
VERIFICATION INVESTIGATION REVISED SECTION 11.0
SWMU 39, Incinerator Wastewater Ponds (Draft)
Task Order No. 4
Radford Army Ammunition Plant, Virginia

Prepared for:

U.S. Army Environmental Center
Aberdeen Proving Ground, Maryland 21010-5401
Contract No. DAAA15-90-D-0015



DAMES & MOORE

2807 N. Parham Road, Suite 114, Richmond, VA 23294

August 31, 1994



2807 N. PARHAM ROAD, SUITE 114, RICHMOND, VIRGINIA 23294
(804) 965-9000 FAX: (804) 965-9764

August 31, 1994

Harry R. Kleiser
U.S. Army Environmental Center
Installation Restoration Division
Building E4480
Aberdeen Proving Ground, MD 21010-5401

Re: Revised VI Section Report
SWMU Closure Report
Radford Army Ammunition Plant, VA

Dear Harry:

Enclosed are one revised section report for the VI at RAAP and the closure report for SWMU 69; one bound and one unbound for each report. These reports include the 1993 data collected at SWMU 39 (Section 11.0) and the documentation for excavating SWMU 69 and landfilling the soil at the RAAP Fly Ash Landfill. Please review these draft documents and provide comments as necessary. A copy of the SWMU 69 report was sent to Bill Hendon (RAAP) for his review. Revised section reports for SWMU O and SWMUs 10/35 are being prepared now and should be out in a week or two. Our plan is still to send the revised section reports to you for comment, give you a week or so to review them and have them returned to us for a final draft of each to be prepared before the end of September. We plan on providing the study on using the onsite soils data to create background concentrations to you in late September.

Please call to discuss any changes or extras to the reports. I will contact you within the next few days if I do not get a call from you or Dennis.

Sincerely,

DAMES & MOORE, INC.

A handwritten signature in cursive script that reads "Anthony J. Duda".

Anthony J. Duda
Sr. Hydrogeologist

Enclosures

VERIFICATION INVESTIGATION REVISED SECTION 11.0
SWMU 39, Incinerator Wastewater Ponds (Draft)
Task Order No. 4
Radford Army Ammunition Plant, Virginia

Prepared for:

U.S. Army Environmental Center
Aberdeen Proving Ground, Maryland 21010-5401
Contract No. DAAA15-90-D-0015



DAMES & MOORE

2807 N. Parham Road, Suite 114, Richmond, VA 23294

August 31, 1994

VERIFICATION INVESTIGATION
Revised Section 11.0
SWMU 39, Incinerator Wastewater Ponds
(Draft)

Task Order No. 4
Radford Army Ammunition Plant, Virginia

Submitted to:

Commander, U.S. Army Environmental Center
Aberdeen Proving Ground, Maryland 21010-5401

Contract No. DAAA15-90-D-0015

Prepared by:

Dames & Moore, Inc.
2807 N. Parham Road, Suite 114
Richmond, Virginia 23294

August 31, 1994

TABLE OF CONTENTS

LIST OF ACRONYMS AND ABBREVIATIONS

11.0	VERIFICATION INVESTIGATION OF SWMU 39, INCINERATOR WASTEWATER PONDS	11-1
11.1	SWMU 39 BACKGROUND AND INVESTIGATION PROGRAM (Revised)	11-1
11.1.1	SWMU History	11-2
11.1.2	Previous Investigations	11-2
11.1.3	VI Program (Revised)	11-4
11.2	ENVIRONMENTAL SETTING (Revised)	11-5
11.2.1	Topography	11-5
11.2.2	Geology and Soils (Revised)	11-5
11.2.3	Groundwater Conditions (Revised)	11-5
11.2.4	Surface Water Drainage	11-6
11.3	CONTAMINATION ASSESSMENT (Revised)	11-6
11.3.1	Soil	11-11
11.3.2	Sediment	11-11
11.3.3	Groundwater (New Section)	
11.4	BASELINE RISK ASSESSMENT (Revised)	11-13
11.4.1	Human Health Evaluation (Revised)	11-13
11.4.2	Environmental Evaluation	11-14
11.4.3	Conclusions to Human Health and Environmental Evaluation (Revised)	11-14
11.5	CONCLUSIONS (Revised)	11-14
11.6	RECOMMENDED ACTION (Revised)	11-15

TABLE OF CONTENTS (Cont'd)

REFERENCES

APPENDIX A - Chemical Abbreviations and Analytical Data

APPENDIX B - Geotechnical Data

APPENDIX C - Supporting Information from Final Draft VI Report

FIGURES

11-1	Location Map, SWMU 39 - Incinerator Wastewater Ponds, Radford Army Ammunition Plant, Virginia (Revised)	11-3
11-2	Groundwater Elevation Map, SWMU 39 - Incinerator Wastewater Ponds, Radford Army Ammunition Plant, Virginia (New Figure)	11-7

TABLES

11-1	Water Elevation Data, SWMU 39 and Vicinity, July 29, 1994, Radford Army Ammunition Plant, Virginia (New Table)	11-8
11-2	Summary of Analytical Data for Soil Samples Collected at SWMU 39, Radford Army Ammunition Plant, Virginia	11-9
11-3	Summary of Analytical Data for Groundwater Samples Collected at SWMU 39, Radford Army Ammunition Plant, Virginia (New Table)	11-10

LIST OF ACRONYMS AND ABBREVIATIONS

AEC	U.S. Army Environmental Center
°C	Celcius Degrees
CFR	Code of Federal Regulations
CL	Silty clay
EP	Extraction Procedure
EPA	U.S. Environmental Protection Agency
ESE	Environmental Science and Engineering, Inc.
°F	Fahrenheit degrees
ft	Feet
gm	Gram
GM	Silty Gravel
HBN	Health Based Number
MCL	Maximum Contaminant Level
mg/l	Milligrams per liter
ML	Clayey silt
msl	Mean sea level
MW	Monitoring Well
pH	Hydrogren-ion activity in gram equivalents per liter
PQL	Practical Quantitation Limit
PVC	Polyvinyl Chloride
QA	Quality Assurance
QC	Quality Control
RAAP	Radford Army Ammunition Plant
RCRA	Resouce Conservation and Recovery Act
RFI	RCRA Facility Investigation
SM	Silty Sand
SP	Poorly-graded sand
SW	Well-graded sand
SVOC	Semivolative Organic Compound
SWMU	Solid Waste Management Unit
TAL	Target Analyte List
TIC	Tentatively Identified Compound
ug/g	Micrograms per gram
ug/L	Micrograms per Liter
UNK	Unknown
USACE	U.S. Army Corps of Engineers
USAEHA	U.S. Army Environmental Hygiene Agency
USATHAMA	U.S. Army Toxic and Hazardous Materials Agency
USCS	Unified Soil Classification System
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
VaDOH	Virginia Department of Health

VDEQ	Virginia Department of Environmental Quality
VHMR	Virginia Hazardous Waste Management Regulations
VI	Verification Investigation
VDWM	Virginia Department of Waste Management

11.0 VERIFICATION INVESTIGATION OF SWMU 39, INCINERATOR WASTEWATER PONDS

11.1 SWMU 39 BACKGROUND AND INVESTIGATION PROGRAM (Revised)

This report is a revision of the Radford Army Ammunition Plant (RAAP) Verification Investigation (VI) Section 11.0, which presented the results of investigations conducted at Solid Waste Management Unit (SWMU) 39, Incinerator Wastewater Ponds in the final draft VI Report dated October 29, 1992 (Dames & Moore, 1992). The additional studies conducted at SWMU 39 in 1993 were authorized by the U.S. Army Environmental Center (AEC) under Contract No. DAAA15-90-D-0015, Task Order 4 after the final draft VI Report was reviewed by AEC and comments on the report were provided by the U.S. Environmental Protection Agency (EPA) and the Virginia Department of Environmental Quality (VDEQ).

The additional data has resulted in revised test in several subsections and these revised subsections have had (Revised) appended to the subsection title. Tables 11-1 and 11-3 and Figure 11-2 have been added to this revised section report to present the groundwater data collected in 1993. Table 11-2 (formerly Table 11-1) has been reproduced as presented in the 1992 VI Report. Figure 11-1 has been revised to show the locations of the three monitoring wells installed in 1993. This revised section report is not intended to be a stand alone document; all background information about RAAP and the overall VI program is presented in the final draft VI Report. Appendix A to this report presents the chemical data acquired for the 1993 program. Appendix B presents geotechnical data from the 1993 program, and Appendix C presents supporting information from the final draft VI Report.

The RCRA Permit provided for the characterization of SWMU 39 waste prior to conduct of a VI for the purpose of determining whether the waste is potentially hazardous. The 1992 investigation of SWMU 39 included both a waste characterization and a VI of soils which may be potentially adversely impacted by contaminated spray water. As a result of the 1992 investigation, which indicated a potential adverse impact to groundwater from pond sediments, a VI of groundwater was conducted at SWMU 39 in 1993.

Section 5.3 of the final draft VI Report presents the waste characterization of the incinerator wastewater sludge. The sections below present the VI on the surface soil adjacent to the spray pond, a summarization of the waste characterization results and the VI on groundwater in the area of SWMU 39.

11.1.1 SWMU History

This unit is located in the north-central section of the Horseshoe Area, adjacent to and associated with the Hazardous Waste Incinerator (SWMU 14).

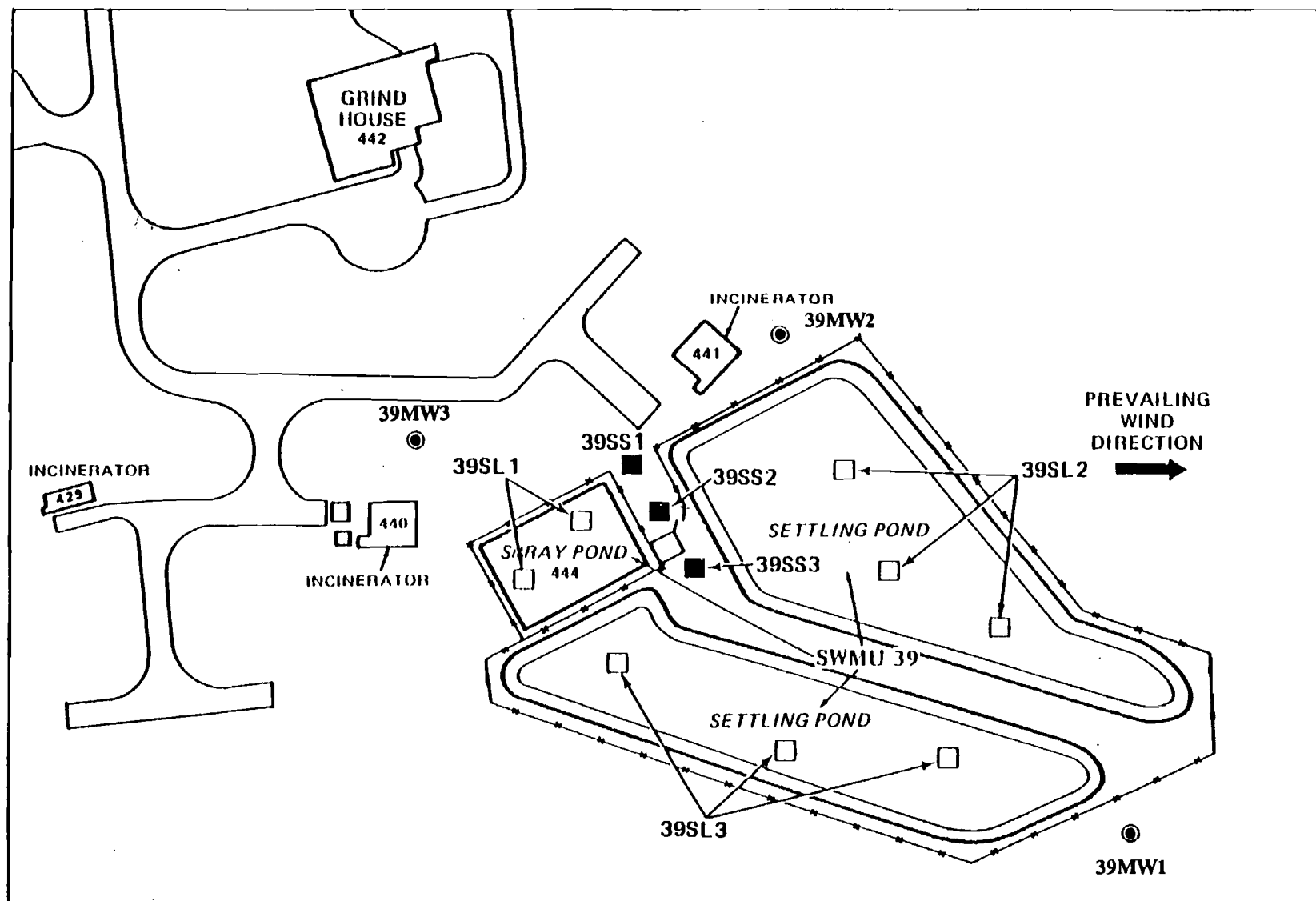
SWMU 39 consists of a concrete-lined aeration pond and two unlined earthen ponds (Figure 11-1). The aeration pond serves as a cooling pond for incinerator scrubber and cooling water, which has been described as either contact or noncontact cooling water. The gas cooler uses water to cool the exhaust gas from the afterburner to 160° F. The scrubber system is designed to cool the exhaust gases to 140° F. The wastewater from the cooler and scrubber is pumped to the spray pond, with the supernatant recycled and reused in the cooler and scrubber. According to a facility representative, caustic is periodically added to the water to neutralize it, and the water is pumped to the Biological Treatment Plant (SWMU 10). Sludges have reportedly never been removed from the pond for disposal. During spray aeration, water is usually windblown from the pond to settle onto the surrounding ground surface. Therefore, there is the potential for contamination of surface soils by the wastewaters.

The settling ponds are excavated an estimated 6 to 8 feet into the natural grade. These ponds receive overflow from the aeration pond, though overflow is reportedly rare. Both are evaporation ponds, with no outlet from either pond.

11.1.2 Previous Investigations

Analysis of a sludge sample collected from the spray pond in 1983 (Olver, 1983) indicated that the sludge did not exhibit any of the four hazardous waste characteristics as outlined in 40 CFR 261.34. Analytical results were as follows:

- EP Toxicity (mg/l):
 - Silver <0.1
 - Arsenic 0.010
 - Barium 1.1



LEGEND:

- Soil Sample
- Monitoring Well
- Waste Composite Sample

FIGURE 11-1
LOCATION MAP
SWMU 39 - INCINERATOR WASTEWATER PONDS
RADFORD ARMY AMMUNITION PLANT, VIRGINIA

- Cadmium <0.1
 - Chromium 0.3
 - Mercury 0.0010
 - Lead 0.2
 - Selenium 0.012
- Ignitability: Not ignitable at 60° C
 - Corrosivity: Not corrosive
 - Reactivity: Not reactive.

11.1.3 VI Program (Revised)

There are two identified concerns at this unit--potential contamination of surface soils adjacent to the aeration pond from windblown spray and potential groundwater contamination from hazardous constituent releases from the aeration pond and the two unlined settling basins. To address the potential soil contamination, three surface soil samples (39SS1, 39SS2, and 39SS3) were collected in February 1992 east of the aeration pond in the area most likely to receive windblown spray (Figure 11-1). Samples were collected from a depth of 0 to 6 inches below any surface gravel or organic root zone and analyzed for metals, explosives and semivolatile organic compounds (SVOCs).

To address the potential for groundwater contamination in the vicinity of the ponds, a waste characterization was performed on sludge samples collected from the ponds. Soil collected from multiple sample locations from each lagoon was composited, resulting in a total of three sludge samples (39SL1, 39SL2, and 39SL3) submitted for analysis. These samples were analyzed for metals, explosives, and SVOCs. The results of the waste characterization were presented in Section 5.3 of the final draft VI Report which has been provided in Appendix C of this report.

Based on the results of the sediment sampling, three groundwater monitoring wells (39MW1, 39MW2 and 39MW3) were installed in June 1993 around the spray and settling ponds to assess potential impacts to groundwater from the sediment present in the ponds (Figure 11-1).

One groundwater sample was collected from each well and analyzed for filtered and unfiltered metals, and SVOCs.

11.2 ENVIRONMENTAL SETTING

11.2.1 Topography

SWMU 39 is generally a flat level area, at approximately 1,700 feet msl. A small section of the southern boundary rises to a maximum elevation of approximately 1,720 feet msl. SWMU 39 consists of a concrete-lined aeration pond and two unlined earthen ponds which were excavated an estimated 6 to 8 feet into the natural grade. There are very few buildings in the area with only dirt roads leading to SWMU 39.

11.2.2 Geology and Soils (Revised)

The subsurface conditions for SWMU 39 were investigated through the drilling of three soil and rock borings to depths ranging from 35 to 50 feet. The borings encountered a relatively thick layer of unconsolidated soil (alluvium; 16.5 to 19.5 feet) over limestone or dolostone bedrock. The upper 6 to 10 feet of soil was generally fine grained and described as a yellowish red or reddish brown sandy silt (ML), sandy clay (CL) or silty sand (SM). Below this strata, the soils were generally described as a yellowish red to brown sand (SP) and silty gravel (GM). These soils became more gravelly with depth and usually had a layer of cobbles (river jack) present above the bedrock surface.

The bedrock encountered in the borings was generally a light gray to bluish gray argillaceous limestone and dolostone (Elbrook Formation). The consistency of bedrock ranged from soft to hard with numerous weathered and fractured zones. Significant solution cavities were encountered in boring 39MW1 between 20 and 30 feet. Mud filled voids and solution cavities were encountered in boring 39MW3 between 20 and 35 feet. The bedrock in the vicinity of SWMU 39 exhibits typical karst characteristics with evidence of subsurface solution features.

11.2.3 Groundwater Conditions (Revised)

Groundwater conditions in the SWMU 39 area are controlled by the karstic nature of the Elbrook Formation. Evidence of groundwater was encountered during drilling within fracture and

solution zones at depths ranging from 20 to 25 feet. Stabilized groundwater depths measured on July 29, 1993 ranged from about 24 to 26 ft. (average elevation of about 1677.5 ft. msl). The groundwater elevation measured at nearby monitoring well 32MW1 (approximately 800 feet east of SWMU 39) was 1679.21 ft msl. Based on these measurements, groundwater flow in the vicinity of SWMU 39 is to the southwest at a shallow hydraulic gradient of about 0.0017 ft/ft. Groundwater level contours for the area are shown in Figure 11-2. Groundwater elevations are summarized in Table 11-2. Based on the observed subsurface conditions, groundwater movement below SWMU 39 would likely be rapid through fractures, voids and solution cavities with eventual discharge either northward or southward into the New River.

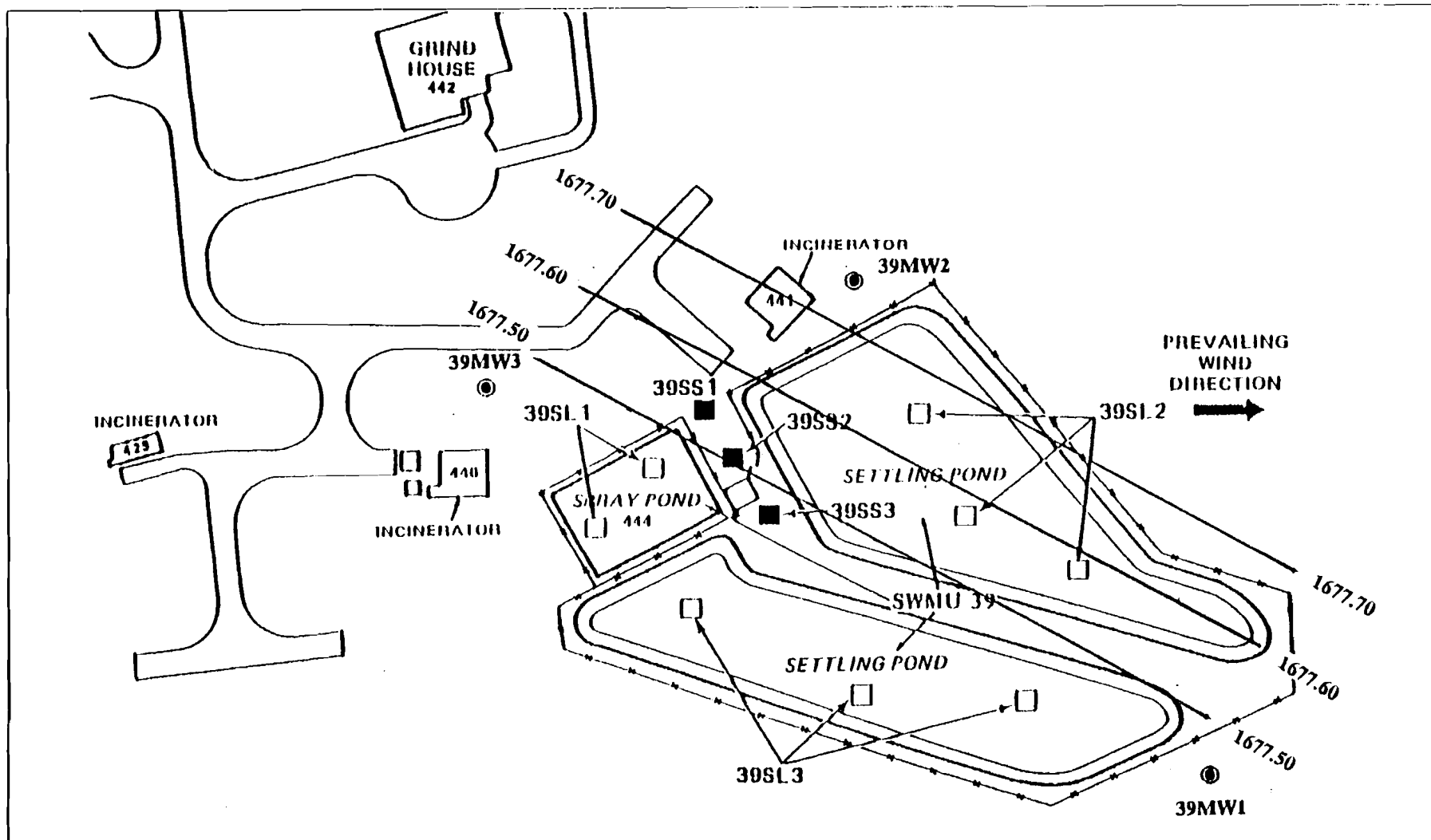
11.2.4 Surface Water Drainage

Surface water runoff probably flows north towards the New River, approximately 1,200 feet away. There are two unlined settling ponds which receive overflow from the aeration pond. Both of these settling ponds are evaporation ponds and do not have any drainage outlets. According to RAAP utility maps, there are no storm drains, manholes, or catch basins located in the vicinity of SWMU 39.

11.3 CONTAMINATION ASSESSMENT (Revised)

The 1992 VI field program included the collection of three soil samples east of the spray pond and the waste characterization consisted of sediment samples from the spray pond and two settling ponds at SWMU 39. Results of the chemical analyses of the soil and sediment samples are presented in Table 11-2 and Appendix C. The results of the VI for soil are presented below; the waste characterization is presented in Section 5.3 of the final draft VI Report.

The 1993 VI field program at SWMU 39 included the installation of three groundwater monitoring wells and the collection of one groundwater sample from each well for chemical analysis. The wells were installed to monitor groundwater quality in assumed upgradient direction (39MW1) and the apparent downgradient direction (39MW2 and 39MW3). Results of the chemical analyses of the groundwater samples are presented in Table 11-3. The results of the VI for groundwater are presented below.



LEGEND:

- Soil Sample
- Monitoring Well
- Waste Composite Sample
- 1677.50- Groundwater Elevation Contour (ft msl)
(July 29, 1993)

FIGURE 11-2
GROUNDWATER ELEVATION MAP
SWMU 39 - INCINERATOR WASTEWATER PONDS
RADFORD ARMY AMMUNITION PLANT, VIRGINIA

Table 11-1
 Water Elevation Data
 SWMU 39 and Vicinity
 July 29, 1993
 Radford Army Ammunition Plant

<u>Well</u>	<u>Surface Elevation (ft msl)</u>	<u>Top of PVC Elev. (ft. msl)</u>	<u>Depth to Water (ft)</u>	<u>Water Elevation (ft msl)</u>	<u>Stick Up (ft)</u>
39MW1	1701.12	1703.40	26.00	1677.40	2.28
39MW2	1700.25	1702.08	24.30	1677.78	1.83
39MW3	1700.05	1701.36	23.90	1677.46	1.31
39MW1	1736.40	1738.31	59.10	1679.21	1.91

Table 11-2
Summary of Analytical Data For Soil Samples Collected At SWMU 39
Radford Army Ammunition Plant, Virginia

SITE ID		39SS1	39SS2	39SS3	
FIELD ID		RVFS*40	RVFS*41	RVFS*42	
S. DATE		25-feb-92	25-feb-92	25-feb-92	
DEPTH(ft)		0.5	0.5	0.5	
MATRIX	PQLs	CSO	CSO	CSO	HBN
UNITS	UGG	UGG	UGG	UGG	UGG
<u>TAL Inorganics</u>					
ALUMINIUM	14.1	14400	14900	17500	230000
ARSENIC	30	[2.52]	[2.71]	[2.74]	0.5
BARIUM	1	98.4	113	94.8	1000
BERYLLIUM	0.2	[0.628]	[1.21]	LT 0.5	0.1
CALCIUM	100	38500	1250 B	3300 B	NSA
CHROMIUM	4	26	27.5	30.2	400
COBALT	3	[11.2]	[13.4]	[13.5]	0.8
COPPER	7	15.1	19.8	22.1	2900
IRON	1000	25100	26700	29100	NSA
LEAD	2	21.8	LT 10.5	19.5	200
MAGNESIUM	50	19000	4250	5060	NSA
MANGANESE	0.275	517	562	506	8000
NICKEL	3	14.3	16.8	17.3	1000
POTASSIUM	37.5	1780	2080	1850	NSA
SILVER	4	1.35	0.972	LT 0.589	200
SODIUM	150	210 B	226 B	239 B	NSA
THALLIUM	20	[22.7]	[17.9]	LT 6.62	6
VANADIUM	0.775	50	52.2	54.4	560
ZINC	30.2	52.4	72.1	61.3	16000
<u>Explosives</u>	NA	None Detected	None Detected	None Detected	NSA
<u>Semivolatiles</u>	NA	None Detected	None Detected	None Detected	NSA
<u>Semivolatile TICs</u>					
CYCLOHEXENE OXIDE	NA	0.225 SB	0.225 SB	0.233 SB	NSA

Footnotes :

B = Analyte was detected in corresponding method blank; values are flagged if the sample concentration is less than 10 times the method blank concentration for common laboratory constituents and 5 times for all other constituents.

HBN = Health based number as defined in the RCRA permit. HBNs not specified in the permit were derived using standard exposure and intake assumptions consistent with EPA guidelines (51 Federal Register 33992, 34006, 34014, and 34028).

LT = Concentration is reported as less than the certified reporting limit.

NA = Not available; PQLs are not available for TICs detected in the library scans.

NSA = No standard (HBN) available; health effects data were not available for the calculation of a HBN. HBNs were not derived for TICs.

PQL = Practical quantitation limit; the lowest concentration that can be reliably detected at a defined level of precision for a given analytical method.

R = Analyte required for reporting purposes but not currently certified by USAF/HAMA.

S = Results are based on an internal standard; flag is used for TICs detected in library scans.

TICs = Tentatively identified compounds that were detected in the GC/MS library scans.

[] = Brackets indicate that the detected concentration exceeds the HBN.

CSO = Chemical soil.

TAL = Target Analyte List.

UGG = Micrograms per gram.

