,6-Dinitrotoluene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

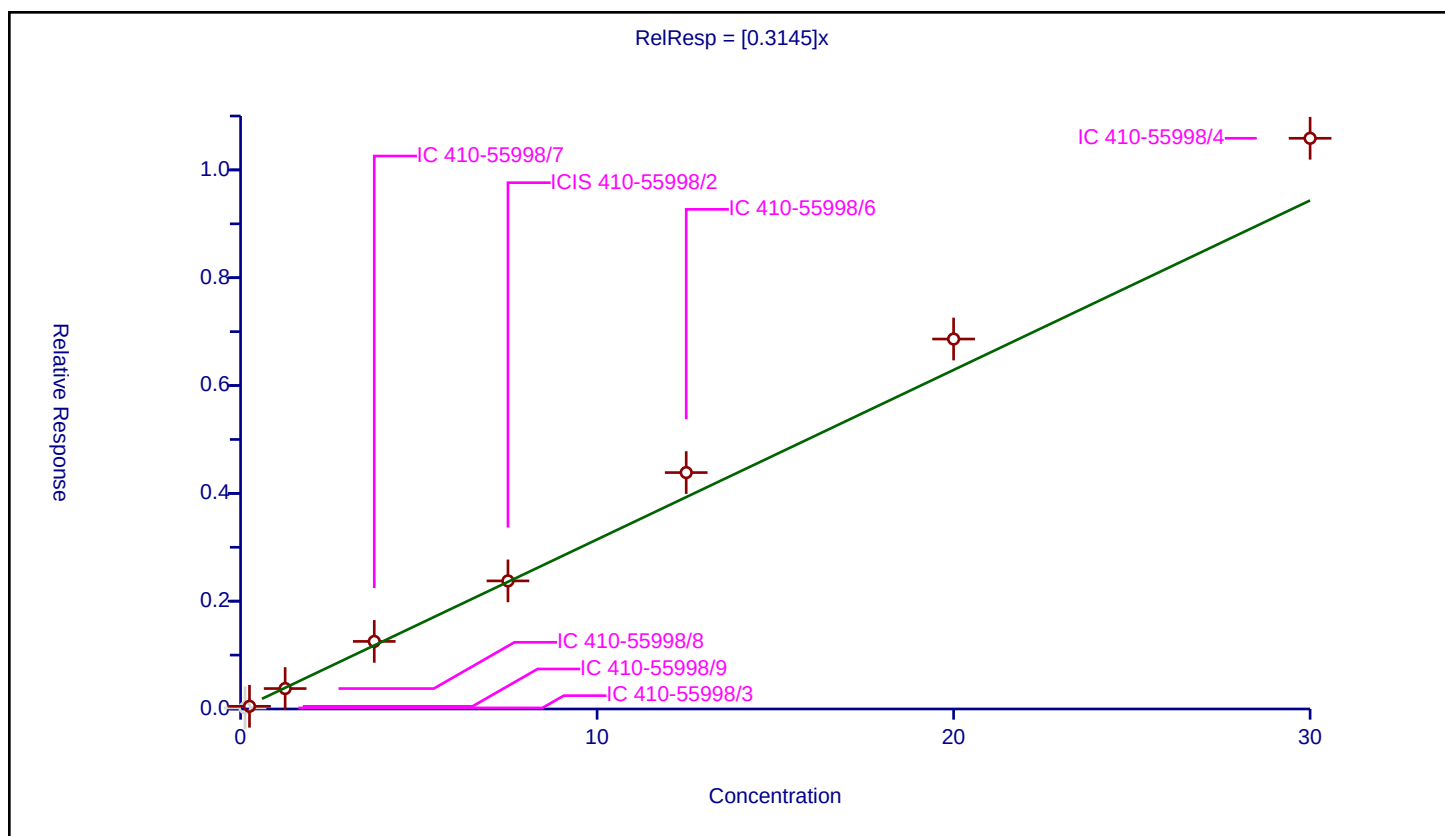
Curve Coefficients

Intercept: 0
Slope: 0.3145

Error Coefficients

Standard Error: 349000
Relative Standard Error: 17.1
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.972

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.020232	5.0	318800.0	0.161857	N
2	IC 410-55998/9	0.25	0.04994	5.0	259912.0	0.19976	Y
3	IC 410-55998/8	1.25	0.379279	5.0	324207.0	0.303423	Y
4	IC 410-55998/7	3.75	1.253806	5.0	268638.0	0.334348	Y
5	ICIS 410-55998/2	7.5	2.376189	5.0	327173.0	0.316825	Y
6	IC 410-55998/6	12.5	4.385592	5.0	333337.0	0.350847	Y
7	IC 410-55998/5	20.0	6.863144	5.0	316347.0	0.343157	Y
8	IC 410-55998/4	30.0	10.586785	5.0	308452.0	0.352893	Y



Calibration

/ Acenaphthylene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

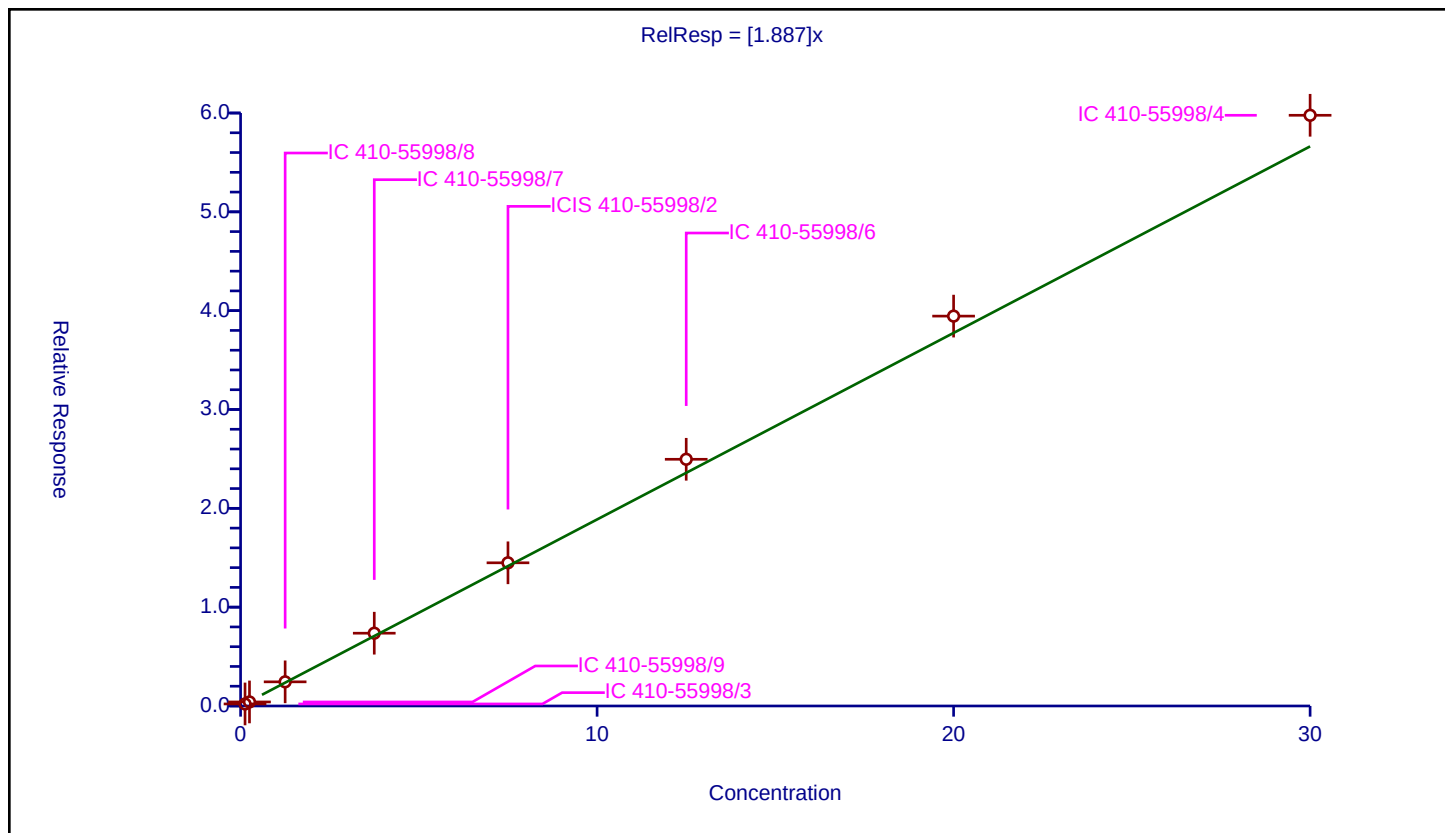
Curve Coefficients

Intercept: 0
 Slope: 1.887

Error Coefficients

Standard Error: 1840000
 Relative Standard Error: 8.0
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.206524	5.0	318800.0	1.652196	Y
2	IC 410-55998/9	0.25	0.408946	5.0	259912.0	1.635784	Y
3	IC 410-55998/8	1.25	2.442159	5.0	324207.0	1.953727	Y
4	IC 410-55998/7	3.75	7.365209	5.0	268638.0	1.964056	Y
5	ICIS 410-55998/2	7.5	14.488497	5.0	327173.0	1.9318	Y
6	IC 410-55998/6	12.5	24.96406	5.0	333337.0	1.997125	Y
7	IC 410-55998/5	20.0	39.448991	5.0	316347.0	1.97245	Y
8	IC 410-55998/4	30.0	59.770548	5.0	308452.0	1.992352	Y



Calibration

/ 3-Nitroaniline

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

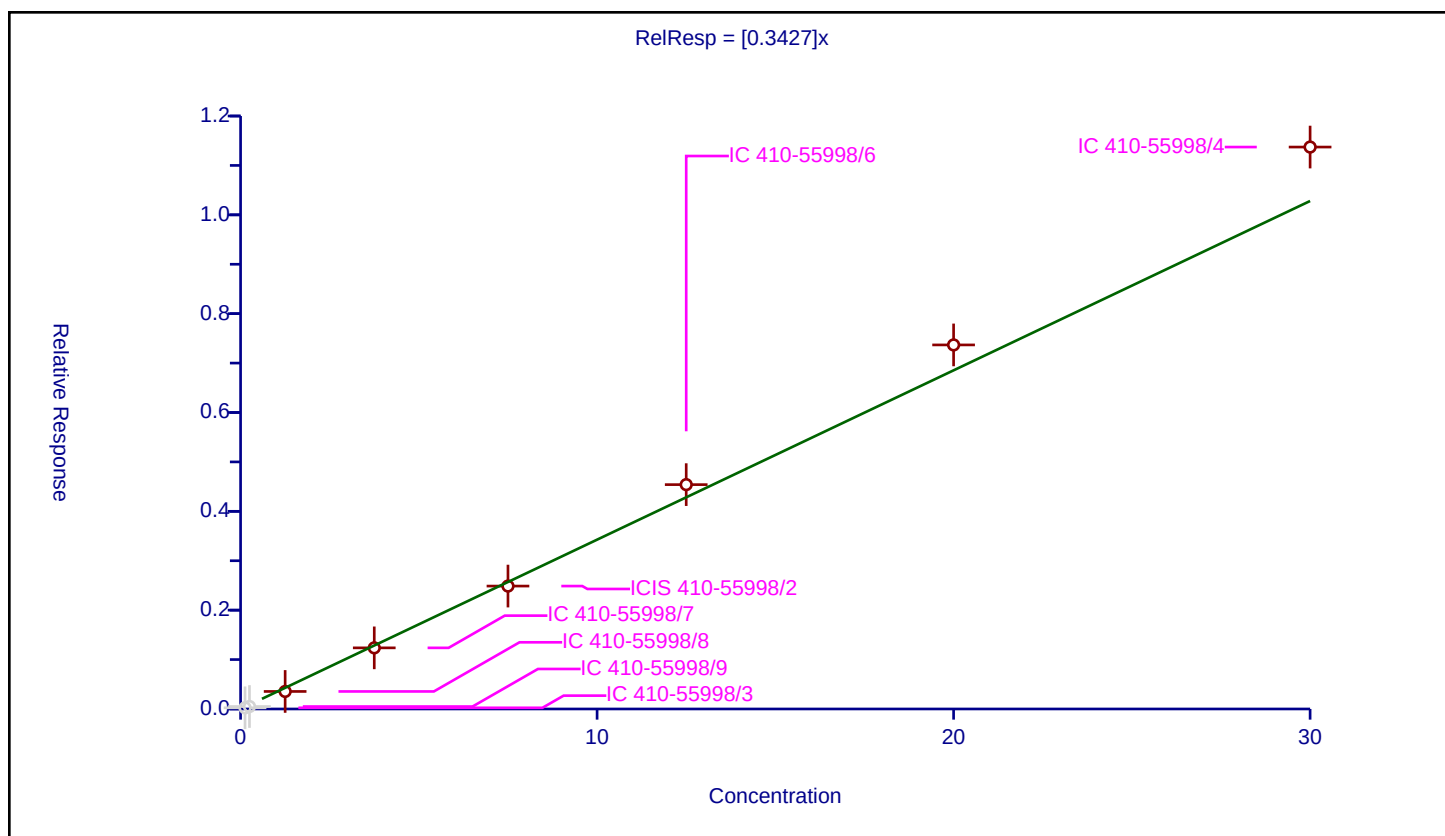
Curve Coefficients

Intercept: 0
 Slope: 0.3427

Error Coefficients

Standard Error: 408000
 Relative Standard Error: 10.2
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.02409	5.0	318800.0	0.192723	N
2	IC 410-55998/9	0.25	0.050171	5.0	259912.0	0.200683	N
3	IC 410-55998/8	1.25	0.354758	5.0	324207.0	0.283806	Y
4	IC 410-55998/7	3.75	1.236999	5.0	268638.0	0.329866	Y
5	ICIS 410-55998/2	7.5	2.487354	5.0	327173.0	0.331647	Y
6	IC 410-55998/6	12.5	4.540465	5.0	333337.0	0.363237	Y
7	IC 410-55998/5	20.0	7.367385	5.0	316347.0	0.368369	Y
8	IC 410-55998/4	30.0	11.372061	5.0	308452.0	0.379069	Y



Calibration

/ Acenaphthene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

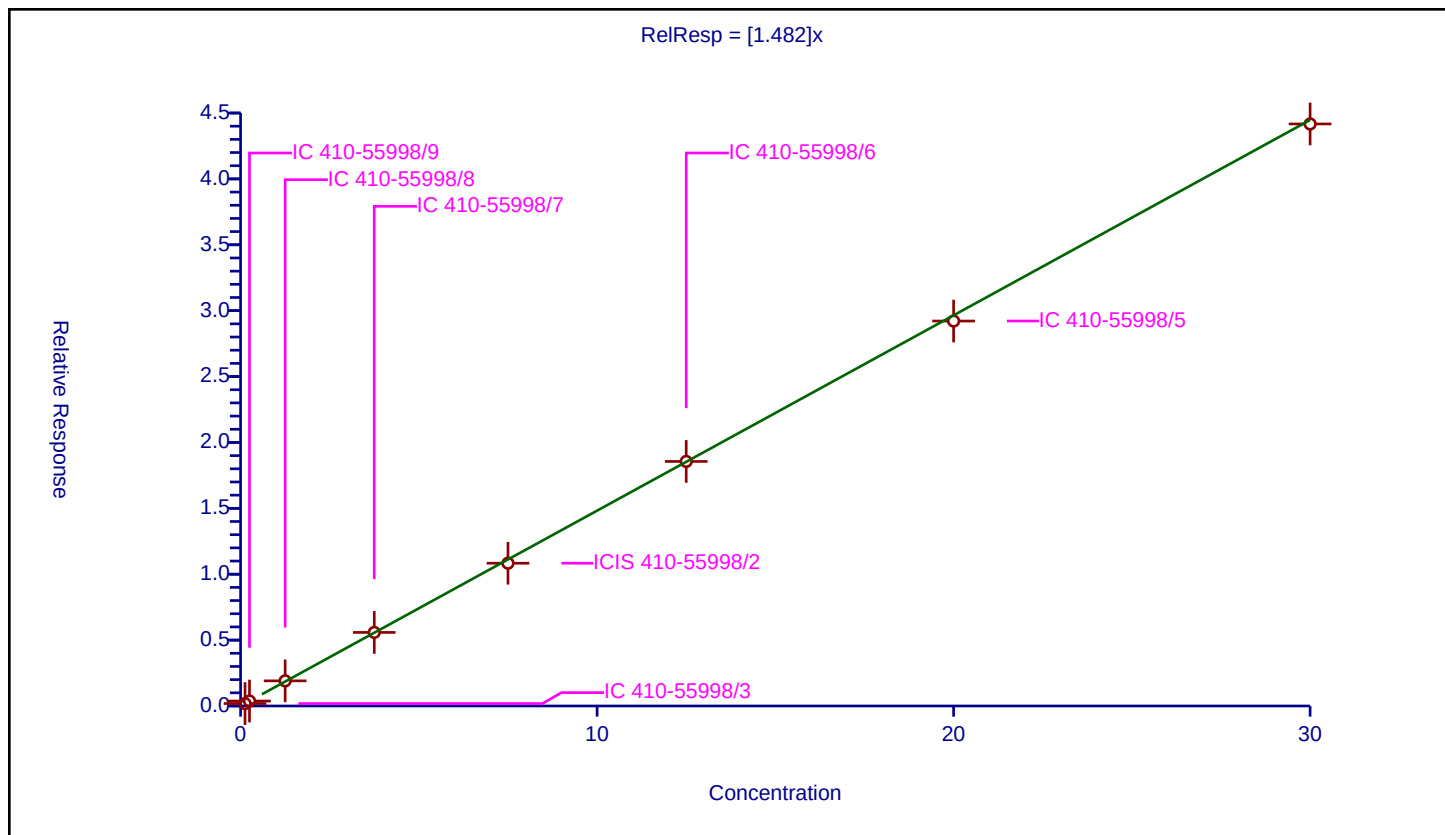
Curve Coefficients

Intercept: 0
 Slope: 1.482

Error Coefficients

Standard Error: 1360000
 Relative Standard Error: 1.7
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.185069	5.0	318800.0	1.480552	Y
2	IC 410-55998/9	0.25	0.375492	5.0	259912.0	1.50197	Y
3	IC 410-55998/8	1.25	1.906529	5.0	324207.0	1.525223	Y
4	IC 410-55998/7	3.75	5.581507	5.0	268638.0	1.488402	Y
5	ICIS 410-55998/2	7.5	10.834574	5.0	327173.0	1.44461	Y
6	IC 410-55998/6	12.5	18.558231	5.0	333337.0	1.484658	Y
7	IC 410-55998/5	20.0	29.212605	5.0	316347.0	1.46063	Y
8	IC 410-55998/4	30.0	44.170098	5.0	308452.0	1.472337	Y



Calibration

/ 2,4-Dinitrophenol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

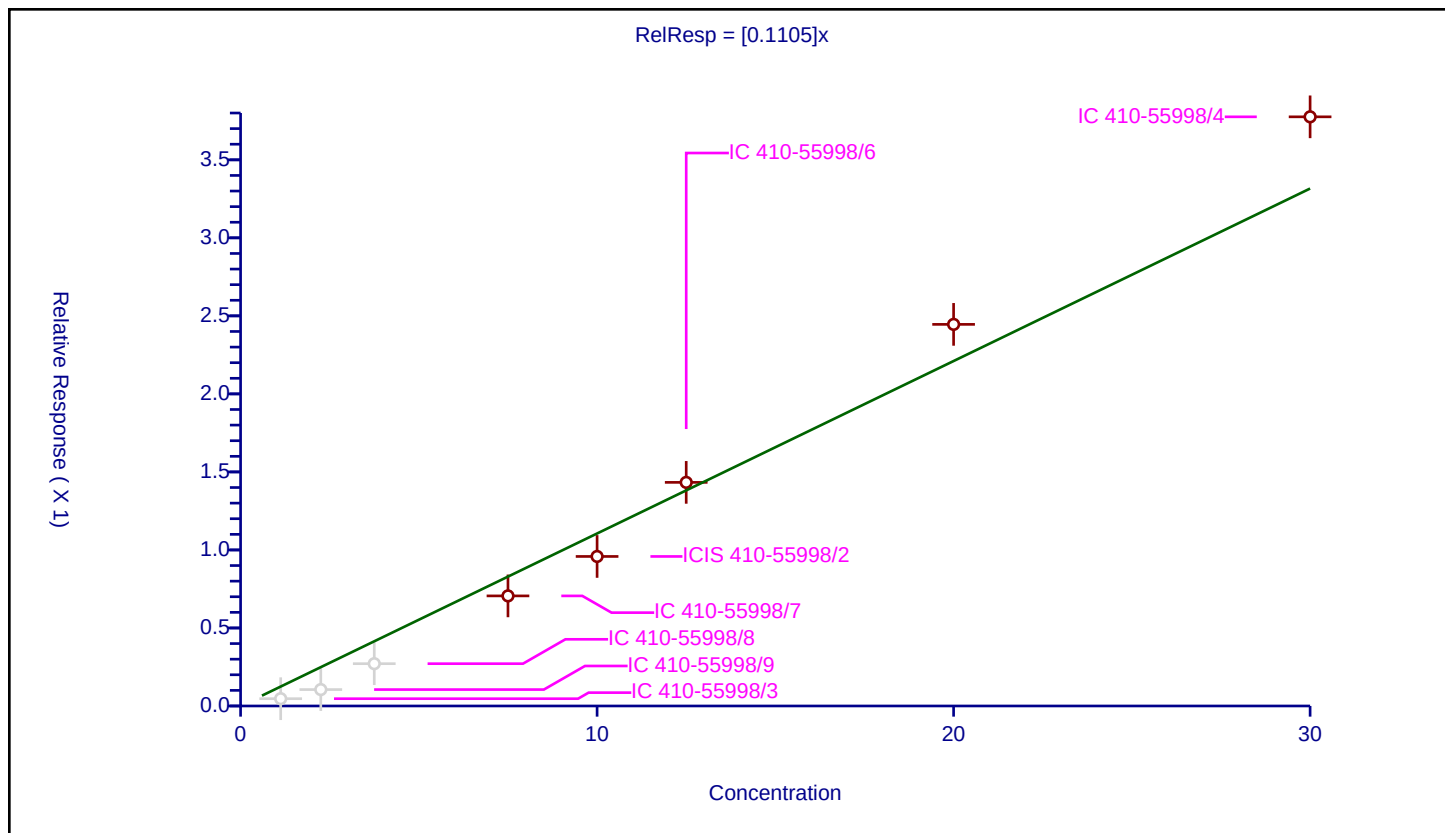
Curve Coefficients

Intercept: 0
 Slope: 0.1105

Error Coefficients

Standard Error: 152000
 Relative Standard Error: 13.4
 Correlation Coefficient: 0.994
 Coefficient of Determination (Adjusted): 0.946

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	1.125	0.046816	5.0	318800.0	0.041614	N
2	IC 410-55998/9	2.25	0.105189	5.0	259912.0	0.046751	N
3	IC 410-55998/8	3.75	0.271154	5.0	324207.0	0.072308	N
4	IC 410-55998/7	7.5	0.705541	5.0	268638.0	0.094072	Y
5	ICIS 410-55998/2	10.0	0.958331	5.0	327173.0	0.095833	Y
6	IC 410-55998/6	12.5	1.432919	5.0	333337.0	0.114634	Y
7	IC 410-55998/5	20.0	2.445448	5.0	316347.0	0.122272	Y
8	IC 410-55998/4	30.0	3.775482	5.0	308452.0	0.125849	Y



Calibration

/ 4-Nitrophenol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

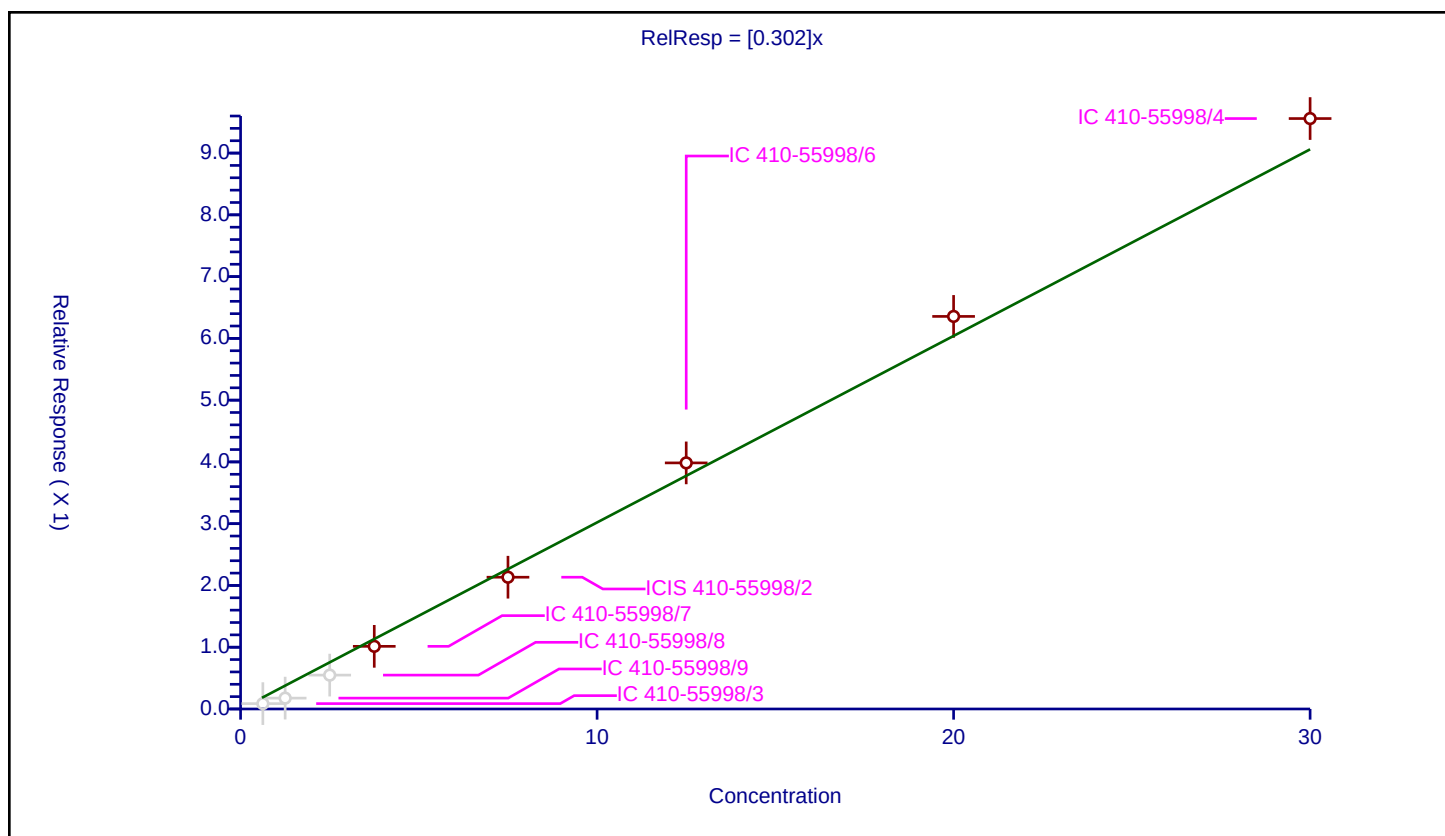
Curve Coefficients

Intercept: 0
 Slope: 0.302

Error Coefficients

Standard Error: 388000
 Relative Standard Error: 7.6
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.625	0.087077	5.0	318800.0	0.139322	N
2	IC 410-55998/9	1.25	0.175713	5.0	259912.0	0.140571	N
3	IC 410-55998/8	2.5	0.548446	5.0	324207.0	0.219378	N
4	IC 410-55998/7	3.75	1.014171	5.0	268638.0	0.270446	Y
5	ICIS 410-55998/2	7.5	2.13352	5.0	327173.0	0.284469	Y
6	IC 410-55998/6	12.5	3.984016	5.0	333337.0	0.318721	Y
7	IC 410-55998/5	20.0	6.355616	5.0	316347.0	0.317781	Y
8	IC 410-55998/4	30.0	9.558878	5.0	308452.0	0.318629	Y



Calibration

/ Pentachlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

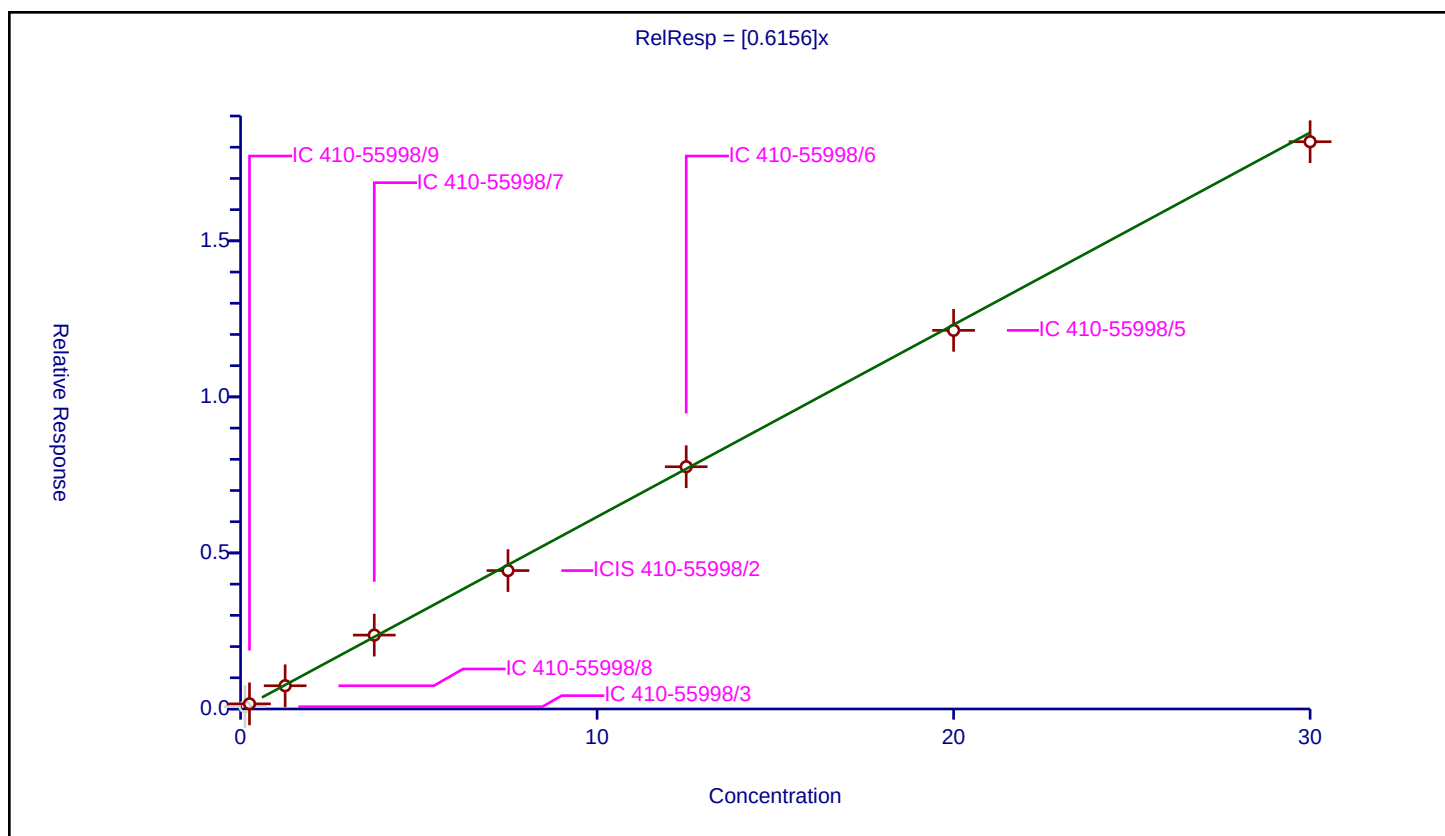
Curve Coefficients

Intercept: 0
 Slope: 0.6156

Error Coefficients

Standard Error: 608000
 Relative Standard Error: 3.7
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.073871	5.0	318800.0	0.590966	N
2	IC 410-55998/9	0.25	0.164344	5.0	259912.0	0.657376	Y
3	IC 410-55998/8	1.25	0.744956	5.0	324207.0	0.595965	Y
4	IC 410-55998/7	3.75	2.367238	5.0	268638.0	0.631263	Y
5	ICIS 410-55998/2	7.5	4.435039	5.0	327173.0	0.591339	Y
6	IC 410-55998/6	12.5	7.76228	5.0	333337.0	0.620982	Y
7	IC 410-55998/5	20.0	12.132042	5.0	316347.0	0.606602	Y
8	IC 410-55998/4	30.0	18.176442	5.0	308452.0	0.605881	Y



Calibration

/ 2,4-Dinitrotoluene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

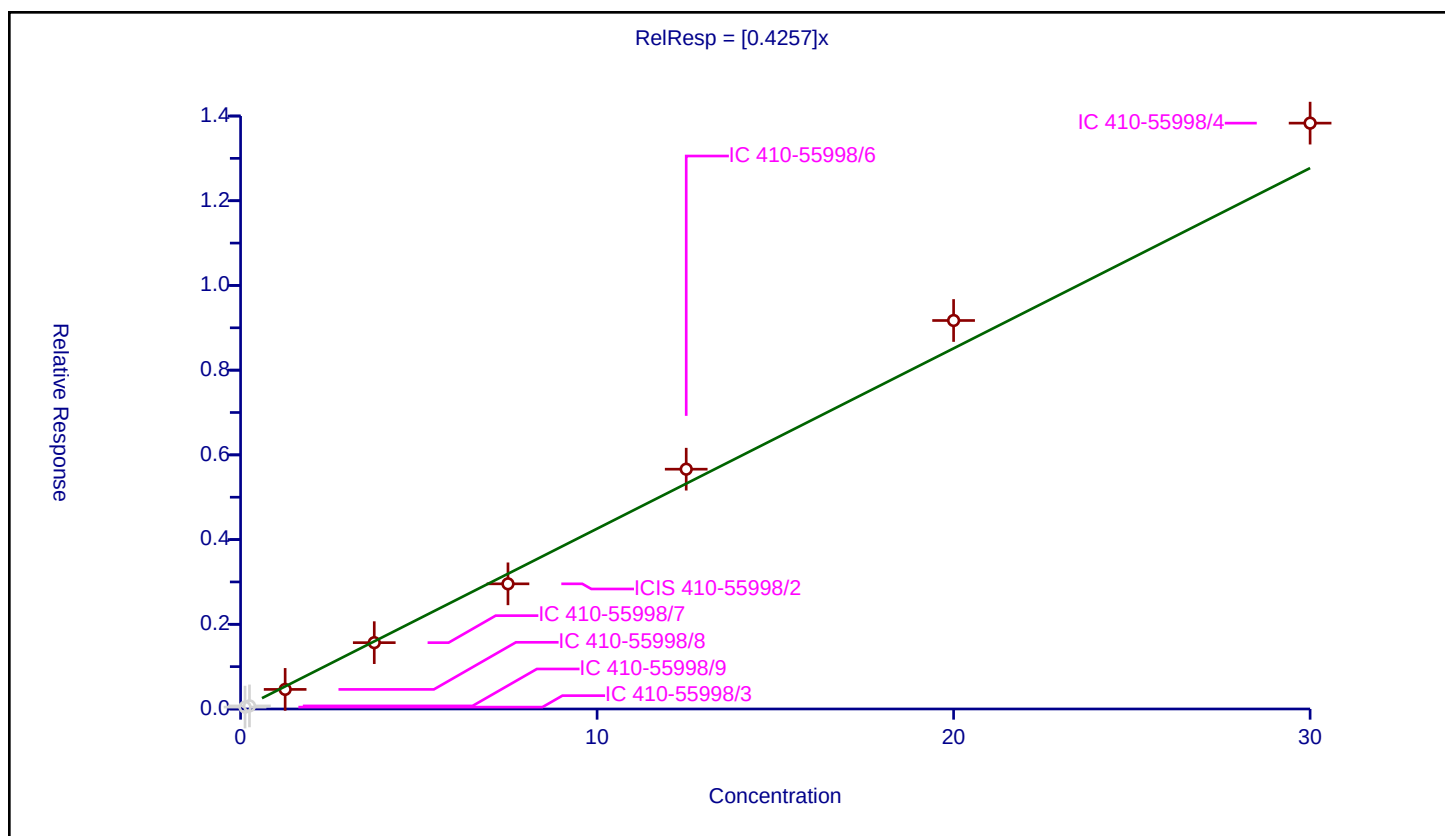
Curve Coefficients

Intercept: 0
Slope: 0.4257

Error Coefficients

Standard Error: 501000
Relative Standard Error: 8.9
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.044166	5.0	318800.0	0.353325	N
2	IC 410-55998/9	0.25	0.072909	5.0	259912.0	0.291637	N
3	IC 410-55998/8	1.25	0.462374	5.0	324207.0	0.369899	Y
4	IC 410-55998/7	3.75	1.566197	5.0	268638.0	0.417653	Y
5	ICIS 410-55998/2	7.5	2.955317	5.0	327173.0	0.394042	Y
6	IC 410-55998/6	12.5	5.661643	5.0	333337.0	0.452931	Y
7	IC 410-55998/5	20.0	9.172175	5.0	316347.0	0.458609	Y
8	IC 410-55998/4	30.0	13.832104	5.0	308452.0	0.46107	Y



Calibration

/ Dibenzofuran

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

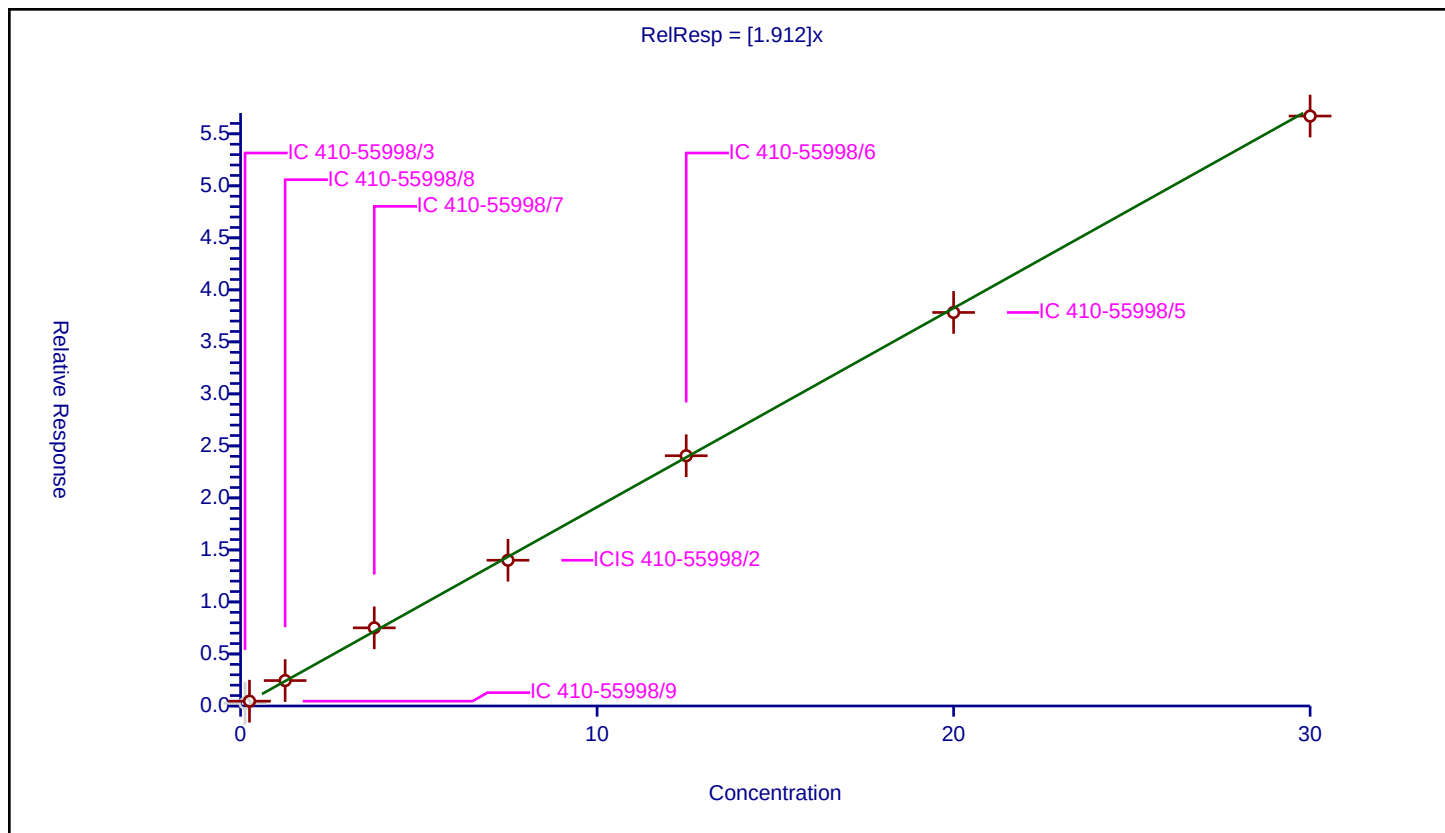
Curve Coefficients

Intercept: 0
 Slope: 1.912

Error Coefficients

Standard Error: 1900000
 Relative Standard Error: 2.7
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.257983	5.0	318800.0	2.063864	N
2	IC 410-55998/9	0.25	0.463368	5.0	259912.0	1.853473	Y
3	IC 410-55998/8	1.25	2.44347	5.0	324207.0	1.954776	Y
4	IC 410-55998/7	3.75	7.511279	5.0	268638.0	2.003008	Y
5	ICIS 410-55998/2	7.5	14.009683	5.0	327173.0	1.867958	Y
6	IC 410-55998/6	12.5	24.05531	5.0	333337.0	1.924425	Y
7	IC 410-55998/5	20.0	37.828255	5.0	316347.0	1.891413	Y
8	IC 410-55998/4	30.0	56.706732	5.0	308452.0	1.890224	Y



Calibration

/ 1-Naphthylamine

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

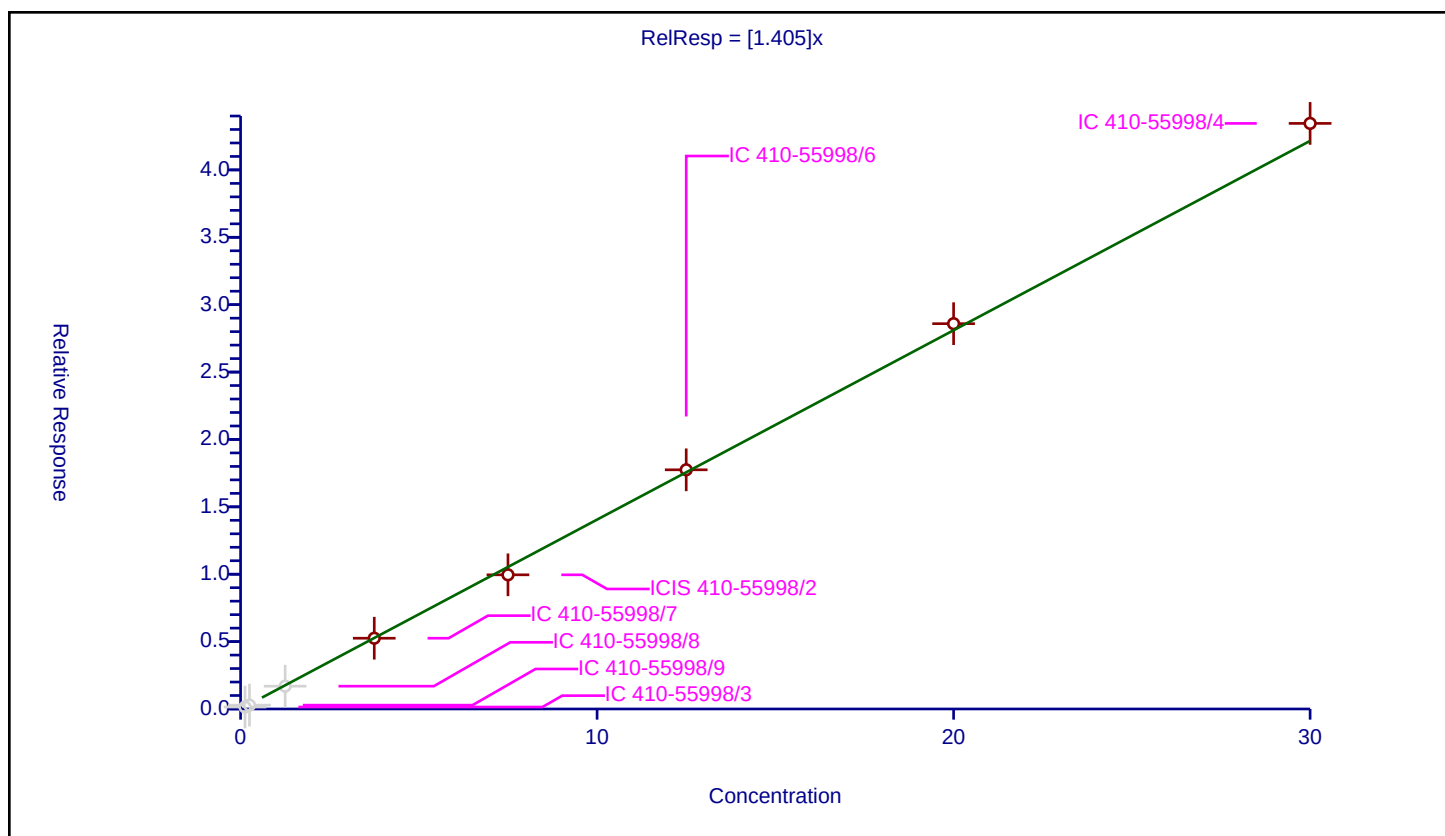
Curve Coefficients

Intercept: 0
 Slope: 1.405

Error Coefficients

Standard Error: 1760000
 Relative Standard Error: 3.3
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.144746	5.0	318800.0	1.157967	N
2	IC 410-55998/9	0.25	0.286001	5.0	259912.0	1.144003	N
3	IC 410-55998/8	1.25	1.692761	5.0	324207.0	1.354209	N
4	IC 410-55998/7	3.75	5.250914	5.0	268638.0	1.400244	Y
5	ICIS 410-55998/2	7.5	9.95591	5.0	327173.0	1.327455	Y
6	IC 410-55998/6	12.5	17.74899	5.0	333337.0	1.419919	Y
7	IC 410-55998/5	20.0	28.591088	5.0	316347.0	1.429554	Y
8	IC 410-55998/4	30.0	43.451023	5.0	308452.0	1.448367	Y



Calibration

/ 2,3,4,6-Tetrachlorophenol

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

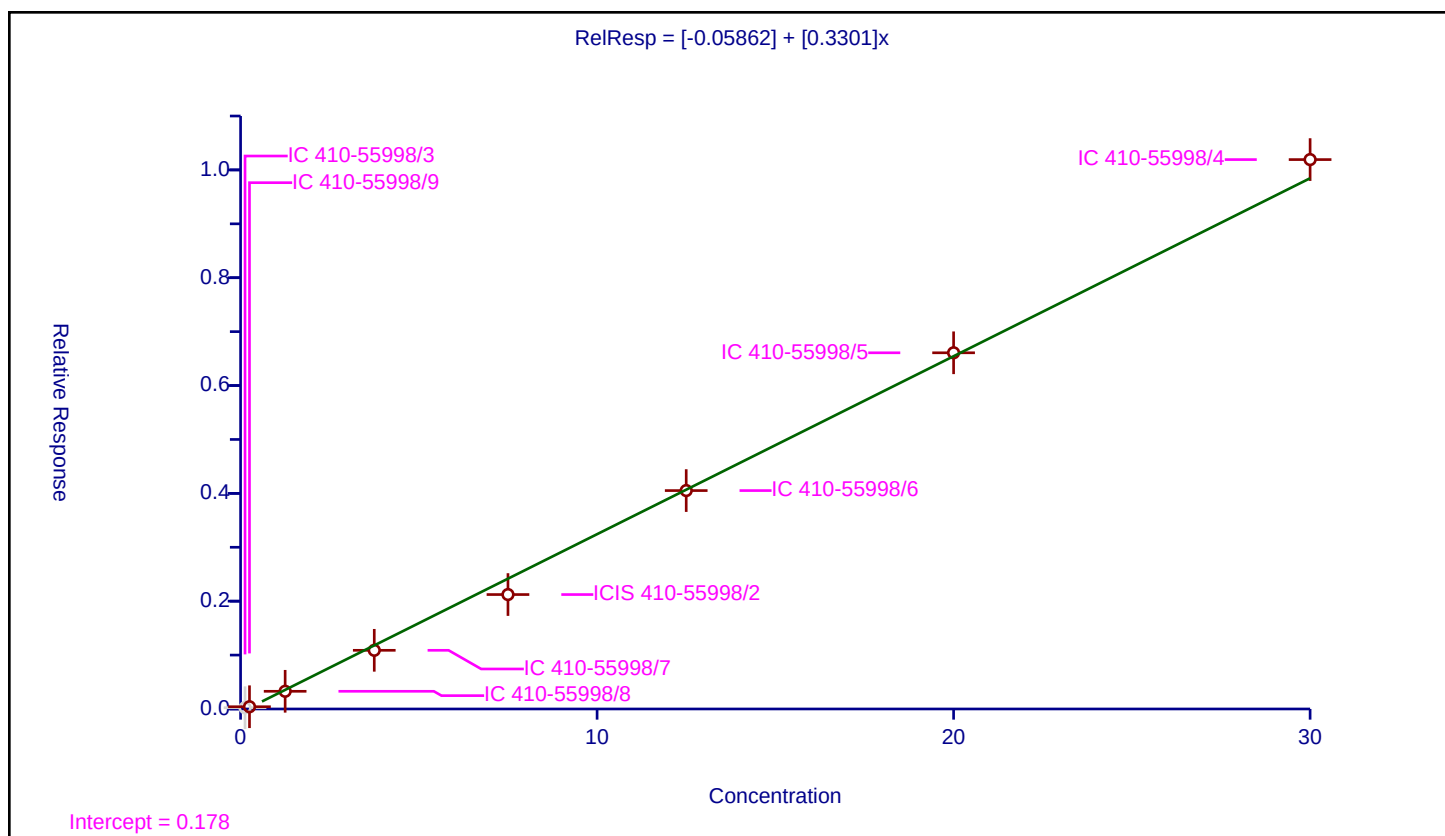
Curve Coefficients

Intercept: -0.05862
 Slope: 0.3301

Error Coefficients

Standard Error: 365000
 Relative Standard Error: 11.9
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.023338	5.0	318800.0	0.1867	N
2	IC 410-55998/9	0.25	0.041572	5.0	259912.0	0.166287	Y
3	IC 410-55998/8	1.25	0.32837	5.0	324207.0	0.262696	Y
4	IC 410-55998/7	3.75	1.088565	5.0	268638.0	0.290284	Y
5	ICIS 410-55998/2	7.5	2.1227	5.0	327173.0	0.283027	Y
6	IC 410-55998/6	12.5	4.051785	5.0	333337.0	0.324143	Y
7	IC 410-55998/5	20.0	6.607839	5.0	316347.0	0.330392	Y
8	IC 410-55998/4	30.0	10.191537	5.0	308452.0	0.339718	Y



Calibration

/ 2-Naphthylamine

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

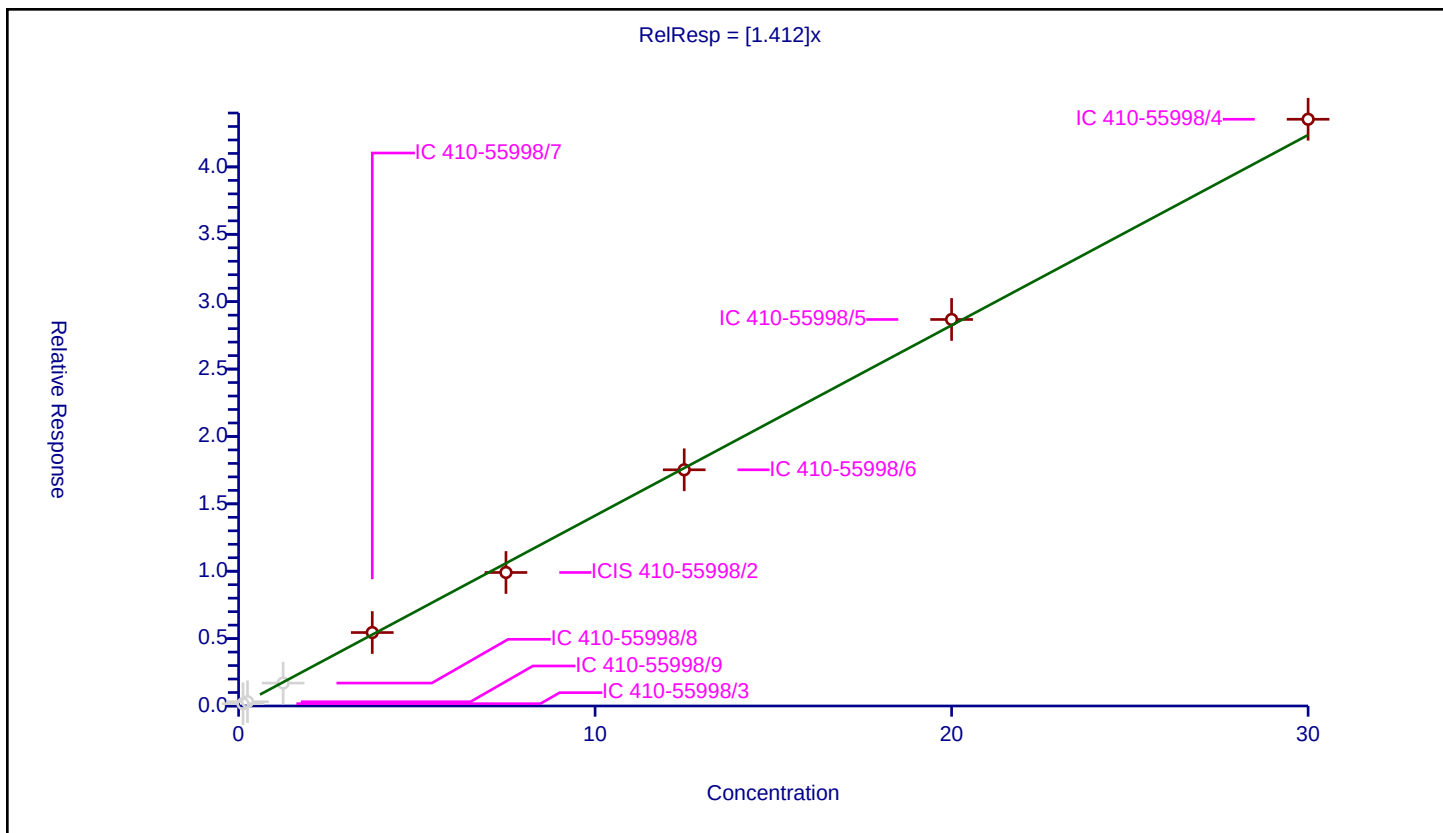
Curve Coefficients

Intercept: 0
 Slope: 1.412

Error Coefficients

Standard Error: 1760000
 Relative Standard Error: 3.9
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.171722	5.0	318800.0	1.373777	N
2	IC 410-55998/9	0.25	0.315934	5.0	259912.0	1.263735	N
3	IC 410-55998/8	1.25	1.701274	5.0	324207.0	1.361019	N
4	IC 410-55998/7	3.75	5.449676	5.0	268638.0	1.453247	Y
5	ICIS 410-55998/2	7.5	9.907083	5.0	327173.0	1.320944	Y
6	IC 410-55998/6	12.5	17.525837	5.0	333337.0	1.402067	Y
7	IC 410-55998/5	20.0	28.681021	5.0	316347.0	1.434051	Y
8	IC 410-55998/4	30.0	43.537374	5.0	308452.0	1.451246	Y



Calibration

/ Diethyl phthalate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

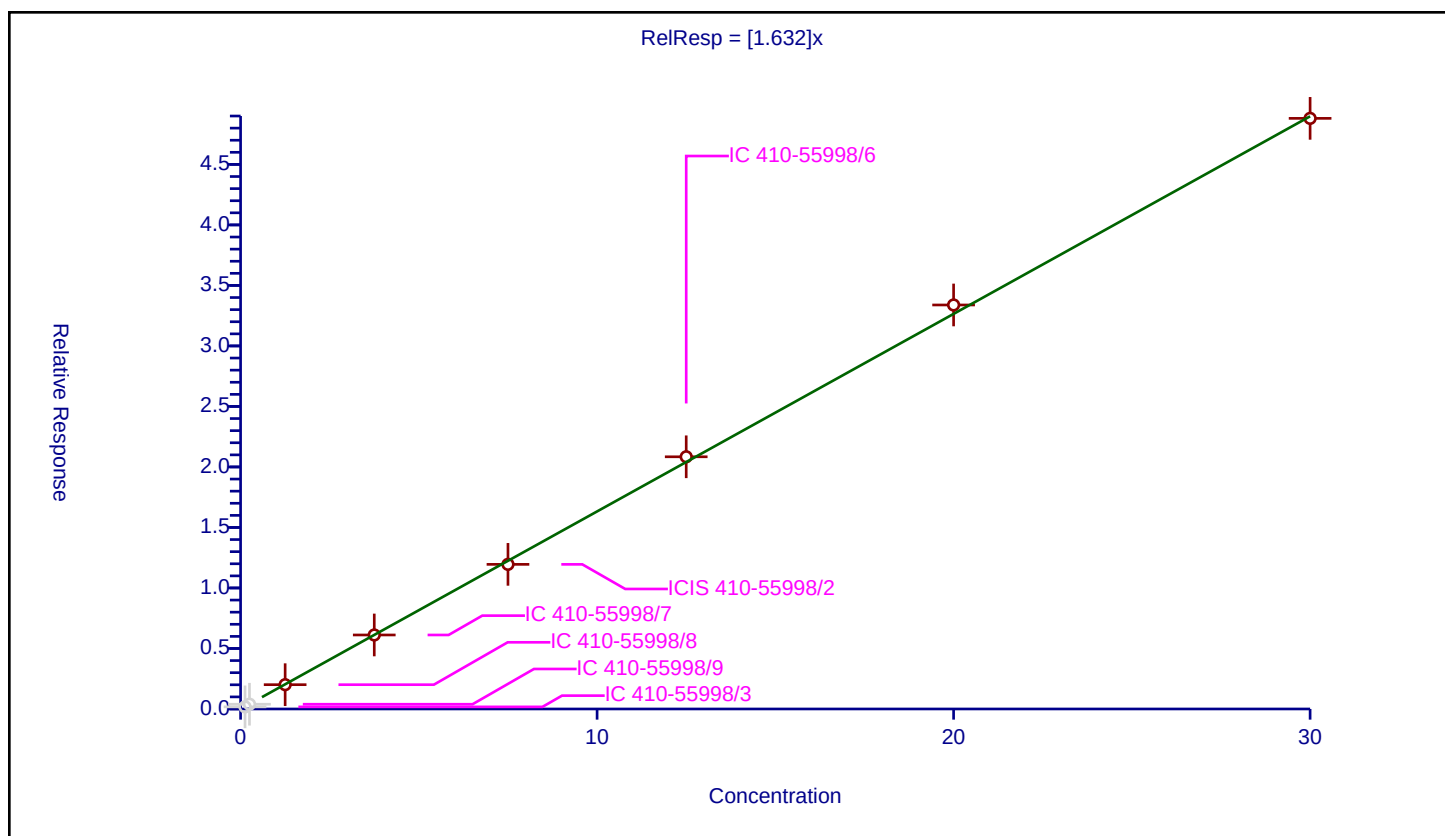
Curve Coefficients

Intercept: 0
 Slope: 1.632

Error Coefficients

Standard Error: 1800000
 Relative Standard Error: 1.9
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.174435	5.0	318800.0	1.395483	N
2	IC 410-55998/9	0.25	0.394307	5.0	259912.0	1.577226	N
3	IC 410-55998/8	1.25	2.008809	5.0	324207.0	1.607047	Y
4	IC 410-55998/7	3.75	6.116316	5.0	268638.0	1.631018	Y
5	ICIS 410-55998/2	7.5	11.951154	5.0	327173.0	1.593487	Y
6	IC 410-55998/6	12.5	20.839451	5.0	333337.0	1.667156	Y
7	IC 410-55998/5	20.0	33.385665	5.0	316347.0	1.669283	Y
8	IC 410-55998/4	30.0	48.805697	5.0	308452.0	1.626857	Y



Calibration

/ Thionazin

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

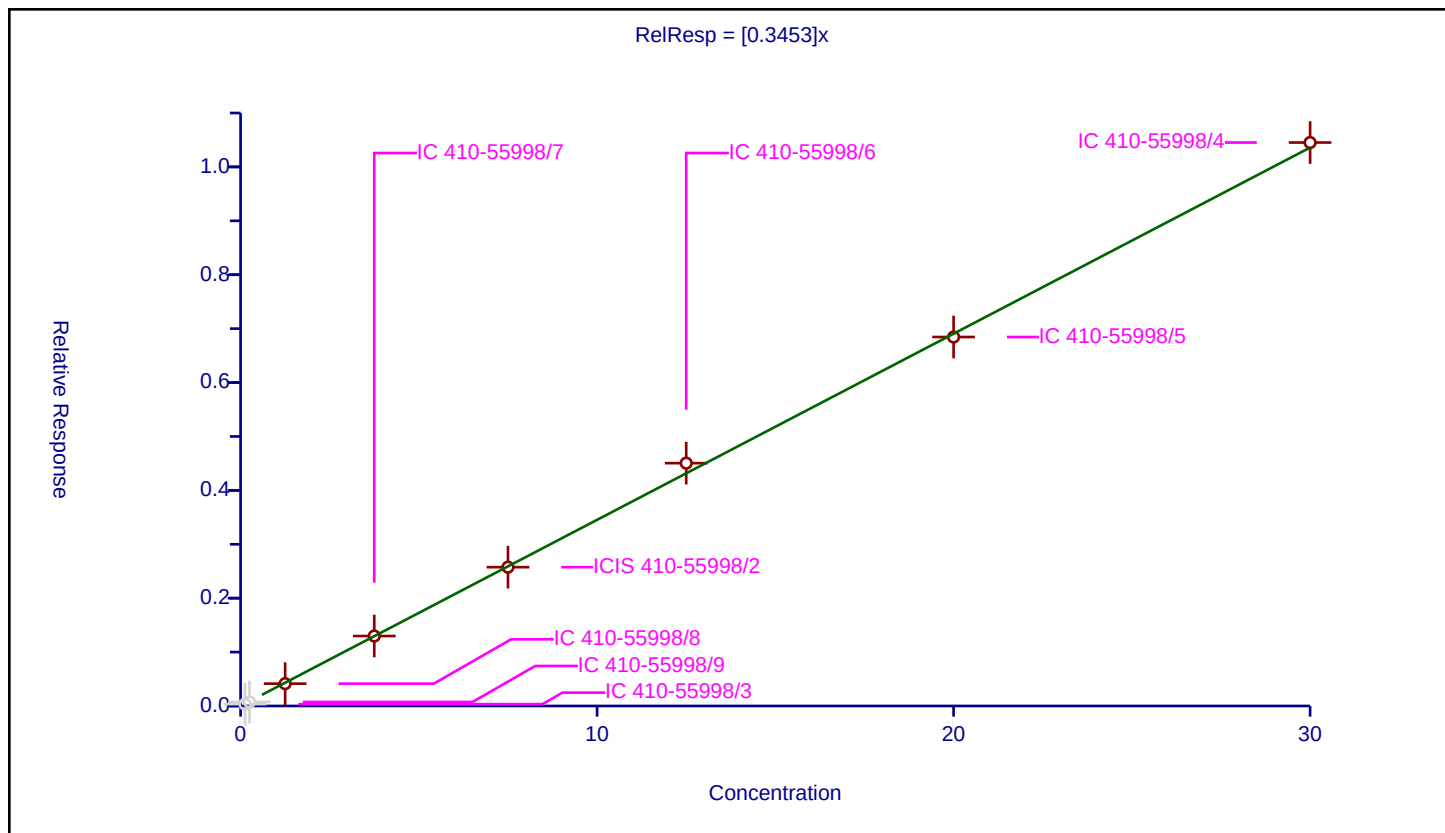
Curve Coefficients

Intercept: 0
 Slope: 0.3453

Error Coefficients

Standard Error: 381000
 Relative Standard Error: 2.7
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.034442	5.0	318800.0	0.275533	N
2	IC 410-55998/9	0.25	0.074852	5.0	259912.0	0.299409	N
3	IC 410-55998/8	1.25	0.414211	5.0	324207.0	0.331369	Y
4	IC 410-55998/7	3.75	1.29775	5.0	268638.0	0.346067	Y
5	ICIS 410-55998/2	7.5	2.575197	5.0	327173.0	0.34336	Y
6	IC 410-55998/6	12.5	4.504885	5.0	333337.0	0.360391	Y
7	IC 410-55998/5	20.0	6.84443	5.0	316347.0	0.342222	Y
8	IC 410-55998/4	30.0	10.452242	5.0	308452.0	0.348408	Y



Calibration

/ Fluorene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

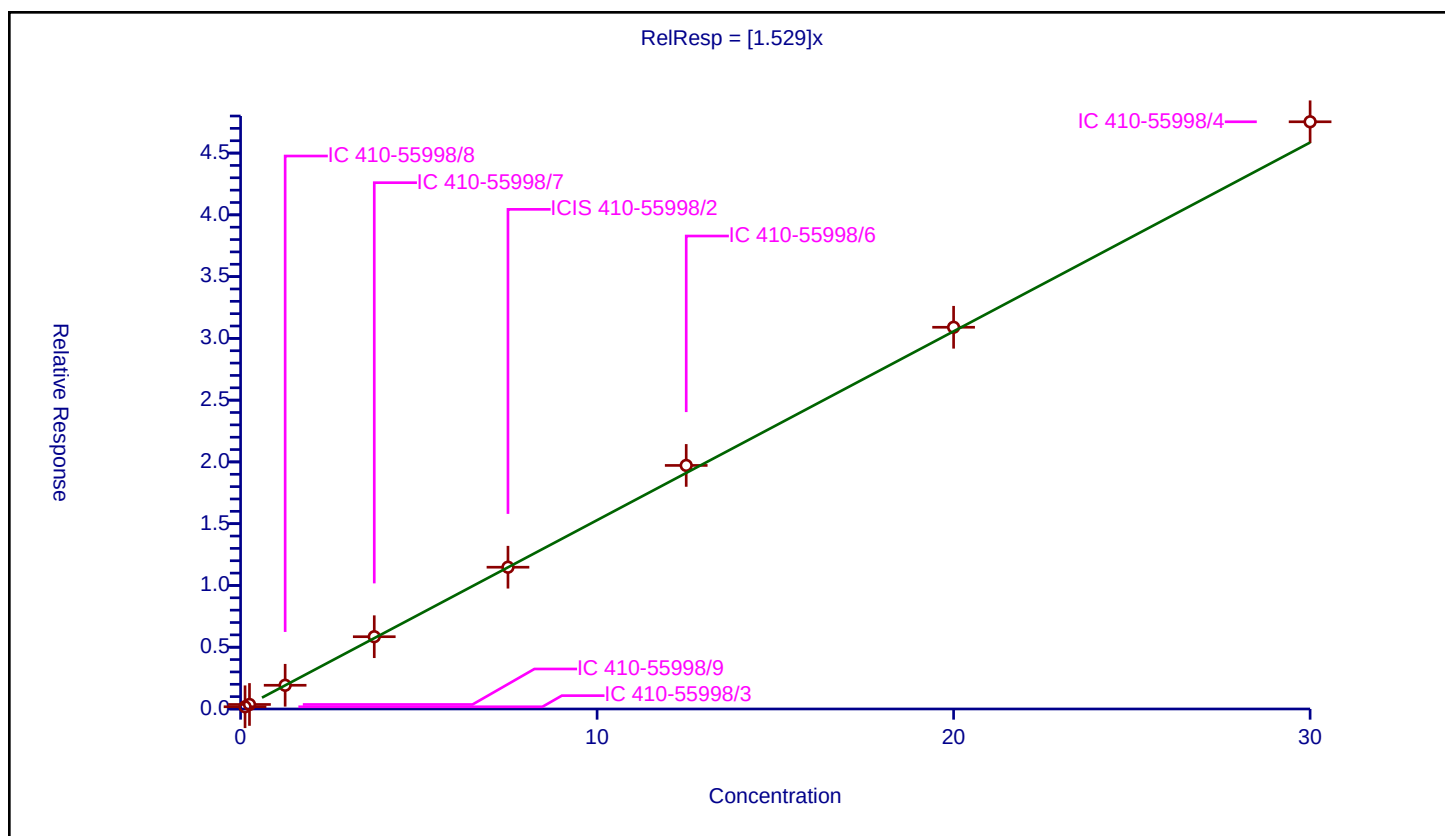
Curve Coefficients

Intercept: 0
 Slope: 1.529

Error Coefficients

Standard Error: 1460000
 Relative Standard Error: 3.5
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.17936	5.0	318800.0	1.434881	Y
2	IC 410-55998/9	0.25	0.365335	5.0	259912.0	1.461341	Y
3	IC 410-55998/8	1.25	1.919283	5.0	324207.0	1.535426	Y
4	IC 410-55998/7	3.75	5.850066	5.0	268638.0	1.560018	Y
5	ICIS 410-55998/2	7.5	11.475229	5.0	327173.0	1.53003	Y
6	IC 410-55998/6	12.5	19.714718	5.0	333337.0	1.577177	Y
7	IC 410-55998/5	20.0	30.89944	5.0	316347.0	1.544972	Y
8	IC 410-55998/4	30.0	47.532906	5.0	308452.0	1.58443	Y



Calibration

/ N-Nitro-o-toluidine

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

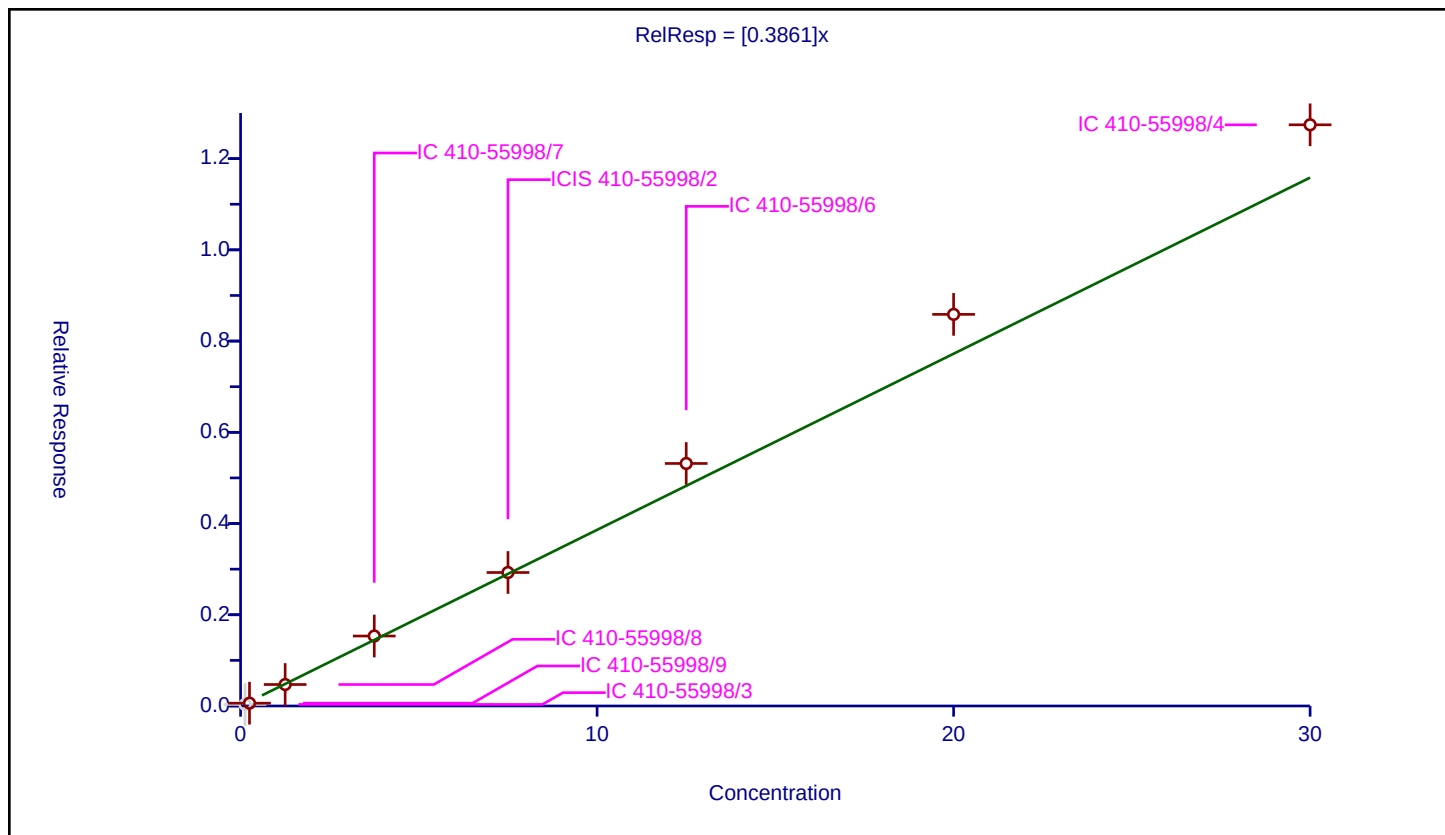
Curve Coefficients

Intercept: 0
 Slope: 0.3861

Error Coefficients

Standard Error: 425000
 Relative Standard Error: 16.6
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.973

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.034003	5.0	318800.0	0.27202	N
2	IC 410-55998/9	0.25	0.061944	5.0	259912.0	0.247776	Y
3	IC 410-55998/8	1.25	0.470641	5.0	324207.0	0.376513	Y
4	IC 410-55998/7	3.75	1.53396	5.0	268638.0	0.409056	Y
5	ICIS 410-55998/2	7.5	2.926158	5.0	327173.0	0.390154	Y
6	IC 410-55998/6	12.5	5.316887	5.0	333337.0	0.425351	Y
7	IC 410-55998/5	20.0	8.585272	5.0	316347.0	0.429264	Y
8	IC 410-55998/4	30.0	12.741658	5.0	308452.0	0.424722	Y



Calibration

/ 4-Nitroaniline

Curve Type: Linear
Weighting: Conc
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

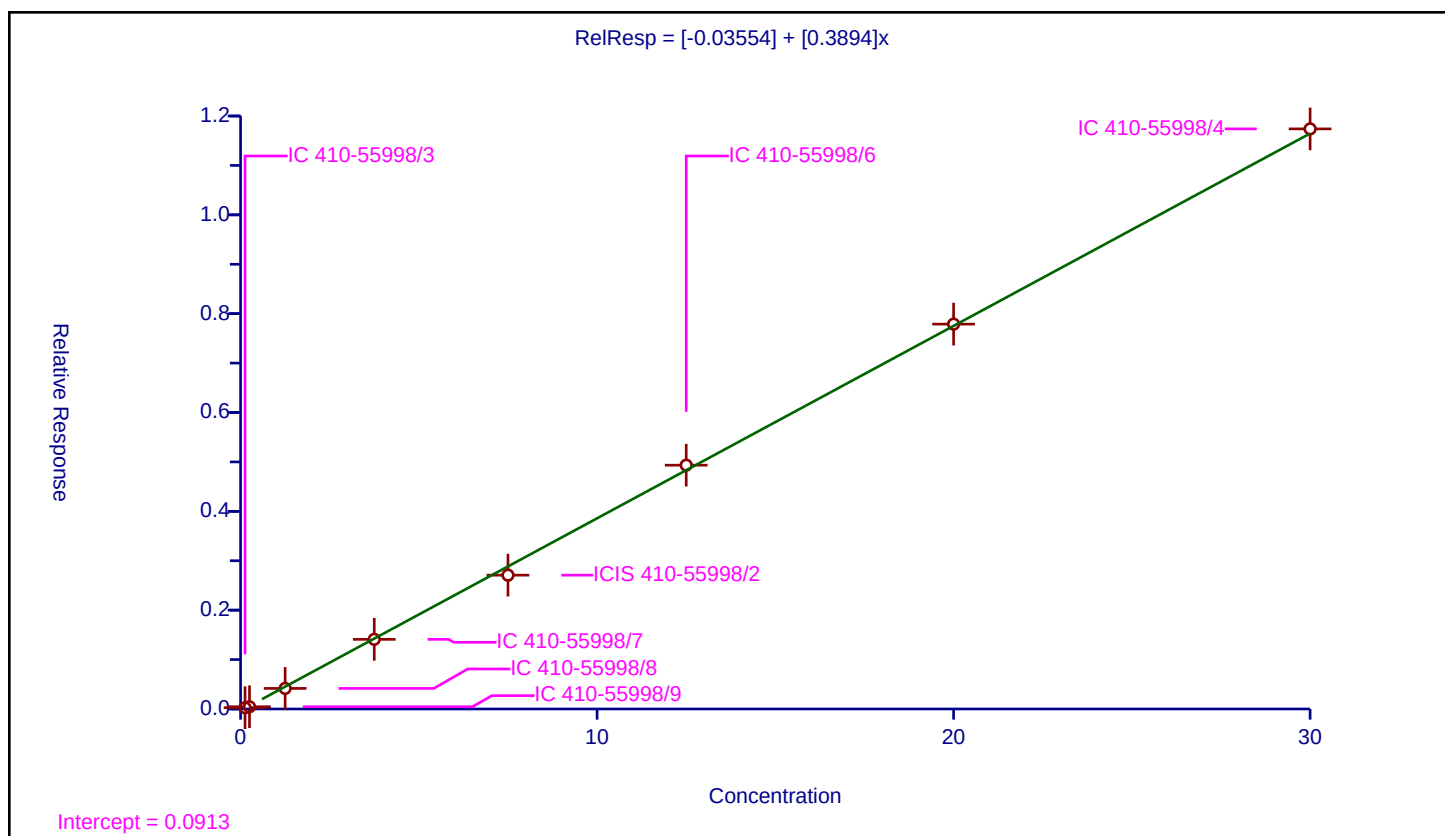
Curve Coefficients

Intercept: -0.03554
Slope: 0.3894

Error Coefficients

Standard Error: 390000
Relative Standard Error: 13.9
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.026694	5.0	318800.0	0.213551	Y
2	IC 410-55998/9	0.25	0.045381	5.0	259912.0	0.181523	Y
3	IC 410-55998/8	1.25	0.416216	5.0	324207.0	0.332972	Y
4	IC 410-55998/7	3.75	1.409071	5.0	268638.0	0.375752	Y
5	ICIS 410-55998/2	7.5	2.708338	5.0	327173.0	0.361112	Y
6	IC 410-55998/6	12.5	4.933806	5.0	333337.0	0.394704	Y
7	IC 410-55998/5	20.0	7.788489	5.0	316347.0	0.389424	Y
8	IC 410-55998/4	30.0	11.739428	5.0	308452.0	0.391314	Y



Calibration

/ 4-Chlorophenyl phenyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

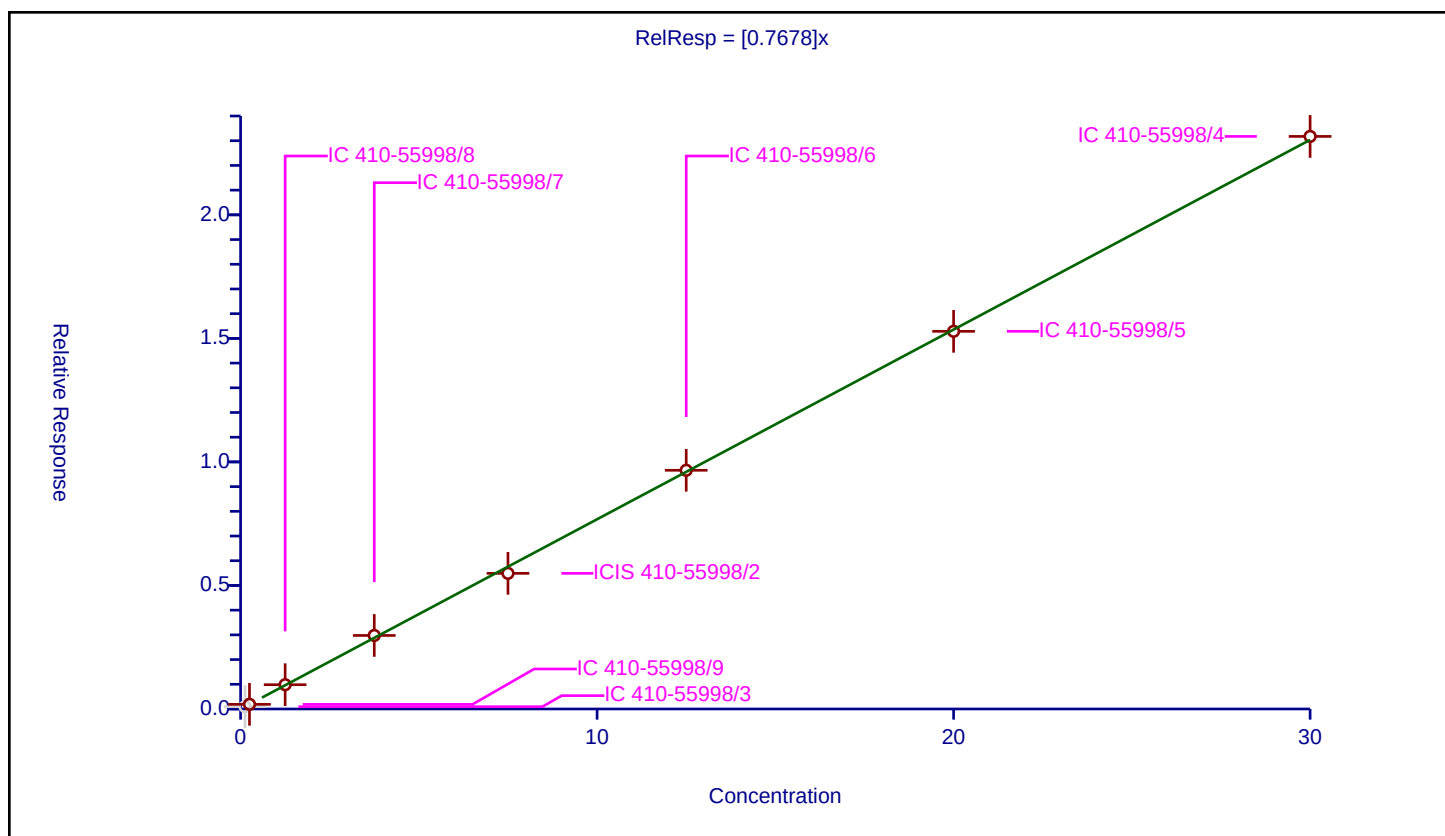
Curve Coefficients

Intercept: 0
 Slope: 0.7678

Error Coefficients

Standard Error: 770000
 Relative Standard Error: 2.7
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.093036	5.0	318800.0	0.744291	N
2	IC 410-55998/9	0.25	0.188448	5.0	259912.0	0.753794	Y
3	IC 410-55998/8	1.25	0.982212	5.0	324207.0	0.78577	Y
4	IC 410-55998/7	3.75	2.976031	5.0	268638.0	0.793608	Y
5	ICIS 410-55998/2	7.5	5.489619	5.0	327173.0	0.731949	Y
6	IC 410-55998/6	12.5	9.661409	5.0	333337.0	0.772913	Y
7	IC 410-55998/5	20.0	15.286062	5.0	316347.0	0.764303	Y
8	IC 410-55998/4	30.0	23.174821	5.0	308452.0	0.772494	Y



Calibration

/ 4,6-Dinitro-2-methylphenol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

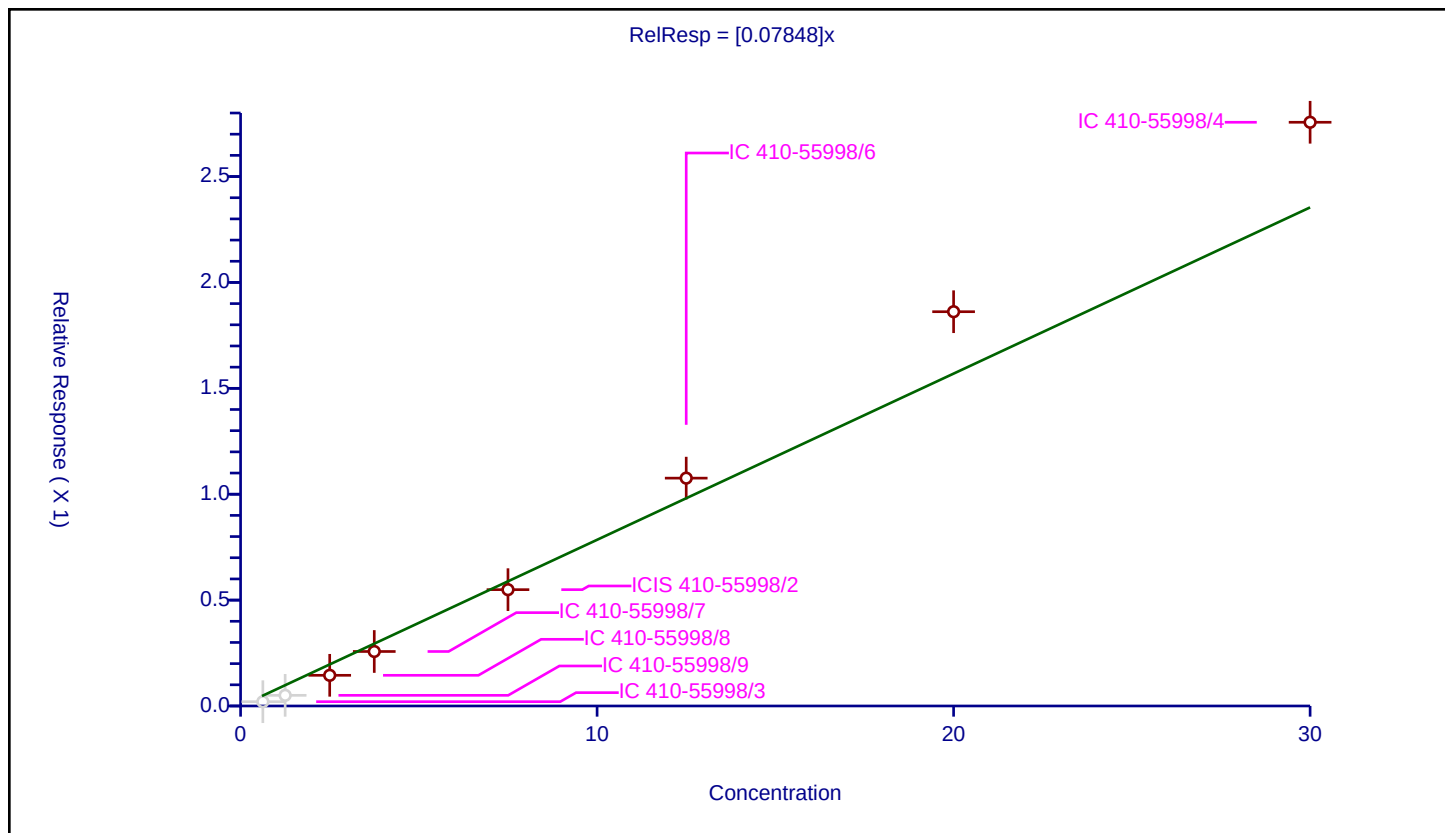
Curve Coefficients

Intercept: 0
 Slope: 0.07848

Error Coefficients

Standard Error: 200000
 Relative Standard Error: 18.0
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.953

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.625	0.020276	5.0	662353.0	0.032442	N
2	IC 410-55998/9	1.25	0.050325	5.0	522303.0	0.04026	N
3	IC 410-55998/8	2.5	0.144884	5.0	629882.0	0.057954	Y
4	IC 410-55998/7	3.75	0.25733	5.0	529845.0	0.068621	Y
5	ICIS 410-55998/2	7.5	0.549297	5.0	643613.0	0.07324	Y
6	IC 410-55998/6	12.5	1.075952	5.0	663245.0	0.086076	Y
7	IC 410-55998/5	20.0	1.861769	5.0	622314.0	0.093088	Y
8	IC 410-55998/4	30.0	2.756314	5.0	627062.0	0.091877	Y



Calibration

/ N-Nitrosodiphenylamine

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

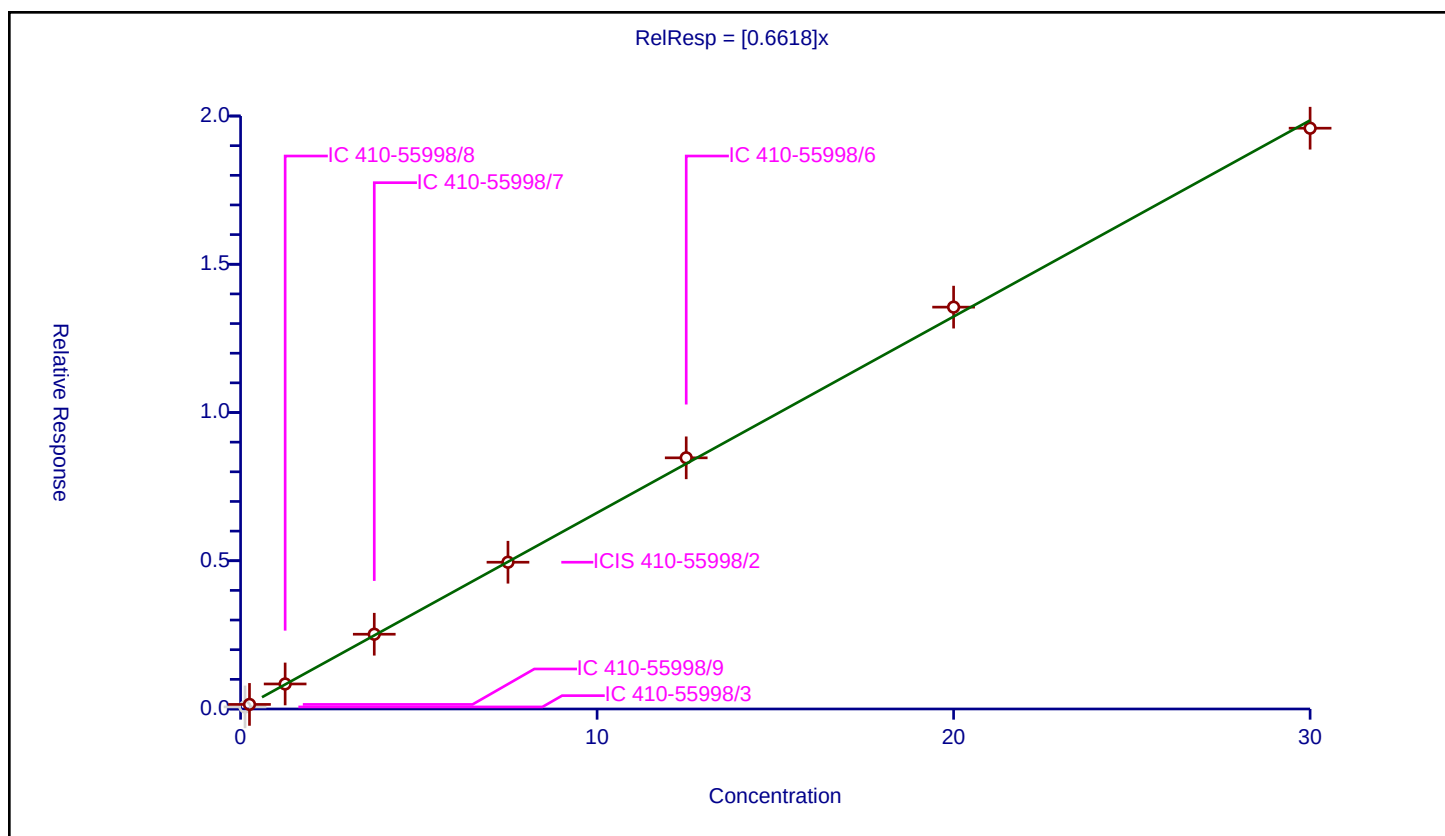
Curve Coefficients

Intercept: 0
 Slope: 0.6618

Error Coefficients

Standard Error: 1330000
 Relative Standard Error: 3.4
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.06991	5.0	662353.0	0.559279	N
2	IC 410-55998/9	0.25	0.154077	5.0	522303.0	0.616309	Y
3	IC 410-55998/8	1.25	0.844372	5.0	629882.0	0.675498	Y
4	IC 410-55998/7	3.75	2.52119	5.0	529845.0	0.672317	Y
5	ICIS 410-55998/2	7.5	4.950265	5.0	643613.0	0.660035	Y
6	IC 410-55998/6	12.5	8.471274	5.0	663245.0	0.677702	Y
7	IC 410-55998/5	20.0	13.554283	5.0	622314.0	0.677714	Y
8	IC 410-55998/4	30.0	19.588972	5.0	627062.0	0.652966	Y



Calibration

/ 1,2-Diphenylhydrazine

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

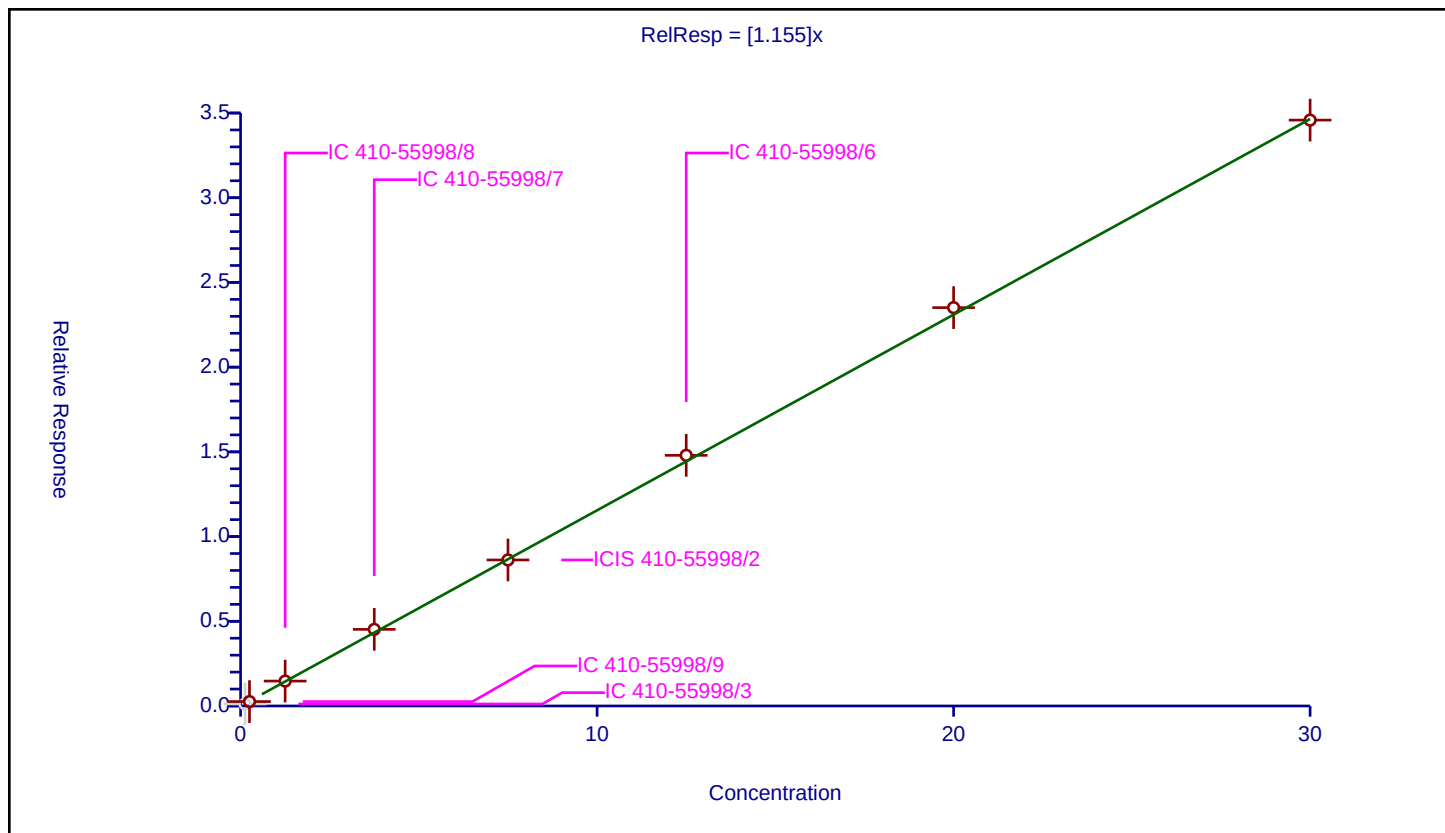
Curve Coefficients

Intercept: 0
Slope: 1.155

Error Coefficients

Standard Error: 2340000
Relative Standard Error: 4.7
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.119015	5.0	662353.0	0.952121	N
2	IC 410-55998/9	0.25	0.260203	5.0	522303.0	1.040813	Y
3	IC 410-55998/8	1.25	1.470283	5.0	629882.0	1.176227	Y
4	IC 410-55998/7	3.75	4.522313	5.0	529845.0	1.20595	Y
5	ICIS 410-55998/2	7.5	8.619924	5.0	643613.0	1.149323	Y
6	IC 410-55998/6	12.5	14.794797	5.0	663245.0	1.183584	Y
7	IC 410-55998/5	20.0	23.513717	5.0	622314.0	1.175686	Y
8	IC 410-55998/4	30.0	34.580895	5.0	627062.0	1.152696	Y



Calibration

/ 2,4,6-Tribromophenol

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

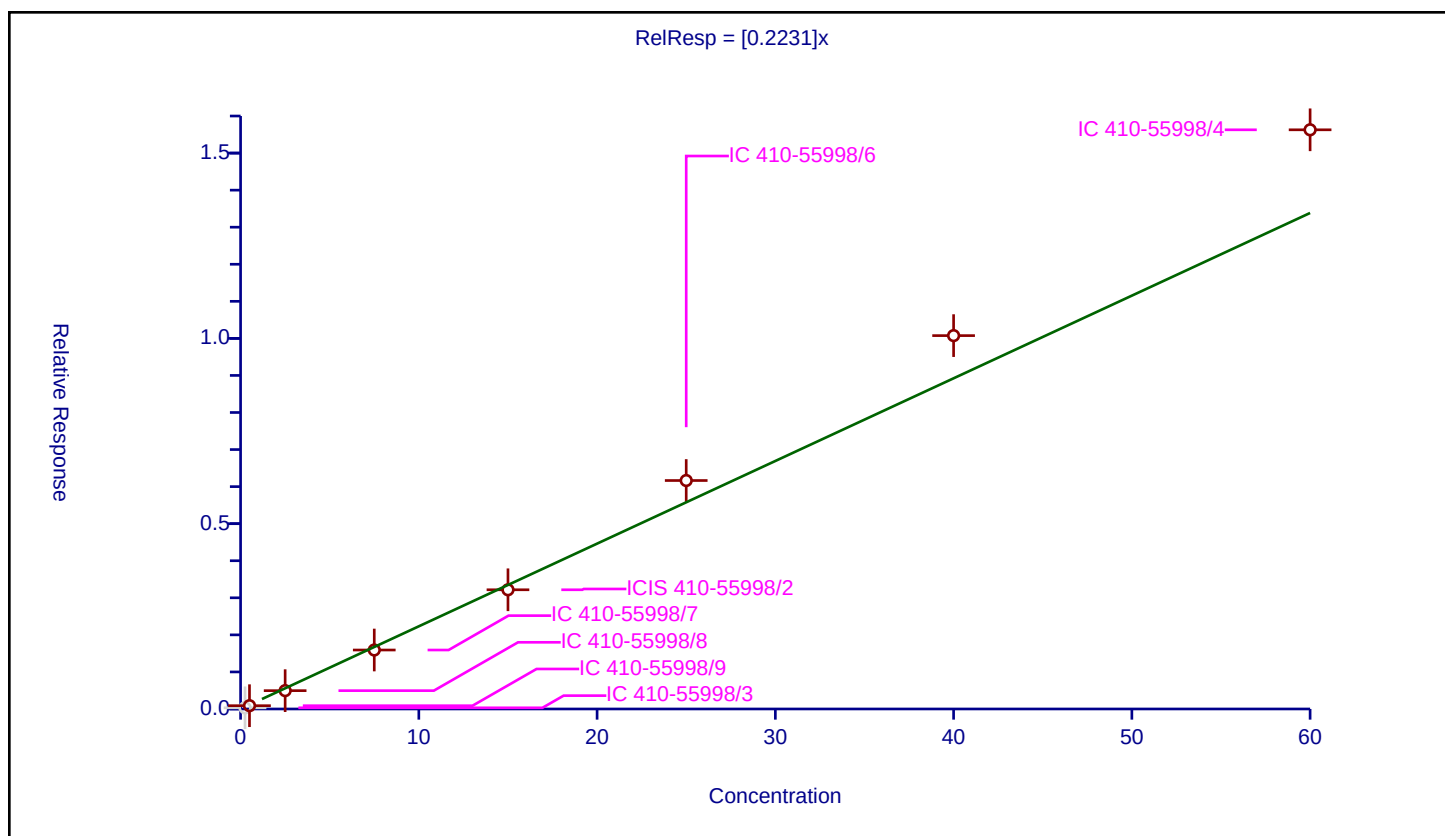
Curve Coefficients

Intercept: 0
Slope: 0.2231

Error Coefficients

Standard Error: 509000
Relative Standard Error: 13.7
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.25	0.032215	5.0	318800.0	0.128858	N
2	IC 410-55998/9	0.5	0.088972	5.0	259912.0	0.177945	Y
3	IC 410-55998/8	2.5	0.495023	5.0	324207.0	0.198009	Y
4	IC 410-55998/7	7.5	1.591268	5.0	268638.0	0.212169	Y
5	ICIS 410-55998/2	15.0	3.216601	5.0	327173.0	0.21444	Y
6	IC 410-55998/6	25.0	6.164722	5.0	333337.0	0.246589	Y
7	IC 410-55998/5	40.0	10.074254	5.0	316347.0	0.251856	Y
8	IC 410-55998/4	60.0	15.628072	5.0	308452.0	0.260468	Y



Calibration

/ Sulfotepp

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

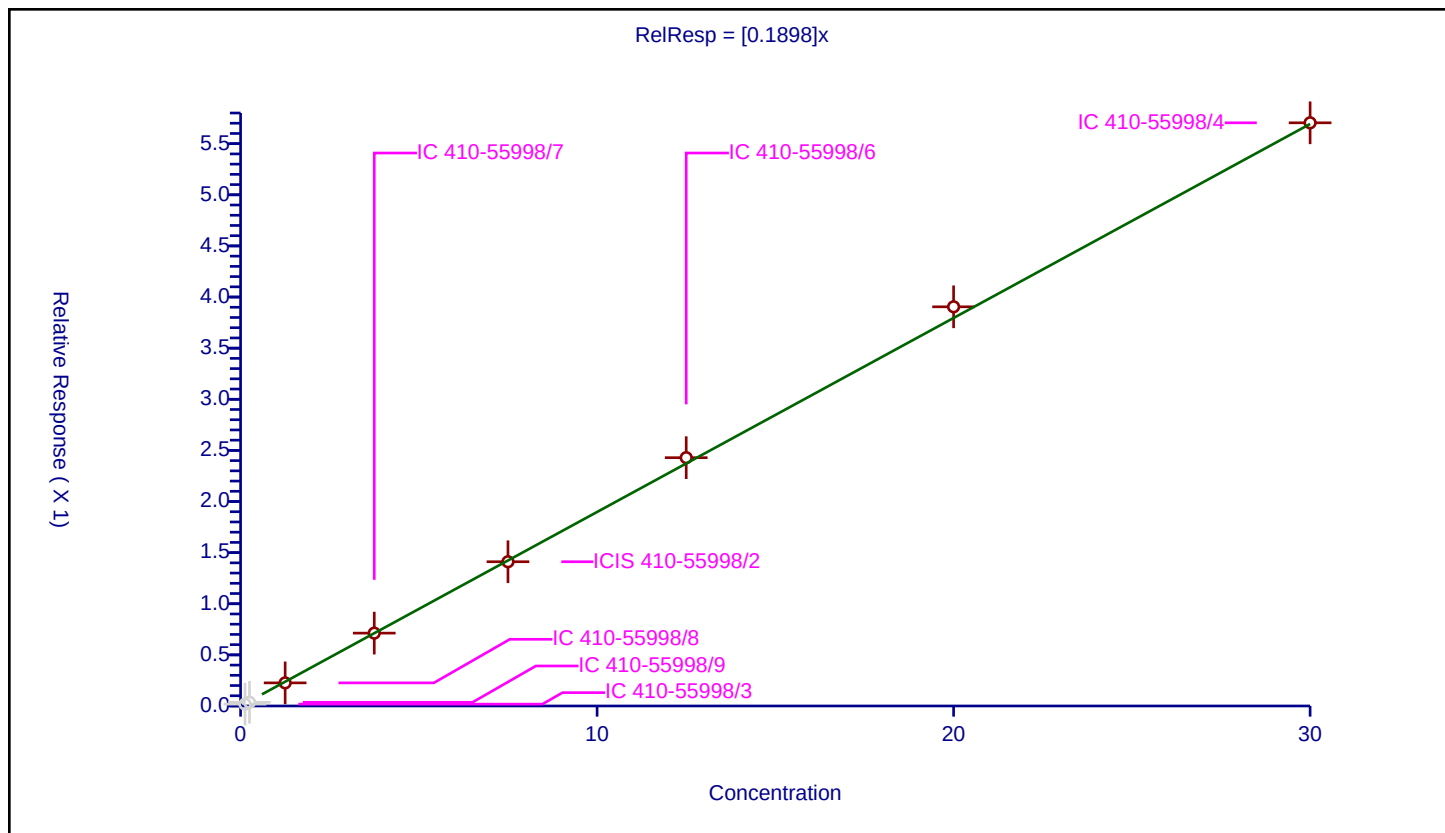
Curve Coefficients

Intercept: 0
 Slope: 0.1898

Error Coefficients

Standard Error: 422000
 Relative Standard Error: 2.7
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.018125	5.0	662353.0	0.144998	N
2	IC 410-55998/9	0.25	0.036109	5.0	522303.0	0.144437	N
3	IC 410-55998/8	1.25	0.225892	5.0	629882.0	0.180713	Y
4	IC 410-55998/7	3.75	0.712812	5.0	529845.0	0.190083	Y
5	ICIS 410-55998/2	7.5	1.410856	5.0	643613.0	0.188114	Y
6	IC 410-55998/6	12.5	2.428673	5.0	663245.0	0.194294	Y
7	IC 410-55998/5	20.0	3.904532	5.0	622314.0	0.195227	Y
8	IC 410-55998/4	30.0	5.704348	5.0	627062.0	0.190145	Y



Calibration

/ cis-Diallate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

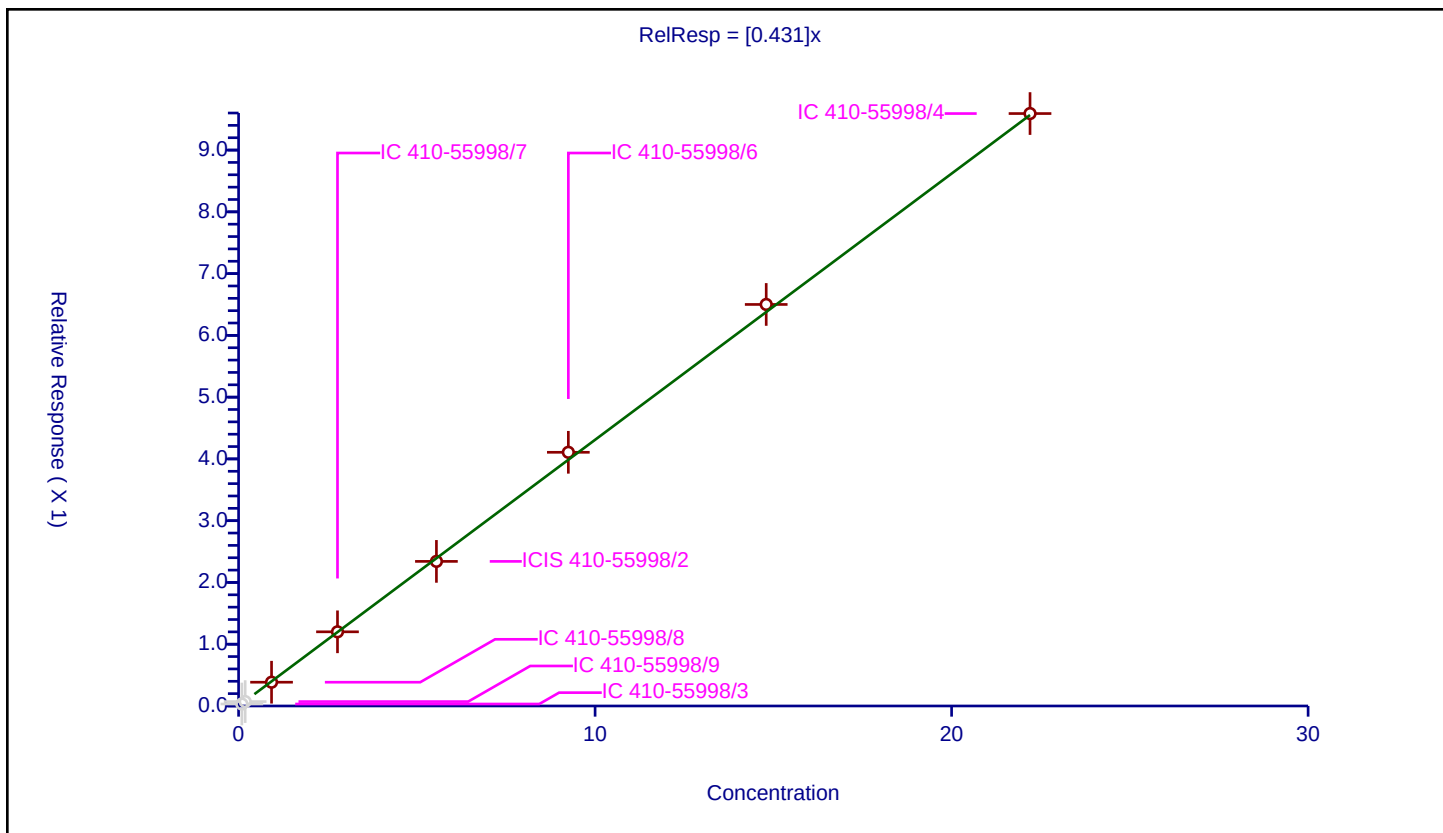
Curve Coefficients

Intercept: 0
 Slope: 0.431

Error Coefficients

Standard Error: 708000
 Relative Standard Error: 2.4
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.0925	0.032	5.0	662353.0	0.345941	N
2	IC 410-55998/9	0.185	0.071616	5.0	522303.0	0.387111	N
3	IC 410-55998/8	0.925	0.384747	5.0	629882.0	0.415942	Y
4	IC 410-55998/7	2.775	1.200785	5.0	529845.0	0.432715	Y
5	ICIS 410-55998/2	5.55	2.34091	5.0	643613.0	0.421786	Y
6	IC 410-55998/6	9.25	4.107004	5.0	663245.0	0.444	Y
7	IC 410-55998/5	14.8	6.500657	5.0	622314.0	0.439234	Y
8	IC 410-55998/4	22.2	9.591556	5.0	627062.0	0.432052	Y



Calibration

/ Phorate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

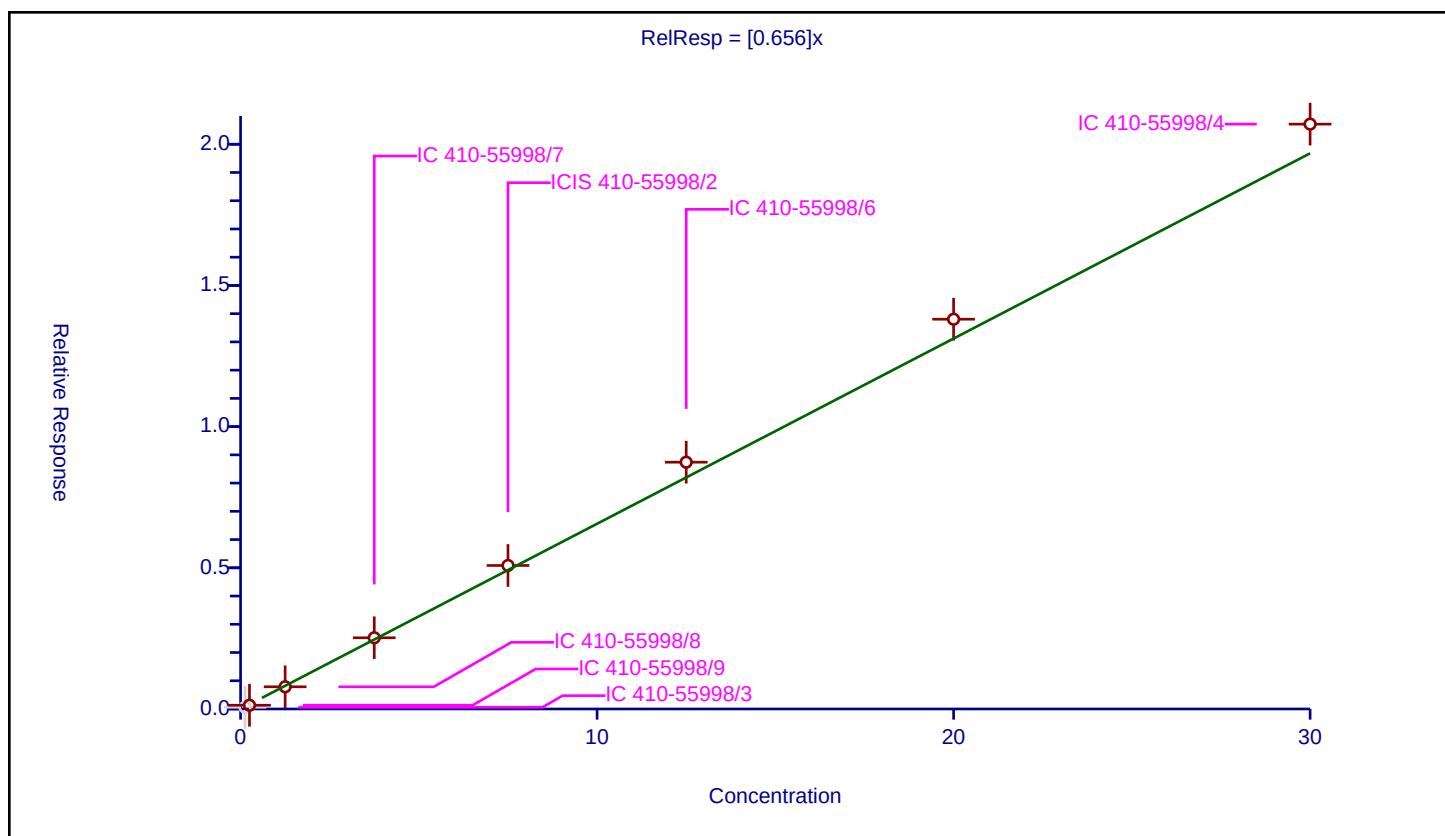
Curve Coefficients

Intercept: 0
 Slope: 0.656

Error Coefficients

Standard Error: 1390000
 Relative Standard Error: 9.0
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.061236	5.0	662353.0	0.48989	N
2	IC 410-55998/9	0.25	0.133151	5.0	522303.0	0.532603	Y
3	IC 410-55998/8	1.25	0.786338	5.0	629882.0	0.62907	Y
4	IC 410-55998/7	3.75	2.522426	5.0	529845.0	0.672647	Y
5	ICIS 410-55998/2	7.5	5.08192	5.0	643613.0	0.677589	Y
6	IC 410-55998/6	12.5	8.739953	5.0	663245.0	0.699196	Y
7	IC 410-55998/5	20.0	13.804028	5.0	622314.0	0.690201	Y
8	IC 410-55998/4	30.0	20.712976	5.0	627062.0	0.690433	Y



Calibration

/ Phenacetin

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

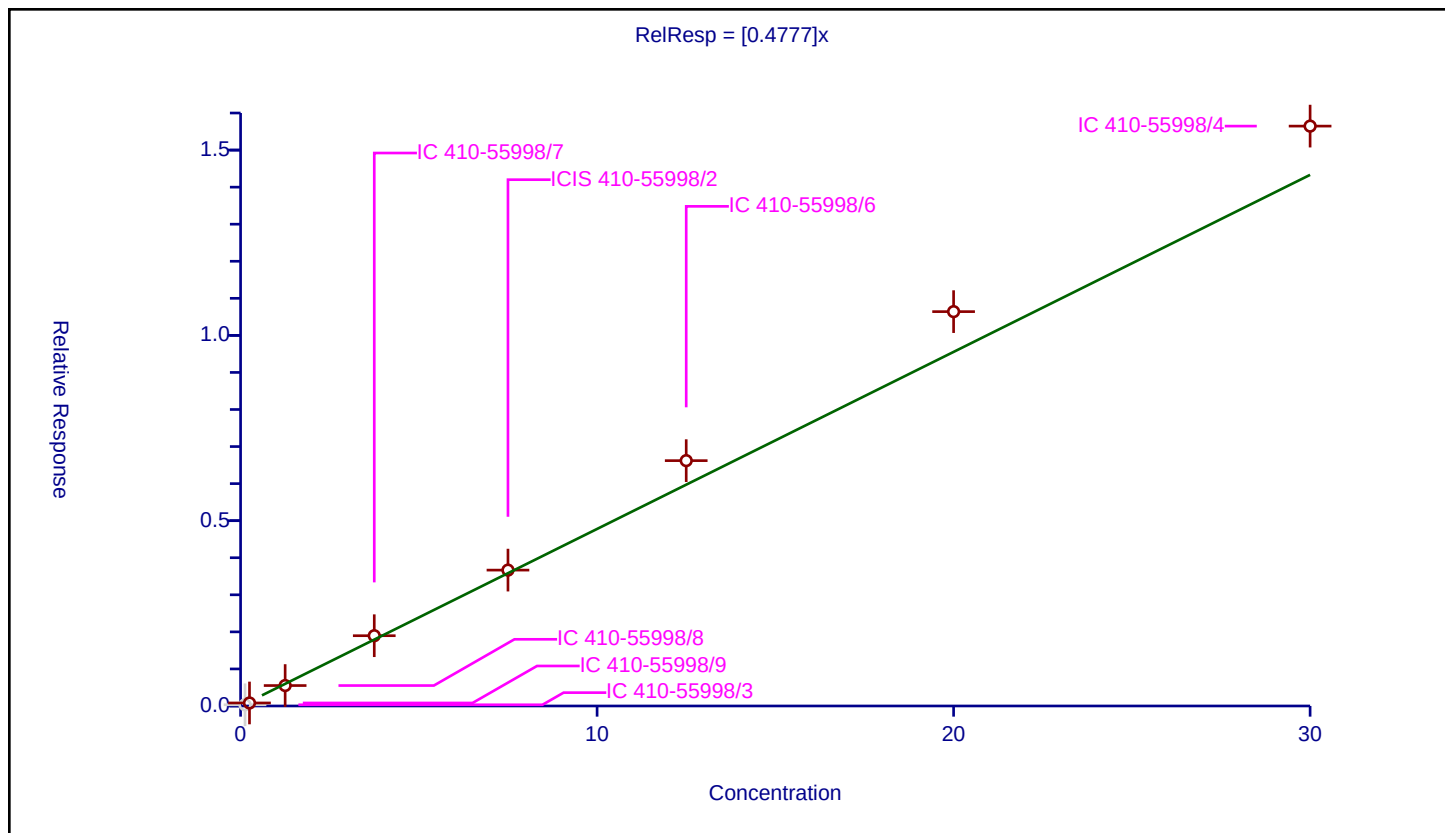
Curve Coefficients

Intercept: 0
 Slope: 0.4777

Error Coefficients

Standard Error: 1050000
 Relative Standard Error: 15.5
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.032475	5.0	662353.0	0.259801	N
2	IC 410-55998/9	0.25	0.081303	5.0	522303.0	0.325214	Y
3	IC 410-55998/8	1.25	0.551381	5.0	629882.0	0.441105	Y
4	IC 410-55998/7	3.75	1.896262	5.0	529845.0	0.50567	Y
5	ICIS 410-55998/2	7.5	3.666077	5.0	643613.0	0.48881	Y
6	IC 410-55998/6	12.5	6.620246	5.0	663245.0	0.52962	Y
7	IC 410-55998/5	20.0	10.640529	5.0	622314.0	0.532026	Y
8	IC 410-55998/4	30.0	15.646411	5.0	627062.0	0.521547	Y



Calibration

/ 4-Bromophenyl phenyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

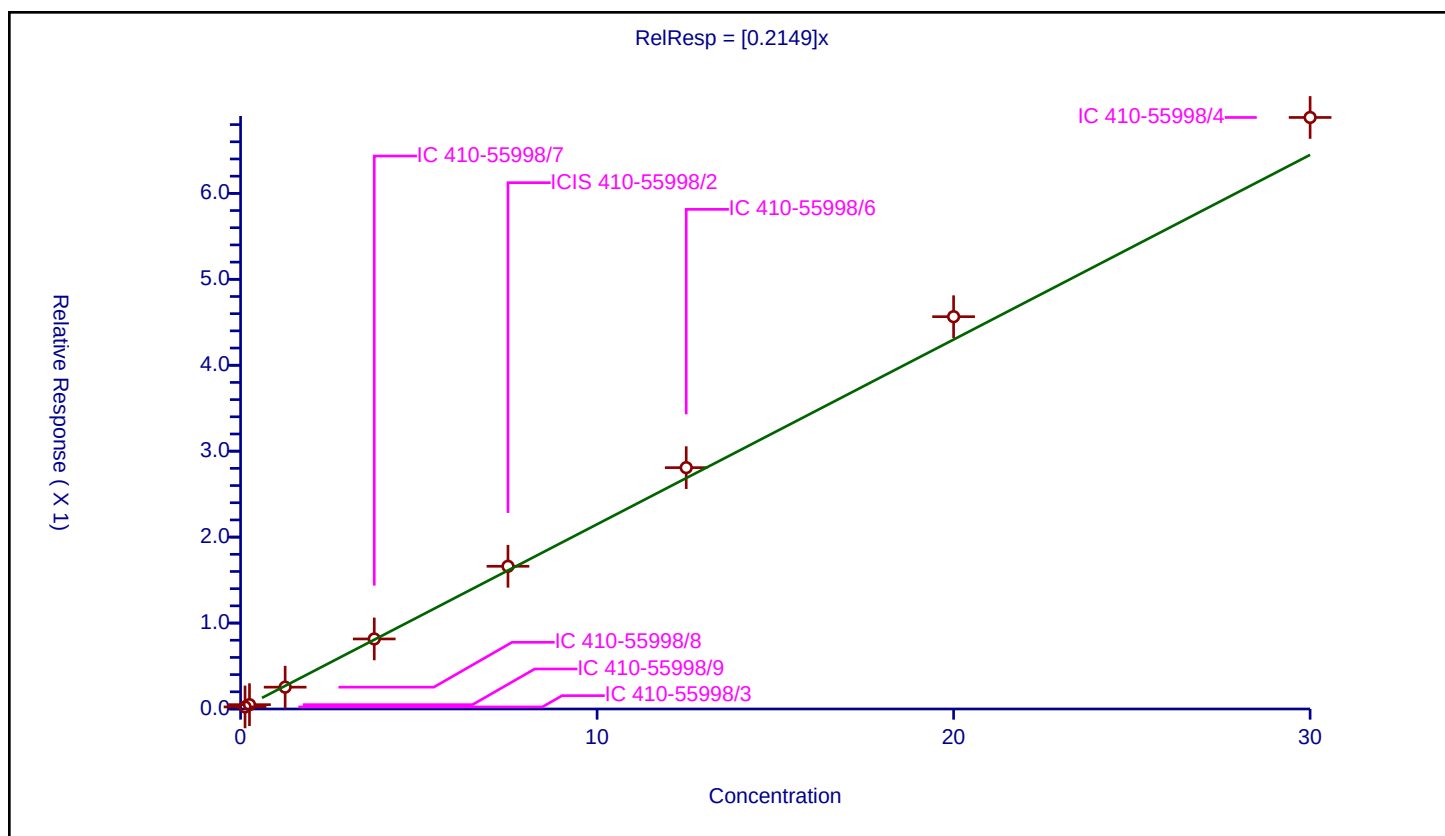
Curve Coefficients

Intercept: 0
 Slope: 0.2149

Error Coefficients

Standard Error: 424000
 Relative Standard Error: 6.4
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.024164	5.0	662353.0	0.193311	Y
2	IC 410-55998/9	0.25	0.050488	5.0	522303.0	0.201952	Y
3	IC 410-55998/8	1.25	0.253929	5.0	629882.0	0.203143	Y
4	IC 410-55998/7	3.75	0.815003	5.0	529845.0	0.217334	Y
5	ICIS 410-55998/2	7.5	1.66047	5.0	643613.0	0.221396	Y
6	IC 410-55998/6	12.5	2.808246	5.0	663245.0	0.22466	Y
7	IC 410-55998/5	20.0	4.565123	5.0	622314.0	0.228256	Y
8	IC 410-55998/4	30.0	6.883091	5.0	627062.0	0.229436	Y



Calibration

/ trans-Diallate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

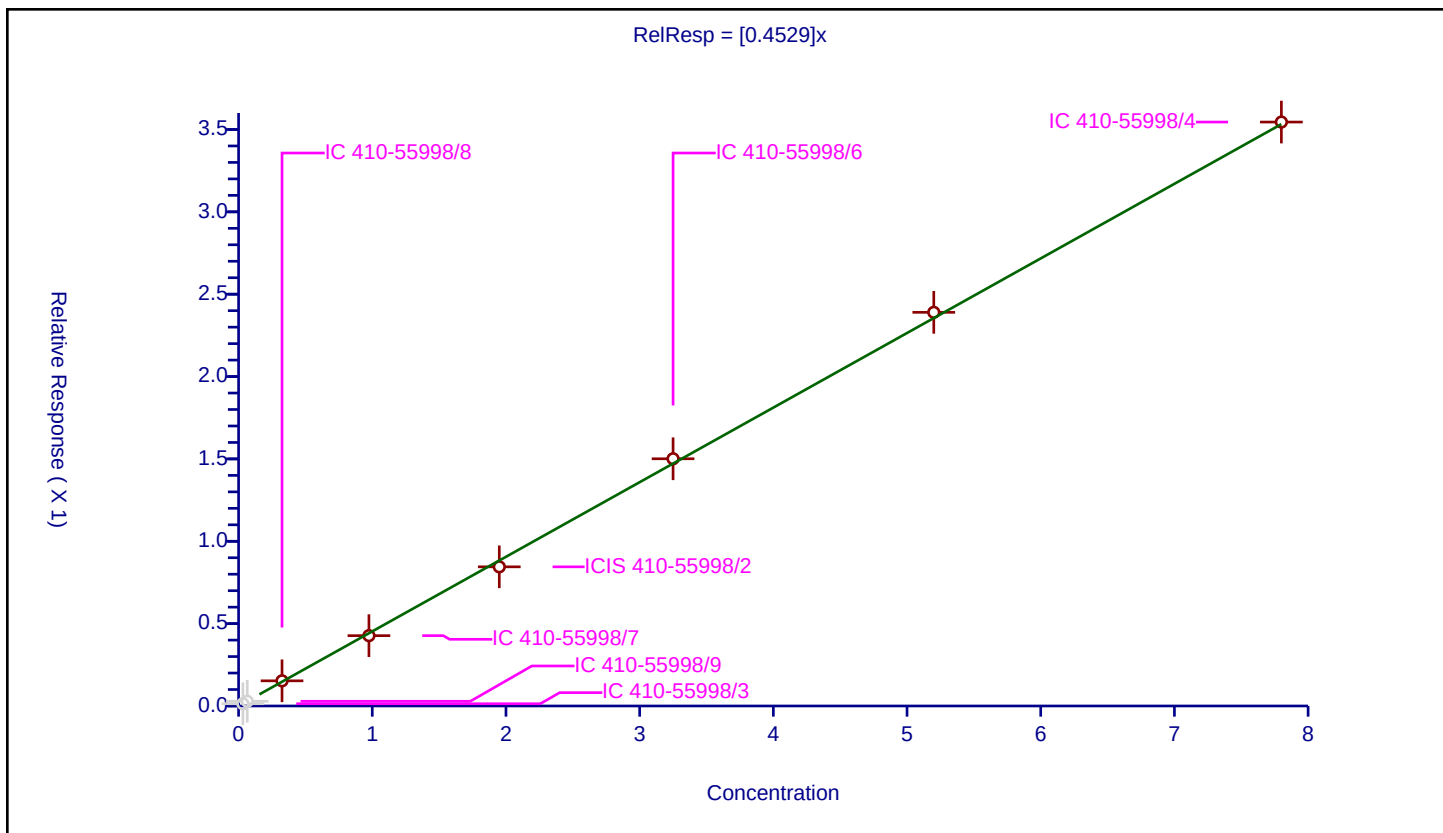
Curve Coefficients

Intercept: 0
 Slope: 0.4529

Error Coefficients

Standard Error: 261000
 Relative Standard Error: 3.2
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.0325	0.013709	5.0	662353.0	0.421806	N
2	IC 410-55998/9	0.065	0.028633	5.0	522303.0	0.440505	N
3	IC 410-55998/8	0.325	0.152814	5.0	629882.0	0.470198	Y
4	IC 410-55998/7	0.975	0.426946	5.0	529845.0	0.437893	Y
5	ICIS 410-55998/2	1.95	0.844778	5.0	643613.0	0.433219	Y
6	IC 410-55998/6	3.25	1.500901	5.0	663245.0	0.461816	Y
7	IC 410-55998/5	5.2	2.389919	5.0	622314.0	0.4596	Y
8	IC 410-55998/4	7.8	3.545176	5.0	627062.0	0.45451	Y



Calibration

/ Hexachlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

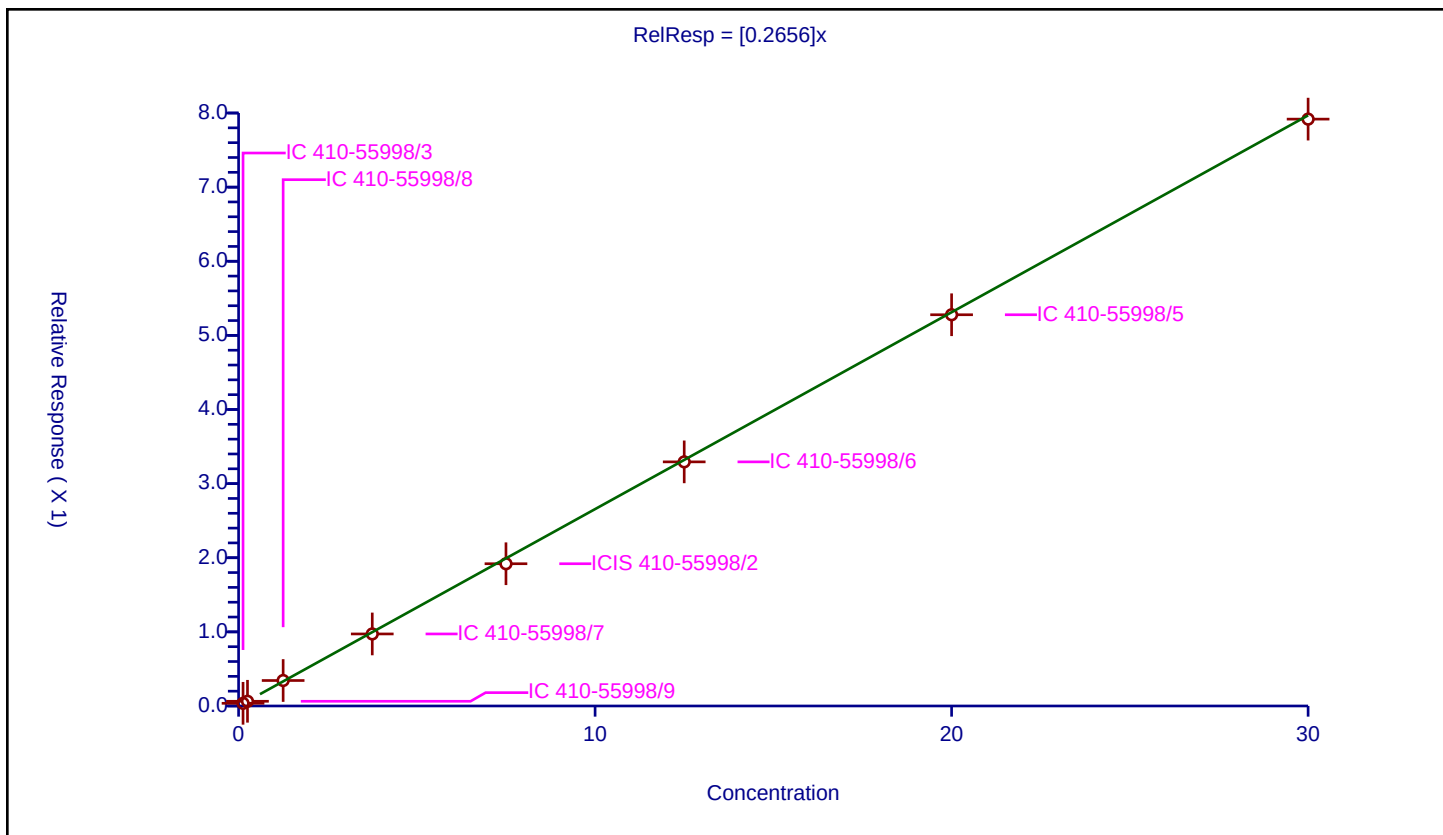
Curve Coefficients

Intercept: 0
 Slope: 0.2656

Error Coefficients

Standard Error: 490000
 Relative Standard Error: 4.4
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.036197	5.0	662353.0	0.289574	Y
2	IC 410-55998/9	0.25	0.063459	5.0	522303.0	0.253837	Y
3	IC 410-55998/8	1.25	0.343707	5.0	629882.0	0.274966	Y
4	IC 410-55998/7	3.75	0.97203	5.0	529845.0	0.259208	Y
5	ICIS 410-55998/2	7.5	1.919142	5.0	643613.0	0.255886	Y
6	IC 410-55998/6	12.5	3.293451	5.0	663245.0	0.263476	Y
7	IC 410-55998/5	20.0	5.278421	5.0	622314.0	0.263921	Y
8	IC 410-55998/4	30.0	7.917574	5.0	627062.0	0.263919	Y



Calibration

/ Dimethoate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

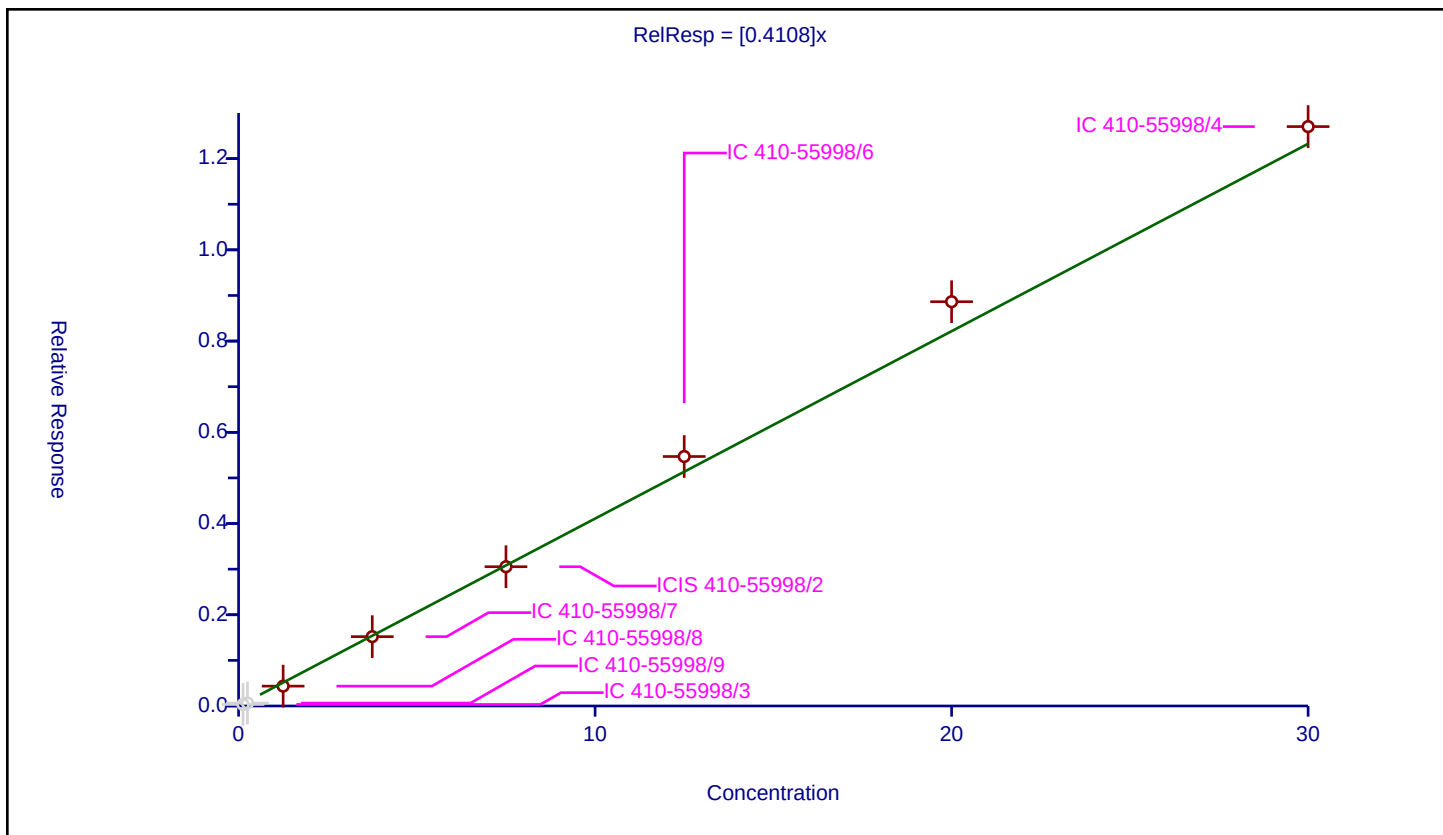
Curve Coefficients

Intercept: 0
 Slope: 0.4108

Error Coefficients

Standard Error: 945000
 Relative Standard Error: 8.3
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.033728	5.0	662353.0	0.269826	N
2	IC 410-55998/9	0.25	0.064072	5.0	522303.0	0.256288	N
3	IC 410-55998/8	1.25	0.435447	5.0	629882.0	0.348357	Y
4	IC 410-55998/7	3.75	1.520313	5.0	529845.0	0.405417	Y
5	ICIS 410-55998/2	7.5	3.053403	5.0	643613.0	0.40712	Y
6	IC 410-55998/6	12.5	5.469502	5.0	663245.0	0.43756	Y
7	IC 410-55998/5	20.0	8.863403	5.0	622314.0	0.44317	Y
8	IC 410-55998/4	30.0	12.702532	5.0	627062.0	0.423418	Y



Calibration

/ Atrazine

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

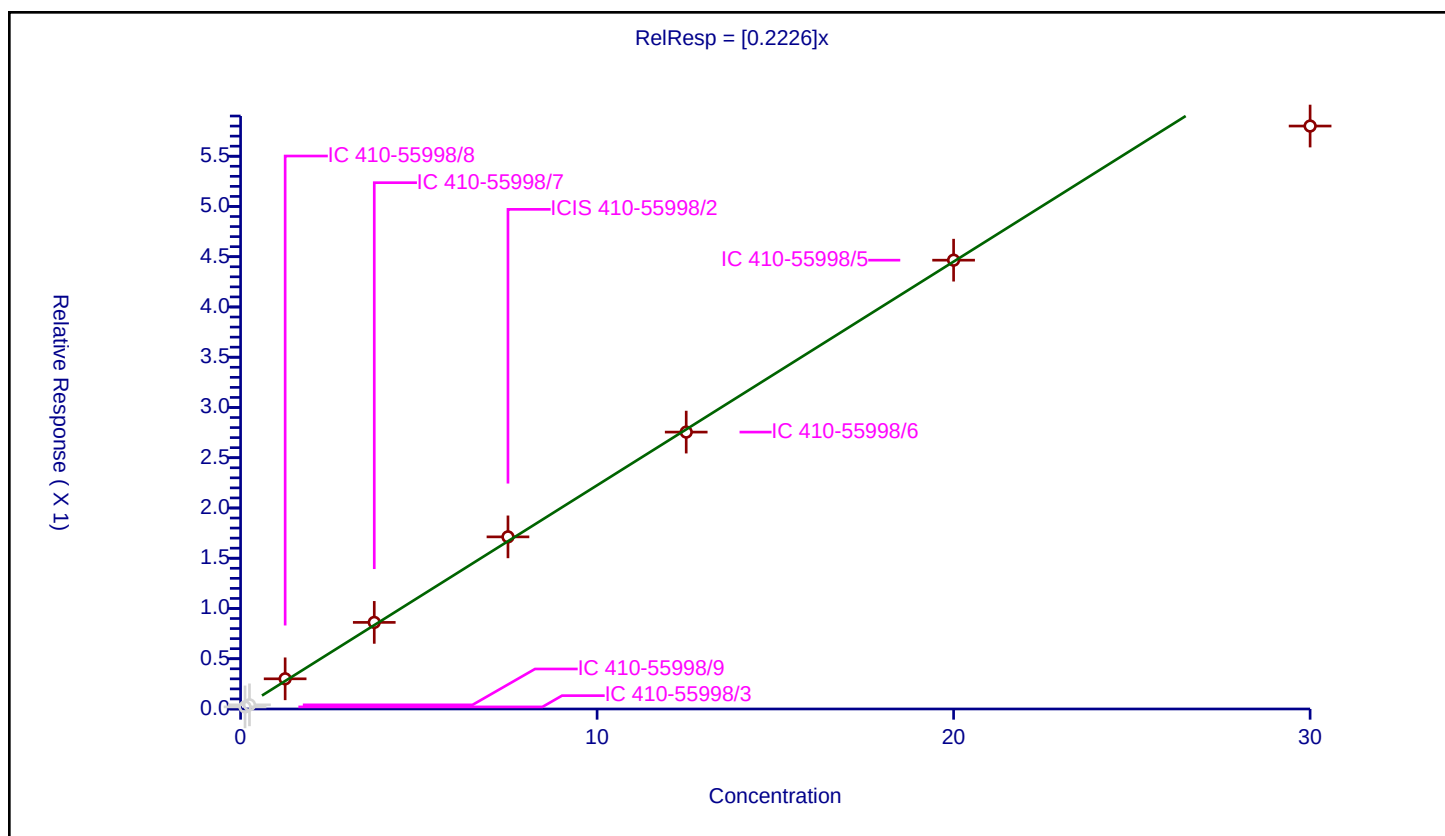
Curve Coefficients

Intercept: 0
 Slope: 0.2226

Error Coefficients

Standard Error: 454000
 Relative Standard Error: 7.1
 Correlation Coefficient: 0.986
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.020925	5.0	662353.0	0.167403	N
2	IC 410-55998/9	0.25	0.041374	5.0	522303.0	0.165498	N
3	IC 410-55998/8	1.25	0.300255	5.0	629882.0	0.240204	Y
4	IC 410-55998/7	3.75	0.861743	5.0	529845.0	0.229798	Y
5	ICIS 410-55998/2	7.5	1.712496	5.0	643613.0	0.228333	Y
6	IC 410-55998/6	12.5	2.754985	5.0	663245.0	0.220399	Y
7	IC 410-55998/5	20.0	4.465656	5.0	622314.0	0.223283	Y
8	IC 410-55998/4	30.0	5.800328	5.0	627062.0	0.193344	Y



Calibration

/ Pentachlorophenol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

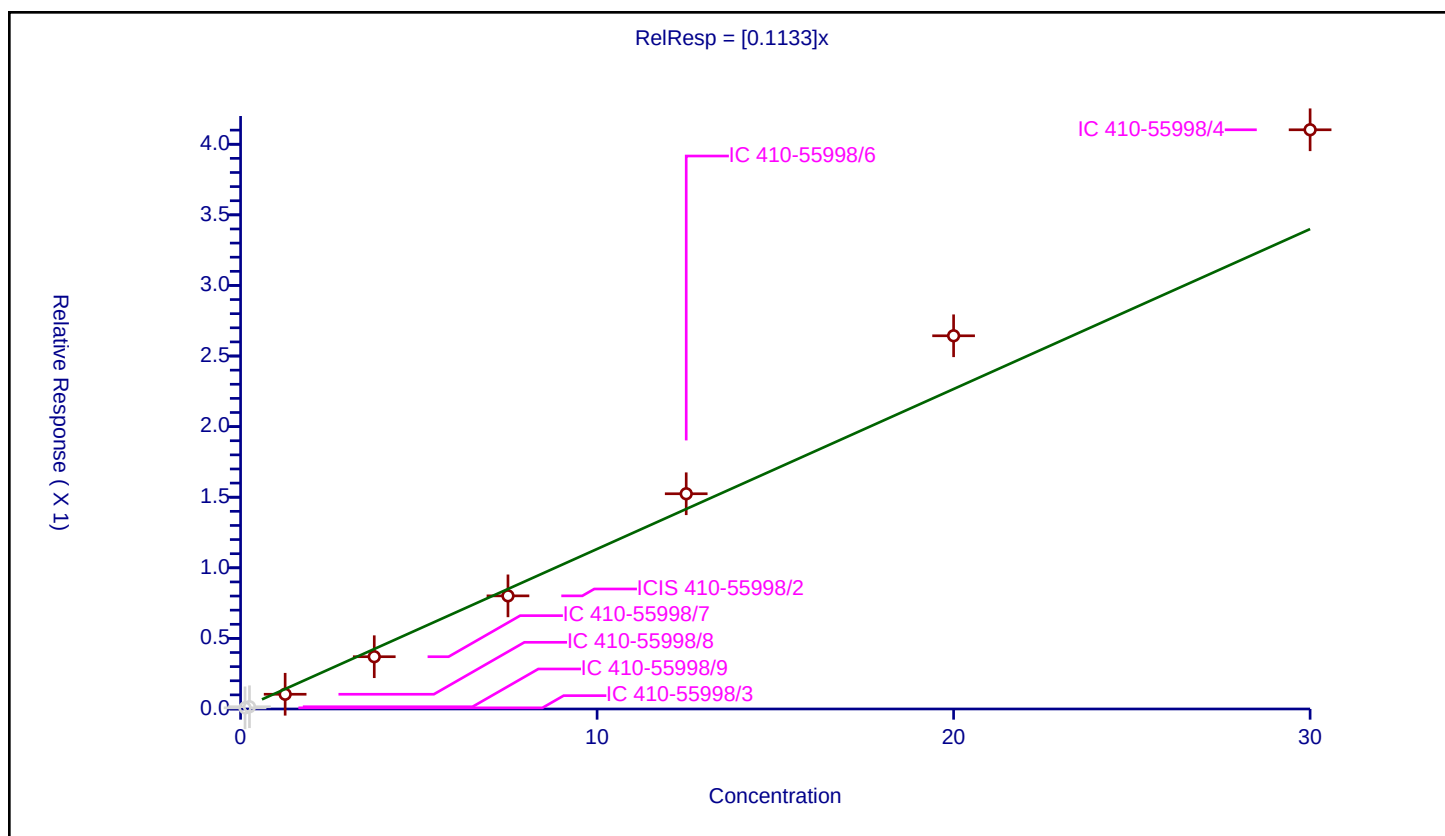
Curve Coefficients

Intercept: 0
 Slope: 0.1133

Error Coefficients

Standard Error: 292000
 Relative Standard Error: 18.2
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.963

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.008296	5.0	662353.0	0.066369	N
2	IC 410-55998/9	0.25	0.016044	5.0	522303.0	0.064177	N
3	IC 410-55998/8	1.25	0.104273	5.0	629882.0	0.083419	Y
4	IC 410-55998/7	3.75	0.370212	5.0	529845.0	0.098723	Y
5	ICIS 410-55998/2	7.5	0.801359	5.0	643613.0	0.106848	Y
6	IC 410-55998/6	12.5	1.524489	5.0	663245.0	0.121959	Y
7	IC 410-55998/5	20.0	2.643529	5.0	622314.0	0.132176	Y
8	IC 410-55998/4	30.0	4.102601	5.0	627062.0	0.136753	Y



Calibration

/ Pentachloronitrobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

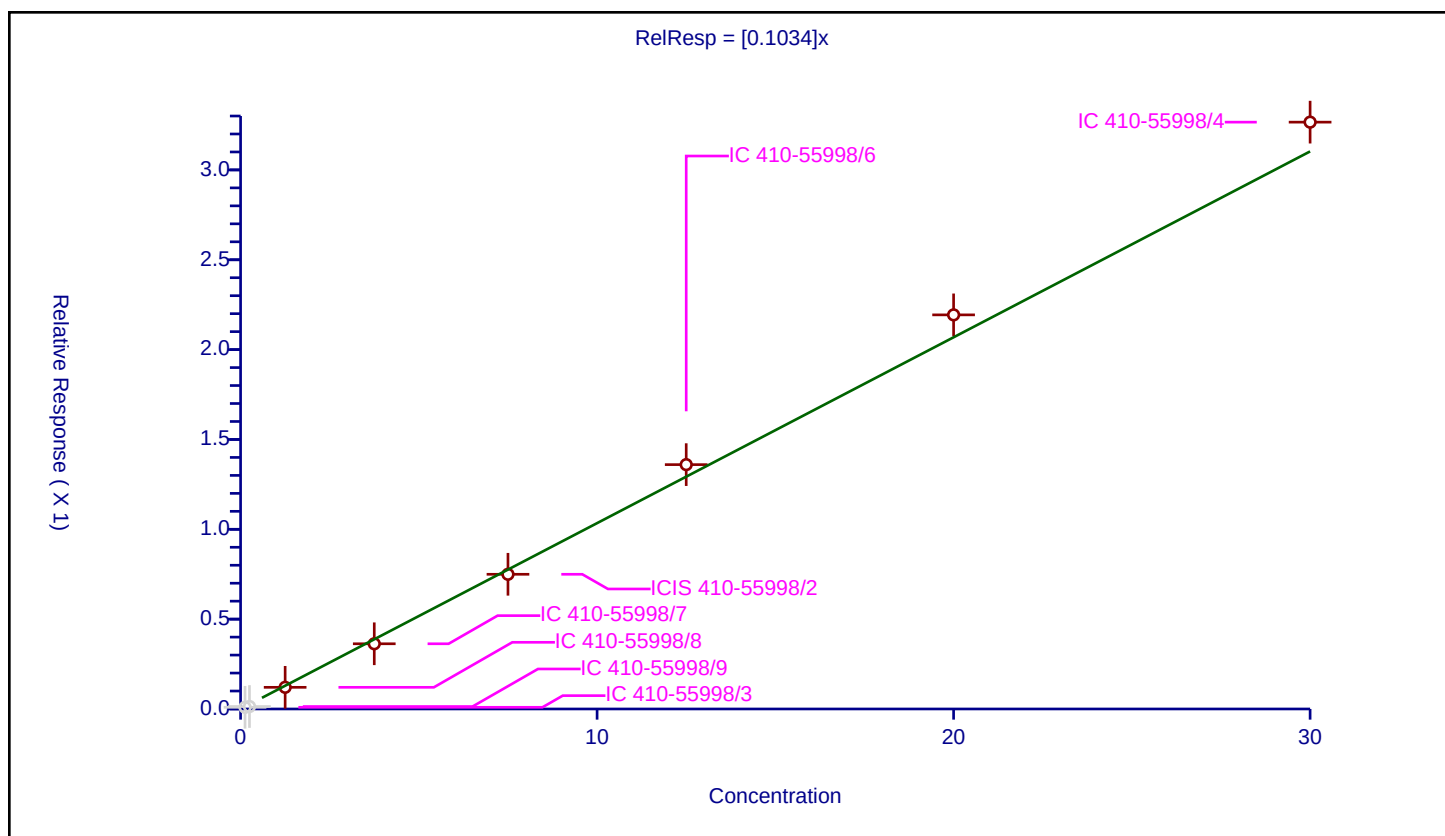
Curve Coefficients

Intercept: 0
 Slope: 0.1034

Error Coefficients

Standard Error: 239000
 Relative Standard Error: 6.1
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.009361	5.0	662353.0	0.074885	N
2	IC 410-55998/9	0.25	0.013699	5.0	522303.0	0.054796	N
3	IC 410-55998/8	1.25	0.120642	5.0	629882.0	0.096513	Y
4	IC 410-55998/7	3.75	0.362984	5.0	529845.0	0.096796	Y
5	ICIS 410-55998/2	7.5	0.749635	5.0	643613.0	0.099951	Y
6	IC 410-55998/6	12.5	1.359837	5.0	663245.0	0.108787	Y
7	IC 410-55998/5	20.0	2.193282	5.0	622314.0	0.109664	Y
8	IC 410-55998/4	30.0	3.265897	5.0	627062.0	0.108863	Y



Calibration

/ 4-Aminobiphenyl

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

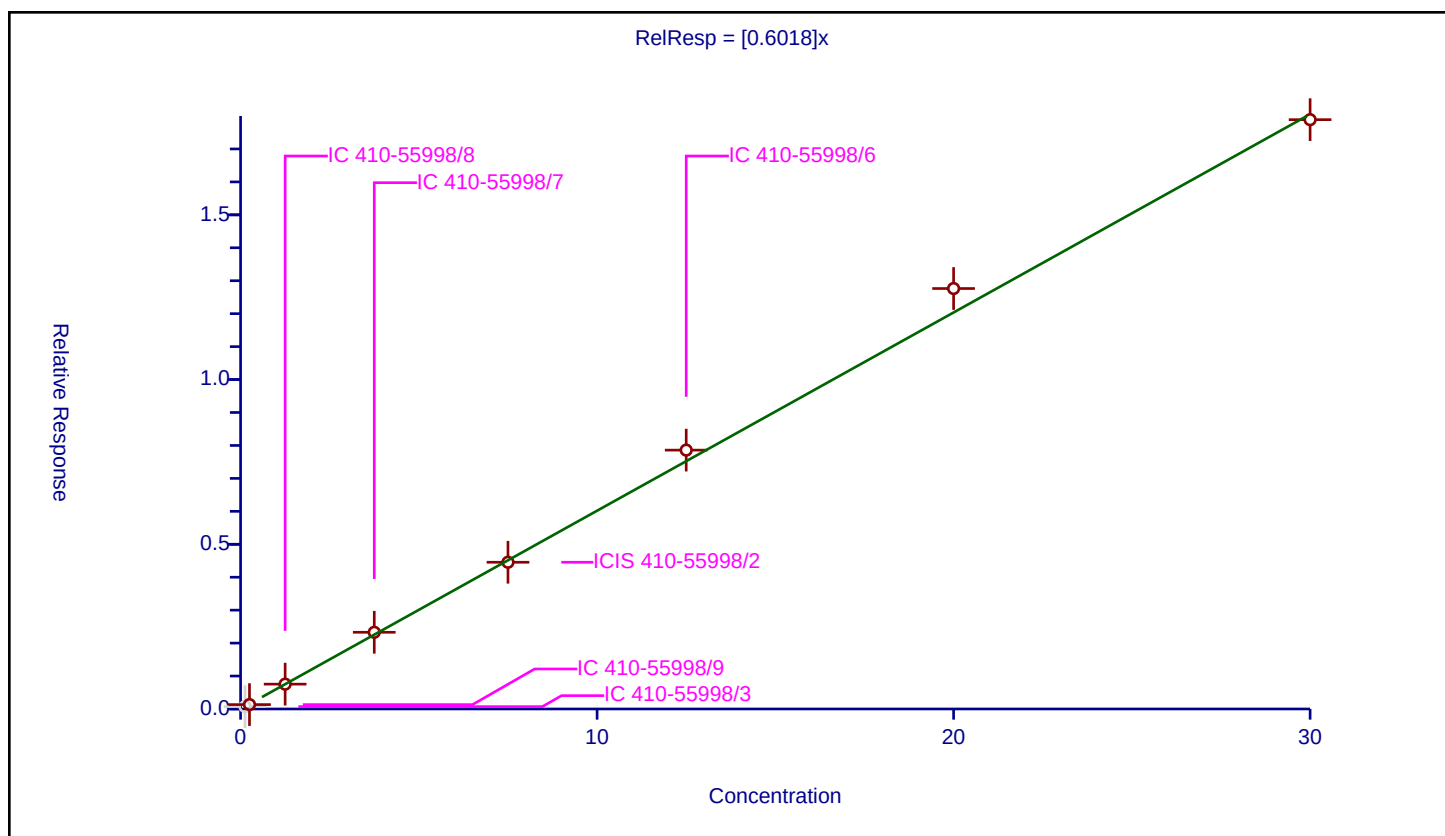
Curve Coefficients

Intercept: 0
Slope: 0.6018

Error Coefficients

Standard Error: 1230000
Relative Standard Error: 5.9
Correlation Coefficient: 0.996
Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.07262	5.0	662353.0	0.580959	N
2	IC 410-55998/9	0.25	0.132873	5.0	522303.0	0.531492	Y
3	IC 410-55998/8	1.25	0.754149	5.0	629882.0	0.603319	Y
4	IC 410-55998/7	3.75	2.3282	5.0	529845.0	0.620853	Y
5	ICIS 410-55998/2	7.5	4.45447	5.0	643613.0	0.593929	Y
6	IC 410-55998/6	12.5	7.858137	5.0	663245.0	0.628651	Y
7	IC 410-55998/5	20.0	12.763372	5.0	622314.0	0.638169	Y
8	IC 410-55998/4	30.0	17.888741	5.0	627062.0	0.596291	Y



Calibration

/ Pronamide

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

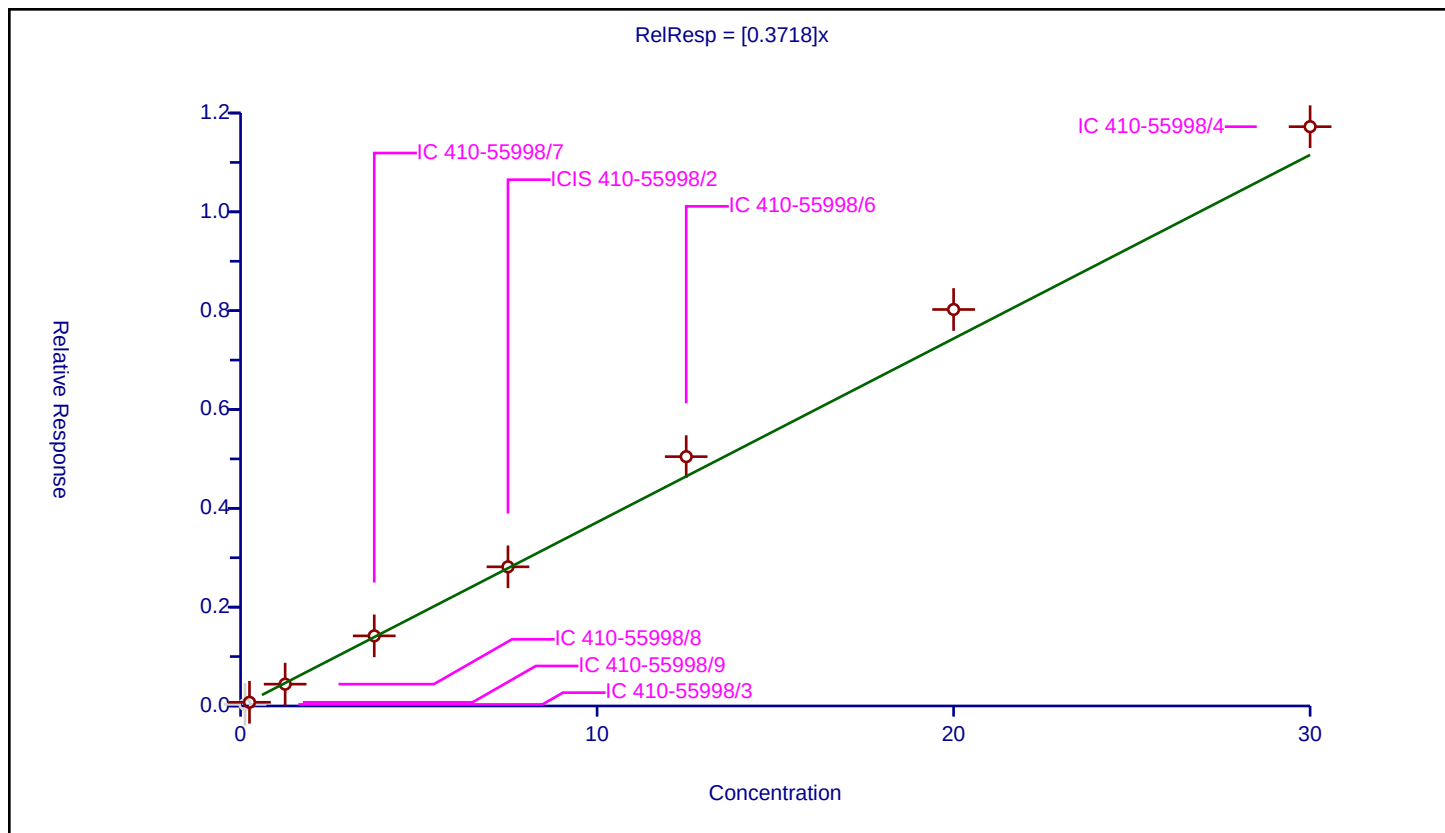
Curve Coefficients

Intercept: 0
 Slope: 0.3718

Error Coefficients

Standard Error: 792000
 Relative Standard Error: 9.7
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.031683	5.0	662353.0	0.25346	N
2	IC 410-55998/9	0.25	0.074851	5.0	522303.0	0.299405	Y
3	IC 410-55998/8	1.25	0.44167	5.0	629882.0	0.353336	Y
4	IC 410-55998/7	3.75	1.419123	5.0	529845.0	0.378433	Y
5	ICIS 410-55998/2	7.5	2.816335	5.0	643613.0	0.375511	Y
6	IC 410-55998/6	12.5	5.045926	5.0	663245.0	0.403674	Y
7	IC 410-55998/5	20.0	8.02406	5.0	622314.0	0.401203	Y
8	IC 410-55998/4	30.0	11.723498	5.0	627062.0	0.390783	Y



Calibration

/ Dinoseb

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

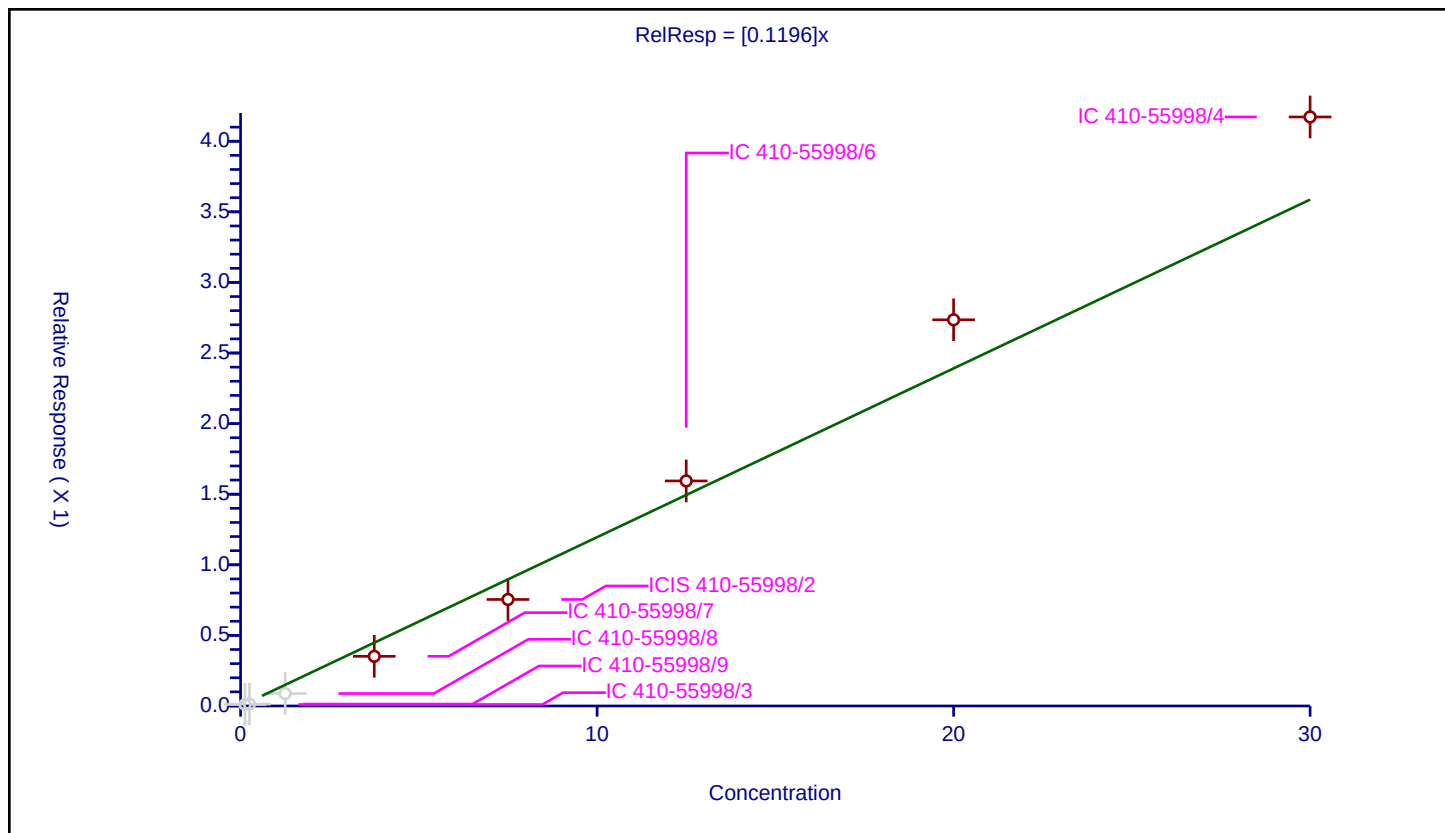
Curve Coefficients

Intercept: 0
 Slope: 0.1196

Error Coefficients

Standard Error: 334000
 Relative Standard Error: 17.6
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.952

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.010742	5.0	662353.0	0.085936	N
2	IC 410-55998/9	0.25	0.013594	5.0	522303.0	0.054375	N
3	IC 410-55998/8	1.25	0.088342	5.0	629882.0	0.070674	N
4	IC 410-55998/7	3.75	0.351782	5.0	529845.0	0.093809	Y
5	ICIS 410-55998/2	7.5	0.754483	5.0	643613.0	0.100598	Y
6	IC 410-55998/6	12.5	1.594004	5.0	663245.0	0.12752	Y
7	IC 410-55998/5	20.0	2.735524	5.0	622314.0	0.136776	Y
8	IC 410-55998/4	30.0	4.172091	5.0	627062.0	0.13907	Y



Calibration

/ Phenanthrene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

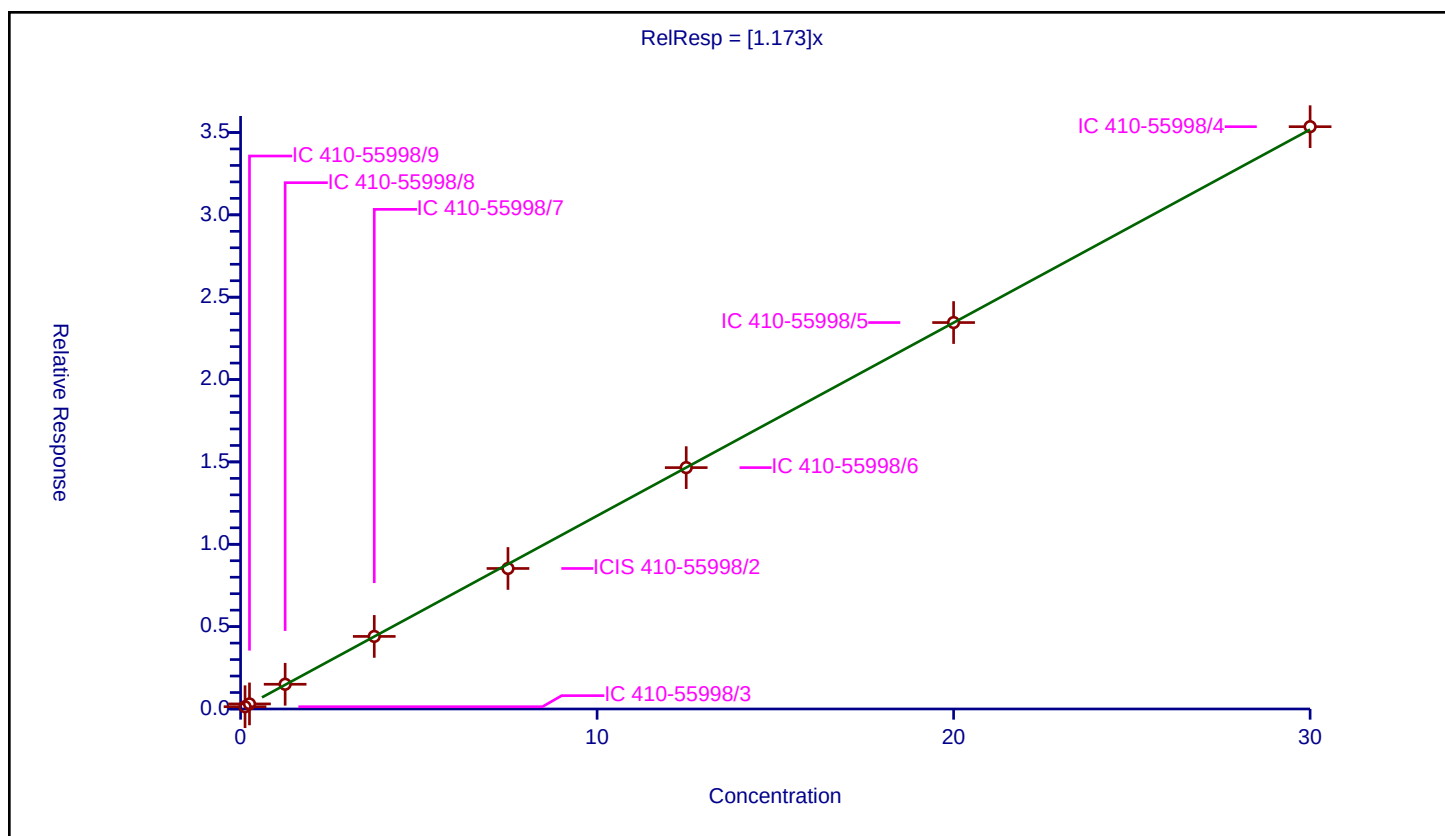
Curve Coefficients

Intercept: 0
 Slope: 1.173

Error Coefficients

Standard Error: 2190000
 Relative Standard Error: 3.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.138891	5.0	662353.0	1.11113	Y
2	IC 410-55998/9	0.25	0.308231	5.0	522303.0	1.232924	Y
3	IC 410-55998/8	1.25	1.501162	5.0	629882.0	1.20093	Y
4	IC 410-55998/7	3.75	4.406723	5.0	529845.0	1.175126	Y
5	ICIS 410-55998/2	7.5	8.530421	5.0	643613.0	1.137389	Y
6	IC 410-55998/6	12.5	14.653808	5.0	663245.0	1.172305	Y
7	IC 410-55998/5	20.0	23.461307	5.0	622314.0	1.173065	Y
8	IC 410-55998/4	30.0	35.351983	5.0	627062.0	1.178399	Y



Calibration

/ Anthracene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

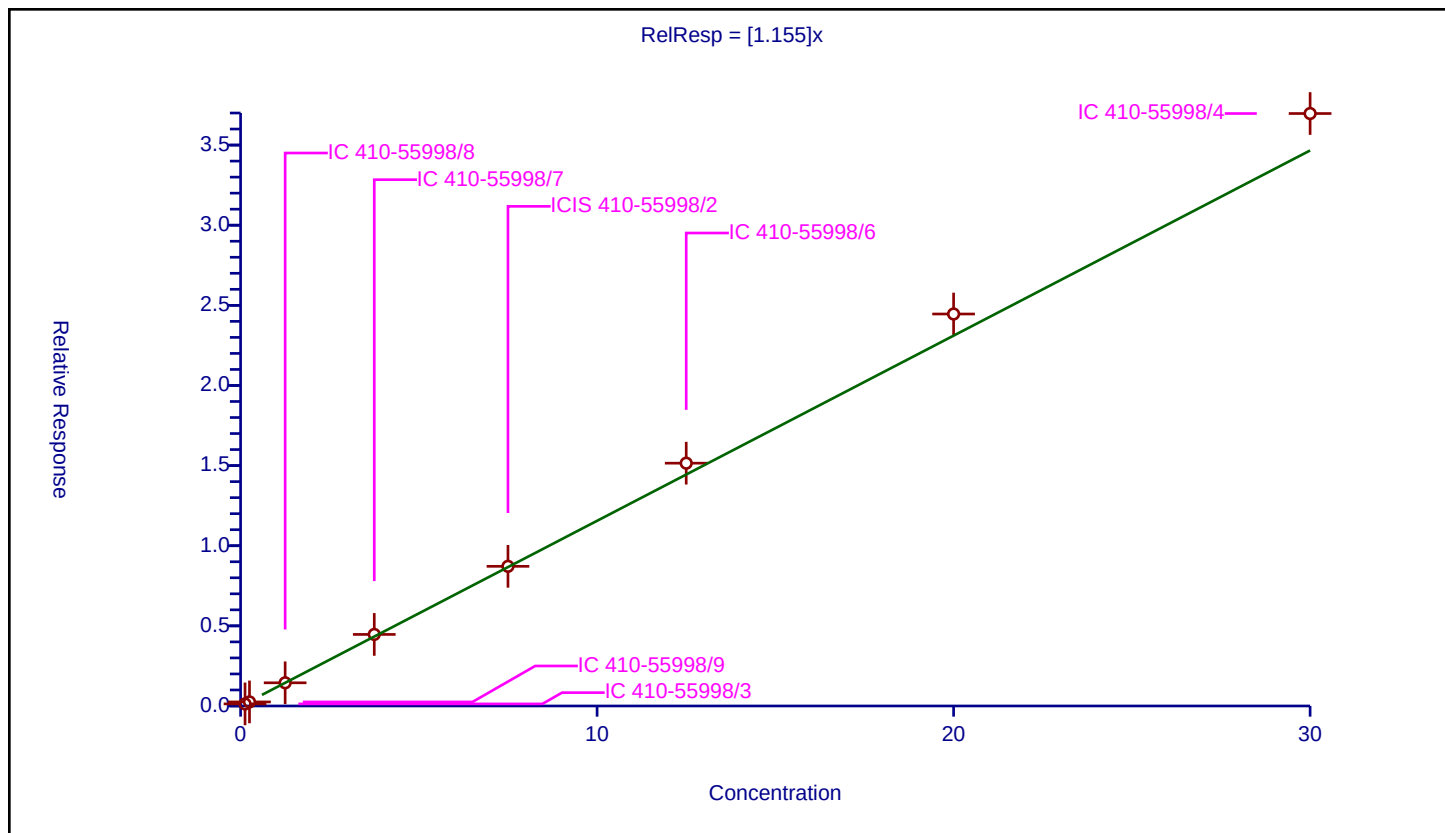
Curve Coefficients

Intercept: 0
 Slope: 1.155

Error Coefficients

Standard Error: 2280000
 Relative Standard Error: 7.0
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.131169	5.0	662353.0	1.04935	Y
2	IC 410-55998/9	0.25	0.254211	5.0	522303.0	1.016843	Y
3	IC 410-55998/8	1.25	1.446207	5.0	629882.0	1.156966	Y
4	IC 410-55998/7	3.75	4.465797	5.0	529845.0	1.190879	Y
5	ICIS 410-55998/2	7.5	8.715564	5.0	643613.0	1.162075	Y
6	IC 410-55998/6	12.5	15.151294	5.0	663245.0	1.212104	Y
7	IC 410-55998/5	20.0	24.459228	5.0	622314.0	1.222961	Y
8	IC 410-55998/4	30.0	36.967692	5.0	627062.0	1.232256	Y



