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SAMPLING AND ANALYSIS PLAN P-159 UST AND P-3 PAD NAS JACKSONVILLE FL
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ABB ENVIRONMENTAL

P-159, UST, AND P-3 PAD
SAMPLING AND ANALYSIS PLAN

NAVAL AIR STATION
JACKSONVILLE, FLORIDA

Contract No. N62467-89-D-0317
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1.0 INTRODUCTION

In accordance with the Statement of Work (SOW) and Contract Task Order No. 075, ABB Environmental Services, Inc. (ABB-ES), has prepared a Sampling and Analysis Plan (SAP) for conducting an investigation at Installation Restoration (IR) Potential Source of Contamination (PSC) in P-159, P-3 Pad, and UST work at Naval Air Station (NAS) Jacksonville. Current construction plans for NAS Jacksonville call for the construction/ renovation of wash and rinse stations for helicopters (Site P-159) and the removal of underground storage tanks adjacent to Building 101 (Site UST). This investigation will identify potential contamination of these sites prior to construction and excavation activities. In addition, previous construction activities at the P-3 engine test cell area extension resulted in transporting and stockpiling of excavated soils to an off-base location. These stockpiles will be evaluated for possible contamination. And, finally, three on-base surface water bodies will be investigated for possible contamination of surface water, sediment, and biota.

For ease of presentation and understanding, the following site designations will be utilized throughout this document and any subsequent reports.

- The helicopter wash/rinse racks will be referred to as Site P-159.
- The underground storage tanks surrounding Building 101 will be referred to as Site UST.
- The soil piles resulting from excavations at the P-3 engine test cell area extension will be referred to as Site P-3 Pad (the samples taken at the soil piles will be differentiated, within the text, from the one sample taken at the actual P-3 engine test cell area extension.
- The electrofishing and surface water/sediment sampling efforts will be referred to as one of the three actual names where this effort is to be done.

1.1 SITE LOCATIONS AND DESCRIPTIONS. Two of the three sites, P-159 and UST, are located in the Naval Aviation Depot (NADEP) at NAS Jacksonville (Figure 1-1). NADEP is within the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Operable Unit (OU) 3, The Industrial Area. The three surface water bodies to be investigated include: Lake Casa Linda and Lake Scotlis (both located within the boundaries of the on-base golf course), and the polishing pond located northeast of the waste water treatment plant in OU2. The P-3 engine test cell area extension is located within PSC 8 approximately ½ mile north of the P-159 site area, and the off-base soil piles (Site P-3 Pad) are located approximately 8 miles west of NAS Jacksonville off Brannon Field Road in Duval County, Florida.

Construction plans for Site P-159 consist of one proposed helicopter rinse facility, one proposed helicopter wash rack, and modification to one existing helicopter wash rack. The proposed helicopter wash and rinse racks are located at the helicopter flight line south of Albermarle Avenue and west of the St. Johns River. The existing wash rack facility is located approximately 20 feet north of Building 190.

The UST site includes nine buried underground storage tanks located in three separate areas along the perimeter of Building 101. The areas are as follows: a group of five USTs (designated tanks 101-BS1 through 101-BS5) located in the northeast alcove of Building 101; a single UST (designated Tank 101-CS) located on the east of Building 101, between the building and Wright Street; and a group of three USTs located in a southwest alcove of Building 101.

Site P-3 Pad is reported to consist of four soil piles. The soil was excavated from within the area defined as PSC 8 during construction of the P-3 engine test cell area and transported to a gravel pit located in an undeveloped area off Brannon Field Road.

1.2 PURPOSE. The objective of this SAP is to present the field exploration and analytical scope of work that will be used to evaluate the presence, magnitude, and characteristics of hazardous substances, if any, at Sites P-159, UST, P-3 Pad, and the individual lakes to be electroshocked that may pose a threat to human health or the environment.

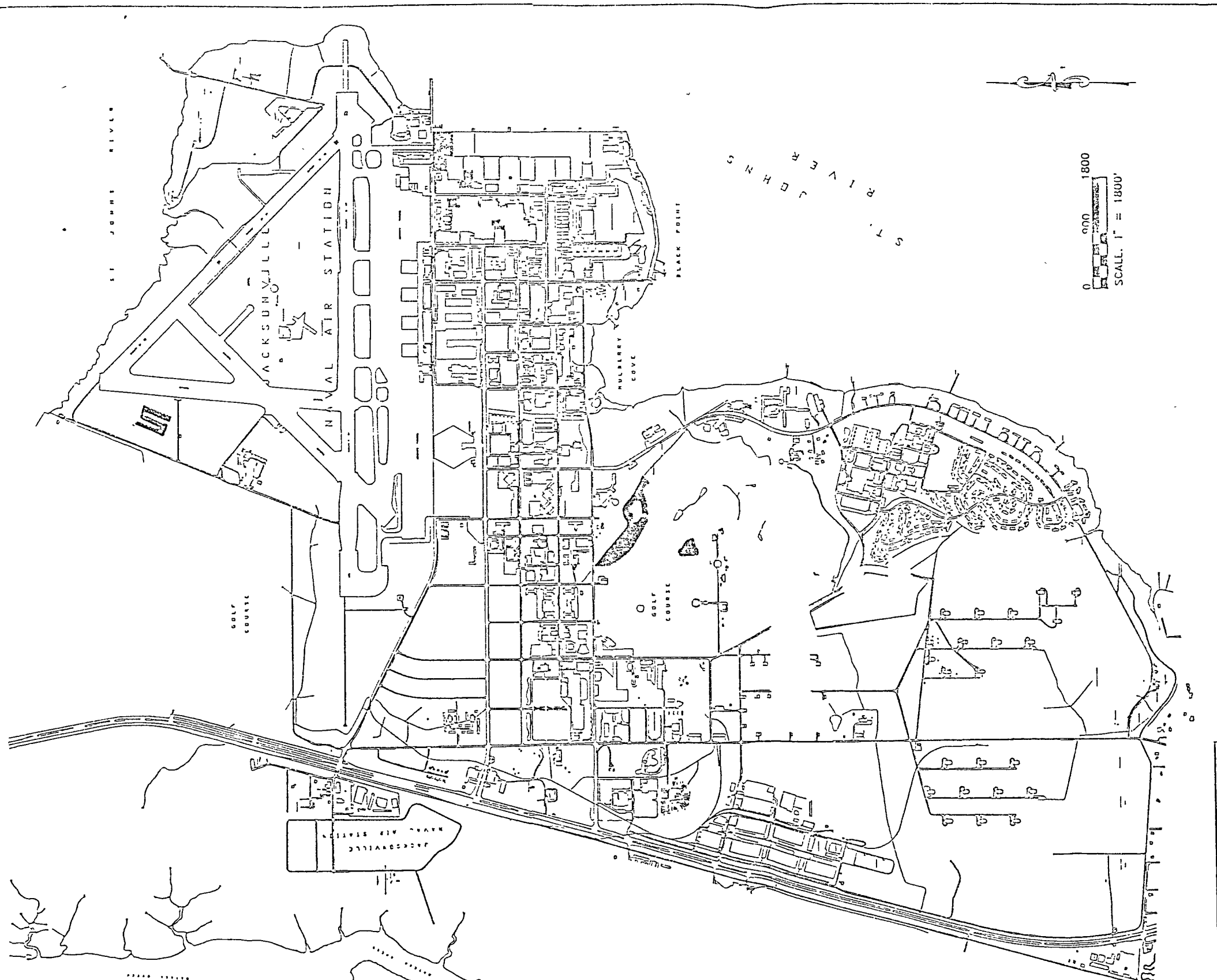

FIGURE 1-1
SITE LOCATIONS MAP

P-159, UST AND P-3 PAD
SAMPLING AND ANALYSIS
PLAN

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2.0 SCOPE OF WORK

The proposed field investigations to be conducted to satisfy the SOW will include subsurface soil sampling, shallow groundwater sampling, surface water and sediment sampling, electrofishing sample collection, laboratory analysis, aquifer testing, and a sample location survey. Soil samples will be collected at the P-159, UST, and P-3 pad sites. Groundwater samples will be collected at the P-159 and UST sites. Electrofishing, surface water, and sediment sampling will be completed at Lake Casa Linda, Lake Scotlis, and the polishing pond. Details concerning Quality Control (QC) procedures, Data Quality Objectives (DQOs), and sampling and decontamination procedures are provided in the Navy Installation Restoration Program (NIRP) Naval Air Station Jacksonville, Florida, Volume 5, specifically Appendix 5.4.1, OU1 Quality Assurance Project Plan (QAPP) and Appendix 5.4.2, OU1 Field Sampling Plan.

2.1 PRELIMINARY ACTIVITIES. On August 28, 1992, representatives from ABB-ES visited Sites P-159 and UST, marked the proposed soil boring and monitoring well locations, and made general observations concerning the sites. Based on this site visit and discussions with the Southern Division's Remedial Program Manager (RPM), a Plan of Action (POA) for the sites was developed. The POA formed the basis for this SAP.

2.2 SAMPLE IDENTIFICATION. Identification for each sample collected at the sites will consist of up to a five-part sample designation system. The representative sample designation, the criteria for the individual portions of the designation, and designation order is as follows:

JAX-P-159-SB01-1-3-01D

1. JAX designates the installation code for NAS Jacksonville.

2. P-159 designates the site number (P-159 designates Site P-159; B101 designates Site UST; P003 designates Site P-3 Pad; PP designates the polishing pond; CL designates Lake Casa Linda; and LS designates Lake Scotlis).

3. SB01 designates the sample type and number (SB for soil boring, GW for groundwater, BO for biota, SW for surface water, SD for sediment, FB for field blank, RB for rinsate blank, and TB for trip blank).

4. 1-3 designates the sample vertical (depth) locator or media (1 to 3 feet for depth, FT for Biota Fillet, and LG for Biota Liver and Gonads).

5. 01 is the sample event number (the letter represents a possible suffix to the event number for a field QC sample; A represents a duplicate sample; MS represents matrix spike; and MSD represents matrix spike duplicates).

2.3 SOIL SAMPLING. A total of 58 soil samples will be collected from 29 soil borings located at Sites P-159 and UST (see Figure 2-1). At each soil boring location, two soil samples will be collected for laboratory analysis as follows:

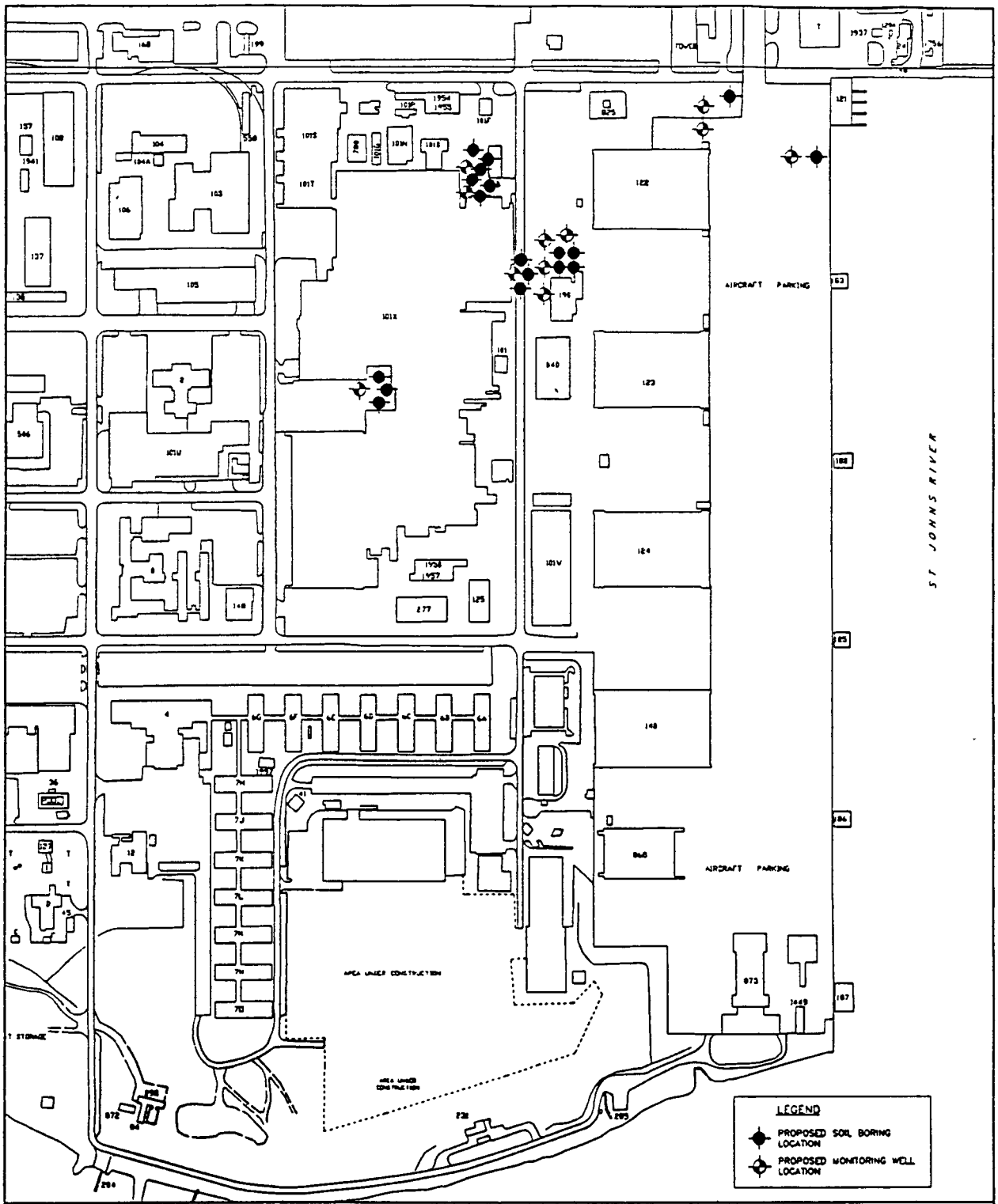

FIGURE 2-1
P-159 AND UST SITES
PROPOSED SOIL BORING AND MONITORING WELL LOCATIONS

P-159, UST AND P-3 SAMPLING AND ANALYSIS PLAN

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(1) soil samples collected from below the concrete or asphalt pavement to a depth of 3 feet below land surface (bls) will be composited into one sample, and (2) a sample collected from 5 to 6 feet bls, which is anticipated to be immediately above the water table. In the event groundwater is encountered prior to the second sampling depth, the second soil sample will not be recovered.

To collect the samples, any concrete or asphalt pavement and gravel base will be removed from each sample location. Shallow soil samples will then be collected using a stainless-steel bucket auger. After collection of the shallow soil sample, the same bucket auger will be used to advance the borehole to the proposed second sampling depth. A separate, decontaminated stainless-steel hand auger will be used to collect the second sample.

Soil samples for target compound list (TCL) volatile organic compound (VOC) analysis will be transferred directly from the sampling tool to the appropriate containers. The soil for the remaining sample fractions will be thoroughly mixed with a stainless-steel spoon in a decontaminated Pyrex™ glass bowl. The sample will then be transferred to the appropriate sample containers.

Following soil boring activities at the P-159 and UST sites, each of the soil boring locations will be surveyed relative to horizontal x and y coordinates by a Florida-registered surveyor. These horizontal coordinates will be referenced to the transverse Merc East Zone and converted to the North American Datum of 1983.

In addition to soil sampling at Sites P-159 and UST, surface soil samples will be collected from the P-3 Pad site. A total of four soil samples (0 to 2 feet deep) will be collected from the soil piles using a stainless-steel hand auger. A single soil sample will also be collected from the P-3 engine test cell extension area, which is the original source area for the soil piles. The sample will be collected from immediately below the concrete or asphalt pavement to a depth of 3 feet using a stainless-steel hand auger.

Soil samples collected from Sites P-159 and UST will be analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), TCL semivolatile organic compounds (SVOCs), and TCL polychlorinated biphenyls (PCBs) and pesticides, and Target Analyte List (TAL) inorganics, including cyanide. Table 2-1 and 2-2 provide summaries of the soil samples to be collected and analyses to be performed. The samples will be analyzed on an accelerated 14-day completion period. The results of the analysis will be used to identify samples containing contaminant concentrations that exceed either the applicable or relevant and appropriate requirements (ARARs) compiled in the *Handbook of Applicable or Relevant and Appropriate Requirements for Navy CLEAN Sites Within the State of Florida* or criteria established for Toxic Characteristic Leaching Procedure (TCLP). TCLP extracts will be analyzed for TCLP listed metals, volatiles, and solvents on samples containing target analytes that exceed either ARAR.

The soil samples collected in association with Site P-3 Pad will be extracted by Toxicity Characteristic Leachate Procedure (TCLP) and analyzed for VOCs, SVOCs, pesticides and PCBs, and metals. In addition, total petroleum hydrocarbon (TPH) analysis will be performed. Tables 2-1, Sample Collection Matrix, and Table 2-2, Analytical Method Summary, provide a summary of the sample designations laboratory analyses to be completed.

Table 2-1
Sample Collection Matrix

NAS Jacksonville
Sites P-159, UST, and P-3 Pad
Jacksonville, Florida

Sample Location/ID	Media	TCL VOC	TCL SVOC	TCL Pesticides and PCBs	TAL Inorganics[1]	TCLP[2]
P-159SB01 1-3	Soil	1	1	1	1	0
P-159SB01 5-6	Soil	1	1	1	1	0
P-159SB02 1-3	Soil	1	1	1	1	0
P-159SB02 5-6	Soil	1	1	1	1	0
P-159SB03 1-3	Soil	1	1	1	1	0
P-159SB03 5-6	Soil	1	1	1	1	0
P-159SB04 1-3	Soil	1	1	1	1	0
P-159SB04 5-6	Soil	1	1	1	1	0
P-159SB05 1-3	Soil	1	1	1	1	0
P-159SB05 5-6	Soil	1	1	1	1	0
P-159SB06 1-3	Soil	1	1	1	1	0
P-159SB06 5-6	Soil	1	1	1	1	0
P-159SB07 1-3	Soil	1	1	1	1	0
P-159SB07 5-6	Soil	1	1	1	1	0
P-159SB08 1-3	Soil	1	1	1	1	0
P-159SB08 5-6	Soil	1	1	1	1	0
P-159SB09 1-3	Soil	1	1	1	1	0
P-159SB09 5-6	Soil	1	1	1	1	0
P-159SB10 1-3	Soil	1	1	1	1	0
P-159SB10 5-6	Soil	1	1	1	1	0
P-159SB11 1-3	Soil	1	1	1	1	0
P-159SB11 5-6	Soil	1	1	1	1	0
P-159SB12 1-3	Soil	1	1	1	1	0
P-159SB12 5-6	Soil	1	1	1	1	0
P-159SB13 1-3	Soil	1	1	1	1	0
P-159SB13 5-6	Soil	1	1	1	1	0
Subtotal		26	26	26	26	[3]6
P-159GW01	Groundwater	1	1	1	1	0
P-159GW02	Groundwater	1	1	1	1	0
P-159GW03	Groundwater	1	1	1	1	0
P-159GW04	Groundwater	1	1	1	1	0
P-159GW05	Groundwater	1	1	1	1	0
P-159GW06	Groundwater	1	1	1	1	0
P-159GW07	Groundwater	1	1	1	1	0
Subtotal		7	7	7	7	0
B101SB01 1-3	Soil	1	1	1	1	0
B101SB01 5-6	Soil	1	1	1	1	0
B101SB02 1-3	Soil	1	1	1	1	0
B101SB02 5-6	Soil	1	1	1	1	0
B101SB03 1-3	Soil	1	1	1	1	0
B101SB03 5-6	Soil	1	1	1	1	0

See notes at end of table.