Table 11-3
Summary of Analytical Data For Groundwater Samples Collected At SWMU 39
Radford Army Ammunition Plant, Virginia

	SITE ID	39MW1	39MW2	39MW3	
	FIELD ID	RDWX*21	RDWX*22	RDWX*23	
	S. DATE	22-jul-93	22-jul-93	22-jul-93	
	DEPTH (ft)	36.0	41.0	24.0	
	MATRIX	CGW	CGW	CGW	HBN
	UNITS	UGL	UGL	UGL	UGL
<u>TAL Metals (total)</u>					
ALUMINIUM	14.1	3480	15300	42600	101500
ANTIMONY	30	<38.0	{ 63.7 }	<38.0	10
ARSENIC	10	<2.54	3.09	<2.54	50
BARIUM	20	105	284	254	1000
CALCIUM	500	84800	910000	249000	NSA
CHROMIUM	10	10.0	37.7	{ 64.9 }	50
COPPER	60	14.5	34.1	55.2	1295
IRON	38.1	5310	33600	72100	NSA
LEAD	10	3.47	25.6	22.7	50
MAGNESIUM	500	31200	436000	131000	NSA
MANGANESE	2.75	90.4	565	1560	3500
NICKEL	50	<34.4	<34.4	71.6	700
POTASSIUM	375	6380	10300	14200	NSA
SODIUM	500	5140	10400	14000	NSA
VANADIUM	40	14.3	64.4	125	245
ZINC	50	<21.1	26.1	239	7000
<u>TAL Metals (filtered)</u>					
BARIUM	20	83.1	77.0	62.4	1000
CALCIUM	500	79700	89900	98700	NSA
MAGNESIUM	500	26900	38700	42200	NSA
MANGANESE	2.75	5.61	48.1	164	3500
POTASSIUM	375	5370	1980	7030	NSA
SODIUM	500	5210	9500	14500	NSA
<u>Semivolatiles</u>	NA	None Detected	None Detected	None Detected	NSA
<u>Semivolatile TICs</u>					
TOTAL UNKNOWN TICs	NA	(3)140	(2)100	(2)14	NSA

Footnotes :

HBN = Health based number as defined in the RCRA permit. HBNs not specified in the permit were derived using standard exposure and intake assumptions consistent with EPA guidelines (51 Federal Register 33992, 34006, 34014, and 34028).

< = Concentration is reported as less than the certified reporting limit.

UGL = Micrograms per liter.

NA = Not available; PQLs are not available for TICs detected in the library scans.

CGW = Chemical groundwater.

NSA = No standard (HBN) available; health effects data were not available for the calculation of a HBN. HBNs were not derived for TICs.

PQL = Practical quantitation limit; the lowest concentration that can be reliably detected at a defined level of precision for a given analytical method.

TICs = Tentatively identified compounds that were detected in the GC/MS library scans.

{ } = Brackets indicate that the detected concentration exceeds the HBN.

() = Parenthesis indicates number of TICs detected, number following parenthesis is total concentration of TICs.

11.3.1 Soil

Four metals--beryllium, chromium, thallium and vanadium--were detected at concentrations above the background alluvial soils comparison criteria (Table 4-14; Appendix C) in at least one soil sample. Each of these metals was also greater than their respective PQL. Of these four metals, only beryllium and thallium exceeded their permit health based numbers (HBNs). Arsenic and cobalt also exceeded their HBN, but their concentrations were below the background alluvial soil comparison criteria. Beryllium and thallium, therefore, are the only two metals found at concentrations which may be a concern in the surface soil at SWMU 39. Beryllium has a low solubility and is expected to be adsorbed onto clay mineral surfaces at a low pH and to be complexed into insoluble compounds at high pH. In most natural environments, beryllium is likely to be sorbed or precipitated, rather than dissolved and is not expected to impact surface water, groundwater or the underlying soil. Thallium is not anticipated to be a concern because it is relatively immobile in the environment and is not expected to impact surface water, groundwater or the underlying soil.

Explosives and SVOCs were not detected in any of the soil samples. Although a tentitively identified compound (TIC) was detected, it is not a concern because the compound was detected in the laboratory method blank and, therefore, can be considered an artifact of the laboratory analysis and not present in the soil samples.

11.3.2 Sediment

The waste characterization in Section 5.3 of the final draft VI Report identified eight metals--antimony, arsenic, barium, beryllium, cobalt, copper, lead, and thallium--above HBNs in at least one sample collected of SWMU 39 waste. The most impacted sample was from the spray pond, but each pond sample had at least four metals which had concentrations in excess of HBNs. Lead and copper are present at such high concentrations in the spray pond (9.7 percent lead, 5.7 percent copper) and the northern settling pond (2.1 percent lead) that the absorption properties which can normally be expected to keep them immobile may be ineffective. No explosives were detected. Six SVOCs and several SVOC TICs were detected, but at concentrations below HBNs.

11.3.3 Groundwater (New Section)

As indicated in Table 11-3, 18 metals were detected in one or more of the samples analyzed. The majority of the metals detected and the highest concentrations were present in the unfiltered samples from wells 39MW2 and 39MW3, which are associated with the northernmost settling pond and spray pond respectively. As expected, the unfiltered samples contained higher concentrations of constituents than the corresponding filtered samples from the same well.

Several of the constituents detected, such as aluminum, calcium, iron, potassium, magnesium and sodium, can be characterized as naturally occurring inorganics. The concentrations of these metals are within the range that would be expected for groundwater in a karst environment containing carbonate and dolomite rocks.

Metals that were detected above HBN criteria were antimony and chromium, but were limited to the unfiltered samples collected from wells 39MW2 and 39MW3. Antimony was detected above its HBN criterion only in sample 39MW2 (63.7 ug/L), and chromium was detected above its HBN criterion only in sample 39MW3 (64.9 ug/L). Lead was detected at elevated concentrations in samples 39MW2 (25.6 ug/L) and 39MW3 (22.5 ug/L), but below its HBN criterion. These lead concentrations exceed the current EPA Maximum Concentration Level (MCL) of 15 ug/L but the chromium concentration is below the current MCL of 100 ug/L. Antimony was detected at an concentration about twice its practical quantitation limit (PQL), but more than 6 times its HBN. The elevated levels of antimony, lead and chromium detected in groundwater may be associated with high concentrations of these metals detected in pond sediment. Copper, which was reported at high concentrations in the spray pond sediment was not detected in any of the groundwater samples at elevated concentrations.

The results of the filtered samples indicate that only naturally occurring inorganics were reported as dissolved metals constituents. Except for barium and potassium, the highest concentrations of inorganic constituents were reported in samples from the two apparently downgradient monitoring wells.

No SVOCs were detected in any of the groundwater samples. Six SVOC TIC unknowns were detected in one or more of the samples analyzed. The concentrations reported for these TICs ranged from 4 to 70 ug/L.

11.4 BASELINE RISK ASSESSMENT (Revised)

Based on the contamination assessment presented in Section 11.3 and the waste characterization in Section 5.3, eight metals--antimony, arsenic, barium, beryllium, cobalt, copper, lead, and thallium--have been identified as contaminants of concern for SWMU 39 sediment. No contaminants of concern were identified for surface soil, indicating that windblown spray has not caused significant downwind contamination. Antimony, lead and chromium were identified as potential contaminants of concern in the groundwater. The potential impact of these metals to human health and the environment is discussed below in Sections 11.4.1 and 11.4.2, respectively.

11.4.1 Human Health Evaluation (Revised)

The sediment samples were collected from within the settling and spray ponds, which are surrounded by a fence. There are no potential human receptors to the sediment/sludge within these ponds, except for workers who may occasionally contact the sludge during cleaning operations. Workers would presumably wear protective equipment (i.e., gloves) and exposure is expected to be infrequent. Therefore, exposure to contaminants in the sediment/sludge is expected to be insignificant. Although surface water samples were not collected from the ponds, worker exposure to surface water would also be infrequent and is considered insignificant.

The metals detected in groundwater samples would not impact any known groundwater users at RAAP or off-base. Groundwater present in the Horseshoe Area discharges into the New River and the resulting dilution would lower concentrations to unmeasurable levels. A water supply well located 1,200 feet west-northwest of SWMU 69 has been put out of service and all connecting distribution piping has been removed. There is little potential for migration of metals contamination to a water supply well that is in service since no other supply well exists within the Horseshoe Area.

11.4.2 Environmental Evaluation

As discussed above, the settling and spray ponds are enclosed by a fence, thereby precluding access by most wildlife. Although birds and possibly small rodents may presumably have access to these settling ponds, considering the surrounding environment, it is not likely that they would forage in this area or use the pond surface water as a primary drinking water source. Therefore, potential exposure to environmental receptors is expected to be insignificant.

11.4.3 Conclusions to Human Health and Environmental Evaluation (Revised)

Exposure to contaminants in the sediment/sludge, and surface water of the ponds is expected to be insignificant for both human and environmental receptors. Exposure to contaminants in groundwater is also expected to be insignificant since no users have been identified.

11.5 CONCLUSIONS (Revised)

The 1992 VI field program included the collection of three soil samples east of the spray pond and sediment samples from the spray pond and two settling ponds at SWMU 39. Soil samples collected downwind of the spray pond showed concentrations of several metals at slightly greater than HBNs but less than or only slightly greater than background criteria; therefore, these metal levels are not considered a concern. These soil sample results indicated that windblown spray has not caused significant downwind soil contamination. However, high concentrations of copper and lead were detected in sediment samples collected from the spray pond and northern settling pond. Antimony, arsenic, barium, beryllium, cobalt, and thallium were also reported above HBNs in the spray pond sample, indicating an accumulation of these metals in the spray pond sediment. Because the ponds are enclosed by a fence, and workers infrequently maintain the ponds, potential human or wildlife surface exposure is considered insignificant.

The 1993 VI program consisted of the installation of three groundwater monitoring wells and the collection of one round of groundwater samples for metals (total and dissolved) and SVOCs. Antimony, lead and chromium have impacted groundwater below the site above HBNs or MCLs. Because SWMU 39 is located on limestone/dolostone residuum and limestone/dolostone with solution-cavity and fracture features, contaminants may be rapidly

25

transported to the subsurface via infiltration of water through the soil column and then the groundwater would eventually discharge into the New River.

11.6 RECOMMENDED ACTION (Revised)

Surficial soil has not been significantly impacted by wind-blown water from the spray pond and no further action is recommended for this environmental medium. As presented in Section 5.3, the sediment deposited at SWMU 39 has shown concentrations of eight metals above HBNs. Samples from monitoring wells indicate that the pond sediments are impacting the underlying groundwater. Interim measures to remove the sediment are recommended to prevent further discharge into the groundwater and possible off-site migration of metals contaminants.

BIBLIOGRAPHY

- Betz-Converse-Murdoch Eastern (BCM), Inc., 1984. Groundwater Quality Site Assessment Study at the Radford Army Ammunition Plant, Radford, Virginia. Prepared for U.S. Army Corps of Engineers, Huntsville, Alabama.
- Dames & Moore, 1992. Verification Investigation, Radford Army Ammunition Plant, Radford, Virginia (Final Draft). Prepared for the U.S. Army Toxic and Hazardous Materials Agency.
- Dames & Moore, 1991. Verification Investigation Work Plan for Radford Army Ammunition Plant, Virginia. Prepared for U.S. Army Toxic and Hazardous Materials Agency, Aberdeen Proving Ground, Maryland.
- Johnson Filtration Systems, Inc., 1986. Groundwater and Wells. Second Edition, Edited by Fletcher G. Driscoll.
- National Oceanic and Atmospheric Administration (NOAA), 1973. Climatology of the United States--Virginia, Vol 38, nos. 11 and 86. U.S. Department of Commerce, NOAA Environmental Data Service, Asheville, North Carolina.
- Olver, Inc., Consulting Engineers and Environmental Laboratories, 1980; 1983; 1989. Sample analyses: November 7, 1980; September 29, 1983, March 24 and September 18, 1989.
- Soil Conservation Service (SCS), 1985b. Soil Survey of Montgomery County, Virginia. U.S. Department of Agriculture.
- Soil Conservation Service (SCS), 1985a. Soil Survey of Pulaski County, Virginia. U.S. Department of Agriculture.
- U.S. Army Environmental Hygiene Agency (USAEHA), 1980a. Hazardous Waste Management Survey No. 39-26-0134-82. Radford Army Ammunition Plant, Radford, Virginia.
- U.S. Army Environmental Hygiene Agency (USAEHA), 1980b. Land Disposal Study No. 38-26 0128-81. Radford Army Ammunition Plant, Radford, Virginia.
- U.S. Army Toxic and Hazardous Materials Agency (USATHAMA), 1990. Quality Assurance Program.
- U.S. Army Toxic and Hazardous Materials Agency (USATHAMA), 1985. Installation Restoration Program Quality Assurance Program. (Revised 2nd edition, 1987).
- U.S. Army Toxic and Hazardous Materials Agency (USATHAMA), 1984. Installation Reassessment of Radford Army Ammunition Plant, Radford, Virginia. Report No. 103R.

- U.S. Army Toxic and Hazardous Materials Agency (USATHAMA), 1976. Installation Assessment of Radford Army Ammunition Plant. Records Evaluation Report No. 103.
- U.S. Environmental Protection Agency (USEPA), 1991. Technical Support Document on Lead. Preliminary Draft, Environmental Criteria and Assessment Office, Office of Health and Environmental Assessment, Cincinnati, Ohio, January 1991.
- U.S. Environmental Protection Agency (USEPA), 1989. Permit for Corrective Action and Incinerator Operation.
- U.S. Environmental Protection Agency (USEPA), 1987. RCRA Facility Assessment of Radford Army Ammunition Plant, Radford, Virginia.
- Virginia Department of Waste Management (VDWM), 1988. Commonwealth of Virginia Hazardous Waste Management Regulations. January 1, 1988.

APPENDIX A

Chemical Abbreviations and Analytical Data

Test Name (Analyte)

8.24

ELEMENT IS USED IN THE FOLLOWING IR RECORDS AND DATA BASE TABLES:

Level 1		Level 2		Level 3	
Record	Column(s)	Record	Column(s)	Table(s)	DB Column
Analysis	2-7	SCC(all)	75-80	chem/cqg	test_num

ELEMENT SIZE AND CHARACTERISTICS:

6 alphanumeric characters, left justified

ELEMENT DESCRIPTION:

Code to identify the analyte or parameter being measured.

ACCEPTABLE CRITERIA:

- Required on all chemical and radiological records
- Must match one of the acceptable codes listed below
- For unknowns, must be within the range of UNK001 through UNK999
- Lab must be certified for the specific Test Name except when one of the following conditions exists:

Method is "99", non-USATIIAMA approved or semiquantitative screening
Method is "00", which is valid for the following Test Names:

ACIDIT	CORRTY	SALINE
ALK	CROCO	SALINI
ALKBIC	DO	SSOL
ALKCAR	DOC	TASTE
ALKIYD	EPTOX	TDS
ALKPIIE	FIBGLS	TEMP
ALPHAG	FLASII	TOC
AMOS	FSTREP	TOTASII
ANPIIO	HARD	TOX
ASBEST	IGNIT	TPHIVG
BETAG	MINWOL	TPHIC
BOD	ODOR	TPHDSL
CHARD	OILGR	TPHIGAS
CHIRYS	ORGFIB	TREACT
COD	PARTIC	TSOLID
COLI	PHI	TSS
COLOR	REACTY	TURBID
COND	RESIST	

8.24

Test Name (Analyte)

NOTE: For unknown compounds, use the code "UNKXXX" where "XXX" represents the number assigned by the field lab to the unknowns from 001 thru 999. The numbers are full field, so "unknown one" would be expressed as "UNK001" with the zeros included. The description of what "UNK001" represents will be defined in the contractor's reports and other documentation and be consistent within the same installation. Therefore "UNK001" can only represent one unique unknown for each installation.

ACCEPTABLE ENTRIES:

Chemical and Radiological Data:

(Sorted alphabetically by Test-Name code)

01N1CL	0.1N Hydrochloric acid
10CUDM	10-Cyclopentylundecanoic acid, methyl ester
10MEOH	10% Methanol
10MUDM	10-Methylundecanoic acid, methyl ester
10OEME	10-Octadecenoic acid, methyl ester
111TCE	1,1,1-Trichloroethane
112TCE	1,1,2-Trichloroethane
113MCH	1,1,3-Trimethylcyclohexane
11C1PE	1,1-Dichloro-1-propene
11C1PN	1,1-Dichloropropene
11DCPE	1,1-Dichloroethylene / 1,1-Dichloroethene
11DCLE	1,1-Dichloroethane
11DCPE	1,1-Dichloropropene
11DMEB	(1,1-Dimethylethyl) benzene
11DPH	1,1-Diphenylhydrazine
11MCPB	1,1-Dimethylcyclopentane
1234MB	1,2,3,4-Tetramethylbenzene
123CPR	1,2,3-Trichloropropene
123MCH	1,2,3-Trimethylcyclohexane
123PDA	1,2,3-Propanetriol diacetate
123TCB	1,2,3-Trichlorobenzene
123TMB	1,2,3-Trimethylbenzene
124MCH	1,2,4-Trimethylcyclohexane
124TCB	1,2,4-Trichlorobenzene
124TMB	1,2,4-Trimethylbenzene
12DB3C	1,2-Dibromo-3-chloropropane
12DBD4	1,2-Dichlorobenzene-D4
12DBRE	1,2-Dibromoethane / Ethyl dibromide
12DCD4	1,2-Dichloroethane-D4

24

ACCEPTABLE ENTRIES: (Cont.)

12DCE	1,2-Dichloroethenes / 1,2-Dichloroethylenes (<i>cis</i> and <i>trans</i> isomers)
12DCLB	1,2-Dichlorobenzene
12DCLF	1,2-Dichloroethane
12DCLP	1,2-Dichloropropane
12DCPE	1,2-Dichloropropene, total
12DMB	1,2-Dimethylbenzene / o-Xylene
12DNAP	1,2-Dimethylnaphthalene
12DPB	1,2-Diphenylbenzene
12DPII	1,2-Diphenylhydrazine
12EPCI	Cyclohexene oxide / 1,2-Epoxy cyclohexene
12EPEB	1,2-Epoxyethylbenzene / Styrene oxide
12MCPE	1,2-Dimethylcyclopentane
12MTDM	12-Methyltetradecanoic acid, methyl ester
12TMCP	1,1,2,2-Tetramethylcyclopropane
13MCIH	1,3,5-Trimethylcyclohexane
13TMB	1,3,5-Trimethylbenzene
13TINB	1,3,5-Trinitrobenzene
13BDE	1,3-Butadiene
13CPDO	1,3-Cyclopentadione
13DBD4	1,3-Dichlorobenzene-D4
13DCLB	1,3-Dichlorobenzene
13DCP	1,3-Dichloropropane
13DCPE	1,3-Dichloropropene
13DEB	1,3-Diethylbenzene
13DFB	1,3-Difluorobenzene
13DMB	1,3-Dimethylbenzene / m-Xylene
13DMBB	(1,3-Dimethylbutyl) benzene
13DMCIH	1,3-Dimethylcyclohexane
13DNAP	1,3-Dimethylnaphthalene
13DNB	1,3-Dinitrobenzene
13DPPR	1,1'-(1,3-Propanediyl) bis(benzene) / 1,3-Diphenylpropane
13IIND	1,3-Dihydro-2H-indol-2-one
13MCPE	1,3-Dimethylcyclopentane
13TDAM	13-Tetradecanoic acid, methyl ester
14D2EB	1,4-Dimethyl-2-ethylbenzene
14DACB	1,4-Diacetylbenzene
14DBD4	1,4-Dichlorobenzene-D4
14DCBU	1,4-Dichlorobutane
14DCLB	1,4-Dichlorobenzene
14DFB	1,4-Difluorobenzene
14DIOX	1,4-Dioxane

ACCEPTABLE ENTRIES: (Cont.)

14DMB	1,4-Dimethylbenzene / p-Xylene
14DMCIH	1,4-Dimethylcyclohexane
14DMNP	1,4-Dihydro-1,4-methanonaphthalene
14DMXA	1,4-Dimethoxyanthracene
14DNB	1,4-Dinitrobenzene
14HXDE	1,4-Hexadiene
14MPME	14-Methylpentadecanoic acid, methyl ester
15DNAP	1,5-Dimethylnaphthalene
15MIIME	15-Methylhexadecanoic acid, methyl ester
167TMN	1,6,7-Trimethylnaphthalene
16DMIN	1,6-Dimethylindan
16DNAP	1,6-Dimethylnaphthalene
16MIIME	16-Methylheptadecanoic acid, methyl ester
17PTCE	17-Pentatriacontene
18DNAP	1,8-Dimethylnaphthalene
18O18D	1,2,3,4,4A,5,8,8A-Octahydro-1,4,5,8-dimethanol-naphthalen-2-ol
1A3MPZ	1-Acetyl-3-methyl-5-pyrazolone
1A4IIMB	1-Acetyl-4-(1-hydroxy-1-methylethyl) benzene
1BY4IIB	1-Benzyl-4-hydroxybenzimidazole
1C3L	1-Propanol
1C4L	1-Butanol
1CDMPZ	1-Carbamoyl-3,5-dimethyl-2-pyrazoline
1CIH	1-Chlorohexane
1CI24II	1-Chloro-2,4-hexadiene
1CLODC	1-Chlorooctadecane
1CNAP	1-Chloronaphthalene
1DDUCL	1-Dodecanol
1E2IDB	1-Ethyl-2,4-dimethylbenzene
1E2MB	1-Ethyl-2-methylbenzene
1E2IB	1-Ethylhexylbenzene
1EIIIND	1-Ethylidene-1H-indene
1EPB	1-Ethylpropylbenzene
1FNAP	1-Fluoronaphthalene
1IIPDOL	1-Heptadecanol
1IIX3OL	1-Hexen-3-ol
1IIXE	1-Hexene
1M2PEC	1-Methyl-2-(2-propenyl) cyclopentane
1M7MEN	1-Methyl-7-(1-methylethyl) naphthalene
1MBAAAN	1-Methylbenz (A) anthracene
1MCPNE	1-Methylcyclopentene
1MDB	1-Methyldecylbenzene

ACCEPTABLE ENTRIES: (Cont.)

1MECIX	1-Methylethylcyclohexane
1MECPR	1-Methylethylcyclopropane
1MEIND	1-Methylindan
1MFLRE	1-Methyl-9H-fluorene
1MNAP	1-Methylnaphthalene
1MNB	1-Methylnonylbenzene
1MPRB	(1-Methylpropyl) benzene
1MPYR	1-Methylpyrene
1MX1PE	1-Methoxy-1-propene
1N2ONE	1-Nitro-2-octanone
1NAPA	1-Naphthylamine
1NIIP	1-Nitroheptane
1NKCL	1.0N Potassium chloride solution
1NPN	1-Nitropropane
1OCTOL	1-Octanol
1PECIX	1-Propenylcyclohexane
1PNAP	1-Phenylnaphthalene
1TBCIA	1-t-Butylcyclohexanecarboxylic acid
210DMU	2,10-Dimethylundecane
2255CB	2,2',5,5'-Tetrachlorobiphenyl
225TCB	2,2',5-Trichlorobiphenyl
226TMO	2,2,6-Trimethyloctane
22DCP	2,2-Dichloropropane
22DMC4	2,2-Dimethylbutane
2345CB	2,3,4,5-Tetrachlorobiphenyl
2346CP	2,3,4,6-Tetrachlorophenol
2356CP	2,3,5,6-Tetrachlorophenol
235TCP	2,3,5-Trichlorophenol
235TMD	2,3,5-Trimethyldecane
236TMN	2,3,6-Trimethylnaphthalene
237TMO	2,3,7-Trimethyloctane
23C1PE	2,3-Dichloro-1-propene
23D21IL	2,3-Dimethyl-2-hexanol
23DCLP	2,3-Dichlorophenol
23DMC4	2,3-Dimethylbutane
23DMCS	2,3-Dimethylpentane
23DMP	2,3-Dimethylphenol
23DNAP	2,3-Dimethylnaphthalene
23TMP	2,2,3,3-Tetramethylpentane
245PCB	2,2',4,5,5'-Pentachlorobiphenyl
245T	2,4,5-Trichlorophenoxyacetic acid

ACCEPTABLE ENTRIES: (Cont.)

245TCP	2,4,5-Trichlorophenol
245TP	2-(2,4,5-Trichlorophenoxy) Propionic Acid
246MPY	2,4,6-Trimethylpyridine
246TBP	2,4,6-Tribromophenol
246TCA	2,4,6-Trichloroaniline
246TCP	2,4,6-Trichlorophenol
246TMO	2,4,6-Trimethyloctane
246TNP	2,4,6-Trinitrophenol / Picric acid
246TNR	2,4,6-Trinitroresorcinol / Syphonic acid
246INT	2,4,6-Trinitrotoluene / alpha-Trinitrotoluene
247HIOI	2,2,4,4,7,7-Hexamethyloctahydro-1H-indene
247TMO	2,4,7-Trimethyloctane
24D	2,4-Dichlorophenoxyacetic acid / 2,4-D
24DB	4-(2,4-Dichlorophenoxy)butyric acid / 2,4-DB
24DCB	2,4-Dichlorobiphenyl
24DCLP	2,4-Dichlorophenol
24DMCS	2,4-Dimethylpentane
24DMD	2,4-Dimethyldecane
24DMIIX	2,4-Dimethylhexane
24DMPN	2,4-Dimethylphenol
24DNP	2,4-Dinitrophenol
24DNT	2,4-Dinitrotoluene
24M2PL	2,4-Dimethyl-2-pentanol
24MPD3	2,4-Dinitrophenol-D3
24T13P	2,2,4-Trimethyl-1,3-pentanediol
256TMD	2,5,6-Trimethyldecane
25C14D	2,5-Cyclohexadiene-1,4-dione
25DCLP	2,5-Dichlorophenol
25DMP	2,5-Dimethylphenol
25DMPA	2,5-Dimethylphenanthrene
25DTIIF	2,5-Dimethyltetrahydrofuran
25ETIIF	2,5-Diethyltetrahydrofuran
25IIPC	2,2',3,4,5,5'-Heptachlorobiphenyl
25IIXCB	2,2',3,4,5,5'-Hexachlorobiphenyl
25OCCB	2,2',3,3',4,4',5,5'-Octachlorobiphenyl
2611MD	2,6,11-Trimethyldodecane
26DBMP	2,6-Di-tert-butyl-4-methylphenol / 2,6-Di-tert-butyl-4-cresol
26DCLP	2,6-Dichlorophenol
26DMO	2,6-Dimethyloctane
26DMP	2,6-Dimethylphenol
26DMST	2,6-Dimethylstyrene

ACCEPTABLE ENTRIES: (Cont.)

26DMUD	2,6-Dimethylundecane
26DNA	2,6-Dinitroaniline
26DNT	2,6-Dinitrotoluene
26IPCB	2,2',3,4,4',5,6-Heptachlorobiphenyl
27DMO	2,7-Dimethyloctane
27DNAP	2,7-Dimethylnaphthalene
29DMUD	2,9-Dimethylundecane
2A46DA	2-Amino-4,6-dinitroaniline
2A46DT	2-Amino-4,6-dinitrotoluene
2A4NT	2-Amino-4-nitrotoluene
2ACAMF	2-Acetylaminofluorene
2B1CP	2-Bromo-1-chloropropane
2B1OOL	2-Butyl-1-octanol
2B4MFU	2-(1-butyl)-4-methylfuran
2BEETO	2-(2-N-Butoxyethoxy) ethanol
2BEMDE	2,2-Bis(ethylmercapto) diethyl ether
2BMMPR	2,2-Bis(methylmercapto) propane
2BNMNM	2-Butyl-N-methylnorleucine, methyl ester
2BR1XA	2-Bromohexanoic acid
2BUTHF	2-Butyltetrahydrofuran
2BUXEL	2-Butoxyethanol
2C4E	2-Butene
2C6MPZ	2-Chloro-6-methoxy-10H-phenothiazine
2C7O	2-Heptanone / Methylpentyl ketone
2CBMN	o-Chlorobenzylidene malononitrile
2CEC11O	2-(2-Cyanoethyl) cyclohexanone
2CI146D	2-Cyclohexyl-4,6-dinitrophenol
2CHAE	2-Cyclopentene-1-hendecanoic acid, ethyl ester
2CHIE1L	2-Cyclohexen-1-ol
2CHIE1O	2-Cyclohexen-1-one
2CLBP	2-Chlorobiphenyl
2CLEVE	(2-Chloroethoxy) ethene / 2-Chloroethylvinyl ether
2CLP	2-Chlorophenol
2CLPD4	2-Chlorophenol-D4
2CLT	2-Chlorotoluene
2CMC11O	2-(Cyanomethyl) cyclohexanone
2CNAP	2-Chloronaphthalene
2DMPEN	2,2-Dimethylpentane
2E11XL	2-Ethyl-1-hexanol
2E21PD	2-Ethyl-2-hydroxymethyl-1,3-propanediol
2E4MPL	2-Ethyl-4-methyl-1-pentanol

ACCEPTABLE ENTRIES: (Cont.)