Calibration

/ Carbazole

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

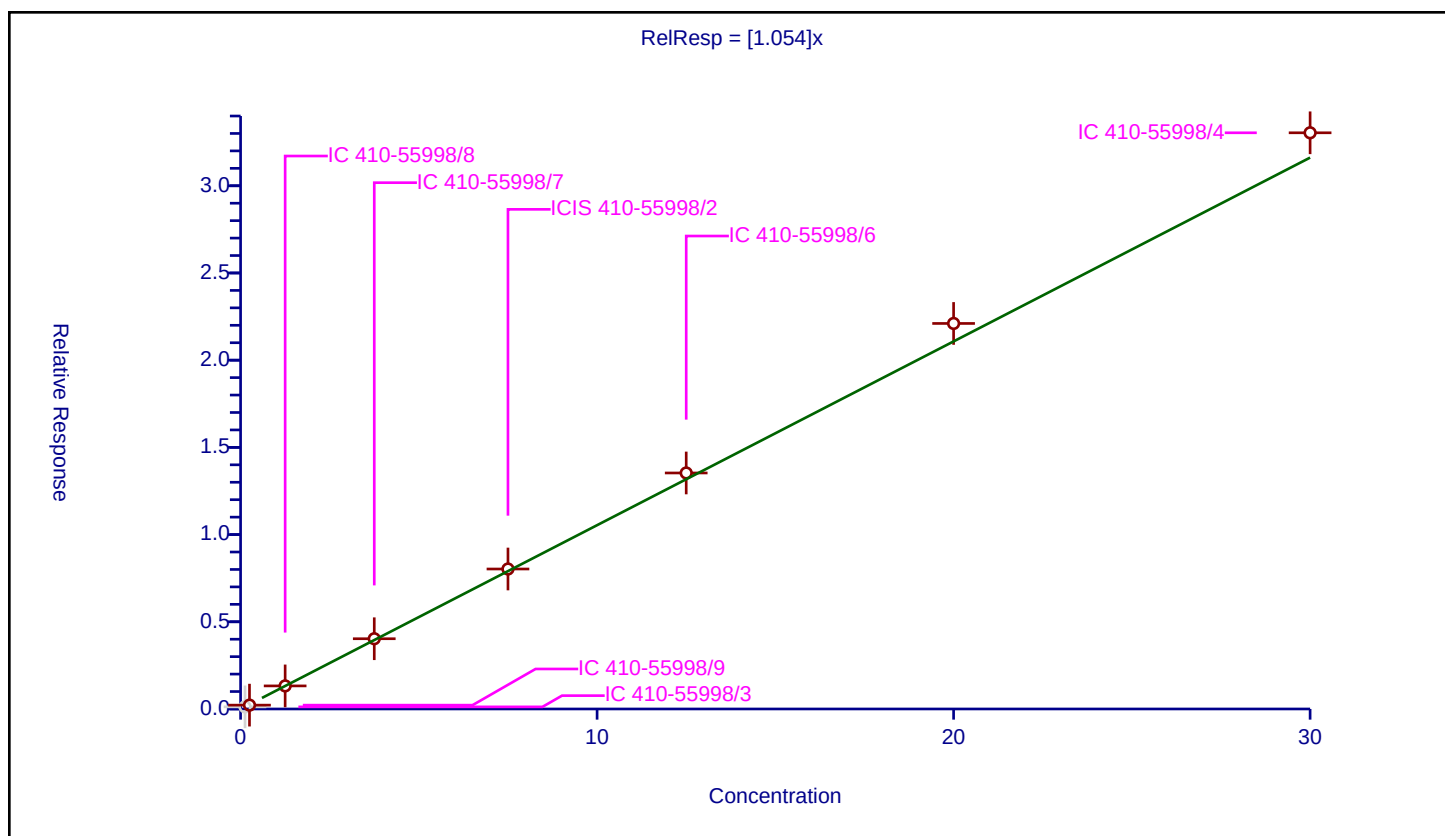
Curve Coefficients

Intercept: 0
Slope: 1.054

Error Coefficients

Standard Error: 2210000
Relative Standard Error: 7.3
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.121227	5.0	662353.0	0.969815	N
2	IC 410-55998/9	0.25	0.221088	5.0	522303.0	0.884353	Y
3	IC 410-55998/8	1.25	1.323438	5.0	629882.0	1.058751	Y
4	IC 410-55998/7	3.75	4.028924	5.0	529845.0	1.07438	Y
5	ICIS 410-55998/2	7.5	8.026772	5.0	643613.0	1.070236	Y
6	IC 410-55998/6	12.5	13.533197	5.0	663245.0	1.082656	Y
7	IC 410-55998/5	20.0	22.105657	5.0	622314.0	1.105283	Y
8	IC 410-55998/4	30.0	33.038161	5.0	627062.0	1.101272	Y



Calibration

/ Methyl parathion

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

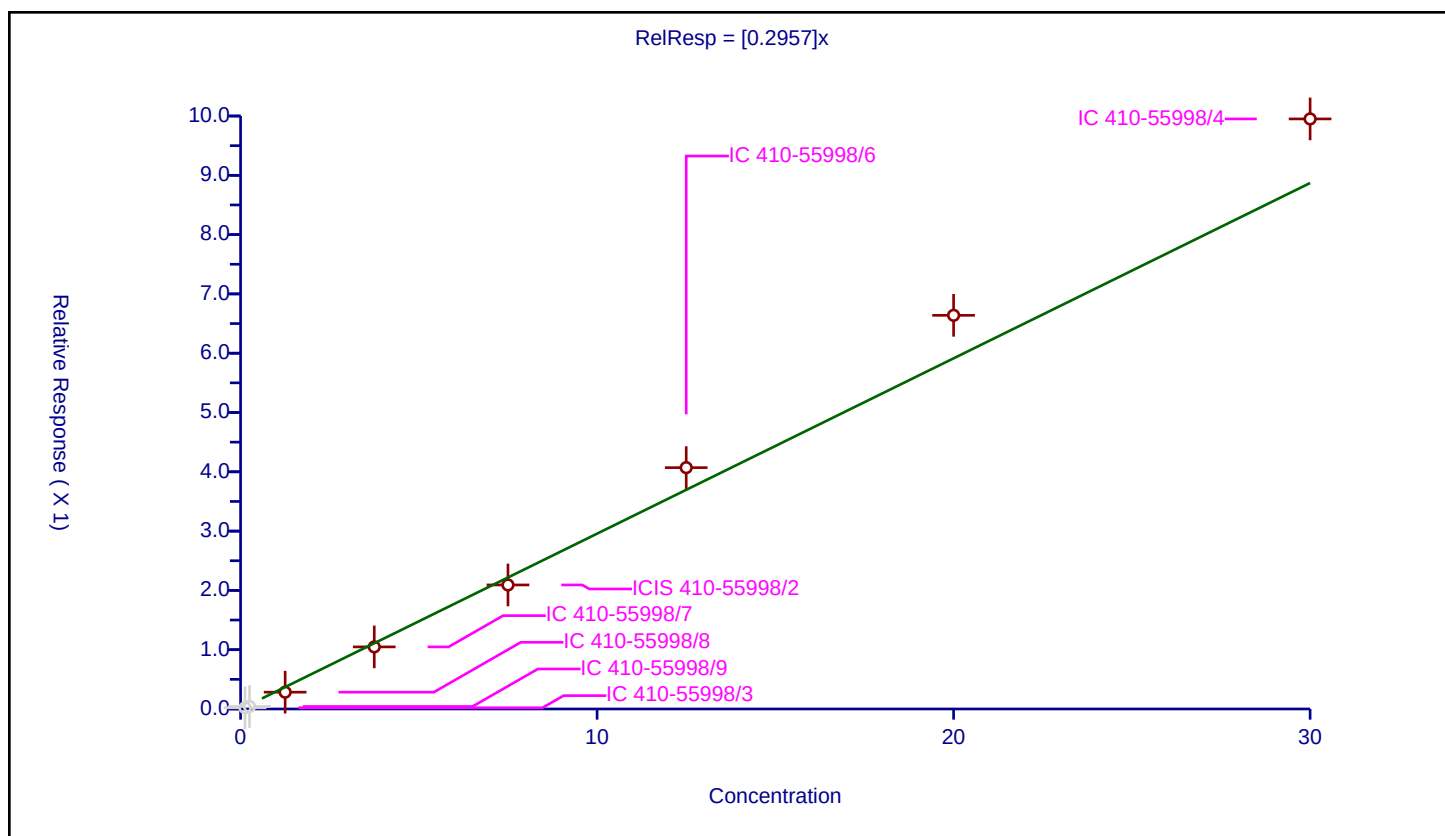
Curve Coefficients

Intercept: 0
 Slope: 0.2957

Error Coefficients

Standard Error: 724000
 Relative Standard Error: 14.2
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.020412	5.0	662353.0	0.163297	N
2	IC 410-55998/9	0.25	0.04259	5.0	522303.0	0.170361	N
3	IC 410-55998/8	1.25	0.283355	5.0	629882.0	0.226684	Y
4	IC 410-55998/7	3.75	1.046976	5.0	529845.0	0.279194	Y
5	ICIS 410-55998/2	7.5	2.091614	5.0	643613.0	0.278882	Y
6	IC 410-55998/6	12.5	4.069982	5.0	663245.0	0.325599	Y
7	IC 410-55998/5	20.0	6.639036	5.0	622314.0	0.331952	Y
8	IC 410-55998/4	30.0	9.951073	5.0	627062.0	0.331702	Y



Calibration

/ Di-n-butyl phthalate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

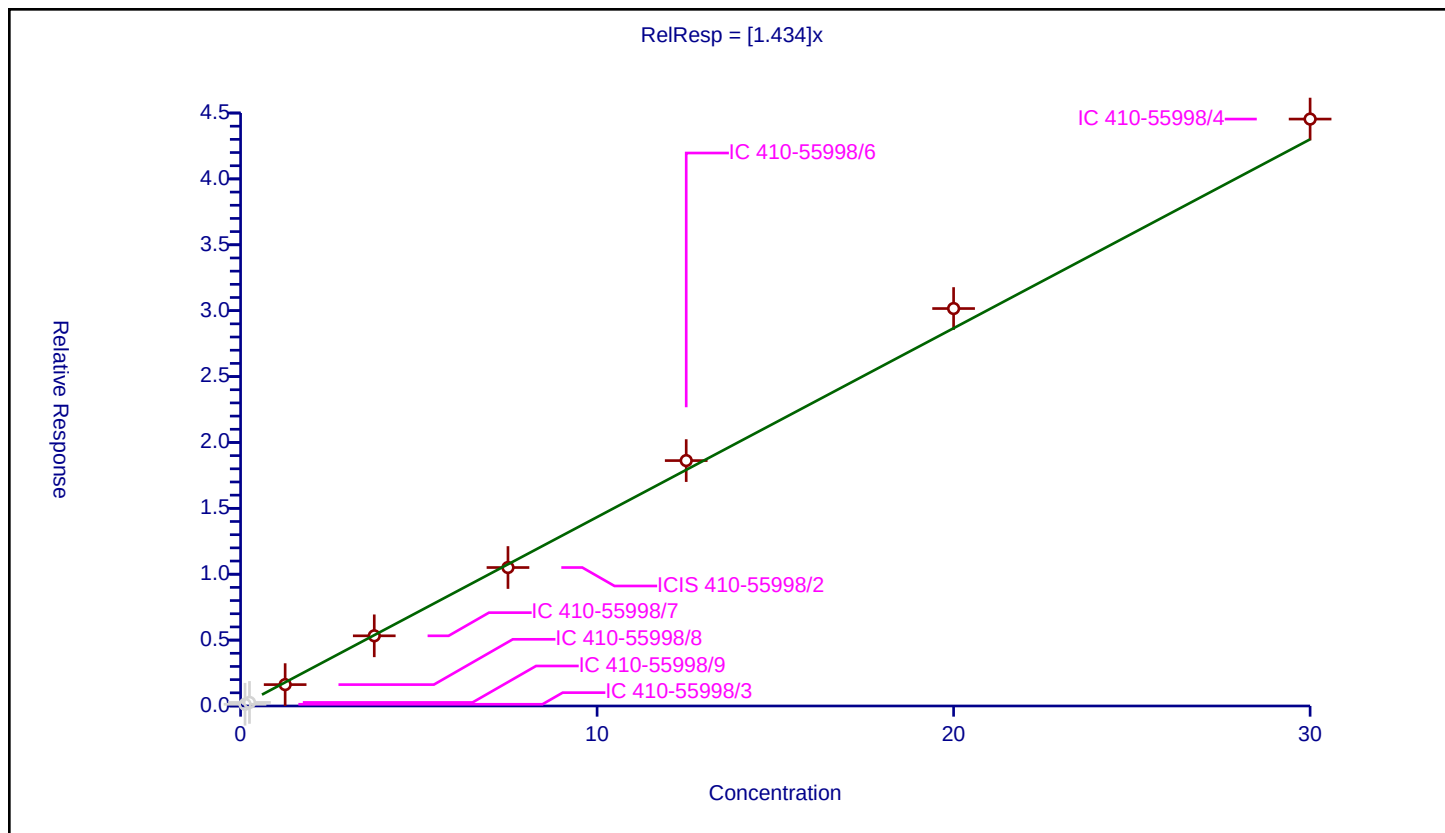
Curve Coefficients

Intercept: 0
 Slope: 1.434

Error Coefficients

Standard Error: 3270000
 Relative Standard Error: 5.5
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.130927	5.0	662353.0	1.047417	N
2	IC 410-55998/9	0.25	0.270983	5.0	522303.0	1.08393	N
3	IC 410-55998/8	1.25	1.621629	5.0	629882.0	1.297303	Y
4	IC 410-55998/7	3.75	5.325322	5.0	529845.0	1.420086	Y
5	ICIS 410-55998/2	7.5	10.507658	5.0	643613.0	1.401021	Y
6	IC 410-55998/6	12.5	18.622123	5.0	663245.0	1.48977	Y
7	IC 410-55998/5	20.0	30.162964	5.0	622314.0	1.508148	Y
8	IC 410-55998/4	30.0	44.540699	5.0	627062.0	1.48469	Y



Calibration

/ Ethyl Parathion

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

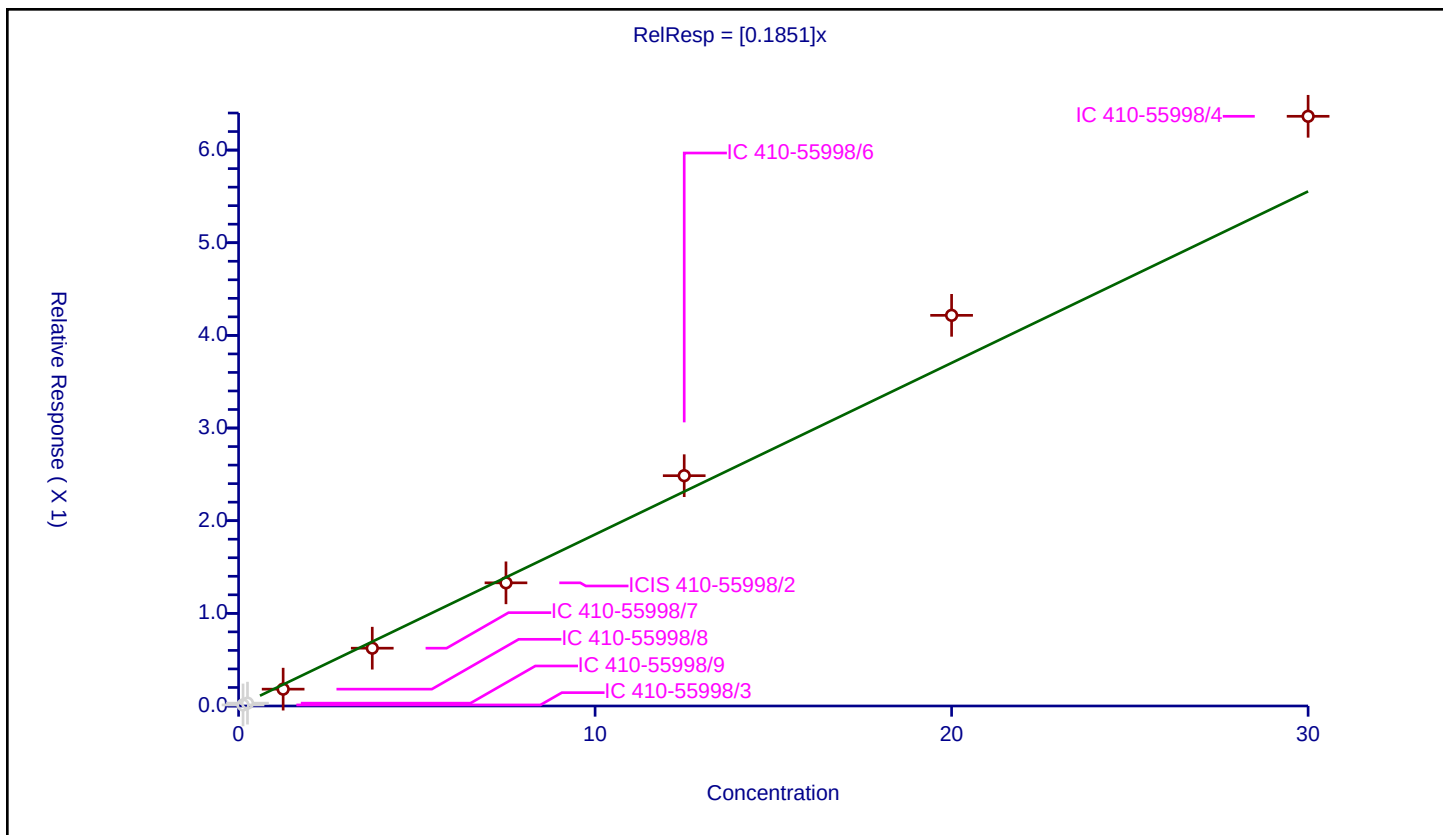
Curve Coefficients

Intercept: 0
 Slope: 0.1851

Error Coefficients

Standard Error: 459000
 Relative Standard Error: 14.4
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.011248	5.0	662353.0	0.089982	N
2	IC 410-55998/9	0.25	0.030662	5.0	522303.0	0.122649	N
3	IC 410-55998/8	1.25	0.181725	5.0	629882.0	0.14538	Y
4	IC 410-55998/7	3.75	0.623937	5.0	529845.0	0.166383	Y
5	ICIS 410-55998/2	7.5	1.329207	5.0	643613.0	0.177228	Y
6	IC 410-55998/6	12.5	2.485831	5.0	663245.0	0.198866	Y
7	IC 410-55998/5	20.0	4.216416	5.0	622314.0	0.210821	Y
8	IC 410-55998/4	30.0	6.364674	5.0	627062.0	0.212156	Y



Calibration

/ 4-Nitroquinoline-1-oxide

Curve Type: Quadratic
Weighting: Conc
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

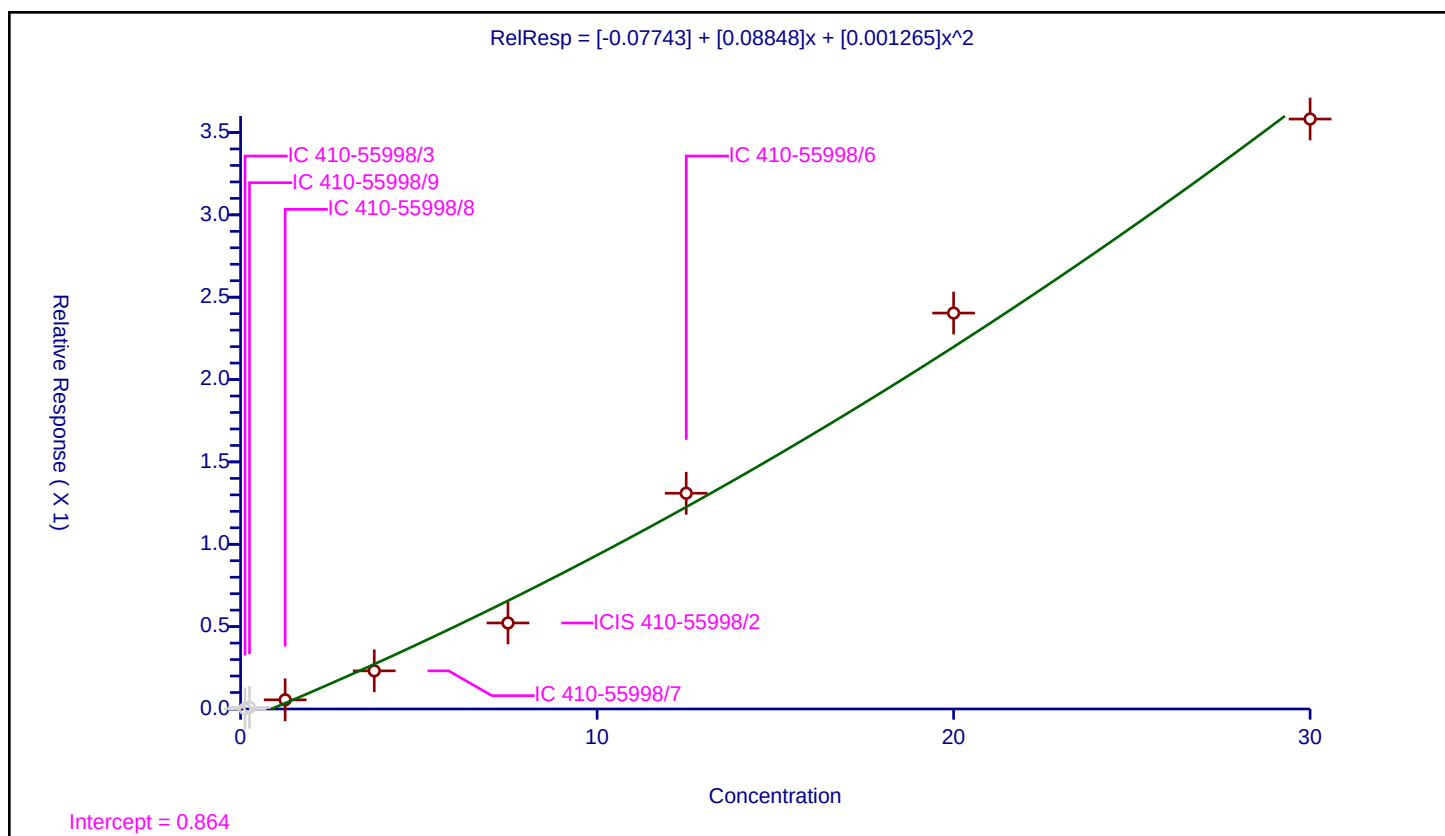
Curve Coefficients

Intercept: -0.07743
Slope: 0.08848
Second Order: 0.001265

Error Coefficients

Standard Error: 330000
Relative Standard Error: 16.5
Correlation Coefficient: 0.990
Coefficient of Determination (Adjusted): 0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.001268	5.0	662353.0	0.010146	N
2	IC 410-55998/9	0.25	0.009248	5.0	522303.0	0.03699	N
3	IC 410-55998/8	1.25	0.055566	5.0	629882.0	0.044453	Y
4	IC 410-55998/7	3.75	0.231549	5.0	529845.0	0.061746	Y
5	ICIS 410-55998/2	7.5	0.522232	5.0	643613.0	0.069631	Y
6	IC 410-55998/6	12.5	1.309863	5.0	663245.0	0.104789	Y
7	IC 410-55998/5	20.0	2.403682	5.0	622314.0	0.120184	Y
8	IC 410-55998/4	30.0	3.581679	5.0	627062.0	0.119389	Y



Calibration

/ Octachlorostyrene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

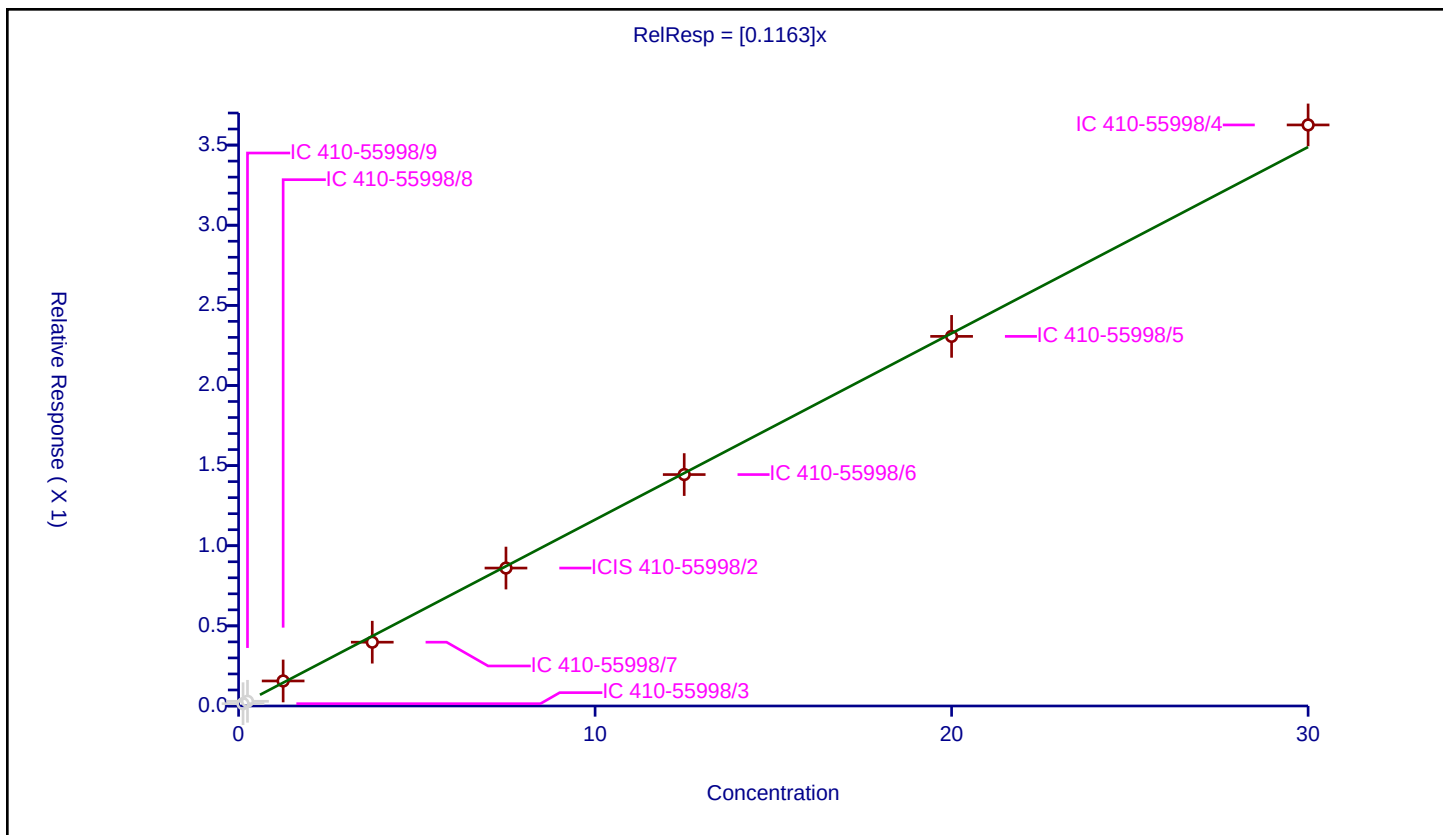
Curve Coefficients

Intercept: 0
 Slope: 0.1163

Error Coefficients

Standard Error: 261000
 Relative Standard Error: 5.5
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.014426	5.0	662353.0	0.115407	N
2	IC 410-55998/9	0.25	0.029389	5.0	522303.0	0.117556	N
3	IC 410-55998/8	1.25	0.156188	5.0	629882.0	0.12495	Y
4	IC 410-55998/7	3.75	0.398088	5.0	529845.0	0.106157	Y
5	ICIS 410-55998/2	7.5	0.860696	5.0	643613.0	0.114759	Y
6	IC 410-55998/6	12.5	1.444089	5.0	663245.0	0.115527	Y
7	IC 410-55998/5	20.0	2.306271	5.0	622314.0	0.115314	Y
8	IC 410-55998/4	30.0	3.625614	5.0	627062.0	0.120854	Y



Calibration

/ Isodrin

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

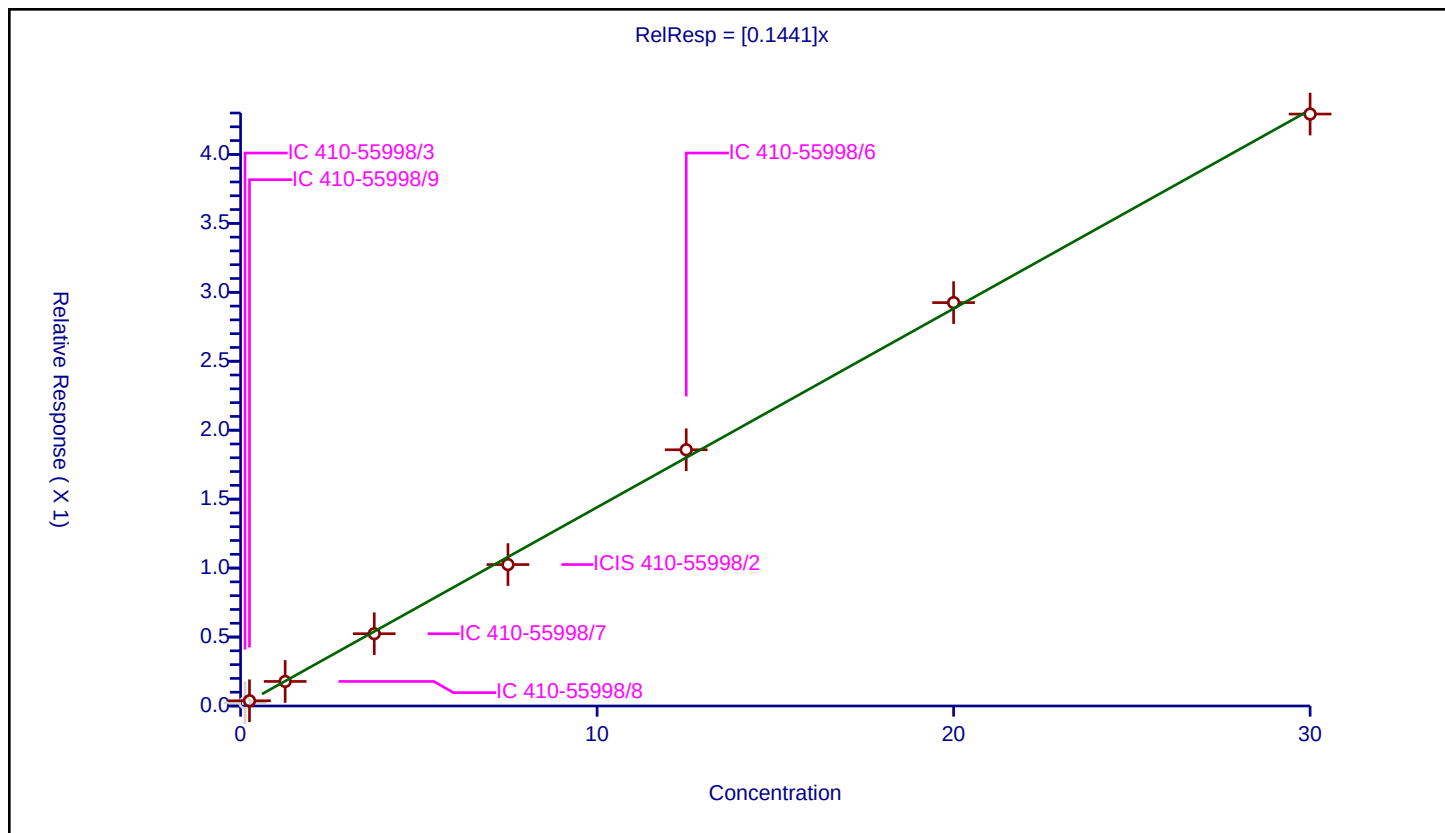
Curve Coefficients

Intercept: 0
Slope: 0.1441

Error Coefficients

Standard Error: 290000
Relative Standard Error: 3.6
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.022496	5.0	662353.0	0.179964	N
2	IC 410-55998/9	0.25	0.037899	5.0	522303.0	0.151598	Y
3	IC 410-55998/8	1.25	0.178033	5.0	629882.0	0.142427	Y
4	IC 410-55998/7	3.75	0.524229	5.0	529845.0	0.139794	Y
5	ICIS 410-55998/2	7.5	1.025562	5.0	643613.0	0.136742	Y
6	IC 410-55998/6	12.5	1.857956	5.0	663245.0	0.148636	Y
7	IC 410-55998/5	20.0	2.925195	5.0	622314.0	0.14626	Y
8	IC 410-55998/4	30.0	4.292391	5.0	627062.0	0.14308	Y



Calibration

/ Fluoranthene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

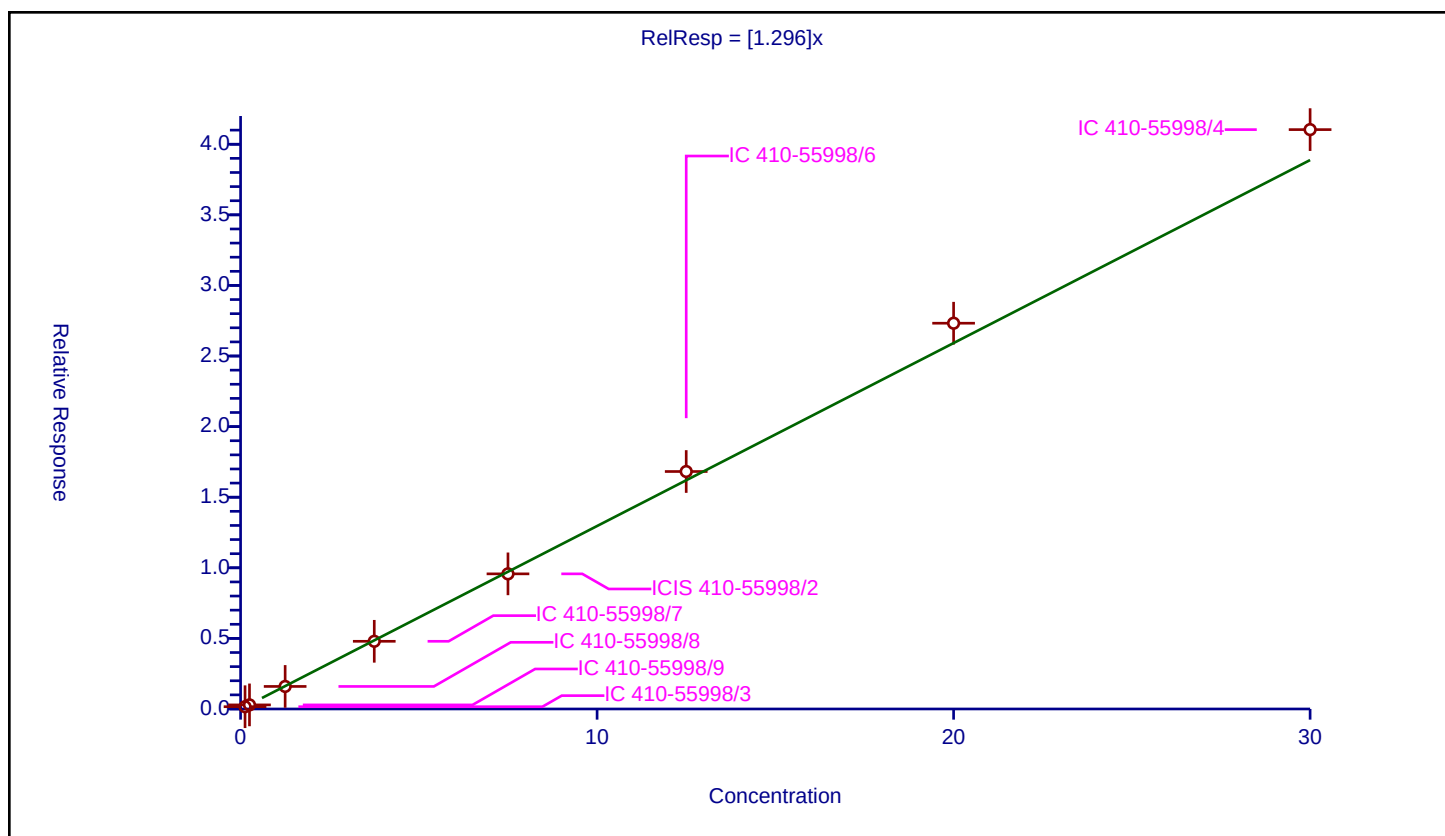
Curve Coefficients

Intercept: 0
Slope: 1.296

Error Coefficients

Standard Error: 2530000
Relative Standard Error: 5.2
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.161613	5.0	662353.0	1.292906	Y
2	IC 410-55998/9	0.25	0.290732	5.0	522303.0	1.162927	Y
3	IC 410-55998/8	1.25	1.596982	5.0	629882.0	1.277585	Y
4	IC 410-55998/7	3.75	4.794298	5.0	529845.0	1.27848	Y
5	ICIS 410-55998/2	7.5	9.570705	5.0	643613.0	1.276094	Y
6	IC 410-55998/6	12.5	16.820526	5.0	663245.0	1.345642	Y
7	IC 410-55998/5	20.0	27.323417	5.0	622314.0	1.366171	Y
8	IC 410-55998/4	30.0	41.037409	5.0	627062.0	1.367914	Y



Calibration

/ Benzidine

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

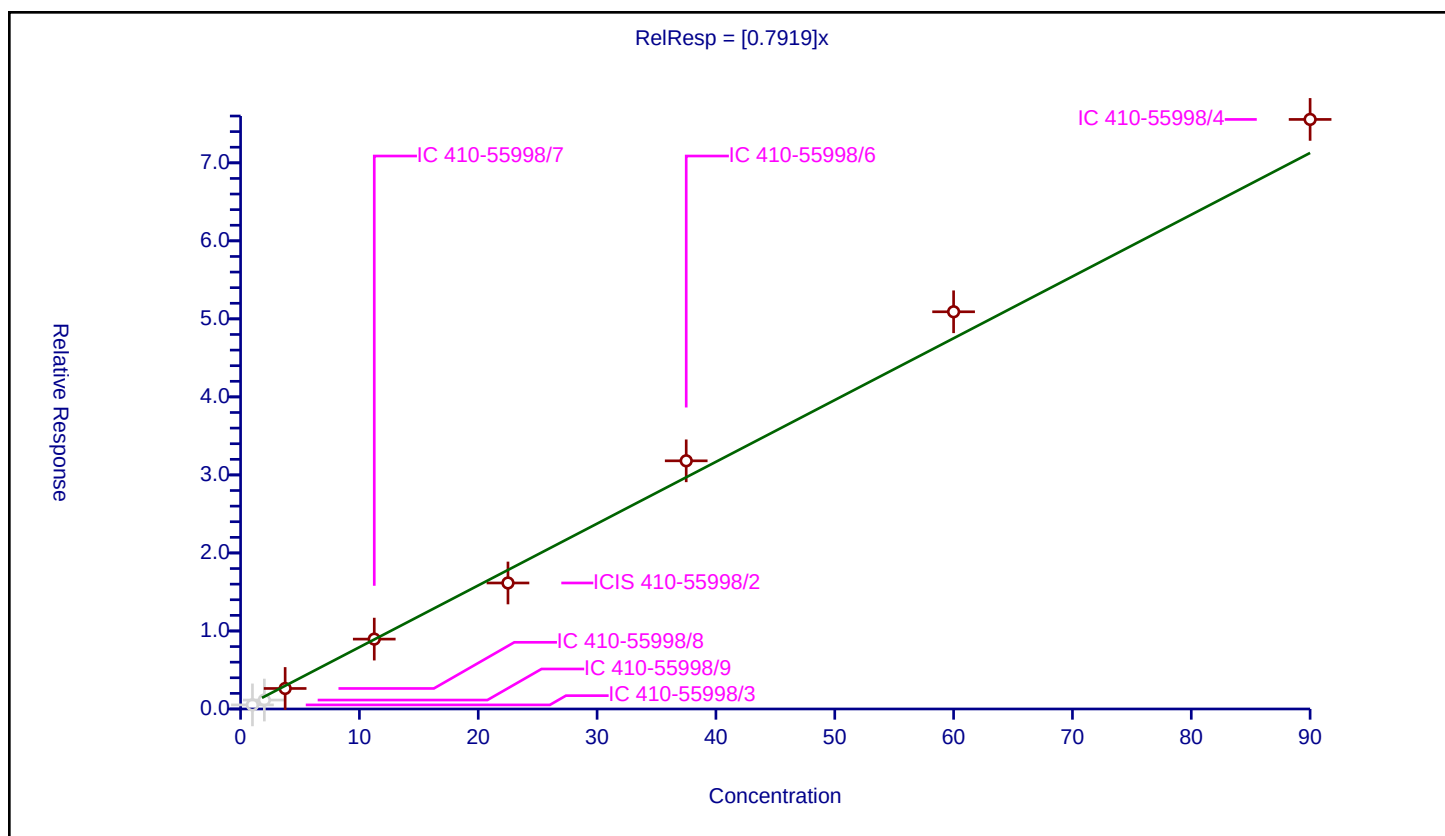
Curve Coefficients

Intercept: 0
Slope: 0.7919

Error Coefficients

Standard Error: 5790000
Relative Standard Error: 8.5
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	1.0	0.525215	5.0	674267.0	0.525215	N
2	IC 410-55998/9	2.0	1.14636	5.0	548427.0	0.57318	N
3	IC 410-55998/8	3.75	2.628653	5.0	644855.0	0.700974	Y
4	IC 410-55998/7	11.25	8.957971	5.0	533939.0	0.796264	Y
5	ICIS 410-55998/2	22.5	16.150962	5.0	665539.0	0.717821	Y
6	IC 410-55998/6	37.5	31.808058	5.0	671248.0	0.848215	Y
7	IC 410-55998/5	60.0	50.910674	5.0	652429.0	0.848511	Y
8	IC 410-55998/4	90.0	75.564051	5.0	661270.0	0.839601	Y



Calibration

/ Pyrene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

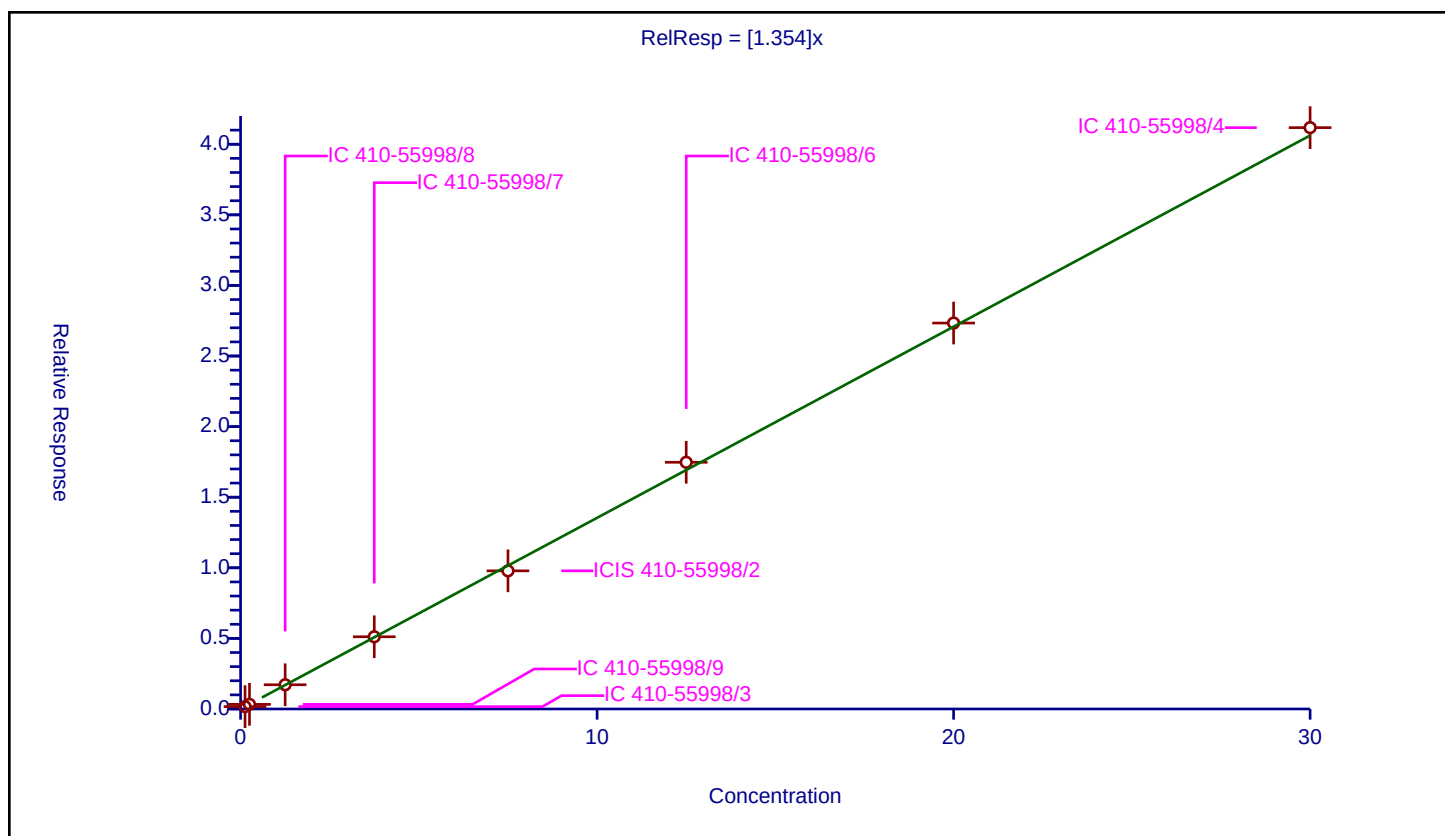
Curve Coefficients

Intercept: 0
Slope: 1.354

Error Coefficients

Standard Error: 2670000
Relative Standard Error: 2.4
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.167552	5.0	674267.0	1.340419	Y
2	IC 410-55998/9	0.25	0.328084	5.0	548427.0	1.312335	Y
3	IC 410-55998/8	1.25	1.715828	5.0	644855.0	1.372662	Y
4	IC 410-55998/7	3.75	5.11654	5.0	533939.0	1.364411	Y
5	ICIS 410-55998/2	7.5	9.784738	5.0	665539.0	1.304632	Y
6	IC 410-55998/6	12.5	17.474704	5.0	671248.0	1.397976	Y
7	IC 410-55998/5	20.0	27.335105	5.0	652429.0	1.366755	Y
8	IC 410-55998/4	30.0	41.177159	5.0	661270.0	1.372572	Y



Calibration

/ p-Terphenyl-d14

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

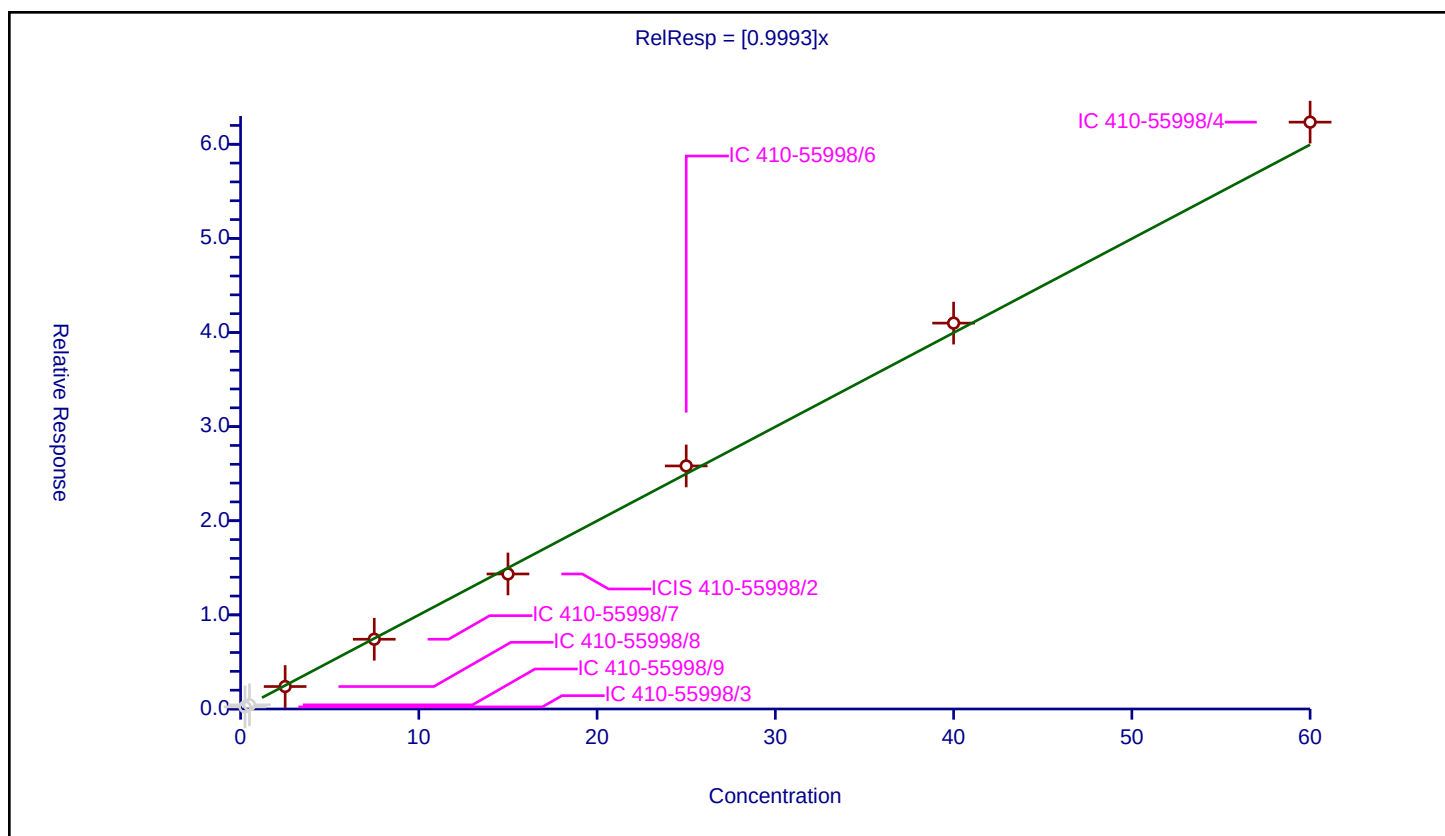
Curve Coefficients

Intercept: 0
Slope: 0.9993

Error Coefficients

Standard Error: 4750000
Relative Standard Error: 3.8
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.25	0.225623	5.0	674267.0	0.902491	N
2	IC 410-55998/9	0.5	0.440451	5.0	548427.0	0.880901	N
3	IC 410-55998/8	2.5	2.385707	5.0	644855.0	0.954283	Y
4	IC 410-55998/7	7.5	7.409929	5.0	533939.0	0.987991	Y
5	ICIS 410-55998/2	15.0	14.345358	5.0	665539.0	0.956357	Y
6	IC 410-55998/6	25.0	25.823362	5.0	671248.0	1.032934	Y
7	IC 410-55998/5	40.0	40.996239	5.0	652429.0	1.024906	Y
8	IC 410-55998/4	60.0	62.349328	5.0	661270.0	1.039155	Y



Calibration

/ p-Dimethylamino azobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

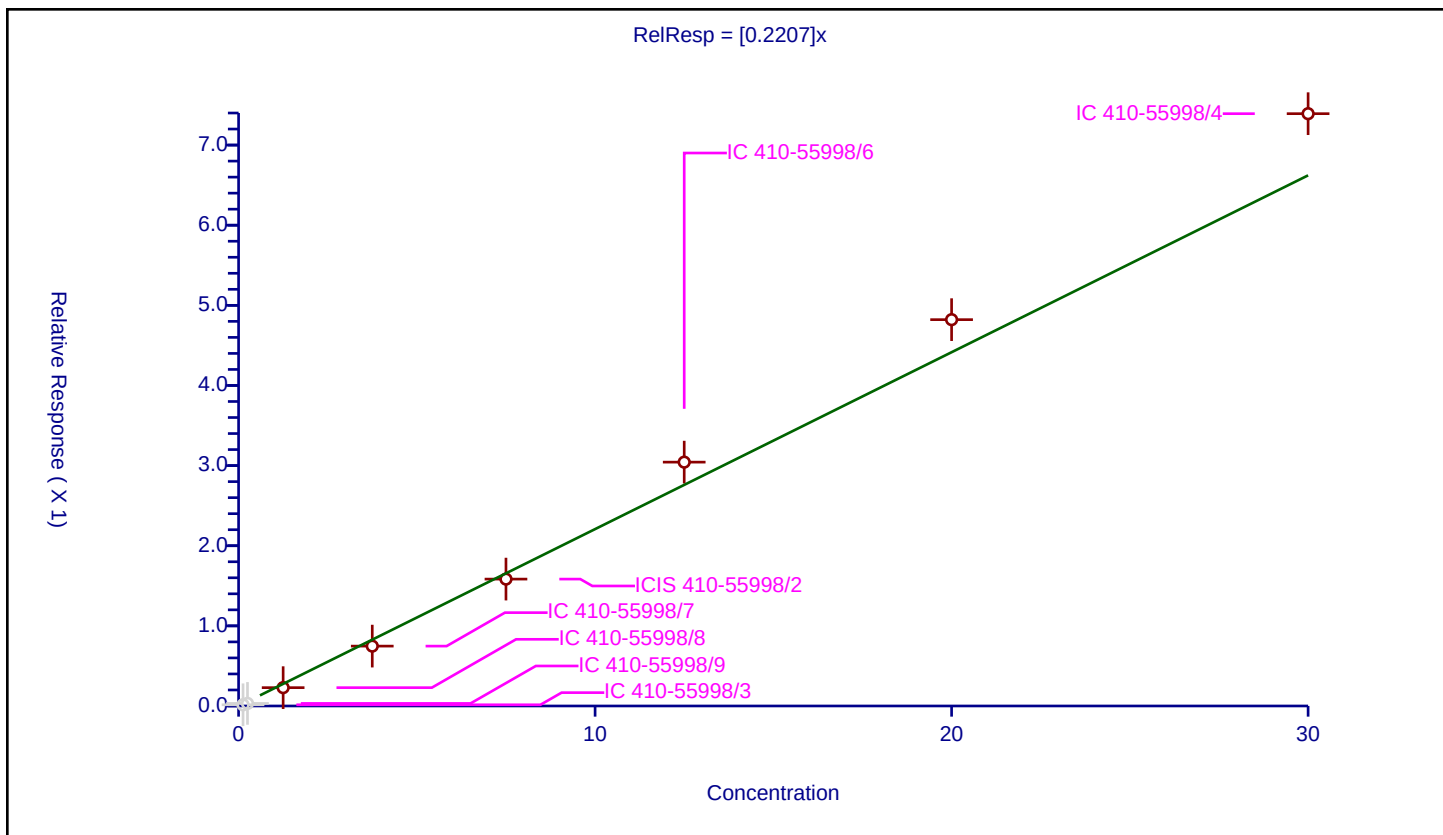
Curve Coefficients

Intercept: 0
 Slope: 0.2207

Error Coefficients

Standard Error: 560000
 Relative Standard Error: 12.1
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.015001	5.0	674267.0	0.120012	N
2	IC 410-55998/9	0.25	0.032001	5.0	548427.0	0.128002	N
3	IC 410-55998/8	1.25	0.22885	5.0	644855.0	0.18308	Y
4	IC 410-55998/7	3.75	0.747304	5.0	533939.0	0.199281	Y
5	ICIS 410-55998/2	7.5	1.583566	5.0	665539.0	0.211142	Y
6	IC 410-55998/6	12.5	3.04316	5.0	671248.0	0.243453	Y
7	IC 410-55998/5	20.0	4.821099	5.0	652429.0	0.241055	Y
8	IC 410-55998/4	30.0	7.391542	5.0	661270.0	0.246385	Y



Calibration

/ Chlorobenzilate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

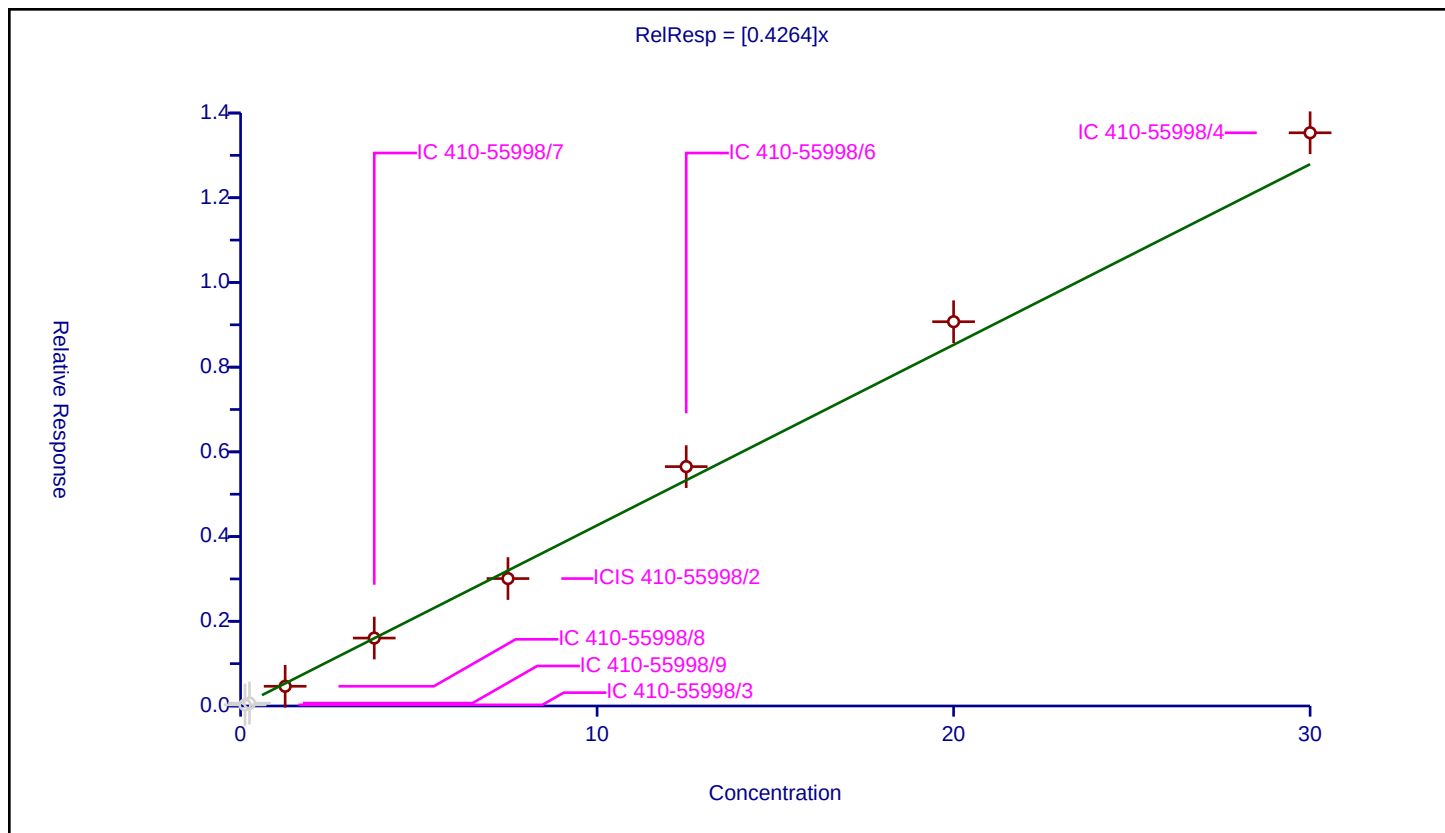
Curve Coefficients

Intercept: 0
 Slope: 0.4264

Error Coefficients

Standard Error: 1040000
 Relative Standard Error: 7.8
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.02671	5.0	674267.0	0.213684	N
2	IC 410-55998/9	0.25	0.068195	5.0	548427.0	0.27278	N
3	IC 410-55998/8	1.25	0.465539	5.0	644855.0	0.372431	Y
4	IC 410-55998/7	3.75	1.604041	5.0	533939.0	0.427744	Y
5	ICIS 410-55998/2	7.5	3.008644	5.0	665539.0	0.401153	Y
6	IC 410-55998/6	12.5	5.651778	5.0	671248.0	0.452142	Y
7	IC 410-55998/5	20.0	9.072543	5.0	652429.0	0.453627	Y
8	IC 410-55998/4	30.0	13.533307	5.0	661270.0	0.45111	Y



Calibration

/ 3,3'-Dimethylbenzidine

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

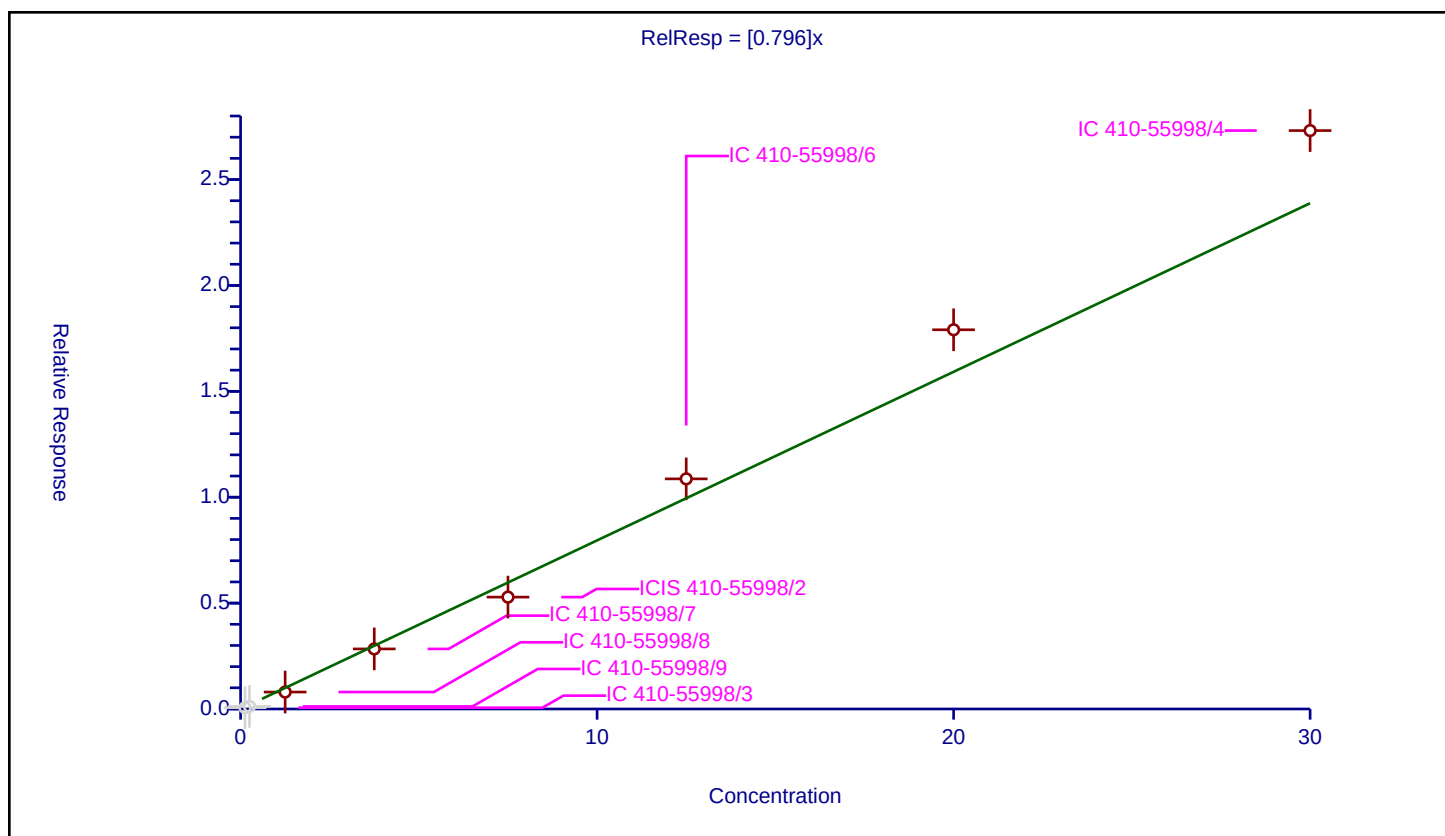
Curve Coefficients

Intercept: 0
Slope: 0.796

Error Coefficients

Standard Error: 2060000
Relative Standard Error: 14.0
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.061066	5.0	674267.0	0.488531	N
2	IC 410-55998/9	0.25	0.122086	5.0	548427.0	0.488342	N
3	IC 410-55998/8	1.25	0.800614	5.0	644855.0	0.640491	Y
4	IC 410-55998/7	3.75	2.836466	5.0	533939.0	0.756391	Y
5	ICIS 410-55998/2	7.5	5.282823	5.0	665539.0	0.704376	Y
6	IC 410-55998/6	12.5	10.866029	5.0	671248.0	0.869282	Y
7	IC 410-55998/5	20.0	17.906316	5.0	652429.0	0.895316	Y
8	IC 410-55998/4	30.0	27.311923	5.0	661270.0	0.910397	Y



Calibration

/ Butyl benzyl phthalate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

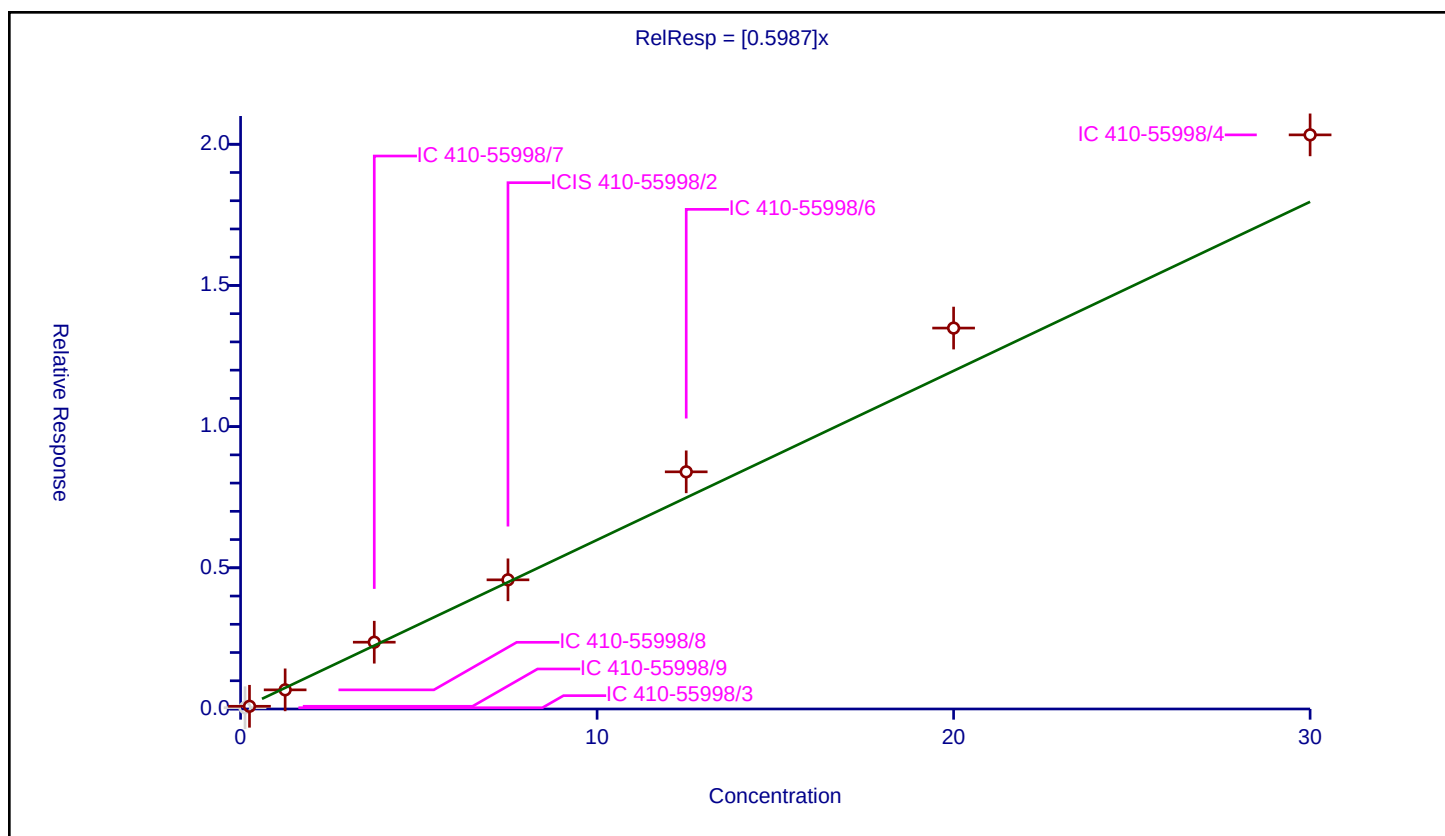
Curve Coefficients

Intercept: 0
 Slope: 0.5987

Error Coefficients

Standard Error: 1420000
 Relative Standard Error: 17.7
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.970

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.044559	5.0	674267.0	0.356476	N
2	IC 410-55998/9	0.25	0.096111	5.0	548427.0	0.384445	Y
3	IC 410-55998/8	1.25	0.677424	5.0	644855.0	0.541939	Y
4	IC 410-55998/7	3.75	2.365139	5.0	533939.0	0.630704	Y
5	ICIS 410-55998/2	7.5	4.574548	5.0	665539.0	0.60994	Y
6	IC 410-55998/6	12.5	8.398602	5.0	671248.0	0.671888	Y
7	IC 410-55998/5	20.0	13.489874	5.0	652429.0	0.674494	Y
8	IC 410-55998/4	30.0	20.332723	5.0	661270.0	0.677757	Y



Calibration

/ 2-Acetylaminofluorene

Curve Type: Linear
Weighting: None
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

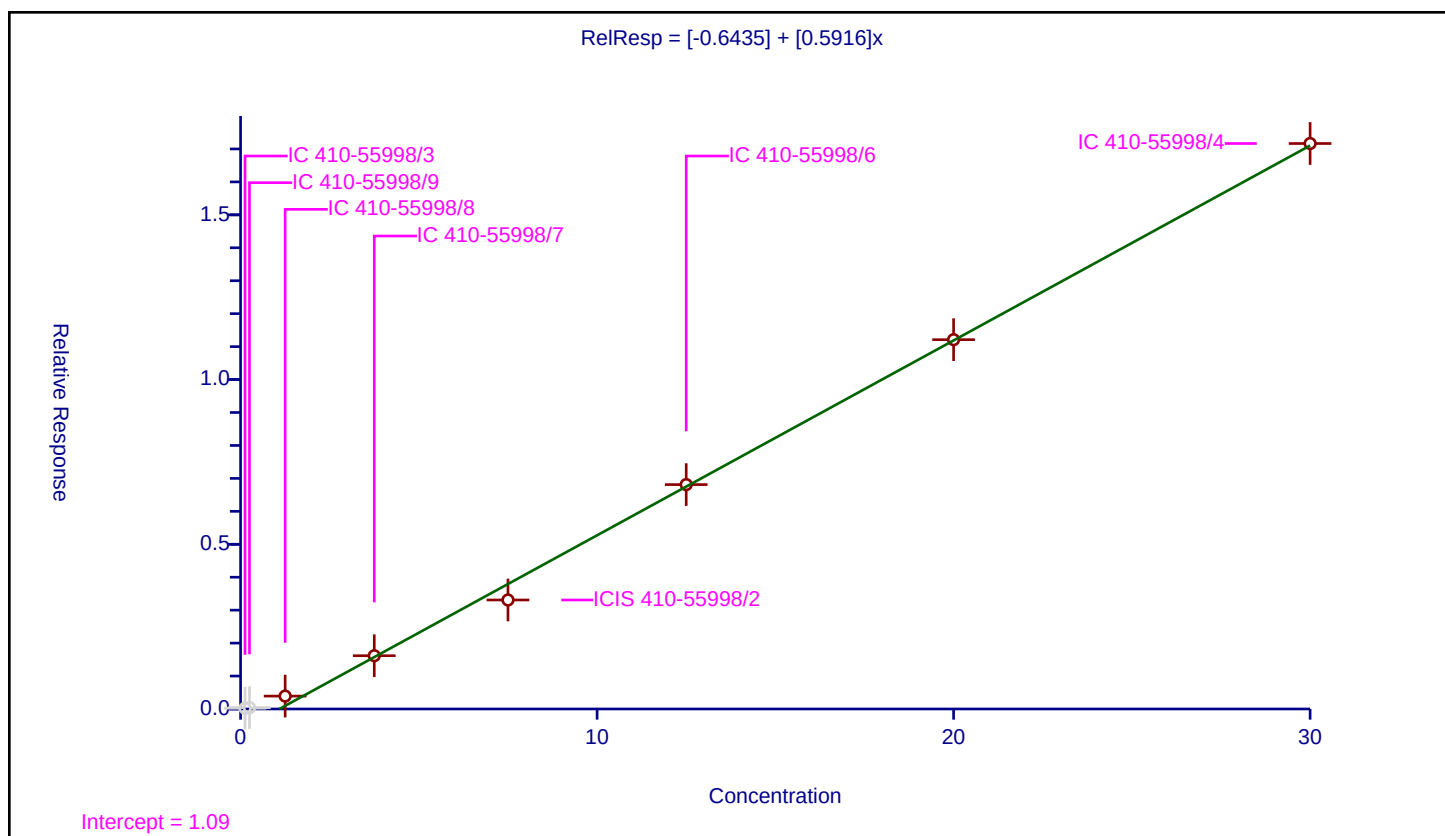
Curve Coefficients

Intercept: -0.6435
Slope: 0.5916

Error Coefficients

Standard Error: 1450000
Relative Standard Error: 20.7
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.024004	5.0	674267.0	0.192031	N
2	IC 410-55998/9	0.25	0.0413	5.0	548427.0	0.1652	N
3	IC 410-55998/8	1.25	0.391096	5.0	644855.0	0.312877	Y
4	IC 410-55998/7	3.75	1.616964	5.0	533939.0	0.43119	Y
5	ICIS 410-55998/2	7.5	3.309032	5.0	665539.0	0.441204	Y
6	IC 410-55998/6	12.5	6.811417	5.0	671248.0	0.544913	Y
7	IC 410-55998/5	20.0	11.211235	5.0	652429.0	0.560562	Y
8	IC 410-55998/4	30.0	17.165432	5.0	661270.0	0.572181	Y



Calibration

/ 3,3'-Dichlorobenzidine

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

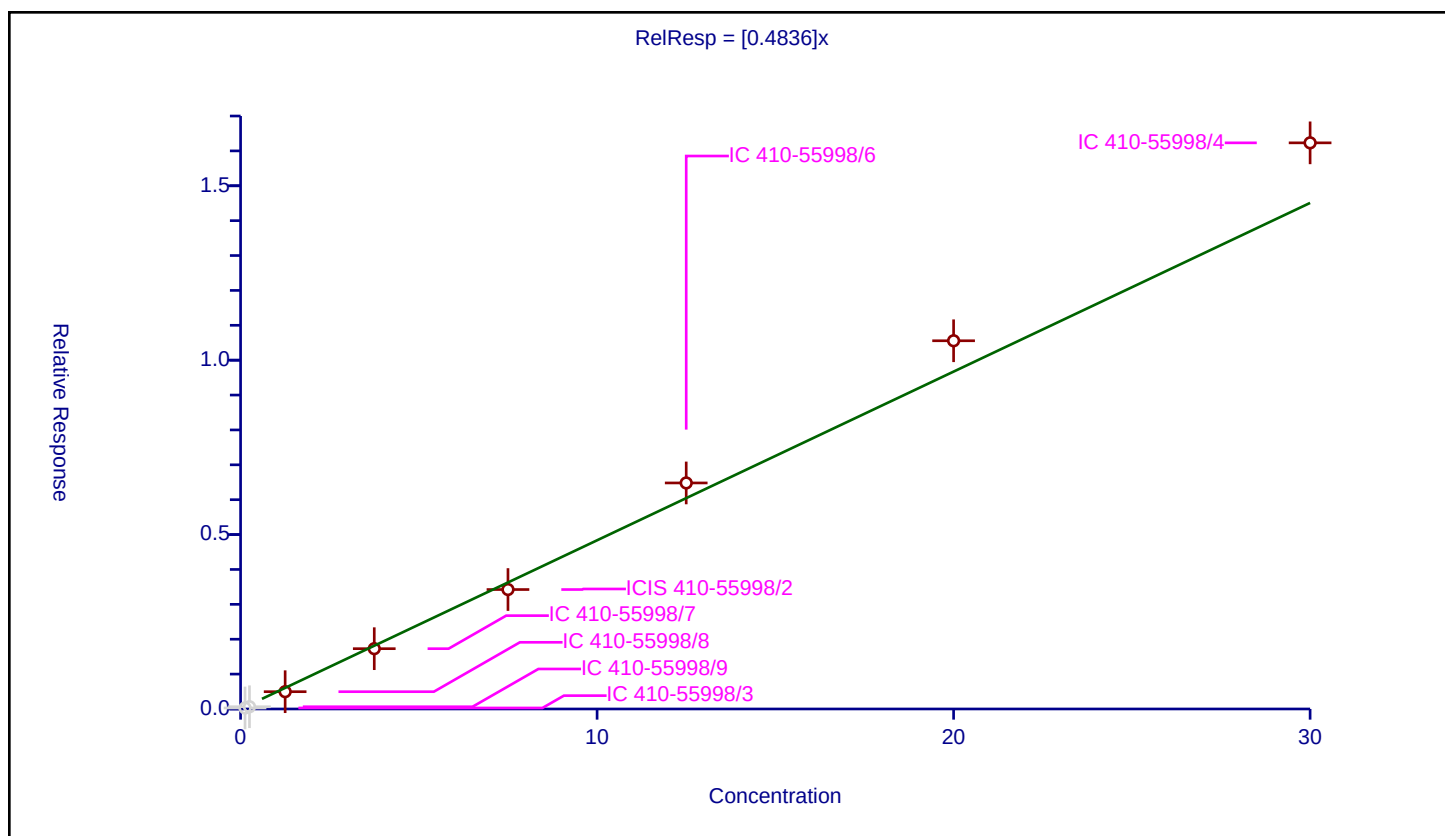
Curve Coefficients

Intercept: 0
 Slope: 0.4836

Error Coefficients

Standard Error: 1230000
 Relative Standard Error: 11.4
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.029343	5.0	674267.0	0.234744	N
2	IC 410-55998/9	0.25	0.06432	5.0	548427.0	0.257281	N
3	IC 410-55998/8	1.25	0.495856	5.0	644855.0	0.396685	Y
4	IC 410-55998/7	3.75	1.728896	5.0	533939.0	0.461039	Y
5	ICIS 410-55998/2	7.5	3.424796	5.0	665539.0	0.456639	Y
6	IC 410-55998/6	12.5	6.48063	5.0	671248.0	0.51845	Y
7	IC 410-55998/5	20.0	10.55652	5.0	652429.0	0.527826	Y
8	IC 410-55998/4	30.0	16.230972	5.0	661270.0	0.541032	Y



Calibration

/ 4,4'-Methylene bis(2-chloroaniline)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

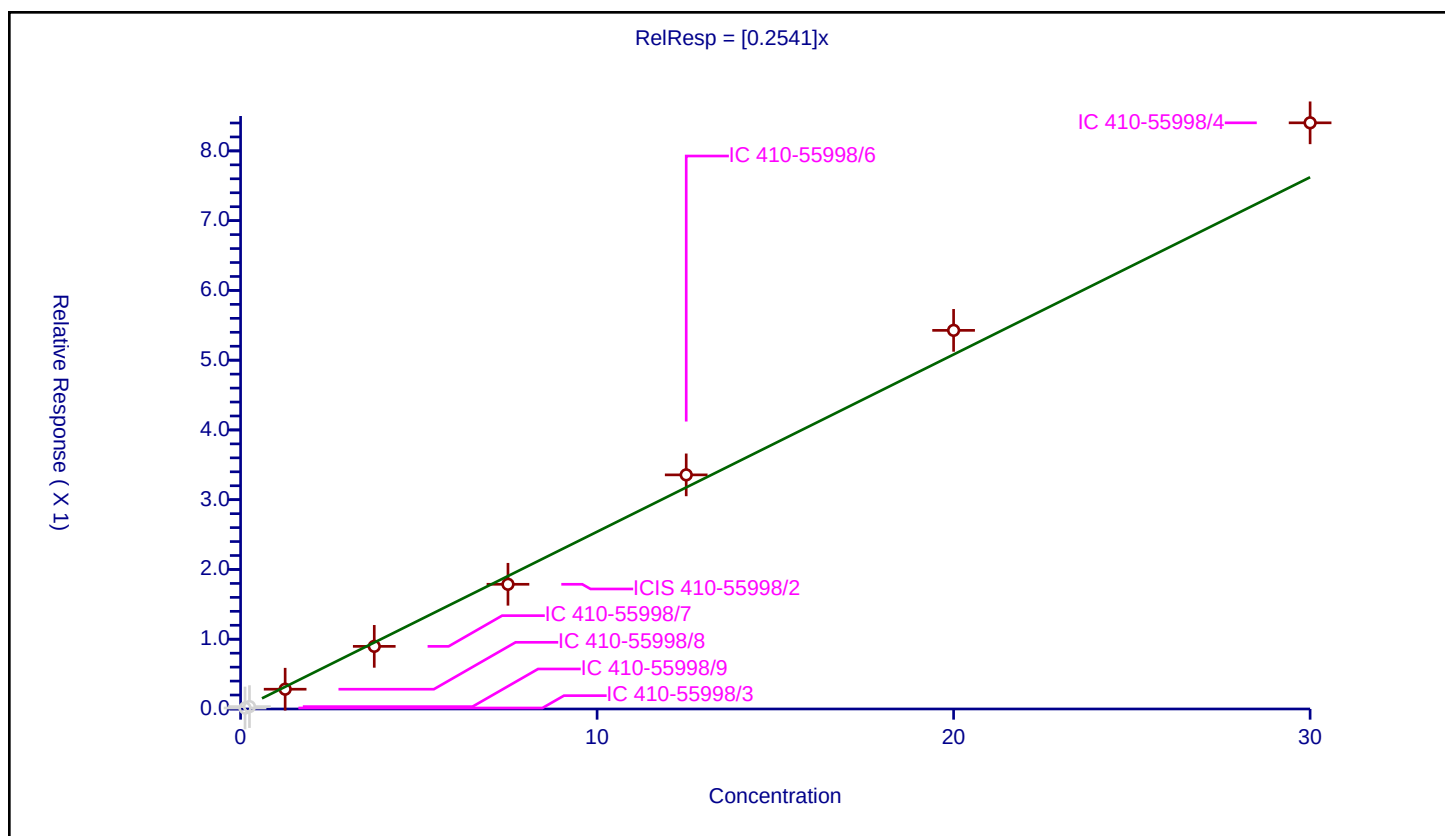
Curve Coefficients

Intercept: 0
 Slope: 0.2541

Error Coefficients

Standard Error: 633000
 Relative Standard Error: 8.6
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.014141	5.0	674267.0	0.11313	N
2	IC 410-55998/9	0.25	0.034389	5.0	548427.0	0.137557	N
3	IC 410-55998/8	1.25	0.283482	5.0	644855.0	0.226786	Y
4	IC 410-55998/7	3.75	0.897706	5.0	533939.0	0.239388	Y
5	ICIS 410-55998/2	7.5	1.787799	5.0	665539.0	0.238373	Y
6	IC 410-55998/6	12.5	3.355868	5.0	671248.0	0.268469	Y
7	IC 410-55998/5	20.0	5.427265	5.0	652429.0	0.271363	Y
8	IC 410-55998/4	30.0	8.402634	5.0	661270.0	0.280088	Y



Calibration

/ Benzo[a]anthracene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

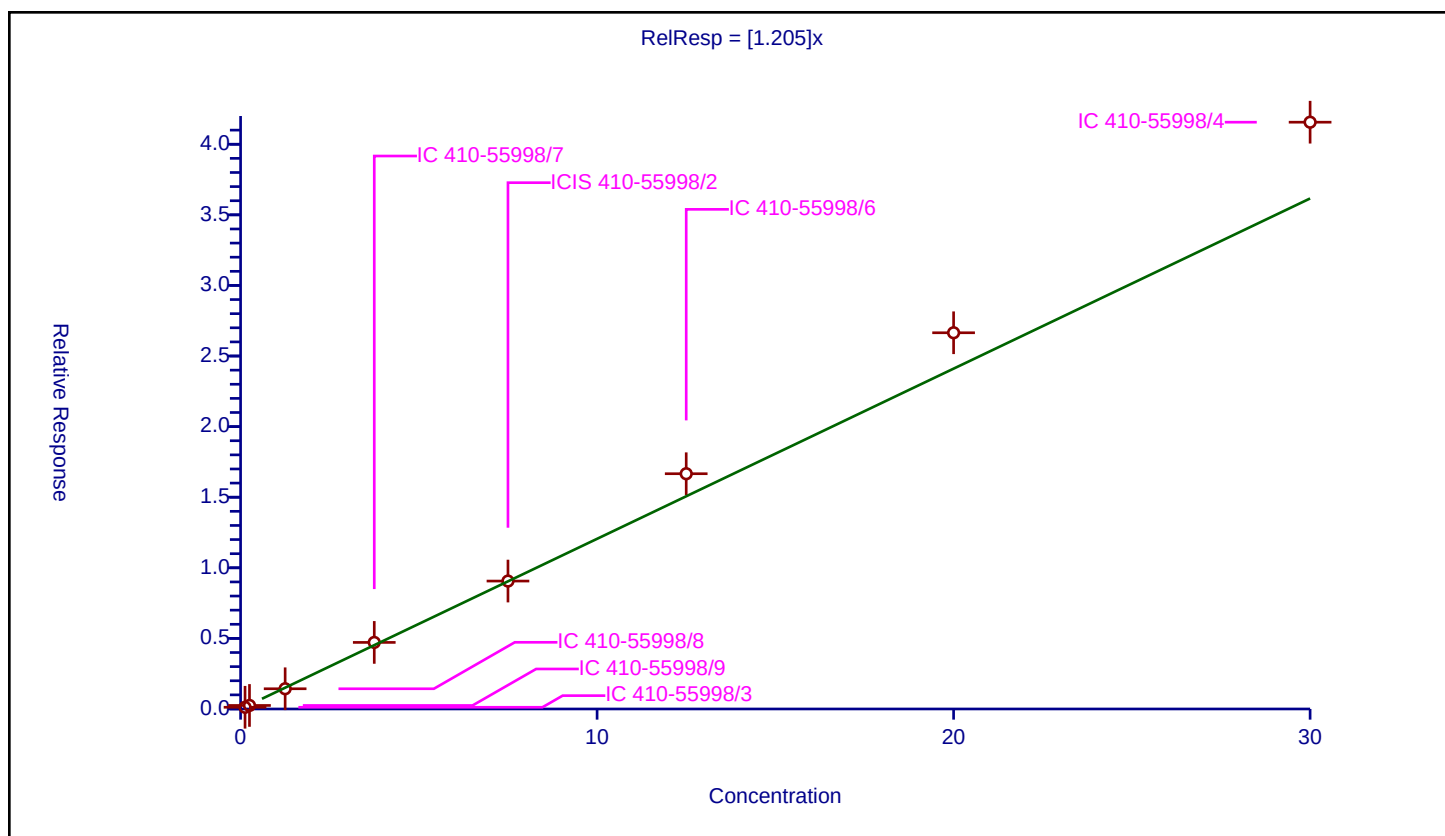
Curve Coefficients

Intercept: 0
Slope: 1.205

Error Coefficients

Standard Error: 2650000
Relative Standard Error: 12.7
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.122696	5.0	674267.0	0.98157	Y
2	IC 410-55998/9	0.25	0.249413	5.0	548427.0	0.997653	Y
3	IC 410-55998/8	1.25	1.433066	5.0	644855.0	1.146453	Y
4	IC 410-55998/7	3.75	4.71625	5.0	533939.0	1.257667	Y
5	ICIS 410-55998/2	7.5	9.061317	5.0	665539.0	1.208176	Y
6	IC 410-55998/6	12.5	16.663513	5.0	671248.0	1.333081	Y
7	IC 410-55998/5	20.0	26.647788	5.0	652429.0	1.332389	Y
8	IC 410-55998/4	30.0	41.561949	5.0	661270.0	1.385398	Y



Calibration

/ Chrysene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

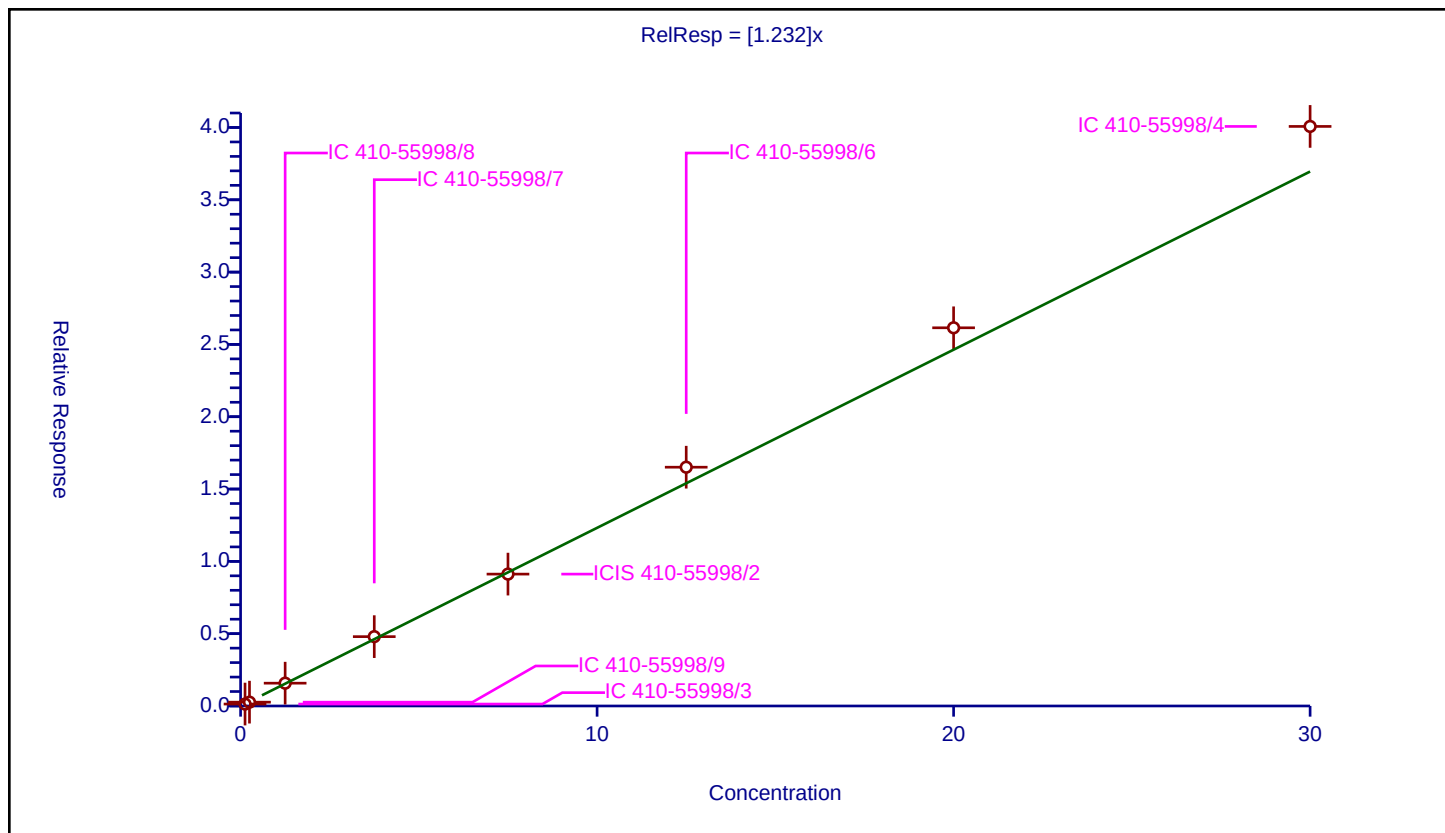
Curve Coefficients

Intercept: 0
 Slope: 1.232

Error Coefficients

Standard Error: 2580000
 Relative Standard Error: 8.8
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.134487	5.0	674267.0	1.075894	Y
2	IC 410-55998/9	0.25	0.264475	5.0	548427.0	1.057898	Y
3	IC 410-55998/8	1.25	1.576835	5.0	644855.0	1.261468	Y
4	IC 410-55998/7	3.75	4.795061	5.0	533939.0	1.278683	Y
5	ICIS 410-55998/2	7.5	9.118714	5.0	665539.0	1.215829	Y
6	IC 410-55998/6	12.5	16.510261	5.0	671248.0	1.320821	Y
7	IC 410-55998/5	20.0	26.150056	5.0	652429.0	1.307503	Y
8	IC 410-55998/4	30.0	40.073359	5.0	661270.0	1.335779	Y



Calibration

/ Bis(2-ethylhexyl) phthalate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

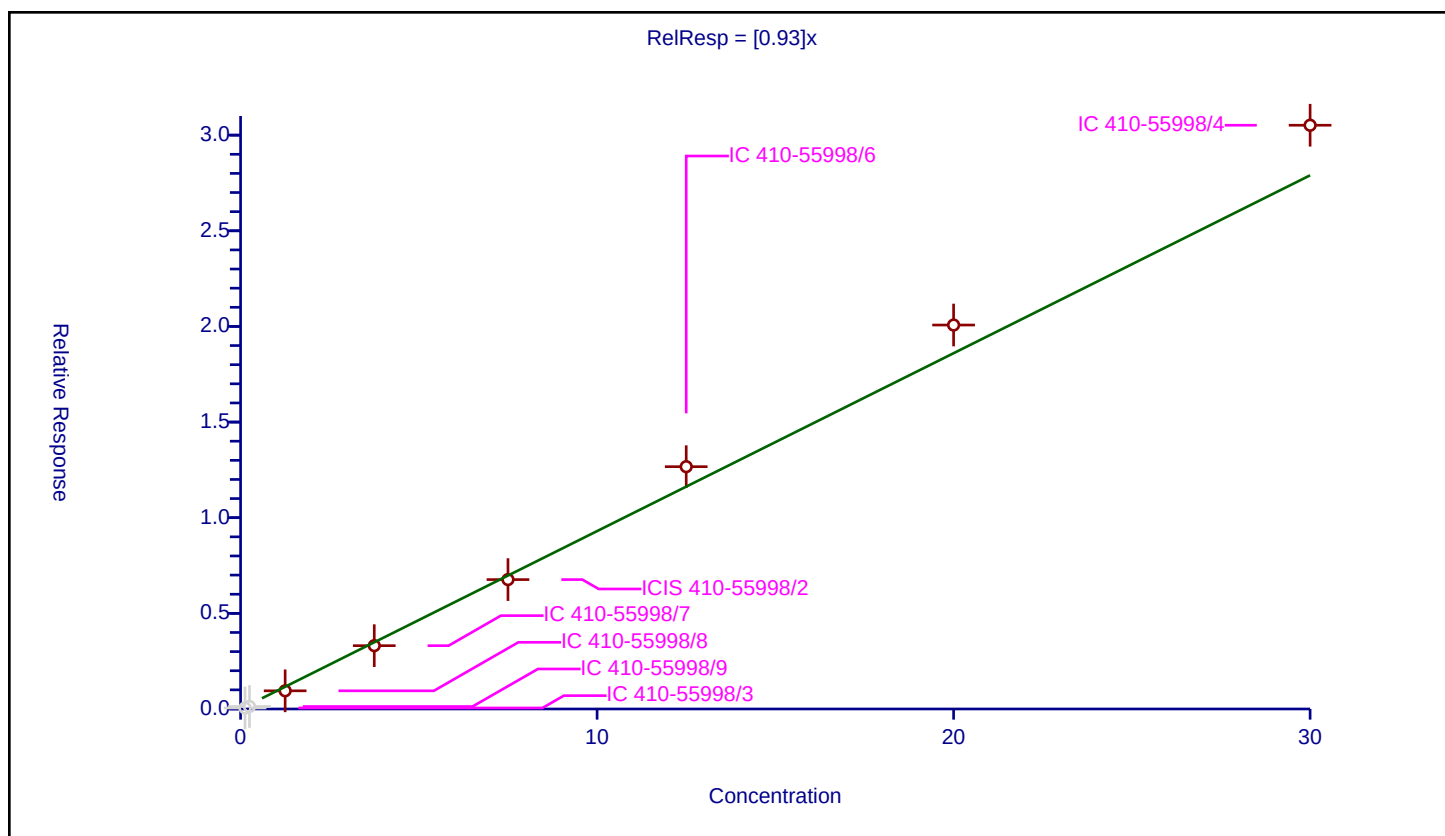
Curve Coefficients

Intercept: 0
 Slope: 0.93

Error Coefficients

Standard Error: 2320000
 Relative Standard Error: 10.9
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.054066	5.0	674267.0	0.432529	N
2	IC 410-55998/9	0.25	0.129999	5.0	548427.0	0.519996	N
3	IC 410-55998/8	1.25	0.95064	5.0	644855.0	0.760512	Y
4	IC 410-55998/7	3.75	3.310874	5.0	533939.0	0.8829	Y
5	ICIS 410-55998/2	7.5	6.765584	5.0	665539.0	0.902078	Y
6	IC 410-55998/6	12.5	12.66765	5.0	671248.0	1.013412	Y
7	IC 410-55998/5	20.0	20.073027	5.0	652429.0	1.003651	Y
8	IC 410-55998/4	30.0	30.517504	5.0	661270.0	1.01725	Y



Calibration

/ 6-Methylchrysene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

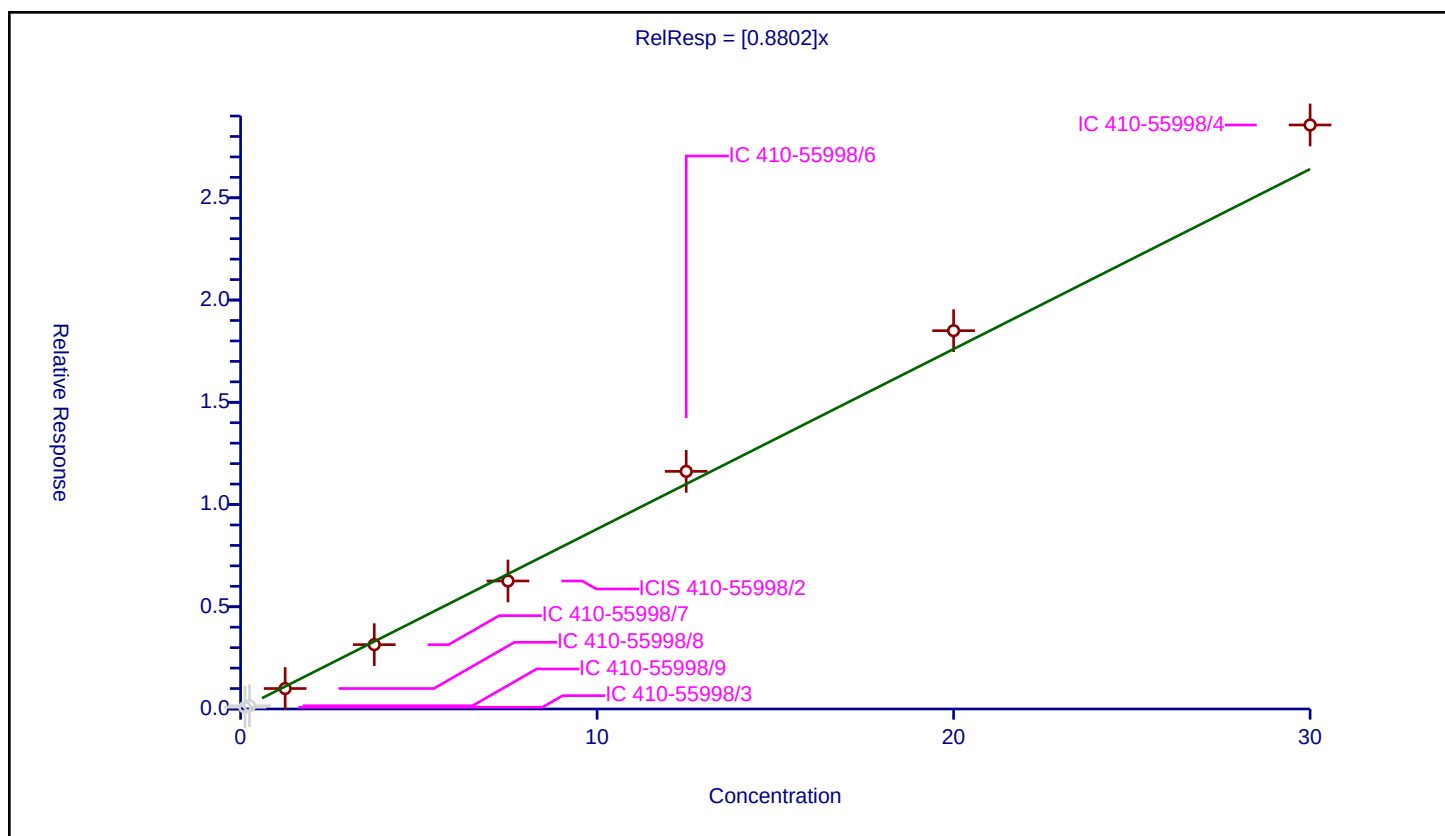
Curve Coefficients

Intercept: 0
 Slope: 0.8802

Error Coefficients

Standard Error: 2160000
 Relative Standard Error: 7.1
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.084892	5.0	674267.0	0.679137	N
2	IC 410-55998/9	0.25	0.158253	5.0	548427.0	0.63301	N
3	IC 410-55998/8	1.25	1.000597	5.0	644855.0	0.800478	Y
4	IC 410-55998/7	3.75	3.146034	5.0	533939.0	0.838942	Y
5	ICIS 410-55998/2	7.5	6.260985	5.0	665539.0	0.834798	Y
6	IC 410-55998/6	12.5	11.620303	5.0	671248.0	0.929624	Y
7	IC 410-55998/5	20.0	18.501906	5.0	652429.0	0.925095	Y
8	IC 410-55998/4	30.0	28.561155	5.0	661270.0	0.952039	Y



Calibration

/ Di-n-octyl phthalate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

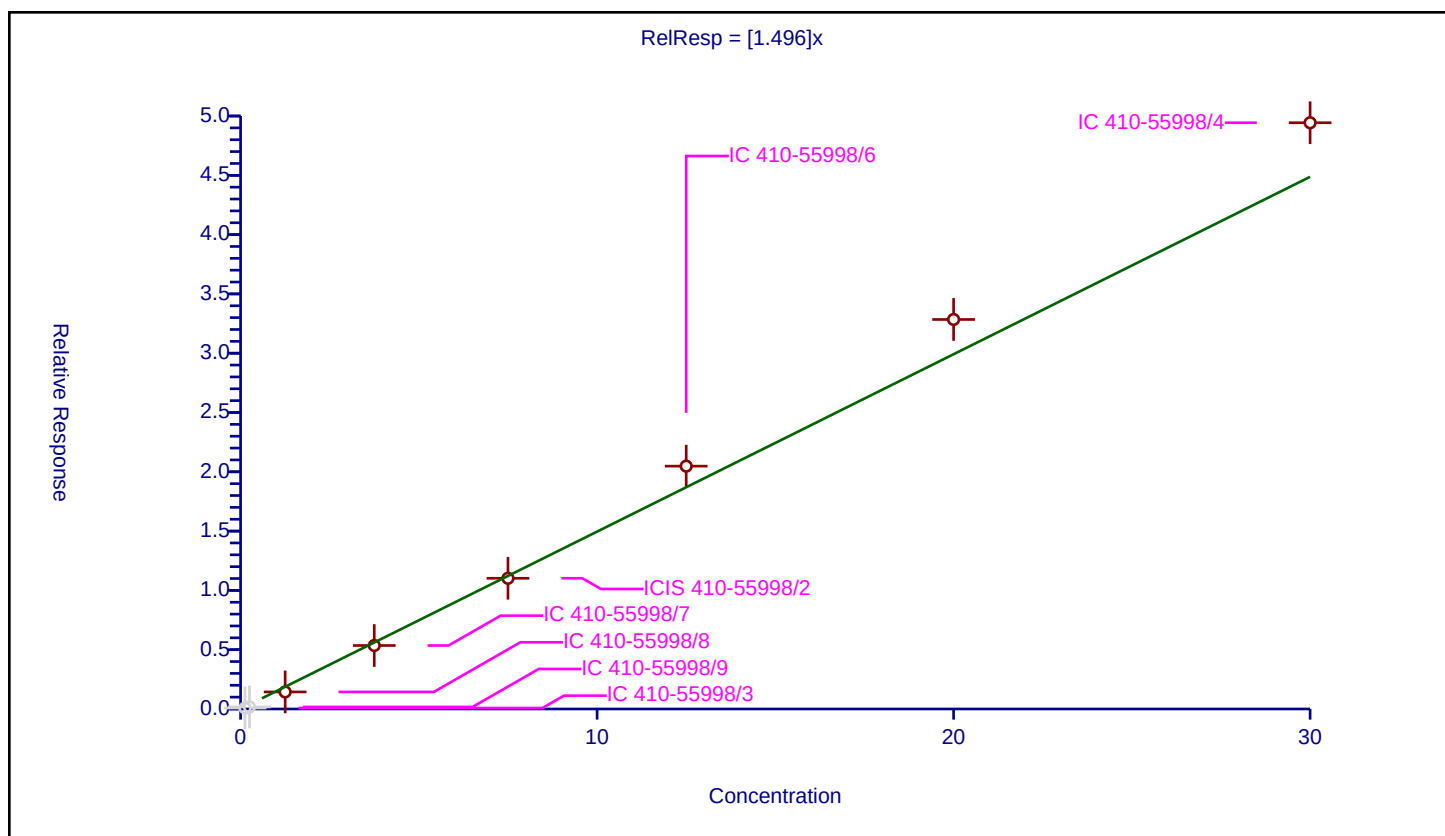
Curve Coefficients

Intercept: 0
 Slope: 1.496

Error Coefficients

Standard Error: 4100000
 Relative Standard Error: 13.0
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.081076	5.0	650868.0	0.648611	N
2	IC 410-55998/9	0.25	0.17236	5.0	525498.0	0.689441	N
3	IC 410-55998/8	1.25	1.436927	5.0	653391.0	1.149541	Y
4	IC 410-55998/7	3.75	5.351738	5.0	545378.0	1.42713	Y
5	ICIS 410-55998/2	7.5	11.021104	5.0	691658.0	1.469481	Y
6	IC 410-55998/6	12.5	20.476416	5.0	726140.0	1.638113	Y
7	IC 410-55998/5	20.0	32.842425	5.0	705220.0	1.642121	Y
8	IC 410-55998/4	30.0	49.433074	5.0	722219.0	1.647769	Y



Calibration

/ Benzo[b]fluoranthene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

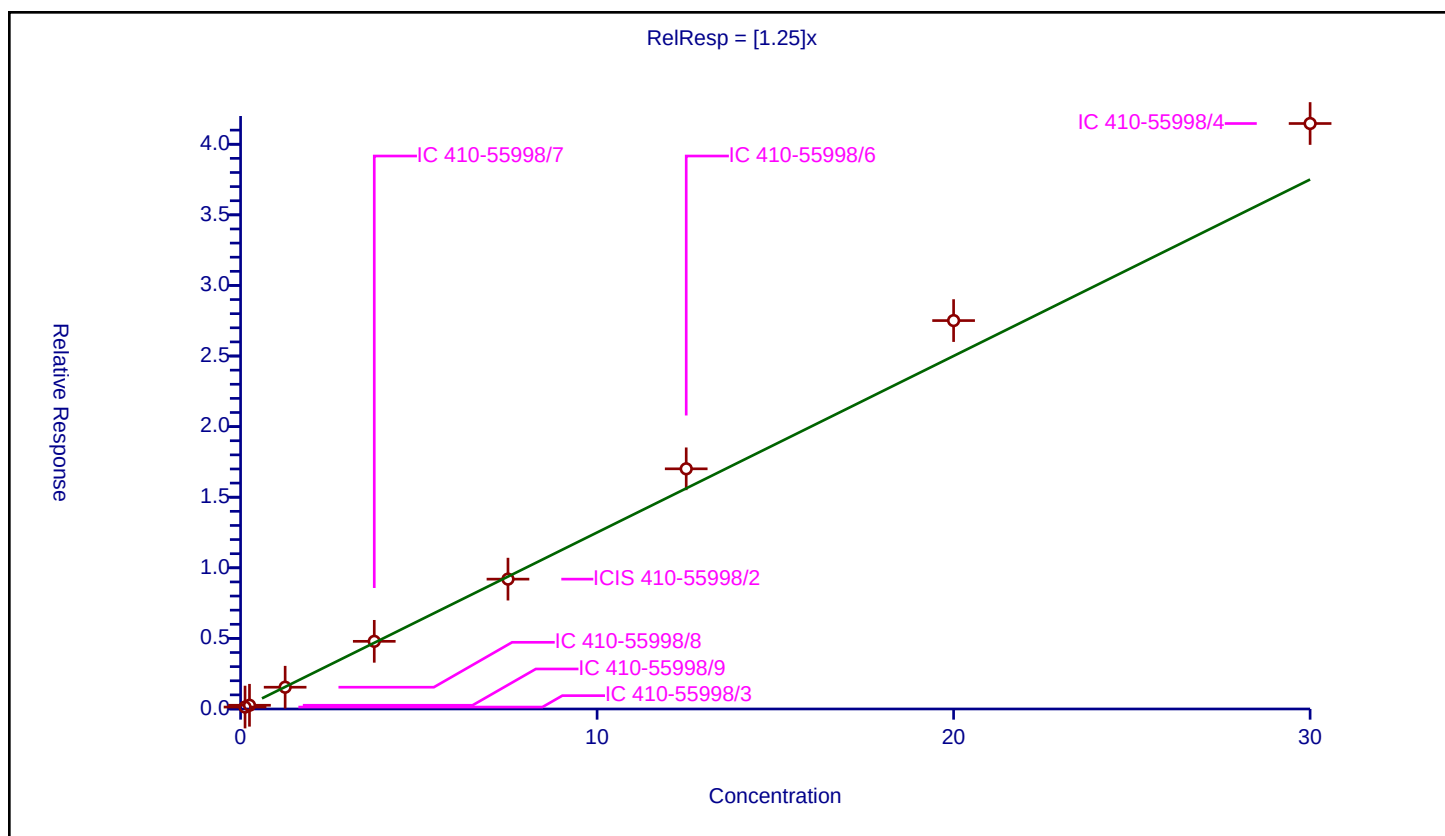
Curve Coefficients

Intercept: 0
 Slope: 1.25

Error Coefficients

Standard Error: 2900000
 Relative Standard Error: 10.1
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.136556	5.0	650868.0	1.092449	Y
2	IC 410-55998/9	0.25	0.262941	5.0	525498.0	1.051764	Y
3	IC 410-55998/8	1.25	1.542415	5.0	653391.0	1.233932	Y
4	IC 410-55998/7	3.75	4.792566	5.0	545378.0	1.278018	Y
5	ICIS 410-55998/2	7.5	9.197588	5.0	691658.0	1.226345	Y
6	IC 410-55998/6	12.5	17.011768	5.0	726140.0	1.360941	Y
7	IC 410-55998/5	20.0	27.511954	5.0	705220.0	1.375598	Y
8	IC 410-55998/4	30.0	41.469499	5.0	722219.0	1.382317	Y



Calibration

/ 7,12-Dimethylbenz(a)anthracene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

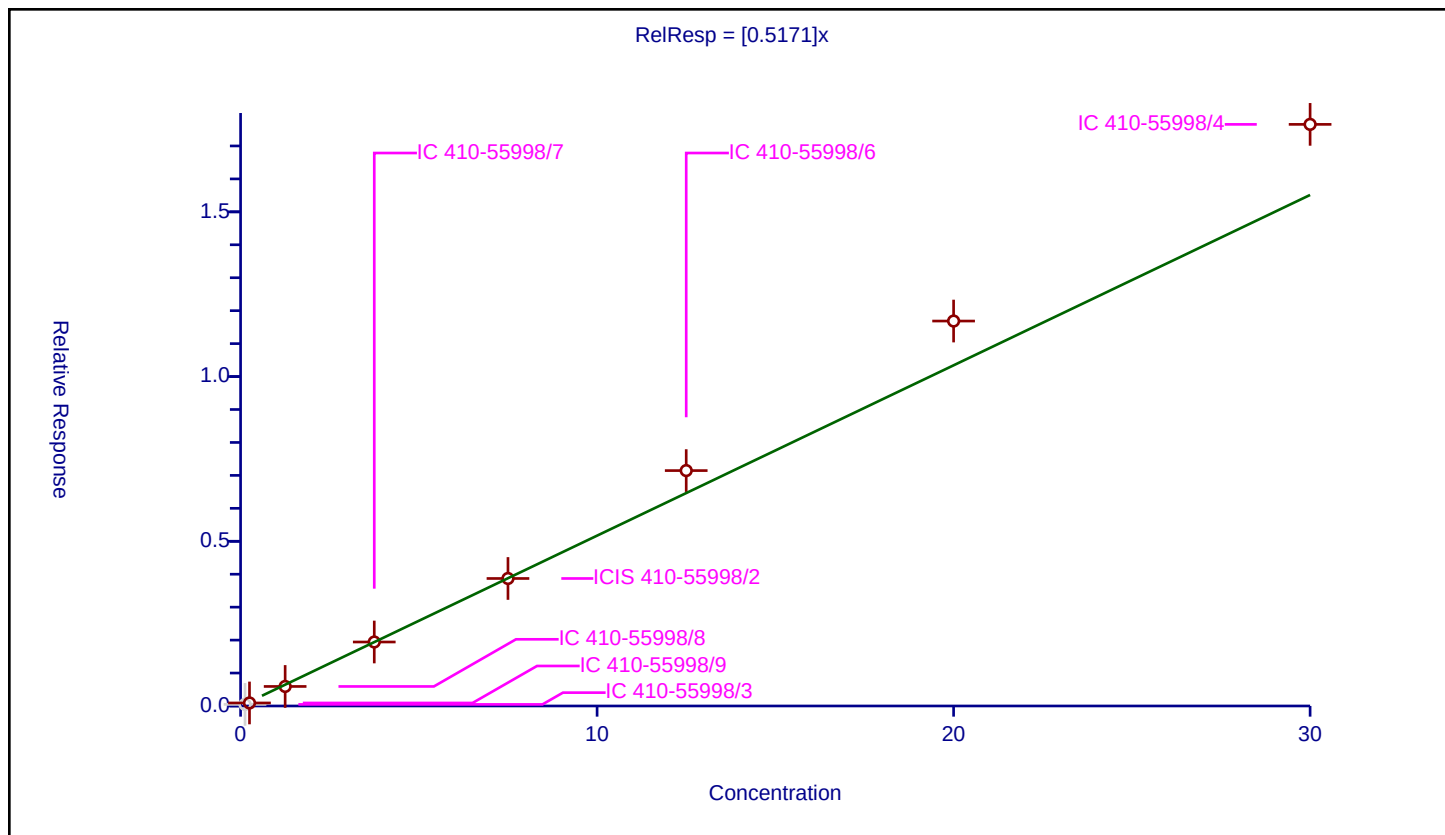
Curve Coefficients

Intercept: 0
Slope: 0.5171

Error Coefficients

Standard Error: 1330000
Relative Standard Error: 15.2
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.047821	5.0	650868.0	0.382566	N
2	IC 410-55998/9	0.25	0.091751	5.0	525498.0	0.367004	Y
3	IC 410-55998/8	1.25	0.592746	5.0	653391.0	0.474197	Y
4	IC 410-55998/7	3.75	1.942084	5.0	545378.0	0.517889	Y
5	ICIS 410-55998/2	7.5	3.870352	5.0	691658.0	0.516047	Y
6	IC 410-55998/6	12.5	7.145757	5.0	726140.0	0.571661	Y
7	IC 410-55998/5	20.0	11.685304	5.0	705220.0	0.584265	Y
8	IC 410-55998/4	30.0	17.65549	5.0	722219.0	0.588516	Y



Calibration

/ Benzo[k]fluoranthene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

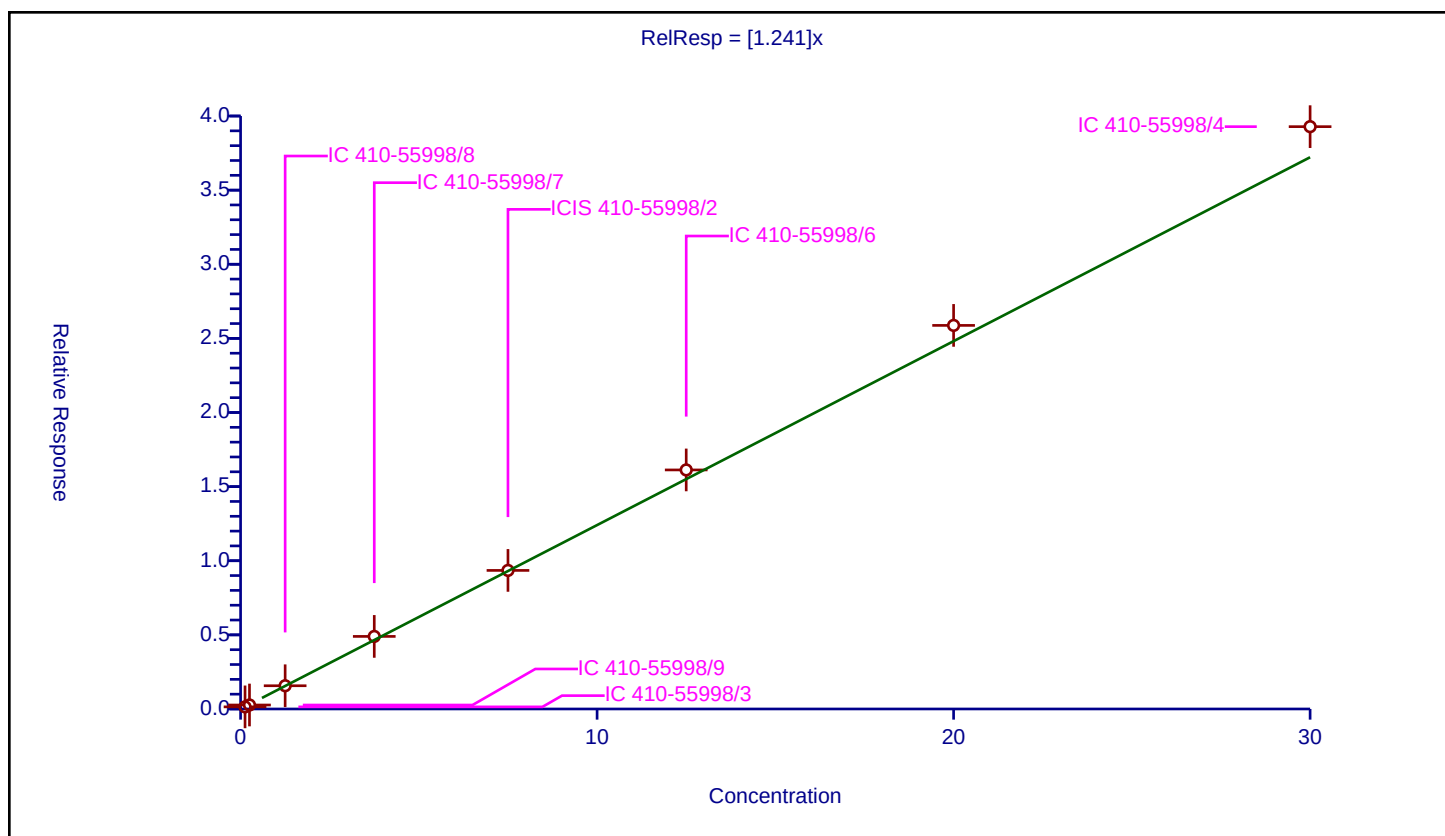
Curve Coefficients

Intercept: 0
Slope: 1.241

Error Coefficients

Standard Error: 2750000
Relative Standard Error: 6.8
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.143316	5.0	650868.0	1.14653	Y
2	IC 410-55998/9	0.25	0.269792	5.0	525498.0	1.079167	Y
3	IC 410-55998/8	1.25	1.567706	5.0	653391.0	1.254165	Y
4	IC 410-55998/7	3.75	4.89477	5.0	545378.0	1.305272	Y
5	ICIS 410-55998/2	7.5	9.347611	5.0	691658.0	1.246348	Y
6	IC 410-55998/6	12.5	16.12636	5.0	726140.0	1.290109	Y
7	IC 410-55998/5	20.0	25.874741	5.0	705220.0	1.293737	Y
8	IC 410-55998/4	30.0	39.281741	5.0	722219.0	1.309391	Y



Calibration

/ Benzo[a]pyrene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

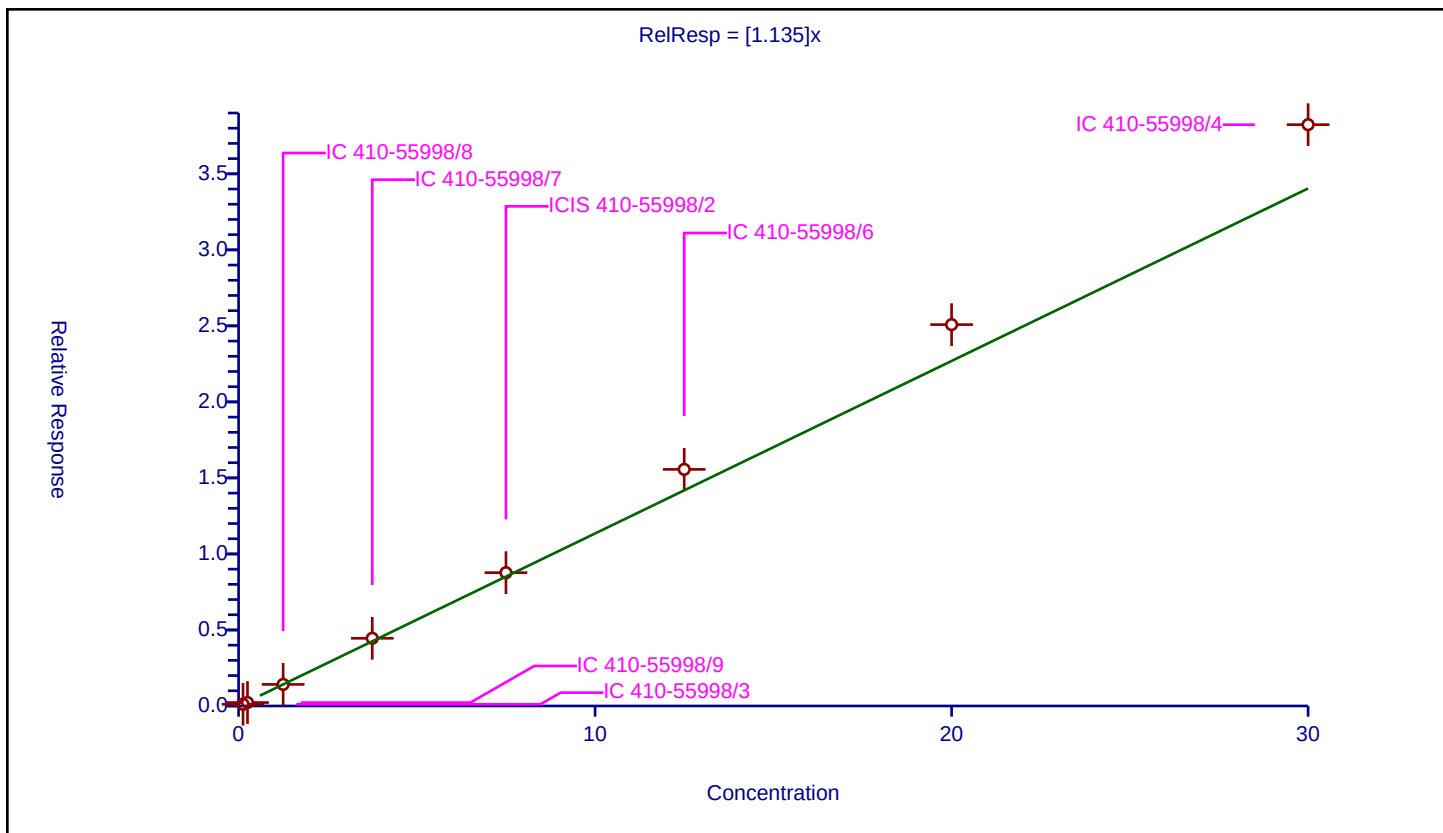
Curve Coefficients

Intercept: 0
 Slope: 1.135

Error Coefficients

Standard Error: 2670000
 Relative Standard Error: 13.1
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.113303	5.0	650868.0	0.90642	Y
2	IC 410-55998/9	0.25	0.226309	5.0	525498.0	0.905237	Y
3	IC 410-55998/8	1.25	1.419173	5.0	653391.0	1.135339	Y
4	IC 410-55998/7	3.75	4.452371	5.0	545378.0	1.187299	Y
5	ICIS 410-55998/2	7.5	8.768047	5.0	691658.0	1.169073	Y
6	IC 410-55998/6	12.5	15.562006	5.0	726140.0	1.24496	Y
7	IC 410-55998/5	20.0	25.082215	5.0	705220.0	1.254111	Y
8	IC 410-55998/4	30.0	38.232752	5.0	722219.0	1.274425	Y



Calibration

/ 3-Methylcholanthrene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

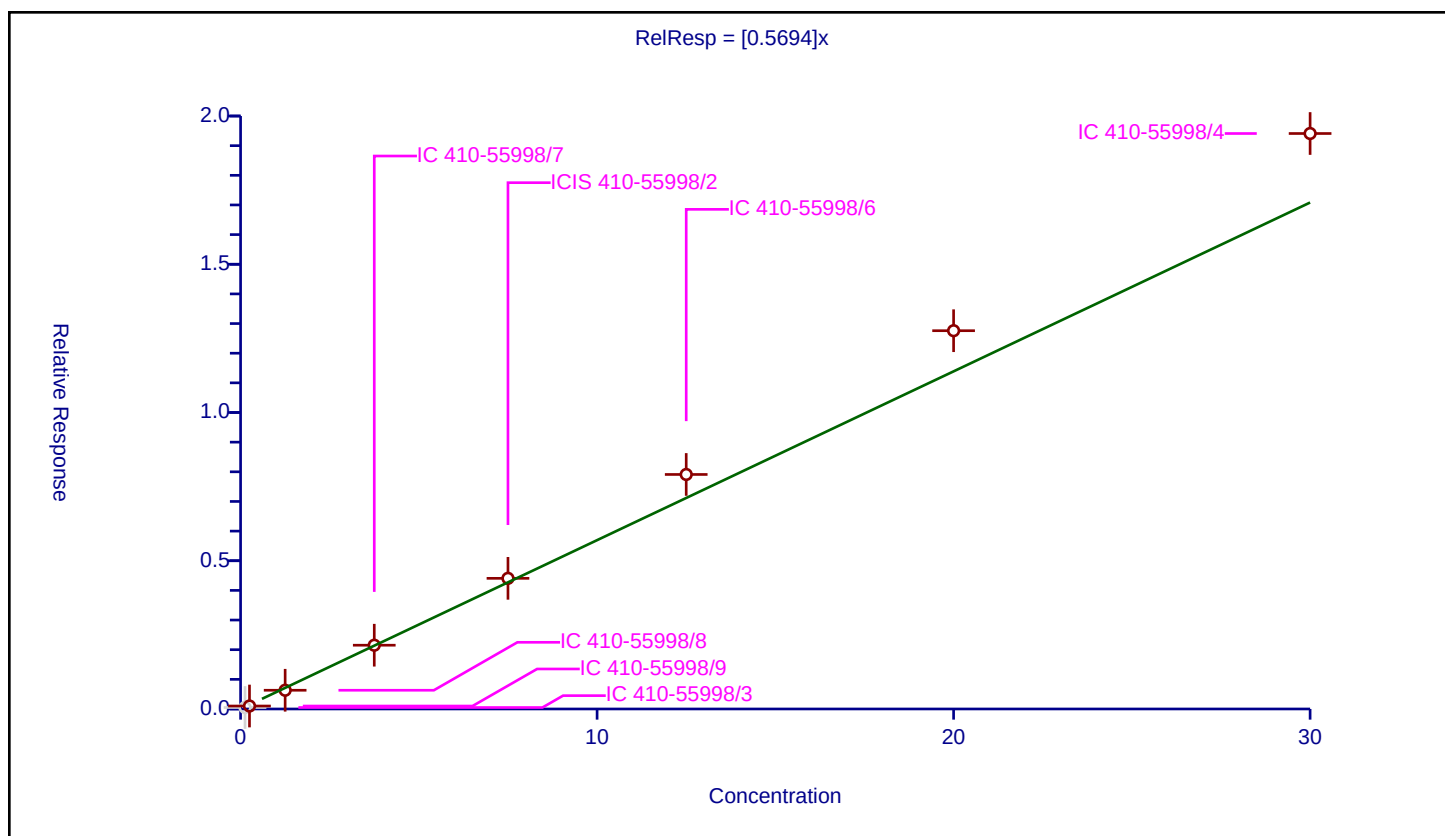
Curve Coefficients

Intercept: 0
Slope: 0.5694

Error Coefficients

Standard Error: 1460000
Relative Standard Error: 15.6
Correlation Coefficient: 0.998
Coefficient of Determination (Adjusted): 0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.050225	5.0	650868.0	0.401802	N
2	IC 410-55998/9	0.25	0.100362	5.0	525498.0	0.401448	Y
3	IC 410-55998/8	1.25	0.631919	5.0	653391.0	0.505535	Y
4	IC 410-55998/7	3.75	2.150738	5.0	545378.0	0.57353	Y
5	ICIS 410-55998/2	7.5	4.407091	5.0	691658.0	0.587612	Y
6	IC 410-55998/6	12.5	7.909783	5.0	726140.0	0.632783	Y
7	IC 410-55998/5	20.0	12.758707	5.0	705220.0	0.637935	Y
8	IC 410-55998/4	30.0	19.409784	5.0	722219.0	0.646993	Y



Calibration

/ Dibenz[a,h]acridine

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

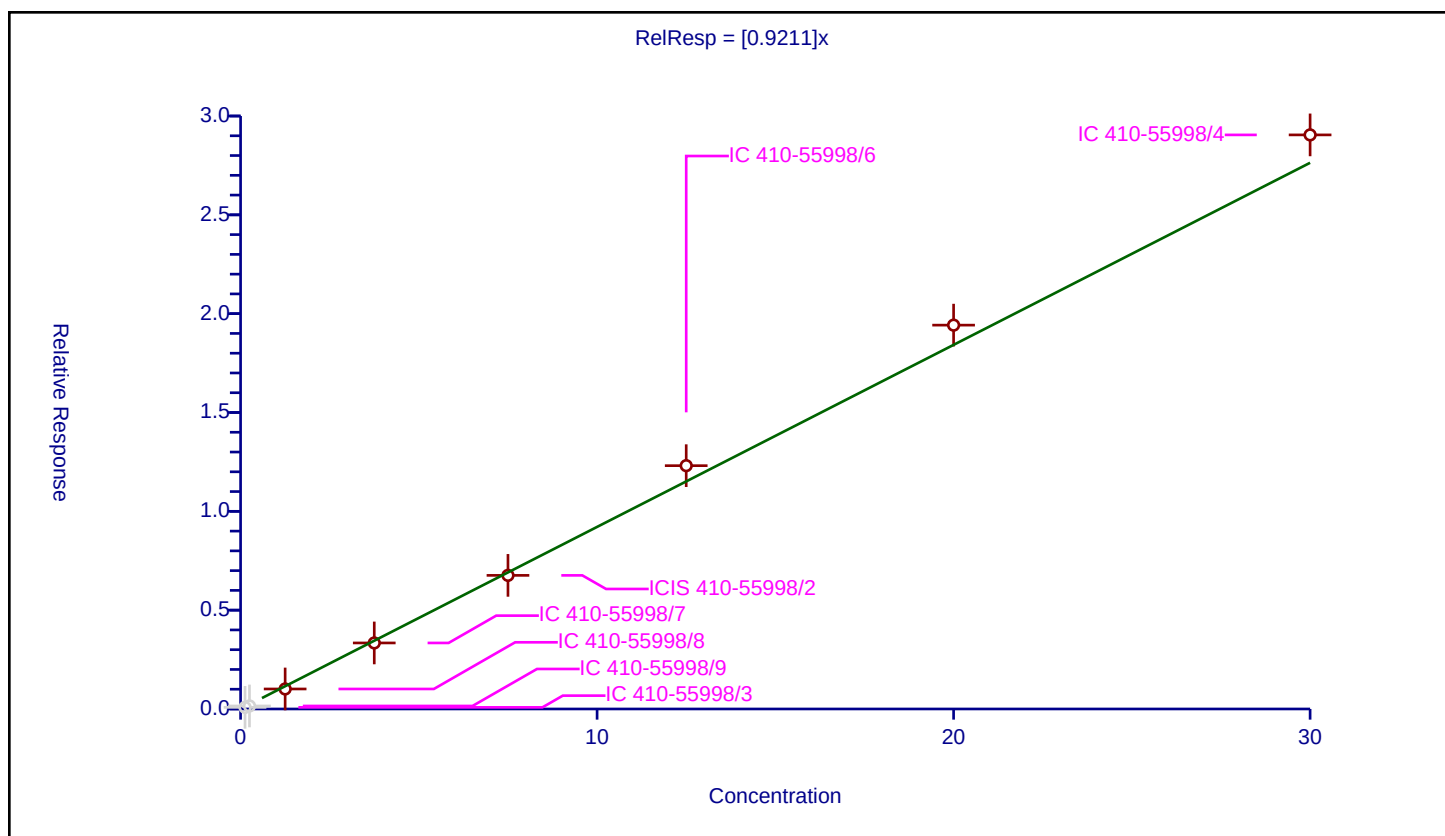
Curve Coefficients

Intercept: 0
 Slope: 0.9211

Error Coefficients

Standard Error: 2420000
 Relative Standard Error: 7.2
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.083212	5.0	650868.0	0.665696	N
2	IC 410-55998/9	0.25	0.153645	5.0	525498.0	0.614579	N
3	IC 410-55998/8	1.25	1.013161	5.0	653391.0	0.810528	Y
4	IC 410-55998/7	3.75	3.340628	5.0	545378.0	0.890834	Y
5	ICIS 410-55998/2	7.5	6.7604	5.0	691658.0	0.901387	Y
6	IC 410-55998/6	12.5	12.310395	5.0	726140.0	0.984832	Y
7	IC 410-55998/5	20.0	19.419607	5.0	705220.0	0.97098	Y
8	IC 410-55998/4	30.0	29.044196	5.0	722219.0	0.96814	Y



Calibration

/ Dibenz[a,j]acridine

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

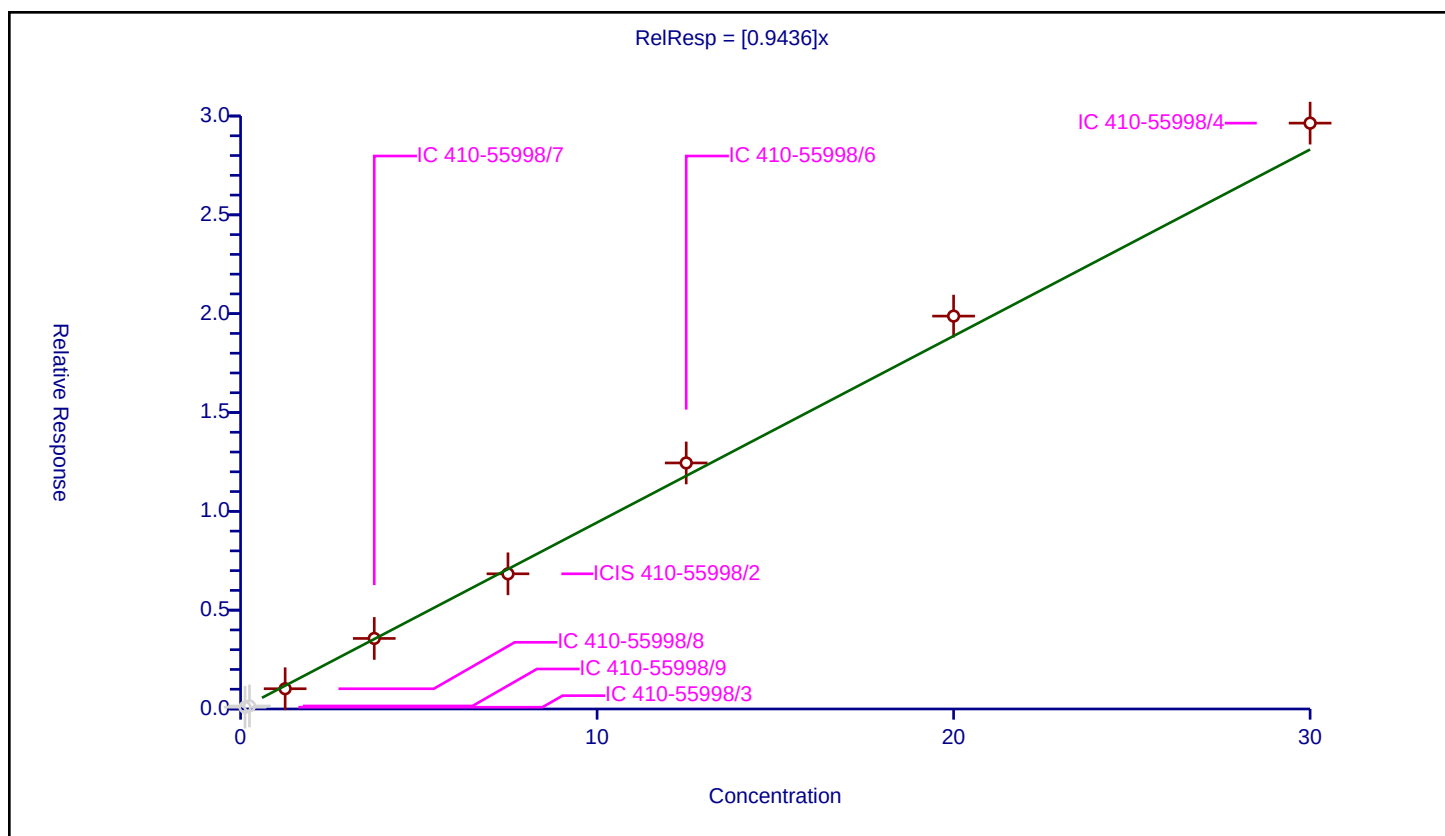
Curve Coefficients

Intercept: 0
 Slope: 0.9436

Error Coefficients

Standard Error: 2470000
 Relative Standard Error: 7.3
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.089888	5.0	650868.0	0.719101	N
2	IC 410-55998/9	0.25	0.153255	5.0	525498.0	0.613019	N
3	IC 410-55998/8	1.25	1.025137	5.0	653391.0	0.820109	Y
4	IC 410-55998/7	3.75	3.568956	5.0	545378.0	0.951722	Y
5	ICIS 410-55998/2	7.5	6.838994	5.0	691658.0	0.911866	Y
6	IC 410-55998/6	12.5	12.44718	5.0	726140.0	0.995774	Y
7	IC 410-55998/5	20.0	19.877967	5.0	705220.0	0.993898	Y
8	IC 410-55998/4	30.0	29.639292	5.0	722219.0	0.987976	Y



Calibration

/ Indeno[1,2,3-cd]pyrene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

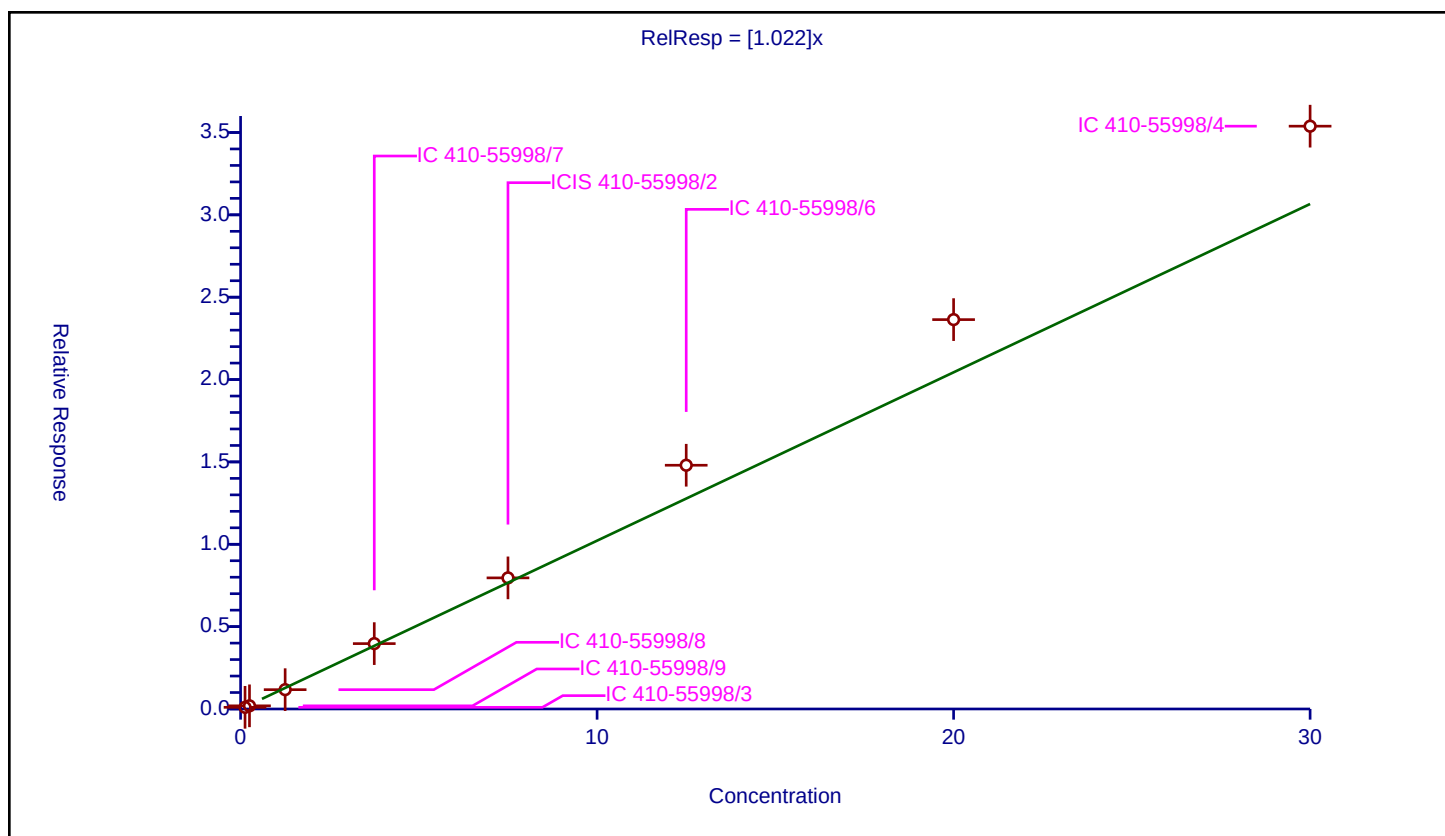
Curve Coefficients

Intercept: 0
 Slope: 1.022

Error Coefficients

Standard Error: 2490000
 Relative Standard Error: 16.5
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.972

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.100865	5.0	650868.0	0.806922	Y
2	IC 410-55998/9	0.25	0.191571	5.0	525498.0	0.766283	Y
3	IC 410-55998/8	1.25	1.172139	5.0	653391.0	0.937711	Y
4	IC 410-55998/7	3.75	3.96833	5.0	545378.0	1.058221	Y
5	ICIS 410-55998/2	7.5	7.959324	5.0	691658.0	1.061243	Y
6	IC 410-55998/6	12.5	14.798765	5.0	726140.0	1.183901	Y
7	IC 410-55998/5	20.0	23.639425	5.0	705220.0	1.181971	Y
8	IC 410-55998/4	30.0	35.382585	5.0	722219.0	1.179419	Y



Calibration

/ Dibenz(a,h)anthracene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

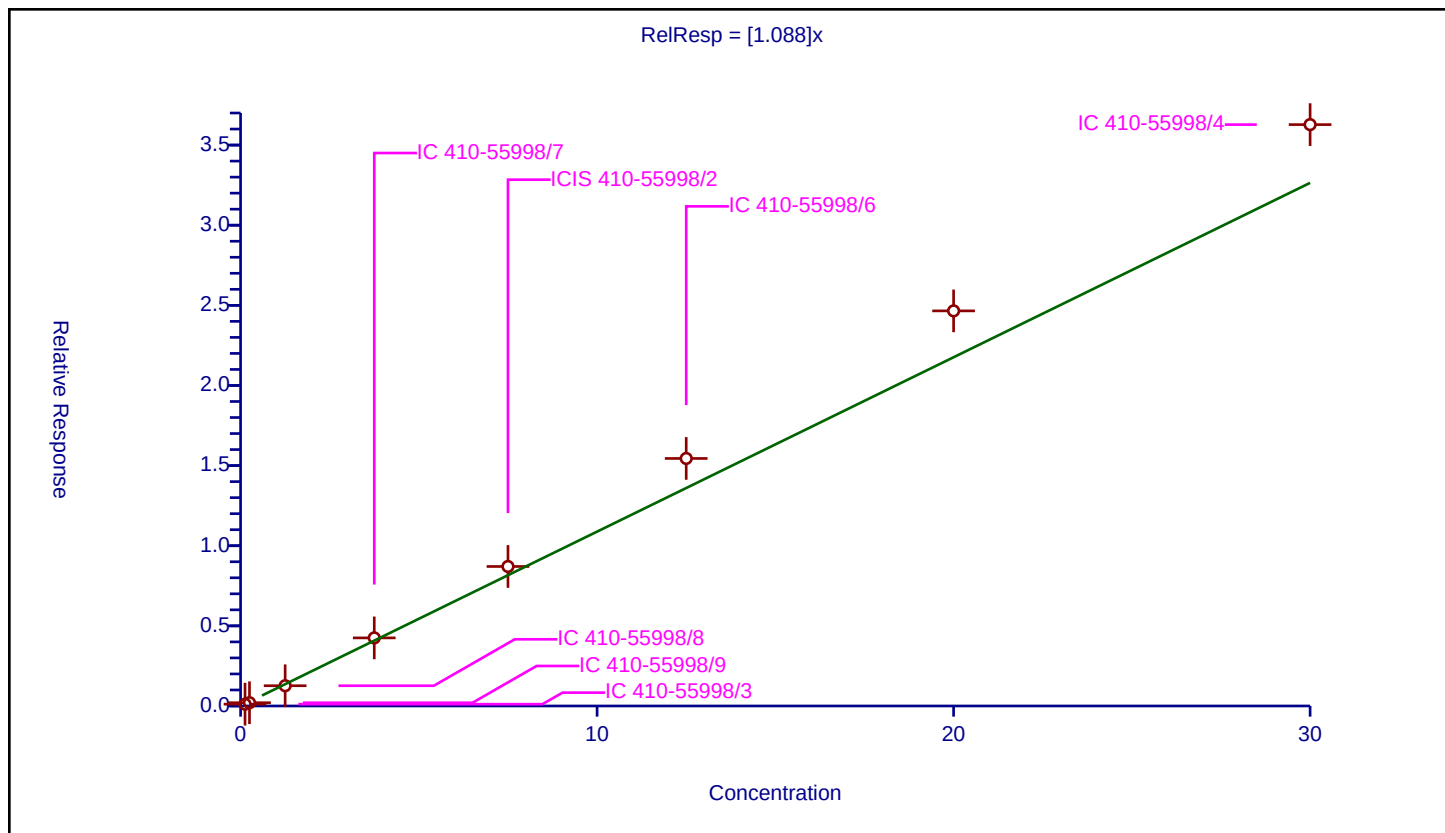
Curve Coefficients

Intercept: 0
 Slope: 1.088

Error Coefficients

Standard Error: 2570000
 Relative Standard Error: 14.7
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.113479	5.0	650868.0	0.907834	Y
2	IC 410-55998/9	0.25	0.203426	5.0	525498.0	0.813704	Y
3	IC 410-55998/8	1.25	1.263822	5.0	653391.0	1.011058	Y
4	IC 410-55998/7	3.75	4.249475	5.0	545378.0	1.133193	Y
5	ICIS 410-55998/2	7.5	8.70556	5.0	691658.0	1.160741	Y
6	IC 410-55998/6	12.5	15.445458	5.0	726140.0	1.235637	Y
7	IC 410-55998/5	20.0	24.653647	5.0	705220.0	1.232682	Y
8	IC 410-55998/4	30.0	36.276483	5.0	722219.0	1.209216	Y



Calibration

/ Benzo[g,h,i]perylene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

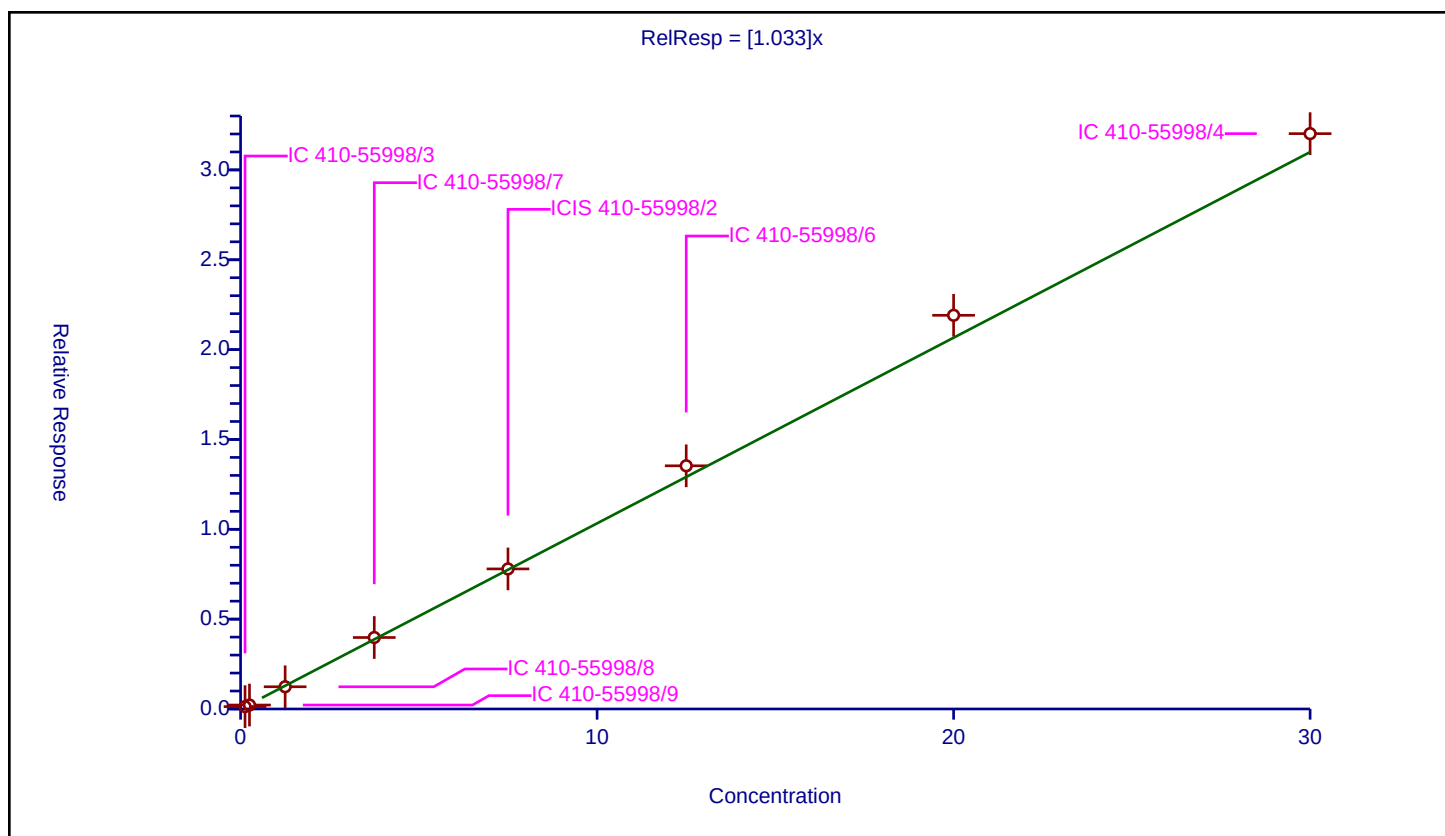
Curve Coefficients

Intercept: 0
Slope: 1.033

Error Coefficients

Standard Error: 2270000
Relative Standard Error: 6.7
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-55998/3	0.125	0.131094	5.0	650868.0	1.048753	Y
2	IC 410-55998/9	0.25	0.220258	5.0	525498.0	0.881031	Y
3	IC 410-55998/8	1.25	1.236909	5.0	653391.0	0.989527	Y
4	IC 410-55998/7	3.75	3.977443	5.0	545378.0	1.060652	Y
5	ICIS 410-55998/2	7.5	7.794951	5.0	691658.0	1.039327	Y
6	IC 410-55998/6	12.5	13.533568	5.0	726140.0	1.082685	Y
7	IC 410-55998/5	20.0	21.909943	5.0	705220.0	1.095497	Y
8	IC 410-55998/4	30.0	32.019062	5.0	722219.0	1.067302	Y



FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 48994

SDG No.: _____

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2020 19:00 Calibration End Date: 09/29/2020 22:52 Calibration ID: 11873

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-48994/3	J11152.D
Level 2	IC 410-48994/9	J11158a.D
Level 3	IC 410-48994/8	J11157.D
Level 4	IC 410-48994/7	J11156.D
Level 5	IC 410-48994/6	J11155.D
Level 6	ICIS 410-48994/2	J11151a.D
Level 7	IC 410-48994/5	J11154.D
Level 8	IC 410-48994/4	J11153.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	+++++ 0.8961	+++++ 0.7725	0.7808 0.8531	0.8370	0.7719	Ave		0.8186				6.3		20.0			
N-Nitrosodimethylamine	+++++ 1.2878	+++++ 1.1662	1.1591 1.2643	1.1578	1.2201	Ave		1.2092				4.7		20.0			
Pyridine	+++++ 2.2117	+++++ 2.0010	1.9915 2.1478	1.9917	1.9701	Ave		2.0523				4.9		20.0			
2-Picoline	+++++ 1.9905	+++++ 1.8348	1.8192 1.9516	1.8362	1.8609	Ave		1.8822				3.8		20.0			
N-Nitrosomethylethylamine	+++++ 0.8236	+++++ 0.7809	0.7841 0.8103	0.7750	0.7727	Ave		0.7911				2.6		20.0			
Methyl methanesulfonate	+++++ 1.1831	+++++ 1.1250	1.0531 1.1765	1.0901	1.0919	Ave		1.1200				4.6		20.0			
N-Nitrosodiethylamine	+++++ 0.7979	0.7762 0.7282	0.6688 0.7789	0.7256	0.7115	Ave		0.7410				6.1		20.0			
Ethyl methanesulfonate	+++++ 0.7424	0.6138 0.6840	0.7553 0.7665	0.7178	0.7062	Ave		0.7123				7.3		20.0			
Benzaldehyde	+++++ 1.6609	+++++ 1.5004	1.6264 1.4774	1.5738	1.6167	Ave		1.5759			0.0100	4.6		20.0			
Phenol	+++++ 2.4306	2.2254 2.2870	2.2832 2.4288	2.3071	2.3583	Ave		2.3315			0.8000	3.3		20.0			
Aniline	+++++ 2.7750	2.2107 2.6115	2.5498 2.7361	2.6414	2.6996	Ave		2.6035				7.3		20.0			
Bis(2-chloroethyl)ether	+++++ 1.7177	1.4674 1.6271	1.5876 1.6243	1.6944	1.6697	Ave		1.6269			0.7000	5.1		20.0			
2-Chlorophenol	+++++ 1.5451	1.4491 1.4543	1.3503 1.5040	1.4670	1.4813	Ave		1.4644			0.8000	4.1		20.0			
1,3-Dichlorobenzene	+++++ 1.6475	1.4626 1.5417	1.5365 1.6210	1.5974	1.5795	Ave		1.5695				3.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 48994

SDG No.: _____

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2020 19:00 Calibration End Date: 09/29/2020 22:52 Calibration ID: 11873

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dichlorobenzene	++++ 1.7002	1.7309 1.5451	1.5301 1.6087	1.6191	1.5840	Ave		1.6169				4.6		20.0			
Benzyl alcohol	++++ 1.0620	++++ 1.0231	0.9429 1.0190	1.0051	1.0412	Ave		1.0156				4.0		20.0			
1,2-Dichlorobenzene	++++ 1.6040	1.6673 1.4969	1.4320 1.5301	1.4917	1.5022	Ave		1.5320				5.1		20.0			
Indene	++++ 2.2977	2.5647 2.1862	2.0966 2.2425	2.1986	2.3064	Ave		2.2704				6.5		20.0			
2-Methylphenol	++++ 1.4680	1.3592 1.4019	1.4626 1.4640	1.4304	1.4073	Ave		1.4276			0.7000	2.9		20.0			
2,2'-oxybis[1-chloropropane]	++++ 2.4415	2.2105 2.2478	2.3045 2.4076	2.3586	2.3283	Ave		2.3284			0.0100	3.5		20.0			
N-Nitrosopyrrolidine	++++ 0.8217	0.7081 0.7987	0.8072 0.8090	0.7844	0.7471	Ave		0.7823				5.2		20.0			
Acetophenone	++++ 2.4678	1.9687 2.4582	2.4913 2.5071	2.4125	2.5650	Ave		2.4101			0.0100	8.3		20.0			
4-Methylphenol (and/or 3-Methylphenol)	++++ 1.6981	1.6308 1.6428	1.5784 1.6758	1.6485	1.6553	Ave		1.6471			0.6000	2.3		20.0			
N-Nitrosodi-n-propylamine	++++ 1.4379	1.4474 1.3773	1.4692 1.4560	1.3963	1.4136	Ave		1.4282			0.5000	2.3		20.0			
N-Nitrosomorpholine	++++ 1.3519	++++ 1.2702	1.3410 1.3361	1.3131	1.2731	Ave		1.3143				2.7		20.0			
o-Toluidine	++++ 2.5244	2.2632 2.3995	2.2537 2.5519	2.4486	2.3880	Ave		2.4042				4.8		20.0			
Hexachloroethane	++++ 0.8408	++++ 0.7817	0.8077 0.8264	0.7574	0.8059	Ave		0.8033			0.3000	3.8		20.0			
Nitrobenzene	++++ 0.5687	0.5118 0.5602	0.5415 0.5700	0.5327	0.5633	Ave		0.5497			0.2000	4.0		20.0			
N-Nitrosopiperidine	++++ 0.2067	0.2281 0.2047	0.1811 0.2002	0.2033	0.1849	Ave		0.2013				7.7		20.0			
Isophorone	++++ 0.9814	0.8519 0.9953	0.9807 0.9831	0.9762	0.9497	Ave		0.9597			0.4000	5.2		20.0			
2-Nitrophenol	++++ 0.2058	0.1929 0.2048	0.2010 0.2058	0.1950	0.2002	Ave		0.2008			0.1000	2.6		20.0			
2,4-Dimethylphenol	++++ 0.4799	0.4476 0.4860	0.4742 0.4849	0.4769	0.4654	Ave		0.4736			0.2000	2.8		20.0			
o,o',o''-Triethylphosphorothioate	++++ 0.1802	++++ 0.1835	0.1787 0.1851	0.1759	0.1693	Ave		0.1788				3.2		20.0			
Benzoic acid	++++ 0.2833	0.1646 0.3198	0.1897 0.3050	0.2526	0.3090	Lin	-0.400	0.3246							0.9960		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 48994

SDG No.: _____

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2020 19:00 Calibration End Date: 09/29/2020 22:52 Calibration ID: 11873

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Bis(2-chloroethoxy)methane	++++ 0.6681	0.5471 0.6809	0.6933 0.6595	0.6553	0.6603	Ave		0.6521			0.3000	7.4		20.0			
2,4-Dichlorophenol	++++ 0.3199	0.2956 0.3329	0.3274 0.3316	0.2963	0.3236	Ave		0.3182			0.2000	5.0		20.0			
1,2,4-Trichlorobenzene	++++ 0.3542	0.2999 0.3451	0.3585 0.3387	0.3485	0.3269	Ave		0.3388				5.9		20.0			
Naphthalene	1.1199 1.0349	0.9518 1.0961	1.0666 1.0594	1.0384	1.0251	Ave		1.0490			0.7000	4.8		20.0			
4-Chloroaniline	++++ 0.4443	0.4209 0.4674	0.4104 0.4349	0.4237	0.4189	Ave		0.4315			0.0100	4.5		20.0			
2,6-Dichlorophenol	++++ 0.3134	0.2623 0.3228	0.3088 0.3224	0.3232	0.3242	Ave		0.3110				7.2		20.0			
Hexachloropropene	++++ 0.2697	++++ 0.2827	0.2677 0.2780	0.2654	0.2629	Ave		0.2711				2.8		20.0			
Hexachlorobutadiene	++++ 0.2242	0.2355 0.2255	0.2290 0.2234	0.2200	0.2204	Ave		0.2254			0.0100	2.4		20.0			
Quinoline	++++ 0.6596	0.6429 0.6575	0.6512 0.6657	0.6538	0.6438	Ave		0.6535				1.3		20.0			
Caprolactam	++++ 0.1155	0.0693 0.1059	0.1106 0.1088	0.1035	0.1132	Ave		0.1038			0.0100	15.2		20.0			
N-Nitrosodi-n-butylamine	++++ 0.4150	0.2629 0.4149	0.3312 0.4242	0.3319	0.3332	Ave		0.3590				16.8		20.0			
4-Chloro-3-methylphenol	++++ 0.4040	0.3056 0.3949	0.3544 0.3982	0.3678	0.3812	Ave		0.3723			0.2000	9.2		20.0			
Safrole, Total	++++ 0.3018	++++ 0.3013	0.2679 0.3043	0.2899	0.2848	Ave		0.2917				4.8		20.0			
2-Methylnaphthalene	0.7033 0.7162	0.6457 0.7307	0.6936 0.7065	0.6789	0.7038	Ave		0.6973			0.4000	3.7		20.0			
1-Methylnaphthalene	0.6390 0.6770	0.5566 0.6852	0.6657 0.6970	0.6669	0.6581	Ave		0.6557				6.7		20.0			
Hexachlorocyclopentadiene	++++ 0.4472	++++ 0.4514	0.3845 0.4591	0.4451	0.4126	Ave		0.4333			0.0500	6.6		20.0			
1,2,4,5-Tetrachlorobenzene	++++ 0.6836	0.6332 0.6839	0.6344 0.6715	0.7019	0.6238	Ave		0.6618			0.0100	4.7		20.0			
Isosafrole Peak 1	++++ 0.6567	++++ 0.6593	0.5912 0.6682	0.6716	0.6630	Ave		0.6517				4.6		20.0			
2,4,6-Trichlorophenol	++++ 0.4846	0.3571 0.4928	0.4432 0.4800	0.4512	0.4459	Ave		0.4507			0.2000	10.2		20.0			
2,4,5-Trichlorophenol	++++ 0.4934	0.3913 0.4913	0.4363 0.4941	0.5091	0.4691	Ave		0.4693			0.2000	8.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 48994

SDG No.: _____

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2020 19:00 Calibration End Date: 09/29/2020 22:52 Calibration ID: 11873

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Isosafrole Peak 2	++++ 0.6951	++++ 0.6829	0.6569 0.7842	0.7084	0.6611	Ave		0.6981				6.7		20.0			
1,1'-Biphenyl	++++ 1.6455	1.2029 1.6984	1.6893 1.6780	1.7060	1.6192	Ave		1.6056			0.0100	11.2		20.0			
2-Chloronaphthalene	++++ 1.3416	1.3933 1.2408	1.4674 1.4992	1.4849	1.3180	Ave		1.3922			0.8000	7.0		20.0			
1-Chloronaphthalene	++++ 1.3502	1.0795 1.5038	1.1757 1.0968	1.1886	1.1427	Ave		1.2196				12.6		20.0			
Diphenyl ether	0.9369 0.9388	0.9551 0.9250	0.8599 0.9512	0.9293	0.9087	Ave		0.9256				3.3		20.0			
2-Nitroaniline	++++ 0.4440	0.4186 0.4598	0.3955 0.4252	0.4586	0.4256	Ave		0.4325			0.0100	5.4		20.0			
1,4-Naphthoquinone	++++ 0.5228	++++ 0.5324	0.5076 0.5064	0.5421	0.4996	Ave		0.5185				3.2		20.0			
1,3-Dinitrobenzene	++++ 0.2160	++++ 0.2144	0.1961 0.2105	0.2315	0.2219	Ave		0.2151				5.5		20.0			
Dimethyl phthalate	++++ 1.4965	++++ 1.5038	1.5446 1.4464	1.6232	1.4617	Ave		1.5127			0.0100	4.2		20.0			
1,4-Dinitrobenzene	++++ 0.2347	++++ 0.2426	0.2251 0.2368	0.2305	0.2268	Ave		0.2327				2.8		20.0			
2,6-Dinitrotoluene	++++ 0.3611	0.3142 0.3400	0.3184 0.3412	0.3408	0.3494	Ave		0.3379			0.2000	4.9		20.0			
Acenaphthylene	1.8379 1.8257	1.6638 1.8263	1.7189 1.8131	1.8324	1.6909	Ave		1.7761			0.9000	4.1		20.0			
3-Nitroaniline	++++ 0.3488	0.2903 0.3606	0.2830 0.3508	0.3519	0.3247	Ave		0.3300			0.0100	9.6		20.0			
Acenaphthene	1.3108 1.2628	1.2437 1.3065	1.1878 1.3104	1.3634	1.2521	Ave		1.2797			0.9000	4.2		20.0			
2,4-Dinitrophenol	++++ 0.2150	++++ 0.2202	++++ 0.2267	0.1974	0.1946	Ave		0.2108			0.0100	6.7		20.0			
4-Nitrophenol	++++ 0.4269	++++ 0.4217	++++ 0.4555	0.4032	0.3641	Ave		0.4143			0.0100	8.1		20.0			
Pentachlorobenzene	++++ 0.5399	0.5406 0.5422	0.4775 0.5490	0.5902	0.5176	Ave		0.5367				6.3		20.0			
Dibenzofuran	++++ 1.8411	1.8153 1.8135	1.8169 1.8709	1.9405	1.7979	Ave		1.8423			0.8000	2.7		20.0			
2,4-Dinitrotoluene	++++ 0.4635	++++ 0.4924	0.4681 0.4826	0.4983	0.4604	Ave		0.4775			0.2000	3.3		20.0			
1-Naphthylamine	++++ 1.2711	++++ 1.3544	++++ 1.3061	1.3327	1.2045	Ave		1.2938				4.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 48994

SDG No.: _____

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2020 19:00 Calibration End Date: 09/29/2020 22:52 Calibration ID: 11873

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2,3,4,6-Tetrachlorophenol	++++ 0.3471	0.3347 0.3625	0.2983 0.3694	0.3503	0.3398	Ave		0.3432			0.0100	6.8		20.0			
2-Naphthylamine	++++ 1.1750	0.3347 1.2601	0.2983 1.2653	1.2365	1.0893	Ave		1.2053				6.1		20.0			
Diethyl phthalate	++++ 1.5456	0.3347 1.5371	0.2983 1.5496	1.6010	1.3903	Ave		1.5236			0.0100	4.7		20.0			
Fluorene	1.3790 1.5030	1.4750 1.4783	1.4001 1.3928	1.4861	1.4598	Ave		1.4468			0.9000	3.3		20.0			
Thionazin	++++ 0.3097	0.3347 0.3074	0.2777 0.3378	0.3247	0.2960	Ave		0.3089				6.8		20.0			
5-Nitro-o-toluidine	++++ 0.4192	0.3339 0.4159	0.3307 0.4119	0.3994	0.3886	Ave		0.3857				9.8		20.0			
4-Chlorophenyl-phenyl ether	++++ 0.6937	0.8428 0.7173	0.6570 0.7172	0.7591	0.6702	Ave		0.7225			0.4000	8.7		20.0			
4-Nitroaniline	++++ 0.3778	0.2911 0.3712	0.3101 0.3845	0.4105	0.3602	Ave		0.3579			0.0100	11.9		20.0			
4,6-Dinitro-2-methylphenol	++++ 0.1703	0.1664 0.1664	0.1792 0.1792	0.1588	0.1646	Ave		0.1679			0.0100	4.5		20.0			
N-Nitrosodiphenylamine	++++ 0.7717	0.6939 0.7521	0.7070 0.6800	0.7668	0.7315	Ave		0.7290			0.0100	5.0		20.0			
1,2-Diphenylhydrazine	++++ 1.1445	1.1260 1.1568	1.1927 1.1444	1.1786	1.2250	Ave		1.1668				2.9		20.0			
Sulfotepp	++++ 0.2164	0.2104 0.2104	0.1985 0.2130	0.1934	0.2063	Ave		0.2063				4.3		20.0			
cis-Diallate	++++ 0.4436	0.4499 0.4499	0.4498 0.4351	0.4329	0.4325	Ave		0.4406				1.9		20.0			
Phorate	0.5232 0.7207	0.6574 0.6713	0.6692 0.7292	0.6865	0.7336	Ave		0.6739				10.0		20.0			
Phenacetin	++++ 0.5405	0.4325 0.5339	0.4626 0.5580	0.4984	0.5030	Ave		0.5041				8.9		20.0			
4-Bromophenyl-phenylether	++++ 0.2372	0.1916 0.2285	0.2315 0.2221	0.2208	0.2325	Ave		0.2235			0.1000	6.8		20.0			
trans-Diallate	++++ 0.4492	0.4595 0.4595	0.3851 0.4542	0.4202	0.4489	Ave		0.4362				6.5		20.0			
Hexachlorobenzene	0.2497 0.2365	0.2501 0.2303	0.2452 0.2318	0.2290	0.2401	Ave		0.2391			0.1000	3.6		20.0			
Dimethoate	++++ 0.4399	0.4105 0.4105	0.3986 0.4301	0.4066	0.4329	Ave		0.4198				4.0		20.0			
Atrazine	++++ 0.2465	0.2095 0.2278	0.2613 0.2356	0.2535	0.2457	Ave		0.2400			0.0100	7.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 48994

SDG No.: _____

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2020 19:00 Calibration End Date: 09/29/2020 22:52 Calibration ID: 11873

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Pentachlorophenol	++++ 0.1659	++++ 0.1667	0.1274 0.1709	0.1437	0.1606	Ave		0.1559			0.0500	10.8		20.0			
4-Aminobiphenyl	++++ 0.6938	0.6186 0.6932	0.6538 0.6657	0.6572	0.6768	Ave		0.6656				3.9		20.0			
Pentachloronitrobenzene	++++ 0.1594	++++ 0.1520	0.1458 0.1520	0.1488	0.1542	Ave		0.1520				3.1		20.0			
Pronamide	++++ 0.4514	0.3121 0.4362	0.3976 0.4090	0.4282	0.4287	Ave		0.4090				11.3		20.0			
Dinoseb	0.1360 0.2344	0.1438 0.2274	0.1800 0.2206	0.2122	0.2197	Ave		0.1968				19.6		20.0			
Phenanthrene	1.2009 1.2079	1.1323 1.2003	1.2414 1.1963	1.1568	1.1743	Ave		1.1888			0.7000	2.8		20.0			
Anthracene	1.1967 1.2357	1.0554 1.2034	1.1841 1.2136	1.1941	1.2279	Ave		1.1889			0.7000	4.8		20.0			
Carbazole	++++ 1.1779	0.9734 1.1552	1.1637 1.1349	1.1233	1.1722	Ave		1.1287			0.0100	6.3		20.0			
Methyl parathion	++++ 0.3583	++++ 0.3527	0.3138 0.3640	0.3364	0.3556	Ave		0.3468				5.4		20.0			
Di-n-butyl phthalate	++++ 1.6354	++++ 1.6072	1.5161 1.5552	1.5905	1.5606	Ave		1.5775			0.0100	2.7		20.0			
Parathion	++++ 0.2416	++++ 0.2454	0.2053 0.2499	0.2132	0.2275	Ave		0.2305				7.9		20.0			
4-Nitroquinoline-1-oxide	++++ 0.1657	0.0918 0.1680	0.1063 0.1686	0.1174	0.1546	Lin1	-0.035	0.1660							0.9950		0.9900
Octachlorostyrene	++++ 0.1199	0.1129 0.1177	0.1001 0.1151	0.1133	0.1118	Ave		0.1130				5.6		20.0			
Isodrin	++++ 0.1787	0.1940 0.1702	0.1569 0.1732	0.1838	0.1726	Ave		0.1756				6.6		20.0			
Fluoranthene	1.1888 1.4346	1.2636 1.4155	1.2804 1.4079	1.4114	1.4067	Ave		1.3511			0.6000	6.9		20.0			
Benzidine	++++ 0.8739	++++ 0.8727	0.7358 0.8664	0.7685	0.8213	Ave		0.8231				7.2		20.0			
Pyrene	1.2832 1.4433	1.4237 1.4041	1.3735 1.3688	1.3580	1.3288	Ave		1.3729			0.6000	3.8		20.0			
p-Dimethylamino azobenzene	++++ 0.2430	0.1721 0.2470	0.2073 0.2302	0.2241	0.2348	Ave		0.2227				11.6		20.0			
Chlorobenzilate	++++ 0.5515	++++ 0.5363	0.4769 0.5259	0.5098	0.5231	Ave		0.5206				4.9		20.0			
3,3'-Dimethylbenzidine	++++ 0.9578	++++ 0.9124	0.7257 0.9270	0.8258	0.8636	Ave		0.8687				9.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 48994

SDG No.: _____

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2020 19:00 Calibration End Date: 09/29/2020 22:52 Calibration ID: 11873

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Butylbenzylphthalate	++++ 0.7143	++++ 0.7160	0.6520 0.7013	0.7047	0.6774	Ave		0.6943			0.0100	3.6		20.0			
2-Acetylaminofluorene	++++ 0.5738	++++ 0.5992	0.4848 0.6057	0.5161	0.5308	Ave		0.5517				8.8		20.0			
3,3'-Dichlorobenzidine	++++ 0.5071	0.3908 0.4810	0.4264 0.5006	0.4515	0.4386	Ave		0.4566			0.0100	9.2		20.0			
Benzo[a]anthracene	1.0960 1.2644	1.1238 1.2303	1.1207 1.2052	1.1894	1.1397	Ave		1.1712			0.8000	5.1		20.0			
4,4'-Methylene bis(2-chloroaniline)	0.2361 0.2537	0.1860 0.2559	0.1877 0.2550	0.2306	0.2236	Ave		0.2286				12.4		20.0			
Chrysene	1.0743 1.2119	1.0862 1.1585	1.1921 1.2081	1.1801	1.1029	Ave		1.1518			0.7000	4.9		20.0			
Bis(2-ethylhexyl) phthalate	++++ 1.0413	++++ 1.0156	0.8978 0.9982	0.9680	0.9320	Ave		0.9755			0.0100	5.5		20.0			
6-Methylchrysene	0.6703 0.8555	0.8293 0.8641	0.8131 0.8637	0.8414	0.8031	Ave		0.8176				7.8		20.0			
Di-n-octyl phthalate	++++ 1.8432	++++ 1.8274	1.6485 1.8290	1.7517	1.7399	Ave		1.7733			0.0100	4.2		20.0			
Benzo[b]fluoranthene	1.0831 1.2778	1.2164 1.3362	1.2335 1.3815	1.2420	1.2723	Ave		1.2554			0.7000	7.1		20.0			
7,12-Dimethylbenz(a)anthracene	++++ 0.5807	0.4648 0.5890	0.5779 0.6005	0.5732	0.5737	Ave		0.5657				8.0		20.0			
Benzo[k]fluoranthene	0.9282 1.2172	1.0923 1.1672	1.2140 1.1360	1.2222	1.1314	Ave		1.1386			0.7000	8.5		20.0			
Benzo[a]pyrene	0.9530 1.2744	1.1805 1.2491	1.2634 1.2877	1.2170	1.1455	Ave		1.1963			0.7000	9.2		20.0			
3-Methylcholanthrene	++++ 0.6007	0.5548 0.5979	0.5558 0.5838	0.5700	0.5487	Ave		0.5731				3.7		20.0			
Dibenz[a,h]acridine	++++ 0.8883	++++ 0.8889	0.8675 0.8890	0.8335	0.8440	Ave		0.8685				2.8		20.0			
Dibenz[a,j]acridine	++++ 0.9299	++++ 0.9215	0.9466 0.8865	0.9101	0.8686	Ave		0.9105				3.2		20.0			
Indeno[1,2,3-cd]pyrene	0.8387 1.0552	0.8192 1.0565	1.0066 1.0651	0.9885	1.0129	Ave		0.9803			0.5000	9.9		20.0			
Dibenz(a,h)anthracene	0.7791 1.1070	0.8558 1.0852	1.0077 1.0616	1.0639	1.0159	Ave		0.9970			0.4000	11.8		20.0			
Benzo[g,h,i]perylene	0.8611 1.1129	0.9696 1.0869	1.0328 1.0484	1.1012	1.0427	Ave		1.0320			0.5000	8.0		20.0			
2-Fluorophenol (Surr)	++++ 1.6139	1.2795 1.4870	1.4640 1.6049	1.5637	1.5509	Ave		1.5091				7.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 48994