Table 2-1 (Continued)
Sample Collection Matrix

NAS Jacksonville
Sites P-159, UST, and P-3 Pad
Jacksonville, Florida

Sample Location/ID	Media	TCL VOC	TCL SVOC	TCL Pesticides and PCBs	TAL Inorganics[1]	TCLP[2]
B101SB04 1-3	Soil	1	1	1	1	0
B101SB04 5-6	Soil	1	1	1	1	0
B101SB05 1-3	Soil	1	1	1	1	0
B101SB05 5-6	Soil	1	1	1	1	0
B101SB06 1-3	Soil	1	1	1	1	0
B101SB06 5-6	Soil	1	1	1	1	0
B101SB07 1-3	Soil	1	1	1	1	0
B101SB07 5-6	Soil	1	1	1	1	0
B101SB08 1-3	Soil	1	1	1	1	0
B101SB08 5-6	Soil	1	1	1	1	0
B101SB09 1-3	Soil	1	1	1	1	0
B101SB09 5-6	Soil	1	1	1	1	0
B101SB10 1-3	Soil	1	1	1	1	0
B101SB10 5-6	Soil	1	1	1	1	0
B101SB11 1-3	Soil	1	1	1	1	0
B101SB11 5-6	Soil	1	1	1	1	0
B101SB12 1-3	Soil	1	1	1	1	0
B101SB12 5-6	Soil	1	1	1	1	0
B101SB13 1-3	Soil	1	1	1	1	0
B101SB13 5-6	Soil	1	1	1	1	0
B101SB14 1-3	Soil	1	1	1	1	0
B101SB14 5-6	Soil	1	1	1	1	0
B101SB15 1-3	Soil	1	1	1	1	0
B101SB15 5-6	Soil	1	1	1	1	0
B101SB16 1-3	Soil	1	1	1	1	0
B101SB16 5-6	Soil	1	1	1	1	0
Subtotal		32	32	32	32	[3]7
B101GW01	Groundwater	1	1	1	1	0
B101GW02	Groundwater	1	1	1	1	0
B101GW03	Groundwater	1	1	1	1	0
B101GW04	Groundwater	1	1	1	1	0
Subtotal		4	4	4	4	0
P003SB01	Soil	0	0	0	0	[4]1
P003SB02	Soil	0	0	0	0	[4]1
P003SB03	Soil	0	0	0	0	[4]1
P003SB04	Soil	0	0	0	0	[4]1
P003SB05	Soil	0	0	0	0	[4]1
Subtotal		0	0	0	0	[4]5

See notes at end of table.

Table 2-1 (Continued)
Sample Collection Matrix

NAS Jacksonville
Sites P-159, UST, and P-3 Pad
Jacksonville, Florida

Sample Location/ID	Media	TCL VOC	TCL SVOC	TCL Pesticides and PCBs	TAL Inorganics[1]	TCLP[2]
LSB001 FT	Biota	0	1	1	1	0
LSB001 LG	Biota	0	1	1	1	0
LSB002 FT	Biota	0	1	1	1	0
LSB002 LG	Biota	0	1	1	1	0
LSB003 FT	Biota	0	1	1	1	0
LSB003 LG	Biota	0	1	1	1	0
LSB004 FT	Biota	0	1	1	1	0
LSB004 LG	Biota	0	1	1	1	0
LSB005 FT	Biota	0	1	1	1	0
LSB005 LG	Biota	0	1	1	1	0
LSB006 FT	Biota	0	1	1	1	0
LSB006 LG	Biota	0	1	1	1	0
LSB007 FT	Biota	0	1	1	1	0
LSB007 LG	Biota	0	1	1	1	0
LSB008 FT	Biota	0	1	1	1	0
LSB008 LG	Biota	0	1	1	1	0
LSB009 FT	Biota	0	1	1	1	0
LSB009 LG	Biota	0	1	1	1	0
CLB001 FT	Biota	0	1	1	1	0
CLB001 LG	Biota	0	1	1	1	0
CLB002 FT	Biota	0	1	1	1	0
CLB002 LG	Biota	0	1	1	1	0
CLB003 FT	Biota	0	1	1	1	0
CLB003 LG	Biota	0	1	1	1	0
CLB004 FT	Biota	0	1	1	1	0
CLB004 LG	Biota	0	1	1	1	0
CLB005 FT	Biota	0	1	1	1	0
CLB005 LG	Biota	0	1	1	1	0
CLB006 FT	Biota	0	1	1	1	0
CLB006 LG	Biota	0	1	1	1	0
CLB007 FT	Biota	0	1	1	1	0
CLB007 LG	Biota	0	1	1	1	0
CLB008 FT	Biota	0	1	1	1	0
CLB008 LG	Biota	0	1	1	1	0
CLB009 FT	Biota	0	1	1	1	0
CLB009 LG	Biota	0	1	1	1	0
PPB001 FT	Biota	0	1	1	1	0
PPB001 LG	Biota	0	1	1	1	0
PPB002 FT	Biota	0	1	1	1	0
PPB002 LG	Biota	0	1	1	1	0
PPB003 FT	Biota	0	1	1	1	0
PPB003 LG	Biota	0	1	1	1	0

See notes at end of table.

Table 2-1 (continued)
Sample Collection Matrix

NAS Jacksonville
Sites P-159, Building 101-USTs, and P-3 Soil Piles
Jacksonville, Florida

Sample Location/ID	Media	TCL VOC	TCL SVOC	TCL Pesticides and PCBs	TAL Inorganics[1]	TCLP[2]
PPB004 FT	Biota	0	1	1	1	0
PPB004 LG	Biota	0	1	1	1	0
PPB005 FT	Biota	0	1	1	1	0
PPB005 LG	Biota	0	1	1	1	0
PPB006 FT	Biota	0	1	1	1	0
PPB006 LG	Biota	0	1	1	1	0
PPB007 FT	Biota	0	1	1	1	0
PPB007 LG	Biota	0	1	1	1	0
PPB008 FT	Biota	0	1	1	1	0
PPB008 LG	Biota	0	1	1	1	0
PPB009 FT	Biota	0	1	1	1	0
PPB009 LG	Biota	0	1	1	1	0
Subtotal		0	54	54	54	0
LS-SD01 0-6	Sediment	1	1	1	1	0
LS-SD02 0-6	Sediment	1	1	1	1	0
LS-SD03 0-6	Sediment	1	1	1	1	0
CL-SD01 0-6	Sediment	1	1	1	1	0
CL-SD02 0-6	Sediment	1	1	1	1	0
CL-SD03 0-6	Sediment	1	1	1	1	0
PP-SD01 0-6	Sediment	1	1	1	1	0
PP-SD02 0-6	Sediment	1	1	1	1	0
PP-SD03 0-6	Sediment	1	1	1	1	0
Subtotal		9	9	9	9	0
LS-SW01	Surface Water	1	1	1	1	0
LS-SW02	Surface Water	1	1	1	1	0
LS-SW03	Surface Water	1	1	1	1	0
CL-SW01	Surface Water	1	1	1	1	0
CL-SW02	Surface Water	1	1	1	1	0
CL-SW03	Surface Water	1	1	1	1	0
PP-SW01	Surface Water	1	1	1	1	0
PP-SW02	Surface Water	1	1	1	1	0
PP-SW03	Surface Water	1	1	1	1	0
Subtotal		9	9	9	9	0
Total Soil Samples		58	58	58	58	18
Total Groundwater Samples		11	11	11	11	0
Total Sediment Samples		9	9	9	9	0
Total Surface Water Samples		9	9	9	9	0
Total Biota Samples		0	54	54	54	0
Total Environmental Samples		87	141	141	141	18

See notes at end of table.

Table 2-1 (Continued)
Sample Collection Matrix

NAS Jacksonville
Sites P-159, UST, and P-3 Pad
Jacksonville, Florida

Sample Location/ID	Media	TCL VOC	TCL SVOC	TCL Pesticides and PCBs	TAL Inorganics[1]	TCLP[2]
QA/QC Samples						
Equipment Blanks	Water	16	16	16	16	0
Field Blanks	Water	3	3	3	3	0
Trip Blanks	Water	0	12	0	0	0
Field Duplicates	Soil	7	7	7	7	0
Field Duplicates	Water	3	3	3	3	0
MS/MSD	Soil	4/4	4/4	4/4	4/4	0
MS/MSD	Water	3/3	3/3	3/3	3/3	0
Total QA/QC Samples		43	55	43	43	0
Total Soil Samples		82	82	82	82	18
Total Water Samples		48	60	48	48	0

[1]Metals (Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, As, Na, Tl, W, Zn plus total cyanide).
[2]Includes TCLP extract and extract analysis for volatiles, solvents, and metals; individual samples will be run based on results of TCL analysis.
[3]Estimate that 20 percent of soil samples will receive TCLP extraction and analyses.
[4]Includes TCLP extraction and extract analysis for VOCs, SVOCs, pesticides and PCBs, metals, and solvents; plus total petroleum hydrocarbons.

Notes: All sample designations have a JAX prefix.
TCL = target compound list.
SVOC = semivolatile organic compounds.
VOC = volatile organic compounds.
PCBs = polychlorinated biphenyls.
TAL = target analyte list.
TCLP = toxicity characteristic leaching procedure.
MS/MSD = matrix spike/matrix spike duplicates.
QA/QC = quality assurance/quality control.
GC = gas chromatograph.

Table 2-2
Analytical Method Summary

NAS Jacksonville
Sites P-159, UST, and P-3 Pad
Jacksonville, Florida

Parameter/Analytes	Matrix	Number of Samples	Analytical Method	NEESA QC Level
(1) Target Compound List				
a Volatile Organic Compounds	Soil	82	8240 CLP	C
	Water	60	8240 CLP	C
b. Semivolatile Organic Compounds	Soil	82	8270 CLP	C
	Water	48	8270 CLP	C
	Biota	54	8270 CLP	C
c. Chlorinated Pesticides & PCBs	Soil	82	8080 CLP	C
	Water	48	8080 CLP	C
	Biota	54	8080 CLP	C
(2) Target Analyte List				
a. Total Cyanide	Soil	82	335.2 CLP	C
	Water	48	335.2 CLP	C
	Biota	54	335.2 CLP	C
b. Metals				
Aluminum (Al)	Soil	82	200.7 CLP	C
	Water	48	200.7 CLP	C
	Biota	54	6010 CLP	C
Antimony (Sb)	Soil	82	200.7 CLP	C
	Water	48	200.7 CLP	C
	Biota	54	6010 CLP	C
Arsenic (As)	Soil	82	206.2 CLP	C
	Water	46	206.2 CLP	C
	Biota	54	6010 CLP	C
Barium (Ba)	Soil	82	200.7 CLP	C
	Water	46	200.7 CLP	C
	Biota	54	6010 CLP	C
Beryllium (Be)	Soil	82	200.7 CLP	C
	Water	48	200.7 CLP	C
	Biota	54	6010 CLP	C
Cadmium (Cd)	Soil	82	200.7 CLP	C
	Water	48	200.7 CLP	C
	Biota	54	6010 CLP	C
Calcium (Ca)	Soil	82	200.7 CLP	C
	Water	48	200.7 CLP	C
	Biota	54	6010 CLP	C
Total Chromium (Cr)	Soil	82	200.7 CLP	C
	Water	48	200.7 CLP	C
	Biota	54	6010 CLP	C
Cobalt (Co)	Soil	82	200.7 CLP	C
	Water	48	200.7 CLP	C
	Biota	54	6010 CLP	C

See notes at end of table.

Table 2-2 (Continued)
Analytical Method Summary

NAS Jacksonville
Sites P-159, UST, and P-3 Pad
Jacksonville, Florida

Parameter/Analytes	Matrix	Number of Samples	Analytical Method	NEESA QC Level
Copper (Cu)	Soil	82	200 7 CLP	C
	Water	48	200.7 CLP	C
	Biota	54	6010 CLP	C
Iron (Fe)	Soil	82	200.7 CLP	C
	Water	48	200.7 CLP	C
	Biota	54	6010 CLP	C
Lead (Pb)	Soil	82	239.2 CLP	C
	Water	48	239.2 CLP	C
	Biota	54	6010 CLP	C
Magnesium (Mg)	Soil	82	200.7 CLP	C
	Water	48	200.7 CLP	C
	Biota	54	6010 CLP	C
Manganese (Mn)	Soil	82	200.7 CLP	C
	Water	48	200.7 CLP	C
	Biota	54	6010 CLP	C
Mercury (Hg)	Soil	82	245.1 CLP	C
	Water	48	245.5 CLP	C
	Biota	54	6010 CLP	C
Nickel (Ni)	Soil	82	200.7 CLP	C
	Water	48	200.7 CLP	C
	Biota	54	6010 CLP	C
Potassium (K)	Soil	82	200.7 CLP	C
	Water	48	200.7 CLP	C
	Biota	54	6010 CLP	C
Selenium (Se)	Soil	82	200.7 CLP	C
	Water	48	200.7 CLP	C
	Biota	54	6010 CLP	C
Silver (Ag)	Soil	82	200.7 CLP	C
	Water	48	200.7 CLP	C
	Biota	54	6010 CLP	C
Sodium (Na)	Soil	82	200.7 CLP	C
	Water	48	200.7 CLP	C
	Biota	54	6010 CLP	C

See notes at end of table.

Table 2-2 (Continued)
Analytical Method Summary

NAS Jacksonville
Sites P-159, UST, and P-3 Pad
Jacksonville, Florida

Parameter/Analytes	Matrix	Number of Samples	Analytical Method	NEESA QC Level
(2) Target Analyte List (continued)				
b. Metals (continued)				
Thallium (Tl)	Soil	82	279.2 CLP	C
	Water	48	279.2 CLP	C
	Biota	54	6010 CLP	C
Vanadium (V)	Soil	82	200.7 CLP	C
	Water	48	200.7 CLP	C
	Biota	54	6010 CLP	C
Zinc (Zn)	Soil	82	200.7 CLP	C
	Water	48	200.7 CLP	C
	Biota	54	6010 CLP	C
(3) Toxic Characteristics Leaching Procedures (TCLP)				
a. Extraction	Soil	21	SW846-1311	E
b. VOCs, Regulated	Extract	21	SW846-8240	E
c. SVOCs, Regulated	Extract	5	SW846-8270	E
d. Pesticides	Extract	5	SW846-8080	E
e. Metals, Regulated				
Arsenic	Extract	21	SW846-7060	E
Barium	Extract	21	SW846-6010	E
Cadmium	Extract	21	SW846-6010	E
Chromium	Extract	21	SW846-6010	E
Lead	Extract	21	SW846-7421	E
Mercury	Extract	21	SW846-7470	E
Selenium	Extract	21	SW846-7740	E
Silver	Extract	21	SW846-6010	E
(4) Land Disposal Restricted Solvents (F001-F005)	Extract	21	SW846-8010 SW846-8020	E
(5) Total recoverable hydrocarbons	Soil	5	Internal	E

Notes: NEESA = Naval Energy and Environmental Support Activity.
QC = quality control.
CLP = U.S. Environmental Protect Agency Contract Laboratory Program.
PCBs = polychlorinated biphenyls.
VOCs = volatile organic chemicals.
SVOCs = semivolatile organic chemicals.

The specific analytes and objectives are the same as those listed in the OU1 Quality Assurance Project Plan (QAPP) in Appendix 5.4 of Volume 5 of the U.S. Environmental Protection (USEPA) approved Work Plan. All samples, except those collected for TCLP analysis, will be analyzed and reported in accordance with Naval Energy and Environmental Support Activity (NEESA) Level C DQOs. Analytical findings will be validated in accordance with Naval Energy and Environmental Support Act (NEESA) Level C requirements. Samples collected for TCLP extraction and subsequent analysis will be reported in accordance with NEESA Level E DQOs.

2.4 MONITORING WELL INSTALLATION. In conjunction with the subsurface soil sampling activities, shallow water table monitoring wells will be installed at 11 of the soil sampling locations (see Figure 2-1). Following collection of the subsurface soil samples (Section 2.3, Soil Sampling), a rotary drill rig will be set up over the borehole and a split-spoon sampler will be driven to collect continuous samples (at 2-foot intervals) from a depth of 6 feet to 20 feet bls. The split-spoon samples will be described by an onsite geologist to document the lithologic conditions of each borehole. Following the split spoon sampling operation, the hollow stem augers will be raised to approximately 15 feet bls and the lower borehole will be allowed to collapse. A determination of static water level will be made and a 2-inch diameter Schedule 40 polyvinyl chloride (PVC) monitoring well will be installed. The PVC well will be constructed of 10 feet of 0.010-inch slotted well screen and will bracket the top of the water table. Surface completions of each well will be of a flush mount type designed for maximum weight bearing capacity. Well completion will include proper well development and containerization of all drill cuttings and development water. The procedure for well development is provided in the NIRP Program Plan, Volume 4, Basic Site Work Plan, Section 3.2.4.2.

2.5 GROUNDWATER SAMPLING. After the monitoring wells have been developed and allowed to equilibrate for a minimum of 24 hours, they will be purged and sampled using a decontaminated Teflon™ bailer. Prior to sampling, between three and five well volumes of groundwater will be purged from each well so as to obtain a groundwater sample representative of the screened interval zone.

During purging activities, field parameters including pH, specific conductance, and temperature will be monitored following removal of each well volume. If three consecutive field parameter measurements are found to be within 5 percent of each measurement, purging activities will be discontinued and the sample will be collected. To avoid over-purging the well, no more than five well volumes will be removed even if field parameter stabilization has not been obtained. Following well purging activities, a Teflon™ bailer will be used to collect the groundwater sample for laboratory analysis.

All groundwater samples will be analyzed for TCL VOCs, SVOCs, pesticides and PCBs, and for TAL inorganics including cyanide. Specific analytes and objectives are the same as those listed in the OU1 QAPP in Appendix 5.4 of Volume 5 of the Work Plan. Tables 2-1 and 2-2 provide a summary of sample designations and laboratory analyses to be completed. Analytical findings will be reported and validated in accordance with NEESA Level C requirements.

2.6 HYDROGEOLOGIC ASSESSMENT. As part of the Sites P-159 and UST investigation, a limited hydrogeologic investigation will be conducted. The hydrogeologic investigation will include: a survey of well head elevations, measurements of

depth-to-water, and completion of rising head "slug" tests in each of the monitoring wells.

Following monitoring well installation activities, the top of casings of all newly installed monitoring wells will be surveyed relative to x, y, and z coordinates. Horizontal coordinates (x and y) will be referenced to the Florida State Plane Coordinate System (North American Datum of 1983) and the vertical coordinate (z) will be referenced to the National Geodetic Vertical Datum (NGVD) system of 1929. The top-of-casing measurements, in conjunction with depth-to-water measurements, will be used to determine the local groundwater elevation and direction of groundwater flow.