2EC6A	2-Ethylhexanoic acid
2ECYBL	2-Ethylcyclobutanol
2EP	2-Ethylphenol
2FDP	2-Fluorobiphenyl
2FNAP	2-Fluoronaphthalene
2FP	2-Fluorophenol
2I1BDDM	2-Hydroxybutanedioic acid, dimethyl ester
2I1BNZL	2-Hydroxybenzaldehyde / Salicylaldehyde
2I1NDOL	2-Undecanol / 2-Undecanol
2I1YBP	2-Hydroxybiphenyl
2M1DDL	2-Methyl-1-dodecanol
2M1PNE	2-Methyl-1-pentene
2M24P	2-Methyl-2,4-pentanediol
2M2BDA	2-Methyl-2-butenediamide
2M2C3L	2-Methyl-2-propanol / tert Butanol
2M2I13B	2-Methyl-2-hydroxy-3-butyne
2M3HIXE	2-Methyl-3-hexene
2M3PNO	2-Methyl-3-pentanone
2M3ZA	2-Methylbenzyl alcohol
2MC3	2-Methylpropane / Isobutane
2MC4	2-Methylbutane / Isopentane
2MC6	2-Methylhexane / Isoheptane
2MC7	2-Methylheptane / Isooctane
2MCPNE	2-Methylcyclopentanone
2MCYPL	2-Methylcyclopentanol
2MDEC	2-Methyldecane
2MDOD	2-Methyldodecane
2MENAP	2-(1-Methylethyl) naphthalene
2MEODE	2-Methyloctadecanoic acid
2MEPEN	2-Methylpentane
2MMECO	2-Methyl-5-(1-methylethyl)-2-cyclohexen-1-one
2MNAP	2-Methylnaphthalene
2MP	2-Methylphenol / 2-Cresol / o-Cresol
2MPA1E	2-Isobutyric acid
2MPA1IT	2-Methylpropanoic acid, 3-hydroxy-2,4,4-trimethyl-1,3-propanediyl ester
2MPAME	2-Methylpropanoic acid, methyl ester
2MPEAE	2-Methyl-2-propenoic acid, 1,2-ethanediyl ester
2MPYR	2-Methylpyrene
2MTETD	2-Methyltetradecane
2MTIIF	2-Methyltetrahydrofuran
2MTIIPM	2-Methyl-4-hydroxypyrimidine

ACCEPTABLE ENTRIES: (Cont.)

2MX1PE	2-Methoxy-1-propene
2MXEL	2-(2-Methoxyethoxy) ethanol / Diethyleneglycol monomethyl ether
2MXMC3	2-Methoxy-2-methylpropane / tert-Butylmethyl ether
2MX1MB	2-Methoxy-2,3,3-trimethylbutane
2N3C	3-Methyl-2-nitrophenol / 2-Nitro-m-cresol
2NANIL	2-Nitroaniline
2NAPA	2-Naphthylamine
2NBZLZ	2-Nitrobenzalazine
2NKCL	2.0N Potassium chloride solution
2NNDPA	2-Nitro-N-nitrosodiphenylamine
2NODCO	2-Nonadecanone
2NP	2-Nitrophenol
2NPN	2-Nitropropane
2NT	2-Nitrotoluene
2OXBEL	2,2-Oxybis[ethanol] (obsolete - use DEGLYC)
2PETOI	2-Phenylethanol
2PIIXEL	2-Phenoxyethanol
2PICO	2-Picoline
2PNAP	2-Phenylnaphthalene
2PROL	2-Propanol
2PXEXL	2-(2-Phenoxyethoxy) ethanol
2PY1OL	2-Propyn-1-ol
2SB46D	2-sec-Butyl-4,6-dinitrophenol
2TCL6A	1,1,1,2-Tetrachloroethane
2TMIIPD	2,6,10,14-Tetramethylheptadecane
2TMPD	2,6,10,14-Tetramethylpentadecane
33DCBD	3,3'-Dichlorobenzidine
33DMBP	3,3'-Dimethoxybiphenyl / 3,3'-Dimethoxybenzidine
33DMEB	3,3'-Dimethylbiphenyl / 3,3'-Dimethylbenzidine
33DMIIX	3,3-Dimethylhexane
33DMPN	3,3-Dimethylpentane
344TPE	3,4,4-Trimethyl-2-pentene
345T111	3,4,5-Trimethyl-1-hexene
34BZFA	3,4-Benzofluoranthene
34CBD6	3,3',4,4'-Tetrachlorobiphenyl-D6
34D1DE	3,4-Dimethyl-1-decene
34DCLP	3,4-Dichlorophenol
34DMP	3,4-Dimethylphenol
34DNT	3,4-Dinitrotoluene
35DMP	3,5-Dimethylphenol
35DNA	3,5-Dinitroaniline

ACCEPTABLE ENTRIES: (Cont.)

35DNP	3,5-Dinitrophenol
35DNT	3,5-Dinitrotoluene
35M3JIL	3,5-Dimethyl-3-hexanol
36DF9O	3,6-Dichlorofluoren-9-one
36DMO	3,6-Dimethyloctane
36TMPA	3,4,5,6-Tetramethylphenanthrene
37DMNN	3,7-Dimethylnonane
38DMUD	3,8-Dimethylundecane
3BPETII	3-Butenylpentyl ether
3C1C3E	3-Chloro-1-propene / Allyl chloride
3C1IXD	3-Cyclohexyldecane
3CLP	3-Chlorophenol
3C1PRN	3-Chloropropionitrile
3CLT	3-Chlorotoluene
3CMCH	3-(Chloromethyl) cyclohexene
3DC1IEO	3,5-Dimethyl-2-cyclohexen-1-one
3E22MP	3-Ethyl-2,2-dimethylpentane / 3-(t-Butyl)-pentane
3E2SDII	3-Ethyl-2,5-dimethyl-3-hexene
3EE2BO	3,4-Epoxy-3-ethyl-2-butanone
3EEBOD	3-Ethyl-5-(2-ethylbutyl) octadecane
3E1IXDE	3-Ethyl-1,4-hexadiene
3EP	3-Ethylphenol
3HDMPL	3-(Hydroxymethyl)-4,4-dimethylpentanal
3HDMPT	3-Hydroxy-2,7-dimethyl-4-[3H]-pteridinone
3IIXE2O	3-Hexen-2-one
3I1YBA	3-Hydroxybenzaldehyde
3M1PL	3-Methyl-1-pentanol
3M2C1O	3-Methoxy-2-cyclopenten-1-one
3M2G5E	3-Methyl-2-pentene
3M2C1HO	3-Methyl-2-cyclohexen-1-one
3M2IIXL	3-Methyl-2-hexanol
3MSPNN	3-Methyl-5-propylnonane
3MBP	3-Methylbiphenyl
3MC6	3-Methylhexane
3MCA	3-Methylcholanthrene
3MCHRY	3-Methylchrysene
3MDEC	3-Methyldecane
3MEPEN	3-Methylpentane
3MP	3-Methylphenol / 3-Cresol / m-Cresol
3MPANR	3-Methylphenanthrene
3MUND	3-Methylundecane

ACCEPTABLE ENTRIES: (Cont.)

3MXIMZ	3-Methoxyimidazole
3MXT	3-Methoxytoluene
3NANIL	3-Nitroaniline
3NT	3-Nitrotoluene
3OCTOL	3-Octanol
3OPPAE	3-Oxo-3-phenylpropanoic acid, ethyl ester
3PC3AC	3-Phenylpropanoyl chloride/1-hydrocinnamyl chloride
3PT	3-Propyltoluene
3SSE3L	(3beta)-Stigmast-5-en-3-ol
3TBUP	3-(t-Butyl) phenol
3TCHEO	3,5,5-Trimethyl-2-cyclohexen-1-one
4IMEIIP	4-(1-Methylethyl) heptane
4DCBZ	4,4'-Dichlorobenzophenone
4DFBZ	4,4'-Difluorobenzophenone
4DMPE	4,4-Dimethyl-2-pentene
4DMUD	4,4-Dimethylundecane
468TIN	4,6,8-Trimethyl-1-nonene
46DN2C	2-Methyl-4,6-dinitrophenol / 4,6-Dinitro-2-cresol
47DMUD	4,7-Dimethylundecane
48DMIID	4,8-Dimethylundecane
4A2NT	4-Amino-2-nitrotoluene
4A3SDT	4-Amino-3,5-dinitrotoluene
4ABP	4-Aminobiphenyl
4AMORP	4-Acetylmorpholine
4B3P2O	4-Butoxy-3-penten-2-one
4BFB	4-Bromofluorobenzene
4BRPPE	4-Bromophenylphenyl ether
4C3MBE	4-Chloro-3-methyl-1-butene
4CANIL	4-Chloroaniline
4CC1XL	4-Chlorocyclohexanol
4CL2C	2-Methyl-4-chlorophenol / 4-Chloro-2-cresol
4CL3C	3-Methyl-4-chlorophenol / 4-Chloro-m-cresol / 4-Chloro-3-cresol / 4-Chloro-3-methylphenol
4CLPPE	4-Chlorophenylphenyl ether
4CLT	4-Chlorotoluene
4DM2PL	4,4-Dimethyl-2-pentanol
4E2M1X	4-Ethyl-2-methylhexane
4E2OCE	4-Ethyl-2-octene
4ETMIIP	4-Ethyl-2,2,6,6-tetramethylheptane
4FANIL	4-Fluoroaniline
4FT	4-Fluorotoluene

ACCEPTABLE ENTRIES: (Cont.)

4I135BA	4-Hydroxy-3,5-dimethoxybenzaldehyde
4I13MBA	4-Hydroxy-3-methoxybenzaldehyde / Vanillin
4I1AZOB	4-Hydroxyazobenzene
4I1YBA	4-Hydroxybenzaldehyde
4IOMQU	4-Iodomethylquinuclidine
4M2PNO	4-Methyl-2-pentanone
4M2PPL	4-Methyl-2-propyl-1-pentanol
4MBP	4-Methylbiphenyl
4MBSA	4-Methylbenzene sulfonamide
4MC7	4-Methylheptane
4MDBFU	4-Methyldibenzofuran
4MENPA	4-(1-Methylethyl)-N-phenylaniline
4MFLRE	4-Methyl-9H-fluorene
4MMBHE	4-Methyl-1-(1-methylethyl)-bicyclo[3.1.0]hex-2-ene
4MP	4-Methylphenol / 4-Cresol / p-Cresol
4MPANR	4-Methylphenanthrene
4MPYR	4-Methylpyrene
4MXCIL	4-Methoxycyclohexanol
4MXP	4-Methoxyphenol
4NANIL	4-Nitroaniline
4NP	4-Nitrophenol
4NT	4-Nitrotoluene
4TBU2C	2-Methyl-4-(t-butyl) phenol / 4-t-Butyl-2-cresol
4TOP	4-t-Octylphenol
50I150A	50% Hexane - 50% acetone
50M50A	50% Methylene chloride - 50% acetone
50WMAN	50% Water - 25% Methanol - 25% acetonitrile
5CL2C	5-Chloro-o-cresol / 2-Methyl-5-chlorophenol
5E2MIIP	5-Ethyl-2-methylheptane
5E5MD	5-Ethyl-5-methyldecane
5M2H1XO	5-Methyl-2-hexanone
5MS1IAL	5-Methyl-5-hydroxyhexanoic acid lactone
5N2OL	5-Norborn-2-ol
5NOTOL	5-Nitro-o-toluidine
5PTRID	5-Propyltridecane
6CL3C	3-Methyl-6-chlorophenol / 6-Chloro-3-cresol
6E6MEV	6-Ethyl-6-methylfulvene
6M3HPL	6-Methyl-3-heptanol
6MDOD	6-Methyldodecane
6MEPUR	6-Methylpurine
6MTRID	6-Methyltridecane

Test Name (Analyte)

8.24

ACCEPTABLE ENTRIES: (Cont.)

6TBU2C	2-Methyl-6-(t-butyl) phenol / 6-t-Butyl-2-cresol
712DMA	7,12-Dimethylbenz(A)anthracene
7MTRID	7-Methyltridecane
8MHNDL	8-Methyl-1,8-nonanediol
9FLENO	9-Fluorenone
9IFLRE	9H-Fluoren-9-one
9MBAAN	9-Methylbenz(A)anthracene
9MXANT	9-Methoxyanthracene
AACIXE	Acetic acid, cyclohexyl ester
AADMP	alpha, alpha-Dimethylphenethylamine
ABIIC	alpha-Benzenehexachloride / alpha-Hexachlorocyclohexane
AC	Hydrogen cyanide / Hydrocyanic acid
AC228	Actinium 228
ACDHMW	Acids (high molecular weight)
ACET	Acetone
ACIE	Anticholinesterase
ACIDIT	Acidity
ACLDAN	alpha-Chlordane
ACHLOR	alpha-Chlordane (obsolete-use ACLDAN)
ACND10	Acenaphthene-D10
ACPIIN	Acetophenone
ACROLN	Acrolein
ACRYLO	Acrylonitrile
ADHP	Ammonium dihydrogen phosphate
AENSLF	alpha-Endosulfan / Endosulfan I
AG	Silver
AG110M	Silver 110 (metastable)
AL	Aluminum
ALACL	Alachlor
ALAL	Aliphatic alcohols
ALDEHY	Aldehydes
ALDI	Aldicarb / 2-Methyl-2-(methylthio)propanal O-[(methylamino)carbonyl] oxime
ALDRN	Aldrin
ALHC	Aliphatic hydrocarbons
ALHMW	Alcohols (high molecular weight)
ALK	Alkalinity
ALKBIC	Alkalinity - bicarbonate
ALKCAR	Alkalinity - carbonate
ALKIYD	Alkalinity - hydroxide
ALKN	Alkanes

13 March 1992

8.24-13

8.24

Test Name (Analyte)

ACCEPTABLE ENTRIES: (Cont.)

ALKPIIE	Alkalinity - phenolphthalein
ALPGF	Alpha gross-field
ALPGI	Alpha gross-lab
ALPGLA	Alpha gross-soluble acid fraction
ALPGLW	Alpha gross-soluble water fraction
ALPIAG	Alpha gross
ALPIPN	alpha-Pinene
ALYLOL	Allyl alcohol
AM241	Americium 241
AMCARB	Aminocarb
AMGD	Aminoguanidine
AMINCR	4-(Dimethylamino)-3-methylphenolmethyl carbamate / Mexacarbate
AMOS	Amosite asbestos
ANAPNE	Acenaphthene
ANAPYL	Acenaphthylene
ANELNT	Anion eluent
ANIL	Aniline
ANPHIO	Anthophyllite asbestos
ANTRC	Anthracene
ANTRCN	9-Anthracenecarbonitrile
ANTRQU	9,10-Anthracenedione / Anthraquinone
ARAMT	Aramite
AS	Arsenic
ASBEST	Asbestos
ASEXT	Arsenic extractable
ASTOT	Arsenic total
ATNBA	2,4,6-Trinitrobenzaldehyde
ATNT	alpha-Trinitrotoluene (obsolete - use 246TNT)
ATZ	Atrazine
AU	Gold
AYLETII	Allyl ether
AZACN	Azacyclononane
AZM	Azinphos methyl
B	Boron
B2CEXM	Bis (2-chloroethoxy) methane
B2CIPE	Bis (2-chloroisopropyl) ether
B2CLIE	Bis (2-chloroethyl) ether
B2EHP	Bis (2-ethylhexyl) phthalate
BA	Barium
BA140	Barium-140
BAANTR	Benzo(A)anthracene

8.24-14

13 March 1992

ACCEPTABLE ENTRIES: (Cont.)

BAC	Benzal chloride
BAIIXE	Butanoic acid, 1-hexyl ester
BAPYR	Benzo[A]pyrene
BARBAN	4-Chloro-2-butyl m-chlorocarbanilate / Barban
BBFANT	Benzo[B]fluoranthene
BBFLRE	Benzo[B]fluorene
BBHIC	beta-Benzenhexachloride / beta-Hexachlorocyclohexane
BBNFM	Benzo[B]naphtho[2,3-D]furan
BDNTIP	Benzo[B]naphtho[1,2-D]thiophene
BBZP	Butylbenzyl phthalate
BCIIPD	Bicyclo[2,2,1]hepta-2,5-diene
BCLDAN	beta-Chlordane
BCLME	Bis (chloromethyl) ether
BCMSO	Bis (carboxymethyl) sulfoxide
SCMSO2	Bis (carboxymethyl) sulfone
BCPIICE	2,2-Bis(chlorophenyl)chloroethylene (DDT related)
BCY3IIX	Bicyclo[3,1,0]hexane
BDADME	Butanedioic acid, dimethyl ester
BDEANT	7H-Benz[DE]anthracen-7-one
BE	Beryllium
BE7	Beryllium 7
BEETO	1-(2-Butoxyethoxy) ethanol
BEGAG	Beta gamma gross
BENSLF	beta-Endosulfan / Endosulfan II
BENZA	Benzanthrone
BENZAL	Benzaldehyde
BENZID	Benzidine
BENZOA	Benzoic acid
BEP	2-Butoxyethanol phosphare
BEPYR	Benzo[E]pyrine
BETAG	Beta gross
BETGF	Beta gross-field
DEIGL	Beta gross-lab
BETGLA	Beta gross-soluble acid fraction
BETGLW	Beta gross-soluble water fraction
BF2ANT	Benzo[b]fluoranthene
BGIHFA	Benzo[G,H,I]fluoranthene
BGHIPY	Benzo[G,H,I]perylene
BIIC	BIIC - nonspecific
BI	Bismuth
BI212	Bismuth 212

ACCEPTABLE ENTRIES: (Cont.)

BI214	Bismuth 214
BICYIIX	Bicyclohexyl
BIDBI	1,5-Bis (1,1-dimethylethyl)-3,3-dimethylbicyclo[3.1.0]hexane-2-one
DINAP	Binaphthyl
BJFANT	Benzo[J]fluoranthene
BKFANT	Benzo[K]fluoranthene
BI.DX	Bladex
BMP	Butylmethyl phthalate
BOD	Biological oxygen demand
BOLS	Bolstar
BPBG	Butylphthalyl butylglycolate
BR	Bromide
BRC6IIS	Bromobenzene
BRCLM	Bromochloromethane
BRDCLM	Bromodichloromethane
BRMCIL	Bromacil
BTAZON	3-(1-Methylethyl)-1H-2,1,3-benzothiadiazin-4(3H)-one-2,2-dioxide / Bentazon
BTIC	Benzotrichloride
BTIHOL	Benzenethiol
BTMSOA	Bis (trimethylsilyl) oxalic acid
BTZ	Benzo[diazole
BUC6IIS	Butylbenzene
BUEETII	Butylethyl ether
BZ	3-Quinuclidinyl benzilate
BZAL2M	alpha, alpha-Dimethylbenzenemethanol
BZALC	Benzyl alcohol
BZAPAN	Benzo[A]phenanthrene
BZCPAN	Benzo[C]phenanthrene
BZFANT	Benzo[fluoranthene
BZHQUN	Benzo[H]quinoline
BZOAME	Benzoic acid, methyl ester / Methyl benzoate
BZONH4	Benzoic acid, ammonium salt
BZOTIIP	Benzo[B]thiophene
BZOTRP	Benzo[B]triphenylene
BZOTRZ	1H-Benzotriazole / 1,2,3-Benzotriazole
BZPA	Benzenephosphonic acid
BZYLBR	Benzyl bromide / alpha-Bromotoluene
BZYLCL	Benzyl chloride
C10	Decane
C11	Undecane

Test Name (Analyte)

8.24

ACCEPTABLE ENTRIES: (Cont.)

C12	Dodecane
C12AMM	8-Methyldecanoic acid, methyl ester
C12DCE	<i>cis</i> -1,2-Dichloroethylene / <i>cis</i> -1,2-Dichloroethene
C13	Tridecane
C13DCP	<i>cis</i> -1,3-Dichloropropylene / <i>cis</i> -1,3-Dichloropropene
C14	Tetradecane
C14A	Tetradecanoic acid / Myristic acid
C14AME	Tetradecanoic acid, methyl ester
C15	Pentadecane
C15A	Pentadecanoic acid
C16	Hexadecane
C16A	Hexadecanoic acid / Palmitic acid
C16ABE	Hexadecanoic acid, butyl ester
C16ADM	Hexadecanoic acid, dimethyl ester
C16AEII	Hexadecanoic acid, bis (2-ethylhexyl) ester
C16AME	Hexadecanoic acid, methyl ester
C16SAT	Saturated hydrocarbons (C16)
C17	Heptadecane
C17A	C17 alkane
C17AM	Heptadecanoic acid, methyl ester
C18	Octadecane
C185FP	Bis (pentafluorophenyl) phenyl phosphine
C18A	C18 alkane
C18ABE	Octadecanoic acid, butyl ester
C18AE	Octadecanoic acid, ethyl ester
C18AME	Octadecanoic acid, methyl ester
C18AOD	Octadecanoic acid, octadecyl ester
C18UNS	C18I1300 Unknown
C19	Nonadecane
C19A	Nonadecanoic acid
C19ADME	Carbonic acid, dimethyl ester
C20	Eicosane
C21	Heneicosane
C22UNS	C22I1400 Unknown
C25	Pentacosane
C2AEE	Acetic acid, ethyl ester / Ethyl acetate
C2AVB	Acetic acid, vinyl ester / Vinyl acetate
C2I13CL	Chloroethene / Vinyl chloride
C2I15CL	Chloroethane
C3OAME	Triacontanoic acid, methyl ester
C35	Pentatriacontane

13 March 1992

8.24-17

8.24

Test Name (Analyte)

ACCEPTABLE ENTRIES: (Cont.)

C36	Hexatriacontane
C3A2MB	Propanoic acid, 2-methylbutyl ester
C3AME	Propanoic acid, methyl ester
C4	Butane
C4I1X1L	<i>cis</i> -4-Hexen-1-ol
C5A	Pentanoic acid / Valeric acid
C6D6	Benzene-D6
C6I16	Benzene
C6I1O1I	Cyclohexanol
C7	Heptane
C7A	Heptanoic acid
C7NB1	Heptachloronorborene
C8	Octane
C8A	C8 alkane
C8AME	Octanoic acid, methyl ester
C9	Nonane
CA	Calcium
CAAI1	Chloroacetaldehyde
CACO3S	Calcium carbonate solution
CALLMW	Hydrocarbons (all molecular weights)
CAMBEN	3-Amino-2,5-dichlorobenzoic acid / Chloramben
CAME	Carbanic acid, methyl ester
CAMP	Camphor
CAPLCT	Caprolactam / 6-Aminoheptanoic acid lactam
CAPTAN	Captan
CARB14	Carbon 14
CARBAZ	9H-Carbazole / Carbazole
CARBOF	2,3-Dihydro-2,2-dimethyl-7-benzofuranyl methylcarbamate
CATOL	Catechol
CBA	o-Chlorobenzaldehyde
CBCCII	<i>cis</i> -1-Bromo-2-chlorocyclohexane
CBOA	o-Chlorobenzoic acid
CC3	XXCC3
CCL2F2	Dichlorodifluoromethane
CC13F	Trichlorofluoromethane
CCL4	Carbon tetrachloride
CCLDAN	<i>cis</i> -Chlordane
CC1F	Chlorofluoromethane
CCLF2	Chlorodifluoromethane
CCLF3	Trifluorochloromethane
CD	Cadmium

8.24-18

13 March 1992

ACCEPTABLE ENTRIES: (Cont.)

CD2CL2	Methylene chloride-D2
CDAC11	cis-1,2-Diacetoxycyclohexane
CDCBU	cis-1,4-Dichloro-2-butene
CDCL3	Chloroform-D
CDNBIS	Chlorodinitrobenzene isomer
CE	Cerium
CE141	Cerium 141
CE144	Cerium 144
CEC	Cation exchange capacity
CF252	Californium 252
CG	Phosgene / Carbonyl chloride
CI12BR2	Methylene bromide
CI12CL2	Methylene chloride
CI13BR	Bromomethane
CI13CL	Chloromethane
CI13CN	Acetonitrile
CI13I	Iodomethane
CI14	Methane
CI1ARD	Calculated Hardness
CI1BR3	Bromoform
CI1CL21	Dichlorodiodomethane
CI1CL3	Chloroform
CHNO	Ethanolamine
CI1NO2	Diethanolamine
CI1O	1,2-Cyclohexane oxide
CI1OLA	Cholestane
CI1ONE	Cyclohexanone
CHRY	Chrysene
CHRY5	Chrysotile asbestos
CK	Cyanogen chloride
CL	Chloride
CL10BP	Decachlorobiphenyl
CL2	Chlorine
CL2ACN	Dichloroacetonitrile
CL2BP	Dichlorobiphenyls
CL2BZ	Dichlorobenzenes
CL2CI12	Dichloromethane
CL2ET11	Ethylene chlorohydrin
CL2NAP	Dichloronaphthalenes
CL3BP	Trichlorobiphenyls
CL3C3E	Trichloropropenes

ACCEPTABLE ENTRIES: (Cont.)

CL3NAP	Trichloronaphthalenes
CL3P	Trichlorophenols
CL4BP	Tetrachlorobiphenyls
CL4NAP	Tetrachloronaphthalenes
CL4XYL	2,4,5,6-Tetrachlorometaxylene / Tetrachlorometaxylene
CL5B	Pentachlorobenzene
CL5BP	Pentachlorobiphenyls
CL5ET	Pentachloroethane
CL6BP	Hexachlorobiphenyls
CL6BZ	Hexachlorobenzene
CL6CP	Hexachlorocyclopentadiene
CL6ET	Hexachloroethane
CL7BP	Heptachlorobiphenyls
CL7NB	Heptachloronorbormadienes
CL8ZL	Chlorobenzilate
CLC2A	Chloroacetic acid
CLC6DS	Chlorobenzene-DS
CLC6I15	Chlorobenzene / Monochlorobenzene
CLCY11X	Chlorocyclohexane
CLD	Chlorine demand
CLDAN	Chlordane
CLDEN	Chlordene
CLNAP	Chloronaphthalenes
CLO3	Chlorate
CLP	Chlorophenols
CLPRPM	Isopropyl m-chlorocarbamate / Chlorpropham
CLT11L	Chlorothalonil
CLVRA	2-Chlorovinyl arsonic acid
CLXB	Chlorinated benzenes
CLXNAP	Chlorinated naphthalenes
CMME	Chloromethyl methyl ether
CMONOX	Carbon monoxide
CN	Chloroacetophenone
CO	Cobalt
CO2	Carbon dioxide
CO3	Carbonate
CO57	Cobalt 57
CO58	Cobalt 58
CO60	Cobalt 60
COD	Chemical oxygen demand
COLI	Fecal coliform

ACCEPTABLE ENTRIES: (Cont.)