SDG No.: _____

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2020 19:00 Calibration End Date: 09/29/2020 22:52 Calibration ID: 11873

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
Phenol-d5 (Surr)	2.1611 2.1757	1.8315 2.0082	2.0056 2.1024	2.0658	2.0728	Ave		2.0529				5.3		20.0			
Nitrobenzene-d5 (Surr)	++++ 0.5807	0.5485 0.5770	0.5704 0.5910	0.5544	0.5561	Ave		0.5683				2.8		20.0			
2-Fluorobiphenyl (Surr)	++++ 1.5650	1.3120 1.5662	1.5128 1.5753	1.6013	1.4422	Ave		1.5107				6.8		20.0			
2,4,6-Tribromophenol (Surr)	++++ 0.1884	0.1796 0.2032	0.1926 0.1962	0.1931	0.1790	Ave		0.1903				4.6		20.0			
p-Terphenyl-d14 (Surr)	++++ 0.9771	0.8127 0.9593	0.9250 0.9217	0.9226	0.9356	Ave		0.9220				5.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

Analy Batch No.: 48994

SDG No.: _____

Instrument ID: HP23264

GC Column: DB-5MS 30m ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2020 19:00

Calibration End Date: 09/29/2020 22:52

Calibration ID: 11873

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-48994/3	JI1152.D
Level 2	IC 410-48994/9	JI1158a.D
Level 3	IC 410-48994/8	JI1157.D
Level 4	IC 410-48994/7	JI1156.D
Level 5	IC 410-48994/6	JI1155.D
Level 6	ICIS 410-48994/2	JI1151a.D
Level 7	IC 410-48994/5	JI1154.D
Level 8	IC 410-48994/4	JI1153.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	DCBd 4	Ave	++++ 428732	++++ 642682	41684 1013361	111798	216349	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
N-Nitrosodimethylamine	DCBd 4	Ave	++++ 616100	++++ 970203	61881 1501807	154641	341945	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Pyridine	DCBd 4	Ave	++++ 1058163	++++ 1664747	106326 2551399	266028	552138	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
2-Picoline	DCBd 4	Ave	++++ 952294	++++ 1526420	97125 2318308	245249	521552	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
N-Nitrosomethylethylamine	DCBd 4	Ave	++++ 394046	++++ 649708	41860 962566	103518	216571	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Methyl methanesulfonate	DCBd 4	Ave	++++ 566039	++++ 935975	56222 1397589	145595	306034	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
N-Nitrosodiethylamine	DCBd 4	Ave	++++ 381721	7385 605815	35705 925193	96915	199397	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Ethyl methanesulfonate	DCBd 4	Ave	++++ 355176	5840 569046	40325 910481	95869	197934	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzaldehyde	DCBd 4	Ave	++++ 794638	++++ 1248277	86832 1755013	210209	453100	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Phenol	DCBd 4	Ave	++++ 1162866	21173 1902672	121899 2885193	308153	660940	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Aniline	DCBd 4	Ave	++++ 1327639	21033 2172642	136131 3250226	352807	756600	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Bis(2-chloroethyl)ether	DCBd 4	Ave	++++ 821787	13961 1353655	84760 1929491	226315	467967	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Chlorophenol	DCBd 4	Ave	++++ 739220	13787 1209941	72089 1786552	195944	415150	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,3-Dichlorobenzene	DCBd 4	Ave	++++ 788215	13915 1282633	82031 1925604	213363	442689	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,4-Dichlorobenzene	DCBd 4	Ave	++++ 813415	16468 1285473	81689 1910951	216257	443939	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

Analy Batch No.: 48994

SDG No.: _____

Instrument ID: HP23264

GC Column: DB-5MS 30m ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2020 19:00

Calibration End Date: 09/29/2020 22:52

Calibration ID: 11873

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Benzyl alcohol	DCBd 4	Ave	+++++ 508111	+++++ 851194	50342 1210465	134242	291819	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
1,2-Dichlorobenzene	DCBd 4	Ave	+++++ 767394	+++++ 1245350	15863 76454 1817604	199244	421016	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Indene	DCBd 4	Ave	+++++ 1099293	+++++ 1818829	24401 2663827	293659	646395	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Methylphenol	DCBd 4	Ave	+++++ 702331	+++++ 1166295	12932 78087 1739020	191050	394406	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,2'-oxybis[1-chloropropane]	DCBd 4	Ave	+++++ 1168082	+++++ 1870054	21031 123035 2859983	315031	652533	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosopyrrolidine	DCBd 4	Ave	+++++ 393117	+++++ 664517	6737 43095 961003	104765	209391	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Acetophenone	DCBd 4	Ave	+++++ 1180689	+++++ 2045060	18730 133006 2978118	322234	718891	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Methylphenol (and/or 3-Methylphenol)	DCBd 4	Ave	+++++ 812428	+++++ 1366764	15516 84268 1990671	220185	463934	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosodi-n-propylamine	DCBd 4	Ave	+++++ 687926	+++++ 1145805	13771 78439 1729559	186503	396193	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosomorpholine	DCBd 4	Ave	+++++ 646799	+++++ 1056751	+++++ 71596 1587177	175392	356818	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
o-Toluidine	DCBd 4	Ave	+++++ 1207753	+++++ 1996256	21532 120321 3031387	327049	669267	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachloroethane	DCBd 4	Ave	+++++ 402265	+++++ 650345	+++++ 43124 981726	101158	225856	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Nitrobenzene	NPT	Ave	+++++ 1078770	+++++ 1727436	18691 108379 2610309	277261	614646	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosopiperidine	NPT	Ave	+++++ 392182	+++++ 631189	8329 36246 916817	105826	201796	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isophorone	NPT	Ave	+++++ 1861641	+++++ 3069104	31111 196288 4501778	508045	1036229	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Nitrophenol	NPT	Ave	+++++ 390409	+++++ 631544	7044 40231 942181	101505	218481	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dimethylphenol	NPT	Ave	+++++ 910421	+++++ 1498577	16346 94922 2220334	248190	507834	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
o,o',o''-Triethylphosphorothioate	NPT	Ave	+++++ 341855	+++++ 565854	+++++ 35776 847467	91523	184753	+++++ 12.5	+++++ 20.0	1.25 30.0	3.75	7.50
Benzoic acid	NPT	Lin	+++++ 537409	+++++ 986220	60123 113895 1396683	262962	449548	+++++ 12.5	2.50 20.0	3.75 30.0	7.50	10.0
Bis(2-chloroethoxy)methane	NPT	Ave	+++++ 1267353	+++++ 2099626	19979 138771 3020050	341041	720472	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dichlorophenol	NPT	Ave	+++++ 606868	+++++ 1026444	10797 65540 1518406	154217	353048	+++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

Analy Batch No.: 48994

SDG No.: _____

Instrument ID: HP23264

GC Column: DB-5MS 30m ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2020 19:00

Calibration End Date: 09/29/2020 22:52

Calibration ID: 11873

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trichlorobenzene	NPT	Ave	++++ 671804	10954 1064041	71752 1550955	181399	356681	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Naphthalene	NPT	Ave	22967 1963073	34760 3379736	213479 4851190	540456	1118535	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Chloroaniline	NPT	Ave	++++ 842785	15370 1441111	82140 1991681	220513	457066	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,6-Dichlorophenol	NPT	Ave	++++ 594557	9579 995492	61809 1476336	168233	353709	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachloropropene	NPT	Ave	++++ 511594	++++ 871672	53591 1272965	138115	286812	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Hexachlorobutadiene	NPT	Ave	++++ 425349	8601 695201	45844 1022964	114497	240535	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Quinoline	NPT	Ave	++++ 1251277	23480 2027348	130340 3048250	340284	702488	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Caprolactam	NPT	Ave	++++ 219115	2531 326677	22140 498046	53880	123477	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
N-Nitrosodi-n-butylamine	NPT	Ave	++++ 787314	9602 1279295	66297 1942360	172746	363552	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Chloro-3-methylphenol	NPT	Ave	++++ 766455	11162 1217750	70945 1823558	191442	415981	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Safrole, Total	NPT	Ave	++++ 572568	++++ 929010	53628 1393508	150869	310804	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
2-Methylnaphthalene	NPT	Ave	14423 1358515	23581 2253084	138835 3235147	353354	767953	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1-Methylnaphthalene	NPT	Ave	13106 1284184	20326 2112742	133240 3191931	347095	718081	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Hexachlorocyclopentadiene	ANT	Ave	++++ 434223	++++ 709358	40202 1061194	112410	233904	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
1,2,4,5-Tetrachlorobenzene	ANT	Ave	++++ 663822	11868 1074772	66329 1552015	177275	353595	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isosafrole Peak 1	ANT	Ave	++++ 102024	++++ 165784	9890 247109	27138	60130	++++ 2.00	++++ 3.20	0.200 4.80	0.600	1.20
2,4,6-Trichlorophenol	ANT	Ave	++++ 470560	6693 774416	46331 1109385	113956	252765	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4,5-Trichlorophenol	ANT	Ave	++++ 479167	7335 772105	45616 1142098	128583	265944	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isosafrole Peak 2	ANT	Ave	++++ 566969	++++ 901463	57687 1522446	150273	314801	++++ 10.5	++++ 16.8	1.05 25.2	3.15	6.30
1,1'-Biphenyl	ANT	Ave	++++ 1597838	22548 2669055	176617 3878205	430855	917908	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Chloronaphthalene	ANT	Ave	++++ 1302802	26116 1949857	153417 3465076	375013	747162	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

Analy Batch No.: 48994

SDG No.: _____

Instrument ID: HP23264

GC Column: DB-5MS 30m ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2020 19:00

Calibration End Date: 09/29/2020 22:52

Calibration ID: 11873

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1-Chloronaphthalene	ANT	Ave	++++ 1311075	20235 2363152	122923 2535031	300184	647751	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Diphenyl ether	ANT	Ave	9498 911612	17903 1453645	89901 2198415	234705	515146	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Nitroaniline	ANT	Ave	++++ 431133	7847 722541	41353 982734	115831	241238	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,4-Naphthoquinone	ANT	Ave	++++ 507654	++++ 836602	53072 1170358	136912	283196	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
1,3-Dinitrobenzene	ANT	Ave	++++ 209758	++++ 336969	20498 486544	58460	125766	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Dimethyl phthalate	ANT	Ave	++++ 1453189	++++ 2363218	161491 3343036	409937	828572	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
1,4-Dinitrobenzene	ANT	Ave	++++ 227905	++++ 381214	23529 547315	58208	128543	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
2,6-Dinitrotoluene	ANT	Ave	++++ 350682	5889 534283	33284 788570	86069	198094	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Acenaphthylene	ANT	Ave	18632 1772844	31187 2870009	179707 4190562	462762	958552	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3-Nitroaniline	ANT	Ave	++++ 338725	5441 566645	29590 810708	88883	184047	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Acenaphthene	ANT	Ave	13288 1226295	23312 2053187	124183 3028794	344338	709793	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dinitrophenol	ANT	Ave	++++ 208805	++++ 346036	++++ 524017	99684	147110	++++ 12.5	++++ 20.0	++++ 30.0	7.50	10.0
4-Nitrophenol	ANT	Ave	++++ 414522	++++ 662669	++++ 1052676	101817	206424	++++ 12.5	++++ 20.0	++++ 30.0	3.75	7.50
Pentachlorobenzene	ANT	Ave	++++ 524254	10133 852017	49926 1268994	149051	293417	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dibenzofuran	ANT	Ave	++++ 1787764	34027 2849899	189955 4324204	490066	1019209	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2,4-Dinitrotoluene	ANT	Ave	++++ 450059	++++ 773827	48936 1115439	125834	261009	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
1-Naphthylamine	ANT	Ave	++++ 1234264	++++ 2128483	++++ 3018773	336569	682820	++++ 12.5	++++ 20.0	++++ 30.0	3.75	7.50
2,3,4,6-Tetrachlorophenol	ANT	Ave	++++ 337066	6274 569746	31190 853771	88461	192596	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Naphthylamine	ANT	Ave	++++ 1140989	++++ 1980241	++++ 2924500	312283	617514	++++ 12.5	++++ 20.0	++++ 30.0	3.75	7.50
Diethyl phthalate	ANT	Ave	++++ 1500908	++++ 2415609	158701 3581452	404332	788114	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Fluorene	ANT	Ave	13980 1459539	27647 2323195	146379 3219038	375304	827510	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

Analy Batch No.: 48994

SDG No.: _____

Instrument ID: HP23264

GC Column: DB-5MS 30m ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2020 19:00

Calibration End Date: 09/29/2020 22:52

Calibration ID: 11873

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Thionazin	ANT	Ave	++++ 300746	++++ 483023	29031 780683	82015	167821	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
5-Nitro-o-toluidine	ANT	Ave	++++ 407098	++++ 6258 653518	34573 952125	100868	220299	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Chlorophenyl-phenyl ether	ANT	Ave	++++ 673577	15797 1127168	68688 1657724	191717	379922	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Nitroaniline	ANT	Ave	++++ 366887	5457 583388	32422 888693	103681	204191	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4,6-Dinitro-2-methylphenol	PHN	Ave	++++ 277216	++++ 459368	++++ 732045	69909	150796	++++ 12.5	++++ 20.0	++++ 30.0	3.75	7.50
N-Nitrosodiphenylamine	PHN	Ave	++++ 1256149	22052 2075959	121904 2778532	337637	670009	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
1,2-Diphenylhydrazine	PHN	Ave	++++ 1863026	35785 3192862	205638 4675901	518991	1121975	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Sulfotepp	PHN	Ave	++++ 352324	++++ 580614	34220 870194	85155	188905	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
cis-Diallate	PHN	Ave	++++ 534333	++++ 918957	57387 1315578	141054	293105	++++ 9.25	++++ 14.8	0.925 22.2	2.78	5.55
Phorate	PHN	Ave	9523 1173131	20893 1852739	115376 2979657	302301	671880	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Phenacetin	PHN	Ave	++++ 879911	13745 1473687	79758 2280107	219440	460716	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4-Bromophenyl-phenylether	PHN	Ave	++++ 386121	6090 630784	39908 907610	97237	212979	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
trans-Diallate	PHN	Ave	++++ 190132	++++ 329772	17261 482491	48105	106892	++++ 3.25	++++ 5.20	0.325 7.80	0.975	1.95
Hexachlorobenzene	PHN	Ave	4545 384930	7948 635688	42272 947139	100855	219901	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dimethoate	PHN	Ave	++++ 716153	++++ 1133147	68722 1757295	179016	396528	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Atrazine	PHN	Ave	++++ 401322	6657 628854	45051 962518	111603	225059	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pentachlorophenol	PHN	Ave	++++ 270002	++++ 460237	21968 698401	63279	147133	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
4-Aminobiphenyl	PHN	Ave	++++ 1129395	19661 1913428	112729 2720021	289370	619833	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Pentachloronitrobenzene	PHN	Ave	++++ 259416	++++ 419580	25138 620910	65504	141194	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Pronamide	PHN	Ave	++++ 734730	9918 1203852	68557 1671189	188559	392598	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dinoseb	PHN	Ave	2476 381563	4571 627703	31037 901589	93436	201184	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

Analy Batch No.: 48994

SDG No.: _____

Instrument ID: HP23264

GC Column: DB-5MS 30m ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2020 19:00

Calibration End Date: 09/29/2020 22:52

Calibration ID: 11873

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Phenanthrene	PHN	Ave	21856 1966280	35988 3312943	214029 4888057	509375	1075520	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Anthracene	PHN	Ave	21781 2011443	33544 3321435	204147 4958682	525800	1124671	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Carbazole	PHN	Ave	++++ 1917451	30937 3188386	200641 4637139	494611	1073642	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Methyl parathion	PHN	Ave	++++ 583177	++++ 973362	54106 1487212	148115	325684	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Di-n-butyl phthalate	PHN	Ave	++++ 2662193	++++ 4436074	261399 6354527	700322	1429360	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Parathion	PHN	Ave	++++ 393248	++++ 677395	35403 1020914	93890	208393	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
4-Nitroquinoline-1-oxide	PHN	Lin1	++++ 269784	2917 463685	18319 688794	51714	141562	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Octachlorostyrene	PHN	Ave	++++ 195120	3589 324818	17263 470206	49880	102358	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Isodrin	PHN	Ave	++++ 290941	6165 469741	27045 707568	80927	158065	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Fluoranthene	PHN	Ave	21637 2335277	40159 3906985	220757 5752975	621498	1288363	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzidine	PYR1 0	Ave	++++ 4437397	++++ 7313772	393229 11377323	1065600	2440632	++++ 37.5	++++ 60.0	3.75 90.0	11.3	22.5
Pyrene	PYR1 0	Ave	23850 2442810	44749 3922308	244673 5991543	627665	1316218	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
p-Dimethylamino azobenzene	PYR1 0	Ave	++++ 411222	5410 690112	36935 1007490	103586	232571	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Chlorobenzilate	PYR1 0	Ave	++++ 933410	++++ 1498257	84948 2302086	235601	518183	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
3,3'-Dimethylbenzidine	PYR1 0	Ave	++++ 1621049	++++ 2548732	129269 4057904	381682	855392	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Butylbenzylphthalate	PYR1 0	Ave	++++ 1208989	++++ 2000203	116151 3069648	325695	670955	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
2-Acetylaminofluorene	PYR1 0	Ave	++++ 971176	++++ 1673739	86358 2651302	238533	525774	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
3,3'-Dichlorobenzidine	PYR1 0	Ave	++++ 858220	12285 1343550	75962 2191413	208665	434439	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[a]anthracene	PYR1 0	Ave	20370 2139943	35323 3436641	199633 5275368	549741	1128888	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
4,4'-Methylene bis(2-chloroaniline)	PYR1 0	Ave	4389 429313	5847 714954	33432 1116280	106588	221518	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Chrysene	PYR1 0	Ave	19967 2051188	34142 3236146	212358 5288042	545407	1092460	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

Analy Batch No.: 48994

SDG No.:

Instrument ID: HP23264

GC Column: DB-5MS 30m ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2020 19:00

Calibration End Date: 09/29/2020 22:52

Calibration ID: 11873

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Bis(2-ethylhexyl) phthalate	PYR10	Ave	++++ 1762378	++++ 2836999	159935 4369320	447396	923127	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
6-Methylchrysene	PYR10	Ave	12458 1447978	26066 2413760	144844 3780700	388874	795509	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Di-n-octyl phthalate	PRY	Ave	++++ 3108945	++++ 5022069	277977 7904461	771113	1684516	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Benzo[b]fluoranthene	PRY	Ave	19559 2155378	38124 3671977	208001 5970551	546748	1231847	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
7,12-Dimethylbenz(a)anthracene	PRY	Ave	++++ 979527	14567 1618806	97450 2595051	252331	555418	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[k]fluoranthene	PRY	Ave	16761 2053110	34236 3207741	204721 4909552	538004	1095416	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[a]pyrene	PRY	Ave	17210 2149600	36999 3432641	213041 5565015	535735	1109058	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
3-Methylcholanthrene	PRY	Ave	++++ 1013224	++++ 1643215	93724 2523011	250899	531239	++++ 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dibenz[a,h]acridine	PRY	Ave	++++ 1498258	++++ 2442904	146283 3842140	366915	817131	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Dibenz[a,j]acridine	PRY	Ave	++++ 1568528	++++ 2532480	159624 3831037	400640	840997	++++ 12.5	++++ 20.0	1.25 30.0	3.75	7.50
Indeno[1,2,3-cd]pyrene	PRY	Ave	15145 1779748	25675 2903384	169746 4603019	435139	980695	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Dibenz(a,h)anthracene	PRY	Ave	14069 1867273	26824 2982251	169919 4588123	468331	983529	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
Benzo[g,h,i]perylene	PRY	Ave	15551 1877175	30389 2987104	174153 4530873	484741	1009541	0.125 12.5	0.250 20.0	1.25 30.0	3.75	7.50
2-Fluorophenol (Surr)	DCBd4	Ave	++++ 1544301	24346 2474134	156329 3812792	417711	869299	++++ 25.0	0.500 40.0	2.50 60.0	7.50	15.0
Phenol-d5 (Surr)	DCBd4	Ave	22370 2081847	34851 3341476	214158 4994956	551856	1161852	0.250 25.0	0.500 40.0	2.50 60.0	7.50	15.0
Nitrobenzene-d5 (Surr)	NPT	Ave	++++ 2202959	40063 3558549	228323 5412960	577054	1213457	++++ 25.0	0.500 40.0	2.50 60.0	7.50	15.0
2-Fluorobiphenyl (Surr)	ANT	Ave	++++ 3039338	49185 4922648	316329 7281720	808799	1635093	++++ 25.0	0.500 40.0	2.50 60.0	7.50	15.0
2,4,6-Tribromophenol (Surr)	ANT	Ave	++++ 365957	6732 638539	40270 906888	97545	202903	++++ 25.0	0.500 40.0	2.50 60.0	7.50	15.0
p-Terphenyl-d14 (Surr)	PYR10	Ave	++++ 3307282	51087 5359375	329562 8068790	852832	1853490	++++ 25.0	0.500 40.0	2.50 60.0	7.50	15.0

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 48994

SDG No.: _____

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2020 19:00 Calibration End Date: 09/29/2020 22:52 Calibration ID: 11873

Curve Type Legend:

Ave = Average ISTD Lin = Linear ISTD Lin1 = Linear 1/conc ISTD
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FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1 Analy Batch No.: 48994

SDG No.: _____

Instrument ID: HP23264 GC Column: DB-5MS 30m ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2020 19:00 Calibration End Date: 09/29/2020 22:52 Calibration ID: 11873

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-48994/3	J11152.D
Level 2	IC 410-48994/9	J11158a.D
Level 3	IC 410-48994/8	J11157.D
Level 4	IC 410-48994/7	J11156.D
Level 5	IC 410-48994/6	J11155.D
Level 6	ICIS 410-48994/2	J11151a.D
Level 7	IC 410-48994/5	J11154.D
Level 8	IC 410-48994/4	J11153.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
	LVL 7 #	LVL 8 #					LVL 7	LVL 8				
Benzoic acid	+++++	0.1	-8.7	-5.7	7.5	-2.9		50	30	30	30	30
	4.7	-1.9					30	30				
4-Nitroquinoline-1-oxide	+++++	40.5	-19.0	-23.6	-4.1	1.5		50	30	30	30	30
	2.3	2.3					30	30				

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1151a.D
 Lims ID: ICIS L6
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 29-Sep-2020 19:00:30 ALS Bottle#: 2 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCVIS L6
 Misc. Info.: 410-0011633-002
 Operator ID: kel10217 Instrument ID: HP23264
 Sublist: chrom-MSSemi_HP23264*sub7
 Method: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 01-Oct-2020 12:40:45 Calib Date: 29-Sep-2020 22:52:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1158a.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: luttek

Date: 29-Sep-2020 19:41:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	2.452	2.452	0.000	98	428732	12.5	13.7	
3 N-Nitrosodimethylamine	74	2.985	2.985	0.000	93	616100	12.5	13.3	
4 Pyridine	79	3.019	3.019	0.000	95	1058163	12.5	13.5	
8 2-Picoline	93	4.165	4.165	0.000	94	952294	12.5	13.2	
10 N-Nitrosomethylethylamine	88	4.346	4.346	0.000	96	394046	12.5	13.0	
11 Methyl methanesulfonate	80	4.800	4.800	0.000	89	566039	12.5	13.2	
\$ 12 2-Fluorophenol	112	5.027	5.027	0.000	93	1544301	25.0	26.7	
13 N-Nitrosodiethylamine	102	5.356	5.356	0.000	93	381721	12.5	13.5	
15 Ethyl methanesulfonate	109	5.810	5.810	0.000	94	355176	12.5	13.0	
19 Benzaldehyde	77	6.263	6.263	0.000	91	794638	12.5	13.2	
\$ 20 Phenol-d5	99	6.388	6.388	0.000	92	2081847	25.0	26.5	
21 Phenol	94	6.399	6.399	0.000	97	1162866	12.5	13.0	
23 Aniline	93	6.422	6.422	0.000	97	1327639	12.5	13.3	
S 46 Dinitrotoluene	165				0		25.0	25.5	
24 Bis(2-chloroethyl)ether	93	6.536	6.536	0.000	91	821787	12.5	13.2	
25 2-Chlorophenol	128	6.581	6.581	0.000	93	739220	12.5	13.2	
26 1,3-Dichlorobenzene	146	6.808	6.808	0.000	91	788215	12.5	13.1	
* 28 1,4-Dichlorobenzene-d4	152	6.899	6.899	0.000	96	191372	5.00	5.00	
29 1,4-Dichlorobenzene	146	6.921	6.921	0.000	87	813415	12.5	13.1	
30 Benzyl alcohol	108	7.114	7.114	0.000	86	508111	12.5	13.1	
31 1,2-Dichlorobenzene	146	7.137	7.137	0.000	91	767394	12.5	13.1	
34 Indene	115	7.273	7.273	0.000	94	1099293	12.5	12.7	
33 2-Methylphenol	108	7.296	7.296	0.000	95	702331	12.5	12.9	
35 2,2'-oxybis[1-chloropropane]	45	7.341	7.341	0.000	90	1168082	12.5	13.1	
36 N-Nitrosopyrrolidine	100	7.477	7.477	0.000	85	393117	12.5	13.1	
38 Acetophenone	105	7.511	7.511	0.000	95	1180689	12.5	12.8	
37 4-Methylphenol	108	7.534	7.534	0.000	86	812428	12.5	12.9	
39 N-Nitrosodi-n-propylamine	70	7.534	7.534	0.000	86	687926	12.5	12.6	
40 N-Nitrosomorpholine	56	7.545	7.545	0.000	90	646799	12.5	12.9	
41 2-Toluidine	106	7.568	7.568	0.000	90	1207753	12.5	13.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
42 Hexachloroethane	117	7.647	7.647	0.000	94	402265	12.5	13.1	
\$ 43 Nitrobenzene-d5	82	7.727	7.727	0.000	89	2202959	25.0	25.5	
44 Nitrobenzene	77	7.761	7.761	0.000	88	1078770	12.5	12.9	
45 N-Nitrosopiperidine	114	7.988	7.988	0.000	80	392182	12.5	12.8	
47 Isophorone	82	8.135	8.135	0.000	99	1861641	12.5	12.8	
48 2-Nitrophenol	139	8.249	8.249	0.000	90	390409	12.5	12.8	
49 2,4-Dimethylphenol	107	8.351	8.351	0.000	98	910421	12.5	12.7	
51 o,o',o"-Triethylphosphorothioat	198	8.475	8.475	0.000	89	341855	12.5	12.6	
50 Benzoic acid	105	8.498	8.498	0.000	89	537409	12.5	12.1	
52 Bis(2-chloroethoxy)methane	93	8.498	8.498	0.000	95	1267353	12.5	12.8	M
54 2,4-Dichlorophenol	162	8.623	8.623	0.000	96	606868	12.5	12.6	
55 1,2,4-Trichlorobenzene	180	8.748	8.748	0.000	90	671804	12.5	13.1	
* 56 Naphthalene-d8	136	8.827	8.827	0.000	99	758776	5.00	5.00	
57 Naphthalene	128	8.861	8.861	0.000	98	1963073	12.5	12.3	
58 4-Chloroaniline	127	8.963	8.963	0.000	92	842785	12.5	12.9	
59 2,6-Dichlorophenol	162	8.975	8.975	0.000	84	594557	12.5	12.6	
61 Hexachloropropene	213	9.020	9.020	0.000	98	511594	12.5	12.4	
62 Hexachlorobutadiene	225	9.088	9.088	0.000	95	425349	12.5	12.4	
63 Quinoline	129	9.394	9.394	0.000	94	1251277	12.5	12.6	
64 Caprolactam	113	9.519	9.519	0.000	75	219115	12.5	13.9	
65 N-Nitrosodi-n-butylamine	84	9.542	9.542	0.000	92	787314	12.5	14.4	
S 60 Diallate	86				0		12.5	12.7	
67 4-Chloro-3-methylphenol	107	9.769	9.769	0.000	93	766455	12.5	13.6	
68 Safrole, Total	162	9.859	9.859	0.000	82	572568	12.5	12.9	
69 2-Methylnaphthalene	142	9.973	9.973	0.000	91	1358515	12.5	12.8	
70 1-Methylnaphthalene	142	10.120	10.120	0.000	91	1284184	12.5	12.9	
71 Hexachlorocyclopentadiene	237	10.234	10.234	0.000	84	434223	12.5	12.9	
72 1,2,4,5-Tetrachlorobenzene	216	10.234	10.234	0.000	95	663822	12.5	12.9	
73 Isosafrole Peak 1	162	10.324	10.324	0.000	82	102024	2.00	2.02	
74 2,4,6-Trichlorophenol	196	10.427	10.427	0.000	94	470560	12.5	13.4	
76 2,4,5-Trichlorophenol	196	10.483	10.483	0.000	90	479167	12.5	13.1	
\$ 77 2-Fluorobiphenyl (Surr)	172	10.585	10.585	0.000	99	3039338	25.0	25.9	
78 Isosafrole Peak 2	162	10.687	10.687	0.000	83	566969	10.5	10.5	
80 1,1'-Biphenyl	154	10.733	10.733	0.000	96	1597838	12.5	12.8	
81 2-Chloronaphthalene	162	10.744	10.744	0.000	95	1302802	12.5	12.0	
82 1-Chloronaphthalene	162	10.778	10.778	0.000	97	1311075	12.5	13.8	
83 Phenyl ether	170	10.914	10.914	0.000	86	911612	12.5	12.7	
84 2-Nitroaniline	138	10.914	10.914	0.000	71	431133	12.5	12.8	
85 1,4-Naphthoquinone	158	11.028	11.028	0.000	67	507654	12.5	12.6	
S 79 Isosafrole	162				0		12.5	12.5	
89 1,3-Dinitrobenzene	168	11.153	11.153	0.000	81	209758	12.5	12.6	
87 Dimethyl phthalate	163	11.255	11.255	0.000	94	1453189	12.5	12.4	
86 1,4-Dinitrobenzene	168	11.266	11.266	0.000	80	227905	12.5	12.6	
90 2,6-Dinitrotoluene	165	11.334	11.334	0.000	86	350682	12.5	13.4	
91 Acenaphthylene	152	11.402	11.402	0.000	98	1772844	12.5	12.8	
92 3-Nitroaniline	138	11.572	11.572	0.000	90	338725	12.5	13.2	
* 93 Acenaphthene-d10	164	11.618	11.618	0.000	94	388422	5.00	5.00	
94 Acenaphthene	153	11.663	11.663	0.000	95	1226295	12.5	12.3	
95 2,4-Dinitrophenol	184	11.731	11.731	0.000	84	208805	12.5	12.8	
97 4-Nitrophenol	109	11.845	11.845	0.000	88	414522	12.5	12.9	
99 Pentachlorobenzene	250	11.856	11.856	0.000	95	524254	12.5	12.6	
101 Dibenzofuran	168	11.913	11.913	0.000	93	1787764	12.5	12.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
100 2,4-Dinitrotoluene	165	11.913	11.913	0.000	64	450059	12.5	12.1	
102 1-Naphthylamine	143	12.015	12.015	0.000	97	1234264	12.5	12.3	
103 2,3,4,6-Tetrachlorophenol	232	12.083	12.083	0.000	80	337066	12.5	12.6	
104 2-Naphthylamine	143	12.128	12.128	0.000	94	1140989	12.5	12.2	
105 Diethyl phthalate	149	12.276	12.276	0.000	96	1500908	12.5	12.7	
107 Fluorene	166	12.355	12.355	0.000	94	1459539	12.5	13.0	
106 Thionazin	107	12.366	12.366	0.000	77	300746	12.5	12.5	
110 N-Nitro-o-toluidine	152	12.378	12.378	0.000	70	407098	12.5	13.6	
109 4-Chlorophenyl phenyl ether	204	12.378	12.378	0.000	88	673577	12.5	12.0	
108 4-Nitroaniline	138	12.389	12.389	0.000	75	366887	12.5	13.2	
111 4,6-Dinitro-2-methylphenol	198	12.434	12.434	0.000	88	277216	12.5	12.7	
112 N-Nitrosodiphenylamine	169	12.525	12.525	0.000	64	1256149	12.5	13.2	
113 1,2-Diphenylhydrazine	77	12.559	12.559	0.000	41	1863026	12.5	12.3	M
\$ 114 2,4,6-Tribromophenol	330	12.639	12.639	0.000	75	365957	25.0	24.8	
115 Sulfotepp	97	12.752	12.752	0.000	78	352324	12.5	13.1	
116 cis-Diallate	86	12.888	12.888	0.000	86	534333	9.25	9.31	
117 Phorate	75	12.888	12.888	0.000	93	1173131	12.5	13.4	
118 Phenacetin	108	12.911	12.911	0.000	91	879911	12.5	13.4	
119 4-Bromophenyl phenyl ether	248	12.968	12.968	0.000	74	386121	12.5	13.3	
120 trans-Diallate	86	12.990	12.990	0.000	90	190132	3.25	3.35	
121 Hexachlorobenzene	284	13.013	13.013	0.000	88	384930	12.5	12.4	
122 Dimethoate	87	13.081	13.081	0.000	94	716153	12.5	13.1	
123 Atrazine	200	13.195	13.195	0.000	94	401322	12.5	12.8	
124 Pentachlorophenol	266	13.263	13.263	0.000	84	270002	12.5	13.3	
126 Pentachloronitrobenzene	237	13.285	13.285	0.000	55	259416	12.5	13.1	
125 4-Aminobiphenyl	169	13.274	13.274	0.000	92	1129395	12.5	13.0	
127 Pronamide	173	13.376	13.376	0.000	90	734730	12.5	13.8	
* 128 Phenanthrene-d10	188	13.501	13.501	0.000	97	651128	5.00	5.00	
129 Dinoseb	211	13.524	13.524	0.000	91	381563	12.5	14.9	
130 Phenanthrene	178	13.524	13.524	0.000	99	1966280	12.5	12.7	
131 Anthracene	178	13.592	13.592	0.000	98	2011443	12.5	13.0	
132 Carbazole	167	13.807	13.807	0.000	97	1917451	12.5	13.0	
133 Methyl parathion	109	14.011	14.011	0.000	89	583177	12.5	12.9	
134 Di-n-butyl phthalate	149	14.329	14.329	0.000	100	2662193	12.5	13.0	
135 Ethyl Parathion	109	14.556	14.556	0.000	79	393248	12.5	13.1	
136 4-Nitroquinoline-1-oxide	190	14.567	14.567	0.000	90	269784	12.5	12.7	
137 Octachlorostyrene	308	14.907	14.907	0.000	85	195120	12.5	13.3	
138 Isodrin	193	14.953	14.953	0.000	91	290941	12.5	12.7	
139 Fluoranthene	202	15.168	15.168	0.000	98	2335277	12.5	13.3	
140 Benzidine	184	15.407	15.407	0.000	99	4437397	37.5	39.8	
* 141 Pyrene-d10 (IS)	212	15.486	15.486	0.000	98	676988	5.00	5.00	
142 Pyrene	202	15.520	15.520	0.000	98	2442810	12.5	13.1	
\$ 143 p-Terphenyl-d14	244	15.804	15.804	0.000	98	3307282	25.0	26.5	
144 p-Dimethylamino azobenzene	225	16.031	16.031	0.000	91	411222	12.5	13.6	
145 Chlorobenzilate	139	16.133	16.133	0.000	87	933410	12.5	13.2	
146 3,3'-Dimethylbenzidine	212	16.598	16.598	0.000	99	1621049	12.5	13.8	
147 Butyl benzyl phthalate	149	16.654	16.654	0.000	95	1208989	12.5	12.9	
148 2-Acetylaminofluorene	181	17.018	17.018	0.000	93	971176	12.5	13.0	
150 3,3'-Dichlorobenzidine	252	17.528	17.528	0.000	77	858220	12.5	13.9	
149 Benzo[a]anthracene	228	17.528	17.528	0.000	98	2139943	12.5	13.5	
151 4,4'-Methylene bis(2-chloroani	231	17.539	17.539	0.000	94	429313	12.5	13.9	
152 Chrysene	228	17.585	17.585	0.000	97	2051188	12.5	13.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
153 Bis(2-ethylhexyl) phthalate	149	17.732	17.732	0.000	97	1762378	12.5	13.3	
154 6-Methylchrysene	242	18.390	18.390	0.000	99	1447978	12.5	13.1	
155 Di-n-octyl phthalate	149	18.901	18.901	0.000	99	3108945	12.5	13.0	
156 Benzo[b]fluoranthene	252	19.388	19.388	0.000	97	2155378	12.5	12.7	
157 7,12-Dimethylbenz(a)anthracene	256	19.388	19.388	0.000	88	979527	12.5	12.8	
158 Benzo[k]fluoranthene	252	19.434	19.434	0.000	99	2053110	12.5	13.4	
159 Benzo[a]pyrene	252	19.910	19.910	0.000	76	2149600	12.5	13.3	
* 160 Perylene-d12	264	20.001	20.001	0.000	99	674689	5.00	5.00	
161 3-Methylcholanthrene	268	20.489	20.489	0.000	91	1013224	12.5	13.1	
162 Dibenz[a,h]acridine	279	21.294	21.294	0.000	91	1498258	12.5	12.8	
163 Dibenz[a,j]acridine	279	21.374	21.374	0.000	96	1568528	12.5	12.8	
164 Indeno[1,2,3-cd]pyrene	276	21.612	21.612	0.000	99	1779748	12.5	13.5	
165 Dibenz(a,h)anthracene	278	21.657	21.657	0.000	93	1867273	12.5	13.9	
166 Benzo[g,h,i]perylene	276	21.998	21.998	0.000	98	1877175	12.5	13.5	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSS_RV8270_6_00007

Amount Added: 1.00

Units: mL

Chrom Revision: 2.3 24-Sep-2020 19:22:38

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1151a.D

Instrument ID: HP23264

Operator ID: kel10217

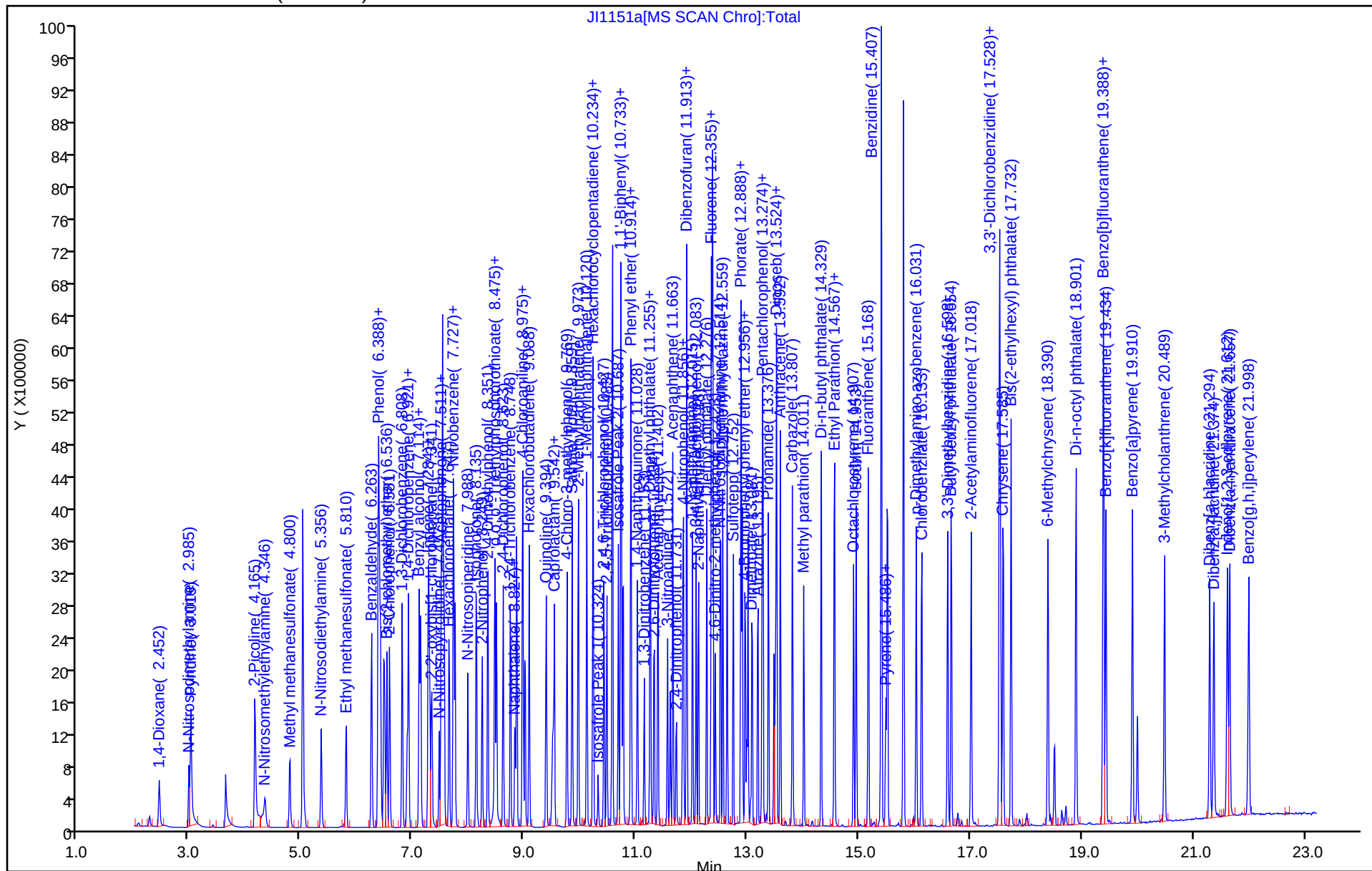
Worklist Smp#: 2

ALS Bottle#: 2

Dil. Factor: 1.0000

Limit Group: MSSV - 8270D E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Env, LLC

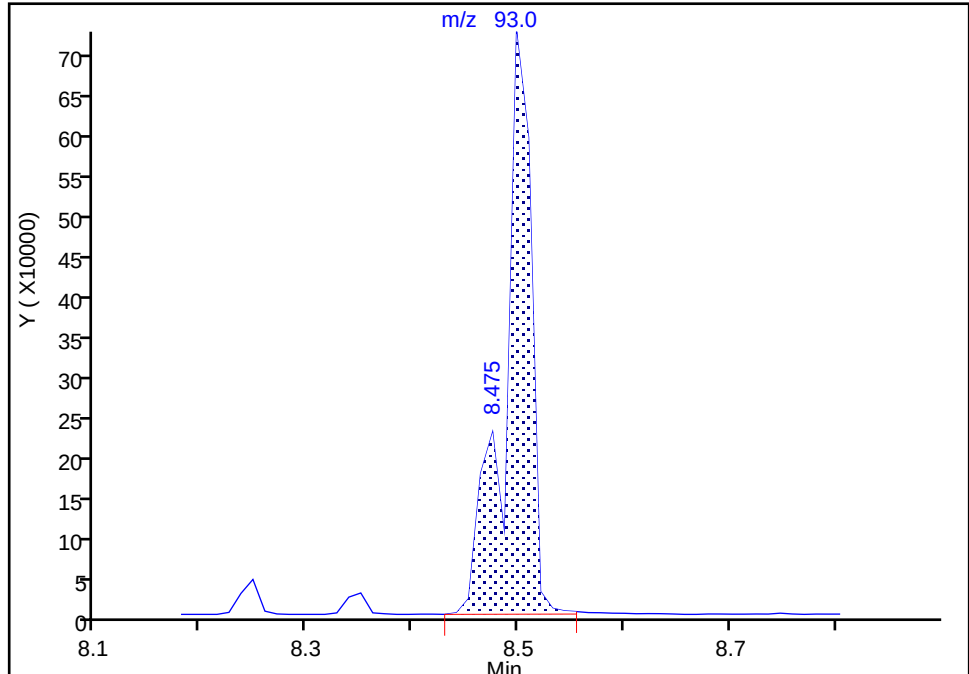
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Injection Date: 29-Sep-2020 19:00:30 Instrument ID: HP23264
Lims ID: ICIS L6
Client ID:
Operator ID: kel10217 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.25mm (0.25 mm) Detector: MS SCAN

52 Bis(2-chloroethoxy)methane, CAS: 111-91-1

Signal: 1

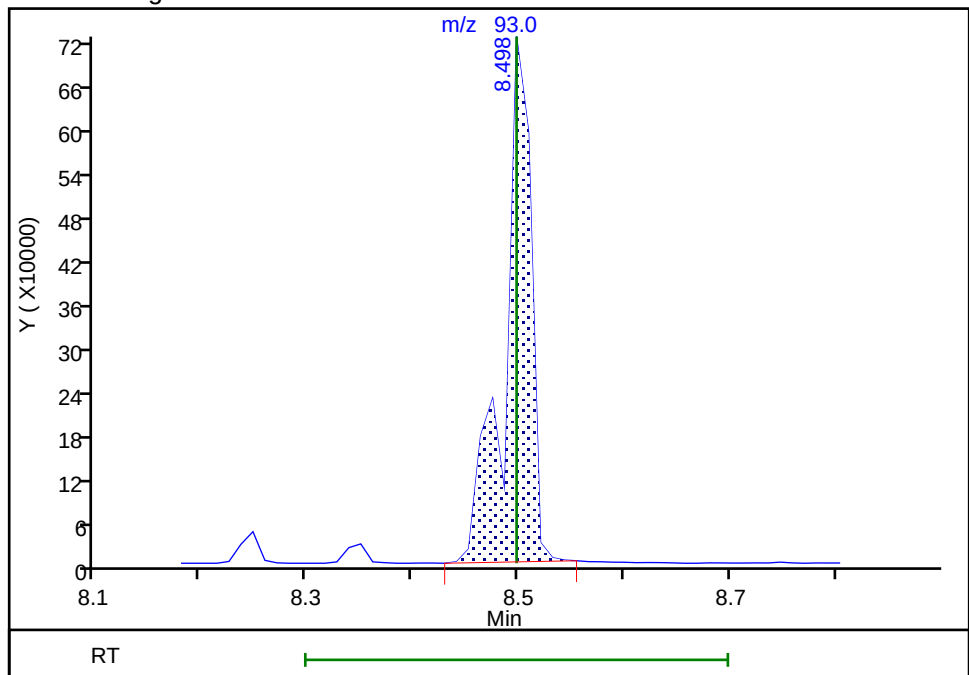
RT: 8.48
Area: 1278693
Amount: 19.151947
Amount Units: ug/ml

Processing Integration Results



RT: 8.50
Area: 1267353
Amount: 12.807398
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 07:39:09
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

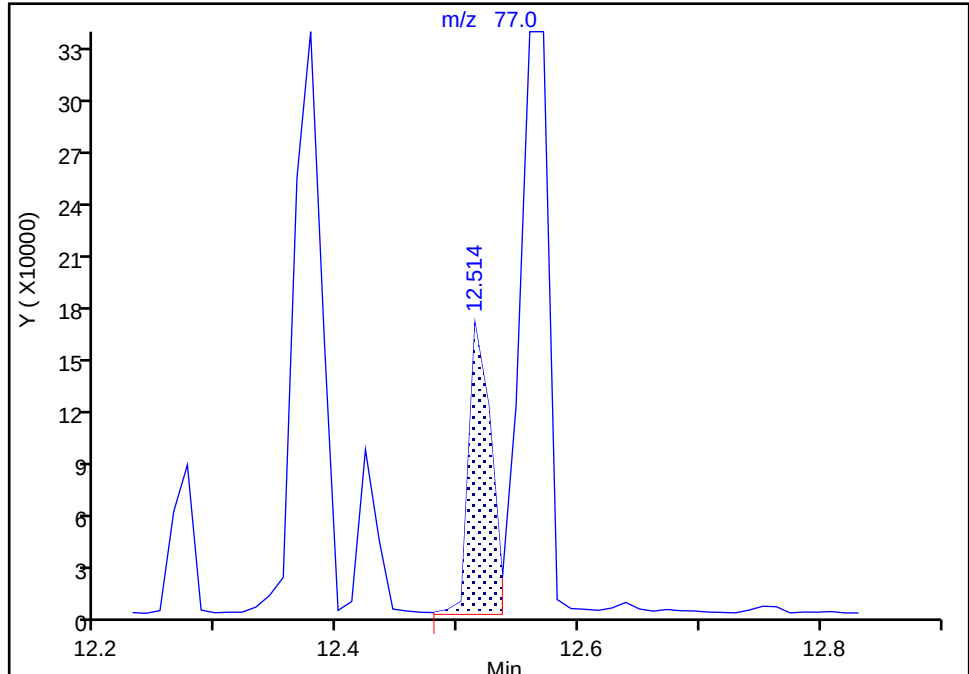
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Injection Date: 29-Sep-2020 19:00:30 Instrument ID: HP23264
Lims ID: ICIS L6
Client ID:
Operator ID: kel10217 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.25mm (0.25 mm) Detector: MS SCAN

113 1,2-Diphenylhydrazine, CAS: 122-66-7

Signal: 1

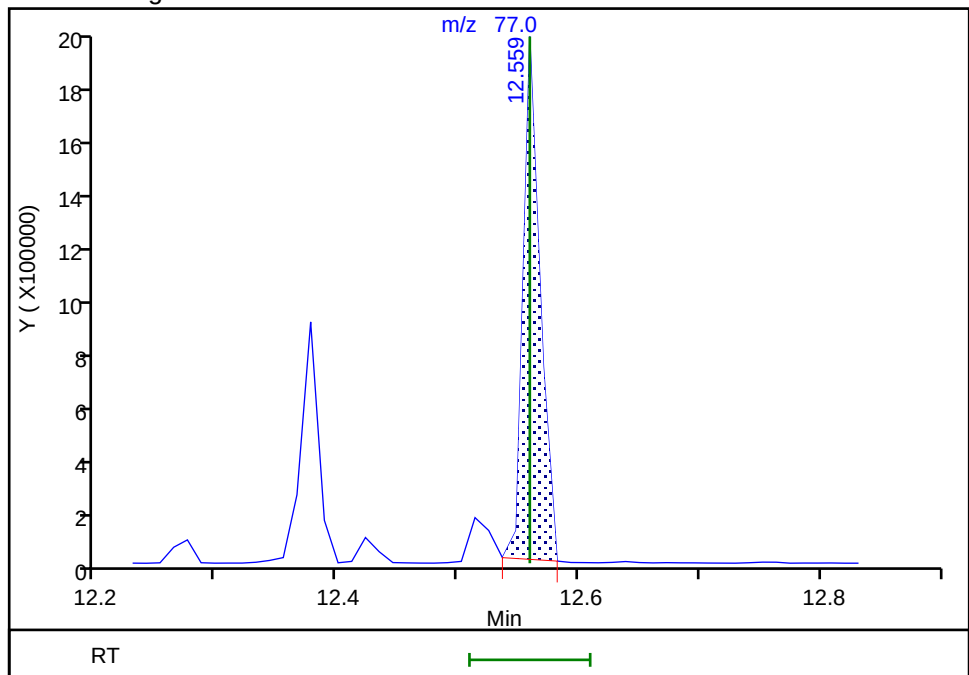
RT: 12.51
Area: 211556
Amount: 1.644151
Amount Units: ug/ml

Processing Integration Results



RT: 12.56
Area: 1863026
Amount: 12.260484
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 07:39:30
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1152.D
 Lims ID: IC L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 29-Sep-2020 19:37:30 ALS Bottle#: 3 Worklist Smp#: 3
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: IC L1
 Misc. Info.: 410-0011633-003
 Operator ID: kel10217 Instrument ID: HP23264
 Sublist: chrom-MSSemi_HP23264*sub7
 Method: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 01-Oct-2020 12:41:00 Calib Date: 29-Sep-2020 22:52:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1158a.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: bekk

Date: 30-Sep-2020 07:44:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	2.463	2.463	0.000	51	4952	0.1250	0.1461	M
3 N-Nitrosodimethylamine	74	3.030	3.030	0.000	67	5552	0.1250	0.1109	
4 Pyridine	79	3.064	3.064	0.000	96	12065	0.1250	0.1420	M
8 2-Picoline	93	4.199	4.199	0.000	81	10019	0.1250	0.1286	M
10 N-Nitrosomethylethylamine	88	4.357	4.357	0.000	22	4035	0.1250	0.1232	
11 Methyl methanesulfonate	80	4.800	4.800	0.000	41	5071	0.1250	0.1094	
\$ 12 2-Fluorophenol	112	5.027	5.027	0.000	90	15582	0.2500	0.2494	
13 N-Nitrosodiethylamine	102	5.356	5.356	0.000	95	4234	0.1250	0.1380	
15 Ethyl methanesulfonate	109	5.798	5.798	0.000	97	4350	0.1250	0.1475	
19 Benzaldehyde	77	6.252	6.252	0.000	86	8409	0.1250	0.1289	
\$ 20 Phenol-d5	99	6.365	6.365	0.000	93	22370	0.2500	0.2632	
21 Phenol	94	6.388	6.388	0.000	54	13028	0.1250	0.1350	
23 Aniline	93	6.411	6.411	0.000	94	11602	0.1250	0.1076	
S 46 Dinitrotoluene	165				0		0.2500	0.2843	
24 Bis(2-chloroethyl)ether	93	6.524	6.524	0.000	80	8606	0.1250	0.1278	
25 2-Chlorophenol	128	6.581	6.581	0.000	88	8192	0.1250	0.1351	
26 1,3-Dichlorobenzene	146	6.808	6.808	0.000	91	6928	0.1250	0.1066	
* 28 1,4-Dichlorobenzene-d4	152	6.899	6.899	0.000	98	207028	5.00	5.00	
29 1,4-Dichlorobenzene	146	6.921	6.921	0.000	86	8385	0.1250	0.1252	
30 Benzyl alcohol	108	7.114	7.114	0.000	83	4671	0.1250	0.1111	
31 1,2-Dichlorobenzene	146	7.137	7.137	0.000	90	8212	0.1250	0.1295	
34 Indene	115	7.273	7.273	0.000	84	11117	0.1250	0.1183	
33 2-Methylphenol	108	7.284	7.284	0.000	79	7865	0.1250	0.1331	
35 2,2'-oxybis[1-chloropropane]	45	7.341	7.341	0.000	90	11339	0.1250	0.1176	
36 N-Nitrosopyrrolidine	100	7.454	7.454	0.000	56	3795	0.1250	0.1172	
38 Acetophenone	105	7.500	7.500	0.000	85	9118	0.1250	0.0914	
37 4-Methylphenol	108	7.522	7.522	0.000	86	8478	0.1250	0.1243	
39 N-Nitrosodi-n-propylamine	70	7.522	7.522	0.000	90	5770	0.1250	0.0976	
40 N-Nitrosomorpholine	56	7.534	7.534	0.000	77	6937	0.1250	0.1275	
41 2-Toluidine	106	7.556	7.556	0.000	90	12411	0.1250	0.1247	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
42 Hexachloroethane	117	7.647	7.647	0.000	73	4383	0.1250	0.1318	
\$ 43 Nitrobenzene-d5	82	7.715	7.715	0.000	90	20605	0.2500	0.2210	
44 Nitrobenzene	77	7.749	7.749	0.000	88	11915	0.1250	0.1321	
45 N-Nitrosopiperidine	114	7.988	7.988	0.000	79	3289	0.1250	0.0996	
47 Isophorone	82	8.135	8.135	0.000	97	17970	0.1250	0.1141	
48 2-Nitrophenol	139	8.237	8.237	0.000	87	4105	0.1250	0.1246	
49 2,4-Dimethylphenol	107	8.339	8.339	0.000	91	9415	0.1250	0.1212	
51 o,o',o"-Triethylphosphorothioat	198	8.464	8.464	0.000	76	3525	0.1250	0.1202	
50 Benzoic acid	105	8.407	8.407	0.000	76	32255	1.25	1.84	
52 Bis(2-chloroethoxy)methane	93	8.498	8.498	0.000	96	16056	0.1250	0.1501	M
54 2,4-Dichlorophenol	162	8.623	8.623	0.000	92	5382	0.1250	0.1031	
55 1,2,4-Trichlorobenzene	180	8.748	8.748	0.000	88	7597	0.1250	0.1367	
* 56 Naphthalene-d8	136	8.827	8.827	0.000	99	820355	5.00	5.00	
57 Naphthalene	128	8.861	8.861	0.000	92	22967	0.1250	0.1334	M
58 4-Chloroaniline	127	8.963	8.963	0.000	91	8691	0.1250	0.1228	
59 2,6-Dichlorophenol	162	8.974	8.974	0.000	76	5676	0.1250	0.1112	
61 Hexachloropropene	213	9.009	9.009	0.000	87	4700	0.1250	0.1057	
62 Hexachlorobutadiene	225	9.088	9.088	0.000	90	4801	0.1250	0.1298	
63 Quinoline	129	9.383	9.383	0.000	95	12482	0.1250	0.1164	
64 Caprolactam	113	9.462	9.462	0.000	21	1491	0.1250	0.0875	M
65 N-Nitrosodi-n-butylamine	84	9.530	9.530	0.000	87	7385	0.1250	0.1254	
S 60 Diallate	86				0		0.1250	0.1323	
67 4-Chloro-3-methylphenol	107	9.757	9.757	0.000	89	7620	0.1250	0.1247	
68 Safrole, Total	162	9.859	9.859	0.000	87	5328	0.1250	0.1113	
69 2-Methylnaphthalene	142	9.961	9.961	0.000	88	14423	0.1250	0.1261	
70 1-Methylnaphthalene	142	10.120	10.120	0.000	87	13106	0.1250	0.1218	
71 Hexachlorocyclopentadiene	237	10.234	10.234	0.000	74	4379	0.1250	0.1246	
72 1,2,4,5-Tetrachlorobenzene	216	10.234	10.234	0.000	88	5627	0.1250	0.1048	
73 Isosafrole Peak 1	162	10.324	10.324	0.000	1	567	0.0200	0.0107	
74 2,4,6-Trichlorophenol	196	10.427	10.427	0.000	82	4411	0.1250	0.1207	
76 2,4,5-Trichlorophenol	196	10.472	10.472	0.000	76	3934	0.1250	0.1034	
\$ 77 2-Fluorobiphenyl (Surr)	172	10.574	10.574	0.000	98	29886	0.2500	0.2439	
78 Isosafrole Peak 2	162	10.687	10.687	0.000	76	5368	0.1050	0.0948	
80 1,1'-Biphenyl	154	10.721	10.721	0.000	95	13348	0.1250	0.1025	
81 2-Chloronaphthalene	162	10.733	10.733	0.000	94	13864	0.1250	0.1228	M
82 1-Chloronaphthalene	162	10.767	10.767	0.000	94	11892	0.1250	0.1202	M
83 Phenyl ether	170	10.903	10.903	0.000	78	9498	0.1250	0.1265	
84 2-Nitroaniline	138	10.914	10.914	0.000	63	4065	0.1250	0.1159	
85 1,4-Naphthoquinone	158	11.028	11.028	0.000	77	4985	0.1250	0.1186	
S 79 Isosafrole	162				0		0.1250	0.1055	
89 1,3-Dinitrobenzene	168	11.141	11.141	0.000	77	1882	0.1250	0.1079	
87 Dimethyl phthalate	163	11.255	11.255	0.000	91	15918	0.1250	0.1298	
86 1,4-Dinitrobenzene	168	11.255	11.255	0.000	41	1909	0.1250	0.1011	a
90 2,6-Dinitrotoluene	165	11.323	11.323	0.000	63	3808	0.1250	0.1390	
91 Acenaphthylene	152	11.391	11.391	0.000	97	18632	0.1250	0.1293	
92 3-Nitroaniline	138	11.561	11.561	0.000	91	3696	0.1250	0.1381	
* 93 Acenaphthene-d10	164	11.618	11.618	0.000	96	405500	5.00	5.00	
94 Acenaphthene	153	11.663	11.663	0.000	93	13288	0.1250	0.1280	
95 2,4-Dinitrophenol	184	11.720	11.720	0.000	83	10755	1.13	0.6291	
97 4-Nitrophenol	109	11.833	11.833	0.000	90	13178	0.6250	0.3922	
99 Pentachlorobenzene	250	11.856	11.856	0.000	87	3833	0.1250	0.0881	
101 Dibenzofuran	168	11.913	11.913	0.000	93	16608	0.1250	0.1112	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
100 2,4-Dinitrotoluene	165	11.913	11.913	0.000	64	5629	0.1250	0.1453	
102 1-Naphthylamine	143	12.015	12.015	0.000	97	12737	0.1250	0.1214	
103 2,3,4,6-Tetrachlorophenol	232	12.083	12.083	0.000	72	3104	0.1250	0.1115	
104 2-Naphthylamine	143	12.117	12.117	0.000	95	12491	0.1250	0.1278	
105 Diethyl phthalate	149	12.264	12.264	0.000	96	16655	0.1250	0.1348	
107 Fluorene	166	12.355	12.355	0.000	96	13980	0.1250	0.1191	
106 Thionazin	107	12.355	12.355	0.000	51	2745	0.1250	0.1096	M
109 4-Chlorophenyl phenyl ether	204	12.378	12.378	0.000	83	7205	0.1250	0.1230	
110 N-Nitro-o-toluidine	152	12.366	12.366	0.000	67	2693	0.1250	0.0861	
108 4-Nitroaniline	138	12.378	12.378	0.000	69	2752	0.1250	0.0948	
111 4,6-Dinitro-2-methylphenol	198	12.423	12.423	0.000	82	9638	0.6250	0.3943	
112 N-Nitrosodiphenylamine	169	12.514	12.514	0.000	63	12547	0.1250	0.1182	
113 1,2-Diphenylhydrazine	77	12.559	12.559	0.000	43	23659	0.1250	0.1393	
\$ 114 2,4,6-Tribromophenol	330	12.639	12.639	0.000	82	3929	0.2500	0.2546	
115 Sulfotepp	97	12.741	12.741	0.000	69	2970	0.1250	0.0989	
116 cis-Diallate	86	12.877	12.877	0.000	58	5551	0.0925	0.0865	M
117 Phorate	75	12.888	12.888	0.000	90	9523	0.1250	0.0971	
118 Phenacetin	108	12.900	12.900	0.000	88	6321	0.1250	0.0861	
119 4-Bromophenyl phenyl ether	248	12.956	12.956	0.000	74	4178	0.1250	0.1284	
120 trans-Diallate	86	12.979	12.979	0.000	1	2910	0.0325	0.0458	M
121 Hexachlorobenzene	284	13.013	13.013	0.000	88	4545	0.1250	0.1306	
122 Dimethoate	87	13.070	13.070	0.000	91	6131	0.1250	0.1003	
123 Atrazine	200	13.183	13.183	0.000	77	3089	0.1250	0.0884	
124 Pentachlorophenol	266	13.251	13.251	0.000	54	1473	0.1250	0.0649	
125 4-Aminobiphenyl	169	13.274	13.274	0.000	88	12164	0.1250	0.1255	
126 Pentachloronitrobenzene	237	13.274	13.274	0.000	50	2507	0.1250	0.1133	
127 Pronamide	173	13.376	13.376	0.000	85	8539	0.1250	0.1434	
* 128 Phenanthrene-d10	188	13.489	13.489	0.000	98	728007	5.00	5.00	
129 Dinoseb	211	13.512	13.512	0.000	61	2476	0.1250	0.0864	
130 Phenanthrene	178	13.523	13.523	0.000	92	21856	0.1250	0.1263	
131 Anthracene	178	13.592	13.592	0.000	96	21781	0.1250	0.1258	
132 Carbazole	167	13.807	13.807	0.000	96	16904	0.1250	0.1029	
133 Methyl parathion	109	14.011	14.011	0.000	81	5757	0.1250	0.1140	
134 Di-n-butyl phthalate	149	14.318	14.318	0.000	98	23724	0.1250	0.1033	
135 Ethyl Parathion	109	14.556	14.556	0.000	71	3372	0.1250	0.1005	
136 4-Nitroquinoline-1-oxide	190	14.567	14.567	0.000	75	1274	0.1250	0.2658	
137 Octachlorostyrene	308	14.896	14.896	0.000	62	2262	0.1250	0.1375	
138 Isodrin	193	14.953	14.953	0.000	77	3675	0.1250	0.1437	
139 Fluoranthene	202	15.168	15.168	0.000	95	21637	0.1250	0.1100	
140 Benzidine	184	15.395	15.395	0.000	98	104301	1.00	0.8522	
* 141 Pyrene-d10 (IS)	212	15.486	15.486	0.000	98	743437	5.00	5.00	
142 Pyrene	202	15.509	15.509	0.000	98	23850	0.1250	0.1168	
\$ 143 p-Terphenyl-d14	244	15.792	15.792	0.000	95	30048	0.2500	0.2192	
144 p-Dimethylamino azobenzene	225	16.031	16.031	0.000	87	4143	0.1250	0.1251	
145 Chlorobenzilate	139	16.121	16.121	0.000	83	6047	0.1250	0.0781	
146 3,3'-Dimethylbenzidine	212	16.586	16.586	0.000	95	11956	0.1250	0.0926	
147 Butyl benzyl phthalate	149	16.654	16.654	0.000	91	9626	0.1250	0.0932	
148 2-Acetylaminofluorene	181	17.006	17.006	0.000	85	6649	0.1250	0.0811	
150 3,3'-Dichlorobenzidine	252	17.517	17.517	0.000	59	7039	0.1250	0.1037	
149 Benzo[a]anthracene	228	17.517	17.517	0.000	97	20370	0.1250	0.1170	
151 4,4'-Methylene bis(2-chloroani	231	17.539	17.539	0.000	86	4389	0.1250	0.1291	
152 Chrysene	228	17.585	17.585	0.000	92	19967	0.1250	0.1166	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
153 Bis(2-ethylhexyl) phthalate	149	17.732	17.732	0.000	94	15214	0.1250	0.1049	
154 6-Methylchrysene	242	18.390	18.390	0.000	98	12458	0.1250	0.1025	
155 Di-n-octyl phthalate	149	18.889	18.889	0.000	98	27518	0.1250	0.1074	
156 Benzo[b]fluoranthene	252	19.377	19.377	0.000	94	19559	0.1250	0.1078	
157 7,12-Dimethylbenz(a)anthracene	256	19.377	19.377	0.000	88	9479	0.1250	0.1160	
158 Benzo[k]fluoranthene	252	19.422	19.422	0.000	95	16761	0.1250	0.1019	
159 Benzo[a]pyrene	252	19.899	19.899	0.000	80	17210	0.1250	0.0996	
* 160 Perylene-d12	264	19.990	19.990	0.000	98	722338	5.00	5.00	
161 3-Methylcholanthrene	268	20.477	20.477	0.000	88	9712	0.1250	0.1173	
162 Dibenz[a,h]acridine	279	21.283	21.283	0.000	90	12045	0.1250	0.0960	
163 Dibenz[a,j]acridine	279	21.351	21.351	0.000	93	12086	0.1250	0.0919	
164 Indeno[1,2,3-cd]pyrene	276	21.600	21.600	0.000	97	15145	0.1250	0.1069	M
165 Dibenz(a,h)anthracene	278	21.646	21.646	0.000	92	14069	0.1250	0.0977	
166 Benzo[g,h,i]perylene	276	21.975	21.975	0.000	92	15551	0.1250	0.1043	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_1_00009

Amount Added: 1.00

Units: mL

Report Date: 01-Oct-2020 12:41:04

Chrom Revision: 2.3 24-Sep-2020 19:22:38

Euofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1152.D

Injection Date: 29-Sep-2020 19:37:30

Instrument ID: HP23264

Operator ID: kel10217

Lims ID: IC L1

Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 ul

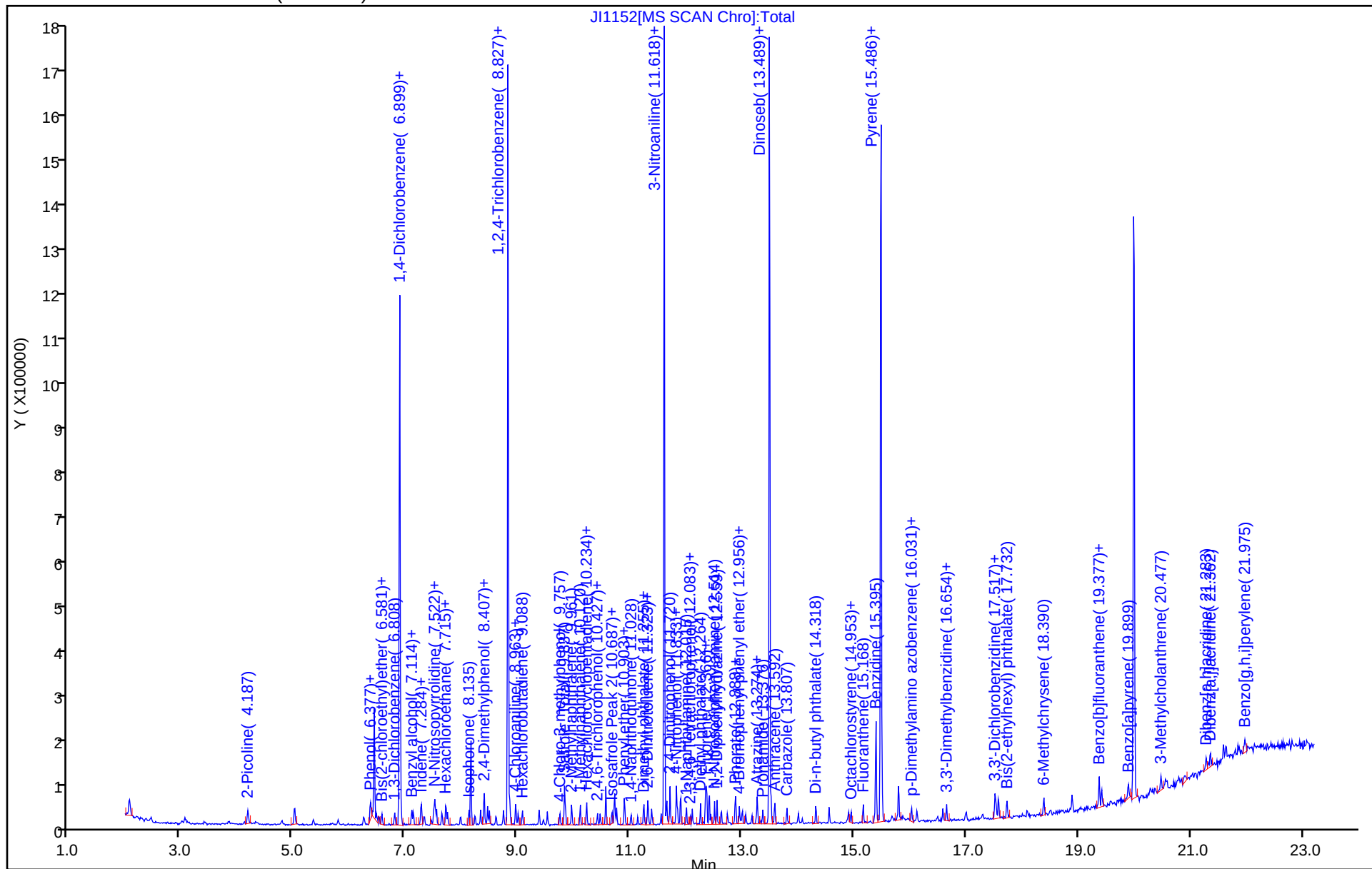
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: MSSeml_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1152.D

Injection Date: 29-Sep-2020 19:37:30

Instrument ID: HP23264

Lims ID: IC L1

Client ID:

Operator ID: kel10217

ALS Bottle#:

3

Worklist Smp#: 3

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

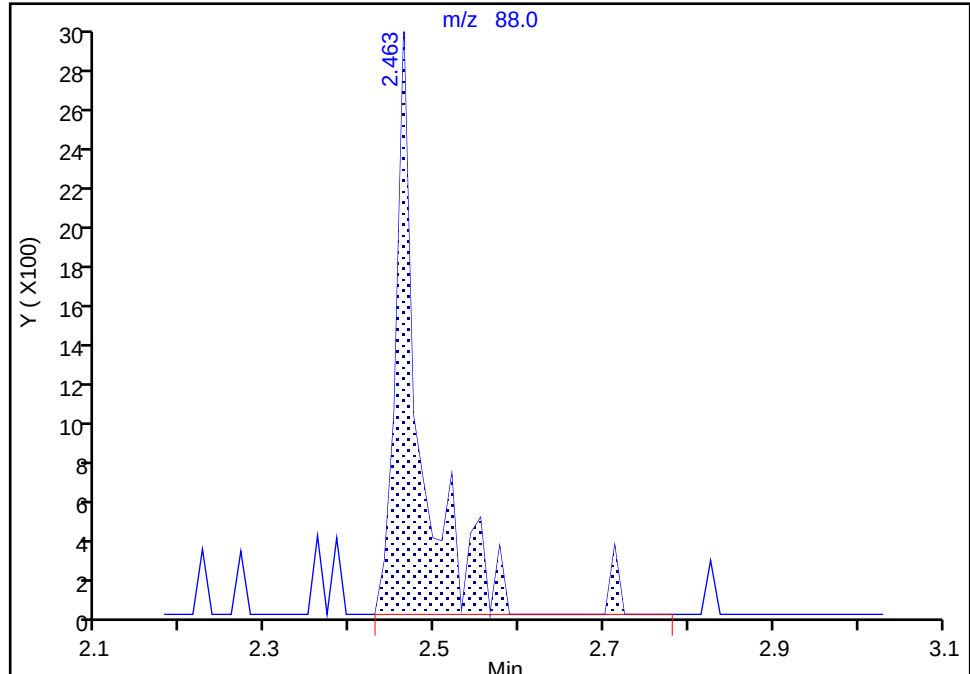
MS SCAN

2 1,4-Dioxane, CAS: 123-91-1

Signal: 1

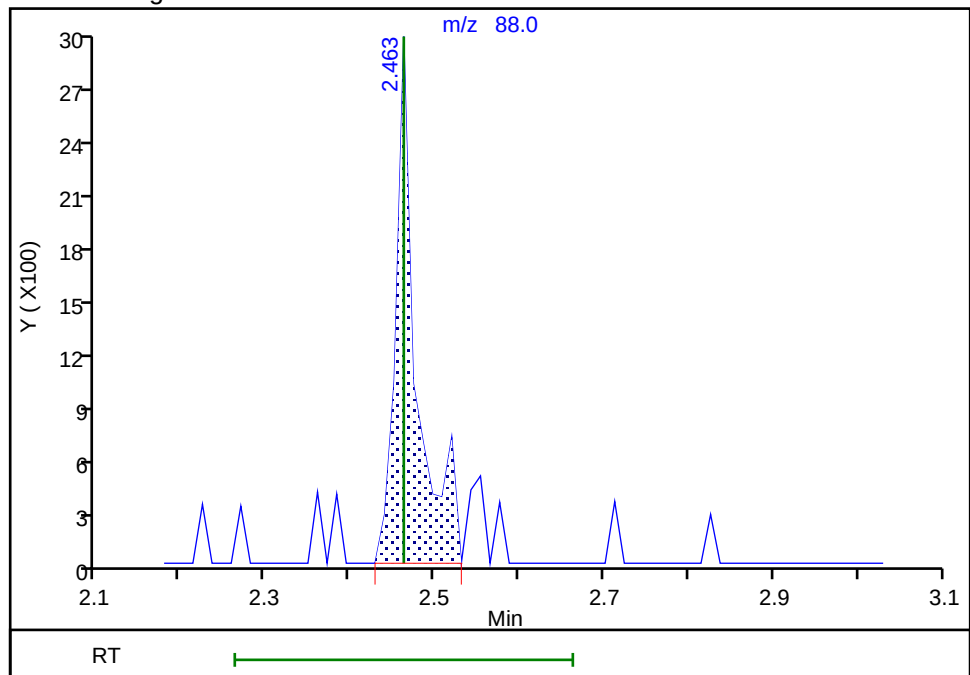
RT: 2.46
Area: 6015
Amount: 0.175469
Amount Units: ug/ml

Processing Integration Results



RT: 2.46
Area: 4952
Amount: 0.146105
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 07:40:36

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

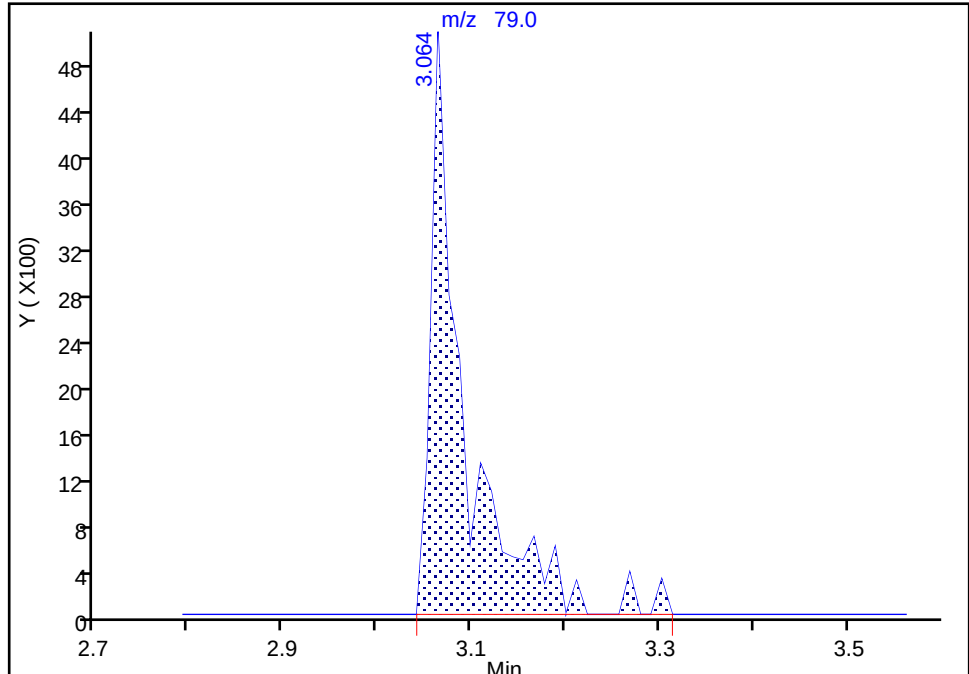
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Injection Date: 29-Sep-2020 19:37:30 Instrument ID: HP23264
Lims ID: IC L1
Client ID:
Operator ID: kel10217 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.25mm (0.25 mm) Detector MS SCAN

4 Pyridine, CAS: 110-86-1

Signal: 1

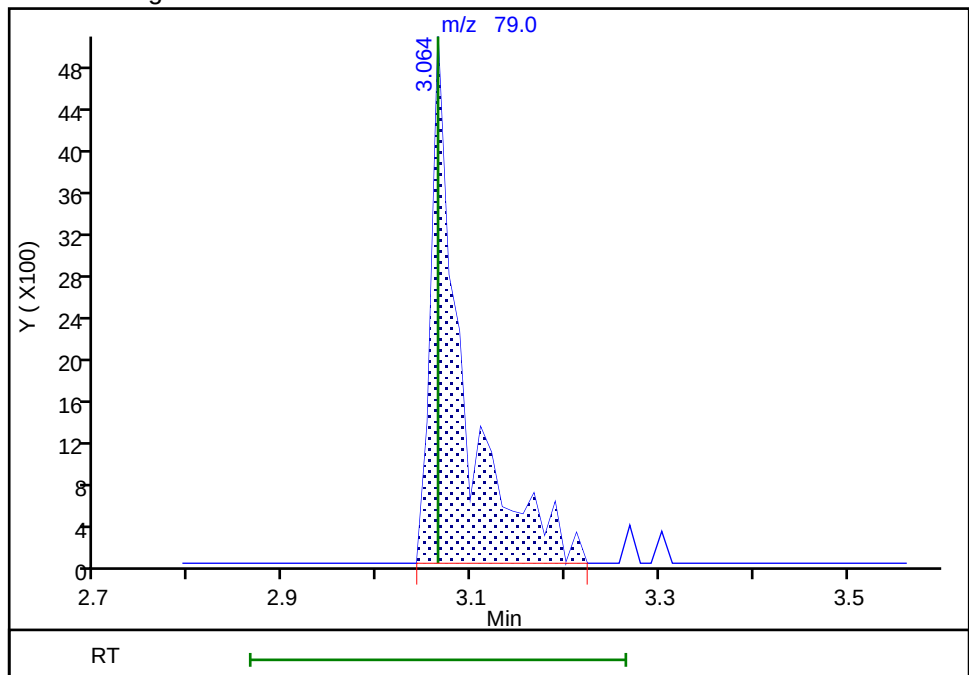
RT: 3.06
Area: 12525
Amount: 0.146220
Amount Units: ug/ml

Processing Integration Results



RT: 3.06
Area: 12065
Amount: 0.141979
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 07:40:56
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1152.D

Injection Date: 29-Sep-2020 19:37:30

Instrument ID: HP23264

Lims ID: IC L1

Client ID:

Operator ID: kel10217

ALS Bottle#:

3

Worklist Smp#: 3

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

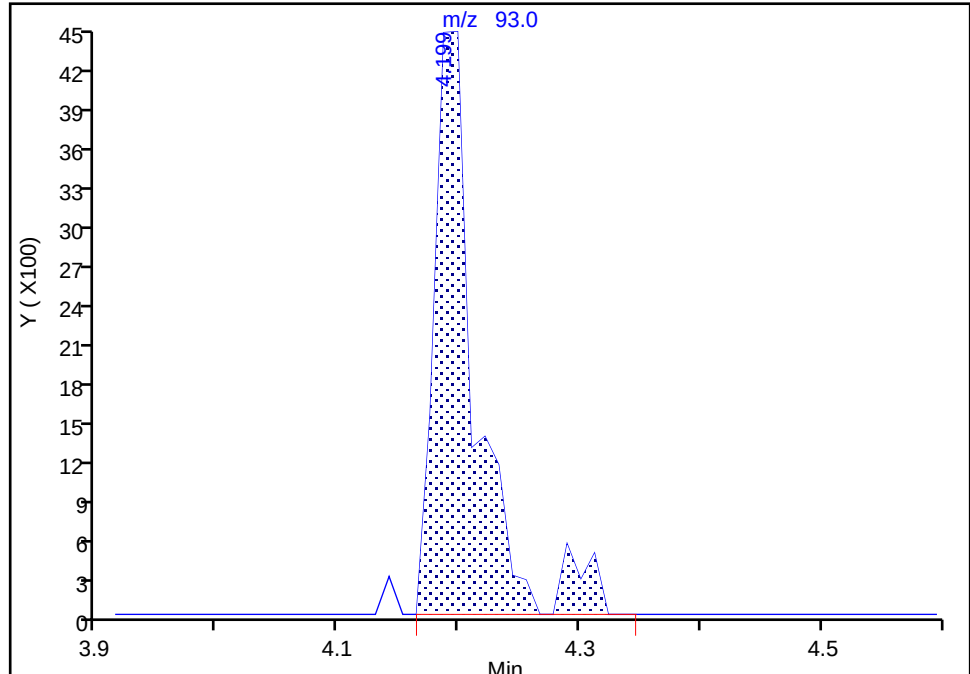
MS SCAN

8 2-Picoline, CAS: 109-06-8

Signal: 1

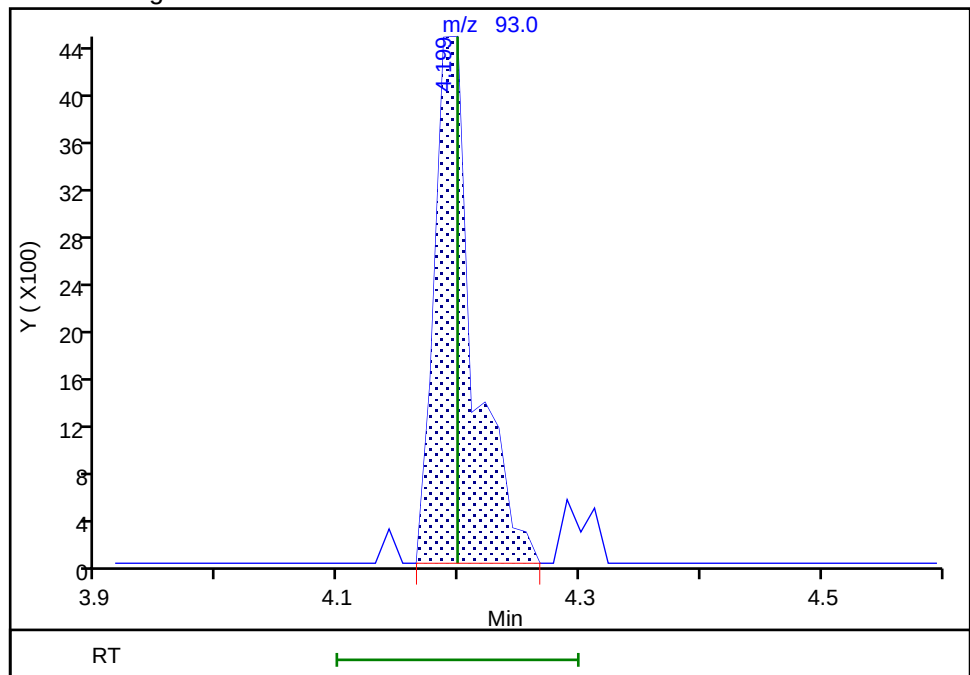
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Area: 10879
Amount: 0.139280
Amount Units: ug/ml

Processing Integration Results



RT: 4.20
Area: 10019
Amount: 0.128559
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 07:41:02

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1152.D

Injection Date: 29-Sep-2020 19:37:30

Instrument ID: HP23264

Lims ID: IC L1

Client ID:

Operator ID: kel10217

ALS Bottle#:

3

Worklist Smp#: 3

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

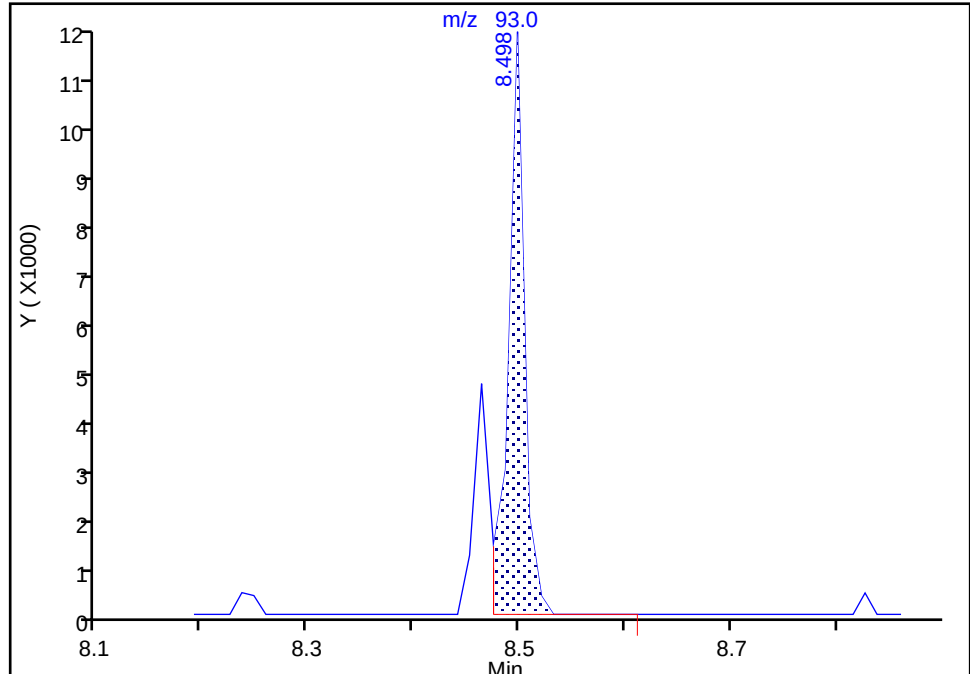
MS SCAN

52 Bis(2-chloroethoxy)methane, CAS: 111-91-1

Signal: 1

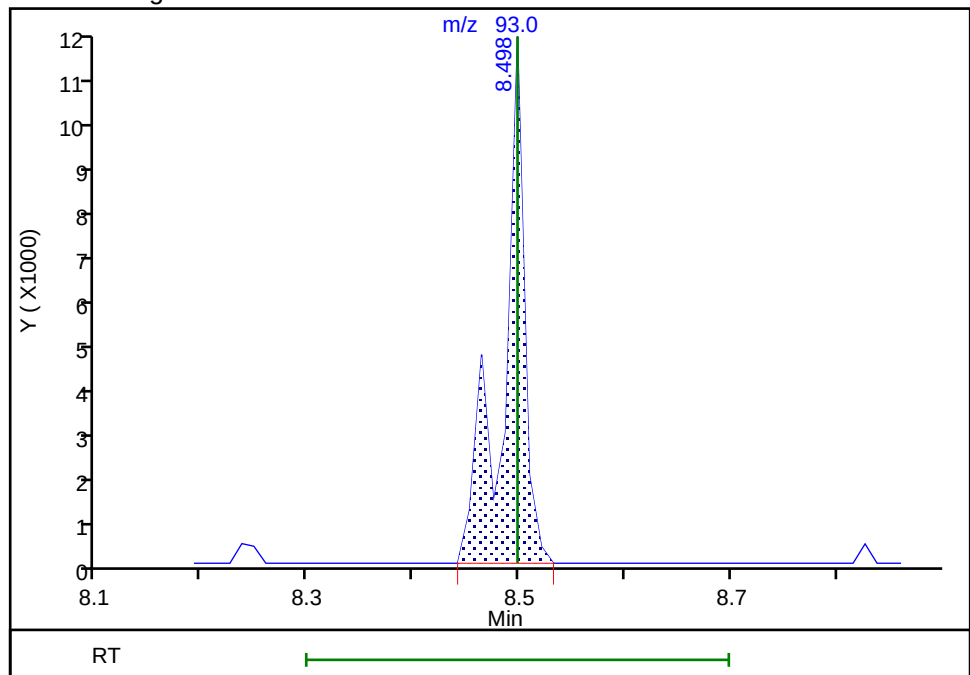
RT: 8.50
Area: 11725
Amount: 0.162801
Amount Units: ug/ml

Processing Integration Results



RT: 8.50
Area: 16056
Amount: 0.150076
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 07:41:24

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1152.D

Injection Date: 29-Sep-2020 19:37:30

Instrument ID: HP23264

Lims ID: IC L1

Client ID:

Operator ID: kel10217

ALS Bottle#:

3

Worklist Smp#: 3

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

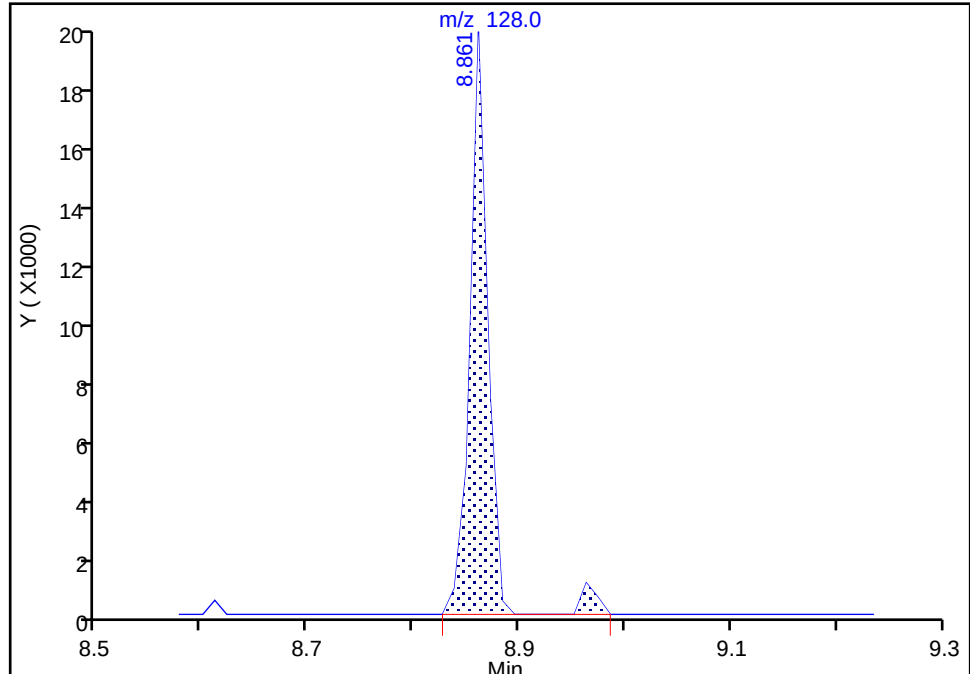
MS SCAN

57 Naphthalene, CAS: 91-20-3

Signal: 1

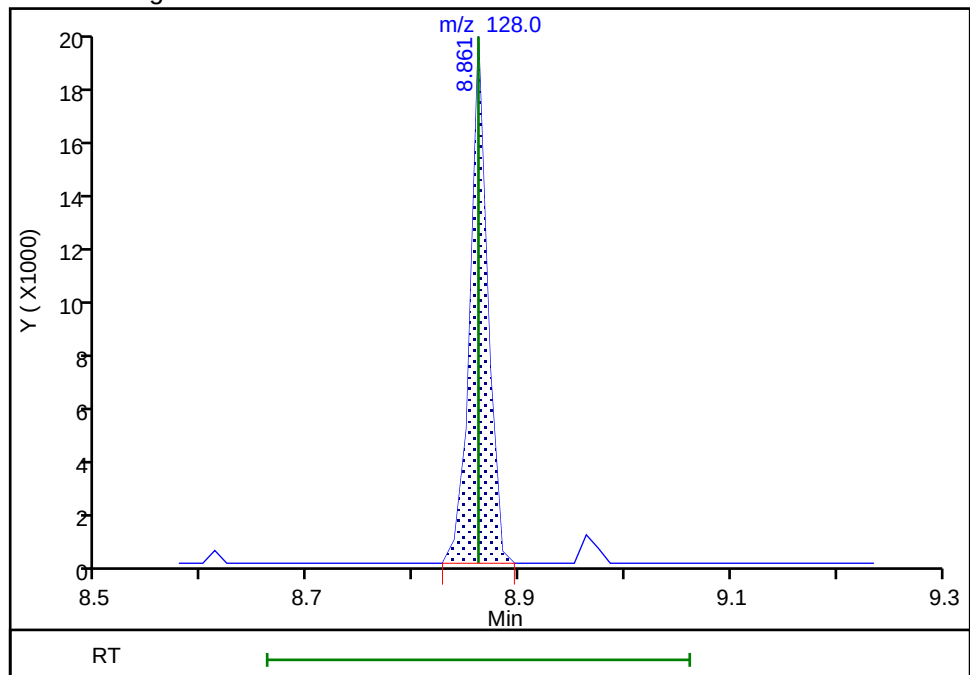
RT: 8.86
Area: 24091
Amount: 0.137134
Amount Units: ug/ml

Processing Integration Results



RT: 8.86
Area: 22967
Amount: 0.133442
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 07:41:33

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1152.D

Injection Date: 29-Sep-2020 19:37:30

Instrument ID: HP23264

Lims ID: IC L1

Client ID:

Operator ID: kel10217

ALS Bottle#:

3

Worklist Smp#: 3

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

MS SCAN

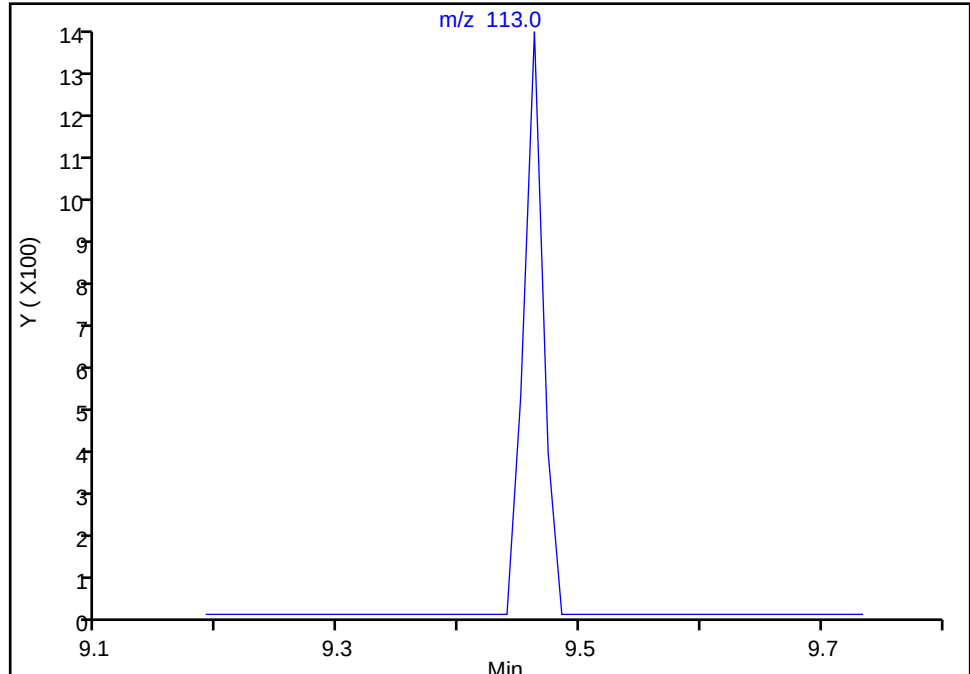
64 Caprolactam, CAS: 105-60-2

Signal: 1

Not Detected

Expected RT: 9.46

Processing Integration Results



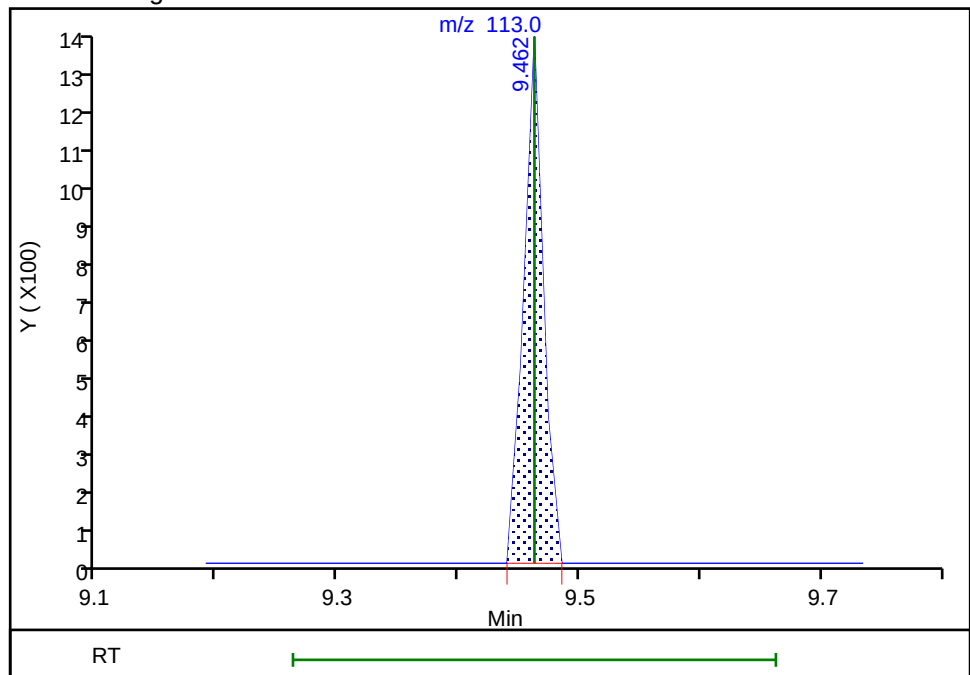
RT: 9.46

Area: 1491

Amount: 0.087522

Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 07:41:41

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1152.D

Injection Date: 29-Sep-2020 19:37:30

Instrument ID: HP23264

Lims ID: IC L1

Client ID:

Operator ID: kel10217

ALS Bottle#:

3

Worklist Smp#: 3

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

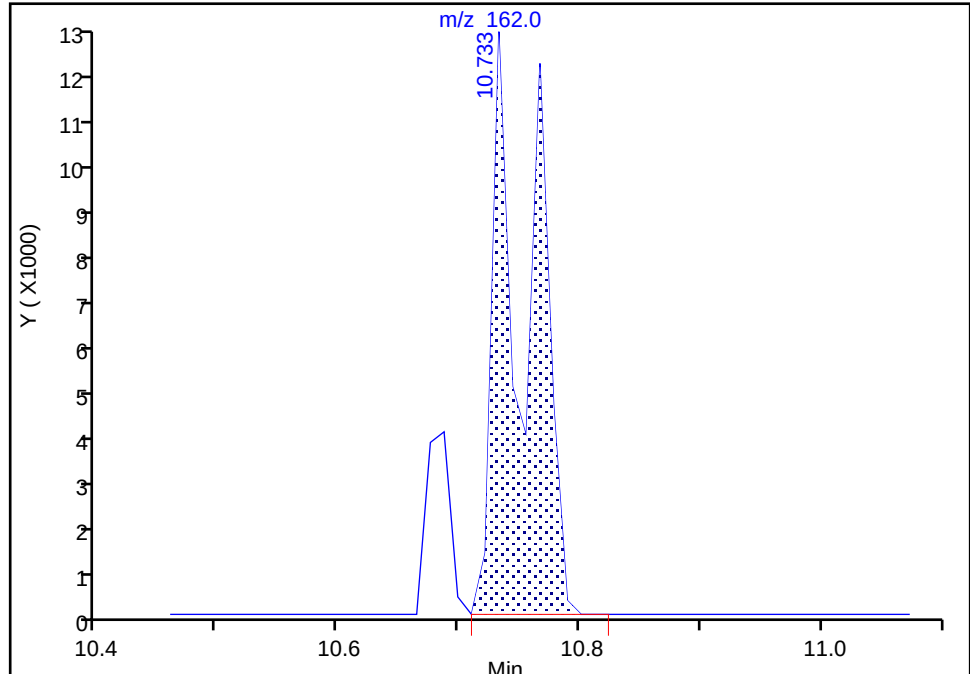
Detector: MS SCAN

81 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

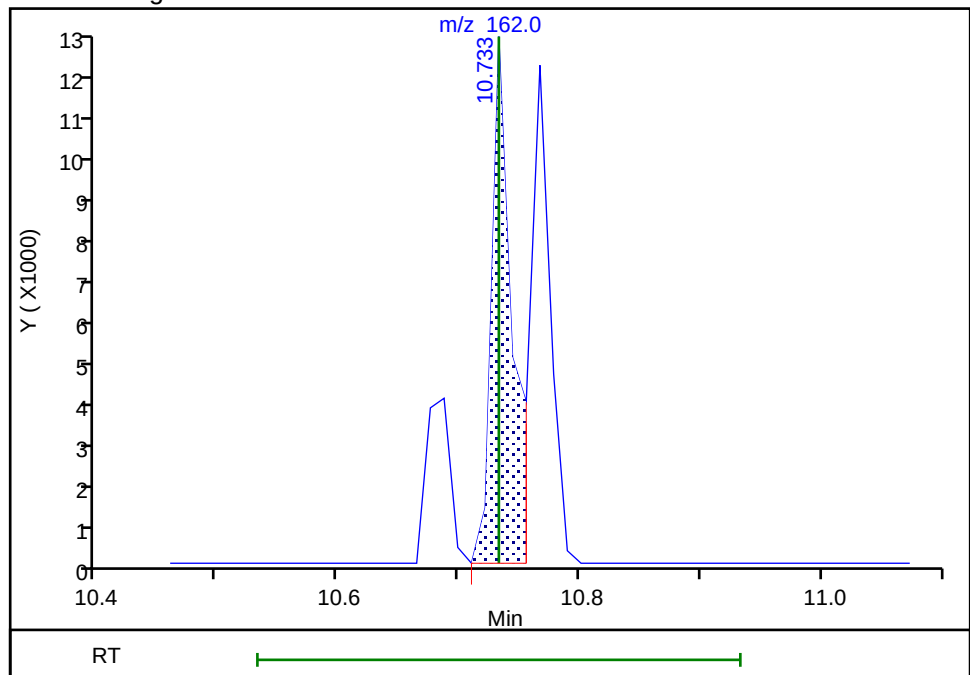
RT: 10.73
Area: 26322
Amount: 0.149012
Amount Units: ug/ml

Processing Integration Results



RT: 10.73
Area: 13864
Amount: 0.122793
Amount Units: ug/ml

Manual Integration Results



Reviewer: beccak, 30-Sep-2020 07:41:58

Audit Action: Split an Integrated Peak

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

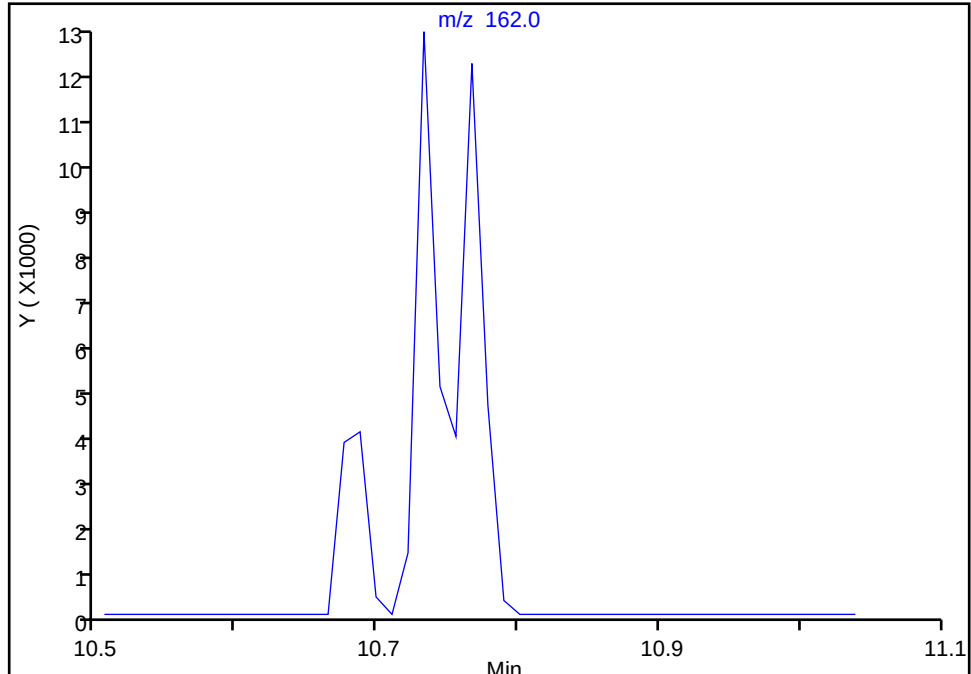
Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1152.D
Injection Date: 29-Sep-2020 19:37:30 Instrument ID: HP23264
Lims ID: IC L1
Client ID:
Operator ID: kel10217 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.25mm (0.25 mm) Detector MS SCAN

82 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

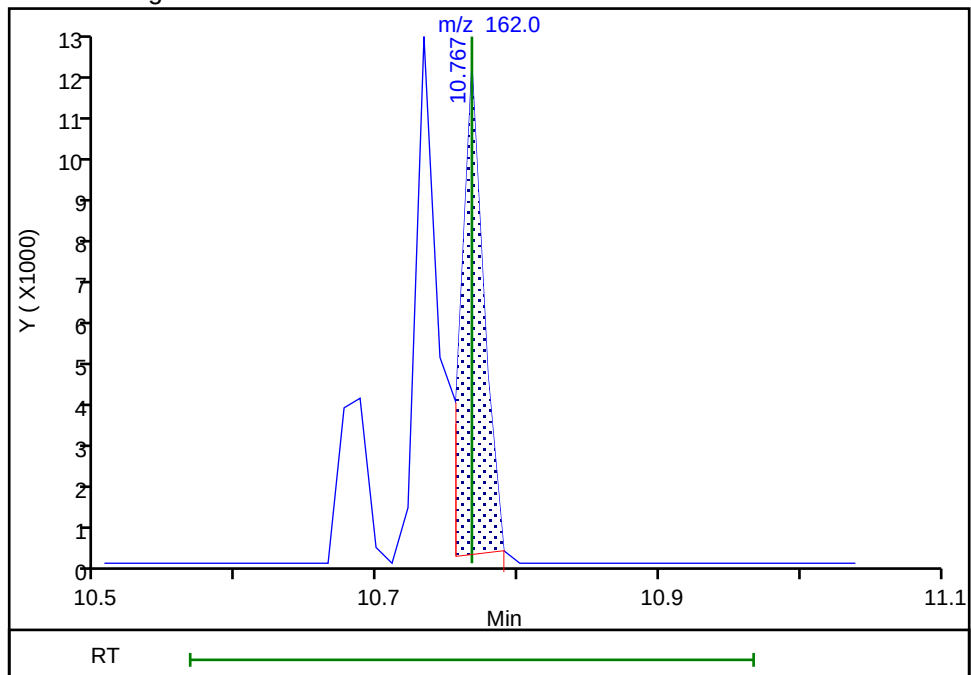
Not Detected
Expected RT: 10.77

Processing Integration Results



Manual Integration Results

RT: 10.77
Area: 11892
Amount: 0.120230
Amount Units: ug/ml



Reviewer: bekk, 30-Sep-2020 07:42:02

Audit Action: Split an Integrated Peak

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1152.D

Injection Date: 29-Sep-2020 19:37:30

Instrument ID: HP23264

Lims ID: IC L1

Client ID:

Operator ID: kel10217

ALS Bottle#:

3

Worklist Smp#: 3

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

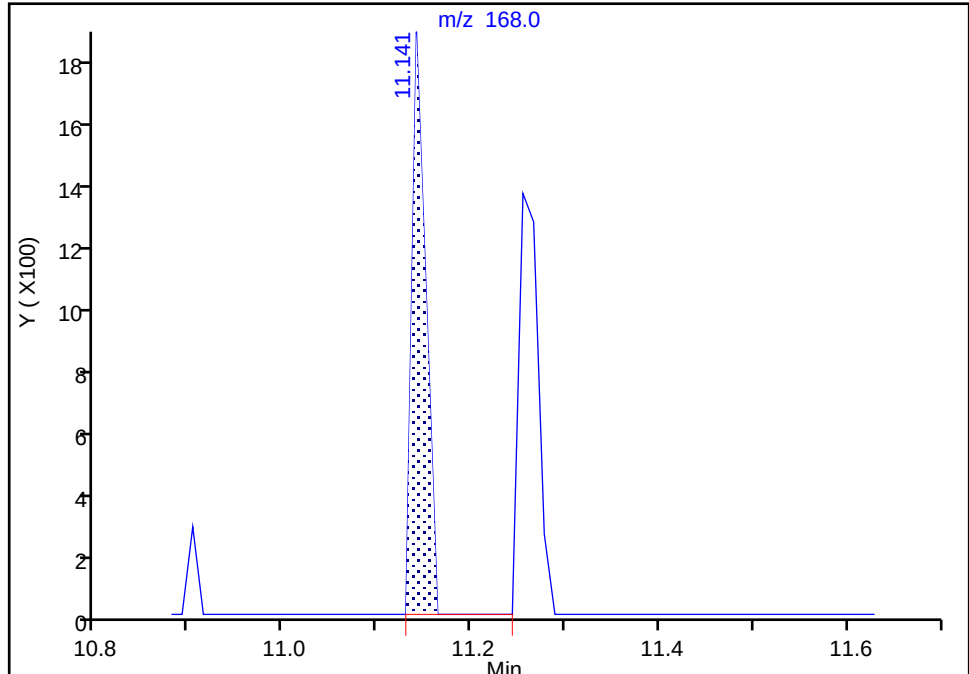
MS SCAN

86 1,4-Dinitrobenzene, CAS: 100-25-4

Signal: 1

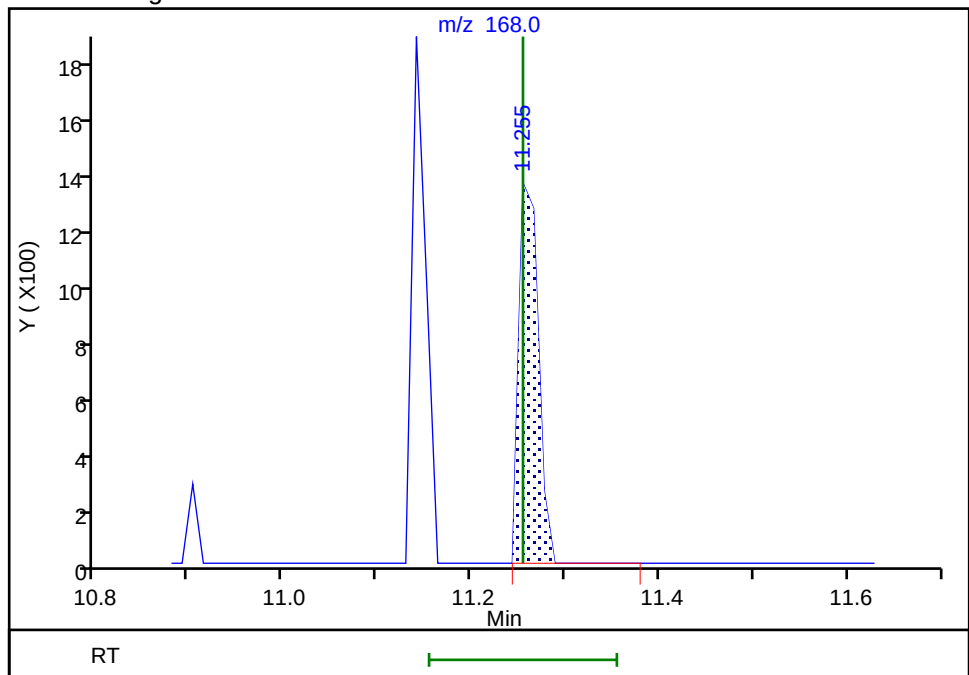
RT: 11.14
Area: 1882
Amount: 0.098840
Amount Units: ug/ml

Processing Integration Results



RT: 11.25
Area: 1909
Amount: 0.101143
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 07:42:51

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1152.D

Injection Date: 29-Sep-2020 19:37:30

Instrument ID: HP23264

Lims ID: IC L1

Client ID:

Operator ID: kel10217

ALS Bottle#:

3

Worklist Smp#: 3

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

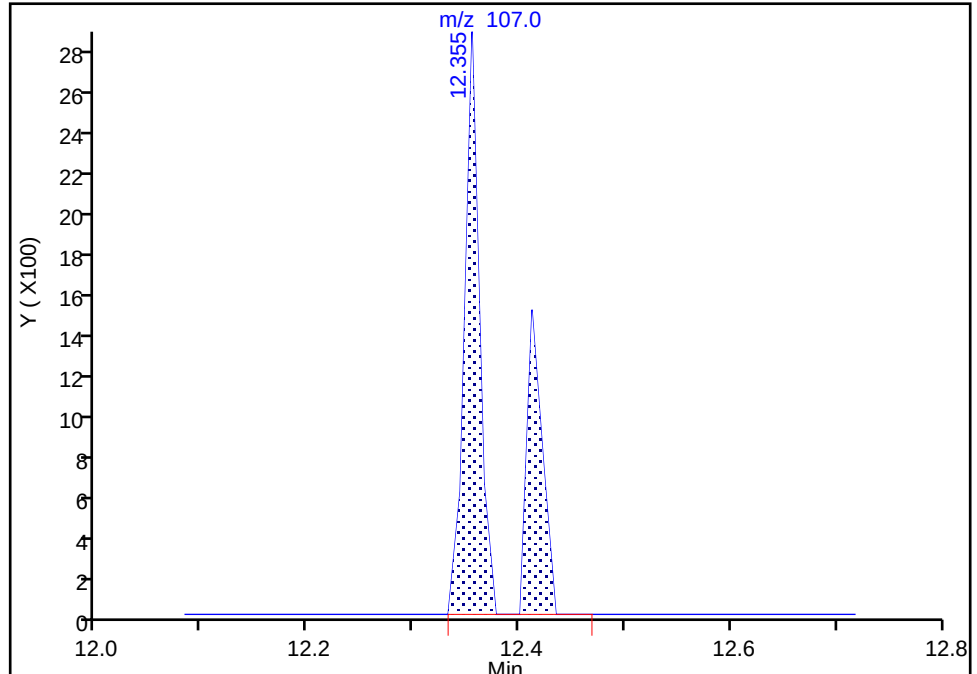
MS SCAN

106 Thionazin, CAS: 297-97-2

Signal: 1

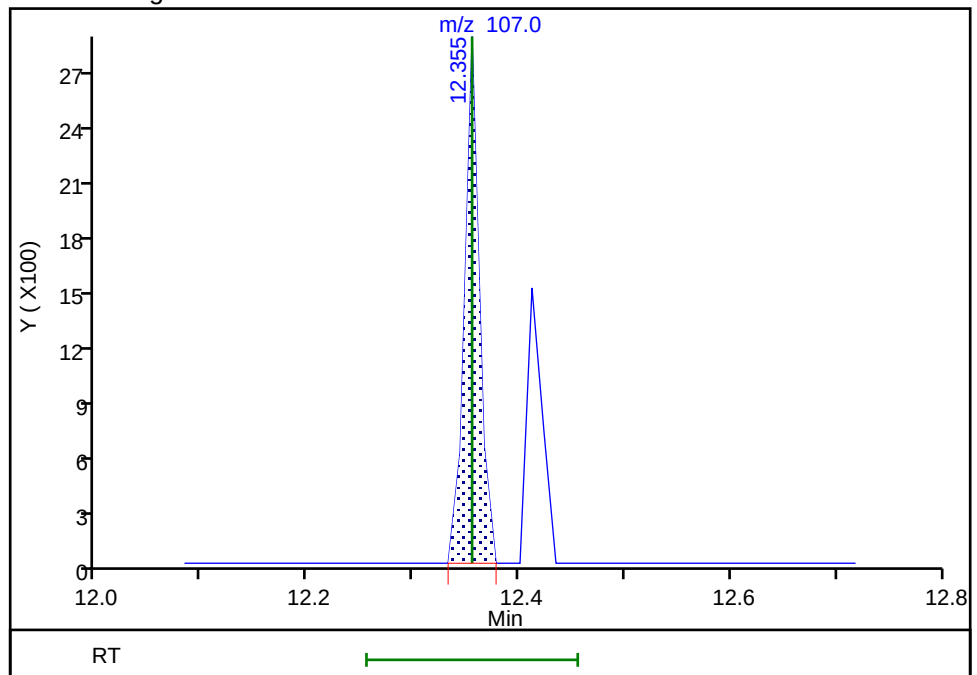
RT: 12.36
Area: 4220
Amount: 0.167070
Amount Units: ug/ml

Processing Integration Results



RT: 12.36
Area: 2745
Amount: 0.109578
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 07:43:22

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1152.D

Injection Date: 29-Sep-2020 19:37:30

Instrument ID: HP23264

Lims ID: IC L1

Client ID:

Operator ID: kel10217

ALS Bottle#:

3

Worklist Smp#: 3

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

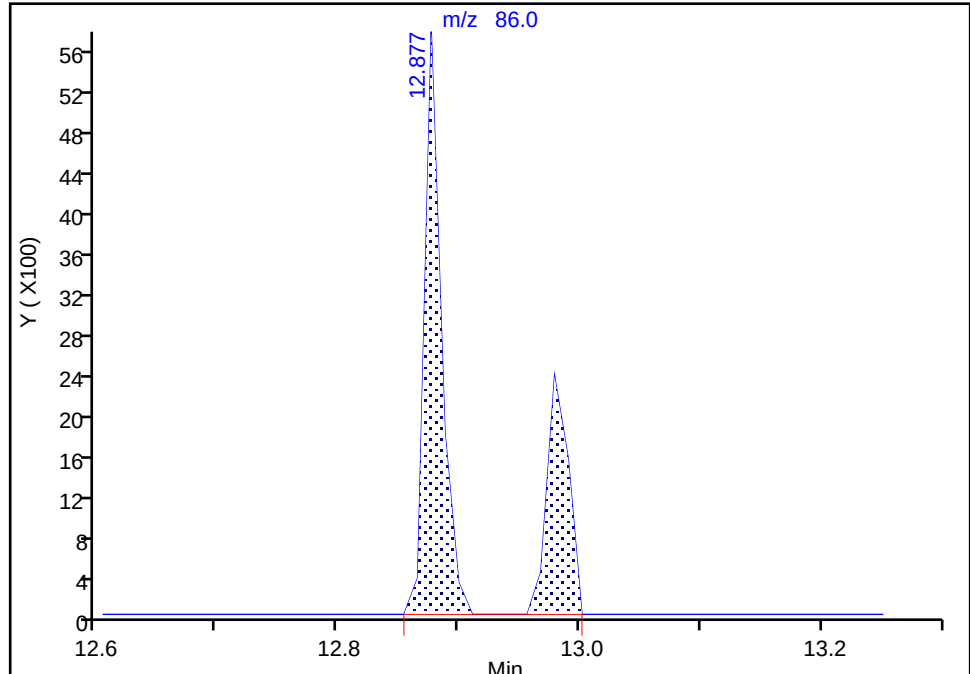
Detector: MS SCAN

116 cis-Diallate, CAS: 17708-57-5

Signal: 1

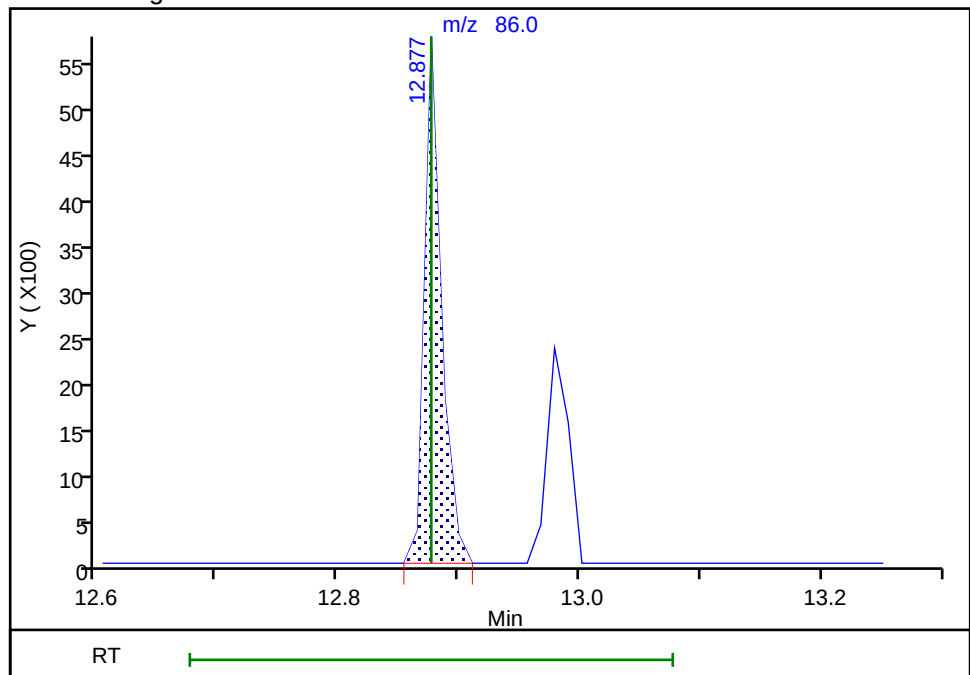
RT: 12.88
Area: 8462
Amount: 0.131412
Amount Units: ug/ml

Processing Integration Results



RT: 12.88
Area: 5551
Amount: 0.086524
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 07:43:34

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1152.D

Injection Date: 29-Sep-2020 19:37:30

Instrument ID: HP23264

Lims ID: IC L1

Client ID:

Operator ID: kel10217

ALS Bottle#:

3

Worklist Smp#: 3

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

MS SCAN

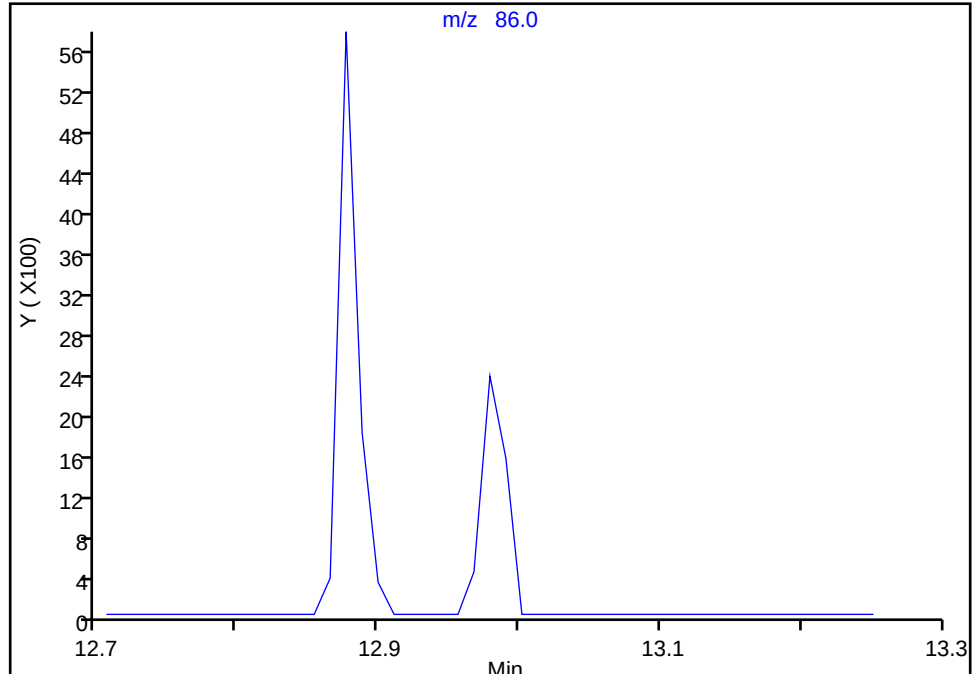
120 trans-Diallate, CAS: 17708-58-6

Signal: 1

Not Detected

Expected RT: 12.98

Processing Integration Results



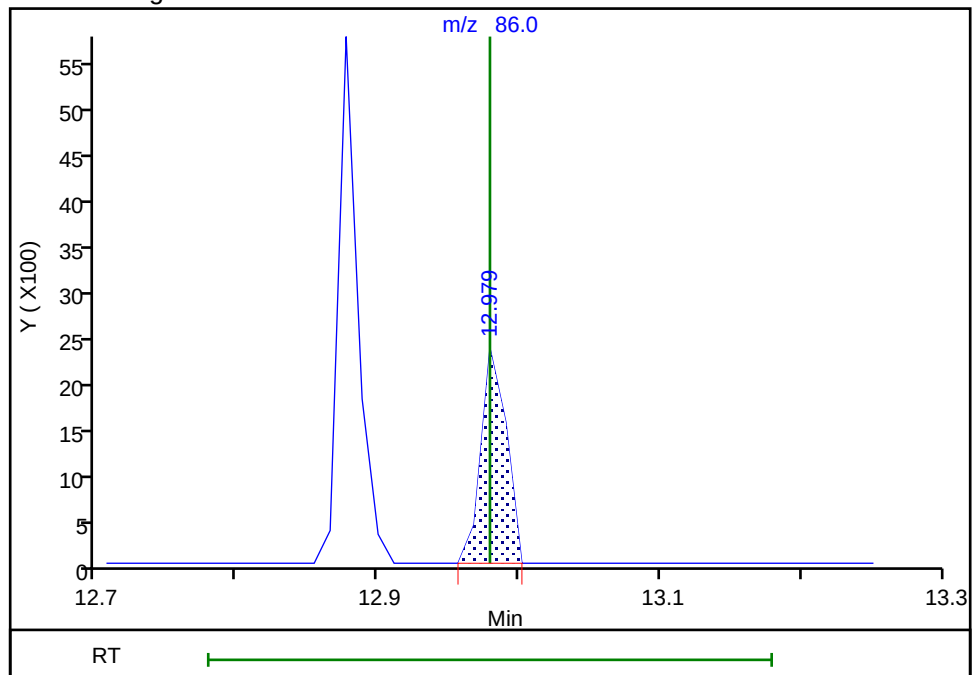
RT: 12.98

Area: 2910

Amount: 0.045821

Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 07:43:40

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1152.D

Injection Date: 29-Sep-2020 19:37:30

Instrument ID: HP23264

Lims ID: IC L1

Client ID:

Operator ID: kel10217

ALS Bottle#:

3

Worklist Smp#: 3

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

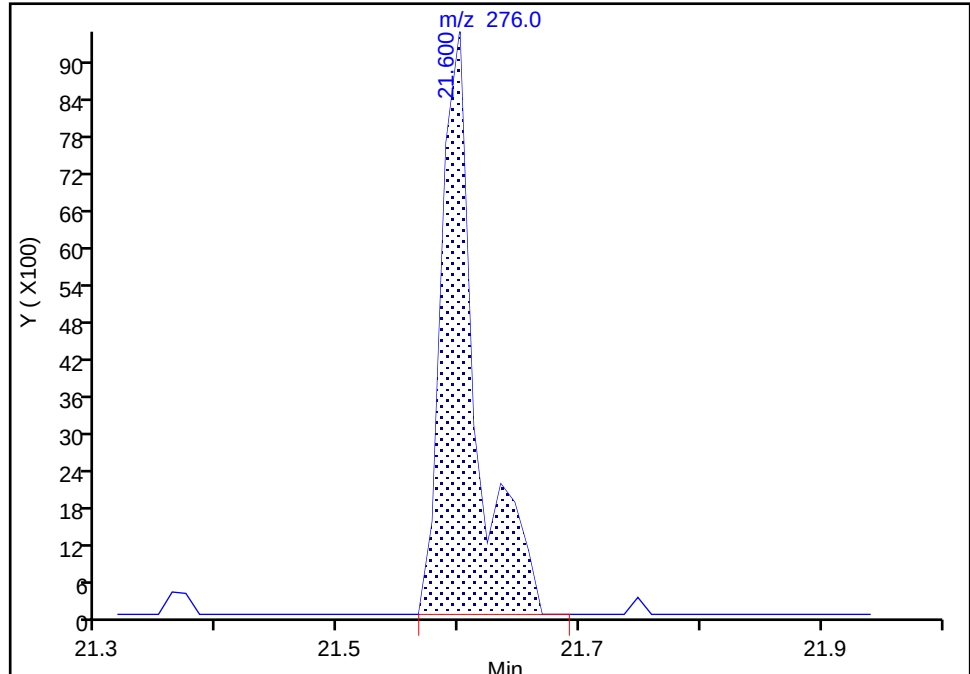
MS SCAN

164 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

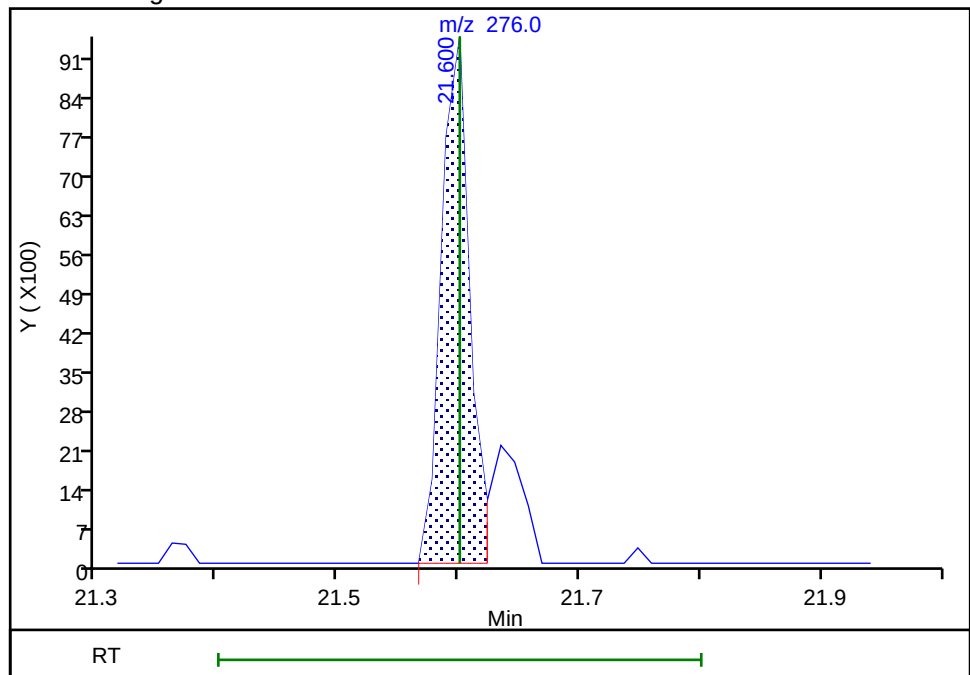
RT: 21.60
Area: 18908
Amount: 0.130051
Amount Units: ug/ml

Processing Integration Results



RT: 21.60
Area: 15145
Amount: 0.106937
Amount Units: ug/ml

Manual Integration Results



Reviewer: beccak, 01-Oct-2020 12:29:41

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1153.D
 Lims ID: IC L8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 29-Sep-2020 20:08:30 ALS Bottle#: 4 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: IC L8
 Misc. Info.: 410-0011633-004
 Operator ID: kel10217 Instrument ID: HP23264
 Sublist: chrom-MSSemi_HP23264*sub7
 Method: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 01-Oct-2020 12:41:14 Calib Date: 29-Sep-2020 22:52:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1158a.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: beckk

Date: 30-Sep-2020 07:45:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	2.463	2.463	0.000	97	1013361	30.0	31.3	
3 N-Nitrosodimethylamine	74	2.996	2.996	0.000	93	1501807	30.0	31.4	
4 Pyridine	79	3.019	3.019	0.000	95	2551399	30.0	31.4	
8 2-Picoline	93	4.176	4.176	0.000	93	2318308	30.0	31.1	
10 N-Nitrosomethylethylamine	88	4.358	4.358	0.000	96	962566	30.0	30.7	
11 Methyl methanesulfonate	80	4.811	4.811	0.000	89	1397589	30.0	31.5	
\$ 12 2-Fluorophenol	112	5.038	5.038	0.000	94	3812792	60.0	63.8	
13 N-Nitrosodiethylamine	102	5.367	5.367	0.000	91	925193	30.0	31.5	
15 Ethyl methanesulfonate	109	5.821	5.821	0.000	94	910481	30.0	32.3	
19 Benzaldehyde	77	6.263	6.263	0.000	91	1755013	30.0	28.1	
\$ 20 Phenol-d5	99	6.399	6.399	0.000	92	4994956	60.0	61.4	
21 Phenol	94	6.422	6.422	0.000	93	2885193	30.0	31.3	
23 Aniline	93	6.434	6.434	0.000	97	3250226	30.0	31.5	
24 Bis(2-chloroethyl)ether	93	6.547	6.547	0.000	91	1929491	30.0	30.0	
S 46 Dinitrotoluene	165				0		60.0	60.6	
25 2-Chlorophenol	128	6.592	6.592	0.000	92	1786552	30.0	30.8	
26 1,3-Dichlorobenzene	146	6.819	6.819	0.000	92	1925604	30.0	31.0	
* 28 1,4-Dichlorobenzene-d4	152	6.899	6.899	0.000	95	197982	5.00	5.00	
29 1,4-Dichlorobenzene	146	6.933	6.933	0.000	87	1910951	30.0	29.8	
30 Benzyl alcohol	108	7.126	7.126	0.000	87	1210465	30.0	30.1	
31 1,2-Dichlorobenzene	146	7.148	7.148	0.000	91	1817604	30.0	30.0	
34 Indene	115	7.284	7.284	0.000	88	2663827	30.0	29.6	
33 2-Methylphenol	108	7.307	7.307	0.000	96	1739020	30.0	30.8	
35 2,2'-oxybis[1-chloropropane]	45	7.341	7.341	0.000	91	2859983	30.0	31.0	
36 N-Nitrosopyrrolidine	100	7.500	7.500	0.000	85	961003	30.0	31.0	
38 Acetophenone	105	7.523	7.523	0.000	94	2978118	30.0	31.2	
37 4-Methylphenol	108	7.545	7.545	0.000	92	1990671	30.0	30.5	
39 N-Nitrosodi-n-propylamine	70	7.557	7.557	0.000	88	1729559	30.0	30.6	
40 N-Nitrosomorpholine	56	7.568	7.568	0.000	88	1587177	30.0	30.5	
41 2-Toluidine	106	7.579	7.579	0.000	93	3031387	30.0	31.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
42 Hexachloroethane	117	7.659	7.659	0.000	94	981726	30.0	30.9	
\$ 43 Nitrobenzene-d5	82	7.749	7.749	0.000	89	5412960	60.0	62.4	
44 Nitrobenzene	77	7.772	7.772	0.000	88	2610309	30.0	31.1	
45 N-Nitrosopiperidine	114	7.999	7.999	0.000	79	916817	30.0	29.8	
47 Isophorone	82	8.146	8.146	0.000	98	4501778	30.0	30.7	
48 2-Nitrophenol	139	8.249	8.249	0.000	85	942181	30.0	30.7	
49 2,4-Dimethylphenol	107	8.351	8.351	0.000	98	2220334	30.0	30.7	
50 Benzoic acid	105	8.555	8.555	0.000	90	1396683	30.0	29.4	
51 o,o',o"-Triethylphosphorothioat	198	8.487	8.487	0.000	89	847467	30.0	31.1	
52 Bis(2-chloroethoxy)methane	93	8.510	8.510	0.000	93	3020050	30.0	30.3	M
54 2,4-Dichlorophenol	162	8.634	8.634	0.000	96	1518406	30.0	31.3	
55 1,2,4-Trichlorobenzene	180	8.759	8.759	0.000	92	1550955	30.0	30.0	
* 56 Naphthalene-d8	136	8.838	8.838	0.000	99	763204	5.00	5.00	
57 Naphthalene	128	8.873	8.873	0.000	99	4851190	30.0	30.3	
58 4-Chloroaniline	127	8.975	8.975	0.000	91	1991681	30.0	30.2	
59 2,6-Dichlorophenol	162	8.986	8.986	0.000	91	1476336	30.0	31.1	
61 Hexachloropropene	213	9.020	9.020	0.000	97	1272965	30.0	30.8	
62 Hexachlorobutadiene	225	9.088	9.088	0.000	95	1022964	30.0	29.7	
63 Quinoline	129	9.406	9.406	0.000	93	3048250	30.0	30.6	
64 Caprolactam	113	9.565	9.565	0.000	76	498046	30.0	31.4	
65 N-Nitrosodi-n-butylamine	84	9.542	9.542	0.000	90	1942360	30.0	35.4	
S 60 Diallate	86				0		30.0	30.0	
67 4-Chloro-3-methylphenol	107	9.780	9.780	0.000	91	1823558	30.0	32.1	
68 Safrole, Total	162	9.871	9.871	0.000	81	1393508	30.0	31.3	
69 2-Methylnaphthalene	142	9.973	9.973	0.000	90	3235147	30.0	30.4	
70 1-Methylnaphthalene	142	10.132	10.132	0.000	92	3191931	30.0	31.9	
71 Hexachlorocyclopentadiene	237	10.234	10.234	0.000	94	1061194	30.0	31.8	
72 1,2,4,5-Tetrachlorobenzene	216	10.245	10.245	0.000	98	1552015	30.0	30.4	
73 Isosafrole Peak 1	162	10.325	10.325	0.000	81	247109	4.80	4.92	
74 2,4,6-Trichlorophenol	196	10.438	10.438	0.000	94	1109385	30.0	32.0	
76 2,4,5-Trichlorophenol	196	10.495	10.495	0.000	91	1142098	30.0	31.6	
\$ 77 2-Fluorobiphenyl (Surr)	172	10.585	10.585	0.000	99	7281720	60.0	62.6	
78 Isosafrole Peak 2	162	10.699	10.699	0.000	84	1522446	25.2	28.3	
80 1,1'-Biphenyl	154	10.744	10.744	0.000	96	3878205	30.0	31.4	
81 2-Chloronaphthalene	162	10.744	10.744	0.000	87	3465076	30.0	32.3	M
82 1-Chloronaphthalene	162	10.778	10.778	0.000	96	2535031	30.0	27.0	M
83 Phenyl ether	170	10.914	10.914	0.000	89	2198415	30.0	30.8	
84 2-Nitroaniline	138	10.926	10.926	0.000	73	982734	30.0	29.5	
85 1,4-Naphthoquinone	158	11.039	11.039	0.000	68	1170358	30.0	29.3	
89 1,3-Dinitrobenzene	168	11.164	11.164	0.000	81	486544	30.0	29.4	
S 79 Isosafrole	162				0		30.0	33.2	
87 Dimethyl phthalate	163	11.266	11.266	0.000	92	3343036	30.0	28.7	
86 1,4-Dinitrobenzene	168	11.277	11.277	0.000	81	547315	30.0	30.5	
90 2,6-Dinitrotoluene	165	11.346	11.346	0.000	88	788570	30.0	30.3	
91 Acenaphthylene	152	11.402	11.402	0.000	99	4190562	30.0	30.6	
92 3-Nitroaniline	138	11.584	11.584	0.000	88	810708	30.0	31.9	
* 93 Acenaphthene-d10	164	11.618	11.618	0.000	97	385212	5.00	5.00	
94 Acenaphthene	153	11.675	11.675	0.000	94	3028794	30.0	30.7	
95 2,4-Dinitrophenol	184	11.743	11.743	0.000	80	524017	30.0	32.3	
97 4-Nitrophenol	109	11.856	11.856	0.000	78	1052676	30.0	33.0	
99 Pentachlorobenzene	250	11.856	11.856	0.000	92	1268994	30.0	30.7	
101 Dibenzofuran	168	11.924	11.924	0.000	94	4324204	30.0	30.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
100 2,4-Dinitrotoluene	165	11.924	11.924	0.000	80	1115439	30.0	30.3	
102 1-Naphthylamine	143	12.026	12.026	0.000	97	3018773	30.0	30.3	
103 2,3,4,6-Tetrachlorophenol	232	12.094	12.094	0.000	79	853771	30.0	32.3	
104 2-Naphthylamine	143	12.128	12.128	0.000	95	2924500	30.0	31.5	
105 Diethyl phthalate	149	12.287	12.287	0.000	96	3581452	30.0	30.5	
107 Fluorene	166	12.355	12.355	0.000	95	3219038	30.0	28.9	
106 Thionazin	107	12.378	12.378	0.000	73	780683	30.0	32.8	
110 N-Nitro-o-toluidine	152	12.389	12.389	0.000	81	952125	30.0	32.0	
108 4-Nitroaniline	138	12.401	12.401	0.000	73	888693	30.0	32.2	
109 4-Chlorophenyl phenyl ether	204	12.378	12.378	0.000	85	1657724	30.0	29.8	
111 4,6-Dinitro-2-methylphenol	198	12.446	12.446	0.000	81	732045	30.0	32.0	
112 N-Nitrosodiphenylamine	169	12.525	12.525	0.000	65	2778532	30.0	28.0	
113 1,2-Diphenylhydrazine	77	12.571	12.571	0.000	41	4675901	30.0	29.4	
\$ 114 2,4,6-Tribromophenol	330	12.650	12.650	0.000	84	906888	60.0	61.9	
115 Sulfotepp	97	12.752	12.752	0.000	76	870194	30.0	31.0	
116 cis-Diallate	86	12.888	12.888	0.000	85	1315578	22.2	21.9	
117 Phorate	75	12.900	12.900	0.000	95	2979657	30.0	32.5	
118 Phenacetin	108	12.934	12.934	0.000	91	2280107	30.0	33.2	
119 4-Bromophenyl phenyl ether	248	12.968	12.968	0.000	70	907610	30.0	29.8	
120 trans-Diallate	86	12.990	12.990	0.000	91	482491	7.80	8.12	
121 Hexachlorobenzene	284	13.024	13.024	0.000	90	947139	30.0	29.1	
122 Dimethoate	87	13.104	13.104	0.000	94	1757295	30.0	30.7	
123 Atrazine	200	13.206	13.206	0.000	94	962518	30.0	29.4	
124 Pentachlorophenol	266	13.274	13.274	0.000	86	698401	30.0	32.9	
125 4-Aminobiphenyl	169	13.285	13.285	0.000	91	2720021	30.0	30.0	
126 Pentachloronitrobenzene	237	13.285	13.285	0.000	52	620910	30.0	30.0	
127 Pronamide	173	13.387	13.387	0.000	90	1671189	30.0	30.0	
* 128 Phenanthrene-d10	188	13.501	13.501	0.000	98	681011	5.00	5.00	
129 Dinoseb	211	13.524	13.524	0.000	89	901589	30.0	33.6	
130 Phenanthrene	178	13.535	13.535	0.000	99	4888057	30.0	30.2	
131 Anthracene	178	13.603	13.603	0.000	98	4958682	30.0	30.6	
132 Carbazole	167	13.819	13.819	0.000	97	4637139	30.0	30.2	
133 Methyl parathion	109	14.023	14.023	0.000	90	1487212	30.0	31.5	
134 Di-n-butyl phthalate	149	14.329	14.329	0.000	99	6354527	30.0	29.6	
135 Ethyl Parathion	109	14.567	14.567	0.000	80	1020914	30.0	32.5	
136 4-Nitroquinoline-1-oxide	190	14.579	14.579	0.000	87	688794	30.0	30.7	
137 Octachlorostyrene	308	14.908	14.908	0.000	84	470206	30.0	30.6	
138 Isodrin	193	14.953	14.953	0.000	90	707568	30.0	29.6	
139 Fluoranthene	202	15.180	15.180	0.000	98	5752975	30.0	31.3	
140 Benzidine	184	15.418	15.418	0.000	99	11377323	90.0	94.7	
* 141 Pyrene-d10 (IS)	212	15.486	15.486	0.000	99	729545	5.00	5.00	
142 Pyrene	202	15.520	15.520	0.000	98	5991543	30.0	29.9	
\$ 143 p-Terphenyl-d14	244	15.815	15.815	0.000	98	8068790	60.0	60.0	
144 p-Dimethylamino azobenzene	225	16.042	16.042	0.000	91	1007490	30.0	31.0	
145 Chlorobenzilate	139	16.133	16.133	0.000	80	2302086	30.0	30.3	
146 3,3'-Dimethylbenzidine	212	16.609	16.609	0.000	99	4057904	30.0	32.0	
147 Butyl benzyl phthalate	149	16.666	16.666	0.000	94	3069648	30.0	30.3	
148 2-Acetylaminofluorene	181	17.040	17.040	0.000	92	2651302	30.0	32.9	
150 3,3'-Dichlorobenzidine	252	17.528	17.528	0.000	78	2191413	30.0	32.9	
149 Benzo[a]anthracene	228	17.539	17.539	0.000	98	5275368	30.0	30.9	
151 4,4'-Methylene bis(2-chloroani	231	17.551	17.551	0.000	93	1116280	30.0	33.5	
152 Chrysene	228	17.607	17.607	0.000	97	5288042	30.0	31.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
153 Bis(2-ethylhexyl) phthalate	149	17.744	17.744	0.000	97	4369320	30.0	30.7	
154 6-Methylchrysene	242	18.402	18.402	0.000	99	3780700	30.0	31.7	
155 Di-n-octyl phthalate	149	18.901	18.901	0.000	99	7904461	30.0	30.9	
157 7,12-Dimethylbenz(a)anthracene	256	19.411	19.411	0.000	91	2595051	30.0	31.8	
156 Benzo[b]fluoranthene	252	19.400	19.400	0.000	97	5970551	30.0	33.0	
158 Benzo[k]fluoranthene	252	19.457	19.457	0.000	99	4909552	30.0	29.9	
159 Benzo[a]pyrene	252	19.922	19.922	0.000	76	5565015	30.0	32.3	
* 160 Perylene-d12	264	20.001	20.001	0.000	98	720285	5.00	5.00	
161 3-Methylcholanthrene	268	20.500	20.500	0.000	91	2523011	30.0	30.6	
162 Dibenz[a,h]acridine	279	21.306	21.306	0.000	91	3842140	30.0	30.7	
163 Dibenz[a,j]acridine	279	21.385	21.385	0.000	96	3831037	30.0	29.2	
164 Indeno[1,2,3-cd]pyrene	276	21.635	21.635	0.000	99	4603019	30.0	32.6	M
165 Dibenz(a,h)anthracene	278	21.669	21.669	0.000	92	4588123	30.0	31.9	
166 Benzo[g,h,i]perylene	276	22.020	22.020	0.000	98	4530873	30.0	30.5	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSS_RV8270_8_00008

Amount Added: 1.00

Units: mL

Chrom Revision: 2.3 24-Sep-2020 19:22:38

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1153.D

Instrument ID: HP23264

Lims ID: IC L8

Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul

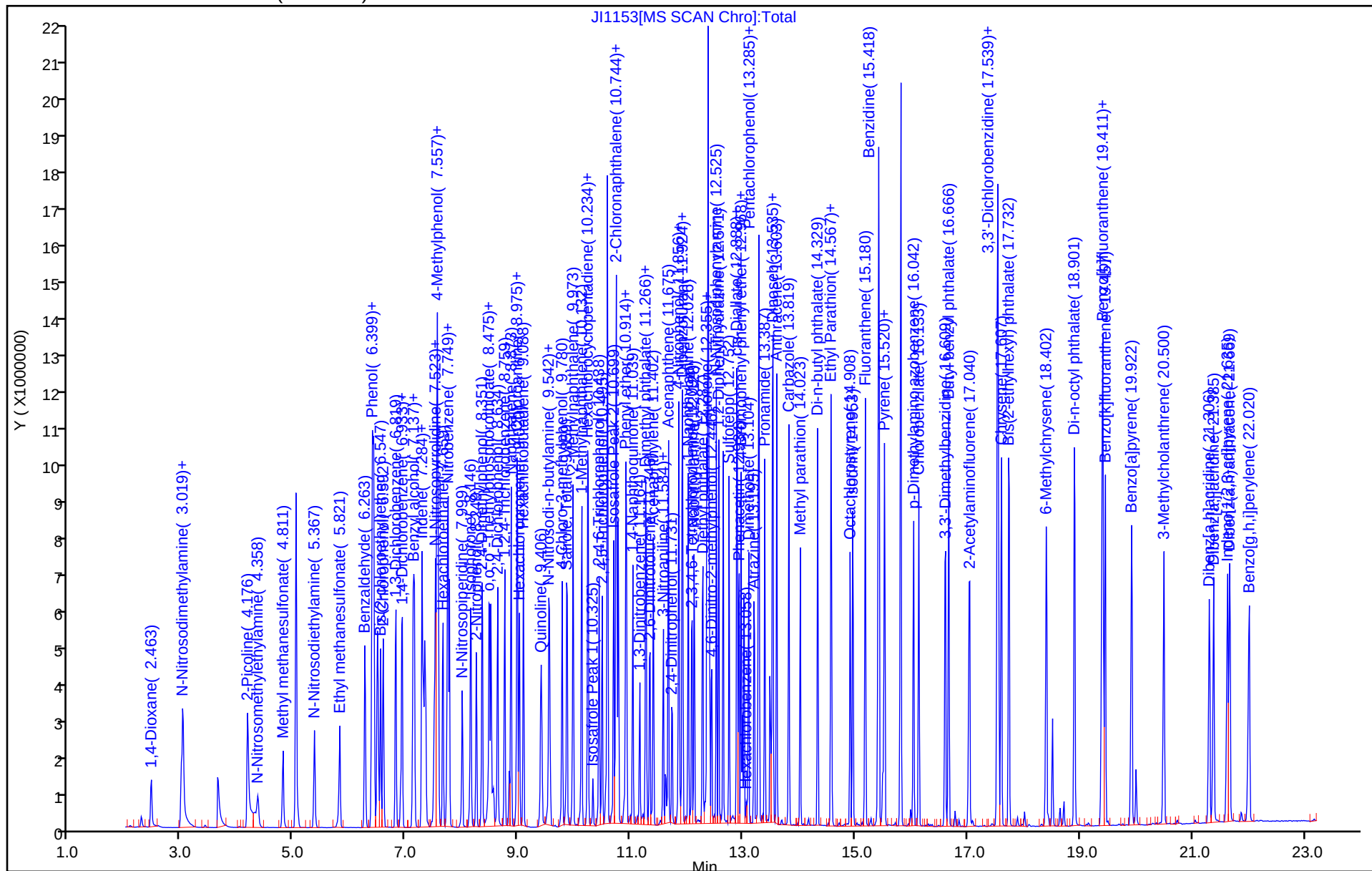
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1153.D

Injection Date: 29-Sep-2020 20:08:30

Instrument ID: HP23264

Lims ID: IC L8

Client ID:

Operator ID: kel10217

ALS Bottle#:

4

Worklist Smp#: 4

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

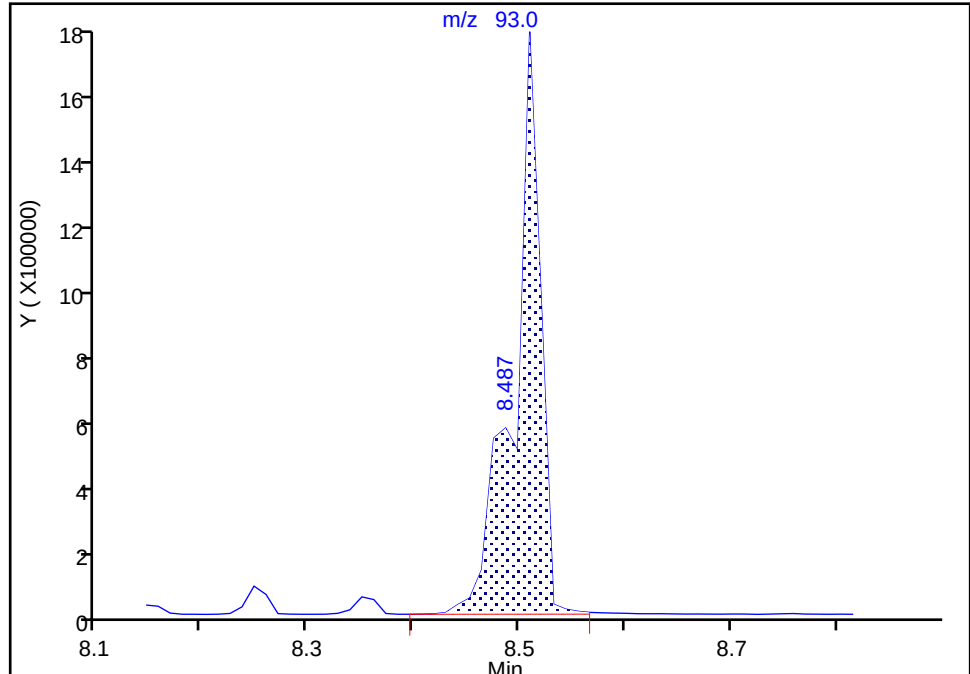
MS SCAN

52 Bis(2-chloroethoxy)methane, CAS: 111-91-1

Signal: 1

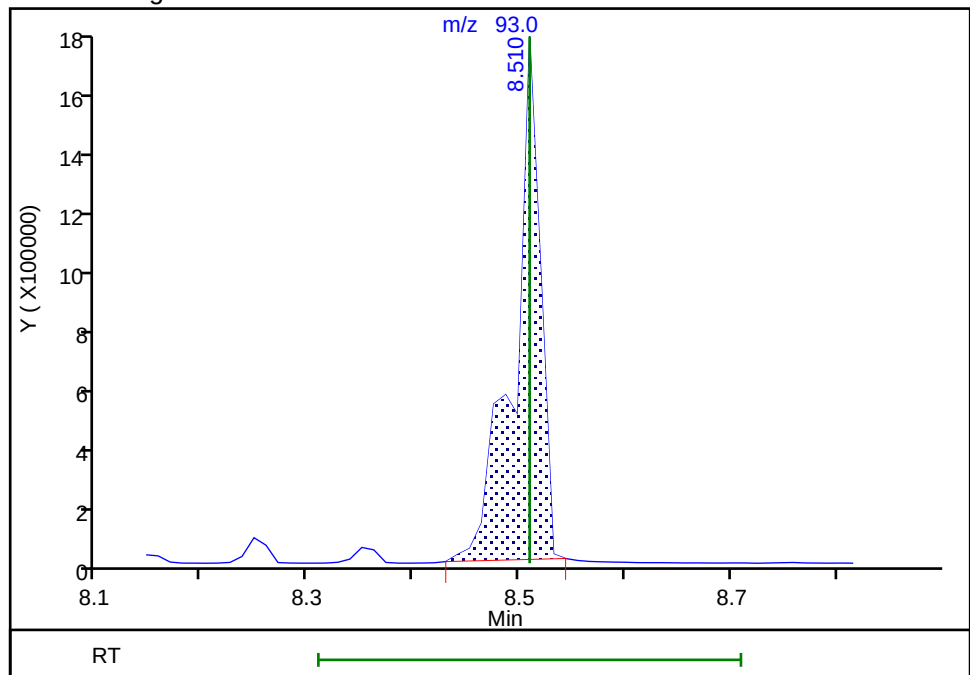
RT: 8.49
Area: 3104913
Amount: 46.339747
Amount Units: ug/ml

Processing Integration Results



RT: 8.51
Area: 3020050
Amount: 30.342432
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 07:44:39

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1153.D

Injection Date: 29-Sep-2020 20:08:30

Instrument ID: HP23264

Lims ID: IC L8

Client ID:

Operator ID: kel10217

ALS Bottle#:

4

Worklist Smp#: 4

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

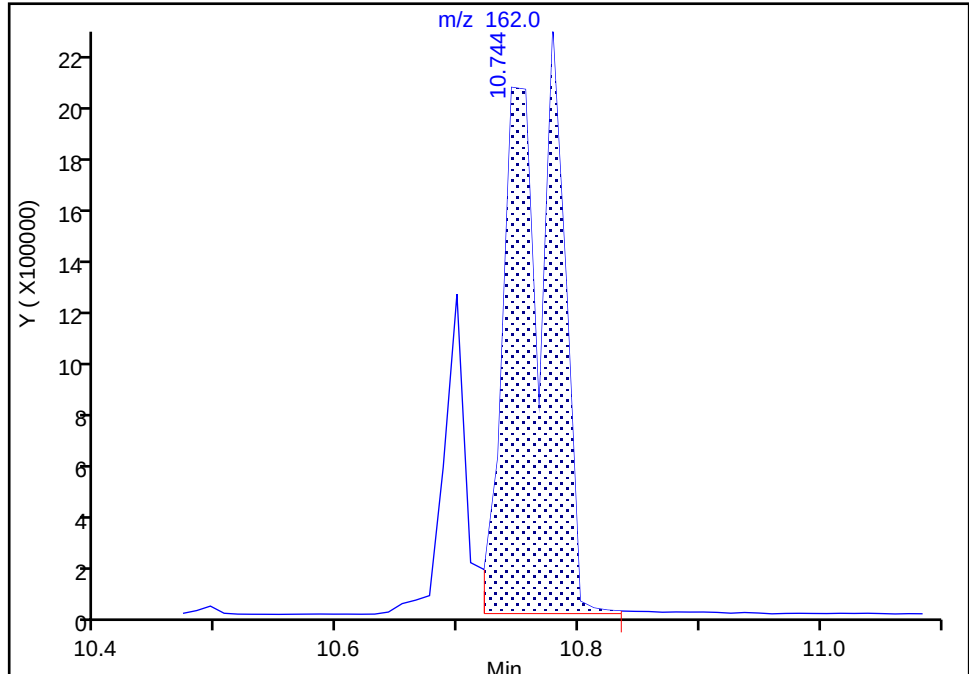
MS SCAN

81 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

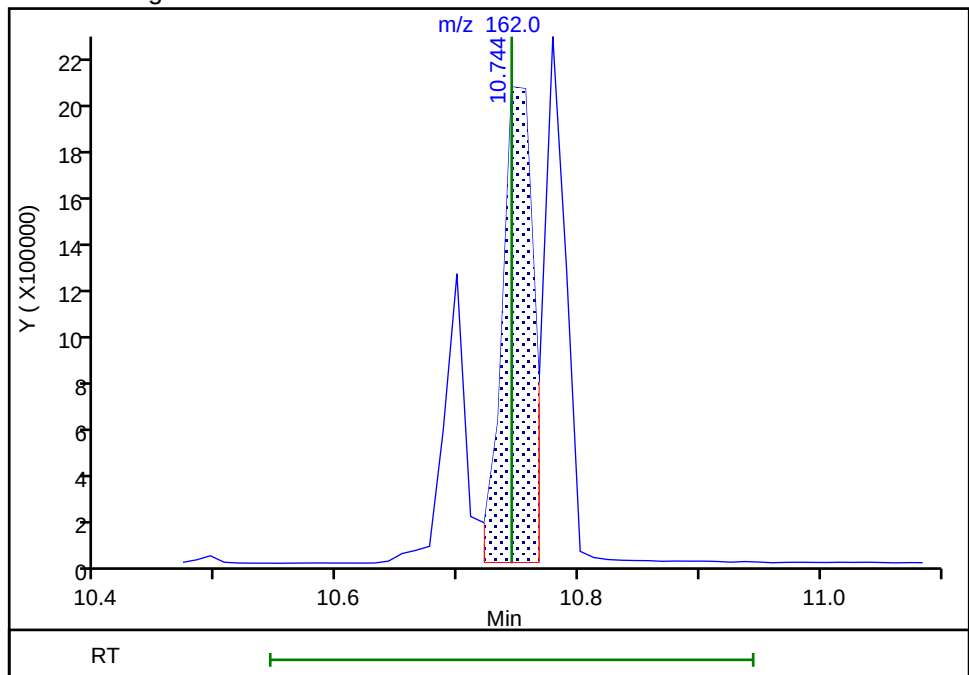
RT: 10.74
Area: 6151292
Amount: 36.657259
Amount Units: ug/ml

Processing Integration Results



RT: 10.74
Area: 3465076
Amount: 32.306363
Amount Units: ug/ml

Manual Integration Results



Reviewer: beccak, 30-Sep-2020 07:44:59

Audit Action: Split an Integrated Peak

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1153.D

Injection Date: 29-Sep-2020 20:08:30

Instrument ID: HP23264

Lims ID: IC L8

Client ID:

Operator ID: kel10217

ALS Bottle#:

4

Worklist Smp#: 4

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

MS SCAN

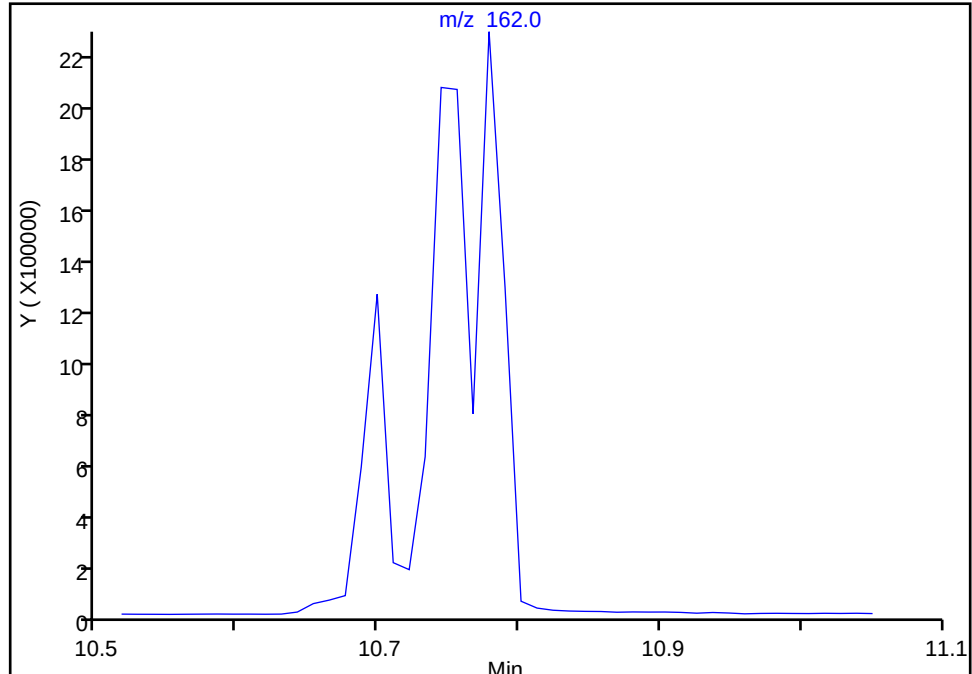
82 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

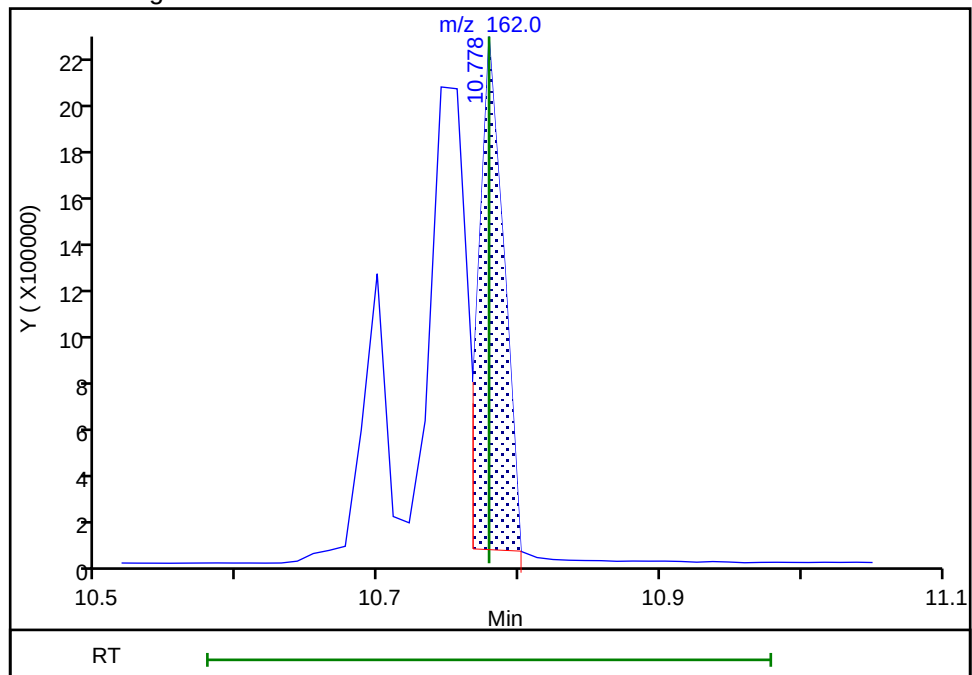
Not Detected

Expected RT: 10.78

Processing Integration Results



Manual Integration Results



RT: 10.78

Area: 2535031

Amount: 26.979372

Amount Units: ug/ml

Reviewer: bekk, 30-Sep-2020 07:45:19

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1153.D

Injection Date: 29-Sep-2020 20:08:30

Instrument ID: HP23264

Lims ID: IC L8

Client ID:

Operator ID: kel10217

ALS Bottle#:

4

Worklist Smp#: 4

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

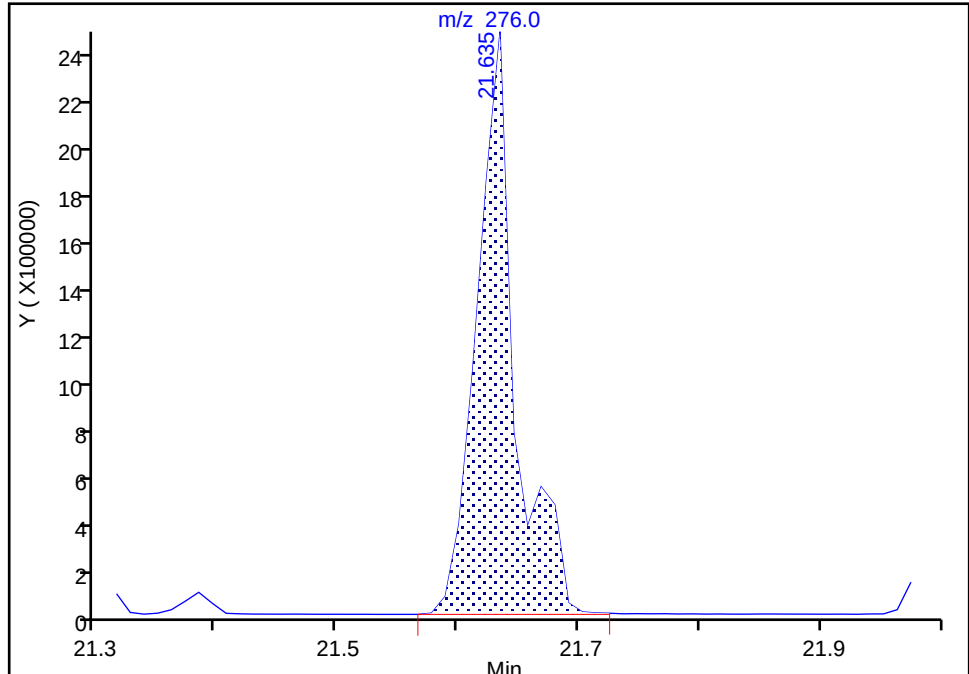
MS SCAN

164 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

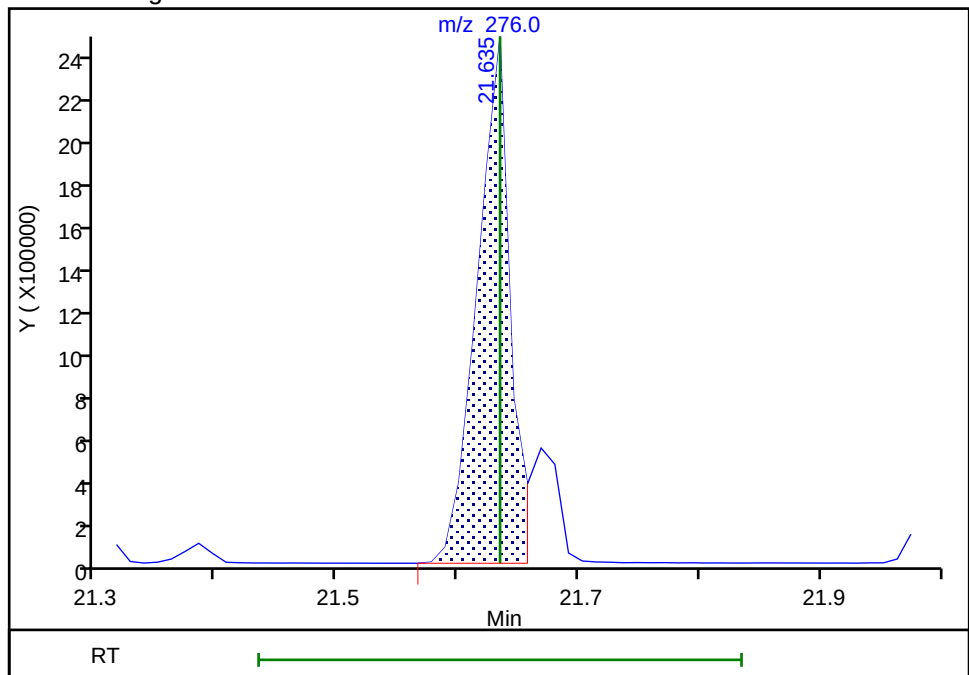
RT: 21.63
Area: 5458089
Amount: 35.575930
Amount Units: ug/ml

Processing Integration Results



RT: 21.63
Area: 4603019
Amount: 32.593967
Amount Units: ug/ml

Manual Integration Results



Reviewer: beccak, 30-Sep-2020 07:45:45

Audit Action: Split an Integrated Peak

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1154.D
 Lims ID: IC L7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 29-Sep-2020 20:38:30 ALS Bottle#: 5 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: IC L7
 Misc. Info.: 410-0011633-005
 Operator ID: kel10217 Instrument ID: HP23264
 Sublist: chrom-MSSemi_HP23264*sub7
 Method: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 01-Oct-2020 12:41:27 Calib Date: 29-Sep-2020 22:52:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1158a.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: bekk