Rising head "slug" test will be completed in each of the newly installed monitoring wells to obtain estimated values of aquifer hydraulic conductivity. To complete the "slug" test, a weighted PVC slug will be lowered into the well displacing a known volume of water. Following the water level's return to equilibrium, the slug will quickly be removed and a Hermit 1000 C data logger equipped with a pressure transducer will record the changes in water level over time.

2.7 ELECTROFISHING INVESTIGATION. The electrofishing investigation at NAS Jacksonville will be conducted by subcontract personnel at three separate water bodies: Lake Casa Linda, Lake Scotlis, and the polishing pond at OU2. At three random locations within each surface water body, a composite sample of at fish from each of the three trophic levels (omnivore, pisciferous, and foraging) will be collected using electrofishing methods. Adequate fish from each age and/or size group within each trophic level will be collected to yield the minimum required 300 grams of fillet and 300 grams of liver/gonad materials for each species. The separating of samples into appropriate trophic level, species, and age/size groups will be completed in the field. At each sample location, a total of 9 composite samples will be collected, including:

- three omnivore species within one age/size group,
- three pisciferous species within one age/size group, and
- three foraging species within one age/size group.

Samples will be hard frozen and placed in zip-loc bags prior to placement in ABB-ES shipping containers. The samples will be kept on ice and shipped in overnight carrier to a subcontract laboratory. Upon arrival at the subcontract laboratory, each individual fish sample will be dissected into separate meat fillet and liver/gonad samples. Samples will be analyzed for TCL SVOCs, TCL pesticides and PCBs, and TAL inorganics, including cyanide. Tables 2-1 and 2-2 provide a summary of the samples to be collected and the analytical methods to be completed. Analytical findings will be reported and validated in accordance with NEESA Level C requirements.

2.8 SURFACE WATER AND SEDIMENT SAMPLING. In conjunction with and support of the electrofishing activities a total of nine surface water and nine sediment samples will be collected from the three water bodies (Lake Casa Linda, Lake Scotlis, and the polishing pond at OU2) in which electrofishing activities occur. The surface water and sediment samples will be collected from the same locations where the electroshocking of fish occurred. All surface water and sediment samples will be collected in accordance with the USEPA Standard Operating Procedures and Quality Assurance Manual (February 1, 1991).

Surface water and sediment samples will be analyzed for TCL VOC, TCL SVOCs, TCL pesticides and PCBs, and TAL inorganics, including cyanide. Tables 2-1 and 2-2 provide a summary of the number of samples and the analytical methods to be completed. Surface water and sediment samples will be analyzed and reported in accordance with NEESA Level C DQOs.

3.0 INVESTIGATION DERIVED WASTE DISPOSAL

It is anticipated that hazardous wastes derived from this work potentially may include soil from the borings, groundwater, equipment decontamination rinsate water, disposable clothing, and gloves that come in contact with contaminated soil or water. Auger cuttings and purge water from the P-159 and UST sites will be separately containerized onsite and delivered to the Navy's temporary hazardous waste storage facility within the NADEP. Similarly disposable clothing and potentially contaminated gloves will be collected and containerized onsite and delivered to the same area. Equipment rinsate will be collected at the OU1 decontamination area and disposed of in accordance with Volume 5 RI/FS Work Plan on OU1, Section 5.15, Disposal of Investigation-Derived Wash.

4.0 HEALTH AND SAFETY

Health and safety protocols will be conducted in accordance with the approved Health and Safety Plan located in Appendix 1.5 of Volume I of the OU1 Work Plan, as modified by the ABB-ES health and safety officer. In summary, the following approach will be taken. Level D personal protection equipment (PPE) with organic vapor and vinyl chloride monitoring will be followed during drilling and sample collection. Dust masks will be worn if visible dust hazards are observed. If organic vapor or vinyl chloride concentrations over 1 part per million (ppm) above background readings are measured in the breathing zone, onsite personnel will withdraw to the designated transition area and reassess site conditions. If the organic vapor monitoring levels remain over 1 ppm above background and it is confirmed that they are not attributable to a malfunction of the monitoring equipment, PPE will be upgraded to Level C using Air Purifying Respirators (APRs). If vinyl chloride concentrations are reported to exceed 2 ppm at any time, PPE will be upgraded to Level B using self-contained breathing apparatus.

5.0 SAMPLING EVENT REPORTS

ABB-ES will prepare four separate Sampling Event Reports (SERs) for technical review and comment by the Navy. Individual SERs will be completed for Sites P-159, UST, P-3 Pad, and the cumulative electrofishing, surface water, and sediment sampling activities.

Each SER will describe the implemented field program, provide a data quality assessment, and develop a contamination assessment that focuses on ARAR compliance (especially RCRA Status and required actions, if any), any precautions recommended for personnel protection and worker safety relative to chemical exposures, and any follow-up work that may be necessary if RCRA action is

required. Review by the Navy will consist of comments on the technical scope and basic structure of the documents.

The SER for electrofishing activities at Lake Casa Linda, Like Scotlis, and the polishing pond will evaluate the public health risks from consuming fish from these three water bodies. Validated data will be used to prepare the evaluation. The SER will contain a recommendation on whether recreational fishing should be allowed to continue at each of the lakes.

ABB-ES will respond to comments from the Navy's review of the draft document. These comments will be incorporated into the Final SER. Four copies of the Draft and Final versions will be provided to the Navy for distribution.

6.0 PROJECT SCHEDULE

The work at this site is anticipated to be completed in one 10-day and one 5-day period. Analytical work related to soil samples will be conducted on a "rapid turn-around" basis, and Form 1 data (non-validated, raw data) should be available for review within 14 days of delivery to the laboratory. Figure 6-1 presents the Gantt chart timeline schedule.

7.0 PROJECT PERSONNEL

The designated roles for the Installation Restoration work at NAS Jacksonville are as follows.

Senior Task Order Manager. The Senior Task Order Manager for NAS Jacksonville will be Philip Georgariou. Mr. Georgariou is responsible for the day-to-day conduct of the work, including the integration of the input of supporting disciplines and subcontractors. He will be reviewing the ongoing quality control during the performance of the work, the technical integrity of conclusions and recommendations, and the clarity and usefulness of all project work products.

Some specific responsibilities of this role include:

- initiating project activities;
- participating in the work plan preparation and staff assignments;
- identifying and fulfilling equipment and other resource requirements;
- monitoring task activities to ensure compliance with established budgets, schedules, and scope of work; and
- regularly interacting with the RPM, the program manager, and others as appropriate, on the status of the project.

Technical Leader. The Technical Leader for this effort will be Mr. Gerald Walker, P.G. Mr. Walker is responsible for evaluating the appropriateness and adequacy of the technical and engineering services provided for this CTO and in developing the technical approach and level of effort required to address each of the POA tasks.

Quality Review Board. A Quality Review Board made up of senior technical staff from the ABB-ES team will assist the Task Order Manager by providing review of the technical aspects of the project to assure that they are produced in accordance with regulatory and corporate policy, and meet the requirements of SOUTHNAVFACENGCOM.

ADDENDUM TO
P-159, UST, AND P-3 PAD
SAMPLING AND ANALYSIS PLAN

This Sampling and Analysis Plan (SAP) Addendum was completed based on discussions between the SOUTHNAVFACENGCOM Engineer-in-Charge and ABB-ES Project Manager for this project, during a meeting conducted on may 14, 1993. Modifications to the SAP are limited to Section 5.0 Sampling Event Reports. This section is modified as follows:

5.0 SAMPLING EVENT REPORTS

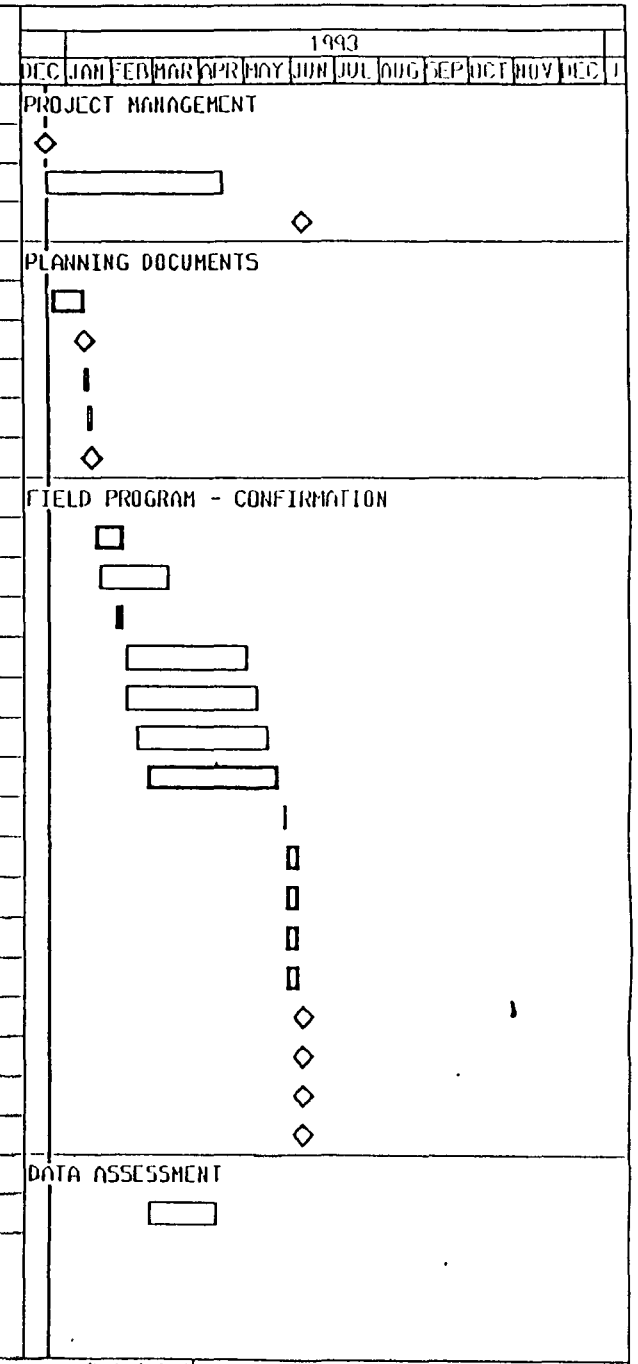
ABB-ES will prepare four separate Sampling Event Reports (SERs) for technical review and comment by the Navy. Individual SERs will be completed for Sites P-159, UST, P-3 Pad, and the cumulative electrofishing, surface water, and sediment sampling activities.

Each SER will describe the implemented field program, provide a data quality assessment, and develop a contamination assessment that focuses on ARAR compliance (especially RCRA Status and required actions, if any), any precautions recommended for personnel protection and worker safety relative to chemical exposures, and any follow-up work that may be necessary if RCRA action is required. Review by the Navy will consist of comments on the technical scope and basic structure of the documents.

The SER for electrofishing activities at Lake Casa Linda, Lake Scotlis, and the polishing pond will report and transmit data only. An evaluation of the public health risks from consuming fish and recommendations on recreational fishing from these three water bodies will not be completed.

ABB-ES will respond to comments from the Navy's review of the draft document. These comments will be incorporated into the Final SER. Four copies of the Draft and Final versions will be provided to the Navy for distribution.

ACTIVITY ID	ACTIVITY DESCRIPTION	EARLY START	EARLY FINISH	ORIG DUR
S10200000	CTO NO 075 NOTICE TO PROCEED	18DEC92		0
S10200005	PROJECT MANAGEMENT	18DEC92	15APR93	83
S10200999	CTO NO. 075 COMPLETE		7JUN93	0
S10410005	PREPARE SAP/HASP	21DEC92	11JAN93	14
S10410015	SUBMIT HASP/SAP		11JAN93	0
S10410020	NAVY REVIEW DRAFT HASP/SAP	12JAN93	13JAN93	2
S10410025	PREPARE FINAL HASP/SAP	13JAN93	15JAN93	3
S10410030	SUBMIT FINAL HASP/SAP		15JAN93	0
S10800005	FIELD WORK (DRILLING/ELECTROFISHING)	18JAN93	5FEB93	15
S10835005	SAMPLE ANALYSIS	21JAN93	8MAR93	33
S10815005	SURVEYING	1FEB93	5FEB93	5
S10865005	PREPARE DRAFT SAMPLING EVENT REPORT (SER) - P159	8FEB93	30APR93	60
S10865105	PREPARE DRAFT SAMPLING EVENT REPORT (SER) - UST	8FEB93	7MAY93	65
S10865205	PREPARE DRAFT SAMPLING EVENT REPORT - P-3 SOIL	15FEB93	14MAY93	65
S10865305	PREPARE DRAFT SER - ELECTROFISHING	22FEB93	21MAY93	65
S10865000	SAMPLING EVENT REPORT REVIEW MEETING	25MAY93	26MAY93	2
S10865010	PREPARE FINAL SAMPLING EVENT REPORT - P159	27MAY93	4JUN93	6
S10865110	PREPARE FINAL SAMPLING EVENT REPORT - UST	27MAY93	4JUN93	6
S10865210	PREPARE FINAL SAMPLING EVENT REPORT - P-3 SOIL	27MAY93	4JUN93	6
S10865310	PREPARE FINAL SER - ELECTROFISHING	27MAY93	4JUN93	6
S10865015	SUBMIT FINAL SAMPLING EVENT REPORT - P159		7JUN93	0
S10865115	SUBMIT FINAL SAMPLING EVENT REPORT - UST		7JUN93	0
S10865215	SUBMIT FINAL SER - P-3 SOIL PILES		7JUN93	0
S10865315	SUBMIT FINAL SER - ELECTROFISHING		7JUN93	0
S11005005	DATA VALIDATION	23FEB93	9APR93	34



Plot Date 1JUN93
Data Date 18DEC92
Project Start 18DEC92
Project Finish 7JUN93

Activity Bar/Early Dates
Critical Activity
Progress Bar
Milestone/Lag Activity

NAVY CLEAN
CTO NO 075
BASELINE PROJECT SCHEDULE

Date | Revision | Checked | Approved

APPENDIX B

ELECTROSHOCKING FISHERIES INVESTIGATION IN THREE WATER BODIES ON NAVAL AIR STATION, JACKSONVILLE, FLORIDA

FINAL REPORT ON AN ELECTROSHOCKING FISHERIES INVESTIGATION IN THREE WATER BODIES ON NAVAL AIR STATION, JACKSONVILLE, FLORIDA

PREPARED FOR:

ABB-ENVIRONMENTAL SERVICES

PREPARED BY:

ECT

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93049-0100

MARCH 1993

INTRODUCTION

Environmental Consulting & Technology, Inc. (ECT) was contracted to collect fisheries specimens from within three separate water bodies on the property of Naval Air Station (NAS) Jacksonville. Casa Linda Lake designated as surface water station 1 (SW-1, see Figure 1), Lake Scotlis designated as SW-2, and a lagoon system referred to as the Polishing Pond designated SW-3. Fisheries sampling was performed to obtain tissue samples for laboratory analysis to detect the presence of contaminants. Specimens were to be obtained from within three separate trophic levels representing the top-predator piscivores, the middle level omnivores and the lower level foraging species which feed primarily upon phytoplankton, vegetation or detritus. The total sample size per species group was to equal or exceed 600 grams (gms) from each water body. Electroshocking was the principal methodology for sample collection, augmented as necessary utilizing dipnets and seines. The physical characteristics of each water body were evaluated concurrent with fisheries sample collection.

METHODOLOGY

For fisheries sample collection ECT utilized an aluminum hulled "Jon-boat" equipped with a Honda 240 volt generator and a Smith-Root® Electrofisher. For fisheries population surveys and small-size sample collection, ECT utilizes direct current (DC) voltage. The reaction of fish to direct current is to turn and swim toward the anode (extended copper probes), a reaction referred to as galvanotaxis (Smith-Root, Inc.). Eventually the fish becomes incapable of further forward movement and turns on its side, a reaction known as galvanonarcosis. Larger fish (within a species group) are stunned at a greater distance from the field than small fish, since the effect increases proportionally with surface area. Small fish often reach, or nearly reach the anode prior to experiencing galvanonarcosis. Differences between species are related to the conductivity of the fish being compared. Electrofishing current will most greatly affect fish with conductivities at or above the ambient conductivity. Aquatic species

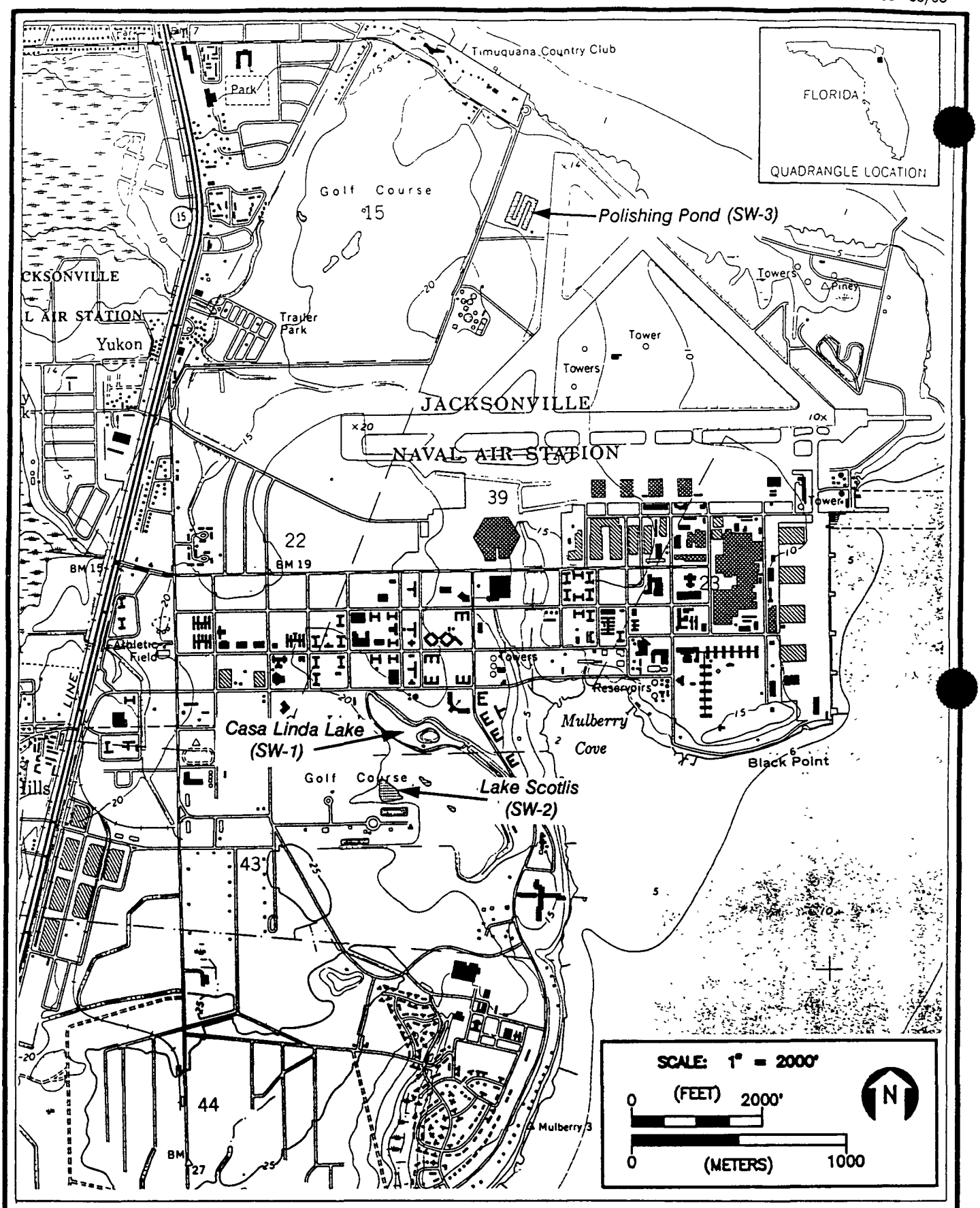

FIGURE 1.
PROJECT LOCATION MAP
NAVAL AIR STATION JACKSONVILLE
JACKSONVILLE, FLORIDA
Source: USGS Quad. Orange Park, Fl. Rev. 1981; ECT, 1993.