COLOR	Color
COND	Specific conductivity
COND-F	Specific conductivity as tested in the field
CORRTY	Corrositivity (tendency to corrode)
COUMA	Coumaphos
COUMRN	2,3-Dihydrobenzofuran / Coumaran
CPCXAL	Cyclopentanecarboxaldehyde
CPMS	p-Chlorophenylmethyl sulfide
CPMSO	p-Chlorophenylmethyl sulfoxide
CPMSO2	p-Chlorophenylmethyl sulfone
CPO	Cyclopentanone
CPYR	Chloropyrifos
CR	Chromium
CR3	Chromium, III
CR51	Chromium 51
CIBRL	Carbaryl
CRFRN	Carbofuran
CRHEX	Hexavalent chromium
CRO4	Chromate
CROCO	Crocidolite asbestos
CRTALD	Crotonaldehyde / trans-2-Butenal
CRYOP	Cryoflex
CS	Cesium
CS134	Cesium 134
CS137	Cesium 137
CS2	Carbon disulfide
CSOL	Cresols
CT	Chlorotoluene
CU	Copper
CUEXT	Copper extractable
CUTOT	Copper total
CX	Phosgene oxime / Dichloroformoxime
CYDODC	Cyclododecane
CYIIX	Cyclohexane
CYIIXA	Cyclohexylamine
CYIIXB	Cyclohexylbenzene / Phenylcyclohexane
CYIIXE	Cyclohexene
CYN	Cyanide
CYNAM	Amenable cyanide
CYNF	Cyanide, free form
CYOCTE	Cyclooctatetraene

ACCEPTABLE ENTRIES: (Cont.)

CYPD	Cyclopentadiene
CYPNE	Cyclopentene
CYSD12	Chrysene-D12
DAIA	2,2-Dichloropropionic acid / Dalapon
DBABA	Dibenz[A,B]anthracene
DBAEPY	Dibenzo[A,E]pyrene
DBAIIA	Dibenz[A,I]anthracene
DBAIIPY	Dibenzo[A,I]pyrene
DBAIPY	Dibenzo[A,I]pyrene
DBAJA	Dibenz[A,J]acridine
DBATTS	2,4-Dihydroxybenzoic acid, tris-trimethylsilyl
DBCP	Dibromochloropropane
DBIC	delta-Benzenehexachloride / delta-Hexachlorocyclohexane
DBRCLM	Dibromochloromethane
DBRDCM	Dibromodichloromethane
DBTSPY	4,5-Dimethyl-2,6-bis(trimethylsiloxy)pyrimidine
DBUCLE	Dibutylchloroendate
DBZFUR	Dibenzofuran
DBZTIIP	Dibenzothiophene
DCAA	2,4-Dichlorophenyl acetic acid / DCAA
DCAMBA	Dicamba / 2-Methoxy-3,6-dichlorobenzoic acid
DCBPDI	Dichlorobenzophenone
DCBUT	Dichlorobutane
DCIIP	Dicyclohexyl phthalate
DCLB	Dichlorobenzene - nonspecific
DCLRN	Dichloran / Dichlorobenzalkonium chloride
DCMBF	5,7-Dichloro-2-methylbenzofuran
DCMPSX	Decamethylcyclopentasiloxane
DCPA	2,3,5,6-Tetrachloro-1,4-benzenedicarboxylic acid dimethyl ester / Dacthal
DCPD	Dicyclopentadiene
DCPL	Dichlorophenlactic
DDVP	Vapona / Dichlorvos / Dichlorophos
DEA	Diethylamine
DECYLB	Decylbenzene
DEDMP	Diethylidimethyl diphosphonate
DEETI	Diethyl ether
DEGLYC	2,2-Oxybis[ethanol] / Diethylene glycol
DEMBZA	N,N-Diethyl-3-methylbenzamide
DEMO	Demeton-O
DEMP	Diethyl methylphosphonite / TR
DEMS	Demeton-S

ACCEPTABLE ENTRIES: (Cont.)

DEP	Diethyl phthalate
DEPD4	Diethyl phthalate-D4
DIH2PY	3,4-Dihydro-2H-1-benzopyran
DIIDMAC	9,10-Dihydro-9,9-dimethylacridine
DIACAL	Diacetone alcohol / 4-Hydroxy-4-methyl-2-pentanone
DIADS	Bis (diisopropylaminoethyl) disulfide
DIAEL	Bis (diisopropylamino) ethanol
DIAEP	S-Diisopropylaminoethyl methylphosphonothioate
DIAET	Bis (diisopropylamino) ethanethiol
DIALAT	Diallate / Diisopropylidocarbamic acid
DIAS	Bis (diisopropylamino) ethylsulfide
DIASO2	Bis (diisopropylamino) ethylsulfonate
DIAZ	Diazinon
DIBP	Diisobutyl phthalate
DICLP	Dichlorophenols
DICOF	Dicofol
DICP	2-(2,4-Dichlorophenoxy)propionic acid / Dichloroprop
DIDDP	Diisopropylidimethyl diphosphonate
DIESEL	Diesel fuel / Fuel oil no. 2
DIH2O	Deionized water
DIMP	Diisopropyl methylphosphonate
DINO	2,4-Dinitro-6-sec-butylphenol / DINOSEB
DIOP	Diisooctyl phthalate
DIOXOL	Dioxolane
DIPETII	Diisopropyl ether
DIPK	Diisopropyl ketone / Dimethyl-2-propanone
DIPUR	Diisopropyl urea
DISCB	Diisobutyl carbinol
DISP	Phosphorus, dissolved (as P)
DITHI	Dithiane
DIURON	3-(3,4-Dichlorophenyl)-1,1-dimethylurea / Diuron
DI2IIPG	di-2-(3-Hydroxyphenyl) glycine
DIIDIN	Dieldrin
DM	Adamsite
DM1ACII	2,2-Dimethyl-1-acetylcyclohexane
DMA	Dimethylaniline (obsolete - use NNDMA)
DMCAR	Dimethyl diidocarbonate
DMCP	Dimethylcyclopentane - nonspecific
DMCPDE	1,2-Dimethylcyclopentadiene
DMDS	Dimethyl disulfide
DMEBZO	4-(1,1-Dimethylethyl)benzoic acid

ACCEPTABLE ENTRIES: (Cont.)

DMETDA	N,N-Dimethyl-1,2-ethanediamine
DMETHI	Dimethyl ether
DMIP	Dimethyl isophthalate
DMMP	Dimethyl methylphosphate
DMOATE	Dimethoate
DMP	Dimethyl phthalate
DMPCIE	3-(2,2-Dimethylpropoxy) cyclohexene
DMPIIEN	Dimethyl phenol / Dimethylhydroxy benzene
DMP11IF	2,2-Dimethyl-5-(1-methylpropyl) tetrahydrofuran
DMXDMS	Dimethoxydimethylsilane
DNBEE	1,1-Di-n-butylethylene / 1,1-Di-n-butylethene
DNBP	Di-N-butyl phthalate
DNOP	Di-N-octyl phthalate
DNOPD4	Di-N-octyl phthalate-D4
DNPP	Di-N-pentyl phthalate
DNTISO	Dinitrotoluene (isomer)
DO	Dissolved oxygen
DOAD	Diocetyl adipate / Hexanedioic acid, dioctyl ester
DOAZ	Dioctyl azelate
DOC	Dissolved organic carbon
DODECB	Dodecylbenzene
DOETHI	Dioctyl ether
DOPAM	4-(2-Aminoethyl) pyrocatechol / Dopamine
DPA	Diphenylamine
DPEPII	Diphenyl ether
DPETYN	1,1-(1,2-Ethynediyl) bis(benzene)
DPII	Diphenylhydrazines - nonspecific
DPIINY	Diphenyl
DPNTLL	D-(+)-Pantolyl lactone
DPSO	Diphenyl sulfoxide
DPSULF	1,1-Thiobis(benzene) / Diphenyl sulfide
DRBM	Dibromomethane
DSEIDN	Diseleno diindole
DSTON	Disulfoton
DTB4C	2,6-Di-tert-butyl-4-cresol (obsolete - use 26DBMP)
DTCHBO	1.alpha.(E),4.alpha.-1-(1,4-Dihydroxy-2,6,6-trimethyl-2-cyclohexen-1-yl)-2-buten-1-one
DURS	Dursban
DXYA12	DXYA12
DYSCAN	GC-MS dye scan
EA2192	S-2-Diisopropylaminoethyl methylphosphonic acid

ACCEPTABLE ENTRIES: (Cont.)

EBCPGL	Ethyl-2,2-bis (4-chlorophenyl) glycolate
ED	Dichloroethyl arsine
EDBDAS	3-Phenylpropanol
EGMEE	Ethylene glycol, monoethyl ether / 1,1-Oxybis(2-ethoxy) ethane
EICOSL	1-Eicosanol
EMFUR	3-Ethyl-4-methyloctane
EMPA	Ethyl methylphosphonic acid / Ethyl methylphosphonate
EMS	Ethyl methanesulfonate
ENDRN	Endrin
ENDRNA	Endrin aldehyde
ENDRNK	Endrin ketone
ENIETI	Ethyl-N-hexyl ether
EPCLID	Epichlorohydrin / Chloromethyloxirane
EPIIEN	Ethyl phenol / Ethylhydroxy benzene
EPTOX	Extraction procedure toxic organics
ESFSO4	Endosulfan sulfate
ET3MBZ	1-Ethyl-3-methylbenzene
ET4MBZ	1-Ethyl-4-methylbenzene
ETBDIO	Ethylbenzene-D10
ETC6I15	Ethylbenzene
ETCY11X	Ethylcyclohexane
ETHIACD	Acetic acid / Ethanoic acid
ETIIBR	Bromoethane / Ethyl bromide
ETIIEB	Ether - nonspecific
ETIHON	Ethion
ETIIOPR	Ethoprop
ETIIPO4	Ethyl phosphate / Phosphoric acid, triethyl ester
ETIMACR	Ethyl methacrylate
ETMEBZ	Ethylmethyl benzene
ETOH	Ethanol
ETOX	Ethylene oxide / Oxirane / Anprolene
EU	Europlum
F	Fluoride
FIOBP	Decafluorobiphenyl
FABPEE	Formic acid, beta-phenylethyl ester
FACIIXE	Formic acid, cyclohexyl ester
FAMP11R	Famphur
FANT	Fluoranthene
FARN	Farnesol
FATAL	Fatty alcohols
PC2A	Fluoroacetic acid

ACCEPTABLE ENTRIES: (Cont.)

FE	Iron
FES9	Iron 59
FENRN	3-Phenyl-1,1-dimethylurea / Fenuron
FENRNT	1,1-Dimethyl-3-phenylurea trichloroacetate
FIBGLS	Fibrous glass / Fiberglass
FLASII	Flash point
FLMTRN	1,1-Dimethyl-3-(A,A,A-trifluoro-m-tolyl)urea
FLRENE	Fluorene
FLUMET	Fluometuron
FNT	Fenthion
FOIL1	Fuel oil no. 1
FOIL6	Fuel oil no. 6
FORM	Formaldehyde / Methyl aldehyde
FREON	Freon / Dichlorofluoromethane
FRN112	Freon 112 / Tetrachlorodifluoroethane
FST	Fensulfothion
FSTREP	Fecal streptococci
FURAL	Furfuryl alcohol / 2-Furanmethanol
FURANS	Dibenzofurans - nonspecific
GA	Tabun / Ethyl-N,N-dimethyl phosphoramidocyanidate
GALM	Gallium
GAMAG	Gamma gross
GAMMAS	Gamma scan / Gamma screen
GAS	Gasoline / Gasoline, regular
GB	Sarin / Isopropyl methylphosphonofluoridate
GBIIC	gamma-Hexachlorocyclohexane (obsolete - use LIN)
GCHLOR	gamma-Chlordane (obsolete-use GCLDAN)
GCLDAN	gamma-Chlordane
GD	Soman / Pinacolyl methylphosphonofluoridate
GE	Germanium
GLPIST	Glyphosate
GRNDY	Green dye
GUNIT	Guanidine nitrate
II	Levinstein mustard
I12O	Water
I12S	Hydrogen sulfide
I13PO4	Phosphoric acid
I14RD	Total hardness
I1CB0	Hexachlorobutadiene / Hexachloro-1,3-butadiene
I1CNB	Hexachloronorbomadiene
I1CO3	Bicarbonate

ACCEPTABLE ENTRIES: (Cont.)

IID	Distilled mustard / Bis (2-chloroethyl) sulfide
IIEDODA	N,N-Bis(2-hydroxyethyl)dodecanamide
IIEAC	Hexanoic acid / Caproic acid
IIEANE	Hexane
IIG	Mercury
IIGEXT	Mercury extractable
IIGTOT	Mercury total
IIMTCHIE	2,6,10,15,19,23-Hexamethyl-2,6,10,14,18,22-tetracosahexane
IIMX	Cyclotetramethylenetetranitramine
IIN	Nitrogen mustard
IIO	Iolium
IIPCDD	Heptachlorodibenzodioxin - nonspecific
IIPCDF	Heptachlorodibenzofuran - nonspecific
IIPCL	Heptachlor
IIPCLE	Heptachlor epoxide
IIPLI2O	HPLC-grade water
IIPA4	Hydrolyzable phosphate
IITI	Hypochlorite
IIFWX013	Halowax 1013
IIFWX099	Halowax 1099
IIXAB2E	Hexanedioic acid, bis (2-ethylhexyl) ester
IIXADBE	Hexanedioic acid, dibutyl ester / Dibutyl adipate
IIXADME	Hexanedioic acid, dimethyl ester / Dimethyl adipate
IIXADOE	Hexanedioic acid, dioctyl ester (obsolete - use DOAD)
IIXCDD	Hexachlorodibenzodioxin - nonspecific
IIXCDF	Hexachlorodibenzofuran - nonspecific
IIXCOS	Hexacosane
IIXCPEN	Perchloropropene / Hexachloropropene
IIXIIMAZ	4,5,6,7,8,8A-Hexahydro-8A-methyl-2-[111]-azulene
IIXMETA	1,3,5,7-Tetraazatricyclo[3.3.1.3.7]decane / Hexamethylene tetramine
IIXMTSX	Hexamethylcyclotrisiloxane
IYDARO	Hydroxylated aromatics / Aromatics, hydroxylated
IYDRND	11-Indene, octahydro- / Hydriindane
IYDRZ	Hydrazine
IYNB	7-Hydroxynorbornadiene
I	Iodine (as I)
I131	Iodine 131
ICDPYR	Indeno[1,2,3-C,D]pyrene
IGNIT	Ignitability
IMPA	Isopropyl methylphosphonic acid / Isopropyl methylphosphonate
IN	Indium

ACCEPTABLE ENTRIES: (Cont.)

INDAN	1-Hydroxy-2,3-methylene indan [M.W.146]
INDENE	Indene
INDOLE	Indole / 2,3-Benzopyrrole
IOCDF	Octachlorodibenzofuran, C13 isomeric
IPA	Isopropylamine
ISODR	Isodrin
ISOPBZ	Isopropylbenzene / Cumene
ISOPHR	Isophorone
ISOPT	Isopropyltoluene
ISOQUN	Isoquinoline
ISOVAL	3-Methylbutanoic acid / Isovaleric acid
ISOSAF	Isosafrole
ITCDD	2,3,7,8-Tetrachlorodibenzodioxin, C13 isomeric
ITCDF	2,3,7,8-Tetrachlorodibenzofuran, C13 isomeric
K	Potassium
K40	Potassium 40
KB	2-Diisopropylaminoethanol
KEP	Kepone / Chlordecone
KEND	Ketoendrin
L	Lewisite
LA	Lanthanum
LA140	Lanthanum 140
LACYBB	Lactic acid, cyclic butaneboronate
LAURIC	Lauric acid
LI	Lithium
LIGNIN	Lignin
LIN	Lindane / gamma-Benzenhexachloride / gamma-Hexachlorocyclohexane
LINRN	3-(3,4-Dichlorophenyl)-1-methoxy-1-methylurea / Linuron
LIPID	Lipids, percentage
LO	Lewisite oxide
LT	Bis (2-diisopropylaminoethyl) methylphosphonite
LT-A	Bis (2-diisopropylaminoethyl) methylphosphonate
MALO	Malononitrile
MBADOE	3-Methylbutanoic acid, 3,7-dimethyl-2,4,6-octatrienyl ester
MBAS	Foaming agents / Methylene blue active substance
MBOH	alpha-Methylbenzyl alcohol
MBZ	Metribuzin
MBZA	alpha-Methylbenzyl acetoacetate
MBZCAC	5-Methylbenzo[C]acridine
MBZCI	alpha-Methylbenzyl-2-chloroacetoacetate
MCPA	4-Chloro-o-tolylxyacetic acid / MCPA

ACCEPTABLE ENTRIES: (Cont.)

MCP	2-(4-Chloro-2-methylphenoxy)propionic acid / MCP
MDC	2-Methylundecanal / 2-Methylundecanal
ME2AEA	Dimethyl arsenic acid
ME2C11	Dimethylundecanes
ME2IG	Dimethyl mercury
ME2IPL	Methyl-2-heptanols
ME2IPO	Methyl-2-heptanones
ME2NAP	Dimethylnaphthalenes
ME3C10	Trimethyldecanes
ME3C11	Trimethylundecanes
ME3C6	Trimethyl hexanes
ME3NAP	Trimethylnaphthalenes
MEA0A	Methyl arsenic acid
MEBP	1,1'-Methylenebis(piperidine)
MEC6D8	Toluene-D8
MEC6H5	Toluene
MECC6	Methylcyclohexane
MECYBU	Methylcyclobutane
MECYDC	Methylcyclodecane
MECYPE	Methylcyclopentane
MEIG	Methyl mercury
MEIGCL	Methyl mercury chloride
MEK	Methyl ethyl ketone / 2-Butanone
MELAM	Melamine / 1,3,5-Triazine-2,4,6-triamine
MEOH	Methanol
MEPIEN	Methylethyl phenol / Methylethylhydroxy benzene
MEPOH	2-Methylpentanol
MERP	Merphos
MES	Methyl sulfide / Thiobismethane
MESTOX	Mesityl oxide / 4-Methyl-3-penten-2-one
METARB	Methoarb
METICB	3,5-Dimethyl-4-(methylthio) phenyl methylcarbamate
METLAP	Methylnaphthalenes
METMYL	Methomyl
MEVIN	Mevinphos
MEXCLR	Methoxychlor
MG	Magnesium
MIIYDRZ	Methylhydrazine
MIBCOH	Methyl Isobutyl carbinol (4-methyl-2-pentanol)
MIBK	Methylisobutyl ketone
MINWOL	Mineral wool

ACCEPTABLE ENTRIES: (Cont.)

MIPK	Methylisopropyl ketone
MIREX	Mirex
MLNAT	Mollinate
MLTIIN	Malathion
MMS	Methyl methanesulfonate
MN	Manganese
MN54	Manganese 54
MNBK	Methyl-N-butyl ketone / 2-Hexanone
MNCRPH	Dimethyl-(E)-1-methyl-2-methylcarbamoylvinyl phosphate
MNRNTC	3-(p-Chlorophenyl)-1,1-dimethylurea trichloroacetate
MO	Molybdenum
MO99	Molybdenum 99
MONRN	3-(p-Chlorophenyl)-1,1-dimethylurea / Monuron
MP	Methylphenols
MPA	Methylphosphonic acid
MPDD	2-(m-Chlorophenyl)-2-(p-chlorophenyl)-1,1-dichloroethane
MPK	Methylpropyl ketone / 2-Pentanone
MPRTIN	Parathion methyl
MQF120	Milli-Q filtered water
MSSCAN	GC-MS organic scan
MTICRN	Methylacrylonitrile / 2-Methyl-2-propenenitrile / Methacrylonitrile
MTIMYL	S-Methyl-N-((methylcarbamoyl)-oxy)-thioacetimidate
MTRTN	Methyl trithion
MTRZL	Metrazol / Cardiazole
MXCRBT	4-Dimethylamino-3,5-xylol N-methylcarbamate
N2KJEL	Nitrogen by Kjeldahl Method
NA	Sodium
NA22	Sodium 22
NACL	Sodium chloride
NACLO	Sodium hypochlorite
NALED	Naled
NAOIME	50% 1M NaOH - 50% Methanol
NAP	Naphthalene
NAPD8	Naphthalene-D8
NB	Nitrobenzene
NB94	Niobium 94 / Columbium
NB95	Niobium 95 / Columbium
NBACET	n-Butylacetate
NBDS	Nitrobenzene-D5
NBMBSA	N-Butyl-4-methylbenzenesulfonamide
NBUETII	1,1'-Oxybis(butane) / n-Butyl ether

ACCEPTABLE ENTRIES: (Cont.)

NC	Nitrocellulose
NC1	Nitrocellulose 12%N
NC2	Nitrocellulose 13.4%N
NCLN	Nortilcyclanol
NCPPPA	N-(4-Chlorophenyl)-3-phenyl-2-propenamide
ND	Neodymium
NDIIXA	N-Nitrodihexylamine
NDIOX	Nitrogen dioxide
NDMBSA	N,4-Dimethylbenzenesulfonamide
NDNPA	Nitrosodi-N-propylamine
NE2PEA	N-Ethyl-2-propenamide
NEBRN	1-n-Butyl-3-(3,4-dichlorophenyl)-1-methylurea / Neburon
NECIIXA	N-Ethylcyclohexylamine
NG	Nitroglycerine
NI13	Ammonia
NI13N2	Ammonia nitrogen
NI14	Ammonium
NI14NIT	Ammonium nitrate
NI14PIC	Ammonium picrate / 2,4,6-Trinitrophenol ammonium salt
NI1EDCA	N-(2-Hydroxyethyl)-decanamide
NI	Nickel
NI63	Nickel 63
NI0B	Niobium
NIT	Nitrite, nitrate - nonspecific
NITARO	Nitroaromatics
NMANIL	N-Methylaniline
NMCANE	N-Methylcarbamic acid, 1-naphthyl ester
NMNSOA	N-Methyl-N-nitrosoaniline
NN4IPL	N-Nitroso-4-hydroxyproline
NNADME	Nonanedioic acid, dimethyl ester
NNDEA	N-Nitrosodilethylamine
NNDMA	N,N-Dimethylaniline
NNDMEA	N-Nitrosodimethylamine
NNDNB	N-Nitroso-di-N-butylamine
NNDNPA	N-Nitrosodi-N-propylamine
NNDPA	N-Nitrosodiphenylamine
NNMEA	N-Nitrosomethylethylamine
NNMORP	N-Nitrosomorpholine
NNPIP	N-Nitrosopiperidine
NNPIPA	N-Nitrosopentylisopentylamine
NNPYRL	N-Nitrosopyrrolidine

ACCEPTABLE ENTRIES: (Cont.)

NO2	Nitrite
NO3	Nitrate
NONPIIE	Nonyl phenol (any isomer)
NPOX	Nonpurgeable organic halides
NPQ	Naphthoquinone
NQ	Nitroguanidine
NTMBSA	N,N,4-Trimethylbenzenesulfonamide
O2	Oxygen
OCADME	Octanedioic acid, dimethyl ester
OCDD	Octachlorodibenzodioxin - nonspecific
OCDF	Octachlorodibenzofuran - nonspecific
ODAPDM	Octadecanoic acid, (2-phenyl-1,3-dioxolan-4-yl) methyl ester
ODECA	Octadecanoic acid / Stearic acid
ODMNSX	Octadecamethylcyclononasiloxane
ODOR	Odor
OEMP	O-Ethyl methylphosphonate
OILGR	Oil & grease
OMCTSX	Octamethylcyclotetrasiloxane
OPDDD	2-(o-Chlorophenyl)-2-(p-chlorophenyl)-1,1-dichloroethane
OPDDE	2-(o-Chlorophenyl)-2-(p-chlorophenyl)-1,1-dichloroethene
OPDDT	2-(o-Chlorophenyl)-2-(p-chlorophenyl)-1,1,1-trichloroethane
OPO4	Organophosphates
ORGFIB	Organic fibers
OS	Osmium
OXAL	Oxalic Acid
OXAMYL	Methyl N',N'-dimethyl-N-((methylcarbamoyl)oxy)-1-amyacetate / Oxamyl
OXAT	1,4-Oxathiane
OXCN	Oxacyclononane
OZONE	Ozone
P-1	Phosphorus
PA234	Protactinium 234
PA2HDE	Propanoic acid, 2-hydroxydecyl ester
PA2MBE	Pentanoic acid, 2-methylbutyl ester
PAD4NE	Phosphoric acid, diethyl-4-nitrophenyl ester
PAH	Polynuclear aromatic hydrocarbons
PAODPE	Phosphoric acid, octyldiphenyl ester
PARTIC	Particulate matter / Particulates measured by filter
PATBUE	Propanoic acid, t-butyl ester
PATPE	Phosphoric acid, triphenyl ester
PB	Lead
PB211	Lead 211

ACCEPTABLE ENTRIES: (Cont.)

PB212	Lead 212
PB214	Lead 214
PBS1Y	Lead stypnate
PBTE	Lead, tetraethyl / Tetraethyllead
PCB016	PCB 1016
PCB221	PCB 1221
PCB232	PCB 1232
PCB242	PCB 1242
PCB248	PCB 1248
PCB254	PCB 1254
PCB260	PCB 1260
PCB262	PCB 1262
PCDD	Pentachlorodibenzodioxin - nonspecific
PCDF	Pentachlorodibenzofuran - nonspecific
PCII	Pentachlorohexane
PCLORM	Dimethyl-2,3,5,6-trichloropicolinic acid / Picloram
PCNB	Pentachloronitrobenzene
PCP	Pentachlorophenol
PCYMEN	4-(1-Methylethyl) toluene / p-Cymene
PD	Dichlorophenyl arsine
PDI1YD	Phosphorus, dissolved hydrolyzable (as P)
PDMAB	p-Dimethylaminoazobenzene
PDMSLX	Polydimethyl siloxane / Dimethylpoly siloxane
PDORG	Phosphorus, dissolved organic (as P)
PEGE	Polyethyleneglycol ethers
PENAMD	N-Pentamide
PENTAN	Pentane
PERTIIN	Perthane
PETDIL	Petroleum distillates
PETN	Pentaerythritol tetranitrate
PFP	Pentafluorophenol
PH	pH
PH-F	pH as tested in the field
PHAD10	Phenanthrene-D10
PHANTR	Phenanthrene
PHENA	Phenacetin
PHENAA	Phenylacetic acid
PHEND5	Phenol-D5
PHEND6	Phenol-D6
PHENLC	Phenolics - nonspecific
PHENOL	Phenol

ACCEPTABLE ENTRIES: (Cont.)

PHOR	Phorate
PHI1IA	1,2-Benzenedicarboxylic acid / Phthalic acid
PHI1IL	Phthalates
PHXAA	Phenoxyacetic acid
PHYCP	1,2,3,4,5-Pentahydroxycyclopentane
PHYDR	Phosphorus, total hydrolyzable (as P)
PHYETII	1,1'-(1,3-Phenylene)ethanone
PIC3	3-Picoline
PIPER	Piperidine
PLEXI	Methyl methacrylate / Plexiglass
PMPA	Propyl methylphosphonic acid
PO4	Phosphate
PO4ORT	Orthophosphate
PORG	Phosphorus, total organic (as P)
POX	Purgeable organic halogen
PPDDD	2,2-Bis (p-chlorophenyl)-1,1-dichloroethane
PPDDE	2,2-Bis (p-chlorophenyl)-1,1-dichloroethene
PPDDT	2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane
PPTDE	2,2-Bis (p-chlorophenyl)-2-phenyl-1,1-dichloroethene
PQUIN	1,4-Benzoquinone / p-Benzoquinone
PRC61IS	Propylbenzene / n-Propylbenzene
PROACD	Propionic acid
PROMET	Prometon / Primatol / 2,4-Bis(isopropylamino)-6-methoxy-1,3,5-triazine
PRONA	Pronamide
PROPIIM	Isopropyl carbanilate / IPC / Prophan
PROPOX	Propylene oxide / Methyl oxirane
PROPKR	2-(1-Methyloxy)phenol methylcarbamate / Propoxur
PRTIIN	Parathion
PT	Platinum
PTI1Z	Phthalazinone
PU238	Plutonium 238 isotope
PU239	Plutonium 239 isotope
PU240	Plutonium 240 isotope
PYLD12	Perylene-D12
PYR	Pyrene
PYRD10	Pyrene-D10
PYRDIN	Pyridine
QA	2-Diisopropylaminoethyl methylphosphinate
QALT	Co-eluting compounds QA and LT (q.v.)
QB	2-Diisopropylaminoethyl ethyl methylphosphonate
QL	QL / Ethyl 2-diisopropylaminoethyl methylphosphonite

45

ACCEPTABLE ENTRIES: (Cont.)