Date: 30-Sep-2020 07:48:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	2.452	2.452	0.000	96	642682	20.0	18.9	
3 N-Nitrosodimethylamine	74	2.996	2.996	0.000	93	970203	20.0	19.3	
4 Pyridine	79	3.019	3.019	0.000	94	1664747	20.0	19.5	
8 2-Picoline	93	4.176	4.176	0.000	93	1526420	20.0	19.5	
10 N-Nitrosomethylethylamine	88	4.357	4.357	0.000	97	649708	20.0	19.7	
11 Methyl methanesulfonate	80	4.800	4.800	0.000	89	935975	20.0	20.1	
\$ 12 2-Fluorophenol	112	5.038	5.038	0.000	94	2474134	40.0	39.4	
13 N-Nitrosodiethylamine	102	5.367	5.367	0.000	93	605815	20.0	19.7	
15 Ethyl methanesulfonate	109	5.809	5.809	0.000	94	569046	20.0	19.2	
19 Benzaldehyde	77	6.263	6.263	0.000	93	1248277	20.0	19.0	
\$ 20 Phenol-d5	99	6.388	6.388	0.000	92	3341476	40.0	39.1	
21 Phenol	94	6.411	6.411	0.000	93	1902672	20.0	19.6	
23 Aniline	93	6.422	6.422	0.000	88	2172642	20.0	20.1	
S 46 Dinitrotoluene	165				0		40.0	40.7	
24 Bis(2-chloroethyl)ether	93	6.535	6.535	0.000	93	1353655	20.0	20.0	
25 2-Chlorophenol	128	6.592	6.592	0.000	94	1209941	20.0	19.9	
26 1,3-Dichlorobenzene	146	6.808	6.808	0.000	91	1282633	20.0	19.6	
* 28 1,4-Dichlorobenzene-d4	152	6.898	6.898	0.000	96	207987	5.00	5.00	
29 1,4-Dichlorobenzene	146	6.921	6.921	0.000	91	1285473	20.0	19.1	
30 Benzyl alcohol	108	7.125	7.125	0.000	87	851194	20.0	20.1	
31 1,2-Dichlorobenzene	146	7.148	7.148	0.000	91	1245350	20.0	19.5	
34 Indene	115	7.284	7.284	0.000	91	1818829	20.0	19.3	
33 2-Methylphenol	108	7.296	7.296	0.000	95	1166295	20.0	19.6	
35 2,2'-oxybis[1-chloropropane]	45	7.341	7.341	0.000	91	1870054	20.0	19.3	
36 N-Nitrosopyrrolidine	100	7.488	7.488	0.000	86	664517	20.0	20.4	
38 Acetophenone	105	7.522	7.522	0.000	96	2045060	20.0	20.4	
37 4-Methylphenol	108	7.545	7.545	0.000	87	1366764	20.0	19.9	
39 N-Nitrosodi-n-propylamine	70	7.545	7.545	0.000	85	1145805	20.0	19.3	
40 N-Nitrosomorpholine	56	7.556	7.556	0.000	88	1056751	20.0	19.3	
41 2-Toluidine	106	7.568	7.568	0.000	96	1996256	20.0	20.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
42 Hexachloroethane	117	7.647	7.647	0.000	95	650345	20.0	19.5	
\$ 43 Nitrobenzene-d5	82	7.738	7.738	0.000	89	3558549	40.0	40.6	
44 Nitrobenzene	77	7.761	7.761	0.000	88	1727436	20.0	20.4	
45 N-Nitrosopiperidine	114	7.999	7.999	0.000	81	631189	20.0	20.3	
47 Isophorone	82	8.146	8.146	0.000	98	3069104	20.0	20.7	
48 2-Nitrophenol	139	8.248	8.248	0.000	86	631544	20.0	20.4	
49 2,4-Dimethylphenol	107	8.351	8.351	0.000	98	1498577	20.0	20.5	
51 o,o',o"-Triethylphosphorothioat	198	8.475	8.475	0.000	93	565854	20.0	20.5	
52 Bis(2-chloroethoxy)methane	93	8.509	8.509	0.000	95	2099626	20.0	20.9	M
50 Benzoic acid	105	8.521	8.521	0.000	90	986220	20.0	20.9	
54 2,4-Dichlorophenol	162	8.623	8.623	0.000	95	1026444	20.0	20.9	
55 1,2,4-Trichlorobenzene	180	8.759	8.759	0.000	92	1064041	20.0	20.4	
* 56 Naphthalene-d8	136	8.838	8.838	0.000	99	770882	5.00	5.00	
57 Naphthalene	128	8.872	8.872	0.000	99	3379736	20.0	20.9	
58 4-Chloroaniline	127	8.974	8.974	0.000	91	1441111	20.0	21.7	
59 2,6-Dichlorophenol	162	8.986	8.986	0.000	95	995492	20.0	20.8	
61 Hexachloropropene	213	9.020	9.020	0.000	97	871672	20.0	20.9	
62 Hexachlorobutadiene	225	9.088	9.088	0.000	96	695201	20.0	20.0	
63 Quinoline	129	9.394	9.394	0.000	93	2027348	20.0	20.1	
65 N-Nitrosodi-n-butylamine	84	9.542	9.542	0.000	89	1279295	20.0	23.1	
64 Caprolactam	113	9.542	9.542	0.000	47	326677	20.0	20.4	
S 60 Diallate	86				0		20.0	20.6	
67 4-Chloro-3-methylphenol	107	9.769	9.769	0.000	91	1217750	20.0	21.2	
68 Safrole, Total	162	9.859	9.859	0.000	80	929010	20.0	20.7	
69 2-Methylnaphthalene	142	9.973	9.973	0.000	90	2253084	20.0	21.0	
70 1-Methylnaphthalene	142	10.120	10.120	0.000	91	2112742	20.0	20.9	
71 Hexachlorocyclopentadiene	237	10.234	10.234	0.000	92	709358	20.0	20.8	
72 1,2,4,5-Tetrachlorobenzene	216	10.245	10.245	0.000	93	1074772	20.0	20.7	
73 Isosafrole Peak 1	162	10.324	10.324	0.000	81	165784	3.20	3.24	
74 2,4,6-Trichlorophenol	196	10.438	10.438	0.000	94	774416	20.0	21.9	
76 2,4,5-Trichlorophenol	196	10.483	10.483	0.000	89	772105	20.0	20.9	
\$ 77 2-Fluorobiphenyl (Surr)	172	10.585	10.585	0.000	100	4922648	40.0	41.5	
78 Isosafrole Peak 2	162	10.687	10.687	0.000	82	901463	16.8	16.4	
80 1,1'-Biphenyl	154	10.733	10.733	0.000	96	2669055	20.0	21.2	
81 2-Chloronaphthalene	162	10.744	10.744	0.000	87	1949857	20.0	17.8	
82 1-Chloronaphthalene	162	10.778	10.778	0.000	97	2363152	20.0	24.7	
83 Phenyl ether	170	10.914	10.914	0.000	88	1453645	20.0	20.0	
84 2-Nitroaniline	138	10.926	10.926	0.000	75	722541	20.0	21.3	
85 1,4-Naphthoquinone	158	11.039	11.039	0.000	71	836602	20.0	20.5	
S 79 Isosafrole	162				0		20.0	19.7	
89 1,3-Dinitrobenzene	168	11.164	11.164	0.000	81	336969	20.0	19.9	
87 Dimethyl phthalate	163	11.266	11.266	0.000	96	2363218	20.0	19.9	
86 1,4-Dinitrobenzene	168	11.277	11.277	0.000	83	381214	20.0	20.8	
90 2,6-Dinitrotoluene	165	11.334	11.334	0.000	83	534283	20.0	20.1	
91 Acenaphthylene	152	11.402	11.402	0.000	98	2870009	20.0	20.6	
92 3-Nitroaniline	138	11.572	11.572	0.000	88	566645	20.0	21.9	
* 93 Acenaphthene-d10	164	11.618	11.618	0.000	97	392876	5.00	5.00	
94 Acenaphthene	153	11.663	11.663	0.000	95	2053187	20.0	20.4	
95 2,4-Dinitrophenol	184	11.731	11.731	0.000	78	346036	20.0	20.9	
99 Pentachlorobenzene	250	11.856	11.856	0.000	93	852017	20.0	20.2	
97 4-Nitrophenol	109	11.856	11.856	0.000	88	662669	20.0	20.4	
101 Dibenzofuran	168	11.913	11.913	0.000	94	2849899	20.0	19.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
100 2,4-Dinitrotoluene	165	11.924	11.924	0.000	87	773827	20.0	20.6	
102 1-Naphthylamine	143	12.026	12.026	0.000	97	2128483	20.0	20.9	
103 2,3,4,6-Tetrachlorophenol	232	12.083	12.083	0.000	82	569746	20.0	21.1	
104 2-Naphthylamine	143	12.128	12.128	0.000	94	1980241	20.0	20.9	
105 Diethyl phthalate	149	12.276	12.276	0.000	96	2415609	20.0	20.2	
107 Fluorene	166	12.355	12.355	0.000	94	2323195	20.0	20.4	
109 4-Chlorophenyl phenyl ether	204	12.378	12.378	0.000	91	1127168	20.0	19.9	
106 Thionazin	107	12.366	12.366	0.000	72	483023	20.0	19.9	
110 N-Nitro-o-toluidine	152	12.389	12.389	0.000	86	653518	20.0	21.6	
108 4-Nitroaniline	138	12.400	12.400	0.000	76	583388	20.0	20.7	
111 4,6-Dinitro-2-methylphenol	198	12.434	12.434	0.000	73	459368	20.0	19.8	
112 N-Nitrosodiphenylamine	169	12.525	12.525	0.000	62	2075959	20.0	20.6	
113 1,2-Diphenylhydrazine	77	12.559	12.559	0.000	41	3192862	20.0	19.8	
\$ 114 2,4,6-Tribromophenol	330	12.650	12.650	0.000	83	638539	40.0	42.7	
115 Sulfotepp	97	12.752	12.752	0.000	77	580614	20.0	20.4	
116 cis-Diallate	86	12.888	12.888	0.000	87	918957	14.8	15.1	
117 Phorate	75	12.888	12.888	0.000	95	1852739	20.0	19.9	
118 Phenacetin	108	12.922	12.922	0.000	91	1473687	20.0	21.2	
119 4-Bromophenyl phenyl ether	248	12.968	12.968	0.000	67	630784	20.0	20.5	
120 trans-Diallate	86	12.990	12.990	0.000	90	329772	5.20	5.48	
121 Hexachlorobenzene	284	13.013	13.013	0.000	86	635688	20.0	19.3	
122 Dimethoate	87	13.092	13.092	0.000	93	1133147	20.0	19.6	
123 Atrazine	200	13.194	13.194	0.000	87	628854	20.0	19.0	
124 Pentachlorophenol	266	13.274	13.274	0.000	88	460237	20.0	21.4	
126 Pentachloronitrobenzene	237	13.285	13.285	0.000	53	419580	20.0	20.0	
125 4-Aminobiphenyl	169	13.285	13.285	0.000	91	1913428	20.0	20.8	
127 Pronamide	173	13.387	13.387	0.000	90	1203852	20.0	21.3	
* 128 Phenanthrene-d10	188	13.501	13.501	0.000	98	690030	5.00	5.00	
129 Dinoseb	211	13.523	13.523	0.000	94	627703	20.0	23.1	
130 Phenanthrene	178	13.535	13.535	0.000	99	3312943	20.0	20.2	
131 Anthracene	178	13.603	13.603	0.000	98	3321435	20.0	20.2	
132 Carbazole	167	13.818	13.818	0.000	96	3188386	20.0	20.5	
133 Methyl parathion	109	14.011	14.011	0.000	91	973362	20.0	20.3	
134 Di-n-butyl phthalate	149	14.329	14.329	0.000	100	4436074	20.0	20.4	
135 Ethyl Parathion	109	14.567	14.567	0.000	80	677395	20.0	21.3	
136 4-Nitroquinoline-1-oxide	190	14.567	14.567	0.000	88	463685	20.0	20.5	
137 Octachlorostyrene	308	14.907	14.907	0.000	85	324818	20.0	20.8	
138 Isodrin	193	14.953	14.953	0.000	91	469741	20.0	19.4	
139 Fluoranthene	202	15.180	15.180	0.000	97	3906985	20.0	21.0	
140 Benzidine	184	15.418	15.418	0.000	99	7313772	60.0	63.6	
* 141 Pyrene-d10 (IS)	212	15.486	15.486	0.000	99	698361	5.00	5.00	
142 Pyrene	202	15.520	15.520	0.000	98	3922308	20.0	20.5	
\$ 143 p-Terphenyl-d14	244	15.804	15.804	0.000	98	5359375	40.0	41.6	
144 p-Dimethylamino azobenzene	225	16.042	16.042	0.000	92	690112	20.0	22.2	
145 Chlorobenzilate	139	16.133	16.133	0.000	83	1498257	20.0	20.6	
146 3,3'-Dimethylbenzidine	212	16.598	16.598	0.000	99	2548732	20.0	21.0	
147 Butyl benzyl phthalate	149	16.666	16.666	0.000	95	2000203	20.0	20.6	
148 2-Acetylaminofluorene	181	17.029	17.029	0.000	92	1673739	20.0	21.7	
150 3,3'-Dichlorobenzidine	252	17.528	17.528	0.000	75	1343550	20.0	21.1	
149 Benzo[a]anthracene	228	17.528	17.528	0.000	99	3436641	20.0	21.0	
151 4,4'-Methylene bis(2-chloroani	231	17.551	17.551	0.000	94	714954	20.0	22.4	
152 Chrysene	228	17.596	17.596	0.000	97	3236146	20.0	20.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
153 Bis(2-ethylhexyl) phthalate	149	17.732	17.732	0.000	97	2836999	20.0	20.8	
154 6-Methylchrysene	242	18.401	18.401	0.000	98	2413760	20.0	21.1	
155 Di-n-octyl phthalate	149	18.901	18.901	0.000	100	5022069	20.0	20.6	
156 Benzo[b]fluoranthene	252	19.388	19.388	0.000	97	3671977	20.0	21.3	
157 7,12-Dimethylbenz(a)anthracene	256	19.400	19.400	0.000	90	1618806	20.0	20.8	
158 Benzo[k]fluoranthene	252	19.445	19.445	0.000	99	3207741	20.0	20.5	
159 Benzo[a]pyrene	252	19.922	19.922	0.000	76	3432641	20.0	20.9	
* 160 Perylene-d12	264	20.001	20.001	0.000	98	687041	5.00	5.00	
161 3-Methylcholanthrene	268	20.489	20.489	0.000	91	1643215	20.0	20.9	
162 Dibenz[a,h]acridine	279	21.305	21.305	0.000	91	2442904	20.0	20.5	
163 Dibenz[a,j]acridine	279	21.374	21.374	0.000	96	2532480	20.0	20.2	
164 Indeno[1,2,3-cd]pyrene	276	21.623	21.623	0.000	99	2903384	20.0	21.6	M
165 Dibenz(a,h)anthracene	278	21.657	21.657	0.000	90	2982251	20.0	21.8	
166 Benzo[g,h,i]perylene	276	22.009	22.009	0.000	98	2987104	20.0	21.1	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSS_RV8270_7_00008

Amount Added: 1.00

Units: mL

Chrom Revision: 2.3 24-Sep-2020 19:22:38

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1154.D

Instrument ID: HP23264

Operator ID: kel10217

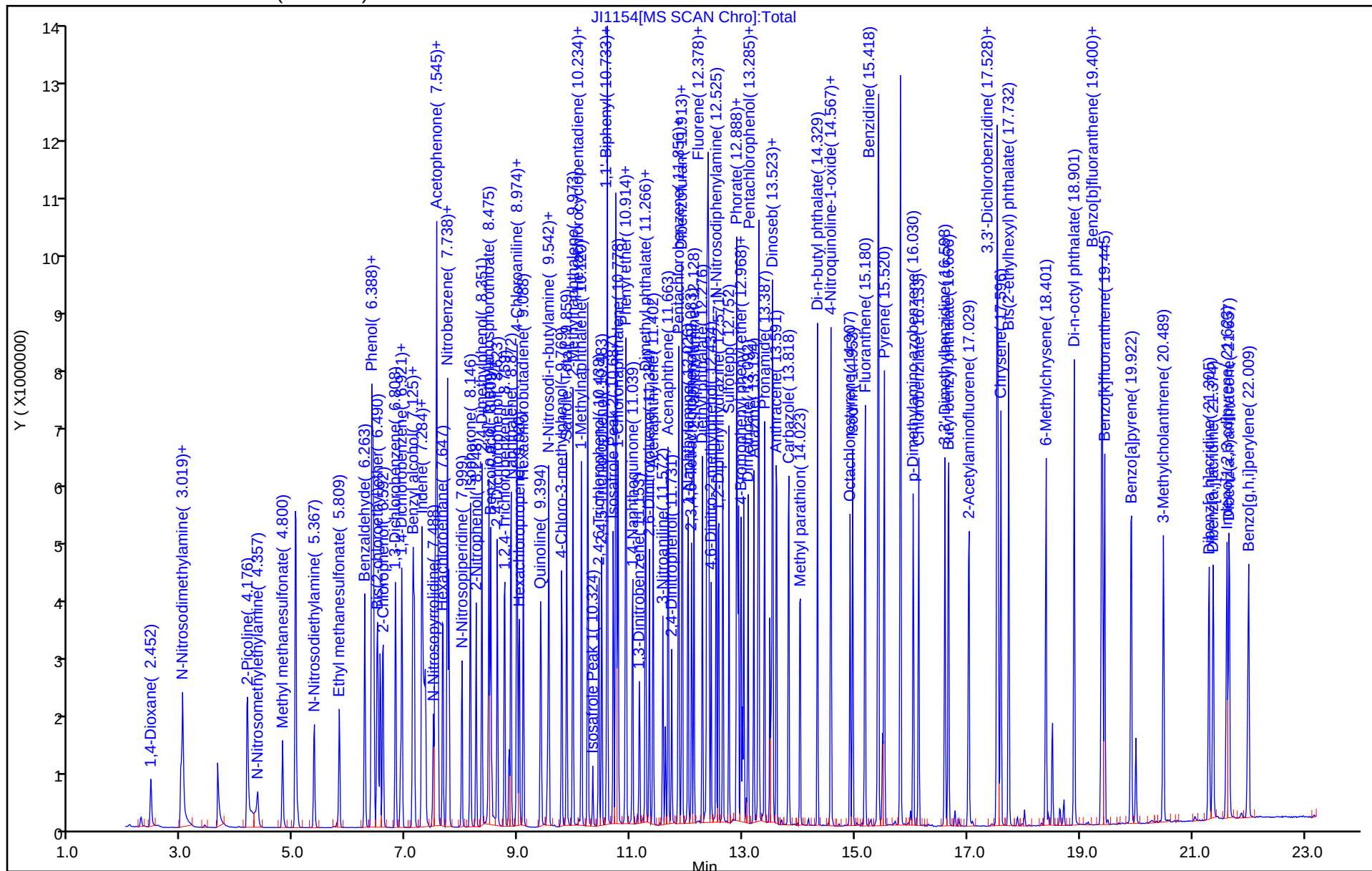
Worklist Smp#: 5

ALS Bottle#: 5

Dil. Factor: 1.0000

Limit Group: MSSV - 8270D E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1154.D

Injection Date: 29-Sep-2020 20:38:30

Instrument ID: HP23264

Lims ID: IC L7

Client ID:

Operator ID: kel10217

ALS Bottle#:

5

Worklist Smp#: 5

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

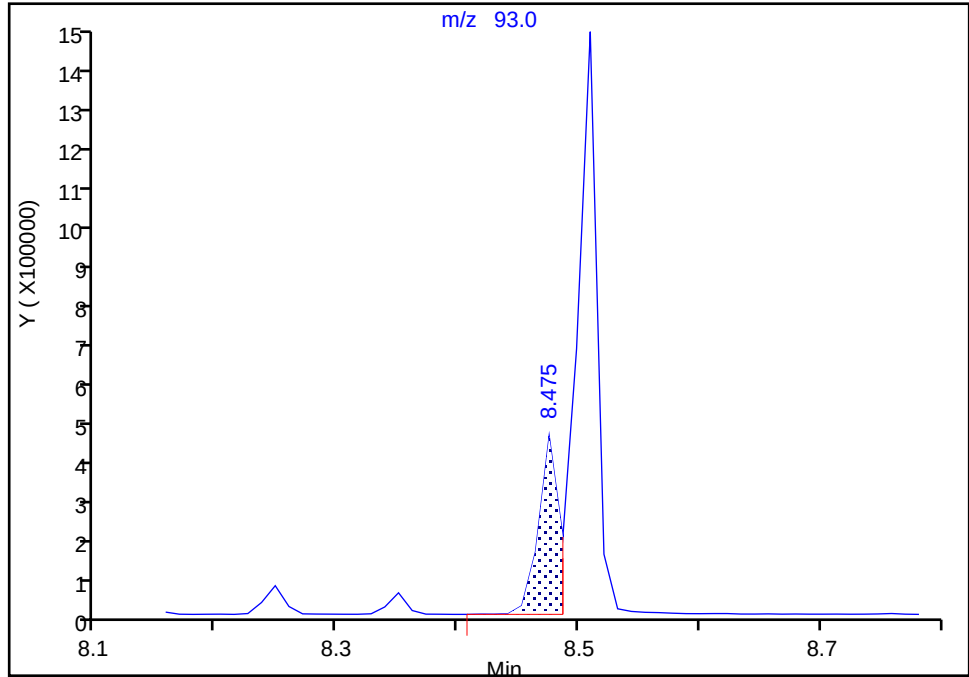
MS SCAN

52 Bis(2-chloroethoxy)methane, CAS: 111-91-1

Signal: 1

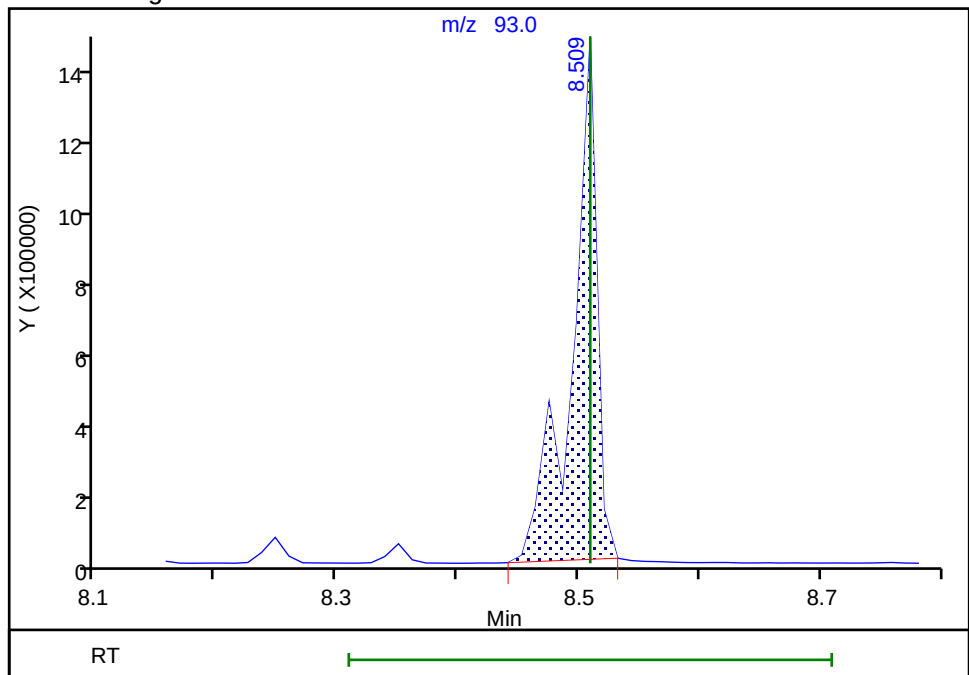
RT: 8.48
Area: 500518
Amount: 7.448063
Amount Units: ug/ml

Processing Integration Results



RT: 8.51
Area: 2099626
Amount: 20.884830
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 07:47:37

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1154.D

Injection Date: 29-Sep-2020 20:38:30

Instrument ID: HP23264

Lims ID: IC L7

Client ID:

Operator ID: kel10217

ALS Bottle#:

5

Worklist Smp#: 5

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

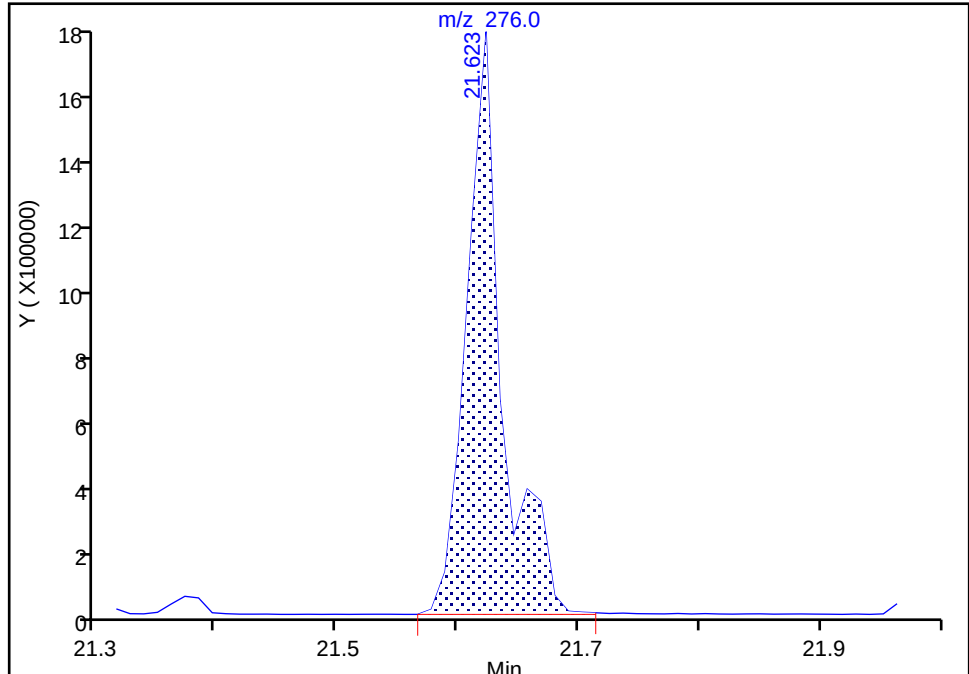
MS SCAN

164 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

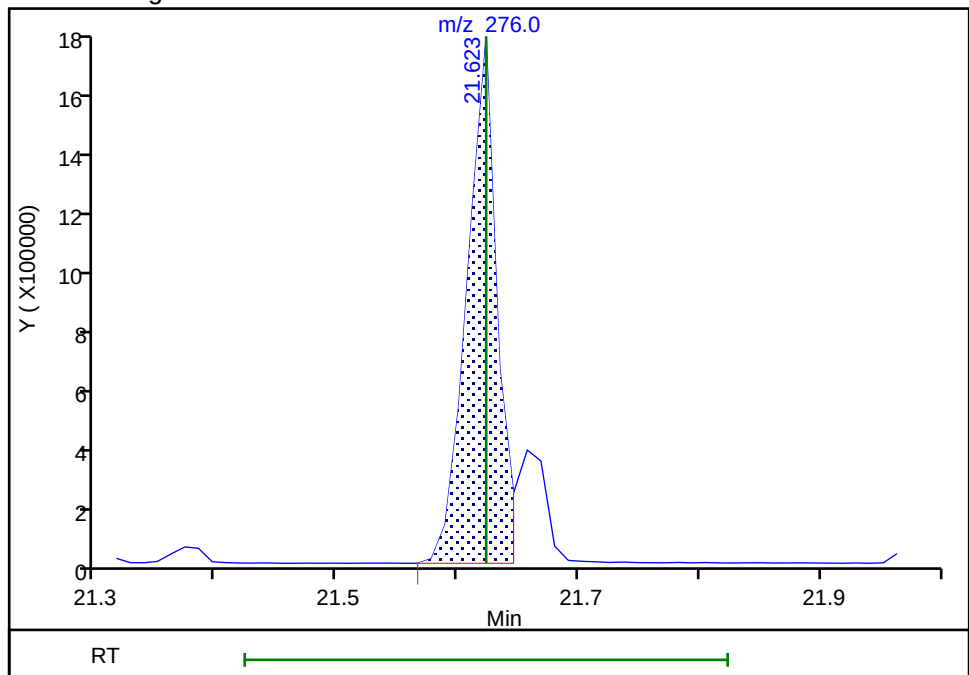
RT: 21.62
Area: 3505443
Amount: 24.607194
Amount Units: ug/ml

Processing Integration Results



RT: 21.62
Area: 2903384
Amount: 21.553641
Amount Units: ug/ml

Manual Integration Results



Reviewer: beccak, 30-Sep-2020 07:48:07

Audit Action: Split an Integrated Peak

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1155.D
 Lims ID: IC L5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 29-Sep-2020 21:08:30 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: IC L5
 Misc. Info.: 410-0011633-006
 Operator ID: kel10217 Instrument ID: HP23264
 Sublist: chrom-MSSemi_HP23264*sub7
 Method: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 01-Oct-2020 12:41:42 Calib Date: 29-Sep-2020 22:52:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1158a.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: bekk

Date: 30-Sep-2020 07:51:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	2.452	2.452	0.000	98	216349	7.50	7.07	
3 N-Nitrosodimethylamine	74	2.985	2.985	0.000	95	341945	7.50	7.57	
4 Pyridine	79	3.019	3.019	0.000	96	552138	7.50	7.20	
8 2-Picoline	93	4.165	4.165	0.000	92	521552	7.50	7.42	
10 N-Nitrosomethylethylamine	88	4.357	4.357	0.000	96	216571	7.50	7.33	
11 Methyl methanesulfonate	80	4.788	4.788	0.000	89	306034	7.50	7.31	
\$ 12 2-Fluorophenol	112	5.027	5.027	0.000	93	869299	15.0	15.4	
13 N-Nitrosodiethylamine	102	5.356	5.356	0.000	90	199397	7.50	7.20	
15 Ethyl methanesulfonate	109	5.798	5.798	0.000	94	197934	7.50	7.44	
19 Benzaldehyde	77	6.263	6.263	0.000	93	453100	7.50	7.69	
\$ 20 Phenol-d5	99	6.377	6.377	0.000	92	1161852	15.0	15.1	
21 Phenol	94	6.399	6.399	0.000	95	660940	7.50	7.59	
23 Aniline	93	6.422	6.422	0.000	97	756600	7.50	7.78	
S 46 Dinitrotoluene	165				0		15.0	15.0	
24 Bis(2-chloroethyl)ether	93	6.535	6.535	0.000	94	467967	7.50	7.70	
25 2-Chlorophenol	128	6.581	6.581	0.000	92	415150	7.50	7.59	
26 1,3-Dichlorobenzene	146	6.808	6.808	0.000	91	442689	7.50	7.55	
* 28 1,4-Dichlorobenzene-d4	152	6.898	6.898	0.000	96	186843	5.00	5.00	
29 1,4-Dichlorobenzene	146	6.921	6.921	0.000	86	443939	7.50	7.35	
30 Benzyl alcohol	108	7.114	7.114	0.000	87	291819	7.50	7.69	
31 1,2-Dichlorobenzene	146	7.137	7.137	0.000	91	421016	7.50	7.35	
34 Indene	115	7.273	7.273	0.000	87	646395	7.50	7.62	
33 2-Methylphenol	108	7.296	7.296	0.000	95	394406	7.50	7.39	
35 2,2'-oxybis[1-chloropropane]	45	7.341	7.341	0.000	91	652533	7.50	7.50	
36 N-Nitrosopyrrolidine	100	7.466	7.466	0.000	86	209391	7.50	7.16	
38 Acetophenone	105	7.511	7.511	0.000	95	718891	7.50	7.98	
37 4-Methylphenol	108	7.534	7.534	0.000	87	463934	7.50	7.54	
39 N-Nitrosodi-n-propylamine	70	7.534	7.534	0.000	88	396193	7.50	7.42	
40 N-Nitrosomorpholine	56	7.534	7.534	0.000	90	356818	7.50	7.27	
41 2-Toluidine	106	7.556	7.556	0.000	96	669267	7.50	7.45	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
42 Hexachloroethane	117	7.647	7.647	0.000	94	225856	7.50	7.52	
\$ 43 Nitrobenzene-d5	82	7.727	7.727	0.000	90	1213457	15.0	14.7	
44 Nitrobenzene	77	7.749	7.749	0.000	87	614646	7.50	7.68	
45 N-Nitrosopiperidine	114	7.988	7.988	0.000	81	201796	7.50	6.89	
47 Isophorone	82	8.135	8.135	0.000	98	1036229	7.50	7.42	
48 2-Nitrophenol	139	8.248	8.248	0.000	90	218481	7.50	7.48	
49 2,4-Dimethylphenol	107	8.339	8.339	0.000	98	507834	7.50	7.37	
51 o,o',o"-Triethylphosphorothioat	198	8.475	8.475	0.000	90	184753	7.50	7.10	
52 Bis(2-chloroethoxy)methane	93	8.498	8.498	0.000	93	720472	7.50	7.59	M
50 Benzoic acid	105	8.475	8.475	0.000	88	449548	10.0	10.8	
54 2,4-Dichlorophenol	162	8.623	8.623	0.000	96	353048	7.50	7.63	
55 1,2,4-Trichlorobenzene	180	8.748	8.748	0.000	92	356681	7.50	7.24	
* 56 Naphthalene-d8	136	8.827	8.827	0.000	98	727424	5.00	5.00	
57 Naphthalene	128	8.861	8.861	0.000	98	1118535	7.50	7.33	
58 4-Chloroaniline	127	8.963	8.963	0.000	92	457066	7.50	7.28	
59 2,6-Dichlorophenol	162	8.974	8.974	0.000	86	353709	7.50	7.82	
61 Hexachloropropene	213	9.009	9.009	0.000	94	286812	7.50	7.27	
62 Hexachlorobutadiene	225	9.088	9.088	0.000	95	240535	7.50	7.33	
63 Quinoline	129	9.394	9.394	0.000	94	702488	7.50	7.39	
65 N-Nitrosodi-n-butylamine	84	9.542	9.542	0.000	93	363552	7.50	6.96	
64 Caprolactam	113	9.496	9.496	0.000	77	123477	7.50	8.17	
S 60 Diallate	86				0		7.50	7.45	
67 4-Chloro-3-methylphenol	107	9.757	9.757	0.000	91	415981	7.50	7.68	
68 Safrole, Total	162	9.859	9.859	0.000	81	310804	7.50	7.32	
69 2-Methylnaphthalene	142	9.973	9.973	0.000	91	767953	7.50	7.57	
70 1-Methylnaphthalene	142	10.120	10.120	0.000	92	718081	7.50	7.53	
71 Hexachlorocyclopentadiene	237	10.234	10.234	0.000	83	233904	7.50	7.14	
72 1,2,4,5-Tetrachlorobenzene	216	10.234	10.234	0.000	94	353595	7.50	7.07	
73 Isosafrole Peak 1	162	10.324	10.324	0.000	82	60130	1.20	1.22	
74 2,4,6-Trichlorophenol	196	10.427	10.427	0.000	94	252765	7.50	7.42	
76 2,4,5-Trichlorophenol	196	10.483	10.483	0.000	91	265944	7.50	7.50	
\$ 77 2-Fluorobiphenyl (Surr)	172	10.574	10.574	0.000	99	1635093	15.0	14.3	
78 Isosafrole Peak 2	162	10.687	10.687	0.000	85	314801	6.30	5.97	
80 1,1'-Biphenyl	154	10.733	10.733	0.000	96	917908	7.50	7.56	
81 2-Chloronaphthalene	162	10.744	10.744	0.000	96	747162	7.50	7.10	M
82 1-Chloronaphthalene	162	10.767	10.767	0.000	96	647751	7.50	7.03	M
83 Phenyl ether	170	10.914	10.914	0.000	89	515146	7.50	7.36	
84 2-Nitroaniline	138	10.914	10.914	0.000	74	241238	7.50	7.38	
85 1,4-Naphthoquinone	158	11.028	11.028	0.000	67	283196	7.50	7.23	
S 79 Isosafrole	162				0		7.50	7.19	
89 1,3-Dinitrobenzene	168	11.153	11.153	0.000	82	125766	7.50	7.74	
87 Dimethyl phthalate	163	11.255	11.255	0.000	96	828572	7.50	7.25	
86 1,4-Dinitrobenzene	168	11.266	11.266	0.000	75	128543	7.50	7.31	
90 2,6-Dinitrotoluene	165	11.323	11.323	0.000	83	198094	7.50	7.76	
91 Acenaphthylene	152	11.391	11.391	0.000	98	958552	7.50	7.14	
92 3-Nitroaniline	138	11.572	11.572	0.000	88	184047	7.50	7.38	
* 93 Acenaphthene-d10	164	11.618	11.618	0.000	93	377916	5.00	5.00	
94 Acenaphthene	153	11.663	11.663	0.000	95	709793	7.50	7.34	
95 2,4-Dinitrophenol	184	11.720	11.720	0.000	75	147110	10.0	9.23	
99 Pentachlorobenzene	250	11.856	11.856	0.000	95	293417	7.50	7.23	
97 4-Nitrophenol	109	11.833	11.833	0.000	89	206424	7.50	6.59	
101 Dibenzofuran	168	11.913	11.913	0.000	92	1019209	7.50	7.32	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
100 2,4-Dinitrotoluene	165	11.913	11.913	0.000	67	261009	7.50	7.23	
102 1-Naphthylamine	143	12.015	12.015	0.000	96	682820	7.50	6.98	
103 2,3,4,6-Tetrachlorophenol	232	12.083	12.083	0.000	76	192596	7.50	7.43	
104 2-Naphthylamine	143	12.117	12.117	0.000	94	617514	7.50	6.78	
105 Diethyl phthalate	149	12.264	12.264	0.000	95	788114	7.50	6.84	
107 Fluorene	166	12.355	12.355	0.000	96	827510	7.50	7.57	
106 Thionazin	107	12.355	12.355	0.000	75	167821	7.50	7.19	
109 4-Chlorophenyl phenyl ether	204	12.378	12.378	0.000	86	379922	7.50	6.96	
110 N-Nitro-o-toluidine	152	12.378	12.378	0.000	69	220299	7.50	7.56	
108 4-Nitroaniline	138	12.378	12.378	0.000	77	204191	7.50	7.55	
111 4,6-Dinitro-2-methylphenol	198	12.423	12.423	0.000	73	150796	7.50	7.36	
112 N-Nitrosodiphenylamine	169	12.514	12.514	0.000	64	670009	7.50	7.53	
113 1,2-Diphenylhydrazine	77	12.559	12.559	0.000	42	1121975	7.50	7.87	
\$ 114 2,4,6-Tribromophenol	330	12.639	12.639	0.000	84	202903	15.0	14.1	
115 Sulfotepp	97	12.741	12.741	0.000	78	188905	7.50	7.50	
116 cis-Diallate	86	12.877	12.877	0.000	95	293105	5.55	5.45	
117 Phorate	75	12.888	12.888	0.000	94	671880	7.50	8.16	
118 Phenacetin	108	12.900	12.900	0.000	85	460716	7.50	7.48	
119 4-Bromophenyl phenyl ether	248	12.968	12.968	0.000	75	212979	7.50	7.80	
120 trans-Diallate	86	12.990	12.990	0.000	91	106892	1.95	2.01	
121 Hexachlorobenzene	284	13.013	13.013	0.000	90	219901	7.50	7.53	
122 Dimethoate	87	13.081	13.081	0.000	95	396528	7.50	7.74	
123 Atrazine	200	13.183	13.183	0.000	84	225059	7.50	7.68	
124 Pentachlorophenol	266	13.263	13.263	0.000	86	147133	7.50	7.73	
125 4-Aminobiphenyl	169	13.274	13.274	0.000	91	619833	7.50	7.63	
126 Pentachloronitrobenzene	237	13.274	13.274	0.000	52	141194	7.50	7.61	
127 Pronamide	173	13.376	13.376	0.000	89	392598	7.50	7.86	
* 128 Phenanthrene-d10	188	13.501	13.501	0.000	98	610596	5.00	5.00	
129 Dinoseb	211	13.512	13.512	0.000	89	201184	7.50	8.37	
130 Phenanthrene	178	13.523	13.523	0.000	99	1075520	7.50	7.41	
131 Anthracene	178	13.592	13.592	0.000	98	1124671	7.50	7.75	
132 Carbazole	167	13.807	13.807	0.000	96	1073642	7.50	7.79	
133 Methyl parathion	109	14.011	14.011	0.000	89	325684	7.50	7.69	
134 Di-n-butyl phthalate	149	14.329	14.329	0.000	100	1429360	7.50	7.42	
135 Ethyl Parathion	109	14.556	14.556	0.000	80	208393	7.50	7.40	
136 4-Nitroquinoline-1-oxide	190	14.567	14.567	0.000	92	141562	7.50	7.20	
137 Octachlorostyrene	308	14.907	14.907	0.000	87	102358	7.50	7.42	
138 Isodrin	193	14.953	14.953	0.000	92	158065	7.50	7.37	
139 Fluoranthene	202	15.168	15.168	0.000	98	1288363	7.50	7.81	
140 Benzidine	184	15.395	15.395	0.000	99	2440632	22.5	22.5	
* 141 Pyrene-d10 (IS)	212	15.486	15.486	0.000	99	660340	5.00	5.00	
142 Pyrene	202	15.509	15.509	0.000	98	1316218	7.50	7.26	
\$ 143 p-Terphenyl-d14	244	15.804	15.804	0.000	98	1853490	15.0	15.2	
144 p-Dimethylamino azobenzene	225	16.031	16.031	0.000	92	232571	7.50	7.91	
145 Chlorobenzilate	139	16.121	16.121	0.000	82	518183	7.50	7.54	
146 3,3'-Dimethylbenzidine	212	16.586	16.586	0.000	99	855392	7.50	7.46	
147 Butyl benzyl phthalate	149	16.654	16.654	0.000	95	670955	7.50	7.32	
148 2-Acetylaminofluorene	181	17.006	17.006	0.000	93	525774	7.50	7.22	
150 3,3'-Dichlorobenzidine	252	17.517	17.517	0.000	76	434439	7.50	7.20	
149 Benzo[a]anthracene	228	17.528	17.528	0.000	98	1128888	7.50	7.30	
151 4,4'-Methylene bis(2-chloroani	231	17.539	17.539	0.000	93	221518	7.50	7.34	
152 Chrysene	228	17.585	17.585	0.000	97	1092460	7.50	7.18	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
153 Bis(2-ethylhexyl) phthalate	149	17.732	17.732	0.000	97	923127	7.50	7.17	
154 6-Methylchrysene	242	18.390	18.390	0.000	99	795509	7.50	7.37	
155 Di-n-octyl phthalate	149	18.901	18.901	0.000	99	1684516	7.50	7.36	
156 Benzo[b]fluoranthene	252	19.377	19.377	0.000	97	1231847	7.50	7.60	
157 7,12-Dimethylbenz(a)anthracene	256	19.388	19.388	0.000	91	555418	7.50	7.61	
158 Benzo[k]fluoranthene	252	19.434	19.434	0.000	99	1095416	7.50	7.45	
159 Benzo[a]pyrene	252	19.910	19.910	0.000	76	1109058	7.50	7.18	
* 160 Perylene-d12	264	20.001	20.001	0.000	99	645455	5.00	5.00	
161 3-Methylcholanthrene	268	20.489	20.489	0.000	91	531239	7.50	7.18	
162 Dibenz[a,h]acridine	279	21.294	21.294	0.000	91	817131	7.50	7.29	
163 Dibenz[a,j]acridine	279	21.362	21.362	0.000	96	840997	7.50	7.15	
164 Indeno[1,2,3-cd]pyrene	276	21.612	21.612	0.000	99	980695	7.50	7.75	M
165 Dibenz(a,h)anthracene	278	21.646	21.646	0.000	92	983529	7.50	7.64	
166 Benzo[g,h,i]perylene	276	21.986	21.986	0.000	98	1009541	7.50	7.58	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSS_RV8270_5_00008

Amount Added: 1.00

Units: mL

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1155.D

Injection Date: 29-Sep-2020 21:08:30

Instrument ID: HP23264

Operator ID: kel10217

Lims ID: IC L5

Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul

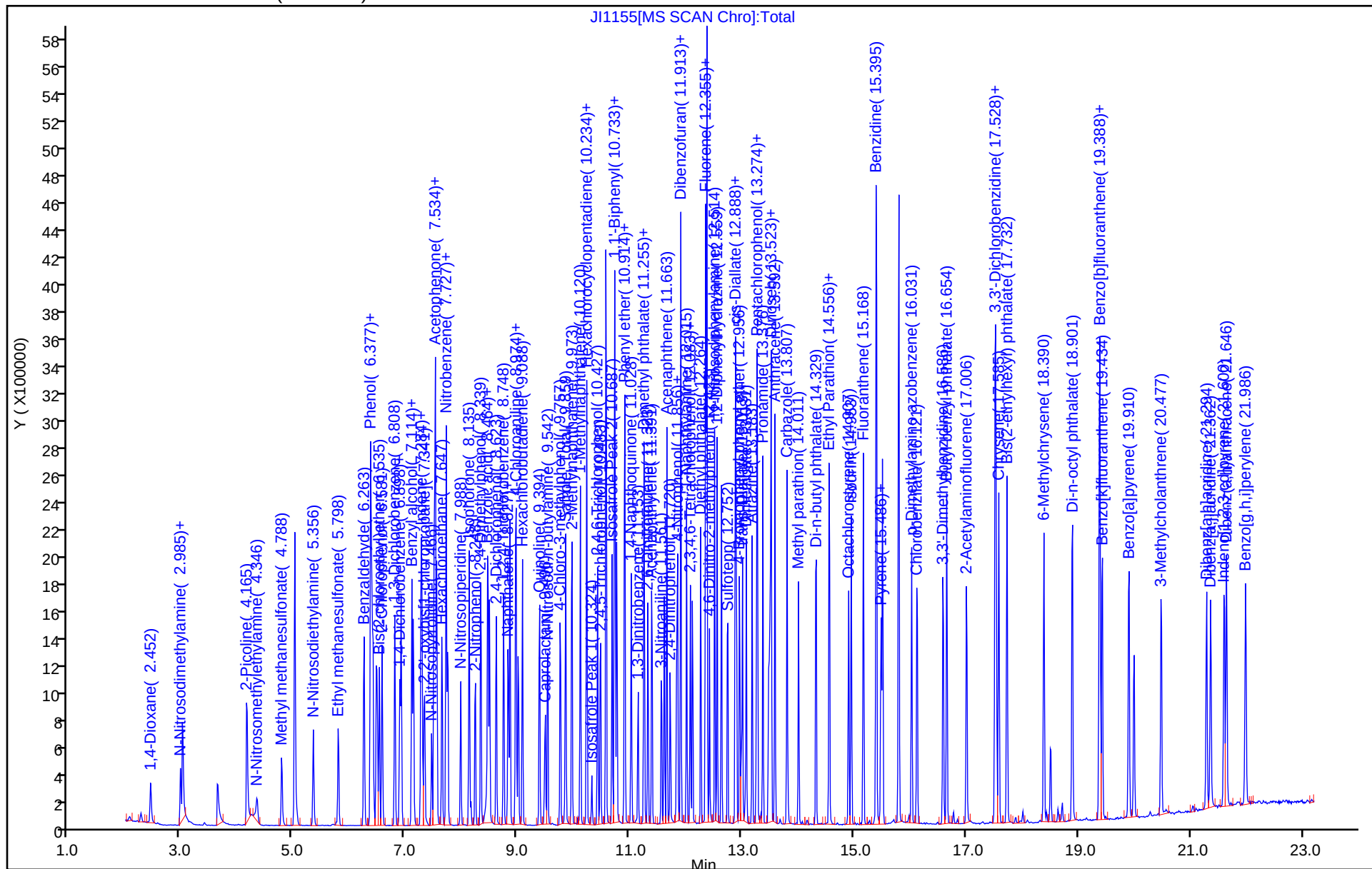
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Env, LLC

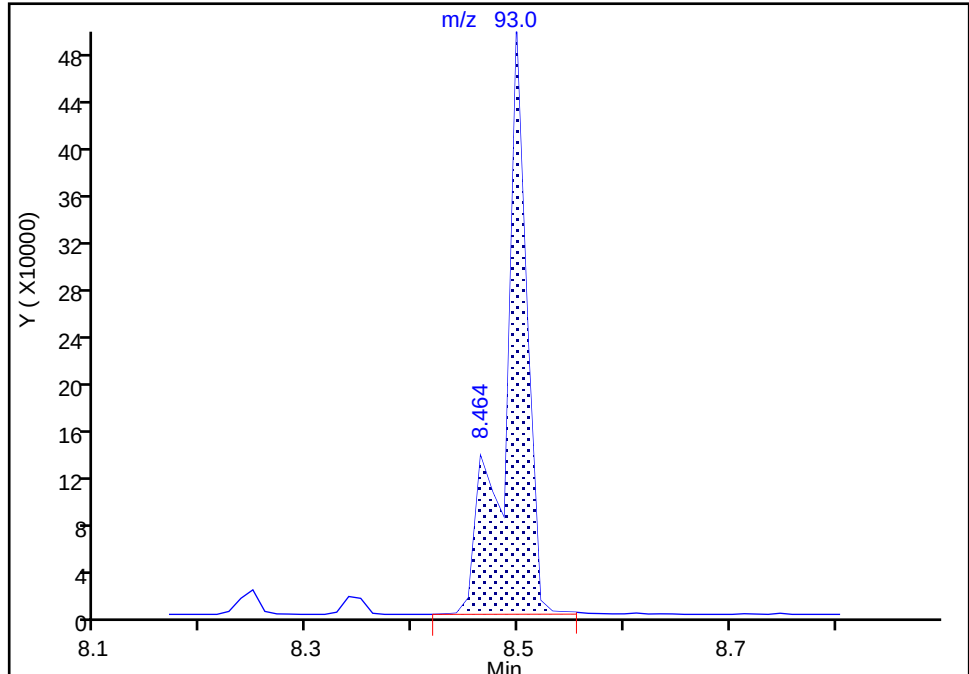
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Injection Date: 29-Sep-2020 21:08:30 Instrument ID: HP23264
Lims ID: IC L5
Client ID:
Operator ID: kel10217 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.25mm (0.25 mm) Detector MS SCAN

52 Bis(2-chloroethoxy)methane, CAS: 111-91-1

Signal: 1

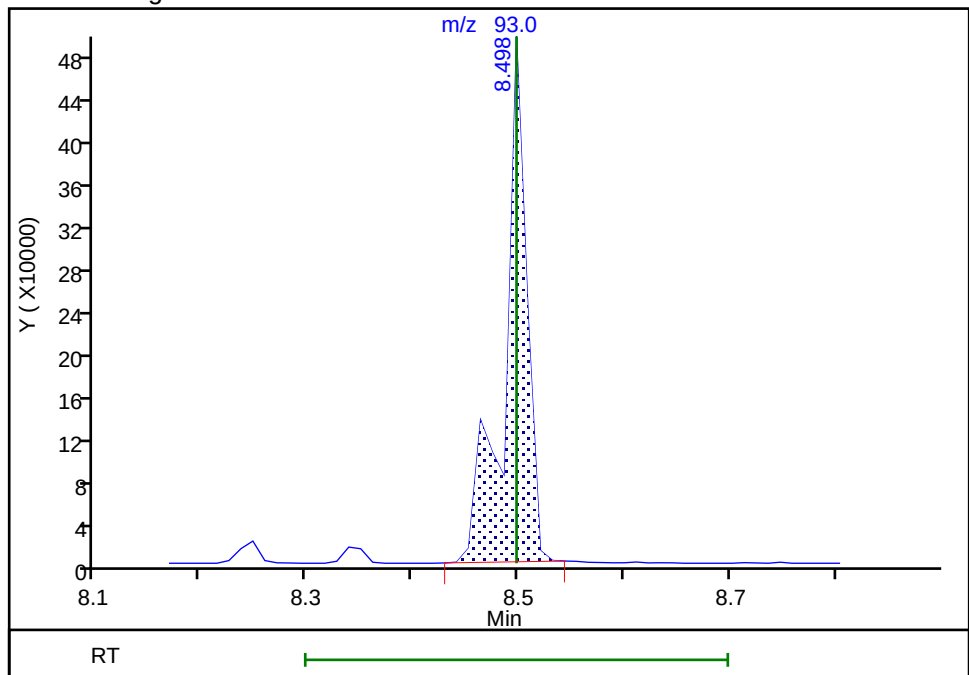
RT: 8.46
Area: 729149
Amount: 9.595224
Amount Units: ug/ml

Processing Integration Results



RT: 8.50
Area: 720472
Amount: 7.594626
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 07:50:45
Audit Action: Manually Integrated

Audit Reason: Assign Peak
Page 1031 of 1228

11/02/2020

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1155.D

Injection Date: 29-Sep-2020 21:08:30

Instrument ID: HP23264

Lims ID: IC L5

Client ID:

Operator ID: kel10217

ALS Bottle#:

6

Worklist Smp#: 6

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

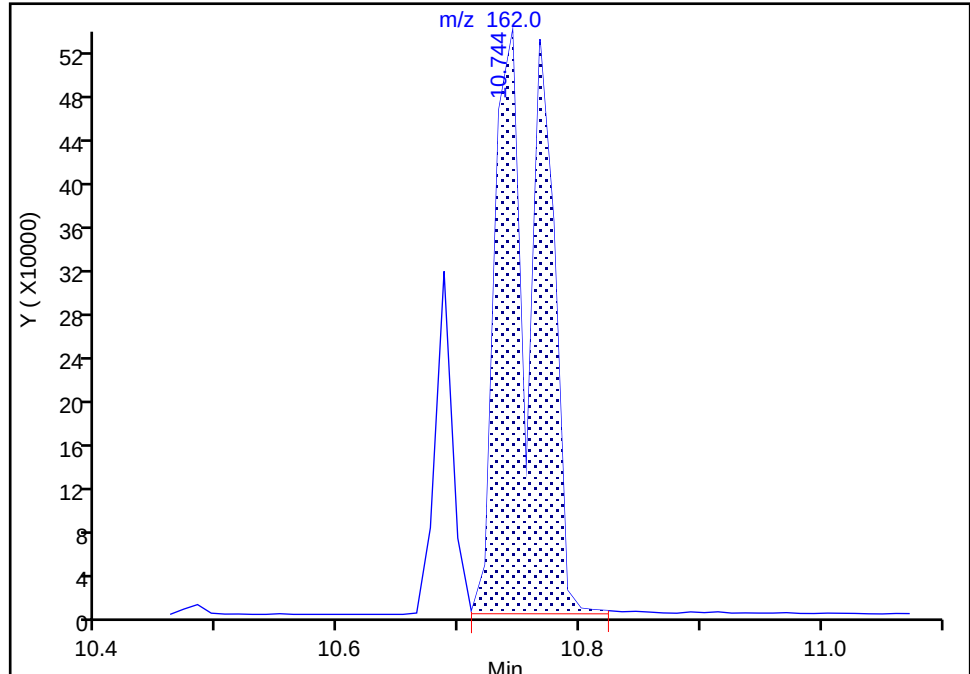
MS SCAN

81 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

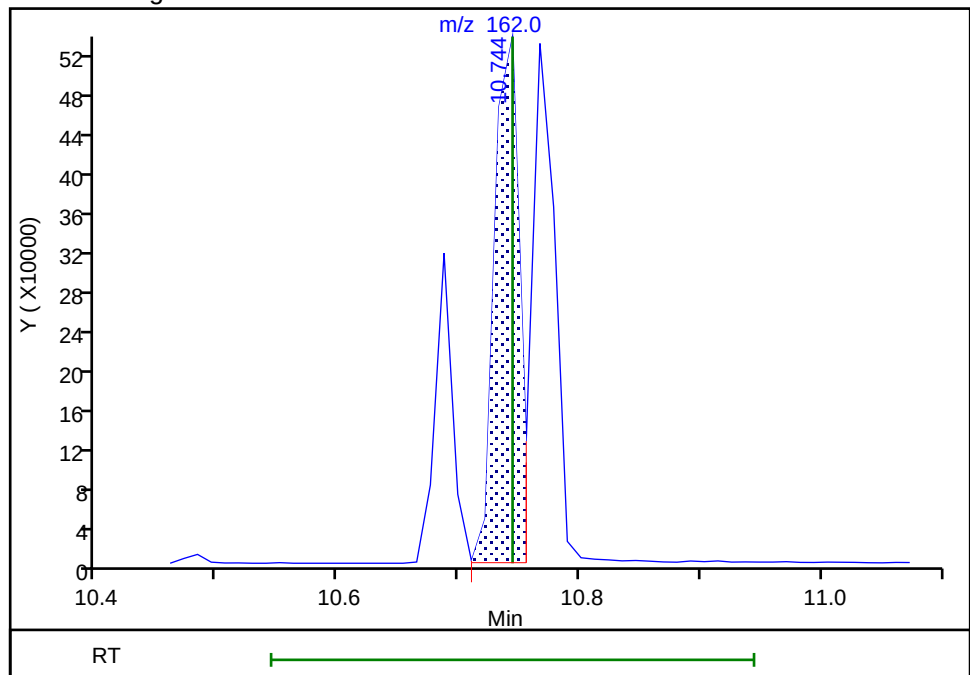
RT: 10.74
Area: 1411527
Amount: 8.583167
Amount Units: ug/ml

Processing Integration Results



RT: 10.74
Area: 747162
Amount: 7.100593
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 07:51:13

Audit Action: Split an Integrated Peak

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1155.D

Injection Date: 29-Sep-2020 21:08:30

Instrument ID: HP23264

Lims ID: IC L5

Client ID:

Operator ID: kel10217

ALS Bottle#:

6

Worklist Smp#: 6

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

MS SCAN

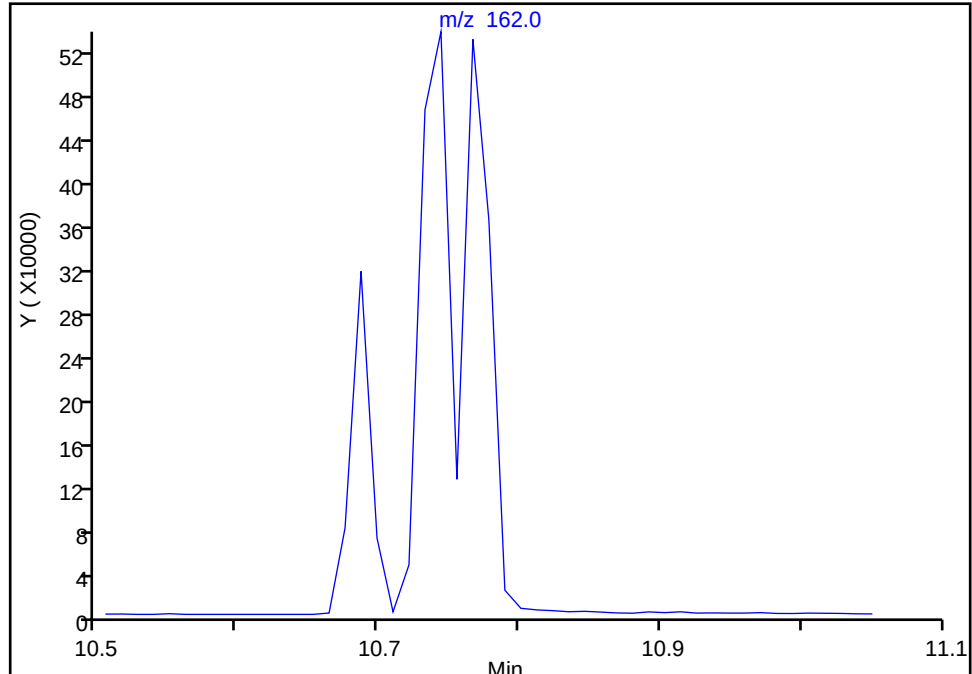
82 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

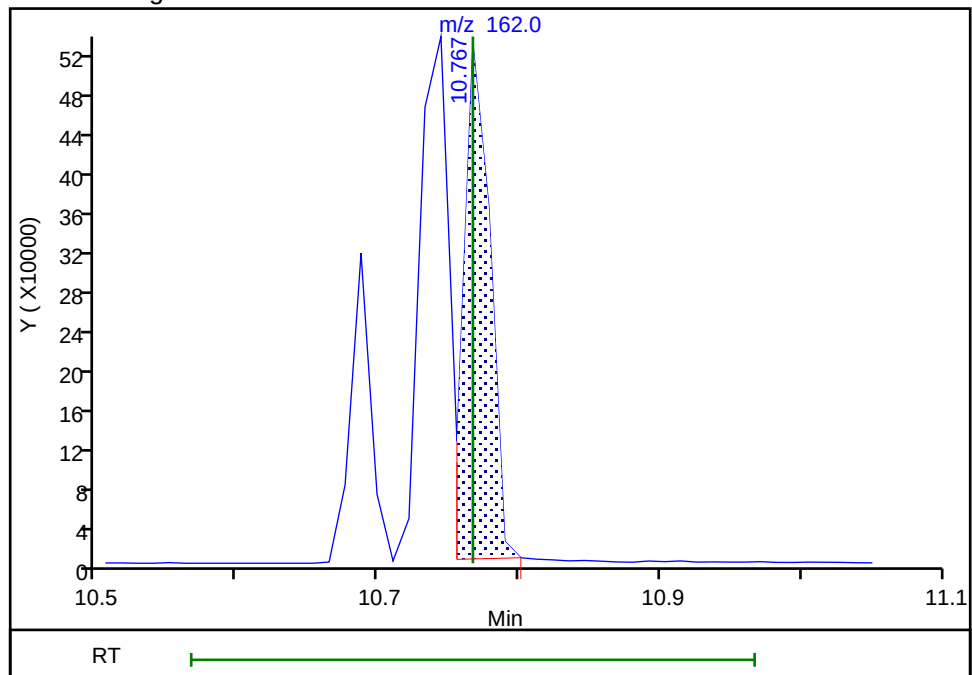
Not Detected

Expected RT: 10.77

Processing Integration Results



Manual Integration Results



Reviewer: bekk, 30-Sep-2020 10:46:40

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1155.D

Injection Date: 29-Sep-2020 21:08:30

Instrument ID: HP23264

Lims ID: IC L5

Client ID:

Operator ID: kel10217

ALS Bottle#:

6

Worklist Smp#: 6

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

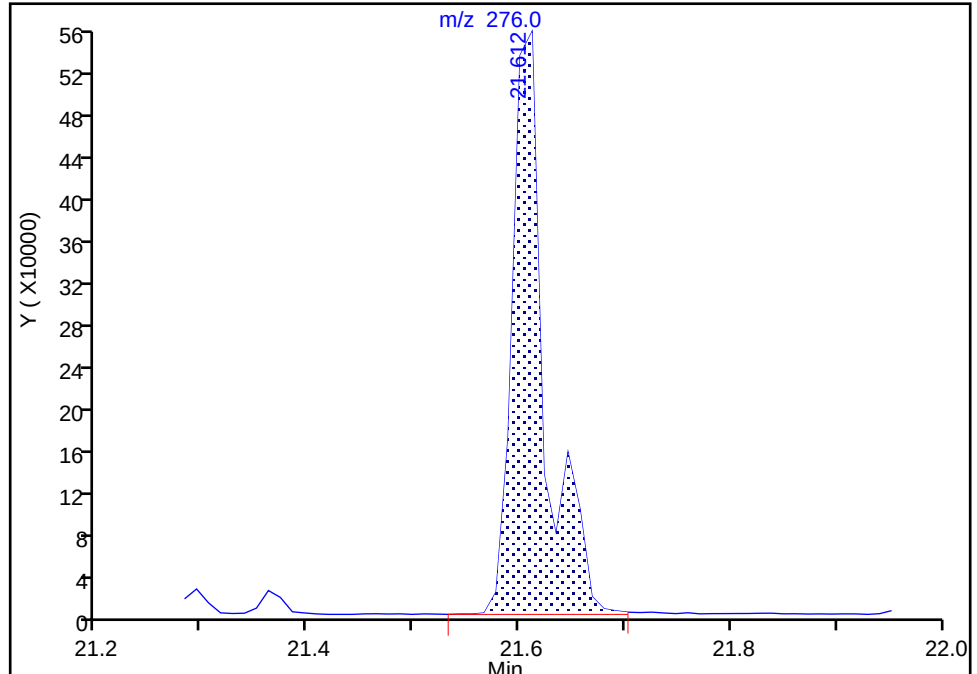
MS SCAN

164 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

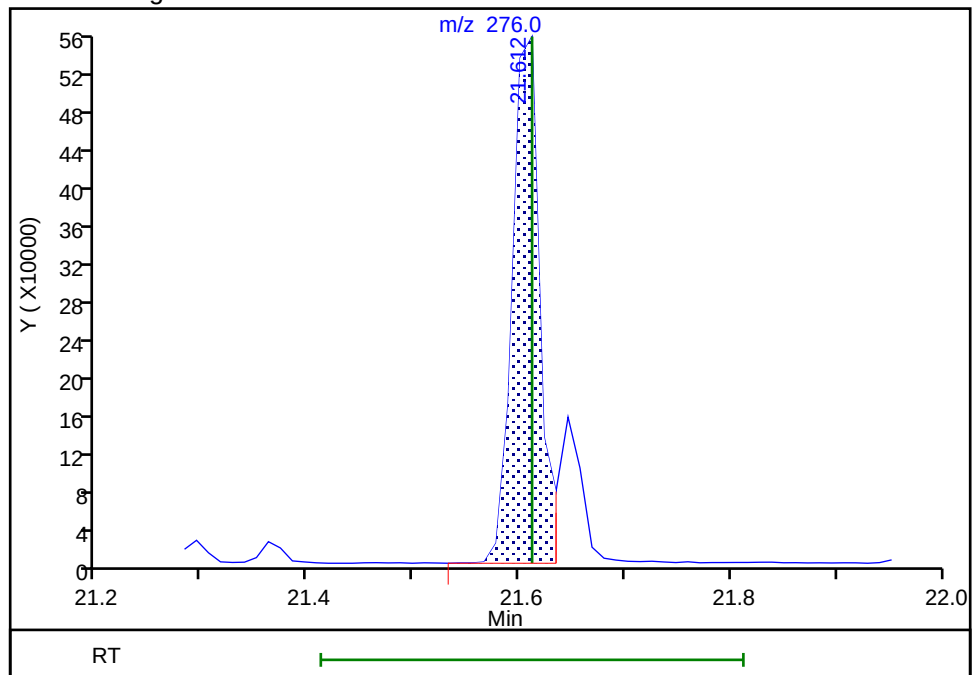
RT: 21.61
Area: 1196111
Amount: 8.985372
Amount Units: ug/ml

Processing Integration Results



RT: 21.61
Area: 980695
Amount: 7.749378
Amount Units: ug/ml

Manual Integration Results



Reviewer: beccak, 30-Sep-2020 07:51:41

Audit Action: Split an Integrated Peak

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1156.D
 Lims ID: IC L4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 29-Sep-2020 21:39:30 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: IC L4
 Misc. Info.: 410-0011633-007
 Operator ID: kel10217 Instrument ID: HP23264
 Sublist: chrom-MSSemi_HP23264*sub7
 Method: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 01-Oct-2020 12:41:56 Calib Date: 29-Sep-2020 22:52:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1158a.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: bekk

Date: 30-Sep-2020 08:58:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	2.452	2.452	0.000	97	111798	3.75	3.83	
3 N-Nitrosodimethylamine	74	2.996	2.996	0.000	94	154641	3.75	3.59	
4 Pyridine	79	3.030	3.030	0.000	95	266028	3.75	3.64	
8 2-Picoline	93	4.176	4.176	0.000	93	245249	3.75	3.66	
10 N-Nitrosomethylethylamine	88	4.358	4.358	0.000	94	103518	3.75	3.67	
11 Methyl methanesulfonate	80	4.789	4.789	0.000	88	145595	3.75	3.65	
\$ 12 2-Fluorophenol	112	5.027	5.027	0.000	93	417711	7.50	7.77	
13 N-Nitrosodiethylamine	102	5.356	5.356	0.000	91	96915	3.75	3.67	
15 Ethyl methanesulfonate	109	5.798	5.798	0.000	95	95869	3.75	3.78	
19 Benzaldehyde	77	6.263	6.263	0.000	94	210209	3.75	3.74	
\$ 20 Phenol-d5	99	6.377	6.377	0.000	92	551856	7.50	7.55	
21 Phenol	94	6.400	6.400	0.000	88	308153	3.75	3.71	
23 Aniline	93	6.411	6.411	0.000	97	352807	3.75	3.80	
S 46 Dinitrotoluene	165				0		7.50	7.70	
24 Bis(2-chloroethyl)ether	93	6.536	6.536	0.000	93	226315	3.75	3.91	
25 2-Chlorophenol	128	6.581	6.581	0.000	91	195944	3.75	3.76	
26 1,3-Dichlorobenzene	146	6.808	6.808	0.000	91	213363	3.75	3.82	
* 28 1,4-Dichlorobenzene-d4	152	6.899	6.899	0.000	96	178089	5.00	5.00	
29 1,4-Dichlorobenzene	146	6.921	6.921	0.000	88	216257	3.75	3.76	
30 Benzyl alcohol	108	7.114	7.114	0.000	86	134242	3.75	3.71	
31 1,2-Dichlorobenzene	146	7.137	7.137	0.000	91	199244	3.75	3.65	
34 Indene	115	7.273	7.273	0.000	88	293659	3.75	3.63	
33 2-Methylphenol	108	7.296	7.296	0.000	95	191050	3.75	3.76	
35 2,2'-oxybis[1-chloropropane]	45	7.341	7.341	0.000	91	315031	3.75	3.80	
36 N-Nitrosopyrrolidine	100	7.466	7.466	0.000	89	104765	3.75	3.76	
38 Acetophenone	105	7.511	7.511	0.000	95	322234	3.75	3.75	
37 4-Methylphenol	108	7.523	7.523	0.000	86	220185	3.75	3.75	
39 N-Nitrosodi-n-propylamine	70	7.523	7.523	0.000	89	186503	3.75	3.67	
40 N-Nitrosomorpholine	56	7.534	7.534	0.000	88	175392	3.75	3.75	
41 2-Toluidine	106	7.557	7.557	0.000	97	327049	3.75	3.82	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
42 Hexachloroethane	117	7.647	7.647	0.000	94	101158	3.75	3.54	
\$ 43 Nitrobenzene-d5	82	7.727	7.727	0.000	90	577054	7.50	7.32	
44 Nitrobenzene	77	7.749	7.749	0.000	89	277261	3.75	3.63	
45 N-Nitrosopiperidine	114	7.988	7.988	0.000	81	105826	3.75	3.79	
47 Isophorone	82	8.135	8.135	0.000	99	508045	3.75	3.81	
48 2-Nitrophenol	139	8.249	8.249	0.000	87	101505	3.75	3.64	
49 2,4-Dimethylphenol	107	8.339	8.339	0.000	98	248190	3.75	3.78	
51 o,o',o"-Triethylphosphorothioat	198	8.464	8.464	0.000	89	91523	3.75	3.69	
50 Benzoic acid	105	8.464	8.464	0.000	88	262962	7.50	7.07	
52 Bis(2-chloroethoxy)methane	93	8.498	8.498	0.000	93	341041	3.75	3.77	M
54 2,4-Dichlorophenol	162	8.623	8.623	0.000	94	154217	3.75	3.49	
55 1,2,4-Trichlorobenzene	180	8.748	8.748	0.000	90	181399	3.75	3.86	
* 56 Naphthalene-d8	136	8.827	8.827	0.000	99	693934	5.00	5.00	
57 Naphthalene	128	8.861	8.861	0.000	98	540456	3.75	3.71	
58 4-Chloroaniline	127	8.963	8.963	0.000	91	220513	3.75	3.68	
59 2,6-Dichlorophenol	162	8.975	8.975	0.000	92	168233	3.75	3.90	
61 Hexachloropropene	213	9.009	9.009	0.000	93	138115	3.75	3.67	
62 Hexachlorobutadiene	225	9.088	9.088	0.000	96	114497	3.75	3.66	
63 Quinoline	129	9.383	9.383	0.000	95	340284	3.75	3.75	
64 Caprolactam	113	9.474	9.474	0.000	79	53880	3.75	3.74	
65 N-Nitrosodi-n-butylamine	84	9.531	9.531	0.000	93	172746	3.75	3.47	
S 60 Diallate	86				0		3.75	3.67	
67 4-Chloro-3-methylphenol	107	9.757	9.757	0.000	91	191442	3.75	3.70	
68 Safrole, Total	162	9.859	9.859	0.000	83	150869	3.75	3.73	
69 2-Methylnaphthalene	142	9.973	9.973	0.000	88	353354	3.75	3.65	
70 1-Methylnaphthalene	142	10.120	10.120	0.000	92	347095	3.75	3.81	
71 Hexachlorocyclopentadiene	237	10.234	10.234	0.000	79	112410	3.75	3.85	
72 1,2,4,5-Tetrachlorobenzene	216	10.234	10.234	0.000	95	177275	3.75	3.98	
73 Isosafrole Peak 1	162	10.325	10.325	0.000	84	27138	0.6000	0.6184	M
74 2,4,6-Trichlorophenol	196	10.427	10.427	0.000	92	113956	3.75	3.75	
76 2,4,5-Trichlorophenol	196	10.472	10.472	0.000	89	128583	3.75	4.07	
\$ 77 2-Fluorobiphenyl (Surr)	172	10.574	10.574	0.000	100	808799	7.50	7.95	
78 Isosafrole Peak 2	162	10.688	10.688	0.000	87	150273	3.15	3.20	
80 1,1'-Biphenyl	154	10.733	10.733	0.000	95	430855	3.75	3.98	
81 2-Chloronaphthalene	162	10.733	10.733	0.000	96	375013	3.75	4.00	M
82 1-Chloronaphthalene	162	10.767	10.767	0.000	96	300184	3.75	3.65	M
84 2-Nitroaniline	138	10.914	10.914	0.000	74	115831	3.75	3.98	
83 Phenyl ether	170	10.903	10.903	0.000	88	234705	3.75	3.77	
85 1,4-Naphthoquinone	158	11.028	11.028	0.000	74	136912	3.75	3.92	
S 79 Isosafrole	162				0		3.75	3.81	
89 1,3-Dinitrobenzene	168	11.153	11.153	0.000	82	58460	3.75	4.04	M
87 Dimethyl phthalate	163	11.255	11.255	0.000	91	409937	3.75	4.02	
86 1,4-Dinitrobenzene	168	11.255	11.255	0.000	47	58208	3.75	3.71	Ma
90 2,6-Dinitrotoluene	165	11.323	11.323	0.000	84	86069	3.75	3.78	
91 Acenaphthylene	152	11.391	11.391	0.000	98	462762	3.75	3.87	
92 3-Nitroaniline	138	11.561	11.561	0.000	87	88883	3.75	4.00	
* 93 Acenaphthene-d10	164	11.618	11.618	0.000	96	336734	5.00	5.00	
94 Acenaphthene	153	11.663	11.663	0.000	96	344338	3.75	4.00	
95 2,4-Dinitrophenol	184	11.720	11.720	0.000	76	99684	7.50	7.02	
97 4-Nitrophenol	109	11.833	11.833	0.000	80	101817	3.75	3.65	
99 Pentachlorobenzene	250	11.856	11.856	0.000	96	149051	3.75	4.12	
101 Dibenzofuran	168	11.913	11.913	0.000	93	490066	3.75	3.95	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
100 2,4-Dinitrotoluene	165	11.913	11.913	0.000	67	125834	3.75	3.91	
102 1-Naphthylamine	143	12.015	12.015	0.000	97	336569	3.75	3.86	
103 2,3,4,6-Tetrachlorophenol	232	12.083	12.083	0.000	75	88461	3.75	3.83	
104 2-Naphthylamine	143	12.117	12.117	0.000	93	312283	3.75	3.85	
105 Diethyl phthalate	149	12.264	12.264	0.000	96	404332	3.75	3.94	
107 Fluorene	166	12.355	12.355	0.000	94	375304	3.75	3.85	
106 Thionazin	107	12.355	12.355	0.000	75	82015	3.75	3.94	
110 N-Nitro-o-toluidine	152	12.378	12.378	0.000	82	100868	3.75	3.88	
108 4-Nitroaniline	138	12.378	12.378	0.000	79	103681	3.75	4.30	
109 4-Chlorophenyl phenyl ether	204	12.378	12.378	0.000	93	191717	3.75	3.94	
111 4,6-Dinitro-2-methylphenol	198	12.423	12.423	0.000	82	69909	3.75	3.55	
112 N-Nitrosodiphenylamine	169	12.514	12.514	0.000	62	337637	3.75	3.94	
113 1,2-Diphenylhydrazine	77	12.559	12.559	0.000	42	518991	3.75	3.79	
\$ 114 2,4,6-Tribromophenol	330	12.639	12.639	0.000	88	97545	7.50	7.61	
115 Sulfotepp	97	12.741	12.741	0.000	80	85155	3.75	3.52	
116 cis-Diallate	86	12.877	12.877	0.000	92	141054	2.78	2.73	
117 Phorate	75	12.888	12.888	0.000	94	302301	3.75	3.82	
118 Phenacetin	108	12.900	12.900	0.000	89	219440	3.75	3.71	
119 4-Bromophenyl phenyl ether	248	12.968	12.968	0.000	78	97237	3.75	3.71	
120 trans-Diallate	86	12.990	12.990	0.000	91	48105	0.9750	0.9393	M
121 Hexachlorobenzene	284	13.013	13.013	0.000	91	100855	3.75	3.59	
122 Dimethoate	87	13.081	13.081	0.000	95	179016	3.75	3.63	
123 Atrazine	200	13.183	13.183	0.000	89	111603	3.75	3.96	
124 Pentachlorophenol	266	13.263	13.263	0.000	87	63279	3.75	3.46	
126 Pentachloronitrobenzene	237	13.274	13.274	0.000	53	65504	3.75	3.67	
125 4-Aminobiphenyl	169	13.274	13.274	0.000	91	289370	3.75	3.70	
127 Pronamide	173	13.376	13.376	0.000	90	188559	3.75	3.93	
* 128 Phenanthrene-d10	188	13.490	13.490	0.000	99	587103	5.00	5.00	
129 Dinoseb	211	13.512	13.512	0.000	91	93436	3.75	4.04	
130 Phenanthrene	178	13.524	13.524	0.000	99	509375	3.75	3.65	
131 Anthracene	178	13.592	13.592	0.000	98	525800	3.75	3.77	
132 Carbazole	167	13.807	13.807	0.000	96	494611	3.75	3.73	
133 Methyl parathion	109	14.011	14.011	0.000	90	148115	3.75	3.64	
134 Di-n-butyl phthalate	149	14.329	14.329	0.000	100	700322	3.75	3.78	
135 Ethyl Parathion	109	14.556	14.556	0.000	80	93890	3.75	3.47	
136 4-Nitroquinoline-1-oxide	190	14.567	14.567	0.000	88	51714	3.75	2.87	
137 Octachlorostyrene	308	14.908	14.908	0.000	85	49880	3.75	3.76	
138 Isodrin	193	14.953	14.953	0.000	92	80927	3.75	3.92	
139 Fluoranthene	202	15.169	15.169	0.000	97	621498	3.75	3.92	
140 Benzidine	184	15.395	15.395	0.000	99	1065600	11.3	10.5	
* 141 Pyrene-d10 (IS)	212	15.486	15.486	0.000	98	616246	5.00	5.00	
142 Pyrene	202	15.509	15.509	0.000	98	627665	3.75	3.71	
\$ 143 p-Terphenyl-d14	244	15.792	15.792	0.000	98	852832	7.50	7.51	
144 p-Dimethylamino azobenzene	225	16.031	16.031	0.000	92	103586	3.75	3.77	
145 Chlorobenzilate	139	16.121	16.121	0.000	80	235601	3.75	3.67	
146 3,3'-Dimethylbenzidine	212	16.587	16.587	0.000	99	381682	3.75	3.56	
147 Butyl benzyl phthalate	149	16.655	16.655	0.000	95	325695	3.75	3.81	
148 2-Acetylaminofluorene	181	17.006	17.006	0.000	93	238533	3.75	3.51	
150 3,3'-Dichlorobenzidine	252	17.517	17.517	0.000	61	208665	3.75	3.71	
149 Benzo[a]anthracene	228	17.517	17.517	0.000	99	549741	3.75	3.81	
151 4,4'-Methylene bis(2-chloroani	231	17.539	17.539	0.000	94	106588	3.75	3.78	
152 Chrysene	228	17.585	17.585	0.000	97	545407	3.75	3.84	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
153 Bis(2-ethylhexyl) phthalate	149	17.732	17.732	0.000	96	447396	3.75	3.72	
154 6-Methylchrysene	242	18.390	18.390	0.000	98	388874	3.75	3.86	
155 Di-n-octyl phthalate	149	18.889	18.889	0.000	99	771113	3.75	3.70	
156 Benzo[b]fluoranthene	252	19.377	19.377	0.000	96	546748	3.75	3.71	
157 7,12-Dimethylbenz(a)anthracene	256	19.389	19.389	0.000	91	252331	3.75	3.80	
158 Benzo[k]fluoranthene	252	19.423	19.423	0.000	99	538004	3.75	4.03	
159 Benzo[a]pyrene	252	19.899	19.899	0.000	77	535735	3.75	3.81	
* 160 Perylene-d12	264	19.990	19.990	0.000	99	586933	5.00	5.00	
161 3-Methylcholanthrene	268	20.478	20.478	0.000	92	250899	3.75	3.73	
162 Dibenz[a,h]acridine	279	21.294	21.294	0.000	92	366915	3.75	3.60	
163 Dibenz[a,j]acridine	279	21.362	21.362	0.000	96	400640	3.75	3.75	
164 Indeno[1,2,3-cd]pyrene	276	21.601	21.601	0.000	100	435139	3.75	3.78	
165 Dibenz(a,h)anthracene	278	21.646	21.646	0.000	92	468331	3.75	4.00	
166 Benzo[g,h,i]perylene	276	21.986	21.986	0.000	98	484741	3.75	4.00	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_4_00008

Amount Added: 1.00

Units: mL

Report Date: 01-Oct-2020 12:41:59

Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1156.D

Injection Date: 29-Sep-2020 21:39:30

Instrument ID: HP23264

Operator ID: kel10217

Lims ID: IC L4

Worklist Smp#: 7

Client ID:

Injection Vol: 1.0 ul

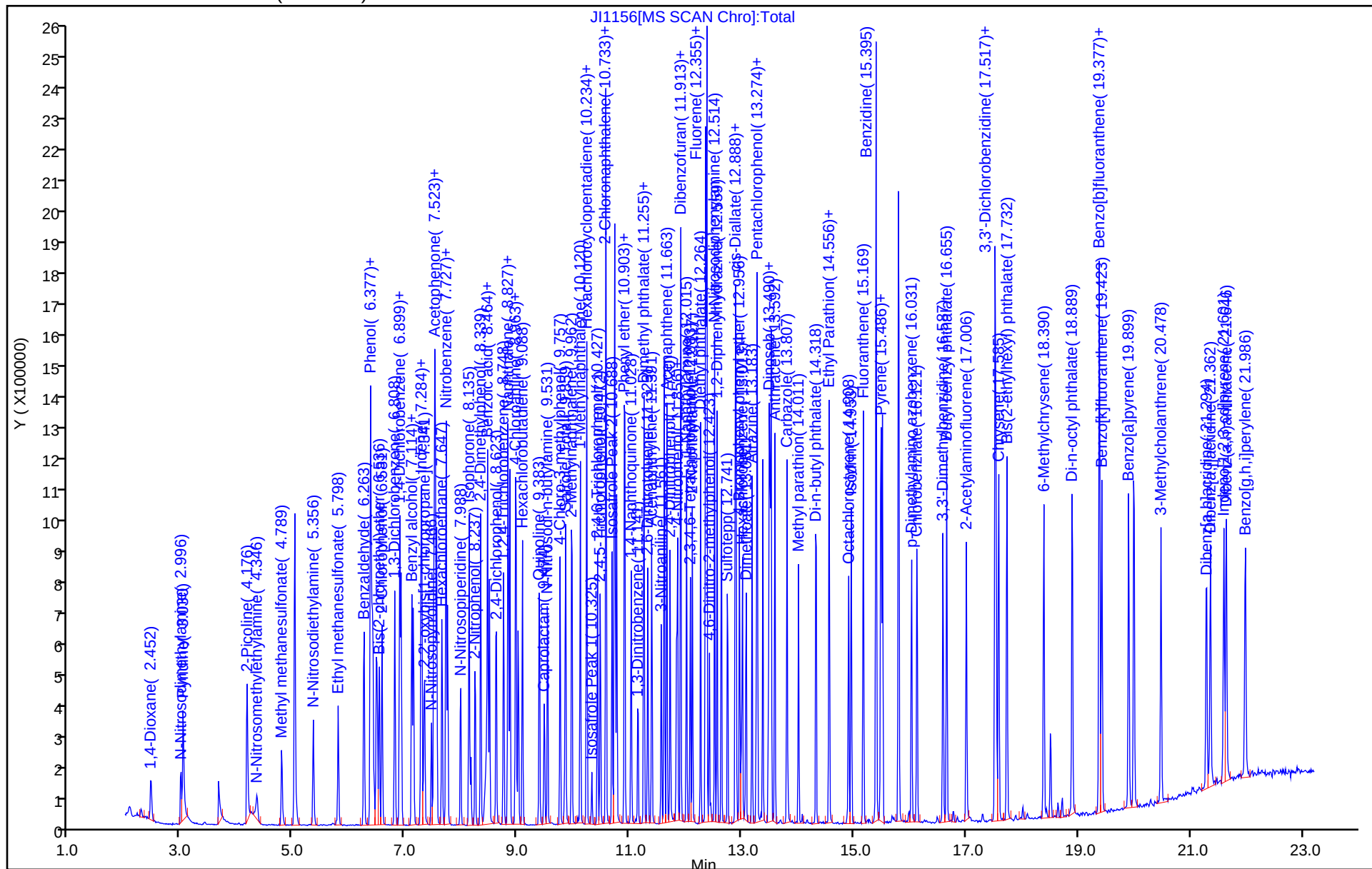
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1156.D

Injection Date: 29-Sep-2020 21:39:30

Instrument ID: HP23264

Lims ID: IC L4

Client ID:

Operator ID: kel10217

ALS Bottle#:

7

Worklist Smp#: 7

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

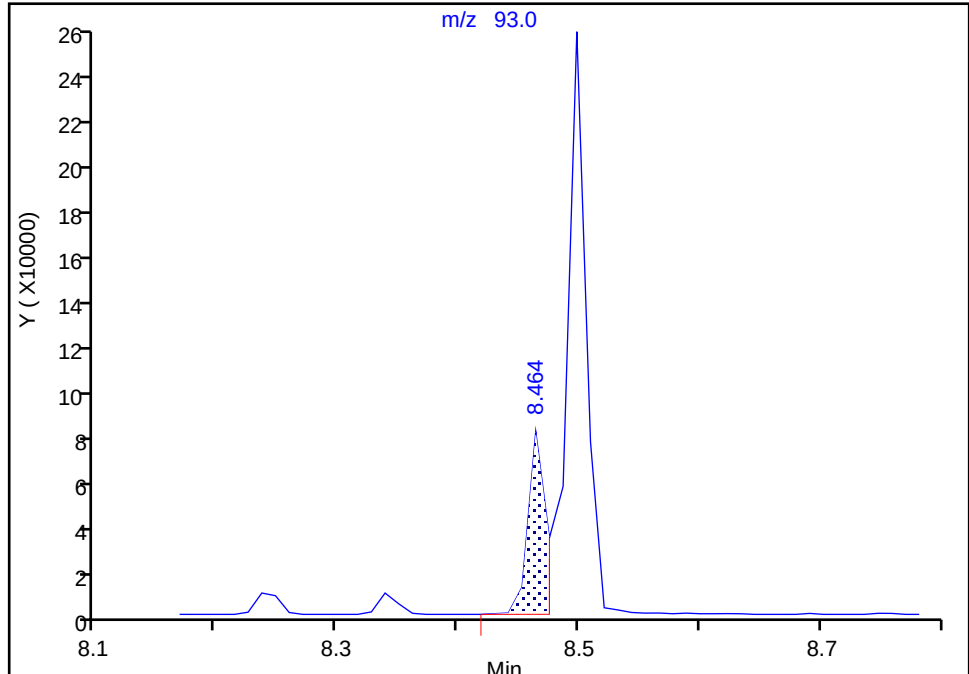
MS SCAN

52 Bis(2-chloroethoxy)methane, CAS: 111-91-1

Signal: 1

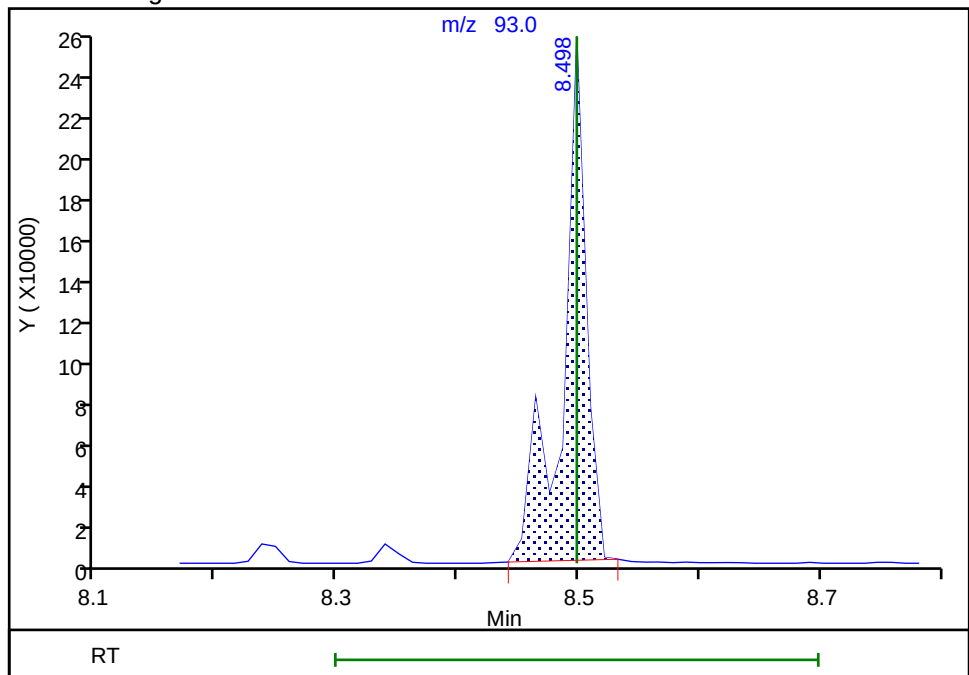
RT: 8.46
Area: 73780
Amount: 1.020353
Amount Units: ug/ml

Processing Integration Results



RT: 8.50
Area: 341041
Amount: 3.768472
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 08:55:10

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1156.D

Injection Date: 29-Sep-2020 21:39:30

Instrument ID: HP23264

Lims ID: IC L4

Client ID:

Operator ID: kel10217

ALS Bottle#:

7

Worklist Smp#: 7

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

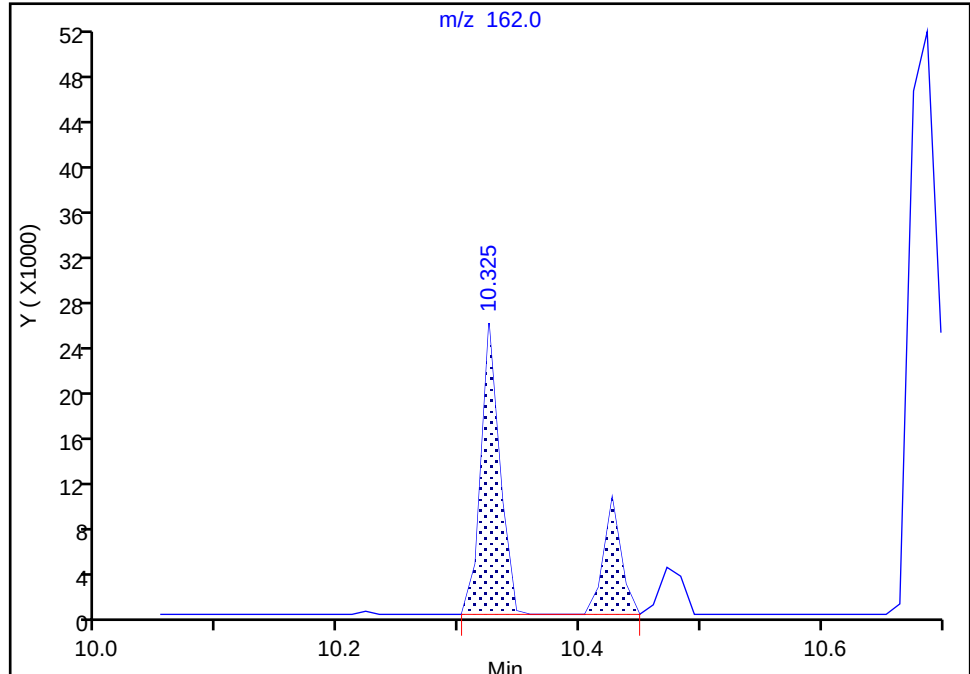
MS SCAN

73 Isosafrole Peak 1, CAS: 120-58-1

Signal: 1

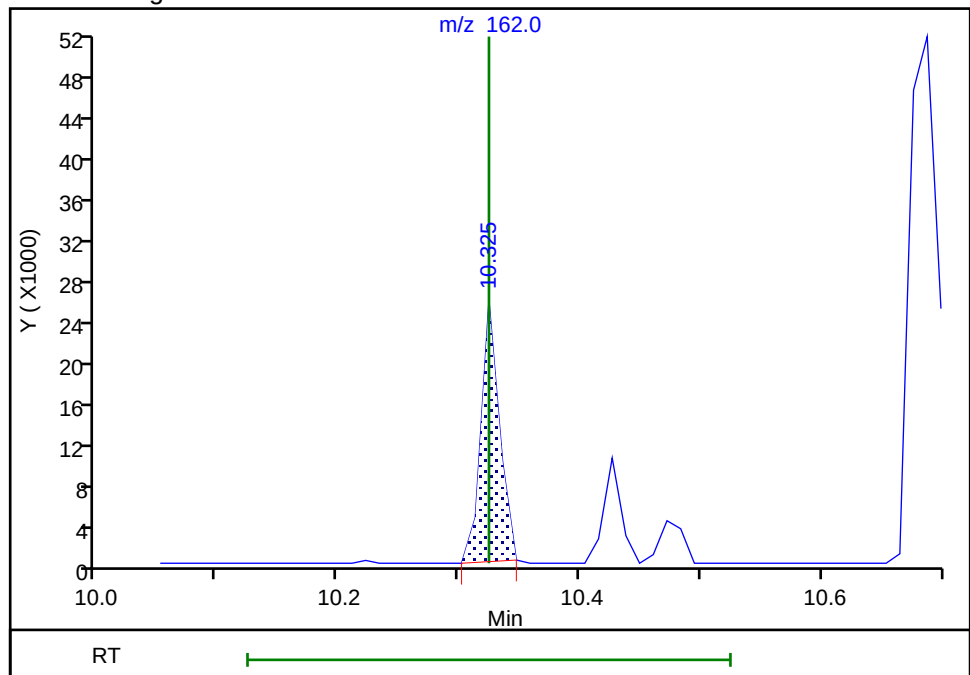
RT: 10.32
Area: 38194
Amount: 0.803988
Amount Units: ug/ml

Processing Integration Results



RT: 10.32
Area: 27138
Amount: 0.618352
Amount Units: ug/ml

Manual Integration Results



Reviewer: beckk, 30-Sep-2020 09:45:43

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1156.D

Injection Date: 29-Sep-2020 21:39:30

Instrument ID: HP23264

Lims ID: IC L4

Client ID:

Operator ID: kel10217

ALS Bottle#:

7

Worklist Smp#: 7

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

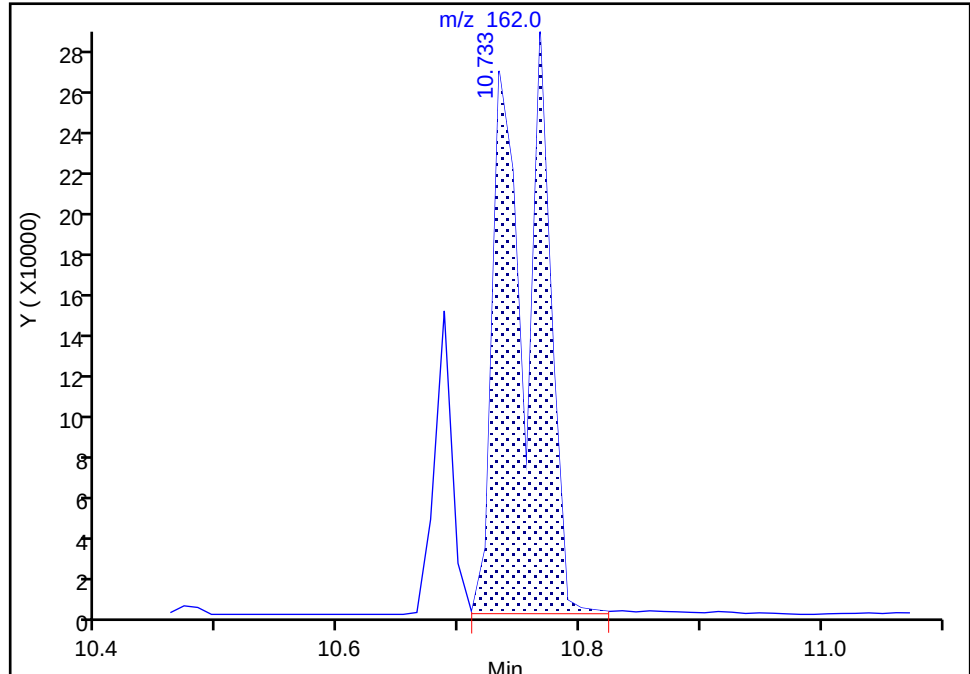
MS SCAN

81 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

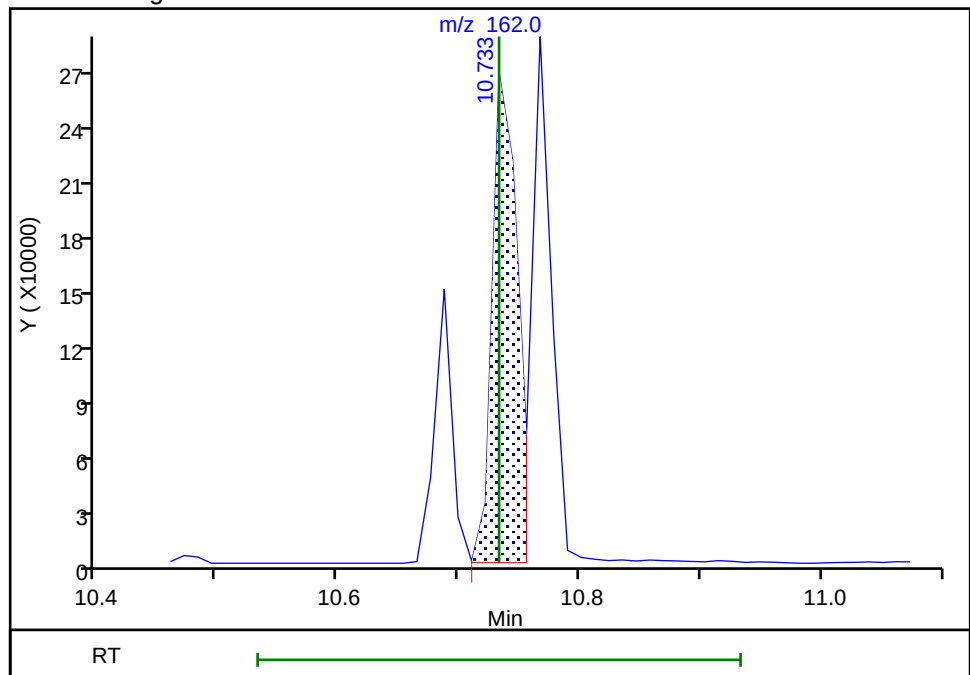
RT: 10.73
Area: 684080
Amount: 5.128904
Amount Units: ug/ml

Processing Integration Results



RT: 10.73
Area: 375013
Amount: 3.999765
Amount Units: ug/ml

Manual Integration Results



Reviewer: beccak, 30-Sep-2020 08:55:51

Audit Action: Split an Integrated Peak

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1156.D

Injection Date: 29-Sep-2020 21:39:30

Instrument ID: HP23264

Lims ID: IC L4

Client ID:

Operator ID: kel10217

ALS Bottle#:

7

Worklist Smp#: 7

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

MS SCAN

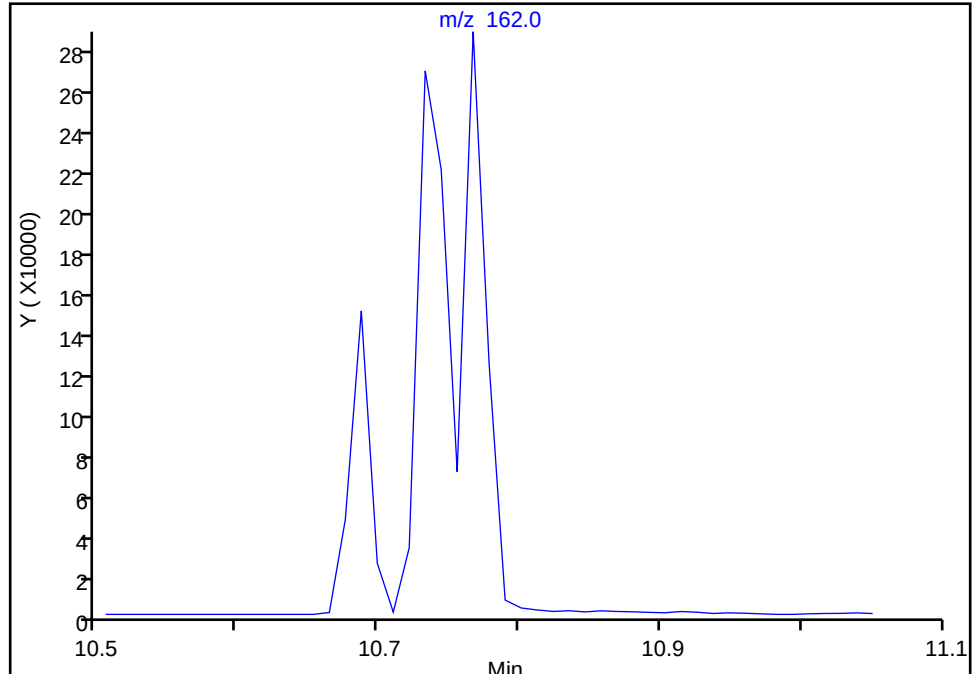
82 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

Not Detected

Expected RT: 10.77

Processing Integration Results



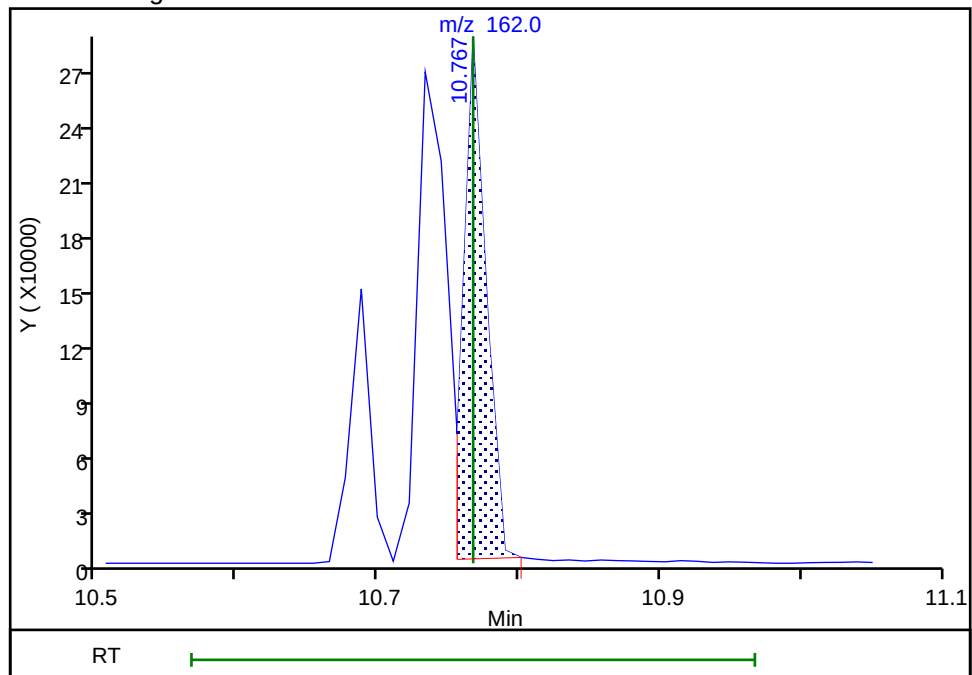
RT: 10.77

Area: 300184

Amount: 3.654676

Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 08:55:56

Audit Action: Split an Integrated Peak

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1156.D

Injection Date: 29-Sep-2020 21:39:30

Instrument ID: HP23264

Lims ID: IC L4

Client ID:

Operator ID: kel10217

ALS Bottle#:

7

Worklist Smp#: 7

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

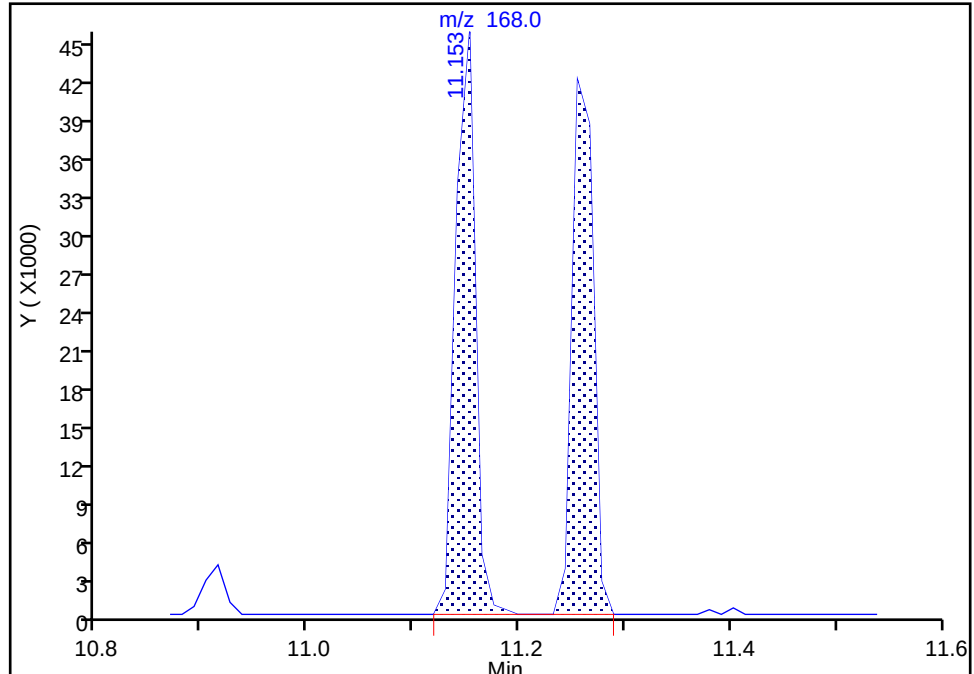
MS SCAN

89 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

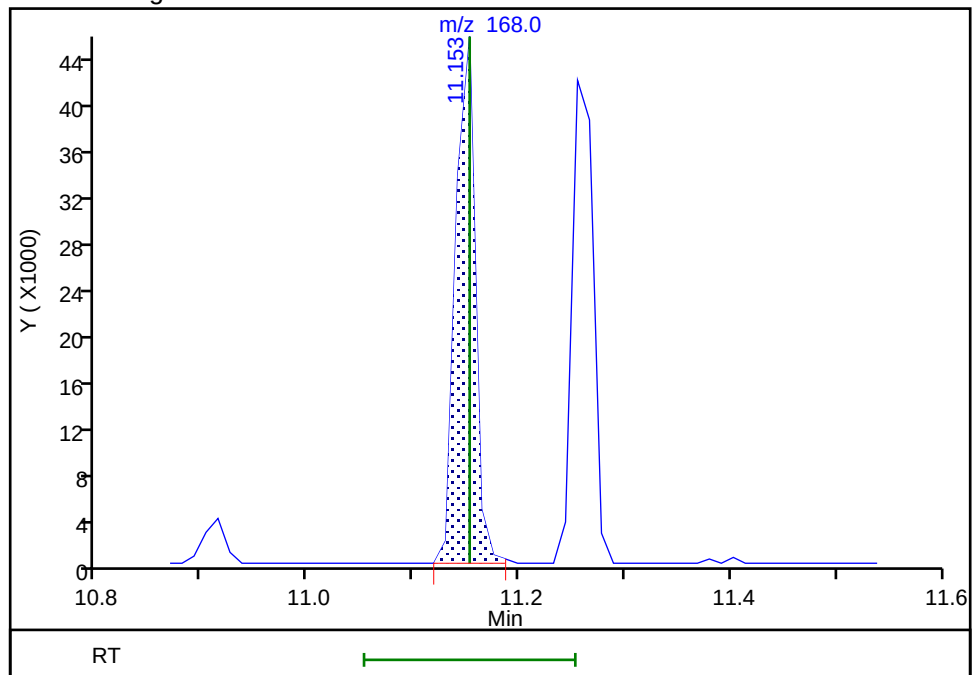
RT: 11.15
Area: 116791
Amount: 6.642815
Amount Units: ug/ml

Processing Integration Results



RT: 11.15
Area: 58460
Amount: 4.036343
Amount Units: ug/ml

Manual Integration Results



Reviewer: beckk, 30-Sep-2020 08:56:12

Audit Action: Split an Integrated Peak

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1156.D

Injection Date: 29-Sep-2020 21:39:30

Instrument ID: HP23264

Lims ID: IC L4

Client ID:

Operator ID: kel10217

ALS Bottle#:

7

Worklist Smp#: 7

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

MS SCAN

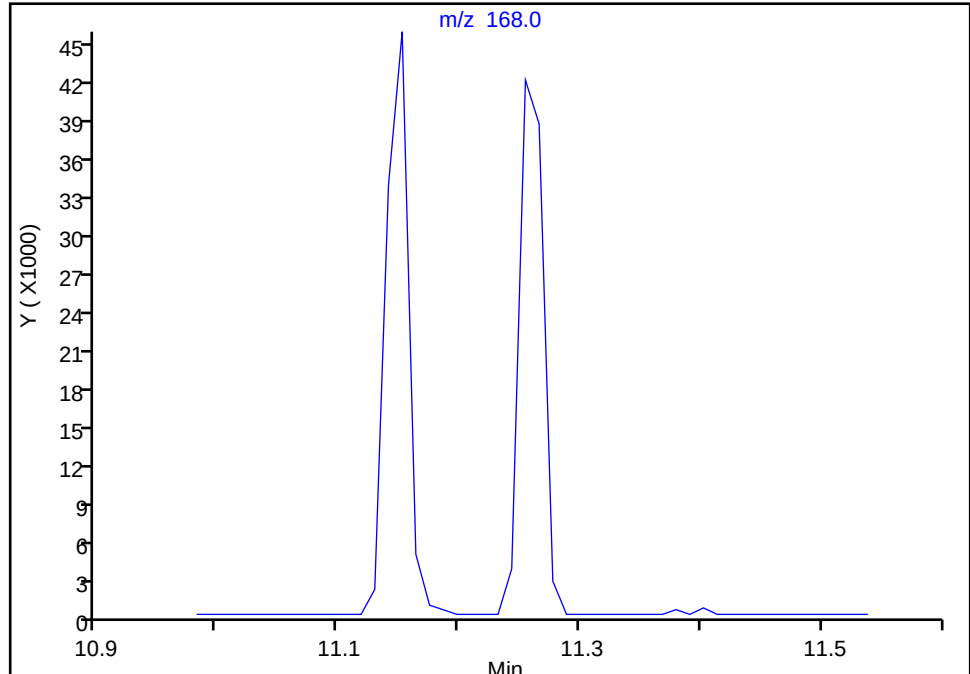
86 1,4-Dinitrobenzene, CAS: 100-25-4

Signal: 1

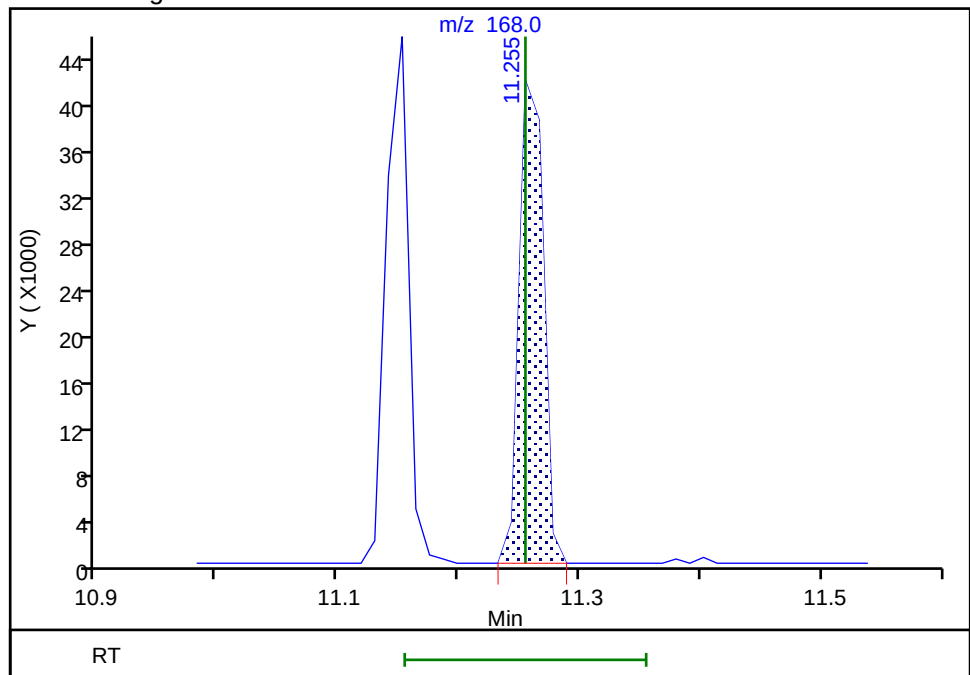
Not Detected

Expected RT: 11.25

Processing Integration Results



Manual Integration Results



Reviewer: bekk, 30-Sep-2020 08:57:21

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1156.D

Injection Date: 29-Sep-2020 21:39:30

Instrument ID: HP23264

Lims ID: IC L4

Client ID:

Operator ID: kel10217

ALS Bottle#:

7

Worklist Smp#: 7

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

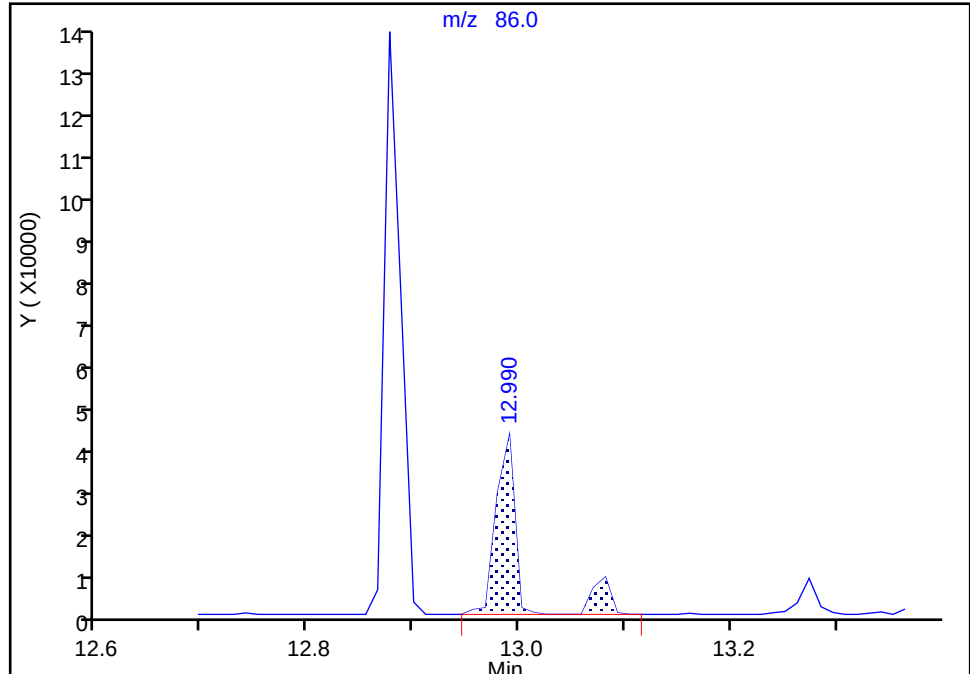
MS SCAN

120 trans-Diallate, CAS: 17708-58-6

Signal: 1

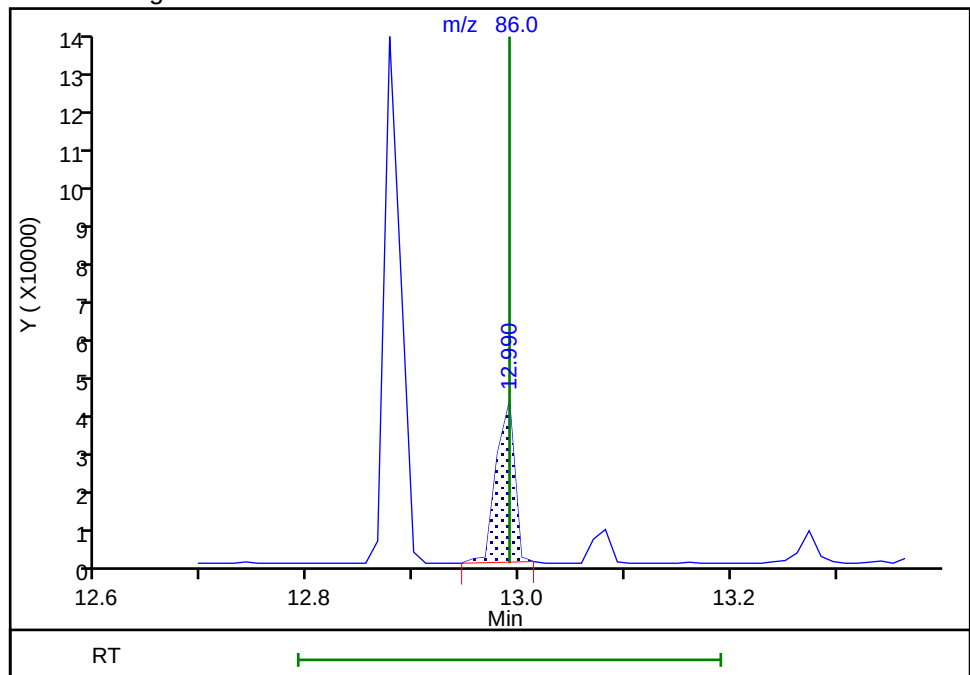
RT: 12.99
Area: 59135
Amount: 1.056594
Amount Units: ug/ml

Processing Integration Results



RT: 12.99
Area: 48105
Amount: 0.939260
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 08:58:25

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1157.D
 Lims ID: IC L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 29-Sep-2020 22:09:30 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: IC L3
 Misc. Info.: 410-0011633-008
 Operator ID: kel10217 Instrument ID: HP23264
 Sublist: chrom-MSSemi_HP23264*sub7
 Method: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 01-Oct-2020 12:42:11 Calib Date: 29-Sep-2020 22:52:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1158a.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: bekk

Date: 30-Sep-2020 09:05:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	2.452	2.452	0.000	96	41684	1.25	1.19	
3 N-Nitrosodimethylamine	74	2.996	2.996	0.000	93	61881	1.25	1.20	
4 Pyridine	79	3.041	3.041	0.000	97	106326	1.25	1.21	
8 2-Picoline	93	4.176	4.176	0.000	88	97125	1.25	1.21	
10 N-Nitrosomethylethylamine	88	4.346	4.346	0.000	91	41860	1.25	1.24	
11 Methyl methanesulfonate	80	4.788	4.788	0.000	90	56222	1.25	1.18	
\$ 12 2-Fluorophenol	112	5.027	5.027	0.000	93	156329	2.50	2.43	
13 N-Nitrosodiethylamine	102	5.356	5.356	0.000	89	35705	1.25	1.13	
15 Ethyl methanesulfonate	109	5.798	5.798	0.000	94	40325	1.25	1.33	
19 Benzaldehyde	77	6.263	6.263	0.000	92	86832	1.25	1.29	
\$ 20 Phenol-d5	99	6.377	6.377	0.000	93	214158	2.50	2.44	
21 Phenol	94	6.388	6.388	0.000	95	121899	1.25	1.22	
23 Aniline	93	6.411	6.411	0.000	96	136131	1.25	1.22	
S 46 Dinitrotoluene	165				0		2.50	2.40	
24 Bis(2-chloroethyl)ether	93	6.535	6.535	0.000	92	84760	1.25	1.22	
25 2-Chlorophenol	128	6.581	6.581	0.000	90	72089	1.25	1.15	
26 1,3-Dichlorobenzene	146	6.808	6.808	0.000	91	82031	1.25	1.22	
* 28 1,4-Dichlorobenzene-d4	152	6.898	6.898	0.000	97	213557	5.00	5.00	
29 1,4-Dichlorobenzene	146	6.921	6.921	0.000	90	81689	1.25	1.18	
30 Benzyl alcohol	108	7.114	7.114	0.000	88	50342	1.25	1.16	
31 1,2-Dichlorobenzene	146	7.137	7.137	0.000	89	76454	1.25	1.17	
34 Indene	115	7.273	7.273	0.000	88	111935	1.25	1.15	
33 2-Methylphenol	108	7.284	7.284	0.000	94	78087	1.25	1.28	
35 2,2'-oxybis[1-chloropropane]	45	7.330	7.330	0.000	92	123035	1.25	1.24	
36 N-Nitrosopyrrolidine	100	7.454	7.454	0.000	89	43095	1.25	1.29	
38 Acetophenone	105	7.500	7.500	0.000	91	133006	1.25	1.29	
37 4-Methylphenol	108	7.522	7.522	0.000	81	84268	1.25	1.20	
39 N-Nitrosodi-n-propylamine	70	7.522	7.522	0.000	89	78439	1.25	1.29	
40 N-Nitrosomorpholine	56	7.534	7.534	0.000	92	71596	1.25	1.28	
41 2-Toluidine	106	7.556	7.556	0.000	96	120321	1.25	1.17	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
42 Hexachloroethane	117	7.647	7.647	0.000	95	43124	1.25	1.26	
\$ 43 Nitrobenzene-d5	82	7.727	7.727	0.000	88	228323	2.50	2.51	
44 Nitrobenzene	77	7.749	7.749	0.000	88	108379	1.25	1.23	
45 N-Nitrosopiperidine	114	7.988	7.988	0.000	79	36246	1.25	1.12	
47 Isophorone	82	8.135	8.135	0.000	98	196288	1.25	1.28	
48 2-Nitrophenol	139	8.248	8.248	0.000	88	40231	1.25	1.25	
49 2,4-Dimethylphenol	107	8.339	8.339	0.000	95	94922	1.25	1.25	
51 o,o',o"-Triethylphosphorothioat	198	8.464	8.464	0.000	85	35776	1.25	1.25	
50 Benzoic acid	105	8.430	8.430	0.000	84	113895	3.75	3.42	
52 Bis(2-chloroethoxy)methane	93	8.498	8.498	0.000	93	138771	1.25	1.33	M
54 2,4-Dichlorophenol	162	8.623	8.623	0.000	96	65540	1.25	1.29	
55 1,2,4-Trichlorobenzene	180	8.748	8.748	0.000	91	71752	1.25	1.32	
* 56 Naphthalene-d8	136	8.827	8.827	0.000	99	800626	5.00	5.00	
57 Naphthalene	128	8.861	8.861	0.000	98	213479	1.25	1.27	
58 4-Chloroaniline	127	8.963	8.963	0.000	92	82140	1.25	1.19	
59 2,6-Dichlorophenol	162	8.974	8.974	0.000	87	61809	1.25	1.24	
61 Hexachloropropene	213	9.008	9.008	0.000	94	53591	1.25	1.23	
62 Hexachlorobutadiene	225	9.088	9.088	0.000	94	45844	1.25	1.27	
63 Quinoline	129	9.383	9.383	0.000	94	130340	1.25	1.25	
64 Caprolactam	113	9.462	9.462	0.000	80	22140	1.25	1.33	
65 N-Nitrosodi-n-butylamine	84	9.530	9.530	0.000	93	66297	1.25	1.15	
S 60 Diallate	86				0		1.25	1.23	
67 4-Chloro-3-methylphenol	107	9.757	9.757	0.000	90	70945	1.25	1.19	
68 Safrole, Total	162	9.859	9.859	0.000	81	53628	1.25	1.15	
69 2-Methylnaphthalene	142	9.961	9.961	0.000	90	138835	1.25	1.24	
70 1-Methylnaphthalene	142	10.120	10.120	0.000	92	133240	1.25	1.27	
71 Hexachlorocyclopentadiene	237	10.234	10.234	0.000	78	40202	1.25	1.11	
72 1,2,4,5-Tetrachlorobenzene	216	10.234	10.234	0.000	94	66329	1.25	1.20	
73 Isosafrole Peak 1	162	10.324	10.324	0.000	81	9890	0.2000	0.1815	
74 2,4,6-Trichlorophenol	196	10.426	10.426	0.000	95	46331	1.25	1.23	
76 2,4,5-Trichlorophenol	196	10.472	10.472	0.000	90	45616	1.25	1.16	
\$ 77 2-Fluorobiphenyl (Surr)	172	10.574	10.574	0.000	99	316329	2.50	2.50	
78 Isosafrole Peak 2	162	10.687	10.687	0.000	87	57687	1.05	0.9880	
80 1,1'-Biphenyl	154	10.721	10.721	0.000	96	176617	1.25	1.32	
81 2-Chloronaphthalene	162	10.733	10.733	0.000	97	153417	1.25	1.32	M
82 1-Chloronaphthalene	162	10.767	10.767	0.000	97	122923	1.25	1.21	Ma
83 Phenyl ether	170	10.903	10.903	0.000	87	89901	1.25	1.16	
84 2-Nitroaniline	138	10.914	10.914	0.000	75	41353	1.25	1.14	
85 1,4-Naphthoquinone	158	11.028	11.028	0.000	73	53072	1.25	1.22	
S 79 Isosafrole	162				0		1.25	1.17	
89 1,3-Dinitrobenzene	168	11.153	11.153	0.000	82	20498	1.25	1.14	
87 Dimethyl phthalate	163	11.255	11.255	0.000	96	161491	1.25	1.28	
86 1,4-Dinitrobenzene	168	11.255	11.255	0.000	71	23529	1.25	1.21	
90 2,6-Dinitrotoluene	165	11.323	11.323	0.000	87	33284	1.25	1.18	M
91 Acenaphthylene	152	11.391	11.391	0.000	99	179707	1.25	1.21	
92 3-Nitroaniline	138	11.561	11.561	0.000	84	29590	1.25	1.07	
* 93 Acenaphthene-d10	164	11.618	11.618	0.000	93	418196	5.00	5.00	
94 Acenaphthene	153	11.663	11.663	0.000	94	124183	1.25	1.16	
95 2,4-Dinitrophenol	184	11.720	11.720	0.000	82	54887	3.75	3.11	
97 4-Nitrophenol	109	11.833	11.833	0.000	87	65745	2.50	1.90	
99 Pentachlorobenzene	250	11.856	11.856	0.000	94	49926	1.25	1.11	
101 Dibenzofuran	168	11.913	11.913	0.000	93	189955	1.25	1.23	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
100 2,4-Dinitrotoluene	165	11.913	11.913	0.000	67	48936	1.25	1.23	
102 1-Naphthylamine	143	12.015	12.015	0.000	95	125902	1.25	1.16	
103 2,3,4,6-Tetrachlorophenol	232	12.083	12.083	0.000	77	31190	1.25	1.09	
104 2-Naphthylamine	143	12.117	12.117	0.000	94	127502	1.25	1.26	
105 Diethyl phthalate	149	12.264	12.264	0.000	97	158701	1.25	1.25	
107 Fluorene	166	12.355	12.355	0.000	96	146379	1.25	1.21	
106 Thionazin	107	12.355	12.355	0.000	65	29031	1.25	1.12	
108 4-Nitroaniline	138	12.378	12.378	0.000	74	32422	1.25	1.08	
109 4-Chlorophenyl phenyl ether	204	12.378	12.378	0.000	91	68688	1.25	1.14	
110 N-Nitro-o-toluidine	152	12.366	12.366	0.000	73	34573	1.25	1.07	
111 4,6-Dinitro-2-methylphenol	198	12.423	12.423	0.000	82	48928	2.50	2.11	
112 N-Nitrosodiphenylamine	169	12.514	12.514	0.000	64	121904	1.25	1.21	
113 1,2-Diphenylhydrazine	77	12.559	12.559	0.000	42	205638	1.25	1.28	
\$ 114 2,4,6-Tribromophenol	330	12.639	12.639	0.000	90	40270	2.50	2.53	
115 Sulfotepp	97	12.741	12.741	0.000	74	34220	1.25	1.20	
116 cis-Diallate	86	12.877	12.877	0.000	90	57387	0.9250	0.9443	
117 Phorate	75	12.888	12.888	0.000	95	115376	1.25	1.24	
118 Phenacetin	108	12.900	12.900	0.000	89	79758	1.25	1.15	
119 4-Bromophenyl phenyl ether	248	12.956	12.956	0.000	75	39908	1.25	1.29	
120 trans-Diallate	86	12.979	12.979	0.000	93	17261	0.3250	0.2869	M
121 Hexachlorobenzene	284	13.013	13.013	0.000	92	42272	1.25	1.28	
122 Dimethoate	87	13.070	13.070	0.000	96	68722	1.25	1.19	
123 Atrazine	200	13.183	13.183	0.000	92	45051	1.25	1.36	
124 Pentachlorophenol	266	13.263	13.263	0.000	90	21968	1.25	1.02	
125 4-Aminobiphenyl	169	13.274	13.274	0.000	89	112729	1.25	1.23	
126 Pentachloronitrobenzene	237	13.274	13.274	0.000	53	25138	1.25	1.20	
127 Pronamide	173	13.376	13.376	0.000	90	68557	1.25	1.22	
* 128 Phenanthrene-d10	188	13.489	13.489	0.000	98	689650	5.00	5.00	
129 Dinoseb	211	13.512	13.512	0.000	91	31037	1.25	1.14	
130 Phenanthrene	178	13.523	13.523	0.000	97	214029	1.25	1.31	
131 Anthracene	178	13.592	13.592	0.000	97	204147	1.25	1.24	
132 Carbazole	167	13.807	13.807	0.000	96	200641	1.25	1.29	
133 Methyl parathion	109	14.011	14.011	0.000	90	54106	1.25	1.13	
134 Di-n-butyl phthalate	149	14.318	14.318	0.000	100	261399	1.25	1.20	
135 Ethyl Parathion	109	14.556	14.556	0.000	77	35403	1.25	1.11	
136 4-Nitroquinoline-1-oxide	190	14.567	14.567	0.000	83	18319	1.25	1.01	
137 Octachlorostyrene	308	14.907	14.907	0.000	82	17263	1.25	1.11	
138 Isodrin	193	14.953	14.953	0.000	90	27045	1.25	1.12	
139 Fluoranthene	202	15.168	15.168	0.000	98	220757	1.25	1.18	
140 Benzidine	184	15.395	15.395	0.000	99	393229	3.75	3.35	
* 141 Pyrene-d10 (IS)	212	15.486	15.486	0.000	99	712561	5.00	5.00	
142 Pyrene	202	15.509	15.509	0.000	99	244673	1.25	1.25	
\$ 143 p-Terphenyl-d14	244	15.792	15.792	0.000	97	329562	2.50	2.51	
144 p-Dimethylamino azobenzene	225	16.030	16.030	0.000	90	36935	1.25	1.16	
145 Chlorobenzilate	139	16.121	16.121	0.000	82	84948	1.25	1.15	
146 3,3'-Dimethylbenzidine	212	16.586	16.586	0.000	99	129269	1.25	1.04	
147 Butyl benzyl phthalate	149	16.654	16.654	0.000	94	116151	1.25	1.17	
148 2-Acetylaminofluorene	181	17.006	17.006	0.000	94	86358	1.25	1.10	
150 3,3'-Dichlorobenzidine	252	17.517	17.517	0.000	60	75962	1.25	1.17	
149 Benzo[a]anthracene	228	17.517	17.517	0.000	99	199633	1.25	1.20	
151 4,4'-Methylene bis(2-chloroani	231	17.539	17.539	0.000	91	33432	1.25	1.03	
152 Chrysene	228	17.585	17.585	0.000	96	212358	1.25	1.29	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
153 Bis(2-ethylhexyl) phthalate	149	17.732	17.732	0.000	96	159935	1.25	1.15	
154 6-Methylchrysene	242	18.390	18.390	0.000	97	144844	1.25	1.24	
155 Di-n-octyl phthalate	149	18.889	18.889	0.000	99	277977	1.25	1.16	
156 Benzo[b]fluoranthene	252	19.377	19.377	0.000	97	208001	1.25	1.23	
157 7,12-Dimethylbenz(a)anthracene	256	19.377	19.377	0.000	92	97450	1.25	1.28	
158 Benzo[k]fluoranthene	252	19.422	19.422	0.000	98	204721	1.25	1.33	
159 Benzo[a]pyrene	252	19.899	19.899	0.000	75	213041	1.25	1.32	
* 160 Perylene-d12	264	20.001	20.001	0.000	99	674508	5.00	5.00	
161 3-Methylcholanthrene	268	20.477	20.477	0.000	92	93724	1.25	1.21	
162 Dibenz[a,h]acridine	279	21.283	21.283	0.000	90	146283	1.25	1.25	
163 Dibenz[a,j]acridine	279	21.362	21.362	0.000	96	159624	1.25	1.30	
164 Indeno[1,2,3-cd]pyrene	276	21.600	21.600	0.000	99	169746	1.25	1.28	
165 Dibenz(a,h)anthracene	278	21.646	21.646	0.000	89	169919	1.25	1.26	
166 Benzo[g,h,i]perylene	276	21.975	21.975	0.000	96	174153	1.25	1.25	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_3_00008

Amount Added: 1.00

Units: mL

Report Date: 01-Oct-2020 12:42:14

Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1157.D

Injection Date: 29-Sep-2020 22:09:30

Instrument ID: HP23264

Operator ID: kel10217

Lims ID: IC L3

Worklist Smp#: 8

Client ID:

Injection Vol: 1.0 ul

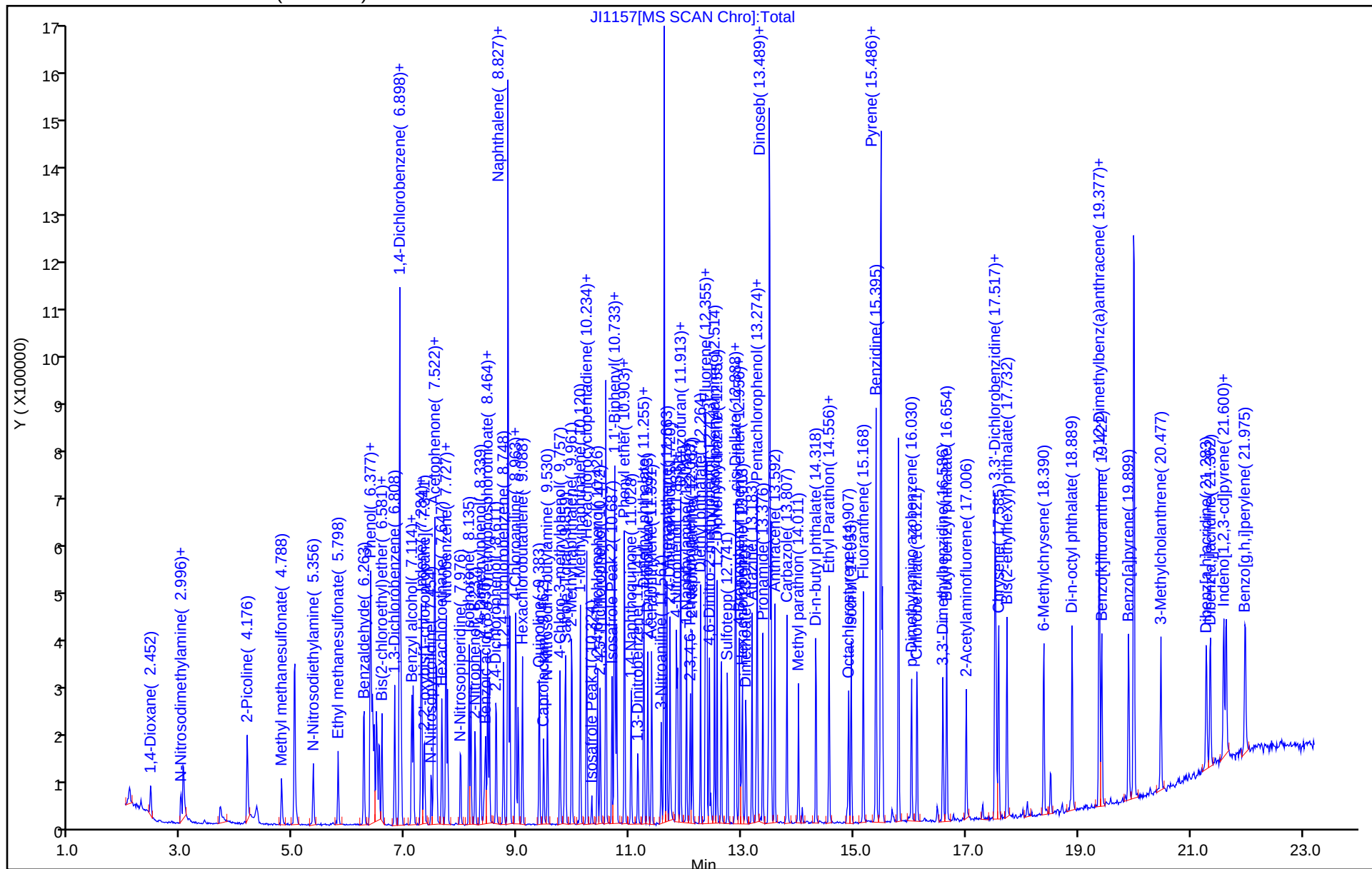
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1157.D

Injection Date: 29-Sep-2020 22:09:30

Instrument ID: HP23264

Lims ID: IC L3

Client ID:

Operator ID: kel10217

ALS Bottle#:

8

Worklist Smp#: 8

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

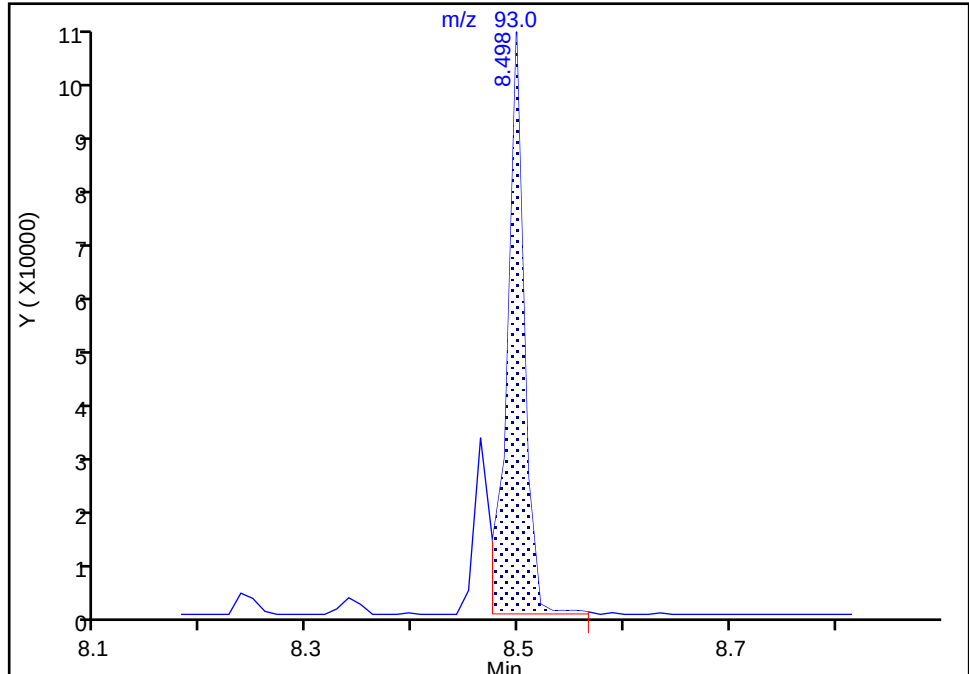
MS SCAN

52 Bis(2-chloroethoxy)methane, CAS: 111-91-1

Signal: 1

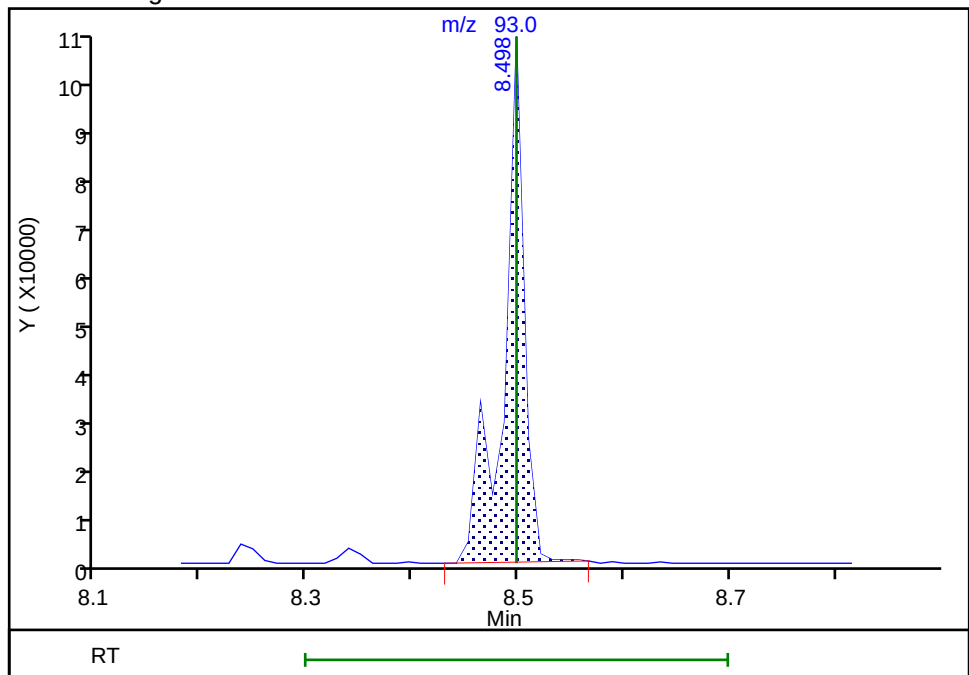
RT: 8.50
Area: 111708
Amount: 1.133661
Amount Units: ug/ml

Processing Integration Results



RT: 8.50
Area: 138771
Amount: 1.329064
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 01-Oct-2020 12:30:39

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1157.D

Injection Date: 29-Sep-2020 22:09:30

Instrument ID: HP23264

Lims ID: IC L3

Client ID:

Operator ID: kel10217

ALS Bottle#:

8

Worklist Smp#: 8

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

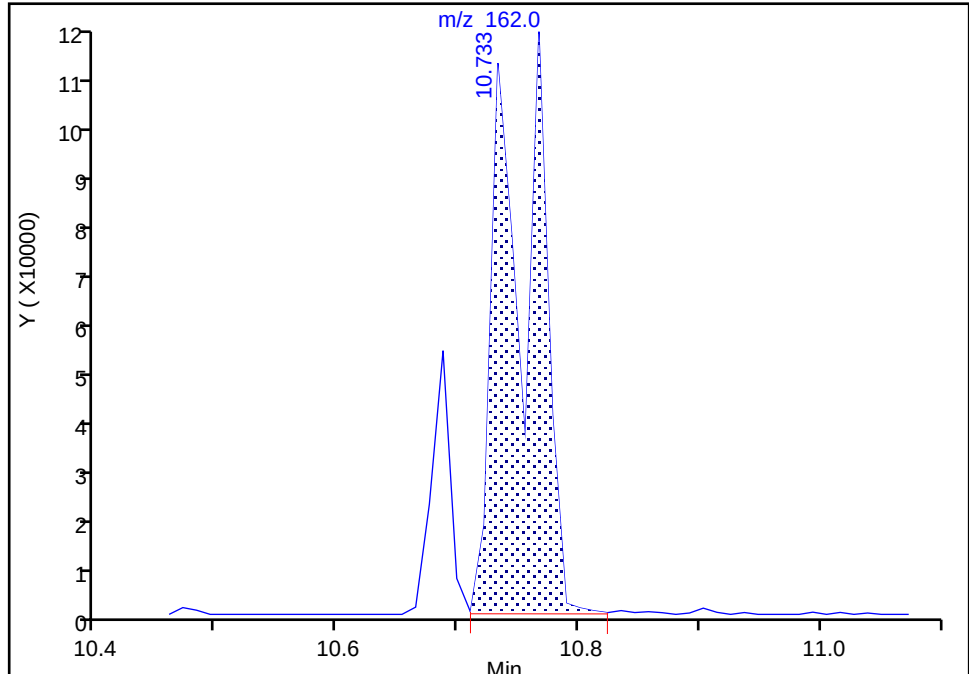
MS SCAN

81 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

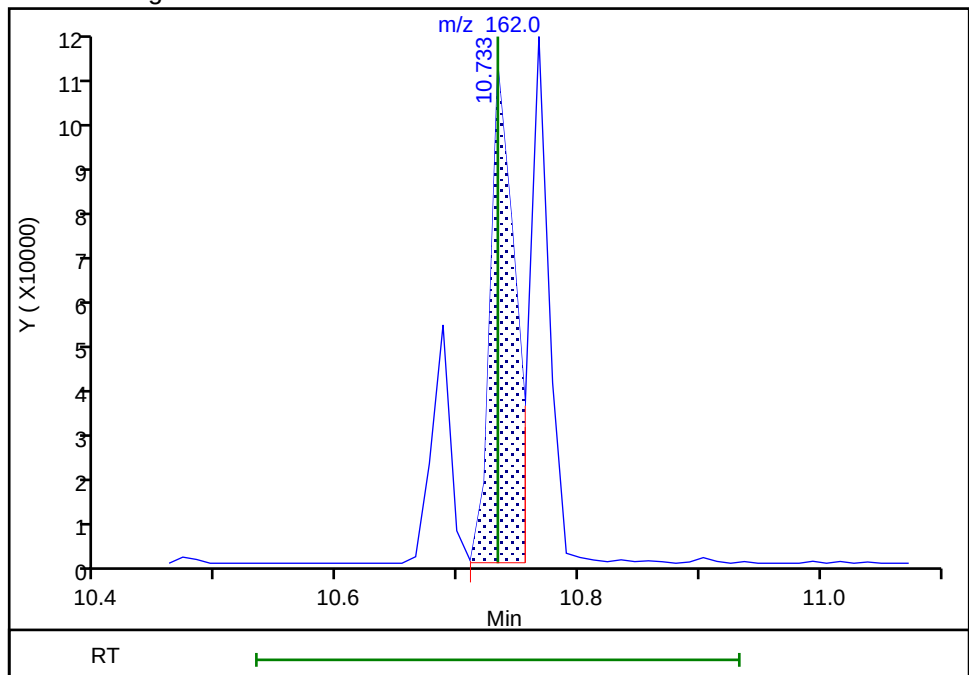
RT: 10.73
Area: 276341
Amount: 1.859824
Amount Units: ug/ml

Processing Integration Results



RT: 10.73
Area: 153417
Amount: 1.317555
Amount Units: ug/ml

Manual Integration Results



Reviewer: beccak, 30-Sep-2020 08:59:48

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1157.D

Injection Date: 29-Sep-2020 22:09:30

Instrument ID: HP23264

Lims ID: IC L3

Client ID:

Operator ID: kel10217

ALS Bottle#:

8

Worklist Smp#: 8

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

MS SCAN

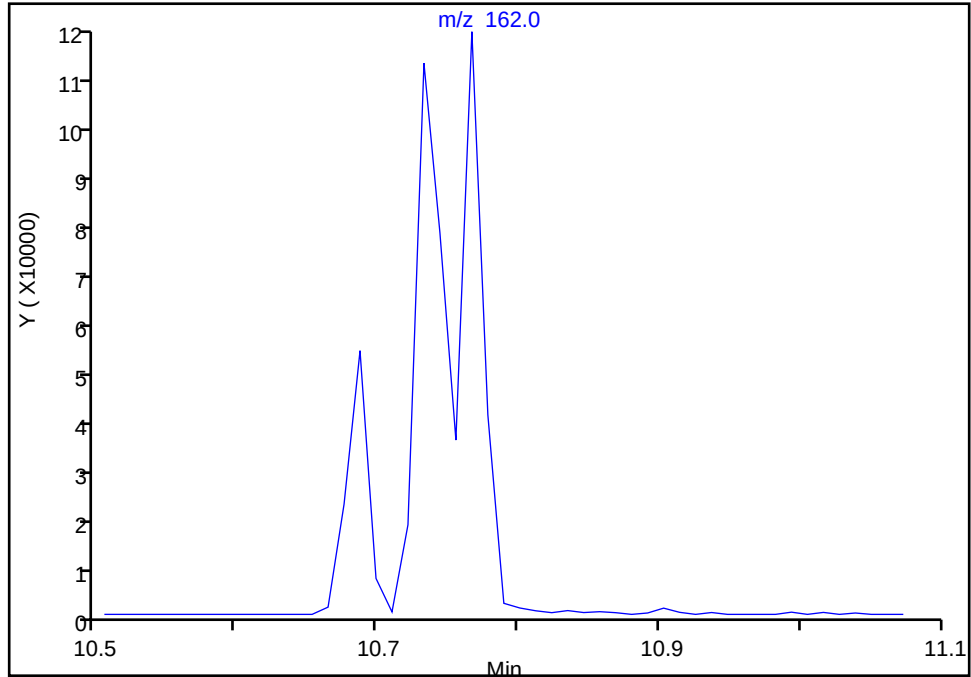
82 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

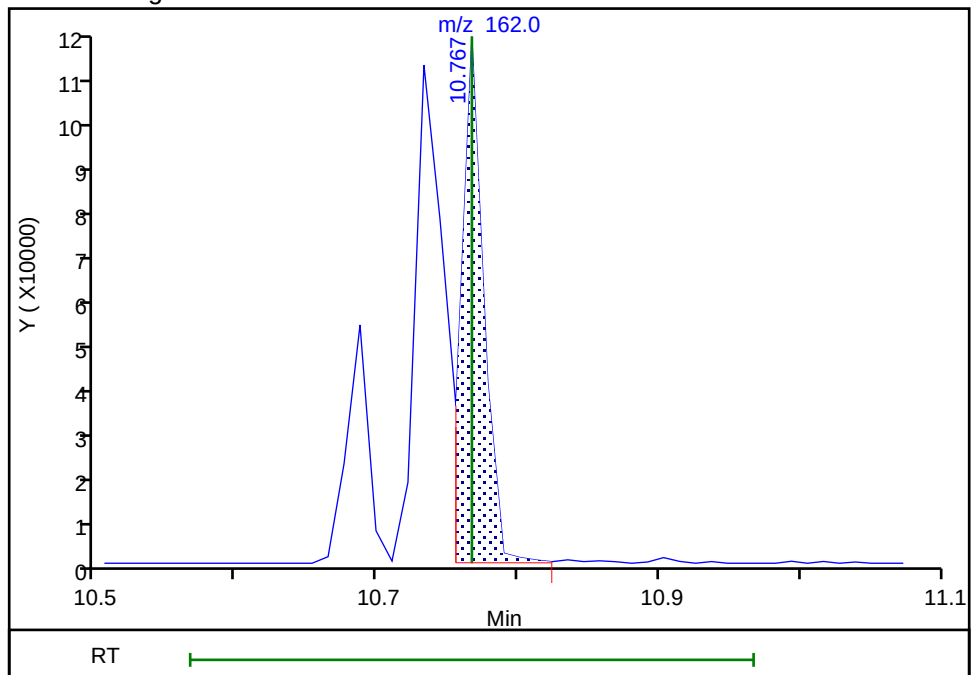
Not Detected

Expected RT: 10.77

Processing Integration Results



Manual Integration Results



RT: 10.77

Area: 122923

Amount: 1.205040

Amount Units: ug/ml

Reviewer: beccak, 30-Sep-2020 08:59:53

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1157.D

Injection Date: 29-Sep-2020 22:09:30

Instrument ID: HP23264

Lims ID: IC L3

Client ID:

Operator ID: kel10217

ALS Bottle#:

8

Worklist Smp#: 8

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

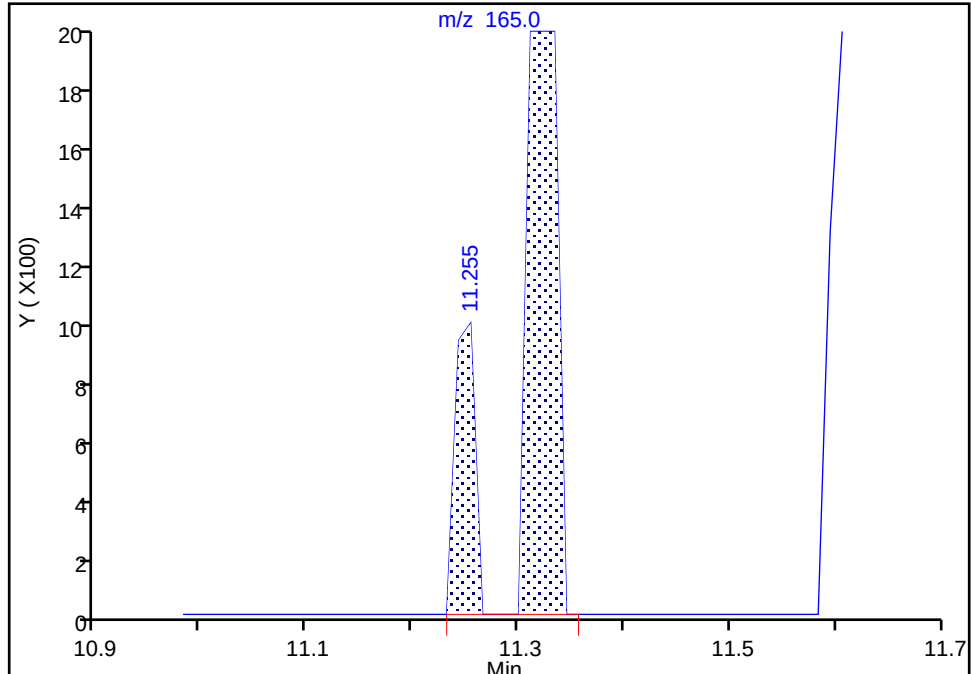
MS SCAN

90 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

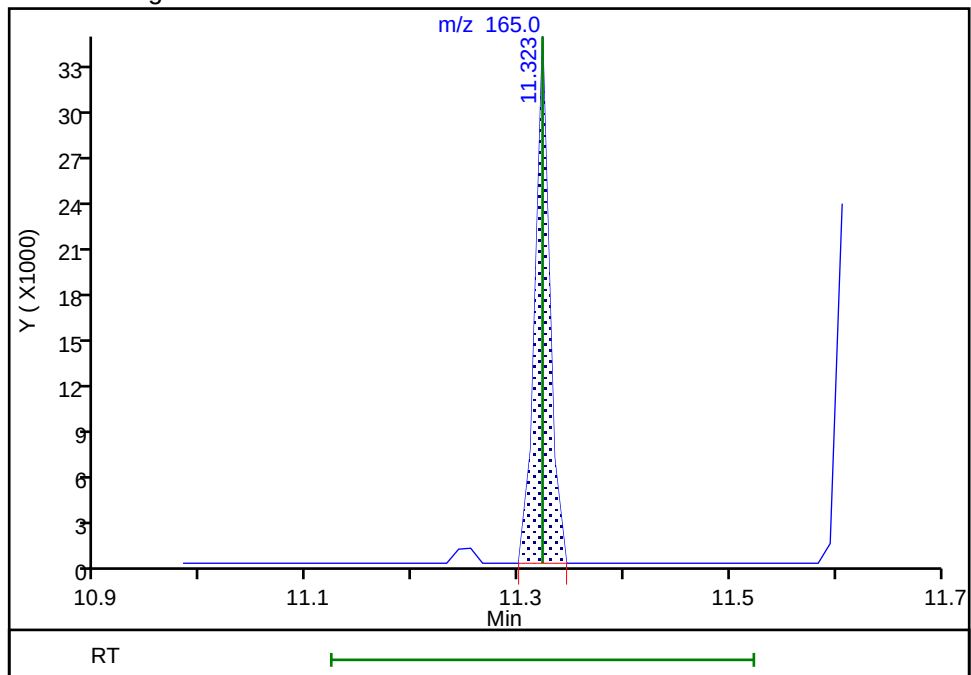
RT: 11.25
Area: 34582
Amount: 1.230331
Amount Units: ug/ml

Processing Integration Results



RT: 11.32
Area: 33284
Amount: 1.177814
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 09:05:01

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1157.D

Injection Date: 29-Sep-2020 22:09:30

Instrument ID: HP23264

Lims ID: IC L3

Client ID:

Operator ID: kel10217

ALS Bottle#:

8

Worklist Smp#: 8

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

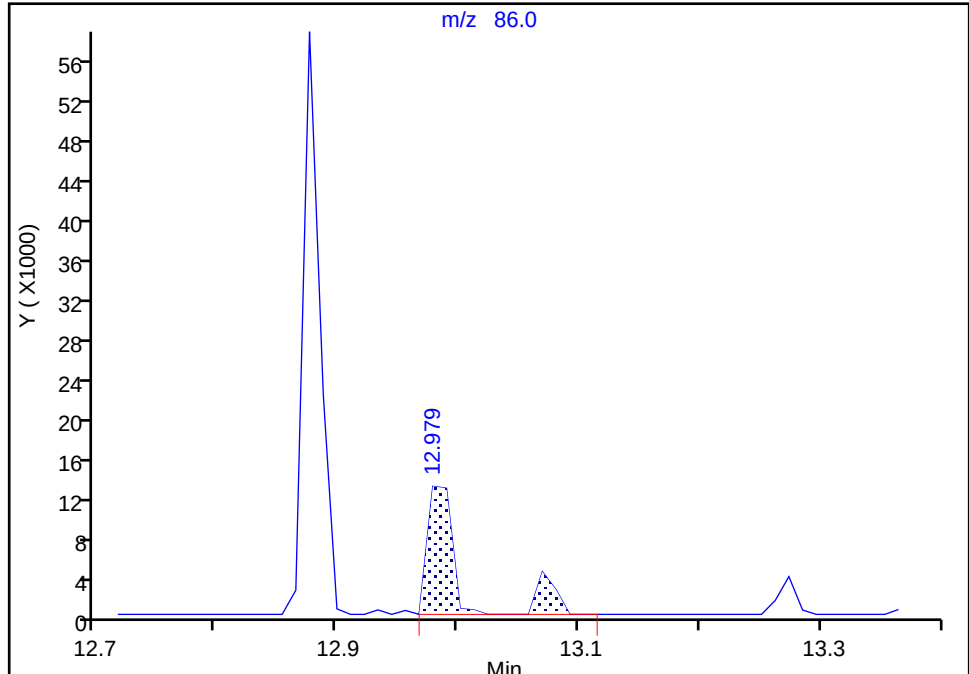
Detector: MS SCAN

120 trans-Diallate, CAS: 17708-58-6

Signal: 1

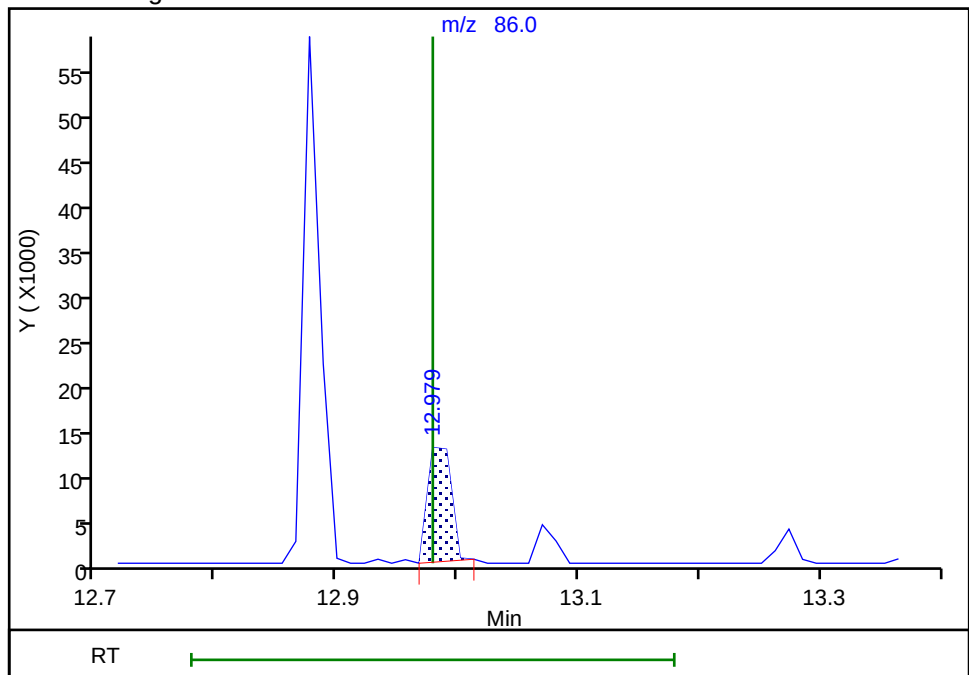
RT: 12.98
Area: 22598
Amount: 0.358212
Amount Units: ug/ml

Processing Integration Results



RT: 12.98
Area: 17261
Amount: 0.286911
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 09:05:19

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1158a.D
 Lims ID: IC L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 29-Sep-2020 22:52:30 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: IC L2
 Misc. Info.: 410-0011633-009
 Operator ID: kel10217 Instrument ID: HP23264
 Sublist: chrom-MSSemi_HP23264*sub7
 Method: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 01-Oct-2020 12:42:27 Calib Date: 29-Sep-2020 22:52:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1158a.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: beckk

Date: 30-Sep-2020 09:15:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	2.463	2.463	0.000	51	8948	0.2500	0.2872	
3 N-Nitrosodimethylamine	74	3.007	3.007	0.000	71	11516	0.2500	0.2503	
4 Pyridine	79	3.053	3.053	0.000	94	18931	0.2500	0.2424	
8 2-Picoline	93	4.187	4.187	0.000	90	17141	0.2500	0.2393	
10 N-Nitrosomethylethylamine	88	4.357	4.357	0.000	35	7522	0.2500	0.2498	
11 Methyl methanesulfonate	80	4.788	4.788	0.000	86	9996	0.2500	0.2345	
\$ 12 2-Fluorophenol	112	5.027	5.027	0.000	95	24346	0.5000	0.4239	
13 N-Nitrosodiethylamine	102	5.356	5.356	0.000	83	7385	0.2500	0.2619	
15 Ethyl methanesulfonate	109	5.798	5.798	0.000	92	5840	0.2500	0.2154	
19 Benzaldehyde	77	6.252	6.252	0.000	89	15018	0.2500	0.2504	
\$ 20 Phenol-d5	99	6.377	6.377	0.000	92	34851	0.5000	0.4461	
21 Phenol	94	6.388	6.388	0.000	68	21173	0.2500	0.2386	
23 Aniline	93	6.411	6.411	0.000	96	21033	0.2500	0.2123	
S 46 Dinitrotoluene	165				0		0.5000	0.4518	
24 Bis(2-chloroethyl)ether	93	6.535	6.535	0.000	62	13961	0.2500	0.2255	
25 2-Chlorophenol	128	6.581	6.581	0.000	94	13787	0.2500	0.2474	
26 1,3-Dichlorobenzene	146	6.808	6.808	0.000	88	13915	0.2500	0.2330	
* 28 1,4-Dichlorobenzene-d4	152	6.898	6.898	0.000	98	190282	5.00	5.00	
29 1,4-Dichlorobenzene	146	6.921	6.921	0.000	88	16468	0.2500	0.2676	
30 Benzyl alcohol	108	7.114	7.114	0.000	86	9821	0.2500	0.2541	
31 1,2-Dichlorobenzene	146	7.137	7.137	0.000	92	15863	0.2500	0.2721	
34 Indene	115	7.273	7.273	0.000	90	24401	0.2500	0.2824	
33 2-Methylphenol	108	7.284	7.284	0.000	92	12932	0.2500	0.2380	
35 2,2'-oxybis[1-chloropropane]	45	7.341	7.341	0.000	90	21031	0.2500	0.2373	
36 N-Nitrosopyrrolidine	100	7.454	7.454	0.000	77	6737	0.2500	0.2263	
38 Acetophenone	105	7.500	7.500	0.000	85	18730	0.2500	0.2042	
37 4-Methylphenol	108	7.522	7.522	0.000	77	15516	0.2500	0.2475	
39 N-Nitrosodi-n-propylamine	70	7.522	7.522	0.000	83	13771	0.2500	0.2534	
40 N-Nitrosomorpholine	56	7.534	7.534	0.000	91	11169	0.2500	0.2233	
41 2-Toluidine	106	7.556	7.556	0.000	87	21532	0.2500	0.2353	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
42 Hexachloroethane	117	7.647	7.647	0.000	89	8105	0.2500	0.2651	
\$ 43 Nitrobenzene-d5	82	7.715	7.715	0.000	89	40063	0.5000	0.4826	
44 Nitrobenzene	77	7.749	7.749	0.000	89	18691	0.2500	0.2327	
45 N-Nitrosopiperidine	114	7.988	7.988	0.000	86	8329	0.2500	0.2832	
47 Isophorone	82	8.135	8.135	0.000	97	31111	0.2500	0.2219	
48 2-Nitrophenol	139	8.248	8.248	0.000	87	7044	0.2500	0.2401	
49 2,4-Dimethylphenol	107	8.339	8.339	0.000	92	16346	0.2500	0.2363	
50 Benzoic acid	105	8.419	8.419	0.000	84	60123	2.50	2.50	
51 o,o',o"-Triethylphosphorothioat	198	8.464	8.464	0.000	81	6492	0.2500	0.2486	
52 Bis(2-chloroethoxy)methane	93	8.498	8.498	0.000	86	19979	0.2500	0.2097	M
54 2,4-Dichlorophenol	162	8.623	8.623	0.000	90	10797	0.2500	0.2323	
55 1,2,4-Trichlorobenzene	180	8.748	8.748	0.000	89	10954	0.2500	0.2213	
* 56 Naphthalene-d8	136	8.827	8.827	0.000	99	730416	5.00	5.00	
57 Naphthalene	128	8.861	8.861	0.000	96	34760	0.2500	0.2268	M
58 4-Chloroaniline	127	8.963	8.963	0.000	91	15370	0.2500	0.2438	
59 2,6-Dichlorophenol	162	8.974	8.974	0.000	89	9579	0.2500	0.2108	
61 Hexachloropropene	213	9.008	9.008	0.000	90	8956	0.2500	0.2262	
62 Hexachlorobutadiene	225	9.088	9.088	0.000	88	8601	0.2500	0.2612	
63 Quinoline	129	9.383	9.383	0.000	95	23480	0.2500	0.2460	
64 Caprolactam	113	9.462	9.462	0.000	80	2531	0.2500	0.1669	
65 N-Nitrosodi-n-butylamine	84	9.530	9.530	0.000	84	9602	0.2500	0.1831	M
S 60 Diallate	86				0		0.2500	0.2154	
67 4-Chloro-3-methylphenol	107	9.757	9.757	0.000	88	11162	0.2500	0.2052	
68 Safrole, Total	162	9.859	9.859	0.000	81	11055	0.2500	0.2594	
69 2-Methylnaphthalene	142	9.961	9.961	0.000	88	23581	0.2500	0.2315	
70 1-Methylnaphthalene	142	10.120	10.120	0.000	85	20326	0.2500	0.2122	
71 Hexachlorocyclopentadiene	237	10.234	10.234	0.000	83	8586	0.2500	0.2643	
72 1,2,4,5-Tetrachlorobenzene	216	10.234	10.234	0.000	93	11868	0.2500	0.2392	
73 Isosafrole Peak 1	162	10.324	10.324	0.000	1	1455	0.0400	0.0298	M
74 2,4,6-Trichlorophenol	196	10.426	10.426	0.000	87	6693	0.2500	0.1981	
76 2,4,5-Trichlorophenol	196	10.472	10.472	0.000	84	7335	0.2500	0.2085	a
\$ 77 2-Fluorobiphenyl (Surr)	172	10.574	10.574	0.000	97	49185	0.5000	0.4342	
78 Isosafrole Peak 2	162	10.687	10.687	0.000	89	9907	0.2100	0.1893	
80 1,1'-Biphenyl	154	10.721	10.721	0.000	95	22548	0.2500	0.1873	
81 2-Chloronaphthalene	162	10.733	10.733	0.000	94	26116	0.2500	0.2502	M
82 1-Chloronaphthalene	162	10.767	10.767	0.000	89	20235	0.2500	0.2213	Ma
83 Phenyl ether	170	10.903	10.903	0.000	85	17903	0.2500	0.2580	
84 2-Nitroaniline	138	10.914	10.914	0.000	69	7847	0.2500	0.2420	
85 1,4-Naphthoquinone	158	11.028	11.028	0.000	80	9454	0.2500	0.2432	
S 79 Isosafrole	162				0		0.2500	0.2191	
89 1,3-Dinitrobenzene	168	11.141	11.141	0.000	78	3195	0.2500	0.1981	M
87 Dimethyl phthalate	163	11.255	11.255	0.000	93	24653	0.2500	0.2174	
86 1,4-Dinitrobenzene	168	11.255	11.255	0.000	46	3345	0.2500	0.1917	
90 2,6-Dinitrotoluene	165	11.323	11.323	0.000	66	5889	0.2500	0.2325	
91 Acenaphthylene	152	11.391	11.391	0.000	97	31187	0.2500	0.2342	
92 3-Nitroaniline	138	11.561	11.561	0.000	86	5441	0.2500	0.2199	
* 93 Acenaphthene-d10	164	11.618	11.618	0.000	95	374883	5.00	5.00	
94 Acenaphthene	153	11.663	11.663	0.000	87	23312	0.2500	0.2430	
95 2,4-Dinitrophenol	184	11.720	11.720	0.000	77	20701	2.25	1.31	
97 4-Nitrophenol	109	11.833	11.833	0.000	88	29088	1.25	0.9365	
99 Pentachlorobenzene	250	11.856	11.856	0.000	94	10133	0.2500	0.2518	
101 Dibenzofuran	168	11.913	11.913	0.000	94	34027	0.2500	0.2463	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
100 2,4-Dinitrotoluene	165	11.913	11.913	0.000	65	7852	0.2500	0.2193	
102 1-Naphthylamine	143	12.015	12.015	0.000	96	23843	0.2500	0.2458	
103 2,3,4,6-Tetrachlorophenol	232	12.083	12.083	0.000	68	6274	0.2500	0.2438	
104 2-Naphthylamine	143	12.117	12.117	0.000	96	25402	0.2500	0.2811	
105 Diethyl phthalate	149	12.264	12.264	0.000	95	31421	0.2500	0.2751	
107 Fluorene	166	12.355	12.355	0.000	95	27647	0.2500	0.2549	
106 Thionazin	107	12.355	12.355	0.000	52	5365	0.2500	0.2317	
110 N-Nitro-o-toluidine	152	12.366	12.366	0.000	65	6258	0.2500	0.2164	
108 4-Nitroaniline	138	12.378	12.378	0.000	63	5457	0.2500	0.2033	
109 4-Chlorophenyl phenyl ether	204	12.378	12.378	0.000	89	15797	0.2500	0.2916	
111 4,6-Dinitro-2-methylphenol	198	12.423	12.423	0.000	77	18312	1.25	0.8581	
112 N-Nitrosodiphenylamine	169	12.514	12.514	0.000	64	22052	0.2500	0.2379	
113 1,2-Diphenylhydrazine	77	12.559	12.559	0.000	41	35785	0.2500	0.2412	
\$ 114 2,4,6-Tribromophenol	330	12.639	12.639	0.000	85	6732	0.5000	0.4718	
115 Sulfotepp	97	12.741	12.741	0.000	73	7088	0.2500	0.2702	
116 cis-Diallate	86	12.877	12.877	0.000	54	8486	0.1850	0.1515	M
117 Phorate	75	12.888	12.888	0.000	92	20893	0.2500	0.2439	
118 Phenacetin	108	12.900	12.900	0.000	82	13745	0.2500	0.2145	M
119 4-Bromophenyl phenyl ether	248	12.956	12.956	0.000	74	6090	0.2500	0.2144	
120 trans-Diallate	86	12.979	12.979	0.000	6	3541	0.0650	0.0639	M
121 Hexachlorobenzene	284	13.013	13.013	0.000	87	7948	0.2500	0.2615	
122 Dimethoate	87	13.070	13.070	0.000	83	9617	0.2500	0.1802	
123 Atrazine	200	13.183	13.183	0.000	85	6657	0.2500	0.2182	
124 Pentachlorophenol	266	13.263	13.263	0.000	54	3205	0.2500	0.1617	
125 4-Aminobiphenyl	169	13.274	13.274	0.000	88	19661	0.2500	0.2324	
126 Pentachloronitrobenzene	237	13.274	13.274	0.000	51	4407	0.2500	0.2281	
127 Pronamide	173	13.376	13.376	0.000	87	9918	0.2500	0.1907	
* 128 Phenanthrene-d10	188	13.489	13.489	0.000	99	635637	5.00	5.00	
129 Dinoseb	211	13.512	13.512	0.000	60	4571	0.2500	0.1827	
130 Phenanthrene	178	13.523	13.523	0.000	96	35988	0.2500	0.2381	
131 Anthracene	178	13.592	13.592	0.000	96	33544	0.2500	0.2219	
132 Carbazole	167	13.807	13.807	0.000	95	30937	0.2500	0.2156	
133 Methyl parathion	109	14.011	14.011	0.000	83	6492	0.2500	0.1473	
134 Di-n-butyl phthalate	149	14.318	14.318	0.000	99	40518	0.2500	0.2020	
135 Ethyl Parathion	109	14.556	14.556	0.000	74	6991	0.2500	0.2386	
136 4-Nitroquinoline-1-oxide	190	14.567	14.567	0.000	72	2917	0.2500	0.3513	
137 Octachlorostyrene	308	14.907	14.907	0.000	79	3589	0.2500	0.2499	
138 Isodrin	193	14.953	14.953	0.000	83	6165	0.2500	0.2761	
139 Fluoranthene	202	15.168	15.168	0.000	97	40159	0.2500	0.2338	
140 Benzidine	184	15.395	15.395	0.000	99	189535	2.00	1.83	
* 141 Pyrene-d10 (IS)	212	15.486	15.486	0.000	98	628645	5.00	5.00	
142 Pyrene	202	15.509	15.509	0.000	98	44749	0.2500	0.2592	
\$ 143 p-Terphenyl-d14	244	15.792	15.792	0.000	96	51087	0.5000	0.4407	
144 p-Dimethylamino azobenzene	225	16.030	16.030	0.000	88	5410	0.2500	0.1933	
145 Chlorobenzilate	139	16.121	16.121	0.000	83	13097	0.2500	0.2001	
146 3,3'-Dimethylbenzidine	212	16.586	16.586	0.000	98	22902	0.2500	0.2097	
147 Butyl benzyl phthalate	149	16.654	16.654	0.000	97	19500	0.2500	0.2234	
148 2-Acetylaminofluorene	181	17.006	17.006	0.000	87	10722	0.2500	0.1546	
150 3,3'-Dichlorobenzidine	252	17.517	17.517	0.000	60	12285	0.2500	0.2140	
149 Benzo[a]anthracene	228	17.517	17.517	0.000	96	35323	0.2500	0.2399	
151 4,4'-Methylene bis(2-chloroani	231	17.539	17.539	0.000	57	5847	0.2500	0.2034	
152 Chrysene	228	17.585	17.585	0.000	95	34142	0.2500	0.2358	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
153 Bis(2-ethylhexyl) phthalate	149	17.732	17.732	0.000	95	23634	0.2500	0.1927	
154 6-Methylchrysene	242	18.390	18.390	0.000	95	26066	0.2500	0.2536	
155 Di-n-octyl phthalate	149	18.889	18.889	0.000	98	40189	0.2500	0.1808	
156 Benzo[b]fluoranthene	252	19.377	19.377	0.000	96	38124	0.2500	0.2422	
157 7,12-Dimethylbenz(a)anthracene	256	19.377	19.377	0.000	70	14567	0.2500	0.2054	
158 Benzo[k]fluoranthene	252	19.422	19.422	0.000	97	34236	0.2500	0.2398	
159 Benzo[a]pyrene	252	19.899	19.899	0.000	77	36999	0.2500	0.2467	
* 160 Perylene-d12	264	20.001	20.001	0.000	98	626857	5.00	5.00	
161 3-Methylcholanthrene	268	20.477	20.477	0.000	92	17390	0.2500	0.2420	
162 Dibenz[a,h]acridine	279	21.283	21.283	0.000	89	21536	0.2500	0.1978	
163 Dibenz[a,j]acridine	279	21.362	21.362	0.000	94	28422	0.2500	0.2490	
164 Indeno[1,2,3-cd]pyrene	276	21.600	21.600	0.000	98	25675	0.2500	0.2089	
165 Dibenz(a,h)anthracene	278	21.646	21.646	0.000	91	26824	0.2500	0.2146	
166 Benzo[g,h,i]perylene	276	21.975	21.975	0.000	97	30389	0.2500	0.2349	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_2_00008

Amount Added: 1.00

Units: mL

Chrom Revision: 2.3 24-Sep-2020 19:22:38

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1158a.D

Instrument ID: HP23264

Lims ID: IC L2

Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 ul

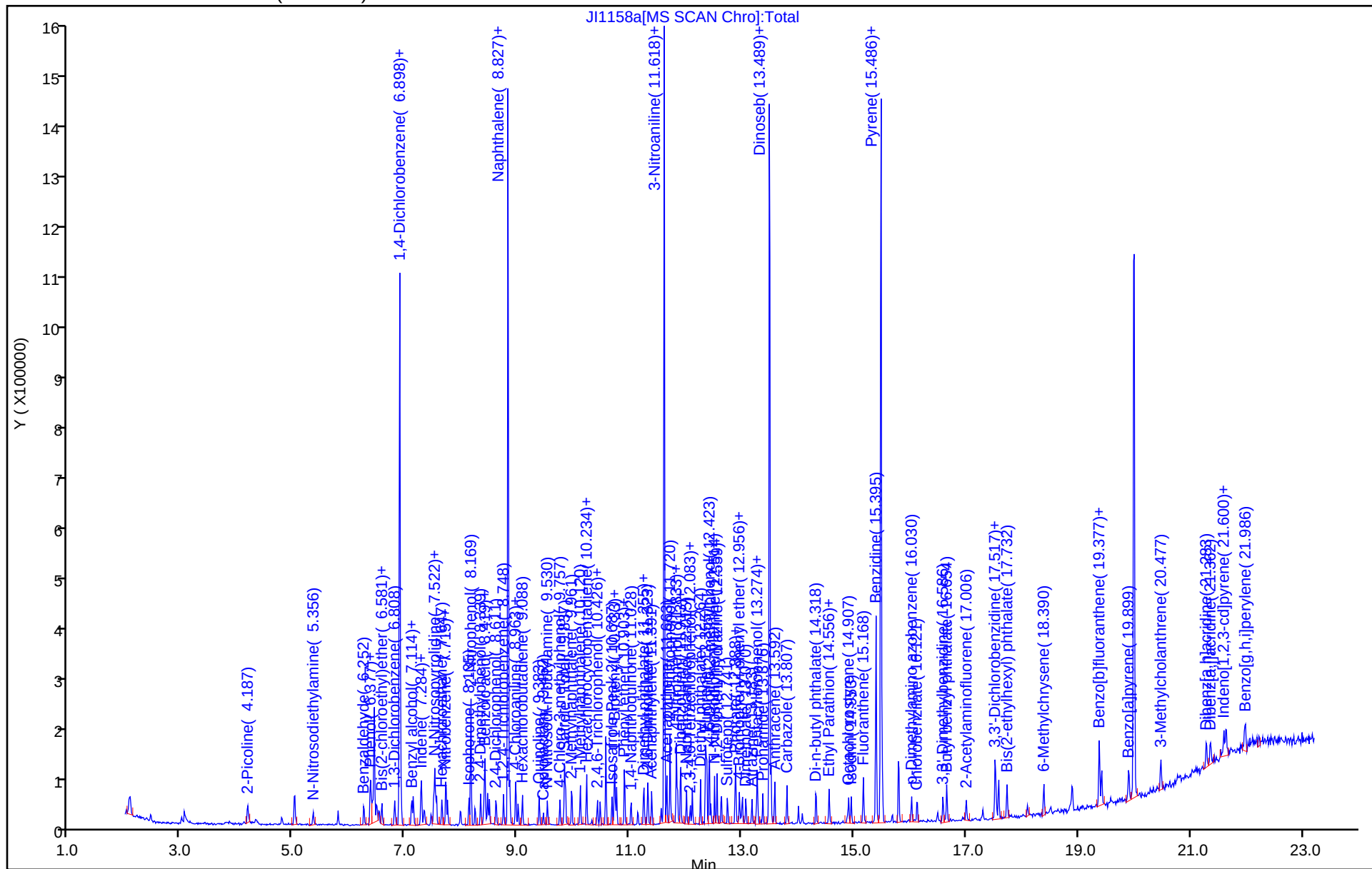
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MSSemi HP23264