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which have conductivity values well below the ambient value can be missed as the current selectively travels through the more conductive water (Smith-Root, Inc.). However, species adapted to freshwater habitat almost always have much greater solute concentrations (and thus conductivity) than their environment, to the extent that energy is expended in either active salt uptake or excessive urination (Hainsworth, 1981). A rare exception to this rule occurs in the lamellibranch species Anodontia, a freshwater bivalve (Potts and Parry, 1963). In addition to the previously mentioned enhanced susceptibility of larger specimens, ECT personnel have observed that species which typically inhabit the lower end of the water column (e.g., gars, catfish, and carp) are the most greatly affected by any given field. These observations have been confirmed in conversation with other experienced electrofishers. This may be due to a higher natural density per unit volume (and thus conductivity) associated with bottom dwelling.

The physical characteristics of the water bodies were measured with a Hydrolab® Surveyor II which was calibrated each morning before sampling.

Prior to obtaining the requisite specimens, electrofishing was conducted in each water body to determine the most productive locations and to select the appropriate species to represent the respective trophic levels. Once collected, specimens were identified to the level of genus and species, wrapped whole in aluminum foil, placed in labelled Ziploc® bags, and then stored on dry ice. Once hard-frozen, the fish samples were transferred to coolers containing wet ice for transport to a laboratory facility within 24 hours of collection.

RESULTS

Casa Linda Lake

Casa Linda Lake (SW-1) is an approximately 8.9 acre lake with highly altered shorelines, receiving drainage from surrounding golf course, multi-family residential,

and office-complex land use. The northern shoreline is maintained lawn with a canopy of secondary growth mixed-oak hardwoods and occasional wax myrtle (Myrica cerifera) shrubbery. A sharp dropoff at the water's edge precludes emergent vegetation except in the northeastern corner. Along the northeastern shoreline, a limited emergent flora includes duck potato (Sagittaria latifolia) and penny wort (Hydrocotyle umbellata). The southern shoreline is more heavily vegetated in wax myrtle and Carolina willow (Salix caroliniana), which tend to protrude into the lake. A sharp drop in the shoreline limits aquatic emergent vegetation along most of the southern shoreline. Exceptions occur in the southeastern corner of the lake where a small island abuts the shoreline and bridging for golf cart access and other fill provide a substrate for aquatic emergents dominated by penny wort.

The physical characteristics of Casa Linda Lake during sample collection were evaluated February 3, 1993 (see Figure 2), with measurements being recorded at approximately 1.5 feet (ft) of depth.

Utilization of Casa Linda Lake by aquatic avifauna was low. This may result from the combination of an abundance of human disturbance as well as the sharply sloping shoreline. A great blue heron (Ardea herodias) was observed foraging along the northern shore, and double-crested cormorants (Phalacrocorax auritus) were occasionally observed feeding within the lake.

Fisheries species diversity appeared to be low during sample collection and the assemblage observed did not include any species which are not frequently stocked into lakes to improve recreational fishing. Foraging species observed within the lower trophic level included gizzard shad (Dorosoma cepedianum), the exotic grass carp (Ctenopharyngodon idella), and golden shiners (Notemigonus crysoleucas). The Florida Game and Freshwater Fish Commission (FGFWFC, 1992) observed mosquitofish (Gambusia affinis) during a December 1992 electroshocking event;

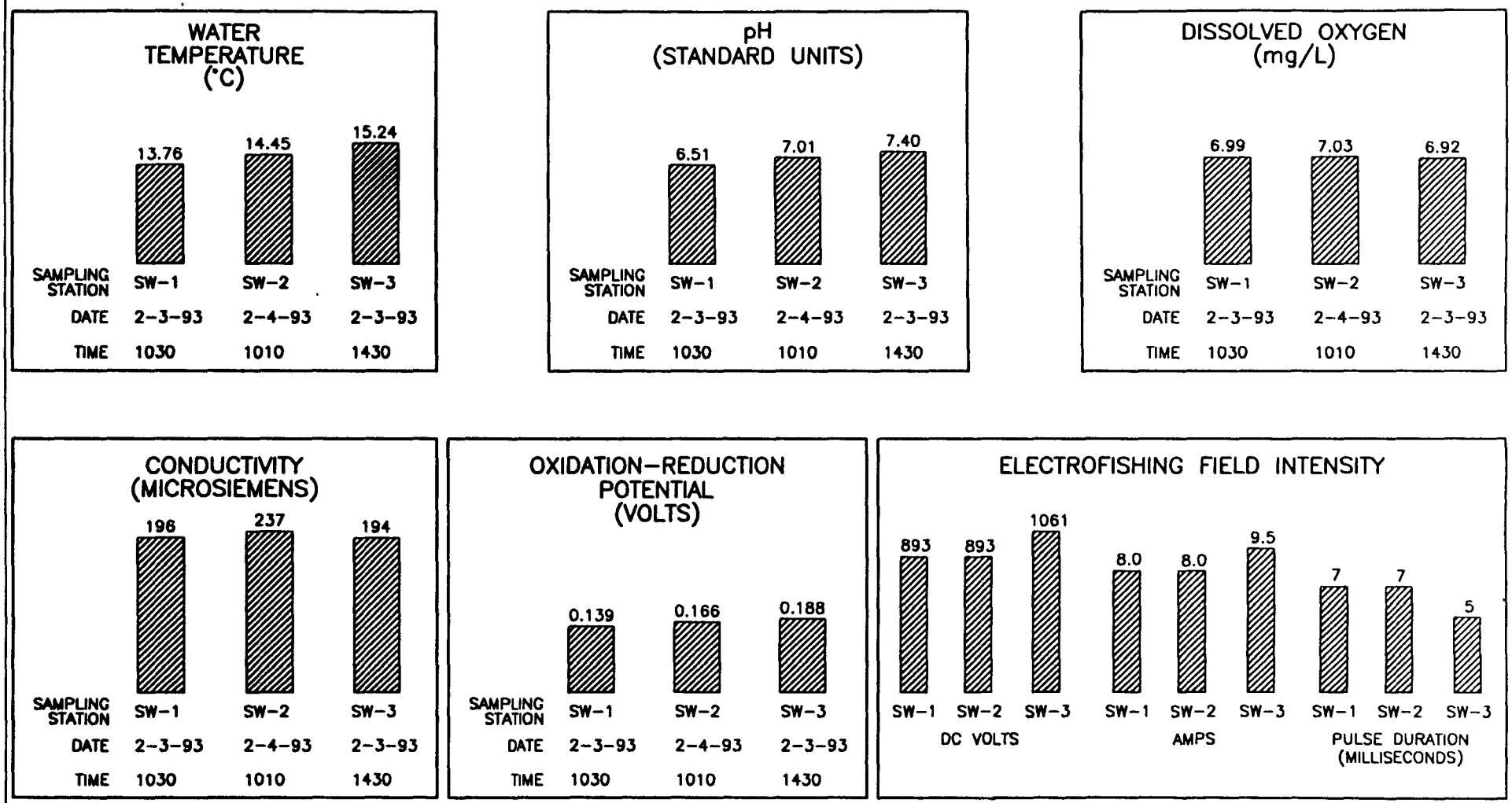

FIGURE 2
PHYSICAL CHARACTERISTICS OF THE WATER IN CASA LINDA LAKE (SW-1), LAKE SCOTLIS (SW-2) AND THE POLISHING POND (SW-3)
NAVAL AIR STATION JACKSONVILLE
JACKSONVILLE, FLORIDA
Source: ECT, 1993.

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however, none were observed during this sampling event. Omnivorous species included numerous bluegills (Lepomis macrochirus), and warmouth (Lepomis gulosus), as well as occasional redear (Lepomis microlophus) and redbreast (Lepomis auritus) sunfish. Top predators observed were numerous largemouth bass (Micropterus salmoides). The focus of ECT's fisheries sampling effort was to obtain specific quantities of specific species groups, rather than qualitative and quantitative population assessments. In general, ECT's investigation yielded similar results to those documented by the FGFWFC in December 1992. Bluegills were the most frequently observed species during electrofishing and largemouth bass were reasonably abundant. Largemouth bass were also frequently large, with the most sizeable individual weighing nearly 3 kilograms (kg). ECT recovered much greater numbers of golden shiners than were obtained by the FGFWFC; however, the FGFWFC was attempting to standardize fishing effort throughout the lake for quantitative sampling, whereas ECT was specifically targeting golden shiners. Species selected to represent the three trophic levels in Casa Linda Lake were the golden shiner (forager), the bluegill (omnivore), and largemouth bass (piscivore). The collected golden shiners were young of year and generally less than 5 centimeters (cm) in length (see Table 1). Collected bluegills were also young of year and varied between 6 and 12 cm in length Largemouth bass were only included if they were less than 24 cm so that several individuals would comprise the desire 600 gms sample size.

Lake Scotlis

Lake Scotlis (SW-2) is a small (approximately 1.3 acre) lake within a secondary growth pine flatwood community. Shoreline vegetation includes wax myrtle and Carolina willow, which are particularly dense along the western edge. The eastern shore has some limited emergent vegetation comprising sedges (Carex sp.) and pennywort. The northeastern and southeastern corners of the lake have a mixture

Table 1. Fish Species and Approximate Size Ranges for Samples Collected From Three Water Bodies on Naval Air Station, Jacksonville, Florida

	Foraging Species	Size Range	Omnivorous Species	Size Range	Piscivorous Species	Size Range
Casa Linda Lake (SW-1)	Golden Shiner *Notemigonus crysoleucas*	<5 cm	Bluegill *Lepomis macrochirus*	6 to 12 cm	Largemouth Bass *Micropterus salmoides*	<24 cm
Lake Scotlis (SW-2)	Gizzard Shad *Dorosoma cepedianum*	20 cm	Bluegill *Lepomis macrochirus*	6 cm	Largemouth Bass *Micropterus salmoides*	12 to 18 cm
Polishing Pond (SW-3)	None Collected	N/A	None Collected	N/A	None Collected	N/A

Source: ECT, February 1993.

of wax myrtle and Carolina willow stands with an understory of emergent species; these areas were particularly rich in young omnivore species.

The physical characteristics of Lake Scotlis during sampling were evaluated on February 4, 1993, with measurements being taken at approximately 1.5 ft of depth (see Figure 2).

There was no observed utilization of Lake Scotlis by aquatic avifauna. The western and southern shorelines drop sharply, limiting access by wading birds. The eastern shore completing the triangular lake is more gradually sloped, but was continually disturbed by the presence and movement of joggers and recreational fishermen during sampling. In addition to these factors, the noise of the electroshocking boat's outboard motor and generator probably kept avifauna at a distance.

The fisheries species composition in Lake Scotlis was nearly identical to that of Casa Linda Lake. Notable exceptions were the absence of golden shiners or grass carp in the foraging group. The FGFWFC discuss catfish stocking in their December 1992 report, but none were recorded as observed by them and catfish were not observed during this sampling event. ECT and the FGFWFC observed similar numbers and sizes of fish in Lake Scotlis. Bluegills were the most abundant, and were mostly quite small; largemouth bass were frequently observed, but were smaller on average than those found in Casa Linda Lake; gizzard shad were infrequently encountered by ECT, but when found were much more numerous than they were in December 1992. Species selected for analysis were gizzard shad (forager), bluegills (omnivore) and largemouth bass (piscivore). Collected gizzard shad were approximately 20 cm in length (see Table 1), bluegills were mostly near 6 cm in length, and largemouth bass ranged from 12 to 18 cm in length.

Polishing Pond

The Polishing Pond (SW-3) is a medium sized (approximately 3.8 acre) meandering lagoon which receives drainage from flatwoods, maintained grassy fields near the flightline, and formerly through an outfall from a wastewater treatment system. The lagoon discharges to a treatment facility at its northwestern end, with an approximately 1,000 ft path length from the pipe at the former wastewater treatment outfall. Upon reaching the end of the lagoon's treatment facility, water discharges to the St. John's River. Vegetation within the lagoon is sodded bank to the shoreline, with a sparse emergent zone of sedges and pennywort. There are occasional shrubby emergents within the lagoons including Carolina willow and the stems of apparently dead shrubs that may be over-wintering or herbicided primrose willow (Ludwigia sp.).

The physical characteristics of the Polishing Poind during sampling were evaluated on February 3, 1993, with measurements taken at approximately 2 ft of depth (see Figure 2).

An abundant aquatic avifauna utilizes the lagoon system, primarily concentrated in the north-central portion near a small stand of Carolina willow. Observed species include the great egret (Casmerodius albus) and white ibis (Eudocimus albus) roosting in the shrubs, as well as laughing gulls (Larus atricilla) and ring-billed gulls (Larus delawarenis) paddling on the surface of the lagoon. Also abundant throughout the lagoon are nutrias (Myocastor coypus), which could be observed swimming and foraging along the banks. These mammals were introduced to North America for the fur trade, but have escaped and become naturalized throughout the southeast.

No fish species were observed within the Polishing Pond. The shoreline was walked with a dipnet and no small minnows of any sort were observed in the shallow grassy

edge. Electroshocking was attempted throughout the lagoon, up to maximum field intensity (1,061 volts, 9.5 amps), and no stunned fish appeared at the surface. The water depth in the Polishing Pond appeared to be an average of 4 ft so it is unlikely that fish were able to escape the field at depth. A 110 ft seine (2 cm mesh) was dragged through the southwestern corner of the lagoon two times; no fish were trapped or observed escaping. The seine frequently snagged on the submerged stems of the dead or overwintering shrubs, allowing for the possibility of escape beneath the lead line.

DISCUSSION

As we previously noted, species diversity was low in both Casa Linda Lake and Lake Scotlis. Those species which were present are those which are commonly stocked into water bodies to enhance recreational fishing or, in the case of the grass carp, control the aquatic vegetation growth response due to the runoff of fertilizer from the surrounding lawns and golf course. Particularly noticeable by their absence were Florida spotted gars (*Lepisosteus platyrhynchus*) and minnows other than golden shiners. It would be reasonable to conclude that neither water body has, nor perhaps has ever had a natural fishery. One explanation for this condition, may be that neither lake ever existed as a natural lake previously. These lakes may have developed as a result of excavation or damming within uplands, or within wetlands which were only seasonally flooded historically. It is common for fisheries to develop in entirely artificial water bodies. This can occur when transient wading birds inoculate the new lakes with fish eggs that become attached to their legs during visits to lakes which have existing fisheries. The fisheries within Casa Linda Lake and Lake Scotlis may have developed in this manner, but the dominance of popular gamefish suggests that this has not been the case. The fisheries community in both lakes most likely represents the result of purposely stocking these lakes with a community that will support a recreational fishery.

The apparent absence of any fishery in the Polishing Pond is not surprising given the obvious unnatural shape, origin, and function of the system. However, it is extremely unusual for a water body that has existed for a long time (as the Polishing Pond presumably has), to have no fish species of any sort observed. The Polishing Pond supports some vegetation and provides habitat for birds and mammals which associate closely with the lagoon. However, neither the birds nor the mammals are entirely aquatic. Entirely aquatic invertebrates (e.g., creeping waterbug, Ambrysus femoratus) were observed swimming in the lagoon. In the absence of specific sediment and surface water quality data no conclusions can be reached which may explain the apparent absence of any fisheries.

During the collection of samples from Casa Linda Lake and Lake Scotlis, fish specimens were observed to have skin lesions. These lesions were observed in various locations on the body, although they were most frequently found on the lateral or ventral surfaces. Lesions were observed most frequently on the omnivores and piscivores; this is most likely because omnivore and piscivores were the most frequently encountered species. Lesions were more frequently observed on fish collected from Casa Linda Lake than they were on those from Lake Scotlis.

A review of the literature available on fisheries pathology suggests that the lesions are a manifestation of Ulcerative Disease Syndrome (UDS). The most likely causative agent is the bacterium Aeromonas hydrophila. This bacterium appears in the blood of both diseased and undiseased fish, and may be a normal part of the fish's flora (McGarey, 1991). Numerous causative agents may be implicated in UDS, including nematodes, fungi, and Vibrio viruses. However, in low salinity or freshwaters the density of Aeromonas hydrophila is greatest (Hazen J.C., *et al.* 1978). The related bacterium Aeromonas sobria also occurs in freshwater and also has been documented as causing UDS at a control temperature of 30 degrees Celsius (°C). However, at lower temperatures (down to 10°C), only Aeromonas hydrophila

continued to produce the hemolysin associated with UDS, a value much closer to the water temperature in either lake (Olivier, G.R., *et al.* 1981). The disease may not be associated with water temperatures below 9.4°C (Austin and Austin, 1987; Gronberg, W.H., *et al.* 1978).

Although both species of Aeromonas have been recovered from fish samples near NAS Jacksonville throughout the year, UDS occurs almost exclusively in the winter months (December through March) (McGarey, 1991). The presence of the bacteria in the blood of healthy fish over a widely distributed geographical area indicates that the bacteria (or other biological pathogens) by themselves are not responsible for the increase in reported UDS outbreaks. Ongoing investigations are examining the roles of heavy metals and organic loads in either debilitating fish from combating infections, or the triggering of latent infectious agents causing an outbreak (Sinderman, C.J., 1990).

ECT is currently recommending against the consumption of fish exhibiting UDS. Minimization of risks is achieved through avoiding consumption of fish during the previously mentioned winter months; although the bacteria appears in the blood of both healthy and diseased fish year round, except during the winter the bacterium may not be present in the fillet tissue. Alternatively, recreational fishermen may be advised to thoroughly cook any fish to kill any bacteria present before consumption. ECT recommends that some management of the fishery from this perspective be implemented since consumption of fish may expose humans to the bacterium (Potter and Baker, 1961), and an exposure to Aeromonas hydrophila can cause a variety of illnesses including gastroenteritis, diarrhea, bacteremia, and wound infections (Dahle and Nordstogg, 1968; Janda and Duffey, 1988; von Graevenitz and mensch, 1978; and Weinstock *et al.* 1982).