QUINO	Quinoline / Benzo[B]pyridine
RA	Radium
RA223	Radium 223
RA224	Radium 224
RA226	Radium 226
RA228	Radium 228
RB	Rubidium
RDX	Cyclonite / Hexahydro-1,3,5-trinitro-1,3,4-triazine
RE	Rhenium
REACTY	Reactivity
REDDY	Red dye
RESACI	Resin acids
RESIST	Resistivity
RESO	Resorcinol / 1,3-Benzenediol
RN	Radon
RN226	Radon 226
RO	Rhodium
RO106	Rhodium 106
RON	Rommel
ROTEN	Rotenone
RU	Ruthenium
RU103	Ruthenium 103
RU106	Ruthenium 106
S	Sulfur
S2CL2	Sulfur monochloride
SAFROL	Safrole / 5-(2-Propenyl)-1,3-benzodioxole
SALINE	Saline
SALINI	Salinity
SB	Antimony
SB124	Antimony-124
SB125	Antimony-125
SBBEN	sec-Butylbenzene / 2-Phenylbutane
SC	Scandium
SCN	Thiocyanate
SE	Selenium
SEVIN	Sevin / 1-Naphthalenol methylcarbamate
SFOTEP	Sulfotep / Thiodiphosphoric acid, tetraethyl ester
SI	Silica
SIDRN	1-(2-Methylcyclohexyl)-3-phenylurea / Silduron
SIL	Silicone
SILCON	Silicon

ACCEPTABLE ENTRIES: (Cont.)

SILVEX	Silvex
SIMAZ	Simazine / 6-Chloro-N,N'-diethyl-1,3,5-triazine-2,4-diamine
SN	Tin
SO2	Sulfur Dioxide
SO3	Sulfite
SO4	Sulfate
SPIRO	(1',5 <i>trans</i>)-7-Chloro-6-hydroxy-2',4'-dimethoxy-6'-methyl spiro [benzofuran-2-(3H)-1'-(2'-cyclohexene)]-3, 4'-dione
SQUAL	Squalene
SR	Strontium
SR90	Strontium 90
SSOL	Settleable solids
STB	Super tropical bleach
STERO	Steroids
STIGMA	Stigmasterol
STIR	Stirophos / Tetraclorvinphos
STROBN	Strobane / Terpine polychlorinates
STYPH	Styphnate ion
STYPHA	Styphnic acid (obsolete - use 246 INR)
STYR	Styrene
SUADME	Sulfuric acid, dimethyl ester
SULFID	Sulfide
SUPONA	Supona / 2-Chloro-1-(2,4-dichlorophenyl) vinyl diethyl phosphate
SWEP	Methyl-N-(3,4-dichlorophenyl)carbamate / Swep
T12DCE	<i>trans</i> -1,2-Dichloroethene / <i>trans</i> -1,2-Dichloroethylene
T13DCP	<i>trans</i> -1,3-Dichloropropene
T1B2BC	<i>trans</i> -1-Bromo-2-butylcyclopropane
T2DEC	<i>trans</i> -2-Decene
TA	Tantalum
TANNIN	Tannin
TASTE	Taste
TBA	Tributylamine
TBASDE	Thiobutyric acid, S-decyl ester
TBBEN	tert-Butylbenzene / 2-Methyl-2-phenylpropane
TBCARB	2,2-Dimethyl-1-propanol / tert-Butylcarbinol / Neopentyl alcohol
TBP	Tributyl phosphate
TCB	Tetrachlorobenzenes
TCB1	1,2,4,5-Tetrachlorobenzene
TCB2	1,2,3,4-Tetrachlorobenzene
TCB3	1,2,3,5-Tetrachlorobenzene
TCDD	2,3,7,8-Tetrachlorodibenzo-p-dioxin / Dioxin

46

Test Name (Analyte)

8.24

ACCEPTABLE ENTRIES: (Cont.)

TCDF	2,3,7,8-Tetrachlorodibenzofuran
TCIDCS	trans-1,2-Cyclohexandiol, cyclic sulfite
TCLDAN	trans-Chlordane
TCLEA	1,1,2,2-Tetrachloroethane
TCLEE	Tetrachloroethylene / Tetrachloroethene
TCLTFE	1,1,2-Trichloro-1,2,2-trifluoroethane
TCN	Trichloronate
TCOS	Tetracosane
TCP	Trichloropropane
TCSAME	15-Tetracosenoic acid, methyl ester
TCST	Trichlorostyrenes
TCYN	Total cyanide
TDCBU	trans-1,4-Dichloro-2-butene
TDEMET	Demeton total
TDGCL	Thiodiglycol
TDGCLA	Thiodiglycolic acid
TDMIISX	Tetradecamethyl hexasiloxane
TDODTL	tert-Dodecanediol
TDS	Total dissolved solids
TE	Tellurium
TEGLME	Triethylene glycol, methyl ether
TEGLYC	2,2'-(1,2-Ethanediylobis(oxy)) bis[ethanol] / Triethylene glycol
TEMP	Temperature
TEMP-F	Temperature as tested in the field
TEPO4	Triethyl phosphate
TETPT	Tetrachlorocyclopentene
TETR	Tetrazene
TETRYL	Nitramine / N-Methyl-N,2,4,6-tetranitroaniline / Tearyl
TFAAPE	Trifluoroacetic acid, 1,5-pentanediyl ester
TFDCL	1,1,2-Trifluoro-1,2-dichloroethane
TFTCL	1,1,1-Trichloro-2,2,2-trifluoroethane
TGLYME	Tetraglyme
TH	Thorium
TH227	Thorium 227
TH228	Thorium 228
TH230	Thorium 230
TH232	Thorium 232
TH234	Thorium 234
THBNC	Thiobencarb
THCDD	Total hexachlorodibenzo-p-dioxins
THCDF	Total hexachlorodibenzofurans

13 March 1992

8.24-37

8.24

Test Name (Analyte)

ACCEPTABLE ENTRIES: (Cont.)

THF	Tetrahydrofuran
THINAP	1,2,3,4-Tetrahydro-1H-methylnaphthalene
THINAP	1,2,3,4-Tetrahydronaphthalene / Tetralin
THINCRB	Thiocarb
THIP2ML	Tetrahydropyran-2-yl methanol
THPCDD	Total heptachlorodibenzo-p-dioxins
THPCDF	Total heptachlorodibenzofurans
TI	Titanium
TINNIN	Tannin and lignin combined
TL	Thallium
TL208	Thallium 208
TM3PL	2,3,4-Trimethyl-3-pentanol
TMBPET	2-(2-(4-(1,1,3,3-Tetramethyl)butyl)phenoxy)ethanol
TMIPDO	3,3,6-Trimethyl-1,5-heptadien-4-one
TMIXL	3,5,5-Trimethyl-1-hexanol
TMNT	Total mononitrotoluenes
TMODEO	2,2,7,7-Tetramethyl-4,5-octadien-3-one
TMP	Trimethyl phosphate
TMPIAN	Tetramethylphenanthrene
TMPO	Trimethylphosphonate
TMPO3	Trimethyl phosphite
TMPO4	Trimethyl phosphate (obsolete - use TMP)
TMTCON	3,5,24-Trimethyltetracontane
TMUR	Tetramethylurea
TNBISO	Trinitrobenzene isomer
TNTISO	Trinitrotoluene isomer
TOC	Total organic carbon
TOCDD	Total octachlorodibenzo-p-dioxins
TOCDF	Total octachlorodibenzofurans
TOKU	Tokuthion / Prothiophos
TORC	Total organic content, 444C (ASTM)
TOTASH	Total ash / Ash, total
TOTCOL	Total coliform
TOTDDT	Total value of all DDT, DDE, DDD isomers
TOTGAF	Total gravimetric, acid fraction
TOTMG2	Total mercury
TOTPCB	Total PCBs
TOX	Total organic halogens
TPCDD	Total pentachlorodibenzo-p-dioxins
TPCDF	Total pentachlorodibenzofurans
THI	Thiophene

8.24-38

13 March 1992

Test Name (Analyte)

8.24

ACCEPTABLE ENTRIES: (Cont.)

TPHVG	Total petroleum hydrocarbons, aviation gasoline fraction
TPHC	Total petroleum hydrocarbons
TPHDSL	Total petroleum hydrocarbons, diesel fraction
TPHGAS	Total petroleum hydrocarbons, gas fraction
TPO4	Total phosphates
TPP	Triphenylphosphate
TRCLE	Trichloroethylene / Trichloroethene
TREACT	Tramolite-actinolite asbestos
TREFLN	Trifluralin / Treflan
TRIBZ	Trichlorobenzenes
TRIMBZ	Trimethylbenzenes
TRIPT	Trichlorocyclopentene
TRITU	Tritium
TRITN	Trithlon
TRMTDE	2,3,4-Trimethyl-4-tetradecene
TRO	Diethyl methylphosphonate
TRPD14	Terphenyl-D14
TRPIEN	Triphenylene
TRXMET	Trihalomethanes
TS	Total sulfur
TSAIPE	p-Toluenesulfonic acid, heptyl ester
TSOLID	Total solids
TSS	Total suspended solids
TTCDD	Total tetrachlorodibenzo-p-dioxins
TTCDF	Total tetrachlorodibenzofurans
TTCP	Tetrachlorophenol
TTCTFE	Trichlorotrifluoroethane
TTO	Total toxic organics
TU	Total uranium
TURBID	Turbidity
TVS	Total volatile solids
TXPIEN	Toxaphene
TXYLEN	Xylenes, total combined
U	Uranium
U234	Uranium 234
U235	Uranium 235
U238	Uranium 238
UDMI1	Unsymmetrical dimethyl hydrazine
UNKXXX	Unknown compound, XXX = 001 thru 999.
UREA	Urea / Carbamide / Carbonyl diamide
V	Vanadium

13 March 1992

8.24-38

8.24

Test Name (Analyte)

ACCEPTABLE ENTRIES: (Cont.)

VARIY	Various hydrocarbons with increasing M.W.
VFA	Vinyl formate
VM	O-Ethyl-S-(2-diethylaminoethyl) methylphosphonothiolate
VX	O-Ethyl-S-(2-diisopropylaminoethyl) methylphosphonothiolate
W	Tungsten
WP	White phosphorus
XPI.OSV	Explosive spray
XYLEN	Xylenes
Y	Yttrium
YB	Ytterbium
YELDY	Yellow dye
YL	Ethyl methylphosphonate
YLQLTR	Co-eluting compounds YL, QL and DEMP (q.v.)
ZINP11S	Zinophos / Thionazin
ZN	Zinc
ZN65	Zinc 65
ZR	Zirconium
ZR95	Zirconium 95

Chemical and Radiological Data:

(Sorted alphabetically by Test Name)

(1-Methylpropyl) benzene	1MPRB
(1,5-trans)-7-Chloro-6-hydroxy-2', 4-dimethoxy-6'-methyl spiro(benzofuran-2-(3H)-1'-(2-cyclohexene)-3, 4'-dione	SPIRO
(1,1-Dimethylethyl) benzene	11DMEB
(1,3-Dimethylbutyl) benzene	13DMUB
(2-Chloroethoxy) ethene	2CLEVE
(3beta)-Stigmast-5-en-3-ol	3SSE3L
0.1N Hydrochloric acid	01NHCL
1-(2-Butoxyethoxy) ethanol	BEETO
1-(2-Methylcyclohexyl)-3-phenylurea	SIDRN
1-Acetyl-3-methyl-5-pyrazolone	1A3MPZ
1-Acetyl-4-(1-hydroxy-1-methylethyl) benzene	1A41MB
1-Benzyl-4-hydroxybenzimidazole	1BY41B
1-Butanol	1C4L
1-Carbamoyl-3,5-dimethyl-2-pyrazoline	1CDMPZ
1-Chloro-2,4-hexadiene	1CL24H
1-Chlorohexane	1CH
1-Chloronaphthalene	1CNAP

8.24-40

13 March 1992

Site ID	Field ID	Media	Date	Depth	Units	Analytical Method	Analyte Abbrev.	Value	Flag	Internal Std. Code
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	C13DCP	0.003	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	C2AVE	0.003	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	C2H3CL	0.006	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	C2H5CL	0.012	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	C6H6	0.002	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	CCL3F	0.006	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	CCL4	0.007	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	CH2CL2	0.012	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	CH3BR	0.006	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	CH3CL	0.009	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	CHBR3	0.007	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	CHCL3	0.001	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	CL2BZ	0.100	ND	R
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	CLC6H5	0.001	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	CS2	0.004	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	DBRCLM	0.003	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	ETC6H5	0.002	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	MEC6H5	0.001	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	MEK	0.070	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	MIBK	0.027	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	MN8K	0.032	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	STYR	0.003	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	T13DCP	0.003	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	TCLEA	0.002	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	TCLEE	0.001	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	TRCLE	0.003	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGG	LM19	XYLEN	0.002	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGL	SB01	HG	0.243	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGL	SD22	AS	2.540	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGL	SS10	AG	4.600	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGL	SS10	BA	756.000		
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGL	SS10	CD	4.010	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGL	SS10	CR	9.690		
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGL	SS10	PB	18.600	LT	
38SL1	RVFS*35	CSE	15-jan-1992	5.0	UGL	SD21	SE	3.020	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LW12	135TNB	4.900	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LW12	13DNB	5.000	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LW12	246TNT	4.600	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LW12	24DNT	4.200	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LW12	26DNT	5.200	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LW12	HMX	6.700	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LW12	NB	24.000	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LW12	RDX	5.900	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LW12	TETRYL	7.300	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JB01	HG	0.050	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JS16	AG	7.510		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JS16	AL	19400.000		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JS16	BA	1200.000		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JS16	BE	0.500	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JS16	CA	3900.000		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JS16	CD	0.700	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JS16	CO	8.450		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JS16	CR	248.000		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JS16	CU	57000.000		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JS16	FE	29300.000		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JS16	K	2890.000		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JS16	MG	2990.000		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JS16	MN	339.000		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JS16	NA	877.000		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JS16	NI	66.600		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JS16	PB	97000.000		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JS16	SB	105.000		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JS16	TL	85.600		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JS16	V	28.100		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JS16	ZN	356.000		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	124TCB	0.400	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	12DCLB	1.100	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	12DPH	1.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	13DCLB	1.300	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	14DCLB	0.980	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	245TCP	1.000	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	246TCP	1.700	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	24DCLP	1.800	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	24DMPN	6.900	LT	

Site ID	Field ID	Media	Date	Depth	Units	Analytical Method	Analyte Abbrev.	Value	Flag	Internal Std. Code
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	24DNP	12.000	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	24DNT	1.400	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	26DNT	0.850	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	2CLP	0.600	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	2CNAP	0.360	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	2MNAP	0.490	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	2MP	0.290	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	2NANIL	0.620	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	2NP	1.400	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	2TMPD	58.000		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	33DCBD	63.000	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	3NANIL	4.500	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	46DN2C	5.500	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	4BRPPE	0.330	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	4CANIL	8.100	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	4CL3C	0.950	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	4CLPPE	0.330	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	4MP	2.400	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	4NANIL	4.100	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	4NP	14.000	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	ABHC	3.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	ACLDAN	3.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	AENSLF	6.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	ALDRN	3.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	ANAPNE	0.360	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	ANAPYL	0.330	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	ANTRC	0.330	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	B2CEXM	0.590	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	B2CIPE	2.000	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	B2CLEE	0.330	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	B2EHP	29.800		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	BAANTR	1.700	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	BAPYR	2.500	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	BBFANT	2.100	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	BBHC	3.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	BBZP	18.100		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	BENSLF	6.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	BENZID	9.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	BENZOA	60.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	BGHIPI	2.500	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	BKFANT	0.660	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	BZALC	1.900	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	C14	17.400		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	C16	58.000		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	C17	87.000		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	C21	58.000		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	CHRY	1.200	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	CL6BZ	0.330	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	CL6CP	62.000	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	CL6ET	1.500	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	DBAHA	2.100	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	DBHC	3.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	DBZFUR	0.330	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	DEP	2.400	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	DLDRN	3.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	DMP	1.700	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	DNBP	9.300		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	DNOP	1.900	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	ENDRN	5.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	ENDRNA	5.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	ENDRNK	5.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	ESFSO4	6.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	FANT	0.680	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	FLRENE	0.330	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	GCLDAN	3.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	HCBD	2.300	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	HPCL	1.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	HPCLE	3.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	ICDPYR	2.900	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	ISOPHR	0.330	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	LIN	3.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	MEXCLR	3.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	NAP	0.370	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	NB	0.450	LT	

Site ID	Field ID	Media	Date	Depth	Units	Analytical Method	Analyte Abbrev.	Value	Flag	Internal Std. Code
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	NNDMEA	1.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	NNDWPA	2.000	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	NNDPA	1.900	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	PCB016	10.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	PCB221	10.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	PCB232	10.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	PCB242	10.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	PCB248	20.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	PCB254	20.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	PCB260	30.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	PCP	13.000	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	PHANTR	5.980		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	PHENOL	1.100	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	PPDD	3.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	PPDDE	3.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	PPDDT	3.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	PYR	10.300		
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	TXPHEN	30.000	ND	R
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	UNK577	14.500		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	UNK583	8.700		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	UNK584	8.700		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	UNK590	29.000		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	UNK593	11.600		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	UNK596	23.200		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	UNK597	11.600		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	UNK598	11.600		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	UNK599	8.700		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	UNK600	87.000		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	UNK605	17.400		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	UNK606	87.000		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	UNK607	1160.000		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	UNK611	58.000		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	UNK615	11.600		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	UNK621	116.000		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	LM18	UNK626	58.000		S
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JD15	SE	0.250	LT	
39SL1	RVFS*37	CSE	25-feb-1992	1.0	UGG	JD19	AS	36.000		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JD15	SE	0.250	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	J801	HG	0.050	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JD19	AS	2.950		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LW12	135TNB	0.488	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LW12	13DNB	0.496	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LW12	246TNT	0.456	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LW12	24DNT	0.424	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LW12	26DNT	0.524	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LW12	HMX	0.666	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LW12	NB	2.410	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LW12	RDX	0.587	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LW12	TETRYL	0.731	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	124TCB	0.040	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	12DCLB	0.110	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	12DPH	0.140	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	12EPCH	0.253		S
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	13DCLB	0.130	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	14DCLB	0.098	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	245TCP	0.100	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	246TCP	0.170	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	24DCLP	0.180	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	24DMPN	0.690	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	24DNP	1.200	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	24DNT	0.140	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	26DNT	0.085	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	2CLP	0.060	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	2CNAP	0.036	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	2MNAP	0.049	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	2MP	0.029	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	2NANIL	0.062	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	2NP	0.140	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	2TMPD	1.140		S
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	33DCBD	6.300	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	3NANIL	0.450	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	46DN2C	0.550	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	4BRPPE	0.033	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	4CANIL	0.810	LT	

5-2

Site ID	Field ID	Media	Date	Depth	Units	Analytical Method	Analyte Abbrev.	Value	Flag	Internal Std. Code
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	4CL3C	0.095	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	4CLPPE	0.033	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	4MP	0.240	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	4NANIL	0.410	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	4NP	1.400	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	ABHC	0.270	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	ACLDAN	0.330	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	AENSLF	0.620	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	ALDRN	0.330	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	ANAPNE	0.036	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	ANAPYL	0.033	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	ANTRC	0.033	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	B2CEXM	0.059	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	B2CIPE	0.200	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	B2CLEE	0.033	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	B2EHP	0.620	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	BAANTR	0.170	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	BAPYR	0.250	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	BBFANT	0.210	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	BBHC	0.270	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	BBZP	0.170	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	BENSLF	0.620	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	BENZID	0.850	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	BENZOA	6.100	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	BGHIPI	0.250	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	BKFANT	0.066	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	BZALC	0.190	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	CHRY	0.120	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	CL6BZ	0.033	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	CL6CP	6.200	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	CL6ET	0.150	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	DBAHA	0.210	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	DBHC	0.270	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	DBZFUR	0.035	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	DEP	0.240	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	DLDNR	0.310	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	DMP	0.170	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	DNBP	1.620		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	DNOP	0.190	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	ENDRN	0.450	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	ENDRNA	0.530	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	ENDRNK	0.530	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	ESFSO4	0.620	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	FANT	0.142		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	FLRENE	0.033	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	GCLDAN	0.330	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	HCBD	0.230	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	HPCL	0.130	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	HPCLE	0.330	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	ICOPYR	0.290	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	ISOPHR	0.033	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	LIN	0.270	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	MEXCLR	0.330	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	NAP	0.037	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	NB	0.045	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	NNDMEA	0.140	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	NNDNPA	0.200	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	NNDPA	0.190	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	PCB016	1.400	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	PCB221	1.400	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	PCB232	1.400	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	PCB242	1.400	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	PCB248	2.000	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	PCB254	2.300	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	PCB260	2.600	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	PCP	1.300	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	PHANTR	0.143		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	PHENOL	0.110	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	PPDD	0.270	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	PPDE	0.310	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	PPDDT	0.310	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	PYR	0.254		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	TXPHEN	2.600	ND	R
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	UNK605	0.379		S

Site ID	Field ID	Media	Date	Depth	Units	Analytical Method	Analyte Abbrev.	Value	Flag	Internal Std. Code
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	UNK606	0.505		S
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	UNK607	379.000		S
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	LM18	UNK676	0.505		S
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JS16	AG	0.934		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JS16	AL	17500.000		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JS16	BA	429.000		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JS16	BE	1.000		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JS16	CA	687.000		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JS16	CD	0.700	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JS16	CO	8.220		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JS16	CR	206.000		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JS16	CU	403.000		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JS16	FE	26600.000		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JS16	K	1420.000		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JS16	MG	2690.000		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JS16	MM	147.000		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JS16	NA	203.000		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JS16	NI	57.200		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JS16	PB	21000.000		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JS16	SB	7.140	LT	
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JS16	TL	28.000		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JS16	V	54.000		
39SL2	RVFS*38	CSE	25-feb-1992	1.0	UGG	JS16	ZN	145.000		
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JD15	SE	0.250	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JB01	HG	0.050	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JD19	AS	2.400		
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LW12	135TNB	0.488	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LW12	13DNB	0.496	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LW12	246TNT	0.456	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LW12	24DNT	0.424	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LW12	26DNT	0.524	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LW12	HMX	0.666	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LW12	NB	2.410	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LW12	RDX	0.587	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LW12	TETRYL	0.731	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	124TCB	0.040	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	12DCLB	0.110	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	12DPH	0.140	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	13DCLB	0.130	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	14DCLB	0.098	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	245TCP	0.100	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	246TCP	0.170	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	240CLP	0.180	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	240MPN	0.690	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	240NP	1.200	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	240NT	0.140	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	260NT	0.085	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	2CLP	0.060	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	2CNAP	0.036	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	2MNAP	0.049	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	2MP	0.029	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	2NANIL	0.062	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	2NP	0.140	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	2TMPD	0.517		S
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	33DCBD	6.300	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	3NANIL	0.450	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	46DN2C	0.550	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	4BRPPE	0.033	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	4CANIL	0.810	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	4CL3C	0.095	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	4CLPPE	0.033	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	4MP	0.240	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	4NANIL	0.410	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	4NP	1.400	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	ABHC	0.270	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	ACLDAN	0.330	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	AENSLF	0.620	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	ALDRN	0.330	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	ANAPNE	0.036	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	ANAPYL	0.033	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	ANTRC	0.033	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	B2CEXM	0.059	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	B2CIPE	0.200	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	B2CLEE	0.033	LT	

Site ID	Field ID	Media	Date	Depth	Units	Analytical Method	Analyte Abbrev.	Value	Flag	Internal Std. Code
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	BZHP	0.620	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	BAANTR	0.170	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	BAPYR	0.250	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	BBFANT	0.210	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	BBHC	0.270	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	BBZP	0.170	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	BENSLF	0.620	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	BENZID	0.850	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	BENZOA	6.100	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	BGHIPY	0.250	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	BKFANT	0.066	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	BZALC	0.190	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	CHRY	0.120	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	CL6BZ	0.033	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	CL6CP	6.200	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	CL6ET	0.150	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	DBAHA	0.210	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	DBHC	0.270	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	DBZFUR	0.035	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	DEP	0.240	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	DLDRN	0.310	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	DMP	0.170	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	DNBP	0.061	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	DNOP	0.190	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	ENDRN	0.450	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	ENDRNA	0.530	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	ENDRNK	0.530	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	ESFSO4	0.620	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	FANT	0.068	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	FLRENE	0.033	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	GCLDAN	0.330	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	HCB0	0.230	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	HPCL	0.130	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	HPCLE	0.330	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	ICDPYR	0.290	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	ISOPHR	0.033	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	LIN	0.270	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	MEXCLR	0.330	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	NAP	0.037	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	NB	0.045	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	NNDMEA	0.140	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	NNDNPA	0.200	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	NNDPA	0.190	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	PCB016	1.400	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	PCB221	1.400	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	PCB232	1.400	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	PCB242	1.400	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	PCB248	2.000	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	PCB254	2.300	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	PCB260	2.600	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	PCP	1.300	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	PHANTR	0.033	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	PHENOL	0.110	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	PPDD	0.270	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	PPDE	0.310	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	PPDT	0.310	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	PYR	0.033	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	TXPHEN	2.600	ND	R
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	UNK606	51.700		S
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	LM18	UNK678	0.517		S
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JS16	AG	1.270		
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JS16	AL	22800.000		
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JS16	BA	131.000		
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JS16	BE	1.160		
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JS16	CA	24300.000		
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JS16	CD	0.700	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JS16	CO	14.800		
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JS16	CR	38.800		
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JS16	CU	21.100		
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JS16	FE	33600.000		
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JS16	K	2650.000		
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JS16	MG	13700.000		
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JS16	MN	617.000		
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JS16	NA	245.000		

55

Site ID	Field ID	Media	Date	Depth	Units	Analytical Method	Analyte Abbrev.	Value	Flag	Internal Std. Code
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JS16	NI	20.500		
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JS16	PB	33.500		
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JS16	SB	7.140	LT	
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JS16	TL	32.300		
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JS16	V	68.000		
39SL3	RVFS*39	CSE	25-feb-1992	1.0	UGG	JS16	ZN	74.700		
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JD15	SE	0.250	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	J801	HG	0.050	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JD19	AS	2.520		
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LW12	135TNB	0.488	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LW12	13DNB	0.496	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LW12	246TNT	0.456	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LW12	24DNT	0.424	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LW12	26DNT	0.524	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LW12	HMX	0.666	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LW12	NB	2.410	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LW12	RDX	0.587	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LW12	TETRYL	0.731	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	124TCB	0.040	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	12DCLB	0.110	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	12DPH	0.140	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	12EPCH	0.225		S
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	13DCLB	0.130	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	14DCLB	0.098	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	245TCP	0.100	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	246TCP	0.170	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	24DCLP	0.180	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	24DMPN	0.690	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	24DNP	1.200	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	24DNT	0.140	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	26DNT	0.085	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	2CLP	0.060	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	2CNAP	0.036	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	2MNAP	0.049	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	2MP	0.029	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	2NANIL	0.062	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	2NP	0.140	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	33DCSD	6.300	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	3NANIL	0.450	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	46DN2C	0.550	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	48RPPE	0.033	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	4CANIL	0.810	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	4CL3C	0.095	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	4CLPPE	0.033	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	4MP	0.240	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	4NANIL	0.410	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	4NP	1.400	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	ABHC	0.270	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	ACLDAN	0.330	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	AENSLF	0.620	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	ALDRN	0.330	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	ANAPNE	0.036	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	ANAPYL	0.033	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	ANTRC	0.033	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	B2CEXM	0.059	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	B2CIPE	0.200	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	B2CLEE	0.033	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	B2EHP	0.620	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	BAANTR	0.170	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	BAPYR	0.250	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	BBFANT	0.210	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	BBHC	0.270	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	BBZP	0.170	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	BENSLF	0.620	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	BENZID	0.850	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	BENZQA	6.100	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	BGHIPIY	0.250	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	BKFANT	0.066	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	BZALC	0.190	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	CHRY	0.120	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	CL6BZ	0.033	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	CL6CP	6.200	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	CL6ET	0.150	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	DBAHA	0.210	LT	