Limit Group: MSSV - 8270D E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



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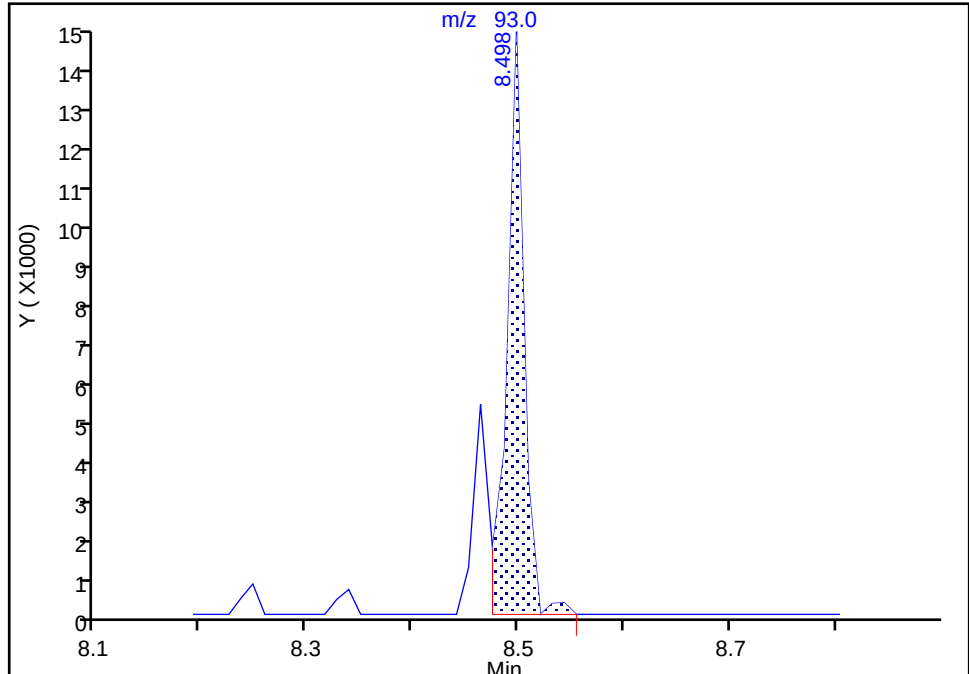
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Injection Date: 29-Sep-2020 22:52:30 Instrument ID: HP23264
Lims ID: IC L2
Client ID:
Operator ID: kel10217 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.25mm (0.25 mm) Detector: MS SCAN

52 Bis(2-chloroethoxy)methane, CAS: 111-91-1

Signal: 1

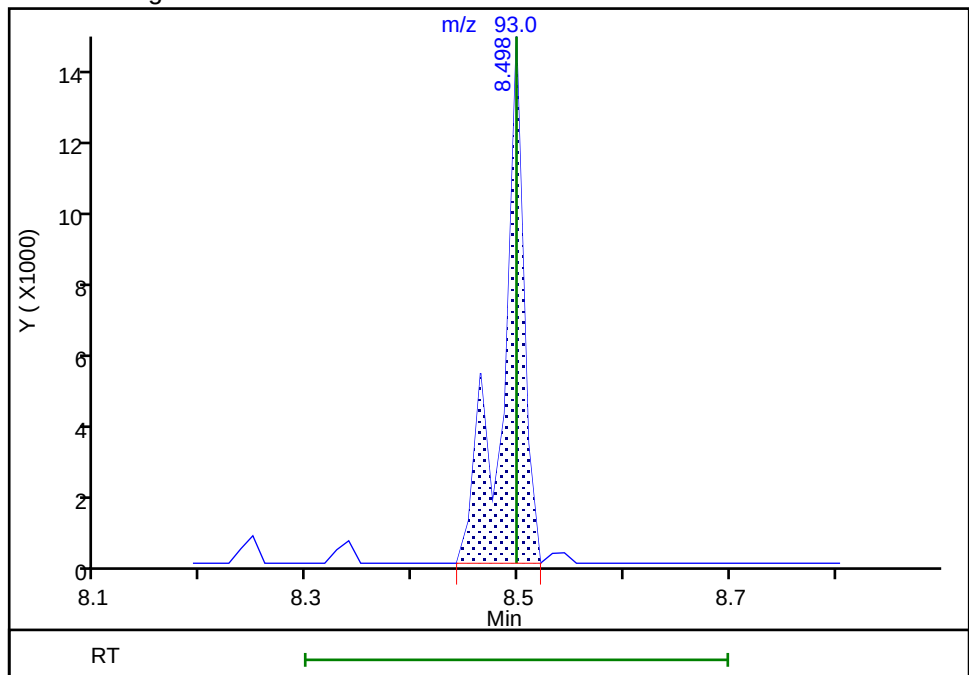
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Area: 15537
Amount: 0.167573
Amount Units: ug/ml

Processing Integration Results



RT: 8.50
Area: 19979
Amount: 0.209740
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 01-Oct-2020 12:31:21
Audit Action: Manually Integrated

Audit Reason: Split Peak
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11/02/2020

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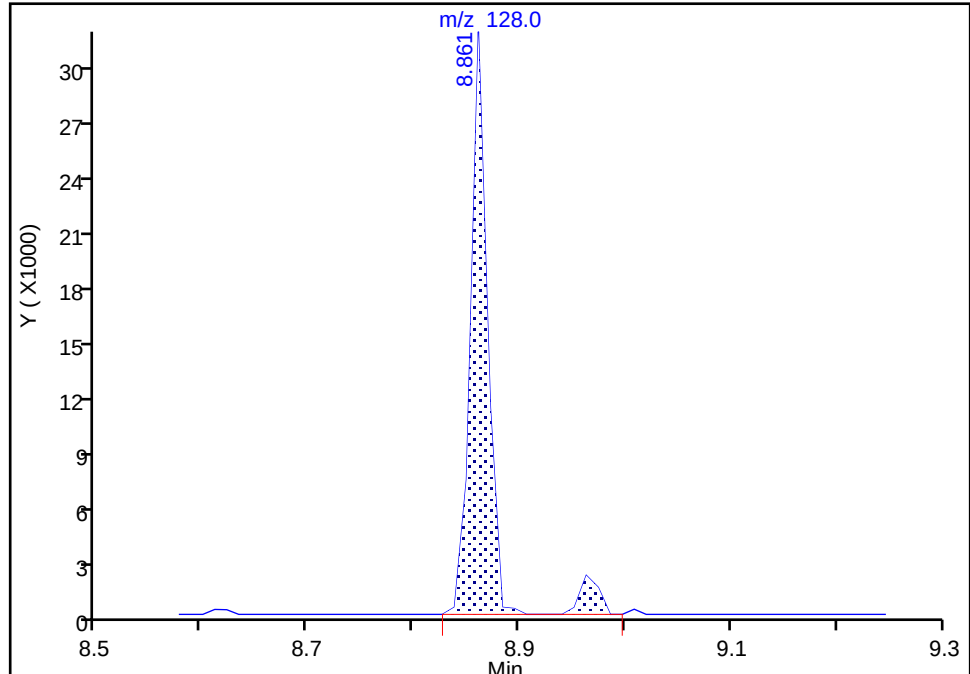
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Client ID:
Operator ID: kel10217 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.25mm (0.25 mm) Detector: MS SCAN

57 Naphthalene, CAS: 91-20-3

Signal: 1

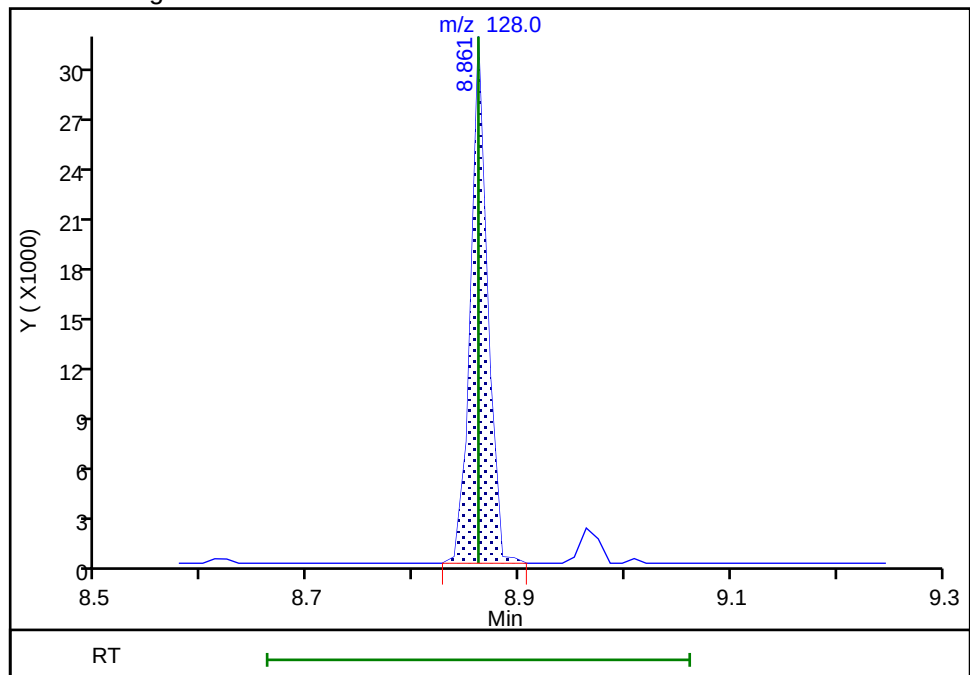
RT: 8.86
Area: 37437
Amount: 0.241424
Amount Units: ug/ml

Processing Integration Results



RT: 8.86
Area: 34760
Amount: 0.226830
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 09:13:09

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

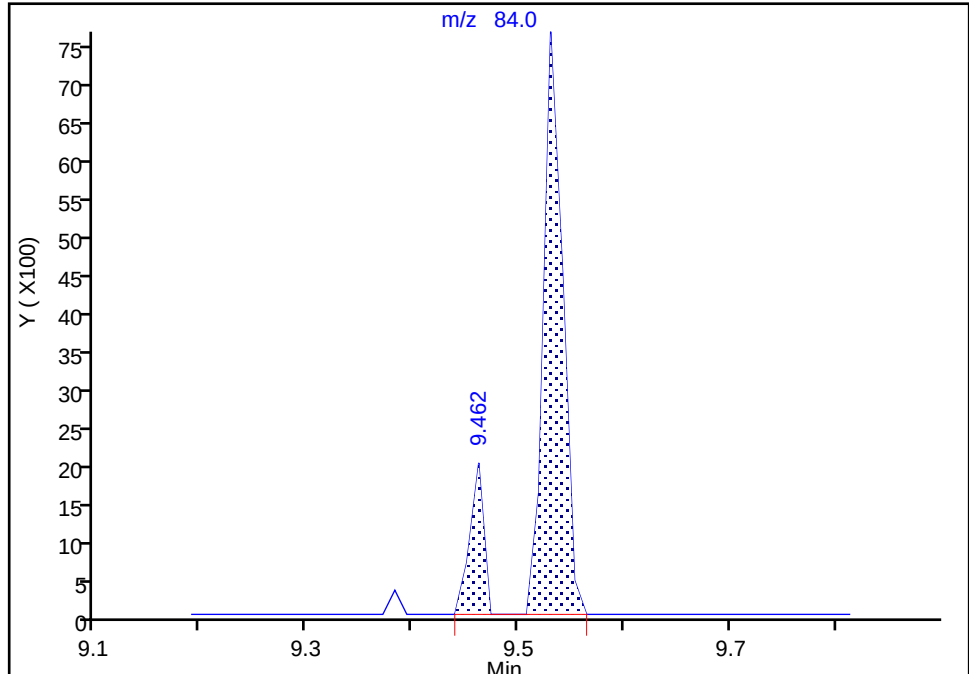
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Lims ID: IC L2
Client ID:
Operator ID: kel10217 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.25mm (0.25 mm) Detector: MS SCAN

65 N-Nitrosodi-n-butylamine, CAS: 924-16-3

Signal: 1

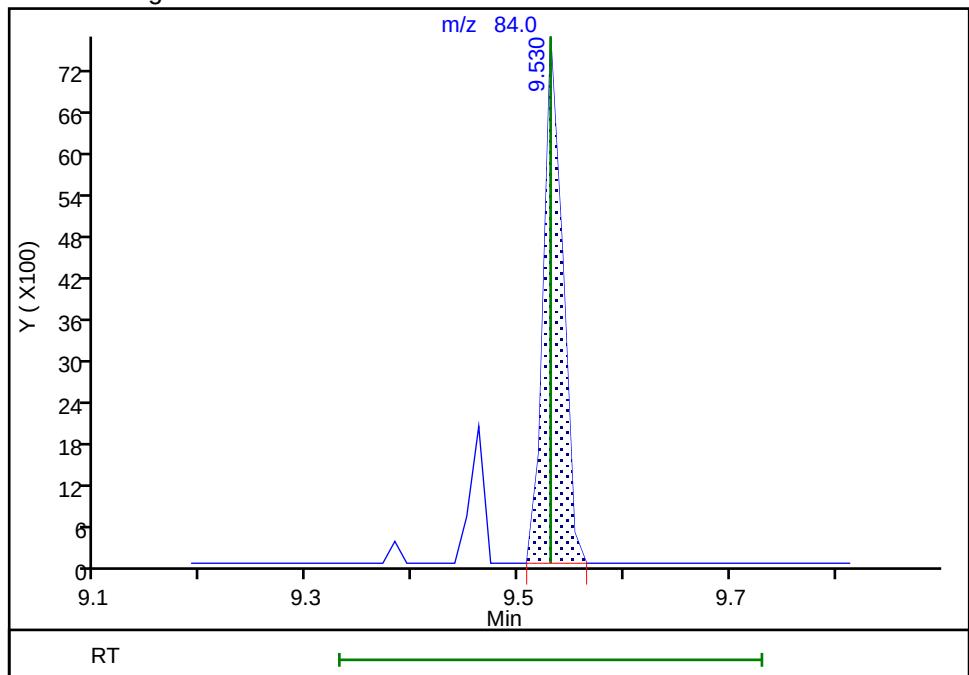
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Area: 11409
Amount: 0.218177
Amount Units: ug/ml

Processing Integration Results



RT: 9.53
Area: 9602
Amount: 0.183066
Amount Units: ug/ml

Manual Integration Results



Reviewer: beckk, 30-Sep-2020 09:13:19
Audit Action: Manually Integrated

Audit Reason: Assign Peak
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11/02/2020

Eurofins Lancaster Laboratories Env, LLC

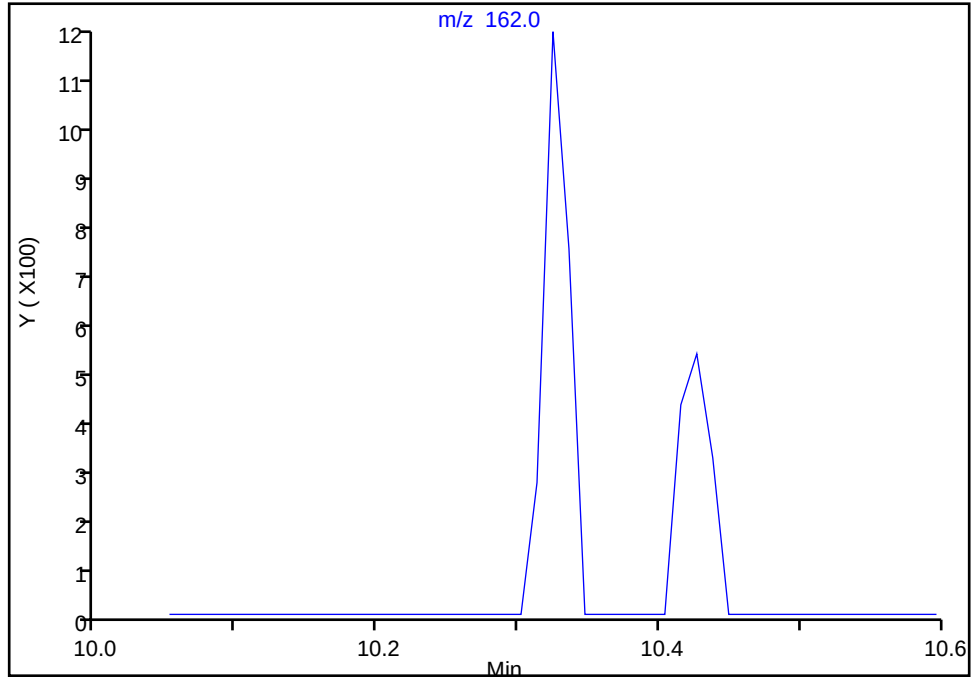
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Lims ID: IC L2
Client ID:
Operator ID: kel10217 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.25mm (0.25 mm) Detector: MS SCAN

73 Isosafrole Peak 1, CAS: 120-58-1

Signal: 1

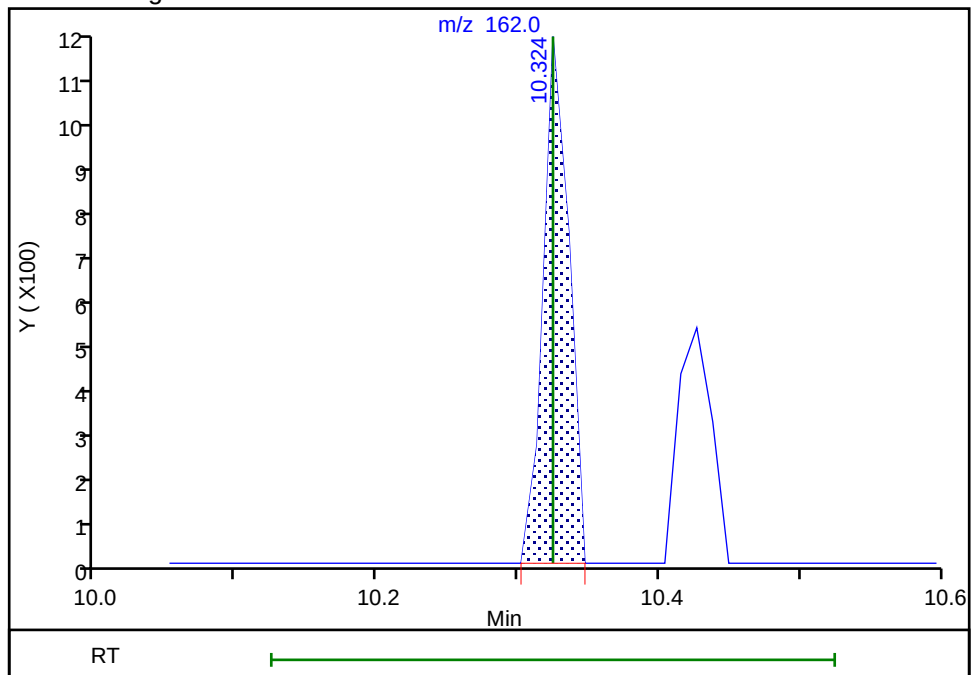
Not Detected
Expected RT: 10.32

Processing Integration Results



RT: 10.32
Area: 1455
Amount: 0.029779
Amount Units: ug/ml

Manual Integration Results



Reviewer: beckk, 30-Sep-2020 09:13:29
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

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Injection Date: 29-Sep-2020 22:52:30

Instrument ID: HP23264

Lims ID: IC L2

Client ID:

Operator ID: kel10217

ALS Bottle#:

9

Worklist Smp#: 9

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

MS SCAN

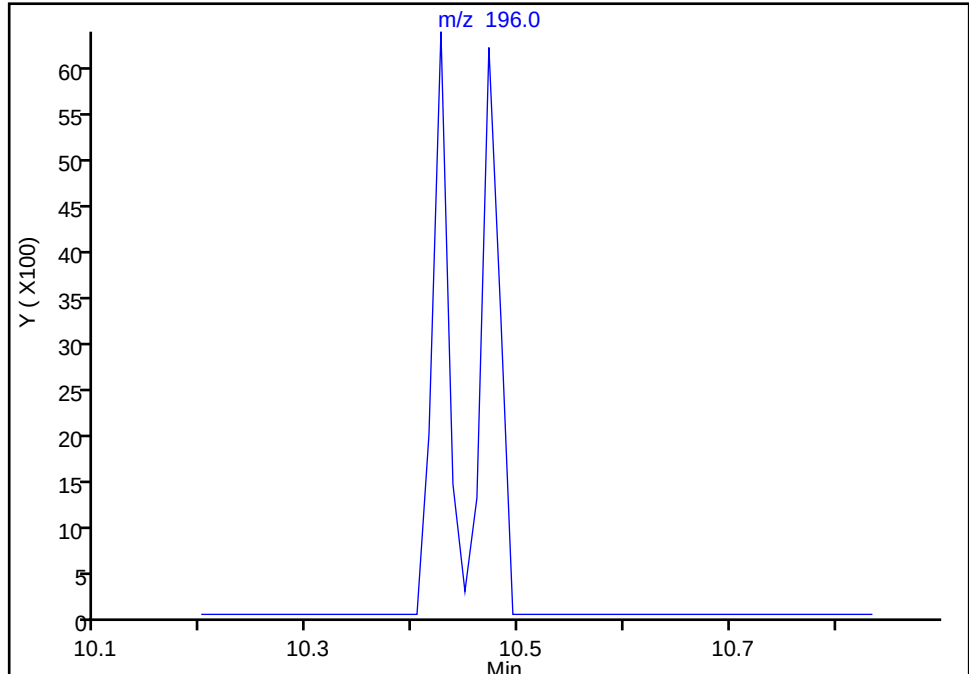
76 2,4,5-Trichlorophenol, CAS: 95-95-4

Signal: 1

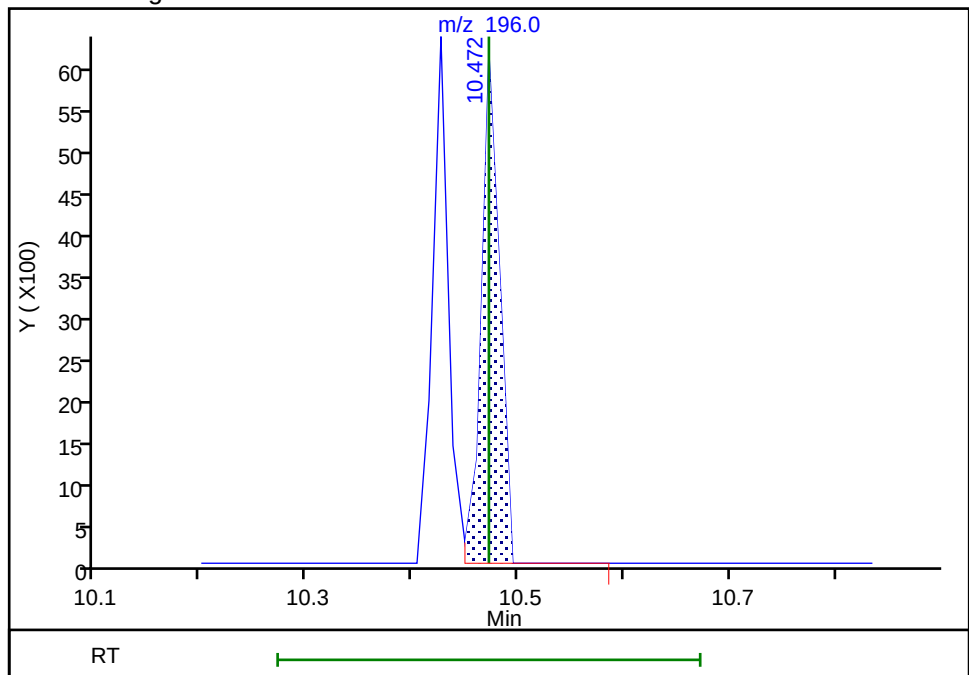
Not Detected

Expected RT: 10.47

Processing Integration Results



Manual Integration Results



RT: 10.47

Area: 7335

Amount: 0.208478

Amount Units: ug/ml

Reviewer: beckk, 30-Sep-2020 09:13:37

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

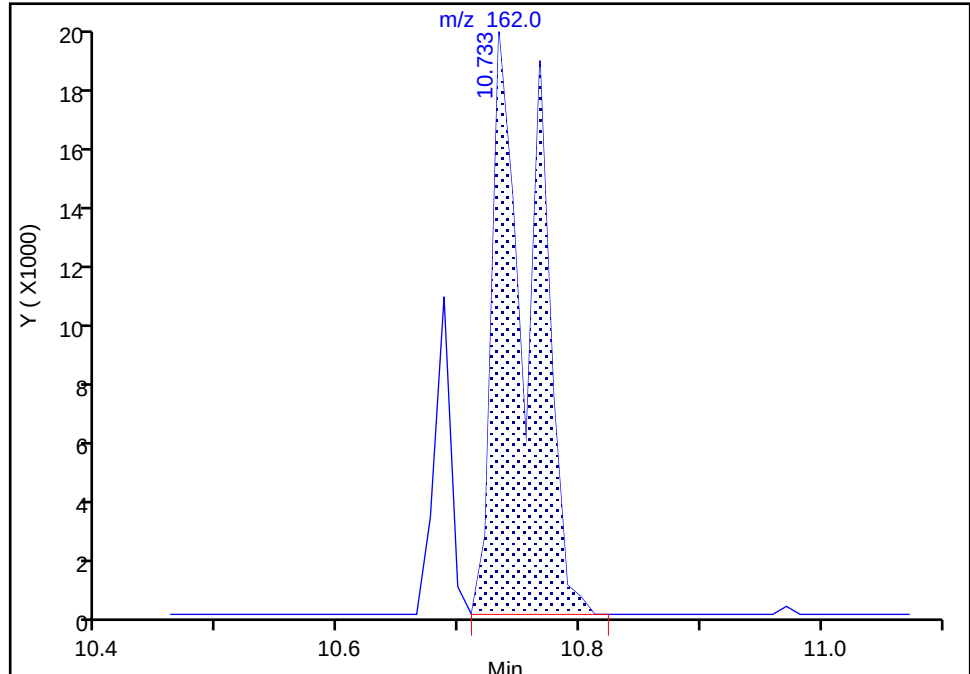
Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1158a.D
Injection Date: 29-Sep-2020 22:52:30 Instrument ID: HP23264
Lims ID: IC L2
Client ID:
Operator ID: kel10217 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.25mm (0.25 mm) Detector: MS SCAN

81 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

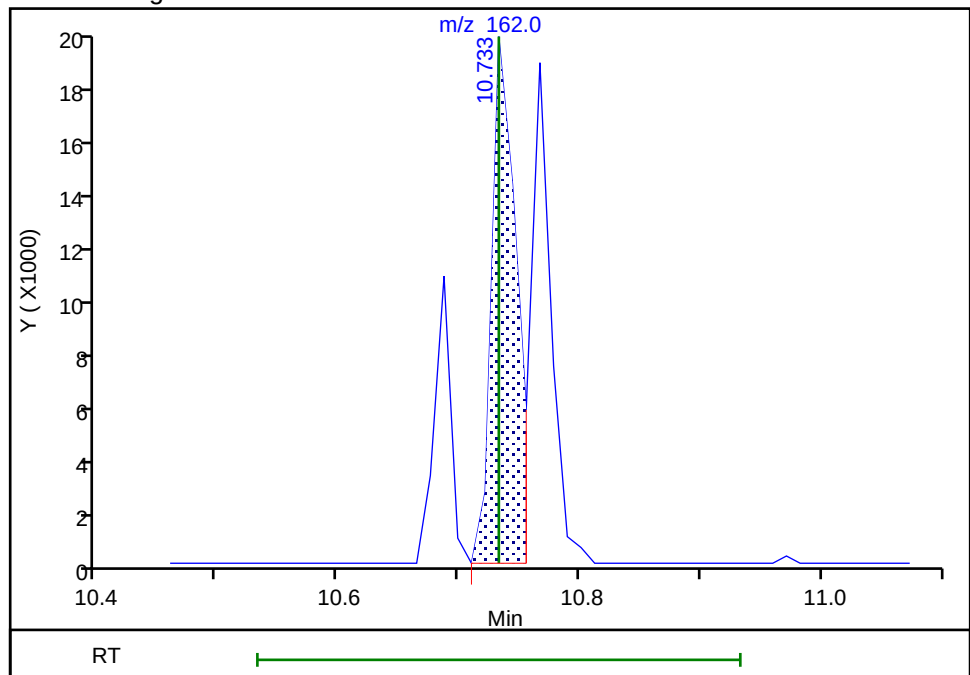
RT: 10.73
Area: 46352
Amount: 0.280035
Amount Units: ug/ml

Processing Integration Results



RT: 10.73
Area: 26116
Amount: 0.250199
Amount Units: ug/ml

Manual Integration Results



Reviewer: beckk, 30-Sep-2020 09:13:57

Audit Action: Split an Integrated Peak

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

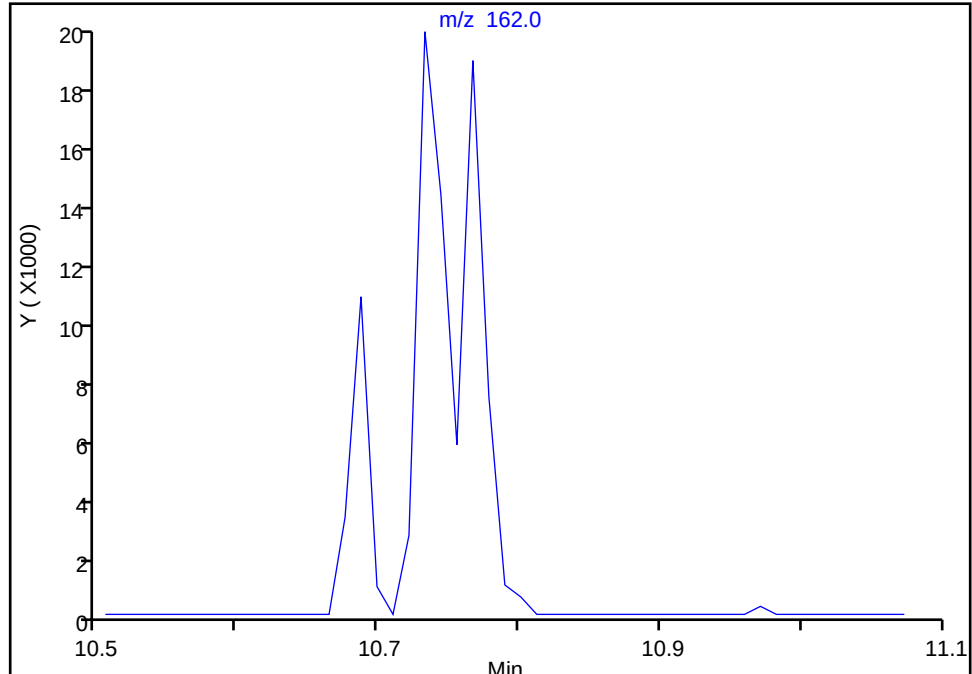
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Injection Date: 29-Sep-2020 22:52:30 Instrument ID: HP23264
Lims ID: IC L2
Client ID:
Operator ID: kel10217 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.25mm (0.25 mm) Detector: MS SCAN

82 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

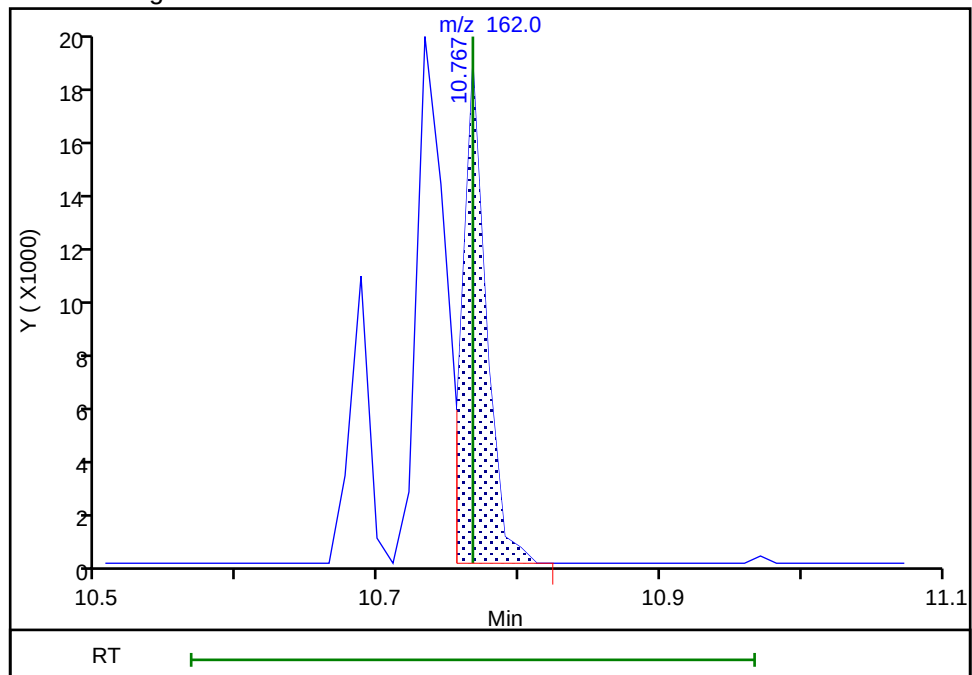
Not Detected
Expected RT: 10.77

Processing Integration Results



Manual Integration Results

RT: 10.77
Area: 20235
Amount: 0.221287
Amount Units: ug/ml



Reviewer: bekk, 30-Sep-2020 09:14:06
Audit Action: Split an Integrated Peak

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1158a.D

Injection Date: 29-Sep-2020 22:52:30

Instrument ID: HP23264

Lims ID: IC L2

Client ID:

Operator ID: kel10217

ALS Bottle#:

9

Worklist Smp#: 9

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

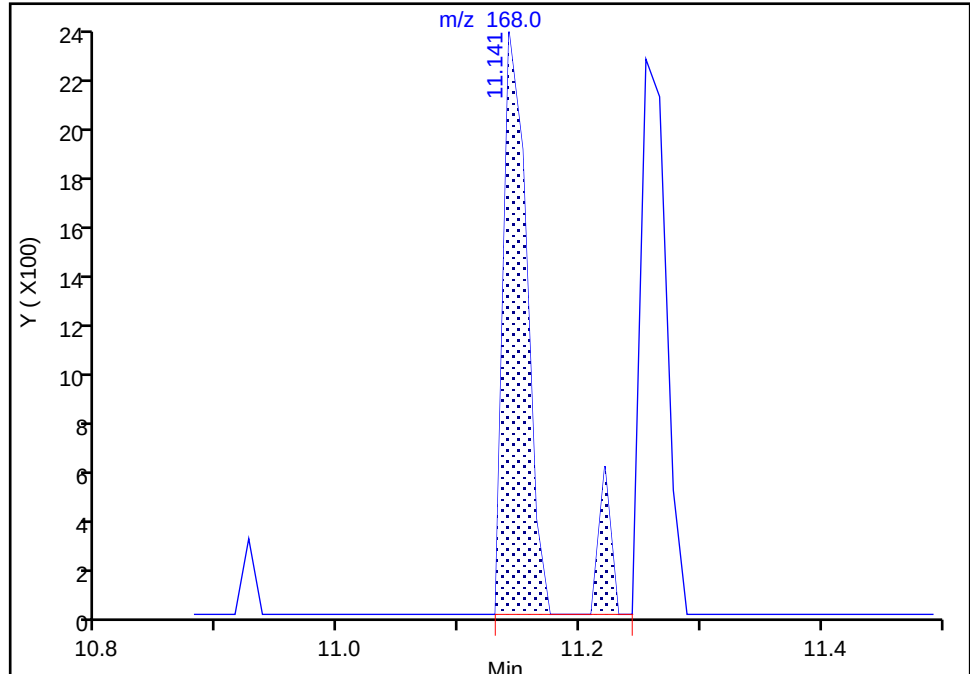
MS SCAN

89 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

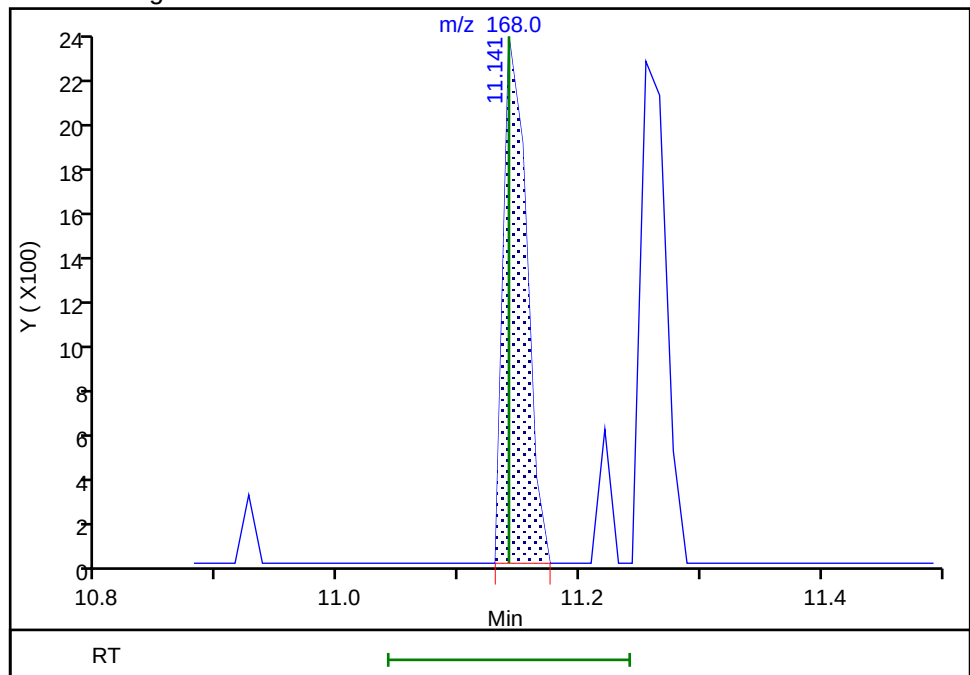
RT: 11.14
Area: 3610
Amount: 0.224085
Amount Units: ug/ml

Processing Integration Results



RT: 11.14
Area: 3195
Amount: 0.198149
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 09:14:18

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

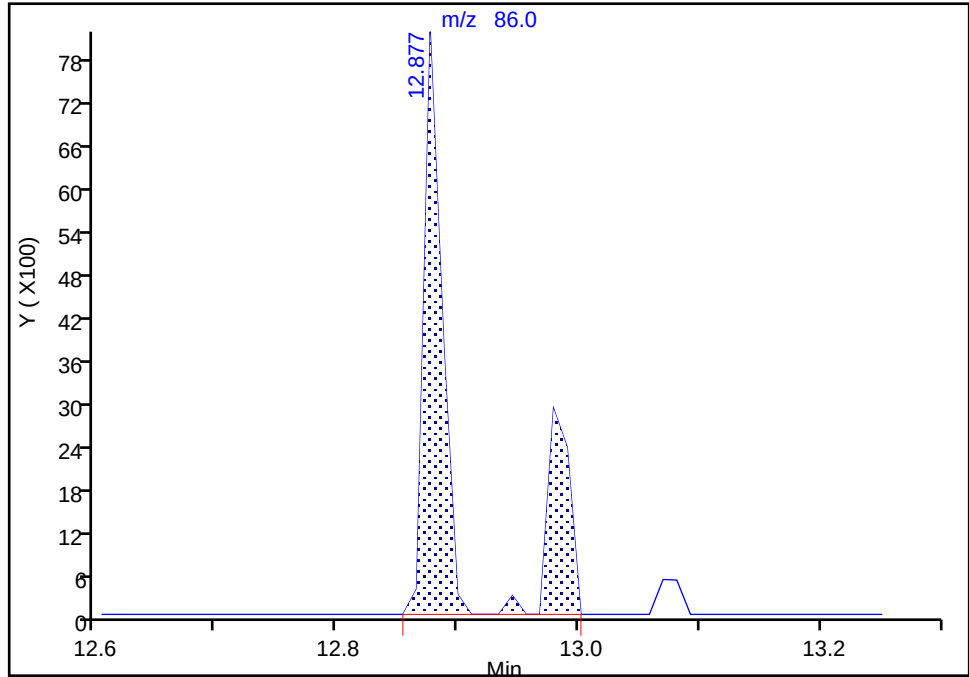
Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1158a.D
Injection Date: 29-Sep-2020 22:52:30 Instrument ID: HP23264
Lims ID: IC L2
Client ID:
Operator ID: kel10217 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.25mm (0.25 mm) Detector MS SCAN

116 cis-Diallate, CAS: 17708-57-5

Signal: 1

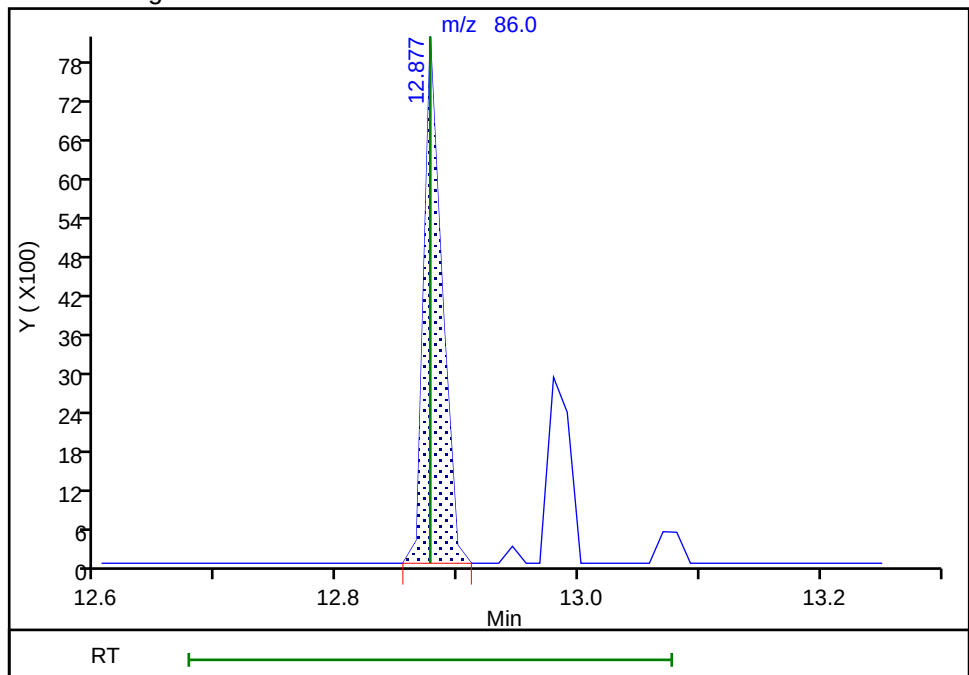
RT: 12.88
Area: 12206
Amount: 0.218198
Amount Units: ug/ml

Processing Integration Results



RT: 12.88
Area: 8486
Amount: 0.151495
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 09:14:31
Audit Action: Manually Integrated

Audit Reason: Assign Peak
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11/02/2020

Eurofins Lancaster Laboratories Env, LLC

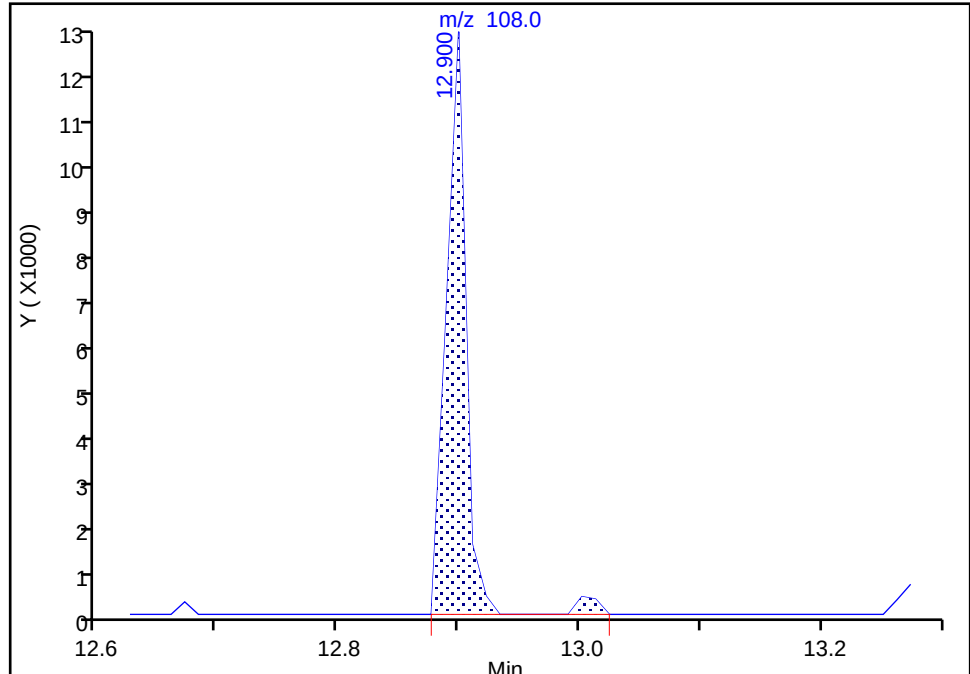
Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1158a.D
Injection Date: 29-Sep-2020 22:52:30 Instrument ID: HP23264
Lims ID: IC L2
Client ID:
Operator ID: kel10217 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.25mm (0.25 mm) Detector: MS SCAN

118 Phenacetin, CAS: 62-44-2

Signal: 1

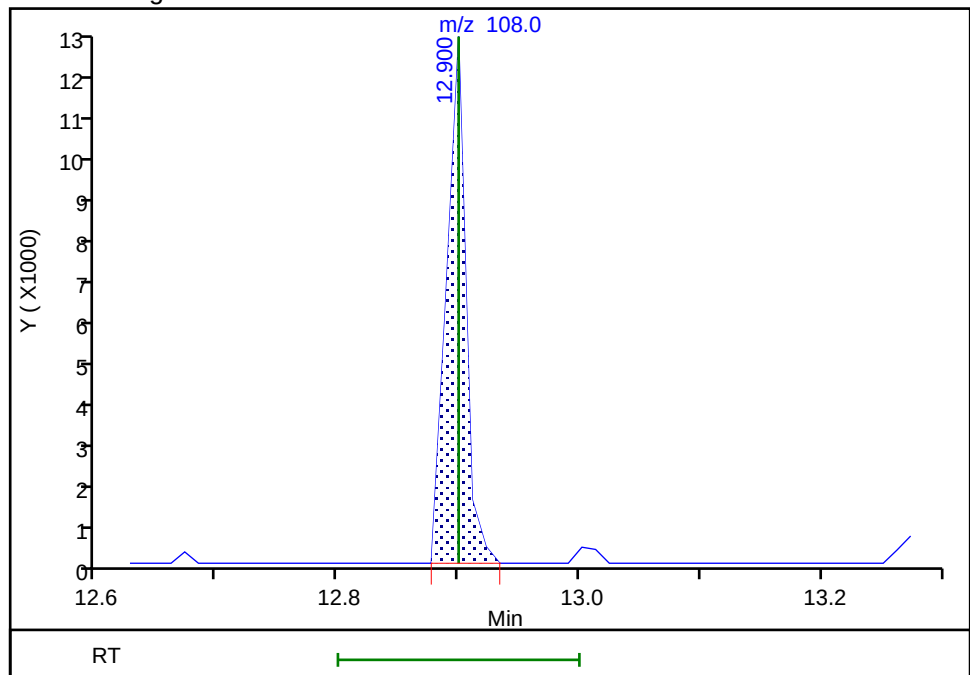
RT: 12.90
Area: 14225
Amount: 0.223530
Amount Units: ug/ml

Processing Integration Results



RT: 12.90
Area: 13745
Amount: 0.214466
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 09:14:38
Audit Action: Manually Integrated

Audit Reason: Assign Peak
Page 1071 of 1228

11/02/2020

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1158a.D

Injection Date: 29-Sep-2020 22:52:30

Instrument ID: HP23264

Lims ID: IC L2

Client ID:

Operator ID: kel10217

ALS Bottle#:

9

Worklist Smp#: 9

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

MS SCAN

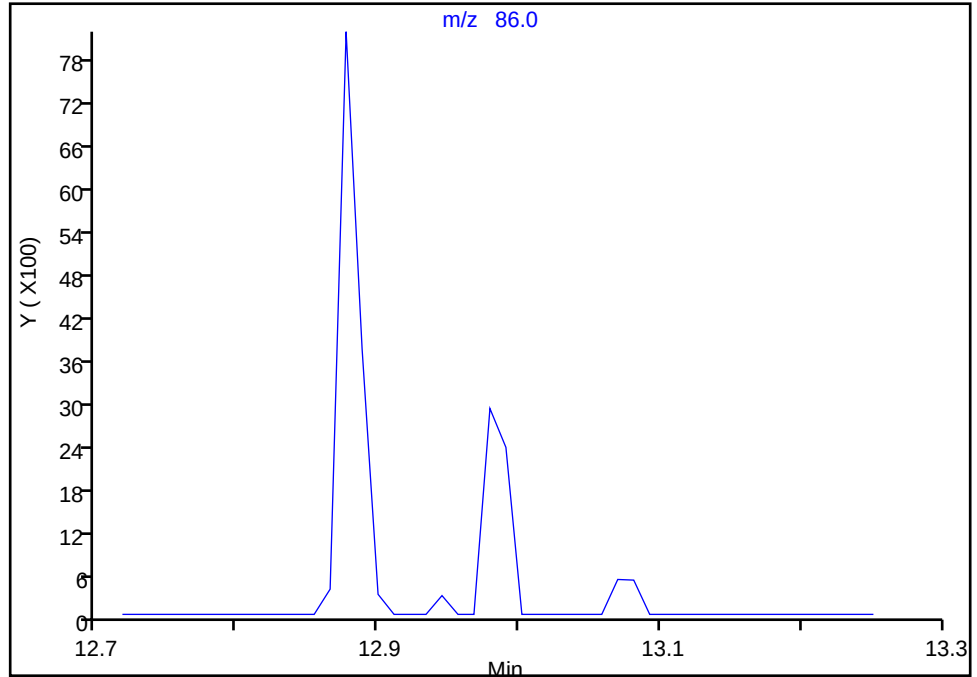
120 trans-Diallate, CAS: 17708-58-6

Signal: 1

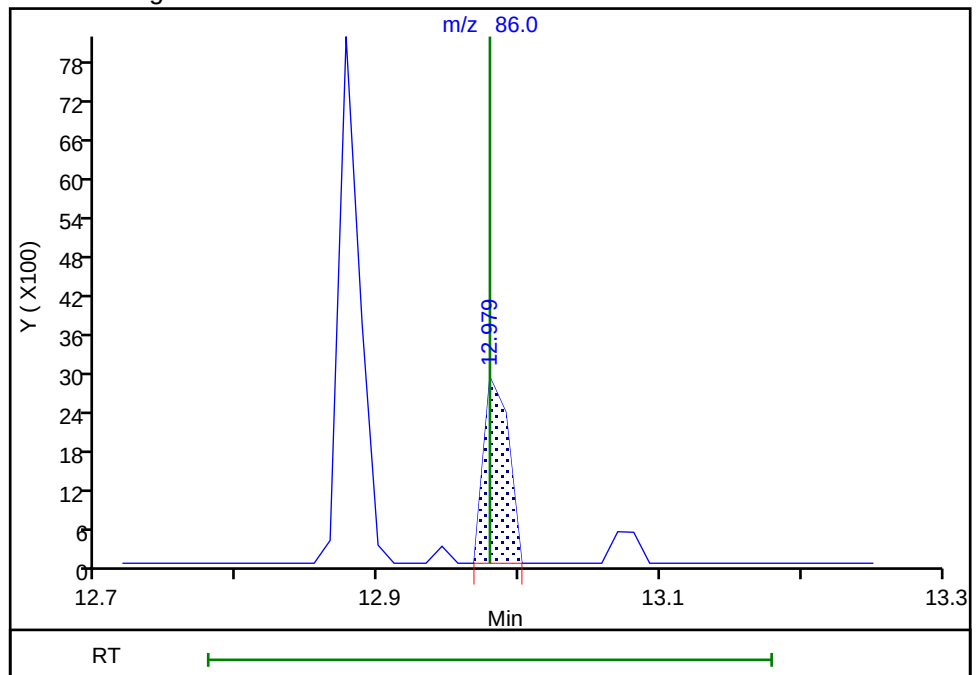
Not Detected

Expected RT: 12.98

Processing Integration Results



Manual Integration Results



RT: 12.98

Area: 3541

Amount: 0.063860

Amount Units: ug/ml

Reviewer: bekk, 30-Sep-2020 09:14:46

Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1
 SDG No.: _____
 Lab Sample ID: ICV 410-55998/12 Calibration Date: 10/19/2020 22:31
 Instrument ID: HP20296 Calib Start Date: 10/19/2020 17:17
 GC Column: DB-5MS 20m 0.18 ID: 0.18 (mm) Calib End Date: 10/19/2020 21:03
 Lab File ID: LJ0711.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.7095	0.6768		11.9	12.5	-4.6	30.0
N-Nitrosodimethylamine	Ave	1.138	1.131		12.4	12.5	-0.7	30.0
Pyridine	Ave	2.002	1.814		22.7	25.0	-9.4	30.0
2-Picoline	Ave	2.045	1.969		12.0	12.5	-3.7	30.0
N-Nitrosomethylethylamine	Ave	0.8259	0.7850		11.9	12.5	-4.9	30.0
Methyl methanesulfonate	Ave	0.9725	1.067		13.7	12.5	9.7	30.0
N-Nitrosodiethylamine	Ave	0.7516	0.7562		12.6	12.5	0.6	30.0
Ethyl methanesulfonate	Ave	0.8335	0.7954		11.9	12.5	-4.6	30.0
Phenol	Ave	2.504	2.331	0.8000	11.6	12.5	-6.9	30.0
Aniline	Ave	2.915	2.760		11.8	12.5	-5.3	30.0
Bis(2-chloroethyl)ether	Ave	1.887	1.765	0.7000	11.7	12.5	-6.4	30.0
2-Chlorophenol	Ave	1.431	1.400	0.8000	12.2	12.5	-2.1	30.0
1,3-Dichlorobenzene	Ave	1.589	1.532		12.1	12.5	-3.6	30.0
1,4-Dichlorobenzene	Ave	1.608	1.577		12.3	12.5	-1.9	30.0
Benzyl alcohol	Ave	1.123	1.100		12.2	12.5	-2.1	30.0
1,2-Dichlorobenzene	Ave	1.544	1.516		12.3	12.5	-1.8	30.0
Indene	Ave	2.441	2.963		15.2	12.5	21.4	30.0
2-Methylphenol	Ave	1.523	1.517	0.7000	12.5	12.5	-0.4	30.0
2,2'-oxybis[1-chloropropane]	Ave	1.626	1.526	0.0100	11.7	12.5	-6.2	30.0
N-Nitrosopyrrolidine	Ave	0.8232	0.8327		12.6	12.5	1.2	30.0
Acetophenone	Ave	2.555	2.432	0.0100	11.9	12.5	-4.8	30.0
4-Methylphenol (and/or 3-Methylphenol)	Ave	1.718	1.569	0.6000	11.4	12.5	-8.7	30.0
N-Nitrosodi-n-propylamine	Ave	1.382	1.336	0.5000	12.1	12.5	-3.3	30.0
N-Nitrosomorpholine	Ave	0.8987	0.8783		12.2	12.5	-2.3	30.0
o-Toluidine	Ave	2.738	2.675		12.2	12.5	-2.3	30.0
Hexachloroethane	Ave	0.7879	0.7422	0.3000	11.8	12.5	-5.8	30.0
Nitrobenzene	Ave	0.5463	0.5149	0.2000	11.8	12.5	-5.8	30.0
N-Nitrosopiperidine	Ave	0.2006	0.1970		12.3	12.5	-1.8	30.0
Isophorone	Ave	0.9382	0.9392	0.4000	12.5	12.5	0.1	30.0
2-Nitrophenol	Lin1		0.1409	0.1000	11.4	12.5	-9.0	30.0
2,4-Dimethylphenol	Ave	0.4461	0.4216	0.2000	11.8	12.5	-5.5	30.0
o,o',o''-Triethylphosphorothioate	Ave	0.1808	0.1841		12.7	12.5	1.8	30.0
Benzoic acid	Lin		0.1831		11.1	12.5	-10.9	30.0
Bis(2-chloroethoxy)methane	Ave	0.6060	0.5815	0.3000	12.0	12.5	-4.0	30.0
2,4-Dichlorophenol	Ave	0.2848	0.2926	0.2000	12.8	12.5	2.8	30.0
1,2,4-Trichlorobenzene	Ave	0.3438	0.3447		12.5	12.5	0.3	30.0
Naphthalene	Ave	1.102	1.072	0.7000	12.2	12.5	-2.7	30.0
4-Chloroaniline	Ave	0.4508	0.4602	0.0100	12.8	12.5	2.1	30.0
2,6-Dichlorophenol	Ave	0.2772	0.2840		12.8	12.5	2.4	30.0
Hexachloropropene	Ave	0.2064	0.2259		13.7	12.5	9.5	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Lab Sample ID: ICV 410-55998/12 Calibration Date: 10/19/2020 22:31

Instrument ID: HP20296 Calib Start Date: 10/19/2020 17:17

GC Column: DB-5MS 20m 0.18 ID: 0.18 (mm) Calib End Date: 10/19/2020 21:03

Lab File ID: LJ0711.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobutadiene	Ave	0.2050	0.2073	0.0100	12.6	12.5	1.1	30.0
Quinoline	Ave	0.6635	0.6845		12.9	12.5	3.2	30.0
N-Nitrosodi-n-butylamine	Ave	0.3646	0.3419		11.7	12.5	-6.2	30.0
4-Chloro-3-methylphenol	Ave	0.3543	0.3763	0.2000	13.3	12.5	6.2	30.0
Safrole, Total	Ave	0.2663	0.2655		12.5	12.5	-0.3	30.0
2-Methylnaphthalene	Ave	0.7014	0.6885	0.4000	12.3	12.5	-1.8	30.0
1-Methylnaphthalene	Ave	0.6721	0.6437		12.0	12.5	-4.2	30.0
Hexachlorocyclopentadiene	Ave	0.3568	0.3488	0.0500	12.2	12.5	-2.2	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.7229	0.7049	0.0100	12.2	12.5	-2.5	30.0
Isosafrole Peak 1	Ave	0.6292	0.6216			2.00	-1.2	30.0
2,4,6-Trichlorophenol	Ave	0.3812	0.3976	0.2000	13.0	12.5	4.3	30.0
2,4,5-Trichlorophenol	Lin		0.4678	0.2000	12.1	12.5	-3.1	30.0
Isosafrole Peak 2	Ave	0.6620	0.4851		7.69	10.5	-26.7	30.0
1,1'-Biphenyl	Ave	1.834	1.751	0.0100	11.9	12.5	-4.6	30.0
2-Chloronaphthalene	Ave	1.488	1.356	0.8000	11.4	12.5	-8.8	30.0
1-Chloronaphthalene	Ave	1.338	1.323		12.4	12.5	-1.1	30.0
2-Nitroaniline	Ave	0.4081	0.4138	0.0100	12.7	12.5	1.4	30.0
1,4-Naphthoquinone	Ave	0.5457	0.5479			12.5	0.4	30.0
1,4-Dinitrobenzene	Ave	0.1708	0.1756		12.8	12.5	2.8	30.0
Dimethyl phthalate	Ave	1.598	1.525	0.0100	11.9	12.5	-4.5	30.0
1,3-Dinitrobenzene	Ave	0.2066	0.2104		12.7	12.5	1.8	30.0
2,6-Dinitrotoluene	Ave	0.3145	0.3225	0.2000	14.6	12.5	2.6	30.0
Acenaphthylene	Ave	1.887	2.165	0.9000	14.3	12.5	14.7	30.0
3-Nitroaniline	Ave	0.3427	0.3672	0.0100	13.4	12.5	7.2	30.0
Acenaphthene	Ave	1.482	1.420	0.9000	12.0	12.5	-4.2	30.0
2,4-Dinitrophenol	Ave	0.1105	0.1116	0.0100	25.2	25.0	1.0	30.0
4-Nitrophenol	Ave	0.3020	0.2834	0.0100	23.5	25.0	-6.2	30.0
Pentachlorobenzene	Ave	0.6156	0.5952		12.1	12.5	-3.3	30.0
2,4-Dinitrotoluene	Ave	0.4257	0.4218	0.2000	12.4	12.5	-0.9	30.0
Dibenzofuran	Ave	1.912	1.854	0.8000	12.1	12.5	-3.0	30.0
1-Naphthylamine	Ave	1.405	1.288		11.5	12.5	-8.3	30.0
2,3,4,6-Tetrachlorophenol	Lin1		0.3400	0.0100	13.1	12.5	4.4	30.0
2-Naphthylamine	Ave	1.412	1.403		12.4	12.5	-0.6	30.0
Diethyl phthalate	Ave	1.632	1.592	0.0100	12.2	12.5	-2.5	30.0
Fluorene	Ave	1.529	1.522	0.9000	12.4	12.5	-0.4	30.0
Thionazin	Ave	0.3453	0.3473		12.6	12.5	0.6	30.0
4-Chlorophenyl-phenyl ether	Ave	0.7678	0.7501	0.4000	12.2	12.5	-2.3	30.0
5-Nitro-o-toluidine	Ave	0.3861	0.4198		13.6	12.5	8.7	30.0
4-Nitroaniline	Lin1		0.3848	0.0100	12.4	12.5	-0.5	30.0
4,6-Dinitro-2-methylphenol	Ave	0.0785	0.0863	0.0100	27.5	25.0	9.9	30.0
N-Nitrosodiphenylamine	Ave	0.6618	0.6406	0.0100	10.3	10.6	-3.2	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1
 SDG No.: _____
 Lab Sample ID: ICV 410-55998/12 Calibration Date: 10/19/2020 22:31
 Instrument ID: HP20296 Calib Start Date: 10/19/2020 17:17
 GC Column: DB-5MS 20m 0.18 ID: 0.18 (mm) Calib End Date: 10/19/2020 21:03
 Lab File ID: LJ0711.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Diphenylhydrazine	Ave	1.155	1.168		12.6	12.5	1.1	30.0
Sulfotepp	Ave	0.1898	0.1855		12.2	12.5	-2.2	30.0
cis-Diallate	Ave	0.4310	0.4399		9.57	9.38	2.1	30.0
Phorate	Ave	0.6560	0.6806		13.0	12.5	3.8	30.0
Phenacetin	Ave	0.4777	0.5030		13.2	12.5	5.3	30.0
4-Bromophenyl-phenylether	Ave	0.2149	0.2137	0.1000	12.4	12.5	-0.6	30.0
trans-Diallate	Ave	0.4529	0.4495		3.10	3.13	-0.7	30.0
Hexachlorobenzene	Ave	0.2656	0.2472	0.1000	11.6	12.5	-6.9	30.0
Dimethoate	Ave	0.4108	0.4148		12.6	12.5	1.0	30.0
Pentachlorophenol	Ave	0.1133	0.1169	0.0500	25.8	25.0	3.1	30.0
4-Aminobiphenyl	Ave	0.6018	0.8673		18.0	12.5	44.1*	30.0
Pentachloronitrobenzene	Ave	0.1034	0.1051		12.7	12.5	1.6	30.0
Pronamide	Ave	0.3718	0.3729		12.5	12.5	0.3	30.0
Dinoseb	Ave	0.1196	0.1247		13.0	12.5	4.3	30.0
Phenanthrene	Ave	1.173	1.134	0.7000	12.1	12.5	-3.3	30.0
Anthracene	Ave	1.155	1.147	0.7000	12.4	12.5	-0.7	30.0
Carbazole	Ave	1.054	1.077	0.0100	12.8	12.5	2.2	30.0
Methyl parathion	Ave	0.2957	0.3189		13.5	12.5	7.9	30.0
Di-n-butyl phthalate	Ave	1.434	1.408	0.0100	12.3	12.5	-1.8	30.0
Parathion	Ave	0.1851	0.2037		13.8	12.5	10.0	30.0
4-Nitroquinoline-1-oxide	Qual		0.1030			12.5	4.1	30.0
Isodrin	Ave	0.1441	0.1403		12.2	12.5	-2.6	30.0
Fluoranthene	Ave	1.296	1.280	0.6000	12.4	12.5	-1.2	30.0
Benidine	Ave	0.7919	0.7851			12.5	-0.9	30.0
Pyrene	Ave	1.354	1.332	0.6000	12.3	12.5	-1.6	30.0
p-Dimethylamino azobenzene	Ave	0.2207	0.2517		14.3	12.5	14.0	30.0
Chlorobenzilate	Ave	0.4264	0.4590		13.5	12.5	7.7	30.0
3,3'-Dimethylbenzidine	Ave	0.7960	0.7841			12.5	-1.5	30.0
Butylbenzylphthalate	Ave	0.5987	0.6801	0.0100	14.2	12.5	13.6	30.0
2-Acetylaminofluorene	Lin		0.5233		12.1	12.5	-2.8	30.0
3,3'-Dichlorobenzidine	Ave	0.4836	0.5155	0.0100	13.3	12.5	6.6	30.0
Benzo[a]anthracene	Ave	1.205	1.312	0.8000	13.6	12.5	8.8	30.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.2541	0.2683			12.5	5.6	30.0
Chrysene	Ave	1.232	1.255	0.7000	12.7	12.5	1.9	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.9300	0.9933	0.0100	13.4	12.5	6.8	30.0
6-Methylchrysene	Ave	0.8802	0.8929		12.7	12.5	1.5	30.0
Di-n-octyl phthalate	Ave	1.496	1.591	0.0100	13.3	12.5	6.4	30.0
Benzo[b]fluoranthene	Ave	1.250	1.305	0.7000	13.0	12.5	4.4	30.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5171	0.4920		11.9	12.5	-4.8	30.0
Benzo[k]fluoranthene	Ave	1.241	1.281	0.7000	12.9	12.5	3.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1
 SDG No.: _____
 Lab Sample ID: ICV 410-55998/12 Calibration Date: 10/19/2020 22:31
 Instrument ID: HP20296 Calib Start Date: 10/19/2020 17:17
 GC Column: DB-5MS 20m 0.18 ID: 0.18 (mm) Calib End Date: 10/19/2020 21:03
 Lab File ID: LJ0711.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]pyrene	Ave	1.135	1.214	0.7000	13.4	12.5	7.0	30.0
3-Methylcholanthrene	Ave	0.5694	0.6255		13.7	12.5	9.9	30.0
Dibenz[a,h]acridine	Ave	0.9211	1.022		13.9	12.5	11.0	30.0
Dibenz[a,j]acridine	Ave	0.9436	1.007		13.3	12.5	6.8	30.0
Indeno[1,2,3-cd]pyrene	Ave	1.022	1.073	0.5000	13.1	12.5	5.0	30.0
Dibenz(a,h)anthracene	Ave	1.088	1.191	0.4000	13.7	12.5	9.5	30.0
Benzo[g,h,i]perylene	Ave	1.033	1.062	0.5000	12.9	12.5	2.8	30.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0711.D
 Lims ID: ICV FULL
 Client ID:
 Sample Type: ICV
 Inject. Date: 19-Oct-2020 22:31:04 ALS Bottle#: 0 Worklist Smp#: 12
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: ICV FULL
 Misc. Info.: 410-0013268-012
 Operator ID: kel10217 Instrument ID: HP20296
 Sublist:
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 20-Oct-2020 18:59:27 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1014

First Level Reviewer: bekk

Date: 20-Oct-2020 12:53:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 1,4-Dioxane	88	2.433	2.433	0.000	90	308092	12.5	11.9	
2 N-Nitrosodimethylamine	74	2.968	2.968	0.000	90	514801	12.5	12.4	
3 Pyridine	79	2.989	2.989	0.000	94	1651525	25.0	22.7	
5 2-Picoline	93	4.155	4.155	0.000	93	896173	12.5	12.0	
6 N-Nitrosomethylethylamine	88	4.348	4.348	0.000	87	357363	12.5	11.9	
9 Methyl methanesulfonate	80	4.808	4.808	0.000	85	485516	12.5	13.7	
11 N-Nitrosodiethylamine	102	5.385	5.385	0.000	89	344209	12.5	12.6	
13 Ethyl methanesulfonate	109	5.851	5.851	0.000	97	362071	12.5	11.9	
17 Phenol	94	6.455	6.455	0.000	97	1061282	12.5	11.6	
18 Aniline	93	6.482	6.482	0.000	97	1256353	12.5	11.8	
19 Bis(2-chloroethyl)ether	93	6.599	6.599	0.000	98	803429	12.5	11.7	
20 2-Chlorophenol	128	6.648	6.648	0.000	94	637381	12.5	12.2	
22 1,3-Dichlorobenzene	146	6.883	6.883	0.000	92	697450	12.5	12.1	
* 24 1,4-Dichlorobenzene-d4	152	6.974	6.974	0.000	95	182085	5.00	5.00	
25 1,4-Dichlorobenzene	146	7.001	7.001	0.000	88	717920	12.5	12.3	
27 Benzyl alcohol	108	7.199	7.199	0.000	89	500855	12.5	12.2	
29 1,2-Dichlorobenzene	146	7.225	7.225	0.000	92	690322	12.5	12.3	
30 Indene	115	7.364	7.364	0.000	88	1348924	12.5	15.2	
31 2-Methylphenol	108	7.380	7.380	0.000	96	690622	12.5	12.5	
32 2,2'-oxybis[1-chloropropane]	45	7.429	7.429	0.000	90	694522	12.5	11.7	
34 N-Nitrosopyrrolidine	100	7.568	7.568	0.000	95	379035	12.5	12.6	
35 Acetophenone	105	7.605	7.605	0.000	94	1106908	12.5	11.9	
36 4-Methylphenol	108	7.626	7.626	0.000	94	714347	12.5	11.4	
37 N-Nitrosodi-n-propylamine	70	7.626	7.626	0.000	75	608123	12.5	12.1	
38 N-Nitrosomorpholine	56	7.637	7.637	0.000	89	399816	12.5	12.2	
39 2-Toluidine	106	7.653	7.653	0.000	94	1217543	12.5	12.2	
40 Hexachloroethane	117	7.749	7.749	0.000	95	337877	12.5	11.8	
42 Nitrobenzene	77	7.856	7.856	0.000	83	885005	12.5	11.8	
44 N-Nitrosopiperidine	114	8.097	8.097	0.000	87	338601	12.5	12.3	
46 Isophorone	82	8.247	8.247	0.000	98	1614389	12.5	12.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
47 2-Nitrophenol	139	8.359	8.359	0.000	93	242274	12.5	11.4	
48 2,4-Dimethylphenol	107	8.455	8.455	0.000	99	724765	12.5	11.8	
50 Benzoic acid	105	8.621	8.621	0.000	31	314689	12.5	11.1	M
49 o,o',o''-Triethylphosphorothioat	198	8.584	8.584	0.000	92	316454	12.5	12.7	
51 Bis(2-chloroethoxy)methane	93	8.621	8.621	0.000	98	999533	12.5	12.0	
52 2,4-Dichlorophenol	162	8.744	8.744	0.000	96	503030	12.5	12.8	
54 1,2,4-Trichlorobenzene	180	8.878	8.878	0.000	92	592584	12.5	12.5	
* 55 Naphthalene-d8	136	8.958	8.958	0.000	99	687575	5.00	5.00	
S 53 Dinitrotoluene	165				0			27.0	
56 Naphthalene	128	8.996	8.996	0.000	99	1843024	12.5	12.2	
57 4-Chloroaniline	127	9.097	9.097	0.000	94	790975	12.5	12.8	
58 2,6-Dichlorophenol	162	9.108	9.108	0.000	92	488095	12.5	12.8	
59 Hexachloropropene	213	9.145	9.145	0.000	91	388385	12.5	13.7	
60 Hexachlorobutadiene	225	9.220	9.220	0.000	96	356378	12.5	12.6	
62 Quinoline	129	9.536	9.536	0.000	93	1176654	12.5	12.9	
S 63 Diallate	86				0		12.5	12.7	
65 N-Nitrosodi-n-butylamine	84	9.680	9.680	0.000	88	587623	12.5	11.7	
66 4-Chloro-3-methylphenol	107	9.905	9.905	0.000	91	646852	12.5	13.3	
67 Safrole, Total	162	10.007	10.007	0.000	80	456456	12.5	12.5	
69 2-Methylnaphthalene	142	10.124	10.124	0.000	90	1183406	12.5	12.3	
70 1-Methylnaphthalene	142	10.279	10.279	0.000	91	1106503	12.5	12.0	
71 Hexachlorocyclopentadiene	237	10.392	10.392	0.000	97	290311	12.5	12.2	
72 1,2,4,5-Tetrachlorobenzene	216	10.397	10.397	0.000	97	586793	12.5	12.2	
73 Isosafrole Peak 1	162	10.483	10.483	0.000	87	82791	2.00	1.98	
74 2,4,6-Trichlorophenol	196	10.590	10.590	0.000	95	330947	12.5	13.0	
75 2,4,5-Trichlorophenol	196	10.643	10.643	0.000	91	389424	12.5	12.1	
77 Isosafrole Peak 2	162	10.857	10.857	0.000	84	339181	10.5	7.69	a
79 1,1'-Biphenyl	154	10.900	10.900	0.000	98	1457200	12.5	11.9	
80 2-Chloronaphthalene	162	10.910	10.910	0.000	98	1129084	12.5	11.4	
81 1-Chloronaphthalene	162	10.943	10.943	0.000	96	1101094	12.5	12.4	
83 2-Nitroaniline	138	11.092	11.092	0.000	74	344435	12.5	12.7	
84 1,4-Naphthoquinone	158	11.210	11.210	0.000	75	456082	12.5	12.6	
85 1,4-Dinitrobenzene	168	11.333	11.333	0.000	83	146194	12.5	12.8	
86 Dimethyl phthalate	163	11.435	11.435	0.000	96	1269609	12.5	11.9	
87 1,3-Dinitrobenzene	168	11.445	11.445	0.000	80	175139	12.5	12.7	
88 2,6-Dinitrotoluene	165	11.504	11.504	0.000	84	268442	12.5	14.6	a
90 Acenaphthylene	152	11.579	11.579	0.000	99	1802122	12.5	14.3	
91 3-Nitroaniline	138	11.745	11.745	0.000	89	305667	12.5	13.4	
* 92 Acenaphthene-d10	164	11.788	11.788	0.000	98	332957	5.00	5.00	
93 Acenaphthene	153	11.836	11.836	0.000	97	1181757	12.5	12.0	
94 2,4-Dinitrophenol	184	11.900	11.900	0.000	76	185834	25.0	25.2	
96 4-Nitrophenol	109	12.012	12.012	0.000	90	471730	25.0	23.5	
98 Pentachlorobenzene	250	12.023	12.023	0.000	96	495466	12.5	12.1	
99 2,4-Dinitrotoluene	165	12.082	12.082	0.000	81	351083	12.5	12.4	
100 Dibenzofuran	168	12.082	12.082	0.000	96	1543485	12.5	12.1	
101 1-Naphthylamine	143	12.189	12.189	0.000	97	1072288	12.5	11.5	
102 2,3,4,6-Tetrachlorophenol	232	12.253	12.253	0.000	78	283020	12.5	13.1	
103 2-Naphthylamine	143	12.290	12.290	0.000	94	1168080	12.5	12.4	
104 Diethyl phthalate	149	12.435	12.435	0.000	96	1325399	12.5	12.2	
106 Thionazin	107	12.526	12.526	0.000	71	289057	12.5	12.6	
105 Fluorene	166	12.520	12.520	0.000	93	1266769	12.5	12.4	
107 N-Nitro-o-toluidine	152	12.547	12.547	0.000	81	349471	12.5	13.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
109 4-Nitroaniline	138	12.558	12.558	0.000	78	320304	12.5	12.4	
108 4-Chlorophenyl phenyl ether	204	12.542	12.542	0.000	90	624376	12.5	12.2	
110 4,6-Dinitro-2-methylphenol	198	12.601	12.601	0.000	74	287384	25.0	27.5	
111 N-Nitrosodiphenylamine	169	12.692	12.692	0.000	99	906926	10.6	10.3	
112 1,2-Diphenylhydrazine	77	12.740	12.740	0.000	100	1944546	12.5	12.6	
114 Sulfotepp	97	12.922	12.922	0.000	81	309025	12.5	12.2	
115 cis-Diallate	86	13.071	13.071	0.000	94	549483	9.38	9.57	
116 Phorate	75	13.077	13.077	0.000	95	1133514	12.5	13.0	
117 Phenacetin	108	13.103	13.103	0.000	90	837801	12.5	13.2	
118 4-Bromophenyl phenyl ether	248	13.157	13.157	0.000	74	355977	12.5	12.4	
119 trans-Diallate	86	13.178	13.178	0.000	90	187177	3.13	3.10	
120 Hexachlorobenzene	284	13.210	13.210	0.000	93	411720	12.5	11.6	
121 Dimethoate	87	13.285	13.285	0.000	96	690882	12.5	12.6	
123 Pentachlorophenol	266	13.472	13.472	0.000	90	389308	25.0	25.8	
125 Pentachloronitrobenzene	237	13.489	13.489	0.000	48	174995	12.5	12.7	
124 4-Aminobiphenyl	169	13.489	13.489	0.000	91	1444470	12.5	18.0	
126 Pronamide	173	13.585	13.585	0.000	91	621104	12.5	12.5	
* 127 Phenanthrene-d10	188	13.719	13.719	0.000	97	666195	5.00	5.00	
128 Dinoseb	211	13.729	13.729	0.000	93	207762	12.5	13.0	
129 Phenanthrene	178	13.751	13.751	0.000	92	1889288	12.5	12.1	
130 Anthracene	178	13.820	13.820	0.000	99	1910653	12.5	12.4	
131 Carbazole	167	14.039	14.039	0.000	96	1793712	12.5	12.8	
132 Methyl parathion	109	14.248	14.248	0.000	90	531173	12.5	13.5	
133 Di-n-butyl phthalate	149	14.558	14.558	0.000	100	2344811	12.5	12.3	
134 Ethyl Parathion	109	14.804	14.804	0.000	82	339260	12.5	13.8	
135 4-Nitroquinoline-1-oxide	190	14.826	14.826	0.000	85	171621	12.5	13.0	
137 Isodrin	193	15.221	15.221	0.000	87	233751	12.5	12.2	
138 Fluoranthene	202	15.446	15.446	0.000	99	2132636	12.5	12.4	
139 Benzidine	184	15.676	15.676	0.000	99	1311681	12.5	12.4	
* 140 Pyrene-d10 (IS)	212	15.767	15.767	0.000	98	668327	5.00	5.00	
141 Pyrene	202	15.799	15.799	0.000	96	2226015	12.5	12.3	
143 p-Dimethylamino azobenzene	225	16.323	16.323	0.000	89	420528	12.5	14.3	
144 Chlorobenzilate	139	16.414	16.414	0.000	83	766971	12.5	13.5	
145 3,3'-Dimethylbenzidine	212	16.896	16.896	0.000	99	1310130	12.5	12.3	
146 Butyl benzyl phthalate	149	16.949	16.949	0.000	93	1136243	12.5	14.2	
147 2-Acetylaminofluorene	181	17.329	17.329	0.000	94	874258	12.5	12.1	
148 3,3'-Dichlorobenzidine	252	17.842	17.842	0.000	79	861328	12.5	13.3	
150 4,4'-Methylene bis(2-chloroaniline)	231	17.858	17.858	0.000	94	448307	12.5	13.2	
149 Benzo[a]anthracene	228	17.853	17.853	0.000	99	2191664	12.5	13.6	
151 Chrysene	228	17.917	17.917	0.000	97	2096330	12.5	12.7	
152 Bis(2-ethylhexyl) phthalate	149	18.030	18.030	0.000	97	1659551	12.5	13.4	
153 6-Methylchrysene	242	18.730	18.730	0.000	99	1491943	12.5	12.7	
154 Di-n-octyl phthalate	149	19.206	19.206	0.000	99	2827832	12.5	13.3	
155 Benzo[b]fluoranthene	252	19.736	19.736	0.000	98	2318432	12.5	13.0	
156 7,12-Dimethylbenz(a)anthracene	256	19.741	19.741	0.000	89	874314	12.5	11.9	
157 Benzo[k]fluoranthene	252	19.789	19.789	0.000	99	2276678	12.5	12.9	
158 Benzo[a]pyrene	252	20.271	20.271	0.000	79	2156520	12.5	13.4	
* 159 Perylene-d12	264	20.362	20.362	0.000	98	710767	5.00	5.00	
160 3-Methylcholanthrene	268	20.848	20.848	0.000	92	1111473	12.5	13.7	
161 Dibenz[a,h]acridine	279	21.672	21.672	0.000	91	1816839	12.5	13.9	
162 Dibenz[a,j]acridine	279	21.747	21.747	0.000	96	1790044	12.5	13.3	
163 Indeno[1,2,3-cd]pyrene	276	22.020	22.020	0.000	99	1907249	12.5	13.1	M

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
164 Dibenz(a,h)anthracene	278	22.057	22.057	0.000	92	2117163	12.5	13.7	
165 Benzo[g,h,i]perylene	276	22.437	22.437	0.000	97	1887780	12.5	12.9	
S 166 Isosafrole	162				0		12.5	9.67	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270ICV_00006

Amount Added: 1.00

Units: mL

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0711.D

Operator ID: kel10217

Worklist Smp#: 12

Injection Vol: 1.0 ul

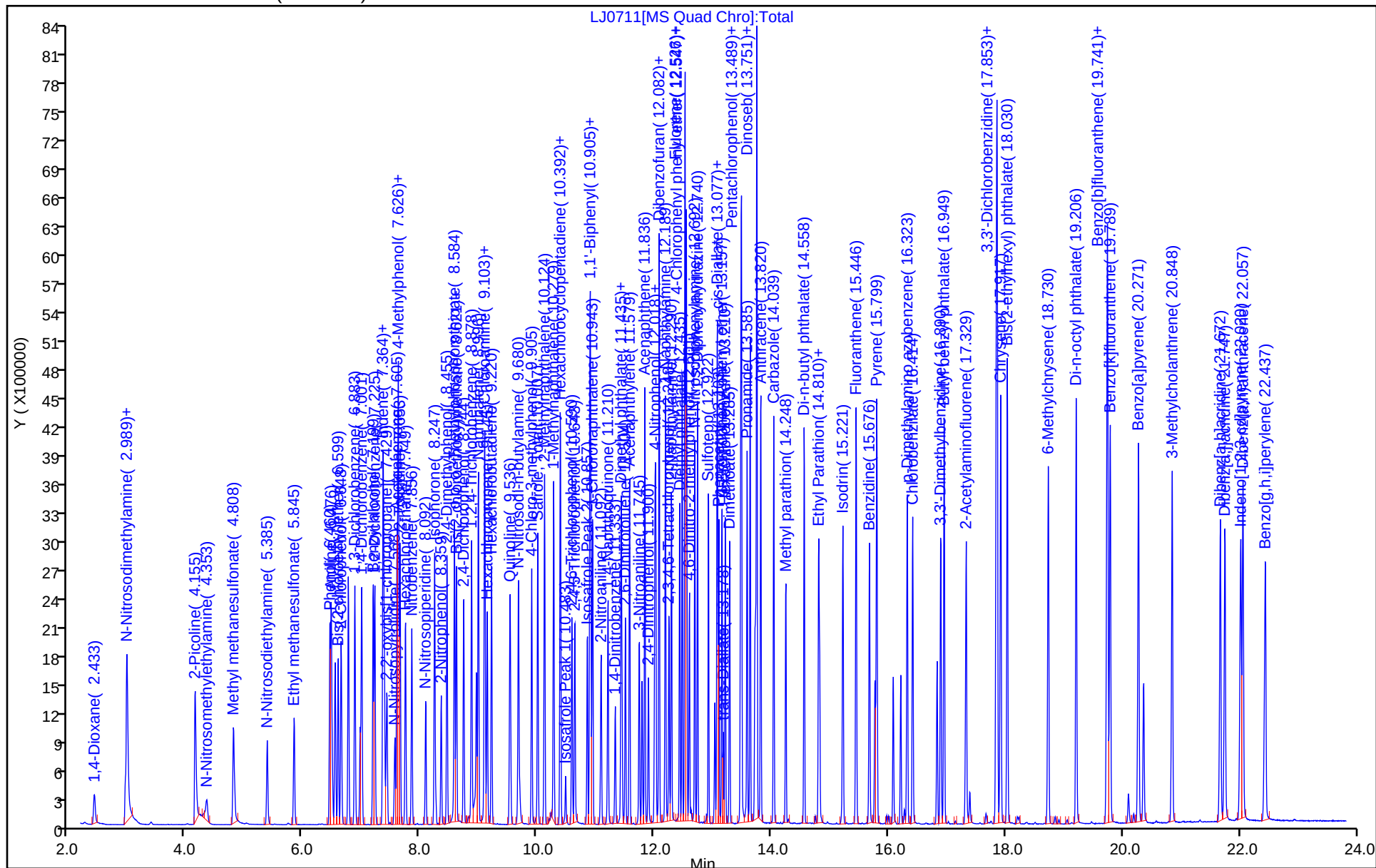
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: MSSemi HP20296

Limit Group: MSSV - 8270D E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0711.D

Injection Date: 19-Oct-2020 22:31:04

Instrument ID: HP20296

Lims ID: ICV FULL

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 12

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

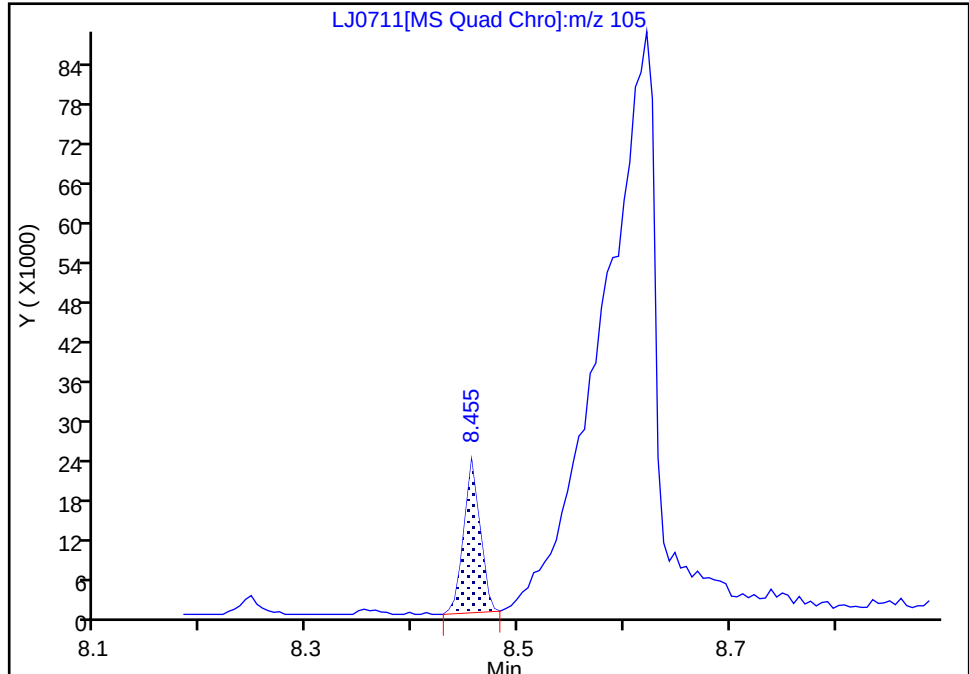
Detector: MS SCAN

50 Benzoic acid, CAS: 65-85-0

Signal: 1

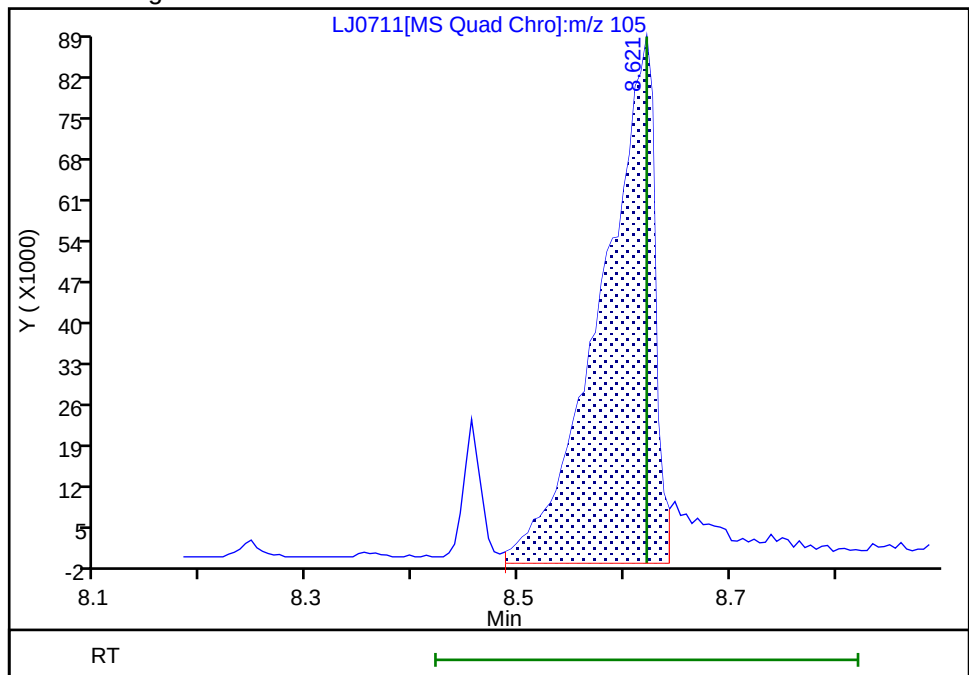
RT: 8.46
Area: 24868
Amount: 3.044157
Amount Units: ug/ml

Processing Integration Results



RT: 8.62
Area: 314689
Amount: 11.140581
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 20-Oct-2020 12:50:23

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

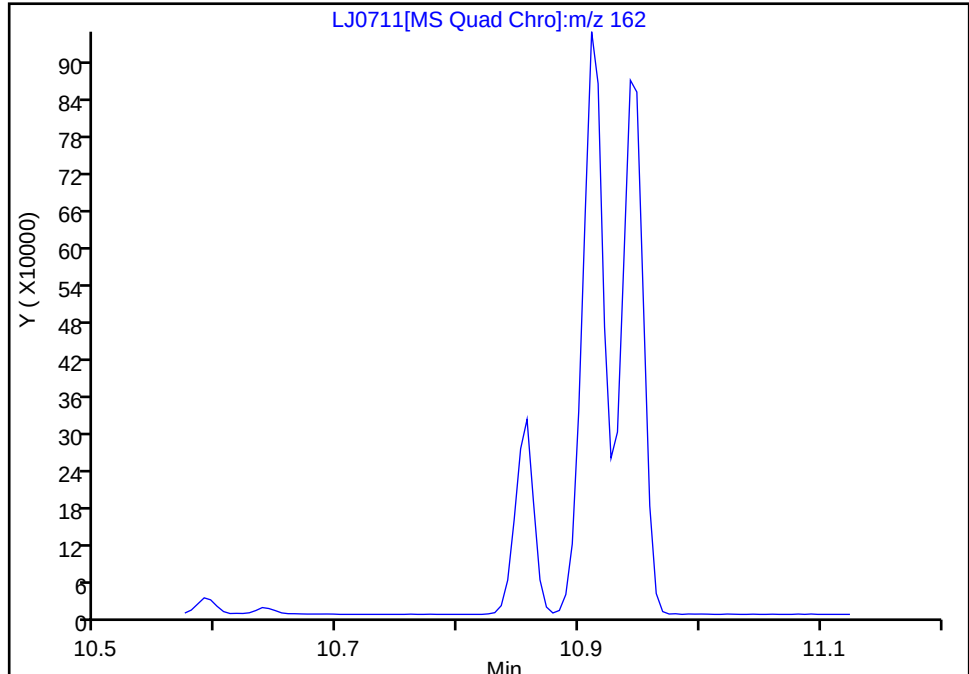
Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0711.D
Injection Date: 19-Oct-2020 22:31:04 Instrument ID: HP20296
Lims ID: ICV FULL
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP20296 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.18mm (0.18 mm) Detector: MS SCAN

77 Isosafrole Peak 2, CAS: 120-58-1

Signal: 1

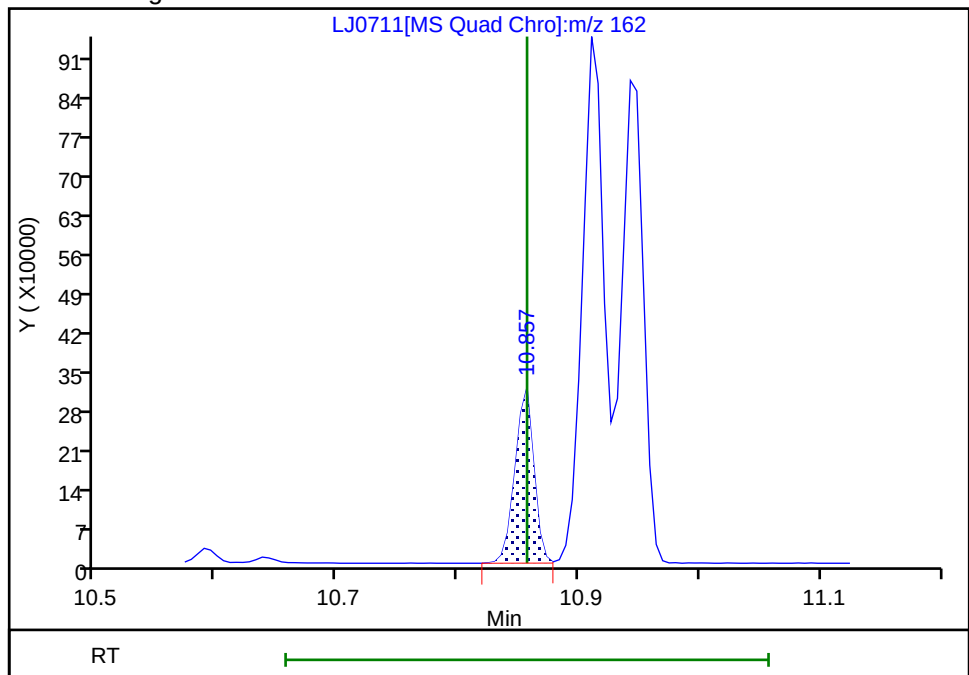
Not Detected
Expected RT: 10.86

Processing Integration Results



RT: 10.86
Area: 339181
Amount: 7.694438
Amount Units: ug/ml

Manual Integration Results



Reviewer: beckk, 20-Oct-2020 12:50:40
Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0711.D

Injection Date: 19-Oct-2020 22:31:04

Instrument ID: HP20296

Lims ID: ICV FULL

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 12

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

Detector: MS SCAN

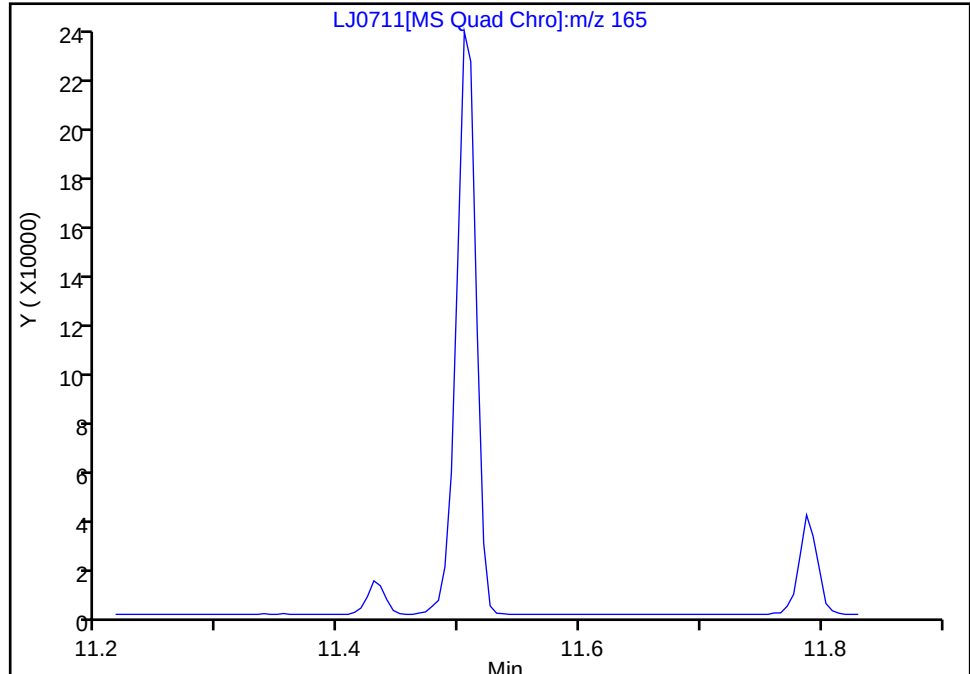
88 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

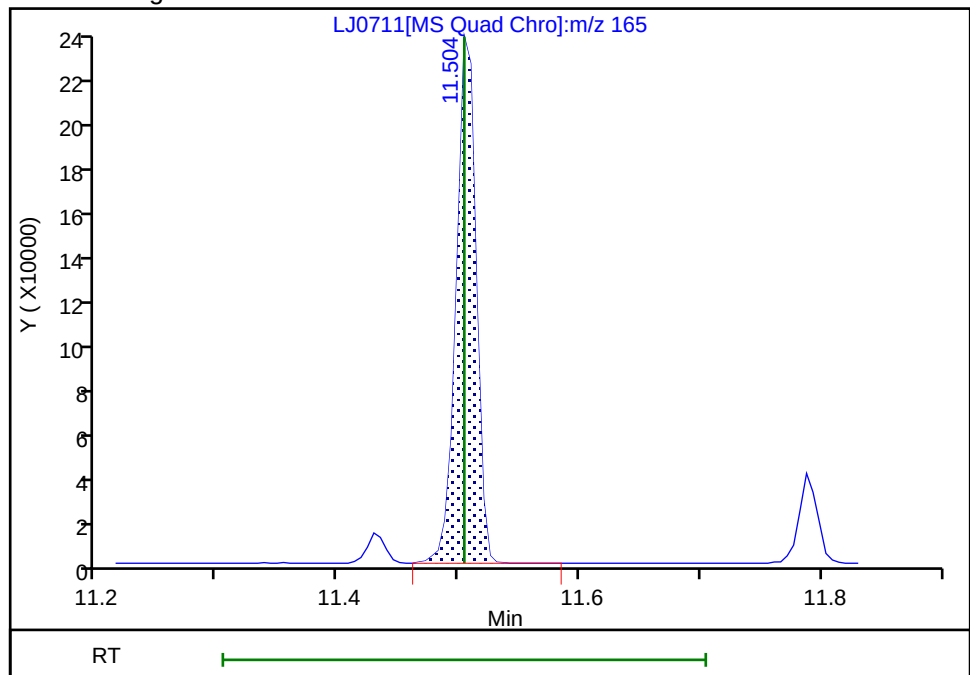
Not Detected

Expected RT: 11.50

Processing Integration Results



Manual Integration Results



Reviewer: luttek, 20-Oct-2020 18:52:52

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0711.D

Injection Date: 19-Oct-2020 22:31:04

Instrument ID: HP20296

Lims ID: ICV FULL

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 12

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP20296

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

Detector

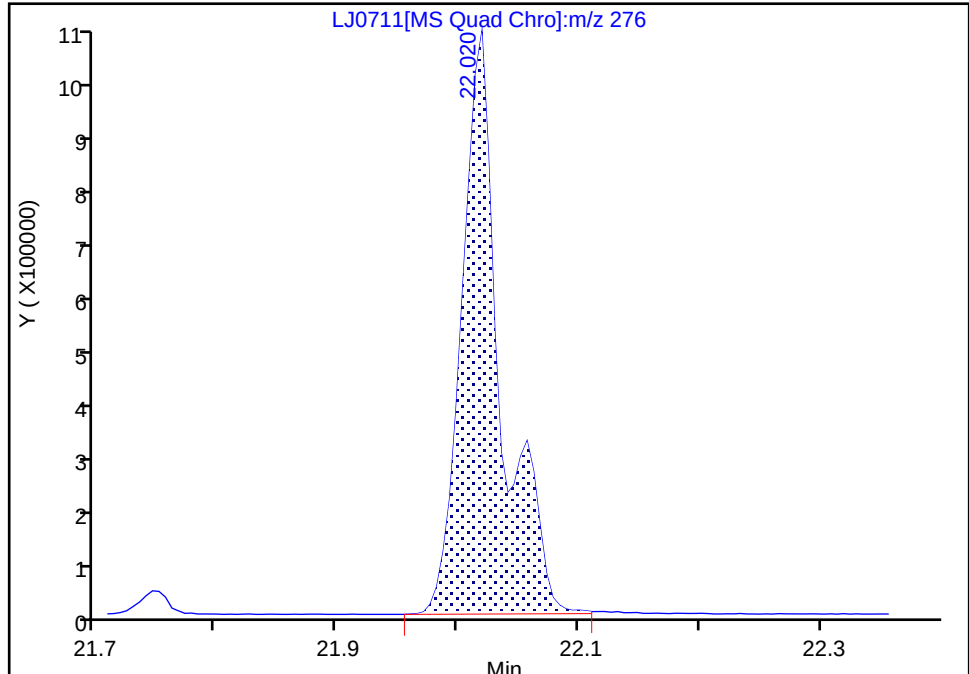
MS SCAN

163 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

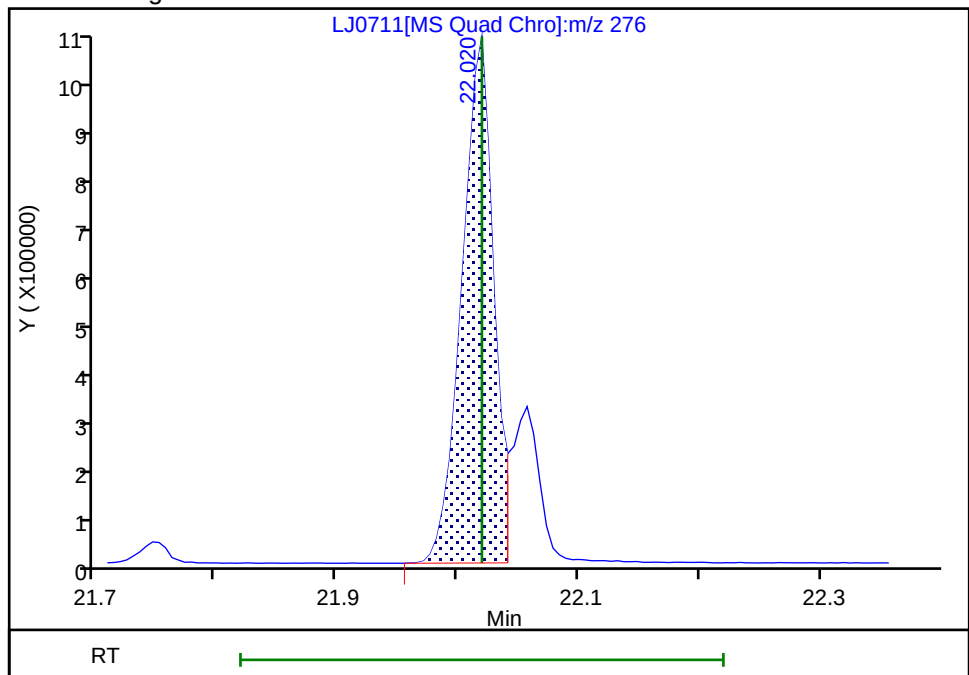
RT: 22.02
Area: 2393061
Amount: 14.509016
Amount Units: ug/ml

Processing Integration Results



RT: 22.02
Area: 1907249
Amount: 13.128546
Amount Units: ug/ml

Manual Integration Results



Reviewer: beckk, 20-Oct-2020 12:49:32

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1
SDG No.: _____
Lab Sample ID: ICV 410-55998/13 Calibration Date: 10/19/2020 23:00
Instrument ID: HP20296 Calib Start Date: 10/19/2020 17:17
GC Column: DB-5MS 20m 0.18 ID: 0.18 (mm) Calib End Date: 10/19/2020 21:03
Lab File ID: LJ0712.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzaldehyde	Ave	1.518	1.656	0.0100	13.6	12.5	9.0	30.0
Caprolactam	Ave	0.1154	0.0930	0.0100	10.1	12.5	-19.4	30.0
Atrazine	Ave	0.2226	0.2380	0.0100	13.4	12.5	6.9	30.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0712.D
 Lims ID: ICV BAS
 Client ID:
 Sample Type: ICV
 Inject. Date: 19-Oct-2020 23:00:08 ALS Bottle#: 0 Worklist Smp#: 13
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: ICV BAS
 Misc. Info.: 410-0013268-013
 Operator ID: kel10217 Instrument ID: HP20296
 Sublist:
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 20-Oct-2020 18:58:00 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1014

First Level Reviewer: beckk

Date: 20-Oct-2020 12:56:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
15 Benzaldehyde	77	6.316	6.316	0.000	94	786632	12.5	13.6	
* 24 1,4-Dichlorobenzene-d4	152	6.974	6.974	0.000	96	190034	5.00	5.00	
* 55 Naphthalene-d8	136	8.958	8.958	0.000	99	688076	5.00	5.00	
64 Caprolactam	113	9.611	9.611	0.000	84	160046	12.5	10.1	
* 92 Acenaphthene-d10	164	11.788	11.788	0.000	99	320592	5.00	5.00	
122 Atrazine	200	13.382	13.382	0.000	90	363605	12.5	13.4	
* 127 Phenanthrene-d10	188	13.713	13.713	0.000	97	611101	5.00	5.00	
* 140 Pyrene-d10 (IS)	212	15.767	15.767	0.000	98	630029	5.00	5.00	
* 159 Perylene-d12	264	20.356	20.356	0.000	97	620222	5.00	5.00	

QC Flag Legend

Processing Flags

Reagents:

MSS_RVICV_BAS_00001

Amount Added: 1.00

Units: mL

Report Date: 20-Oct-2020 18:58:01

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0712.D

Injection Date: 19-Oct-2020 23:00:08

Instrument ID: HP20296

Operator ID: kel10217

Lims ID: ICV BAS

Worklist Smp#: 13

Client ID:

Injection Vol: 1.0 ul

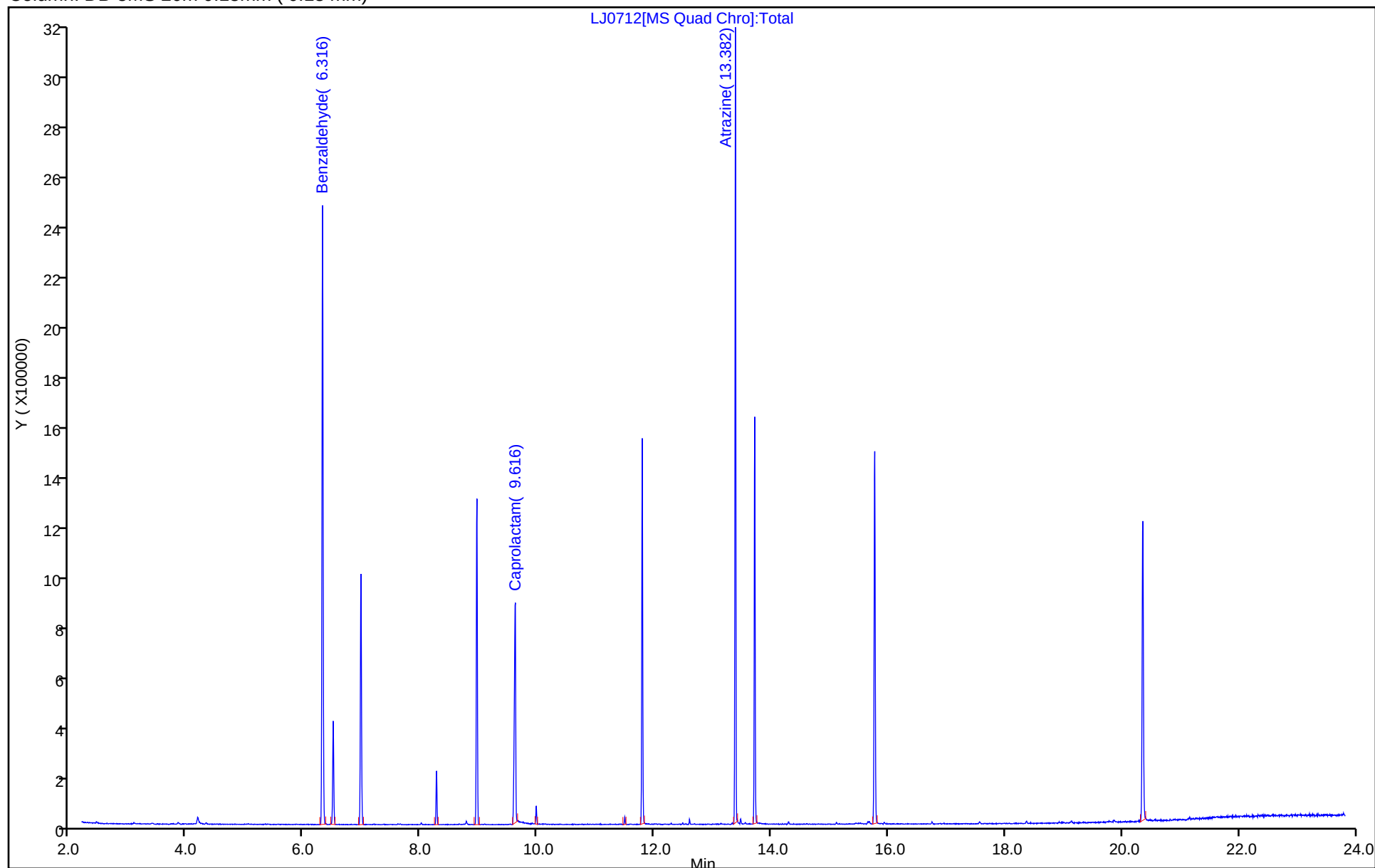
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Lab Sample ID: CCVIS 410-59610/2 Calibration Date: 10/28/2020 16:54

Instrument ID: HP20296 Calib Start Date: 10/19/2020 17:17

GC Column: DB-5MS 20m 0.18 ID: 0.18 (mm) Calib End Date: 10/19/2020 21:03

Lab File ID: LJ1001.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.7095	0.7291		7.71	7.50	2.8	20.0
N-Nitrosodimethylamine	Ave	1.138	1.146		7.55	7.50	0.7	20.0
Pyridine	Ave	2.002	1.931		7.24	7.50	-3.5	20.0
2-Picoline	Ave	2.045	1.953		7.16	7.50	-4.5	20.0
N-Nitrosomethylethylamine	Ave	0.8259	0.8103		7.36	7.50	-1.9	20.0
Methyl methanesulfonate	Ave	0.9725	0.9843		7.59	7.50	1.2	20.0
N-Nitrosodiethylamine	Ave	0.7516	0.7785		7.77	7.50	3.6	20.0
Ethyl methanesulfonate	Ave	0.8335	0.8148		7.33	7.50	-2.2	20.0
Benzaldehyde	Ave	1.518	1.633	0.0100	8.07	7.50	7.6	20.0
Aniline	Ave	2.915	2.830		7.28	7.50	-2.9	20.0
Phenol	Ave	2.504	2.559	0.8000	7.66	7.50	2.2	20.0
Bis(2-chloroethyl)ether	Ave	1.887	1.888	0.7000	7.51	7.50	0.1	20.0
2-Chlorophenol	Ave	1.431	1.432	0.8000	7.51	7.50	0.1	20.0
1,3-Dichlorobenzene	Ave	1.589	1.544		7.29	7.50	-2.8	20.0
1,4-Dichlorobenzene	Ave	1.608	1.562		7.28	7.50	-2.9	20.0
Benzyl alcohol	Ave	1.123	1.108			7.50	-1.4	20.0
1,2-Dichlorobenzene	Ave	1.544	1.472		7.15	7.50	-4.7	20.0
Indene	Ave	2.441	2.473		7.60	7.50	1.3	20.0
2-Methylphenol	Ave	1.523	1.514	0.7000	7.46	7.50	-0.6	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.626	1.618	0.0100	7.46	7.50	-0.5	20.0
N-Nitrosopyrrolidine	Ave	0.8232	0.8641		7.87	7.50	5.0	20.0
Acetophenone	Ave	2.555	2.644	0.0100	7.76	7.50	3.5	20.0
N-Nitrosodi-n-propylamine	Ave	1.382	1.475	0.5000	8.00	7.50	6.7	20.0
N-Nitrosomorpholine	Ave	0.8987	0.9448		7.88	7.50	5.1	20.0
o-Toluidine	Ave	2.738	2.710		7.42	7.50	-1.0	20.0
4-Methylphenol (and/or 3-Methylphenol)	Ave	1.718	1.767	0.6000	7.71	7.50	2.8	20.0
Hexachloroethane	Ave	0.7879	0.7710	0.3000	7.34	7.50	-2.1	20.0
Nitrobenzene	Ave	0.5463	0.5520	0.2000	7.58	7.50	1.0	20.0
N-Nitrosopiperidine	Ave	0.2006	0.2025		7.57	7.50	0.9	20.0
Isophorone	Ave	0.9382	0.9716	0.4000	7.77	7.50	3.6	20.0
2-Nitrophenol	Lin1		0.1432	0.1000	6.97	7.50	-7.1	20.0
2,4-Dimethylphenol	Ave	0.4461	0.4611	0.2000	7.75	7.50	3.4	20.0
o,o',o''-Triethylphosphorothioate	Ave	0.1808	0.1775		7.36	7.50	-1.8	20.0
Bis(2-chloroethoxy)methane	Ave	0.6060	0.6164	0.3000	7.63	7.50	1.7	20.0
Benzoic acid	Lin		0.2027		10.1	10.0	1.3	20.0
2,4-Dichlorophenol	Ave	0.2848	0.2967	0.2000	7.82	7.50	4.2	20.0
1,2,4-Trichlorobenzene	Ave	0.3438	0.3346		7.30	7.50	-2.7	20.0
Naphthalene	Ave	1.102	1.089	0.7000	7.41	7.50	-1.2	20.0
4-Chloroaniline	Ave	0.4508	0.4532	0.0100	7.54	7.50	0.5	20.0
2,6-Dichlorophenol	Ave	0.2772	0.2834		7.67	7.50	2.3	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Lab Sample ID: CCVIS 410-59610/2 Calibration Date: 10/28/2020 16:54

Instrument ID: HP20296 Calib Start Date: 10/19/2020 17:17

GC Column: DB-5MS 20m 0.18 ID: 0.18 (mm) Calib End Date: 10/19/2020 21:03

Lab File ID: LJ1001.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachloropropene	Ave	0.2064	0.1916		6.96	7.50	-7.2	20.0
Hexachlorobutadiene	Ave	0.2050	0.1984	0.0100	7.26	7.50	-3.2	20.0
Quinoline	Ave	0.6635	0.6795		7.68	7.50	2.4	20.0
Caprolactam	Ave	0.1154	0.1166	0.0100	7.58	7.50	1.1	20.0
N-Nitrosodi-n-butylamine	Ave	0.3646	0.3621		7.45	7.50	-0.7	20.0
4-Chloro-3-methylphenol	Ave	0.3543	0.3971	0.2000	8.41	7.50	12.1	20.0
Safrole, Total	Ave	0.2663	0.2646		7.45	7.50	-0.6	20.0
2-Methylnaphthalene	Ave	0.7014	0.7081	0.4000	7.57	7.50	0.9	20.0
1-Methylnaphthalene	Ave	0.6721	0.6720		7.50	7.50	-0.0	20.0
Hexachlorocyclopentadiene	Ave	0.3568	0.2958	0.0500	6.22	7.50	-17.1	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.7229	0.6708	0.0100	6.96	7.50	-7.2	20.0
Isosafrole Peak 1	Ave	0.6292	0.5682			1.20	-9.7	20.0
2,4,6-Trichlorophenol	Ave	0.3812	0.4172	0.2000	8.21	7.50	9.4	20.0
2,4,5-Trichlorophenol	Lin		0.4613	0.2000	7.24	7.50	-3.4	20.0
Isosafrole Peak 2	Ave	0.6620	0.6509		6.20	6.30	-1.7	20.0
1,1'-Biphenyl	Ave	1.834	1.819	0.0100	7.44	7.50	-0.8	20.0
2-Chloronaphthalene	Ave	1.488	1.385	0.8000	6.98	7.50	-6.9	20.0
1-Chloronaphthalene	Ave	1.338	1.239		6.95	7.50	-7.3	20.0
Diphenyl ether	Ave	0.9402	0.8912		7.11	7.50	-5.2	20.0
2-Nitroaniline	Ave	0.4081	0.3917	0.0100	7.20	7.50	-4.0	20.0
1,4-Naphthoquinone	Ave	0.5457	0.5266			7.50	-3.5	20.0
1,4-Dinitrobenzene	Ave	0.1708	0.1734		7.61	7.50	1.5	20.0
Dimethyl phthalate	Ave	1.598	1.531	0.0100	7.19	7.50	-4.1	20.0
1,3-Dinitrobenzene	Ave	0.2066	0.2029		7.37	7.50	-1.8	20.0
2,6-Dinitrotoluene	Ave	0.3145	0.3026	0.2000	7.22	7.50	-3.8	20.0
Acenaphthylene	Ave	1.887	1.876	0.9000	7.46	7.50	-0.6	20.0
3-Nitroaniline	Ave	0.3427	0.3318	0.0100	7.26	7.50	-3.2	20.0
Acenaphthene	Ave	1.482	1.414	0.9000	7.15	7.50	-4.6	20.0
2,4-Dinitrophenol	Ave	0.1105	0.1263	0.0100	11.4	10.0	14.2	20.0
Pentachlorobenzene	Ave	0.6156	0.5761		7.02	7.50	-6.4	20.0
Dibenzofuran	Ave	1.912	1.852	0.8000	7.27	7.50	-3.1	20.0
2,4-Dinitrotoluene	Ave	0.4257	0.3950	0.2000	6.96	7.50	-7.2	20.0
4-Nitrophenol	Ave	0.3020	0.2873	0.0100		7.50	-4.9	20.0
1-Naphthylamine	Ave	1.405	1.358		7.25	7.50	-3.4	20.0
2,3,4,6-Tetrachlorophenol	Lin1		0.2995	0.0100	6.98	7.50	-6.9	20.0
2-Naphthylamine	Ave	1.412	1.361		7.23	7.50	-3.6	20.0
Diethyl phthalate	Ave	1.632	1.604	0.0100	7.37	7.50	-1.7	20.0
Fluorene	Ave	1.529	1.537	0.9000	7.54	7.50	0.6	20.0
Thionazin	Ave	0.3453	0.3069		6.67	7.50	-11.1	20.0
4-Chlorophenyl-phenyl ether	Ave	0.7678	0.7444	0.4000	7.27	7.50	-3.1	20.0
5-Nitro-o-toluidine	Ave	0.3861	0.3941		7.65	7.50	2.1	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Lab Sample ID: CCVIS 410-59610/2 Calibration Date: 10/28/2020 16:54

Instrument ID: HP20296 Calib Start Date: 10/19/2020 17:17

GC Column: DB-5MS 20m 0.18 ID: 0.18 (mm) Calib End Date: 10/19/2020 21:03

Lab File ID: LJ1001.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Lin1		0.3800	0.0100	7.41	7.50	-1.2	20.0
4,6-Dinitro-2-methylphenol	Ave	0.0785	0.0888	0.0100	8.49	7.50	13.1	20.0
N-Nitrosodiphenylamine	Ave	0.6618	0.6495	0.0100	7.36	7.50	-1.9	20.0
1,2-Diphenylhydrazine	Ave	1.155	1.180		7.66	7.50	2.1	20.0
Sulfotepp	Ave	0.1898	0.1960		7.75	7.50	3.3	20.0
cis-Diallate	Ave	0.4310	0.4379		5.64	5.55	1.6	20.0
Phorate	Ave	0.6560	0.6825		7.80	7.50	4.0	20.0
Phenacetin	Ave	0.4777	0.4993		7.84	7.50	4.5	20.0
4-Bromophenyl-phenylether	Ave	0.2149	0.2163	0.1000	7.55	7.50	0.6	20.0
trans-Diallate	Ave	0.4529	0.4507		1.94	1.95	-0.5	20.0
Hexachlorobenzene	Ave	0.2656	0.2558	0.1000	7.22	7.50	-3.7	20.0
Dimethoate	Ave	0.4108	0.4256		7.77	7.50	3.6	20.0
Atrazine	Ave	0.2226	0.2197	0.0100	7.40	7.50	-1.3	20.0
4-Aminobiphenyl	Ave	0.6018	0.6030		7.51	7.50	0.2	20.0
Pentachloronitrobenzene	Ave	0.1034	0.0954		6.92	7.50	-7.8	20.0
Pentachlorophenol	Ave	0.1133	0.1158	0.0500	7.67	7.50	2.2	20.0
Pronamide	Ave	0.3718	0.3719		7.50	7.50	0.0	20.0
Dinoseb	Ave	0.1196	0.1260		7.90	7.50	5.4	20.0
Phenanthrene	Ave	1.173	1.137	0.7000	7.27	7.50	-3.1	20.0
Anthracene	Ave	1.155	1.158	0.7000	7.52	7.50	0.3	20.0
Carbazole	Ave	1.054	1.071	0.0100	7.62	7.50	1.6	20.0
Methyl parathion	Ave	0.2957	0.2978		7.56	7.50	0.7	20.0
Di-n-butyl phthalate	Ave	1.434	1.435	0.0100	7.51	7.50	0.1	20.0
Parathion	Ave	0.1851	0.1817		7.36	7.50	-1.9	20.0
4-Nitroquinoline-1-oxide	Qua1		0.0716			7.50	-15.1	20.0
Octachlorostyrene	Ave	0.1163	0.1182		7.62	7.50	1.7	20.0
Isodrin	Ave	0.1441	0.1419		7.39	7.50	-1.5	20.0
Fluoranthene	Ave	1.296	1.304	0.6000	7.54	7.50	0.6	20.0
Benzidine	Ave	0.7919	0.7939		22.6	22.5	0.3	20.0
Pyrene	Ave	1.354	1.304	0.6000	7.22	7.50	-3.7	20.0
p-Dimethylamino azobenzene	Ave	0.2207	0.2128		7.23	7.50	-3.6	20.0
Chlorobenzilate	Ave	0.4264	0.4107		7.22	7.50	-3.7	20.0
3,3'-Dimethylbenzidine	Ave	0.7960	0.8280			7.50	4.0	20.0
Butylbenzylphthalate	Ave	0.5987	0.6300	0.0100	7.89	7.50	5.2	20.0
2-Acetylaminofluorene	Lin		0.4722		7.07	7.50	-5.7	20.0
3,3'-Dichlorobenzidine	Ave	0.4836	0.4777	0.0100	7.41	7.50	-1.2	20.0
Benzo[a]anthracene	Ave	1.205	1.254	0.8000	7.80	7.50	4.0	20.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.2541	0.2542			7.50	0.0	20.0
Chrysene	Ave	1.232	1.256	0.7000	7.65	7.50	2.0	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.9300	0.9282	0.0100	7.49	7.50	-0.2	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-59610/2 Calibration Date: 10/28/2020 16:54
 Instrument ID: HP20296 Calib Start Date: 10/19/2020 17:17
 GC Column: DB-5MS 20m 0.18 ID: 0.18 (mm) Calib End Date: 10/19/2020 21:03
 Lab File ID: LJ1001.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
6-Methylchrysene	Ave	0.8802	0.8712		7.42	7.50	-1.0	20.0
Di-n-octyl phthalate	Ave	1.496	1.494	0.0100	7.49	7.50	-0.0	20.0
Benzo[b]fluoranthene	Ave	1.250	1.242	0.7000	7.45	7.50	-0.7	20.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5171	0.4967		7.21	7.50	-3.9	20.0
Benzo[k]fluoranthene	Ave	1.241	1.216	0.7000	7.35	7.50	-2.0	20.0
Benzo[a]pyrene	Ave	1.135	1.160	0.7000	7.67	7.50	2.2	20.0
3-Methylcholanthrene	Ave	0.5694	0.5884		7.75	7.50	3.3	20.0
Dibenz[a,h]acridine	Ave	0.9211	0.9248		7.53	7.50	0.4	20.0
Dibenz[a,j]acridine	Ave	0.9436	0.9466		7.52	7.50	0.3	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.022	1.126	0.5000	8.27	7.50	10.2	20.0
Dibenz(a,h)anthracene	Ave	1.088	1.191	0.4000	8.21	7.50	9.5	20.0
Benzo[g,h,i]perylene	Ave	1.033	1.183	0.5000	8.59	7.50	14.5	20.0
2-Fluorophenol (Surr)	Ave	1.610	1.532		14.3	15.0	-4.8	20.0
Phenol-d5 (Surr)	Ave	1.963	2.017		15.4	15.0	2.7	20.0
Nitrobenzene-d5 (Surr)	Ave	0.5293	0.5236		14.8	15.0	-1.1	20.0
2-Fluorobiphenyl (Surr)	Ave	1.639	1.547		14.2	15.0	-5.6	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.2231	0.2282		15.3	15.0	2.3	20.0
p-Terphenyl-d14 (Surr)	Ave	0.999	0.9660		14.5	15.0	-3.3	20.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1001.D
 Lims ID: CCVIS L5
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 28-Oct-2020 16:54:26 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCVIS L5
 Misc. Info.: 410-0014101-002
 Operator ID: kel10217 Instrument ID: HP20296
 Sublist: chrom-MSSemi_HP20296*sub6
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 28-Oct-2020 19:51:21 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: luttek

Date: 28-Oct-2020 17:26:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 1,4-Dioxane	88	2.390	2.390	0.000	89	230711	7.50	7.71	
2 N-Nitrosodimethylamine	74	2.930	2.930	0.000	90	362771	7.50	7.55	
3 Pyridine	79	2.968	2.968	0.000	94	611070	7.50	7.24	
5 2-Picoline	93	4.129	4.129	0.000	93	617828	7.50	7.16	
6 N-Nitrosomethylethylamine	88	4.321	4.321	0.000	85	256397	7.50	7.36	
9 Methyl methanesulfonate	80	4.776	4.776	0.000	84	311436	7.50	7.59	
\$ 10 2-Fluorophenol	112	5.054	5.054	0.000	93	969468	15.0	14.3	
11 N-Nitrosodiethylamine	102	5.353	5.353	0.000	88	246324	7.50	7.77	
13 Ethyl methanesulfonate	109	5.813	5.813	0.000	96	257822	7.50	7.33	
15 Benzaldehyde	77	6.279	6.279	0.000	93	516847	7.50	8.07	
18 Aniline	93	6.445	6.445	0.000	97	895362	7.50	7.28	
\$ 16 Phenol-d5	99	6.450	6.450	0.000	97	1276161	15.0	15.4	
17 Phenol	94	6.471	6.471	0.000	95	809579	7.50	7.66	
19 Bis(2-chloroethyl)ether	93	6.562	6.562	0.000	98	597508	7.50	7.51	
20 2-Chlorophenol	128	6.632	6.632	0.000	93	453127	7.50	7.51	
22 1,3-Dichlorobenzene	146	6.846	6.846	0.000	91	488398	7.50	7.29	
* 24 1,4-Dichlorobenzene-d4	152	6.937	6.937	0.000	96	210946	5.00	5.00	
25 1,4-Dichlorobenzene	146	6.963	6.963	0.000	88	494115	7.50	7.28	
27 Benzyl alcohol	108	7.167	7.167	0.000	88	350552	7.50	7.40	
29 1,2-Dichlorobenzene	146	7.188	7.188	0.000	91	465902	7.50	7.15	
30 Indene	115	7.327	7.327	0.000	87	782499	7.50	7.60	
31 2-Methylphenol	108	7.386	7.386	0.000	95	479031	7.50	7.46	
32 2,2'-oxybis[1-chloropropane]	45	7.391	7.391	0.000	91	511830	7.50	7.46	
34 N-Nitrosopyrrolidine	100	7.530	7.530	0.000	96	273422	7.50	7.87	
35 Acetophenone	105	7.568	7.568	0.000	92	836706	7.50	7.76	
37 N-Nitrosodi-n-propylamine	70	7.589	7.589	0.000	72	466743	7.50	8.00	
38 N-Nitrosomorpholine	56	7.600	7.600	0.000	84	298944	7.50	7.88	
39 2-Toluidine	106	7.621	7.621	0.000	94	857431	7.50	7.42	
36 4-Methylphenol	108	7.627	7.627	0.000	88	559147	7.50	7.71	
40 Hexachloroethane	117	7.707	7.707	0.000	93	243950	7.50	7.34	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
\$ 41 Nitrobenzene-d5	82	7.792	7.792	0.000	86	1269702	15.0	14.8	
42 Nitrobenzene	77	7.819	7.819	0.000	83	669273	7.50	7.58	
44 N-Nitrosopiperidine	114	8.060	8.060	0.000	87	245529	7.50	7.57	
46 Isophorone	82	8.210	8.210	0.000	98	1178121	7.50	7.77	
47 2-Nitrophenol	139	8.322	8.322	0.000	91	173638	7.50	6.97	
48 2,4-Dimethylphenol	107	8.445	8.445	0.000	98	559093	7.50	7.75	
49 o,o',o"-Triethylphosphorothioat	198	8.547	8.547	0.000	93	215165	7.50	7.36	
51 Bis(2-chloroethoxy)methane	93	8.584	8.584	0.000	98	747371	7.50	7.63	
50 Benzoic acid	105	8.611	8.611	0.000	87	327641	10.0	10.1	M
52 2,4-Dichlorophenol	162	8.739	8.739	0.000	94	359773	7.50	7.82	
54 1,2,4-Trichlorobenzene	180	8.835	8.835	0.000	92	405697	7.50	7.30	
* 55 Naphthalene-d8	136	8.921	8.921	0.000	99	808351	5.00	5.00	
56 Naphthalene	128	8.953	8.953	0.000	99	1319870	7.50	7.41	
S 53 Dinitrotoluene	165				0		15.0	14.2	
57 4-Chloroaniline	127	9.065	9.065	0.000	92	549563	7.50	7.54	
58 2,6-Dichlorophenol	162	9.076	9.076	0.000	90	343688	7.50	7.67	
59 Hexachloropropene	213	9.103	9.103	0.000	91	232263	7.50	6.96	
60 Hexachlorobutadiene	225	9.178	9.178	0.000	96	240555	7.50	7.26	
62 Quinoline	129	9.493	9.493	0.000	93	823964	7.50	7.68	
64 Caprolactam	113	9.611	9.611	0.000	82	141433	7.50	7.58	
65 N-Nitrosodi-n-butylamine	84	9.643	9.643	0.000	86	439001	7.50	7.45	
S 63 Diallate	86				0		7.50	7.58	
66 4-Chloro-3-methylphenol	107	9.916	9.916	0.000	90	481531	7.50	8.41	
67 Safrole, Total	162	9.969	9.969	0.000	80	320881	7.50	7.45	
69 2-Methylnaphthalene	142	10.082	10.082	0.000	90	858535	7.50	7.57	
70 1-Methylnaphthalene	142	10.242	10.242	0.000	91	814831	7.50	7.50	
71 Hexachlorocyclopentadiene	237	10.349	10.349	0.000	97	182705	7.50	6.22	
72 1,2,4,5-Tetrachlorobenzene	216	10.354	10.354	0.000	98	414241	7.50	6.96	
73 Isosafrole Peak 1	162	10.445	10.445	0.000	80	56143	1.20	1.08	
74 2,4,6-Trichlorophenol	196	10.568	10.568	0.000	94	257654	7.50	8.21	
75 2,4,5-Trichlorophenol	196	10.659	10.659	0.000	91	284900	7.50	7.24	
\$ 76 2-Fluorobiphenyl (Surr)	172	10.707	10.707	0.000	99	1910632	15.0	14.2	
77 Isosafrole Peak 2	162	10.814	10.814	0.000	83	337681	6.30	6.20	
79 1,1'-Biphenyl	154	10.862	10.862	0.000	96	1123219	7.50	7.44	
80 2-Chloronaphthalene	162	10.873	10.873	0.000	98	855351	7.50	6.98	
81 1-Chloronaphthalene	162	10.905	10.905	0.000	96	765360	7.50	6.95	
82 Phenyl ether	170	11.039	11.039	0.000	87	550401	7.50	7.11	
83 2-Nitroaniline	138	11.060	11.060	0.000	73	241880	7.50	7.20	
84 1,4-Naphthoquinone	158	11.167	11.167	0.000	73	325226	7.50	7.24	
85 1,4-Dinitrobenzene	168	11.296	11.296	0.000	82	107059	7.50	7.61	
86 Dimethyl phthalate	163	11.397	11.397	0.000	96	945803	7.50	7.19	
87 1,3-Dinitrobenzene	168	11.413	11.413	0.000	79	125302	7.50	7.37	
88 2,6-Dinitrotoluene	165	11.472	11.472	0.000	81	186902	7.50	7.22	
90 Acenaphthylene	152	11.536	11.536	0.000	99	1158789	7.50	7.46	
91 3-Nitroaniline	138	11.713	11.713	0.000	88	204913	7.50	7.26	
* 92 Acenaphthene-d10	164	11.756	11.756	0.000	97	411716	5.00	5.00	
93 Acenaphthene	153	11.798	11.798	0.000	97	873254	7.50	7.15	
94 2,4-Dinitrophenol	184	11.868	11.868	0.000	74	103963	10.0	11.4	
98 Pentachlorobenzene	250	11.991	11.991	0.000	96	355773	7.50	7.02	
100 Dibenzofuran	168	12.045	12.045	0.000	95	1143918	7.50	7.27	
99 2,4-Dinitrotoluene	165	12.050	12.050	0.000	80	243946	7.50	6.96	
96 4-Nitrophenol	109	12.061	12.061	0.000	88	177421	7.50	7.13	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
101 1-Naphthylamine	143	12.157	12.157	0.000	97	838442	7.50	7.25	
102 2,3,4,6-Tetrachlorophenol	232	12.226	12.226	0.000	78	184938	7.50	6.98	
103 2-Naphthylamine	143	12.258	12.258	0.000	93	840558	7.50	7.23	
104 Diethyl phthalate	149	12.398	12.398	0.000	96	990695	7.50	7.37	
105 Fluorene	166	12.488	12.488	0.000	92	949230	7.50	7.54	
106 Thionazin	107	12.494	12.494	0.000	73	189514	7.50	6.67	
108 4-Chlorophenyl phenyl ether	204	12.510	12.510	0.000	89	459708	7.50	7.27	
107 N-Nitro-o-toluidine	152	12.521	12.521	0.000	79	243357	7.50	7.65	
109 4-Nitroaniline	138	12.531	12.531	0.000	76	234674	7.50	7.41	
110 4,6-Dinitro-2-methylphenol	198	12.563	12.563	0.000	73	111035	7.50	8.49	
111 N-Nitrosodiphenylamine	169	12.660	12.660	0.000	99	812162	7.50	7.36	
112 1,2-Diphenylhydrazine	77	12.702	12.702	0.000	100	1475127	7.50	7.66	a
\$ 113 2,4,6-Tribromophenol	330	12.793	12.793	0.000	94	281850	15.0	15.3	
114 Sulfotepp	97	12.890	12.890	0.000	82	245134	7.50	7.75	
115 cis-Diallate	86	13.034	13.034	0.000	90	405185	5.55	5.64	
116 Phorate	75	13.045	13.045	0.000	94	853406	7.50	7.80	
117 Phenacetin	108	13.066	13.066	0.000	90	624393	7.50	7.84	
118 4-Bromophenyl phenyl ether	248	13.120	13.120	0.000	75	270499	7.50	7.55	
119 trans-Diallate	86	13.141	13.141	0.000	91	146539	1.95	1.94	
120 Hexachlorobenzene	284	13.173	13.173	0.000	93	319905	7.50	7.22	
121 Dimethoate	87	13.248	13.248	0.000	96	532251	7.50	7.77	
122 Atrazine	200	13.355	13.355	0.000	89	274724	7.50	7.40	
123 Pentachlorophenol	266	13.451	13.451	0.000	83	144835	7.50	7.67	
124 4-Aminobiphenyl	169	13.451	13.451	0.000	92	753974	7.50	7.51	
125 Pentachloronitrobenzene	237	13.451	13.451	0.000	51	119265	7.50	6.92	
126 Pronamide	173	13.548	13.548	0.000	91	465051	7.50	7.50	
* 127 Phenanthrene-d10	188	13.681	13.681	0.000	97	833641	5.00	5.00	
128 Dinoseb	211	13.697	13.697	0.000	93	157539	7.50	7.90	
129 Phenanthrene	178	13.713	13.713	0.000	99	1421514	7.50	7.27	
130 Anthracene	178	13.777	13.777	0.000	99	1448580	7.50	7.52	
131 Carbazole	167	14.007	14.007	0.000	97	1339370	7.50	7.62	
132 Methyl parathion	109	14.211	14.211	0.000	89	372435	7.50	7.56	
133 Di-n-butyl phthalate	149	14.521	14.521	0.000	100	1794913	7.50	7.51	
134 Ethyl Parathion	109	14.767	14.767	0.000	83	227199	7.50	7.36	
135 4-Nitroquinoline-1-oxide	190	14.788	14.788	0.000	81	89523	7.50	6.36	
136 Octachlorostyrene	308	15.125	15.125	0.000	92	147779	7.50	7.62	
137 Isodrin	193	15.179	15.179	0.000	86	177500	7.50	7.39	
138 Fluoranthene	202	15.403	15.403	0.000	100	1630020	7.50	7.54	
139 Benzidine	184	15.644	15.644	0.000	99	3098112	22.5	22.6	
* 140 Pyrene-d10 (IS)	212	15.724	15.724	0.000	99	867160	5.00	5.00	
141 Pyrene	202	15.756	15.756	0.000	96	1695737	7.50	7.22	
\$ 142 p-Terphenyl-d14	244	16.040	16.040	0.000	98	2513054	15.0	14.5	
143 p-Dimethylamino azobenzene	225	16.275	16.275	0.000	88	276784	7.50	7.23	
144 Chlorobenzilate	139	16.366	16.366	0.000	83	534163	7.50	7.22	
145 3,3'-Dimethylbenzidine	212	16.848	16.848	0.000	99	1077063	7.50	7.80	
146 Butyl benzyl phthalate	149	16.906	16.906	0.000	92	819509	7.50	7.89	
147 2-Acetylaminofluorene	181	17.286	17.286	0.000	95	614181	7.50	7.07	
148 3,3'-Dichlorobenzidine	252	17.794	17.794	0.000	80	621405	7.50	7.41	
149 Benzo[a]anthracene	228	17.805	17.805	0.000	100	1630502	7.50	7.80	
150 4,4'-Methylene bis(2-chloroaniline)	231	17.816	17.816	0.000	93	330607	7.50	7.50	
151 Chrysene	228	17.869	17.869	0.000	97	1633760	7.50	7.65	
152 Bis(2-ethylhexyl) phthalate	149	17.982	17.982	0.000	97	1207410	7.50	7.49	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
153 6-Methylchrysene	242	18.682	18.682	0.000	99	1133192	7.50	7.42	
154 Di-n-octyl phthalate	149	19.158	19.158	0.000	99	2105496	7.50	7.49	
155 Benzo[b]fluoranthene	252	19.688	19.688	0.000	98	1749494	7.50	7.45	
156 7,12-Dimethylbenz(a)anthracene	256	19.693	19.693	0.000	88	699878	7.50	7.21	
157 Benzo[k]fluoranthene	252	19.741	19.741	0.000	99	1712882	7.50	7.35	
158 Benzo[a]pyrene	252	20.223	20.223	0.000	79	1634436	7.50	7.67	
* 159 Perylene-d12	264	20.314	20.314	0.000	97	939284	5.00	5.00	
160 3-Methylcholanthrene	268	20.800	20.800	0.000	92	829055	7.50	7.75	
161 Dibenz[a,h]acridine	279	21.619	21.619	0.000	91	1302985	7.50	7.53	
162 Dibenz[a,j]acridine	279	21.693	21.693	0.000	96	1333723	7.50	7.52	
163 Indeno[1,2,3-cd]pyrene	276	21.961	21.961	0.000	99	1586937	7.50	8.27	M
164 Dibenz(a,h)anthracene	278	21.998	21.998	0.000	92	1677977	7.50	8.21	
165 Benzo[g,h,i]perylene	276	22.378	22.378	0.000	97	1666452	7.50	8.59	
S 166 Isosafrole	162				0		7.50	7.28	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_5_00008

Amount Added: 1.00

Units: mL

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1001.D

Instrument ID: HP20296

Operator ID: kel10217

Worklist Smp#: 2

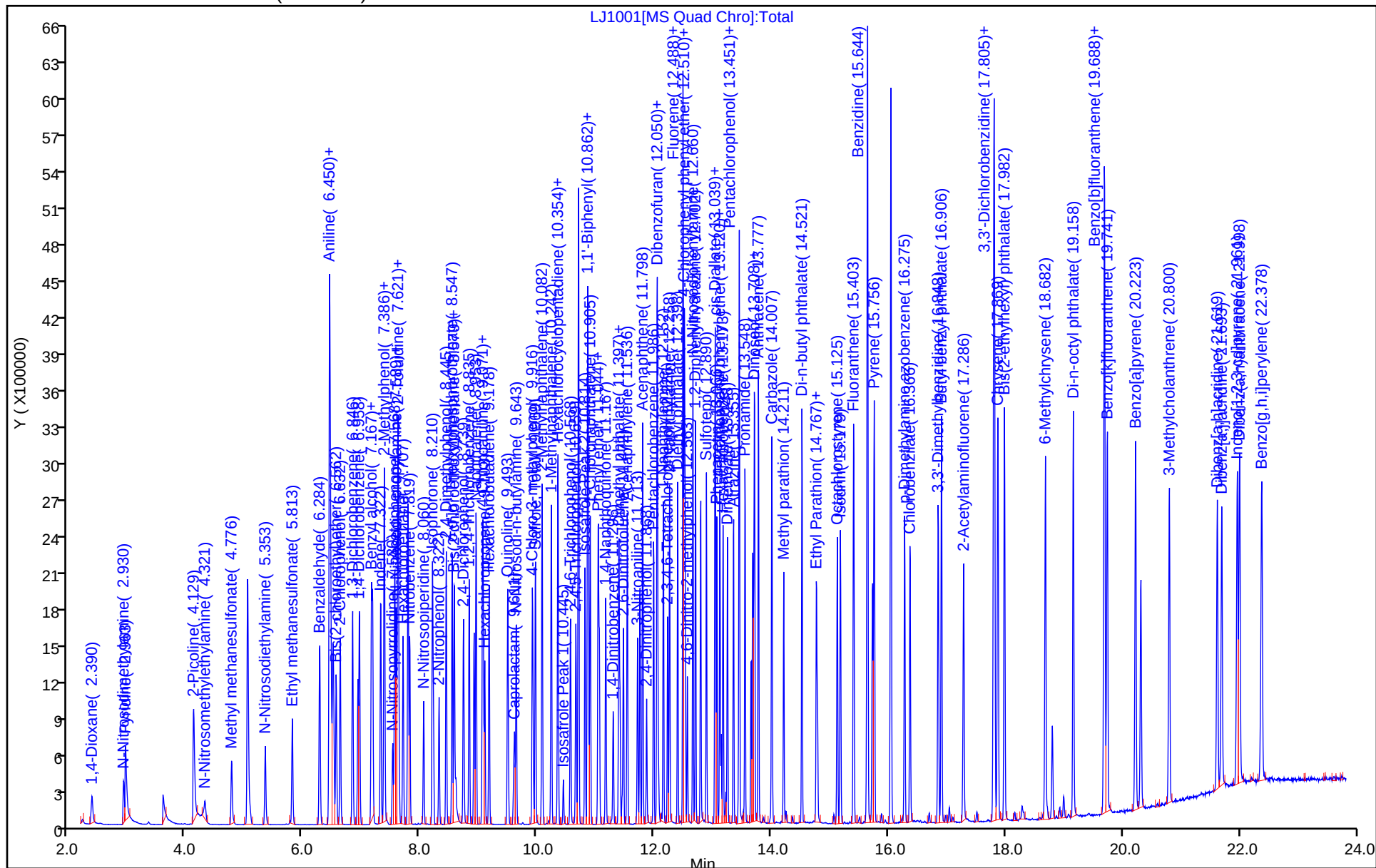
Client ID:

Dil. Factor: 1.0000

ALS Bottle#: 0

Limit Group: MSSV - 8270D E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1001.D

Injection Date: 28-Oct-2020 16:54:26

Instrument ID: HP20296

Lims ID: CCVIS L5

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 2

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP20296

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

Detector

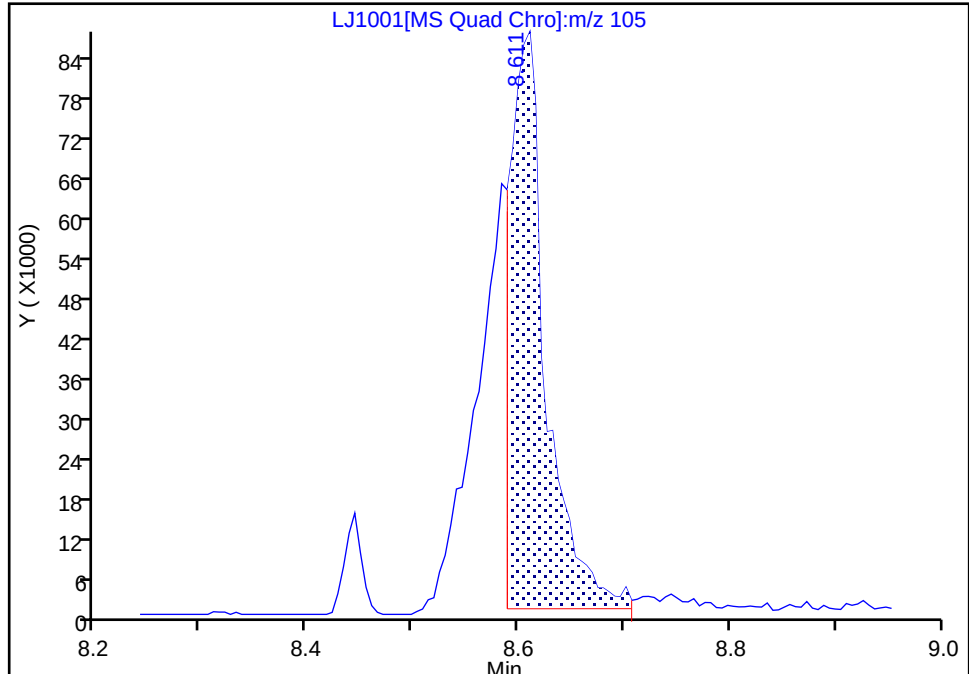
MS SCAN

50 Benzoic acid, CAS: 65-85-0

Signal: 1

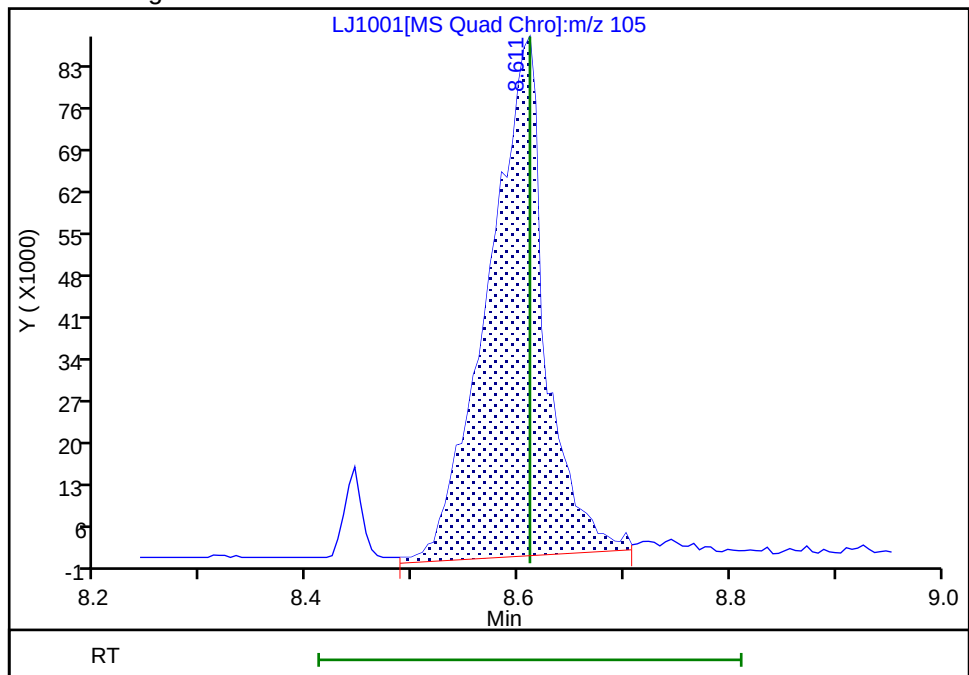
RT: 8.61
Area: 194984
Amount: 6.982661
Amount Units: ug/ml

Processing Integration Results



RT: 8.61
Area: 327641
Amount: 10.134860
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 28-Oct-2020 17:25:04

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1001.D

Injection Date: 28-Oct-2020 16:54:26

Instrument ID: HP20296

Lims ID: CCVIS L5

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#: 2

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP20296

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)

Detector

MS SCAN

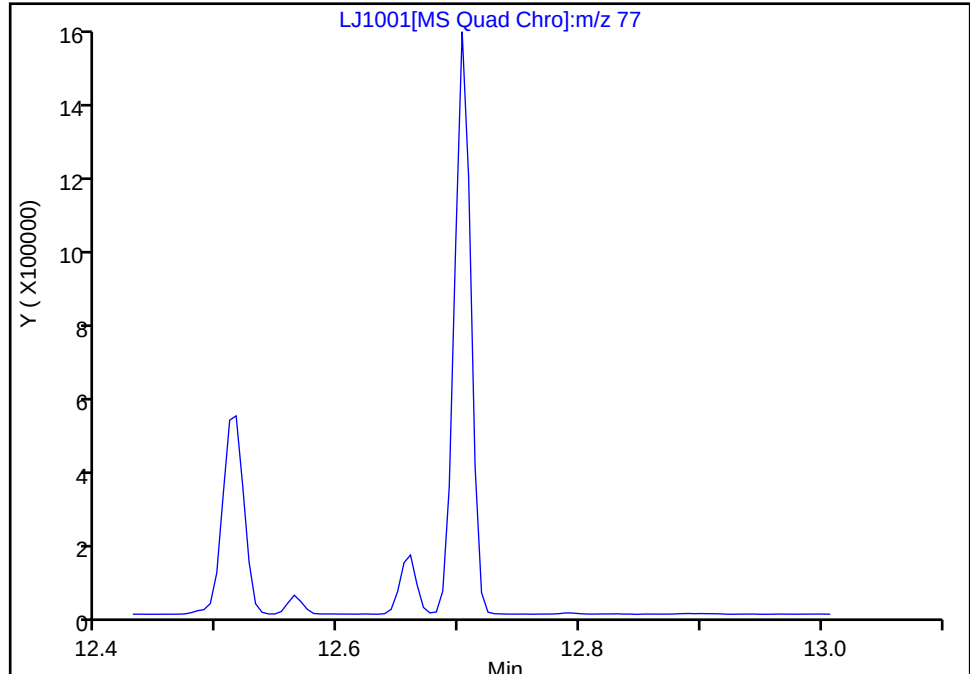
112 1,2-Diphenylhydrazine, CAS: 122-66-7

Signal: 1

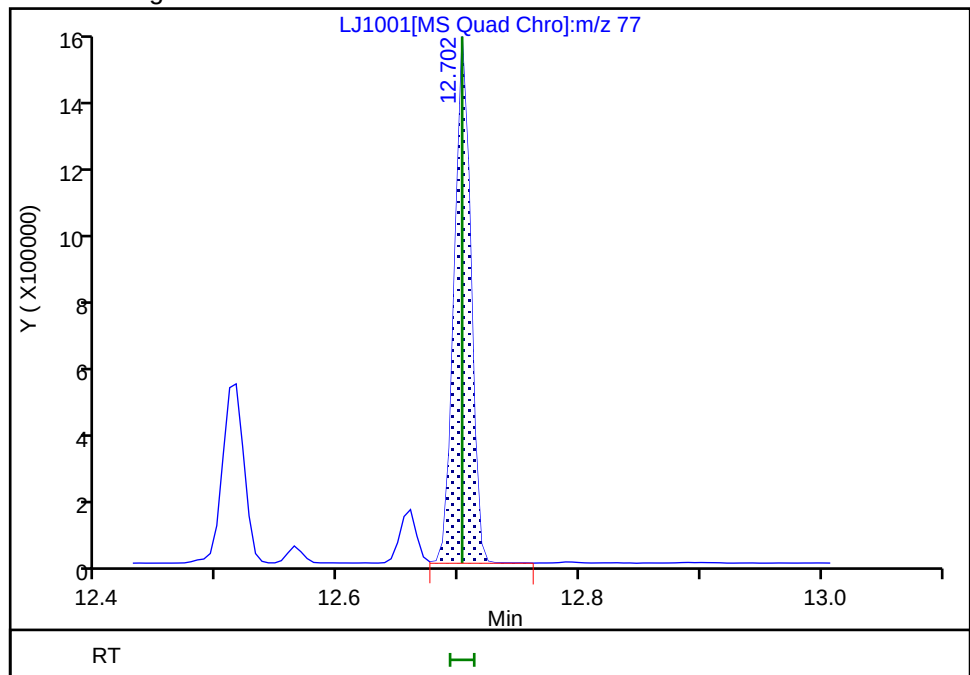
Not Detected

Expected RT: 12.70

Processing Integration Results



Manual Integration Results



RT: 12.70

Area: 1475127

Amount: 7.660852

Amount Units: ug/ml

Reviewer: luttek, 28-Oct-2020 17:25:22

Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

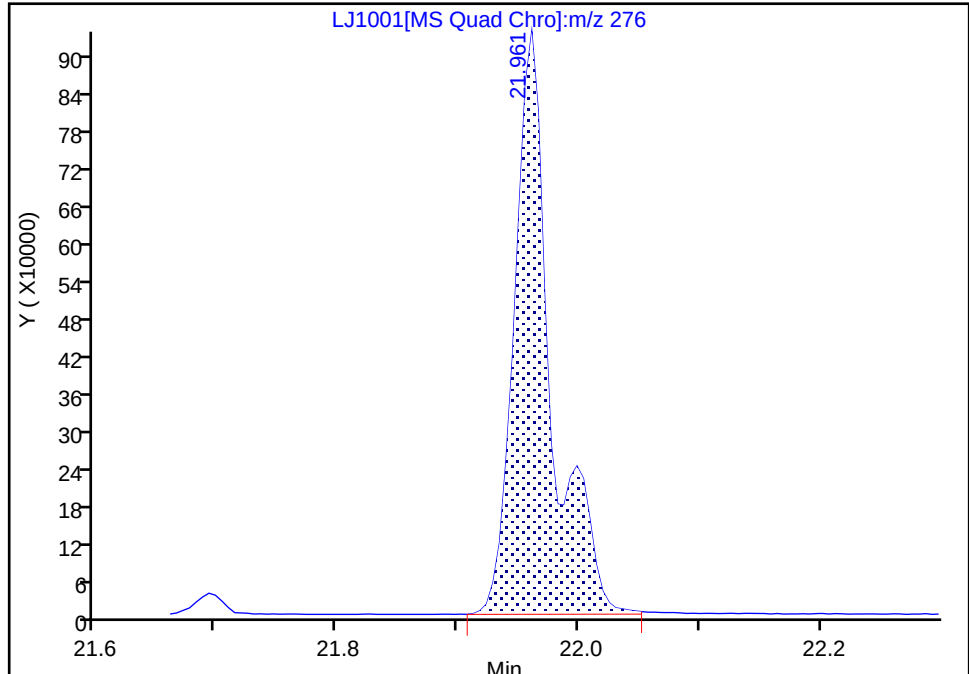
Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1001.D
Injection Date: 28-Oct-2020 16:54:26 Instrument ID: HP20296
Lims ID: CCVIS L5
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP20296 Limit Group: MSSV - 8270D_E LVI
Column: DB-5MS 20m 0.18mm (0.18 mm) Detector MS SCAN

163 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

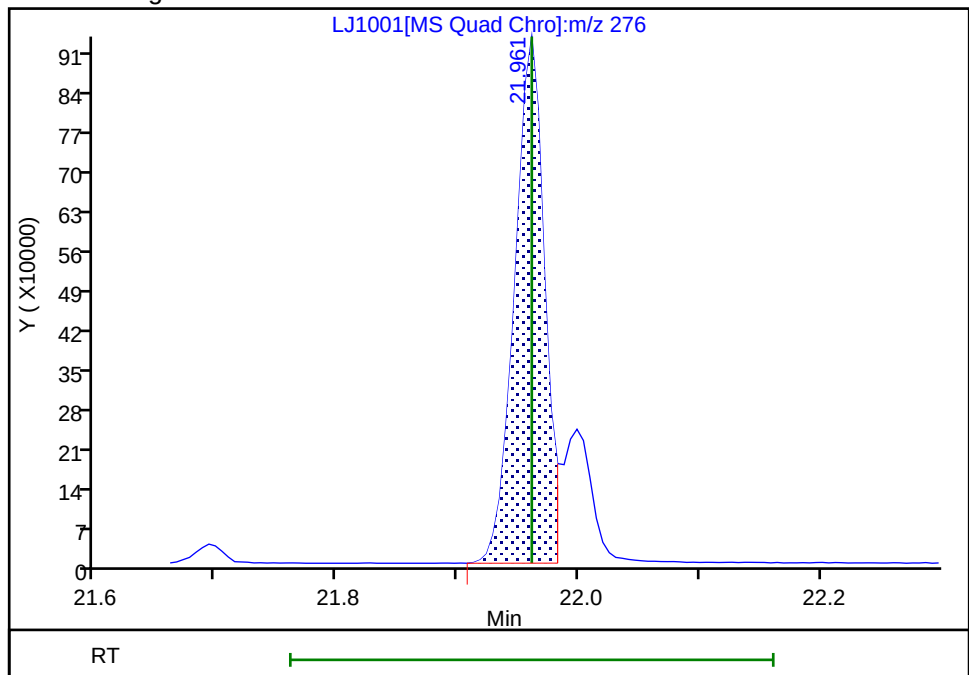
RT: 21.96
Area: 1990109
Amount: 10.366125
Amount Units: ug/ml

Processing Integration Results



RT: 21.96
Area: 1586937
Amount: 8.266073
Amount Units: ug/ml

Manual Integration Results



Reviewer: luttek, 28-Oct-2020 17:25:58

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1
 SDG No.: _____
 Lab Sample ID: ICV 410-48994/12 Calibration Date: 09/30/2020 00:23
 Instrument ID: HP23264 Calib Start Date: 09/29/2020 19:00
 GC Column: DB-5MS 30m 0.25 ID: 0.25 (mm) Calib End Date: 09/29/2020 22:52
 Lab File ID: J11161.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.8186	0.8498		13.0	12.5	3.8	30.0
N-Nitrosodimethylamine	Ave	1.209	1.271		13.1	12.5	5.1	30.0
Pyridine	Ave	2.052	1.951		23.8	25.0	-4.9	30.0
2-Picoline	Ave	1.882	1.902		12.6	12.5	1.1	30.0
N-Nitrosomethylethylamine	Ave	0.7911	0.8035		12.7	12.5	1.6	30.0
Methyl methanesulfonate	Ave	1.120	1.362		15.2	12.5	21.6	30.0
N-Nitrosodiethylamine	Ave	0.7410	0.7465		12.6	12.5	0.7	30.0
Ethyl methanesulfonate	Ave	0.7123	0.6965		12.2	12.5	-2.2	30.0
Phenol	Ave	2.331	2.374	0.8000	12.7	12.5	1.8	30.0
Aniline	Ave	2.603	2.666		12.8	12.5	2.4	30.0
Bis(2-chloroethyl)ether	Ave	1.627	1.657	0.7000	12.7	12.5	1.9	30.0
2-Chlorophenol	Ave	1.464	1.444	0.8000	12.3	12.5	-1.4	30.0
1,3-Dichlorobenzene	Ave	1.569	1.588		12.6	12.5	1.2	30.0
1,4-Dichlorobenzene	Ave	1.617	1.608		12.4	12.5	-0.6	30.0
Benzyl alcohol	Ave	1.016	1.002		12.3	12.5	-1.3	30.0
1,2-Dichlorobenzene	Ave	1.532	1.533		12.5	12.5	0.0	30.0
Indene	Ave	2.270	2.786		15.3	12.5	22.7	30.0
2-Methylphenol	Ave	1.428	1.452	0.7000	12.7	12.5	1.7	30.0
2,2'-oxybis[1-chloropropane]	Ave	2.328	2.372	0.0100	12.7	12.5	1.9	30.0
N-Nitrosopyrrolidine	Ave	0.7823	0.8107		13.0	12.5	3.6	30.0
Acetophenone	Ave	2.410	2.386	0.0100	12.4	12.5	-1.0	30.0
4-Methylphenol (and/or 3-Methylphenol)	Ave	1.647	1.675	0.6000	12.7	12.5	1.7	30.0
N-Nitrosodi-n-propylamine	Ave	1.428	1.468	0.5000	12.8	12.5	2.8	30.0
N-Nitrosomorpholine	Ave	1.314	1.332		12.7	12.5	1.3	30.0
o-Toluidine	Ave	2.404	2.452		12.7	12.5	2.0	30.0
Hexachloroethane	Ave	0.8033	0.7974	0.3000	12.4	12.5	-0.7	30.0
Nitrobenzene	Ave	0.5497	0.5579	0.2000	12.7	12.5	1.5	30.0
N-Nitrosopiperidine	Ave	0.2013	0.1937		12.0	12.5	-3.7	30.0
Isophorone	Ave	0.9597	0.9884	0.4000	12.9	12.5	3.0	30.0
2-Nitrophenol	Ave	0.2008	0.1995	0.1000	12.4	12.5	-0.6	30.0
2,4-Dimethylphenol	Ave	0.4736	0.4506	0.2000	11.9	12.5	-4.8	30.0
o,o',o''-Triethylphosphorothioate	Ave	0.1788	0.1853		13.0	12.5	3.6	30.0
Benzoic acid	Lin		0.2009		8.97	12.5	-28.3	30.0
Bis(2-chloroethoxy)methane	Ave	0.6521	0.6640	0.3000	12.7	12.5	1.8	30.0
2,4-Dichlorophenol	Ave	0.3182	0.3251	0.2000	12.8	12.5	2.2	30.0
1,2,4-Trichlorobenzene	Ave	0.3388	0.3408		12.6	12.5	0.6	30.0
Naphthalene	Ave	1.049	1.045	0.7000	12.4	12.5	-0.4	30.0
4-Chloroaniline	Ave	0.4315	0.4573	0.0100	13.2	12.5	6.0	30.0
2,6-Dichlorophenol	Ave	0.3110	0.3203		12.9	12.5	3.0	30.0
Hexachloropropene	Ave	0.2711	0.2935		13.5	12.5	8.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Lab Sample ID: ICV 410-48994/12 Calibration Date: 09/30/2020 00:23

Instrument ID: HP23264 Calib Start Date: 09/29/2020 19:00

GC Column: DB-5MS 30m 0.25 ID: 0.25 (mm) Calib End Date: 09/29/2020 22:52

Lab File ID: J11161.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobutadiene	Ave	0.2254	0.2257	0.0100	12.5	12.5	0.1	30.0
Quinoline	Ave	0.6535	0.6730		12.9	12.5	3.0	30.0
N-Nitrosodi-n-butylamine	Ave	0.3590	0.3476		12.1	12.5	-3.2	30.0
4-Chloro-3-methylphenol	Ave	0.3723	0.3919	0.2000	13.2	12.5	5.3	30.0
Safrole, Total	Ave	0.2917	0.3017		12.9	12.5	3.4	30.0
2-Methylnaphthalene	Ave	0.6973	0.7244	0.4000	13.0	12.5	3.9	30.0
1-Methylnaphthalene	Ave	0.6557	0.6814		13.0	12.5	3.9	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.6618	0.6424	0.0100	12.1	12.5	-2.9	30.0
Hexachlorocyclopentadiene	Ave	0.4333	0.4686	0.0500	13.5	12.5	8.1	30.0
Isosafrole Peak 1	Ave	0.6517	0.6219			2.00	-4.6	30.0
2,4,6-Trichlorophenol	Ave	0.4507	0.4470	0.2000	12.4	12.5	-0.8	30.0
2,4,5-Trichlorophenol	Ave	0.4693	0.4752	0.2000	12.7	12.5	1.3	30.0
Isosafrole Peak 2	Ave	0.6981	0.5150		7.75	10.5	-26.2	30.0
1,1'-Biphenyl	Ave	1.606	1.557	0.0100	12.1	12.5	-3.0	30.0
2-Chloronaphthalene	Ave	1.392	1.313	0.8000	11.8	12.5	-5.7	30.0
1-Chloronaphthalene	Ave	1.220	1.283		13.1	12.5	5.2	30.0
2-Nitroaniline	Ave	0.4325	0.4326	0.0100	12.5	12.5	0.0	30.0
1,4-Naphthoquinone	Ave	0.5185	0.4884			12.5	-5.8	30.0
1,3-Dinitrobenzene	Ave	0.2151	0.2144		12.5	12.5	-0.3	30.0
Dimethyl phthalate	Ave	1.513	1.412	0.0100	11.7	12.5	-6.7	30.0
1,4-Dinitrobenzene	Ave	0.2327	0.2363		12.7	12.5	1.5	30.0
2,6-Dinitrotoluene	Ave	0.3379	0.3293	0.2000	12.2	12.5	-2.5	30.0
Acenaphthylene	Ave	1.776	1.968	0.9000	13.9	12.5	10.8	30.0
3-Nitroaniline	Ave	0.3300	0.3531	0.0100	13.4	12.5	7.0	30.0
Acenaphthene	Ave	1.280	1.202	0.9000	11.7	12.5	-6.0	30.0
2,4-Dinitrophenol	Ave	0.2108	0.2028	0.0100	24.0	25.0	-3.8	30.0
4-Nitrophenol	Ave	0.4143	0.3840	0.0100	23.2	25.0	-7.3	30.0
Pentachlorobenzene	Ave	0.5367	0.5354		12.5	12.5	-0.2	30.0
Dibenzofuran	Ave	1.842	1.824	0.8000	12.4	12.5	-1.0	30.0
2,4-Dinitrotoluene	Ave	0.4775	0.4587	0.2000	12.0	12.5	-3.9	30.0
1-Naphthylamine	Ave	1.294	1.153		11.1	12.5	-10.9	30.0
2,3,4,6-Tetrachlorophenol	Ave	0.3432	0.3550	0.0100	12.9	12.5	3.4	30.0
2-Naphthylamine	Ave	1.205	1.192		12.4	12.5	-1.1	30.0
Diethyl phthalate	Ave	1.524	1.523	0.0100	12.5	12.5	-0.0	30.0
Fluorene	Ave	1.447	1.446	0.9000	12.5	12.5	-0.0	30.0
Thionazin	Ave	0.3089	0.3259		13.2	12.5	5.5	30.0
4-Chlorophenyl-phenyl ether	Ave	0.7225	0.6725	0.4000	11.6	12.5	-6.9	30.0
5-Nitro-o-toluidine	Ave	0.3857	0.4119		13.4	12.5	6.8	30.0
4-Nitroaniline	Ave	0.3579	0.3539	0.0100	12.4	12.5	-1.1	30.0
4,6-Dinitro-2-methylphenol	Ave	0.1679	0.1705	0.0100	25.4	25.0	1.6	30.0
N-Nitrosodiphenylamine	Ave	0.7290	0.6735	0.0100	9.82	10.6	-7.6	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Lab Sample ID: ICV 410-48994/12 Calibration Date: 09/30/2020 00:23

Instrument ID: HP23264 Calib Start Date: 09/29/2020 19:00

GC Column: DB-5MS 30m 0.25 ID: 0.25 (mm) Calib End Date: 09/29/2020 22:52

Lab File ID: J11161.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Diphenylhydrazine	Ave	1.167	1.147		12.3	12.5	-1.7	30.0
Sulfotepp	Ave	0.2063	0.2134		12.9	12.5	3.4	30.0
cis-Diallate	Ave	0.4406	0.4383		9.33	9.38	-0.5	30.0
Phorate	Ave	0.6739	0.6777		12.6	12.5	0.6	30.0
Phenacetin	Ave	0.5041	0.5024		12.5	12.5	-0.3	30.0
4-Bromophenyl-phenylether	Ave	0.2235	0.2241	0.1000	12.5	12.5	0.3	30.0
trans-Diallate	Ave	0.4362	0.4315		3.09	3.13	-1.1	30.0
Hexachlorobenzene	Ave	0.2391	0.2230	0.1000	11.7	12.5	-6.7	30.0
Dimethoate	Ave	0.4198	0.4420		13.2	12.5	5.3	30.0
Pentachlorophenol	Ave	0.1559	0.1633	0.0500	26.2	25.0	4.8	30.0
4-Aminobiphenyl	Ave	0.6656	0.9570		18.0	12.5	43.8*	30.0
Pentachloronitrobenzene	Ave	0.1520	0.1631		13.4	12.5	7.3	30.0
Pronamide	Ave	0.4090	0.4233		12.9	12.5	3.5	30.0
Dinoseb	Ave	0.1968	0.2307		14.7	12.5	17.2	30.0
Phenanthrene	Ave	1.189	1.152	0.7000	12.1	12.5	-3.1	30.0
Anthracene	Ave	1.189	1.164	0.7000	12.2	12.5	-2.1	30.0
Carbazole	Ave	1.129	1.165	0.0100	12.9	12.5	3.2	30.0
Methyl parathion	Ave	0.3468	0.3532		12.7	12.5	1.9	30.0
Di-n-butyl phthalate	Ave	1.578	1.563	0.0100	12.4	12.5	-0.9	30.0
Parathion	Ave	0.2305	0.2385		12.9	12.5	3.5	30.0
4-Nitroquinoline-1-oxide	Lin1		0.1635			12.5	0.2	30.0
Isodrin	Ave	0.1756	0.1781		12.7	12.5	1.4	30.0
Fluoranthene	Ave	1.351	1.356	0.6000	12.5	12.5	0.4	30.0
Benidine	Ave	0.8231	0.7504			12.5	-8.8	30.0
Pyrene	Ave	1.373	1.340	0.6000	12.2	12.5	-2.4	30.0
p-Dimethylamino azobenzene	Ave	0.2227	0.2556		14.4	12.5	14.8	30.0
Chlorobenzilate	Ave	0.5206	0.5596		13.4	12.5	7.5	30.0
3,3'-Dimethylbenzidine	Ave	0.8687	0.8021			12.5	-7.7	30.0
Butylbenzylphthalate	Ave	0.6943	0.7121	0.0100	12.8	12.5	2.6	30.0
2-Acetylaminofluorene	Ave	0.5517	0.5650		12.8	12.5	2.4	30.0
3,3'-Dichlorobenzidine	Ave	0.4566	0.4817	0.0100	13.2	12.5	5.5	30.0
Benzo[a]anthracene	Ave	1.171	1.219	0.8000	13.0	12.5	4.1	30.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.2286	0.2507			12.5	9.7	30.0
Chrysene	Ave	1.152	1.107	0.7000	12.0	12.5	-3.9	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.9755	0.9686	0.0100	12.4	12.5	-0.7	30.0
6-Methylchrysene	Ave	0.8176	0.8287		12.7	12.5	1.4	30.0
Di-n-octyl phthalate	Ave	1.773	1.845	0.0100	13.0	12.5	4.0	30.0
Benzo[b]fluoranthene	Ave	1.255	1.289	0.7000	12.8	12.5	2.7	30.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5657	0.5252		11.6	12.5	-7.2	30.0
Benzo[k]fluoranthene	Ave	1.139	1.242	0.7000	13.6	12.5	9.1	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1
 SDG No.: _____
 Lab Sample ID: ICV 410-48994/12 Calibration Date: 09/30/2020 00:23
 Instrument ID: HP23264 Calib Start Date: 09/29/2020 19:00
 GC Column: DB-5MS 30m 0.25 ID: 0.25 (mm) Calib End Date: 09/29/2020 22:52
 Lab File ID: JI1161.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]pyrene	Ave	1.196	1.224	0.7000	12.8	12.5	2.3	30.0
3-Methylcholanthrene	Ave	0.5731	0.6092		13.3	12.5	6.3	30.0
Dibenz[a,h]acridine	Ave	0.8685	0.9306		13.4	12.5	7.1	30.0
Dibenz[a,j]acridine	Ave	0.9105	0.9576		13.1	12.5	5.2	30.0
Indeno[1,2,3-cd]pyrene	Ave	0.9803	0.9552	0.5000	12.2	12.5	-2.6	30.0
Dibenz(a,h)anthracene	Ave	0.997	1.065	0.4000	13.3	12.5	6.8	30.0
Benzo[g,h,i]perylene	Ave	1.032	1.063	0.5000	12.9	12.5	3.0	30.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1161.D
 Lims ID: ICV FULL
 Client ID:
 Sample Type: ICV
 Inject. Date: 30-Sep-2020 00:23:30 ALS Bottle#: 11 Worklist Smp#: 12
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: ICV FULL
 Misc. Info.: 410-0011633-012
 Operator ID: kel10217 Instrument ID: HP23264
 Sublist:
 Method: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 01-Oct-2020 12:43:15 Calib Date: 29-Sep-2020 22:52:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1158a.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: bekk