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APPENDIX C

ANALYTICAL RESULTS

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CLB001F

Lab Name: CH2M_HILL_MGM_____ Contract: 23978_____

Lab Code: NA____ Case No.: 23978_ SAS No.: 23978_ SDG No.: 23978_

Matrix (soil/water): FILLE Lab Sample ID: 23978001__

Level (low/med): LOW__ Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	0.97	U		P_
7440-36-0	Antimony_	0.66	U		P_
7440-38-2	Arsenic__	0.03	U	WN	F_
7440-39-3	Barium___	0.07	B		P_
7440-41-7	Beryllium	0.01	U		P_
7440-43-9	Cadmium__	0.11	U		P_
7440-70-2	Calcium__	1090		*	P_
7440-47-3	Chromium_	0.17	B		P_
7440-48-4	Cobalt___	0.11	U		P_
7440-50-8	Copper___	0.88	B		P_
7439-89-6	Iron____	3.6	B		P_
7439-92-1	Lead____	0.07	U	WN	F_
7439-95-4	Magnesium	305			P_
7439-96-5	Manganese	0.16	B		P_
7439-97-6	Mercury__	0.08	B		CV
7440-02-0	Nickel___	0.38	U		P_
7440-09-7	Potassium	4540			P_
7782-49-2	Selenium_	0.07	U		F_
7440-22-4	Silver___	0.08	U		P_
7440-23-5	Sodium___	550			P_
7440-28-0	Thallium_	0.09	U	WN	F_
7440-62-2	Vanadium_	0.11	U		P_
7440-66-6	Zinc____	8.0			P_
5955-70-0	Cyanide__	0.14	U		CA

Color Before: GRAY_&_TA Clarity Before: N/A___ Texture: TISSUE

Color After: YELLOW___ Clarity After: N/A___ Artifacts: YES___

Comments:
ARTIFACTS_CONSIST_OF_BONES.__THE_"N"_QUALIFIER_INDICATES_POOR_PRESPIKE RECOVERY.__THE_"*"_QUALIFIER_DENOTES_POOR_DUPLICATE_PRECISION.__THE___ "W"_QUALIFIER_REFLECTS_POOR_POSTSPIKE_RECOVERY.

FORM I - IN

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CLB002F

Lab Name: CH2M_HILL_MGM Contract: 23978

Lab Code: NA Case No.: 23978 SAS No.: 23978 SDG No.: 23978

Matrix (soil/water): FILLE Lab Sample ID: 23978002

Level (low/med): LOW Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	0.97	U		P
7440-36-0	Antimony	0.66	U		P
7440-38-2	Arsenic	0.03	U	N	F
7440-39-3	Barium	0.11	B		P
7440-41-7	Beryllium	0.01	U		P
7440-43-9	Cadmium	0.11	U		P
7440-70-2	Calcium	2650		*	P
7440-47-3	Chromium	0.15	B		P
7440-48-4	Cobalt	0.11	U		P
7440-50-8	Copper	0.33	B		P
7439-89-6	Iron	4.6			P
7439-92-1	Lead	0.10	B	N	F
7439-95-4	Magnesium	319			P
7439-96-5	Manganese	0.20	B		P
7439-97-6	Mercury	0.06	B		CV
7440-02-0	Nickel	0.38	U		P
7440-09-7	Potassium	4150			P
7782-49-2	Selenium	0.16	B		F
7440-22-4	Silver	0.08	U		P
7440-23-5	Sodium	637			P
7440-28-0	Thallium	0.09	U	N	F
7440-62-2	Vanadium	0.11	U		P
7440-66-6	Zinc	9.7			P
5955-70-0	Cyanide	0.14	U		CA

Color Before: GRAY_&_TA Clarity Before: N/A Texture: TISSUE

Color After: YELLOW Clarity After: N/A Artifacts: YES

Comments:
ARTIFACTS_CONSIST_OF_BONES.

FORM I - IN

ILMO2.1

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CLB003F

Lab Name: CH2M_HILL_MGM Contract: 23978

Lab Code: NA Case No.: 23978 SAS No.: 23978 SDG No.: 23978

Matrix (soil/water): FILLE Lab Sample ID: 23978003

Level (low/med): LOW Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	0.97	U		P
7440-36-0	Antimony	0.66	U		P
7440-38-2	Arsenic	0.03	B	N	F
7440-39-3	Barium	0.43	B		P
7440-41-7	Beryllium	0.01	U		P
7440-43-9	Cadmium	0.11	U		P
7440-70-2	Calcium	3820		*	P
7440-47-3	Chromium	0.18	B		P
7440-48-4	Cobalt	0.11	U		P
7440-50-8	Copper	0.43	B		P
7439-89-6	Iron	8.4			P
7439-92-1	Lead	0.08	B	N	F
7439-95-4	Magnesium	349			P
7439-96-5	Manganese	0.97			P
7439-97-6	Mercury	0.06	B		CV
7440-02-0	Nickel	0.38	U		P
7440-09-7	Potassium	3990			P
7782-49-2	Selenium	0.14	B		F
7440-22-4	Silver	0.08	U		P
7440-23-5	Sodium	752			P
7440-28-0	Thallium	0.09	U	N	F
7440-62-2	Vanadium	0.11	U		P
7440-66-6	Zinc	12.7			P
5955-70-0	Cyanide	0.14	U		CA

Color Before: GRAY_&_TA Clarity Before: N/A Texture: TISSUE

Color After: YELLOW Clarity After: N/A Artifacts: YES

Comments:
ARTIFACTS_CONSIST_OF_BONES.

FORM I - IN

ILMO2.1

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CLB004F

Lab Name: CH2M_HILL_MGM Contract: 23978

Lab Code: NA Case No.: 23978 SAS No.: 23978 SDG No.: 23978

Matrix (soil/water): FILLE Lab Sample ID: 23978004

Level (low/med): LOW Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1.2	B		P
7440-36-0	Antimony	0.66	U		P
7440-38-2	Arsenic	0.03	U	N	F
7440-39-3	Barium	0.72	B		P
7440-41-7	Beryllium	0.01	U		P
7440-43-9	Cadmium	0.11	U		P
7440-70-2	Calcium	6280		*	P
7440-47-3	Chromium	0.33	B		P
7440-48-4	Cobalt	0.11	U		P
7440-50-8	Copper	0.53	B		P
7439-89-6	Iron	18.2			P
7439-92-1	Lead	0.15		N	F
7439-95-4	Magnesium	387			P
7439-96-5	Manganese	1.5			P
7439-97-6	Mercury	0.03	U		CV
7440-02-0	Nickel	0.38	U		P
7440-09-7	Potassium	3950			P
7782-49-2	Selenium	0.07	U		F
7440-22-4	Silver	0.08	U		P
7440-23-5	Sodium	876			P
7440-28-0	Thallium	0.09	U	N	F
7440-62-2	Vanadium	0.11	U		P
7440-66-6	Zinc	13.4			P
5955-70-0	Cyanide	1.4	U		CA

Color Before: GRAY_&_TA Clarity Before: N/A Texture: TISSUE

Color After: YELLOW Clarity After: N/A Artifacts: YES

Comments:
ARTIFACTS_CONSIST_OF_BONES.

FORM I - IN

ILMO2.1

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CLB001G

Lab Name: CH2M_HILL_MGM_____ Contract: 23978_____

Lab Code: NA____ Case No.: 23978_ SAS No.: 23978_ SDG No.: 23978_

Matrix (soil/water): GUTS_ Lab Sample ID: 23978005__

Level (low/med): LOW__ Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	1.0	B		P_
7440-36-0	Antimony_	0.66	U		P_
7440-38-2	Arsenic__	0.03	U	WN	F_
7440-39-3	Barium___	0.34	B		P_
7440-41-7	Beryllium	0.01	U		P_
7440-43-9	Cadmium__	0.11	U		P_
7440-70-2	Calcium__	2530			P_
7440-47-3	Chromium_	0.21	B		P_
7440-48-4	Cobalt___	0.11	U		P_
7440-50-8	Copper___	1.4			P_
7439-89-6	Iron____	86.7			P_
7439-92-1	Lead____	0.11	B		F_
7439-95-4	Magnesium	223			P_
7439-96-5	Manganese	1.2			P_
7439-97-6	Mercury__	0.05	B		CV
7440-02-0	Nickel___	0.38	U		P_
7440-09-7	Potassium	2500			P_
7782-49-2	Selenium_	0.37			F_
7440-22-4	Silver___	0.08	U		P_
7440-23-5	Sodium___	1140			P_
7440-28-0	Thallium_	0.09	U		F_
7440-62-2	Vanadium_	0.11	U		P_
7440-66-6	Zinc____	22.4			P_
5955-70-0	Cyanide__	0.14	U		CA

Color Before: YELLOW_&_ Clarity Before: N/A___ Texture: TISSUE

Color After: YELLOW___ Clarity After: N/A___ Artifacts: _____

Comments:

FORM I - IN

ILMO2.1

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CLB002G

Lab Name: CH2M_HILL_MGM Contract: 23978

Lab Code: NA Case No.: 23978 SAS No.: 23978 SDG No.: 23978

Matrix (soil/water): GUTS Lab Sample ID: 23978006

Level (low/med): LOW Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2.6	B		P
7440-36-0	Antimony	0.66	U		P
7440-38-2	Arsenic	0.03	U	N	F
7440-39-3	Barium	0.40	B		P
7440-41-7	Beryllium	0.01	U		P
7440-43-9	Cadmium	0.11	U		P
7440-70-2	Calcium	2100			P
7440-47-3	Chromium	0.16	B		P
7440-48-4	Cobalt	0.11	U		P
7440-50-8	Copper	1.4			P
7439-89-6	Iron	89.8			P
7439-92-1	Lead	0.09	B		F
7439-95-4	Magnesium	258			P
7439-96-5	Manganese	1.1			P
7439-97-6	Mercury	0.02	U		CV
7440-02-0	Nickel	0.38	U		P
7440-09-7	Potassium	2910			P
7782-49-2	Selenium	0.36			F
7440-22-4	Silver	0.08	U		P
7440-23-5	Sodium	1030			P
7440-28-0	Thallium	0.09	U		F
7440-62-2	Vanadium	0.11	U		P
7440-66-6	Zinc	23.4			P
5955-70-0	Cyanide	0.14	U		CA

Color Before: YELLOW & Clarity Before: N/A Texture: TISSUE

Color After: YELLOW Clarity After: N/A Artifacts:

Comments:

FORM I - IN

ILMO2.1

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CLB003G

Lab Name: CH2M_HILL_MGM_____ Contract: 23978_____

Lab Code: NA____ Case No.: 23978_ SAS No.: 23978_ SDG No.: 23978_

Matrix (soil/water): GUTS_ Lab Sample ID: 23978007__

Level (low/med): LOW__ Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	35.2			P
7440-36-0	Antimony_	0.66	U		P
7440-38-2	Arsenic__	0.25	B	N	F
7440-39-3	Barium___	1.1	B		P
7440-41-7	Beryllium	0.01	U		P
7440-43-9	Cadmium__	0.11	U		P
7440-70-2	Calcium__	2100			P
7440-47-3	Chromium_	0.31	B		P
7440-48-4	Cobalt___	0.11	U		P
7440-50-8	Copper___	1.5			P
7439-89-6	Iron_____	467			P
7439-92-1	Lead_____	0.91			F
7439-95-4	Magnesium	212			P
7439-96-5	Manganese	4.2			P
7439-97-6	Mercury__	0.03	U		CV
7440-02-0	Nickel___	0.38	U		P
7440-09-7	Potassium	2190			P
7782-49-2	Selenium_	0.31			F
7440-22-4	Silver___	0.08	U		P
7440-23-5	Sodium___	1100			P
7440-28-0	Thallium_	0.09	U		F
7440-62-2	Vanadium_	0.30	B		P
7440-66-6	Zinc_____	20.0			P
5955-70-0	Cyanide__	0.14	U		CA

Color Before: YELLOW_&_ Clarity Before: N/A___ Texture: TISSUE

Color After: YELLOW___ Clarity After: N/A___ Artifacts: _____

Comments:

FORM I - IN

ILMO2.1

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CLB004W

Lab Name: CH2M_HILL_MGM Contract: 23978

Lab Code: NA Case No.: 23978 SAS No.: 23978 SDG No.: 23978

Matrix (soil/water): FISH Lab Sample ID: 23978008

Level (low/med): LOW Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4.0	B		P
7440-36-0	Antimony	0.66	U		P
7440-38-2	Arsenic	0.04	B	N	F
7440-39-3	Barium	2.0	B		P
7440-41-7	Beryllium	0.01	U		P
7440-43-9	Cadmium	0.11	U		P
7440-70-2	Calcium	15400		*	P
7440-47-3	Chromium	0.43			P
7440-48-4	Cobalt	0.11	U		P
7440-50-8	Copper	0.53	B		P
7439-89-6	Iron	31.4			P
7439-92-1	Lead	0.31			F
7439-95-4	Magnesium	518			P
7439-96-5	Manganese	3.7			P
7439-97-6	Mercury	0.03	U		CV
7440-02-0	Nickel	0.38	U		P
7440-09-7	Potassium	3460			P
7782-49-2	Selenium	0.13	B	N	F
7440-22-4	Silver	0.08	U		P
7440-23-5	Sodium	1020			P
7440-28-0	Thallium	0.09	U		F
7440-62-2	Vanadium	0.11	U		P
7440-66-6	Zinc	28.0		*	P
5955-70-0	Cyanide	0.89	B	N	CA

Color Before: TAN_&_GRA Clarity Before: N/A Texture: TISSUE

Color After: YELLOW Clarity After: N/A Artifacts: YES

Comments:
ARTIFACTS_CONSIST_OF_SCALES_AND_BONES.

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CLB005-01F

Lab Name: CH2M_HILL_MGM Contract: 23978

Lab Code: NA Case No.: 23978 SAS No.: 23978 SDG No.: 23978

Matrix (soil/water): FILLE Lab Sample ID: 23978009

Level (low/med): LOW Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	0.97	U		P
7440-36-0	Antimony	0.66	U		P
7440-38-2	Arsenic	0.03	B	N	F
7440-39-3	Barium	0.91	B		P
7440-41-7	Beryllium	0.01	U		P
7440-43-9	Cadmium	0.11	U		P
7440-70-2	Calcium	4110		*	P
7440-47-3	Chromium	0.19	B		P
7440-48-4	Cobalt	0.11	U		P
7440-50-8	Copper	1.0			P
7439-89-6	Iron	56.1			P
7439-92-1	Lead	0.23		N	F
7439-95-4	Magnesium	325			P
7439-96-5	Manganese	1.6			P
7439-97-6	Mercury	0.03	U		CV
7440-02-0	Nickel	0.38	U		P
7440-09-7	Potassium	3880			P
7782-49-2	Selenium	0.07	U		F
7440-22-4	Silver	0.08	U		P
7440-23-5	Sodium	1050			P
7440-28-0	Thallium	0.09	U	N	F
7440-62-2	Vanadium	0.11	U		P
7440-66-6	Zinc	12.6			P
5955-70-0	Cyanide	0.14	U		CA

Color Before: GRAY_&_TA Clarity Before: N/A Texture: TISSUE

Color After: YELLOW Clarity After: N/A Artifacts: YES

Comments:
ARTIFACTS_CONSIST_OF_BONES.

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EPA SAMPLE NO.

CLB006-01F

Lab Name: CH2M_HILL_MGM Contract: 23978

Lab Code: NA Case No.: 23978 SAS No.: 23978 SDG No.: 23978

Matrix (soil/water): FILLE Lab Sample ID: 23978010

Level (low/med): LOW Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1.4	B		P
7440-36-0	Antimony	0.66	U		P
7440-38-2	Arsenic	0.03	U	N	F
7440-39-3	Barium	0.93	B		P
7440-41-7	Beryllium	0.01	U		P
7440-43-9	Cadmium	0.11	U		P
7440-70-2	Calcium	4240		*	P
7440-47-3	Chromium	0.21	B		P
7440-48-4	Cobalt	0.11	U		P
7440-50-8	Copper	1.0			P
7439-89-6	Iron	30.6			P
7439-92-1	Lead	0.27		N	F
7439-95-4	Magnesium	296			P
7439-96-5	Manganese	2.2			P
7439-97-6	Mercury	0.03	U		CV
7440-02-0	Nickel	0.38	U		P
7440-09-7	Potassium	3770			P
7782-49-2	Selenium	0.07	U		F
7440-22-4	Silver	0.08	U		P
7440-23-5	Sodium	979			P
7440-28-0	Thallium	0.09	U	N	F
7440-62-2	Vanadium	0.11	U		P
7440-66-6	Zinc	13.6			P
5955-70-0	Cyanide	0.14	U		CA

Color Before: GRAY_&_TA Clarity Before: N/A Texture: TISSUE

Color After: YELLOW Clarity After: N/A Artifacts: YES

Comments:
ARTIFACTS_CONSIST_OF_BONES.

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CLB007-01F

Lab Name: CH2M_HILL_MGM Contract: 23978

Lab Code: NA Case No.: 23978 SAS No.: 23978 SDG No.: 23978

Matrix (soil/water): FILLE Lab Sample ID: 23978011

Level (low/med): LOW Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1.1	B		P
7440-36-0	Antimony	0.66	U		P
7440-38-2	Arsenic	0.05	B	N	F
7440-39-3	Barium	1.2	B		P
7440-41-7	Beryllium	0.01	U		P
7440-43-9	Cadmium	0.11	U		P
7440-70-2	Calcium	4470		*	P
7440-47-3	Chromium	0.21	B		P
7440-48-4	Cobalt	0.11	U		P
7440-50-8	Copper	1.4			P
7439-89-6	Iron	31.3			P
7439-92-1	Lead	0.16		N	F
7439-95-4	Magnesium	302			P
7439-96-5	Manganese	2.0			P
7439-97-6	Mercury	0.03	U		CV
7440-02-0	Nickel	0.38	U		P
7440-09-7	Potassium	3020			P
7782-49-2	Selenium	0.22			F
7440-22-4	Silver	0.08	U		P
7440-23-5	Sodium	830			P
7440-28-0	Thallium	0.09	U	N	F
7440-62-2	Vanadium	0.11	U		P
7440-66-6	Zinc	17.7			P
5955-70-0	Cyanide	0.14	U		CA

Color Before: GRAY_&_TA Clarity Before: N/A Texture: TISSUE

Color After: YELLOW Clarity After: N/A Artifacts: YES

Comments:
ARTIFACTS_CONSIST_OF_BONES.

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EPA SAMPLE NO.

CLB005-01W

Lab Name: CH2M_HILL_MGM Contract: 23978

Lab Code: NA Case No.: 23978 SAS No.: 23978 SDG No.: 23978

Matrix (soil/water): FISH Lab Sample ID: 23978012

Level (low/med): LOW Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4.6	B		P
7440-36-0	Antimony	0.66	U		P
7440-38-2	Arsenic	0.03	U	N	F
7440-39-3	Barium	3.0	B		P
7440-41-7	Beryllium	0.01	U		P
7440-43-9	Cadmium	0.11	U		P
7440-70-2	Calcium	13600		*	P
7440-47-3	Chromium	0.40	B		P
7440-48-4	Cobalt	0.11	U		P
7440-50-8	Copper	1.5			P
7439-89-6	Iron	91.9			P
7439-92-1	Lead	0.65			F
7439-95-4	Magnesium	388			P
7439-96-5	Manganese	5.3			P
7439-97-6	Mercury	0.03	B		CV
7440-02-0	Nickel	0.38	U		P
7440-09-7	Potassium	3000			P
7782-49-2	Selenium	0.22		N	F
7440-22-4	Silver	0.08	U		P
7440-23-5	Sodium	1330			P
7440-28-0	Thallium	0.09	U		F
7440-62-2	Vanadium	0.11	U		P
7440-66-6	Zinc	25.6		*	P
5955-70-0	Cyanide	0.14	U	N	CA

Color Before: TAN & GRA Clarity Before: N/A Texture: TISSUE

Color After: YELLOW Clarity After: N/A Artifacts: YES

Comments:
ARTIFACTS CONSIST OF SCALES AND BONES.