Site ID	Field ID	Media	Date	Depth	Units	Analytical Method	Analyte Abbrev.	Value	Flag	Internal Std. Code
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	DBHC	0.270	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	DBZFUR	0.035	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	DEP	0.240	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	DLDRN	0.310	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	DMP	0.170	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	DNBP	0.061	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	DNOP	0.190	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	ENDRN	0.450	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	ENDRNA	0.530	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	ENDRNK	0.530	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	ESFSO4	0.620	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	FANT	0.068	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	FLRENE	0.033	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	GCLDAN	0.330	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	HCB0	0.230	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	HPCL	0.130	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	HPCLE	0.330	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	ICDPYR	0.290	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	ISOPHR	0.033	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	LIN	0.270	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	MEXCLR	0.330	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	NAP	0.037	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	NB	0.045	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	NNDMEA	0.140	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	NNDNPA	0.200	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	NNDPA	0.190	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	PCB016	1.400	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	PCB221	1.400	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	PCB232	1.400	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	PCB242	1.400	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	PCB248	2.000	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	PCB254	2.300	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	PCB260	2.600	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	PCP	1.300	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	PHANTR	0.033	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	PHENOL	0.110	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	PPDD	0.270	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	PPDE	0.310	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	PPDDT	0.310	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	PYR	0.033	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	LM18	TXPHEN	2.600	ND	R
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JS16	AG	1.350		
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JS16	AL	14400.000		
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JS16	BA	98.400		
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JS16	BE	0.628		
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JS16	CA	38500.000		
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JS16	CD	0.700	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JS16	CO	11.200		
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JS16	CR	26.000		
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JS16	CU	15.100		
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JS16	FE	25100.000		
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JS16	K	1780.000		
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JS16	MG	19000.000		
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JS16	MM	517.000		
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JS16	NA	210.000		
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JS16	NI	14.300		
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JS16	PB	21.800		
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JS16	SB	7.140	LT	
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JS16	TL	22.700		
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JS16	V	50.000		
39SS1	RVFS*40	CSO	25-feb-1992	0.5	UGG	JS16	ZN	52.400		
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JD15	SE	0.250	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	J801	HG	0.050	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JD19	AS	2.710		
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LW12	135TNB	0.488	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LW12	130NB	0.496	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LW12	246TNT	0.456	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LW12	240MT	0.424	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LW12	260MT	0.524	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LW12	HMX	0.666	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LW12	NB	2.410	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LW12	RDX	0.587	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LW12	TETRYL	0.731	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	124TCB	0.040	LT	

Site ID	Field ID	Media	Date	Depth	Units	Analytical Method	Analyte Abbrev.	Value	Flag	Internal Std. Code
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	12DCLB	0.110	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	12DPH	0.140	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	12EPCH	0.225		S
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	13DCLB	0.130	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	14DCLB	0.098	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	245TCP	0.100	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	246TCP	0.170	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	24DCLP	0.180	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	24DMPN	0.690	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	24DNP	1.200	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	24DNT	0.140	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	26DNT	0.085	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	2CLP	0.060	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	2CNAP	0.036	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	2MNAP	0.049	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	2MP	0.029	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	2NANIL	0.062	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	2NP	0.140	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	33DCBD	6.300	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	3NANIL	0.450	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	46DN2C	0.550	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	4BRPPE	0.033	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	4CANIL	0.810	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	4CL3C	0.095	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	4CLPPE	0.033	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	4MP	0.240	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	4NANIL	0.410	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	4NP	1.400	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	ABHC	0.270	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	ACLDAN	0.330	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	AENSLF	0.620	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	ALDRN	0.330	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	ANAPNE	0.036	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	ANAPYL	0.033	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	ANTRC	0.033	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	B2CEXM	0.059	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	B2CIPE	0.200	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	B2CLEE	0.033	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	B2EHP	0.620	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	BAANTR	0.170	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	BAPYR	0.250	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	BBFANT	0.210	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	BBHC	0.270	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	BBZP	0.170	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	BENSLF	0.620	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	BENZIO	0.850	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	BENZQA	6.100	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	BGHIPY	0.250	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	BKFANT	0.066	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	BZALC	0.190	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	CHRY	0.120	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	CL6BZ	0.033	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	CL6CP	6.200	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	CL6ET	0.150	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	DBAHA	0.210	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	DBHC	0.270	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	DBZFUR	0.035	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	DEP	0.240	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	DLDRN	0.310	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	DMP	0.170	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	DNBP	0.061	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	DNOP	0.190	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	ENDRN	0.450	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	ENDRNA	0.530	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	ENDRNK	0.530	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	ESFSO4	0.620	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	FANT	0.068	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	FLRENE	0.033	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	GCLDAN	0.330	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	HCB0	0.230	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	HPCL	0.130	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	HPCLE	0.330	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	ICDPYR	0.290	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	ISOPHR	0.033	LT	

58

Site ID	Field ID	Media	Date	Depth	Units	Analytical Method	Analyte Abbrev.	Value	Flag	Internal Std. Code
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	LIN	0.270	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	MEXCLR	0.330	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	NAP	0.037	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	NB	0.045	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	NNDMEA	0.140	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	NNDNPA	0.200	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	NNDPA	0.190	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	PCB016	1.400	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	PCB221	1.400	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	PCB232	1.400	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	PCB242	1.400	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	PCB248	2.000	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	PCB254	2.300	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	PCB260	2.600	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	PCP	1.300	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	PHANTR	0.033	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	PHENOL	0.110	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	PPDDO	0.270	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	PPDDE	0.310	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	PPDOT	0.310	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	PYR	0.033	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	LM18	TXPHEN	2.600	ND	R
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JS16	AG	0.972		
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JS16	AL	14900.000		
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JS16	BA	113.000		
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JS16	BE	1.210		
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JS16	CA	1250.000		
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JS16	CD	0.700	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JS16	CO	13.400		
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JS16	CR	27.500		
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JS16	CJ	19.800		
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JS16	FE	26700.000		
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JS16	K	2080.000		
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JS16	MG	4250.000		
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JS16	MN	562.000		
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JS16	NA	226.000		
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JS16	NI	16.800		
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JS16	PB	10.500	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JS16	SB	7.140	LT	
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JS16	TL	17.900		
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JS16	V	52.200		
39SS2	RVFS*41	CSO	25-feb-1992	0.5	UGG	JS16	ZN	72.100		
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LW12	135TNB	0.488	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LW12	13DNB	0.496	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LW12	246TNT	0.456	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LW12	24DNT	0.424	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LW12	26DNT	0.524	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LW12	HMX	0.666	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LW12	NB	2.410	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LW12	RDX	0.587	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LW12	TETRYL	0.731	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JB01	HG	0.050	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JS16	AG	0.589	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JS16	AL	17500.000		
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JS16	BA	94.800		
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JS16	BE	0.500	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JS16	CA	3300.000		
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JS16	CD	0.700	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JS16	CO	13.500		
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JS16	CR	30.200		
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JS16	CJ	22.100		
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JS16	FE	29100.000		
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JS16	K	1850.000		
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JS16	MG	5060.000		
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JS16	MN	506.000		
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JS16	NA	239.000		
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JS16	NI	17.300		
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JS16	PB	19.500		
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JS16	SB	7.140	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JS16	TL	6.620	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JS16	V	54.400		
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JS16	ZN	61.300		
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	124TCB	0.040	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	12DCLB	0.110	LT	

59

Site ID	Field ID	Media	Date	Depth	Units	Analytical Method	Analyte Abbrev.	Value	Flag	Internal Std. Code
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	12DPH	0.140	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	12EPCH	0.233		S
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	130CLB	0.130	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	140CLB	0.098	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	245TCP	0.100	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	246TCP	0.170	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	240CLP	0.180	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	240MPN	0.690	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	240NP	1.200	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	240NT	0.140	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	260NT	0.085	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	2CLP	0.060	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	2CNAP	0.036	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	2MNAP	0.049	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	2MP	0.029	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	2NANIL	0.062	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	2NP	0.140	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	33DCBD	6.300	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	3NANIL	0.450	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	460N2C	0.550	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	48RPPE	0.033	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	4CANIL	0.810	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	4CL3C	0.095	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	4CLPPE	0.033	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	4MP	0.240	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	4NANIL	0.410	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	4NP	1.400	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	ABHC	0.270	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	ACLDAN	0.330	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	AENSLF	0.620	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	ALDRN	0.330	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	ANAPNE	0.036	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	ANAPYL	0.033	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	ANTRC	0.033	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	B2CEXM	0.059	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	B2CIPE	0.200	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	B2CLEE	0.033	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	B2EHP	0.620	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	BAANTR	0.170	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	BAPYR	0.250	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	B8FANT	0.210	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	B8HC	0.270	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	B8ZP	0.170	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	BENSLF	0.620	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	BENZID	0.850	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	BENZOA	6.100	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	BGHIPY	0.250	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	BKFANT	0.066	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	BZALC	0.190	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	CHRY	0.120	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	CL6BZ	0.033	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	CL6CP	6.200	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	CL6ET	0.150	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	DBAHA	0.210	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	DBHC	0.270	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	DBZFUR	0.035	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	DEP	0.240	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	DLDRN	0.310	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	DMP	0.170	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	DNBP	0.061	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	DNOP	0.190	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	ENDRN	0.450	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	ENDRNA	0.530	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	ENDRNK	0.530	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	ESFSO4	0.620	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	FANT	0.068	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	FLRENE	0.033	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	GCLDAN	0.330	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	HCBD	0.230	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	HPCL	0.130	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	HPCLE	0.330	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	ICDPYR	0.290	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	ISOPHR	0.033	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	LIN	0.270	ND	R

Site ID	Field ID	Media	Date	Depth	Units	Analytical Method	Analyte Abbrev.	Value	Flag	Internal Std. Code
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	MEXCLR	0.330	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	NAP	0.037	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	NB	0.045	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	NNDMEA	0.140	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	NNDNPA	0.200	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	NNDPA	0.190	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	PCB016	1.400	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	PCB221	1.400	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	PCB232	1.400	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	PCB242	1.400	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	PCB248	2.000	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	PCB254	2.300	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	PCB260	2.600	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	PCP	1.300	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	PHANTR	0.033	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	PHENOL	0.110	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	PPDD	0.270	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	PPDDE	0.310	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	PPDDT	0.310	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	PYR	0.033	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	LM18	TXPHEN	2.600	ND	R
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JD15	SE	0.250	LT	
39SS3	RVFS*42	CSO	25-feb-1992	0.5	UGG	JD19	AS	2.740		
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	SD09	TL	6.990	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	SD23	AG	0.321		
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	00	TOC	38000.000		
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	SD22	AS	2.540	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	00	TOX	77.800		
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	SD20	PB	1.260	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	124TCB	1.800	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	120CLB	1.700	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	12DPH	2.000	ND	R
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	130CLB	1.700	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	140CLB	1.700	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	245TCP	5.200	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	246TCP	4.200	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	240CLP	2.900	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	240MPN	5.800	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	240NP	21.000	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	240NT	4.500	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	260HT	0.790	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	2CLP	0.990	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	2CNAP	0.500	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	2MNAP	1.700	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	2MP	3.900	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	2NANIL	4.300	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	2NP	3.700	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	33DCBD	12.000	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	3NANIL	4.900	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	46DN2C	17.000	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	48RPPE	4.200	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	4CANIL	7.300	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	4CL3C	4.000	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	4CLPPE	5.100	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	4MP	0.520	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	4NANIL	5.200	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	4NP	12.000	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	ABHC	4.000	ND	R
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	ACLDAN	5.100	ND	R
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	AENSLF	9.200	ND	R
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	ALDRN	4.700	ND	R
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	ANAPNE	1.700	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	ANAPYL	0.500	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	ANTRC	0.500	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	B2CEXM	1.500	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	B2CIPE	5.300	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	B2CLEE	1.900	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	B2EHP	4.800	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	BAANTR	1.600	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	BAPYR	4.700	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	BBFANT	5.400	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	BBHC	4.000	ND	R
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	BBZP	3.400	LT	
41MW1	RDWC*69	CGW	03-mar-1992	70.0	UGL	UM18	BENSLF	9.200	ND	R

29-JUL-94

16:09:20

Final Documentation Appendix Report
 Installation :Radford AAP, VA (RD)
 File Type: CGW

Sampling Date Range: 01-JAN-93 29-JUL-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
39MW1		RDWX*21	36.0	22-JUL-93	ES RDWX*21	SB01/W	39-97-6	Mercury	LT	.243	UGL		
						SD09/W	40-28-0	Thallium	LT	6.99	UGL		
						SD20/W	39-92-1	Lead		3.47	UGL		
						SD21/W	82-49-2	Selenium	LT	3.02	UGL		
						SD22/W	40-38-2	Arsenic	LT	2.54	UGL		
						SD23/W	40-22-4	Silver	LT	.25	UGL		
						SS10/W	29-90-5	Aluminum		3840	UGL		
							39-89-6	Iron		5310	UGL		
							39-95-4	Magnesium		31200	UGL		
							39-96-5	Manganese		90.4	UGL		
							40-02-0	Nickel	LT	34.3	UGL		
							40-09-7	Potassium		6380	UGL		
							40-23-5	Sodium		5140	UGL		
							40-36-0	Antimony	LT	38	UGL		
							40-39-3	Barium		105	UGL		
							40-41-7	Beryllium	LT	5	UGL		
							40-43-9	Cadmium	LT	4.01	UGL		
							40-47-3	Chromium		10	UGL		
							40-48-4	Cobalt	LT	25	UGL		
							40-50-8	Copper		14.5	UGL		
							40-62-2	Vanadium		14.3	UGL		
							40-66-6	Zinc	LT	21.1	UGL		
							40-70-2	Calcium		84800	UGL		
						UM18/W	00-01-6	4-Nitroaniline	LT	5.2	UGL		
							00-02-7	4-Nitrophenol	LT	12	UGL		
							00-51-6	Benzyl alcohol	LT	.72	UGL		
							01-35-2	Toxaphene / Chlorinated camphene / Camphchlor / Alltox / *	ND	36	UGL	R	
							03-71-9	alpha-Chlordane	ND	5.1	UGL	R	
							04-28-2	PCB 1221	ND	21	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report

Installation :Radford AAP, VA (RD)

File Type: CGW

Sampling Date Range: 01-JAN-93

29-JUL-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	39MW1	RDWX*21	36.0	22-JUL-93	ES RDWX*21	UM18/W	05-67-9	2,4-Dimethylphenol	LT	5.8	UGL		
							05-99-2	Benzo[b]fluoranthene / 3,4-Benzofluoranthene	LT	5.4	UGL		
							06-20-2	2,6-Dinitrotoluene	LT	.79	UGL		
							06-44-0	Fluoranthene	LT	3.3	UGL		
							06-44-5	p-Cresol / 4-Cresol / 4-Methylphenol	LT	.52	UGL		
							06-46-7	1,4-Dichlorobenzene	LT	1.7	UGL		
							06-47-8	4-Chloroaniline	LT	7.3	UGL		
							07-08-9	Benzo[k]fluoranthene	LT	.87	UGL		
							08-60-1	Bis(2-chloroisopropyl) ether	LT	5.3	UGL		
							08-95-2	Phenol / Carbolic acid / Phenic acid / Phenylic acid / Phe*	LT	9.2	UGL		
							08-96-8	Acenaphthylene	LT	.5	UGL		
							09-00-2	Aldrin	ND	4.7	UGL	R	
							11-44-4	Bis(2-chloroethyl) ether	LT	1.9	UGL		
							11-91-1	Bis(2-chloroethoxy) methane	LT	1.5	UGL		
							122-66-7	1,2-Diphenylhydrazine	ND	2	UGL	R	
							13-65-9	Endosulfan II / beta-Endosulfan	ND	9.2	UGL	R	
							17-81-7	Bis(2-ethylhexyl) phthalate	LT	4.8	UGL		
							17-84-0	Di-n-octyl phthalate	LT	15	UGL		
							18-01-9	Chrysene	LT	2.4	UGL		
							18-74-1	Hexachlorobenzene	LT	1.6	UGL		
							19-84-6	alpha-Hexachlorocyclohexane / alpha-Benzene hexachloride	ND	4	UGL	R	
							19-85-7	beta-Hexachlorocyclohexane / beta-Benzene hexachloride	ND	4	UGL	R	
							19-86-8	delta-Hexachlorocyclohexane / delta-Benzene hexachloride	ND	4	UGL	R	
							20-12-7	Anthracene	LT	.5	UGL		
							20-82-1	1,2,4-Trichlorobenzene	LT	1.8	UGL		
							20-83-2	2,4-Dichlorophenol	LT	2.9	UGL		
							21-14-2	2,4-Dinitrotoluene	LT	4.5	UGL		
							21-64-7	N-Nitrosodi-n-propylamine	LT	4.4	UGL		
							21-93-4	Endrin aldehyde	ND	8	UGL	R	
							24-57-3	Heptachlor epoxide	ND	5	UGL	R	
							29-00-0	Benzo[def]phenanthrene / Pyrene	LT	2.8	UGL		
							31-07-8	Endosulfan sulfate	ND	9.2	UGL	R	
							31-11-3	Dimethyl phthalate	LT	1.5	UGL		
							32-64-9	Dibenzofuran	LT	1.7	UGL		
							34-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	LT	17	UGL		
							41-16-5	PCB 1232	ND	21	UGL	R	
							41-73-1	1,3-Dichlorobenzene	LT	1.7	UGL		
							50-29-3						

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report

Installation :Radford AAP, VA (RD)

File Type: CGW

Sampling Date Range: 01-JAN-93

29-JUL-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	39MW1	RDWX*21	36.0	22-JUL-93	ES RDWX*21	UM18/W	50-29-3	2,2-Bis(p-chlorophenyl)-1,1,1-trichloroethane	ND	9.2	UGL	R	
							50-32-8	Benzo[a]pyrene	LT	4.7	UGL		
							51-28-5	2,4-Dinitrophenol	LT	21	UGL		
							53-70-3	Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	LT	6.5	UGL		
							56-55-3	Benzo[a]anthracene	LT	1.6	UGL		
							58-89-9	Lindane / gamma-Benzene hexachloride / gamma-Hexachlorocyc*	ND	4	UGL	R	
							59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	LT	4	UGL		
							59-98-8	Endosulfan I / alpha-Endosulfan	ND	9.2	UGL	R	
							60-57-1	Dieldrin	ND	4.7	UGL	R	
							62-75-9	N-Nitrosodimethylamine / N-Methyl-N-nitrosomethanamine / D*	ND	2	UGL	R	
							65-85-0	Benzoic acid	LT	13	UGL		
							66-34-7	gamma-Chlordane	ND	5.1	UGL	R	
							67-72-1	Hexachloroethane	LT	1.5	UGL		
							69-21-9	PCB 1242	ND	30	UGL	R	
							72-20-8	Endrin	ND	7.6	UGL	R	
							72-29-6	PCB 1248	ND	30	UGL	R	
							72-43-5	Methoxychlor / Methoxy-DDT / 1,1'-(2,2,2-Trichloroethylide*	ND	5.1	UGL	R	
							72-54-8	ppDDD / 1,1-Dichloro-2,2-bis(p-chlorophenyl)ethane / Rhoth*	ND	4	UGL	R	
							72-55-9	2,2-Bis(p-chlorophenyl)-1,1-dichloroethene	ND	4.7	UGL	R	
							74-11-2	PCB 1016	ND	21	UGL	R	
							76-44-8	Heptachlor / 1H-1,4,5,6,7,8,8-Heptachloro-3a,4,7,7a-tetra*	ND	2	UGL	R	
							77-47-4	Hexachlorocyclopentadiene	LT	8.6	UGL		
							78-59-1	Isophorone	LT	4.8	UGL		
							83-32-9	Acenaphthene	LT	1.7	UGL		
							84-66-2	Diethyl phthalate	LT	2	UGL		
							84-74-2	Di-n-butyl phthalate	LT	3.7	UGL		
							85-01-8	Phenanthrene	LT	.5	UGL		
							85-68-7	Butylbenzyl phthalate	LT	3.4	UGL		
							86-30-6	N-Nitrosodiphenylamine	LT	3	UGL		
							86-73-7	Fluorene / 9H-Fluorene	LT	3.7	UGL		
							87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	LT	3.4	UGL		
							87-86-5	Pentachlorophenol	LT	18	UGL		
							88-06-2	2,4,6-Trichlorophenol	LT	4.2	UGL		
							88-74-4	2-Nitroaniline	LT	4.3	UGL		

* - Analyte Description has been truncated. See Data Dictionary

29-JUL-94

16:09:20

Final Documentation Appendix Report
Installation :Radford AAP, VA (RD)
File Type: CGW

Sampling Date Range: 01-JAN-93

29-JUL-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	39MW1	RDWX*21	36.0	22-JUL-93	ES RDWX*21	UM18/W	88-75-5	2-Nitrophenol	LT	3.7	UGL		
							91-20-3	Naphthalene / Tar camphor	LT	.5	UGL		
							91-24-2	Benzo[ghi]perylene	LT	6.1	UGL		
							91-57-6	2-Methylnaphthalene	LT	1.7	UGL		
							91-58-7	2-Chloronaphthalene	LT	.5	UGL		
							91-94-1	3,3'-Dichlorobenzidine	LT	12	UGL		
							92-87-5	Benidine	ND	10	UGL	R	
							93-39-5	Indeno[1,2,3-C,D]pyrene	LT	8.6	UGL		
							94-70-5	Endrin ketone	ND	8	UGL	R	
							95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	LT	3.9	UGL		
							95-50-1	1,2-Dichlorobenzene	LT	1.7	UGL		
							95-57-8	2-Chlorophenol	LT	.99	UGL		
							95-95-4	2,4,5-Trichlorophenol	LT	5.2	UGL		
							96-82-5	PCB 1260	ND	36	UGL	R	
							97-69-1	PCB 1254	ND	36	UGL	R	
							98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	LT	.5	UGL		
							99-09-2	3-Nitroaniline	LT	4.9	UGL		
								4-Bromophenyl phenyl ether	LT	4.2	UGL		
								4-Chlorophenyl phenyl ether	LT	5.1	UGL		
								Unknown compound 654		60	UGL	S	
								Unknown compound 686		20	UGL	S	
								Unknown compound 687		60	UGL	S	
		RDWXU*21	36.0	22-JUL-93	ES RDWXU*21	SB01/W	39-97-6	Mercury	LT	.243	UGL		
						SD09/W	40-28-0	Thallium	LT	6.99	UGL		
						SD20/W	39-92-1	Lead	LT	1.26	UGL		
						SD21/W	82-49-2	Selenium	LT	3.02	UGL		
						SD22/W	40-38-2	Arsenic	LT	2.54	UGL		
						SD23/W	40-22-4	Silver	LT	.25	UGL		
						SS10/W	29-90-5	Aluminum	LT	141	UGL		
							39-89-6	Iron	LT	38.8	UGL		
							39-95-4	Magnesium		26900	UGL		
							39-96-5	Manganese		5.61	UGL		
							40-02-0	Nickel	LT	34.3	UGL		
							40-09-7	Potassium		5370	UGL		
							40-23-5	Sodium		5210	UGL		
							40-36-0	Antimony	LT	38	UGL		
							40-39-3	Barium		83.1	UGL		
							40-41-7	Beryllium	LT	5	UGL		
							40-43-9	Cadmium	LT	4.01	UGL		
							40-47-3	Chromium	LT	6.02	UGL		
							40-48-4	Cobalt	LT	25	UGL		
							40-50-8	Copper	LT	8.09	UGL		
							40-62-2	Vanadium	LT	11	UGL		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
Installation :Radford AAP, VA (RD)
File Type: CGW

Sampling Date Range: 01-JAN-93

29-JUL-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	39MW1	RDWXU*21	36.0	22-JUL-93	ES	RDWXU*21	SS10/W	40-66-6	Zinc	LT	21.1	UGL		
								40-70-2	Calcium		79700	UGL		
	39MW2	RDWX*22	41.0	22-JUL-93	ES	RDWX*22	SB01/W	39-97-6	Mercury	LT	.243	UGL		
							SD09/W	40-28-0	Thallium	LT	6.99	UGL		
							SD20/W	39-92-1	Lead		25.6	UGL		
							SD21/W	82-49-2	Selenium	LT	3.02	UGL		
							SD22/W	40-38-2	Arsenic		3.09	UGL		
							SD23/W	40-22-4	Silver	LT	.25	UGL		
							SS10/W	29-90-5	Aluminum		15300	UGL		
								39-89-6	Iron		33600	UGL		
								39-95-4	Magnesium		4.36 E 5	UGL		
								39-96-5	Manganese		565	UGL		
								40-02-0	Nickel	LT	34.3	UGL		
								40-09-7	Potassium		10300	UGL		
								40-23-5	Sodium		10400	UGL		
								40-36-0	Antimony		63.7	UGL		
								40-39-3	Barium		284	UGL		
								40-41-7	Beryllium	LT	5	UGL		
								40-43-9	Cadmium	LT	4.01	UGL		
								40-47-3	Chromium		37.7	UGL		
								40-48-4	Cobalt	LT	25	UGL		
								40-50-8	Copper		34.1	UGL		
								40-62-2	Vanadium		64.4	UGL		
								40-66-6	Zinc		26.1	UGL		
								40-70-2	Calcium		9.1 E 5	UGL		
							UM18/W	00-01-6	4-Nitroaniline	LT	5.2	UGL		
								00-02-7	4-Nitrophenol	LT	12	UGL		
								00-51-6	Benzyl alcohol	LT	.72	UGL		
								01-35-2	Toxaphene / Chlorinated camphene / Camphchlor / Alltox / *	ND	36	UGL	R	
								03-71-9	alpha-Chlordane	ND	5.1	UGL	R	
								04-28-2	PCB 1221	ND	21	UGL	R	
								05-67-9	2,4-Dimethylphenol	LT	5.8	UGL		
								05-99-2	Benzo[b]fluoranthene / 3,4-Benzofluoranthene	LT	5.4	UGL		
								06-20-2	2,6-Dinitrotoluene	LT	.79	UGL		
								06-44-0	Fluoranthene	LT	3.3	UGL		
								06-44-5	p-Cresol / 4-Cresol / 4-Methylphenol	LT	.52	UGL		
								06-46-7	1,4-Dichlorobenzene	LT	1.7	UGL		
								06-47-8	4-Chloroaniline	LT	7.3	UGL		
								07-08-9	Benzo[k]fluoranthene	LT	.87	UGL		
								08-60-1	Bis(2-chloroisopropyl) ether	LT	5.3	UGL		
								08-95-2	Phenol / Carboic acid / Phenic acid / Phenylc acid / Phe*	LT	9.2	UGL		

* - Analyte Description has been truncated. See Data Dictionary

29-JUL-94

16:09:20

Final Documentation Appendix Report

Installation :Radford AAP, VA (RD)