Date: 30-Sep-2020 09:28:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	2.463	2.463	0.000	98	411378	12.5	13.0	
3 N-Nitrosodimethylamine	74	2.996	2.996	0.000	93	615276	12.5	13.1	
4 Pyridine	79	3.019	3.019	0.000	95	1889055	25.0	23.8	
10 N-Nitrosomethylethylamine	88	4.357	4.357	0.000	96	388966	12.5	12.7	
8 2-Picoline	93	4.165	4.165	0.000	94	920869	12.5	12.6	
11 Methyl methanesulfonate	80	4.800	4.800	0.000	89	659349	12.5	15.2	
13 N-Nitrosodiethylamine	102	5.356	5.356	0.000	91	361382	12.5	12.6	
15 Ethyl methanesulfonate	109	5.809	5.809	0.000	94	337157	12.5	12.2	
21 Phenol	94	6.399	6.399	0.000	96	1149458	12.5	12.7	
23 Aniline	93	6.422	6.422	0.000	95	1290404	12.5	12.8	
S 46 Dinitrotoluene	165				0			24.2	
24 Bis(2-chloroethyl)ether	93	6.535	6.535	0.000	90	802324	12.5	12.7	
25 2-Chlorophenol	128	6.581	6.581	0.000	89	699114	12.5	12.3	
26 1,3-Dichlorobenzene	146	6.808	6.808	0.000	91	768839	12.5	12.6	
* 28 1,4-Dichlorobenzene-d4	152	6.898	6.898	0.000	96	193641	5.00	5.00	
29 1,4-Dichlorobenzene	146	6.921	6.921	0.000	87	778266	12.5	12.4	
30 Benzyl alcohol	108	7.114	7.114	0.000	86	485134	12.5	12.3	
31 1,2-Dichlorobenzene	146	7.148	7.148	0.000	90	742182	12.5	12.5	
34 Indene	115	7.284	7.284	0.000	87	1348615	12.5	15.3	
33 2-Methylphenol	108	7.295	7.295	0.000	96	703154	12.5	12.7	
35 2,2'-oxybis[1-chloropropane]	45	7.341	7.341	0.000	91	1148127	12.5	12.7	
36 N-Nitrosopyrrolidine	100	7.477	7.477	0.000	85	392439	12.5	13.0	
38 Acetophenone	105	7.511	7.511	0.000	94	1155104	12.5	12.4	
37 4-Methylphenol	108	7.534	7.534	0.000	86	810919	12.5	12.7	
39 N-Nitrosodi-n-propylamine	70	7.534	7.534	0.000	86	710677	12.5	12.8	
40 N-Nitrosomorpholine	56	7.545	7.545	0.000	89	644786	12.5	12.7	
41 2-Toluidine	106	7.568	7.568	0.000	97	1187007	12.5	12.7	
42 Hexachloroethane	117	7.647	7.647	0.000	95	386024	12.5	12.4	
44 Nitrobenzene	77	7.761	7.761	0.000	88	1035546	12.5	12.7	
45 N-Nitrosopiperidine	114	7.987	7.987	0.000	79	359657	12.5	12.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
47 Isophorone	82	8.135	8.135	0.000	99	1834838	12.5	12.9	
48 2-Nitrophenol	139	8.248	8.248	0.000	90	370400	12.5	12.4	
49 2,4-Dimethylphenol	107	8.350	8.350	0.000	98	836440	12.5	11.9	
50 Benzoic acid	105	8.487	8.487	0.000	87	372843	12.5	8.97	
51 o,o',o"-Triethylphosphorothioat	198	8.475	8.475	0.000	89	343977	12.5	13.0	
52 Bis(2-chloroethoxy)methane	93	8.498	8.498	0.000	95	1232540	12.5	12.7	M
54 2,4-Dichlorophenol	162	8.623	8.623	0.000	96	603475	12.5	12.8	
55 1,2,4-Trichlorobenzene	180	8.748	8.748	0.000	91	632535	12.5	12.6	
* 56 Naphthalene-d8	136	8.827	8.827	0.000	99	742519	5.00	5.00	
57 Naphthalene	128	8.861	8.861	0.000	98	1939285	12.5	12.4	
58 4-Chloroaniline	127	8.963	8.963	0.000	88	848866	12.5	13.2	
59 2,6-Dichlorophenol	162	8.974	8.974	0.000	82	594660	12.5	12.9	
61 Hexachloropropene	213	9.020	9.020	0.000	98	544782	12.5	13.5	
62 Hexachlorobutadiene	225	9.088	9.088	0.000	95	418913	12.5	12.5	
63 Quinoline	129	9.394	9.394	0.000	94	1249236	12.5	12.9	
65 N-Nitrosodi-n-butylamine	84	9.542	9.542	0.000	94	645172	12.5	12.1	
S 60 Diallate	86				0		12.5	12.4	
67 4-Chloro-3-methylphenol	107	9.757	9.757	0.000	91	727468	12.5	13.2	
68 Safrole, Total	162	9.859	9.859	0.000	80	560003	12.5	12.9	
69 2-Methylnaphthalene	142	9.973	9.973	0.000	91	1344629	12.5	13.0	
70 1-Methylnaphthalene	142	10.120	10.120	0.000	92	1264790	12.5	13.0	
71 Hexachlorocyclopentadiene	237	10.234	10.234	0.000	89	470097	12.5	13.5	
72 1,2,4,5-Tetrachlorobenzene	216	10.234	10.234	0.000	94	644459	12.5	12.1	
73 Isosafrole Peak 1	162	10.324	10.324	0.000	83	99825	2.00	1.91	
74 2,4,6-Trichlorophenol	196	10.426	10.426	0.000	94	448434	12.5	12.4	
76 2,4,5-Trichlorophenol	196	10.483	10.483	0.000	88	476747	12.5	12.7	
78 Isosafrole Peak 2	162	10.687	10.687	0.000	84	434012	10.5	7.75	
80 1,1'-Biphenyl	154	10.733	10.733	0.000	96	1561990	12.5	12.1	
81 2-Chloronaphthalene	162	10.744	10.744	0.000	97	1316875	12.5	11.8	
82 1-Chloronaphthalene	162	10.778	10.778	0.000	97	1287024	12.5	13.1	
84 2-Nitroaniline	138	10.914	10.914	0.000	74	433988	12.5	12.5	
85 1,4-Naphthoquinone	158	11.028	11.028	0.000	67	489958	12.5	11.8	
S 79 Isosafrole	162				0		12.5	9.65	
89 1,3-Dinitrobenzene	168	11.152	11.152	0.000	80	215082	12.5	12.5	
87 Dimethyl phthalate	163	11.255	11.255	0.000	94	1416436	12.5	11.7	
86 1,4-Dinitrobenzene	168	11.266	11.266	0.000	81	237064	12.5	12.7	
90 2,6-Dinitrotoluene	165	11.334	11.334	0.000	85	330387	12.5	12.2	
91 Acenaphthylene	152	11.402	11.402	0.000	98	1974755	12.5	13.9	
92 3-Nitroaniline	138	11.572	11.572	0.000	88	354268	12.5	13.4	
* 93 Acenaphthene-d10	164	11.618	11.618	0.000	94	401313	5.00	5.00	
94 Acenaphthene	153	11.663	11.663	0.000	95	1206243	12.5	11.7	
95 2,4-Dinitrophenol	184	11.731	11.731	0.000	79	406875	25.0	24.0	
97 4-Nitrophenol	109	11.844	11.844	0.000	87	770553	25.0	23.2	
99 Pentachlorobenzene	250	11.856	11.856	0.000	94	537173	12.5	12.5	
101 Dibenzofuran	168	11.913	11.913	0.000	93	1829721	12.5	12.4	
100 2,4-Dinitrotoluene	165	11.924	11.924	0.000	65	460229	12.5	12.0	
102 1-Naphthylamine	143	12.015	12.015	0.000	96	1156897	12.5	11.1	
103 2,3,4,6-Tetrachlorophenol	232	12.083	12.083	0.000	80	356150	12.5	12.9	
104 2-Naphthylamine	143	12.128	12.128	0.000	94	1196093	12.5	12.4	
105 Diethyl phthalate	149	12.276	12.276	0.000	96	1527735	12.5	12.5	
107 Fluorene	166	12.355	12.355	0.000	94	1450293	12.5	12.5	
106 Thionazin	107	12.366	12.366	0.000	74	326968	12.5	13.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
108 4-Nitroaniline	138	12.389	12.389	0.000	73	355090	12.5	12.4	
110 N-Nitro-o-toluidine	152	12.378	12.378	0.000	73	413249	12.5	13.4	
109 4-Chlorophenyl phenyl ether	204	12.378	12.378	0.000	86	674678	12.5	11.6	
111 4,6-Dinitro-2-methylphenol	198	12.434	12.434	0.000	80	591614	25.0	25.4	
112 N-Nitrosodiphenylamine	169	12.525	12.525	0.000	65	993048	10.6	9.82	
113 1,2-Diphenylhydrazine	77	12.559	12.559	0.000	42	1990366	12.5	12.3	
115 Sulfotepp	97	12.752	12.752	0.000	79	370092	12.5	12.9	
116 cis-Diallate	86	12.888	12.888	0.000	75	570176	9.38	9.33	
117 Phorate	75	12.888	12.888	0.000	93	1175459	12.5	12.6	
118 Phenacetin	108	12.911	12.911	0.000	90	871452	12.5	12.5	
119 4-Bromophenyl phenyl ether	248	12.968	12.968	0.000	72	388714	12.5	12.5	
120 trans-Diallate	86	12.990	12.990	0.000	91	187123	3.13	3.09	
121 Hexachlorobenzene	284	13.013	13.013	0.000	87	386789	12.5	11.7	
122 Dimethoate	87	13.092	13.092	0.000	94	766619	12.5	13.2	
124 Pentachlorophenol	266	13.274	13.274	0.000	83	566586	25.0	26.2	
125 4-Aminobiphenyl	169	13.285	13.285	0.000	91	1659870	12.5	18.0	
126 Pentachloronitrobenzene	237	13.285	13.285	0.000	55	282963	12.5	13.4	
127 Pronamide	173	13.387	13.387	0.000	91	734200	12.5	12.9	
* 128 Phenanthrene-d10	188	13.501	13.501	0.000	97	693812	5.00	5.00	
129 Dinoseb	211	13.523	13.523	0.000	93	400177	12.5	14.7	
130 Phenanthrene	178	13.535	13.535	0.000	98	1998200	12.5	12.1	
131 Anthracene	178	13.591	13.591	0.000	98	2018308	12.5	12.2	
132 Carbazole	167	13.807	13.807	0.000	97	2020397	12.5	12.9	
133 Methyl parathion	109	14.011	14.011	0.000	90	612670	12.5	12.7	
134 Di-n-butyl phthalate	149	14.329	14.329	0.000	100	2711838	12.5	12.4	
136 4-Nitroquinoline-1-oxide	190	14.567	14.567	0.000	91	283660	12.5	12.5	
135 Ethyl Parathion	109	14.556	14.556	0.000	80	413760	12.5	12.9	
138 Isodrin	193	14.953	14.953	0.000	92	308991	12.5	12.7	
139 Fluoranthene	202	15.168	15.168	0.000	98	2352574	12.5	12.5	
140 Benzidine	184	15.395	15.395	0.000	99	1361865	12.5	11.4	
* 141 Pyrene-d10 (IS)	212	15.486	15.486	0.000	99	725952	5.00	5.00	
142 Pyrene	202	15.520	15.520	0.000	98	2431217	12.5	12.2	
144 p-Dimethylamino azobenzene	225	16.030	16.030	0.000	91	463958	12.5	14.4	
145 Chlorobenzilate	139	16.133	16.133	0.000	85	1015520	12.5	13.4	
146 3,3'-Dimethylbenzidine	212	16.598	16.598	0.000	99	1455732	12.5	11.5	
147 Butyl benzyl phthalate	149	16.666	16.666	0.000	95	1292420	12.5	12.8	
148 2-Acetylaminofluorene	181	17.017	17.017	0.000	92	1025467	12.5	12.8	
150 3,3'-Dichlorobenzidine	252	17.528	17.528	0.000	76	874171	12.5	13.2	
149 Benzo[a]anthracene	228	17.528	17.528	0.000	99	2212379	12.5	13.0	
151 4,4'-Methylene bis(2-chloroaniline)	231	17.539	17.539	0.000	93	455060	12.5	13.7	
152 Chrysene	228	17.585	17.585	0.000	97	2009253	12.5	12.0	
153 Bis(2-ethylhexyl) phthalate	149	17.732	17.732	0.000	97	1757848	12.5	12.4	
154 6-Methylchrysene	242	18.390	18.390	0.000	99	1503994	12.5	12.7	
155 Di-n-octyl phthalate	149	18.901	18.901	0.000	99	3147066	12.5	13.0	
156 Benzo[b]fluoranthene	252	19.388	19.388	0.000	97	2199124	12.5	12.8	
157 7,12-Dimethylbenz(a)anthracene	256	19.400	19.400	0.000	90	895961	12.5	11.6	
158 Benzo[k]fluoranthene	252	19.434	19.434	0.000	99	2118462	12.5	13.6	
159 Benzo[a]pyrene	252	19.910	19.910	0.000	77	2087482	12.5	12.8	
* 160 Perylene-d12	264	20.001	20.001	0.000	99	682422	5.00	5.00	
161 3-Methylcholanthrene	268	20.489	20.489	0.000	90	1039396	12.5	13.3	
162 Dibenz[a,h]acridine	279	21.294	21.294	0.000	91	1587684	12.5	13.4	
163 Dibenz[a,j]acridine	279	21.374	21.374	0.000	96	1633783	12.5	13.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
164 Indeno[1,2,3-cd]pyrene	276	21.612	21.612	0.000	99	1629646	12.5	12.2	
165 Dibenz(a,h)anthracene	278	21.657	21.657	0.000	93	1816311	12.5	13.3	
166 Benzo[g,h,i]perylene	276	21.997	21.997	0.000	98	1812690	12.5	12.9	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSS_RV8270ICV_00006

Amount Added: 1.00

Units: mL

Chrom Revision: 2.3 24-Sep-2020 19:22:38

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1161.D

Instrument ID: HP23264

Operator ID: kel10217

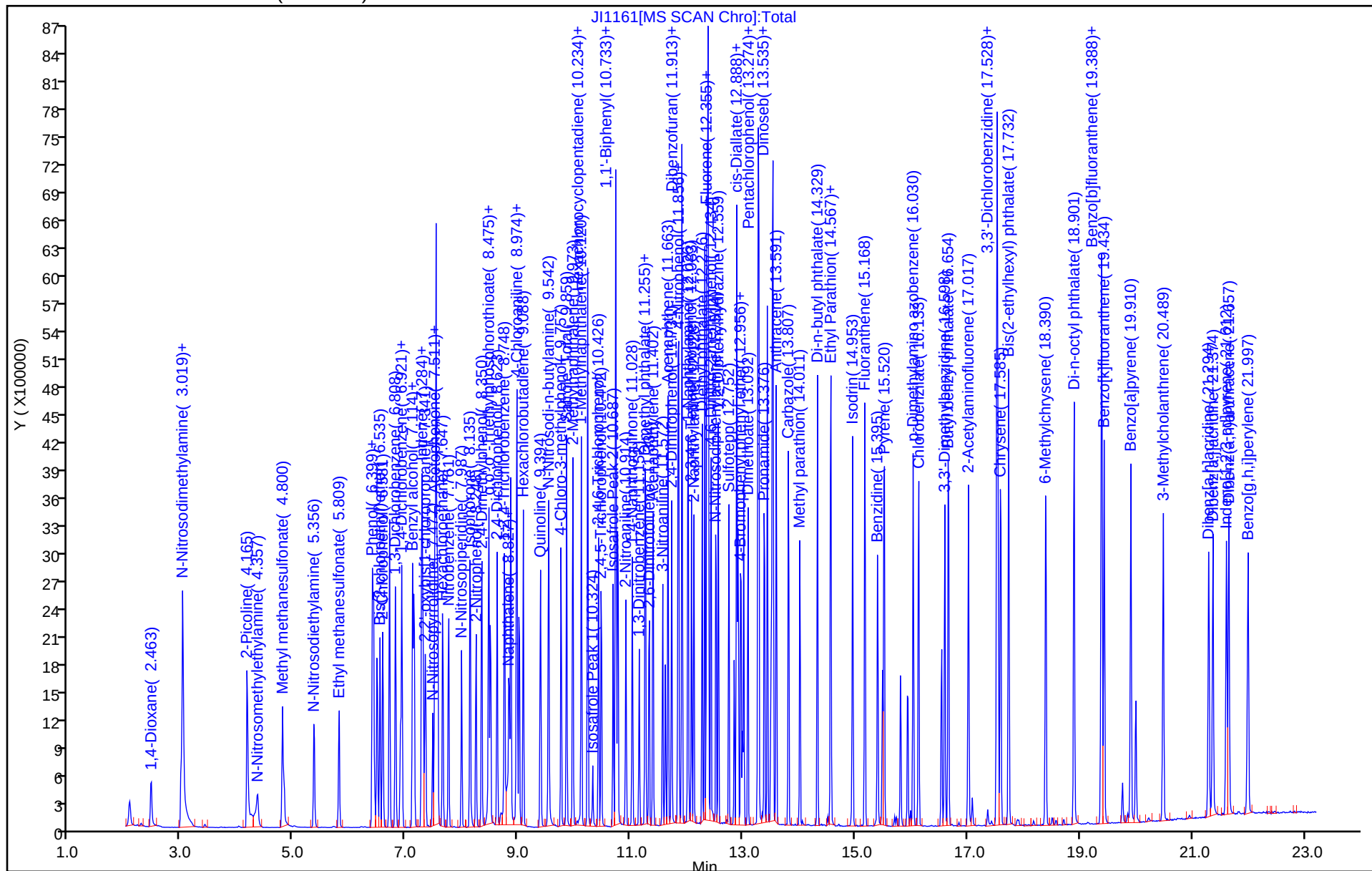
Worklist Smp#: 12

ALS Bottle#: 11

Dil. Factor: 1.0000

Limit Group: MSSV - 8270D E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1161.D

Injection Date: 30-Sep-2020 00:23:30

Instrument ID: HP23264

Lims ID: ICV FULL

Client ID:

Operator ID: kel10217

ALS Bottle#:

11

Worklist Smp#: 12

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

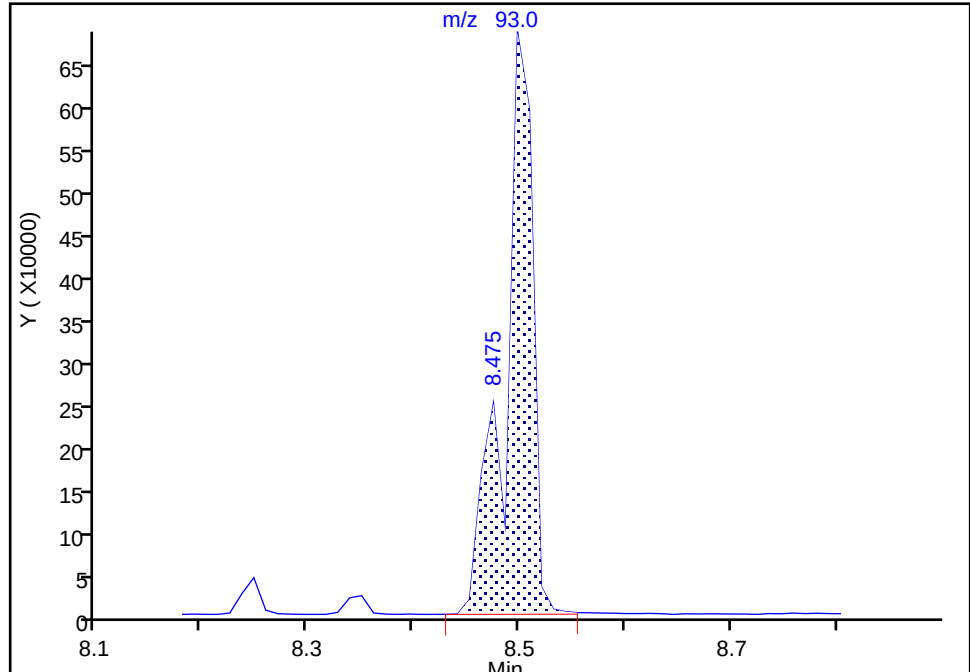
MS SCAN

52 Bis(2-chloroethoxy)methane, CAS: 111-91-1

Signal: 1

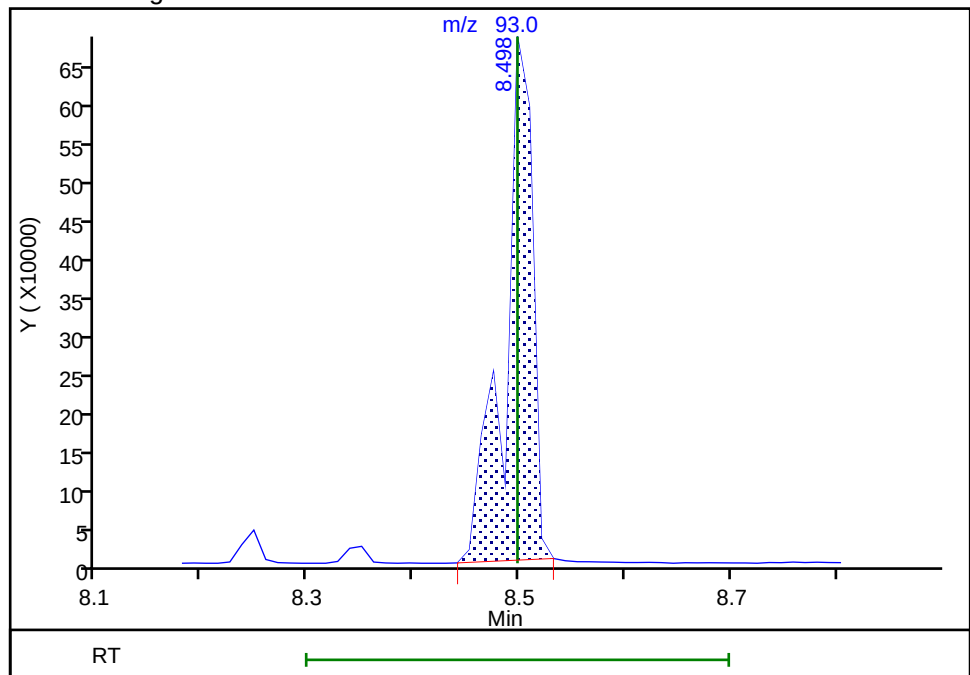
RT: 8.48
Area: 1254804
Amount: 12.724619
Amount Units: ug/ml

Processing Integration Results



RT: 8.50
Area: 1232540
Amount: 12.728298
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Sep-2020 09:28:12

Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-60208/2 Calibration Date: 10/29/2020 23:51
 Instrument ID: HP23264 Calib Start Date: 09/29/2020 19:00
 GC Column: DB-5MS 30m 0.25 ID: 0.25 (mm) Calib End Date: 09/29/2020 22:52
 Lab File ID: JJ1301.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.8186	0.8548		7.83	7.50	4.4	20.0
N-Nitrosodimethylamine	Ave	1.209	1.082		6.71	7.50	-10.5	20.0
Pyridine	Ave	2.052	1.989		7.27	7.50	-3.1	20.0
2-Picoline	Ave	1.882	1.610		6.42	7.50	-14.5	20.0
N-Nitrosomethylethylamine	Ave	0.7911	0.7604		7.21	7.50	-3.9	20.0
Methyl methanesulfonate	Ave	1.120	1.047		7.01	7.50	-6.5	20.0
N-Nitrosodiethylamine	Ave	0.7410	0.6759		6.84	7.50	-8.8	20.0
Ethyl methanesulfonate	Ave	0.7123	0.6630		6.98	7.50	-6.9	20.0
Benzaldehyde	Ave	1.576	1.424	0.0100	6.78	7.50	-9.7	20.0
Aniline	Ave	2.603	2.400		6.92	7.50	-7.8	20.0
Phenol	Ave	2.331	2.065	0.8000	6.64	7.50	-11.4	20.0
Bis(2-chloroethyl)ether	Ave	1.627	1.476	0.7000	6.81	7.50	-9.3	20.0
2-Chlorophenol	Ave	1.464	1.400	0.8000	7.17	7.50	-4.4	20.0
1,3-Dichlorobenzene	Ave	1.569	1.534		7.33	7.50	-2.3	20.0
1,4-Dichlorobenzene	Ave	1.617	1.528		7.09	7.50	-5.5	20.0
Benzyl alcohol	Ave	1.016	0.9005			7.50	-11.3	20.0
1,2-Dichlorobenzene	Ave	1.532	1.513		7.41	7.50	-1.3	20.0
Indene	Ave	2.270	2.233		7.38	7.50	-1.7	20.0
2,2'-oxybis[1-chloropropane]	Ave	2.328	1.980	0.0100	6.38	7.50	-14.9	20.0
2-Methylphenol	Ave	1.428	1.384	0.7000	7.27	7.50	-3.1	20.0
N-Nitrosopyrrolidine	Ave	0.7823	0.7541		7.23	7.50	-3.6	20.0
Acetophenone	Ave	2.410	2.462	0.0100	7.66	7.50	2.1	20.0
N-Nitrosodi-n-propylamine	Ave	1.428	1.295	0.5000	6.80	7.50	-9.3	20.0
N-Nitrosomorpholine	Ave	1.314	1.262		7.20	7.50	-4.0	20.0
o-Toluidine	Ave	2.404	2.271		7.08	7.50	-5.5	20.0
4-Methylphenol (and/or 3-Methylphenol)	Ave	1.647	1.484	0.6000	6.76	7.50	-9.9	20.0
Hexachloroethane	Ave	0.8033	0.7873	0.3000	7.35	7.50	-2.0	20.0
Nitrobenzene	Ave	0.5497	0.4960	0.2000	6.77	7.50	-9.8	20.0
N-Nitrosopiperidine	Ave	0.2013	0.1898		7.07	7.50	-5.7	20.0
Isophorone	Ave	0.9597	0.9037	0.4000	7.06	7.50	-5.8	20.0
2-Nitrophenol	Ave	0.2008	0.1858	0.1000	6.94	7.50	-7.5	20.0
2,4-Dimethylphenol	Ave	0.4736	0.4489	0.2000	7.11	7.50	-5.2	20.0
o,o',o''-Triethylphosphorothioate	Ave	0.1788	0.1850		7.76	7.50	3.5	20.0
Bis(2-chloroethoxy)methane	Ave	0.6521	0.4816	0.3000	5.54	7.50	-26.1*	20.0
Benzoic acid	Lin		0.2254		8.18	10.0	-18.2	20.0
2,4-Dichlorophenol	Ave	0.3182	0.3261	0.2000	7.69	7.50	2.5	20.0
1,2,4-Trichlorobenzene	Ave	0.3388	0.3344		7.40	7.50	-1.3	20.0
Naphthalene	Ave	1.049	0.999	0.7000	7.14	7.50	-4.7	20.0
4-Chloroaniline	Ave	0.4315	0.4230	0.0100	7.35	7.50	-2.0	20.0
2,6-Dichlorophenol	Ave	0.3110	0.3090		7.45	7.50	-0.6	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-60208/2 Calibration Date: 10/29/2020 23:51
 Instrument ID: HP23264 Calib Start Date: 09/29/2020 19:00
 GC Column: DB-5MS 30m 0.25 ID: 0.25 (mm) Calib End Date: 09/29/2020 22:52
 Lab File ID: JJ1301.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachloropropene	Ave	0.2711	0.2852		7.89	7.50	5.2	20.0
Hexachlorobutadiene	Ave	0.2254	0.2233	0.0100	7.43	7.50	-0.9	20.0
Quinoline	Ave	0.6535	0.6527		7.49	7.50	-0.1	20.0
Caprolactam	Ave	0.1038	0.1094	0.0100	7.90	7.50	5.4	20.0
N-Nitrosodi-n-butylamine	Ave	0.3590	0.3826		7.99	7.50	6.6	20.0
4-Chloro-3-methylphenol	Ave	0.3723	0.3927	0.2000	7.91	7.50	5.5	20.0
Safrole, Total	Ave	0.2917	0.2851		7.33	7.50	-2.3	20.0
2-Methylnaphthalene	Ave	0.6973	0.6944	0.4000	7.47	7.50	-0.4	20.0
1-Methylnaphthalene	Ave	0.6557	0.6800		7.78	7.50	3.7	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.6618	0.6143	0.0100	6.96	7.50	-7.2	20.0
Hexachlorocyclopentadiene	Ave	0.4333	0.3981	0.0500	6.89	7.50	-8.1	20.0
Isosafrole Peak 1	Ave	0.6517	0.5833			1.20	-10.5	20.0
2,4,6-Trichlorophenol	Ave	0.4507	0.4317	0.2000	7.18	7.50	-4.2	20.0
2,4,5-Trichlorophenol	Ave	0.4693	0.4595	0.2000	7.34	7.50	-2.1	20.0
Isosafrole Peak 2	Ave	0.6981	0.6133		5.54	6.30	-12.1	20.0
1,1'-Biphenyl	Ave	1.606	1.570	0.0100	7.34	7.50	-2.2	20.0
2-Chloronaphthalene	Ave	1.392	1.305	0.8000	7.03	7.50	-6.3	20.0
1-Chloronaphthalene	Ave	1.220	1.064		6.55	7.50	-12.7	20.0
Diphenyl ether	Ave	0.9256	0.8603		6.97	7.50	-7.1	20.0
2-Nitroaniline	Ave	0.4325	0.4217	0.0100	7.31	7.50	-2.5	20.0
1,4-Naphthoquinone	Ave	0.5185	0.4950			7.50	-4.5	20.0
1,3-Dinitrobenzene	Ave	0.2151	0.2033		7.09	7.50	-5.5	20.0
Dimethyl phthalate	Ave	1.513	1.473	0.0100	7.30	7.50	-2.6	20.0
1,4-Dinitrobenzene	Ave	0.2327	0.2292		7.39	7.50	-1.5	20.0
2,6-Dinitrotoluene	Ave	0.3379	0.3287	0.2000	7.30	7.50	-2.7	20.0
Acenaphthylene	Ave	1.776	1.664	0.9000	7.03	7.50	-6.3	20.0
3-Nitroaniline	Ave	0.3300	0.3035	0.0100	6.90	7.50	-8.0	20.0
Acenaphthene	Ave	1.280	1.180	0.9000	6.91	7.50	-7.8	20.0
2,4-Dinitrophenol	Ave	0.2108	0.2027	0.0100	9.61	10.0	-3.9	20.0
Pentachlorobenzene	Ave	0.5367	0.5248		7.33	7.50	-2.2	20.0
Dibenzofuran	Ave	1.842	1.786	0.8000	7.27	7.50	-3.1	20.0
2,4-Dinitrotoluene	Ave	0.4775	0.4490	0.2000	7.05	7.50	-6.0	20.0
4-Nitrophenol	Ave	0.4143	0.3614	0.0100		7.50	-12.8	20.0
1-Naphthylamine	Ave	1.294	1.093		6.34	7.50	-15.5	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3432	0.3391	0.0100	7.41	7.50	-1.2	20.0
2-Naphthylamine	Ave	1.205	0.9292		5.78	7.50	-22.9*	20.0
Diethyl phthalate	Ave	1.524	1.489	0.0100	7.33	7.50	-2.3	20.0
Fluorene	Ave	1.447	1.426	0.9000	7.39	7.50	-1.4	20.0
Thionazin	Ave	0.3089	0.2902		7.05	7.50	-6.0	20.0
4-Chlorophenyl-phenyl ether	Ave	0.7225	0.7005	0.4000	7.27	7.50	-3.0	20.0
5-Nitro-o-toluidine	Ave	0.3857	0.4127		8.03	7.50	7.0	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-60208/2 Calibration Date: 10/29/2020 23:51
 Instrument ID: HP23264 Calib Start Date: 09/29/2020 19:00
 GC Column: DB-5MS 30m 0.25 ID: 0.25 (mm) Calib End Date: 09/29/2020 22:52
 Lab File ID: JJ1301.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Ave	0.3579	0.3150	0.0100	6.60	7.50	-12.0	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1679	0.1417	0.0100	6.33	7.50	-15.6	20.0
N-Nitrosodiphenylamine	Ave	0.7290	0.6699	0.0100	6.89	7.50	-8.1	20.0
1,2-Diphenylhydrazine	Ave	1.167	0.9622		6.18	7.50	-17.5	20.0
Sulfotepp	Ave	0.2063	0.1898		6.90	7.50	-8.0	20.0
cis-Diallate	Ave	0.4406	0.3717		4.68	5.55	-15.6	20.0
Phorate	Ave	0.6739	0.5767		6.42	7.50	-14.4	20.0
Phenacetin	Ave	0.5041	0.4439		6.60	7.50	-11.9	20.0
4-Bromophenyl-phenylether	Ave	0.2235	0.2286	0.1000	7.67	7.50	2.3	20.0
trans-Diallate	Ave	0.4362	0.4023		1.80	1.95	-7.8	20.0
Hexachlorobenzene	Ave	0.2391	0.2282	0.1000	7.16	7.50	-4.5	20.0
Dimethoate	Ave	0.4198	0.3621		6.47	7.50	-13.7	20.0
Atrazine	Ave	0.2400	0.2166	0.0100	6.77	7.50	-9.7	20.0
Pentachloronitrobenzene	Ave	0.1520	0.1503		7.42	7.50	-1.1	20.0
4-Aminobiphenyl	Ave	0.6656	0.5355		6.03	7.50	-19.6	20.0
Pentachlorophenol	Ave	0.1559	0.1571	0.0500	7.56	7.50	0.8	20.0
Pronamide	Ave	0.4090	0.3788		6.95	7.50	-7.4	20.0
Dinoseb	Ave	0.1968	0.2074		7.90	7.50	5.4	20.0
Phenanthrene	Ave	1.189	1.130	0.7000	7.13	7.50	-5.0	20.0
Anthracene	Ave	1.189	1.128	0.7000	7.12	7.50	-5.1	20.0
Carbazole	Ave	1.129	1.069	0.0100	7.10	7.50	-5.3	20.0
Methyl parathion	Ave	0.3468	0.3050		6.60	7.50	-12.1	20.0
Di-n-butyl phthalate	Ave	1.578	1.449	0.0100	6.89	7.50	-8.1	20.0
4-Nitroquinoline-1-oxide	Lin1		0.1283			7.50	-19.9	20.0
Parathion	Ave	0.2305	0.2193		7.14	7.50	-4.8	20.0
Octachlorostyrene	Ave	0.1130	0.1155		7.67	7.50	2.3	20.0
Isodrin	Ave	0.1756	0.1715		7.32	7.50	-2.4	20.0
Fluoranthene	Ave	1.351	1.446	0.6000	8.03	7.50	7.0	20.0
Benidine	Ave	0.8231	0.7357		20.1	22.5	-10.6	20.0
Pyrene	Ave	1.373	1.379	0.6000	7.53	7.50	0.4	20.0
p-Dimethylamino azobenzene	Ave	0.2227	0.2290		7.71	7.50	2.8	20.0
Chlorobenzilate	Ave	0.5206	0.5009		7.22	7.50	-3.8	20.0
3,3'-Dimethylbenzidine	Ave	0.8687	0.8631			7.50	-0.6	20.0
Butylbenzylphthalate	Ave	0.6943	0.6559	0.0100	7.09	7.50	-5.5	20.0
2-Acetylaminofluorene	Ave	0.5517	0.5139		6.99	7.50	-6.9	20.0
Benzo[a]anthracene	Ave	1.171	1.179	0.8000	7.55	7.50	0.7	20.0
3,3'-Dichlorobenzidine	Ave	0.4566	0.4637	0.0100	7.62	7.50	1.6	20.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.2286	0.2329			7.50	1.9	20.0
Chrysene	Ave	1.152	1.176	0.7000	7.66	7.50	2.1	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.9755	0.9046	0.0100	6.96	7.50	-7.3	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-60208/2 Calibration Date: 10/29/2020 23:51
 Instrument ID: HP23264 Calib Start Date: 09/29/2020 19:00
 GC Column: DB-5MS 30m 0.25 ID: 0.25 (mm) Calib End Date: 09/29/2020 22:52
 Lab File ID: JJ1301.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
6-Methylchrysene	Ave	0.8176	0.8625		7.91	7.50	5.5	20.0
Di-n-octyl phthalate	Ave	1.773	1.691	0.0100	7.15	7.50	-4.7	20.0
Benzo[b]fluoranthene	Ave	1.255	1.282	0.7000	7.66	7.50	2.1	20.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5657	0.5885		7.80	7.50	4.0	20.0
Benzo[k]fluoranthene	Ave	1.139	1.264	0.7000	8.33	7.50	11.0	20.0
Benzo[a]pyrene	Ave	1.196	1.247	0.7000	7.82	7.50	4.3	20.0
3-Methylcholanthrene	Ave	0.5731	0.5896		7.72	7.50	2.9	20.0
Dibenz[a,h]acridine	Ave	0.8685	0.8730		7.54	7.50	0.5	20.0
Dibenz[a,j]acridine	Ave	0.9105	0.8820		7.26	7.50	-3.1	20.0
Indeno[1,2,3-cd]pyrene	Ave	0.9803	0.9757	0.5000	7.46	7.50	-0.5	20.0
Dibenz(a,h)anthracene	Ave	0.997	1.036	0.4000	7.80	7.50	4.0	20.0
Benzo[g,h,i]perylene	Ave	1.032	1.037	0.5000	7.54	7.50	0.5	20.0
2-Fluorophenol (Surr)	Ave	1.509	1.489		14.8	15.0	-1.3	20.0
Phenol-d5 (Surr)	Ave	2.053	1.838		13.4	15.0	-10.5	20.0
Nitrobenzene-d5 (Surr)	Ave	0.5683	0.5093		13.4	15.0	-10.4	20.0
2-Fluorobiphenyl (Surr)	Ave	1.511	1.438		14.3	15.0	-4.8	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1903	0.2022		15.9	15.0	6.3	20.0
p-Terphenyl-d14 (Surr)	Ave	0.9220	0.9294		15.1	15.0	0.8	20.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1301.D
 Lims ID: CCVIS L5
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 29-Oct-2020 23:51:30 ALS Bottle#: 2 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCVIS L5
 Misc. Info.: 410-0014245-002
 Operator ID: sw30417 Instrument ID: HP23264
 Sublist: chrom-MSSemi_HP23264*sub7
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 30-Oct-2020 10:04:53 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1008

First Level Reviewer: bekk

Date: 30-Oct-2020 10:04:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	2.179	2.179	0.000	96	197780	7.50	7.83	
3 N-Nitrosodimethylamine	74	2.747	2.747	0.000	92	250286	7.50	6.71	
4 Pyridine	79	2.792	2.792	0.000	92	460140	7.50	7.27	
8 2-Picoline	93	3.972	3.972	0.000	94	372479	7.50	6.42	
10 N-Nitrosomethylethylamine	88	4.165	4.165	0.000	96	175930	7.50	7.21	
11 Methyl methanesulfonate	80	4.618	4.618	0.000	90	242237	7.50	7.01	
\$ 12 2-Fluorophenol	112	4.925	4.925	0.000	92	689097	15.0	14.8	
13 N-Nitrosodiethylamine	102	5.174	5.174	0.000	93	156386	7.50	6.84	
15 Ethyl methanesulfonate	109	5.639	5.639	0.000	94	153387	7.50	6.98	
19 Benzaldehyde	77	6.082	6.082	0.000	92	329381	7.50	6.78	
23 Aniline	93	6.252	6.252	0.000	97	555383	7.50	6.92	
\$ 20 Phenol-d5	99	6.297	6.297	0.000	92	850579	15.0	13.4	
21 Phenol	94	6.320	6.320	0.000	92	477862	7.50	6.64	
24 Bis(2-chloroethyl)ether	93	6.365	6.365	0.000	93	341559	7.50	6.81	
25 2-Chlorophenol	128	6.445	6.445	0.000	93	323976	7.50	7.17	
S 46 Dinitrotoluene	165				0		15.0	14.3	
26 1,3-Dichlorobenzene	146	6.626	6.626	0.000	91	354895	7.50	7.33	
* 28 1,4-Dichlorobenzene-d4	152	6.717	6.717	0.000	95	154243	5.00	5.00	
29 1,4-Dichlorobenzene	146	6.751	6.751	0.000	91	353483	7.50	7.09	
30 Benzyl alcohol	108	6.955	6.955	0.000	87	208339	7.50	6.65	
31 1,2-Dichlorobenzene	146	6.967	6.967	0.000	90	349971	7.50	7.41	
34 Indene	115	7.103	7.103	0.000	87	516575	7.50	7.38	
35 2,2'-oxybis[1-chloropropane]	45	7.159	7.159	0.000	90	458217	7.50	6.38	
33 2-Methylphenol	108	7.194	7.194	0.000	92	320138	7.50	7.27	
36 N-Nitrosopyrrolidine	100	7.307	7.307	0.000	87	174464	7.50	7.23	
38 Acetophenone	105	7.341	7.341	0.000	92	569556	7.50	7.66	
39 N-Nitrosodi-n-propylamine	70	7.364	7.364	0.000	81	299644	7.50	6.80	
40 N-Nitrosomorpholine	56	7.375	7.375	0.000	91	291889	7.50	7.20	
41 2-Toluidine	106	7.386	7.386	0.000	97	525408	7.50	7.08	
37 4-Methylphenol	108	7.432	7.432	0.000	84	343429	7.50	6.76	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
42 Hexachloroethane	117	7.466	7.466	0.000	93	182142	7.50	7.35	
\$ 43 Nitrobenzene-d5	82	7.557	7.557	0.000	90	923927	15.0	13.4	
44 Nitrobenzene	77	7.579	7.579	0.000	89	449869	7.50	6.77	
45 N-Nitrosopiperidine	114	7.817	7.817	0.000	80	172164	7.50	7.07	
47 Isophorone	82	7.965	7.965	0.000	99	819611	7.50	7.06	
48 2-Nitrophenol	139	8.078	8.078	0.000	90	168523	7.50	6.94	
49 2,4-Dimethylphenol	107	8.214	8.214	0.000	97	407178	7.50	7.11	
51 o,o',o"-Triethylphosphorothioat	198	8.305	8.305	0.000	86	167766	7.50	7.76	
52 Bis(2-chloroethoxy)methane	93	8.339	8.339	0.000	97	436813	7.50	5.54	
50 Benzoic acid	105	8.385	8.385	0.000	89	272617	10.0	8.18	
54 2,4-Dichlorophenol	162	8.498	8.498	0.000	96	295754	7.50	7.69	
55 1,2,4-Trichlorobenzene	180	8.577	8.577	0.000	93	303333	7.50	7.40	
* 56 Naphthalene-d8	136	8.657	8.657	0.000	99	604651	5.00	5.00	
57 Naphthalene	128	8.691	8.691	0.000	98	906305	7.50	7.14	
58 4-Chloroaniline	127	8.804	8.804	0.000	94	383694	7.50	7.35	
59 2,6-Dichlorophenol	162	8.816	8.816	0.000	90	280300	7.50	7.45	
61 Hexachloropropene	213	8.838	8.838	0.000	96	258664	7.50	7.89	
62 Hexachlorobutadiene	225	8.906	8.906	0.000	95	202557	7.50	7.43	
63 Quinoline	129	9.213	9.213	0.000	94	592004	7.50	7.49	
65 N-Nitrosodi-n-butylamine	84	9.338	9.338	0.000	92	347016	7.50	7.99	
64 Caprolactam	113	9.338	9.338	0.000	76	99237	7.50	7.90	
S 60 Diallate	86				0		7.50	6.48	
67 4-Chloro-3-methylphenol	107	9.667	9.667	0.000	91	356206	7.50	7.91	
68 Safrole, Total	162	9.678	9.678	0.000	80	258573	7.50	7.33	
69 2-Methylnaphthalene	142	9.791	9.791	0.000	90	629818	7.50	7.47	
70 1-Methylnaphthalene	142	9.939	9.939	0.000	91	616776	7.50	7.78	
71 Hexachlorocyclopentadiene	237	10.052	10.052	0.000	96	207240	7.50	6.89	
72 1,2,4,5-Tetrachlorobenzene	216	10.052	10.052	0.000	96	319781	7.50	6.96	
73 Isosafrole Peak 1	162	10.154	10.154	0.000	85	48584	1.20	1.07	
74 2,4,6-Trichlorophenol	196	10.268	10.268	0.000	93	224716	7.50	7.18	
76 2,4,5-Trichlorophenol	196	10.370	10.370	0.000	90	239214	7.50	7.34	
\$ 77 2-Fluorobiphenyl (Surr)	172	10.404	10.404	0.000	99	1497345	15.0	14.3	
78 Isosafrole Peak 2	162	10.506	10.506	0.000	83	268191	6.30	5.54	
80 1,1'-Biphenyl	154	10.551	10.551	0.000	95	817434	7.50	7.34	
81 2-Chloronaphthalene	162	10.563	10.563	0.000	94	679184	7.50	7.03	M
82 1-Chloronaphthalene	162	10.585	10.585	0.000	97	554108	7.50	6.55	Ma
83 Phenyl ether	170	10.733	10.733	0.000	87	447849	7.50	6.97	
84 2-Nitroaniline	138	10.744	10.744	0.000	76	219533	7.50	7.31	
85 1,4-Naphthoquinone	158	10.858	10.858	0.000	73	257664	7.50	7.16	
89 1,3-Dinitrobenzene	168	10.982	10.982	0.000	82	105823	7.50	7.09	
87 Dimethyl phthalate	163	11.085	11.085	0.000	96	766861	7.50	7.30	
86 1,4-Dinitrobenzene	168	11.096	11.096	0.000	82	119290	7.50	7.39	
S 79 Isosafrole	162				0		7.50	6.61	
90 2,6-Dinitrotoluene	165	11.153	11.153	0.000	81	171097	7.50	7.30	
91 Acenaphthylene	152	11.209	11.209	0.000	98	866392	7.50	7.03	
92 3-Nitroaniline	138	11.414	11.414	0.000	89	157999	7.50	6.90	
* 93 Acenaphthene-d10	164	11.436	11.436	0.000	94	347029	5.00	5.00	
94 Acenaphthene	153	11.493	11.493	0.000	94	614052	7.50	6.91	
95 2,4-Dinitrophenol	184	11.572	11.572	0.000	76	140663	10.0	9.61	
99 Pentachlorobenzene	250	11.686	11.686	0.000	93	273207	7.50	7.33	
101 Dibenzofuran	168	11.754	11.754	0.000	95	929586	7.50	7.27	
100 2,4-Dinitrotoluene	165	11.765	11.765	0.000	86	233700	7.50	7.05	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
97 4-Nitrophenol	109	11.822	11.822	0.000	85	188124	7.50	6.54	
102 1-Naphthylamine	143	11.867	11.867	0.000	97	569152	7.50	6.34	
103 2,3,4,6-Tetrachlorophenol	232	11.947	11.947	0.000	76	176536	7.50	7.41	
104 2-Naphthylamine	143	11.969	11.969	0.000	93	483685	7.50	5.78	
105 Diethyl phthalate	149	12.128	12.128	0.000	97	775158	7.50	7.33	
107 Fluorene	166	12.208	12.208	0.000	95	742478	7.50	7.39	
106 Thionazin	107	12.219	12.219	0.000	73	151079	7.50	7.05	
109 4-Chlorophenyl phenyl ether	204	12.230	12.230	0.000	95	364652	7.50	7.27	
110 N-Nitro-o-toluidine	152	12.242	12.242	0.000	87	214809	7.50	8.03	
108 4-Nitroaniline	138	12.253	12.253	0.000	76	163947	7.50	6.60	
111 4,6-Dinitro-2-methylphenol	198	12.287	12.287	0.000	60	135478	7.50	6.33	
112 N-Nitrosodiphenylamine	169	12.378	12.378	0.000	63	640462	7.50	6.89	
113 1,2-Diphenylhydrazine	77	12.423	12.423	0.000	41	919993	7.50	6.18	
\$ 114 2,4,6-Tribromophenol	330	12.503	12.503	0.000	91	210521	15.0	15.9	
115 Sulfotepp	97	12.605	12.605	0.000	77	181436	7.50	6.90	
116 cis-Diallate	86	12.729	12.729	0.000	84	262967	5.55	4.68	
117 Phorate	75	12.741	12.741	0.000	94	551375	7.50	6.42	
118 Phenacetin	108	12.763	12.763	0.000	92	424454	7.50	6.60	
119 4-Bromophenyl phenyl ether	248	12.809	12.809	0.000	66	218521	7.50	7.67	
120 trans-Diallate	86	12.832	12.832	0.000	88	99993	1.95	1.80	M
121 Hexachlorobenzene	284	12.854	12.854	0.000	87	218212	7.50	7.16	
122 Dimethoate	87	12.934	12.934	0.000	92	346171	7.50	6.47	
123 Atrazine	200	13.036	13.036	0.000	88	207125	7.50	6.77	
126 Pentachloronitrobenzene	237	13.115	13.115	0.000	74	143714	7.50	7.42	
124 Pentachlorophenol	266	13.126	13.126	0.000	70	150198	7.50	7.56	
125 4-Aminobiphenyl	169	13.126	13.126	0.000	90	511944	7.50	6.03	
127 Pronamide	173	13.229	13.229	0.000	91	362140	7.50	6.95	
* 128 Phenanthrene-d10	188	13.331	13.331	0.000	97	637395	5.00	5.00	
129 Dinoseb	211	13.353	13.353	0.000	69	198270	7.50	7.90	
130 Phenanthrene	178	13.365	13.365	0.000	98	1079980	7.50	7.13	
131 Anthracene	178	13.421	13.421	0.000	98	1078480	7.50	7.12	
132 Carbazole	167	13.648	13.648	0.000	96	1021630	7.50	7.10	
133 Methyl parathion	109	13.841	13.841	0.000	91	291590	7.50	6.60	
134 Di-n-butyl phthalate	149	14.147	14.147	0.000	100	1385479	7.50	6.89	
135 Ethyl Parathion	109	14.386	14.386	0.000	80	209704	7.50	7.14	
136 4-Nitroquinoline-1-oxide	190	14.386	14.386	0.000	91	122620	7.50	6.01	
137 Octachlorostyrene	308	14.715	14.715	0.000	86	110455	7.50	7.67	
138 Isodrin	193	14.760	14.760	0.000	93	163955	7.50	7.32	
139 Fluoranthene	202	14.976	14.976	0.000	96	1382818	7.50	8.03	
140 Benzidine	184	15.214	15.214	0.000	99	2217641	22.5	20.1	
* 141 Pyrene-d10 (IS)	212	15.282	15.282	0.000	98	669818	5.00	5.00	
142 Pyrene	202	15.316	15.316	0.000	99	1385224	7.50	7.53	
\$ 143 p-Terphenyl-d14	244	15.599	15.599	0.000	98	1867573	15.0	15.1	
144 p-Dimethylamino azobenzene	225	15.826	15.826	0.000	92	230077	7.50	7.71	
145 Chlorobenzilate	139	15.928	15.928	0.000	84	503276	7.50	7.22	
146 3,3'-Dimethylbenzidine	212	16.394	16.394	0.000	99	867153	7.50	7.45	
147 Butyl benzyl phthalate	149	16.450	16.450	0.000	96	659026	7.50	7.09	
148 2-Acetylaminofluorene	181	16.813	16.813	0.000	92	516357	7.50	6.99	
149 Benzo[a]anthracene	228	17.301	17.301	0.000	99	1184963	7.50	7.55	
150 3,3'-Dichlorobenzidine	252	17.312	17.312	0.000	75	465939	7.50	7.62	
151 4,4'-Methylene bis(2-chloroani	231	17.335	17.335	0.000	95	233961	7.50	7.64	
152 Chrysene	228	17.369	17.369	0.000	96	1181615	7.50	7.66	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
153 Bis(2-ethylhexyl) phthalate	149	17.517	17.517	0.000	96	908924	7.50	6.96	
154 6-Methylchrysene	242	18.175	18.175	0.000	98	866547	7.50	7.91	
155 Di-n-octyl phthalate	149	18.674	18.674	0.000	99	1642264	7.50	7.15	
156 Benzo[b]fluoranthene	252	19.150	19.150	0.000	96	1245549	7.50	7.66	
157 7,12-Dimethylbenz(a)anthracene	256	19.162	19.162	0.000	92	571647	7.50	7.80	
158 Benzo[k]fluoranthene	252	19.207	19.207	0.000	98	1228193	7.50	8.33	
159 Benzo[a]pyrene	252	19.672	19.672	0.000	76	1211602	7.50	7.82	
* 160 Perylene-d12	264	19.763	19.763	0.000	99	647612	5.00	5.00	
161 3-Methylcholanthrene	268	20.251	20.251	0.000	90	572789	7.50	7.72	
162 Dibenz[a,h]acridine	279	21.056	21.056	0.000	90	848084	7.50	7.54	
163 Dibenz[a,j]acridine	279	21.124	21.124	0.000	96	856763	7.50	7.26	
164 Indeno[1,2,3-cd]pyrene	276	21.362	21.362	0.000	99	947842	7.50	7.46	
165 Dibenz(a,h)anthracene	278	21.408	21.408	0.000	91	1006859	7.50	7.80	
166 Benzo[g,h,i]perylene	276	21.737	21.737	0.000	98	1007305	7.50	7.54	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSS_RV8270_5_00008

Amount Added: 1.00

Units: mL

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1301.D

Instrument ID: HP23264

Operator ID: sw30417

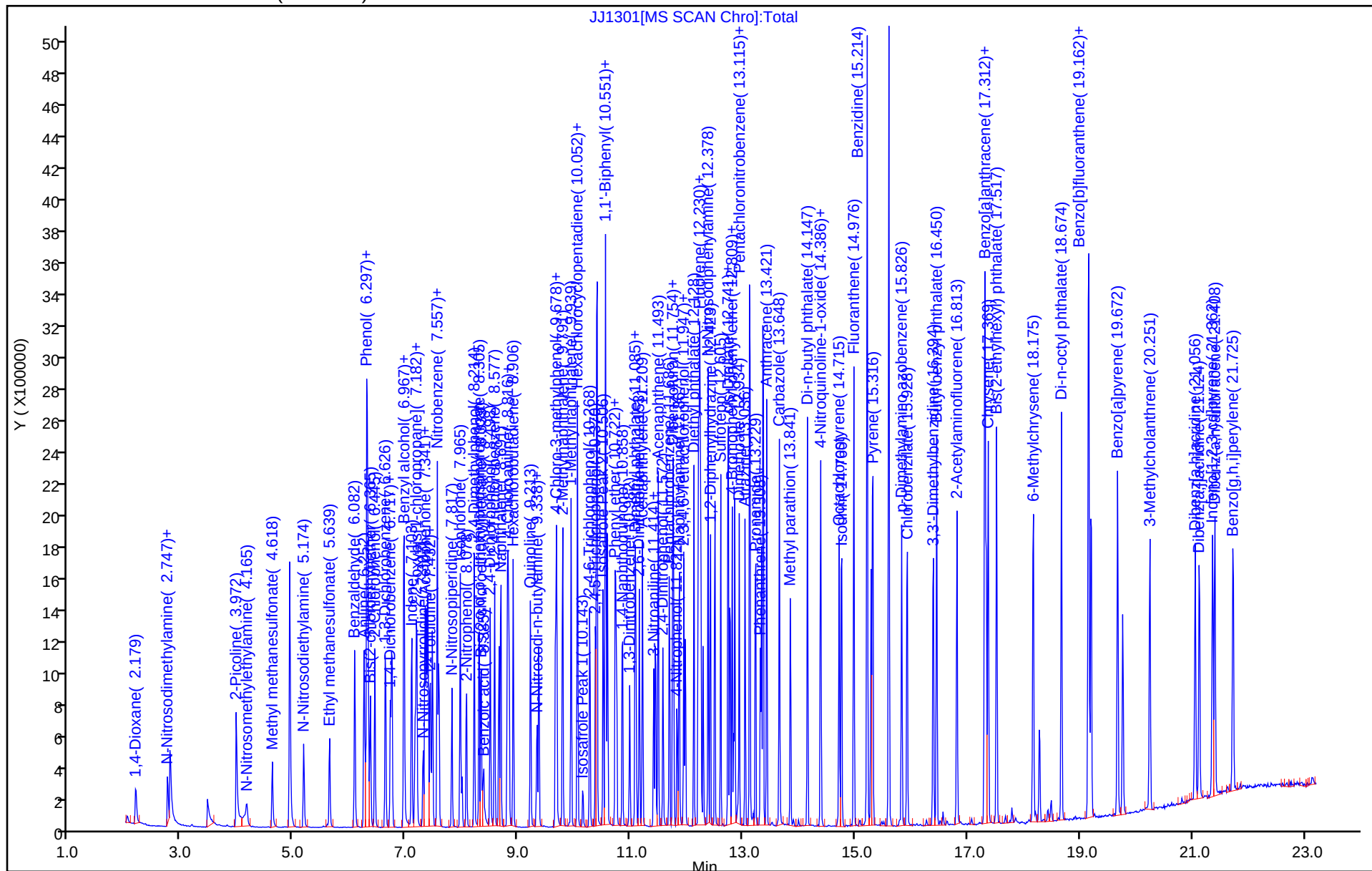
Worklist Smp#: 2

ALS Bottle#: 2

Dil. Factor: 1.0000

Limit Group: MSSV - 8270D E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1301.D

Injection Date: 29-Oct-2020 23:51:30

Instrument ID: HP23264

Lims ID: CCVIS L5

Client ID:

Operator ID: sw30417

ALS Bottle#:

2

Worklist Smp#: 2

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

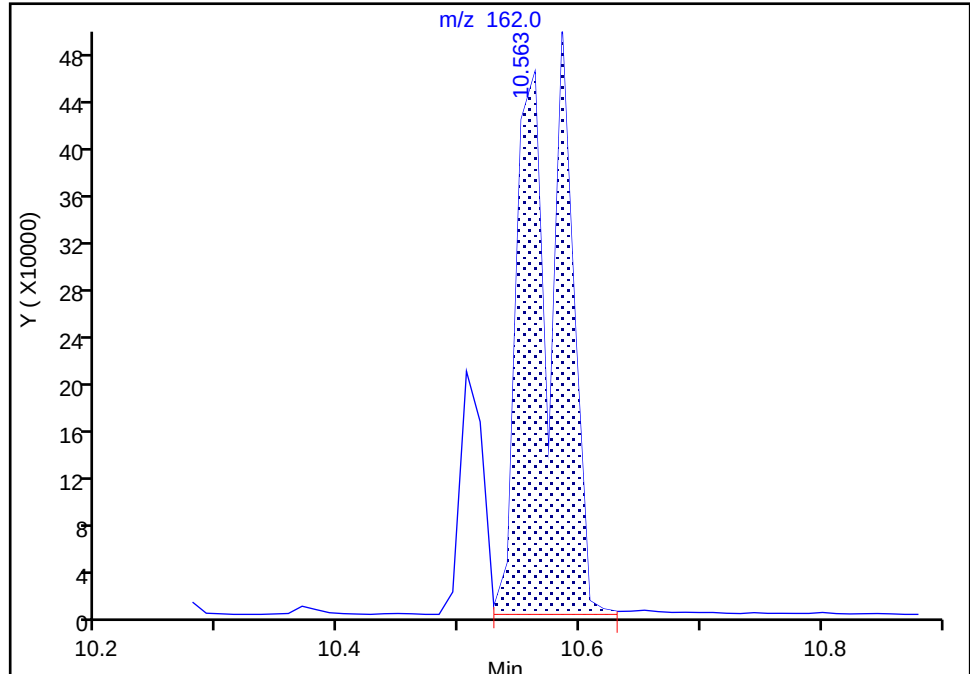
MS SCAN

81 2-Chloronaphthalene, CAS: 91-58-7

Signal: 1

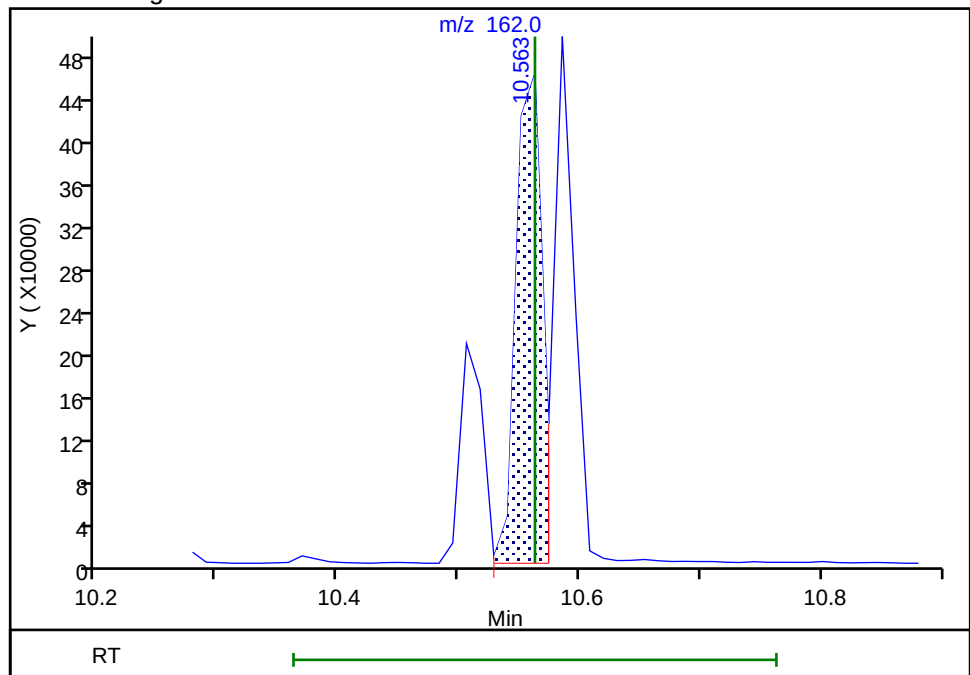
RT: 10.56
Area: 1233293
Amount: 12.763671
Amount Units: ug/ml

Processing Integration Results



RT: 10.56
Area: 679184
Amount: 7.029053
Amount Units: ug/ml

Manual Integration Results



Reviewer: williamss, 30-Oct-2020 00:45:06

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1301.D

Injection Date: 29-Oct-2020 23:51:30

Instrument ID: HP23264

Lims ID: CCVIS L5

Client ID:

Operator ID: sw30417

ALS Bottle#:

2

Worklist Smp#: 2

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

MS SCAN

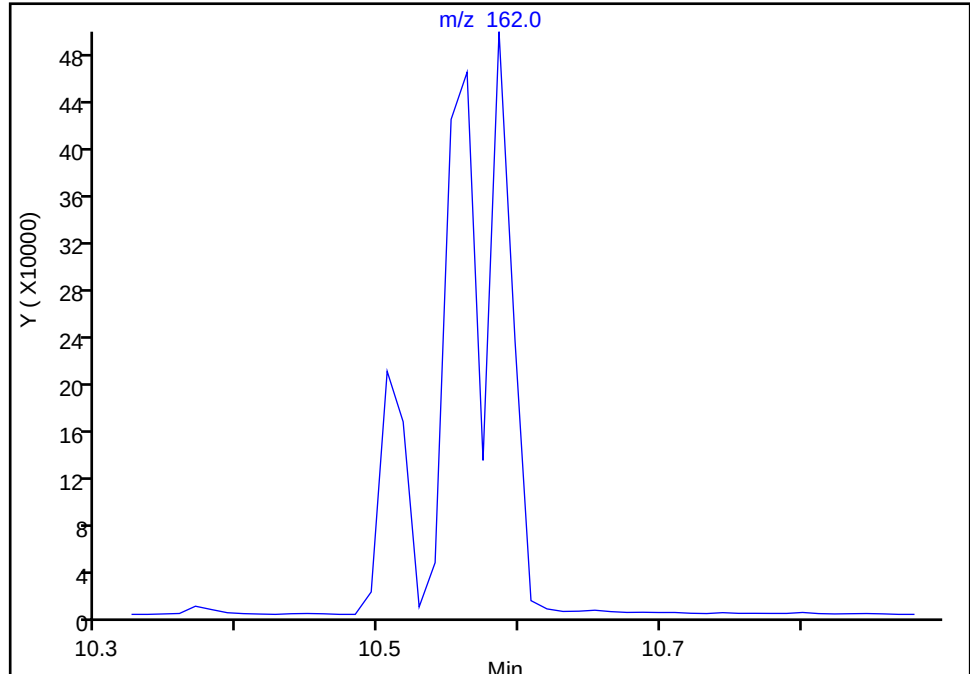
82 1-Chloronaphthalene, CAS: 90-13-1

Signal: 1

Not Detected

Expected RT: 10.59

Processing Integration Results



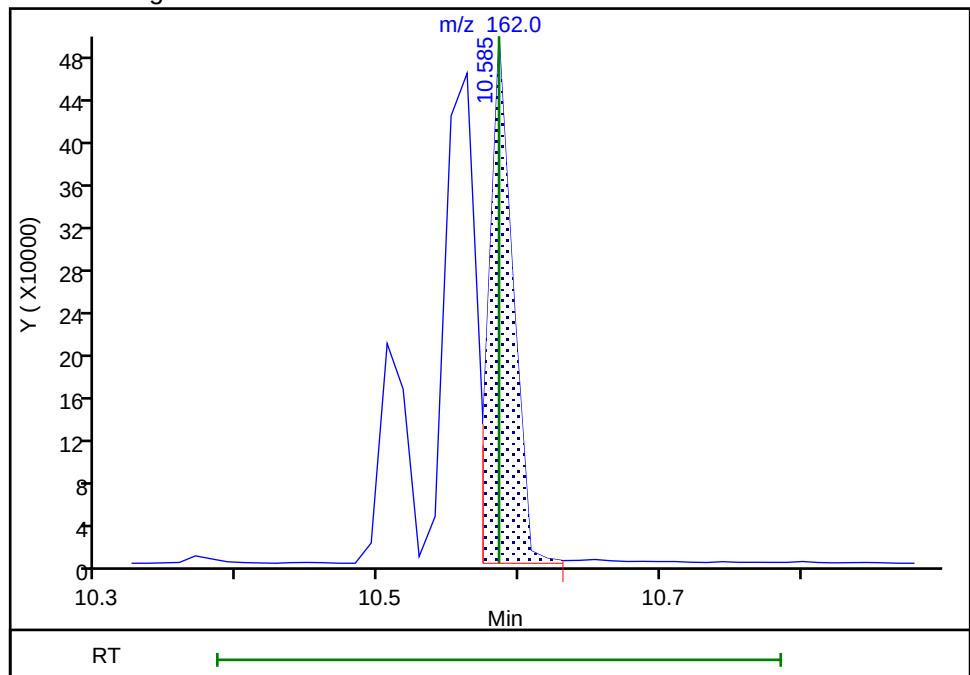
RT: 10.59

Area: 554108

Amount: 6.546015

Amount Units: ug/ml

Manual Integration Results



Reviewer: williamss, 30-Oct-2020 00:45:22

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1301.D

Injection Date: 29-Oct-2020 23:51:30

Instrument ID: HP23264

Lims ID: CCVIS L5

Client ID:

Operator ID: sw30417

ALS Bottle#:

2

Worklist Smp#: 2

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

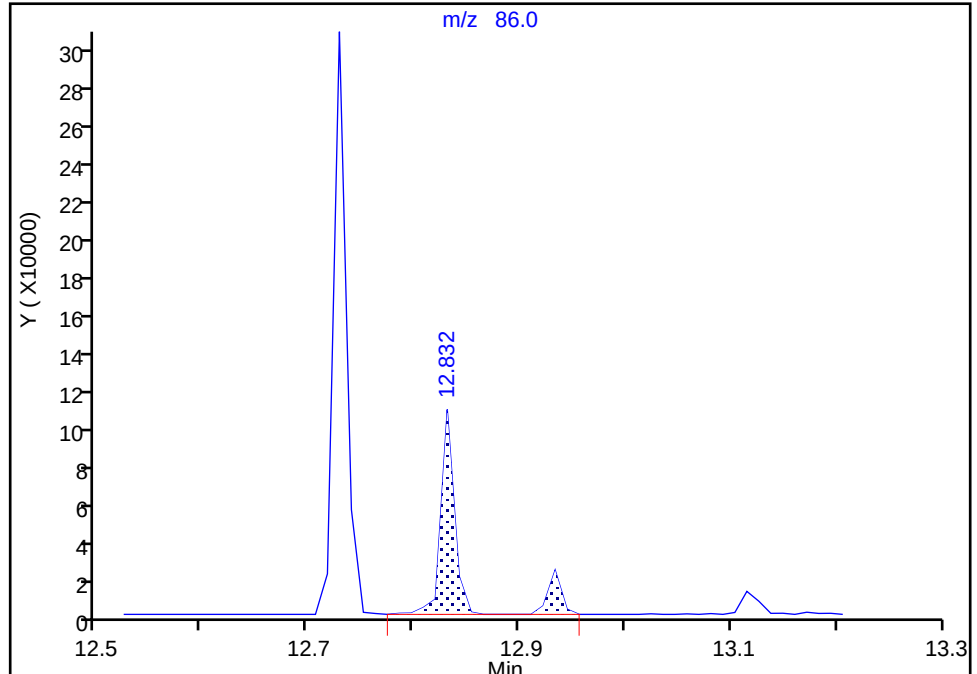
Detector: MS SCAN

120 trans-Diallate, CAS: 17708-58-6

Signal: 1

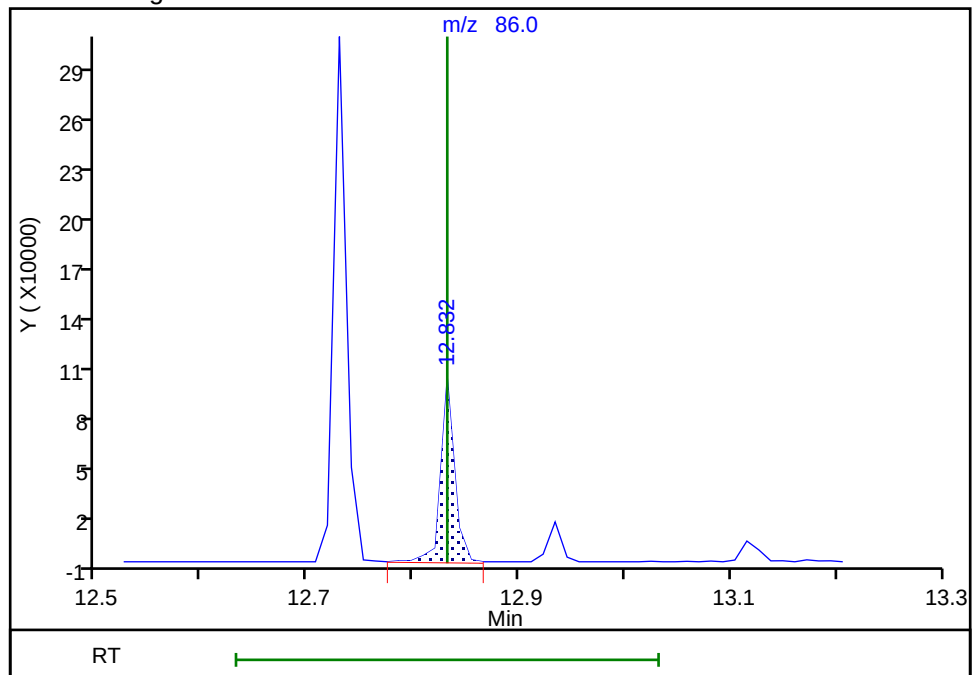
RT: 12.83
Area: 117709
Amount: 2.116952
Amount Units: ug/ml

Processing Integration Results



RT: 12.83
Area: 99993
Amount: 1.798337
Amount Units: ug/ml

Manual Integration Results



Reviewer: williamss, 30-Oct-2020 00:46:59

Audit Action: Manually Integrated

Audit Reason: Split Peak

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Lab Sample ID: CCVIS 410-60388/2 Calibration Date: 10/30/2020 10:15

Instrument ID: HP23264 Calib Start Date: 09/29/2020 19:00

GC Column: DB-5MS 30m 0.25 ID: 0.25 (mm) Calib End Date: 09/29/2020 22:52

Lab File ID: JJ1321.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.8186	0.8083		12.3	12.5	-1.2	20.0
N-Nitrosodimethylamine	Ave	1.209	1.136		11.7	12.5	-6.0	20.0
Pyridine	Ave	2.052	1.905		11.6	12.5	-7.2	20.0
2-Picoline	Ave	1.882	1.822		12.1	12.5	-3.2	20.0
N-Nitrosomethylethylamine	Ave	0.7911	0.7674		12.1	12.5	-3.0	20.0
Methyl methanesulfonate	Ave	1.120	1.134		12.7	12.5	1.2	20.0
N-Nitrosodiethylamine	Ave	0.7410	0.7162		12.1	12.5	-3.4	20.0
Ethyl methanesulfonate	Ave	0.7123	0.6964		12.2	12.5	-2.2	20.0
Benzaldehyde	Ave	1.576	1.334	0.0100	10.6	12.5	-15.4	20.0
Aniline	Ave	2.603	2.528		12.1	12.5	-2.9	20.0
Phenol	Ave	2.331	2.212	0.8000	11.9	12.5	-5.1	20.0
Bis(2-chloroethyl)ether	Ave	1.627	1.507	0.7000	11.6	12.5	-7.3	20.0
2-Chlorophenol	Ave	1.464	1.448	0.8000	12.4	12.5	-1.1	20.0
1,3-Dichlorobenzene	Ave	1.569	1.603		12.8	12.5	2.1	20.0
1,4-Dichlorobenzene	Ave	1.617	1.602		12.4	12.5	-0.9	20.0
1,2-Dichlorobenzene	Ave	1.532	1.498		12.2	12.5	-2.2	20.0
Benzyl alcohol	Ave	1.016	0.9626		11.8	12.5	-5.2	20.0
Indene	Ave	2.270	2.108		11.6	12.5	-7.1	20.0
2,2'-oxybis[1-chloropropane]	Ave	2.328	2.005	0.0100	10.8	12.5	-13.9	20.0
2-Methylphenol	Ave	1.428	1.433	0.7000	12.5	12.5	0.4	20.0
N-Nitrosopyrrolidine	Ave	0.7823	0.7714		12.3	12.5	-1.4	20.0
Acetophenone	Ave	2.410	2.307	0.0100	12.0	12.5	-4.3	20.0
N-Nitrosodi-n-propylamine	Ave	1.428	1.391	0.5000	12.2	12.5	-2.6	20.0
N-Nitrosomorpholine	Ave	1.314	1.271		12.1	12.5	-3.3	20.0
o-Toluidine	Ave	2.404	2.379		12.4	12.5	-1.1	20.0
4-Methylphenol (and/or 3-Methylphenol)	Ave	1.647	1.645	0.6000	12.5	12.5	-0.1	20.0
Hexachloroethane	Ave	0.8033	0.7747	0.3000	12.1	12.5	-3.6	20.0
Nitrobenzene	Ave	0.5497	0.5377	0.2000	12.2	12.5	-2.2	20.0
N-Nitrosopiperidine	Ave	0.2013	0.2078		12.9	12.5	3.2	20.0
Isophorone	Ave	0.9597	0.9410	0.4000	12.3	12.5	-2.0	20.0
2-Nitrophenol	Ave	0.2008	0.2128	0.1000	13.2	12.5	6.0	20.0
2,4-Dimethylphenol	Ave	0.4736	0.4921	0.2000	13.0	12.5	3.9	20.0
o,o',o''-Triethylphosphorothioate	Ave	0.1788	0.1975		13.8	12.5	10.5	20.0
Bis(2-chloroethoxy)methane	Ave	0.6521	0.5242	0.3000	10.0	12.5	-19.6	20.0
Benzoic acid	Lin		0.2109		9.36	12.5	-25.2*	20.0
2,4-Dichlorophenol	Ave	0.3182	0.3560	0.2000	14.0	12.5	11.9	20.0
1,2,4-Trichlorobenzene	Ave	0.3388	0.3647		13.5	12.5	7.6	20.0
Naphthalene	Ave	1.049	1.098	0.7000	13.1	12.5	4.6	20.0
4-Chloroaniline	Ave	0.4315	0.4494	0.0100	13.0	12.5	4.1	20.0
2,6-Dichlorophenol	Ave	0.3110	0.3371		13.5	12.5	8.4	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-60388/2 Calibration Date: 10/30/2020 10:15
 Instrument ID: HP23264 Calib Start Date: 09/29/2020 19:00
 GC Column: DB-5MS 30m 0.25 ID: 0.25 (mm) Calib End Date: 09/29/2020 22:52
 Lab File ID: JJ1321.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachloropropene	Ave	0.2711	0.2891		13.3	12.5	6.6	20.0
Hexachlorobutadiene	Ave	0.2254	0.2416	0.0100	13.4	12.5	7.2	20.0
Quinoline	Ave	0.6535	0.7061		13.5	12.5	8.1	20.0
Caprolactam	Ave	0.1038	0.1176	0.0100	14.2	12.5	13.3	20.0
N-Nitrosodi-n-butylamine	Ave	0.3590	0.4315		15.0	12.5	20.2*	20.0
4-Chloro-3-methylphenol	Ave	0.3723	0.4255	0.2000	14.3	12.5	14.3	20.0
Safrole, Total	Ave	0.2917	0.3240		13.9	12.5	11.1	20.0
2-Methylnaphthalene	Ave	0.6973	0.7704	0.4000	13.8	12.5	10.5	20.0
1-Methylnaphthalene	Ave	0.6557	0.7188		13.7	12.5	9.6	20.0
Hexachlorocyclopentadiene	Ave	0.4333	0.4289	0.0500	12.4	12.5	-1.0	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.6618	0.6642	0.0100	12.5	12.5	0.4	20.0
Isosafrole Peak 1	Ave	0.6517	0.6265			2.00	-3.9	20.0
2,4,6-Trichlorophenol	Ave	0.4507	0.4678	0.2000	13.0	12.5	3.8	20.0
2,4,5-Trichlorophenol	Ave	0.4693	0.5062	0.2000	13.5	12.5	7.9	20.0
Isosafrole Peak 2	Ave	0.6981	0.7015		10.6	10.5	0.5	20.0
1,1'-Biphenyl	Ave	1.606	1.580	0.0100	12.3	12.5	-1.6	20.0
2-Chloronaphthalene	Ave	1.392	1.280	0.8000	11.5	12.5	-8.0	20.0
1-Chloronaphthalene	Ave	1.220	1.364		14.0	12.5	11.8	20.0
Diphenyl ether	Ave	0.9256	0.9433		12.7	12.5	1.9	20.0
2-Nitroaniline	Ave	0.4325	0.4358	0.0100	12.6	12.5	0.8	20.0
1,4-Naphthoquinone	Ave	0.5185	0.5209			12.5	0.5	20.0
1,3-Dinitrobenzene	Ave	0.2151	0.2158		12.5	12.5	0.3	20.0
Dimethyl phthalate	Ave	1.513	1.502	0.0100	12.4	12.5	-0.7	20.0
1,4-Dinitrobenzene	Ave	0.2327	0.2366		12.7	12.5	1.7	20.0
2,6-Dinitrotoluene	Ave	0.3379	0.3686	0.2000	13.6	12.5	9.1	20.0
Acenaphthylene	Ave	1.776	1.795	0.9000	12.6	12.5	1.1	20.0
3-Nitroaniline	Ave	0.3300	0.3479	0.0100	13.2	12.5	5.4	20.0
Acenaphthene	Ave	1.280	1.239	0.9000	12.1	12.5	-3.2	20.0
2,4-Dinitrophenol	Ave	0.2108	0.2442	0.0100	14.5	12.5	15.8	20.0
Pentachlorobenzene	Ave	0.5367	0.5755		13.4	12.5	7.2	20.0
Dibenzofuran	Ave	1.842	1.907	0.8000	12.9	12.5	3.5	20.0
2,4-Dinitrotoluene	Ave	0.4775	0.5115	0.2000	13.4	12.5	7.1	20.0
4-Nitrophenol	Ave	0.4143	0.3939	0.0100	11.9	12.5	-4.9	20.0
1-Naphthylamine	Ave	1.294	1.224		11.8	12.5	-5.4	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3432	0.3798	0.0100	13.8	12.5	10.7	20.0
2-Naphthylamine	Ave	1.205	1.230		12.8	12.5	2.0	20.0
Diethyl phthalate	Ave	1.524	1.570	0.0100	12.9	12.5	3.1	20.0
Fluorene	Ave	1.447	1.498	0.9000	12.9	12.5	3.6	20.0
4-Chlorophenyl-phenyl ether	Ave	0.7225	0.7348	0.4000	12.7	12.5	1.7	20.0
Thionazin	Ave	0.3089	0.3301		13.4	12.5	6.9	20.0
5-Nitro-o-toluidine	Ave	0.3857	0.4171		13.5	12.5	8.1	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Lab Sample ID: CCVIS 410-60388/2 Calibration Date: 10/30/2020 10:15

Instrument ID: HP23264 Calib Start Date: 09/29/2020 19:00

GC Column: DB-5MS 30m 0.25 ID: 0.25 (mm) Calib End Date: 09/29/2020 22:52

Lab File ID: JJ1321.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitroaniline	Ave	0.3579	0.3208	0.0100	11.2	12.5	-10.4	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1679	0.1698	0.0100	12.6	12.5	1.1	20.0
N-Nitrosodiphenylamine	Ave	0.7290	0.7358	0.0100	12.6	12.5	0.9	20.0
1,2-Diphenylhydrazine	Ave	1.167	1.067		11.4	12.5	-8.6	20.0
Sulfotepp	Ave	0.2063	0.2055		12.4	12.5	-0.4	20.0
cis-Diallate	Ave	0.4406	0.3905		8.20	9.25	-11.4	20.0
Phorate	Ave	0.6739	0.5885		10.9	12.5	-12.7	20.0
Phenacetin	Ave	0.5041	0.4961		12.3	12.5	-1.6	20.0
4-Bromophenyl-phenylether	Ave	0.2235	0.2385	0.1000	13.3	12.5	6.7	20.0
trans-Diallate	Ave	0.4362	0.3910		2.91	3.25	-10.4	20.0
Hexachlorobenzene	Ave	0.2391	0.2408	0.1000	12.6	12.5	0.7	20.0
Dimethoate	Ave	0.4198	0.3922		11.7	12.5	-6.6	20.0
Atrazine	Ave	0.2400	0.2341	0.0100	12.2	12.5	-2.5	20.0
4-Aminobiphenyl	Ave	0.6656	0.6325		11.9	12.5	-5.0	20.0
Pentachloronitrobenzene	Ave	0.1520	0.1618		13.3	12.5	6.5	20.0
Pentachlorophenol	Ave	0.1559	0.1797	0.0500	14.4	12.5	15.3	20.0
Pronamide	Ave	0.4090	0.4341		13.3	12.5	6.1	20.0
Dinoseb	Ave	0.1968	0.2402		15.3	12.5	22.1*	20.0
Phenanthrene	Ave	1.189	1.215	0.7000	12.8	12.5	2.2	20.0
Anthracene	Ave	1.189	1.247	0.7000	13.1	12.5	4.9	20.0
Carbazole	Ave	1.129	1.140	0.0100	12.6	12.5	1.0	20.0
Methyl parathion	Ave	0.3468	0.3443		12.4	12.5	-0.7	20.0
Di-n-butyl phthalate	Ave	1.578	1.560	0.0100	12.4	12.5	-1.1	20.0
Parathion	Ave	0.2305	0.2331		12.6	12.5	1.1	20.0
4-Nitroquinoline-1-oxide	Lin1		0.1424			12.5	-12.5	20.0
Octachlorostyrene	Ave	0.1130	0.1250		13.8	12.5	10.7	20.0
Isodrin	Ave	0.1756	0.1718		12.2	12.5	-2.2	20.0
Fluoranthene	Ave	1.351	1.519	0.6000	14.1	12.5	12.4	20.0
Benidine	Ave	0.8231	0.8018		36.5	37.5	-2.6	20.0
Pyrene	Ave	1.373	1.387	0.6000	12.6	12.5	1.0	20.0
p-Dimethylamino azobenzene	Ave	0.2227	0.2402		13.5	12.5	7.9	20.0
Chlorobenzilate	Ave	0.5206	0.5357		12.9	12.5	2.9	20.0
3,3'-Dimethylbenzidine	Ave	0.8687	0.8948			12.5	3.0	20.0
Butylbenzylphthalate	Ave	0.6943	0.6663	0.0100	12.0	12.5	-4.0	20.0
2-Acetylaminofluorene	Ave	0.5517	0.5651		12.8	12.5	2.4	20.0
Benzo[a]anthracene	Ave	1.171	1.264	0.8000	13.5	12.5	7.9	20.0
3,3'-Dichlorobenzidine	Ave	0.4566	0.4973	0.0100	13.6	12.5	8.9	20.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.2286	0.2504			12.5	9.5	20.0
Chrysene	Ave	1.152	1.205	0.7000	13.1	12.5	4.6	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.9755	0.9428	0.0100	12.1	12.5	-3.3	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-60388/2 Calibration Date: 10/30/2020 10:15
 Instrument ID: HP23264 Calib Start Date: 09/29/2020 19:00
 GC Column: DB-5MS 30m 0.25 ID: 0.25 (mm) Calib End Date: 09/29/2020 22:52
 Lab File ID: JJ1321.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
6-Methylchrysene	Ave	0.8176	0.8965		13.7	12.5	9.7	20.0
Di-n-octyl phthalate	Ave	1.773	1.732	0.0100	12.2	12.5	-2.3	20.0
Benzo[b]fluoranthene	Ave	1.255	1.354	0.7000	13.5	12.5	7.9	20.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5657	0.5735		12.7	12.5	1.4	20.0
Benzo[k]fluoranthene	Ave	1.139	1.169	0.7000	12.8	12.5	2.7	20.0
Benzo[a]pyrene	Ave	1.196	1.218	0.7000	12.7	12.5	1.8	20.0
3-Methylcholanthrene	Ave	0.5731	0.5982		13.0	12.5	4.4	20.0
Dibenz[a,h]acridine	Ave	0.8685	0.8411		12.1	12.5	-3.2	20.0
Dibenz[a,j]acridine	Ave	0.9105	0.8335		11.4	12.5	-8.5	20.0
Indeno[1,2,3-cd]pyrene	Ave	0.9803	0.9770	0.5000	12.5	12.5	-0.3	20.0
Dibenz(a,h)anthracene	Ave	0.997	1.021	0.4000	12.8	12.5	2.4	20.0
Benzo[g,h,i]perylene	Ave	1.032	1.016	0.5000	12.3	12.5	-1.6	20.0
2-Fluorophenol (Surr)	Ave	1.509	1.511		25.0	25.0	0.1	20.0
Phenol-d5 (Surr)	Ave	2.053	1.937		23.6	25.0	-5.7	20.0
Nitrobenzene-d5 (Surr)	Ave	0.5683	0.5538		24.4	25.0	-2.6	20.0
2-Fluorobiphenyl (Surr)	Ave	1.511	1.515		25.1	25.0	0.3	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1903	0.2112		27.8	25.0	11.0	20.0
p-Terphenyl-d14 (Surr)	Ave	0.9220	0.9929		26.9	25.0	7.7	20.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1321.D
 Lims ID: CCVIS L6
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 30-Oct-2020 10:15:30 ALS Bottle#: 2 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCVIS L6
 Misc. Info.: 410-0014287-001
 Operator ID: knb25316 Instrument ID: HP23264
 Sublist: chrom-MSSemi_HP23264*sub7
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 30-Oct-2020 11:06:32 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1008

First Level Reviewer: bekk

Date: 30-Oct-2020 11:06:32

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	2.191	2.191	0.000	95	440051	12.5	12.3	
3 N-Nitrosodimethylamine	74	2.758	2.758	0.000	92	618583	12.5	11.7	
4 Pyridine	79	2.781	2.781	0.000	95	1037286	12.5	11.6	
8 2-Picoline	93	3.960	3.960	0.000	93	992100	12.5	12.1	
10 N-Nitrosomethylethylamine	88	4.165	4.165	0.000	96	417774	12.5	12.1	
11 Methyl methanesulfonate	80	4.618	4.618	0.000	89	617188	12.5	12.7	
\$ 12 2-Fluorophenol	112	4.925	4.925	0.000	92	1645223	25.0	25.0	
13 N-Nitrosodiethylamine	102	5.186	5.186	0.000	94	389861	12.5	12.1	
15 Ethyl methanesulfonate	109	5.639	5.639	0.000	94	379129	12.5	12.2	
19 Benzaldehyde	77	6.082	6.082	0.000	92	725961	12.5	10.6	
23 Aniline	93	6.252	6.252	0.000	96	1376164	12.5	12.1	
\$ 20 Phenol-d5	99	6.297	6.297	0.000	92	2108453	25.0	23.6	
21 Phenol	94	6.309	6.309	0.000	93	1204270	12.5	11.9	
24 Bis(2-chloroethyl)ether	93	6.365	6.365	0.000	93	820600	12.5	11.6	
25 2-Chlorophenol	128	6.445	6.445	0.000	94	788253	12.5	12.4	
S 46 Dinitrotoluene	165				0		25.0	27.0	
26 1,3-Dichlorobenzene	146	6.638	6.638	0.000	92	872707	12.5	12.8	
* 28 1,4-Dichlorobenzene-d4	152	6.728	6.728	0.000	96	217753	5.00	5.00	
29 1,4-Dichlorobenzene	146	6.751	6.751	0.000	88	872259	12.5	12.4	
30 Benzyl alcohol	108	6.967	6.967	0.000	80	524030	12.5	11.8	
31 1,2-Dichlorobenzene	146	6.967	6.967	0.000	88	815324	12.5	12.2	
34 Indene	115	7.103	7.103	0.000	89	1147764	12.5	11.6	
35 2,2'-oxybis[1-chloropropane]	45	7.171	7.171	0.000	90	1091260	12.5	10.8	
33 2-Methylphenol	108	7.194	7.194	0.000	95	780028	12.5	12.5	
36 N-Nitrosopyrrolidine	100	7.318	7.318	0.000	83	419958	12.5	12.3	
38 Acetophenone	105	7.341	7.341	0.000	92	1255934	12.5	12.0	
39 N-Nitrosodi-n-propylamine	70	7.375	7.375	0.000	80	757063	12.5	12.2	
40 N-Nitrosomorpholine	56	7.386	7.386	0.000	90	691820	12.5	12.1	
41 2-Toluidine	106	7.398	7.398	0.000	97	1294935	12.5	12.4	
37 4-Methylphenol	108	7.432	7.432	0.000	80	895327	12.5	12.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
42 Hexachloroethane	117	7.466	7.466	0.000	92	421751	12.5	12.1	
\$ 43 Nitrobenzene-d5	82	7.568	7.568	0.000	90	2290002	25.0	24.4	
44 Nitrobenzene	77	7.591	7.591	0.000	89	1111673	12.5	12.2	
45 N-Nitrosopiperidine	114	7.829	7.829	0.000	82	429687	12.5	12.9	
47 Isophorone	82	7.965	7.965	0.000	99	1945545	12.5	12.3	
48 2-Nitrophenol	139	8.078	8.078	0.000	91	439992	12.5	13.2	
49 2,4-Dimethylphenol	107	8.214	8.214	0.000	98	1017520	12.5	13.0	
51 o,o',o"-Triethylphosphorothioat	198	8.305	8.305	0.000	89	408288	12.5	13.8	
52 Bis(2-chloroethoxy)methane	93	8.339	8.339	0.000	96	1083882	12.5	10.0	
50 Benzoic acid	105	8.407	8.407	0.000	90	436087	12.5	9.36	
54 2,4-Dichlorophenol	162	8.498	8.498	0.000	96	736113	12.5	14.0	
55 1,2,4-Trichlorobenzene	180	8.577	8.577	0.000	91	754003	12.5	13.5	
* 56 Naphthalene-d8	136	8.657	8.657	0.000	99	827032	5.00	5.00	
57 Naphthalene	128	8.691	8.691	0.000	98	2269668	12.5	13.1	
58 4-Chloroaniline	127	8.804	8.804	0.000	93	929069	12.5	13.0	
59 2,6-Dichlorophenol	162	8.816	8.816	0.000	90	696989	12.5	13.5	
61 Hexachloropropene	213	8.838	8.838	0.000	98	597657	12.5	13.3	
62 Hexachlorobutadiene	225	8.906	8.906	0.000	94	499555	12.5	13.4	
63 Quinoline	129	9.224	9.224	0.000	95	1460016	12.5	13.5	
65 N-Nitrosodi-n-butylamine	84	9.372	9.372	0.000	89	892264	12.5	15.0	
64 Caprolactam	113	9.372	9.372	0.000	48	243162	12.5	14.2	
S 60 Diallate	86				0		12.5	11.1	
67 4-Chloro-3-methylphenol	107	9.667	9.667	0.000	92	879707	12.5	14.3	
68 Safrole, Total	162	9.689	9.689	0.000	86	669815	12.5	13.9	
69 2-Methylnaphthalene	142	9.791	9.791	0.000	91	1592798	12.5	13.8	
70 1-Methylnaphthalene	142	9.939	9.939	0.000	92	1486176	12.5	13.7	
71 Hexachlorocyclopentadiene	237	10.052	10.052	0.000	96	508806	12.5	12.4	
72 1,2,4,5-Tetrachlorobenzene	216	10.064	10.064	0.000	96	788030	12.5	12.5	
73 Isosafrole Peak 1	162	10.154	10.154	0.000	84	118915	2.00	1.92	
74 2,4,6-Trichlorophenol	196	10.279	10.279	0.000	93	555026	12.5	13.0	
76 2,4,5-Trichlorophenol	196	10.381	10.381	0.000	92	600572	12.5	13.5	
\$ 77 2-Fluorobiphenyl (Surr)	172	10.404	10.404	0.000	99	3595365	25.0	25.1	
78 Isosafrole Peak 2	162	10.517	10.517	0.000	87	699028	10.5	10.6	
80 1,1'-Biphenyl	154	10.551	10.551	0.000	95	1873953	12.5	12.3	
81 2-Chloronaphthalene	162	10.563	10.563	0.000	67	1518719	12.5	11.5	
82 1-Chloronaphthalene	162	10.597	10.597	0.000	98	1618078	12.5	14.0	
83 Phenyl ether	170	10.733	10.733	0.000	83	1119098	12.5	12.7	
84 2-Nitroaniline	138	10.756	10.756	0.000	75	516958	12.5	12.6	
85 1,4-Naphthoquinone	158	10.858	10.858	0.000	70	618012	12.5	12.6	
89 1,3-Dinitrobenzene	168	10.994	10.994	0.000	82	255999	12.5	12.5	
87 Dimethyl phthalate	163	11.085	11.085	0.000	95	1781484	12.5	12.4	
86 1,4-Dinitrobenzene	168	11.107	11.107	0.000	86	280682	12.5	12.7	
S 79 Isosafrole	162				0		12.5	12.5	
90 2,6-Dinitrotoluene	165	11.164	11.164	0.000	89	437318	12.5	13.6	
91 Acenaphthylene	152	11.221	11.221	0.000	98	2129851	12.5	12.6	
92 3-Nitroaniline	138	11.414	11.414	0.000	89	412727	12.5	13.2	
* 93 Acenaphthene-d10	164	11.448	11.448	0.000	94	474545	5.00	5.00	
94 Acenaphthene	153	11.493	11.493	0.000	94	1470116	12.5	12.1	
95 2,4-Dinitrophenol	184	11.584	11.584	0.000	84	289655	12.5	14.5	
99 Pentachlorobenzene	250	11.697	11.697	0.000	96	682731	12.5	13.4	
101 Dibenzofuran	168	11.754	11.754	0.000	94	2262803	12.5	12.9	
100 2,4-Dinitrotoluene	165	11.777	11.777	0.000	89	606767	12.5	13.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
97 4-Nitrophenol	109	11.822	11.822	0.000	85	467260	12.5	11.9	
102 1-Naphthylamine	143	11.867	11.867	0.000	96	1452619	12.5	11.8	
103 2,3,4,6-Tetrachlorophenol	232	11.958	11.958	0.000	80	450559	12.5	13.8	
104 2-Naphthylamine	143	11.981	11.981	0.000	95	1458777	12.5	12.8	
105 Diethyl phthalate	149	12.128	12.128	0.000	96	1862963	12.5	12.9	
107 Fluorene	166	12.208	12.208	0.000	95	1777453	12.5	12.9	
108 4-Nitroaniline	138	12.264	12.264	0.000	75	380608	12.5	11.2	M
109 4-Chlorophenyl phenyl ether	204	12.230	12.230	0.000	93	871761	12.5	12.7	
106 Thionazin	107	12.230	12.230	0.000	73	391646	12.5	13.4	
110 N-Nitro-o-toluidine	152	12.253	12.253	0.000	92	494816	12.5	13.5	
111 4,6-Dinitro-2-methylphenol	198	12.298	12.298	0.000	72	372090	12.5	12.6	
112 N-Nitrosodiphenylamine	169	12.389	12.389	0.000	60	1612824	12.5	12.6	
113 1,2-Diphenylhydrazine	77	12.423	12.423	0.000	41	2337758	12.5	11.4	
\$ 114 2,4,6-Tribromophenol	330	12.503	12.503	0.000	77	501226	25.0	27.8	
115 Sulfotepp	97	12.605	12.605	0.000	77	450384	12.5	12.4	
116 cis-Diallate	86	12.729	12.729	0.000	92	633419	9.25	8.20	
117 Phorate	75	12.741	12.741	0.000	93	1289903	12.5	10.9	
118 Phenacetin	108	12.786	12.786	0.000	91	1087425	12.5	12.3	
119 4-Bromophenyl phenyl ether	248	12.809	12.809	0.000	72	522786	12.5	13.3	
120 trans-Diallate	86	12.832	12.832	0.000	91	222828	3.25	2.91	
121 Hexachlorobenzene	284	12.866	12.866	0.000	90	527872	12.5	12.6	
122 Dimethoate	87	12.945	12.945	0.000	92	859610	12.5	11.7	
123 Atrazine	200	13.047	13.047	0.000	92	513006	12.5	12.2	
126 Pentachloronitrobenzene	237	13.126	13.126	0.000	53	354716	12.5	13.3	
124 Pentachlorophenol	266	13.126	13.126	0.000	67	393931	12.5	14.4	
125 4-Aminobiphenyl	169	13.126	13.126	0.000	90	1386364	12.5	11.9	
127 Pronamide	173	13.229	13.229	0.000	90	951433	12.5	13.3	
* 128 Phenanthrene-d10	188	13.331	13.331	0.000	97	876740	5.00	5.00	
129 Dinoseb	211	13.365	13.365	0.000	70	526580	12.5	15.3	
130 Phenanthrene	178	13.365	13.365	0.000	98	2663506	12.5	12.8	
131 Anthracene	178	13.433	13.433	0.000	97	2733688	12.5	13.1	
132 Carbazole	167	13.648	13.648	0.000	97	2497840	12.5	12.6	
133 Methyl parathion	109	13.852	13.852	0.000	93	754549	12.5	12.4	
134 Di-n-butyl phthalate	149	14.159	14.159	0.000	100	3418414	12.5	12.4	
135 Ethyl Parathion	109	14.386	14.386	0.000	81	510901	12.5	12.6	
136 4-Nitroquinoline-1-oxide	190	14.397	14.397	0.000	88	312207	12.5	10.9	
137 Octachlorostyrene	308	14.715	14.715	0.000	85	273978	12.5	13.8	
138 Isodrin	193	14.760	14.760	0.000	92	376472	12.5	12.2	
139 Fluoranthene	202	14.976	14.976	0.000	97	3329011	12.5	14.1	
140 Benzidine	184	15.225	15.225	0.000	99	5600450	37.5	36.5	
* 141 Pyrene-d10 (IS)	212	15.282	15.282	0.000	98	931290	5.00	5.00	
142 Pyrene	202	15.316	15.316	0.000	98	3229185	12.5	12.6	
\$ 143 p-Terphenyl-d14	244	15.611	15.611	0.000	98	4623435	25.0	26.9	
144 p-Dimethylamino azobenzene	225	15.838	15.838	0.000	92	559309	12.5	13.5	
145 Chlorobenzilate	139	15.928	15.928	0.000	82	1247201	12.5	12.9	
146 3,3'-Dimethylbenzidine	212	16.394	16.394	0.000	99	2083365	12.5	12.9	
147 Butyl benzyl phthalate	149	16.462	16.462	0.000	96	1551394	12.5	12.0	
148 2-Acetylaminofluorene	181	16.825	16.825	0.000	92	1315765	12.5	12.8	
149 Benzo[a]anthracene	228	17.312	17.312	0.000	98	2943403	12.5	13.5	
150 3,3'-Dichlorobenzidine	252	17.324	17.324	0.000	74	1157941	12.5	13.6	
151 4,4'-Methylene bis(2-chloroani	231	17.335	17.335	0.000	93	582897	12.5	13.7	
152 Chrysene	228	17.381	17.381	0.000	96	2804425	12.5	13.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
153 Bis(2-ethylhexyl) phthalate	149	17.517	17.517	0.000	96	2195128	12.5	12.1	
154 6-Methylchrysene	242	18.175	18.175	0.000	98	2087363	12.5	13.7	
155 Di-n-octyl phthalate	149	18.674	18.674	0.000	99	3992436	12.5	12.2	
156 Benzo[b]fluoranthene	252	19.162	19.162	0.000	96	3121451	12.5	13.5	
157 7,12-Dimethylbenz(a)anthracene	256	19.173	19.173	0.000	89	1322259	12.5	12.7	
158 Benzo[k]fluoranthene	252	19.218	19.218	0.000	98	2694543	12.5	12.8	
159 Benzo[a]pyrene	252	19.683	19.683	0.000	76	2807787	12.5	12.7	
* 160 Perylene-d12	264	19.774	19.774	0.000	99	922181	5.00	5.00	
161 3-Methylcholanthrene	268	20.262	20.262	0.000	90	1379222	12.5	13.0	
162 Dibenz[a,h]acridine	279	21.067	21.067	0.000	91	1939215	12.5	12.1	
163 Dibenz[a,j]acridine	279	21.147	21.147	0.000	96	1921641	12.5	11.4	
164 Indeno[1,2,3-cd]pyrene	276	21.374	21.374	0.000	98	2252317	12.5	12.5	M
165 Dibenz(a,h)anthracene	278	21.419	21.419	0.000	91	2353522	12.5	12.8	
166 Benzo[g,h,i]perylene	276	21.748	21.748	0.000	99	2341854	12.5	12.3	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSS_RV8270_6_00009

Amount Added: 1.00

Units: mL

Report Date: 30-Oct-2020 11:06:36

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1321.D

Injection Date: 30-Oct-2020 10:15:30

Instrument ID: HP23264

Operator ID: knb25316

Lims ID: CCVIS L6

Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 ul

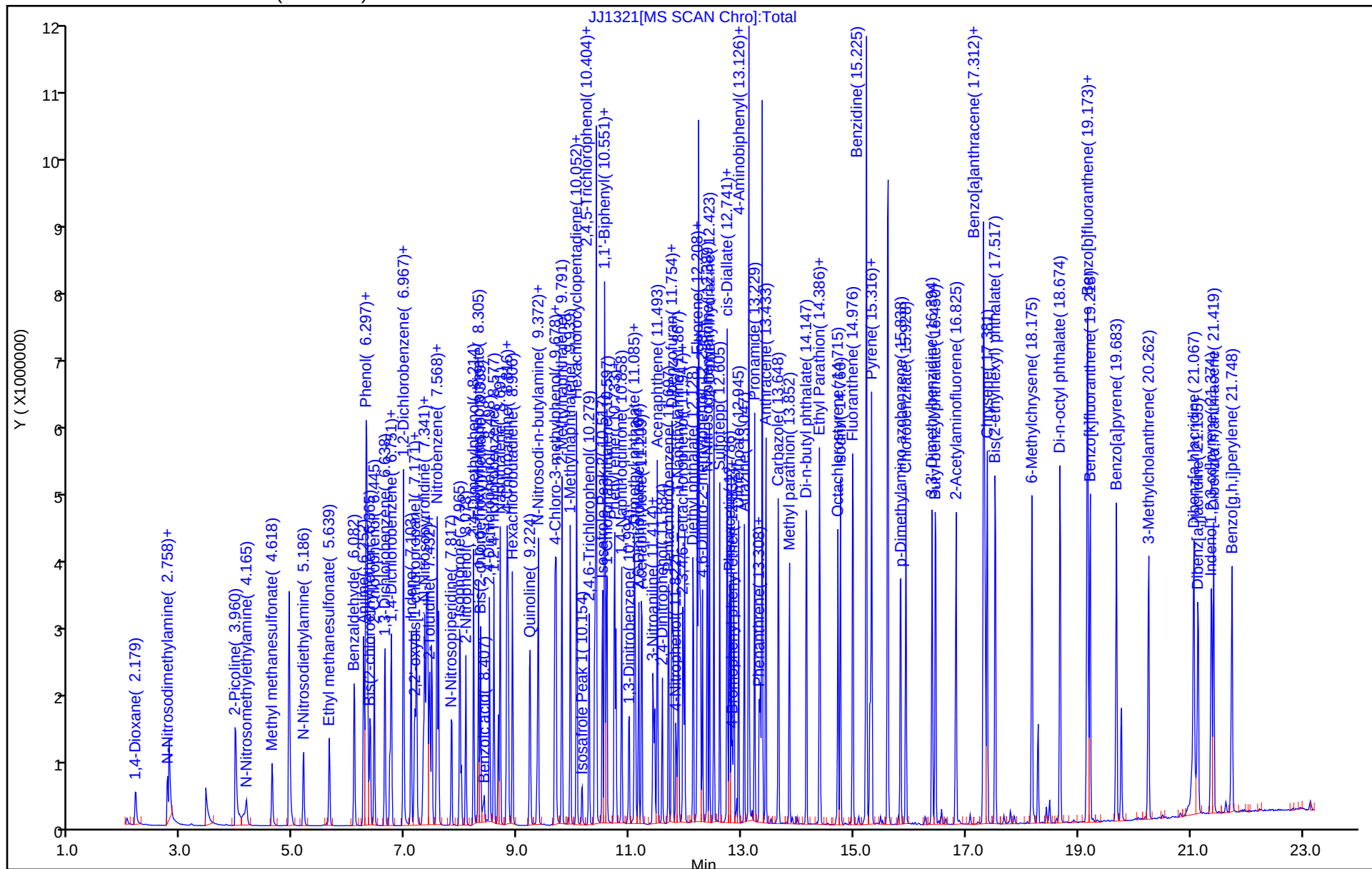
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1321.D

Injection Date: 30-Oct-2020 10:15:30

Instrument ID: HP23264

Lims ID: CCVIS L6

Client ID:

Operator ID: knb25316

ALS Bottle#:

2

Worklist Smp#: 2

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

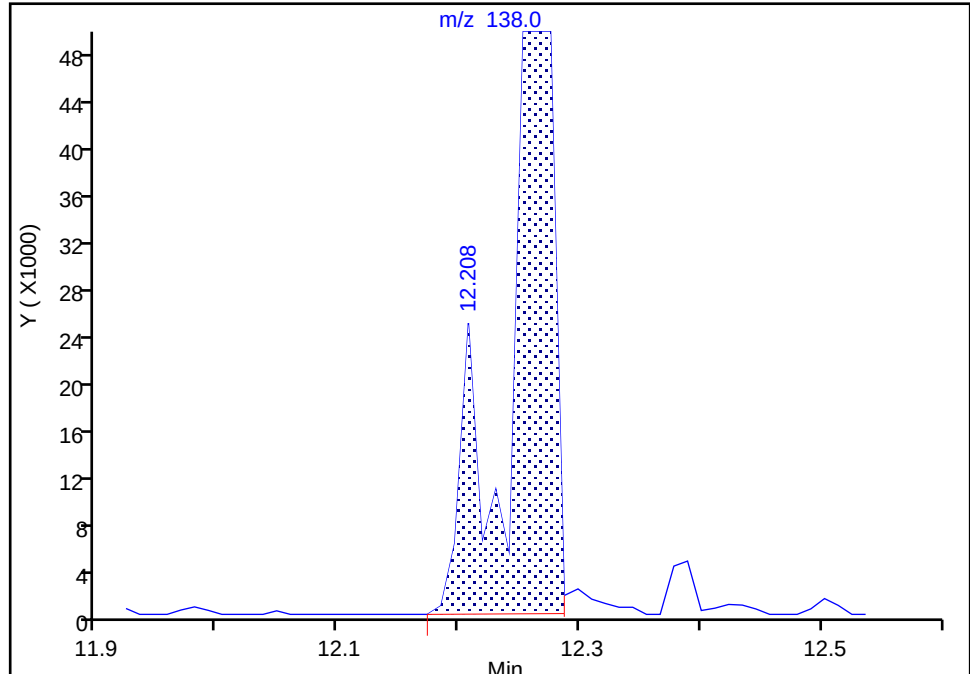
Detector: MS SCAN

108 4-Nitroaniline, CAS: 100-01-6

Signal: 1

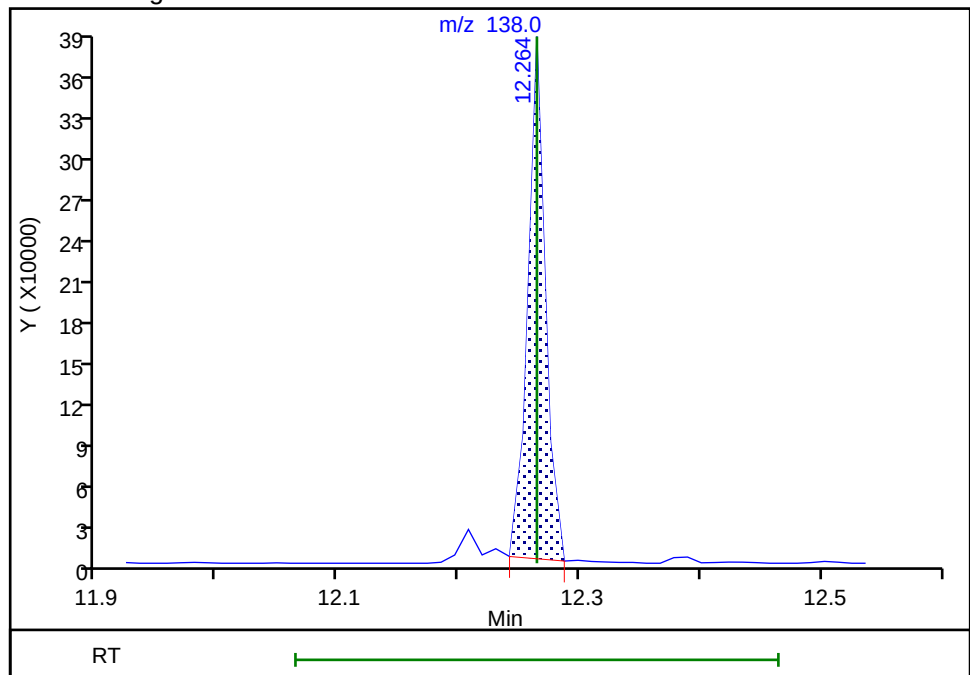
RT: 12.21
Area: 423799
Amount: 12.475245
Amount Units: ug/ml

Processing Integration Results



RT: 12.26
Area: 380608
Amount: 11.203845
Amount Units: ug/ml

Manual Integration Results



Reviewer: bekk, 30-Oct-2020 11:03:10

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1321.D

Injection Date: 30-Oct-2020 10:15:30

Instrument ID: HP23264

Lims ID: CCVIS L6

Client ID:

Operator ID: knb25316

ALS Bottle#:

2

Worklist Smp#: 2

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: MSSemi_HP23264

Limit Group:

MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)

Detector

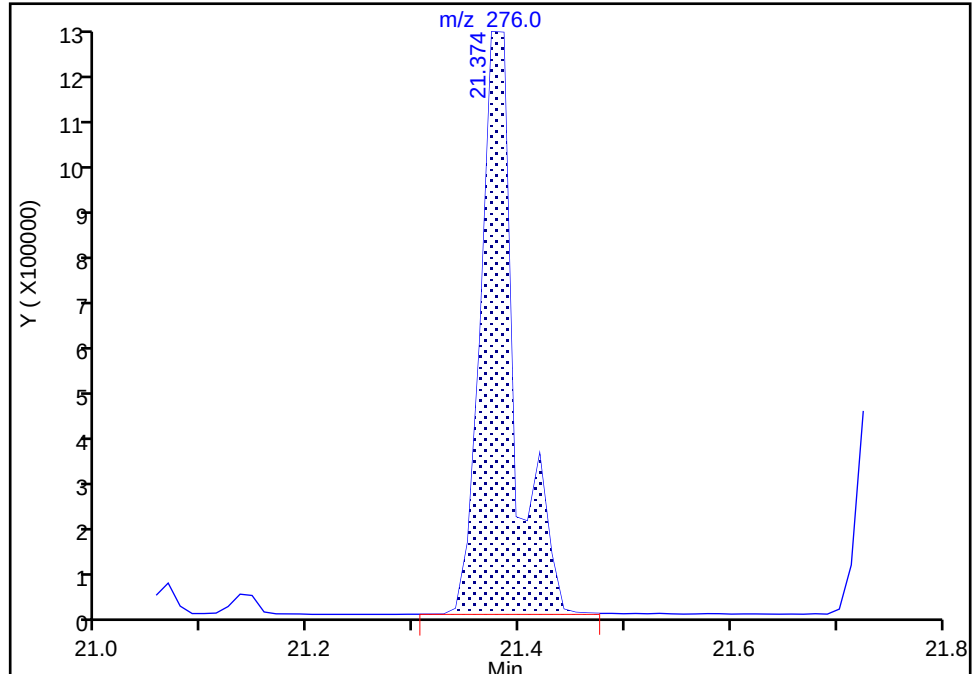
MS SCAN

164 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

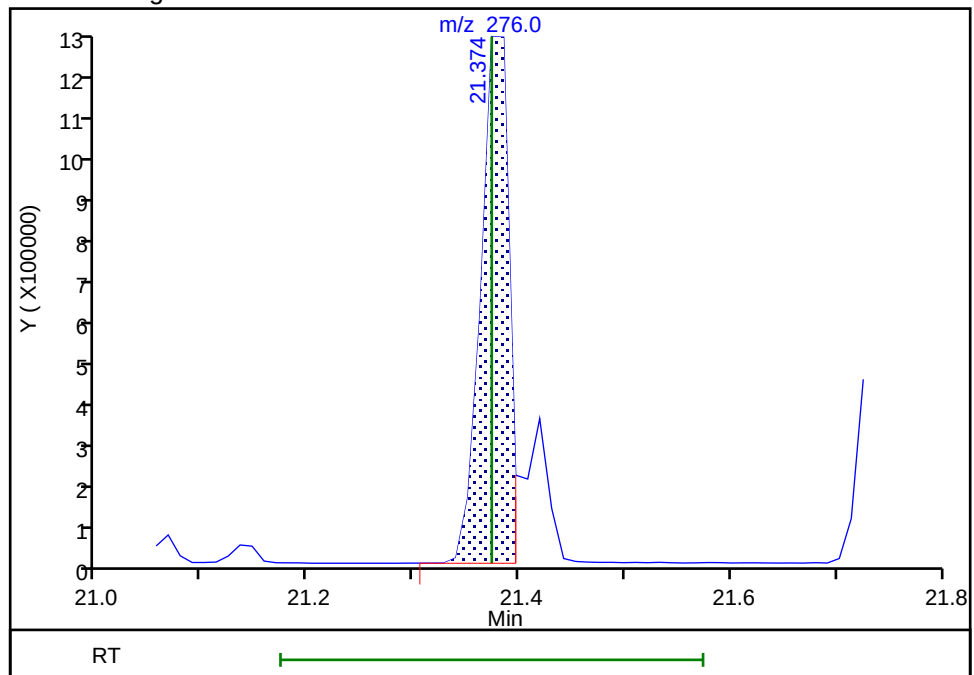
RT: 21.37
Area: 2786700
Amount: 15.412492
Amount Units: ug/ml

Processing Integration Results



RT: 21.37
Area: 2252317
Amount: 12.456963
Amount Units: ug/ml

Manual Integration Results



Reviewer: beccak, 30-Oct-2020 11:03:30

Audit Action: Split an Integrated Peak

Audit Reason: Assign Peak

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0700a.D
 Lims ID: DFTPP
 Client ID:
 Sample Type: DFTPP
 Inject. Date: 19-Oct-2020 16:58:22 ALS Bottle#: 0 Worklist Smp#: 1
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: DFTPP
 Misc. Info.: 410-0013268-001
 Operator ID: kel10217 Instrument ID: HP20296
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 20-Oct-2020 14:21:26 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1016

First Level Reviewer: luttek

Date: 19-Oct-2020 17:14:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 Pentachlorophenol_T	266	4.798	4.798	0.000	89	183487	NR	NR	
14 Benzidine_T	184	6.071	6.071	0.000	99	1113818	NR	NR	
178 DFTPP									
179 4,4'-DDE	246	6.231	6.231	0.000	85	3037		NR	
180 4,4'-DDD	235	6.520	6.520	0.000	93	7692		NR	
181 4,4'-DDT	235	6.788	6.788	0.000	96	609687	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

MSS_RVDFTPP_00004

Amount Added: 1.00

Units: mL

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0700a.D

Injection Date: 19-Oct-2020 16:58:22

Instrument ID: HP20296

Lims ID: DFTPP

Client ID:

Operator ID: kel10217

ALS Bottle#: 0 Worklist Smp#: 1

Injection Vol: 1.0 ul

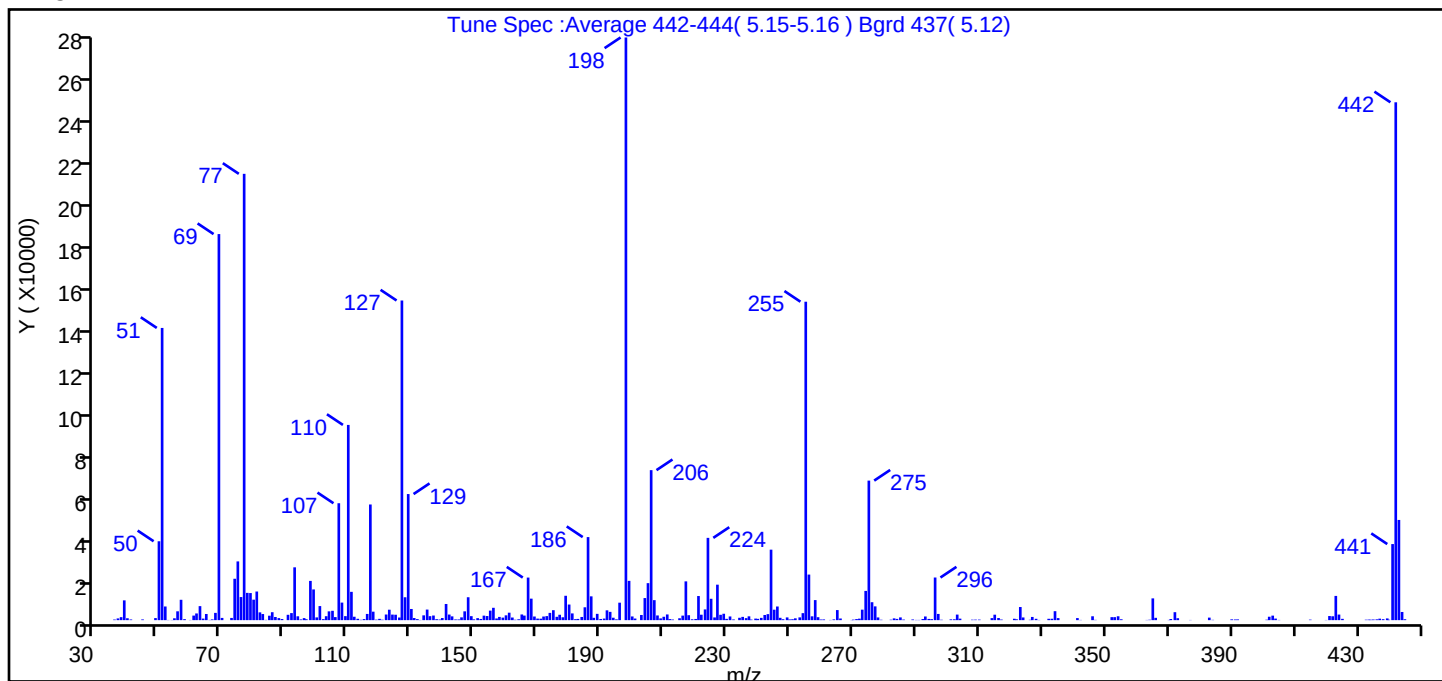
Dil. Factor: 1.0000

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Tune Method: DFTPP Method 8270D, BP 198

178 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >50% of 442	100.0 (112.5)
51	10-80% of the base peak	50.2
68	<2% of mass 69	1.2 (1.9)
69	Present	66.3
70	<2% of mass 69	0.4 (0.6)
127	10-80% of the base peak	54.9
197	<2% of mass 198	0.0
199	5-9% of mass 198	6.7
275	10-60% of the base peak	23.9
365	>1% of mass 198	3.7
441	present but <24% of mass 442	13.1 (14.7)
442	base peak, or >50% of 198	88.9
443	15-24% of mass 442	17.2 (19.3)

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0700a.D\MSSemi_HP20296.rslt\spectra.
Injection Date: 19-Oct-2020 16:58:22
Spectrum: Tune Spec :Average 442-444(5.15-5.16) Bgrd 437(5.12)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 313

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	287	125.00	2577	206.00	71392	294.00	583
37.00	820	126.00	1244	207.00	9514	295.00	479
38.00	1415	127.00	152128	208.00	2232	296.00	20288
39.00	9414	128.00	10889	209.00	829	297.00	2953
40.00	908	129.00	60008	210.00	1608	298.00	190
41.00	317	130.00	5314	211.00	2710	301.00	381
45.00	342	131.00	1004	212.00	502	302.00	409
49.00	982	132.00	490	213.00	292	303.00	2645
50.00	37544	133.00	88	215.00	897	304.00	706
51.00	139072	134.00	2285	216.00	2154	308.00	216
52.00	6501	135.00	5033	217.00	18456	309.00	254
53.00	89	136.00	1895	218.00	2349	310.00	261
54.00	86	137.00	2195	219.00	404	314.00	964
55.00	884	138.00	457	220.00	565	315.00	2592
56.00	4204	139.00	290	221.00	11478	316.00	1014
57.00	9688	140.00	1014	222.00	2583	317.00	280
58.00	471	141.00	7689	223.00	5099	321.00	667
60.00	89	142.00	2660	224.00	39160	322.00	426
61.00	2167	143.00	1796	225.00	10166	323.00	6249
62.00	3183	144.00	341	226.00	1286	324.00	1278
63.00	6667	145.00	324	227.00	16880	326.00	172
64.00	735	146.00	1322	228.00	2545	327.00	1519
65.00	2927	147.00	4191	229.00	3046	328.00	635
66.00	107	148.00	10899	230.00	616	329.00	94
67.00	357	149.00	1894	231.00	1755	332.00	645
68.00	3457	150.00	380	232.00	326	333.00	667
69.00	183744	151.00	960	234.00	1122	334.00	4264
70.00	1059	152.00	566	235.00	1552	335.00	975
73.00	1049	153.00	2141	236.00	954	341.00	985
74.00	19696	154.00	1957	237.00	1822	342.00	101
75.00	27952	155.00	4531	238.00	278	346.00	1839
76.00	10988	156.00	5878	239.00	735	347.00	137
77.00	212416	157.00	796	240.00	614	352.00	1425

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0700a.D\MSSemi_HP20296.rslt\spectra.

Injection Date: 19-Oct-2020 16:58:22

Spectrum: Tune Spec :Average 442-444(5.15-5.16) Bgrd 437(5.12)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 313

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	12980	158.00	1536	241.00	1081	353.00	1424
79.00	12891	159.00	1206	242.00	2453	354.00	1844
80.00	9753	160.00	2287	243.00	2856	355.00	417
81.00	13625	161.00	3546	244.00	33544	363.00	98
82.00	3699	162.00	1243	245.00	4975	364.00	199
83.00	2901	163.00	193	246.00	6493	365.00	10360
84.00	130	164.00	416	247.00	1111	366.00	1100
85.00	2109	165.00	2703	248.00	437	370.00	99
86.00	3776	166.00	2170	249.00	1296	371.00	542
87.00	1502	167.00	20264	250.00	336	372.00	3789
88.00	970	168.00	10230	251.00	434	373.00	918
89.00	533	169.00	1729	252.00	865	377.00	93
91.00	2546	170.00	746	253.00	1316	383.00	1199
92.00	3352	171.00	697	254.00	3328	384.00	135
93.00	25136	172.00	1722	255.00	151552	390.00	374
94.00	1835	173.00	1918	256.00	21688	391.00	316
95.00	348	174.00	3450	257.00	1817	392.00	346
96.00	972	175.00	4734	258.00	9542	401.00	210
97.00	440	176.00	1580	259.00	1397	402.00	1623
98.00	18672	177.00	2560	260.00	301	403.00	2149
99.00	14620	178.00	1368	261.00	336	404.00	741
100.00	1308	179.00	11596	263.00	96	405.00	97
101.00	6696	180.00	7428	264.00	354	415.00	245
102.00	480	181.00	3203	265.00	4790	420.00	85
103.00	1871	182.00	475	266.00	780	421.00	1959
104.00	4183	183.00	584	270.00	84	422.00	1848
105.00	4445	184.00	1511	270.00	251	423.00	11528
106.00	1449	185.00	6116	271.00	514	424.00	2654
107.00	55640	186.00	39528	272.00	710	425.00	620
108.00	8352	187.00	11326	273.00	4987	433.00	214
109.00	1907	188.00	1111	274.00	13911	434.00	260
110.00	92912	189.00	2992	275.00	66408	434.00	203
111.00	13470	190.00	555	276.00	8533	435.00	306
112.00	1621	191.00	749	277.00	6553	436.00	386

Report Date: 20-Oct-2020 14:21:27

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0700a.D\MSSemi_HP20296.rslt\spectra.

Injection Date: 19-Oct-2020 16:58:22

Spectrum: Tune Spec :Average 442-444(5.15-5.16) Bgrd 437(5.12)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 313

m/z	Y	m/z	Y	m/z	Y	m/z	Y
113.00	644	192.00	4670	278.00	1286	437.00	699
114.00	163	193.00	3938	279.00	187	438.00	457
115.00	501	194.00	1151	282.00	226	439.00	823
116.00	2954	195.00	385	283.00	845	440.00	196
117.00	55048	196.00	8311	284.00	588	441.00	36208
118.00	4031	198.00	277312	285.00	1304	442.00	246464
119.00	238	199.00	18696	286.00	269	443.00	47688
120.00	619	200.00	1756	289.00	320	444.00	3884
121.00	209	201.00	765	290.00	111	445.00	433
122.00	2679	203.00	2455	291.00	111		
123.00	4967	204.00	10508	292.00	525		
124.00	2642	205.00	17608	293.00	1740		

Report Date: 20-Oct-2020 14:21:27

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0700a.D

Injection Date: 19-Oct-2020 16:58:22

Instrument ID: HP20296

Operator ID: kel10217

Lims ID: DFTPP

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 ul

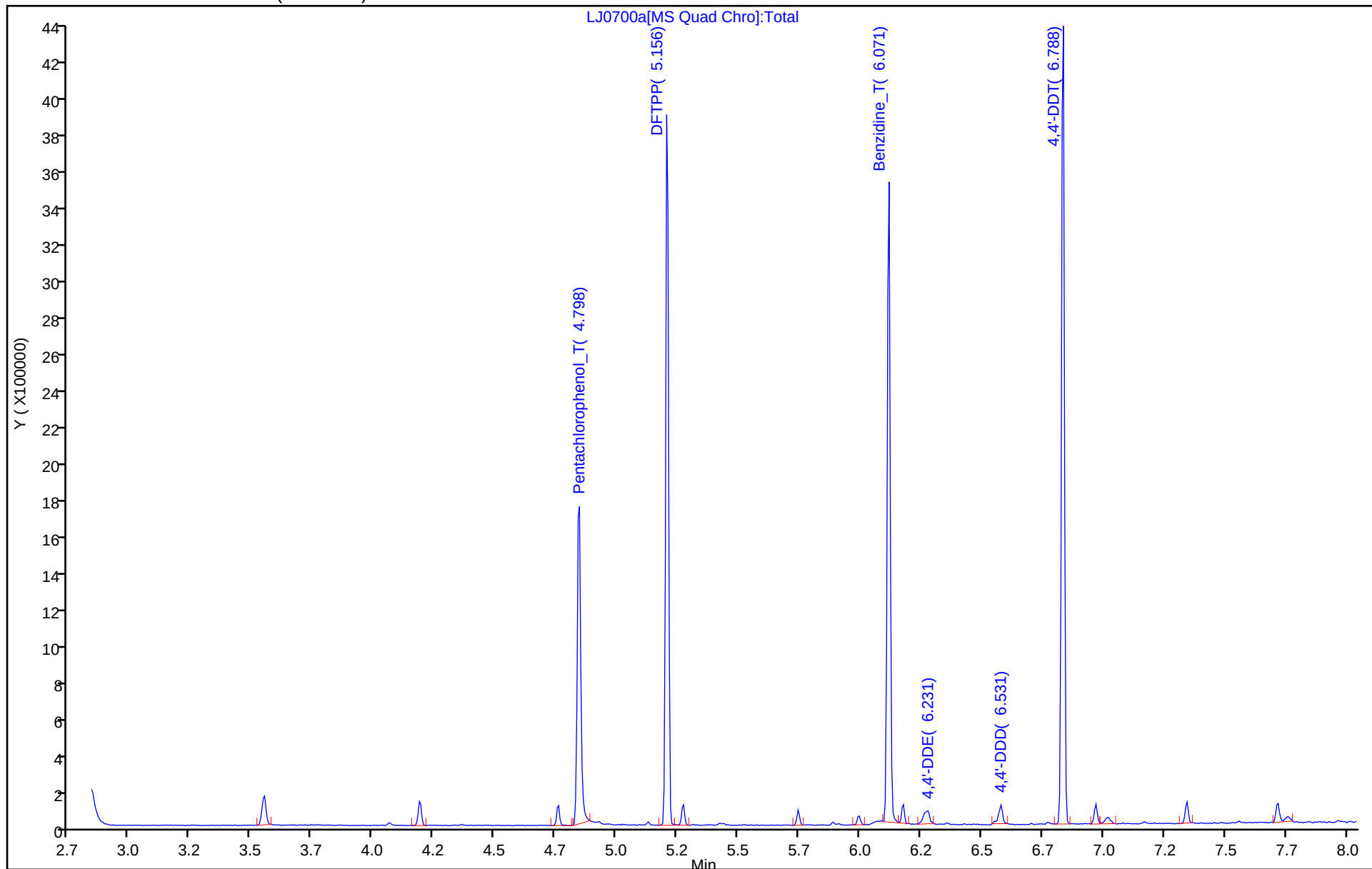
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0700a.D
Injection Date: 19-Oct-2020 16:58:22 Instrument ID: HP20296
Lims ID: DFTPP
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP20296 Limit Group: MSSV - 8270D_E LVI

181 4,4'-DDT, Detector: MS Quad

SW-846 Method

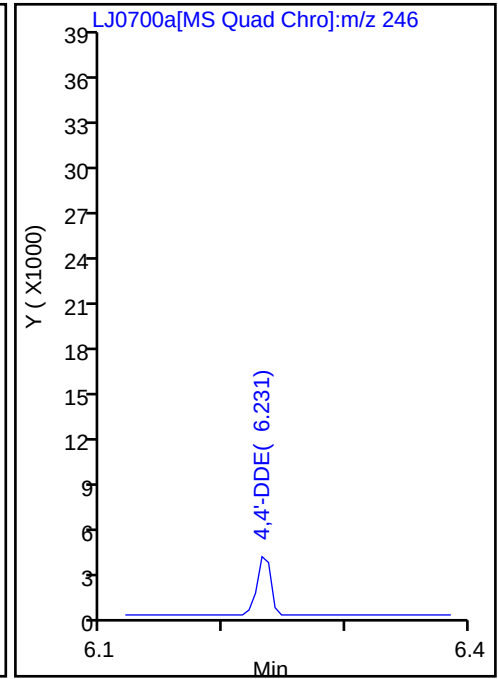
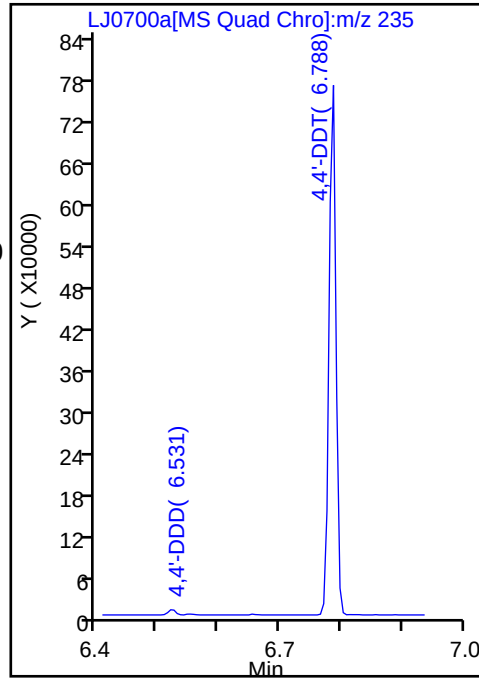
%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

181 4,4'-DDT, Area = 609687

180 4,4'-DDD, Area = 7692

179 4,4'-DDE, Area = 3037

%Breakdown: 1.73%, <= 20.00%
Passed



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0700a.D

Injection Date: 19-Oct-2020 16:58:22

Instrument ID: HP20296

Lims ID: DFTPP

Client ID:

Operator ID: kel10217

ALS Bottle#: 0 Worklist Smp#: 1

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

14 Benzidine_T, Detector: MS Quad

Peak Tailing Factor =

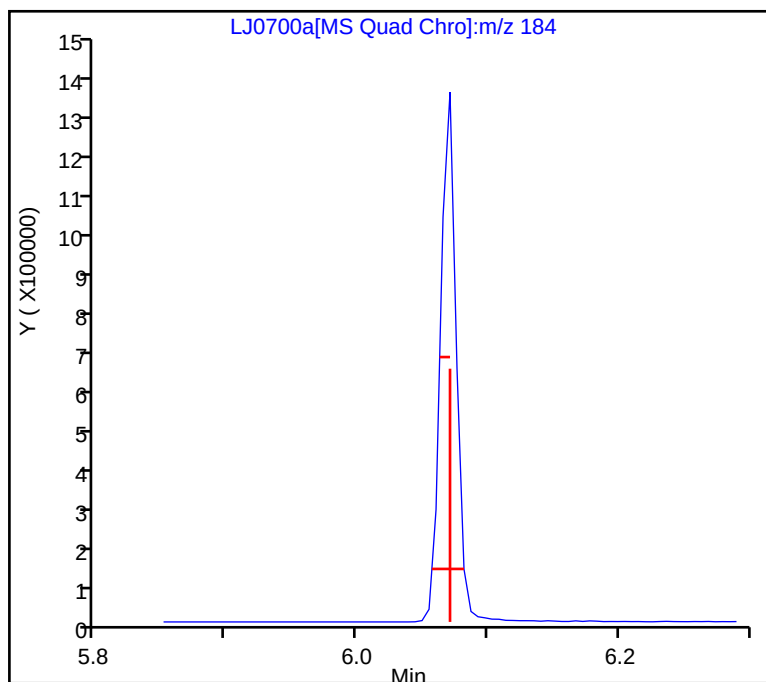
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.011 (min.)

Front Width = 0.014 (min.)

Tailing Factor = 0.8, Max. Tailing <= 2.00

Passed



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0700a.D
Injection Date: 19-Oct-2020 16:58:22 Instrument ID: HP20296
Lims ID: DFTPP
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP20296 Limit Group: MSSV - 8270D_E LVI

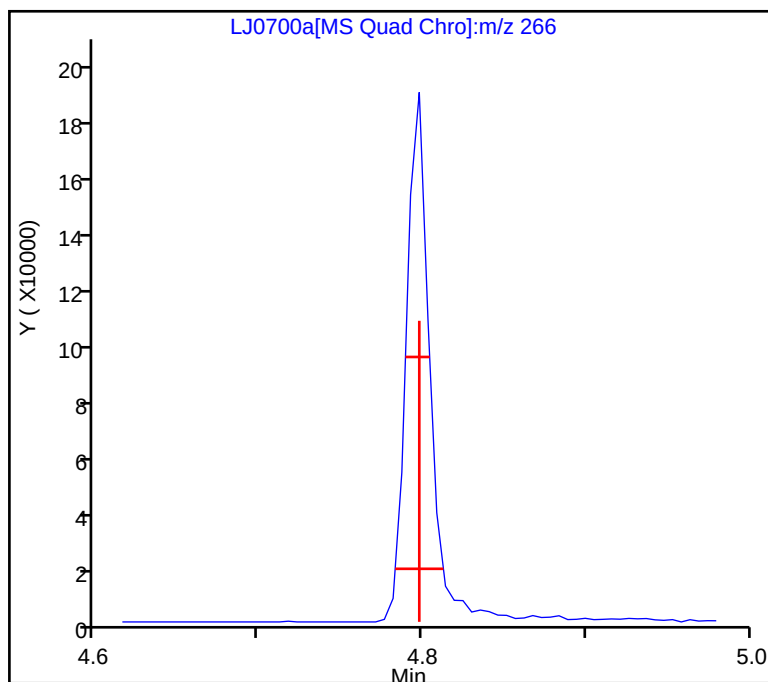
8 Pentachlorophenol_T, Detector: MS Quad

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.015 (min.)

Front Width = 0.015 (min.)

Tailing Factor = 1.0, Max. Tailing <= 2.00
Passed



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1000a.D
 Lims ID: DFTPP
 Client ID:
 Sample Type: DFTPP
 Inject. Date: 28-Oct-2020 16:36:15 ALS Bottle#: 0 Worklist Smp#: 1
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: DFTPP
 Misc. Info.: 410-0014101-001
 Operator ID: kel10217 Instrument ID: HP20296
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 28-Oct-2020 19:51:19 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: luttek

Date: 28-Oct-2020 16:49:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 Pentachlorophenol_T	266	4.777	4.777	0.000	88	208651	NR	NR	
14 Benzidine_T	184	6.050	6.050	0.000	99	1246390	NR	NR	
178 DFTPP									
179 4,4'-DDE	246	6.210	6.210	0.000	79	1289		NR	
180 4,4'-DDD	235	6.510	6.510	0.000	58	2404		NR	
181 4,4'-DDT	235	6.772	6.772	0.000	96	570747	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

MSS_RVDFTPP_00005

Amount Added: 1.00

Units: mL

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1000a.D

Injection Date: 28-Oct-2020 16:36:15

Instrument ID: HP20296

Lims ID: DFTPP

Client ID:

Operator ID: kel10217

ALS Bottle#:

0

Worklist Smp#:

1

Injection Vol: 1.0 ul

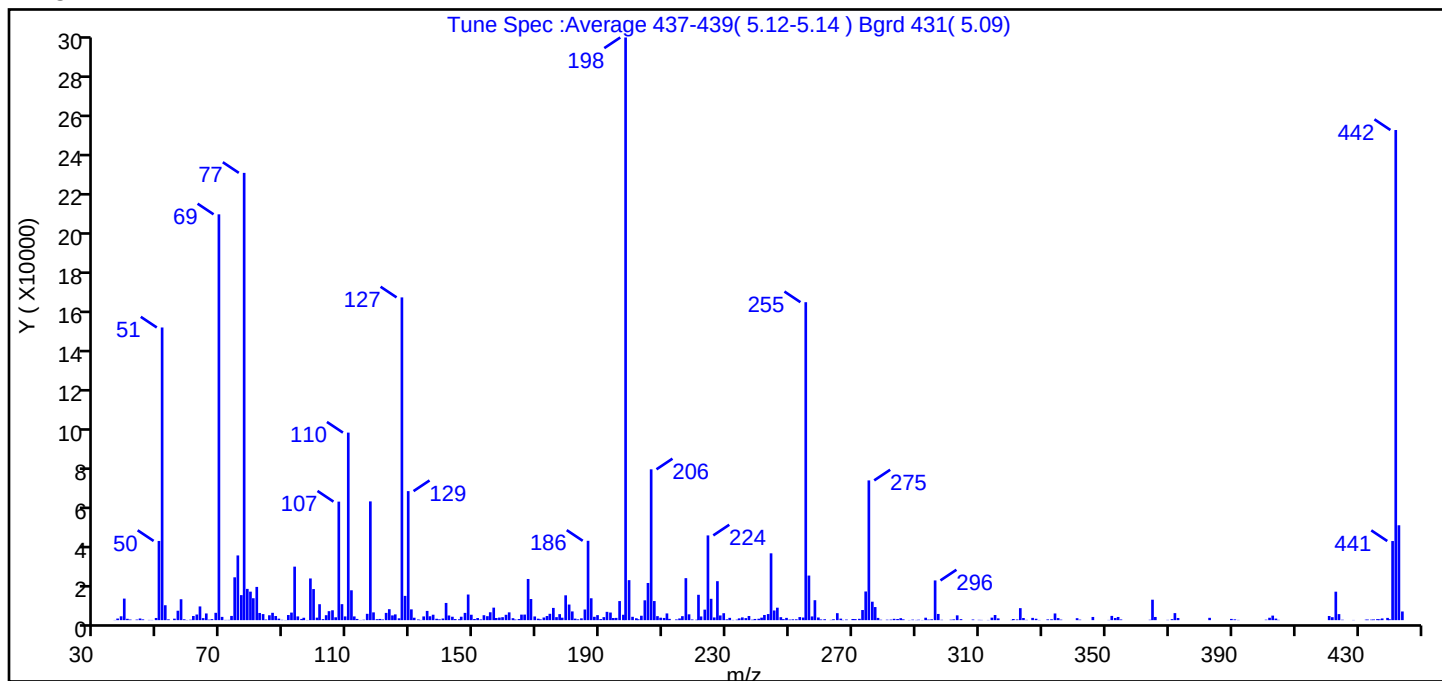
Dil. Factor: 1.0000

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Tune Method: DFTPP Method 8270D, BP 198

178 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >50% of 442	100.0 (118.9)
51	10-80% of the base peak	50.2
68	<2% of mass 69	1.3 (1.8)
69	Present	69.6
70	<2% of mass 69	0.6 (0.8)
127	10-80% of the base peak	55.4
197	<2% of mass 198	0.9
199	5-9% of mass 198	6.9
275	10-60% of the base peak	24.0
365	>1% of mass 198	3.5
441	present but <24% of mass 442	13.6 (16.1)
442	base peak, or >50% of 198	84.1
443	15-24% of mass 442	16.3 (19.4)

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1000a.D\MSSemi_HP20296.rsl\spectra.
Injection Date: 28-Oct-2020 16:36:15
Spectrum: Tune Spec :Average 437-439(5.12-5.14) Bgrd 431(5.09)
Base Peak: 197.90
Minimum % Base Peak: 0
Number of Points: 323

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	91	120.00	608	201.00	951	286.00	393
37.00	811	121.00	355	202.00	450	288.00	84
38.00	1949	122.00	3671	203.00	2225	289.00	261
39.00	10909	123.00	5539	204.00	10046	290.00	114
40.00	682	124.00	2403	205.00	18816	291.00	223
41.00	295	125.00	2914	206.00	76360	292.00	85
43.00	290	126.00	924	207.00	9666	293.00	1231
44.00	829	127.00	163392	208.00	2025	294.00	290
45.00	385	128.00	12279	209.00	1239	295.00	439
47.00	117	129.00	65320	210.00	1113	296.00	20104
48.00	101	130.00	5458	211.00	3404	297.00	3136
49.00	1096	131.00	1221	212.00	641	298.00	175
50.00	40088	132.00	344	214.00	365	301.00	230
51.00	148160	133.00	116	215.00	851	302.00	392
52.00	7544	134.00	1881	216.00	2019	303.00	2429
53.00	409	135.00	4667	217.00	21256	304.00	500
55.00	748	136.00	1972	218.00	2947	308.00	325
56.00	4766	137.00	2745	219.00	343	310.00	156
57.00	10583	138.00	692	220.00	225	311.00	120
58.00	422	139.00	413	221.00	12836	313.00	98
59.00	93	140.00	824	222.00	1872	314.00	1266
60.00	248	141.00	8706	223.00	5314	315.00	2590
61.00	2111	142.00	2362	224.00	42896	316.00	894
62.00	2853	143.00	1724	225.00	10805	320.00	145
63.00	6943	144.00	549	226.00	1369	321.00	566
64.00	1021	145.00	439	227.00	19728	322.00	336
65.00	3390	146.00	1729	228.00	2373	323.00	6075
66.00	252	147.00	3674	229.00	3520	324.00	1081
67.00	531	148.00	12972	230.00	406	325.00	141
68.00	3710	149.00	2734	231.00	1163	327.00	1145
69.00	205440	150.00	579	232.00	112	328.00	705
70.00	1648	151.00	1070	233.00	245	329.00	93
71.00	133	152.00	367	234.00	893	332.00	389

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1000a.D\MSSemi_HP20296.rslt\spectra.

Injection Date: 28-Oct-2020 16:36:15

Spectrum: Tune Spec :Average 437-439(5.12-5.14) Bgrd 431(5.09)

Base Peak: 197.90

Minimum % Base Peak: 0

Number of Points: 323

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	143	153.00	2497	235.00	1391	333.00	442
73.00	2131	154.00	2009	236.00	1024	334.00	3384
74.00	21680	155.00	3994	237.00	2099	335.00	1038
75.00	32760	156.00	6329	238.00	235	336.00	252
76.00	12667	157.00	1087	239.00	602	341.00	992
77.00	226432	158.00	1295	240.00	713	342.00	243
78.00	15822	159.00	1503	241.00	1258	346.00	1614
79.00	14425	160.00	2712	242.00	2612	351.00	107
80.00	11090	161.00	3939	243.00	3075	352.00	2148
81.00	16824	162.00	990	244.00	33832	353.00	1090
82.00	3626	163.00	316	245.00	4894	354.00	1607
83.00	3059	164.00	561	246.00	6302	355.00	349
84.00	311	165.00	2798	247.00	1503	364.00	198
85.00	2472	166.00	2813	248.00	511	365.00	10351
86.00	3712	167.00	20840	249.00	1147	366.00	1609
87.00	2081	168.00	10696	250.00	273	370.00	137
88.00	760	169.00	1868	251.00	424	371.00	507
89.00	171	170.00	747	252.00	427	372.00	3560
90.00	91	171.00	423	253.00	1553	373.00	1091
91.00	2588	172.00	1344	254.00	1323	383.00	1176
92.00	3826	173.00	2082	255.00	160960	390.00	623
93.00	27088	174.00	3217	256.00	22568	391.00	396
94.00	1895	175.00	6197	257.00	1874	392.00	116
95.00	617	176.00	1517	258.00	10094	401.00	229
96.00	1210	177.00	3045	259.00	1343	402.00	1209
97.00	94	178.00	1243	260.00	362	403.00	2297
98.00	21104	179.00	12569	261.00	458	404.00	788
99.00	15739	180.00	7900	263.00	140	405.00	144
100.00	1267	181.00	4411	264.00	447	421.00	2101
101.00	8070	182.00	762	265.00	3532	422.00	1493
102.00	513	183.00	409	266.00	758	423.00	14409
103.00	2502	184.00	913	267.00	102	424.00	3053
104.00	4545	185.00	5383	268.00	308	425.00	208
105.00	4996	186.00	40168	270.00	584	429.00	98

Report Date: 28-Oct-2020 19:51:20

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1000a.D\MSSemi_HP20296.rslt\spectra.

Injection Date: 28-Oct-2020 16:36:15

Spectrum: Tune Spec :Average 437-439(5.12-5.14) Bgrd 431(5.09)

Base Peak: 197.90

Minimum % Base Peak: 0

Number of Points: 323

m/z	Y	m/z	Y	m/z	Y	m/z	Y
106.00	1448	187.00	11075	271.00	524	433.00	260
107.00	60000	188.00	1690	272.00	671	433.00	273
108.00	8092	189.00	2535	273.00	5125	434.00	257
109.00	1892	190.00	538	274.00	14510	435.00	356
110.00	94936	191.00	1525	275.00	70744	436.00	524
111.00	15117	192.00	4206	276.00	9334	437.00	401
112.00	1886	193.00	3850	277.00	6620	438.00	856
113.00	614	194.00	1076	278.00	1137	439.00	1134
114.00	100	195.00	1144	279.00	207	440.00	450
115.00	226	196.00	9657	281.00	233	441.00	40048
116.00	3204	197.00	2730	282.00	276	442.00	248128
117.00	60120	198.00	294976	283.00	668	443.00	48032
118.00	3937	199.00	20248	284.00	585	444.00	4388
119.00	492	200.00	1685	285.00	994		

Report Date: 28-Oct-2020 19:51:20

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1000a.D

Injection Date: 28-Oct-2020 16:36:15

Instrument ID: HP20296

Operator ID: kel10217

Lims ID: DFTPP

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 ul

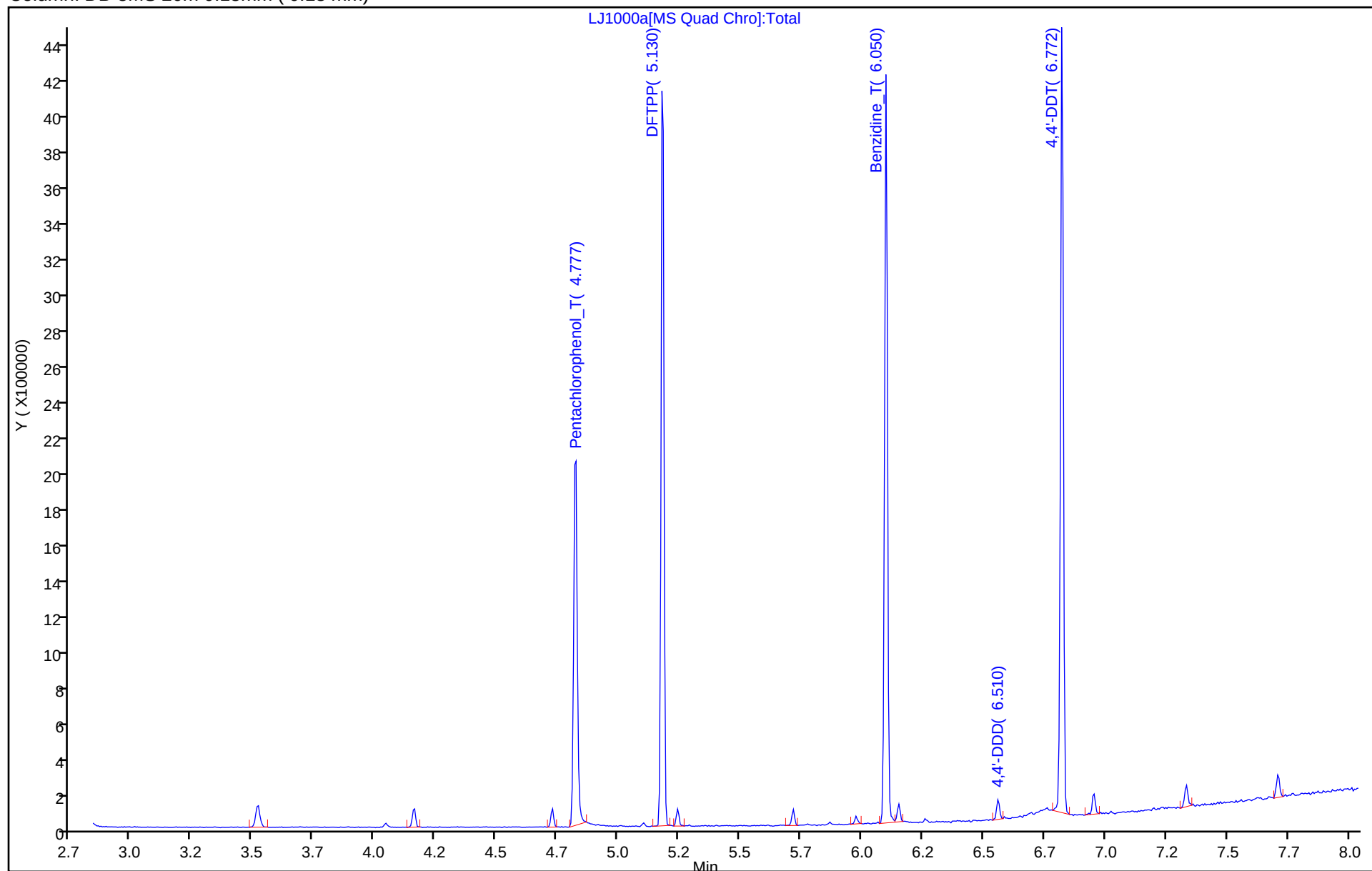
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1000a.D
Injection Date: 28-Oct-2020 16:36:15 Instrument ID: HP20296
Lims ID: DFTPP
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP20296 Limit Group: MSSV - 8270D_E LVI

181 4,4'-DDT, Detector: MS Quad

SW-846 Method

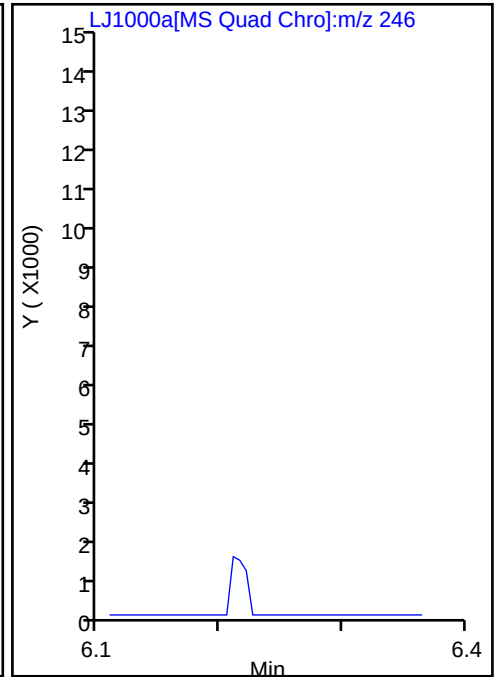
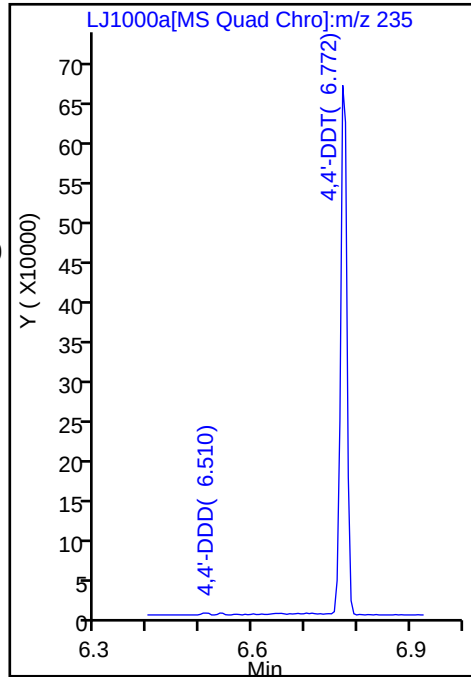
%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

181 4,4'-DDT, Area = 570747

180 4,4'-DDD, Area = 2404

179 4,4'-DDE, Area = 1289

%Breakdown: 0.64%, <= 20.00%
Passed



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1000a.D
Injection Date: 28-Oct-2020 16:36:15 Instrument ID: HP20296
Lims ID: DFTPP
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP20296 Limit Group: MSSV - 8270D_E LVI

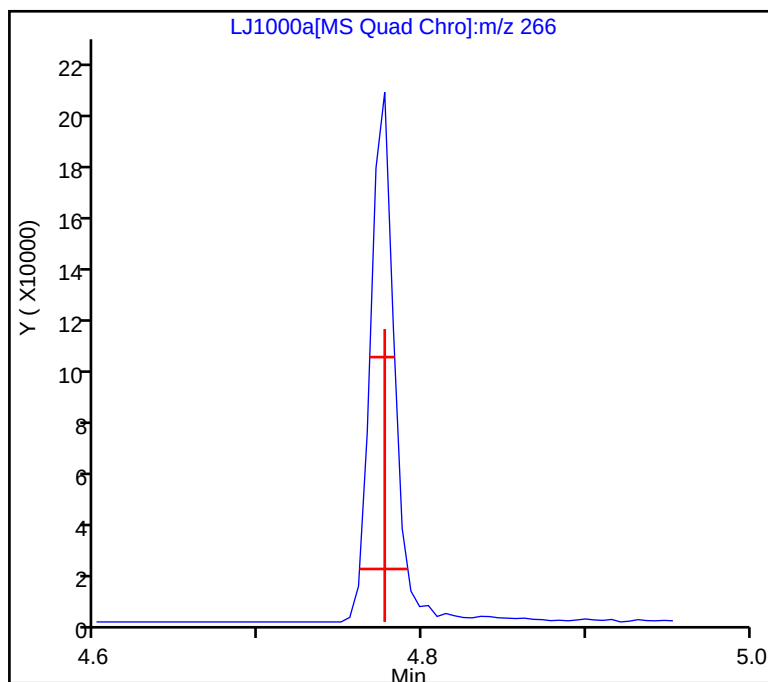
8 Pentachlorophenol_T, Detector: MS Quad

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.014 (min.)

Front Width = 0.015 (min.)

Tailing Factor = 0.9, Max. Tailing <= 2.00
Passed



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1000a.D
Injection Date: 28-Oct-2020 16:36:15 Instrument ID: HP20296
Lims ID: DFTPP
Client ID:
Operator ID: kel10217 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP20296 Limit Group: MSSV - 8270D_E LVI

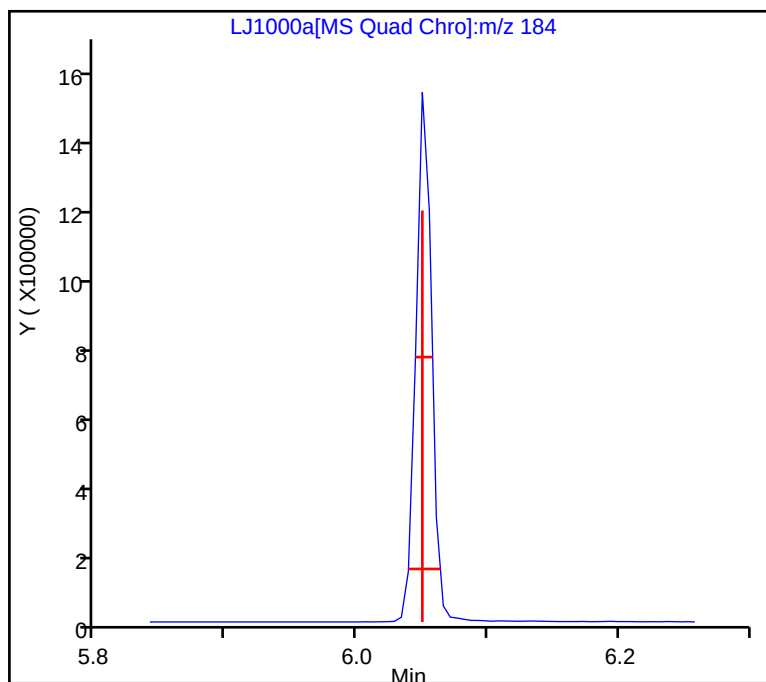
14 Benzidine_T, Detector: MS Quad

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.014 (min.)

Front Width = 0.011 (min.)

Tailing Factor = 1.3, Max. Tailing <= 2.00
Passed



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1150c.D
 Lims ID: DFTPP
 Client ID:
 Sample Type: DFTPP
 Inject. Date: 29-Sep-2020 18:37:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: DFTPP
 Misc. Info.: 410-0011633-001
 Operator ID: kel10217 Instrument ID: HP23264
 Method: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 01-Oct-2020 12:40:41 Calib Date: 29-Sep-2020 22:52:30
 Integrator: Falcon ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1158a.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1010

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
5 Pentachlorophenol_T	266	4.916	4.916	0.000	87	348570	NR	NR	
7 Benzidine_T	184	6.154	6.154	0.000	99	1615269	NR	NR	
180 DFTPP									
178 4,4'-DDE	246	6.306	6.306	0.000	1	2206		NR	
179 4,4'-DDD	235	6.592	6.592	0.000	1	2847		NR	a
181 4,4'-DDT	235	6.837	6.837	0.000	96	820168	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

a - User Assigned ID

Reagents:

MSS_RVDFTPP_00004

Amount Added: 1.00

Units: mL

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1150c.D

Injection Date: 29-Sep-2020 18:37:30

Instrument ID: HP23264

Lims ID: DFTPP

Client ID:

Operator ID: kel10217

ALS Bottle#: 1 Worklist Smp#: 1

Injection Vol: 1.0 ul

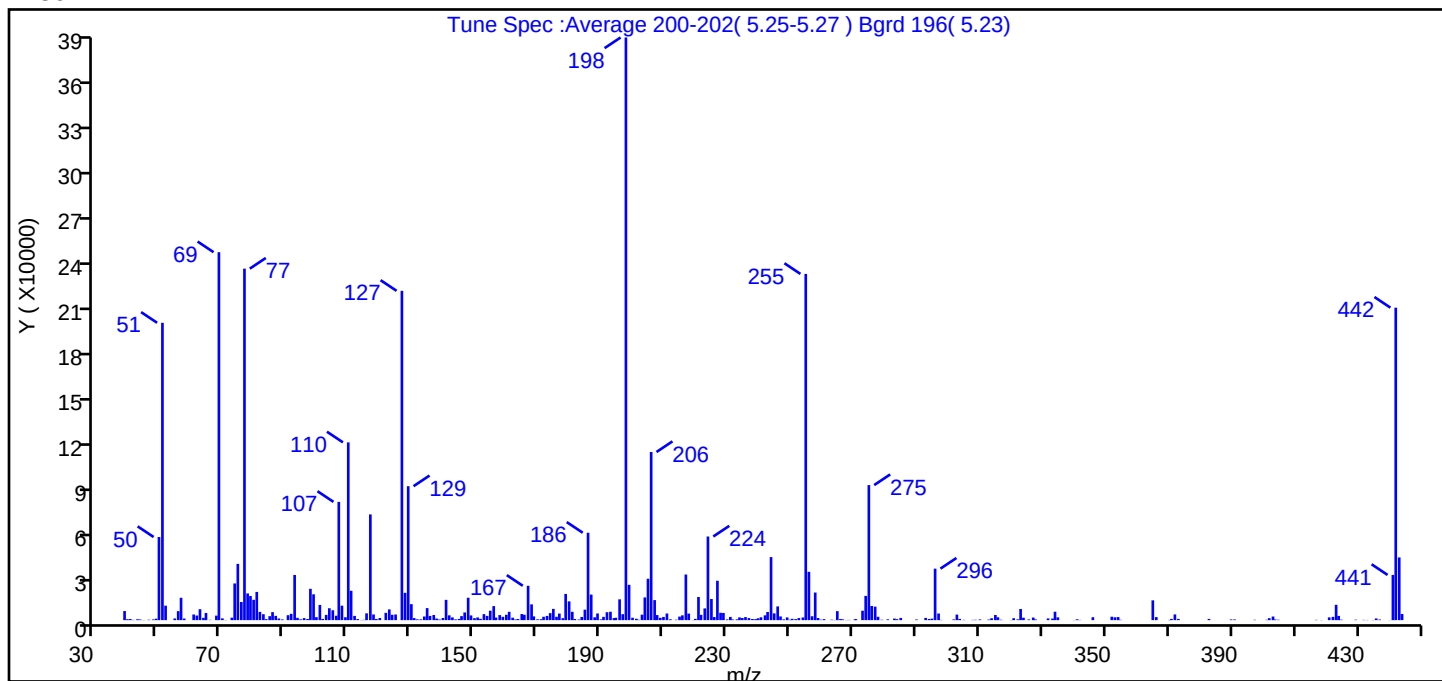
Dil. Factor: 1.0000

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Tune Method: DFTPP Method 8270D, BP 198

180 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >50% of 442	100.0 (186.5)
51	10-80% of the base peak	51.0
68	<2% of mass 69	0.8 (1.2)
69	Present	63.1
70	<2% of mass 69	0.3 (0.5)
127	10-80% of the base peak	56.5
197	<2% of mass 198	1.0
199	5-9% of mass 198	6.1
275	10-60% of the base peak	23.2
365	>1% of mass 198	3.4
441	present but <24% of mass 442	7.8 (14.5)
442	base peak, or >50% of 198	53.6
443	15-24% of mass 442	10.8 (20.1)

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\J11150c.D\MSSemi_HP23264.rslt\spectra.d
Injection Date: 29-Sep-2020 18:37:30
Spectrum: Tune Spec :Average 200-202(5.25-5.27) Bgrd 196(5.23)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 304

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	6092	124.00	3574	201.00	937	281.00	538
40.00	638	125.00	3780	202.00	270	283.00	1053
41.00	732	127.00	220352	203.00	3661	284.00	656
42.00	178	128.00	18272	204.00	15200	285.00	1485
43.00	594	129.00	89632	205.00	27696	290.00	445
44.00	444	130.00	10709	206.00	112512	293.00	1486
45.00	92	131.00	1354	207.00	13418	294.00	776
47.00	284	132.00	549	208.00	3405	295.00	1003
48.00	472	133.00	528	209.00	1540	296.00	34456
49.00	959	134.00	2445	210.00	2135	297.00	4441
50.00	55624	135.00	8072	211.00	4449	298.00	175
51.00	198976	136.00	2839	212.00	583	302.00	498
52.00	9689	137.00	3449	214.00	289	303.00	3725
55.00	1126	138.00	1050	215.00	2364	304.00	812
56.00	6029	139.00	436	216.00	3205	305.00	172
57.00	14979	140.00	1446	217.00	30528	308.00	179
58.00	1049	141.00	13561	218.00	4379	309.00	256
61.00	3786	142.00	3230	219.00	99	310.00	476
62.00	3085	143.00	1829	220.00	866	313.00	387
63.00	7318	144.00	522	221.00	15487	314.00	1258
64.00	1528	145.00	804	222.00	3548	315.00	3445
65.00	4821	146.00	2687	223.00	7863	316.00	1927
66.00	209	147.00	5139	224.00	55960	317.00	273
68.00	3021	148.00	14997	225.00	14124	320.00	101
69.00	246208	149.00	3156	226.00	2064	321.00	1300
70.00	1188	150.00	1319	227.00	26360	322.00	539
71.00	142	151.00	1810	228.00	4921	323.00	7471
73.00	1656	152.00	881	229.00	4803	324.00	1631
74.00	24552	153.00	4013	230.00	495	326.00	484
75.00	37656	154.00	2848	231.00	2147	327.00	1725
76.00	12133	155.00	6316	232.00	492	328.00	517
77.00	235200	156.00	9393	233.00	542	332.00	1154
78.00	17880	157.00	1737	234.00	1858	333.00	1055

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\J11150c.D\MSSemi_HP23264.rsl\spectra.d

Injection Date: 29-Sep-2020 18:37:30

Spectrum: Tune Spec :Average 200-202(5.25-5.27) Bgrd 196(5.23)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 304

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	16146	158.00	3391	235.00	1402	334.00	5645
80.00	13615	159.00	2221	236.00	2049	335.00	1879
81.00	18888	160.00	3585	237.00	1380	340.00	93
82.00	5527	161.00	5580	238.00	770	341.00	593
83.00	3974	162.00	1641	239.00	695	342.00	165
84.00	655	163.00	457	240.00	1230	346.00	1959
85.00	2650	164.00	738	241.00	1900	352.00	2289
86.00	5372	165.00	4093	242.00	3217	353.00	1917
87.00	2868	166.00	3595	243.00	5454	354.00	2068
88.00	1106	167.00	22992	244.00	42200	355.00	250
89.00	476	168.00	10558	245.00	4532	365.00	13251
91.00	3303	169.00	2516	246.00	9192	366.00	2042
92.00	4226	170.00	554	247.00	2470	370.00	162
93.00	30232	171.00	639	248.00	531	371.00	835
94.00	1528	172.00	2256	249.00	1818	372.00	3821
95.00	542	173.00	2823	250.00	267	373.00	822
96.00	1366	174.00	4691	251.00	886	383.00	817
97.00	774	175.00	7533	252.00	693	390.00	472
98.00	20968	176.00	2247	253.00	1387	391.00	470
99.00	17296	177.00	4414	254.00	1801	397.00	246
100.00	2001	178.00	1293	255.00	231680	401.00	224
101.00	10168	179.00	17536	256.00	32344	402.00	1303
102.00	800	180.00	12566	257.00	2602	403.00	2418
103.00	3501	181.00	5588	258.00	18472	404.00	449
104.00	7970	182.00	775	259.00	1422	405.00	264
105.00	6615	183.00	410	260.00	296	417.00	219
106.00	2958	184.00	2118	261.00	664	418.00	93
107.00	79136	185.00	7016	263.00	304	421.00	1841
108.00	9672	186.00	58488	264.00	134	422.00	2193
109.00	1923	187.00	17104	265.00	6026	423.00	10253
110.00	118960	188.00	1913	266.00	729	424.00	2856
111.00	19640	189.00	4470	267.00	528	425.00	336
112.00	2841	190.00	499	268.00	136	429.00	299
113.00	700	191.00	2198	269.00	149	432.00	175

Report Date: 01-Oct-2020 12:40:41

Chrom Revision: 2.3 24-Sep-2020 19:22:38

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\J11150c.D\MSSemi_HP23264.rslt\spectra.d

Injection Date: 29-Sep-2020 18:37:30

Spectrum: Tune Spec :Average 200-202(5.25-5.27) Bgrd 196(5.23)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 304

m/z	Y	m/z	Y	m/z	Y	m/z	Y
114.00	126	192.00	5311	271.00	537	433.00	140
115.00	213	193.00	5617	271.00	642	435.00	117
116.00	4551	194.00	1337	273.00	6312	436.00	1130
117.00	70752	195.00	1604	274.00	16225	437.00	431
118.00	3798	196.00	13926	275.00	90376	440.00	110
119.00	757	197.00	3988	276.00	9476	441.00	30248
120.00	1438	198.00	389888	277.00	9029	442.00	209088
122.00	4880	199.00	23624	278.00	2229	443.00	41960
123.00	7168	200.00	1611	279.00	254	444.00	4119

Report Date: 01-Oct-2020 12:40:41

Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1150c.D

Injection Date: 29-Sep-2020 18:37:30

Instrument ID: HP23264

Operator ID: kel10217

Lims ID: DFTPP

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 ul

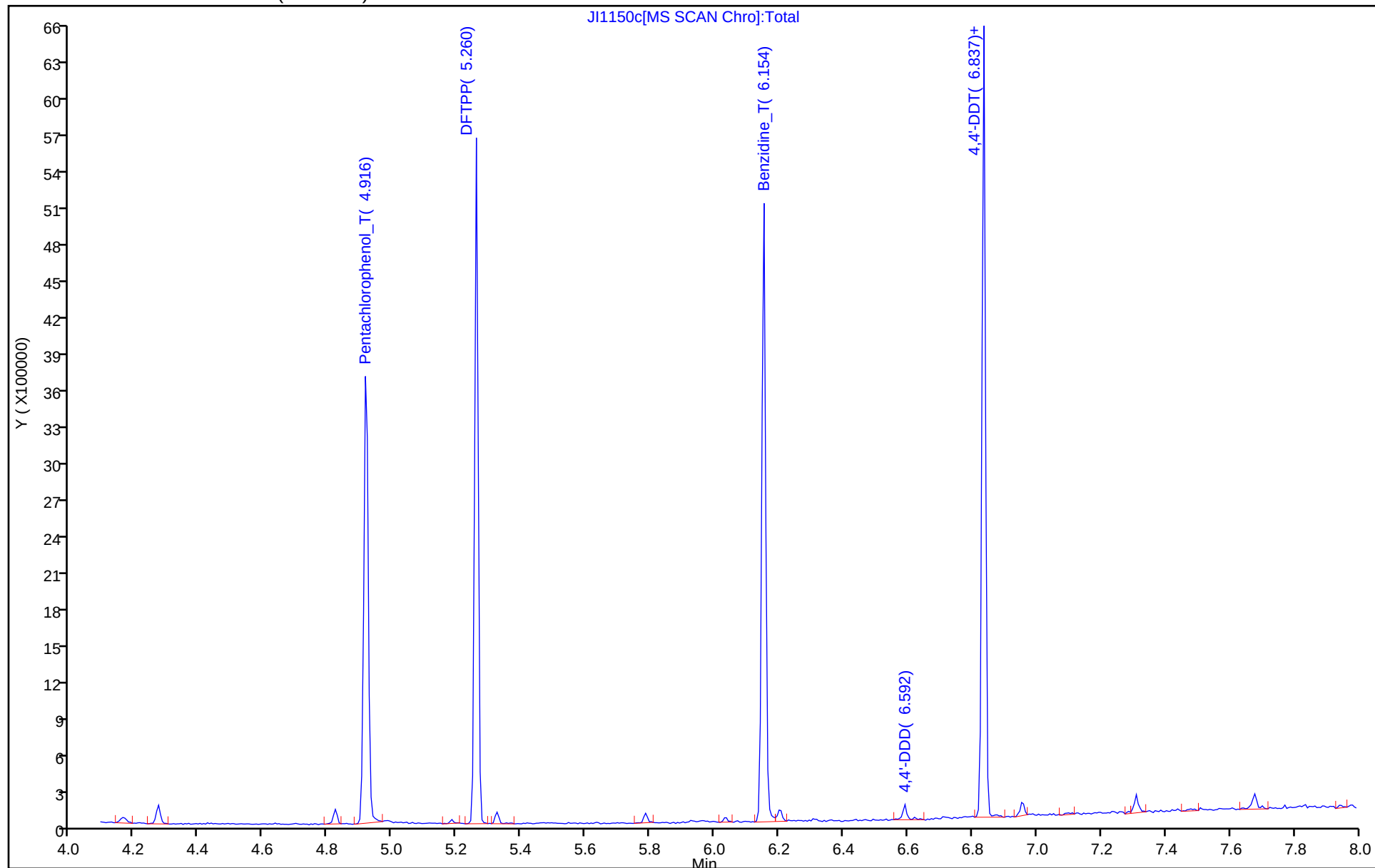
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1150c.D
Injection Date: 29-Sep-2020 18:37:30 Instrument ID: HP23264
Lims ID: DFTPP
Client ID:
Operator ID: kel10217 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

181 4,4'-DDT, Detector: MS SCAN

SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

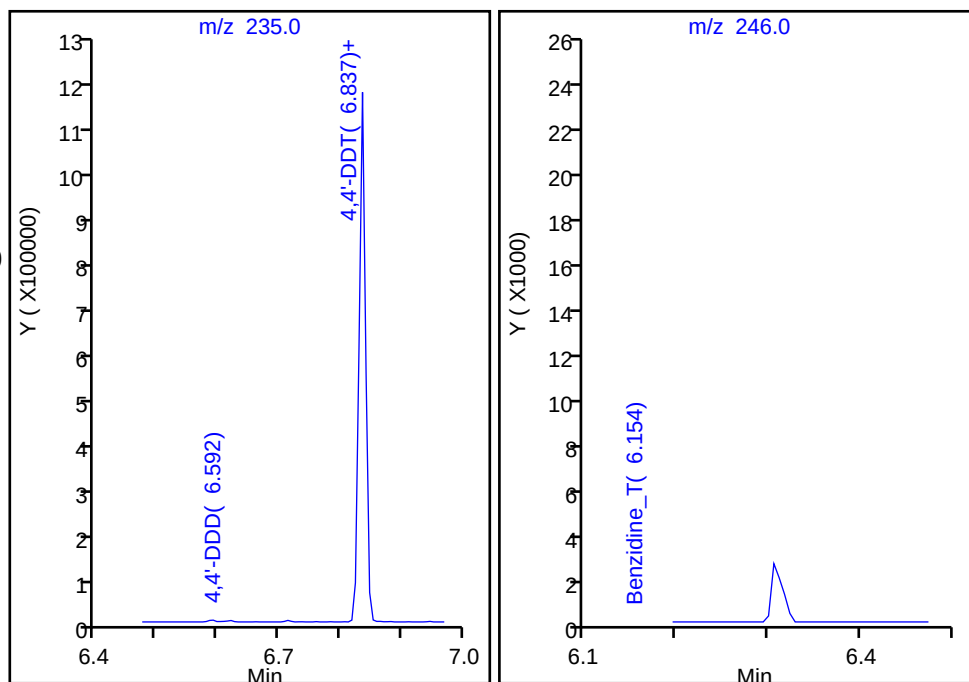
181 4,4'-DDT, Area = 820168

179 4,4'-DDD, Area = 2847

178 4,4'-DDE, Area = 2206

%Breakdown: 0.61%, <= 20.00%

Passed



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1150c.D
Injection Date: 29-Sep-2020 18:37:30 Instrument ID: HP23264
Lims ID: DFTPP
Client ID:
Operator ID: kel10217
Injection Vol: 1.0 ul
Method: MSSemi_HP23264

ALS Bottle#: 1 Worklist Smp#: 1
Dil. Factor: 1.0000
Limit Group: MSSV - 8270D_E LVI

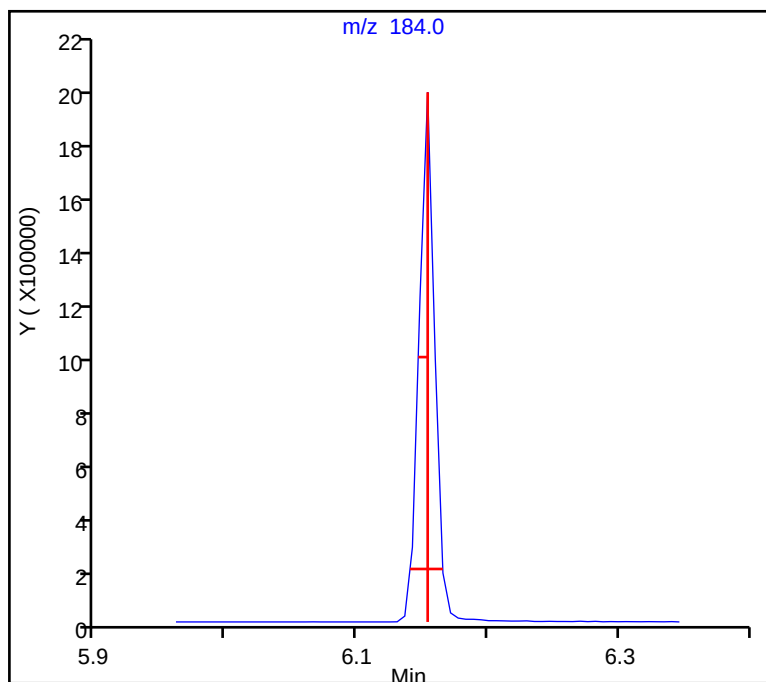
7 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.012 (min.)