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EPA SAMPLE NO.

CLB006-01W

Lab Name: CH2M_HILL_MGM Contract: 23978

Lab Code: NA Case No.: 23978 SAS No.: 23978 SDG No.: 23978

Matrix (soil/water): FISH Lab Sample ID: 23978013

Level (low/med): LOW Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6.6	B		P
7440-36-0	Antimony	0.66	U		P
7440-38-2	Arsenic	0.03	B	N	F
7440-39-3	Barium	2.2	B		P
7440-41-7	Beryllium	0.01	U		P
7440-43-9	Cadmium	0.11	U		P
7440-70-2	Calcium	12400		*	P
7440-47-3	Chromium	0.38	B		P
7440-48-4	Cobalt	0.11	U		P
7440-50-8	Copper	1.1			P
7439-89-6	Iron	86.6			P
7439-92-1	Lead	0.73			F
7439-95-4	Magnesium	332			P
7439-96-5	Manganese	5.0			P
7439-97-6	Mercury	0.04	B		CV
7440-02-0	Nickel	0.38	U		P
7440-09-7	Potassium	2980			P
7782-49-2	Selenium	0.17	B	N	F
7440-22-4	Silver	0.08	U		P
7440-23-5	Sodium	1270			P
7440-28-0	Thallium	0.09	U		F
7440-62-2	Vanadium	0.11	U		P
7440-66-6	Zinc	27.6		*	P
5955-70-0	Cyanide	0.14	U	N	CA

Color Before: TAN_&_GRA Clarity Before: N/A Texture: TISSUE

Color After: YELLOW Clarity After: N/A Artifacts: YES

Comments:
ARTIFACTS_CONSIST_OF_SCALES_AND_BONES.

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EPA SAMPLE NO.

CLB007-01W

Lab Name: CH2M_HILL_MGM Contract: 23978

Lab Code: NA Case No.: 23978 SAS No.: 23978 SDG No.: 23978

Matrix (soil/water): FISH Lab Sample ID: 23978014

Level (low/med): LOW Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10.1			P
7440-36-0	Antimony	0.66	U		P
7440-38-2	Arsenic	0.08	B	N	F
7440-39-3	Barium	2.2	B		P
7440-41-7	Beryllium	0.01	U		P
7440-43-9	Cadmium	0.11	U		P
7440-70-2	Calcium	11100		*	P
7440-47-3	Chromium	0.35	B		P
7440-48-4	Cobalt	0.11	U		P
7440-50-8	Copper	1.5			P
7439-89-6	Iron	68.4			P
7439-92-1	Lead	0.45			F
7439-95-4	Magnesium	431			P
7439-96-5	Manganese	4.4			P
7439-97-6	Mercury	0.04	B		CV
7440-02-0	Nickel	0.38	U		P
7440-09-7	Potassium	3350			P
7782-49-2	Selenium	0.18	B	N	F
7440-22-4	Silver	0.08	U		P
7440-23-5	Sodium	1080			P
7440-28-0	Thallium	0.09	U		F
7440-62-2	Vanadium	0.12	B		P
7440-66-6	Zinc	31.8		*	P
5955-70-0	Cyanide	0.14	U	N	CA

Color Before: TAN_&_GRA Clarity Before: N/A Texture: TISSUE

Color After: YELLOW Clarity After: N/A Artifacts: YES

Comments:
ARTIFACTS_CONSIST_OF_SCALES_AND_BONES.

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

LSB001-01F

Lab Name: CH2M_HILL_MGM Contract: 23978

Lab Code: NA Case No.: 23978 SAS No.: 23978 SDG No.: 23978

Matrix (soil/water): FILLE Lab Sample ID: 23978015

Level (low/med): LOW Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	0.97	U		P
7440-36-0	Antimony	0.66	U		P
7440-38-2	Arsenic	0.03	U	N	F
7440-39-3	Barium	0.10	B		P
7440-41-7	Beryllium	0.01	U		P
7440-43-9	Cadmium	0.11	U		P
7440-70-2	Calcium	2010		*	P
7440-47-3	Chromium	0.21	B		P
7440-48-4	Cobalt	0.11	U		P
7440-50-8	Copper	0.33	B		P
7439-89-6	Iron	4.8			P
7439-92-1	Lead	0.12		N	F
7439-95-4	Magnesium	306			P
7439-96-5	Manganese	0.16	B		P
7439-97-6	Mercury	0.21			CV
7440-02-0	Nickel	0.38	U		P
7440-09-7	Potassium	4060			P
7782-49-2	Selenium	0.26			F
7440-22-4	Silver	0.08	U		P
7440-23-5	Sodium	779			P
7440-28-0	Thallium	0.09	U	N	F
7440-62-2	Vanadium	0.11	U		P
7440-66-6	Zinc	7.3			P
5955-70-0	Cyanide	0.14	U		CA

Color Before: GRAY_&_TA Clarity Before: N/A Texture: TISSUE

Color After: YELLOW Clarity After: N/A Artifacts: YES

Comments:
ARTIFACTS_CONSIST_OF_BONES.

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

LSB002-01F

Lab Name: CH2M_HILL_MGM Contract: 23978

Lab Code: NA Case No.: 23978 SAS No.: 23978 SDG No.: 23978

Matrix (soil/water): FILLE Lab Sample ID: 23978016

Level (low/med): LOW Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	0.97	U		P
7440-36-0	Antimony	0.66	U		P
7440-38-2	Arsenic	0.03	U	N	F
7440-39-3	Barium	0.11	B		P
7440-41-7	Beryllium	0.01	U		P
7440-43-9	Cadmium	0.11	U		P
7440-70-2	Calcium	2640		*	P
7440-47-3	Chromium	0.18	B		P
7440-48-4	Cobalt	0.11	U		P
7440-50-8	Copper	0.33	B		P
7439-89-6	Iron	4.9			P
7439-92-1	Lead	0.17		N	F
7439-95-4	Magnesium	308			P
7439-96-5	Manganese	0.20	B		P
7439-97-6	Mercury	0.07	B		CV
7440-02-0	Nickel	0.38	U		P
7440-09-7	Potassium	3770			P
7782-49-2	Selenium	0.29			F
7440-22-4	Silver	0.08	U		P
7440-23-5	Sodium	799			P
7440-28-0	Thallium	0.09	U	N	F
7440-62-2	Vanadium	0.11	U		P
7440-66-6	Zinc	9.3			P
5955-70-0	Cyanide	0.14	U		CA

Color Before: GRAY_&_TA Clarity Before: N/A Texture: TISSUE

Color After: YELLOW Clarity After: N/A Artifacts: YES

Comments:
ARTIFACTS_CONSIST_OF_BONES.

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

LSB003-01F

Lab Name: CH2M_HILL_MGM Contract: 23978

Lab Code: NA Case No.: 23978 SAS No.: 23978 SDG No.: 23978

Matrix (soil/water): FILLE Lab Sample ID: 23978017

Level (low/med): LOW Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	11.8			P
7440-36-0	Antimony	0.66	U		P
7440-38-2	Arsenic	0.03	U	N	F
7440-39-3	Barium	0.61	B		P
7440-41-7	Beryllium	0.01	U		P
7440-43-9	Cadmium	0.11	U		P
7440-70-2	Calcium	4010		*	P
7440-47-3	Chromium	0.22	B		P
7440-48-4	Cobalt	0.11	U		P
7440-50-8	Copper	0.60	B		P
7439-89-6	Iron	9.5			P
7439-92-1	Lead	0.42		N	F
7439-95-4	Magnesium	312			P
7439-96-5	Manganese	0.99			P
7439-97-6	Mercury	0.03	U		CV
7440-02-0	Nickel	0.38	U		P
7440-09-7	Potassium	3340			P
7782-49-2	Selenium	0.28			F
7440-22-4	Silver	0.08	U		P
7440-23-5	Sodium	845			P
7440-28-0	Thallium	0.09	U	N	F
7440-62-2	Vanadium	0.11	U		P
7440-66-6	Zinc	16.3			P
5955-70-0	Cyanide	0.14	U		CA

Color Before: GRAY_&_TA Clarity Before: N/A Texture: TISSUE

Color After: YELLOW Clarity After: N/A Artifacts: YES

Comments:
ARTIFACTS_CONSIST_OF_BONES.

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

LSB004-01F

Lab Name: CH2M_HILL_MGM Contract: 23978

Lab Code: NA Case No.: 23978 SAS No.: 23978 SDG No.: 23978

Matrix (soil/water): FILLE Lab Sample ID: 23978018

Level (low/med): LOW Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8.8			P
7440-36-0	Antimony	0.66	U		P
7440-38-2	Arsenic	0.03	U	N	F
7440-39-3	Barium	0.78	B		P
7440-41-7	Beryllium	0.01	U		P
7440-43-9	Cadmium	0.11	U		P
7440-70-2	Calcium	3670		*	P
7440-47-3	Chromium	0.14	B		P
7440-48-4	Cobalt	0.11	U		P
7440-50-8	Copper	0.55	B		P
7439-89-6	Iron	8.5			P
7439-92-1	Lead	0.42		N	F
7439-95-4	Magnesium	284			P
7439-96-5	Manganese	1.3			P
7439-97-6	Mercury	0.06	B		CV
7440-02-0	Nickel	0.38	U		P
7440-09-7	Potassium	3800			P
7782-49-2	Selenium	0.20	B		F
7440-22-4	Silver	0.08	U		P
7440-23-5	Sodium	869			P
7440-28-0	Thallium	0.09	U	N	F
7440-62-2	Vanadium	0.11	U		P
7440-66-6	Zinc	11.1			P
5955-70-0	Cyanide	0.14	U		CA

Color Before: GRAY_&_TA Clarity Before: N/A Texture: TISSUE

Color After: YELLOW Clarity After: N/A Artifacts: YES

Comments:
ARTIFACTS_CONSIST_OF_BONES.

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

LSB005-01F

Lab Name: CH2M_HILL_MGM Contract: 23978

Lab Code: NA Case No.: 23978 SAS No.: 23978 SDG No.: 23978

Matrix (soil/water): FILLE Lab Sample ID: 23978019

Level (low/med): LOW Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8			P
7440-36-0	Antimony	0.66	U		P
7440-38-2	Arsenic	0.06	B	N	F
7440-39-3	Barium	0.78	B		P
7440-41-7	Beryllium	0.01	U		P
7440-43-9	Cadmium	0.11	U		P
7440-70-2	Calcium	8580		*	P
7440-47-3	Chromium	0.33	B		P
7440-48-4	Cobalt	0.11	U		P
7440-50-8	Copper	1.3			P
7439-89-6	Iron	36.4			P
7439-92-1	Lead	1.5		N	F
7439-95-4	Magnesium	304			P
7439-96-5	Manganese	1.2			P
7439-97-6	Mercury	0.06	B		CV
7440-02-0	Nickel	0.38	U		P
7440-09-7	Potassium	2790			P
7782-49-2	Selenium	0.44			F
7440-22-4	Silver	0.08	U		P
7440-23-5	Sodium	999			P
7440-28-0	Thallium	0.09	U	N	F
7440-62-2	Vanadium	0.11	B		P
7440-66-6	Zinc	16.3			P
5955-70-0	Cyanide	0.14	U		CA

Color Before: GRAY_&_TA Clarity Before: N/A Texture: TISSUE

Color After: YELLOW Clarity After: N/A Artifacts: YES

Comments:
ARTIFACTS_CONSIST_OF_BONES.

FORM I - IN

ILMO2.1

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

LSB001-01W

Lab Name: CH2M_HILL_MGM_____ Contract: 23978_____

Lab Code: NA____ Case No.: 23978_ SAS No.: 23978_ SDG No.: 23978_

Matrix (soil/water): FISH_ Lab Sample ID: 23978020__

Level (low/med): LOW__ Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	3.1	B		P_
7440-36-0	Antimony_	0.66	U		P_
7440-38-2	Arsenic__	0.03	U	N	F_
7440-39-3	Barium___	0.63	B		P_
7440-41-7	Beryllium	0.01	U		P_
7440-43-9	Cadmium__	0.11	U		P_
7440-70-2	Calcium__	20300		*	P_
7440-47-3	Chromium_	0.52			P_
7440-48-4	Cobalt___	0.11	U		P_
7440-50-8	Copper___	1.0			P_
7439-89-6	Iron_____	13.6			P_
7439-92-1	Lead_____	0.99			F_
7439-95-4	Magnesium	585			P_
7439-96-5	Manganese	0.95			P_
7439-97-6	Mercury__	0.06	B		CV
7440-02-0	Nickel___	0.38	U		P_
7440-09-7	Potassium	3420			P_
7782-49-2	Selenium_	0.19	B	N	F_
7440-22-4	Silver___	0.08	U		P_
7440-23-5	Sodium___	1210			P_
7440-28-0	Thallium_	0.09	U		F_
7440-62-2	Vanadium_	0.11	U		P_
7440-66-6	Zinc_____	18.5		*	P_
5955-70-0	Cyanide__	0.14	U	N	CA

Color Before: TAN_&_GRA Clarity Before: N/A___ Texture: TISSUE

Color After: YELLOW___ Clarity After: N/A___ Artifacts: YES___

Comments:
ARTIFACTS_CONSIST_OF_SCALES_AND_BONES.

FORM I - IN

ILMO2.1

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

LSB002-01W

Lab Name: CH2M_HILL_MGM_____ Contract: 23978_____

Lab Code: NA____ Case No.: 23978_ SAS No.: 23978_ SDG No.: 23978_

Matrix (soil/water): FISH_ Lab Sample ID: 23978021__

Level (low/med): LOW__ Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	9.1			P_
7440-36-0	Antimony_	0.66	U		P_
7440-38-2	Arsenic__	0.03	B	N	F_
7440-39-3	Barium___	0.56	B		P_
7440-41-7	Beryllium	0.01	U		P_
7440-43-9	Cadmium__	0.11	U		P_
7440-70-2	Calcium__	13200		*	P_
7440-47-3	Chromium_	0.39	B		P_
7440-48-4	Cobalt___	0.11	U		P_
7440-50-8	Copper___	1.1			P_
7439-89-6	Iron____	18.5			P_
7439-92-1	Lead____	2.0			F_
7439-95-4	Magnesium	486			P_
7439-96-5	Manganese	0.86			P_
7439-97-6	Mercury__	0.05	B		CV
7440-02-0	Nickel___	0.38	U		P_
7440-09-7	Potassium	3200			P_
7782-49-2	Selenium_	0.22		N	F_
7440-22-4	Silver___	0.08	U		P_
7440-23-5	Sodium___	1070			P_
7440-28-0	Thallium_	0.09	U		F_
7440-62-2	Vanadium_	0.11	U		P_
7440-66-6	Zinc____	29.5		*	P_
5955-70-0	Cyanide__	0.14	U	N	CA

Color Before: TAN_&_GRA Clarity Before: N/A___ Texture: TISSUE

Color After: YELLOW___ Clarity After: N/A___ Artifacts: YES___

Comments:
ARTIFACTS_CONSIST_OF_SCALES_AND_BONES.

FORM I - IN

ILMO2.1

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

LSB003-01W

Lab Name: CH2M_HILL_MGM_____ Contract: 23978_____

Lab Code: NA____ Case No.: 23978_ SAS No.: 23978_ SDG No.: 23978_

Matrix (soil/water): FISH_ Lab Sample ID: 23978022__

Level (low/med): LOW__ Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	12.5	_		P_
7440-36-0	Antimony_	0.66	U		P_
7440-38-2	Arsenic__	0.03	U	N	F_
7440-39-3	Barium___	1.8	B		P_
7440-41-7	Beryllium	0.01	U		P_
7440-43-9	Cadmium__	0.11	U		P_
7440-70-2	Calcium__	10800	_	*	P_
7440-47-3	Chromium_	0.33	B		P_
7440-48-4	Cobalt___	0.11	U		P_
7440-50-8	Copper___	0.24	B		P_
7439-89-6	Iron_____	20.3	_		P_
7439-92-1	Lead_____	1.4	_		F_
7439-95-4	Magnesium	407	_		P_
7439-96-5	Manganese	2.8	_		P_
7439-97-6	Mercury__	0.04	B		CV
7440-02-0	Nickel___	0.38	U		P_
7440-09-7	Potassium	3110	_		P_
7782-49-2	Selenium_	0.28	_	N	F_
7440-22-4	Silver___	0.08	U		P_
7440-23-5	Sodium___	932	_		P_
7440-28-0	Thallium_	0.09	U		F_
7440-62-2	Vanadium_	0.11	U		P_
7440-66-6	Zinc_____	34.2	_	*	P_
5955-70-0	Cyanide__	0.14	U	N	CA

Color Before: TAN_&_GRA Clarity Before: N/A___ Texture: TISSUE

Color After: YELLOW___ Clarity After: N/A___ Artifacts: YES___

Comments:
ARTIFACTS_CONSIST_OF_SCALES_AND_BONES.

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

LSB004-01W

Lab Name: CH2M_HILL_MGM Contract: 23978

Lab Code: NA Case No.: 23978 SAS No.: 23978 SDG No.: 23978

Matrix (soil/water): FISH Lab Sample ID: 23978023

Level (low/med): LOW Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15.0			P
7440-36-0	Antimony	0.66	U		P
7440-38-2	Arsenic	0.03	U	N	F
7440-39-3	Barium	1.3	B		P
7440-41-7	Beryllium	0.01	U		P
7440-43-9	Cadmium	0.11	U		P
7440-70-2	Calcium	16100		*	P
7440-47-3	Chromium	0.48			P
7440-48-4	Cobalt	0.11	U		P
7440-50-8	Copper	0.12	B		P
7439-89-6	Iron	32.5			P
7439-92-1	Lead	2.1			F
7439-95-4	Magnesium	529			P
7439-96-5	Manganese	2.6			P
7439-97-6	Mercury	0.07	B		CV
7440-02-0	Nickel	0.38	U		P
7440-09-7	Potassium	3040			P
7782-49-2	Selenium	0.14	B	N	F
7440-22-4	Silver	0.08	U		P
7440-23-5	Sodium	1090			P
7440-28-0	Thallium	0.09	U		F
7440-62-2	Vanadium	0.11	B		P
7440-66-6	Zinc	26.9		*	P
5955-70-0	Cyanide	0.14	U	N	CA

Color Before: TAN_&_GRA Clarity Before: N/A Texture: TISSUE

Color After: YELLOW Clarity After: N/A Artifacts: YES

Comments:
ARTIFACTS_CONSIST_OF_SCALES_AND_BONES.