File Type: CGW

Sampling Date Range: 01-JAN-93

29-JUL-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	39MW2	RDWX*22	41.0	22-JUL-93	ES RDWX*22	UM18/W	08-96-8	Acenaphthylene	LT	.5	UGL		
							09-00-2	Aldrin	ND	4.7	UGL	R	
							11-44-4	Bis(2-chloroethyl) ether	LT	1.9	UGL		
							11-91-1	Bis(2-chloroethoxy) methane	LT	1.5	UGL		
							122-66-7	1,2-Diphenylhydrazine	ND	2	UGL	R	
							13-65-9	Endosulfan II / beta-Endosulfan	ND	9.2	UGL	R	
							17-81-7	Bis(2-ethylhexyl) phthalate	LT	4.8	UGL		
							17-84-0	Di-n-octyl phthalate	LT	15	UGL		
							18-01-9	Chrysene	LT	2.4	UGL		
							18-74-1	Hexachlorobenzene	LT	1.6	UGL		
							19-84-6	alpha-Hexachlorocyclohexane / alpha-Benzene hexachloride	ND	4	UGL	R	
							19-85-7	beta-Hexachlorocyclohexane / beta-Benzene hexachloride	ND	4	UGL	R	
							19-86-8	delta-Hexachlorocyclohexane / delta-Benzene hexachloride	ND	4	UGL	R	
							20-12-7	Anthracene	LT	.5	UGL		
							20-82-1	1,2,4-Trichlorobenzene	LT	1.8	UGL		
							20-83-2	2,4-Dichlorophenol	LT	2.9	UGL		
							21-14-2	2,4-Dinitrotoluene	LT	4.5	UGL		
							21-64-7	N-Nitrosodi-n-propylamine	LT	4.4	UGL		
							21-93-4	Endrin aldehyde	ND	8	UGL	R	
							24-57-3	Heptachlor epoxide	ND	5	UGL	R	
							29-00-0	Benzo[def]phenanthrene / Pyrene	LT	2.8	UGL		
							31-07-8	Endosulfan sulfate	ND	9.2	UGL	R	
							31-11-3	Dimethyl phthalate	LT	1.5	UGL		
							32-64-9	Dibenzofuran	LT	1.7	UGL		
							34-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	LT	17	UGL		
							41-16-5	PCB 1232	ND	21	UGL	R	
							41-73-1	1,3-Dichlorobenzene	LT	1.7	UGL		
							50-29-3	2,2-Bis(p-chlorophenyl)-1,1,1-trichloroethane	ND	9.2	UGL	R	
							50-32-8	Benzo[a]pyrene	LT	4.7	UGL		
							51-28-5	2,4-Dinitrophenol	LT	21	UGL		
							53-70-3	Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	LT	6.5	UGL		
							56-55-3	Benzo[a]anthracene	LT	1.6	UGL		
							58-89-9	Lindane / gamma-Benzene hexachloride / gamma-Hexachlorocyc*	ND	4	UGL	R	
							59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	LT	4	UGL		
							59-98-8	Endosulfan I / alpha-Endosulfan	ND	9.2	UGL	R	
							60-57-1	Dieldrin	ND	4.7	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report

Installation :Radford AAP, VA (RD)

File Type: CGW

Sampling Date Range: 01-JAN-93

29-JUL-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	39MW2	RDWX*22	41.0	22-JUL-93	ES	RDWX*22	UM18/W	62-75-9	N-Nitrosodimethylamine / N-Methyl-N-nitrosomethanamine / D*	ND	2	UGL	R
							65-85-0	Benzoic acid	LT	13	UGL		
							66-34-7	gamma-Chlordane	ND	5.1	UGL	R	
							67-72-1	Hexachloroethane	LT	1.5	UGL		
							69-21-9	PCB 1242	ND	30	UGL	R	
							72-20-8	Endrin	ND	7.6	UGL	R	
							72-29-6	PCB 1248	ND	30	UGL	R	
							72-43-5	Methoxychlor / Methoxy-DDT / 1,1'-(2,2,2-Trichloroethylidene* ppDDD / 1,1-Dichloro-2,2-bis(p-chlorophenyl)ethane / Rhoth*	ND	5.1	UGL	R	
							72-54-8	2,2-Bis(p-chlorophenyl)-1,1-dichloroethene	ND	4	UGL	R	
							72-55-9	PCB 1016	ND	4.7	UGL	R	
							74-11-2	Heptachlor / 1H-1,4,5,6,7,8,8-Heptachloro-3a,4,7,7a-tetra*	ND	21	UGL	R	
							76-44-8	Hexachlorocyclopentadiene	ND	2	UGL	R	
							77-47-4	Isophorone	LT	8.6	UGL		
							78-59-1	Acenaphthene	LT	4.8	UGL		
							83-32-9	Diethyl phthalate	LT	1.7	UGL		
							84-66-2	Di-n-butyl phthalate	LT	2	UGL		
							84-74-2	Phenanthrene	LT	3.7	UGL		
							85-01-8	Butylbenzyl phthalate	LT	.5	UGL		
							85-68-7	N-Nitrosodiphenylamine	LT	3.4	UGL		
							86-30-6	Fluorene / 9H-Fluorene	LT	3	UGL		
							86-73-7	Hexachlorobutadiene / Hexachloro-1,3-butadiene	LT	3.7	UGL		
							87-68-3	Pentachlorophenol	LT	3.4	UGL		
							87-86-5	2,4,6-Trichlorophenol	LT	18	UGL		
							88-06-2	2-Nitroaniline	LT	4.2	UGL		
							88-74-4	2-Nitrophenol	LT	4.3	UGL		
							88-75-5	Naphthalene / Tar camphor	LT	3.7	UGL		
							91-20-3	Benzo[ghi]perylene	LT	.5	UGL		
							91-24-2	2-Methylnaphthalene	LT	6.1	UGL		
							91-57-6	2-Chloronaphthalene	LT	1.7	UGL		
							91-58-7	3,3'-Dichlorobenzidine	LT	.5	UGL		
							91-94-1	Benzidine	LT	12	UGL		
							92-87-5	Indeno[1,2,3-C,D]pyrene	ND	10	UGL	R	
							93-39-5	Endrin ketone	LT	8.6	UGL		
							94-70-5	o-Cresol / 2-Cresol / 2-Methylphenol	ND	8	UGL	R	
							95-48-7	1,2-Dichlorobenzene	LT	3.9	UGL		
							95-50-1	2-Chlorophenol	LT	1.7	UGL		
							95-57-8	2,4,5-Trichlorophenol	LT	.99	UGL		
							95-95-4		LT	5.2	UGL		

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report
 Installation :Radford AAP, VA (RD)
 File Type: CGW
 Sampling Date Range: 01-JAN-93 29-JUL-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
-----	----	-----	-----	-----	Lab Anly. No.	-----	-----	-----	-----	-----	-----	-----	-----
WELL	39MW2	RDWX*22	41.0	22-JUL-93	ES	RDWX*22	UM18/W	96-82-5	PCB 1260	ND	36	UGL	R
								97-69-1	PCB 1254	ND	36	UGL	R
								98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	LT	.5	UGL	
							99-09-2	3-Nitroaniline	LT	4.9	UGL		
								4-Bromophenyl phenyl ether	LT	4.2	UGL		
								4-Chlorophenyl phenyl ether	LT	5.1	UGL		
								Unknown compound 619		70	UGL	S	
								Unknown compound 674		30	UGL	S	
		RDWXU*22	41.0	22-JUL-93	ES	RDWXU*22	SB01/W	39-97-6	Mercury	LT	.243	UGL	
							SD09/W	40-28-0	Thallium	LT	6.99	UGL	
							SD20/W	39-92-1	Lead	LT	1.26	UGL	
							SD21/W	82-49-2	Selenium	LT	3.02	UGL	
							SD22/W	40-38-2	Arsenic	LT	2.54	UGL	
							SD23/W	40-22-4	Silver	LT	.25	UGL	
							SS10/W	29-90-5	Aluminum	LT	141	UGL	
								39-89-6	Iron	LT	38.8	UGL	
								39-95-4	Magnesium		38700	UGL	
								39-96-5	Manganese		48.1	UGL	
								40-02-0	Nickel	LT	34.3	UGL	
								40-09-7	Potassium		1980	UGL	
								40-23-5	Sodium		9500	UGL	
								40-36-0	Antimony	LT	38	UGL	
								40-39-3	Barium		77	UGL	
								40-41-7	Beryllium	LT	5	UGL	
								40-43-9	Cadmium	LT	4.01	UGL	
								40-47-3	Chromium	LT	6.02	UGL	
								40-48-4	Cobalt	LT	25	UGL	
								40-50-8	Copper	LT	8.09	UGL	
								40-62-2	Vanadium	LT	11	UGL	
								40-66-6	Zinc	LT	21.1	UGL	
								40-70-2	Calcium		89900	UGL	
	39MW3	RDWX*23	24.0	22-JUL-93	ES	RDWX*23	SB01/W	39-97-6	Mercury	LT	.243	UGL	
							SD09/W	40-28-0	Thallium	LT	6.99	UGL	
							SD20/W	39-92-1	Lead		22.5	UGL	
							SD21/W	82-49-2	Selenium	LT	3.02	UGL	
							SD22/W	40-38-2	Arsenic	LT	2.54	UGL	
							SD23/W	40-22-4	Silver	LT	.25	UGL	
							SS10/W	29-90-5	Aluminum		42600	UGL	
								39-89-6	Iron		72100	UGL	
								39-95-4	Magnesium		1.31 E 5	UGL	
								39-96-5	Manganese		1560	UGL	
								40-02-0	Nickel		71.6	UGL	
								40-09-7	Potassium		14200	UGL	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report

Installation :Radford AAP, VA (RD)

File Type: CGW

Sampling Date Range: 01-JAN-93

29-JUL-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	39MW3	RDWX*23	24.0	22-JUL-93	ES RDWX*23	SS10/W	40-23-5	Sodium		14000	UGL		
							40-36-0	Antimony	LT	38	UGL		
							40-39-3	Barium		254	UGL		
							40-41-7	Beryllium	LT	5	UGL		
							40-43-9	Cadmium	LT	4.01	UGL		
							40-47-3	Chromium		64.9	UGL		
							40-48-4	Cobalt	LT	25	UGL		
							40-50-8	Copper		55.2	UGL		
							40-62-2	Vanadium		125	UGL		
							40-66-6	Zinc		239	UGL		
							40-70-2	Calcium		2.49 E 5	UGL		
						UM18/W	00-01-6	4-Nitroaniline	LT	5.2	UGL		
							00-02-7	4-Nitrophenol	LT	12	UGL		
							00-51-6	Benzyl alcohol	LT	.72	UGL		
							01-35-2	Toxaphene / Chlorinated camphene / Camphechlor / Alltox / *	ND	36	UGL	R	
							03-71-9	alpha-Chlordane	ND	5.1	UGL	R	
							04-28-2	PCB 1221	ND	21	UGL	R	
							05-67-9	2,4-Dimethylphenol	LT	5.8	UGL		
							05-99-2	Benzo[b]fluoranthene / 3,4- Benzo[a]fluoranthene	LT	5.4	UGL		
							06-20-2	2,6-Dinitrotoluene	LT	.79	UGL		
							06-44-0	Fluoranthene	LT	3.3	UGL		
							06-44-5	p-Cresol / 4-Cresol / 4-Methylphenol	LT	.52	UGL		
							06-46-7	1,4-Dichlorobenzene	LT	1.7	UGL		
							06-47-8	4-Chloroaniline	LT	7.3	UGL		
							07-08-9	Benzo[k]fluoranthene	LT	.87	UGL		
							08-60-1	Bis(2-chloroisopropyl) ether	LT	5.3	UGL		
							08-95-2	Phenol / Carboic acid / Phenic acid / Phenylic acid / Phe*	LT	9.2	UGL		
							08-96-8	Acenaphthylene	LT	.5	UGL		
							09-00-2	Aldrin	ND	4.7	UGL	R	
							11-44-4	Bis(2-chloroethyl) ether	LT	1.9	UGL		
							11-91-1	Bis(2-chloroethoxy) methane	LT	1.5	UGL		
							122-66-7	1,2-Diphenylhydrazine	ND	2	UGL	R	
							13-65-9	Endosulfan II / beta-Endosulfan	ND	9.2	UGL	R	
							17-81-7	Bis(2-ethylhexyl) phthalate	LT	4.8	UGL		
							17-84-0	Di-n-octyl phthalate	LT	15	UGL		
							18-01-9	Chrysene	LT	2.4	UGL		
							18-74-1	Hexachlorobenzene	LT	1.6	UGL		
							19-84-6	alpha-Hexachlorocyclohexane / alpha- Benzene hexachloride	ND	4	UGL	R	
							19-85-7	beta-Hexachlorocyclohexane / beta- Benzene hexachloride	ND	4	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

Final Documentation Appendix Report

Installation :Radford AAP, VA (RD)

File Type: CGW

Sampling Date Range: 01-JAN-93

29-JUL-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	39MW3	RDWX*23	24.0	22-JUL-93	ES RDWX*23	UM18/W	19-86-8	delta-Hexachlorocyclohexane / delta-Benzene hexachloride	ND	4	UGL	R	
							20-12-7	Anthracene	LT	.5	UGL		
							20-82-1	1,2,4-Trichlorobenzene	LT	1.8	UGL		
							20-83-2	2,4-Dichlorophenol	LT	2.9	UGL		
							21-14-2	2,4-Dinitrotoluene	LT	4.5	UGL		
							21-64-7	N-Nitrosodi-n-propylamine	LT	4.4	UGL		
							21-93-4	Endrin aldehyde	ND	8	UGL	R	
							24-57-3	Heptachlor epoxide	ND	5	UGL	R	
							29-00-0	Benzo[def]phenanthrene / Pyrene	LT	2.8	UGL		
							31-07-8	Endosulfan sulfate	ND	9.2	UGL	R	
							31-11-3	Dimethyl phthalate	LT	1.5	UGL		
							32-64-9	Dibenzofuran	LT	1.7	UGL		
							34-52-1	4,6-Dinitro-2-cresol / 2-Methyl-4,6-dinitrophenol	LT	17	UGL		
							41-16-5	PCB 1232	ND	21	UGL	R	
							41-73-1	1,3-Dichlorobenzene	LT	1.7	UGL		
							50-29-3	2,2-Bis(p-chlorophenyl)-1,1,1-trichloroethane	ND	9.2	UGL	R	
							50-32-8	Benzo[a]pyrene	LT	4.7	UGL		
							51-28-5	2,4-Dinitrophenol	LT	21	UGL		
							53-70-3	Dibenz[ah]anthracene / 1,2:5,6-Dibenzanthracene	LT	6.5	UGL		
							56-55-3	Benzo[a]anthracene	LT	1.6	UGL		
							58-89-9	Lindane / gamma-Benzene hexachloride / gamma-Hexachlorocyc*	ND	4	UGL	R	
							59-50-7	3-Methyl-4-chlorophenol / 4-Chloro-3-cresol / 4-Chloro-3-m*	LT	4	UGL		
							59-98-8	Endosulfan I / alpha-Endosulfan	ND	9.2	UGL	R	
							60-57-1	Dieldrin	ND	4.7	UGL	R	
							62-75-9	N-Nitrosodimethylamine / N-Methyl-N-nitrosomethanamine / D*	ND	2	UGL	R	
							65-85-0	Benzoic acid	LT	13	UGL		
							66-34-7	gamma-Chlordane	ND	5.1	UGL	R	
							67-72-1	Hexachloroethane	LT	1.5	UGL		
							69-21-9	PCB 1242	ND	30	UGL	R	
							72-20-8	Endrin	ND	7.6	UGL	R	
							72-29-6	PCB 1248	ND	30	UGL	R	
							72-43-5	Methoxychlor / Methoxy-DDT / 1,1'-(2,2,2-Trichloroethylidene*)	ND	5.1	UGL	R	
							72-54-8	ppDDD / 1,1-Dichloro-2,2-bis(p-chlorophenyl)ethane / Rhoth*	ND	4	UGL	R	
							72-55-9	2,2-Bis(p-chlorophenyl)-1,1-dichloroethene	ND	4.7	UGL	R	

* - Analyte Description has been truncated. See Data Dictionary

29-JUL-94

16:09:20

Final Documentation Appendix Report

Installation :Radford AAP, VA (RD)

File Type: CGW

Sampling Date Range: 01-JAN-93

29-JUL-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	39MW3	RDWX*23	24.0	22-JUL-93	ES RDWX*23	UM18/W	74-11-2	PCB 1016	ND	21	UGL	R	
							76-44-8	Heptachlor / 1H-1,4,5,6,7,8,8-Heptachloro-3a,4,7,7a-tetraH*	ND	2	UGL	R	
							77-47-4	Hexachlorocyclopentadiene	LT	8.6	UGL		
							78-59-1	Isophorone	LT	4.8	UGL		
							83-32-9	Acenaphthene	LT	1.7	UGL		
							84-66-2	Diethyl phthalate	LT	2	UGL		
							84-74-2	Di-n-butyl phthalate	LT	3.7	UGL		
							85-01-8	Phenanthrene	LT	.5	UGL		
							85-68-7	Butylbenzyl phthalate	LT	3.4	UGL		
							86-30-6	N-Nitrosodiphenylamine	LT	3	UGL		
							86-73-7	Fluorene / 9H-Fluorene	LT	3.7	UGL		
							87-68-3	Hexachlorobutadiene / Hexachloro-1,3-butadiene	LT	3.4	UGL		
							87-86-5	Pentachlorophenol	LT	18	UGL		
							88-06-2	2,4,6-Trichlorophenol	LT	4.2	UGL		
							88-74-4	2-Nitroaniline	LT	4.3	UGL		
							88-75-5	2-Nitrophenol	LT	3.7	UGL		
							91-20-3	Naphthalene / Tar camphor	LT	.5	UGL		
							91-24-2	Benzo[ghi]perylene	LT	6.1	UGL		
							91-57-6	2-Methylnaphthalene	LT	1.7	UGL		
							91-58-7	2-Chloronaphthalene	LT	.5	UGL		
							91-94-1	3,3'-Dichlorobenzidine	LT	12	UGL		
							92-87-5	Benzidine	ND	10	UGL	R	
							93-39-5	Indeno[1,2,3-C,D]pyrene	LT	8.6	UGL		
							94-70-5	Endrin ketone	ND	8	UGL	R	
							95-48-7	o-Cresol / 2-Cresol / 2-Methylphenol	LT	3.9	UGL		
							95-50-1	1,2-Dichlorobenzene	LT	1.7	UGL		
							95-57-8	2-Chlorophenol	LT	.99	UGL		
							95-95-4	2,4,5-Trichlorophenol	LT	5.2	UGL		
							96-82-5	PCB 1260	ND	36	UGL	R	
							97-69-1	PCB 1254	ND	36	UGL	R	
							98-95-3	Nitrobenzene / Essence of mirbane / Oil of mirbane	LT	.5	UGL		
							99-09-2	3-Nitroaniline	LT	4.9	UGL		
								4-Bromophenyl phenyl ether	LT	4.2	UGL		
								4-Chlorophenyl phenyl ether	LT	5.1	UGL		
								Unknown compound 532		4	UGL	S	
								Unknown compound 619		10	UGL	S	
		RDWXU*23	24.0	22-JUL-93	ES RDWXU*23	SB01/W	39-97-6	Mercury	LT	.243	UGL		
						SD09/W	40-28-0	Thallium	LT	6.99	UGL		
						SD20/W	39-92-1	Lead	LT	1.26	UGL		
						SD21/W	82-49-2	Selenium	LT	3.02	UGL		
						SD22/W	40-38-2	Arsenic	LT	2.54	UGL		

* - Analyte Description has been truncated. See Data Dictionary

29-JUL-94

16:09:20

Final Documentation Appendix Report
 Installation :Radford AAP, VA (RD)
 File Type: CGW

Sampling Date Range: 01-JAN-93 29-JUL-94

Site Type	Site ID	Field Sample No.	Depth	Sample Date	Lab Lab Anly. No.	Meth/ Matrix	CAS No.	Analyte Description	Meas. Bool.	Conc.	Unit Meas.	Flag Codes	Data Quals
WELL	39MW3	RDWXU*23	24.0	22-JUL-93	ES RDWXU*23	SD23/W SS10/W	40-22-4	Silver	LT	.25	UGL		
							29-90-5	Aluminum	LT	141	UGL		
							39-89-6	Iron	LT	38.8	UGL		
							39-95-4	Magnesium		42200	UGL		
							39-96-5	Manganese		164	UGL		
							40-02-0	Nickel	LT	34.3	UGL		
							40-09-7	Potassium		7030	UGL		
							40-23-5	Sodium		14500	UGL		
							40-36-0	Antimony	LT	38	UGL		
							40-39-3	Barium		62.4	UGL		
							40-41-7	Beryllium	LT	5	UGL		
							40-43-9	Cadmium	LT	4.01	UGL		
							40-47-3	Chromium	LT	6.02	UGL		
							40-48-4	Cobalt	LT	25	UGL		
							40-50-8	Copper	LT	8.09	UGL		
							40-62-2	Vanadium	LT	11	UGL		
							40-66-6	Zinc	LT	21.1	UGL		
							40-70-2	Calcium		98700	UGL		

* - Analyte Description has been truncated. See Data Dictionary

APPENDIX B

Geotechnical Data

BORING 39MW1
 SURFACE ELEVATION: 1701.1 FEET, MSL
 LOCATION: RADFORD AAP, VIRGINIA
 START: 10:32 ON 6/2/93
 FINISH: 13:49 ON 6/2/93

DEPTH (FEET)	SAMPLING METHOD	SAMPLE NO.	BLOW COUNT/FOOT	% RECOVERY	SAMPLE INTERVAL
0	CUT	1			
	SPT	2	15	100	
10	SPT	3	41	100	
	SPT	4	22	15	
	SPT	5			
20					
30	AH	6			
	AH	7			
	AH	8			
40					
50	AH	9			

SYMBOLS	DESCRIPTION
ML	REDDISH BROWN (5 YR 4/4) SOFT SANDY SILT, VERY MOIST, MICACEOUS, SLIGHTLY CLAYEY NO ODOR
CL	REDDISH BROWN (5 YR 4/4) SLIGHTLY SANDY CLAY AND SILT, MOIST, TRACE BLACK SPECKS, NO ODOR
SM GM	REDDISH BROWN VERY FINE GRAINED GRAVELLY SANDY SILT, HIGHLY MICACEOUS, LESS MOIST, TRACE CLAY, NO BLACK SPECKS GRADING SANDIER GRADING MORE GRAVELLY
LS	GRAVEL PREVENTED SPOON RECOVERY ROCK AT 16.5 THIN SILT SEAM ABOVE LIGHT BROWNISH GRAY LIMESTONE ROCK SOLUTION CAVITY AT 20 FEET, FEW CUTTINGS TO SURFACE LIMESTONE W/ SOLUTION CAVITIES, NO CUTTINGS COMING TO SURFACE PROBABLE WATER TABLE AT 20 FEET MUDDY POSSIBLE WATER AT 30 FEET LIMESTONE (10 YR 6/1) GRAY, HARD, FINE GRAIN, SOME MUDSTONE PIECES AND SOME DARK GRAYISH BROWN LIMESTONE GRADING TO VERY DARK GRAY LIMESTONE SOME YELLOWISH BROWN STAINING CALCITE INFILLING OF SOLUTION CAVITIES IN LARGER FRAGMENTS OF ROCK CUTTINGS SOME PALE BROWN SOFT SILTSTONE W/ INCREASED LIGHT GRAY LIMESTONE VERY LITTLE WATER (VERY FEW CUTTINGS COMING TO SURFACE) SAME, W/ SOME GREENISH GRAY DOLOSTONE CHIPS BOREHOLE TERMINATED AT A DEPTH OF 50 FEET

BORING

39MW2

SURFACE ELEVATION: 1700.3 FEET, MSL
 LOCATION: RADFORD AAP, VIRGINIA
 START: 08:00 ON 6/3/93
 FINISH: 12:57 ON 6/3/93

DEPTH (FEET)	SAMPLING METHOD	SAMPLE NO.	BLOW COUNT/FOOT	% RECOVERY	SAMPLE INTERVAL	SYMBOLS	DESCRIPTION
0	CUT					SM	YELLOWISH RED SILTY SLIGHTLY CLAYEY SAND, MOIST, NO ODOR
	SPT	1	15	60		SC	YELLOWISH RED (5 YR 4/6) SLIGHTLY CLAYEY SAND, FINE GRAINED, LOOSE SLIGHTLY MOIST, NO ODOR, HOMOGENOUS
10	SPT	2	53	5		GM	COARSE GRAVELS AND SILTS/SANDS GRAVELS ROUNDED, YELLOWISH RED GRAVELS PREVENTED SAMPLE RECOVERY
	SPT	3	70	5			SAME GRAVELS SILTS AND SANDS (POOR RECOVERY DUE TO GRAVELS)
20							COBBLES 18.5-19.5 FEET ROCK AT 19.5 FEET
	AH	4				LS DS	BLUISH GRAY DOLOSTONE, AND GRAVEL PIECES (FEW CUTTINGS COMING TO SURFACE)
							CUTTINGS BECOMING MOIST AT 25 FEET, PROBABLE AREA OF WATER TABLE
	AH	5					LIGHT BLUISH GRAY LIMESTONE/DOLOSTONE
30							
	AH	6					SAME W/ SOME DARKER GRAY LIMESTONE/DOLOSTONE, TRACE CALCITE
40							
	AH	7					CONTINUED LIGHT GRAY AND DARK GRAY LIMESTONE/DOLOSTONE CUTTINGS
50							
	AH	8					GRADES TO MAINLY DARK GRAY LIMESTONE/DOLOSTONE, W/ SOME CALCITE CHIPS
							BOREHOLE TERMINATED AT A DEPTH OF 49 FEET

LOG OF BORING

Dames & Moore

BORING	39MW3
SURFACE ELEVATION:	1700.1 FEET, MSL
LOCATION:	RADFORD AAP, VIRGINIA
START:	14:40 ON 6/3/93
FINISH:	12:00 ON 6/4/93

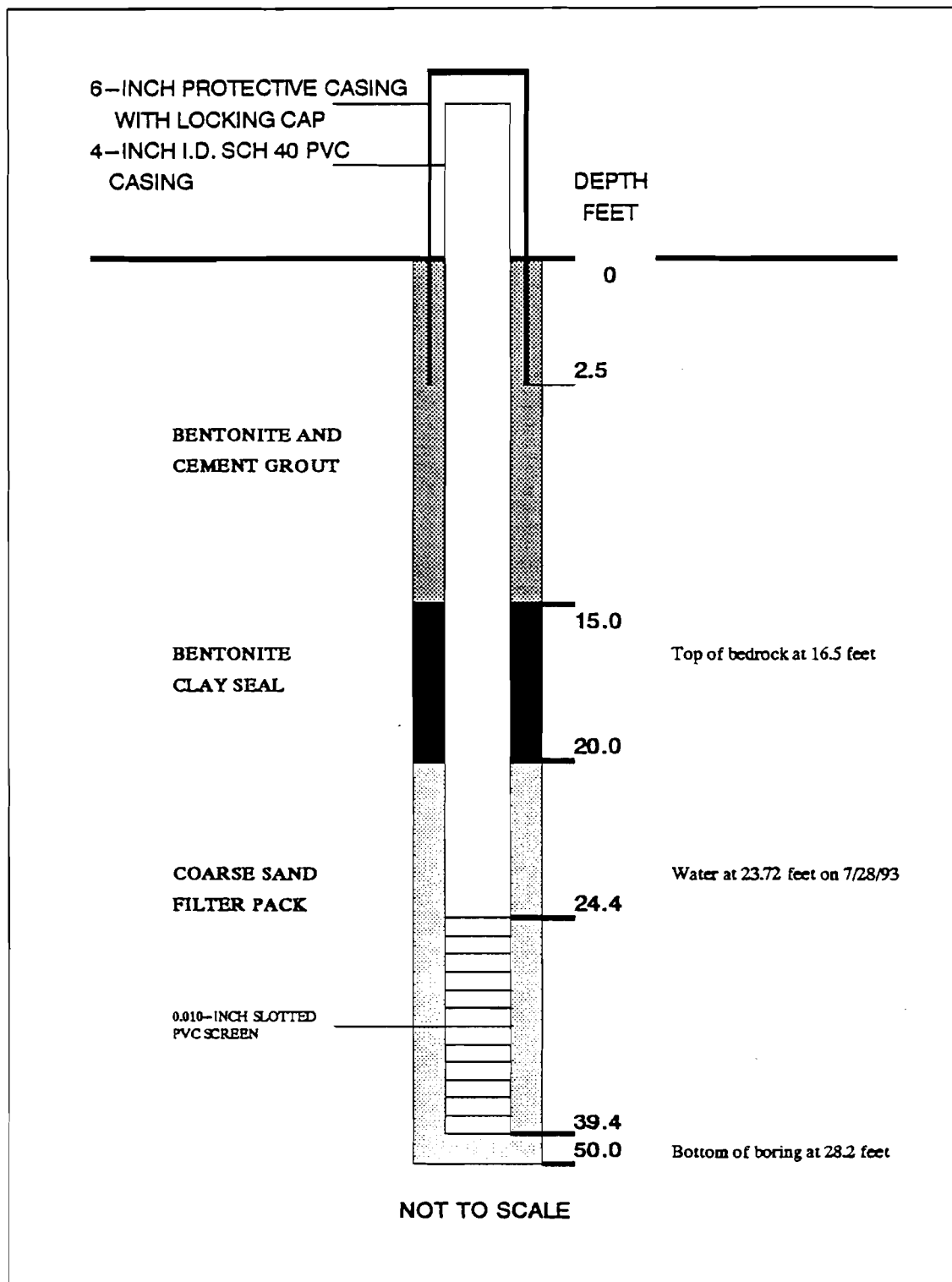
DEPTH (FEET)	SAMPLING METHOD	SAMPLE NO.	BLOW COUNT/FOOT	% RECOVERY	SAMPLE INTERVAL
0	CUT				
5	SPT	1	24	25	
10	SPT	2	18	100	
15	SPT	3	12	0	
20					
25					
30					
35					