Front Width = 0.014 (min.)

Tailing Factor = 0.9, Max. Tailing <= 2.00
Passed



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20200929-11633.b\JI1150c.D
Injection Date: 29-Sep-2020 18:37:30 Instrument ID: HP23264
Lims ID: DFTPP
Client ID:
Operator ID: kel10217
Injection Vol: 1.0 ul
Method: MSSemi_HP23264

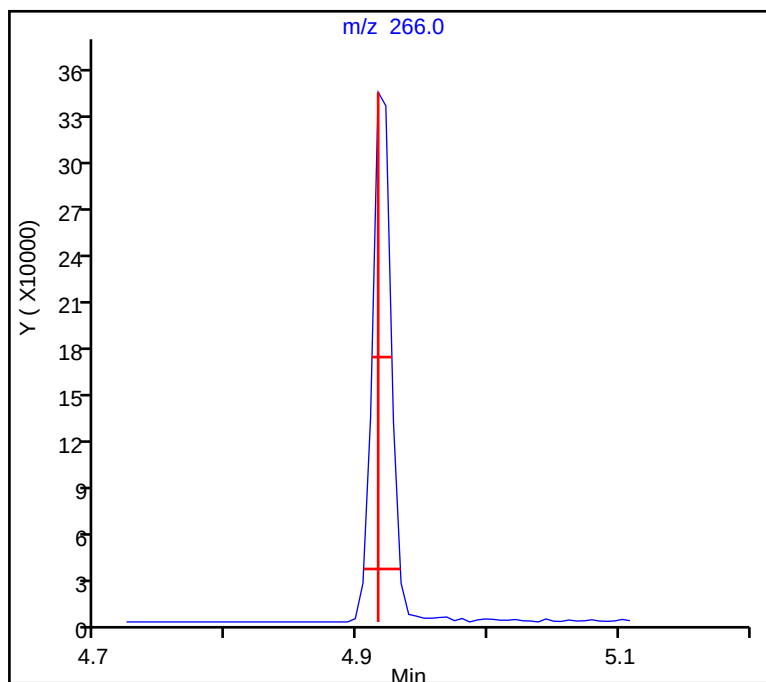
ALS Bottle#: 1 Worklist Smp#: 1
Dil. Factor: 1.0000
Limit Group: MSSV - 8270D_E LVI

5 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.017 (min.)
Front Width = 0.011 (min.)

Tailing Factor = 1.6, Max. Tailing <= 2.00
Passed



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1300.D
 Lims ID: DFTPP
 Client ID:
 Sample Type: DFTPP
 Inject. Date: 29-Oct-2020 23:26:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: DFTPP
 Misc. Info.: 410-0014245-001
 Operator ID: sw30417 Instrument ID: HP23264
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 30-Oct-2020 08:22:55 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1008

First Level Reviewer: williamss

Date: 29-Oct-2020 23:58:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
5 Pentachlorophenol_T	266	4.787	4.787	0.000	88	396583	NR	NR	
7 Benzidine_T	184	6.019	6.019	0.000	99	1566286	NR	NR	
180 DFTPP									
178 4,4'-DDE	246	6.177	6.177	0.000	3	2342		NR	
179 4,4'-DDD	235	6.451	6.451	0.000	55	5900		NR	a
181 4,4'-DDT	235	6.697	6.697	0.000	95	955825	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

a - User Assigned ID

Reagents:

MSS_RVDFTPP_00005

Amount Added: 1.00

Units: mL

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1300.D

Injection Date: 29-Oct-2020 23:26:30

Instrument ID: HP23264

Lims ID: DFTPP

Client ID:

Operator ID: sw30417

ALS Bottle#: 1 Worklist Smp#: 1

Injection Vol: 1.0 ul

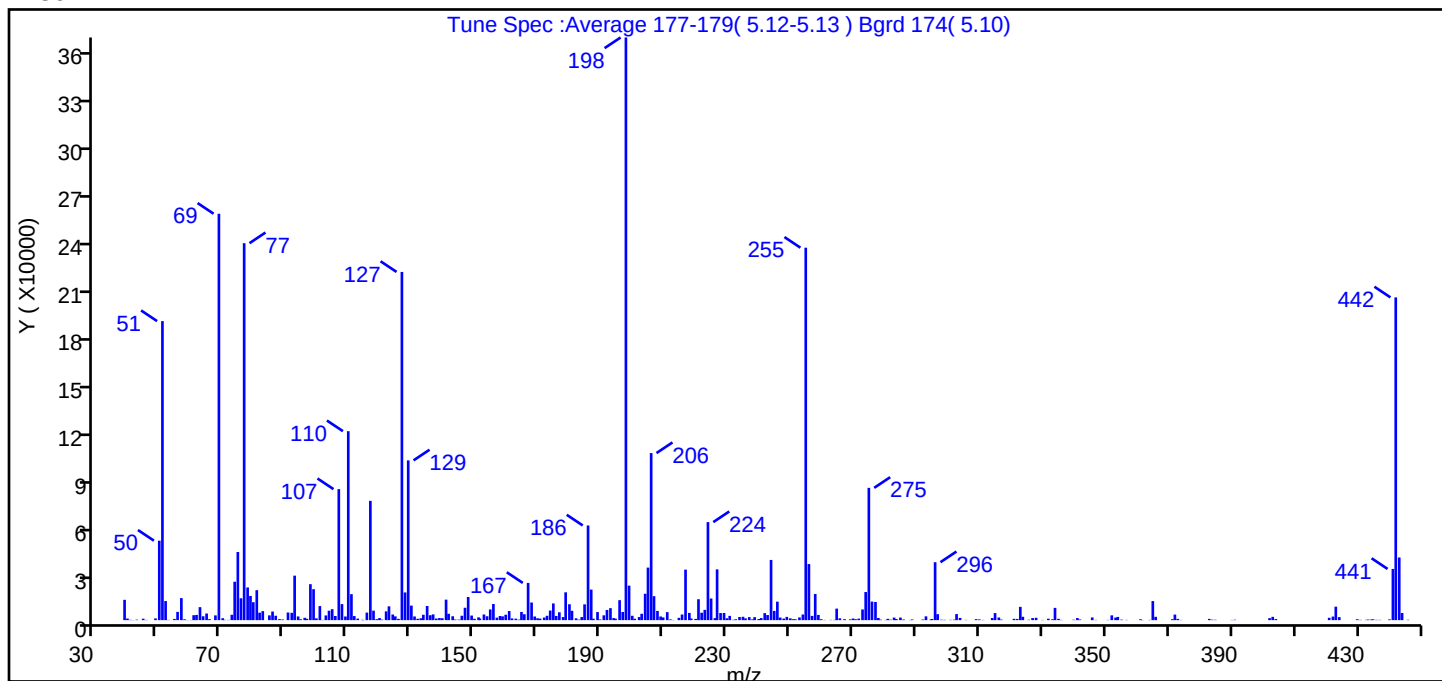
Dil. Factor: 1.0000

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Tune Method: DFTPP Method 8270D, BP 198

180 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >50% of 442	100.0 (180.5)
51	10-80% of the base peak	51.3
68	<2% of mass 69	0.8 (1.2)
69	Present	69.7
70	<2% of mass 69	0.3 (0.5)
127	10-80% of the base peak	59.8
197	<2% of mass 198	1.4
199	5-9% of mass 198	5.9
275	10-60% of the base peak	22.7
365	>1% of mass 198	3.3
441	present but <24% of mass 442	8.8 (15.9)
442	base peak, or >50% of 198	55.4
443	15-24% of mass 442	10.8 (19.4)

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1300.D\MSSemi_HP23264.rslt\spectra.d
Injection Date: 29-Oct-2020 23:26:30
Spectrum: Tune Spec :Average 177-179(5.12-5.13) Bgrd 174(5.10)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 319

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	12661	126.00	816	206.00	104160	292.00	413
40.00	1006	127.00	217088	207.00	14951	293.00	2365
41.00	212	128.00	17272	208.00	5727	295.00	369
42.00	87	129.00	99600	209.00	2282	295.00	722
43.00	302	130.00	9073	210.00	1695	296.00	36120
45.00	908	131.00	2297	211.00	4998	297.00	3720
46.00	153	132.00	861	212.00	462	298.00	269
49.00	1086	133.00	1163	213.00	117	299.00	211
50.00	49536	134.00	3362	215.00	1433	301.00	195
51.00	186432	135.00	8822	216.00	3514	302.00	286
52.00	11889	136.00	3069	217.00	31488	303.00	3784
53.00	160	137.00	3592	218.00	4509	304.00	1394
55.00	758	138.00	1004	219.00	1010	306.00	146
56.00	5128	139.00	1301	220.00	773	309.00	643
57.00	13754	140.00	1196	221.00	13041	310.00	475
58.00	534	141.00	12787	222.00	4616	311.00	138
59.00	103	142.00	3954	223.00	6405	314.00	1332
60.00	103	143.00	2427	224.00	61120	315.00	4403
61.00	3078	144.00	381	225.00	13491	316.00	1656
62.00	3250	145.00	343	226.00	1246	317.00	335
63.00	8106	146.00	2742	227.00	31656	321.00	820
64.00	2416	147.00	7735	228.00	4429	322.00	753
65.00	4134	148.00	14428	229.00	4463	323.00	8285
66.00	622	149.00	2864	230.00	1161	324.00	2104
68.00	2966	150.00	847	231.00	2659	326.00	237
69.00	253376	151.00	1741	232.00	210	327.00	1298
70.00	1194	152.00	1021	233.00	554	328.00	1480
71.00	235	153.00	3525	234.00	1934	330.00	128
72.00	162	154.00	2427	235.00	2098	332.00	888
73.00	3338	155.00	6668	236.00	1130	333.00	551
74.00	23944	156.00	10079	237.00	1880	334.00	7653
75.00	42480	157.00	1560	238.00	489	335.00	832
76.00	13638	158.00	2595	239.00	1879	336.00	151

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1300.D\MSSemi_HP23264.rsl\spectra.d

Injection Date: 29-Oct-2020 23:26:30

Spectrum: Tune Spec :Average 177-179(5.12-5.13) Bgrd 174(5.10)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 319

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	235008	159.00	2358	240.00	733	340.00	263
78.00	20392	160.00	3368	241.00	1304	341.00	1313
79.00	15088	161.00	5683	242.00	4379	342.00	402
80.00	11187	162.00	1089	243.00	3178	346.00	1690
81.00	18688	163.00	916	244.00	37528	347.00	159
82.00	4647	164.00	336	245.00	5752	351.00	160
83.00	5616	165.00	5097	246.00	11524	352.00	2993
85.00	2977	166.00	3687	247.00	1620	353.00	1605
86.00	5372	167.00	23208	248.00	972	354.00	2004
87.00	2745	168.00	10986	249.00	2035	355.00	334
88.00	628	169.00	2274	250.00	1114	357.00	150
89.00	420	170.00	1186	251.00	578	361.00	554
91.00	4776	171.00	954	252.00	562	362.00	113
92.00	4570	172.00	1615	253.00	1688	364.00	151
93.00	27728	173.00	2716	254.00	3524	365.00	11889
94.00	2313	174.00	5985	255.00	232192	366.00	2076
95.00	555	175.00	10421	256.00	34960	371.00	598
96.00	1454	176.00	2618	257.00	2644	372.00	3475
97.00	841	177.00	4895	258.00	16305	373.00	783
98.00	22424	178.00	1918	259.00	3270	374.00	131
99.00	19304	179.00	17360	260.00	595	383.00	780
100.00	1118	180.00	9905	261.00	131	384.00	284
101.00	8762	181.00	5827	263.00	168	385.00	234
102.00	162	182.00	1144	264.00	177	390.00	131
103.00	2931	183.00	363	265.00	7193	391.00	259
104.00	5871	184.00	1927	266.00	1140	402.00	1245
105.00	6841	185.00	9844	267.00	614	403.00	2055
106.00	2578	186.00	59032	269.00	474	404.00	672
107.00	81680	187.00	19048	270.00	1012	421.00	1457
108.00	9998	188.00	903	271.00	588	422.00	2222
109.00	2292	189.00	5041	272.00	960	423.00	8403
110.00	117808	190.00	435	273.00	6662	424.00	1872
111.00	16194	191.00	3008	274.00	17528	430.00	578
112.00	2545	192.00	6341	275.00	82480	431.00	178

Report Date: 30-Oct-2020 08:22:56

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1300.D\MSSemi_HP23264.rsl\spectra.d

Injection Date: 29-Oct-2020 23:26:30

Spectrum: Tune Spec :Average 177-179(5.12-5.13) Bgrd 174(5.10)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 319

m/z	Y	m/z	Y	m/z	Y	m/z	Y
113.00	969	193.00	7466	276.00	11565	433.00	196
114.00	208	194.00	1298	277.00	11343	433.00	364
115.00	84	195.00	946	278.00	1338	434.00	382
116.00	4696	196.00	12461	279.00	336	435.00	492
117.00	74360	197.00	5094	280.00	133	436.00	195
118.00	5919	198.00	363264	281.00	816	437.00	185
119.00	610	199.00	21512	282.00	295	440.00	479
120.00	1311	200.00	2724	283.00	1590	441.00	31920
121.00	307	201.00	889	284.00	700	442.00	201216
122.00	5480	202.00	1913	285.00	1597	443.00	39064
123.00	8615	203.00	3976	286.00	404	444.00	4481
124.00	3523	204.00	16464	288.00	109	446.00	244
125.00	2353	205.00	32760	289.00	421		

Report Date: 30-Oct-2020 08:22:56

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1300.D

Injection Date: 29-Oct-2020 23:26:30

Instrument ID: HP23264

Operator ID: sw30417

Lims ID: DFTPP

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 ul

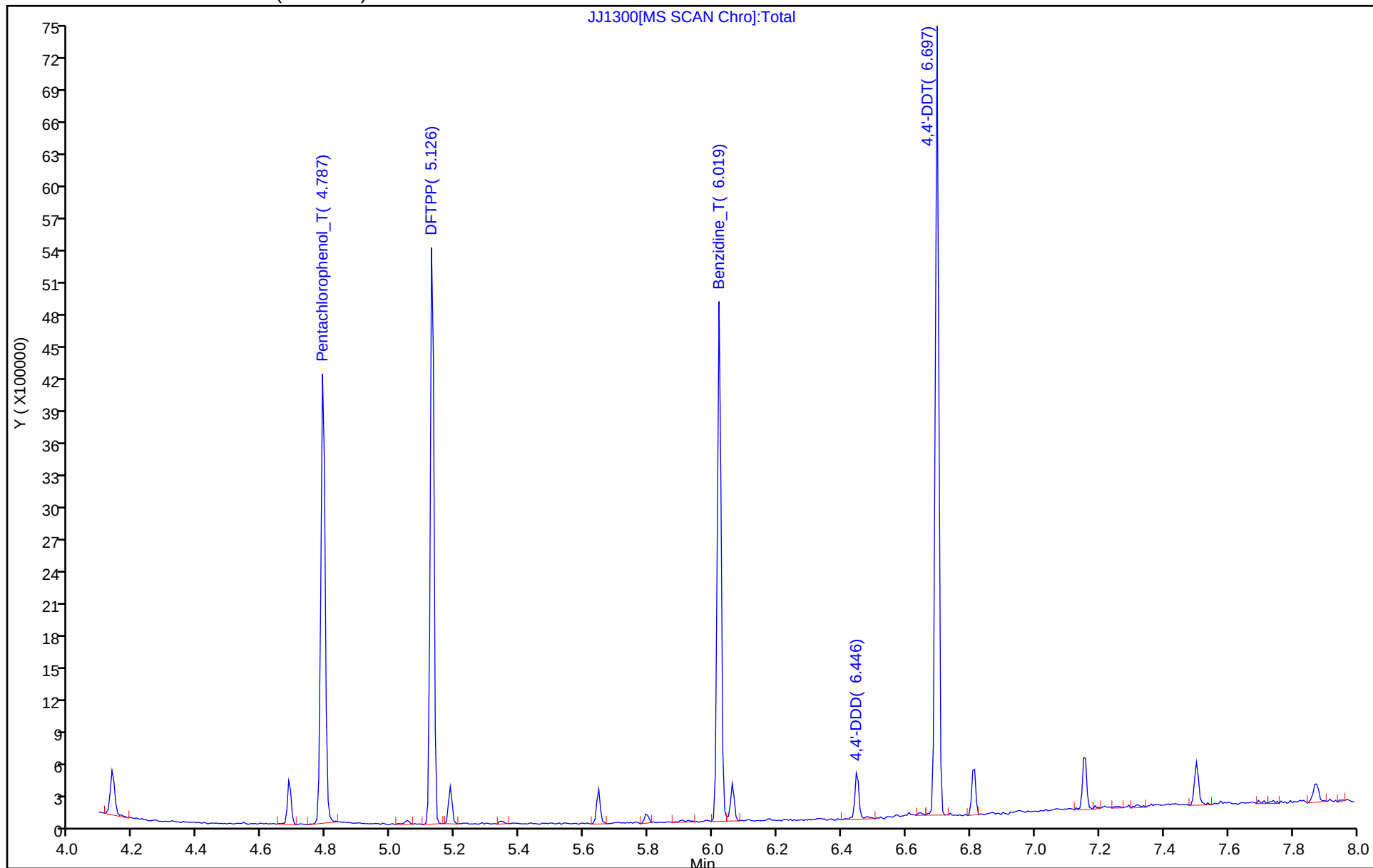
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1300.D
Injection Date: 29-Oct-2020 23:26:30 Instrument ID: HP23264
Lims ID: DFTPP
Client ID:
Operator ID: sw30417 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: MSSemi_HP23264 Limit Group: MSSV - 8270D_E LVI

181 4,4'-DDT, Detector: MS SCAN

SW-846 Method

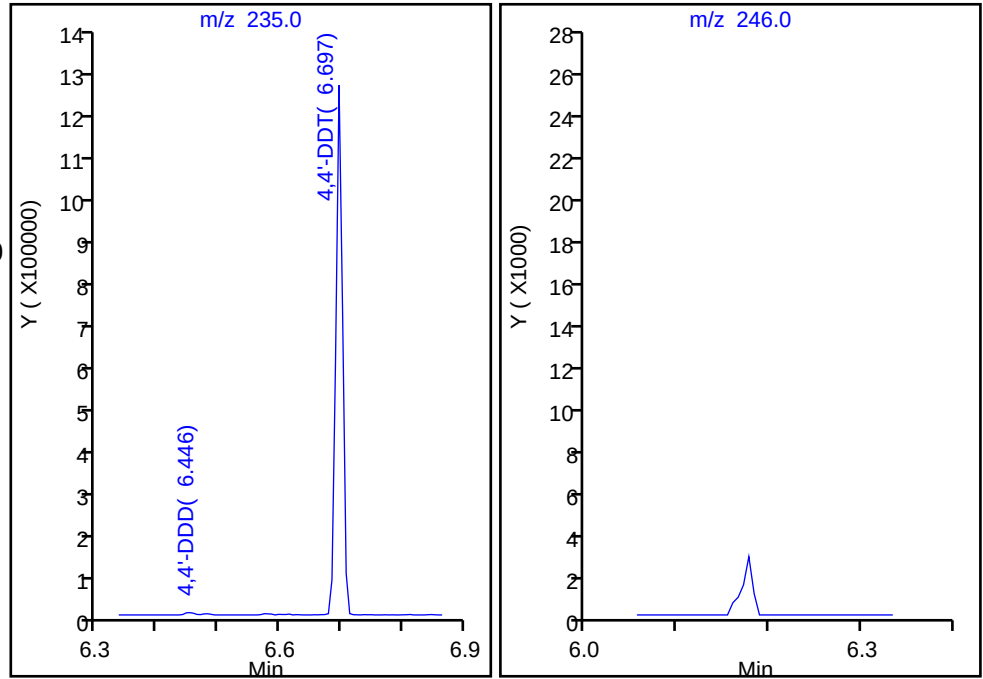
%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

181 4,4'-DDT, Area = 955825

179 4,4'-DDD, Area = 5900

178 4,4'-DDE, Area = 2342

%Breakdown: 0.85%, <= 20.00%
Passed



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1300.D
Injection Date: 29-Oct-2020 23:26:30 Instrument ID: HP23264
Lims ID: DFTPP
Client ID:
Operator ID: sw30417
Injection Vol: 1.0 ul
Method: MSSemi_HP23264

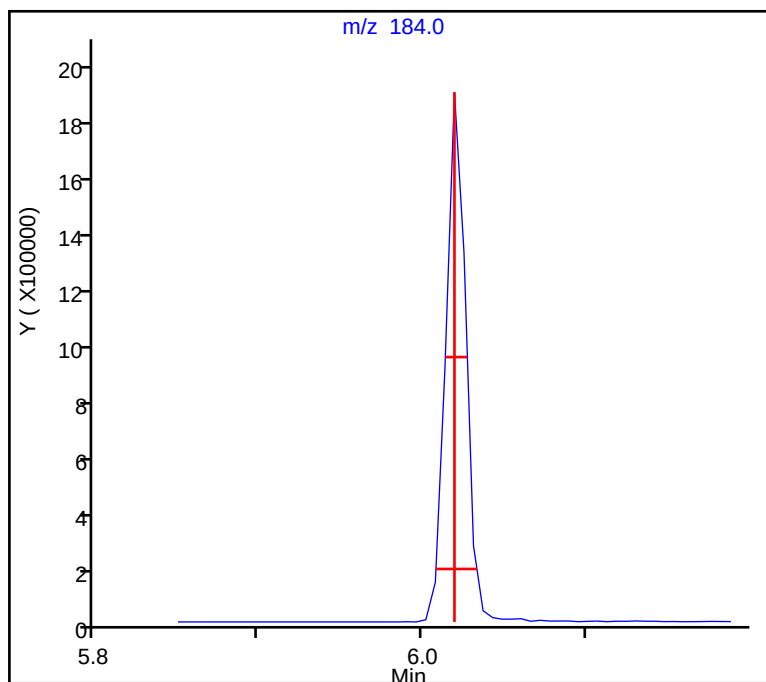
ALS Bottle#: 1 Worklist Smp#: 1
Dil. Factor: 1.0000
Limit Group: MSSV - 8270D_E LVI

7 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.014 (min.)
Front Width = 0.011 (min.)

Tailing Factor = 1.3, Max. Tailing <= 2.00
Passed



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1300.D
Injection Date: 29-Oct-2020 23:26:30 Instrument ID: HP23264
Lims ID: DFTPP
Client ID:
Operator ID: sw30417
Injection Vol: 1.0 ul
Method: MSSemi_HP23264

ALS Bottle#: 1 Worklist Smp#: 1
Dil. Factor: 1.0000
Limit Group: MSSV - 8270D_E LVI

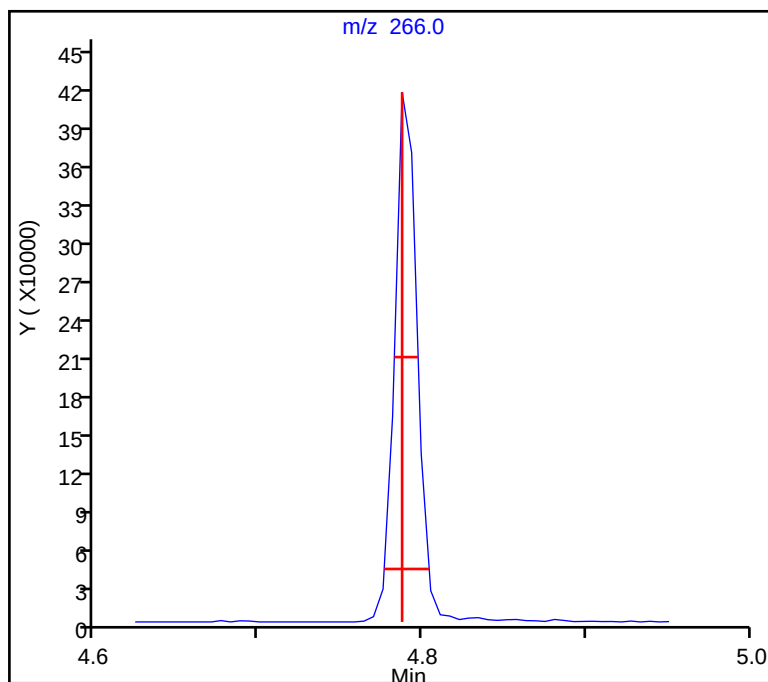
5 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.017 (min.)

Front Width = 0.011 (min.)

Tailing Factor = 1.6, Max. Tailing <= 2.00
Passed



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1320.D
 Lims ID: DFTPP
 Client ID:
 Sample Type: DFTPP
 Inject. Date: 30-Oct-2020 09:55:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: DFTPP
 Misc. Info.: 410-0014287-001
 Operator ID: knb25316 Instrument ID: HP23264
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 30-Oct-2020 11:07:54 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1008

First Level Reviewer: beckk

Date: 30-Oct-2020 11:07:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
5 Pentachlorophenol_T	266	4.799	4.799	0.000	87	1251406	NR	NR	
7 Benzidine_T	184	6.031	6.031	0.000	99	5472780	NR	NR	
180 DFTPP									
178 4,4'-DDE	246	6.177	6.177	0.000	83	7081		NR	
179 4,4'-DDD	235	6.457	6.457	0.000	82	24575		NR	
181 4,4'-DDT	235	6.708	6.708	0.000	95	2717831	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

MSS_RVDFTPP_00005

Amount Added: 1.00

Units: mL

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1320.D

Injection Date: 30-Oct-2020 09:55:30

Instrument ID: HP23264

Lims ID: DFTPP

Client ID:

Operator ID: knb25316

ALS Bottle#: 1 Worklist Smp#: 1

Injection Vol: 1.0 ul

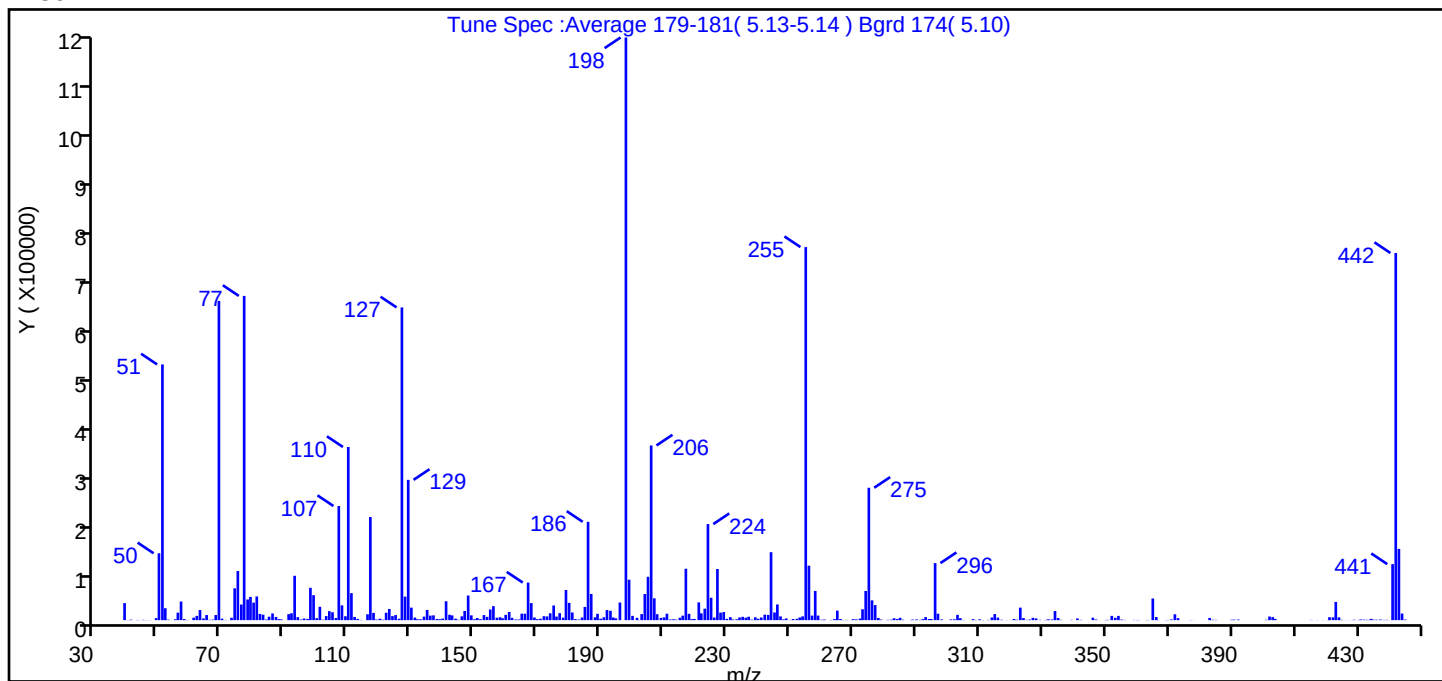
Dil. Factor: 1.0000

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Tune Method: DFTPP Method 8270D, BP 198

180 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >50% of 442	100.0 (158.7)
51	10-80% of the base peak	43.9
68	<2% of mass 69	0.9 (1.6)
69	Present	54.8
70	<2% of mass 69	0.2 (0.4)
127	10-80% of the base peak	53.7
197	<2% of mass 198	0.0
199	5-9% of mass 198	6.9
275	10-60% of the base peak	22.7
365	>1% of mass 198	3.7
441	present but <24% of mass 442	9.6 (15.3)
442	base peak, or >50% of 198	63.0
443	15-24% of mass 442	12.2 (19.4)

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1320.D\MSSemi_HP23264.rslt\spectra.d
Injection Date: 30-Oct-2020 09:55:30
Spectrum: Tune Spec :Average 179-181(5.13-5.14) Bgrd 174(5.10)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 349

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	33864	132.00	1908	221.00	35296	317.00	768
40.00	274	133.00	1805	222.00	13463	319.00	194
41.00	1006	134.00	6995	223.00	22784	320.00	185
43.00	374	135.00	20288	224.00	190784	321.00	2334
44.00	210	136.00	9042	225.00	44520	322.00	901
45.00	585	137.00	9484	226.00	5136	323.00	24816
46.00	322	138.00	2269	227.00	101616	324.00	4169
47.00	250	139.00	1853	228.00	14870	325.00	555
49.00	4043	140.00	3134	229.00	16005	326.00	1237
50.00	132736	141.00	37520	230.00	2494	327.00	4575
51.00	507840	142.00	10658	231.00	5980	328.00	3427
52.00	23616	143.00	9393	232.00	1331	329.00	617
53.00	1040	144.00	2885	233.00	1664	331.00	559
55.00	1802	145.00	858	234.00	5344	332.00	1825
56.00	14827	146.00	7579	235.00	6537	333.00	1442
57.00	37000	147.00	18152	236.00	4937	334.00	18152
58.00	2179	148.00	48920	237.00	6749	335.00	4311
59.00	422	149.00	9493	238.00	1093	336.00	600
61.00	4906	150.00	1824	239.00	5677	339.00	551
62.00	8484	151.00	4171	240.00	2824	341.00	3389
63.00	20104	152.00	1951	241.00	5204	342.00	584
64.00	3357	153.00	10024	242.00	10870	346.00	4817
65.00	10143	154.00	6523	243.00	10379	347.00	1331
66.00	695	155.00	21184	244.00	134976	348.00	84
67.00	1115	156.00	27840	245.00	15234	350.00	508
68.00	10123	157.00	4803	246.00	31168	351.00	515
69.00	633920	158.00	5760	247.00	7408	352.00	8440
70.00	2847	159.00	3790	248.00	1428	353.00	4624
71.00	441	160.00	10539	249.00	3369	354.00	8436
72.00	95	161.00	16319	250.00	443	355.00	1166
73.00	4780	162.00	4604	251.00	2228	356.00	413
74.00	63232	163.00	1479	252.00	2664	359.00	426
75.00	97552	164.00	1315	253.00	5233	360.00	354

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1320.D\MSSemi_HP23264.rsl\spectra.d

Injection Date: 30-Oct-2020 09:55:30

Spectrum: Tune Spec :Average 179-181(5.13-5.14) Bgrd 174(5.10)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 349

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.00	30992	165.00	12826	254.00	7501	361.00	249
77.00	643904	166.00	12776	255.00	740864	363.00	426
78.00	41016	167.00	74592	256.00	108136	364.00	193
79.00	46088	168.00	33832	257.00	9012	365.00	42952
80.00	34720	169.00	5294	258.00	57952	366.00	6178
81.00	47032	170.00	2051	259.00	9041	367.00	247
82.00	12288	171.00	2810	260.00	787	369.00	255
83.00	10801	172.00	7806	261.00	1224	370.00	364
84.00	1185	173.00	7379	263.00	466	371.00	1443
85.00	6845	174.00	13617	264.00	2135	372.00	11651
86.00	13300	175.00	29048	265.00	18808	373.00	3920
87.00	6331	176.00	7060	266.00	2305	377.00	339
88.00	1988	177.00	13881	267.00	293	378.00	152
89.00	1495	178.00	4821	268.00	478	383.00	4431
91.00	11892	179.00	59856	269.00	134	384.00	814
92.00	13676	180.00	34296	270.00	1971	385.00	554
93.00	88096	181.00	15199	271.00	1658	390.00	830
94.00	5918	182.00	2060	272.00	3136	391.00	1023
95.00	1224	183.00	1246	273.00	21616	392.00	1260
96.00	3252	184.00	5165	274.00	57912	401.00	719
97.00	2339	185.00	26256	275.00	262912	402.00	7154
98.00	64224	186.00	195264	276.00	39320	403.00	5968
99.00	49576	187.00	52032	277.00	29856	404.00	2467
100.00	3947	188.00	5563	278.00	4297	415.00	459
101.00	26432	189.00	12557	279.00	1132	417.00	220
102.00	905	190.00	2763	281.00	591	419.00	145
103.00	8072	191.00	5614	282.00	1012	420.00	282
104.00	17824	192.00	20016	283.00	3715	421.00	5828
105.00	15680	193.00	18496	284.00	2364	422.00	5575
106.00	4279	194.00	5262	285.00	4602	423.00	36208
107.00	226624	195.00	3623	286.00	830	424.00	5621
108.00	29392	196.00	35008	288.00	240	425.00	634
109.00	7736	198.00	1157120	289.00	1142	426.00	151
110.00	343872	199.00	80312	290.00	1439	427.00	193

Report Date: 30-Oct-2020 11:07:55

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1320.D\MSSemi_HP23264.rsl\spectra.d

Injection Date: 30-Oct-2020 09:55:30

Spectrum: Tune Spec :Average 179-181(5.13-5.14) Bgrd 174(5.10)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 349

m/z	Y	m/z	Y	m/z	Y	m/z	Y
111.00	53552	200.00	8479	291.00	480	428.00	153
112.00	6357	202.00	4612	292.00	1962	429.00	825
113.00	2504	202.00	347	293.00	5989	430.00	364
114.00	426	203.00	12003	294.00	2257	431.00	1393
115.00	92	204.00	51880	295.00	2320	432.00	1012
116.00	11629	205.00	86128	296.00	113312	433.00	683
117.00	204800	206.00	346944	297.00	12768	434.00	2510
118.00	14445	207.00	43312	298.00	1521	435.00	1187
119.00	1253	208.00	11795	301.00	1430	436.00	930
120.00	2753	209.00	4513	302.00	1748	437.00	1218
121.00	902	210.00	5579	303.00	10477	438.00	542
122.00	14711	211.00	12766	304.00	3834	439.00	590
123.00	22216	212.00	1332	305.00	340	440.00	162
124.00	7982	213.00	1824	308.00	1949	441.00	111280
125.00	10081	214.00	923	309.00	520	442.00	729152
126.00	2738	215.00	4727	310.00	1682	443.00	141568
127.00	621056	216.00	8883	311.00	313	444.00	13074
128.00	46728	217.00	102024	313.00	556	445.00	1176
129.00	278592	218.00	12591	314.00	5297		
130.00	24872	219.00	1942	315.00	12021		
131.00	5083	220.00	2468	316.00	4988		

Report Date: 30-Oct-2020 11:07:55

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1320.D

Injection Date: 30-Oct-2020 09:55:30

Instrument ID: HP23264

Operator ID: knb25316

Lims ID: DFTPP

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 ul

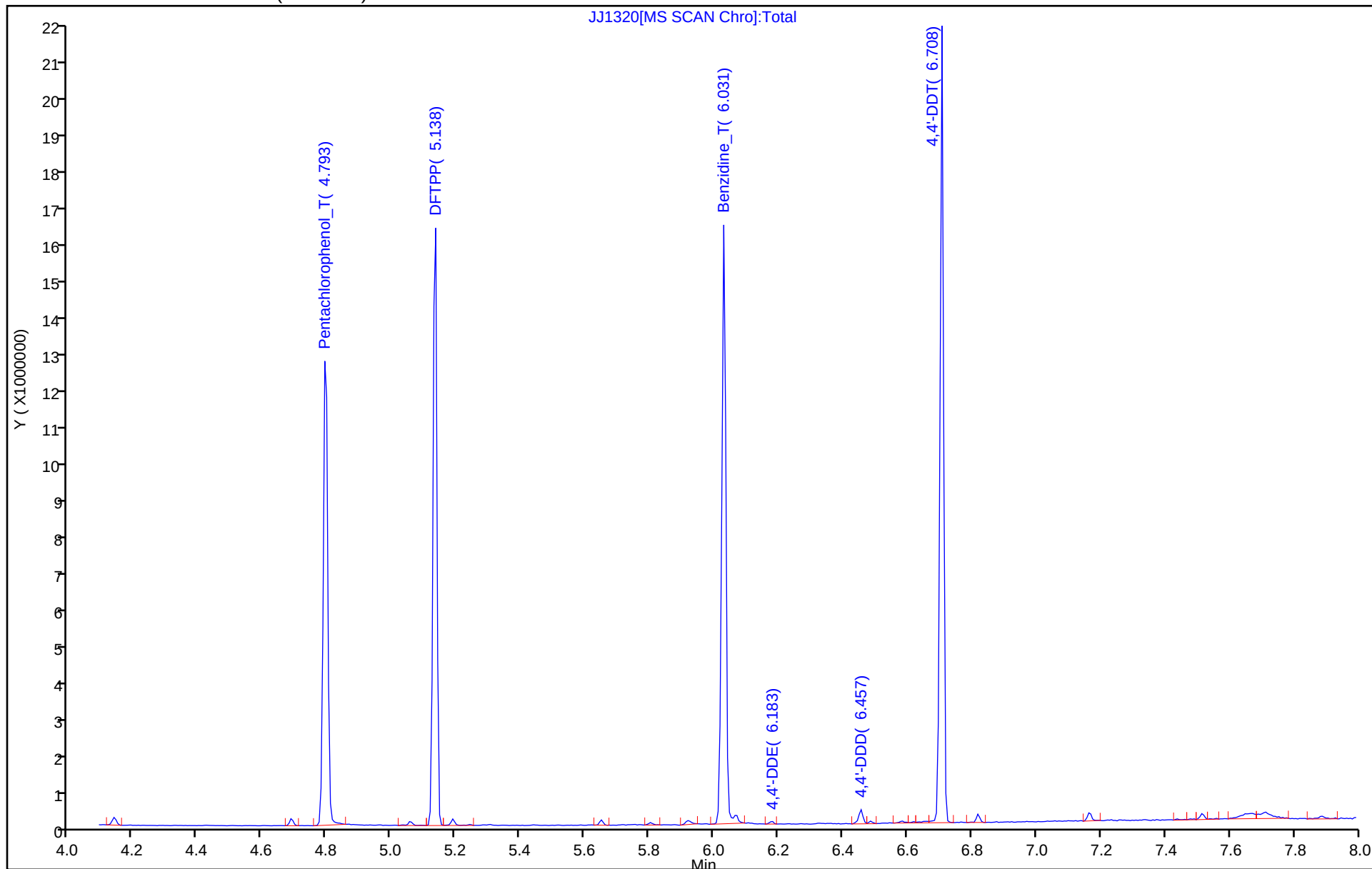
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1320.D

Injection Date: 30-Oct-2020 09:55:30

Instrument ID: HP23264

Lims ID: DFTPP

Client ID:

Operator ID: knb25316

ALS Bottle#: 1

Worklist Smp#: 1

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

181 4,4'-DDT, Detector: MS SCAN

SW-846 Method

%Breakdown =

$$\left(\frac{\text{Area Breakdown Cpnds}}{\text{Total Area Breakdown Cpnds}} \right) * 100$$

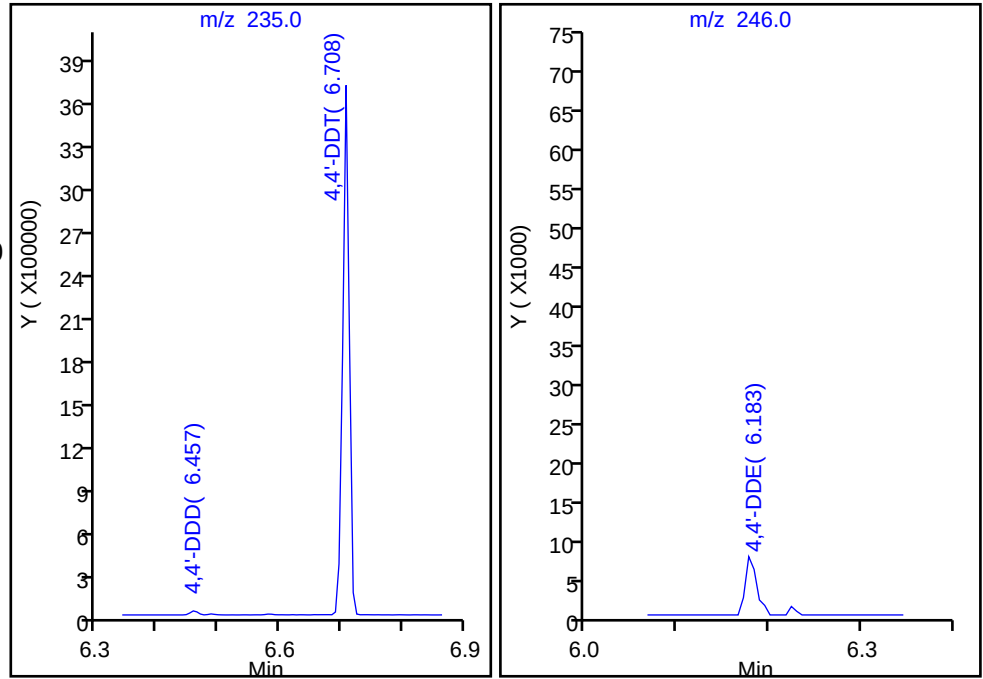
181 4,4'-DDT, Area = 2717831

179 4,4'-DDD, Area = 24575

178 4,4'-DDE, Area = 7081

%Breakdown: 1.15%, <= 20.00%

Passed



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1320.D

Injection Date: 30-Oct-2020 09:55:30

Instrument ID: HP23264

Lims ID: DFTPP

Client ID:

Operator ID: knb25316

ALS Bottle#: 1 Worklist Smp#: 1

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

5 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =

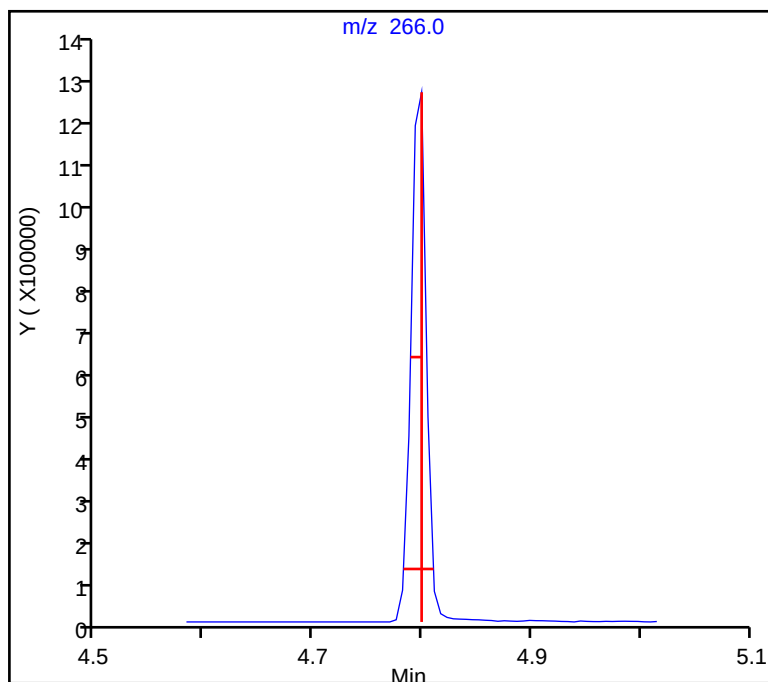
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.011 (min.)

Front Width = 0.017 (min.)

Tailing Factor = 0.7, Max. Tailing <= 2.00

Passed



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201030-14287.b\JJ1320.D

Injection Date: 30-Oct-2020 09:55:30

Instrument ID: HP23264

Lims ID: DFTPP

Client ID:

Operator ID: knb25316

ALS Bottle#: 1 Worklist Smp#: 1

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

7 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =

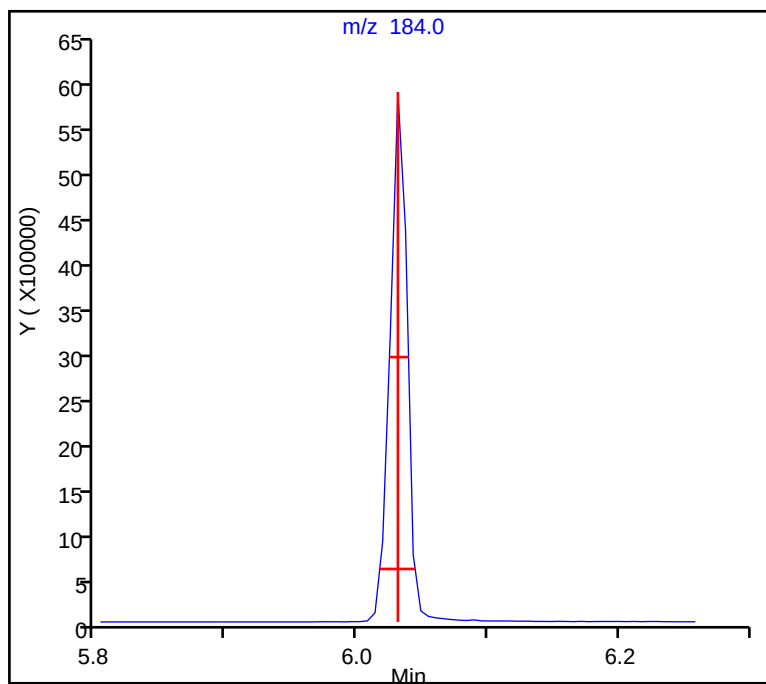
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.013 (min.)

Front Width = 0.014 (min.)

Tailing Factor = 0.9, Max. Tailing <= 2.00

Passed



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 410-59339/1-A
 Matrix: Water Lab File ID: LJ1002.D
 Analysis Method: 8270D Date Collected: _____
 Extract. Method: 3510C Date Extracted: 10/28/2020 09:30
 Sample wt/vol: 250 (mL) Date Analyzed: 10/28/2020 17:35
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 59610 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
121-14-2	2,4-Dinitrotoluene	ND		10	
606-20-2	2,6-Dinitrotoluene	ND		10	
84-66-2	Diethyl phthalate	ND		5.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	84		44-102
4165-60-0	Nitrobenzene-d5 (Surr)	88		38-113
1718-51-0	p-Terphenyl-d14 (Surr)	83		34-128

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1002.D
 Lims ID: MB 410-59339/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 28-Oct-2020 17:35:42 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: MB 410-59339/1-A
 Misc. Info.: 410-0014101-003
 Operator ID: kel10217 Instrument ID: HP20296
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 28-Oct-2020 23:23:55 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: luttek

Date: 28-Oct-2020 20:40:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
\$ 10 2-Fluorophenol	112	5.054	5.050	0.000	93	1075961	50.2	21.8	
\$ 16 Phenol-d5	99	6.455	6.445	0.005	98	969751	50.2	16.1	
* 24 1,4-Dichlorobenzene-d4	152	6.936	6.937	-0.001	97	153570	5.00	5.00	
\$ 41 Nitrobenzene-d5	82	7.787	7.787	-0.005	86	1318888	25.0	22.0	
* 55 Naphthalene-d8	136	8.921	8.921	0.000	99	565477	5.00	5.00	
56 Naphthalene	128		8.953					ND	7
\$ 76 2-Fluorobiphenyl (Surr)	172	10.702	10.702	-0.005	99	1875497	25.1	21.1	
88 2,6-Dinitrotoluene	165		11.472					ND	7
* 92 Acenaphthene-d10	164	11.750	11.756	-0.006	97	271166	5.00	5.00	
99 2,4-Dinitrotoluene	165		12.050					ND	
104 Diethyl phthalate	149		12.398					ND	7
105 Fluorene	166		12.488					ND	
\$ 113 2,4,6-Tribromophenol	330	12.793	12.787	0.000	95	560244	50.2	46.3	
* 127 Phenanthrene-d10	188	13.676	13.681	-0.005	97	528240	5.00	5.00	
129 Phenanthrene	178		13.713					ND	7
130 Anthracene	178		13.777					ND	7
* 140 Pyrene-d10 (IS)	212	15.724	15.724	0.000	98	525333	5.00	5.00	
141 Pyrene	202		15.756					ND	7
\$ 142 p-Terphenyl-d14	244	16.040	16.034	0.000	98	2184753	25.1	20.8	
149 Benzo[a]anthracene	228		17.805					ND	7
151 Chrysene	228		17.869					ND	7
155 Benzo[b]fluoranthene	252		19.688					ND	7
158 Benzo[a]pyrene	252		20.223					ND	U
* 159 Perylene-d12	264	20.308	20.314	-0.006	98	555798	5.00	5.00	
165 Benzo[g,h,i]perylene	276		22.378					ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSS_RV8270_IS_00015

Amount Added: 20.00

Units: uL

Run Reagent

Report Date: 28-Oct-2020 23:24:36

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1002.D

Injection Date: 28-Oct-2020 17:35:42

Instrument ID: HP20296

Operator ID: kel10217

Lims ID: MB 410-59339/1-A

Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 ul

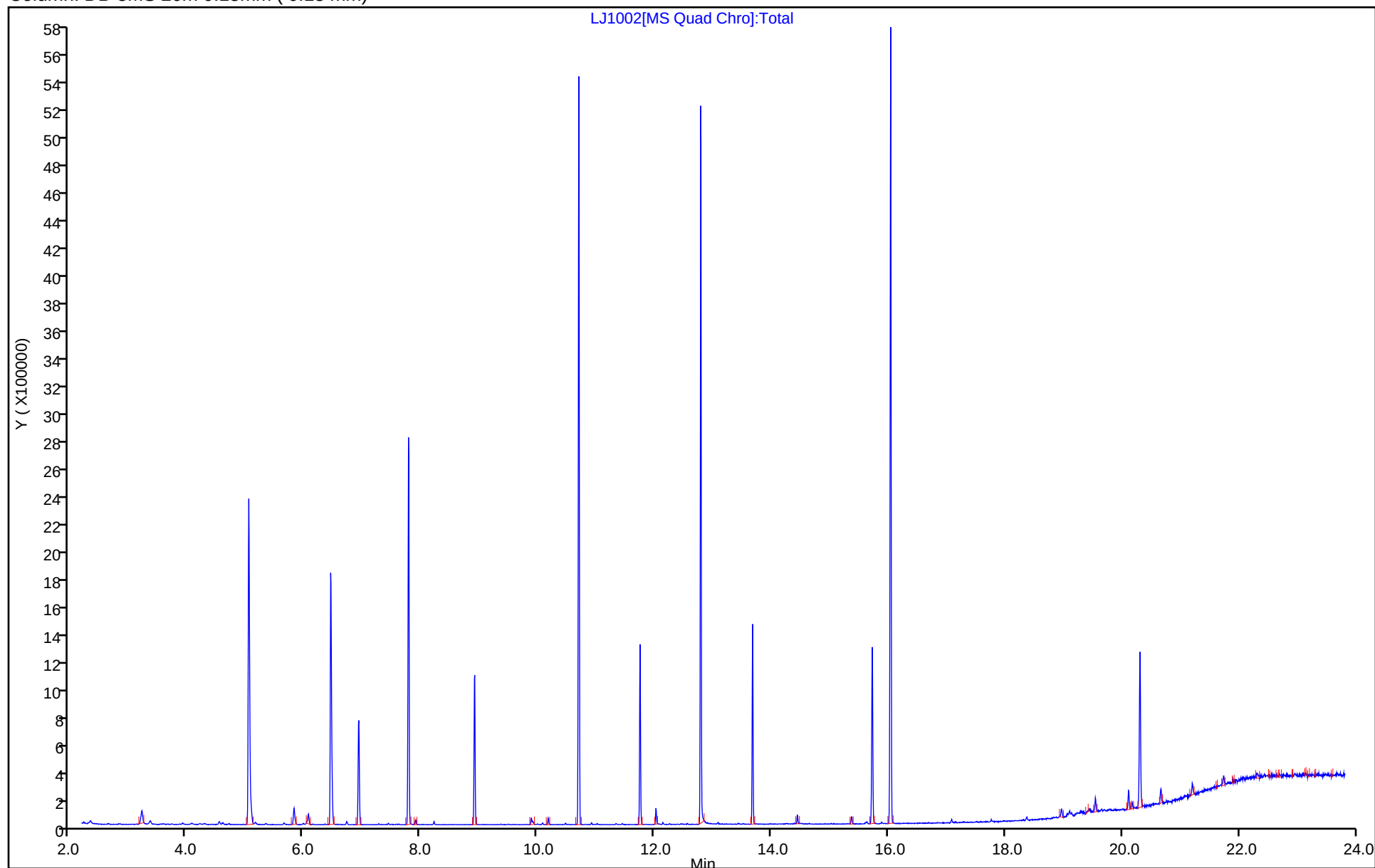
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1002.D
 Lims ID: MB 410-59339/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 28-Oct-2020 17:35:42 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: MB 410-59339/1-A
 Misc. Info.: 410-0014101-003
 Operator ID: kel10217 Instrument ID: HP20296
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 28-Oct-2020 23:23:55 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: luttek

Date: 28-Oct-2020 20:40:51

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 2-Fluorophenol	50.2	21.8	43.37
\$ 16 Phenol-d5	50.2	16.1	32.05
\$ 41 Nitrobenzene-d5	25.0	22.0	88.04
\$ 76 2-Fluorobiphenyl (Surr)	25.1	21.1	84.16
\$ 113 2,4,6-Tribromophenol	50.2	46.3	92.30
\$ 142 p-Terphenyl-d14	25.1	20.8	82.90

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 410-59818/1-A
 Matrix: Water Lab File ID: JJ1303.D
 Analysis Method: 8270D Date Collected: _____
 Extract. Method: 3510C Date Extracted: 10/29/2020 09:00
 Sample wt/vol: 250 (mL) Date Analyzed: 10/30/2020 02:03
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 60208 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
121-14-2	2,4-Dinitrotoluene	ND		10	
606-20-2	2,6-Dinitrotoluene	ND		10	
84-66-2	Diethyl phthalate	ND		5.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	92		44-102
4165-60-0	Nitrobenzene-d5 (Surr)	88		38-113
1718-51-0	p-Terphenyl-d14 (Surr)	91		34-128

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1303.D
 Lims ID: MB 410-59818/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 30-Oct-2020 02:03:30 ALS Bottle#: 4 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: MB 410-59818/1-A
 Misc. Info.: 410-0014245-004
 Operator ID: sw30417 Instrument ID: HP23264
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 30-Oct-2020 10:54:59 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1008

First Level Reviewer: bekk

Date: 30-Oct-2020 09:57:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88		2.179					ND	
3 N-Nitrosodimethylamine	74		2.747					ND	
4 Pyridine	79		2.792					ND	
8 2-Picoline	93		3.972					ND	
10 N-Nitrosomethylethylamine	88		4.165					ND	
11 Methyl methanesulfonate	80		4.618					ND	
\$ 12 2-Fluorophenol	112	4.924	4.933	-0.001	93	1062604	50.2	28.9	
13 N-Nitrosodiethylamine	102		5.174					ND	
15 Ethyl methanesulfonate	109		5.639					ND	
19 Benzaldehyde	77		6.082					ND	7
23 Aniline	93		6.252					ND	
\$ 20 Phenol-d5	99	6.297	6.308	0.000	93	1010886	50.2	20.2	
21 Phenol	94		6.320					ND	7
24 Bis(2-chloroethyl)ether	93		6.365					ND	
25 2-Chlorophenol	128		6.445					ND	
26 1,3-Dichlorobenzene	146		6.626					ND	
* 28 1,4-Dichlorobenzene-d4	152	6.717	6.717	0.000	98	121913	5.00	5.00	
29 1,4-Dichlorobenzene	146		6.751					ND	
30 Benzyl alcohol	108		6.955					ND	
31 1,2-Dichlorobenzene	146		6.967					ND	
35 2,2'-oxybis[1-chloropropane]	45		7.159					ND	7
33 2-Methylphenol	108		7.194					ND	
36 N-Nitrosopyrrolidine	100		7.307					ND	
38 Acetophenone	105		7.341					ND	
39 N-Nitrosodi-n-propylamine	70		7.364					ND	U
40 N-Nitrosomorpholine	56		7.375					ND	
41 2-Toluidine	106		7.386					ND	
37 4-Methylphenol	108		7.432					ND	
42 Hexachloroethane	117		7.466					ND	7
\$ 43 Nitrobenzene-d5	82	7.556	7.557	0.000	89	1163059	25.0	22.0	
44 Nitrobenzene	77		7.579					ND	U

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
45 N-Nitrosopiperidine	114		7.817					ND	
47 Isophorone	82		7.965					ND	7
48 2-Nitrophenol	139		8.078					ND	
49 2,4-Dimethylphenol	107		8.214					ND	
51 o,o',o''-Triethylphosphorothioat	198		8.305					ND	
52 Bis(2-chloroethoxy)methane	93		8.339					ND	
54 2,4-Dichlorophenol	162		8.498					ND	
55 1,2,4-Trichlorobenzene	180		8.577					ND	
* 56 Naphthalene-d8	136	8.657	8.657	0.000	99	464744	5.00	5.00	
57 Naphthalene	128		8.691					ND	
58 4-Chloroaniline	127		8.804					ND	
59 2,6-Dichlorophenol	162		8.816					ND	
61 Hexachloropropene	213		8.838					ND	
62 Hexachlorobutadiene	225		8.906					ND	
22 p-Phenylene diamine	108		9.024					ND	
65 N-Nitrosodi-n-butylamine	84		9.338					ND	
64 Caprolactam	113		9.338					ND	
S 60 Diallate	86		9.653					ND	7
67 4-Chloro-3-methylphenol	107		9.667					ND	
68 Safrole, Total	162		9.678					ND	
69 2-Methylnaphthalene	142		9.791					ND	
71 Hexachlorocyclopentadiene	237		10.052					ND	
72 1,2,4,5-Tetrachlorobenzene	216		10.052					ND	
73 Isosafrole Peak 1	162		10.154					ND	
74 2,4,6-Trichlorophenol	196		10.268					ND	
76 2,4,5-Trichlorophenol	196		10.370					ND	
\$ 77 2-Fluorobiphenyl (Surr)	172	10.404	10.404	0.000	99	1695382	25.1	23.1	
78 Isosafrole Peak 2	162		10.506					ND	
80 1,1'-Biphenyl	154		10.551					ND	7
81 2-Chloronaphthalene	162		10.563					ND	
84 2-Nitroaniline	138		10.744					ND	
85 1,4-Naphthoquinone	158		10.858					ND	
89 1,3-Dinitrobenzene	168		10.982					ND	
87 Dimethyl phthalate	163		11.085					ND	
S 79 Isosafrole	162		11.144					ND	7
90 2,6-Dinitrotoluene	165		11.153					ND	
91 Acenaphthylene	152		11.209					ND	
92 3-Nitroaniline	138		11.414					ND	
* 93 Acenaphthene-d10	164	11.436	11.436	0.000	95	243117	5.00	5.00	
94 Acenaphthene	153		11.493					ND	
95 2,4-Dinitrophenol	184		11.572					ND	
99 Pentachlorobenzene	250		11.686					ND	
101 Dibenzofuran	168		11.754					ND	
100 2,4-Dinitrotoluene	165		11.765					ND	
97 4-Nitrophenol	109		11.822					ND	
102 1-Naphthylamine	143		11.867					ND	
103 2,3,4,6-Tetrachlorophenol	232		11.947					ND	
104 2-Naphthylamine	143		11.969					ND	
105 Diethyl phthalate	149		12.128					ND	
107 Fluorene	166		12.208					ND	
106 Thionazin	107		12.219					ND	
109 4-Chlorophenyl phenyl ether	204		12.230					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
110 N-Nitro-o-toluidine	152		12.242					ND	
108 4-Nitroaniline	138		12.253					ND	
111 4,6-Dinitro-2-methylphenol	198		12.287					ND	
112 N-Nitrosodiphenylamine	169		12.378					ND	
167 1,3,5-Trinitrobenzene	213		12.463					ND	
\$ 114 2,4,6-Tribromophenol	330	12.502	12.503	-0.001	90	529658	50.2	57.2	
115 Sulfotepp	97		12.605					ND	
116 cis-Diallate	86		12.729					ND	7
117 Phorate	75		12.741					ND	
118 Phenacetin	108		12.763					ND	
119 4-Bromophenyl phenyl ether	248		12.809					ND	7
120 trans-Diallate	86		12.832					ND	7
121 Hexachlorobenzene	284		12.854					ND	
122 Dimethoate	87		12.934					ND	7
123 Atrazine	200		13.036					ND	
126 Pentachloronitrobenzene	237		13.115					ND	
124 Pentachlorophenol	266		13.126					ND	
125 4-Aminobiphenyl	169		13.126					ND	
127 Pronamide	173		13.229					ND	7
* 128 Phenanthrene-d10	188	13.330	13.331	-0.001	97	446622	5.00	5.00	
130 Phenanthrene	178		13.365					ND	
66 Disulfoton	88		13.410					ND	
131 Anthracene	178		13.421					ND	
132 Carbazole	167		13.648					ND	
133 Methyl parathion	109		13.841					ND	
134 Di-n-butyl phthalate	149		14.147					ND	7
75 Methapyrilene	97	14.295	14.193	0.102	1	334		NC	
135 Ethyl Parathion	109		14.386					ND	
136 4-Nitroquinoline-1-oxide	190		14.386					ND	
138 Isodrin	193		14.760					ND	7
139 Fluoranthene	202		14.976					ND	7
* 141 Pyrene-d10 (IS)	212	15.282	15.282	0.000	99	454712	5.00	5.00	
142 Pyrene	202		15.316					ND	7
\$ 143 p-Terphenyl-d14	244	15.599	15.599	0.000	97	1908899	25.1	22.8	
144 p-Dimethylamino azobenzene	225		15.826					ND	
145 Chlorobenzilate	139		15.928					ND	
96 Famphur	218		16.259					ND	
146 3,3'-Dimethylbenzidine	212		16.394					ND	7
147 Butyl benzyl phthalate	149		16.450					ND	7
148 2-Acetylaminofluorene	181		16.813					ND	
149 Benzo[a]anthracene	228		17.301					ND	
150 3,3'-Dichlorobenzidine	252		17.312					ND	
152 Chrysene	228		17.369					ND	
153 Bis(2-ethylhexyl) phthalate	149		17.517					ND	7
155 Di-n-octyl phthalate	149		18.674					ND	7
156 Benzo[b]fluoranthene	252		19.150					ND	
157 7,12-Dimethylbenz(a)anthracene	256		19.162					ND	
158 Benzo[k]fluoranthene	252		19.207					ND	
159 Benzo[a]pyrene	252		19.672					ND	U
* 160 Perylene-d12	264	19.763	19.763	0.000	99	429995	5.00	5.00	
161 3-Methylcholanthrene	268		20.251					ND	7
164 Indeno[1,2,3-cd]pyrene	276		21.362					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
165 Dibenz(a,h)anthracene	278		21.408					ND	7
166 Benzo[g,h,i]perylene	276		21.737					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSS_RV8270_IS_00015

Amount Added: 20.00

Units: uL

Run Reagent

Report Date: 30-Oct-2020 10:55:47

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1303.D

Injection Date: 30-Oct-2020 02:03:30

Instrument ID: HP23264

Operator ID: sw30417

Lims ID: MB 410-59818/1-A

Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul

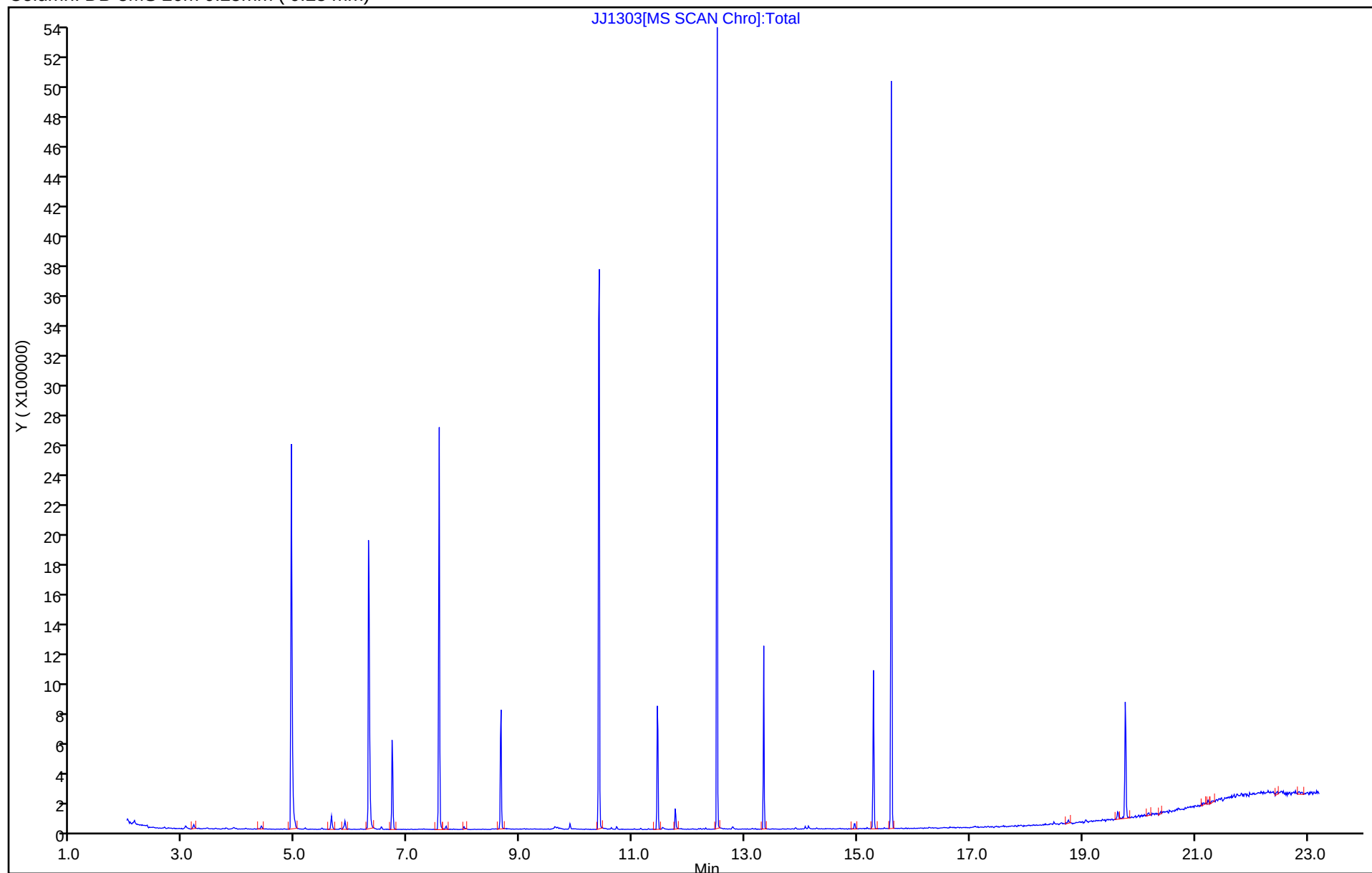
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1303.D
 Lims ID: MB 410-59818/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 30-Oct-2020 02:03:30 ALS Bottle#: 4 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: MB 410-59818/1-A
 Misc. Info.: 410-0014245-004
 Operator ID: sw30417 Instrument ID: HP23264
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 30-Oct-2020 10:54:59 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1008

First Level Reviewer: bekk

Date: 30-Oct-2020 09:57:48

Compound	Amount Added	Amount Recovered	% Rec.
\$ 12 2-Fluorophenol	50.2	28.9	57.55
\$ 20 Phenol-d5	50.2	20.2	40.25
\$ 43 Nitrobenzene-d5	25.0	22.0	87.99
\$ 77 2-Fluorobiphenyl (Surr)	25.1	23.1	92.05
\$ 114 2,4,6-Tribromophenol	50.2	57.2	114.09
\$ 143 p-Terphenyl-d14	25.1	22.8	90.70

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 410-59339/2-A
 Matrix: Water Lab File ID: LJ1003.D
 Analysis Method: 8270D Date Collected: _____
 Extract. Method: 3510C Date Extracted: 10/28/2020 09:30
 Sample wt/vol: 250 (mL) Date Analyzed: 10/28/2020 18:04
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 59610 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
121-14-2	2,4-Dinitrotoluene	40.7		10	
606-20-2	2,6-Dinitrotoluene	43.6		10	
84-66-2	Diethyl phthalate	39.1		5.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	72		44-102
4165-60-0	Nitrobenzene-d5 (Surr)	82		38-113
1718-51-0	p-Terphenyl-d14 (Surr)	78		34-128

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1003.D
 Lims ID: LCS 410-59339/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 28-Oct-2020 18:04:50 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: LCS 410-59339/2-A
 Misc. Info.: 410-0014101-004
 Operator ID: kel10217 Instrument ID: HP20296
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 29-Oct-2020 15:17:15 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1009

First Level Reviewer: saadehw

Date: 29-Oct-2020 17:34:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
\$ 10 2-Fluorophenol	112	5.059	5.054	0.005	93	1234310	50.2	23.4	
\$ 16 Phenol-d5	99	6.455	6.450	0.005	97	1168605	50.2	18.2	
* 24 1,4-Dichlorobenzene-d4	152	6.936	6.937	-0.001	96	163928	5.00	5.00	
\$ 41 Nitrobenzene-d5	82	7.787	7.792	-0.005	86	1327910	25.0	20.5	
* 55 Naphthalene-d8	136	8.915	8.921	-0.006	99	611544	5.00	5.00	
56 Naphthalene	128	8.953	8.953	0.000	99	1377404	12.5	10.2	
\$ 76 2-Fluorobiphenyl (Surr)	172	10.702	10.702	-0.005	99	1787354	25.1	18.0	
88 2,6-Dinitrotoluene	165	11.467	11.467	-0.005	81	207959	12.5	10.9	
* 92 Acenaphthene-d10	164	11.750	11.756	-0.006	96	303700	5.00	5.00	
99 2,4-Dinitrotoluene	165	12.050	12.044	0.000	81	262875	12.5	10.2	
104 Diethyl phthalate	149	12.397	12.392	-0.001	96	969858	12.5	9.78	
105 Fluorene	166	12.488	12.483	0.000	92	988076	12.5	10.6	
\$ 113 2,4,6-Tribromophenol	330	12.793	12.787	0.000	95	621761	50.2	45.9	
* 127 Phenanthrene-d10	188	13.676	13.681	-0.005	97	586991	5.00	5.00	
129 Phenanthrene	178	13.708	13.708	-0.005	99	1466163	12.5	10.6	
130 Anthracene	178	13.777	13.772	0.000	99	1507084	12.5	11.1	
* 140 Pyrene-d10 (IS)	212	15.724	15.724	0.000	98	629412	5.00	5.00	
141 Pyrene	202	15.756	15.756	0.000	97	1795556	12.5	10.5	
\$ 142 p-Terphenyl-d14	244	16.040	16.040	0.000	98	2451096	25.1	19.5	
149 Benzo[a]anthracene	228	17.799	17.805	-0.006	100	1675883	12.5	11.0	
151 Chrysene	228	17.869	17.869	0.000	97	1660511	12.5	10.7	
155 Benzo[b]fluoranthene	252	19.682	19.688	-0.006	97	1624862	12.5	9.74	
158 Benzo[a]pyrene	252	20.217	20.223	-0.006	79	1387504	12.5	9.17	
* 159 Perylene-d12	264	20.308	20.314	-0.006	97	666895	5.00	5.00	
165 Benzo[g,h,i]perylene	276	22.373	22.378	-0.005	96	1507464	12.5	10.9	

QC Flag Legend

Processing Flags

Reagents:

MSS_RV8270_IS_00015

Amount Added: 20.00

Units: uL

Run Reagent

Report Date: 29-Oct-2020 17:34:29

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1003.D

Injection Date: 28-Oct-2020 18:04:50

Instrument ID: HP20296

Operator ID: kel10217

Lims ID: LCS 410-59339/2-A

Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul

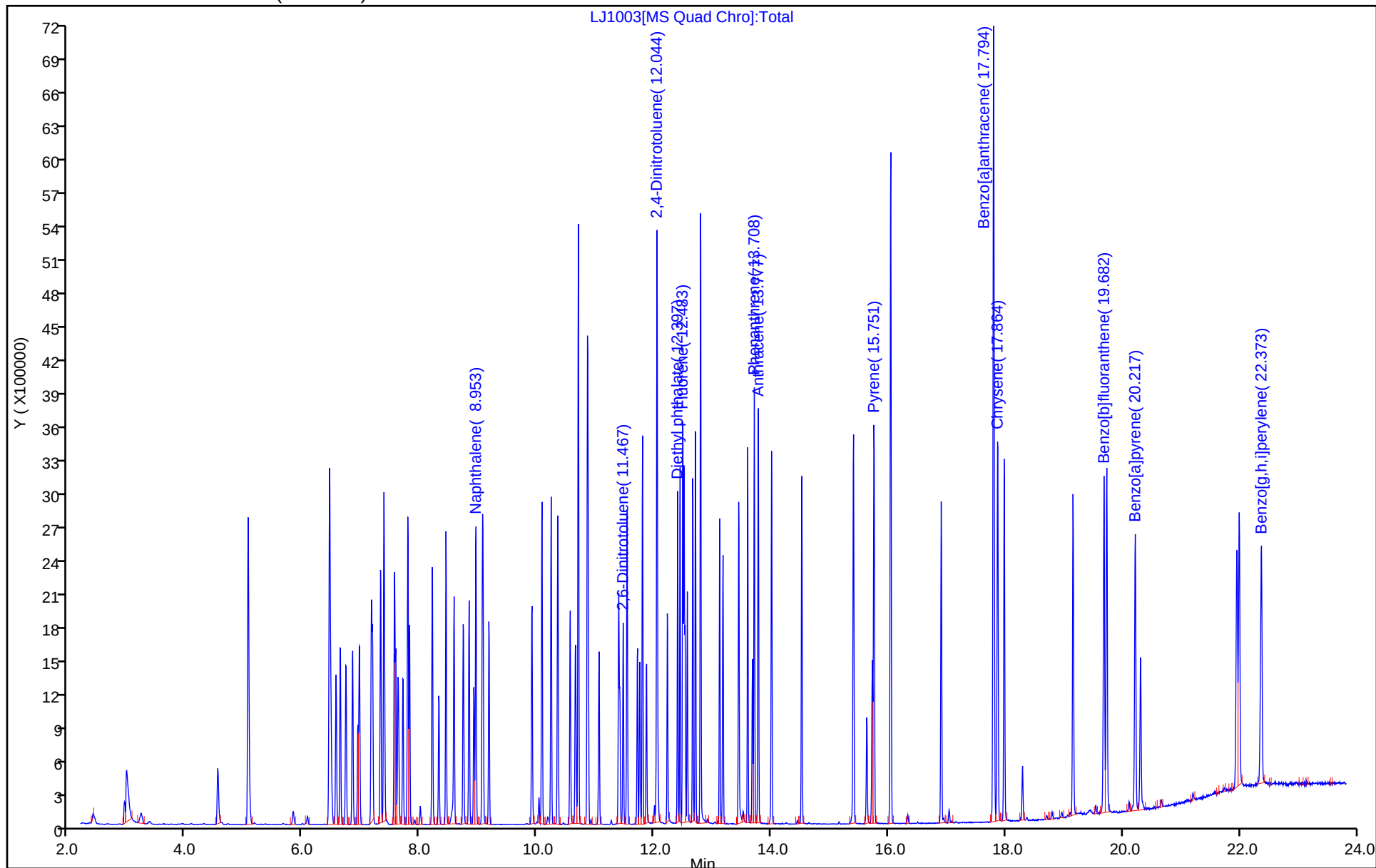
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1003.D
 Lims ID: LCS 410-59339/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 28-Oct-2020 18:04:50 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: LCS 410-59339/2-A
 Misc. Info.: 410-0014101-004
 Operator ID: kel10217 Instrument ID: HP20296
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 29-Oct-2020 15:17:15 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1009

First Level Reviewer: saadehw

Date: 29-Oct-2020 17:34:29

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 2-Fluorophenol	50.2	23.4	46.60
\$ 16 Phenol-d5	50.2	18.2	36.19
\$ 41 Nitrobenzene-d5	25.0	20.5	81.97
\$ 76 2-Fluorobiphenyl (Surr)	25.1	18.0	71.61
\$ 113 2,4,6-Tribromophenol	50.2	45.9	91.46
\$ 142 p-Terphenyl-d14	25.1	19.5	77.63

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCS 410-59818/2-A

Matrix: Water Lab File ID: JJ1304.D

Analysis Method: 8270D Date Collected: _____

Extract. Method: 3510C Date Extracted: 10/29/2020 09:00

Sample wt/vol: 250 (mL) Date Analyzed: 10/30/2020 02:33

Con. Extract Vol.: 1 (mL) Dilution Factor: 1

Injection Volume: 1 (uL) Level: (low/med) Low

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 60208 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
121-14-2	2,4-Dinitrotoluene	44.1		10	
606-20-2	2,6-Dinitrotoluene	48.2		10	
84-66-2	Diethyl phthalate	42.5		5.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	84		44-102
4165-60-0	Nitrobenzene-d5 (Surr)	86		38-113
1718-51-0	p-Terphenyl-d14 (Surr)	98		34-128

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1304.D
 Lims ID: LCS 410-59818/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 30-Oct-2020 02:33:30 ALS Bottle#: 5 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: LCS 410-59818/2-A
 Misc. Info.: 410-0014245-005
 Operator ID: sw30417 Instrument ID: HP23264
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 30-Oct-2020 10:54:59 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1008

First Level Reviewer: bekk

Date: 30-Oct-2020 09:57:58

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2 1,4-Dioxane	88	2.225	2.183	0.046	96	96552	12.5	4.81	
3 N-Nitrosodimethylamine	74	2.781	2.751	0.034	89	170181	12.5	5.74	
4 Pyridine	79	2.826	2.797	0.034	95	490173	25.0	9.74	
\$ 12 2-Fluorophenol	112	4.936	4.933	0.011	93	1010065	50.2	27.3	
19 Benzaldehyde	77	6.093	6.082	0.011	92	373191	12.6	9.65	
23 Aniline	93	6.252	6.252	0.000	96	518496	12.5	8.12	
\$ 20 Phenol-d5	99	6.309	6.308	0.012	92	945041	50.2	18.8	
21 Phenol	94	6.320	6.320	0.000	93	264688	12.5	4.63	
24 Bis(2-chloroethyl)ether	93	6.365	6.376	0.000	91	391705	12.5	9.82	
25 2-Chlorophenol	128	6.445	6.456	0.000	92	361106	12.5	10.1	
26 1,3-Dichlorobenzene	146	6.638	6.638	0.012	93	370551	12.5	9.63	
* 28 1,4-Dichlorobenzene-d4	152	6.728	6.717	0.011	97	122639	5.00	5.00	
29 1,4-Dichlorobenzene	146	6.751	6.763	0.000	86	369062	12.5	9.31	
30 Benzyl alcohol	108	6.955	6.955	0.000	87	230942	12.5	9.27	
31 1,2-Dichlorobenzene	146	6.967	6.978	0.000	90	366412	12.5	9.75	
35 2,2'-oxybis[1-chloropropane]	45	7.159	7.172	0.000	90	554053	12.5	9.70	
33 2-Methylphenol	108	7.182	7.206	-0.012	95	353244	12.5	10.1	
38 Acetophenone	105	7.341	7.341	0.000	92	629034	12.5	10.6	
39 N-Nitrosodi-n-propylamine	70	7.364	7.364	0.000	86	356166	12.5	10.2	
37 4-Methylphenol	108	7.432	7.444	0.000	87	330380	12.5	8.18	
42 Hexachloroethane	117	7.466	7.478	0.000	90	160890	12.5	8.17	
\$ 43 Nitrobenzene-d5	82	7.557	7.557	0.000	89	1084127	25.0	21.6	
44 Nitrobenzene	77	7.579	7.579	0.000	88	547925	12.5	11.3	
47 Isophorone	82	7.965	7.965	0.000	98	974899	12.5	11.5	
48 2-Nitrophenol	139	8.078	8.078	0.000	89	208114	12.5	11.8	
49 2,4-Dimethylphenol	107	8.214	8.215	0.000	98	484632	12.5	11.6	
52 Bis(2-chloroethoxy)methane	93	8.339	8.339	0.000	95	485627	12.5	8.45	
54 2,4-Dichlorophenol	162	8.498	8.498	0.000	95	341587	12.5	12.2	
55 1,2,4-Trichlorobenzene	180	8.577	8.578	0.000	91	352402	12.5	11.8	
* 56 Naphthalene-d8	136	8.657	8.657	0.000	99	440834	5.00	5.00	
57 Naphthalene	128	8.691	8.691	0.000	98	1068245	12.5	11.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
58 4-Chloroaniline	127	8.804	8.804	0.000	93	386994	12.5	10.2	
59 2,6-Dichlorophenol	162	8.816	8.816	0.000	91	342731	12.5	12.5	
62 Hexachlorobutadiene	225	8.906	8.907	0.000	95	199264	12.5	10.0	
64 Caprolactam	113	9.326	9.338	-0.012	78	27396	12.6	2.99	
67 4-Chloro-3-methylphenol	107	9.655	9.667	-0.012	92	400130	12.5	12.2	
69 2-Methylnaphthalene	142	9.791	9.791	0.000	91	760362	12.5	12.4	
71 Hexachlorocyclopentadiene	237	10.052	10.052	0.000	96	187010	12.5	8.58	
72 1,2,4,5-Tetrachlorobenzene	216	10.052	10.052	0.000	98	360486	12.5	10.8	
74 2,4,6-Trichlorophenol	196	10.268	10.268	0.000	94	272595	12.5	12.0	
76 2,4,5-Trichlorophenol	196	10.370	10.370	0.000	91	296478	12.5	12.6	
\$ 77 2-Fluorobiphenyl (Surr)	172	10.404	10.404	0.000	99	1598871	25.1	21.0	
80 1,1'-Biphenyl	154	10.551	10.551	0.000	96	884833	12.5	11.0	
81 2-Chloronaphthalene	162	10.563	10.563	0.000	97	747021	12.5	10.7	
84 2-Nitroaniline	138	10.744	10.744	0.000	76	258324	12.5	11.9	
89 1,3-Dinitrobenzene	168		10.982				ND	ND	
87 Dimethyl phthalate	163	11.085	11.085	0.000	96	608169	12.5	7.99	
90 2,6-Dinitrotoluene	165	11.153	11.153	0.000	83	204906	12.5	12.1	
91 Acenaphthylene	152	11.209	11.209	0.000	98	1097097	12.5	12.3	
92 3-Nitroaniline	138	11.414	11.414	0.000	90	181028	12.5	10.9	
* 93 Acenaphthene-d10	164	11.436	11.436	0.000	93	251605	5.00	5.00	
94 Acenaphthene	153	11.493	11.493	0.000	94	714004	12.5	11.1	
95 2,4-Dinitrophenol	184	11.572	11.572	0.000	75	240578	25.0	22.7	
101 Dibenzofuran	168	11.754	11.754	0.000	95	1111158	12.5	12.0	
100 2,4-Dinitrotoluene	165	11.765	11.765	0.000	84	265045	12.5	11.0	
97 4-Nitrophenol	109	11.822	11.822	0.000	86	254646	25.0	12.2	
103 2,3,4,6-Tetrachlorophenol	232	11.947	11.947	0.000	76	231073	12.5	13.4	
105 Diethyl phthalate	149	12.128	12.128	0.000	96	814148	12.5	10.6	
107 Fluorene	166	12.208	12.208	0.000	94	842777	12.5	11.6	
109 4-Chlorophenyl phenyl ether	204	12.230	12.230	0.000	95	407584	12.5	11.2	
108 4-Nitroaniline	138	12.253	12.253	0.000	75	178238	12.5	9.90	
111 4,6-Dinitro-2-methylphenol	198	12.298	12.287	0.011	83	326839	25.0	23.0	
112 N-Nitrosodiphenylamine	169	12.378	12.378	0.000	63	630552	10.6	10.2	
\$ 114 2,4,6-Tribromophenol	330	12.503	12.503	0.000	89	490452	50.2	51.2	
119 4-Bromophenyl phenyl ether	248	12.809	12.809	0.000	67	245361	12.5	13.0	
121 Hexachlorobenzene	284	12.854	12.854	0.000	87	251414	12.5	12.4	
123 Atrazine	200	13.036	13.036	0.000	88	266496	12.6	13.1	
124 Pentachlorophenol	266	13.115	13.127	-0.011	83	355062	25.0	27.0	
* 128 Phenanthrene-d10	188	13.331	13.331	0.000	97	422449	5.00	5.00	
130 Phenanthrene	178	13.365	13.365	0.000	97	1249722	12.5	12.4	
131 Anthracene	178	13.421	13.421	0.000	97	1287200	12.5	12.8	
132 Carbazole	167	13.648	13.648	0.000	97	1180159	12.5	12.4	
134 Di-n-butyl phthalate	149	14.147	14.147	0.000	100	1505472	12.5	11.3	
139 Fluoranthene	202	14.976	14.976	0.000	97	1489853	12.5	13.1	
* 141 Pyrene-d10 (IS)	212	15.282	15.282	0.000	98	465599	5.00	5.00	
142 Pyrene	202	15.316	15.316	0.000	99	1563294	12.5	12.2	
\$ 143 p-Terphenyl-d14	244	15.599	15.599	0.000	97	2101915	25.1	24.5	
147 Butyl benzyl phthalate	149	16.450	16.450	0.000	95	573023	12.5	8.86	
149 Benzo[a]anthracene	228	17.312	17.301	0.011	98	1376713	12.5	12.6	
150 3,3'-Dichlorobenzidine	252	17.312	17.312	0.000	74	944047	25.0	22.2	
152 Chrysene	228	17.369	17.369	0.000	96	1322525	12.5	12.3	
153 Bis(2-ethylhexyl) phthalate	149	17.517	17.517	0.000	96	924148	12.5	10.2	
155 Di-n-octyl phthalate	149	18.674	18.674	0.000	99	1572895	12.5	9.64	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
156 Benzo[b]fluoranthene	252	19.150	19.150	0.000	96	1312310	12.5	11.4	
158 Benzo[k]fluoranthene	252	19.196	19.207	-0.011	98	1383715	12.5	13.2	
159 Benzo[a]pyrene	252	19.672	19.672	0.000	75	1186447	12.5	10.8	
* 160 Perylene-d12	264	19.763	19.763	0.000	99	460192	5.00	5.00	
164 Indeno[1,2,3-cd]pyrene	276	21.362	21.362	0.000	98	1105373	12.5	12.3	M
165 Dibenz(a,h)anthracene	278	21.408	21.408	0.000	91	1107608	12.5	12.1	
166 Benzo[g,h,i]perylene	276	21.737	21.737	0.000	98	1112645	12.5	11.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSS_RV8270_IS_00015

Amount Added: 20.00

Units: uL

Run Reagent

Report Date: 30-Oct-2020 10:55:51

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1304.D

Injection Date: 30-Oct-2020 02:33:30

Instrument ID: HP23264

Operator ID: sw30417

Lims ID: LCS 410-59818/2-A

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul

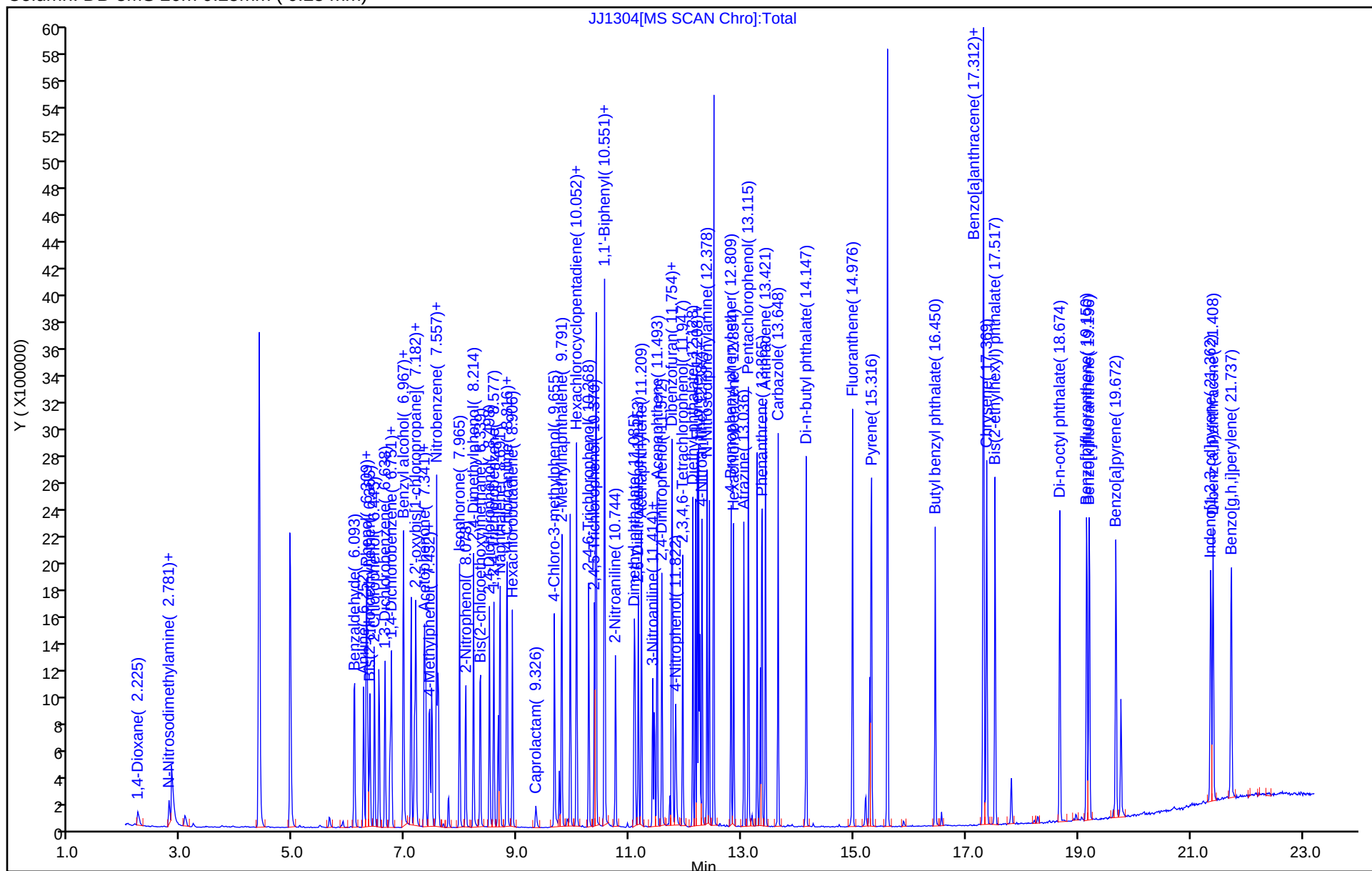
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1304.D
 Lims ID: LCS 410-59818/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 30-Oct-2020 02:33:30 ALS Bottle#: 5 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: LCS 410-59818/2-A
 Misc. Info.: 410-0014245-005
 Operator ID: sw30417 Instrument ID: HP23264
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 30-Oct-2020 10:54:59 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1008

First Level Reviewer: bekk

Date: 30-Oct-2020 09:57:58

Compound	Amount Added	Amount Recovered	% Rec.
\$ 12 2-Fluorophenol	50.2	27.3	54.39
\$ 20 Phenol-d5	50.2	18.8	37.41
\$ 43 Nitrobenzene-d5	25.0	21.6	86.46
\$ 77 2-Fluorobiphenyl (Surr)	25.1	21.0	83.88
\$ 114 2,4,6-Tribromophenol	50.2	51.2	102.08
\$ 143 p-Terphenyl-d14	25.1	24.5	97.54

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 410-59339/3-A
 Matrix: Water Lab File ID: LJ1004.D
 Analysis Method: 8270D Date Collected: _____
 Extract. Method: 3510C Date Extracted: 10/28/2020 09:30
 Sample wt/vol: 250 (mL) Date Analyzed: 10/28/2020 18:33
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 59610 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
121-14-2	2,4-Dinitrotoluene	39.4		10	
606-20-2	2,6-Dinitrotoluene	41.6		10	
84-66-2	Diethyl phthalate	36.2		5.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	69		44-102
4165-60-0	Nitrobenzene-d5 (Surr)	73		38-113
1718-51-0	p-Terphenyl-d14 (Surr)	69		34-128

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1004.D
 Lims ID: LCSD 410-59339/3-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 28-Oct-2020 18:33:55 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: LCSD 410-59339/3-A
 Misc. Info.: 410-0014101-005
 Operator ID: kel10217 Instrument ID: HP20296
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 28-Oct-2020 23:23:55 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: luttek

Date: 28-Oct-2020 20:03:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
\$ 10 2-Fluorophenol	112	5.059	5.050	0.005	93	1231673	50.2	24.1	
\$ 16 Phenol-d5	99	6.455	6.445	0.005	98	1136786	50.2	18.2	
* 24 1,4-Dichlorobenzene-d4	152	6.936	6.937	-0.001	96	158982	5.00	5.00	
\$ 41 Nitrobenzene-d5	82	7.787	7.787	-0.005	86	1183727	25.0	18.3	
* 55 Naphthalene-d8	136	8.915	8.921	-0.006	99	609424	5.00	5.00	
56 Naphthalene	128	8.953	8.947	0.000	99	1206348	12.5	8.98	
\$ 76 2-Fluorobiphenyl (Surr)	172	10.702	10.702	-0.005	99	1646338	25.1	17.2	
88 2,6-Dinitrotoluene	165	11.467	11.467	-0.005	83	191245	12.5	10.4	
* 92 Acenaphthene-d10	164	11.750	11.756	-0.006	98	292332	5.00	5.00	
99 2,4-Dinitrotoluene	165	12.044	12.044	-0.006	81	245324	12.5	9.86	
104 Diethyl phthalate	149	12.397	12.392	-0.001	96	864515	12.5	9.06	
105 Fluorene	166	12.483	12.482	-0.005	92	892738	12.5	9.99	
\$ 113 2,4,6-Tribromophenol	330	12.788	12.787	-0.005	92	573573	50.2	44.0	
* 127 Phenanthrene-d10	188	13.676	13.681	-0.005	97	578912	5.00	5.00	
129 Phenanthrene	178	13.708	13.702	-0.005	99	1336692	12.5	9.85	
130 Anthracene	178	13.772	13.766	-0.005	99	1377236	12.5	10.3	
* 140 Pyrene-d10 (IS)	212	15.724	15.724	0.000	98	615356	5.00	5.00	
141 Pyrene	202	15.751	15.751	-0.005	96	1605774	12.5	9.64	
\$ 142 p-Terphenyl-d14	244	16.040	16.034	0.000	98	2125785	25.1	17.3	
149 Benzo[a]anthracene	228	17.799	17.799	-0.006	100	1470689	12.5	9.91	
151 Chrysene	228	17.864	17.863	-0.005	97	1460658	12.5	9.64	
155 Benzo[b]fluoranthene	252	19.682	19.682	-0.006	97	1410697	12.5	8.71	
158 Benzo[a]pyrene	252	20.217	20.217	-0.006	79	1245686	12.5	8.47	
* 159 Perylene-d12	264	20.308	20.314	-0.006	97	648057	5.00	5.00	
165 Benzo[g,h,i]perylene	276	22.367	22.372	-0.011	97	1309777	12.5	9.78	

QC Flag Legend

Processing Flags

Reagents:

MSS_RV8270_IS_00015

Amount Added: 20.00

Units: uL

Run Reagent

Report Date: 28-Oct-2020 23:24:38

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1004.D

Injection Date: 28-Oct-2020 18:33:55

Instrument ID: HP20296

Operator ID: kel10217

Lims ID: LCSD 410-59339/3-A

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul

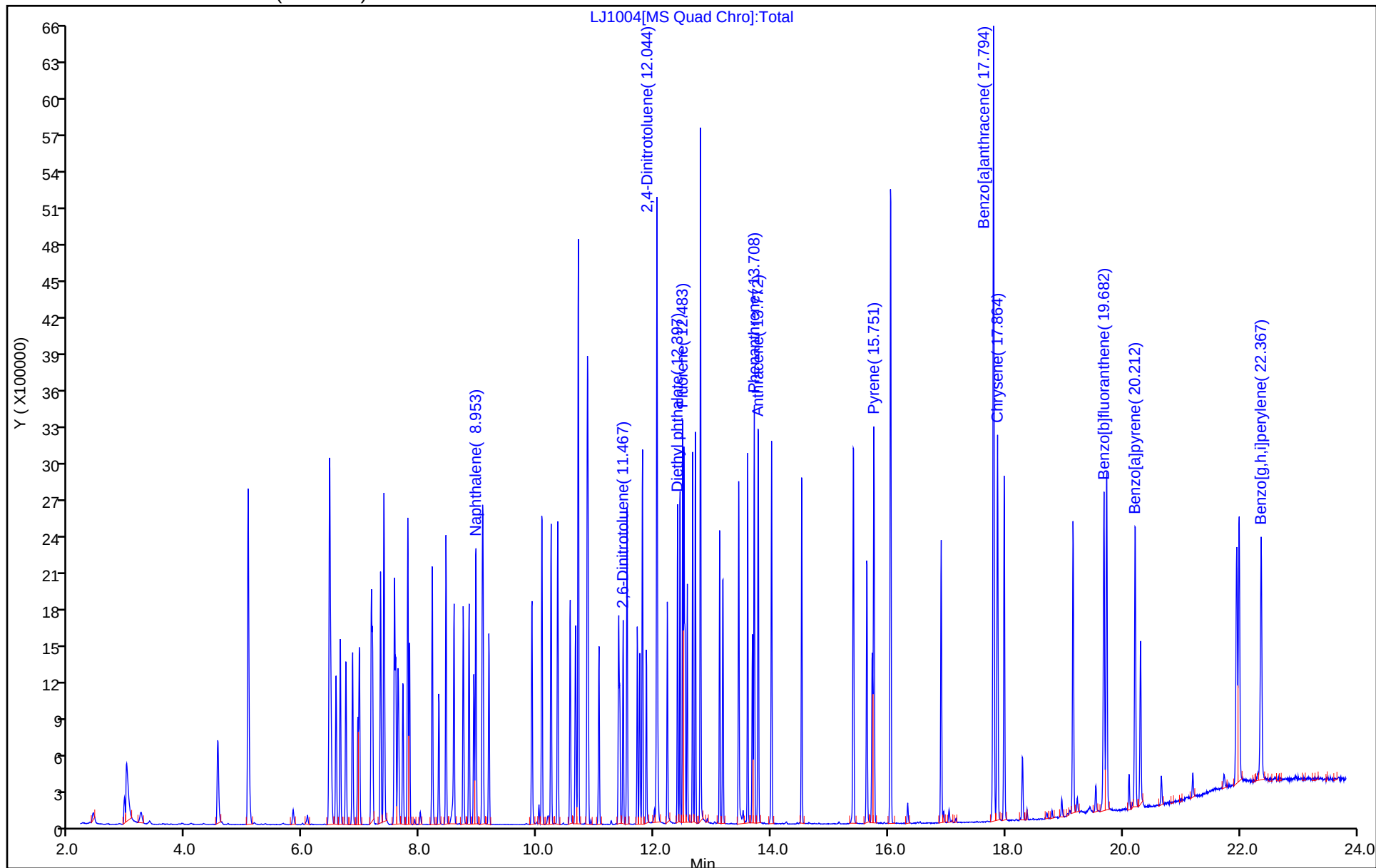
Dil. Factor: 1.0000

ALS Bottle#: 0

Method: MSSemi_HP20296

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.18mm (0.18 mm)



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\LJ1004.D
 Lims ID: LCSD 410-59339/3-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 28-Oct-2020 18:33:55 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: LCSD 410-59339/3-A
 Misc. Info.: 410-0014101-005
 Operator ID: kel10217 Instrument ID: HP20296
 Method: \\chromfs\Lancaster\ChromData\HP20296\20201028-14101.b\MSSemi_HP20296.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 28-Oct-2020 23:23:55 Calib Date: 19-Oct-2020 21:03:44
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP20296\20201019-13268.b\LJ0708.D
 Column 1 : DB-5MS 20m 0.18mm (0.18 mm) Det: MS SCAN
 Process Host: CTX1010

First Level Reviewer: luttek

Date: 28-Oct-2020 20:03:55

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 2-Fluorophenol	50.2	24.1	47.95
\$ 16 Phenol-d5	50.2	18.2	36.30
\$ 41 Nitrobenzene-d5	25.0	18.3	73.32
\$ 76 2-Fluorobiphenyl (Surr)	25.1	17.2	68.52
\$ 113 2,4,6-Tribromophenol	50.2	44.0	87.65
\$ 142 p-Terphenyl-d14	25.1	17.3	68.87

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1

SDG No.: _____

Client Sample ID: 16WC1A MS Lab Sample ID: 410-18116-4 MS

Matrix: Ground Water Lab File ID: JJ1308.D

Analysis Method: 8270D Date Collected: 10/22/2020 09:25

Extract. Method: 3510C Date Extracted: 10/29/2020 09:00

Sample wt/vol: 246.6(mL) Date Analyzed: 10/30/2020 04:34

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 60208 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
121-14-2	2,4-Dinitrotoluene	46.1		10	
606-20-2	2,6-Dinitrotoluene	49.2		10	
84-66-2	Diethyl phthalate	46.7		5.1	

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	83		44-102
4165-60-0	Nitrobenzene-d5 (Surr)	77		38-113
1718-51-0	p-Terphenyl-d14 (Surr)	89		34-128

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1308.D
 Lims ID: 410-18116-A-4-A MS
 Client ID: 16WC1A
 Sample Type: MS
 Inject. Date: 30-Oct-2020 04:34:30 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-4-A MS
 Misc. Info.: 410-0014245-009
 Operator ID: sw30417 Instrument ID: HP23264
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 30-Oct-2020 10:54:59 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1008

First Level Reviewer: beckk

Date: 30-Oct-2020 10:16:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
\$ 12 2-Fluorophenol	112	4.947	4.933	0.022	92	582448	50.2	14.5	
\$ 20 Phenol-d5	99	6.309	6.308	0.012	93	796410	50.2	14.6	
* 28 1,4-Dichlorobenzene-d4	152	6.728	6.717	0.011	96	132794	5.00	5.00	
\$ 43 Nitrobenzene-d5	82	7.557	7.557	0.001	90	1135434	25.0	19.2	
* 56 Naphthalene-d8	136	8.657	8.657	0.000	99	519535	5.00	5.00	
\$ 77 2-Fluorobiphenyl (Surr)	172	10.404	10.404	0.000	99	1835374	25.1	20.8	
90 2,6-Dinitrotoluene	165	11.153	11.153	0.000	86	239332	12.5	12.1	
* 93 Acenaphthene-d10	164	11.448	11.436	0.012	96	291657	5.00	5.00	
100 2,4-Dinitrotoluene	165	11.765	11.765	0.000	84	316632	12.5	11.4	
105 Diethyl phthalate	149	12.128	12.128	0.000	96	1022415	12.5	11.5	
\$ 114 2,4,6-Tribromophenol	330	12.503	12.503	0.000	90	117860	50.2	10.6	
* 128 Phenanthrene-d10	188	13.331	13.331	0.000	97	503368	5.00	5.00	
* 141 Pyrene-d10 (IS)	212	15.282	15.282	0.000	99	528029	5.00	5.00	
\$ 143 p-Terphenyl-d14	244	15.600	15.599	0.001	97	2181090	25.1	22.4	
* 160 Perylene-d12	264	19.763	19.763	0.000	99	524647	5.00	5.00	

QC Flag Legend

Processing Flags

Reagents:

MSS_RV8270_IS_00015

Amount Added: 20.00

Units: uL

Run Reagent

Report Date: 30-Oct-2020 10:56:05

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1308.D

Injection Date: 30-Oct-2020 04:34:30

Instrument ID: HP23264

Operator ID: sw30417

Lims ID: 410-18116-A-4-A MS

Worklist Smp#: 9

Client ID: 16WC1A

Injection Vol: 1.0 ul

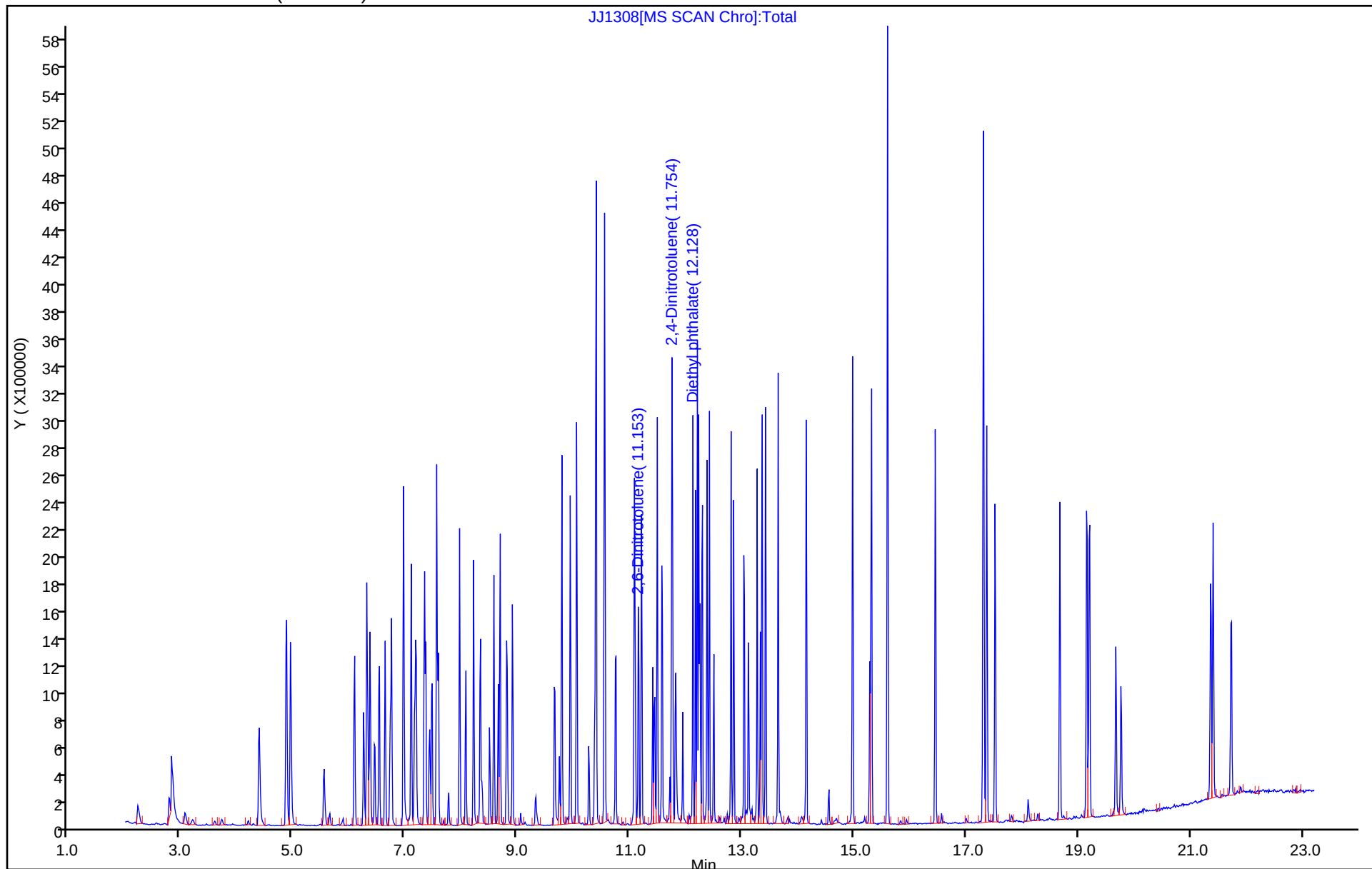
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



11/02/2020

Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1308.D
 Lims ID: 410-18116-A-4-A MS
 Client ID: 16WC1A
 Sample Type: MS
 Inject. Date: 30-Oct-2020 04:34:30 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-4-A MS
 Misc. Info.: 410-0014245-009
 Operator ID: sw30417 Instrument ID: HP23264
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 30-Oct-2020 10:54:59 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1008

First Level Reviewer: bekk

Date: 30-Oct-2020 10:16:21

Compound	Amount Added	Amount Recovered	% Rec.
\$ 12 2-Fluorophenol	50.2	14.5	28.96
\$ 20 Phenol-d5	50.2	14.6	29.11
\$ 43 Nitrobenzene-d5	25.0	19.2	76.84
\$ 77 2-Fluorobiphenyl (Surr)	25.1	20.8	83.06
\$ 114 2,4,6-Tribromophenol	50.2	10.6	21.16
\$ 143 p-Terphenyl-d14	25.1	22.4	89.25

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-18116-1

SDG No.: _____

Client Sample ID: 16WC1A MSD Lab Sample ID: 410-18116-4 MSD

Matrix: Ground Water Lab File ID: JJ1309.D

Analysis Method: 8270D Date Collected: 10/22/2020 09:25

Extract. Method: 3510C Date Extracted: 10/29/2020 09:00

Sample wt/vol: 249.4 (mL) Date Analyzed: 10/30/2020 05:05

Con. Extract Vol.: 1 (mL) Dilution Factor: 1

Injection Volume: 1 (uL) Level: (low/med) Low

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 60208 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
121-14-2	2,4-Dinitrotoluene	44.3		10	
606-20-2	2,6-Dinitrotoluene	48.3		10	
84-66-2	Diethyl phthalate	46.6		5.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	85		44-102
4165-60-0	Nitrobenzene-d5 (Surr)	82		38-113
1718-51-0	p-Terphenyl-d14 (Surr)	86		34-128

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1309.D
 Lims ID: 410-18116-A-4-B MSD
 Client ID: 16WC1A
 Sample Type: MSD
 Inject. Date: 30-Oct-2020 05:05:30 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-4-B MSD
 Misc. Info.: 410-0014245-010
 Operator ID: sw30417 Instrument ID: HP23264
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 30-Oct-2020 10:54:59 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1008

First Level Reviewer: beckk

Date: 30-Oct-2020 10:16:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
\$ 12 2-Fluorophenol	112	4.947	4.933	0.022	93	768732	50.2	18.7	
\$ 20 Phenol-d5	99	6.309	6.308	0.012	92	993130	50.2	17.7	
* 28 1,4-Dichlorobenzene-d4	152	6.728	6.717	0.011	95	136390	5.00	5.00	
\$ 43 Nitrobenzene-d5	82	7.556	7.557	0.000	89	1216411	25.0	20.5	
* 56 Naphthalene-d8	136	8.657	8.657	0.000	99	521909	5.00	5.00	
\$ 77 2-Fluorobiphenyl (Surr)	172	10.404	10.404	0.000	99	1872743	25.1	21.4	
90 2,6-Dinitrotoluene	165	11.164	11.153	0.011	87	236464	12.5	12.1	
* 93 Acenaphthene-d10	164	11.448	11.436	0.012	95	290226	5.00	5.00	
100 2,4-Dinitrotoluene	165	11.765	11.765	0.000	85	306421	12.5	11.1	
105 Diethyl phthalate	149	12.128	12.128	0.000	96	1027031	12.5	11.6	
\$ 114 2,4,6-Tribromophenol	330	12.503	12.503	0.000	88	154766	50.2	14.0	
* 128 Phenanthrene-d10	188	13.331	13.331	0.000	97	495894	5.00	5.00	
* 141 Pyrene-d10 (IS)	212	15.282	15.282	0.000	98	546057	5.00	5.00	
\$ 143 p-Terphenyl-d14	244	15.599	15.599	0.000	97	2174352	25.1	21.6	
* 160 Perylene-d12	264	19.763	19.763	0.000	99	498641	5.00	5.00	

QC Flag Legend

Processing Flags

Reagents:

MSS_RV8270_IS_00015

Amount Added: 20.00

Units: uL

Run Reagent

Report Date: 30-Oct-2020 10:56:06

Chrom Revision: 2.3 14-Oct-2020 14:51:38

Euofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1309.D

Injection Date: 30-Oct-2020 05:05:30

Instrument ID: HP23264

Operator ID: sw30417

Lims ID: 410-18116-A-4-B MSD

Worklist Smp#: 10

Client ID: 16WC1A

Injection Vol: 1.0 ul

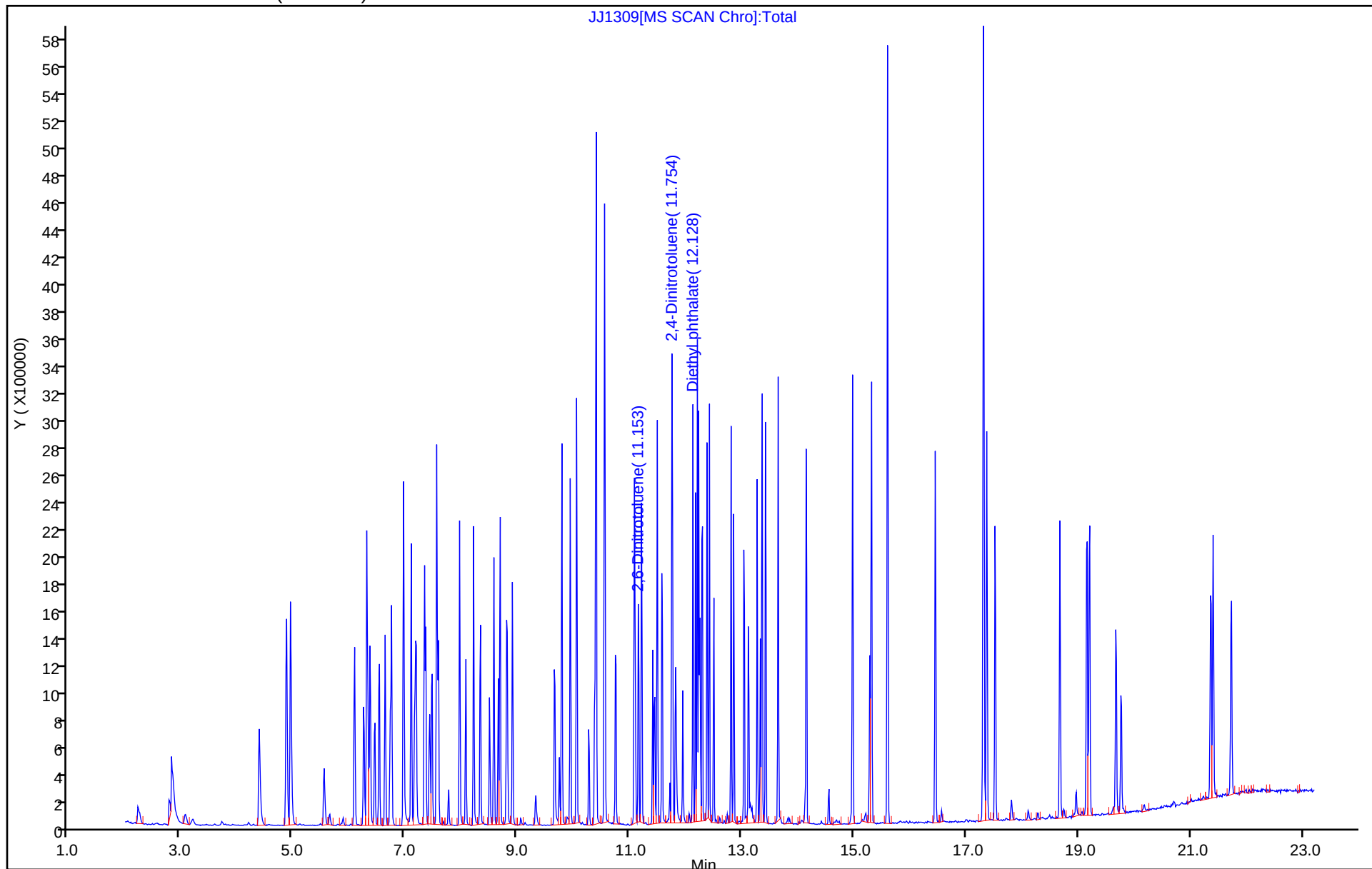
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: MSSemi_HP23264

Limit Group: MSSV - 8270D_E LVI

Column: DB-5MS 20m 0.25mm (0.25 mm)



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\JJ1309.D
 Lims ID: 410-18116-A-4-B MSD
 Client ID: 16WC1A
 Sample Type: MSD
 Inject. Date: 30-Oct-2020 05:05:30 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 410-18116-A-4-B MSD
 Misc. Info.: 410-0014245-010
 Operator ID: sw30417 Instrument ID: HP23264
 Method: \\chromfs\Lancaster\ChromData\HP23264\20201029-14245.b\MSSemi_HP23264.m
 Limit Group: MSSV - 8270D_E LVI
 Last Update: 30-Oct-2020 10:54:59 Calib Date: 06-Oct-2020 13:38:30
 Integrator: Falcon ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\HP23264\20201006-12144.b\JJ0228.D
 Column 1 : DB-5MS 20m 0.25mm (0.25 mm) Det: MS SCAN
 Process Host: CTX1008

First Level Reviewer: bekk

Date: 30-Oct-2020 10:16:35

Compound	Amount Added	Amount Recovered	% Rec.
\$ 12 2-Fluorophenol	50.2	18.7	37.22
\$ 20 Phenol-d5	50.2	17.7	35.35
\$ 43 Nitrobenzene-d5	25.0	20.5	81.94
\$ 77 2-Fluorobiphenyl (Surr)	25.1	21.4	85.17
\$ 114 2,4,6-Tribromophenol	50.2	14.0	27.93
\$ 143 p-Terphenyl-d14	25.1	21.6	86.03

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Instrument ID: HP23264Start Date: 09/29/2020 18:37Analysis Batch Number: 48994End Date: 09/30/2020 01:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 410-48994/1		09/29/2020 18:37	1	J11150c.D	DB-5MS 30m 0.25 0.25 (mm)
ICIS 410-48994/2		09/29/2020 19:00	1	J11151a.D	DB-5MS 30m 0.25 0.25 (mm)
IC 410-48994/3		09/29/2020 19:37	1	J11152.D	DB-5MS 30m 0.25 0.25 (mm)
IC 410-48994/4		09/29/2020 20:08	1	J11153.D	DB-5MS 30m 0.25 0.25 (mm)
IC 410-48994/5		09/29/2020 20:38	1	J11154.D	DB-5MS 30m 0.25 0.25 (mm)
IC 410-48994/6		09/29/2020 21:08	1	J11155.D	DB-5MS 30m 0.25 0.25 (mm)
IC 410-48994/7		09/29/2020 21:39	1	J11156.D	DB-5MS 30m 0.25 0.25 (mm)
IC 410-48994/8		09/29/2020 22:09	1	J11157.D	DB-5MS 30m 0.25 0.25 (mm)
IC 410-48994/9		09/29/2020 22:52	1	J11158a.D	DB-5MS 30m 0.25 0.25 (mm)
ICVL 410-48994/10		09/29/2020 23:22	1		DB-5MS 30m 0.25 0.25 (mm)
ICVL 410-48994/11		09/29/2020 23:52	1		DB-5MS 30m 0.25 0.25 (mm)
ICV 410-48994/12		09/30/2020 00:23	1	J11161.D	DB-5MS 30m 0.25 0.25 (mm)
ICV 410-48994/13		09/30/2020 00:53	1	J11162.D	DB-5MS 30m 0.25 0.25 (mm)
ICV 410-48994/14		09/30/2020 01:23	1	J11163.D	DB-5MS 30m 0.25 0.25 (mm)
ICV 410-48994/15		09/30/2020 01:53	1	J11164.D	DB-5MS 30m 0.25 0.25 (mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Instrument ID: HP20296 Start Date: 10/19/2020 16:58Analysis Batch Number: 55998 End Date: 10/19/2020 23:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 410-55998/1		10/19/2020 16:58	1	LJ0700a.D	DB-5MS 20m 0.18 0.18 (mm)
ICIS 410-55998/2		10/19/2020 17:17	1	LJ0701.D	DB-5MS 20m 0.18 0.18 (mm)
IC 410-55998/3		10/19/2020 18:09	1	LJ0702.D	DB-5MS 20m 0.18 0.18 (mm)
IC 410-55998/4		10/19/2020 18:38	1	LJ0703.D	DB-5MS 20m 0.18 0.18 (mm)
IC 410-55998/5		10/19/2020 19:07	1	LJ0704.D	DB-5MS 20m 0.18 0.18 (mm)
IC 410-55998/6		10/19/2020 19:36	1	LJ0705.D	DB-5MS 20m 0.18 0.18 (mm)
IC 410-55998/7		10/19/2020 20:05	1	LJ0706.D	DB-5MS 20m 0.18 0.18 (mm)
IC 410-55998/8		10/19/2020 20:34	1	LJ0707.D	DB-5MS 20m 0.18 0.18 (mm)
IC 410-55998/9		10/19/2020 21:03	1	LJ0708.D	DB-5MS 20m 0.18 0.18 (mm)
ICVL 410-55998/10		10/19/2020 21:32	1		DB-5MS 20m 0.18 0.18 (mm)
ICVL 410-55998/11		10/19/2020 22:01	1		DB-5MS 20m 0.18 0.18 (mm)
ICV 410-55998/12		10/19/2020 22:31	1	LJ0711.D	DB-5MS 20m 0.18 0.18 (mm)
ICV 410-55998/13		10/19/2020 23:00	1	LJ0712.D	DB-5MS 20m 0.18 0.18 (mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Instrument ID: HP20296Start Date: 10/28/2020 16:36Analysis Batch Number: 59610End Date: 10/29/2020 03:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 410-59610/1		10/28/2020 16:36	1	LJ1000a.D	DB-5MS 20m 0.18 0.18 (mm)
CCVIS 410-59610/2		10/28/2020 16:54	1	LJ1001.D	DB-5MS 20m 0.18 0.18 (mm)
MB 410-59339/1-A		10/28/2020 17:35	1	LJ1002.D	DB-5MS 20m 0.18 0.18 (mm)
LCS 410-59339/2-A		10/28/2020 18:04	1	LJ1003.D	DB-5MS 20m 0.18 0.18 (mm)
LCSD 410-59339/3-A		10/28/2020 18:33	1	LJ1004.D	DB-5MS 20m 0.18 0.18 (mm)
ZZZZZ		10/28/2020 19:03	10		DB-5MS 20m 0.18 0.18 (mm)
410-18116-2	16MW8	10/28/2020 19:32	1	LJ1006.D	DB-5MS 20m 0.18 0.18 (mm)
410-18116-7	16-2	10/28/2020 20:01	1	LJ1007.D	DB-5MS 20m 0.18 0.18 (mm)
410-18116-8	16-3	10/28/2020 20:30	1	LJ1008.D	DB-5MS 20m 0.18 0.18 (mm)
410-18116-9	16-5	10/28/2020 20:59	1	LJ1009.D	DB-5MS 20m 0.18 0.18 (mm)
410-18116-10	16WC2B	10/28/2020 21:28	1	LJ1010.D	DB-5MS 20m 0.18 0.18 (mm)
410-18116-11	16SPRING	10/28/2020 21:57	1	LJ1011.D	DB-5MS 20m 0.18 0.18 (mm)
ZZZZZ		10/28/2020 22:27	1		DB-5MS 20m 0.18 0.18 (mm)
ZZZZZ		10/28/2020 22:56	1		DB-5MS 20m 0.18 0.18 (mm)
ZZZZZ		10/28/2020 23:25	1		DB-5MS 20m 0.18 0.18 (mm)
ZZZZZ		10/28/2020 23:54	1		DB-5MS 20m 0.18 0.18 (mm)
ZZZZZ		10/29/2020 00:23	1		DB-5MS 20m 0.18 0.18 (mm)
ZZZZZ		10/29/2020 00:52	1		DB-5MS 20m 0.18 0.18 (mm)
ZZZZZ		10/29/2020 01:22	1		DB-5MS 20m 0.18 0.18 (mm)
ZZZZZ		10/29/2020 01:51	1		DB-5MS 20m 0.18 0.18 (mm)
ZZZZZ		10/29/2020 02:20	1		DB-5MS 20m 0.18 0.18 (mm)
ZZZZZ		10/29/2020 02:49	1		DB-5MS 20m 0.18 0.18 (mm)
ZZZZZ		10/29/2020 03:18	1		DB-5MS 20m 0.18 0.18 (mm)
ZZZZZ		10/29/2020 03:47	1		DB-5MS 20m 0.18 0.18 (mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Instrument ID: HP23264 Start Date: 10/29/2020 23:26Analysis Batch Number: 60208 End Date: 10/30/2020 08:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 410-60208/1		10/29/2020 23:26	1	JJ1300.D	DB-5MS 30m 0.25 0.25 (mm)
CCVIS 410-60208/2		10/29/2020 23:51	1	JJ1301.D	DB-5MS 30m 0.25 0.25 (mm)
MB 410-59818/1-A		10/30/2020 02:03	1	JJ1303.D	DB-5MS 30m 0.25 0.25 (mm)
LCS 410-59818/2-A		10/30/2020 02:33	1	JJ1304.D	DB-5MS 30m 0.25 0.25 (mm)
ZZZZZ		10/30/2020 03:03	1		DB-5MS 30m 0.25 0.25 (mm)
ZZZZZ		10/30/2020 03:34	1		DB-5MS 30m 0.25 0.25 (mm)
410-18116-4	16WC1A	10/30/2020 04:04	1	JJ1307.D	DB-5MS 30m 0.25 0.25 (mm)
410-18116-4 MS	16WC1A MS	10/30/2020 04:34	1	JJ1308.D	DB-5MS 30m 0.25 0.25 (mm)
410-18116-4 MSD	16WC1A MSD	10/30/2020 05:05	1	JJ1309.D	DB-5MS 30m 0.25 0.25 (mm)
ZZZZZ		10/30/2020 07:06	50		DB-5MS 30m 0.25 0.25 (mm)
ZZZZZ		10/30/2020 07:36	1		DB-5MS 30m 0.25 0.25 (mm)
ZZZZZ		10/30/2020 08:06	1		DB-5MS 30m 0.25 0.25 (mm)
ZZZZZ		10/30/2020 08:36	1		DB-5MS 30m 0.25 0.25 (mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-18116-1

SDG No.: _____

Instrument ID: HP23264Start Date: 10/30/2020 09:55Analysis Batch Number: 60388End Date: 10/30/2020 19:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 410-60388/1		10/30/2020 09:55	1	JJ1320.D	DB-5MS 30m 0.25 0.25 (mm)
CCVIS 410-60388/2		10/30/2020 10:15	1	JJ1321.D	DB-5MS 30m 0.25 0.25 (mm)
ZZZZZ		10/30/2020 11:24	500		DB-5MS 30m 0.25 0.25 (mm)
ZZZZZ		10/30/2020 11:54	1		DB-5MS 30m 0.25 0.25 (mm)
ZZZZZ		10/30/2020 12:24	1		DB-5MS 30m 0.25 0.25 (mm)
ZZZZZ		10/30/2020 12:54	1		DB-5MS 30m 0.25 0.25 (mm)
ZZZZZ		10/30/2020 13:24	1		DB-5MS 30m 0.25 0.25 (mm)
ZZZZZ		10/30/2020 13:54	1		DB-5MS 30m 0.25 0.25 (mm)
ZZZZZ		10/30/2020 14:25	100		DB-5MS 30m 0.25 0.25 (mm)
ZZZZZ		10/30/2020 14:55	10		DB-5MS 30m 0.25 0.25 (mm)
ZZZZZ		10/30/2020 15:25	100		DB-5MS 30m 0.25 0.25 (mm)
410-18116-1	16C1	10/30/2020 16:26	1	JJ1331.D	DB-5MS 30m 0.25 0.25 (mm)
410-18116-3	16MW9	10/30/2020 16:56	1	JJ1332.D	DB-5MS 30m 0.25 0.25 (mm)
410-18116-5	16WDUP	10/30/2020 17:26	1	JJ1333.D	DB-5MS 30m 0.25 0.25 (mm)
410-18116-6	16WC1B	10/30/2020 17:56	1	JJ1334.D	DB-5MS 30m 0.25 0.25 (mm)
ZZZZZ		10/30/2020 19:26	1		DB-5MS 30m 0.25 0.25 (mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-18116-1

SDG No.: _____

Batch Number: 59339Batch Start Date: 10/28/20 09:30Batch Analyst: Ruth, Joshua RBatch Method: 3510CBatch End Date: 10/28/20 14:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH
MB 410-59339/1		3510C, 8270D				250 mL	1 mL	n/a SU	>11 SU
LCS 410-59339/2		3510C, 8270D				250 mL	1 mL	n/a SU	>11 SU
LCSD 410-59339/3		3510C, 8270D				250 mL	1 mL	n/a SU	>11 SU
410-18116-A-2	16MW8	3510C, 8270D	T	415.33 g	167.17 g	248.2 mL	1 mL	n/a SU	>11 SU
410-18116-A-7	16-2	3510C, 8270D	T	415.56 g	166.90 g	248.7 mL	1 mL	n/a SU	>11 SU
410-18116-A-8	16-3	3510C, 8270D	T	417.41 g	167.07 g	250.3 mL	1 mL	n/a SU	>11 SU
410-18116-A-9	16-5	3510C, 8270D	T	415.69 g	166.81 g	248.9 mL	1 mL	n/a SU	>11 SU
410-18116-A-10	16WC2B	3510C, 8270D	T	416.05 g	167.03 g	249 mL	1 mL	n/a SU	>11 SU
410-18116-A-11	16SPRING	3510C, 8270D	T	412.47 g	166.49 g	246 mL	1 mL	n/a SU	>11 SU

Lab Sample ID	Client Sample ID	Method Chain	Basis	SecondAdjustpH	OP_MINIBNA_SS 00024	OP_MINLCS1_MS 00043	AnalysisComment		
MB 410-59339/1		3510C, 8270D		<2 SU	1 mL		Tap H2O		
LCS 410-59339/2		3510C, 8270D		<2 SU	1 mL	1 mL	Tap H2O		
LCSD 410-59339/3		3510C, 8270D		<2 SU	1 mL	1 mL	Tap H2O		
410-18116-A-2	16MW8	3510C, 8270D	T	<2 SU	1 mL		Clear		
410-18116-A-7	16-2	3510C, 8270D	T	<2 SU	1 mL		Clear		
410-18116-A-8	16-3	3510C, 8270D	T	<2 SU	1 mL		Clear		
410-18116-A-9	16-5	3510C, 8270D	T	<2 SU	1 mL		Clear		
410-18116-A-10	16WC2B	3510C, 8270D	T	<2 SU	1 mL		Clear		
410-18116-A-11	16SPRING	3510C, 8270D	T	<2 SU	1 mL		Clear		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-18116-1

SDG No.: _____

Batch Number: 59339 Batch Start Date: 10/28/20 09:30 Batch Analyst: Ruth, Joshua RBatch Method: 3510C Batch End Date: 10/28/20 14:00

Batch Notes	
Acid Used for pH Adjustment ID	H2SO4 194547
Balance ID	25996
Base Used to Adjust pH ID	NaOH 4005E31
Analyst ID - Concentration	JSR12366
Equipment ID - Concentration 1	RVAP 2, 9, 4, 5
Analyst ID - Extraction	JSR12366
Na2SO4 ID	20300A
Pipette/Syringe/Dispenser ID	1
Prep Solvent ID	MeCl2 205043
Prep Solvent Volume Used	90 mL
Analyst ID - Spike Analyst	JSR12366
Concentration 1 Uncorrected Temperature	90 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-18116-1

SDG No.: _____

Batch Number: 59818Batch Start Date: 10/29/20 09:00Batch Analyst: Ruth, Joshua RBatch Method: 3510CBatch End Date: 10/29/20 14:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH
MB 410-59818/1		3510C, 8270D				250 mL	1 mL	n/a SU	>11 SU
LCS 410-59818/2		3510C, 8270D				250 mL	1 mL	n/a SU	>11 SU
410-18116-A-4 MS	16WC1A	3510C, 8270D	T	413.14 g	166.50 g	246.6 mL	1 mL	n/a SU	>11 SU
410-18116-A-4 MSD	16WC1A	3510C, 8270D	T	415.98 g	166.63 g	249.4 mL	1 mL	n/a SU	>11 SU
410-18116-A-1	16C1	3510C, 8270D	T	415.36 g	166.40 g	249 mL	1 mL	n/a SU	>11 SU
410-18116-A-3	16MW9	3510C, 8270D	T	416.71 g	166.98 g	249.7 mL	1 mL	n/a SU	>11 SU
410-18116-A-4	16WC1A	3510C, 8270D	T	402.82 g	167.17 g	235.7 mL	1 mL	n/a SU	>11 SU
410-18116-A-5	16WDUP	3510C, 8270D	T	415.81 g	166.72 g	249.1 mL	1 mL	n/a SU	>11 SU
410-18116-A-6	16WC1B	3510C, 8270D	T	417.13 g	167.02 g	250.1 mL	1 mL	n/a SU	>11 SU

Lab Sample ID	Client Sample ID	Method Chain	Basis	SecondAdjustpH	OP_MINIBNA_SS 00024	OP_MINLCS1_MS 00043	OP_MINLCS2_MS 00025	AnalysisComment	
MB 410-59818/1		3510C, 8270D		<2 SU	1 mL			Tap H2O; Split w/ 59819	
LCS 410-59818/2		3510C, 8270D		<2 SU	1 mL	1 mL	1 mL	Tap H2O	
410-18116-A-4 MS	16WC1A	3510C, 8270D	T	<2 SU	1 mL	1 mL	1 mL	Tan Tint	
410-18116-A-4 MSD	16WC1A	3510C, 8270D	T	<2 SU	1 mL	1 mL	1 mL	Tan Tint	
410-18116-A-1	16C1	3510C, 8270D	T	<2 SU	1 mL			Clear	
410-18116-A-3	16MW9	3510C, 8270D	T	<2 SU	1 mL			Tan Tint	
410-18116-A-4	16WC1A	3510C, 8270D	T	<2 SU	1 mL			Tan Tint	
410-18116-A-5	16WDUP	3510C, 8270D	T	<2 SU	1 mL			Tan Tint	
410-18116-A-6	16WC1B	3510C, 8270D	T	<2 SU	1 mL			Tan Tint	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-18116-1

SDG No.: _____

Batch Number: 59818 Batch Start Date: 10/29/20 09:00 Batch Analyst: Ruth, Joshua RBatch Method: 3510C Batch End Date: 10/29/20 14:00

Batch Notes	
Acid Used for pH Adjustment ID	H2SO4 194547
Balance ID	25996
Base Used to Adjust pH ID	NaOH 4005E31
Analyst ID - Concentration	jsr12366
Equipment ID - Concentration 1	RVAP 1, 2, 9, 4
Analyst ID - Extraction	jsr12366
Na2SO4 ID	20301A
Pipette/Syringe/Dispenser ID	3
Prep Solvent ID	MeCl2 205429
Prep Solvent Volume Used	90 mL
Analyst ID - Spike Analyst	jsr12366
Concentration 1 Uncorrected Temperature	90 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents



410-18116-02 Chain of Custody

HWMU16
Radford Army Ammunition Plant (RFAAP)
Semiannual Monitoring Event
DAA JN: B03204-20A

ANALYTICAL METHOD: 8260C/5030C 25 ml purge volume
TYPE METHOD: GCMS
CLASS: VOLATILE

No.	ANALYTE	CAS RN	Required LOQ (µg/l)
1.	Carbon tetrachloride	56-23-5	1
2.	chloromethane ; (Methyl chloride)	74-87-3	1
3.	2-butanone (methyl ethyl ketone - MEK)	78-93-3	10
4.	1,1-dichloroethane	75-34-3	1
5.	Dichlorodifluoromethane	75-71-8	1
6.	Ethylbenzene	100-41-4	1
7.	Tetrachloroethene	127-18-4	1
8.	Toluene (methyl benzene)	108-88-3	1
9.	1,1,1-trichloroethane (methyl chloroform)	71-55-6	1
10.	Trichloroethene	79-01-6	1
11.	Trichlorofluoromethane (CFC-11)	75-69-4	1
12.	Xylenes (total)	1330-20-7	3
13.	Chloroethane	75-00-3	1
14.	Diethyl ether	60-29-7	12.5
15.	Dimethyl ether	115-10-6	12.5
16.	Methylene chloride	75-09-2	1
17.	1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	1
18.	Benzene	71-43-2	1
19.	1,1-Dichloroethene	75-35-4	1
20.	Tetrahydrofuran		25
21.	Vinyl Chloride		1

Notes

13-16 added 10/03. JCF

Revised 10/31/03 JCF

17 added 0704. Revised 7/28/2004

10/2008 JCF

18 added 04 2011. JCF

19 added 04 2014 KPO

20 added 04 2016 JCF

21 added 08 2020 JCF

NOTE ADDITION OF VINYL
CHLORIDE 4Q2020.....JCF 9-22-20

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JCF 9-22-2020

t:\environmental\bbg\databases\rap\sample event set up\semi-annual events\hwmu-16\hwmu16-target analyte list q 4 2020.doc
JCF 11/04/2004

25 ml purge volume

ANALYTICAL METHOD: 8270D/3510C

TYPE METHOD: GCMS

CLASS: SEMIVOLATILE

No.	ANALYTE	CAS RN	Required LOQ (µg/l)
1.	2,4-dinitrotoluene	121-14-2	10
2.	2,6-dinitrotoluene	606-20-2	10
3.	Diethylphthalate		5

10/13 – diethylphthate added

Page 3 of 3
JCF 9-22-2020

Login Sample Receipt Checklist

Client: Draper Aden Associates, Inc.

Job Number: 410-18116-1

Login Number: 18116

List Number: 1

Creator: Rivera-Santa, Julissa

List Source: Eurofins Lancaster Laboratories Env

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable ($\leq 6^{\circ}\text{C}$, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	True	



**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF GENERAL SERVICES
DIVISION OF CONSOLIDATED LABORATORY SERVICES**



Certifies that

**VA Laboratory ID#: 460182
Eurofins Lancaster Laboratories Environmental, LLC
2425 New Holland Pike
Lancaster, PA 17601**

**Owner: EUROFINS SCIENTIFIC
Responsible Official: DUANE LUCKENBILL**

Having met the requirements of 1 VAC 30-46 and
having been found compliant with the 2009 TNI Standard approved by The NELAC Institute
is hereby approved as an

Accredited Environmental Laboratory

As more fully described in the attached Scope of Accreditation

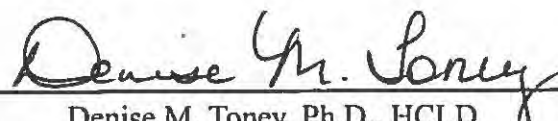
Effective Date: June 15, 2020

Expiration Date: June 14, 2021

Certificate # 10906

Continued accreditation status depends on successful ongoing participation in the program.
Certificate to be conspicuously displayed at the laboratory.
Not valid unless accompanied by a valid Virginia Environmental Laboratory Accreditation Program (VELAP)
Scope of Accreditation.
Customers are urged to verify the laboratory's current accreditation status.

Certificate Not Transferable


Denise M. Toney, Ph.D., HCLD
DGS Deputy Director for Laboratories

Surrender Upon Revocation



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 10906

Eurofins Lancaster Laboratories Environmental, LLC
2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182
Effective Date: June 15, 2020
Expiration Date: June 14, 2021

AIR

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 18	TOTAL GASEOUS ORGANIC COMPOUNDS	LA DEQ	EPA 25	TOTAL GASEOUS NONMETHANE ORGANIC COMPOUNDS (TGNMO)	LA DEQ
EPA TO-14A 2nd Ed.	1,1,1-TRICHLOROETHANE	LA DEQ	EPA TO-14A 2nd Ed.	1,1,2,2-TETRACHLOROETHANE	LA DEQ
EPA TO-14A 2nd Ed.	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113)	LA DEQ	EPA TO-14A 2nd Ed.	1,1,2-TRICHLOROETHANE	LA DEQ
EPA TO-14A 2nd Ed.	1,1-DICHLOROETHANE	LA DEQ	EPA TO-14A 2nd Ed.	1,1-DICHLOROETHYLENE	LA DEQ
EPA TO-14A 2nd Ed.	1,2,4-TRICHLOROBENZENE	LA DEQ	EPA TO-14A 2nd Ed.	1,2,4-TRIMETHYLBENZENE	LA DEQ
EPA TO-14A 2nd Ed.	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	LA DEQ	EPA TO-14A 2nd Ed.	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	LA DEQ
EPA TO-14A 2nd Ed.	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	LA DEQ	EPA TO-14A 2nd Ed.	1,2-DICHLOROPROPANE	LA DEQ
EPA TO-14A 2nd Ed.	1,3,5-TRIMETHYLBENZENE	LA DEQ	EPA TO-14A 2nd Ed.	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	LA DEQ
EPA TO-14A 2nd Ed.	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	LA DEQ	EPA TO-14A 2nd Ed.	2-BUTANONE (METHYL ETHYL KETONE, MEK)	LA DEQ
EPA TO-14A 2nd Ed.	BENZENE	LA DEQ	EPA TO-14A 2nd Ed.	BROMOFORM	LA DEQ
EPA TO-14A 2nd Ed.	CARBON TETRACHLORIDE	LA DEQ	EPA TO-14A 2nd Ed.	CHLOROBENZENE	LA DEQ
EPA TO-14A 2nd Ed.	CHLOROETHANE (ETHYL CHLORIDE)	LA DEQ	EPA TO-14A 2nd Ed.	CHLOROFORM	LA DEQ
EPA TO-14A 2nd Ed.	CIS-1,2-DICHLOROETHYLENE	LA DEQ	EPA TO-14A 2nd Ed.	CIS-1,3-DICHLOROPROPENE	LA DEQ
EPA TO-14A 2nd Ed.	ETHYLBENZENE	LA DEQ	EPA TO-14A 2nd Ed.	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	LA DEQ
EPA TO-14A 2nd Ed.	M+P-XYLENE	LA DEQ	EPA TO-14A 2nd Ed.	METHYL BROMIDE (BROMOMETHANE)	LA DEQ
EPA TO-14A 2nd Ed.	METHYL CHLORIDE (CHLOROMETHANE)	LA DEQ	EPA TO-14A 2nd Ed.	METHYLENE CHLORIDE (DICHLOROMETHANE)	LA DEQ
EPA TO-14A 2nd Ed.	O-XYLENE	LA DEQ	EPA TO-14A 2nd Ed.	STYRENE	LA DEQ
EPA TO-14A 2nd Ed.	TETRACHLOROETHENE (PERCHLOROETHENE)	LA DEQ	EPA TO-14A 2nd Ed.	TOLUENE	LA DEQ
EPA TO-14A 2nd Ed.	TRANS-1,2-DICHLOROETHENE	LA DEQ	EPA TO-14A 2nd Ed.	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	LA DEQ
EPA TO-14A 2nd Ed.	TRICHLOROETHENE (TRICHLOROETHYLENE)	LA DEQ	EPA TO-14A 2nd Ed.	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	LA DEQ
EPA TO-14A 2nd Ed.	VINYL CHLORIDE (CHLOROETHENE)	LA DEQ	EPA TO-14A 2nd Ed. - EXTENDED	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	LA DEQ
EPA TO-14A 2nd Ed. - EXTENDED	BROMODICHLOROMETHANE	LA DEQ	EPA TO-14A 2nd Ed. - EXTENDED	CARBON DISULFIDE	LA DEQ
EPA TO-14A 2nd Ed. - EXTENDED	METHYL TERT-BUTYL ETHER (MTBE)	LA DEQ	EPA TO-14A 2nd Ed. - EXTENDED	XYLENE (TOTAL)	LA DEQ
EPA TO-15 2nd Ed.	1,1,1-TRICHLOROETHANE	LA DEQ	EPA TO-15 2nd Ed.	1,1,2,2-TETRACHLOROETHANE	LA DEQ
EPA TO-15 2nd Ed.	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113)	LA DEQ	EPA TO-15 2nd Ed.	1,1,2-TRICHLOROETHANE	LA DEQ
EPA TO-15 2nd Ed.	1,1-DICHLOROETHANE	LA DEQ	EPA TO-15 2nd Ed.	1,1-DICHLOROETHYLENE	LA DEQ
EPA TO-15 2nd Ed.	1,2,4-TRICHLOROBENZENE	LA DEQ	EPA TO-15 2nd Ed.	1,2,4-TRIMETHYLBENZENE	LA DEQ



Commonwealth of Virginia
Department of General Services
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Scope of Accreditation

VELAP Certificate No.: 10906

Eurofins Lancaster Laboratories Environmental, LLC
2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182
Effective Date: June 15, 2020
Expiration Date: June 14, 2021

AIR

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA TO-15 2nd Ed.	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	LA DEQ	EPA TO-15 2nd Ed.	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	LA DEQ
EPA TO-15 2nd Ed.	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	LA DEQ	EPA TO-15 2nd Ed.	1,2-DICHLOROPROPANE	LA DEQ
EPA TO-15 2nd Ed.	1,3,5-TRIMETHYLBENZENE	LA DEQ	EPA TO-15 2nd Ed.	1,3-BUTADIENE	LA DEQ
EPA TO-15 2nd Ed.	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	LA DEQ	EPA TO-15 2nd Ed.	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	LA DEQ
EPA TO-15 2nd Ed.	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	LA DEQ	EPA TO-15 2nd Ed.	2-BUTANONE (METHYL ETHYL KETONE, MEK)	LA DEQ
EPA TO-15 2nd Ed.	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	LA DEQ	EPA TO-15 2nd Ed.	ACETONITRILE	LA DEQ
EPA TO-15 2nd Ed.	ACROLEIN (PROPENAL)	LA DEQ	EPA TO-15 2nd Ed.	ACRYLONITRILE	LA DEQ
EPA TO-15 2nd Ed.	ALLYL CHLORIDE (3-CHLOROPROPENE)	LA DEQ	EPA TO-15 2nd Ed.	BENZENE	LA DEQ
EPA TO-15 2nd Ed.	BROMODICHLOROMETHANE	LA DEQ	EPA TO-15 2nd Ed.	BROMOFORM	LA DEQ
EPA TO-15 2nd Ed.	CARBON DISULFIDE	LA DEQ	EPA TO-15 2nd Ed.	CARBON TETRACHLORIDE	LA DEQ
EPA TO-15 2nd Ed.	CHLOROBENZENE	LA DEQ	EPA TO-15 2nd Ed.	CHLOROETHANE (ETHYL CHLORIDE)	LA DEQ
EPA TO-15 2nd Ed.	CHLOROFORM	LA DEQ	EPA TO-15 2nd Ed.	CIS-1,2-DICHLOROETHYLENE	LA DEQ
EPA TO-15 2nd Ed.	CIS-1,3-DICHLOROPROPENE	LA DEQ	EPA TO-15 2nd Ed.	CYCLOHEXANE	LA DEQ
EPA TO-15 2nd Ed.	ETHYL ACRYLATE	LA DEQ	EPA TO-15 2nd Ed.	ETHYLBENZENE	LA DEQ
EPA TO-15 2nd Ed.	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	LA DEQ	EPA TO-15 2nd Ed.	HEXACHLOROETHANE	LA DEQ
EPA TO-15 2nd Ed.	IODOMETHANE (METHYL IODIDE)	LA DEQ	EPA TO-15 2nd Ed.	ISOPROPYLBENZENE	LA DEQ
EPA TO-15 2nd Ed.	M+P-XYLENE	LA DEQ	EPA TO-15 2nd Ed.	METHYL BROMIDE (BROMOMETHANE)	LA DEQ
EPA TO-15 2nd Ed.	METHYL CHLORIDE (CHLOROMETHANE)	LA DEQ	EPA TO-15 2nd Ed.	METHYL METHACRYLATE	LA DEQ
EPA TO-15 2nd Ed.	METHYL TERT-BUTYL ETHER (MTBE)	LA DEQ	EPA TO-15 2nd Ed.	METHYLENE CHLORIDE (DICHLOROMETHANE)	LA DEQ
EPA TO-15 2nd Ed.	O-XYLENE	LA DEQ	EPA TO-15 2nd Ed.	PROPYLENE (PROPENE)	LA DEQ
EPA TO-15 2nd Ed.	STYRENE	LA DEQ	EPA TO-15 2nd Ed.	TETRACHLOROETHENE (PERCHLOROETHENE)	LA DEQ
EPA TO-15 2nd Ed.	TOLUENE	LA DEQ	EPA TO-15 2nd Ed.	TRANS-1,2-DICHLOROETHENE	LA DEQ
EPA TO-15 2nd Ed.	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	LA DEQ	EPA TO-15 2nd Ed.	TRICHLOROETHENE (TRICHLOROETHYLENE)	LA DEQ
EPA TO-15 2nd Ed.	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	LA DEQ	EPA TO-15 2nd Ed.	VINYL ACETATE	LA DEQ
EPA TO-15 2nd Ed.	VINYL CHLORIDE (CHLOROETHENE)	LA DEQ	EPA TO-15 2nd Ed.	XYLENE (TOTAL)	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	2-CHLOROTOLUENE	LA DEQ	EPA TO-15 2nd Ed. - EXTENDED	2-HEXANONE	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	4-ETHYLTOLUENE	LA DEQ	EPA TO-15 2nd Ed. - EXTENDED	ACETONE	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	CHLORODIFLUOROMETHANE (FREON-22)	LA DEQ	EPA TO-15 2nd Ed. - EXTENDED	NAPHTHALENE	LA DEQ

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AIR

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA TO-15 2nd Ed. - EXTENDED	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	LA DEQ			

DRINKING WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 200.7 REV 4.4	BARIUM	PA	EPA 200.7 REV 4.4	CALCIUM	PA
EPA 200.7 REV 4.4	CHROMIUM	PA	EPA 200.7 REV 4.4	COPPER	PA
EPA 200.7 REV 4.4	IRON	PA	EPA 200.7 REV 4.4	MAGNESIUM	PA
EPA 200.7 REV 4.4	MANGANESE	PA	EPA 200.7 REV 4.4	NICKEL	PA
EPA 200.7 REV 4.4	SILVER	PA	EPA 200.7 REV 4.4	SODIUM	PA
EPA 200.7 REV 4.4	ZINC	PA	EPA 200.8 REV 5.4	ALUMINUM	PA
EPA 200.8 REV 5.4	ANTIMONY	PA	EPA 200.8 REV 5.4	ARSENIC	PA
EPA 200.8 REV 5.4	BERYLLIUM	PA	EPA 200.8 REV 5.4	CADMIUM	PA
EPA 200.8 REV 5.4	CHROMIUM	PA	EPA 200.8 REV 5.4	COPPER	PA
EPA 200.8 REV 5.4	IRON	PA	EPA 200.8 REV 5.4	LEAD	PA
EPA 200.8 REV 5.4	MANGANESE	PA	EPA 200.8 REV 5.4	NICKEL	PA
EPA 200.8 REV 5.4	SELENIUM	PA	EPA 200.8 REV 5.4	THALLIUM	PA
EPA 200.8 REV 5.4	ZINC	PA	EPA 245.1 REV 3	MERCURY	PA
EPA 300.0 REV 2.1	CHLORIDE	PA	EPA 300.0 REV 2.1	FLUORIDE	PA
EPA 300.0 REV 2.1	NITRATE AS N	PA	EPA 300.0 REV 2.1	NITRITE AS N	PA
EPA 300.0 REV 2.1	SULFATE	PA	EPA 335.4 REV 1.0	CYANIDE	PA
EPA 353.2 REV 2	NITRATE AS N	PA	EPA 353.2 REV 2	NITRATE/NITRITE	PA
EPA 353.2 REV 2	NITRITE AS N	PA	EPA 524.2 REV 4.1	1,1,1-TRICHLOROETHANE	PA
EPA 524.2 REV 4.1	1,1,2-TRICHLOROETHANE	PA	EPA 524.2 REV 4.1	1,1-DICHLOROETHYLENE	PA
EPA 524.2 REV 4.1	1,2,4-TRICHLOROBENZENE	PA	EPA 524.2 REV 4.1	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 524.2 REV 4.1	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	PA	EPA 524.2 REV 4.1	1,2-DICHLOROPROPANE	PA
EPA 524.2 REV 4.1	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA	EPA 524.2 REV 4.1	BENZENE	PA
EPA 524.2 REV 4.1	BROMODICHLOROMETHANE	PA	EPA 524.2 REV 4.1	BROMOFORM	PA
EPA 524.2 REV 4.1	CARBON TETRACHLORIDE	PA	EPA 524.2 REV 4.1	CHLOROBENZENE	PA
EPA 524.2 REV 4.1	CHLORODIBROMOMETHANE	PA	EPA 524.2 REV 4.1	CHLOROFORM	PA
EPA 524.2 REV 4.1	CIS-1,2-DICHLOROETHYLENE	PA	EPA 524.2 REV 4.1	ETHYLBENZENE	PA
EPA 524.2 REV 4.1	METHYLENE CHLORIDE (DICHLOROMETHANE)	PA	EPA 524.2 REV 4.1	STYRENE	PA
EPA 524.2 REV 4.1	TETRACHLOROETHENE (PERCHLOROETHENE)	PA	EPA 524.2 REV 4.1	TOLUENE	PA
EPA 524.2 REV 4.1	TOTAL TRIHALOMETHANES (THMS)	PA	EPA 524.2 REV 4.1	TRANS-1,2-DICHLOROETHENE	PA
EPA 524.2 REV 4.1	TRICHLOROETHENE (TRICHLOROETHYLENE)	PA	EPA 524.2 REV 4.1	VINYL CHLORIDE (CHLOROETHENE)	PA

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DRINKING WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 524.2 REV 4.1	XYLENE (TOTAL)	PA	EPA 531.1 REV 3.1	CARBOFURAN (FURADEN)	PA
EPA 531.1 REV 3.1	OXAMYL	PA	SM 2120 B-2011	COLOR	PA
SM 2130 B-2011	TURBIDITY	PA	SM 2320 B-2011	ALKALINITY AS CaCO ₃	PA
SM 2510 B-2011	CONDUCTIVITY	PA	SM 2540 C-2011	RESIDUE-FILTERABLE (TDS)	PA
SM 4500-F ⁻ C-2011	FLUORIDE	PA	SM 4500-H ⁺ B-2011	PH	PA
SM 4500-P E-2011	ORTHOPHOSPHATE AS P	PA	SM 5310 C-2011	TOTAL ORGANIC CARBON (TOC)	PA
SM 5540 C-2011	SURFACTANTS - MBAS	PA			

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1010	FLASHPOINT	PA	EPA 1311	PREP. TOXICITY CHARACTERISTIC LEACHING PROCEDURE	PA
EPA 1312	PREP. SYNTHETIC PRECIPITATION LEACHING PROCEDURE	PA	EPA 160.4	RESIDUE-VOLATILE	PA
EPA 1613 B	1,2,3,4,6,7,8,9-OCTACHLORODIBENZ O-P-DIOXIN (OCDD)	PA	EPA 1613 B	1,2,3,4,6,7,8,9-OCTACHLORODIBENZ OFURAN (OCDF)	PA
EPA 1613 B	1,2,3,4,6,7,8-HEPTACHLORODIBENZ O-P-DIOXIN (1,2,3,4,6,7,8-HPCDD)	PA	EPA 1613 B	1,2,3,4,6,7,8-HEPTACHLORODIBENZ OFURAN (1,2,3,4,6,7,8-HPCDF)	PA
EPA 1613 B	1,2,3,4,7,8,9-HEPTACHLORODIBENZ OFURAN (1,2,3,4,7,8,9-HPCDF)	PA	EPA 1613 B	1,2,3,4,7,8-HEXACHLORODIBENZO-P -DIOXIN (1,2,3,4,7,8-HXCDD)	PA
EPA 1613 B	1,2,3,4,7,8-HEXACHLORODIBENZOF URAN (1,2,3,4,7,8-HXCDF)	PA	EPA 1613 B	1,2,3,6,7,8-HEXACHLORODIBENZO-P -DIOXIN(1,2,3,6,7,8-HXCDD)	PA
EPA 1613 B	1,2,3,6,7,8-HEXACHLORODIBENZOF URAN (1,2,3,6,7,8-HXCDF)	PA	EPA 1613 B	1,2,3,7,8,9-HEXACHLORODIBENZO-P -DIOXIN (1,2,3,7,8,9-HXCDD)	PA
EPA 1613 B	1,2,3,7,8,9-HEXACHLORODIBENZOF URAN (1,2,3,7,8,9-HXCDF)	PA	EPA 1613 B	1,2,3,7,8-PENTACHLORODIBENZO-P -DIOXIN (1,2,3,7,8-PECDD)	PA
EPA 1613 B	1,2,3,7,8-PENTACHLORODIBENZOF URAN (1,2,3,7,8-PECDF)	PA	EPA 1613 B	2,3,4,6,7,8-HEXACHLORODIBENZOF URAN (2,3,4,6,7,8-HXCDF)	PA
EPA 1613 B	2,3,4,7,8-PENTACHLORODIBENZOF URAN	PA	EPA 1613 B	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (2,3,7,8-TCDD)	PA
EPA 1613 B	2,3,7,8-TETRACHLORODIBENZOFUR AN (2,3,7,8-TCDF)	PA	EPA 1664 A	OIL AND GREASE (AS N-HEXANE EXTRACTABLE MATERIAL (HEM))	PA
EPA 1664 A	TOTAL PETROLEUM HYDROCARBONS (TPH) (AS NONPOLAR MATERIAL, SGT-HEM)	PA	EPA 1666 A	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	PA
EPA 1666 A	DI-ISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	PA	EPA 1666 A	ETHYL ACETATE	PA
EPA 1666 A	ISOBUTYRALDEHYDE	PA	EPA 1666 A	ISOPROPYL ACETATE	PA
EPA 1666 A	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA	EPA 1666 A	METHYL FORMATE	PA
EPA 1666 A	N-AMYL ACETATE	PA	EPA 1666 A	N-AMYL ALCOHOL	PA
EPA 1666 A	N-BUTYL-ACETATE	PA	EPA 1666 A	N-HEPTANE	PA
EPA 1666 A	N-HEXANE	PA	EPA 1666 A	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	PA
EPA 1666 A	TETRAHYDROFURAN (THF)	PA	EPA 1666 A	XYLENE (TOTAL)	PA

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NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1668 A	2,2',3,3',4,4',5,5',6'-NONACHLOROBIPHENYL (BZ-206)	PA	EPA 1668 A	2,2',3,3',4,4',5,5'-OCTACHLOROBIPHENYL (BZ-194)	PA
EPA 1668 A	2,2',3,3',4,4',5,6'-OCTACHLOROBIPHENYL (BZ-196)	PA	EPA 1668 A	2,2',3,3',4,4',5,6,6'-NONACHLOROBIPHENYL (BZ-207)	PA
EPA 1668 A	2,2',3,3',4,4',5,6-OCTACHLOROBIPHENYL (BZ-195)	PA	EPA 1668 A	2,2',3,3',4,4',5-HEPTACHLOROBIPHENYL (BZ-170)	PA
EPA 1668 A	2,2',3,3',4,4',6,6'-OCTACHLOROBIPHENYL (BZ-197)	PA	EPA 1668 A	2,2',3,3',4,4',6-HEPTACHLOROBIPHENYL (BZ-171)	PA
EPA 1668 A	2,2',3,3',4,4',-HEXACHLOROBIPHENYL (BZ-128)	PA	EPA 1668 A	2,2',3,3',4,5,6'-HEPTACHLOROBIPHENYL (BZ-177)	PA
EPA 1668 A	2,2',3,3',4,5,6,6'-OCTACHLOROBIPHENYL (BZ-201)	PA	EPA 1668 A	2,2',3,3',4,5,6-HEPTACHLOROBIPHENYL (BZ-175)	PA
EPA 1668 A	2,2',3,3',4,5'-HEXACHLOROBIPHENYL (BZ-130)	PA	EPA 1668 A	2,2',3,3',4,5,5',6'-OCTACHLOROBIPHENYL (BZ-199)	PA
EPA 1668 A	2,2',3,3',4,5,5',6,6'-NONACHLOROBIPHENYL (BZ-208)	PA	EPA 1668 A	2,2',3,3',4,5,5',6-OCTACHLOROBIPHENYL (BZ-198)	PA
EPA 1668 A	2,2',3,3',4,5,5',6-HEPTACHLOROBIPHENYL (BZ-172)	PA	EPA 1668 A	2,2',3,3',4,5,6'-HEPTACHLOROBIPHENYL (BZ-174)	PA
EPA 1668 A	2,2',3,3',4,5,6,6'-OCTACHLOROBIPHENYL (BZ-200)	PA	EPA 1668 A	2,2',3,3',4,5,6-HEPTACHLOROBIPHENYL (BZ-173)	PA
EPA 1668 A	2,2',3,3',4,5-HEXACHLOROBIPHENYL (BZ-129)	PA	EPA 1668 A	2,2',3,3',4,6'-HEXACHLOROBIPHENYL (BZ-132)	PA
EPA 1668 A	2,2',3,3',4,6,6'-HEPTACHLOROBIPHENYL (BZ-176)	PA	EPA 1668 A	2,2',3,3',4,6-HEXACHLOROBIPHENYL (BZ-131)	PA
EPA 1668 A	2,2',3,3',4-PENTACHLOROBIPHENYL (BZ-82)	PA	EPA 1668 A	2,2',3,3',5,5',6'-OCTACHLOROBIPHENYL (BZ-202)	PA
EPA 1668 A	2,2',3,3',5,5',6-HEPTACHLOROBIPHENYL (BZ-178)	PA	EPA 1668 A	2,2',3,3',5,5'-HEXACHLOROBIPHENYL (BZ-133)	PA
EPA 1668 A	2,2',3,3',5,6'-HEXACHLOROBIPHENYL (BZ-135)	PA	EPA 1668 A	2,2',3,3',5,6,6'-HEPTACHLOROBIPHENYL (BZ-179)	PA
EPA 1668 A	2,2',3,3',5,6-HEXACHLOROBIPHENYL (BZ-134)	PA	EPA 1668 A	2,2',3,3',5-PENTACHLOROBIPHENYL (BZ-83)	PA
EPA 1668 A	2,2',3,3',6,6'-HEXACHLOROBIPHENYL (BZ-136)	PA	EPA 1668 A	2,2',3,3',6-PENTACHLOROBIPHENYL (BZ-84)	PA
EPA 1668 A	2,2',3,3',-TETRACHLOROBIPHENYL (BZ-40)	PA	EPA 1668 A	2,2',3,4',5,6-HEXACHLOROBIPHENYL (BZ-149)	PA
EPA 1668 A	2,2',3,4',5'-PENTACHLOROBIPHENYL (BZ-97)	PA	EPA 1668 A	2,2',3,4',5,5',6-HEPTACHLOROBIPHENYL (BZ-187)	PA
EPA 1668 A	2,2',3,4',5,5'-HEXACHLOROBIPHENYL (BZ-146)	PA	EPA 1668 A	2,2',3,4',5,6'-HEXACHLOROBIPHENYL (BZ-148)	PA
EPA 1668 A	2,2',3,4',5,6,6'-HEPTACHLOROBIPHENYL (BZ-188)	PA	EPA 1668 A	2,2',3,4',5,6-HEXACHLOROBIPHENYL (BZ-147)	PA
EPA 1668 A	2,2',3,4',5-PENTACHLOROBIPHENYL (BZ-90)	PA	EPA 1668 A	2,2',3,4',6'-PENTACHLOROBIPHENYL (BZ-98)	PA
EPA 1668 A	2,2',3,4',6,6'-HEXACHLOROBIPHENYL (BZ-150)	PA	EPA 1668 A	2,2',3,4',6-PENTACHLOROBIPHENYL (BZ-91)	PA
EPA 1668 A	2,2',3,4',-TETRACHLOROBIPHENYL (BZ-42)	PA	EPA 1668 A	2,2',3,4,4',5,6-HEPTACHLOROBIPHENYL (BZ-183)	PA
EPA 1668 A	2,2',3,4,4',5'-HEXACHLOROBIPHENYL (BZ-138)	PA	EPA 1668 A	2,2',3,4,4',5,5',6-OCTACHLOROBIPHENYL (BZ-203)	PA

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EPA 1668 A	2,2',3,4,4',5,5'-HEPTACHLOROBIPHE NYL (BZ-180)	PA	EPA 1668 A	2,2',3,4,4',5,6'-HEPTACHLOROBIPHE NYL (BZ-182)	PA
EPA 1668 A	2,2',3,4,4',5,6'-OCTACHLOROBIPHE NYL (BZ-204)	PA	EPA 1668 A	2,2',3,4,4',5,6'-HEPTACHLOROBIPHE NYL (BZ-181)	PA
EPA 1668 A	2,2',3,4,4',5-HEXACHLOROBIPHENYL (BZ-137)	PA	EPA 1668 A	2,2',3,4,4',6'-HEXACHLOROBIPHENY L (BZ-140)	PA
EPA 1668 A	2,2',3,4,4',6,6'-HEPTACHLOROBIPHE NYL (BZ-184)	PA	EPA 1668 A	2,2',3,4,4',6-HEXACHLOROBIPHENYL (BZ-139)	PA
EPA 1668 A	2,2',3,4,4'-PENTACHLOROBIPHENYL (BZ-85)	PA	EPA 1668 A	2,2',3,4,5,6-HEXACHLOROBIPHENYL (BZ-144)	PA
EPA 1668 A	2,2',3,4,5'-PENTACHLOROBIPHENYL (BZ-87)	PA	EPA 1668 A	2,2',3,4,5,5'-HEPTACHLOROBIPHE NYL (BZ-185)	PA
EPA 1668 A	2,2',3,4,5,5'-HEXACHLOROBIPHENYL (BZ-141)	PA	EPA 1668 A	2,2',3,4,5,6'-HEXACHLOROBIPHENYL (BZ-143)	PA
EPA 1668 A	2,2',3,4,5,6,6'-HEPTACHLOROBIPHE NYL (BZ-186)	PA	EPA 1668 A	2,2',3,4,5,6-HEXACHLOROBIPHENYL (BZ-142)	PA
EPA 1668 A	2,2',3,4,5-PENTACHLOROBIPHENYL (BZ-86)	PA	EPA 1668 A	2,2',3,4,6'-PENTACHLOROBIPHENYL (BZ-89)	PA
EPA 1668 A	2,2',3,4,6,6'-HEXACHLOROBIPHENYL (BZ-145)	PA	EPA 1668 A	2,2',3,4,6-PENTACHLOROBIPHENYL (BZ-88)	PA
EPA 1668 A	2,2',3,4-TETRACHLOROBIPHENYL (BZ-41)	PA	EPA 1668 A	2,2',3,5,6-PENTACHLOROBIPHENYL (BZ-95)	PA
EPA 1668 A	2,2',3,5-TETRACHLOROBIPHENYL (BZ-44)	PA	EPA 1668 A	2,2',3,5,5',6-HEXACHLOROBIPHENYL (BZ-151)	PA
EPA 1668 A	2,2',3,5,5'-PENTACHLOROBIPHENYL (BZ-92)	PA	EPA 1668 A	2,2',3,5,6'-PENTACHLOROBIPHENYL (BZ-94)	PA
EPA 1668 A	2,2',3,5,6,6'-HEXACHLOROBIPHENYL (BZ-152)	PA	EPA 1668 A	2,2',3,5,6-PENTACHLOROBIPHENYL (BZ-93)	PA
EPA 1668 A	2,2',3,5-TETRACHLOROBIPHENYL (BZ-43)	PA	EPA 1668 A	2,2',3,6-TETRACHLOROBIPHENYL (BZ-46)	PA
EPA 1668 A	2,2',3,6,6'-PENTACHLOROBIPHENYL (BZ-96)	PA	EPA 1668 A	2,2',3,6-TETRACHLOROBIPHENYL (BZ-45)	PA
EPA 1668 A	2,2',3-TRICHLOROBIPHENYL (BZ-16)	PA	EPA 1668 A	2,2',4,4',5,5'-HEXACHLOROBIPHENY L (BZ-153)	PA
EPA 1668 A	2,2',4,4',5,6'-HEXACHLOROBIPHENY L (BZ-154)	PA	EPA 1668 A	2,2',4,4',5-PENTACHLOROBIPHENYL (BZ-99)	PA
EPA 1668 A	2,2',4,4',6,6'-HEXACHLOROBIPHENY L (BZ-155)	PA	EPA 1668 A	2,2',4,4',6-PENTACHLOROBIPHENYL (BZ-100)	PA
EPA 1668 A	2,2',4,4'-TETRACHLOROBIPHENYL (BZ-47)	PA	EPA 1668 A	2,2',4,5,6-PENTACHLOROBIPHENYL (BZ-103)	PA
EPA 1668 A	2,2',4,5-TETRACHLOROBIPHENYL (BZ-49)	PA	EPA 1668 A	2,2',4,5,5'-PENTACHLOROBIPHENYL (BZ-101)	PA
EPA 1668 A	2,2',4,5,6'-PENTACHLOROBIPHENYL (BZ-102)	PA	EPA 1668 A	2,2',4,5-TETRACHLOROBIPHENYL (BZ-48)	PA
EPA 1668 A	2,2',4,6-TETRACHLOROBIPHENYL (BZ-51)	PA	EPA 1668 A	2,2',4,6,6'-PENTACHLOROBIPHENYL (BZ-104)	PA
EPA 1668 A	2,2',4,6-TETRACHLOROBIPHENYL (BZ-50)	PA	EPA 1668 A	2,2',4-TRICHLOROBIPHENYL (BZ-17)	PA
EPA 1668 A	2,2',5,5'-TETRACHLOROBIPHENYL (BZ-52)	PA	EPA 1668 A	2,2',5,6'-TETRACHLOROBIPHENYL (BZ-53)	PA

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EPA 1668 A	2,2',5-TRICHLOROBIPHENYL (BZ-18)	PA	EPA 1668 A	2,2',6,6'-TETRACHLOROBIPHENYL (BZ-54)	PA
EPA 1668 A	2,2',6-TRICHLOROBIPHENYL (BZ-19)	PA	EPA 1668 A	2,2'-DICHLOROBIPHENYL (BZ-4)	PA
EPA 1668 A	2,3',4',5',6-PENTACHLOROBIPHENYL (BZ-125)	PA	EPA 1668 A	2,3',4',5'-TETRACHLOROBIPHENYL (BZ-76)	PA
EPA 1668 A	2,3',4',5,5'-PENTACHLOROBIPHENYL (BZ-124)	PA	EPA 1668 A	2,3',4',5-TETRACHLOROBIPHENYL (BZ-70)	PA
EPA 1668 A	2,3',4',6-TETRACHLOROBIPHENYL (BZ-71)	PA	EPA 1668 A	2,3',4'-TRICHLOROBIPHENYL (BZ-33)	PA
EPA 1668 A	2,3',4,4',5',6-HEXACHLOROBIPHENYL (BZ-168)	PA	EPA 1668 A	2,3',4,4',5'-PENTACHLOROBIPHENYL (BZ-123)	PA
EPA 1668 A	2,3',4,4',5,5'-HEXACHLOROBIPHENYL (BZ-167)	PA	EPA 1668 A	2,3',4,4',5-PENTACHLOROBIPHENYL (BZ-118)	PA
EPA 1668 A	2,3',4,4',6-PENTACHLOROBIPHENYL (BZ-119)	PA	EPA 1668 A	2,3',4,4'-TETRACHLOROBIPHENYL (BZ-66)	PA
EPA 1668 A	2,3',4,5',6-PENTACHLOROBIPHENYL (BZ-121)	PA	EPA 1668 A	2,3',4,5'-TETRACHLOROBIPHENYL (BZ-68)	PA
EPA 1668 A	2,3',4,5,5'-PENTACHLOROBIPHENYL (BZ-120)	PA	EPA 1668 A	2,3',4,5-TETRACHLOROBIPHENYL (BZ-67)	PA
EPA 1668 A	2,3',4,6-TETRACHLOROBIPHENYL (BZ-69)	PA	EPA 1668 A	2,3',4-TRICHLOROBIPHENYL (BZ-25)	PA
EPA 1668 A	2,3',5',6-TETRACHLOROBIPHENYL (BZ-73)	PA	EPA 1668 A	2,3',5'-TRICHLOROBIPHENYL (BZ-34)	PA
EPA 1668 A	2,3',5,5'-TETRACHLOROBIPHENYL (BZ-72)	PA	EPA 1668 A	2,3',5-TRICHLOROBIPHENYL (BZ-26)	PA
EPA 1668 A	2,3',6-TRICHLOROBIPHENYL (BZ-27)	PA	EPA 1668 A	2,3'-DICHLOROBIPHENYL (BZ-6)	PA
EPA 1668 A	2,3,3',4',5',6-HEXACHLOROBIPHENYL (BZ-164)	PA	EPA 1668 A	2,3,3',4',5'-PENTACHLOROBIPHENYL (BZ-122)	PA
EPA 1668 A	2,3,3',4',5,5',6-HEPTACHLOROBIPHENYL (BZ-193)	PA	EPA 1668 A	2,3,3',4',5,5'-HEXACHLOROBIPHENYL (BZ-162)	PA
EPA 1668 A	2,3,3',4',5,6-HEXACHLOROBIPHENYL (BZ-163)	PA	EPA 1668 A	2,3,3',4',5-PENTACHLOROBIPHENYL (BZ-107)	PA
EPA 1668 A	2,3,3',4',6-PENTACHLOROBIPHENYL (BZ-110)	PA	EPA 1668 A	2,3,3',4'-TETRACHLOROBIPHENYL (BZ-56)	PA
EPA 1668 A	2,3,3',4,4',5',6-HEPTACHLOROBIPHENYL (BZ-191)	PA	EPA 1668 A	2,3,3',4,4',5'-HEXACHLOROBIPHENYL (BZ-157)	PA
EPA 1668 A	2,3,3',4,4',5,5',6-OCTACHLOROBIPHENYL (BZ-205)	PA	EPA 1668 A	2,3,3',4,4',5-HEPTACHLOROBIPHENYL (BZ-189)	PA
EPA 1668 A	2,3,3',4,4',5,6-HEPTACHLOROBIPHENYL (BZ-190)	PA	EPA 1668 A	2,3,3',4,4',5-HEXACHLOROBIPHENYL (BZ-156)	PA
EPA 1668 A	2,3,3',4,4',6-HEXACHLOROBIPHENYL (BZ-158)	PA	EPA 1668 A	2,3,3',4,4'-PENTACHLOROBIPHENYL (BZ-105)	PA
EPA 1668 A	2,3,3',4,5',6-HEXACHLOROBIPHENYL (BZ-161)	PA	EPA 1668 A	2,3,3',4,5'-PENTACHLOROBIPHENYL (BZ-108)	PA
EPA 1668 A	2,3,3',4,5,5',6-HEPTACHLOROBIPHENYL (BZ-192)	PA	EPA 1668 A	2,3,3',4,5,5'-HEXACHLOROBIPHENYL (BZ-159)	PA
EPA 1668 A	2,3,3',4,5,6-HEXACHLOROBIPHENYL (BZ-160)	PA	EPA 1668 A	2,3,3',4,5-PENTACHLOROBIPHENYL (BZ-106)	PA