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

LSB005-01W

Lab Name: CH2M_HILL_MGM Contract: 23978

Lab Code: NA Case No.: 23978 SAS No.: 23978 SDG No.: 23978

Matrix (soil/water): FISH Lab Sample ID: 23978024

Level (low/med): LOW Date Received: 02/05/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4.1	B		P
7440-36-0	Antimony	0.66	U		P
7440-38-2	Arsenic	0.04	B	WN	F
7440-39-3	Barium	0.45	B		P
7440-41-7	Beryllium	0.01	U		P
7440-43-9	Cadmium	0.11	U		P
7440-70-2	Calcium	2890		*	P
7440-47-3	Chromium	0.19	B		P
7440-48-4	Cobalt	0.15	B		P
7440-50-8	Copper	1.0			P
7439-89-6	Iron	19.4			P
7439-92-1	Lead	0.52			F
7439-95-4	Magnesium	282			P
7439-96-5	Manganese	0.66			P
7439-97-6	Mercury	0.03	U		CV
7440-02-0	Nickel	0.38	U		P
7440-09-7	Potassium	3400			P
7782-49-2	Selenium	0.33		+N	F
7440-22-4	Silver	0.08	U		P
7440-23-5	Sodium	737			P
7440-28-0	Thallium	0.09	U		F
7440-62-2	Vanadium	0.11	U		P
7440-66-6	Zinc	7.5		*	P
5955-70-0	Cyanide	0.14	U	N	CA

Color Before: TAN & GRA Clarity Before: N/A Texture: TISSUE

Color After: YELLOW Clarity After: N/A Artifacts: YES

Comments:
ARTIFACTS CONSIST OF SCALES AND BONES. THE "+" QUALIFIER INDICATES THE CORRELATION COEFFICIENT FOR THE MSA IS LESS THAN 0.995.

FORM I - IN

ILMO2.1

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SO3013B1

Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN1996

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/22/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	990	U
111-44-4	bis(2-Chloroethyl)ether	990	U
95-57-8	2-Chlorophenol	990	U
541-73-1	1,3-Dichlorobenzene	990	U
106-46-7	1,4-Dichlorobenzene	990	U
95-50-1	1,2-Dichlorobenzene	990	U
95-48-7	2-Methylphenol	990	U
108-60-1	2,2'-oxybis(1-Chloropropane)	990	U
106-44-5	4-Methylphenol	990	U
621-64-7	N-Nitroso-di-n-propylamine	990	U
67-72-1	Hexachloroethane	990	U
98-95-3	Nitrobenzene	990	U
78-59-1	Isophorone	990	U
88-75-5	2-Nitrophenol	990	U
105-67-9	2,4-Dimethylphenol	990	U
111-91-1	bis(2-Chloroethoxy)methane	990	U
120-83-2	2,4-Dichlorophenol	990	U
120-82-1	1,2,4-Trichlorobenzene	990	U
91-20-3	Naphthalene	990	U
106-47-8	4-Chloroaniline	990	U
87-68-3	Hexachlorobutadiene	990	U
59-50-7	4-Chloro-3-methylphenol	990	U
91-57-6	2-Methylnaphthalene	990	U
77-47-4	Hexachlorocyclopentadiene	990	U
88-06-2	2,4,6-Trichlorophenol	990	U
95-95-4	2,4,5-Trichlorophenol	2400	U
91-58-7	2-Chloronaphthalene	990	U
88-74-4	2-Nitroaniline	2400	U
131-11-3	Dimethylphthalate	990	U
208-96-8	Acenaphthylene	990	U
606-20-2	2,6-Dinitrotoluene	990	U
99-09-2	3-Nitroaniline	2400	U
83-32-9	Acenaphthene	990	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S03013B1

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN1996

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/22/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	2400	U
100-02-7	4-Nitrophenol	2400	U
132-64-9	Dibenzofuran	990	U
121-14-2	2,4-Dinitrotoluene	990	U
84-66-2	Diethylphthalate	990	U
7005-72-3	4-Chlorophenyl-phenylether	990	U
86-73-7	Fluorene	990	U
100-01-6	4-Nitroaniline	2400	U
534-52-1	4,6-Dinitro-2-methylphenol	2400	U
86-30-6	N-Nitrosodiphenylamine (1)	990	U
101-55-3	4-Bromophenyl-phenylether	990	U
118-74-1	Hexachlorobenzene	990	U
87-86-5	Pentachlorophenol	2400	U
85-01-8	Phenanthrene	990	U
120-12-7	Anthracene	990	U
86-74-8	Carbazole	990	U
84-74-2	Di-n-butylphthalate	990	U
206-44-0	Fluoranthene	990	U
129-00-0	Pyrene	990	U
85-68-7	Butylbenzylphthalate	990	U
91-94-1	3,3'-Dichlorobenzidine	990	U
56-55-3	Benzo(a)anthracene	990	U
218-01-9	Chrysene	990	U
117-81-7	bis(2-Ethylhexyl)phthalate	990	U
117-84-0	Di-n-octylphthalate	990	U
205-99-2	Benzo(b)fluoranthene	990	U
207-08-9	Benzo(k)fluoranthene	990	U
50-32-8	Benzo(a)pyrene	990	U
193-39-5	Indeno(1,2,3-cd)pyrene	990	U
53-70-3	Dibenz(a,h)anthracene	990	U
191-24-2	Benzo(g,h,i)perylene	990	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SO3013B1

Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN1996

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/22/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.47	530	BJ
2. 930-68-7	2-CYCLOHEXEN-1-ONE	8.89	380	BJ
3.	UNKNOWN	11.14	3200	J
4.	UNKNOWN	35.59	840	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S03013B1

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M3BN2026

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/23/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	800	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	800	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	800	U
83-32-9	Acenaphthene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SO3013B1

Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M3BN2026

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/23/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	800	U
100-02-7	4-Nitrophenol	800	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	800	U
534-52-1	4,6-Dinitro-2-methylphenol	800	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	800	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenz(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S03013B1

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M3BN2026

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/23/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.50	190	BJ
2. 930-68-7	2-CYCLOHEXEN-1-ONE	8.94	130	BJ
3.	UNKNOWN	11.20	1100	J
4. 931-17-9	1,2-CYCLOHEXANEDIOL	12.07	130	BJ
5.	UNKNOWN	18.52	180	J
6. 3375-84-6	2-OXAZOLIDINONE, 3-(2-HYDROX	19.17	370	BJ
7.	UNKNOWN	35.76	280	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S03033B1

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M3BN2053

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/03/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	800	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	800	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	800	U
83-32-9	Acenaphthene	330	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S03033B1

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M3BN2053

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/03/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	800	U
100-02-7	4-Nitrophenol	800	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	800	U
534-52-1	4,6-Dinitro-2-methylphenol	800	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	800	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenz(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S03033B1

Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M3BN2053

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/03/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB00201L

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385017

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2063

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/03/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4000	U
111-44-4	bis(2-Chloroethyl)ether	4000	U
95-57-8	2-Chlorophenol	4000	U
541-73-1	1,3-Dichlorobenzene	4000	U
106-46-7	1,4-Dichlorobenzene	4000	U
95-50-1	1,2-Dichlorobenzene	4000	U
95-48-7	2-Methylphenol	4000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	4000	U
106-44-5	4-Methylphenol	4000	U
621-64-7	N-Nitroso-di-n-propylamine	4000	U
67-72-1	Hexachloroethane	4000	U
98-95-3	Nitrobenzene	4000	U
78-59-1	Isophorone	4000	U
88-75-5	2-Nitrophenol	4000	U
105-67-9	2,4-Dimethylphenol	4000	U
111-91-1	bis(2-Chloroethoxy)methane	4000	U
120-83-2	2,4-Dichlorophenol	4000	U
120-82-1	1,2,4-Trichlorobenzene	4000	U
91-20-3	Naphthalene	4000	U
106-47-8	4-Chloroaniline	4000	U
87-68-3	Hexachlorobutadiene	4000	U
59-50-7	4-Chloro-3-methylphenol	4000	U
91-57-6	2-Methylnaphthalene	4000	U
77-47-4	Hexachlorocyclopentadiene	4000	U
88-06-2	2,4,6-Trichlorophenol	4000	U
95-95-4	2,4,5-Trichlorophenol	9600	U
91-58-7	2-Chloronaphthalene	4000	U
88-74-4	2-Nitroaniline	9600	U
131-11-3	Dimethylphthalate	4000	U
208-96-8	Acenaphthylene	4000	U
606-20-2	2,6-Dinitrotoluene	4000	U
99-09-2	3-Nitroaniline	9600	U
83-32-9	Acenaphthene	4000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB00201L

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385017

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2063

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/03/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	9600	U
100-02-7	4-Nitrophenol	9600	U
132-64-9	Dibenzofuran	4000	U
121-14-2	2,4-Dinitrotoluene	4000	U
84-66-2	Diethylphthalate	4000	U
7005-72-3	4-Chlorophenyl-phenylether	4000	U
86-73-7	Fluorene	4000	U
100-01-6	4-Nitroaniline	9600	U
534-52-1	4,6-Dinitro-2-methylphenol	9600	U
86-30-6	N-Nitrosodiphenylamine (1)	4000	U
101-55-3	4-Bromophenyl-phenylether	4000	U
118-74-1	Hexachlorobenzene	4000	U
87-86-5	Pentachlorophenol	9600	U
85-01-8	Phenanthrene	4000	U
120-12-7	Anthracene	4000	U
86-74-8	Carbazole	4000	U
84-74-2	Di-n-butylphthalate	4000	U
206-44-0	Fluoranthene	4000	U
129-00-0	Pyrene	4000	U
85-68-7	Butylbenzylphthalate	4000	U
91-94-1	3,3'-Dichlorobenzidine	4000	U
56-55-3	Benzo(a)anthracene	4000	U
218-01-9	Chrysene	4000	U
117-81-7	bis(2-Ethylhexyl)phthalate	4000	U
117-84-0	Di-n-octylphthalate	4000	U
205-99-2	Benzo(b)fluoranthene	4000	U
207-08-9	Benzo(k)fluoranthene	4000	U
50-32-8	Benzo(a)pyrene	4000	U
193-39-5	Indeno(1,2,3-cd)pyrene	4000	U
53-70-3	Dibenz(a,h)anthracene	4000	U
191-24-2	Benzo(g,h,i)perylene	4000	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

LSB00201L

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385017

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2063

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/03/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0 (uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 616-04-6	2,4-IMIDAZOLIDINEDIONE, 1-ME	15.95	1700	J
2.	UNKNOWN	26.19	1000	J
3.	UNKNOWN	26.32	2800	J
4. 57-10-3	HEXADECANOIC ACID	26.44	9000	J
5.	UNKNOWN	28.61	1400	J
6.	UNKNOWN	28.84	990	J
7.	UNKNOWN	31.41	910	J
8.	UNKNOWN	33.27	840	J
9.	UNKNOWN	39.97	39000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB00601

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385013

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2052

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/03/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/24/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4000	U
111-44-4	bis(2-Chloroethyl)ether	4000	U
95-57-8	2-Chlorophenol	4000	U
541-73-1	1,3-Dichlorobenzene	4000	U
106-46-7	1,4-Dichlorobenzene	4000	U
95-50-1	1,2-Dichlorobenzene	4000	U
95-48-7	2-Methylphenol	4000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	4000	U
106-44-5	4-Methylphenol	4000	U
621-64-7	N-Nitroso-di-n-propylamine	4000	U
67-72-1	Hexachloroethane	4000	U
98-95-3	Nitrobenzene	4000	U
78-59-1	Isophorone	4000	U
88-75-5	2-Nitrophenol	4000	U
105-67-9	2,4-Dimethylphenol	4000	U
111-91-1	bis(2-Chloroethoxy)methane	4000	U
120-83-2	2,4-Dichlorophenol	4000	U
120-82-1	1,2,4-Trichlorobenzene	4000	U
91-20-3	Naphthalene	4000	U
106-47-8	4-Chloroaniline	4000	U
87-68-3	Hexachlorobutadiene	4000	U
59-50-7	4-Chloro-3-methylphenol	4000	U
91-57-6	2-Methylnaphthalene	4000	U
77-47-4	Hexachlorocyclopentadiene	4000	U
88-06-2	2,4,6-Trichlorophenol	4000	U
95-95-4	2,4,5-Trichlorophenol	9600	U
91-58-7	2-Chloronaphthalene	4000	U
88-74-4	2-Nitroaniline	9600	U
131-11-3	Dimethylphthalate	4000	U
208-96-8	Acenaphthylene	4000	U
606-20-2	2,6-Dinitrotoluene	4000	U
99-09-2	3-Nitroaniline	9600	U
83-32-9	Acenaphthene	4000	U

B6

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB00601

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385013

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2052

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/03/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/24/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	9600	U
100-02-7	4-Nitrophenol	9600	U
132-64-9	Dibenzofuran	4000	U
121-14-2	2,4-Dinitrotoluene	4000	U
84-66-2	Diethylphthalate	4000	U
7005-72-3	4-Chlorophenyl-phenylether	4000	U
86-73-7	Fluorene	4000	U
100-01-6	4-Nitroaniline	9600	U
534-52-1	4,6-Dinitro-2-methylphenol	9600	U
86-30-6	N-Nitrosodiphenylamine (1)	4000	U
101-55-3	4-Bromophenyl-phenylether	4000	U
118-74-1	Hexachlorobenzene	4000	U
87-86-5	Pentachlorophenol	9600	U
85-01-8	Phenanthrene	4000	U
120-12-7	Anthracene	4000	U
86-74-8	Carbazole	4000	U
84-74-2	Di-n-butylphthalate	4000	U
206-44-0	Fluoranthene	4000	U
129-00-0	Pyrene	4000	U
85-68-7	Butylbenzylphthalate	4000	U
91-94-1	3,3'-Dichlorobenzidine	4000	U
56-55-3	Benzo(a)anthracene	4000	U
218-01-9	Chrysene	4000	U
117-81-7	bis(2-Ethylhexyl)phthalate	4000	U
117-84-0	Di-n-octylphthalate	4000	U
205-99-2	Benzo(b)fluoranthene	4000	U
207-08-9	Benzo(k)fluoranthene	4000	U
50-32-8	Benzo(a)pyrene	4000	U
193-39-5	Indeno(1,2,3-cd)pyrene	4000	U
53-70-3	Dibenz(a,h)anthracene	4000	U
191-24-2	Benzo(g,h,i)perylene	4000	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CLB00601

Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385013

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2052

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/03/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/24/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 12

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	18.89	1300	J
2. 629-78-7	HEPTADECANE	22.75	23000	J
3.	UNKNOWN	23.62	3800	J
4. 544-63-8	TETRADECANOIC ACID	23.75	5000	J
5.	UNKNOWN	25.07	860	J
6.	UNKNOWN	26.19	3000	J
7.	UNKNOWN	26.29	2500	J
8. 57-10-3	HEXADECANOIC ACID	26.44	8300	J
9.	UNKNOWN	28.66	4500	J
10.	UNKNOWN	28.82	2100	J
11.	UNKNOWN	35.71	2700	J
12.	UNKNOWN	39.82	13000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB00501L

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385009

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2006

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/22/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4000	U
111-44-4	bis(2-Chloroethyl)ether	4000	U
95-57-8	2-Chlorophenol	4000	U
541-73-1	1,3-Dichlorobenzene	4000	U
106-46-7	1,4-Dichlorobenzene	4000	U
95-50-1	1,2-Dichlorobenzene	4000	U
95-48-7	2-Methylphenol	4000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	4000	U
106-44-5	4-Methylphenol	4000	U
621-64-7	N-Nitroso-di-n-propylamine	4000	U
67-72-1	Hexachloroethane	4000	U
98-95-3	Nitrobenzene	4000	U
78-59-1	Isophorone	4000	U
88-75-5	2-Nitrophenol	4000	U
105-67-9	2,4-Dimethylphenol	4000	U
111-91-1	bis(2-Chloroethoxy)methane	4000	U
120-83-2	2,4-Dichlorophenol	4000	U
120-82-1	1,2,4-Trichlorobenzene	4000	U
91-20-3	Naphthalene	4000	U
106-47-8	4-Chloroaniline	4000	U
87-68-3	Hexachlorobutadiene	4000	U
59-50-7	4-Chloro-3-methylphenol	4000	U
91-57-6	2-Methylnaphthalene	4000	U
77-47-4	Hexachlorocyclopentadiene	4000	U
88-06-2	2,4,6-Trichlorophenol	4000	U
95-95-4	2,4,5-Trichlorophenol	9600	U
91-58-7	2-Chloronaphthalene	4000	U
88-74-4	2-Nitroaniline	9600	U
131-11-3	Dimethylphthalate	4000	U
208-96-8	Acenaphthylene	4000	U
606-20-2	2,6-Dinitrotoluene	4000	U
99-09-2	3-Nitroaniline	9600	U
83-32-9	Acenaphthene	4000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB00501L

Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385009

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2006

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/22/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	9600	U
100-02-7	4-Nitrophenol	9600	U
132-64-9	Dibenzofuran	4000	U
121-14-2	2,4-Dinitrotoluene	4000	U
84-66-2	Diethylphthalate	4000	U
7005-72-3	4-Chlorophenyl-phenylether	4000	U
86-73-7	Fluorene	4000	U
100-01-6	4-Nitroaniline	9600	U
534-52-1	4,6-Dinitro-2-methylphenol	9600	U
86-30-6	N-Nitrosodiphenylamine (1)	4000	U
101-55-3	4-Bromophenyl-phenylether	4000	U
118-74-1	Hexachlorobenzene	4000	U
87-86-5	Pentachlorophenol	9600	U
85-01-8	Phenanthrene	4000	U
120-12-7	Anthracene	4000	U
86-74-8	Carbazole	4000	U
84-74-2	Di-n-butylphthalate	4000	U
206-44-0	Fluoranthene	4000	U
129-00-0	Pyrene	4000	U
85-68-7	Butylbenzylphthalate	4000	U
91-94-1	3,3'-Dichlorobenzidine	4000	U
56-55-3	Benzo(a)anthracene	4000	U
218-01-9	Chrysene	4000	U
117-81-7	bis(2-Ethylhexyl)phthalate	4000	U
117-84-0	Di-n-octylphthalate	4000	U
205-99-2	Benzo(b)fluoranthene	4000	U
207-08-9	Benzo(k)fluoranthene	4000	U
50-32-8	Benzo(a)pyrene	4000	U
193-39-5	Indeno(1,2,3-cd)pyrene	4000	U
53-70-3	Dibenz(a,h)anthracene	4000	U
191-24-2	Benzo(g,h,i)perylene	4000	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