SYMBOLS	DESCRIPTION
	YELLOWISH RED SANDY CLAYEY SILT, SL MOIST, NO ODOR
ML	YELLOWISH RED (5 YR 5/8) SOFT VERY FINE GRAINED SANDY SILT, W/ CLAY, MICACEOUS, VERY MOIST, NO ODOR
	CLAY DECREASING
SP	STRONG BROWN (7.5 YR 5/6) FINE GRAINED BEACH SAND, SL MOIST, LOOSE TO MED. DENSE, TRACE SILT
	GRAVELLY
GM	NO SAMPLE RECOVERY DUE TO GRAVELS
	ROCK AT 18 FEET
LS	LIMESTONE ROCK
	MUD-FILLED VOID FROM 20-25 FEET
VOID	PROBABLE WATER TABLE DEPTH 20-25 FEET
LS	HIGHLY WEATHERED LIMESTONE, W/ FILLED CAVITIES AND VOIDS, OCCASIONALLY GRAVELLY, CUTTINGS ARE LIGHT YELLOWISH BROWN, VERY SOFT CLAY AND SILT, WET
LS	GRADING SLIGHTLY MORE COMPETENT
LS	CAVITIES INCREASING, INTERBEDDED THIN ROCK SEAMS AND MUD FILLED CAVITIES AND VOIDS

BOREHOLE TERMINATED AT A DEPTH OF 35 FEET

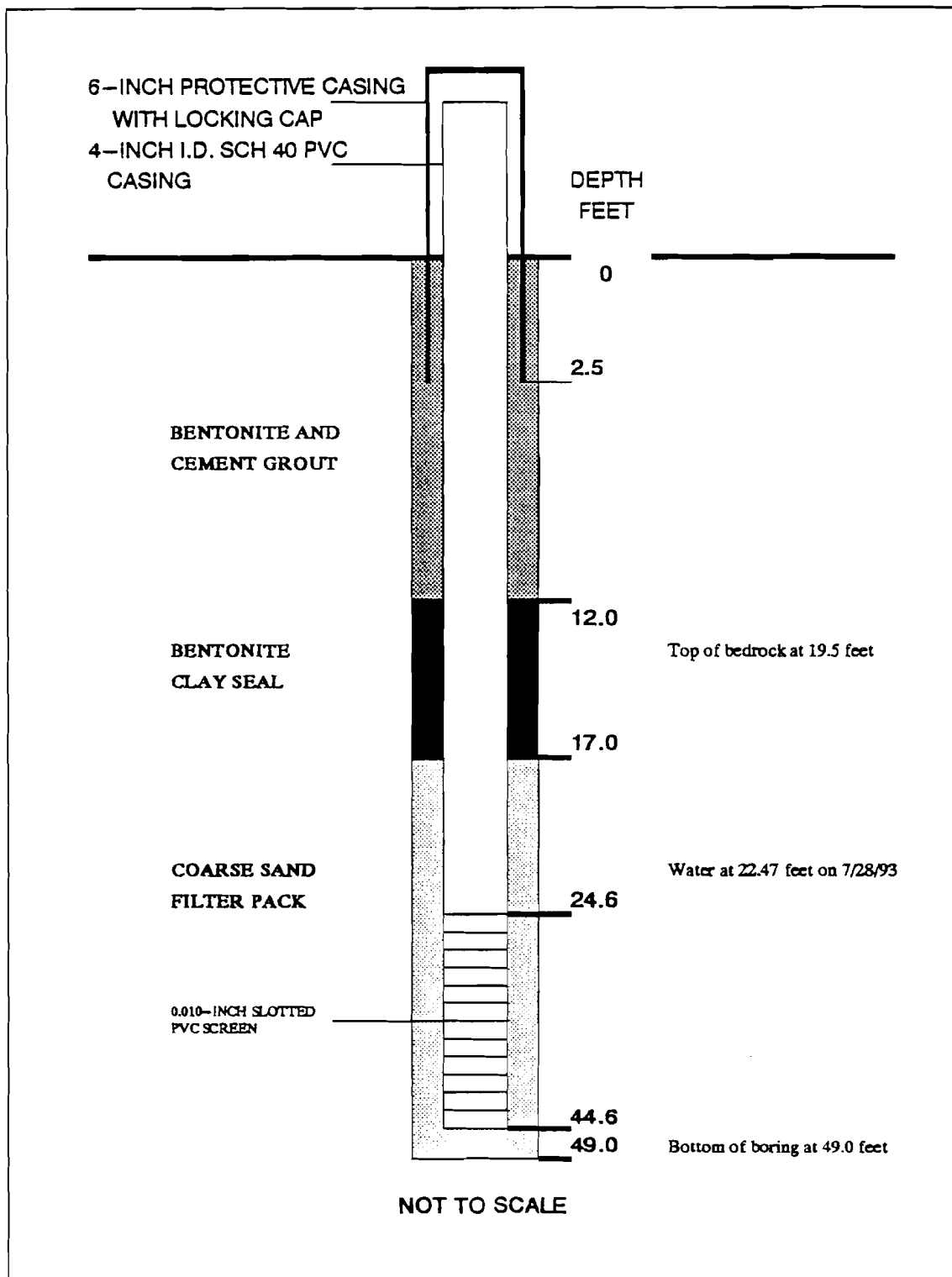
**WELL INSTALLATION DIAGRAM
FOR VERIFICATION INVESTIGATION
RADFORD AAP, VIRGINIA**

Location: 39MW1
Installation Date: 6/2/93
Surface Elevation: 1701.1 Feet
Top of PVC Elevation: 1703.40 Feet



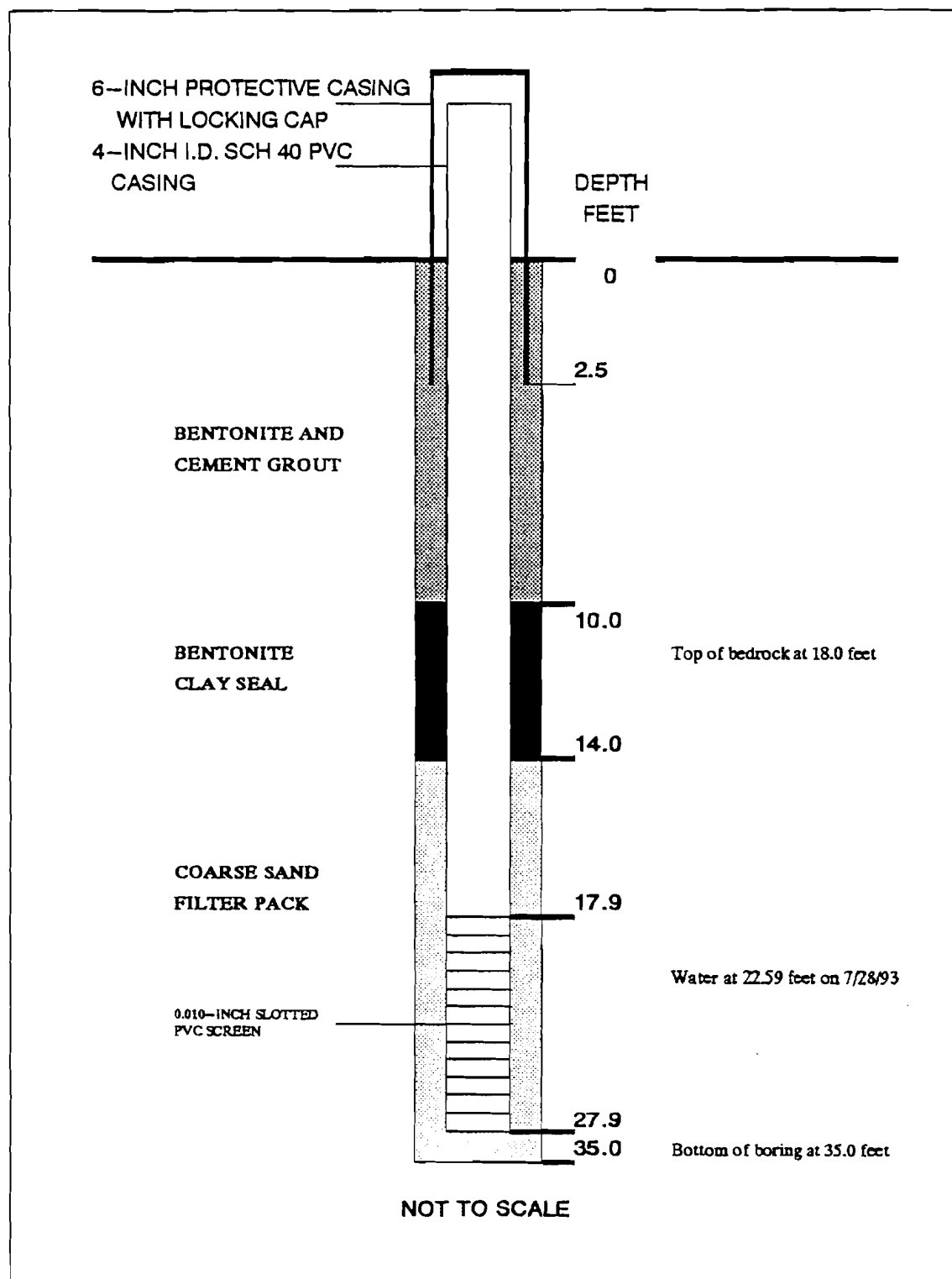
WELL INSTALLATION DIAGRAM
FOR VERIFICATION INVESTIGATION
RADFORD AAP, VIRGINIA

Location: 39MW2
Installation Date: 6/3/93
Surface Elevation: 1700.3 Feet
Top of PVC Elevation: 1702.08 Feet



WELL INSTALLATION DIAGRAM
FOR VERIFICATION INVESTIGATION
RADFORD AAP, VIRGINIA

Location: 39MW3
Installation Date: 6/4/93
Surface Elevation: 1700.1 Feet
Top of PVC Elevation: 1701.36 Feet



RCRA
Facility Investigation
Radford Army Ammunition Plant
Radford, Virginia
Monitoring Well Locations & Elevations
for
Dames & Moore

SITE SWMU-39
(INCINERATOR AREA)

Well	Top Elev. Inner (pvc) Pipe	Top Elev. Outer Casing	Top Elev. Concrete Pad	Ground Elev. At Well (Average)	Va. State Plane Coordinates (1927) (Northing Easting)
39MW1	1703.40	1703.63	1701.72	1701.12	321,075 1,403,785
39MW2	1702.08	1702.35	1700.54	1700.25	321,396 1,403,556
39MW3	1701.36	1701.70	1700.31	1700.05	321,333 1,403,323



ANDERSON
AND
ASSOCIATES, Inc.

Engineers
Surveyors
Planners

Blacksburg, VA
Greensboro, NC

DRAWN
FBT

SCALE

DATE
04 AUG 93

DOCUMENT NO.
10523002

PLOT 1=1

APPENDIX C

Supporting Information From Final Draft VI Report

5.3 INCINERATOR SCRUBBER WASTEWATER SLUDGE AT SWMU 39

5.3.1 Background and Environmental Setting

5.3.1.1 SWMU 39 History. This unit is located in the north-central section of the Horseshoe Area. It is located adjacent to and associated with the Hazardous Waste Incinerator (SWMU 14).

SWMU 39 (Figure 5-6) consists of a concrete-lined aeration pond and two unlined earthen ponds. The aeration pond serves as a cooling pond for incinerator scrubber and cooling water, which has been described as either contact or noncontact cooling water. The gas cooler uses water to cool the exhaust gas from the afterburner to 160° F. The scrubber system is designed to cool the exhaust gases to 140° F. The wastewater from the cooler and scrubber is pumped to the spray pond, with the supernatant recycled and reused in the cooler and scrubber. According to a facility representative, caustic is periodically added to the water to neutralize it, and the water is pumped to the Biological Treatment Plant (SWMU 10). Sludges have reportedly never been removed from the pond for disposal. During spray aeration, water is usually windblown from the pond to settle onto the surrounding ground surface. Therefore, there is the potential for contamination of surface soils by the wastewaters.

The settling ponds are excavated an estimated 6 to 8 feet into the natural grade. These ponds receive overflow from the aeration pond, though overflow is reportedly rare. Both are evaporation ponds, with no outlet from either pond.

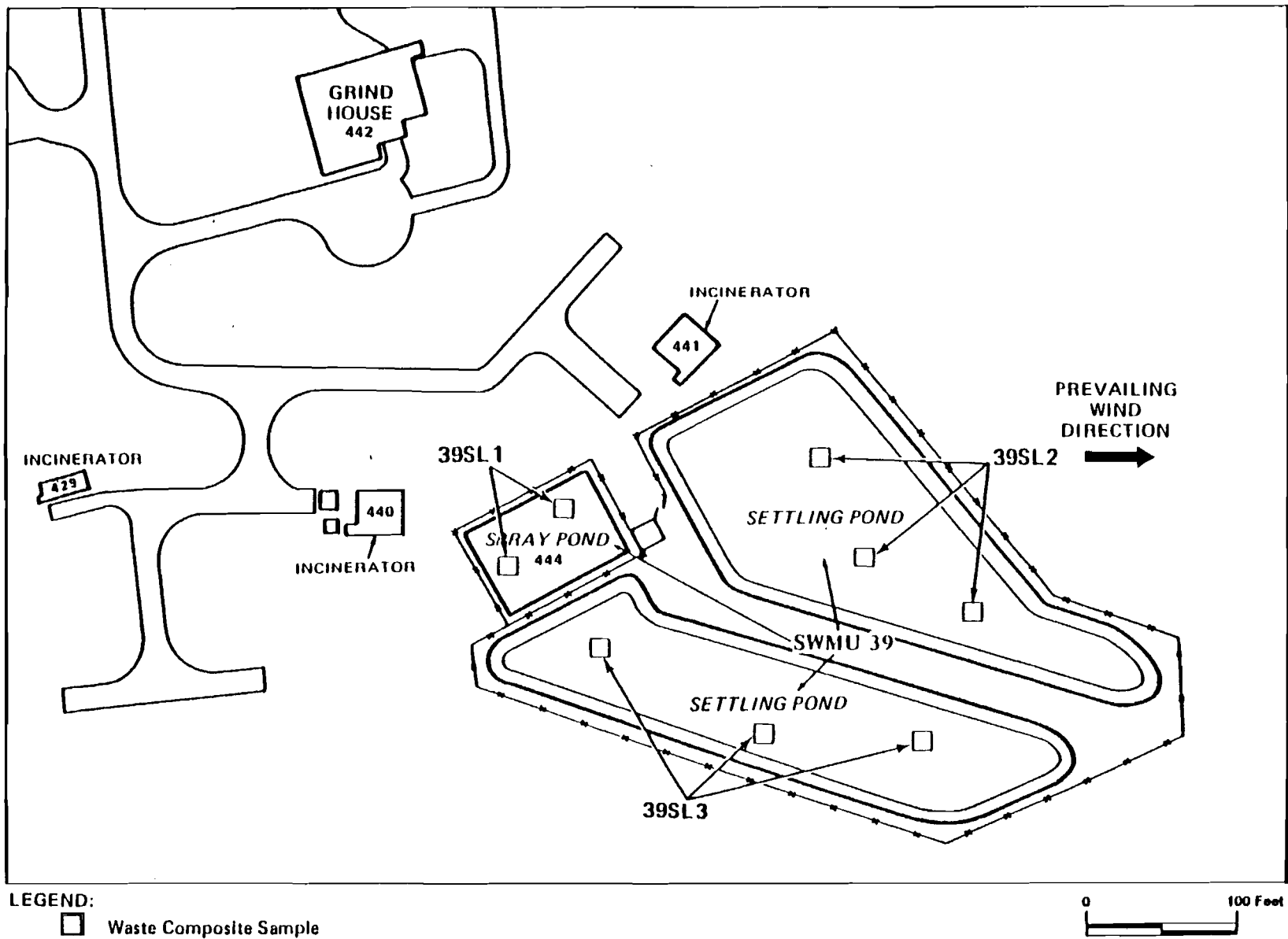


FIGURE 5-6
WASTE CHARACTERIZATION SAMPLE LOCATIONS
SWMU 39 – INCINERATOR WASTEWATER PONDS
RADFORD ARMY AMMUNITION PLANT, VIRGINIA

5.3.1.2 Background and Environmental Setting. SWMU 39 is located on the edge of a nearly level terrace adjacent to the New River at an approximate elevation of 1,700 feet above msl. No site-specific subsurface investigations have been performed at SWMU 39, but the subsurface conditions can be inferred from similar areas along the New River. Approximately 20 to 30 feet of unconsolidated alluvial sediment—mostly sand, clay, and silt—can be expected. Occasional seams of gravel or cobbles (river jack) would also be expected. Bedrock would likely consist of fractured limestone/dolostone of the Elbrook Formation. The water table should be encountered at an elevation similar to the nearby New River. If the water table is within the bedrock, the aquifer would be karstic with high velocity though solution features and fractures. Groundwater flow direction below SWMU 39 would be north toward the New River.

5.3.2 Sample and Analyses Program

To address the potential for groundwater contamination in the vicinity of the ponds, waste characterization was performed on sludge samples collected from the ponds. Two sludge samples were collected from the aeration pond, and three samples were collected from each of the settling ponds. Sample depths were 0 to 1 foot below the water/sludge interface. The two or three samples from each pond were composited, resulting in a total of three sludge samples (39SL1, 39SL2, and 39SL3) submitted for analysis. These samples were analyzed for metals, explosives, and SVOCs as indicated in Table 5-4.

5.3.3 Comparison to Health Based Numbers

The waste characterization investigation included the collection of three composite sediment samples, one each from the spray pond and two settling ponds at SWMU 39. As presented in Table 5-4 the results of the chemical analyses indicated that concentrations of antimony, arsenic, barium, beryllium, cobalt, copper, lead and thallium in one or more sediment samples exceeded the HBN criteria. Concentrations of antimony, arsenic and thallium were greatest in the concrete spray field sample (i.e., 39SL1) and the levels exceeded the background criteria by factors ranging from four for arsenic to greater than 10 for antimony and thallium. These elements are not highly mobile in the environment

Table 5-4
Summary of Analytical Data For Sediment Samples Collected At SWMU 39
Radford Army Ammunition Plant, Virginia

SITE ID		39SL1	39SL2	39SL3	
FIELD ID		RVFS*37	RVFS*38	RVFS*39	
S. DATE		25-feb-92	25-feb-92	25-feb-92	
DEPTH (ft)		1.0	1.0	1.0	
MATRIX	PQLs	CSE	CSE	CSE	HBN
UNIT'S	UGG	UGG	UGG	UGG	UGG
<u>TAL Inorganics</u>					
ALUMINIUM	14.1	19400	17500	22800	230000
ANTIMONY	20	[105]	LT 7.14	LT 7.14	30
ARSENIC	30	[36]	[2.95]	[2.4]	0.5
BARIUM	1	[1200]	429	131	1000
BERYLLIUM	0.2	LT 0.5	[1]	[1.16]	0.1
CALCIUM	100	3900 B	687 B	24300	NSA
CHROMIUM	4	248	206	38.8	400
COBALT	3	[8.45]	[8.22]	[14.8]	0.8
COPPER	7	[57000]	403	21.1	2900
IRON	1000	29300	26600	33600	NSA
LEAD	2	[97000]	[21000]	33.5	200
MAGNESIUM	50	2990	2690	13700	NSA
MANGANESE	0.275	339	147	617	8000
NICKEL	3	66.6	57.2	20.5	1000
POTASSIUM	37.5	2890	1420	2650	NSA
SILVER	4	7.51	0.934	1.27	200
SODIUM	150	877 B	203 B	245 B	NSA
THALLIUM	20	[85.6]	[28]	[32.3]	6
VANADIUM	0.775	28.1	54	68	560
ZINC	30.2	356	145	74.7	16000
<u>Explosives</u>	NA	None Detected	None Detected	None Detected	NSA
<u>Semivolatiles</u>					
BIS(2-ETHYLHEXYL) PHTHALATE	0.3	29.8	LT 0.62	LT 0.62	50
BUTYLBENZYL PHTHALATE	0.3	18.1	LT 0.17	LT 0.17	1000
DI-N-BUTYL PHTHALATE	0.3	9.3	1.62	LT 0.061	1000
FLUORANTHENE	0.3	LT 0.68	0.142	LT 0.068	500
PHENANTHRENE	0.5	5.98	0.143	LT 0.033	40
PYRENE	0.3	10.3	0.254	LT 0.033	1000
<u>Semivolatile TICs</u>					
2,6,10,14-TETRAMETHYLPENTADECANE	NA	58 S	1.14 S	0.517 S	NSA
CYCLOHEXENE OXIDE	NA	ND	0.253 SB	ND	NSA
HEHEICOSANE	NA	58 S	ND	ND	NSA
HEPTADECANE	NA	87 S	ND	ND	NSA
HEXADECANE	NA	58 S	ND	ND	NSA

Table 5-4 (Cont'd)

SITE ID		39SL1	39SL2	39SL3	
FIELD ID		RVFS*37	RVFS*38	RVFS*39	
S. DATE		25-feb-92	25-feb-92	25-feb-92	
DEPTH(ft)		1.0	1.0	1.0	
MATRIX	PQLs	CSE	CSE	CSE	HBN
UNITS	<u>UGG</u>	<u>UGG</u>	<u>UGG</u>	<u>UGG</u>	<u>UGG</u>
<u>Semivolatile TICs</u>					
TETRADECANE	NA	17.4 S	ND	ND	NSA
TOTAL UNKNOWN TICs	NA	(17)1723	(4)380	(2)52.2	NSA

Footnotes:

B = Analyte was detected in corresponding method blank; values are flagged if the sample concentration is less than 10 times the method blank concentration for common laboratory constituents and 5 times for all other constituents.

CSE = Chemical sediment.

HBN = Health based number as defined in the RCRA permit. HBNs not specified in the permit were derived using standard exposure and intake assumptions consistent with EPA guidelines (51 Federal Register 33992, 34006, 34014, and 34028).

LT = Concentration is reported as less than the certified reporting limit.

NA = Not available; PQLs are not available for TICs detected in the library scans.

ND = Analyte was not detected.

NSA = No standard (HBN) available; health effects data were not available for the calculation of a HBN. HBNs were not derived for TICs.

PQL = Practical quantitation limit; the lowest concentration that can be reliably detected at a defined level of precision for a given analytical method.

TAL = Target Analyte List.

TICs = Tentatively identified compounds that were detected in the GC/MS library scans.

UGG = Micrograms per gram.

() = Parentheses are used to indicate the number of unknown TICs that were detected in either the volatile or semivolatile GC/MS library scans. The number beside the parenthesis is the total concentration of all TICs detected in each respective scan.

[] = Brackets indicate that the detected concentration exceeds the HBN.

and are not expected to impact surface water, groundwater or the underlying soil at the present concentrations. Copper and lead in the spray field sample and lead in the southern settling pond sample (39SL2) may be a concern. Copper, which was detected in the spray field sample at nearly 20 times the HBN criterion (5.7 percent of sample by weight), is among the more mobile metals in the environment and can be brought into solution through reactions with organic acids or complexing organic compounds. Although lead has a strong affinity to adsorb to inorganic solids and organic materials, the relatively high concentrations reported in the spray field (9.7 percent by weight) and northern settling pond (2.1 percent by weight) samples may be a concern to groundwater, particularly in the presence of infiltrating acidic wastewater or precipitation. Several other metals such as aluminum, chromium, nickel, silver, sodium and vanadium were detected at concentrations greater than the soil background criteria and likely represent concentrated metals resulting from disposal operations; however, the concentrations of these metals were below HBN criteria.

No explosives were detected in any sediment sample. Several SVOCs and SVOC TICs were detected but were limited mainly to samples obtained from the spray field and northern settling ponds. Most of the detected SVOCs are PAHs and other saturated hydrocarbons which are associated with petroleum products such as commercial coal tar, gasoline, solvents, power plant emissions and coal ash and cinders. Although several known and unknown SVOCs were detected, the concentrations of these organic compounds generally are several orders of magnitude less than applicable HBNs. Many of these organic constituents readily adsorb onto particulate matter, especially in the presence of soil organics, and are not expected to impact deeper soil or groundwater at the site. However, these constituents may be available for transport if brought into solution by the chemical action of solvents.

5.3.4 Summary and Recommendations

Eight metals—antimony, arsenic, barium, beryllium, cobalt, copper, lead, and thallium—were detected above HBNs in at least one sample collected of SWMU 39 waste. The most

impacted sample was from the spray pond, but each pond sample had at least four metals which had concentrations in excess of HBNs. Lead and copper are present at such high concentrations in the spray pond (9.7 percent lead, 5.7 percent copper) and the northern settling pond (2.1 percent lead) that the absorption properties which can normally be expected to keep them immobile may be ineffective. No explosives were detected. Six SVOCs and several SVOC TICs were detected, but at concentrations below HBNs.

A VI is recommended for SWMU 39 to determine if metals are migrating from the ponds at significant concentrations. Since at least four metals exceeded HBNs in each pond, a groundwater monitoring network encompassing the area is recommended. Interim measures to remove the soil from the unlined ponds is also recommended since the high concentrations of some detected metals are likely to cause the sediment to fail TCLP criteria. Confirmatory TCLP analyses on the pond sediments are also recommended. Section 11.0 presents a VI analysis of soil samples collected in an area next to the spray pond which is impacted by wind blown spray water.

5.4 SUMMARY OF RECOMMENDED ACTIONS

Three waste types were characterized at RAAP and an evaluation was made on the potential of each waste type to be hazardous based on a comparison of the concentrations of various analytes in the waste to HBNs and background concentrations. The following recommendations present a summary of the evaluation for each waste type.

5.4.1 Calcium Sulfate

5.4.2 Coal Ash

5.4.3 Incinerator Scrubber Wastewater Sludge

This waste, being deposited at SWMU 39, has concentrations of eight metals above HBNs. Two of the three ponds are unlined and infiltration of impacted water will occur. Interim measures to remove the sediment is recommended with TCLP analyses for metals performed in order to confirm the probably characteristic toxicity. A VI is recommended for the purpose of evaluating the potential impact to the groundwater.