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EPA 1668 A	2,3,3',4,6-PENTACHLOROBIPHENYL (BZ-109)	PA	EPA 1668 A	2,3,3',4-TETRACHLOROBIPHENYL (BZ-55)	PA
EPA 1668 A	2,3,3',5,6-PENTACHLOROBIPHENYL (BZ-113)	PA	EPA 1668 A	2,3,3',5-TETRACHLOROBIPHENYL (BZ-58)	PA
EPA 1668 A	2,3,3',5,5',6-HEXACHLOROBIPHENYL (BZ-165)	PA	EPA 1668 A	2,3,3',5,5'-PENTACHLOROBIPHENYL (BZ-111)	PA
EPA 1668 A	2,3,3',5,6-PENTACHLOROBIPHENYL (BZ-112)	PA	EPA 1668 A	2,3,3',5-TETRACHLOROBIPHENYL (BZ-57)	PA
EPA 1668 A	2,3,3',6-TETRACHLOROBIPHENYL (BZ-59)	PA	EPA 1668 A	2,3,3'-TRICHLOROBIPHENYL (BZ-20)	PA
EPA 1668 A	2,3,4',5,6-PENTACHLOROBIPHENYL (BZ-117)	PA	EPA 1668 A	2,3,4',5-TETRACHLOROBIPHENYL (BZ-63)	PA
EPA 1668 A	2,3,4',6-TETRACHLOROBIPHENYL (BZ-64)	PA	EPA 1668 A	2,3,4'-TRICHLOROBIPHENYL (BZ-22)	PA
EPA 1668 A	2,3,4,4',5,6-HEXACHLOROBIPHENYL (BZ-166)	PA	EPA 1668 A	2,3,4,4',5-PENTACHLOROBIPHENYL (BZ-114)	PA
EPA 1668 A	2,3,4,4',6-PENTACHLOROBIPHENYL (BZ-115)	PA	EPA 1668 A	2,3,4,4'-TETRACHLOROBIPHENYL (BZ-60)	PA
EPA 1668 A	2,3,4,5,6-PENTACHLOROBIPHENYL (BZ-116)	PA	EPA 1668 A	2,3,4,5-TETRACHLOROBIPHENYL (BZ-61)	PA
EPA 1668 A	2,3,4,6-TETRACHLOROBIPHENYL (BZ-62)	PA	EPA 1668 A	2,3,4-TRICHLOROBIPHENYL (BZ-21)	PA
EPA 1668 A	2,3,5,6-TETRACHLOROBIPHENYL (BZ-65)	PA	EPA 1668 A	2,3,5-TRICHLOROBIPHENYL (BZ-23)	PA
EPA 1668 A	2,3,6-TRICHLOROBIPHENYL (BZ-24)	PA	EPA 1668 A	2,3-DICHLOROBIPHENYL (BZ-5)	PA
EPA 1668 A	2,4',5-TRICHLOROBIPHENYL (BZ-31)	PA	EPA 1668 A	2,4',6-TRICHLOROBIPHENYL (BZ-32)	PA
EPA 1668 A	2,4'-DICHLOROBIPHENYL (BZ-8)	PA	EPA 1668 A	2,4,4',5-TETRACHLOROBIPHENYL (BZ-74)	PA
EPA 1668 A	2,4,4',6-TETRACHLOROBIPHENYL (BZ-75)	PA	EPA 1668 A	2,4,4'-TRICHLOROBIPHENYL (BZ-28)	PA
EPA 1668 A	2,4,5-TRICHLOROBIPHENYL (BZ-29)	PA	EPA 1668 A	2,4,6-TRICHLOROBIPHENYL (BZ-30)	PA
EPA 1668 A	2,4-DICHLOROBIPHENYL (BZ-7)	PA	EPA 1668 A	2,5-DICHLOROBIPHENYL (BZ-9)	PA
EPA 1668 A	2,6-DICHLOROBIPHENYL (BZ-10)	PA	EPA 1668 A	2-CHLOROBIPHENYL (BZ-1)	PA
EPA 1668 A	3,3',4,4',5,5'-HEXACHLOROBIPHENYL (BZ-169)	PA	EPA 1668 A	3,3',4,4',5-PENTACHLOROBIPHENYL (BZ-126)	PA
EPA 1668 A	3,3',4,4'-TETRACHLOROBIPHENYL (BZ-77)	PA	EPA 1668 A	3,3',4,5'-TETRACHLOROBIPHENYL (BZ-79)	PA
EPA 1668 A	3,3',4,5,5'-PENTACHLOROBIPHENYL (BZ-127)	PA	EPA 1668 A	3,3',4,5-TETRACHLOROBIPHENYL (BZ-78)	PA
EPA 1668 A	3,3',4-TRICHLOROBIPHENYL (BZ-35)	PA	EPA 1668 A	3,3',5,5'-TETRACHLOROBIPHENYL (BZ-80)	PA
EPA 1668 A	3,3',5-TRICHLOROBIPHENYL (BZ-36)	PA	EPA 1668 A	3,3'-DICHLOROBIPHENYL (BZ-11)	PA
EPA 1668 A	3,4',5-TRICHLOROBIPHENYL (BZ-39)	PA	EPA 1668 A	3,4'-DICHLOROBIPHENYL (BZ-13)	PA
EPA 1668 A	3,4,4',5-TETRACHLOROBIPHENYL (BZ-81)	PA	EPA 1668 A	3,4,4'-TRICHLOROBIPHENYL (BZ-37)	PA
EPA 1668 A	3,4,5-TRICHLOROBIPHENYL (BZ-38)	PA	EPA 1668 A	3,4-DICHLOROBIPHENYL (BZ-12)	PA
EPA 1668 A	3,5-DICHLOROBIPHENYL (BZ-14)	PA	EPA 1668 A	3-CHLOROBIPHENYL (BZ-2)	PA



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EPA 1668 A	4,4'-DICHLOROBIPHENYL (BZ-15)	PA	EPA 1668 A	4-CHLOROBIPHENYL (BZ-3)	PA
EPA 1668 A	DECACHLOROBIPHENYL (BZ-209)	PA	EPA 1671 A	2-METHOXYETHANOL (METHYL CELLOSOLVE)	PA
EPA 1671 A	ACETONITRILE	PA	EPA 1671 A	DIETHYLAMINE	PA
EPA 1671 A	DIMETHYL SULFOXIDE	PA	EPA 1671 A	ETHANOL	PA
EPA 1671 A	METHANOL	PA	EPA 1671 A	N-PROPANOL (1-PROPANOL)	PA
EPA 1671 A	TRIETHYLAMINE	PA	EPA 180.1 REV 2	TURBIDITY	PA
EPA 200.7 REV 4.4	ALUMINUM	PA	EPA 200.7 REV 4.4	ANTIMONY	PA
EPA 200.7 REV 4.4	ARSENIC	PA	EPA 200.7 REV 4.4	BARIUM	PA
EPA 200.7 REV 4.4	BERYLLIUM	PA	EPA 200.7 REV 4.4	BORON	PA
EPA 200.7 REV 4.4	CADMIUM	PA	EPA 200.7 REV 4.4	CALCIUM	PA
EPA 200.7 REV 4.4	CHROMIUM	PA	EPA 200.7 REV 4.4	COBALT	PA
EPA 200.7 REV 4.4	COPPER	PA	EPA 200.7 REV 4.4	IRON	PA
EPA 200.7 REV 4.4	LEAD	PA	EPA 200.7 REV 4.4	MAGNESIUM	PA
EPA 200.7 REV 4.4	MANGANESE	PA	EPA 200.7 REV 4.4	MOLYBDENUM	PA
EPA 200.7 REV 4.4	NICKEL	PA	EPA 200.7 REV 4.4	POTASSIUM	PA
EPA 200.7 REV 4.4	SELENIUM	PA	EPA 200.7 REV 4.4	SILVER	PA
EPA 200.7 REV 4.4	SODIUM	PA	EPA 200.7 REV 4.4	THALLIUM	PA
EPA 200.7 REV 4.4	TIN	PA	EPA 200.7 REV 4.4	TITANIUM	PA
EPA 200.7 REV 4.4	VANADIUM	PA	EPA 200.7 REV 4.4	ZINC	PA
EPA 200.8 REV 5.4	ALUMINUM	PA	EPA 200.8 REV 5.4	ANTIMONY	PA
EPA 200.8 REV 5.4	ARSENIC	PA	EPA 200.8 REV 5.4	BARIUM	PA
EPA 200.8 REV 5.4	BERYLLIUM	PA	EPA 200.8 REV 5.4	CADMIUM	PA
EPA 200.8 REV 5.4	CHROMIUM	PA	EPA 200.8 REV 5.4	COBALT	PA
EPA 200.8 REV 5.4	COPPER	PA	EPA 200.8 REV 5.4	LEAD	PA
EPA 200.8 REV 5.4	MANGANESE	PA	EPA 200.8 REV 5.4	MOLYBDENUM	PA
EPA 200.8 REV 5.4	NICKEL	PA	EPA 200.8 REV 5.4	SELENIUM	PA
EPA 200.8 REV 5.4	SILVER	PA	EPA 200.8 REV 5.4	THALLIUM	PA
EPA 200.8 REV 5.4	VANADIUM	PA	EPA 200.8 REV 5.4	ZINC	PA
EPA 200.8 REV 5.4 - EXTENDED	CALCIUM	PA	EPA 200.8 REV 5.4 - EXTENDED	IRON	PA
EPA 200.8 REV 5.4 - EXTENDED	MAGNESIUM	PA	EPA 200.8 REV 5.4 - EXTENDED	POTASSIUM	PA
EPA 200.8 REV 5.4 - EXTENDED	SODIUM	PA	EPA 200.8 REV 5.4 - EXTENDED	TIN	PA
EPA 245.1 REV 3	MERCURY	PA	EPA 300.0 REV 2.1	BROMIDE	PA
EPA 300.0 REV 2.1	CHLORIDE	PA	EPA 300.0 REV 2.1	FLUORIDE	PA
EPA 300.0 REV 2.1	NITRATE AS N	PA	EPA 300.0 REV 2.1	NITRITE AS N	PA
EPA 300.0 REV 2.1	SULFATE	PA			



Commonwealth of Virginia
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Virginia Laboratory ID: 460182
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EPA 3005 A	PREP: ACID DIGESTION OF WATERS FOR TOTAL RECOVERABLE OR DISSOLVED METALS	PA	EPA 3010 A	PREP: ACID DIGESTION OF AQUEOUS SAMPLES AND EXTRACTS FOR TOTAL METALS	PA
EPA 3020 A	PREP: ACID DIGESTION OF AQUEOUS SAMPLES AND EXTRACTS FOR TOTAL METALS	PA	EPA 335.4 REV 1.0	CYANIDE	PA
EPA 3510 C	PREP: LIQUID-LIQUID EXTRACTION	PA	EPA 3511	PREP: ORGANIC EXTRACTION AND SAMPLE PREPARATION	PA
EPA 3520 C	PREP: CONTINUOUS LIQUID-LIQUID EXTRACTION	PA	EPA 353.2 REV 2	NITRATE AS N	PA
EPA 353.2 REV 2	NITRATE/NITRITE	PA	EPA 353.2 REV 2	NITRITE AS N	PA
EPA 3620 C	PREP: FLORISIL CLEANUP	PA	EPA 3630 C	PREP: SILICA GEL CLEANUP	PA
EPA 410.4 REV 2	CHEMICAL OXYGEN DEMAND (COD)	PA	EPA 420.4 REV 1	TOTAL PHENOLICS	PA
EPA 5030 C	PREP: PURGE AND TRAP FOR AQUEOUS SAMPLES	PA	EPA 6010 D	ALUMINUM	PA
EPA 6010 D	ANTIMONY	PA	EPA 6010 D	ARSENIC	PA
EPA 6010 D	BARIUM	PA	EPA 6010 D	BERYLLIUM	PA
EPA 6010 D	BORON	PA	EPA 6010 D	CADMIUM	PA
EPA 6010 D	CALCIUM	PA	EPA 6010 D	CHROMIUM	PA
EPA 6010 D	COBALT	PA	EPA 6010 D	COPPER	PA
EPA 6010 D	IRON	PA	EPA 6010 D	LEAD	PA
EPA 6010 D	LITHIUM	PA	EPA 6010 D	MAGNESIUM	PA
EPA 6010 D	MANGANESE	PA	EPA 6010 D	MOLYBDENUM	PA
EPA 6010 D	NICKEL	PA	EPA 6010 D	POTASSIUM	PA
EPA 6010 D	SELENIUM	PA	EPA 6010 D	SILVER	PA
EPA 6010 D	SODIUM	PA	EPA 6010 D	STRONTIUM	PA
EPA 6010 D	THALLIUM	PA	EPA 6010 D	TIN	PA
EPA 6010 D	TITANIUM	PA	EPA 6010 D	VANADIUM	PA
EPA 6010 D	ZINC	PA	EPA 6010 D - EXTENDED	SULFUR	PA
EPA 6010 D - EXTENDED	THORIUM	PA	EPA 6010 D - EXTENDED	ZIRCONIUM	PA
EPA 6020 B	ALUMINUM	PA	EPA 6020 B	ANTIMONY	PA
EPA 6020 B	ARSENIC	PA	EPA 6020 B	BARIUM	PA
EPA 6020 B	BERYLLIUM	PA	EPA 6020 B	CADMIUM	PA
EPA 6020 B	CALCIUM	PA	EPA 6020 B	CHROMIUM	PA
EPA 6020 B	COBALT	PA	EPA 6020 B	COPPER	PA
EPA 6020 B	IRON	PA	EPA 6020 B	LEAD	PA
EPA 6020 B	MAGNESIUM	PA	EPA 6020 B	MANGANESE	PA
EPA 6020 B	MOLYBDENUM	PA	EPA 6020 B	NICKEL	PA
EPA 6020 B	POTASSIUM	PA	EPA 6020 B	SELENIUM	PA
EPA 6020 B	SILVER	PA	EPA 6020 B	SODIUM	PA
EPA 6020 B	THALLIUM	PA			

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EPA 6020 B	TIN	PA	EPA 6020 B	VANADIUM	PA
EPA 6020 B	ZINC	PA	EPA 6020 B - EXTENDED	STRONTIUM	PA
EPA 6020 B - EXTENDED	URANIUM	PA	EPA 608.3	4,4'-DDD	PA
EPA 608.3	4,4'-DDE	PA	EPA 608.3	4,4'-DDT	PA
EPA 608.3	ALDRIN	PA	EPA 608.3	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	PA
EPA 608.3	ALPHA-CHLORDANE (CIS-CHLORDANE)	PA	EPA 608.3	AROCLOR-1016 (PCB-1016)	PA
EPA 608.3	AROCLOR-1221 (PCB-1221)	PA	EPA 608.3	AROCLOR-1232 (PCB-1232)	PA
EPA 608.3	AROCLOR-1242 (PCB-1242)	PA	EPA 608.3	AROCLOR-1248 (PCB-1248)	PA
EPA 608.3	AROCLOR-1254 (PCB-1254)	PA	EPA 608.3	AROCLOR-1260 (PCB-1260)	PA
EPA 608.3	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	PA	EPA 608.3	CHLORDANE, TOTAL	PA
EPA 608.3	DELTA-BHC	PA	EPA 608.3	DIELDRIN	PA
EPA 608.3	ENDOSULFAN I	PA	EPA 608.3	ENDOSULFAN II	PA
EPA 608.3	ENDOSULFAN SULFATE	PA	EPA 608.3	ENDRIN	PA
EPA 608.3	ENDRIN ALDEHYDE	PA	EPA 608.3	ENDRIN KETONE	PA
EPA 608.3	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	PA	EPA 608.3	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	PA
EPA 608.3	HEPTACHLOR	PA	EPA 608.3	HEPTACHLOR EPOXIDE	PA
EPA 608.3	METHOXYCHLOR	PA	EPA 608.3	MIREX	PA
EPA 608.3	TOXAPHENE (CHLORINATED CAMPHENE)	PA	EPA 624.1	1,1,1,2-TETRACHLOROETHANE	PA
EPA 624.1	1,1,1-TRICHLOROETHANE	PA	EPA 624.1	1,1,2,2-TETRACHLOROETHANE	PA
EPA 624.1	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	PA	EPA 624.1	1,1,2-TRICHLOROETHANE	PA
EPA 624.1	1,1-DICHLOROETHANE	PA	EPA 624.1	1,1-DICHLOROETHYLENE	PA
EPA 624.1	1,1-DICHLOROPROPENE	PA	EPA 624.1	1,2,3-TRICHLOROBENZENE	PA
EPA 624.1	1,2,3-TRICHLOROPROPANE	PA	EPA 624.1	1,2,4-TRIMETHYLBENZENE	PA
EPA 624.1	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	PA	EPA 624.1	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	PA
EPA 624.1	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA	EPA 624.1	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	PA
EPA 624.1	1,2-DICHLOROPROPANE	PA	EPA 624.1	1,3,5-TRIMETHYLBENZENE	PA
EPA 624.1	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA	EPA 624.1	1,3-DICHLOROPROPANE	PA
EPA 624.1	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA	EPA 624.1	1,4-DIOXANE (P-DIOXANE /1,4- DIETHYLENEOXIDE)	PA
EPA 624.1	2,2-DICHLOROPROPANE	PA	EPA 624.1	2-BUTANONE (METHYL ETHYL KETONE, MEK)	PA
EPA 624.1	2-CHLOROETHYL VINYL ETHER	PA	EPA 624.1	2-CHLOROTOLUENE	PA

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EPA 624.1	2-HEXANONE	PA
EPA 624.1	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	PA
EPA 624.1	ACETONITRILE	PA
EPA 624.1	ACRYLONITRILE	PA
EPA 624.1	BROMOBENZENE	PA
EPA 624.1	BROMODICHLOROMETHANE	PA
EPA 624.1	CARBON DISULFIDE	PA
EPA 624.1	CHLOROBENZENE	PA
EPA 624.1	CHLOROETHANE (ETHYL CHLORIDE)	PA
EPA 624.1	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	PA
EPA 624.1	CIS-1,3-DICHLOROPROPENE	PA
EPA 624.1	DIBROMOMETHANE (METHYLENE BROMIDE)	PA
EPA 624.1	ETHYL ACETATE	PA
EPA 624.1	ETHYLBENZENE	PA
EPA 624.1	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 624.1	METHYL BROMIDE (BROMOMETHANE)	PA
EPA 624.1	METHYL TERT-BUTYL ETHER (MTBE)	PA
EPA 624.1	N-BUTYLBENZENE	PA
EPA 624.1	NAPHTHALENE	PA
EPA 624.1	SEC-BUTYLBENZENE	PA
EPA 624.1	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	PA
EPA 624.1	TETRACHLOROETHENE (PERCHLOROETHENE)	PA
EPA 624.1	TRANS-1,2-DICHLOROETHENE	PA
EPA 624.1	TRANS-1,4-DICHLORO-2-BUTENE	PA
EPA 624.1	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	PA
EPA 624.1	VINYL CHLORIDE (CHLOROETHENE)	PA
EPA 624.1 EXTENDED	ISOPROPYL ACETATE	PA
EPA 625.1	1,1'-BIPHENYL (BZ-0)	PA
EPA 625.1	1,2,4-TRICHLOROBENZENE	PA
EPA 625.1	2,2'-OXYBIS(1-CHLOROPROPANE)	PA

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EPA 624.1	4-CHLOROTOLUENE	PA
EPA 624.1	ACETONE	PA
EPA 624.1	ACROLEIN (PROPENAL)	PA
EPA 624.1	BENZENE	PA
EPA 624.1	BROMOCHLOROMETHANE	PA
EPA 624.1	BROMOFORM	PA
EPA 624.1	CARBON TETRACHLORIDE	PA
EPA 624.1	CHLORODIBROMOMETHANE	PA
EPA 624.1	CHLOROFORM	PA
EPA 624.1	CIS-1,2-DICHLOROETHYLENE	PA
EPA 624.1	CYCLOHEXANE	PA
EPA 624.1	DICHLORODIFLUOROMETHANE (FREON-12)	PA
EPA 624.1	ETHYL METHACRYLATE	PA
EPA 624.1	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA
EPA 624.1	M+P-XYLENE	PA
EPA 624.1	METHYL CHLORIDE (CHLOROMETHANE)	PA
EPA 624.1	METHYLENE CHLORIDE (DICHLOROMETHANE)	PA
EPA 624.1	N-PROPYLBENZENE	PA
EPA 624.1	O-XYLENE	PA
EPA 624.1	STYRENE	PA
EPA 624.1	TERT-BUTYLBENZENE	PA
EPA 624.1	TOLUENE	PA
EPA 624.1	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	PA
EPA 624.1	TRICHLOROETHENE (TRICHLOROETHYLENE)	PA
EPA 624.1	VINYL ACETATE	PA
EPA 624.1	XYLENE (TOTAL)	PA
EPA 624.1 EXTENDED	N-HEXANE	PA
EPA 625.1	1,2,4,5-TETRACHLOROBENZENE	PA
EPA 625.1	1,2-DIPHENYLHYDRAZINE	PA
EPA 625.1	2,3,4,6-TETRACHLOROPHENOL	PA



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EPA 625.1	2,3-DICHLOROANILINE	PA	EPA 625.1	2,4,5-TRICHLOROPHENOL	PA
EPA 625.1	2,4,6-TRICHLOROPHENOL	PA	EPA 625.1	2,4-DICHLOROPHENOL	PA
EPA 625.1	2,4-DIMETHYLPHENOL	PA	EPA 625.1	2,4-DINITROPHENOL	PA
EPA 625.1	2,4-DINITROTOLUENE (2,4-DNT)	PA	EPA 625.1	2,6-DICHLOROPHENOL	PA
EPA 625.1	2,6-DINITROTOLUENE (2,6-DNT)	PA	EPA 625.1	2-CHLORONAPHTHALENE	PA
EPA 625.1	2-CHLOROPHENOL	PA	EPA 625.1	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	PA
EPA 625.1	2-METHYLNAPHTHALENE	PA	EPA 625.1	2-METHYLPHENOL (O-CRESOL)	PA
EPA 625.1	2-NITROANILINE	PA	EPA 625.1	2-NITROPHENOL	PA
EPA 625.1	3+4-METHYLPHENOL (M+P CRESOL)	PA	EPA 625.1	3,3'-DICHLOROBENZIDINE	PA
EPA 625.1	3-NITROANILINE	PA	EPA 625.1	4-BROMOPHENYL PHENYL ETHER (BDE-3)	PA
EPA 625.1	4-CHLORO-3-METHYLPHENOL	PA	EPA 625.1	4-CHLOROANILINE	PA
EPA 625.1	4-CHLOROPHENYL PHENYLETHER	PA	EPA 625.1	4-NITROPHENOL	PA
EPA 625.1	ACENAPHTHENE	PA	EPA 625.1	ACENAPHTHYLENE	PA
EPA 625.1	ACETOPHENONE	PA	EPA 625.1	ALPHA-TERPINEOL	PA
EPA 625.1	ANILINE	PA	EPA 625.1	ANTHRACENE	PA
EPA 625.1	BENZIDINE	PA	EPA 625.1	BENZO(A)ANTHRACENE	PA
EPA 625.1	BENZO(A)PYRENE	PA	EPA 625.1	BENZO(B)FLUORANTHENE	PA
EPA 625.1	BENZO(G,H,I)PERYLENE	PA	EPA 625.1	BENZO(K)FLUORANTHENE	PA
EPA 625.1	BENZOIC ACID	PA	EPA 625.1	BENZYL ALCOHOL	PA
EPA 625.1	BIS(2-CHLOROETHOXY)METHANE	PA	EPA 625.1	BIS(2-CHLOROETHYL) ETHER	PA
EPA 625.1	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	PA	EPA 625.1	BUTYL BENZYL PHTHALATE	PA
EPA 625.1	CARBAZOLE	PA	EPA 625.1	CHRYSENE	PA
EPA 625.1	DI-N-BUTYL PHTHALATE	PA	EPA 625.1	DI-N-OCTYL PHTHALATE	PA
EPA 625.1	DIBENZO(A,H) ANTHRACENE	PA	EPA 625.1	DIBENZOFURAN	PA
EPA 625.1	DIETHYL PHTHALATE	PA	EPA 625.1	DIMETHYL PHTHALATE	PA
EPA 625.1	DIPHENYL ETHER (DIPHENYL OXIDE)	PA	EPA 625.1	FLUORANTHENE	PA
EPA 625.1	FLUORENE	PA	EPA 625.1	HEXACHLOROBENZENE	PA
EPA 625.1	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA	EPA 625.1	HEXACHLOROCYCLOPENTADIENE	PA
EPA 625.1	HEXACHLOROETHANE	PA	EPA 625.1	INDENO(1,2,3-CD) PYRENE	PA
EPA 625.1	ISOPHORONE	PA	EPA 625.1	N-NITROSO-DI-N-BUTYLAMINE	PA
EPA 625.1	N-NITROSODI-N-PROPYLAMINE	PA	EPA 625.1	N-NITROSODIETHYLAMINE	PA
EPA 625.1	N-NITROSODIMETHYLAMINE	PA	EPA 625.1	N-NITROSODIPHENYLAMINE	PA
EPA 625.1	N-NITROSOPYRROLIDINE	PA	EPA 625.1	NAPHTHALENE	PA
EPA 625.1	NITROBENZENE	PA	EPA 625.1	PENTACHLOROBENZENE	PA



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EPA 625.1	PENTACHLOROPHENOL	PA
EPA 625.1	PHENOL	PA
EPA 625.1	PYRIDINE	PA
EPA 625.1 EXTENDED	N-OCTADECANE	PA
EPA 7196 A	CHROMIUM VI	PA
EPA 7470 A	MERCURY	PA
EPA 8011	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	PA
EPA 8015 C	ETHANOL	PA
EPA 8015 C	GASOLINE RANGE ORGANICS (GRO)	PA
EPA 8015 C	METHANOL	PA
EPA 8015 C - EXTENDED	TRIETHYLENE GLYCOL	PA
EPA 8015 D	ETHANOL	PA
EPA 8015 D	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 8015 D	N-PROPANOL (1-PROPANOL)	PA
EPA 8015 D - EXTENDED	ETHYLENE GLYCOL	PA
EPA 8015 D - EXTENDED	PROPYLENE GLYCOL	PA
EPA 8081 B	4,4'-DDD	PA
EPA 8081 B	4,4'-DDT	PA
EPA 8081 B	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	PA
EPA 8081 B	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	PA
EPA 8081 B	DELTA-BHC	PA
EPA 8081 B	ENDOSULFAN I	PA
EPA 8081 B	ENDOSULFAN SULFATE	PA
EPA 8081 B	ENDRIN ALDEHYDE	PA
EPA 8081 B	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	PA
EPA 8081 B	HEPTACHLOR	PA
EPA 8081 B	METHOXYCHLOR	PA
EPA 8081 B - EXTENDED	KEPONE	PA
EPA 8082 A	AROCLOR-1221 (PCB-1221)	PA
EPA 8082 A	AROCLOR-1242 (PCB-1242)	PA

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EPA 625.1	PHENANTHRENE	PA
EPA 625.1	PYRENE	PA
EPA 625.1 EXTENDED	N-DECANE	PA
EPA 6850	PERCHLORATE	PA
EPA 7199	CHROMIUM VI	PA
EPA 8011	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	PA
EPA 8015 C	DIESEL RANGE ORGANICS (DRO)	PA
EPA 8015 C	ETHYLENE GLYCOL	PA
EPA 8015 C	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 8015 C - EXTENDED	PROPYLENE GLYCOL	PA
EPA 8015 D	DIESEL RANGE ORGANICS (DRO)	PA
EPA 8015 D	GASOLINE RANGE ORGANICS (GRO)	PA
EPA 8015 D	METHANOL	PA
EPA 8015 D - EXTENDED	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	PA
EPA 8015 D - EXTENDED	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	PA
EPA 8015 D - EXTENDED	TRIETHYLENE GLYCOL	PA
EPA 8081 B	4,4'-DDE	PA
EPA 8081 B	ALDRIN	PA
EPA 8081 B	ALPHA-CHLORDANE (CIS-CHLORDANE)	PA
EPA 8081 B	CHLORDANE, TOTAL	PA
EPA 8081 B	DIELDRIN	PA
EPA 8081 B	ENDOSULFAN II	PA
EPA 8081 B	ENDRIN	PA
EPA 8081 B	ENDRIN KETONE	PA
EPA 8081 B	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	PA
EPA 8081 B	HEPTACHLOR EPOXIDE	PA
EPA 8081 B	TOXAPHENE (CHLORINATED CAMPHENE)	PA
EPA 8082 A	AROCLOR-1016 (PCB-1016)	PA
EPA 8082 A	AROCLOR-1232 (PCB-1232)	PA
EPA 8082 A	AROCLOR-1248 (PCB-1248)	PA

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EPA 8082 A	AROCLOR-1254 (PCB-1254)	PA
EPA 8082 A - EXTENDED	AROCLOR-1262 (PCB-1262)	PA
EPA 8151 A	2,4,5-T	PA
EPA 8151 A	2,4-DB	PA
EPA 8151 A	DICAMBA	PA
EPA 8151 A	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	PA
EPA 8151 A	MCPP	PA
EPA 8151 A	PICLORAM	PA
EPA 8260 C	1,1,1,2-TETRACHLOROETHANE	PA
EPA 8260 C	1,1,2,2-TETRACHLOROETHANE	PA
EPA 8260 C	1,1-DICHLOROETHANE	PA
EPA 8260 C	1,1-DICHLOROPROPENE	PA
EPA 8260 C	1,2,3-TRICHLOROPROPANE	PA
EPA 8260 C	1,2,4-TRIMETHYLBENZENE	PA
EPA 8260 C	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	PA
EPA 8260 C	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	PA
EPA 8260 C	1,3,5-TRIMETHYLBENZENE	PA
EPA 8260 C	1,3-DICHLOROPROPANE	PA
EPA 8260 C	1,4-DIOXANE (P-DIOXANE /1,4- DIETHYLENEOXIDE)	PA
EPA 8260 C	2,2-DICHLOROPROPANE	PA
EPA 8260 C	2-CHLOROETHYL VINYL ETHER	PA
EPA 8260 C	2-HEXANONE	PA
EPA 8260 C	4-CHLOROTOLUENE	PA
EPA 8260 C	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	PA
EPA 8260 C	ACETONITRILE	PA
EPA 8260 C	ACRYLONITRILE	PA
EPA 8260 C	BENZENE	PA
EPA 8260 C	BROMOBENZENE	PA
EPA 8260 C	BROMODICHLOROMETHANE	PA
EPA 8260 C	CARBON DISULFIDE	PA
EPA 8260 C	CHLOROBENZENE	PA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8082 A	AROCLOR-1260 (PCB-1260)	PA
EPA 8082 A - EXTENDED	AROCLOR-1268 (PCB-1268)	PA
EPA 8151 A	2,4-D	PA
EPA 8151 A	DALAPON	PA
EPA 8151 A	DICHLOROPROP (DICHLORPROP)	PA
EPA 8151 A	MCPA	PA
EPA 8151 A	PENTACHLOROPHENOL	PA
EPA 8151 A	SILVEX (2,4,5-TP)	PA
EPA 8260 C	1,1,1-TRICHLOROETHANE	PA
EPA 8260 C	1,1,2-TRICHLOROETHANE	PA
EPA 8260 C	1,1-DICHLOROETHYLENE	PA
EPA 8260 C	1,2,3-TRICHLOROBENZENE	PA
EPA 8260 C	1,2,4-TRICHLOROBENZENE	PA
EPA 8260 C	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	PA
EPA 8260 C	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 8260 C	1,2-DICHLOROPROPANE	PA
EPA 8260 C	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA
EPA 8260 C	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 8260 C	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	PA
EPA 8260 C	2-BUTANONE (METHYL ETHYL KETONE, MEK)	PA
EPA 8260 C	2-CHLOROTOLUENE	PA
EPA 8260 C	2-NITROPROPANE	PA
EPA 8260 C	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	PA
EPA 8260 C	ACETONE	PA
EPA 8260 C	ACROLEIN (PROPENAL)	PA
EPA 8260 C	ALLYL CHLORIDE (3-CHLOROPROPENE)	PA
EPA 8260 C	BENZYL CHLORIDE	PA
EPA 8260 C	BROMOCHLOROMETHANE	PA
EPA 8260 C	BROMOFORM	PA
EPA 8260 C	CARBON TETRACHLORIDE	PA
EPA 8260 C	CHLORODIBROMOMETHANE	PA

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2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182
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NON-POTABLE WATER

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EPA 8260 C	CHLOROETHANE (ETHYL CHLORIDE)	PA	EPA 8260 C	CHLOROFORM	PA
EPA 8260 C	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	PA	EPA 8260 C	CIS-1,2-DICHLOROETHYLENE	PA
EPA 8260 C	CIS-1,3-DICHLOROPROPENE	PA	EPA 8260 C	CYCLOHEXANE	PA
EPA 8260 C	DIBROMOMETHANE (METHYLENE BROMIDE)	PA	EPA 8260 C	DICHLORODIFLUOROMETHANE (FREON-12)	PA
EPA 8260 C	DIETHYL ETHER	PA	EPA 8260 C	ETHANOL	PA
EPA 8260 C	ETHYL ACETATE	PA	EPA 8260 C	ETHYL METHACRYLATE	PA
EPA 8260 C	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	PA	EPA 8260 C	ETHYLBENZENE	PA
EPA 8260 C	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA	EPA 8260 C	IODOMETHANE (METHYL IODIDE)	PA
EPA 8260 C	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	PA	EPA 8260 C	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 8260 C	ISOPROPYLBENZENE	PA	EPA 8260 C	M+P-XYLENE	PA
EPA 8260 C	METHACRYLONITRILE	PA	EPA 8260 C	METHYL BROMIDE (BROMOMETHANE)	PA
EPA 8260 C	METHYL CHLORIDE (CHLOROMETHANE)	PA	EPA 8260 C	METHYL METHACRYLATE	PA
EPA 8260 C	METHYL TERT-BUTYL ETHER (MTBE)	PA	EPA 8260 C	METHYLCYCLOHEXANE	PA
EPA 8260 C	METHYLENE CHLORIDE (DICHLOROMETHANE)	PA	EPA 8260 C	N-BUTYLBENZENE	PA
EPA 8260 C	N-PROPYLBENZENE	PA	EPA 8260 C	NAPHTHALENE	PA
EPA 8260 C	O-XYLENE	PA	EPA 8260 C	PENTACHLOROETHANE	PA
EPA 8260 C	PROPIONITRILE (ETHYL CYANIDE)	PA	EPA 8260 C	SEC-BUTYLBENZENE	PA
EPA 8260 C	STYRENE	PA	EPA 8260 C	T-AMYL METHYLETHER (TAME)	PA
EPA 8260 C	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	PA	EPA 8260 C	TERT-BUTYLBENZENE	PA
EPA 8260 C	TETRACHLOROETHENE (PERCHLOROETHENE)	PA	EPA 8260 C	TOLUENE	PA
EPA 8260 C	TRANS-1,2-DICHLOROETHENE	PA	EPA 8260 C	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	PA
EPA 8260 C	TRANS-1,4-DICHLORO-2-BUTENE	PA	EPA 8260 C	TRICHLOROETHENE (TRICHLOROETHYLENE)	PA
EPA 8260 C	TRICHLOROFLUOROMETHANE (FLUOROTRICHOROMETHANE, FREON 11)	PA	EPA 8260 C	VINYL ACETATE	PA
EPA 8260 C	VINYL CHLORIDE (CHLOROETHENE)	PA	EPA 8260 C	XYLENE (TOTAL)	PA
EPA 8260 C - EXTENDED	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113)	PA	EPA 8260 C - EXTENDED	1,2,3-TRIMETHYLBENZENE	PA
EPA 8260 C - EXTENDED	1,3,5-TRICHLOROBENZENE	PA	EPA 8260 C - EXTENDED	1,3-BUTADIENE	PA
EPA 8260 C - EXTENDED	CYCLOHEXANONE	PA	EPA 8260 C - EXTENDED	DIISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	PA

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EPA 8260 C - EXTENDED	DIMETHYL ETHER	PA	EPA 8260 C - EXTENDED	GASOLINE RANGE ORGANICS (GRO)	PA
EPA 8260 C - EXTENDED	METHYL ACETATE	PA	EPA 8260 C - EXTENDED	N-BUTYL-ACETATE	PA
EPA 8260 C - EXTENDED	N-HEPTANE	PA	EPA 8260 C - EXTENDED	N-HEXANE	PA
EPA 8260 C - EXTENDED	T-AMYL ALCOHOL (TAA)	PA	EPA 8260 C - EXTENDED	TETRAHYDROFURAN (THF)	PA
EPA 8260 C SIM	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA	EPA 8260 D	1,1,1,2-TETRACHLOROETHANE	PA
EPA 8260 D	1,1,1-TRICHLOROETHANE	PA	EPA 8260 D	1,1,2,2-TETRACHLOROETHANE	PA
EPA 8260 D	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113)	PA	EPA 8260 D	1,1,2-TRICHLOROETHANE	PA
EPA 8260 D	1,1-DICHLOROETHANE	PA	EPA 8260 D	1,1-DICHLOROETHYLENE	PA
EPA 8260 D	1,1-DICHLOROPROPENE	PA	EPA 8260 D	1,2,3-TRICHLOROBENZENE	PA
EPA 8260 D	1,2,3-TRICHLOROPROPANE	PA	EPA 8260 D	1,2,4-TRICHLOROBENZENE	PA
EPA 8260 D	1,2,4-TRIMETHYLBENZENE	PA	EPA 8260 D	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	PA
EPA 8260 D	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	PA	EPA 8260 D	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 8260 D	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	PA	EPA 8260 D	1,2-DICHLOROPROPANE	PA
EPA 8260 D	1,3,5-TRIMETHYLBENZENE	PA	EPA 8260 D	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA
EPA 8260 D	1,3-DICHLOROPROPANE	PA	EPA 8260 D	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 8260 D	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA	EPA 8260 D	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	PA
EPA 8260 D	2,2-DICHLOROPROPANE	PA	EPA 8260 D	2-BUTANONE (METHYL ETHYL KETONE, MEK)	PA
EPA 8260 D	2-CHLOROETHYL VINYL ETHER	PA	EPA 8260 D	2-CHLOROTOLUENE	PA
EPA 8260 D	2-HEXANONE	PA	EPA 8260 D	2-NITROPROPANE	PA
EPA 8260 D	4-CHLOROTOLUENE	PA	EPA 8260 D	4-ISOPROPYLTOLUENE (P-CYME, P-ISOPROPYLTOLUENE)	PA
EPA 8260 D	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	PA	EPA 8260 D	ACETONE	PA
EPA 8260 D	ACETONITRILE	PA	EPA 8260 D	ACROLEIN (PROPENAL)	PA
EPA 8260 D	ACRYLONITRILE	PA	EPA 8260 D	ALLYL CHLORIDE (3-CHLOROPROPENE)	PA
EPA 8260 D	BENZENE	PA	EPA 8260 D	BENZYL CHLORIDE	PA
EPA 8260 D	BROMOBENZENE	PA	EPA 8260 D	BROMOCHLOROMETHANE	PA
EPA 8260 D	BROMODICHLOROMETHANE	PA	EPA 8260 D	BROMOFORM	PA
EPA 8260 D	CARBON DISULFIDE	PA	EPA 8260 D	CARBON TETRACHLORIDE	PA
EPA 8260 D	CHLOROBENZENE	PA	EPA 8260 D	CHLORODIBROMOMETHANE	PA
EPA 8260 D	CHLOROETHANE (ETHYL CHLORIDE)	PA	EPA 8260 D	CHLOROFORM	PA
EPA 8260 D	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	PA			

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EPA 8260 D	CIS-1,2-DICHLOROETHYLENE	PA
EPA 8260 D	CYCLOHEXANE	PA
EPA 8260 D	DIBROMOMETHANE (METHYLENE BROMIDE)	PA
EPA 8260 D	DIETHYL ETHER	PA
EPA 8260 D	ETHYL ACETATE	PA
EPA 8260 D	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	PA
EPA 8260 D	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA
EPA 8260 D	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	PA
EPA 8260 D	ISOPROPYL BENZENE	PA
EPA 8260 D	METHACRYLONITRILE	PA
EPA 8260 D	METHYL BROMIDE (BROMOMETHANE)	PA
EPA 8260 D	METHYL METHACRYLATE	PA
EPA 8260 D	METHYLCYCLOHEXANE	PA
EPA 8260 D	N-BUTYLBENZENE	PA
EPA 8260 D	NAPHTHALENE	PA
EPA 8260 D	PENTACHLOROETHANE	PA
EPA 8260 D	SEC-BUTYLBENZENE	PA
EPA 8260 D	T-AMYLMETHYLETHER (TAME)	PA
EPA 8260 D	TERT-BUTYLBENZENE	PA
EPA 8260 D	TOLUENE	PA
EPA 8260 D	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	PA
EPA 8260 D	TRICHLOROETHENE (TRICHLOROETHYLENE)	PA
EPA 8260 D	VINYL ACETATE	PA
EPA 8260 D	XYLENE (TOTAL)	PA
EPA 8260 D - EXTENDED	1,3,5-TRICHLOROBENZENE	PA
EPA 8260 D - EXTENDED	TETRAHYDROFURAN (THF)	PA
EPA 8270 D	1,2,4-TRICHLOROBENZENE	PA
EPA 8270 D	1,2-DIPHENYLHYDRAZINE	PA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8260 D	CIS-1,3-DICHLOROPROPENE	PA
EPA 8260 D	DI-ISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	PA
EPA 8260 D	DICHLORODIFLUOROMETHANE (FREON-12)	PA
EPA 8260 D	ETHANOL	PA
EPA 8260 D	ETHYL METHACRYLATE	PA
EPA 8260 D	ETHYLBENZENE	PA
EPA 8260 D	IODOMETHANE (METHYL IODIDE)	PA
EPA 8260 D	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 8260 D	M+P-XYLENE	PA
EPA 8260 D	METHYL ACETATE	PA
EPA 8260 D	METHYL CHLORIDE (CHLOROMETHANE)	PA
EPA 8260 D	METHYL TERT-BUTYL ETHER (MTBE)	PA
EPA 8260 D	METHYLENE CHLORIDE (DICHLOROMETHANE)	PA
EPA 8260 D	N-PROPYLBENZENE	PA
EPA 8260 D	O-XYLENE	PA
EPA 8260 D	PROPIONITRILE (ETHYL CYANIDE)	PA
EPA 8260 D	STYRENE	PA
EPA 8260 D	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	PA
EPA 8260 D	TETRACHLOROETHENE (PERCHLOROETHENE)	PA
EPA 8260 D	TRANS-1,2-DICHLOROETHENE	PA
EPA 8260 D	TRANS-1,4-DICHLORO-2-BUTENE	PA
EPA 8260 D	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	PA
EPA 8260 D	VINYL CHLORIDE (CHLOROETHENE)	PA
EPA 8260 D - EXTENDED	1,2-DICHLORO-1,1,2-TRIFLUOROETHANE (FREON 123A)	PA
EPA 8260 D - EXTENDED	N-HEXANE	PA
EPA 8270 D	1,2,4,5-TETRACHLOROBENZENE	PA
EPA 8270 D	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 8270 D	1,3,5-TRINITROBENZENE (1,3,5-TNB)	PA



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EPA 8270 D	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA	EPA 8270 D	1,3-DINITROBENZENE (1,3-DNB)	PA
EPA 8270 D	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA	EPA 8270 D	1,4-DINITROBENZENE (1,4-DNB)	PA
EPA 8270 D	1,4-NAPHTHOQUINONE	PA	EPA 8270 D	1,4-PHENYLENEDIAMINE	PA
EPA 8270 D	1-CHLORONAPHTHALENE	PA	EPA 8270 D	1-NAPHTHYLAMINE	PA
EPA 8270 D	2,2'-OXYBIS(1-CHLOROPROPANE)	PA	EPA 8270 D	2,3,4,6-TETRACHLOROPHENOL	PA
EPA 8270 D	2,4,5-TRICHLOROPHENOL	PA	EPA 8270 D	2,4,6-TRICHLOROPHENOL	PA
EPA 8270 D	2,4-DICHLOROPHENOL	PA	EPA 8270 D	2,4-DIMETHYLPHENOL	PA
EPA 8270 D	2,4-DINITROPHENOL	PA	EPA 8270 D	2,4-DINITROTOLUENE (2,4-DNT)	PA
EPA 8270 D	2,6-DICHLOROPHENOL	PA	EPA 8270 D	2,6-DINITROTOLUENE (2,6-DNT)	PA
EPA 8270 D	2-ACETYLAMINOFLUORENE	PA	EPA 8270 D	2-CHLORONAPHTHALENE	PA
EPA 8270 D	2-CHLOROPHENOL	PA	EPA 8270 D	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	PA
EPA 8270 D	2-METHYLNAPHTHALENE	PA	EPA 8270 D	2-METHYLPHENOL (O-CRESOL)	PA
EPA 8270 D	2-NAPHTHYLAMINE	PA	EPA 8270 D	2-NITROANILINE	PA
EPA 8270 D	2-NITROPHENOL	PA	EPA 8270 D	2-PICOLINE (2-METHYLPYRIDINE)	PA
EPA 8270 D	3,3'-DICHLOROBENZIDINE	PA	EPA 8270 D	3,3'-DIMETHYLBENZIDINE	PA
EPA 8270 D	3-METHYLCHOLANTHRENE	PA	EPA 8270 D	3-NITROANILINE	PA
EPA 8270 D	4,4'-METHYLENEBIS-2-CHLOROANIL INE	PA	EPA 8270 D	4-AMINOBIIPHENYL	PA
EPA 8270 D	4-BROMOPHENYL PHENYL ETHER (BDE-3)	PA	EPA 8270 D	4-CHLORO-3-METHYLPHENOL	PA
EPA 8270 D	4-CHLOROANILINE	PA	EPA 8270 D	4-CHLOROPHENYL PHENYLETHER	PA
EPA 8270 D	4-DIMETHYL AMINOAZOBENZENE	PA	EPA 8270 D	4-NITROANILINE	PA
EPA 8270 D	4-NITROPHENOL	PA	EPA 8270 D	4-NITROQUINOLINE-1-OXIDE	PA
EPA 8270 D	5-NITRO-O-TOLUIDINE	PA	EPA 8270 D	7,12-DIMETHYLBENZ(A) ANTHRACENE	PA
EPA 8270 D	A-A-DIMETHYLPHENETHYLAMINE	PA	EPA 8270 D	ACENAPHTHENE	PA
EPA 8270 D	ACENAPHTHYLENE	PA	EPA 8270 D	ACETOPHENONE	PA
EPA 8270 D	ANILINE	PA	EPA 8270 D	ANTHRACENE	PA
EPA 8270 D	ARAMITE	PA	EPA 8270 D	BENZIDINE	PA
EPA 8270 D	BENZO(A)ANTHRACENE	PA	EPA 8270 D	BENZO(A)PYRENE	PA
EPA 8270 D	BENZO(B)FLUORANTHENE	PA	EPA 8270 D	BENZO(G,H,I)PERYLENE	PA
EPA 8270 D	BENZO(K)FLUORANTHENE	PA	EPA 8270 D	BENZOIC ACID	PA
EPA 8270 D	BENZYL ALCOHOL	PA	EPA 8270 D	BIS(2-CHLOROETHOXY)METHANE	PA
EPA 8270 D	BIS(2-CHLOROETHYL) ETHER	PA	EPA 8270 D	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	PA
EPA 8270 D	BUTYL BENZYL PHTHALATE	PA	EPA 8270 D	CHLOROBENZILATE	PA
EPA 8270 D	CHRYSENE	PA	EPA 8270 D	DI-N-BUTYL PHTHALATE	PA
EPA 8270 D	DI-N-OCTYL PHTHALATE	PA	EPA 8270 D	DIALATE	PA

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EPA 8270 D	DIBENZ(A, J) ACRIDINE	PA
EPA 8270 D	DIBENZOFURAN	PA
EPA 8270 D	DIMETHOATE	PA
EPA 8270 D	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	PA
EPA 8270 D	DISULFOTON	PA
EPA 8270 D	FAMPHUR	PA
EPA 8270 D	FLUORENE	PA
EPA 8270 D	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA
EPA 8270 D	HEXACHLOROETHANE	PA
EPA 8270 D	INDENO(1,2,3-CD) PYRENE	PA
EPA 8270 D	ISOPHORONE	PA
EPA 8270 D	KEPONE	PA
EPA 8270 D	METHYL METHANESULFONATE	PA
EPA 8270 D	N-NITROSO-DI-N-BUTYLAMINE	PA
EPA 8270 D	N-NITROSODIETHYLAMINE	PA
EPA 8270 D	N-NITROSODIPHENYLAMINE	PA
EPA 8270 D	N-NITROSOMORPHOLINE	PA
EPA 8270 D	N-NITROSOPYRROLIDINE	PA
EPA 8270 D	NITROBENZENE	PA
EPA 8270 D	O-TOLUIDINE (2-METHYLANILINE)	PA
EPA 8270 D	PENTACHLOROBENZENE	PA
EPA 8270 D	PENTACHLOROPHENOL	PA
EPA 8270 D	PHENANTHRENE	PA
EPA 8270 D	PHORATE	PA
EPA 8270 D	PRONAMIDE (KERB)	PA
EPA 8270 D	SAFROLE	PA
EPA 8270 D	THIONAZIN (ZINOPHOS)	PA
EPA 8270 D - EXTENDED	1,1'-BIPHENYL (BZ-0)	PA
EPA 8270 D - EXTENDED	1,2,3,5-TETRACHLOROBENZENE	PA
EPA 8270 D - EXTENDED	1-METHYLNAPHTHALENE	PA
EPA 8270 D - EXTENDED	ATRAZINE	PA
EPA 8270 D - EXTENDED	CAPROLACTAM	PA
EPA 8270 D - EXTENDED	INDENE	PA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8270 D	DIBENZO(A,H) ANTHRACENE	PA
EPA 8270 D	DIETHYL PHTHALATE	PA
EPA 8270 D	DIMETHYL PHTHALATE	PA
EPA 8270 D	DIPHENYLAMINE	PA
EPA 8270 D	ETHYL METHANESULFONATE	PA
EPA 8270 D	FLUORANTHENE	PA
EPA 8270 D	HEXACHLOROBENZENE	PA
EPA 8270 D	HEXACHLOROCYCLOPENTADIENE	PA
EPA 8270 D	HEXACHLOROPROPENE	PA
EPA 8270 D	ISODRIN	PA
EPA 8270 D	ISOSAFROLE	PA
EPA 8270 D	METHAPYRILENE	PA
EPA 8270 D	METHYL PARATHION (PARATHION, METHYL)	PA
EPA 8270 D	N-NITROSODI-N-PROPYLAMINE	PA
EPA 8270 D	N-NITROSODIMETHYLAMINE	PA
EPA 8270 D	N-NITROSOMETHYLETHYLAMINE	PA
EPA 8270 D	N-NITROSOPIPERIDINE	PA
EPA 8270 D	NAPHTHALENE	PA
EPA 8270 D	O,O,O-TRIETHYL PHOSPHOROTHIOATE	PA
EPA 8270 D	PARATHION (PARATHION - ETHYL)	PA
EPA 8270 D	PENTACHLORONITROBENZENE	PA
EPA 8270 D	PHENACETIN	PA
EPA 8270 D	PHENOL	PA
EPA 8270 D	PHTHALIC ANHYDRIDE	PA
EPA 8270 D	PYRENE	PA
EPA 8270 D	SULFOTEPP (TETRAETHYL DITHIOPYROPHOSPHATE)	PA
EPA 8270 D	TRIS-(2,3-DIBROMOPROPYL) PHOSPHATE (TRIS-BP)	PA
EPA 8270 D - EXTENDED	1,2,3,4-TETRACHLOROBENZENE	PA
EPA 8270 D - EXTENDED	1,4-DIOXANE (P-DIOXANE /1,4- DIETHYLENEOXIDE)	PA
EPA 8270 D - EXTENDED	3+4-METHYLPHENOL (M+P CRESOL)	PA
EPA 8270 D - EXTENDED	BENZALDEHYDE	PA
EPA 8270 D - EXTENDED	CARBAZOLE	PA
EPA 8270 D - EXTENDED	N,N-DIMETHYLFORMAMIDE	PA



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EPA 8270 D - EXTENDED	PYRIDINE	PA
EPA 8270 D SIM	ACENAPHTHENE	PA
EPA 8270 D SIM	ANTHRACENE	PA
EPA 8270 D SIM	BENZO(A)PYRENE	PA
EPA 8270 D SIM	BENZO(G,H,I)PERYLENE	PA
EPA 8270 D SIM	CHRYSENE	PA
EPA 8270 D SIM	FLUORANTHENE	PA
EPA 8270 D SIM	INDENO(1,2,3-CD) PYRENE	PA
EPA 8270 D SIM	PHENANTHRENE	PA
EPA 8270 D SIM - EXTENDED	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA
EPA 8290 A	1,2,3,4,6,7,8,9-OCTACHLORODIBENZ O-P-DIOXIN (OCDD)	PA
EPA 8290 A	1,2,3,4,6,7,8-HEPTACHLORODIBENZ O-P-DIOXIN (1,2,3,4,6,7,8-HPCDD)	PA
EPA 8290 A	1,2,3,4,7,8,9-HEPTACHLORODIBENZ OFURAN (1,2,3,4,7,8,9-HPCDF)	PA
EPA 8290 A	1,2,3,4,7,8-HEXACHLORODIBENZOF URAN (1,2,3,4,7,8-HXCDF)	PA
EPA 8290 A	1,2,3,6,7,8-HEXACHLORODIBENZOF URAN (1,2,3,6,7,8-HXCDF)	PA
EPA 8290 A	1,2,3,7,8-HEXACHLORODIBENZOF URAN (1,2,3,7,8-HXCDF)	PA
EPA 8290 A	1,2,3,7,8-PENTACHLORODIBENZOF URAN (1,2,3,7,8-PCDF)	PA
EPA 8290 A	2,3,4,7,8-PENTACHLORODIBENZOF URAN	PA
EPA 8290 A	2,3,7,8-TETRACHLORODIBENZOFUR AN (2,3,7,8-TCDF)	PA
EPA 8315 A	BENZALDEHYDE	PA
EPA 8315 A	CROTONALDEHYDE	PA
EPA 8315 A	HEXANALDEHYDE (HEXANAL)	PA
EPA 8315 A	M-TOLUALDEHYDE (1,3-TOLUALDEHYDE)	PA
EPA 8315 A	P-TOLUALDEHYDE (1,4-TOLUALDEHYDE)	PA
EPA 8315 A	PROPIONALDEHYDE (PROPANAL)	PA
EPA 8330 B	1,3-DINITROBENZENE (1,3-DNB)	PA
EPA 8330 B	2,4-DINITROTOLUENE (2,4-DNT)	PA
EPA 8330 B	2-AMINO-4,6-DINITROTOLUENE (2-AM-DNT)	PA
EPA 8330 B	3,5-DINITROANILINE	PA
EPA 8330 B	4-AMINO-2,6-DINITROTOLUENE (4-AM-DNT)	PA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8270 D SIM	2-METHYLNAPHTHALENE	PA
EPA 8270 D SIM	ACENAPHTHYLENE	PA
EPA 8270 D SIM	BENZO(A)ANTHRACENE	PA
EPA 8270 D SIM	BENZO(B)FLUORANTHENE	PA
EPA 8270 D SIM	BENZO(K)FLUORANTHENE	PA
EPA 8270 D SIM	DIBENZO(A,H) ANTHRACENE	PA
EPA 8270 D SIM	FLUORENE	PA
EPA 8270 D SIM	NAPHTHALENE	PA
EPA 8270 D SIM	PYRENE	PA
EPA 8270 D SIM - EXTENDED	1-METHYLNAPHTHALENE	PA
EPA 8290 A	1,2,3,4,6,7,8,9-OCTACHLORODIBENZ OFURAN (OCDF)	PA
EPA 8290 A	1,2,3,4,6,7,8-HEPTACHLORODIBENZ OFURAN (1,2,3,4,6,7,8-HPCDF)	PA
EPA 8290 A	1,2,3,4,7,8-HEXACHLORODIBENZO-P -DIOXIN (1,2,3,4,7,8-HXCDD)	PA
EPA 8290 A	1,2,3,6,7,8-HEXACHLORODIBENZO-P -DIOXIN(1,2,3,6,7,8-HXCDD)	PA
EPA 8290 A	1,2,3,7,8-HEXACHLORODIBENZO-P -DIOXIN (1,2,3,7,8-HXCDD)	PA
EPA 8290 A	1,2,3,7,8-PENTACHLORODIBENZO-P -DIOXIN (1,2,3,7,8-PCDD)	PA
EPA 8290 A	2,3,4,6,7,8-HEXACHLORODIBENZOF URAN (2,3,4,6,7,8-HXCDF)	PA
EPA 8290 A	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (2,3,7,8-TCDD)	PA
EPA 8315 A	ACETALDEHYDE	PA
EPA 8315 A	BUTYLALDEHYDE (BUTANAL)	PA
EPA 8315 A	FORMALDEHYDE	PA
EPA 8315 A	ISOVALERALDEHYDE	PA
EPA 8315 A	O-TOLUALDEHYDE (1,2-TOLUALDEHYDE)	PA
EPA 8315 A	PENTANAL (VALERALDEHYDE)	PA
EPA 8330 B	1,3,5-TRINITROBENZENE (1,3,5-TNB)	PA
EPA 8330 B	2,4,6-TRINITROTOLUENE (2,4,6-TNT)	PA
EPA 8330 B	2,6-DINITROTOLUENE (2,6-DNT)	PA
EPA 8330 B	2-NITROTOLUENE	PA
EPA 8330 B	3-NITROTOLUENE	PA
EPA 8330 B	4-NITROTOLUENE	PA



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EPA 8330 B	METHYL-2,4,6-TRINITROPHENYL NITRAMINE (TETRYL)	PA
EPA 8330 B	NITROGLYCERIN	PA
EPA 8330 B	PENTAERYTHRITOL TETRANITRATE (PETN)	PA
EPA 9012 B	TOTAL CYANIDE	PA
EPA 9050 A	CONDUCTIVITY	PA
EPA 9056 A	CHLORIDE	PA
EPA 9056 A	NITRATE AS N	PA
EPA 9056 A	SULFATE	PA
EPA 9066	TOTAL PHENOLICS	PA
OIA-1677-09	FREE CYANIDE	PA
RSK-175	ETHENE (ETHYLENE)	PA
SM 2310 B-2011	ACIDITY, AS CaCO ₃	PA
SM 2340 C-2011	TOTAL HARDNESS AS CaCO ₃	PA
SM 2540 B-2011	RESIDUE-TOTAL (TS)	PA
SM 2540 D-2011	RESIDUE-NONFILTERABLE (TSS)	PA
SM 3500-CR B-2011	CHROMIUM VI	PA
SM 4500-CN ⁻ G-2011	AMENABLE CYANIDE	PA
SM 4500-F ⁻ C-2011	FLUORIDE	PA
SM 4500-NH ₃ C-2011	AMMONIA AS N	PA
SM 4500-S ₂ ⁻ D-2011	SULFIDE	PA
SM 4500-SiO ₂ C-2011	SILICA AS SiO ₂	PA
SM 5210 B-2011	CARBONACEOUS BOD (CBOD)	PA
SM 5540 C-2011	SURFACTANTS - MBAS	PA

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EPA 8330 B	NITROBENZENE	PA
EPA 8330 B	OCTAHYDRO-1,3,5,7-TETRA-NITRO-1,3,5,7-TETRAZOCINE (HMX)	PA
EPA 8330 B	RDX (HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE)	PA
EPA 9040 C	PH	PA
EPA 9056 A	BROMIDE	PA
EPA 9056 A	FLUORIDE	PA
EPA 9056 A	NITRITE AS N	PA
EPA 9060 A	TOTAL ORGANIC CARBON (TOC)	PA
OIA-1677-09	AMENABLE CYANIDE	PA
RSK-175	ETHANE	PA
RSK-175	METHANE	PA
SM 2320 B-2011	ALKALINITY AS CaCO ₃	PA
SM 2510 B-2011	CONDUCTIVITY	PA
SM 2540 C-2011	RESIDUE-FILTERABLE (TDS)	PA
SM 2540 F-2011	RESIDUE-SETTLABLE	PA
SM 4500-CL ⁻ C-2011	CHLORIDE	PA
SM 4500-F ⁻ B-2011	FLUORIDE	PA
SM 4500-NH ₃ B-2011	AMMONIA AS N	PA
SM 4500-NH ₃ D-2011	AMMONIA AS N	PA
SM 4500-S ₂ ⁻ F-2011	SULFIDE	PA
SM 5210 B-2011	BIOCHEMICAL OXYGEN DEMAND (BOD)	PA
SM 5310 C-2011	TOTAL ORGANIC CARBON (TOC)	PA

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1010 A	FLASHPOINT	PA
EPA 1312	PREP: SYNTHETIC PRECIPITATION LEACHING PROCEDURE	PA
EPA 1668 A	2,2',3,3',4,4',5,5'-OCTACHLOROBIPHENYL (BZ-194)	PA
EPA 1668 A	2,2',3,3',4,4',5,6'-NONACHLOROBIPHENYL (BZ-207)	PA
EPA 1668 A	2,2',3,3',4,4',5-HEPTACHLOROBIPHENYL (BZ-170)	PA
EPA 1668 A	2,2',3,3',4,4',6-HEPTACHLOROBIPHENYL (BZ-171)	PA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1311	PREP: TOXICITY CHARACTERISTIC LEACHING PROCEDURE	PA
EPA 1668 A	2,2',3,3',4,4',5,5',6'-NONACHLOROBIPHENYL (BZ-206)	PA
EPA 1668 A	2,2',3,3',4,4',5,6'-OCTACHLOROBIPHENYL (BZ-196)	PA
EPA 1668 A	2,2',3,3',4,4',5,6-OCTACHLOROBIPHENYL (BZ-195)	PA
EPA 1668 A	2,2',3,3',4,4',6,6'-OCTACHLOROBIPHENYL (BZ-197)	PA
EPA 1668 A	2,2',3,3',4,4'-HEXACHLOROBIPHENYL (BZ-128)	PA

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EPA 1668 A	2,2',3,3',4,5',6'-HEPTACHLOROBIPHE NYL (BZ-177)	PA	EPA 1668 A	2,2',3,3',4,5',6,6'-OCTACHLOROBIPH ENYL (BZ-201)	PA
EPA 1668 A	2,2',3,3',4,5',6'-HEPTACHLOROBIPHE NYL (BZ-175)	PA	EPA 1668 A	2,2',3,3',4,5'-HEXACHLOROBIPHENY L (BZ-130)	PA
EPA 1668 A	2,2',3,3',4,5,5',6'-OCTACHLOROBIPH ENYL (BZ-199)	PA	EPA 1668 A	2,2',3,3',4,5,5',6'-NONACHLOROBIP HENYL (BZ-208)	PA
EPA 1668 A	2,2',3,3',4,5,5',6'-OCTACHLOROBIPHE NYL (BZ-198)	PA	EPA 1668 A	2,2',3,3',4,5,5'-HEPTACHLOROBIPHE NYL (BZ-172)	PA
EPA 1668 A	2,2',3,3',4,5,6'-HEPTACHLOROBIPHE NYL (BZ-174)	PA	EPA 1668 A	2,2',3,3',4,5,6,6'-OCTACHLOROBIPHE NYL (BZ-200)	PA
EPA 1668 A	2,2',3,3',4,5,6-HEPTACHLOROBIPHE NYL (BZ-173)	PA	EPA 1668 A	2,2',3,3',4,5-HEXACHLOROBIPHENYL (BZ-129)	PA
EPA 1668 A	2,2',3,3',4,6'-HEXACHLOROBIPHENY L (BZ-132)	PA	EPA 1668 A	2,2',3,3',4,6,6'-HEPTACHLOROBIPHE NYL (BZ-176)	PA
EPA 1668 A	2,2',3,3',4,6-HEXACHLOROBIPHENYL (BZ-131)	PA	EPA 1668 A	2,2',3,3',4-PENTACHLOROBIPHENYL (BZ-82)	PA
EPA 1668 A	2,2',3,3',5,5',6,6'-OCTACHLOROBIPH ENYL (BZ-202)	PA	EPA 1668 A	2,2',3,3',5,5',6-HEPTACHLOROBIPHE NYL (BZ-178)	PA
EPA 1668 A	2,2',3,3',5,5'-HEXACHLOROBIPHENY L (BZ-133)	PA	EPA 1668 A	2,2',3,3',5,6'-HEXACHLOROBIPHENY L (BZ-135)	PA
EPA 1668 A	2,2',3,3',5,6,6'-HEPTACHLOROBIPHE NYL (BZ-179)	PA	EPA 1668 A	2,2',3,3',5,6-HEXACHLOROBIPHENYL (BZ-134)	PA
EPA 1668 A	2,2',3,3',5-PENTACHLOROBIPHENYL (BZ-83)	PA	EPA 1668 A	2,2',3,3',6,6'-HEXACHLOROBIPHENY L (BZ-136)	PA
EPA 1668 A	2,2',3,3',6-PENTACHLOROBIPHENYL (BZ-84)	PA	EPA 1668 A	2,2',3,3'-TETRACHLOROBIPHENYL (BZ-40)	PA
EPA 1668 A	2,2',3,4',5',6-HEXACHLOROBIPHENY L (BZ-149)	PA	EPA 1668 A	2,2',3,4',5'-PENTACHLOROBIPHENYL (BZ-97)	PA
EPA 1668 A	2,2',3,4',5,5',6-HEPTACHLOROBIPHE NYL (BZ-187)	PA	EPA 1668 A	2,2',3,4',5,5'-HEXACHLOROBIPHENY L (BZ-146)	PA
EPA 1668 A	2,2',3,4',5,6'-HEXACHLOROBIPHENY L (BZ-148)	PA	EPA 1668 A	2,2',3,4',5,6,6'-HEPTACHLOROBIPHE NYL (BZ-188)	PA
EPA 1668 A	2,2',3,4',5,6-HEXACHLOROBIPHENYL (BZ-147)	PA	EPA 1668 A	2,2',3,4',5-PENTACHLOROBIPHENYL (BZ-90)	PA
EPA 1668 A	2,2',3,4',6-PENTACHLOROBIPHENYL (BZ-98)	PA	EPA 1668 A	2,2',3,4',6,6'-HEXACHLOROBIPHENY L (BZ-150)	PA
EPA 1668 A	2,2',3,4',6-PENTACHLOROBIPHENYL (BZ-91)	PA	EPA 1668 A	2,2',3,4'-TETRACHLOROBIPHENYL (BZ-42)	PA
EPA 1668 A	2,2',3,4,4',5',6-HEPTACHLOROBIPHE NYL (BZ-183)	PA	EPA 1668 A	2,2',3,4,4',5'-HEXACHLOROBIPHENY L (BZ-138)	PA
EPA 1668 A	2,2',3,4,4',5,5',6-OCTACHLOROBIPHE NYL (BZ-203)	PA	EPA 1668 A	2,2',3,4,4',5,5'-HEPTACHLOROBIPHE NYL (BZ-180)	PA
EPA 1668 A	2,2',3,4,4',5,6'-HEPTACHLOROBIPHE NYL (BZ-182)	PA	EPA 1668 A	2,2',3,4,4',5,6,6'-OCTACHLOROBIPHE NYL (BZ-204)	PA
EPA 1668 A	2,2',3,4,4',5,6-HEPTACHLOROBIPHE NYL (BZ-181)	PA	EPA 1668 A	2,2',3,4,4',5-HEXACHLOROBIPHENYL (BZ-137)	PA
EPA 1668 A	2,2',3,4,4',6'-HEXACHLOROBIPHENY L (BZ-140)	PA	EPA 1668 A	2,2',3,4,4',6,6'-HEPTACHLOROBIPHE NYL (BZ-184)	PA
EPA 1668 A	2,2',3,4,4',6-HEXACHLOROBIPHENYL (BZ-139)	PA	EPA 1668 A	2,2',3,4,4'-PENTACHLOROBIPHENYL (BZ-85)	PA

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EPA 1668 A	2,2',3,4,5',6'-HEXACHLOROBIPHENYL (BZ-144)	PA	EPA 1668 A	2,2',3,4,5'-PENTACHLOROBIPHENYL (BZ-87)	PA
EPA 1668 A	2,2',3,4,5,5',6'-HEPTACHLOROBIPHENYL (BZ-185)	PA	EPA 1668 A	2,2',3,4,5,5'-HEXACHLOROBIPHENYL (BZ-141)	PA
EPA 1668 A	2,2',3,4,5,6'-HEXACHLOROBIPHENYL (BZ-143)	PA	EPA 1668 A	2,2',3,4,5,6'-HEPTACHLOROBIPHENYL (BZ-186)	PA
EPA 1668 A	2,2',3,4,5,6'-HEXACHLOROBIPHENYL (BZ-142)	PA	EPA 1668 A	2,2',3,4,5-PENTACHLOROBIPHENYL (BZ-86)	PA
EPA 1668 A	2,2',3,4,6'-PENTACHLOROBIPHENYL (BZ-89)	PA	EPA 1668 A	2,2',3,4,6'-HEXACHLOROBIPHENYL (BZ-145)	PA
EPA 1668 A	2,2',3,4,6-PENTACHLOROBIPHENYL (BZ-88)	PA	EPA 1668 A	2,2',3,4-TETRACHLOROBIPHENYL (BZ-41)	PA
EPA 1668 A	2,2',3,5',6-PENTACHLOROBIPHENYL (BZ-95)	PA	EPA 1668 A	2,2',3,5'-TETRACHLOROBIPHENYL (BZ-44)	PA
EPA 1668 A	2,2',3,5,5',6'-HEXACHLOROBIPHENYL (BZ-151)	PA	EPA 1668 A	2,2',3,5,5'-PENTACHLOROBIPHENYL (BZ-92)	PA
EPA 1668 A	2,2',3,5,6'-PENTACHLOROBIPHENYL (BZ-94)	PA	EPA 1668 A	2,2',3,5,6,6'-HEXACHLOROBIPHENYL (BZ-152)	PA
EPA 1668 A	2,2',3,5,6-PENTACHLOROBIPHENYL (BZ-93)	PA	EPA 1668 A	2,2',3,5-TETRACHLOROBIPHENYL (BZ-43)	PA
EPA 1668 A	2,2',3,6'-TETRACHLOROBIPHENYL (BZ-46)	PA	EPA 1668 A	2,2',3,6,6'-PENTACHLOROBIPHENYL (BZ-96)	PA
EPA 1668 A	2,2',3,6-TETRACHLOROBIPHENYL (BZ-45)	PA	EPA 1668 A	2,2',3-TRICHLOROBIPHENYL (BZ-16)	PA
EPA 1668 A	2,2',4,4',5,5'-HEXACHLOROBIPHENYL (BZ-153)	PA	EPA 1668 A	2,2',4,4',5,6'-HEXACHLOROBIPHENYL (BZ-154)	PA
EPA 1668 A	2,2',4,4',5-PENTACHLOROBIPHENYL (BZ-99)	PA	EPA 1668 A	2,2',4,4',6,6'-HEXACHLOROBIPHENYL (BZ-155)	PA
EPA 1668 A	2,2',4,4',6-PENTACHLOROBIPHENYL (BZ-100)	PA	EPA 1668 A	2,2',4,4'-TETRACHLOROBIPHENYL (BZ-47)	PA
EPA 1668 A	2,2',4,5',6-PENTACHLOROBIPHENYL (BZ-103)	PA	EPA 1668 A	2,2',4,5'-TETRACHLOROBIPHENYL (BZ-49)	PA
EPA 1668 A	2,2',4,5,5'-PENTACHLOROBIPHENYL (BZ-101)	PA	EPA 1668 A	2,2',4,5,6'-PENTACHLOROBIPHENYL (BZ-102)	PA
EPA 1668 A	2,2',4,5-TETRACHLOROBIPHENYL (BZ-48)	PA	EPA 1668 A	2,2',4,6'-TETRACHLOROBIPHENYL (BZ-51)	PA
EPA 1668 A	2,2',4,6,6'-PENTACHLOROBIPHENYL (BZ-104)	PA	EPA 1668 A	2,2',4,6-TETRACHLOROBIPHENYL (BZ-50)	PA
EPA 1668 A	2,2',4-TRICHLOROBIPHENYL (BZ-17)	PA	EPA 1668 A	2,2',5,5'-TETRACHLOROBIPHENYL (BZ-52)	PA
EPA 1668 A	2,2',5,6'-TETRACHLOROBIPHENYL (BZ-53)	PA	EPA 1668 A	2,2',5-TRICHLOROBIPHENYL (BZ-18)	PA
EPA 1668 A	2,2',6,6'-TETRACHLOROBIPHENYL (BZ-54)	PA	EPA 1668 A	2,2',6-TRICHLOROBIPHENYL (BZ-19)	PA
EPA 1668 A	2,2'-DICHLOROBIPHENYL (BZ-4)	PA	EPA 1668 A	2,3',4',5',6-PENTACHLOROBIPHENYL (BZ-125)	PA
EPA 1668 A	2,3',4',5'-TETRACHLOROBIPHENYL (BZ-76)	PA	EPA 1668 A	2,3',4',5,5'-PENTACHLOROBIPHENYL (BZ-124)	PA
EPA 1668 A	2,3',4',5-TETRACHLOROBIPHENYL (BZ-70)	PA	EPA 1668 A	2,3',4',6-TETRACHLOROBIPHENYL (BZ-71)	PA

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Eurofins Lancaster Laboratories Environmental, LLC
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Virginia Laboratory ID: 460182
Effective Date: June 15, 2020
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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 1668 A	2,3,4'-TRICHLOROBIPHENYL (BZ-33)	PA
EPA 1668 A	2,3,4,4',5'-PENTACHLOROBIPHENYL (BZ-123)	PA
EPA 1668 A	2,3,4,4',5'-PENTACHLOROBIPHENYL (BZ-118)	PA
EPA 1668 A	2,3,4,4'-TETRACHLOROBIPHENYL (BZ-66)	PA
EPA 1668 A	2,3,4,5'-TETRACHLOROBIPHENYL (BZ-68)	PA
EPA 1668 A	2,3,4,5-TETRACHLOROBIPHENYL (BZ-67)	PA
EPA 1668 A	2,3,4-TRICHLOROBIPHENYL (BZ-25)	PA
EPA 1668 A	2,3,5'-TRICHLOROBIPHENYL (BZ-34)	PA
EPA 1668 A	2,3,5-TRICHLOROBIPHENYL (BZ-26)	PA
EPA 1668 A	2,3'-DICHLOROBIPHENYL (BZ-6)	PA
EPA 1668 A	2,3,3',4',5'-PENTACHLOROBIPHENYL (BZ-122)	PA
EPA 1668 A	2,3,3',4',5,5'-HEXACHLOROBIPHENYL (BZ-162)	PA
EPA 1668 A	2,3,3',4',5-PENTACHLOROBIPHENYL (BZ-107)	PA
EPA 1668 A	2,3,3',4'-TETRACHLOROBIPHENYL (BZ-56)	PA
EPA 1668 A	2,3,3',4,4',5'-HEXACHLOROBIPHENYL (BZ-157)	PA
EPA 1668 A	2,3,3',4,4',5,5'-HEPTACHLOROBIPHENYL (BZ-189)	PA
EPA 1668 A	2,3,3',4,4',5-HEXACHLOROBIPHENYL (BZ-156)	PA
EPA 1668 A	2,3,3',4,4'-PENTACHLOROBIPHENYL (BZ-105)	PA
EPA 1668 A	2,3,3',4,5'-PENTACHLOROBIPHENYL (BZ-108)	PA
EPA 1668 A	2,3,3',4,5,5'-HEXACHLOROBIPHENYL (BZ-159)	PA
EPA 1668 A	2,3,3',4,5-PENTACHLOROBIPHENYL (BZ-106)	PA
EPA 1668 A	2,3,3',4-TETRACHLOROBIPHENYL (BZ-55)	PA
EPA 1668 A	2,3,3',5-TETRACHLOROBIPHENYL (BZ-58)	PA
EPA 1668 A	2,3,3',5,5'-PENTACHLOROBIPHENYL (BZ-111)	PA
EPA 1668 A	2,3,3',5-TETRACHLOROBIPHENYL (BZ-57)	PA

METHOD	ANALYTE	PRIMARY
EPA 1668 A	2,3',4,4',5',6-HEXACHLOROBIPHENYL (BZ-168)	PA
EPA 1668 A	2,3',4,4',5,5'-HEXACHLOROBIPHENYL (BZ-167)	PA
EPA 1668 A	2,3',4,4',6-PENTACHLOROBIPHENYL (BZ-119)	PA
EPA 1668 A	2,3',4,5',6-PENTACHLOROBIPHENYL (BZ-121)	PA
EPA 1668 A	2,3',4,5,5'-PENTACHLOROBIPHENYL (BZ-120)	PA
EPA 1668 A	2,3',4,6-TETRACHLOROBIPHENYL (BZ-69)	PA
EPA 1668 A	2,3',5',6-TETRACHLOROBIPHENYL (BZ-73)	PA
EPA 1668 A	2,3',5,5'-TETRACHLOROBIPHENYL (BZ-72)	PA
EPA 1668 A	2,3',6-TRICHLOROBIPHENYL (BZ-27)	PA
EPA 1668 A	2,3,3',4',5',6-HEXACHLOROBIPHENYL (BZ-164)	PA
EPA 1668 A	2,3,3',4',5,5',6-HEPTACHLOROBIPHENYL (BZ-193)	PA
EPA 1668 A	2,3,3',4',5,6-HEXACHLOROBIPHENYL (BZ-163)	PA
EPA 1668 A	2,3,3',4',6-PENTACHLOROBIPHENYL (BZ-110)	PA
EPA 1668 A	2,3,3',4,4',5',6-HEPTACHLOROBIPHENYL (BZ-191)	PA
EPA 1668 A	2,3,3',4,4',5,5',6-OCTACHLOROBIPHENYL (BZ-205)	PA
EPA 1668 A	2,3,3',4,4',5,6-HEPTACHLOROBIPHENYL (BZ-190)	PA
EPA 1668 A	2,3,3',4,4',6-HEXACHLOROBIPHENYL (BZ-158)	PA
EPA 1668 A	2,3,3',4,5',6-HEXACHLOROBIPHENYL (BZ-161)	PA
EPA 1668 A	2,3,3',4,5,5',6-HEPTACHLOROBIPHENYL (BZ-192)	PA
EPA 1668 A	2,3,3',4,5,6-HEXACHLOROBIPHENYL (BZ-160)	PA
EPA 1668 A	2,3,3',4,6-PENTACHLOROBIPHENYL (BZ-109)	PA
EPA 1668 A	2,3,3',5',6-PENTACHLOROBIPHENYL (BZ-113)	PA
EPA 1668 A	2,3,3',5,5',6-HEXACHLOROBIPHENYL (BZ-165)	PA
EPA 1668 A	2,3,3',5,6-PENTACHLOROBIPHENYL (BZ-112)	PA
EPA 1668 A	2,3,3',6-TETRACHLOROBIPHENYL (BZ-59)	PA



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<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1668 A	2,3,3'-TRICHLOROBIPHENYL (BZ-20)	PA	EPA 1668 A	2,3,4',5,6-PENTACHLOROBIPHENYL (BZ-117)	PA
EPA 1668 A	2,3,4',5-TETRACHLOROBIPHENYL (BZ-63)	PA	EPA 1668 A	2,3,4',6-TETRACHLOROBIPHENYL (BZ-64)	PA
EPA 1668 A	2,3,4'-TRICHLOROBIPHENYL (BZ-22)	PA	EPA 1668 A	2,3,4,4',5,6-HEXACHLOROBIPHENYL (BZ-166)	PA
EPA 1668 A	2,3,4,4',5-PENTACHLOROBIPHENYL (BZ-114)	PA	EPA 1668 A	2,3,4,4',6-PENTACHLOROBIPHENYL (BZ-115)	PA
EPA 1668 A	2,3,4,4'-TETRACHLOROBIPHENYL (BZ-60)	PA	EPA 1668 A	2,3,4,5,6-PENTACHLOROBIPHENYL (BZ-116)	PA
EPA 1668 A	2,3,4,5-TETRACHLOROBIPHENYL (BZ-61)	PA	EPA 1668 A	2,3,4,6-TETRACHLOROBIPHENYL (BZ-62)	PA
EPA 1668 A	2,3,4-TRICHLOROBIPHENYL (BZ-21)	PA	EPA 1668 A	2,3,5,6-TETRACHLOROBIPHENYL (BZ-65)	PA
EPA 1668 A	2,3,5-TRICHLOROBIPHENYL (BZ-23)	PA	EPA 1668 A	2,3,6-TRICHLOROBIPHENYL (BZ-24)	PA
EPA 1668 A	2,3-DICHLOROBIPHENYL (BZ-5)	PA	EPA 1668 A	2,4',5-TRICHLOROBIPHENYL (BZ-31)	PA
EPA 1668 A	2,4',6-TRICHLOROBIPHENYL (BZ-32)	PA	EPA 1668 A	2,4'-DICHLOROBIPHENYL (BZ-8)	PA
EPA 1668 A	2,4,4',5-TETRACHLOROBIPHENYL (BZ-74)	PA	EPA 1668 A	2,4,4',6-TETRACHLOROBIPHENYL (BZ-75)	PA
EPA 1668 A	2,4,4'-TRICHLOROBIPHENYL (BZ-28)	PA	EPA 1668 A	2,4,5-TRICHLOROBIPHENYL (BZ-29)	PA
EPA 1668 A	2,4,6-TRICHLOROBIPHENYL (BZ-30)	PA	EPA 1668 A	2,4-DICHLOROBIPHENYL (BZ-7)	PA
EPA 1668 A	2,5-DICHLOROBIPHENYL (BZ-9)	PA	EPA 1668 A	2,6-DICHLOROBIPHENYL (BZ-10)	PA
EPA 1668 A	2-CHLOROBIPHENYL (BZ-1)	PA	EPA 1668 A	3,3',4,4',5,5'-HEXACHLOROBIPHENYL (BZ-169)	PA
EPA 1668 A	3,3',4,4',5-PENTACHLOROBIPHENYL (BZ-126)	PA	EPA 1668 A	3,3',4,4'-TETRACHLOROBIPHENYL (BZ-77)	PA
EPA 1668 A	3,3',4,5'-TETRACHLOROBIPHENYL (BZ-79)	PA	EPA 1668 A	3,3',4,5,5'-PENTACHLOROBIPHENYL (BZ-127)	PA
EPA 1668 A	3,3',4,5-TETRACHLOROBIPHENYL (BZ-78)	PA	EPA 1668 A	3,3',4-TRICHLOROBIPHENYL (BZ-35)	PA
EPA 1668 A	3,3',5,5'-TETRACHLOROBIPHENYL (BZ-80)	PA	EPA 1668 A	3,3',5-TRICHLOROBIPHENYL (BZ-36)	PA
EPA 1668 A	3,3'-DICHLOROBIPHENYL (BZ-11)	PA	EPA 1668 A	3,4',5-TRICHLOROBIPHENYL (BZ-39)	PA
EPA 1668 A	3,4'-DICHLOROBIPHENYL (BZ-13)	PA	EPA 1668 A	3,4,4',5-TETRACHLOROBIPHENYL (BZ-81)	PA
EPA 1668 A	3,4,4'-TRICHLOROBIPHENYL (BZ-37)	PA	EPA 1668 A	3,4,5-TRICHLOROBIPHENYL (BZ-38)	PA
EPA 1668 A	3,4-DICHLOROBIPHENYL (BZ-12)	PA	EPA 1668 A	3,5-DICHLOROBIPHENYL (BZ-14)	PA
EPA 1668 A	3-CHLOROBIPHENYL (BZ-2)	PA	EPA 1668 A	4,4'-DICHLOROBIPHENYL (BZ-15)	PA
EPA 1668 A	4-CHLOROBIPHENYL (BZ-3)	PA	EPA 1668 A	DECACHLOROBIPHENYL (BZ-209)	PA
EPA 300.0 REV 2.1	BROMIDE	PA	EPA 300.0 REV 2.1	CHLORIDE	PA
EPA 300.0 REV 2.1	FLUORIDE	PA	EPA 300.0 REV 2.1	NITRATE AS N	PA
EPA 300.0 REV 2.1	NITRITE AS N	PA	EPA 300.0 REV 2.1	SULFATE	PA
EPA 3050 B	PREP: ACID DIGESTION OF SEDIMENTS, SLUDGES, AND SOILS	PA	EPA 3540 C	PREP: SOXHLET EXTRACTION	PA
EPA 3546	PREP: MICROWAVE EXTRACTION	PA	EPA 3550 C	PREP: ULTRASONIC EXTRACTION	PA



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EPA 3620 C	PREP: FLORISIL CLEANUP	PA
EPA 3640 A	PREP: GEL PERMEATION CLEANUP	PA
EPA 3665 A	SULFURIC ACID/PERMANGANATE CLEAN-UP	PA
EPA 5035 A	PREP: CLOSED-SYSTEM PURGE AND TRAP AND EXTRACTION	PA
EPA 6010 D	ANTIMONY	PA
EPA 6010 D	BARIUM	PA
EPA 6010 D	BORON	PA
EPA 6010 D	CALCIUM	PA
EPA 6010 D	COBALT	PA
EPA 6010 D	IRON	PA
EPA 6010 D	LITHIUM	PA
EPA 6010 D	MANGANESE	PA
EPA 6010 D	NICKEL	PA
EPA 6010 D	SELENIUM	PA
EPA 6010 D	SILVER	PA
EPA 6010 D	STRONTIUM	PA
EPA 6010 D	TIN	PA
EPA 6010 D	VANADIUM	PA
EPA 6010 D - EXTENDED	SULFUR	PA
EPA 6010 D - EXTENDED	ZIRCONIUM	PA
EPA 6020 B	ANTIMONY	PA
EPA 6020 B	BARIUM	PA
EPA 6020 B	CADMIUM	PA
EPA 6020 B	CHROMIUM	PA
EPA 6020 B	COPPER	PA
EPA 6020 B	LEAD	PA
EPA 6020 B	MANGANESE	PA
EPA 6020 B	NICKEL	PA
EPA 6020 B	SELENIUM	PA
EPA 6020 B	SODIUM	PA
EPA 6020 B	TIN	PA
EPA 6020 B	ZINC	PA
EPA 6020 B - EXTENDED	TITANIUM	PA
EPA 6850	PERCHLORATE	PA
EPA 7199	CHROMIUM VI	PA
EPA 7471 B	MERCURY	PA
EPA 8015 C	ETHANOL	PA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 3630 C	PREP: SILICA GEL CLEANUP	PA
EPA 3660 B	PREP: SULFUR CLEANUP	PA
EPA 5030	PREP: PURGE AND TRAP FOR AQUEOUS SAMPLES	PA
EPA 6010 D	ALUMINUM	PA
EPA 6010 D	ARSENIC	PA
EPA 6010 D	BERYLLIUM	PA
EPA 6010 D	CADMIUM	PA
EPA 6010 D	CHROMIUM	PA
EPA 6010 D	COPPER	PA
EPA 6010 D	LEAD	PA
EPA 6010 D	MAGNESIUM	PA
EPA 6010 D	MOLYBDENUM	PA
EPA 6010 D	POTASSIUM	PA
EPA 6010 D	SILICA AS SiO ₂	PA
EPA 6010 D	SODIUM	PA
EPA 6010 D	THALLIUM	PA
EPA 6010 D	TITANIUM	PA
EPA 6010 D	ZINC	PA
EPA 6010 D - EXTENDED	THORIUM	PA
EPA 6020 B	ALUMINUM	PA
EPA 6020 B	ARSENIC	PA
EPA 6020 B	BERYLLIUM	PA
EPA 6020 B	CALCIUM	PA
EPA 6020 B	COBALT	PA
EPA 6020 B	IRON	PA
EPA 6020 B	MAGNESIUM	PA
EPA 6020 B	MOLYBDENUM	PA
EPA 6020 B	POTASSIUM	PA
EPA 6020 B	SILVER	PA
EPA 6020 B	THALLIUM	PA
EPA 6020 B	VANADIUM	PA
EPA 6020 B - EXTENDED	STRONTIUM	PA
EPA 6020 B - EXTENDED	URANIUM	PA
EPA 7196 A	CHROMIUM VI	PA
EPA 7471 A	MERCURY	PA
EPA 8015 C	DIESEL RANGE ORGANICS (DRO)	PA
EPA 8015 C	ETHYLENE GLYCOL	PA



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EPA 8015 C	GASOLINE RANGE ORGANICS (GRO)	PA
EPA 8015 C	METHANOL	PA
EPA 8015 D	DIESEL RANGE ORGANICS (DRO)	PA
EPA 8015 D	GASOLINE RANGE ORGANICS (GRO)	PA
EPA 8015 D	METHANOL	PA
EPA 8015 D - EXTENDED	TRIETHYLENE GLYCOL	PA
EPA 8081 B	4,4'-DDE	PA
EPA 8081 B	ALDRIN	PA
EPA 8081 B	ALPHA-CHLORDANE (CIS-CHLORDANE)	PA
EPA 8081 B	CHLORDANE, TOTAL	PA
EPA 8081 B	DIELDRIN	PA
EPA 8081 B	ENDOSULFAN II	PA
EPA 8081 B	ENDRIN	PA
EPA 8081 B	ENDRIN KETONE	PA
EPA 8081 B	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	PA
EPA 8081 B	HEPTACHLOR EPOXIDE	PA
EPA 8081 B	TOXAPHENE (CHLORINATED CAMPHENE)	PA
EPA 8081 B - EXTENDED	MIREX	PA
EPA 8082 A	AROCLOR-1221 (PCB-1221)	PA
EPA 8082 A	AROCLOR-1242 (PCB-1242)	PA
EPA 8082 A	AROCLOR-1254 (PCB-1254)	PA
EPA 8082 A - EXTENDED	AROCLOR-1262 (PCB-1262)	PA
EPA 8151 A	2,4,5-T	PA
EPA 8151 A	2,4-DB	PA
EPA 8151 A	DICAMBA	PA
EPA 8151 A	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	PA
EPA 8151 A	MCPP	PA
EPA 8151 A	PICLORAM	PA
EPA 8260 C	1,1,1,2-TETRACHLOROETHANE	PA
EPA 8260 C	1,1,2,2-TETRACHLOROETHANE	PA
EPA 8260 C	1,1-DICHLOROETHANE	PA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8015 C	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 8015 C - EXTENDED	TRIETHYLENE GLYCOL	PA
EPA 8015 D	ETHANOL	PA
EPA 8015 D	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 8015 D - EXTENDED	ETHYLENE GLYCOL	PA
EPA 8081 B	4,4'-DDD	PA
EPA 8081 B	4,4'-DDT	PA
EPA 8081 B	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	PA
EPA 8081 B	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	PA
EPA 8081 B	DELTA-BHC	PA
EPA 8081 B	ENDOSULFAN I	PA
EPA 8081 B	ENDOSULFAN SULFATE	PA
EPA 8081 B	ENDRIN ALDEHYDE	PA
EPA 8081 B	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	PA
EPA 8081 B	HEPTACHLOR	PA
EPA 8081 B	METHOXYCHLOR	PA
EPA 8081 B - EXTENDED	KEPONE	PA
EPA 8082 A	AROCLOR-1016 (PCB-1016)	PA
EPA 8082 A	AROCLOR-1232 (PCB-1232)	PA
EPA 8082 A	AROCLOR-1248 (PCB-1248)	PA
EPA 8082 A	AROCLOR-1260 (PCB-1260)	PA
EPA 8082 A - EXTENDED	AROCLOR-1268 (PCB-1268)	PA
EPA 8151 A	2,4-D	PA
EPA 8151 A	DALAPON	PA
EPA 8151 A	DICHLOROPROP (DICHLOROPROP)	PA
EPA 8151 A	MCPA	PA
EPA 8151 A	PENTACHLOROPHENOL	PA
EPA 8151 A	SILVEX (2,4,5-TP)	PA
EPA 8260 C	1,1,1-TRICHLOROETHANE	PA
EPA 8260 C	1,1,2-TRICHLOROETHANE	PA

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EPA 8260 C	1,1-DICHLOROETHYLENE	PA
EPA 8260 C	1,2,3-TRICHLOROBENZENE	PA
EPA 8260 C	1,2,4-TRICHLOROBENZENE	PA
EPA 8260 C	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	PA
EPA 8260 C	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 8260 C	1,2-DICHLOROPROPANE	PA
EPA 8260 C	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA
EPA 8260 C	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 8260 C	2,2-DICHLOROPROPANE	PA
EPA 8260 C	2-CHLOROETHYL VINYL ETHER	PA
EPA 8260 C	2-HEXANONE	PA
EPA 8260 C	4-ISOPROPYLTOLUENE (P-CYME, P-ISOPROPYLTOLUENE)	PA
EPA 8260 C	ACETONE	PA
EPA 8260 C	ACROLEIN (PROPENAL)	PA
EPA 8260 C	ALLYL CHLORIDE (3-CHLOROPROPENE)	PA
EPA 8260 C	BENZYL CHLORIDE	PA
EPA 8260 C	BROMOCHLOROMETHANE	PA
EPA 8260 C	BROMOFORM	PA
EPA 8260 C	CARBON TETRACHLORIDE	PA
EPA 8260 C	CHLORODIBROMOMETHANE	PA
EPA 8260 C	CHLOROFORM	PA
EPA 8260 C	CIS-1,2-DICHLOROETHYLENE	PA
EPA 8260 C	CYCLOHEXANE	PA
EPA 8260 C	DICHLORODIFLUOROMETHANE (FREON-12)	PA
EPA 8260 C	ETHYL ACETATE	PA
EPA 8260 C	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	PA
EPA 8260 C	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA
EPA 8260 C	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	PA
EPA 8260 C	ISOPROPYLBENZENE	PA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8260 C	1,1-DICHLOROPROPENE	PA
EPA 8260 C	1,2,3-TRICHLOROPROPANE	PA
EPA 8260 C	1,2,4-TRIMETHYLBENZENE	PA
EPA 8260 C	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	PA
EPA 8260 C	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	PA
EPA 8260 C	1,3,5-TRIMETHYLBENZENE	PA
EPA 8260 C	1,3-DICHLOROPROPANE	PA
EPA 8260 C	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA
EPA 8260 C	2-BUTANONE (METHYL ETHYL KETONE, MEK)	PA
EPA 8260 C	2-CHLOROTOLUENE	PA
EPA 8260 C	4-CHLOROTOLUENE	PA
EPA 8260 C	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	PA
EPA 8260 C	ACETONITRILE	PA
EPA 8260 C	ACRYLONITRILE	PA
EPA 8260 C	BENZENE	PA
EPA 8260 C	BROMOBENZENE	PA
EPA 8260 C	BROMODICHLOROMETHANE	PA
EPA 8260 C	CARBON DISULFIDE	PA
EPA 8260 C	CHLOROBENZENE	PA
EPA 8260 C	CHLOROETHANE (ETHYL CHLORIDE)	PA
EPA 8260 C	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	PA
EPA 8260 C	CIS-1,3-DICHLOROPROPENE	PA
EPA 8260 C	DIBROMOMETHANE (METHYLENE BROMIDE)	PA
EPA 8260 C	ETHANOL	PA
EPA 8260 C	ETHYL METHACRYLATE	PA
EPA 8260 C	ETHYLBENZENE	PA
EPA 8260 C	IODOMETHANE (METHYL IODIDE)	PA
EPA 8260 C	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 8260 C	METHACRYLONITRILE	PA



Commonwealth of Virginia
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Virginia Laboratory ID: 460182
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SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8260 C	METHYL BROMIDE (BROMOMETHANE)	PA
EPA 8260 C	METHYL METHACRYLATE	PA
EPA 8260 C	METHYLCYCLOHEXANE	PA
EPA 8260 C	N-BUTYLBENZENE	PA
EPA 8260 C	NAPHTHALENE	PA
EPA 8260 C	PROPIONITRILE (ETHYL CYANIDE)	PA
EPA 8260 C	STYRENE	PA
EPA 8260 C	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	PA
EPA 8260 C	TETRACHLOROETHENE (PERCHLOROETHENE)	PA
EPA 8260 C	TRANS-1,2-DICHLOROETHENE	PA
EPA 8260 C	TRANS-1,4-DICHLORO-2-BUTENE	PA
EPA 8260 C	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	PA
EPA 8260 C	VINYL CHLORIDE (CHLOROETHENE)	PA
EPA 8260 C - EXTENDED	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113)	PA
EPA 8260 C - EXTENDED	CYCLOHEXANONE	PA
EPA 8260 C - EXTENDED	GASOLINE RANGE ORGANICS (GRO)	PA
EPA 8260 C - EXTENDED	N-BUTYL-ACETATE	PA
EPA 8260 C - EXTENDED	T-AMYL ALCOHOL (TAA)	PA
EPA 8260 C SIM	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA
EPA 8260 D	1,1,1-TRICHLOROETHANE	PA
EPA 8260 D	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113)	PA
EPA 8260 D	1,1-DICHLOROETHANE	PA
EPA 8260 D	1,1-DICHLOROPROPENE	PA
EPA 8260 D	1,2,3-TRICHLOROPROPANE	PA
EPA 8260 D	1,2,4-TRIMETHYLBENZENE	PA
EPA 8260 D	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	PA
EPA 8260 D	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	PA
EPA 8260 D	1,3,5-TRIMETHYLBENZENE	PA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8260 C	METHYL CHLORIDE (CHLOROMETHANE)	PA
EPA 8260 C	METHYL TERT-BUTYL ETHER (MTBE)	PA
EPA 8260 C	METHYLENE CHLORIDE (DICHLOROMETHANE)	PA
EPA 8260 C	N-PROPYLBENZENE	PA
EPA 8260 C	PENTACHLOROETHANE	PA
EPA 8260 C	SEC-BUTYLBENZENE	PA
EPA 8260 C	T-AMYLMETHYLETHER (TAME)	PA
EPA 8260 C	TERT-BUTYLBENZENE	PA
EPA 8260 C	TOLUENE	PA
EPA 8260 C	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	PA
EPA 8260 C	TRICHLOROETHENE (TRICHLOROETHYLENE)	PA
EPA 8260 C	VINYL ACETATE	PA
EPA 8260 C	XYLENE (TOTAL)	PA
EPA 8260 C - EXTENDED	1,2,3-TRIMETHYLBENZENE	PA
EPA 8260 C - EXTENDED	DIISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	PA
EPA 8260 C - EXTENDED	METHYL ACETATE	PA
EPA 8260 C - EXTENDED	N-HEXANE	PA
EPA 8260 C - EXTENDED	TETRAHYDROFURAN (THF)	PA
EPA 8260 D	1,1,1,2-TETRACHLOROETHANE	PA
EPA 8260 D	1,1,2,2-TETRACHLOROETHANE	PA
EPA 8260 D	1,1,2-TRICHLOROETHANE	PA
EPA 8260 D	1,1-DICHLOROETHYLENE	PA
EPA 8260 D	1,2,3-TRICHLOROBENZENE	PA
EPA 8260 D	1,2,4-TRICHLOROBENZENE	PA
EPA 8260 D	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	PA
EPA 8260 D	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 8260 D	1,2-DICHLOROPROPANE	PA
EPA 8260 D	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA



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EPA 8260 D	1,3-DICHLOROPROPANE	PA	EPA 8260 D	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 8260 D	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA	EPA 8260 D	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	PA
EPA 8260 D	2,2-DICHLOROPROPANE	PA	EPA 8260 D	2-BUTANONE (METHYL ETHYL KETONE, MEK)	PA
EPA 8260 D	2-CHLOROTOLUENE	PA	EPA 8260 D	2-HEXANONE	PA
EPA 8260 D	2-NITROPROPANE	PA	EPA 8260 D	4-CHLOROTOLUENE	PA
EPA 8260 D	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	PA	EPA 8260 D	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	PA
EPA 8260 D	ACETONE	PA	EPA 8260 D	ACETONITRILE	PA
EPA 8260 D	ACROLEIN (PROPENAL)	PA	EPA 8260 D	ACRYLONITRILE	PA
EPA 8260 D	ALLYL CHLORIDE (3-CHLOROPROPENE)	PA	EPA 8260 D	BENZENE	PA
EPA 8260 D	BENZYL CHLORIDE	PA	EPA 8260 D	BROMOBENZENE	PA
EPA 8260 D	BROMOCHLOROMETHANE	PA	EPA 8260 D	BROMODICHLOROMETHANE	PA
EPA 8260 D	BROMOFORM	PA	EPA 8260 D	CARBON DISULFIDE	PA
EPA 8260 D	CARBON TETRACHLORIDE	PA	EPA 8260 D	CHLOROBENZENE	PA
EPA 8260 D	CHLORODIBROMOMETHANE	PA	EPA 8260 D	CHLOROETHANE (ETHYL CHLORIDE)	PA
EPA 8260 D	CHLOROFORM	PA	EPA 8260 D	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	PA
EPA 8260 D	CIS-1,2-DICHLOROETHYLENE	PA	EPA 8260 D	CIS-1,3-DICHLOROPROPENE	PA
EPA 8260 D	CYCLOHEXANE	PA	EPA 8260 D	DIISOPROPYLETHYER (DIPE, ISOPROPYL ETHER)	PA
EPA 8260 D	DIBROMOMETHANE (METHYLENE BROMIDE)	PA	EPA 8260 D	DICHLORODIFLUOROMETHANE (FREON-12)	PA
EPA 8260 D	ETHANOL	PA	EPA 8260 D	ETHYL METHACRYLATE	PA
EPA 8260 D	ETHYL-T-BUTYLETHYER (2-ETHOXY-2-METHYLPROPANE, ETBE)	PA	EPA 8260 D	ETHYLBENZENE	PA
EPA 8260 D	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA	EPA 8260 D	IODOMETHANE (METHYL IODIDE)	PA
EPA 8260 D	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	PA	EPA 8260 D	ISOPROPYLBENZENE	PA
EPA 8260 D	M+P-XYLENE	PA	EPA 8260 D	METHACRYLONITRILE	PA
EPA 8260 D	METHYL BROMIDE (BROMOMETHANE)	PA	EPA 8260 D	METHYL CHLORIDE (CHLOROMETHANE)	PA
EPA 8260 D	METHYL METHACRYLATE	PA	EPA 8260 D	METHYL TERT-BUTYL ETHER (MTBE)	PA
EPA 8260 D	METHYLENE CHLORIDE (DICHLOROMETHANE)	PA	EPA 8260 D	N-BUTYLBENZENE	PA
EPA 8260 D	N-PROPYLBENZENE	PA	EPA 8260 D	NAPHTHALENE	PA
EPA 8260 D	O-XYLENE	PA	EPA 8260 D	PENTACHLOROETHANE	PA
EPA 8260 D	PROPIONITRILE (ETHYL CYANIDE)	PA	EPA 8260 D	SEC-BUTYLBENZENE	PA

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SOLID AND CHEMICAL MATERIALS

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EPA 8260 D	STYRENE	PA	EPA 8260 D	T-AMYL METHYLETHYER (TAME)	PA
EPA 8260 D	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	PA	EPA 8260 D	TERT-BUTYL BENZENE	PA
EPA 8260 D	TETRACHLOROETHENE (PERCHLOROETHENE)	PA	EPA 8260 D	TOLUENE	PA
EPA 8260 D	TRANS-1,2-DICHLOROETHENE	PA	EPA 8260 D	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	PA
EPA 8260 D	TRANS-1,4-DICHLORO-2-BUTENE	PA	EPA 8260 D	TRICHLOROETHENE (TRICHLOROETHYLENE)	PA
EPA 8260 D	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	PA	EPA 8260 D	VINYL ACETATE	PA
EPA 8260 D	VINYL CHLORIDE (CHLOROETHENE)	PA	EPA 8260 D	XYLENE (TOTAL)	PA
EPA 8260 D - EXTENDED	CYCLOHEXANONE	PA	EPA 8260 D - EXTENDED	N-HEXANE	PA
EPA 8260 D - EXTENDED	TETRAHYDROFURAN (THF)	PA	EPA 8270 D	1,2,4,5-TETRACHLOROBENZENE	PA
EPA 8270 D	1,2,4-TRICHLOROBENZENE	PA	EPA 8270 D	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 8270 D	1,2-DINITROBENZENE (1,2-DNB)	PA	EPA 8270 D	1,2-DIPHENYLHYDRAZINE	PA
EPA 8270 D	1,3,5-TRINITROBENZENE (1,3,5-TNB)	PA	EPA 8270 D	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA
EPA 8270 D	1,3-DINITROBENZENE (1,3-DNB)	PA	EPA 8270 D	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 8270 D	1,4-DINITROBENZENE (1,4-DNB)	PA	EPA 8270 D	1,4-NAPHTHOQUINONE	PA
EPA 8270 D	1,4-PHENYLENEDIAMINE	PA	EPA 8270 D	1-CHLORONAPHTHALENE	PA
EPA 8270 D	1-NAPHTHYLAMINE	PA	EPA 8270 D	2,2'-OXYBIS(1-CHLOROPROPANE)	PA
EPA 8270 D	2,3,4,6-TETRACHLOROPHENOL	PA	EPA 8270 D	2,4,5-TRICHLOROPHENOL	PA
EPA 8270 D	2,4,6-TRICHLOROPHENOL	PA	EPA 8270 D	2,4-DICHLOROPHENOL	PA
EPA 8270 D	2,4-DIMETHYLPHENOL	PA	EPA 8270 D	2,4-DINITROPHENOL	PA
EPA 8270 D	2,4-DINITROTOLUENE (2,4-DNT)	PA	EPA 8270 D	2,6-DICHLOROPHENOL	PA
EPA 8270 D	2,6-DINITROTOLUENE (2,6-DNT)	PA	EPA 8270 D	2-ACETYLAMINOFLUORENE	PA
EPA 8270 D	2-CHLORONAPHTHALENE	PA	EPA 8270 D	2-CHLOROPHENOL	PA
EPA 8270 D	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	PA	EPA 8270 D	2-METHYLNAPHTHALENE	PA
EPA 8270 D	2-METHYLPHENOL (O-CRESOL)	PA	EPA 8270 D	2-NAPHTHYLAMINE	PA
EPA 8270 D	2-NITROANILINE	PA	EPA 8270 D	2-NITROPHENOL	PA
EPA 8270 D	2-PICOLINE (2-METHYLPYRIDINE)	PA	EPA 8270 D	3,3'-DICHLOROBENZIDINE	PA
EPA 8270 D	3,3'-DIMETHOXYBENZIDINE	PA	EPA 8270 D	3,3'-DIMETHYLBENZIDINE	PA
EPA 8270 D	3-METHYLCHOLANTHRENE	PA	EPA 8270 D	3-NITROANILINE	PA
EPA 8270 D	4,4'-METHYLENEBIS-2-CHLOROANIL INE	PA	EPA 8270 D	4-AMINOBIIPHENYL	PA
EPA 8270 D	4-BROMOPHENYL PHENYL ETHER (BDE-3)	PA	EPA 8270 D	4-CHLORO-3-METHYLPHENOL	PA
EPA 8270 D	4-CHLOROANILINE	PA	EPA 8270 D	4-CHLOROPHENYL PHENYLETHYER	PA



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EPA 8270 D	4-DIMETHYL AMINOAZOBENZENE	PA	EPA 8270 D	4-NITROANILINE	PA
EPA 8270 D	4-NITROPHENOL	PA	EPA 8270 D	4-NITROQUINOLINE-1-OXIDE	PA
EPA 8270 D	5-NITRO-O-TOLUIDINE	PA	EPA 8270 D	7,12-DIMETHYLBENZ(A) ANTHRACENE	PA
EPA 8270 D	A-A-DIMETHYLPHENETHYLAMINE	PA	EPA 8270 D	ACENAPHTHENE	PA
EPA 8270 D	ACENAPHTHYLENE	PA	EPA 8270 D	ACETOPHENONE	PA
EPA 8270 D	ANILINE	PA	EPA 8270 D	ANTHRACENE	PA
EPA 8270 D	ARAMITE	PA	EPA 8270 D	BENZIDINE	PA
EPA 8270 D	BENZO(A)ANTHRACENE	PA	EPA 8270 D	BENZO(A)PYRENE	PA
EPA 8270 D	BENZO(B)FLUORANTHENE	PA	EPA 8270 D	BENZO(G,H,I)PERYLENE	PA
EPA 8270 D	BENZO(K)FLUORANTHENE	PA	EPA 8270 D	BENZOIC ACID	PA
EPA 8270 D	BENZYL ALCOHOL	PA	EPA 8270 D	BIS(2-CHLOROETHOXY)METHANE	PA
EPA 8270 D	BIS(2-CHLOROETHYL) ETHER	PA	EPA 8270 D	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	PA
EPA 8270 D	BUTYL BENZYL PHTHALATE	PA	EPA 8270 D	CHLOROBENZILATE	PA
EPA 8270 D	CHRYSENE	PA	EPA 8270 D	DI-N-BUTYL PHTHALATE	PA
EPA 8270 D	DI-N-OCTYL PHTHALATE	PA	EPA 8270 D	DIALATE	PA
EPA 8270 D	DIBENZ(A, J) ACRIDINE	PA	EPA 8270 D	DIBENZO(A,H) ANTHRACENE	PA
EPA 8270 D	DIBENZOFURAN	PA	EPA 8270 D	DIETHYL PHTHALATE	PA
EPA 8270 D	DIMETHOATE	PA	EPA 8270 D	DIMETHYL PHTHALATE	PA
EPA 8270 D	DIPHENYLAMINE	PA	EPA 8270 D	DISULFOTON	PA
EPA 8270 D	ETHYL METHANESULFONATE	PA	EPA 8270 D	FAMPHUR	PA
EPA 8270 D	FLUORANTHENE	PA	EPA 8270 D	FLUORENE	PA
EPA 8270 D	HEXACHLOROBENZENE	PA	EPA 8270 D	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA
EPA 8270 D	HEXACHLOROCYCLOPENTADIENE	PA	EPA 8270 D	HEXACHLOROETHANE	PA
EPA 8270 D	HEXACHLOROPROPENE	PA	EPA 8270 D	INDENO(1,2,3-CD) PYRENE	PA
EPA 8270 D	ISODRIN	PA	EPA 8270 D	ISOPHORONE	PA
EPA 8270 D	ISOSAFROLE	PA	EPA 8270 D	KEPONE	PA
EPA 8270 D	METHAPYRILENE	PA	EPA 8270 D	METHYL METHANESULFONATE	PA
EPA 8270 D	METHYL PARATHION (PARATHION, METHYL)	PA	EPA 8270 D	N-NITROSO-DI-N-BUTYLAMINE	PA
EPA 8270 D	N-NITROSODI-N-PROPYLAMINE	PA	EPA 8270 D	N-NITROSODIETHYLAMINE	PA
EPA 8270 D	N-NITROSODIMETHYLAMINE	PA	EPA 8270 D	N-NITROSODIPHENYLAMINE	PA
EPA 8270 D	N-NITROSOMETHYLETHYLAMINE	PA	EPA 8270 D	N-NITROSOMORPHOLINE	PA
EPA 8270 D	N-NITROSOPIPERIDINE	PA	EPA 8270 D	N-NITROSOPYRROLIDINE	PA
EPA 8270 D	NAPHTHALENE	PA	EPA 8270 D	NITROBENZENE	PA
EPA 8270 D	O,O,O-TRIETHYL PHOSPHOROTHIOATE	PA	EPA 8270 D	O-TOLUIDINE (2-METHYLANILINE)	PA
EPA 8270 D	PARATHION (PARATHION - ETHYL)	PA	EPA 8270 D	PENTACHLOROBENZENE	PA

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EPA 8270 D	PENTACHLORONITROBENZENE	PA
EPA 8270 D	PHENACETIN	PA
EPA 8270 D	PHENOL	PA
EPA 8270 D	PHTHALIC ANHYDRIDE	PA
EPA 8270 D	PYRENE	PA
EPA 8270 D	SULFOTEPP (TETRAETHYL DITHIOPYROPHOSPHATE)	PA
EPA 8270 D	TRIS-(2,3-DIBROMOPROPYL) PHOSPHATE (TRIS-BP)	PA
EPA 8270 D - EXTENDED	1,2,3,4-TETRACHLOROBENZENE	PA
EPA 8270 D - EXTENDED	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA
EPA 8270 D - EXTENDED	3+4-METHYLPHENOL (M+P CRESOL)	PA
EPA 8270 D - EXTENDED	ATRAZINE	PA
EPA 8270 D - EXTENDED	BIS(2-ETHYLHEXYL)ADIPATE (DK(2-ETHYLHEXYL)ADIPATE)	PA
EPA 8270 D - EXTENDED	CARBAZOLE	PA
EPA 8270 D - EXTENDED	INDENE	PA
EPA 8270 D - EXTENDED	PYRIDINE	PA
EPA 8270 D SIM	2-METHYLNAPHTHALENE	PA
EPA 8270 D SIM	ACENAPHTHYLENE	PA
EPA 8270 D SIM	BENZO(A)ANTHRACENE	PA
EPA 8270 D SIM	BENZO(B)FLUORANTHENE	PA
EPA 8270 D SIM	BENZO(K)FLUORANTHENE	PA
EPA 8270 D SIM	DIBENZO(A,H) ANTHRACENE	PA
EPA 8270 D SIM	FLUORENE	PA
EPA 8270 D SIM	NAPHTHALENE	PA
EPA 8270 D SIM	PYRENE	PA
EPA 8270 D SIM - EXTENDED	1-METHYLNAPHTHALENE	PA
EPA 8290 A	1,2,3,4,6,7,8,9-OCTACHLORODIBENZ OFURAN (OCDF)	PA
EPA 8290 A	1,2,3,4,6,7,8-HEPTACHLORODIBENZ OFURAN (1,2,3,4,6,7,8-HPCDF)	PA
EPA 8290 A	1,2,3,4,7,8-HEXACHLORODIBENZO-P -DIOXIN (1,2,3,4,7,8-HXCDD)	PA
EPA 8290 A	1,2,3,6,7,8-HEXACHLORODIBENZO-P -DIOXIN (1,2,3,6,7,8-HXCDD)	PA
EPA 8290 A	1,2,3,7,8,9-HEXACHLORODIBENZO-P -DIOXIN (1,2,3,7,8,9-HXCDD)	PA
EPA 8290 A	1,2,3,7,8-PENTACHLORODIBENZO-P -DIOXIN (1,2,3,7,8-PCDD)	PA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8270 D	PENTACHLOROPHENOL	PA
EPA 8270 D	PHENANTHRENE	PA
EPA 8270 D	PHORATE	PA
EPA 8270 D	PRONAMIDE (KERB)	PA
EPA 8270 D	SAFROLE	PA
EPA 8270 D	THIONAZIN (ZINOPHOS)	PA
EPA 8270 D - EXTENDED	1,1'-BIPHENYL (BZ-0)	PA
EPA 8270 D - EXTENDED	1,2,3,5-TETRACHLOROBENZENE	PA
EPA 8270 D - EXTENDED	1-METHYLNAPHTHALENE	PA
EPA 8270 D - EXTENDED	6-METHYLCHRYSENE	PA
EPA 8270 D - EXTENDED	BENZALDEHYDE	PA
EPA 8270 D - EXTENDED	CAPROLACTAM	PA
EPA 8270 D - EXTENDED	DIBENZ(A,H) ACRIDINE	PA
EPA 8270 D - EXTENDED	N,N-DIMETHYLFORMAMIDE	PA
EPA 8270 D - EXTENDED	QUINOLINE	PA
EPA 8270 D SIM	ACENAPHTHENE	PA
EPA 8270 D SIM	ANTHRACENE	PA
EPA 8270 D SIM	BENZO(A)PYRENE	PA
EPA 8270 D SIM	BENZO(G,H,I)PERYLENE	PA
EPA 8270 D SIM	CHRYSENE	PA
EPA 8270 D SIM	FLUORANTHENE	PA
EPA 8270 D SIM	INDENO(1,2,3-CD) PYRENE	PA
EPA 8270 D SIM	PHENANTHRENE	PA
EPA 8270 D SIM - EXTENDED	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA
EPA 8290 A	1,2,3,4,6,7,8,9-OCTACHLORODIBENZ O-P-DIOXIN (OCDD)	PA
EPA 8290 A	1,2,3,4,6,7,8-HEPTACHLORODIBENZ O-P-DIOXIN (1,2,3,4,6,7,8-HPCDD)	PA
EPA 8290 A	1,2,3,4,7,8,9-HEPTACHLORODIBENZ OFURAN (1,2,3,4,7,8,9-HPCDF)	PA
EPA 8290 A	1,2,3,4,7,8-HEXACHLORODIBENZO-P -DIOXIN (1,2,3,4,7,8-HXCDF)	PA
EPA 8290 A	1,2,3,6,7,8-HEXACHLORODIBENZO-P -DIOXIN (1,2,3,6,7,8-HXCDF)	PA
EPA 8290 A	1,2,3,7,8,9-HEXACHLORODIBENZO-P -DIOXIN (1,2,3,7,8,9-HXCDF)	PA
EPA 8290 A	1,2,3,7,8-PENTACHLORODIBENZO-P -DIOXIN (1,2,3,7,8-PCDF)	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCL5 with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 10906

Eurofins Lancaster Laboratories Environmental, LLC
2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182
Effective Date: June 15, 2020
Expiration Date: June 14, 2021

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8290 A	2,3,4,6,7,8-HEXACHLORODIBENZOF URAN (2,3,4,6,7,8-HXCDF)	PA
EPA 8290 A	2,3,7,8-TETRACHLORODIBENZO- P-DIOXIN (2,3,7,8-TCDD)	PA
EPA 8315 A	2,5-DIMETHYLBENZALDEHYDE	PA
EPA 8315 A	BENZALDEHYDE	PA
EPA 8315 A	CROTONALDEHYDE	PA
EPA 8315 A	HEXANALDEHYDE (HEXANAL)	PA
EPA 8315 A	M-TOLUALDEHYDE (1,3-TOLUALDEHYDE)	PA
EPA 8315 A	P-TOLUALDEHYDE (1,4-TOLUALDEHYDE)	PA
EPA 8315 A	PROPIONALDEHYDE (PROPANAL)	PA
EPA 8330 B	1,3-DINITROBENZENE (1,3-DNB)	PA
EPA 8330 B	2,4-DINITROTOLUENE (2,4-DNT)	PA
EPA 8330 B	2-AMINO-4,6-DINITROTOLUENE (2-AM-DNT)	PA
EPA 8330 B	3,5-DINITROANILINE	PA
EPA 8330 B	4-AMINO-2,6-DINITROTOLUENE (4-AM-DNT)	PA
EPA 8330 B	METHYL-2,4,6-TRINITROPHENYLNIT RAMINE (TETRYL)	PA
EPA 8330 B	NITROGLYCERIN	PA
EPA 8330 B	PENTAERYTHRITOLTETRANITRATE (PETN)	PA
EPA 9012 B	TOTAL CYANIDE	PA
EPA 9050 A	CONDUCTIVITY	PA
EPA 9071 B	OIL AND GREASE (AS N-HEXANE EXTRACTABLE MATERIAL (HEM))	PA
SM 2540 G-2011	RESIDUE-TOTAL (TS)	PA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8290 A	2,3,4,7,8-PENTACHLORODIBENZOF URAN	PA
EPA 8290 A	2,3,7,8-TETRACHLORODIBENZOFUR AN (2,3,7,8-TCDF)	PA
EPA 8315 A	ACETALDEHYDE	PA
EPA 8315 A	BUTYLALDEHYDE (BUTANAL)	PA
EPA 8315 A	FORMALDEHYDE	PA
EPA 8315 A	ISOVALERALDEHYDE	PA
EPA 8315 A	O-TOLUALDEHYDE (1,2-TOLUALDEHYDE)	PA
EPA 8315 A	PENTANAL (VALERALDEHYDE)	PA
EPA 8330 B	1,3,5-TRINITROBENZENE (1,3,5-TNB)	PA
EPA 8330 B	2,4,6-TRINITROTOLUENE (2,4,6-TNT)	PA
EPA 8330 B	2,6-DINITROTOLUENE (2,6-DNT)	PA
EPA 8330 B	2-NITROTOLUENE	PA
EPA 8330 B	3-NITROTOLUENE	PA
EPA 8330 B	4-NITROTOLUENE	PA
EPA 8330 B	NITROBENZENE	PA
EPA 8330 B	OCTAHYDRO-1,3,5,7-TETRANITRO-1 ,3,5,7-TETRAZOCINE (HMX)	PA
EPA 8330 B	RDX (HEXAHYDRO-1,3,5-TRINITRO-1,3,5- TRIAZINE)	PA
EPA 9045 D	PH	PA
EPA 9066	TOTAL PHENOLICS	PA
EPA 9095 B	FREE LIQUID	PA
SM 2540 G-2011	RESIDUE-VOLATILE	PA



**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF GENERAL SERVICES
DIVISION OF CONSOLIDATED LABORATORY SERVICES**



Certifies that

**VA Laboratory ID#: 460193
Pace Analytical Services, LLC - West Columbia SC
106 Vantage Point Drive
West Columbia, SC 29172**

Owner: DAN WRIGHT

Responsible Official: DANIEL J. WRIGHT

Having met the requirements of 1 VAC 30-46 and
having been found compliant with the 2009 TNI Standard approved by The NELAC Institute
is hereby approved as an

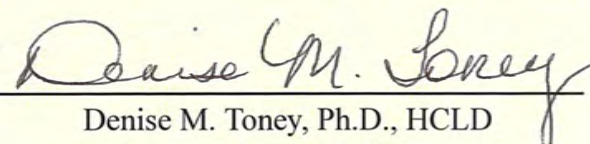
Accredited Environmental Laboratory

As more fully described in the attached Scope of Accreditation

Effective Date: **September 15, 2020**

Expiration Date: **September 14, 2021**

Certificate # 11031


Denise M. Toney, Ph.D., HCLD

DGS Deputy Director for Laboratories

Continued accreditation status depends on successful ongoing participation in the program.

Certificate to be conspicuously displayed at the laboratory.

Not valid unless accompanied by a valid Virginia Environmental Laboratory Accreditation Program (VELAP)

Scope of Accreditation.

Customers are urged to verify the laboratory's current accreditation status.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 11031

Pace Analytical Services, LLC - West Columbia SC

106 Vantage Point Drive
West Columbia, SC 29172

Virginia Laboratory ID: 460193

Effective Date: September 15, 2020

Expiration Date: September 14, 2021

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 1010	FLASHPOINT	FL	EPA 120.1	CONDUCTIVITY	FL
EPA 1631 E	MERCURY	FL	EPA 1664 B	OIL AND GREASE (AS N-HEXANE EXTRACTABLE MATERIAL (HEM))	FL
EPA 180.1 REV 2	TURBIDITY	FL	EPA 200.7 REV 4.4	ALUMINUM	FL
EPA 200.7 REV 4.4	ANTIMONY	FL	EPA 200.7 REV 4.4	ARSENIC	FL
EPA 200.7 REV 4.4	BARIUM	FL	EPA 200.7 REV 4.4	BERYLLIUM	FL
EPA 200.7 REV 4.4	BORON	FL	EPA 200.7 REV 4.4	CADMIUM	FL
EPA 200.7 REV 4.4	CALCIUM	FL	EPA 200.7 REV 4.4	CHROMIUM	FL
EPA 200.7 REV 4.4	COBALT	FL	EPA 200.7 REV 4.4	COPPER	FL
EPA 200.7 REV 4.4	IRON	FL	EPA 200.7 REV 4.4	LEAD	FL
EPA 200.7 REV 4.4	MAGNESIUM	FL	EPA 200.7 REV 4.4	MANGANESE	FL
EPA 200.7 REV 4.4	MOLYBDENUM	FL	EPA 200.7 REV 4.4	NICKEL	FL
EPA 200.7 REV 4.4	POTASSIUM	FL	EPA 200.7 REV 4.4	SELENIUM	FL
EPA 200.7 REV 4.4	SILVER	FL	EPA 200.7 REV 4.4	SODIUM	FL
EPA 200.7 REV 4.4	THALLIUM	FL	EPA 200.7 REV 4.4	TIN	FL
EPA 200.7 REV 4.4	VANADIUM	FL	EPA 200.7 REV 4.4	ZINC	FL
EPA 200.8 REV 5.4	ALUMINUM	FL	EPA 200.8 REV 5.4	ANTIMONY	FL
EPA 200.8 REV 5.4	ARSENIC	FL	EPA 200.8 REV 5.4	BARIUM	FL
EPA 200.8 REV 5.4	BERYLLIUM	FL	EPA 200.8 REV 5.4	CADMIUM	FL
EPA 200.8 REV 5.4	CHROMIUM	FL	EPA 200.8 REV 5.4	COBALT	FL
EPA 200.8 REV 5.4	COPPER	FL	EPA 200.8 REV 5.4	LEAD	FL
EPA 200.8 REV 5.4	MANGANESE	FL	EPA 200.8 REV 5.4	MOLYBDENUM	FL
EPA 200.8 REV 5.4	NICKEL	FL	EPA 200.8 REV 5.4	SELENIUM	FL
EPA 200.8 REV 5.4	SILVER	FL	EPA 200.8 REV 5.4	THALLIUM	FL
EPA 200.8 REV 5.4	VANADIUM	FL	EPA 200.8 REV 5.4	ZINC	FL
EPA 245.1 REV 3	MERCURY	FL	EPA 300.0 REV 2.1	BROMIDE	FL
EPA 300.0 REV 2.1	CHLORIDE	FL	EPA 300.0 REV 2.1	FLUORIDE	FL
EPA 300.0 REV 2.1	NITRATE AS N	FL	EPA 300.0 REV 2.1	NITRITE AS N	FL
EPA 300.0 REV 2.1	SULFATE	FL	EPA 335.4 REV 1.0	CYANIDE	FL
EPA 350.1 REV 2	AMMONIA AS N	FL	EPA 351.2 REV 2	KJELDAHL NITROGEN - TOTAL (TKN)	FL
EPA 353.2 REV 2	NITRATE AS N	FL	EPA 353.2 REV 2	NITRATE/NITRITE	FL
EPA 353.2 REV 2	NITRITE AS N	FL	EPA 420.4 REV 1	TOTAL PHENOLICS	FL
EPA 6010 C	ALUMINUM	FL	EPA 6010 C	ANTIMONY	FL
EPA 6010 C	ARSENIC	FL	EPA 6010 C	BARIUM	FL
EPA 6010 C	BERYLLIUM	FL	EPA 6010 C	BORON	FL
EPA 6010 C	CADMIUM	FL	EPA 6010 C	CALCIUM	FL
EPA 6010 C	CHROMIUM	FL	EPA 6010 C	COBALT	FL
EPA 6010 C	COPPER	FL	EPA 6010 C	IRON	FL

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 11031

Pace Analytical Services, LLC - West Columbia SC

106 Vantage Point Drive
West Columbia, SC 29172

Virginia Laboratory ID: 460193

Effective Date: September 15, 2020

Expiration Date: September 14, 2021

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 6010 C	LEAD	FL	EPA 6010 C	MAGNESIUM	FL
EPA 6010 C	MANGANESE	FL	EPA 6010 C	MOLYBDENUM	FL
EPA 6010 C	NICKEL	FL	EPA 6010 C	POTASSIUM	FL
EPA 6010 C	SELENIUM	FL	EPA 6010 C	SILVER	FL
EPA 6010 C	SODIUM	FL	EPA 6010 C	THALLIUM	FL
EPA 6010 C	TIN	FL	EPA 6010 C	TITANIUM	FL
EPA 6010 C	VANADIUM	FL	EPA 6010 C	ZINC	FL
EPA 6010 D	ALUMINUM	FL	EPA 6010 D	ANTIMONY	FL
EPA 6010 D	ARSENIC	FL	EPA 6010 D	BARIUM	FL
EPA 6010 D	BERYLLIUM	FL	EPA 6010 D	BORON	FL
EPA 6010 D	CADMIUM	FL	EPA 6010 D	CALCIUM	FL
EPA 6010 D	CHROMIUM	FL	EPA 6010 D	COBALT	FL
EPA 6010 D	COPPER	FL	EPA 6010 D	IRON	FL
EPA 6010 D	LEAD	FL	EPA 6010 D	MAGNESIUM	FL
EPA 6010 D	MANGANESE	FL	EPA 6010 D	MOLYBDENUM	FL
EPA 6010 D	NICKEL	FL	EPA 6010 D	POTASSIUM	FL
EPA 6010 D	SELENIUM	FL	EPA 6010 D	SILVER	FL
EPA 6010 D	SODIUM	FL	EPA 6010 D	THALLIUM	FL
EPA 6010 D	TIN	FL	EPA 6010 D	TITANIUM	FL
EPA 6010 D	VANADIUM	FL	EPA 6010 D	ZINC	FL
EPA 6020 A	ALUMINUM	FL	EPA 6020 A	ANTIMONY	FL
EPA 6020 A	ARSENIC	FL	EPA 6020 A	BARIUM	FL
EPA 6020 A	BERYLLIUM	FL	EPA 6020 A	CADMIUM	FL
EPA 6020 A	CALCIUM	FL	EPA 6020 A	CHROMIUM	FL
EPA 6020 A	COBALT	FL	EPA 6020 A	COPPER	FL
EPA 6020 A	IRON	FL	EPA 6020 A	LEAD	FL
EPA 6020 A	MAGNESIUM	FL	EPA 6020 A	MANGANESE	FL
EPA 6020 A	NICKEL	FL	EPA 6020 A	POTASSIUM	FL
EPA 6020 A	SELENIUM	FL	EPA 6020 A	SILVER	FL
EPA 6020 A	SODIUM	FL	EPA 6020 A	THALLIUM	FL
EPA 6020 A	VANADIUM	FL	EPA 6020 A	ZINC	FL
EPA 6020 A - EXTENDED	BORON	FL	EPA 6020 A - EXTENDED	MOLYBDENUM	FL
EPA 6020 A - EXTENDED	TIN	FL	EPA 6020 A - EXTENDED	TITANIUM	FL
EPA 6020 B	ALUMINUM	FL	EPA 6020 B	ANTIMONY	FL
EPA 6020 B	ARSENIC	FL	EPA 6020 B	BARIUM	FL
EPA 6020 B	BERYLLIUM	FL	EPA 6020 B	CADMIUM	FL
EPA 6020 B	CALCIUM	FL	EPA 6020 B	CHROMIUM	FL
EPA 6020 B	COBALT	FL	EPA 6020 B	COPPER	FL



Commonwealth of Virginia
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Scope of Accreditation

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Virginia Laboratory ID: 460193

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NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 6020 B	IRON	FL	EPA 6020 B	LEAD	FL
EPA 6020 B	MAGNESIUM	FL	EPA 6020 B	MANGANESE	FL
EPA 6020 B	NICKEL	FL	EPA 6020 B	POTASSIUM	FL
EPA 6020 B	SELENIUM	FL	EPA 6020 B	SILVER	FL
EPA 6020 B	SODIUM	FL	EPA 6020 B	THALLIUM	FL
EPA 6020 B	TIN	FL	EPA 6020 B	VANADIUM	FL
EPA 6020 B	ZINC	FL	EPA 6020 B - EXTENDED	BORON	FL
EPA 6020 B - EXTENDED	TITANIUM	FL	EPA 608.3	4,4'-DDD	FL
EPA 608.3	4,4'-DDE	FL	EPA 608.3	4,4'-DDT	FL
EPA 608.3	ALDRIN	FL	EPA 608.3	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	FL
EPA 608.3	AROCLOR-1016 (PCB-1016)	FL	EPA 608.3	AROCLOR-1221 (PCB-1221)	FL
EPA 608.3	AROCLOR-1232 (PCB-1232)	FL	EPA 608.3	AROCLOR-1242 (PCB-1242)	FL
EPA 608.3	AROCLOR-1248 (PCB-1248)	FL	EPA 608.3	AROCLOR-1254 (PCB-1254)	FL
EPA 608.3	AROCLOR-1260 (PCB-1260)	FL	EPA 608.3	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	FL
EPA 608.3	CHLORDANE, TOTAL	FL	EPA 608.3	DELTA-BHC	FL
EPA 608.3	DIELDRIN	FL	EPA 608.3	ENDOSULFAN I	FL
EPA 608.3	ENDOSULFAN II	FL	EPA 608.3	ENDOSULFAN SULFATE	FL
EPA 608.3	ENDRIN	FL	EPA 608.3	ENDRIN ALDEHYDE	FL
EPA 608.3	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	FL	EPA 608.3	HEPTACHLOR	FL
EPA 608.3	HEPTACHLOR EPOXIDE	FL	EPA 608.3	TOXAPHENE (CHLORINATED CAMPHENE)	FL
EPA 624.1	1,1,1-TRICHLOROETHANE	FL	EPA 624.1	1,1,2,2-TETRACHLOROETHANE	FL
EPA 624.1	1,1,2-TRICHLOROETHANE	FL	EPA 624.1	1,1-DICHLOROETHANE	FL
EPA 624.1	1,1-DICHLOROETHYLENE	FL	EPA 624.1	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	FL
EPA 624.1	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	FL	EPA 624.1	1,2-DICHLOROPROPANE	FL
EPA 624.1	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	FL	EPA 624.1	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	FL
EPA 624.1	2-CHLOROETHYL VINYL ETHER	FL	EPA 624.1	BENZENE	FL
EPA 624.1	BROMODICHLOROMETHANE	FL	EPA 624.1	BROMOFORM	FL
EPA 624.1	CARBON TETRACHLORIDE	FL	EPA 624.1	CHLOROBENZENE	FL
EPA 624.1	CHLOROETHANE (ETHYL CHLORIDE)	FL	EPA 624.1	CHLOROFORM	FL
EPA 624.1	CIS-1,3-DICHLOROPROPENE	FL	EPA 624.1	ETHYLBENZENE	FL
EPA 624.1	METHYL BROMIDE (BROMOMETHANE)	FL	EPA 624.1	METHYL CHLORIDE (CHLOROMETHANE)	FL

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 11031

Pace Analytical Services, LLC - West Columbia SC
106 Vantage Point Drive
West Columbia, SC 29172

Virginia Laboratory ID: 460193
Effective Date: September 15, 2020
Expiration Date: September 14, 2021

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 624.1	METHYLENE CHLORIDE (DICHLOROMETHANE)	FL	EPA 624.1	TETRACHLOROETHENE (PERCHLOROETHENE)	FL
EPA 624.1	TOLUENE	FL	EPA 624.1	TRANS-1,2-DICHLOROETHENE	FL
EPA 624.1	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	FL	EPA 624.1	TRICHLOROETHENE (TRICHLOROETHYLENE)	FL
EPA 624.1	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	FL	EPA 624.1	VINYL CHLORIDE (CHLOROETHENE)	FL
EPA 624.1	XYLENE (TOTAL)	FL	EPA 625.1	1,2,4-TRICHLOROBENZENE	FL
EPA 625.1	2,4,6-TRICHLOROPHENOL	FL	EPA 625.1	2,4-DICHLOROPHENOL	FL
EPA 625.1	2,4-DIMETHYLPHENOL	FL	EPA 625.1	2,4-DINITROPHENOL	FL
EPA 625.1	2,4-DINITROTOLUENE (2,4-DNT)	FL	EPA 625.1	2,6-DINITROTOLUENE (2,6-DNT)	FL
EPA 625.1	2-CHLORONAPHTHALENE	FL	EPA 625.1	2-CHLOROPHENOL	FL
EPA 625.1	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	FL	EPA 625.1	2-NITROPHENOL	FL
EPA 625.1	3,3'-DICHLOROBENZIDINE	FL	EPA 625.1	4-BROMOPHENYL PHENYL ETHER (BDE-3)	FL
EPA 625.1	4-CHLORO-3-METHYLPHENOL	FL	EPA 625.1	4-CHLOROPHENYL PHENYLETHER	FL
EPA 625.1	4-NITROPHENOL	FL	EPA 625.1	ACENAPHTHENE	FL
EPA 625.1	ACENAPHTHYLENE	FL	EPA 625.1	ANTHRACENE	FL
EPA 625.1	BENZIDINE	FL	EPA 625.1	BENZO(A)ANTHRACENE	FL
EPA 625.1	BENZO(A)PYRENE	FL	EPA 625.1	BENZO(B)FLUORANTHENE	FL
EPA 625.1	BENZO(G,H,I)PERYLENE	FL	EPA 625.1	BENZO(K)FLUORANTHENE	FL
EPA 625.1	BIS(2-CHLOROETHOXY)METHANE	FL	EPA 625.1	BIS(2-CHLOROETHYL) ETHER	FL
EPA 625.1	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	FL	EPA 625.1	BUTYL BENZYL PHTHALATE	FL
EPA 625.1	CHRYSENE	FL	EPA 625.1	DI-N-BUTYL PHTHALATE	FL
EPA 625.1	DI-N-OCTYL PHTHALATE	FL	EPA 625.1	DIBENZO(A,H) ANTHRACENE	FL
EPA 625.1	DIETHYL PHTHALATE	FL	EPA 625.1	DIMETHYL PHTHALATE	FL
EPA 625.1	FLUORANTHENE	FL	EPA 625.1	FLUORENE	FL
EPA 625.1	HEXACHLOROBENZENE	FL	EPA 625.1	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	FL
EPA 625.1	HEXACHLOROCYCLOPENTADIENE	FL	EPA 625.1	HEXACHLOROETHANE	FL
EPA 625.1	INDENO(1,2,3-CD) PYRENE	FL	EPA 625.1	ISOPHORONE	FL
EPA 625.1	N-NITROSODI-N-PROPYLAMINE	FL	EPA 625.1	N-NITROSODIMETHYLAMINE	FL
EPA 625.1	N-NITROSODIPHENYLAMINE	FL	EPA 625.1	NAPHTHALENE	FL
EPA 625.1	NITROBENZENE	FL	EPA 625.1	PENTACHLOROPHENOL	FL
EPA 625.1	PHENANTHRENE	FL	EPA 625.1	PHENOL	FL
EPA 625.1	PYRENE	FL	EPA 7196 A	CHROMIUM VI	FL
EPA 7470 A	MERCURY	FL	EPA 8011	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	FL



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 11031

Pace Analytical Services, LLC - West Columbia SC

106 Vantage Point Drive
West Columbia, SC 29172

Virginia Laboratory ID: 460193

Effective Date: September 15, 2020

Expiration Date: September 14, 2021

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 8011	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	FL	EPA 8015 C	DIESEL RANGE ORGANICS (DRO)	FL
EPA 8015 C	GASOLINE RANGE ORGANICS (GRO)	FL	EPA 8081 B	4,4'-DDD	FL
EPA 8081 B	4,4'-DDE	FL	EPA 8081 B	4,4'-DDT	FL
EPA 8081 B	ALDRIN	FL	EPA 8081 B	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	FL
EPA 8081 B	ALPHA-CHLORDANE (CIS-CHLORDANE)	FL	EPA 8081 B	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	FL
EPA 8081 B	CHLORDANE, TOTAL	FL	EPA 8081 B	DELTA-BHC	FL
EPA 8081 B	DIELDRIN	FL	EPA 8081 B	ENDOSULFAN I	FL
EPA 8081 B	ENDOSULFAN II	FL	EPA 8081 B	ENDOSULFAN SULFATE	FL
EPA 8081 B	ENDRIN	FL	EPA 8081 B	ENDRIN ALDEHYDE	FL
EPA 8081 B	ENDRIN KETONE	FL	EPA 8081 B	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	FL
EPA 8081 B	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	FL	EPA 8081 B	HEPTACHLOR	FL
EPA 8081 B	HEPTACHLOR EPOXIDE	FL	EPA 8081 B	METHOXYCHLOR	FL
EPA 8081 B	TOXAPHENE (CHLORINATED CAMPHENE)	FL	EPA 8082 A	AROCLOR-1016 (PCB-1016)	FL
EPA 8082 A	AROCLOR-1221 (PCB-1221)	FL	EPA 8082 A	AROCLOR-1232 (PCB-1232)	FL
EPA 8082 A	AROCLOR-1242 (PCB-1242)	FL	EPA 8082 A	AROCLOR-1248 (PCB-1248)	FL
EPA 8082 A	AROCLOR-1254 (PCB-1254)	FL	EPA 8082 A	AROCLOR-1260 (PCB-1260)	FL
EPA 8082 A - EXTENDED	AROCLOR-1262 (PCB-1262)	FL	EPA 8082 A - EXTENDED	AROCLOR-1268 (PCB-1268)	FL
EPA 8151 A	2,4,5-T	FL	EPA 8151 A	2,4-D	FL
EPA 8151 A	2,4-DB	FL	EPA 8151 A	DICAMBA	FL
EPA 8151 A	DICHLOROPROP (DICHLORPROP)	FL	EPA 8151 A	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	FL
EPA 8151 A	PENTACHLOROPHENOL	FL	EPA 8151 A	SILVEX (2,4,5-TP)	FL
EPA 8260 D	1,1,1,2-TETRACHLOROETHANE	FL	EPA 8260 D	1,1,1-TRICHLOROETHANE	FL
EPA 8260 D	1,1,2,2-TETRACHLOROETHANE	FL	EPA 8260 D	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113)	FL
EPA 8260 D	1,1,2-TRICHLOROETHANE	FL	EPA 8260 D	1,1-DICHLOROETHANE	FL
EPA 8260 D	1,1-DICHLOROETHYLENE	FL	EPA 8260 D	1,1-DICHLOROPROPENE	FL
EPA 8260 D	1,2,3-TRICHLOROBENZENE	FL	EPA 8260 D	1,2,3-TRICHLOROPROPANE	FL
EPA 8260 D	1,2,4-TRICHLOROBENZENE	FL	EPA 8260 D	1,2,4-TRIMETHYLBENZENE	FL
EPA 8260 D	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	FL	EPA 8260 D	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	FL
EPA 8260 D	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	FL	EPA 8260 D	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	FL

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Expiration Date: September 14, 2021

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 8260 D	1,2-DICHLOROPROPANE	FL	EPA 8260 D	1,3,5-TRIMETHYLBENZENE	FL
EPA 8260 D	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	FL	EPA 8260 D	1,3-DICHLOROPROPANE	FL
EPA 8260 D	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	FL	EPA 8260 D	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	FL
EPA 8260 D	2,2-DICHLOROPROPANE	FL	EPA 8260 D	2-BUTANONE (METHYL ETHYL KETONE, MEK)	FL
EPA 8260 D	2-CHLOROETHYL VINYL ETHER	FL	EPA 8260 D	2-CHLOROTOLUENE	FL
EPA 8260 D	2-HEXANONE	FL	EPA 8260 D	4-CHLOROTOLUENE	FL
EPA 8260 D	4-ISOPROPYLTOLUENE (P-CYME, P-ISOPROPYLTOLUENE)	FL	EPA 8260 D	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	FL
EPA 8260 D	ACETONE	FL	EPA 8260 D	ACETONITRILE	FL
EPA 8260 D	ACROLEIN (PROPENAL)	FL	EPA 8260 D	ACRYLONITRILE	FL
EPA 8260 D	ALLYL ALCOHOL	FL	EPA 8260 D	ALLYL CHLORIDE (3-CHLOROPROPENE)	FL
EPA 8260 D	BENZENE	FL	EPA 8260 D	BENZYL CHLORIDE	FL
EPA 8260 D	BROMOBENZENE	FL	EPA 8260 D	BROMOCHLOROMETHANE	FL
EPA 8260 D	BROMODICHLOROMETHANE	FL	EPA 8260 D	BROMOFORM	FL
EPA 8260 D	CARBON DISULFIDE	FL	EPA 8260 D	CARBON TETRACHLORIDE	FL
EPA 8260 D	CHLOROBENZENE	FL	EPA 8260 D	CHLORODIBROMOMETHANE	FL
EPA 8260 D	CHLOROETHANE (ETHYL CHLORIDE)	FL	EPA 8260 D	CHLOROFORM	FL
EPA 8260 D	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	FL	EPA 8260 D	CIS-1,2-DICHLOROETHYLENE	FL
EPA 8260 D	CIS-1,3-DICHLOROPROPENE	FL	EPA 8260 D	CYCLOHEXANE	FL
EPA 8260 D	DI-ISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	FL	EPA 8260 D	DIBROMOMETHANE (METHYLENE BROMIDE)	FL
EPA 8260 D	DICHLORODIFLUOROMETHANE (FREON-12)	FL	EPA 8260 D	DIETHYL ETHER	FL
EPA 8260 D	ETHYL ACETATE	FL	EPA 8260 D	ETHYL METHACRYLATE	FL
EPA 8260 D	ETHYLBENZENE	FL	EPA 8260 D	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	FL
EPA 8260 D	HEXACHLOROETHANE	FL	EPA 8260 D	IODOMETHANE (METHYL IODIDE)	FL
EPA 8260 D	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	FL	EPA 8260 D	ISOPROPYLBENZENE	FL
EPA 8260 D	M+P-XYLENE	FL	EPA 8260 D	METHACRYLONITRILE	FL
EPA 8260 D	METHYL ACETATE	FL	EPA 8260 D	METHYL BROMIDE (BROMOMETHANE)	FL
EPA 8260 D	METHYL CHLORIDE (CHLOROMETHANE)	FL	EPA 8260 D	METHYL METHACRYLATE	FL
EPA 8260 D	METHYL TERT-BUTYL ETHER (MTBE)	FL	EPA 8260 D	METHYLCYCLOHEXANE	FL
EPA 8260 D	METHYLENE CHLORIDE (DICHLOROMETHANE)	FL	EPA 8260 D	N-BUTYLBENZENE	FL
EPA 8260 D	N-PROPYLBENZENE	FL			

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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 8260 D	NAPHTHALENE	FL	EPA 8260 D	O-XYLENE	FL
EPA 8260 D	PENTACHLOROETHANE	FL	EPA 8260 D	PROPIONITRILE (ETHYL CYANIDE)	FL
EPA 8260 D	SEC-BUTYLBENZENE	FL	EPA 8260 D	STYRENE	FL
EPA 8260 D	TERT-BUTYLBENZENE	FL	EPA 8260 D	TETRACHLOROETHENE (PERCHLOROETHENE)	FL
EPA 8260 D	TOLUENE	FL	EPA 8260 D	TRANS-1,2-DICHLOROETHENE	FL
EPA 8260 D	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	FL	EPA 8260 D	TRANS-1,4-DICHLORO-2-BUTENE	FL
EPA 8260 D	TRICHLOROETHENE (TRICHLOROETHYLENE)	FL	EPA 8260 D	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	FL
EPA 8260 D	VINYL ACETATE	FL	EPA 8260 D	VINYL CHLORIDE (CHLOROETHENE)	FL
EPA 8260 D	XYLENE (TOTAL)	FL	EPA 8260 D - EXTENDED	CYCLOHEXANONE	FL
EPA 8260 D - EXTENDED	TETRAHYDROFURAN (THF)	FL	EPA 8270 E	1,1'-BIPHENYL (BZ-0)	FL
EPA 8270 E	1,2,4,5-TETRACHLOROBENZENE	FL	EPA 8270 E	1,2,4-TRICHLOROBENZENE	FL
EPA 8270 E	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	FL	EPA 8270 E	1,2-DIPHENYLHYDRAZINE	FL
EPA 8270 E	1,3,5-TRINITROBENZENE (1,3,5-TNB)	FL	EPA 8270 E	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	FL
EPA 8270 E	1,3-DINITROBENZENE (1,3-DNB)	FL	EPA 8270 E	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	FL
EPA 8270 E	1,4-NAPHTHOQUINONE	FL	EPA 8270 E	1,4-PHENYLENEDIAMINE	FL
EPA 8270 E	1-CHLORONAPHTHALENE	FL	EPA 8270 E	1-METHYLNAPHTHALENE	FL
EPA 8270 E	1-NAPHTHYLAMINE	FL	EPA 8270 E	2,3,4,6-TETRACHLOROPHENOL	FL
EPA 8270 E	2,4,5-TRICHLOROPHENOL	FL	EPA 8270 E	2,4,6-TRICHLOROPHENOL	FL
EPA 8270 E	2,4-DICHLOROPHENOL	FL	EPA 8270 E	2,4-DIMETHYLPHENOL	FL
EPA 8270 E	2,4-DINITROPHENOL	FL	EPA 8270 E	2,4-DINITROTOLUENE (2,4-DNT)	FL
EPA 8270 E	2,6-DICHLOROPHENOL	FL	EPA 8270 E	2,6-DINITROTOLUENE (2,6-DNT)	FL
EPA 8270 E	2-ACETYLAMINOFLUORENE	FL	EPA 8270 E	2-CHLORONAPHTHALENE	FL
EPA 8270 E	2-CHLOROPHENOL	FL	EPA 8270 E	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	FL
EPA 8270 E	2-METHYLNAPHTHALENE	FL	EPA 8270 E	2-METHYLPHENOL (O-CRESOL)	FL
EPA 8270 E	2-NAPHTHYLAMINE	FL	EPA 8270 E	2-NITROANILINE	FL
EPA 8270 E	2-NITROPHENOL	FL	EPA 8270 E	2-PICOLINE (2-METHYLPYRIDINE)	FL
EPA 8270 E	3+4-METHYLPHENOL (M+P CRESOL)	FL	EPA 8270 E	3,3'-DICHLOROBENZIDINE	FL
EPA 8270 E	3,3'-DIMETHOXYBENZIDINE	FL	EPA 8270 E	3-METHYLCHOLANTHRENE	FL
EPA 8270 E	3-NITROANILINE	FL	EPA 8270 E	4-AMINOBIIPHENYL	FL
EPA 8270 E	4-BROMOPHENYL PHENYL ETHER (BDE-3)	FL	EPA 8270 E	4-CHLORO-3-METHYLPHENOL	FL
EPA 8270 E	4-CHLOROANILINE	FL	EPA 8270 E	4-CHLOROPHENYL PHENYLETHER	FL
EPA 8270 E	4-NITROANILINE	FL	EPA 8270 E	4-NITROPHENOL	FL

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NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8270 E	4-NITROQUINOLINE-1-OXIDE	FL	EPA 8270 E	5-NITRO-O-TOLUIDINE	FL
EPA 8270 E	7,12-DIMETHYLBENZ(A) ANTHRACENE	FL	EPA 8270 E	ACENAPHTHENE	FL
EPA 8270 E	ACENAPHTHYLENE	FL	EPA 8270 E	ACETOPHENONE	FL
EPA 8270 E	ANILINE	FL	EPA 8270 E	ANTHRACENE	FL
EPA 8270 E	ARAMITE	FL	EPA 8270 E	ATRAZINE	FL
EPA 8270 E	BENZALDEHYDE	FL	EPA 8270 E	BENZIDINE	FL
EPA 8270 E	BENZO(A)ANTHRACENE	FL	EPA 8270 E	BENZO(A)PYRENE	FL
EPA 8270 E	BENZO(B)FLUORANTHENE	FL	EPA 8270 E	BENZO(G,H,I)PERYLENE	FL
EPA 8270 E	BENZO(K)FLUORANTHENE	FL	EPA 8270 E	BENZOIC ACID	FL
EPA 8270 E	BENZYL ALCOHOL	FL	EPA 8270 E	BIS(2-CHLOROETHOXY)METHANE	FL
EPA 8270 E	BIS(2-CHLOROETHYL) ETHER	FL	EPA 8270 E	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	FL
EPA 8270 E	BUTYL BENZYL PHTHALATE	FL	EPA 8270 E	CAPROLACTAM	FL
EPA 8270 E	CARBAZOLE	FL	EPA 8270 E	CHLOROBENZILATE	FL
EPA 8270 E	CHRYSENE	FL	EPA 8270 E	DI-N-BUTYL PHTHALATE	FL
EPA 8270 E	DI-N-OCTYL PHTHALATE	FL	EPA 8270 E	DIALATE	FL
EPA 8270 E	DIBENZO(A,H) ANTHRACENE	FL	EPA 8270 E	DIBENZOFURAN	FL
EPA 8270 E	DIETHYL PHTHALATE	FL	EPA 8270 E	DIMETHOATE	FL
EPA 8270 E	DIMETHYL PHTHALATE	FL	EPA 8270 E	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	FL
EPA 8270 E	DISULFOTON	FL	EPA 8270 E	ETHYL METHANESULFONATE	FL
EPA 8270 E	FAMPHUR	FL	EPA 8270 E	FLUORANTHENE	FL
EPA 8270 E	FLUORENE	FL	EPA 8270 E	HEXACHLOROBENZENE	FL
EPA 8270 E	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	FL	EPA 8270 E	HEXACHLOROCYCLOPENTADIENE	FL
EPA 8270 E	HEXACHLOROETHANE	FL	EPA 8270 E	HEXACHLOROPROPENE	FL
EPA 8270 E	INDENO(1,2,3-CD) PYRENE	FL	EPA 8270 E	ISODRIN	FL
EPA 8270 E	ISOPHORONE	FL	EPA 8270 E	ISOSAFROLE	FL
EPA 8270 E	KEPONE	FL	EPA 8270 E	METHAPYRILENE	FL
EPA 8270 E	METHYL METHANESULFONATE	FL	EPA 8270 E	METHYL PARATHION (PARATHION, METHYL)	FL
EPA 8270 E	N-NITROSO-DI-N-BUTYLAMINE	FL	EPA 8270 E	N-NITROSODI-N-PROPYLAMINE	FL
EPA 8270 E	N-NITROSODIETHYLAMINE	FL	EPA 8270 E	N-NITROSODIMETHYLAMINE	FL
EPA 8270 E	N-NITROSODIPHENYLAMINE	FL	EPA 8270 E	N-NITROSOMETHYLETHYLAMINE	FL
EPA 8270 E	N-NITROSOMORPHOLINE	FL	EPA 8270 E	N-NITROSOPIPERIDINE	FL
EPA 8270 E	N-NITROSOPYRROLIDINE	FL	EPA 8270 E	NAPHTHALENE	FL
EPA 8270 E	NITROBENZENE	FL	EPA 8270 E	O,O,O-TRIETHYL PHOSPHOROTHIOATE	FL
EPA 8270 E	PARATHION (PARATHION - ETHYL)	FL	EPA 8270 E	PENTACHLOROBENZENE	FL

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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8270 E	PENTACHLORONITROBENZENE	FL
EPA 8270 E	PHENACETIN	FL
EPA 8270 E	PHENOL	FL
EPA 8270 E	PRONAMIDE (KERB)	FL
EPA 8270 E	PYRIDINE	FL
EPA 8270 E	SULFOTEPP (TETRAETHYL DITHIOPYROPHOSPHATE)	FL
EPA 8270 E - EXTENDED	2,2'-OXYBIS(1-CHLOROPROPANE)	FL
EPA 8270 E - EXTENDED	N-DECANE	FL
EPA 8270 E - EXTENDED	PENTACHLOROETHANE	FL
EPA 9040 C	PH	FL
EPA 9056 A	CHLORIDE	FL
EPA 9056 A	NITRATE AS N	FL
EPA 9056 A	SULFATE	FL
SM 2120 B-2011	COLOR	FL
SM 2340 C-2011	TOTAL HARDNESS AS CaCO ₃	FL
SM 2540 C-2011	RESIDUE-FILTERABLE (TDS)	FL
SM 3500-CR B-2011	CHROMIUM VI	FL
SM 5210 B-2011	BIOCHEMICAL OXYGEN DEMAND (BOD)	FL
SM 5220 D-2011	CHEMICAL OXYGEN DEMAND (COD)	FL

METHOD	ANALYTE	PRIMARY
EPA 8270 E	PENTACHLOROPHENOL	FL
EPA 8270 E	PHENANTHRENE	FL
EPA 8270 E	PHORATE	FL
EPA 8270 E	PYRENE	FL
EPA 8270 E	SAFROLE	FL
EPA 8270 E	THIONAZIN (ZINOPHOS, DIETHYL-O-2-PYRAZINYL PHOSPHOROTHIONATE)	FL
EPA 8270 E - EXTENDED	4-DIMETHYL AMINOAZOBENZENE	FL
EPA 8270 E - EXTENDED	N-OCTADECANE	FL
EPA 9012 B	TOTAL CYANIDE	FL
EPA 9056 A	BROMIDE	FL
EPA 9056 A	FLUORIDE	FL
EPA 9056 A	NITRITE AS N	FL
EPA 9065	TOTAL PHENOLICS	FL
SM 2320 B-2011	ALKALINITY AS CaCO ₃	FL
SM 2540 B-2011	RESIDUE-TOTAL (TS)	FL
SM 2540 D-2011	RESIDUE-NONFILTERABLE (TSS)	FL
SM 4500-S ₂ -F-2011	SULFIDE	FL
SM 5210 B-2011	CARBONACEOUS BOD (CBOD)	FL
SM 5310 C-2011	TOTAL ORGANIC CARBON (TOC)	FL

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 1010 A	FLASHPOINT	FL
EPA 1312	PREP: SYNTHETIC PRECIPITATION LEACHING PROCEDURE	FL
EPA 6010 C	ANTIMONY	FL
EPA 6010 C	BARIUM	FL
EPA 6010 C	BORON	FL
EPA 6010 C	CALCIUM	FL
EPA 6010 C	COBALT	FL
EPA 6010 C	IRON	FL
EPA 6010 C	MAGNESIUM	FL
EPA 6010 C	MOLYBDENUM	FL
EPA 6010 C	POTASSIUM	FL
EPA 6010 C	SILVER	FL
EPA 6010 C	THALLIUM	FL

METHOD	ANALYTE	PRIMARY
EPA 1311	PREP: TOXICITY CHARACTERISTIC LEACHING PROCEDURE	FL
EPA 6010 C	ALUMINUM	FL
EPA 6010 C	ARSENIC	FL
EPA 6010 C	BERYLLIUM	FL
EPA 6010 C	CADMIUM	FL
EPA 6010 C	CHROMIUM	FL
EPA 6010 C	COPPER	FL
EPA 6010 C	LEAD	FL
EPA 6010 C	MANGANESE	FL
EPA 6010 C	NICKEL	FL
EPA 6010 C	SELENIUM	FL
EPA 6010 C	SODIUM	FL
EPA 6010 C	TIN	FL



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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 6010 C	TITANIUM	FL	EPA 6010 C	VANADIUM	FL
EPA 6010 C	ZINC	FL	EPA 6010 D	ALUMINUM	FL
EPA 6010 D	ANTIMONY	FL	EPA 6010 D	ARSENIC	FL
EPA 6010 D	BARIUM	FL	EPA 6010 D	BERYLLIUM	FL
EPA 6010 D	BORON	FL	EPA 6010 D	CADMIUM	FL
EPA 6010 D	CALCIUM	FL	EPA 6010 D	CHROMIUM	FL
EPA 6010 D	COBALT	FL	EPA 6010 D	COPPER	FL
EPA 6010 D	IRON	FL	EPA 6010 D	LEAD	FL
EPA 6010 D	MAGNESIUM	FL	EPA 6010 D	MANGANESE	FL
EPA 6010 D	MOLYBDENUM	FL	EPA 6010 D	NICKEL	FL
EPA 6010 D	POTASSIUM	FL	EPA 6010 D	SELENIUM	FL
EPA 6010 D	SILVER	FL	EPA 6010 D	SODIUM	FL
EPA 6010 D	THALLIUM	FL	EPA 6010 D	TIN	FL
EPA 6010 D	TITANIUM	FL	EPA 6010 D	VANADIUM	FL
EPA 6010 D	ZINC	FL	EPA 6020 B	ALUMINUM	FL
EPA 6020 B	ANTIMONY	FL	EPA 6020 B	ARSENIC	FL
EPA 6020 B	BARIUM	FL	EPA 6020 B	BERYLLIUM	FL
EPA 6020 B	CADMIUM	FL	EPA 6020 B	CALCIUM	FL
EPA 6020 B	CHROMIUM	FL	EPA 6020 B	COBALT	FL
EPA 6020 B	COPPER	FL	EPA 6020 B	IRON	FL
EPA 6020 B	LEAD	FL	EPA 6020 B	MAGNESIUM	FL
EPA 6020 B	MANGANESE	FL	EPA 6020 B	NICKEL	FL
EPA 6020 B	POTASSIUM	FL	EPA 6020 B	SELENIUM	FL
EPA 6020 B	SILVER	FL	EPA 6020 B	SODIUM	FL
EPA 6020 B	THALLIUM	FL	EPA 6020 B	VANADIUM	FL
EPA 6020 B	ZINC	FL	EPA 7196 A	CHROMIUM VI	FL
EPA 7471 B	MERCURY	FL	EPA 8015 C	DIESEL RANGE ORGANICS (DRO)	FL
EPA 8015 C	GASOLINE RANGE ORGANICS (GRO)	FL	EPA 8081 B	4,4'-DDD	FL
EPA 8081 B	4,4'-DDE	FL	EPA 8081 B	4,4'-DDT	FL
EPA 8081 B	ALDRIN	FL	EPA 8081 B	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	FL
EPA 8081 B	ALPHA-CHLORDANE (CIS-CHLORDANE)	FL	EPA 8081 B	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	FL
EPA 8081 B	CHLORDANE, TOTAL	FL	EPA 8081 B	DELTA-BHC	FL
EPA 8081 B	DIELDRIN	FL	EPA 8081 B	ENDOSULFAN I	FL
EPA 8081 B	ENDOSULFAN II	FL	EPA 8081 B	ENDOSULFAN SULFATE	FL
EPA 8081 B	ENDRIN	FL	EPA 8081 B	ENDRIN ALDEHYDE	FL



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SOLID AND CHEMICAL MATERIALS

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EPA 8081 B	ENDRIN KETONE	FL	EPA 8081 B	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	FL
EPA 8081 B	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	FL	EPA 8081 B	HEPTACHLOR	FL
EPA 8081 B	HEPTACHLOR EPOXIDE	FL	EPA 8081 B	METHOXYCHLOR	FL
EPA 8081 B	TOXAPHENE (CHLORINATED CAMPHENE)	FL	EPA 8082 A	AROCLOR-1016 (PCB-1016)	FL
EPA 8082 A	AROCLOR-1221 (PCB-1221)	FL	EPA 8082 A	AROCLOR-1232 (PCB-1232)	FL
EPA 8082 A	AROCLOR-1242 (PCB-1242)	FL	EPA 8082 A	AROCLOR-1248 (PCB-1248)	FL
EPA 8082 A	AROCLOR-1254 (PCB-1254)	FL	EPA 8082 A	AROCLOR-1260 (PCB-1260)	FL
EPA 8082 A - EXTENDED	AROCLOR-1262 (PCB-1262)	FL	EPA 8082 A - EXTENDED	AROCLOR-1268 (PCB-1268)	FL
EPA 8151 A	2,4,5-T	FL	EPA 8151 A	2,4-D	FL
EPA 8151 A	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	FL	EPA 8151 A	PENTACHLOROPHENOL	FL
EPA 8151 A	SILVEX (2,4,5-TP)	FL	EPA 8260 D	1,1,1,2-TETRACHLOROETHANE	FL
EPA 8260 D	1,1,1-TRICHLOROETHANE	FL	EPA 8260 D	1,1,2,2-TETRACHLOROETHANE	FL
EPA 8260 D	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	FL	EPA 8260 D	1,1,2-TRICHLOROETHANE	FL
EPA 8260 D	1,1-DICHLOROETHANE	FL	EPA 8260 D	1,1-DICHLOROETHYLENE	FL
EPA 8260 D	1,1-DICHLOROPROPENE	FL	EPA 8260 D	1,2,3-TRICHLOROBENZENE	FL
EPA 8260 D	1,2,3-TRICHLOROPROPANE	FL	EPA 8260 D	1,2,4-TRICHLOROBENZENE	FL
EPA 8260 D	1,2,4-TRIMETHYLBENZENE	FL	EPA 8260 D	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	FL
EPA 8260 D	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	FL	EPA 8260 D	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	FL
EPA 8260 D	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	FL	EPA 8260 D	1,2-DICHLOROPROPANE	FL
EPA 8260 D	1,3,5-TRIMETHYLBENZENE	FL	EPA 8260 D	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	FL
EPA 8260 D	1,3-DICHLOROPROPANE	FL	EPA 8260 D	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	FL
EPA 8260 D	1,4-DIOXANE (P-DIOXANE /1,4- DIETHYLENEOXIDE)	FL	EPA 8260 D	2,2-DICHLOROPROPANE	FL
EPA 8260 D	2-BUTANONE (METHYL ETHYL KETONE, MEK)	FL	EPA 8260 D	2-CHLOROETHYL VINYL ETHER	FL
EPA 8260 D	2-CHLOROTOLUENE	FL	EPA 8260 D	2-HEXANONE	FL
EPA 8260 D	4-CHLOROTOLUENE	FL	EPA 8260 D	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	FL
EPA 8260 D	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	FL	EPA 8260 D	ACETONE	FL
EPA 8260 D	ACETONITRILE	FL	EPA 8260 D	ACROLEIN (PROPENAL)	FL
EPA 8260 D	ACRYLONITRILE	FL	EPA 8260 D	ALLYL CHLORIDE (3-CHLOROPROPENE)	FL

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8260 D	BENZYL CHLORIDE	FL
EPA 8260 D	BROMOCHLOROMETHANE	FL
EPA 8260 D	BROMOFORM	FL
EPA 8260 D	CARBON TETRACHLORIDE	FL
EPA 8260 D	CHLORODIBROMOMETHANE	FL
EPA 8260 D	CHLOROFORM	FL
EPA 8260 D	CIS-1,2-DICHLOROETHYLENE	FL
EPA 8260 D	CYCLOHEXANE	FL
EPA 8260 D	DIBROMOMETHANE (METHYLENE BROMIDE)	FL
EPA 8260 D	DIETHYL ETHER	FL
EPA 8260 D	ETHYL METHACRYLATE	FL
EPA 8260 D	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	FL
EPA 8260 D	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	FL
EPA 8260 D	METHACRYLONITRILE	FL
EPA 8260 D	METHYL BROMIDE (BROMOMETHANE)	FL
EPA 8260 D	METHYL METHACRYLATE	FL
EPA 8260 D	METHYLCYCLOHEXANE	FL
EPA 8260 D	N-BUTYLBENZENE	FL
EPA 8260 D	NAPHTHALENE	FL
EPA 8260 D	SEC-BUTYLBENZENE	FL
EPA 8260 D	TERT-BUTYLBENZENE	FL
EPA 8260 D	TOLUENE	FL
EPA 8260 D	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	FL
EPA 8260 D	TRICHLOROETHENE (TRICHLOROETHYLENE)	FL
EPA 8260 D	VINYL ACETATE	FL
EPA 8260 D	XYLENE (TOTAL)	FL
EPA 8260 D - EXTENDED	N-HEXANE	FL
EPA 8270 E	1,1'-BIPHENYL (BZ-0)	FL
EPA 8270 E	1,2,4-TRICHLOROBENZENE	FL

METHOD	ANALYTE	PRIMARY
EPA 8260 D	BENZENE	FL
EPA 8260 D	BROMOBENZENE	FL
EPA 8260 D	BROMODICHLOROMETHANE	FL
EPA 8260 D	CARBON DISULFIDE	FL
EPA 8260 D	CHLOROBENZENE	FL
EPA 8260 D	CHLOROETHANE (ETHYL CHLORIDE)	FL
EPA 8260 D	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	FL
EPA 8260 D	CIS-1,3-DICHLOROPROPENE	FL
EPA 8260 D	DIISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	FL
EPA 8260 D	DICHLORODIFLUOROMETHANE (FREON-12)	FL
EPA 8260 D	ETHYL ACETATE	FL
EPA 8260 D	ETHYLBENZENE	FL
EPA 8260 D	IODOMETHANE (METHYL IODIDE)	FL
EPA 8260 D	ISOPROPYLBENZENE	FL
EPA 8260 D	METHYL ACETATE	FL
EPA 8260 D	METHYL CHLORIDE (CHLOROMETHANE)	FL
EPA 8260 D	METHYL TERT-BUTYL ETHER (MTBE)	FL
EPA 8260 D	METHYLENE CHLORIDE (DICHLOROMETHANE)	FL
EPA 8260 D	N-PROPYLBENZENE	FL
EPA 8260 D	PROPIONITRILE (ETHYL CYANIDE)	FL
EPA 8260 D	STYRENE	FL
EPA 8260 D	TETRACHLOROETHENE (PERCHLOROETHENE)	FL
EPA 8260 D	TRANS-1,2-DICHLOROETHENE	FL
EPA 8260 D	TRANS-1,4-DICHLORO-2-BUTENE	FL
EPA 8260 D	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	FL
EPA 8260 D	VINYL CHLORIDE (CHLOROETHENE)	FL
EPA 8260 D - EXTENDED	CYCLOHEXANONE	FL
EPA 8260 D - EXTENDED	TETRAHYDROFURAN (THF)	FL
EPA 8270 E	1,2,4,5-TETRACHLOROBENZENE	FL
EPA 8270 E	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	FL



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EPA 8270 E	1,2-DIPHENYLHYDRAZINE	FL	EPA 8270 E	1,3,5-TRINITROBENZENE (1,3,5-TNB)	FL
EPA 8270 E	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	FL	EPA 8270 E	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	FL
EPA 8270 E	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	FL	EPA 8270 E	1,4-NAPHTHOQUINONE	FL
EPA 8270 E	1,4-PHENYLENEDIAMINE	FL	EPA 8270 E	1-CHLORONAPHTHALENE	FL
EPA 8270 E	1-METHYLNAPHTHALENE	FL	EPA 8270 E	1-NAPHTHYLAMINE	FL
EPA 8270 E	2,3,4,6-TETRACHLOROPHENOL	FL	EPA 8270 E	2,4,5-TRICHLOROPHENOL	FL
EPA 8270 E	2,4,6-TRICHLOROPHENOL	FL	EPA 8270 E	2,4-DICHLOROPHENOL	FL
EPA 8270 E	2,4-DIMETHYLPHENOL	FL	EPA 8270 E	2,4-DINITROPHENOL	FL
EPA 8270 E	2,4-DINITROTOLUENE (2,4-DNT)	FL	EPA 8270 E	2,6-DICHLOROPHENOL	FL
EPA 8270 E	2,6-DINITROTOLUENE (2,6-DNT)	FL	EPA 8270 E	2-ACETYLAMINOFLUORENE	FL
EPA 8270 E	2-CHLORONAPHTHALENE	FL	EPA 8270 E	2-CHLOROPHENOL	FL
EPA 8270 E	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	FL	EPA 8270 E	2-METHYLNAPHTHALENE	FL
EPA 8270 E	2-METHYLPHENOL (O-CRESOL)	FL	EPA 8270 E	2-NAPHTHYLAMINE	FL
EPA 8270 E	2-NITROANILINE	FL	EPA 8270 E	2-NITROPHENOL	FL
EPA 8270 E	2-PICOLINE (2-METHYLPYRIDINE)	FL	EPA 8270 E	3+4-METHYLPHENOL (M+P CRESOL)	FL
EPA 8270 E	3,3'-DICHLOROBENZIDINE	FL	EPA 8270 E	3,3'-DIMETHYLBENZIDINE	FL
EPA 8270 E	3-METHYLCHOLANTHRENE	FL	EPA 8270 E	3-NITROANILINE	FL
EPA 8270 E	4-AMINOBIIPHENYL	FL	EPA 8270 E	4-BROMOPHENYL PHENYL ETHER (BDE-3)	FL
EPA 8270 E	4-CHLORO-3-METHYLPHENOL	FL	EPA 8270 E	4-CHLOROANILINE	FL
EPA 8270 E	4-CHLOROPHENYL PHENYLETHER	FL	EPA 8270 E	4-NITROANILINE	FL
EPA 8270 E	4-NITROPHENOL	FL	EPA 8270 E	4-NITROQUINOLINE-1-OXIDE	FL
EPA 8270 E	5-NITRO-O-TOLUIDINE	FL	EPA 8270 E	7,12-DIMETHYLBENZ(A) ANTHRACENE	FL
EPA 8270 E	ACENAPHTHENE	FL	EPA 8270 E	ACENAPHTHYLENE	FL
EPA 8270 E	ACETOPHENONE	FL	EPA 8270 E	ANTHRACENE	FL
EPA 8270 E	ARAMITE	FL	EPA 8270 E	ATRAZINE	FL
EPA 8270 E	BENZALDEHYDE	FL	EPA 8270 E	BENZIDINE	FL
EPA 8270 E	BENZO(A)ANTHRACENE	FL	EPA 8270 E	BENZO(A)PYRENE	FL
EPA 8270 E	BENZO(B)FLUORANTHENE	FL	EPA 8270 E	BENZO(G,H,I)PERYLENE	FL
EPA 8270 E	BENZO(K)FLUORANTHENE	FL	EPA 8270 E	BENZOIC ACID	FL
EPA 8270 E	BENZYL ALCOHOL	FL	EPA 8270 E	BIS(2-CHLOROETHOXY)METHANE	FL
EPA 8270 E	BIS(2-CHLOROETHYL) ETHER	FL	EPA 8270 E	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	FL
EPA 8270 E	BUTYL BENZYL PHTHALATE	FL	EPA 8270 E	CAPROLACTAM	FL
EPA 8270 E	CARBAZOLE	FL	EPA 8270 E	CHLOROBENZILATE	FL



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EPA 8270 E	CHRYSENE	FL
EPA 8270 E	DI-N-OCTYL PHTHALATE	FL
EPA 8270 E	DIBENZO(A,H) ANTHRACENE	FL
EPA 8270 E	DIETHYL PHTHALATE	FL
EPA 8270 E	ETHYL METHANESULFONATE	FL
EPA 8270 E	FLUORENE	FL
EPA 8270 E	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	FL
EPA 8270 E	HEXACHLOROETHANE	FL
EPA 8270 E	ISODRIN	FL
EPA 8270 E	ISOSAFROLE	FL
EPA 8270 E	N-NITROSO-DI-N-BUTYLAMINE	FL
EPA 8270 E	N-NITROSODIETHYLAMINE	FL
EPA 8270 E	N-NITROSODIPHENYLAMINE	FL
EPA 8270 E	N-NITROSOMORPHOLINE	FL
EPA 8270 E	N-NITROSOPYRROLIDINE	FL
EPA 8270 E	NITROBENZENE	FL
EPA 8270 E	PENTACHLOROBENZENE	FL
EPA 8270 E	PENTACHLOROPHENOL	FL
EPA 8270 E	PHENANTHRENE	FL
EPA 8270 E	PRONAMIDE (KERB)	FL
EPA 8270 E	PYRIDINE	FL
EPA 8270 E - EXTENDED	2,2'-OXYBIS(1-CHLOROPROPANE)	FL
EPA 8270 E - EXTENDED	PENTACHLOROETHANE	FL
EPA 9045 D	PH	FL

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8270 E	DI-N-BUTYL PHTHALATE	FL
EPA 8270 E	DIALATE	FL
EPA 8270 E	DIBENZOFURAN	FL
EPA 8270 E	DIMETHYL PHTHALATE	FL
EPA 8270 E	FLUORANTHENE	FL
EPA 8270 E	HEXACHLOROBENZENE	FL
EPA 8270 E	HEXACHLOROCYCLOPENTADIENE	FL
EPA 8270 E	INDENO(1,2,3-CD) PYRENE	FL
EPA 8270 E	ISOPHORONE	FL
EPA 8270 E	METHYL METHANESULFONATE	FL
EPA 8270 E	N-NITROSODI-N-PROPYLAMINE	FL
EPA 8270 E	N-NITROSODIMETHYLAMINE	FL
EPA 8270 E	N-NITROSOMETHYLETHYLAMINE	FL
EPA 8270 E	N-NITROSOPIPERIDINE	FL
EPA 8270 E	NAPHTHALENE	FL
EPA 8270 E	O-TOLUIDINE (2-METHYLANILINE)	FL
EPA 8270 E	PENTACHLORONITROBENZENE	FL
EPA 8270 E	PHENACETIN	FL
EPA 8270 E	PHENOL	FL
EPA 8270 E	PYRENE	FL
EPA 8270 E	SAFROLE	FL
EPA 8270 E - EXTENDED	4-DIMETHYL AMINOAZOBENZENE	FL
EPA 9045 C	PH	FL
EPA 9071 B	OIL AND GREASE (AS N-HEXANE EXTRACTABLE MATERIAL (HEM))	FL