LSB00501L

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385009

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2006

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/22/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	11.17	3400	J
2. 629-59-4	TETRADECANE	19.85	2700	J
3. 112-53-8	1-DODECANOL	22.60	7500	J
4. 18733-57-8	SILANE, TRICHLOROEICOSYL-	22.70	7600	J
5. 629-78-7	HEPTADECANE	22.89	69000	J
6. 20959-33-5	HEPTADECANE, 7-METHYL-	23.49	11000	J
7. 544-63-8	TETRADECANOIC ACID	23.99	16000	J
8. 62238-13-5	DECANE, 2,3,7-TRIMETHYL-	24.27	4100	J
9.	UNKNOWN	25.36	7300	J
10.	UNKNOWN	25.42	5800	J
11. 18435-45-5	1-NONADECENE	25.54	17000	J
12. 3913-02-8	1-OCTANOL, 2-BUTYL-	25.62	7000	J
13. 18435-45-5	1-NONADECENE	25.87	9900	J
14. 6975-98-0	DECANE, 2-METHYL-	26.16	5000	J
15. 57-10-3	HEXADECANOIC ACID	26.89	68000	J
16.	UNKNOWN	27.81	9300	J
17.	UNKNOWN	29.16	56000	J
18. 4337-65-9	HEXANEDIOIC ACID, MONO(2-ETH	31.66	13000	J
19.	UNKNOWN	35.96	17000000	J
20.	UNKNOWN	40.42	13000000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB00401L

Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385008

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2029

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/23/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4000	U
111-44-4	bis(2-Chloroethyl)ether	4000	U
95-57-8	2-Chlorophenol	4000	U
541-73-1	1,3-Dichlorobenzene	4000	U
106-46-7	1,4-Dichlorobenzene	4000	U
95-50-1	1,2-Dichlorobenzene	4000	U
95-48-7	2-Methylphenol	4000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	4000	U
106-44-5	4-Methylphenol	4000	U
621-64-7	N-Nitroso-di-n-propylamine	4000	U
67-72-1	Hexachloroethane	4000	U
98-95-3	Nitrobenzene	4000	U
78-59-1	Isophorone	4000	U
88-75-5	2-Nitrophenol	4000	U
105-67-9	2,4-Dimethylphenol	4000	U
111-91-1	bis(2-Chloroethoxy)methane	4000	U
120-83-2	2,4-Dichlorophenol	4000	U
120-82-1	1,2,4-Trichlorobenzene	4000	U
91-20-3	Naphthalene	4000	U
106-47-8	4-Chloroaniline	4000	U
87-68-3	Hexachlorobutadiene	4000	U
59-50-7	4-Chloro-3-methylphenol	4000	U
91-57-6	2-Methylnaphthalene	4000	U
77-47-4	Hexachlorocyclopentadiene	4000	U
88-06-2	2,4,6-Trichlorophenol	4000	U
95-95-4	2,4,5-Trichlorophenol	9600	U
91-58-7	2-Chloronaphthalene	4000	U
88-74-4	2-Nitroaniline	9600	U
131-11-3	Dimethylphthalate	4000	U
208-96-8	Acenaphthylene	4000	U
606-20-2	2,6-Dinitrotoluene	4000	U
99-09-2	3-Nitroaniline	9600	U
83-32-9	Acenaphthene	4000	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB00401L

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385008

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2029

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/23/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	9600	U
100-02-7	4-Nitrophenol	9600	U
132-64-9	Dibenzofuran	4000	U
121-14-2	2,4-Dinitrotoluene	4000	U
84-66-2	Diethylphthalate	4000	U
7005-72-3	4-Chlorophenyl-phenylether	4000	U
86-73-7	Fluorene	4000	U
100-01-6	4-Nitroaniline	9600	U
534-52-1	4,6-Dinitro-2-methylphenol	9600	U
86-30-6	N-Nitrosodiphenylamine (1)	4000	U
101-55-3	4-Bromophenyl-phenylether	4000	U
118-74-1	Hexachlorobenzene	4000	U
87-86-5	Pentachlorophenol	9600	U
85-01-8	Phenanthrene	4000	U
120-12-7	Anthracene	4000	U
86-74-8	Carbazole	4000	U
84-74-2	Di-n-butylphthalate	4000	U
206-44-0	Fluoranthene	4000	U
129-00-0	Pyrene	4000	U
85-68-7	Butylbenzylphthalate	4000	U
91-94-1	3,3'-Dichlorobenzidine	4000	U
56-55-3	Benzo(a)anthracene	4000	U
218-01-9	Chrysene	4000	U
117-81-7	bis(2-Ethylhexyl)phthalate	4000	U
117-84-0	Di-n-octylphthalate	4000	U
205-99-2	Benzo(b)fluoranthene	4000	U
207-08-9	Benzo(k)fluoranthene	4000	U
50-32-8	Benzo(a)pyrene	4000	U
193-39-5	Indeno(1,2,3-cd)pyrene	4000	U
53-70-3	Dibenz(a,h)anthracene	4000	U
191-24-2	Benzo(g,h,i)perylene	4000	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

LSB00401L

Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385008

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2029

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/23/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 513-85-9	2,3-BUTANEDIOL	4.80	1100	J
2.	UNKNOWN	11.17	2800	J
3. 27154-43-4	PIPERIDINONE	14.65	1600	J
4. 544-63-8	TETRADECANOIC ACID	23.90	3500	J
5.	UNKNOWN	26.39	4300	J
6. 57-10-3	HEXADECANOIC ACID	26.66	26000	J
7.	UNKNOWN	28.84	19000	J
8.	UNKNOWN	29.06	4200	J
9.	UNKNOWN	33.22	1000	J
10.	UNKNOWN	35.96	3800	J
11.	UNKNOWN	40.26	19000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB00301L

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385007

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2028

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/23/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4000	U
111-44-4	bis(2-Chloroethyl)ether	4000	U
95-57-8	2-Chlorophenol	4000	U
541-73-1	1,3-Dichlorobenzene	4000	U
106-46-7	1,4-Dichlorobenzene	4000	U
95-50-1	1,2-Dichlorobenzene	4000	U
95-48-7	2-Methylphenol	4000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	4000	U
106-44-5	4-Methylphenol	4000	U
621-64-7	N-Nitroso-di-n-propylamine	4000	U
67-72-1	Hexachloroethane	4000	U
98-95-3	Nitrobenzene	4000	U
78-59-1	Isophorone	4000	U
88-75-5	2-Nitrophenol	4000	U
105-67-9	2,4-Dimethylphenol	4000	U
111-91-1	bis(2-Chloroethoxy)methane	4000	U
120-83-2	2,4-Dichlorophenol	4000	U
120-82-1	1,2,4-Trichlorobenzene	4000	U
91-20-3	Naphthalene	4000	U
106-47-8	4-Chloroaniline	4000	U
87-68-3	Hexachlorobutadiene	4000	U
59-50-7	4-Chloro-3-methylphenol	4000	U
91-57-6	2-Methylnaphthalene	4000	U
77-47-4	Hexachlorocyclopentadiene	4000	U
88-06-2	2,4,6-Trichlorophenol	4000	U
95-95-4	2,4,5-Trichlorophenol	9600	U
91-58-7	2-Chloronaphthalene	4000	U
88-74-4	2-Nitroaniline	9600	U
131-11-3	Dimethylphthalate	4000	U
208-96-8	Acenaphthylene	4000	U
606-20-2	2,6-Dinitrotoluene	4000	U
99-09-2	3-Nitroaniline	9600	U
83-32-9	Acenaphthene	4000	U

BG

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB00301L

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385007

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2028

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/23/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	9600	U
100-02-7	4-Nitrophenol	9600	U
132-64-9	Dibenzofuran	4000	U
121-14-2	2,4-Dinitrotoluene	4000	U
84-66-2	Diethylphthalate	4000	U
7005-72-3	4-Chlorophenyl-phenylether	4000	U
86-73-7	Fluorene	4000	U
100-01-6	4-Nitroaniline	9600	U
534-52-1	4,6-Dinitro-2-methylphenol	9600	U
86-30-6	N-Nitrosodiphenylamine (1)	4000	U
101-55-3	4-Bromophenyl-phenylether	4000	U
118-74-1	Hexachlorobenzene	4000	U
87-86-5	Pentachlorophenol	9600	U
85-01-8	Phenanthrene	4000	U
120-12-7	Anthracene	4000	U
86-74-8	Carbazole	4000	U
84-74-2	Di-n-butylphthalate	4000	U
206-44-0	Fluoranthene	4000	U
129-00-0	Pyrene	4000	U
85-68-7	Butylbenzylphthalate	4000	U
91-94-1	3,3'-Dichlorobenzidine	4000	U
56-55-3	Benzo(a)anthracene	4000	U
218-01-9	Chrysene	4000	U
117-81-7	bis(2-Ethylhexyl)phthalate	4000	U
117-84-0	Di-n-octylphthalate	4000	U
205-99-2	Benzo(b)fluoranthene	4000	U
207-08-9	Benzo(k)fluoranthene	4000	U
50-32-8	Benzo(a)pyrene	4000	U
193-39-5	Indeno(1,2,3-cd)pyrene	4000	U
53-70-3	Dibenz(a,h)anthracene	4000	U
191-24-2	Benzo(g,h,i)perylene	4000	U

(1) - Cannot be separated from Diphenylamine

BG

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

LSB00301L

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385007

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2028

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/23/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 14

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	11.17	870	J
2. 27154-43-4	PIPERIDINONE	14.72	2300	J
3. 544-63-8	TETRADECANOIC ACID	23.94	8900	J
4.	UNKNOWN	26.42	7500	J
5.	UNKNOWN	26.54	9200	J
6. 57-10-3	HEXADECANOIC ACID	26.71	37000	J
7.	UNKNOWN	27.62	980	J
8.	UNKNOWN	27.82	1100	J
9.	UNKNOWN	28.92	35000	J
10.	UNKNOWN	29.09	9500	J
11.	UNKNOWN	30.89	850	J
12.	UNKNOWN	33.24	900	J
13.	UNKNOWN	35.96	2000	J
14.	UNKNOWN	40.29	35000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB00101L

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385006

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2027

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/23/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4000	U
111-44-4	bis(2-Chloroethyl)ether	4000	U
95-57-8	2-Chlorophenol	4000	U
541-73-1	1,3-Dichlorobenzene	4000	U
106-46-7	1,4-Dichlorobenzene	4000	U
95-50-1	1,2-Dichlorobenzene	4000	U
95-48-7	2-Methylphenol	4000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	4000	U
106-44-5	4-Methylphenol	4000	U
621-64-7	N-Nitroso-di-n-propylamine	4000	U
67-72-1	Hexachloroethane	4000	U
98-95-3	Nitrobenzene	4000	U
78-59-1	Isophorone	4000	U
88-75-5	2-Nitrophenol	4000	U
105-67-9	2,4-Dimethylphenol	4000	U
111-91-1	bis(2-Chloroethoxy)methane	4000	U
120-83-2	2,4-Dichlorophenol	4000	U
120-82-1	1,2,4-Trichlorobenzene	4000	U
91-20-3	Naphthalene	4000	U
106-47-8	4-Chloroaniline	4000	U
87-68-3	Hexachlorobutadiene	4000	U
59-50-7	4-Chloro-3-methylphenol	4000	U
91-57-6	2-Methylnaphthalene	4000	U
77-47-4	Hexachlorocyclopentadiene	4000	U
88-06-2	2,4,6-Trichlorophenol	4000	U
95-95-4	2,4,5-Trichlorophenol	9600	U
91-58-7	2-Chloronaphthalene	4000	U
88-74-4	2-Nitroaniline	9600	U
131-11-3	Dimethylphthalate	4000	U
208-96-8	Acenaphthylene	4000	U
606-20-2	2,6-Dinitrotoluene	4000	U
99-09-2	3-Nitroaniline	9600	U
83-32-9	Acenaphthene	4000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB00101L

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385006

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2027

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/23/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	9600	U
100-02-7	4-Nitrophenol	9600	U
132-64-9	Dibenzofuran	4000	U
121-14-2	2,4-Dinitrotoluene	4000	U
84-66-2	Diethylphthalate	4000	U
7005-72-3	4-Chlorophenyl-phenylether	4000	U
86-73-7	Fluorene	4000	U
100-01-6	4-Nitroaniline	9600	U
534-52-1	4,6-Dinitro-2-methylphenol	9600	U
86-30-6	N-Nitrosodiphenylamine (1)	4000	U
101-55-3	4-Bromophenyl-phenylether	4000	U
118-74-1	Hexachlorobenzene	4000	U
87-86-5	Pentachlorophenol	9600	U
85-01-8	Phenanthrene	4000	U
120-12-7	Anthracene	4000	U
86-74-8	Carbazole	4000	U
84-74-2	Di-n-butylphthalate	4000	U
206-44-0	Fluoranthene	4000	U
129-00-0	Pyrene	4000	U
85-68-7	Butylbenzylphthalate	4000	U
91-94-1	3,3'-Dichlorobenzidine	4000	U
56-55-3	Benzo(a)anthracene	4000	U
218-01-9	Chrysene	4000	U
117-81-7	bis(2-Ethylhexyl)phthalate	4000	U
117-84-0	Di-n-octylphthalate	4000	U
205-99-2	Benzo(b)fluoranthene	4000	U
207-08-9	Benzo(k)fluoranthene	4000	U
50-32-8	Benzo(a)pyrene	4000	U
193-39-5	Indeno(1,2,3-cd)pyrene	4000	U
53-70-3	Dibenz(a,h)anthracene	4000	U
191-24-2	Benzo(g,h,i)perylene	4000	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

LSB00101L

Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385006

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2027

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/23/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 12

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 107-88-0	1,3-BUTANEDIOL	4.82	2400	J
2.	UNKNOWN	11.17	2700	J
3. 27154-43-4	PIPERIDINONE	14.70	1100	J
4. 544-63-8	TETRADECANOIC ACID	23.92	6100	J
5.	UNKNOWN	25.27	1200	J
6.	UNKNOWN	26.42	9600	J
7.	UNKNOWN	26.54	7500	J
8. 57-10-3	HEXADECANOIC ACID	26.69	35000	J
9.	UNKNOWN	27.61	1000	J
10.	UNKNOWN	28.87	33000	J
11.	UNKNOWN	29.07	7100	J
12.	UNKNOWN	40.27	32000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB00501

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385005

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2030

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/23/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4000	U
111-44-4	bis(2-Chloroethyl)ether	4000	U
95-57-8	2-Chlorophenol	4000	U
541-73-1	1,3-Dichlorobenzene	4000	U
106-46-7	1,4-Dichlorobenzene	4000	U
95-50-1	1,2-Dichlorobenzene	4000	U
95-48-7	2-Methylphenol	4000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	4000	U
106-44-5	4-Methylphenol	4000	U
621-64-7	N-Nitroso-di-n-propylamine	4000	U
67-72-1	Hexachloroethane	4000	U
98-95-3	Nitrobenzene	4000	U
78-59-1	Isophorone	4000	U
88-75-5	2-Nitrophenol	4000	U
105-67-9	2,4-Dimethylphenol	4000	U
111-91-1	bis(2-Chloroethoxy)methane	4000	U
120-83-2	2,4-Dichlorophenol	4000	U
120-82-1	1,2,4-Trichlorobenzene	4000	U
91-20-3	Naphthalene	4000	U
106-47-8	4-Chloroaniline	4000	U
87-68-3	Hexachlorobutadiene	4000	U
59-50-7	4-Chloro-3-methylphenol	4000	U
91-57-6	2-Methylnaphthalene	4000	U
77-47-4	Hexachlorocyclopentadiene	4000	U
88-06-2	2,4,6-Trichlorophenol	4000	U
95-95-4	2,4,5-Trichlorophenol	9600	U
91-58-7	2-Chloronaphthalene	4000	U
88-74-4	2-Nitroaniline	9600	U
131-11-3	Dimethylphthalate	4000	U
208-96-8	Acenaphthylene	4000	U
606-20-2	2,6-Dinitrotoluene	4000	U
99-09-2	3-Nitroaniline	9600	U
83-32-9	Acenaphthene	4000	U

B6

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB00501

Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385005

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2030

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/23/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	9600	U
100-02-7	4-Nitrophenol	9600	U
132-64-9	Dibenzofuran	4000	U
121-14-2	2,4-Dinitrotoluene	4000	U
84-66-2	Diethylphthalate	4000	U
7005-72-3	4-Chlorophenyl-phenylether	4000	U
86-73-7	Fluorene	4000	U
100-01-6	4-Nitroaniline	9600	U
534-52-1	4,6-Dinitro-2-methylphenol	9600	U
86-30-6	N-Nitrosodiphenylamine (1)	4000	U
101-55-3	4-Bromophenyl-phenylether	4000	U
118-74-1	Hexachlorobenzene	4000	U
87-86-5	Pentachlorophenol	9600	U
85-01-8	Phenanthrene	4000	U
120-12-7	Anthracene	4000	U
86-74-8	Carbazole	4000	U
84-74-2	Di-n-butylphthalate	4000	U
206-44-0	Fluoranthene	4000	U
129-00-0	Pyrene	4000	U
85-68-7	Butylbenzylphthalate	4000	U
91-94-1	3,3'-Dichlorobenzidine	4000	U
56-55-3	Benzo(a)anthracene	4000	U
218-01-9	Chrysene	4000	U
117-81-7	bis(2-Ethylhexyl)phthalate	1500	J
117-84-0	Di-n-octylphthalate	4000	U
205-99-2	Benzo(b)fluoranthene	4000	U
207-08-9	Benzo(k)fluoranthene	4000	U
50-32-8	Benzo(a)pyrene	4000	U
193-39-5	Indeno(1,2,3-cd)pyrene	4000	U
53-70-3	Dibenz(a,h)anthracene	4000	U
191-24-2	Benzo(g,h,i)perylene	4000	U

(1) - Cannot be separated from Diphenylamine

B6

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

LSB00501

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385005

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2030

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/23/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 18733-57-8	SILANE, TRICHLOROEICOSYL-	22.75	6700	J
2. 629-78-7	HEPTADECANE	22.94	100000	J
3.	UNKNOWN	23.54	11000	J
4.	UNKNOWN	23.85	5200	J
5. 544-63-8	TETRADECANOIC ACID	24.00	28000	J
6. 1002-84-2	PENTADECANOIC ACID	25.34	18000	J
7.	UNKNOWN	25.46	8300	J
8. 112-53-8	1-DODECANOL	25.57	14000	J
9. 3913-02-8	1-OCTANOL, 2-BUTYL-	25.66	6800	J
10. 18733-57-8	SILANE, TRICHLOROEICOSYL-	25.91	8000	J
11.	UNKNOWN	26.52	110000	J
12. 57-10-3	HEXADECANOIC ACID	26.79	130000	J
13.	UNKNOWN	27.71	36000	J
14.	UNKNOWN	27.87	6600	J
15.	UNKNOWN	29.02	250000	J
16.	UNKNOWN	29.17	13000	J
17.	UNKNOWN	30.86	9200	J
18.	UNKNOWN	30.94	12000	J
19.	UNKNOWN	35.97	28000	J
20.	UNKNOWN	40.27	32000	J

B6

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB00401

Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385004

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN1999

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/22/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	990	U
111-44-4	bis(2-Chloroethyl)ether	990	U
95-57-8	2-Chlorophenol	990	U
541-73-1	1,3-Dichlorobenzene	990	U
106-46-7	1,4-Dichlorobenzene	990	U
95-50-1	1,2-Dichlorobenzene	990	U
95-48-7	2-Methylphenol	990	U
108-60-1	2,2'-oxybis(1-Chloropropane)	990	U
106-44-5	4-Methylphenol	990	U
621-64-7	N-Nitroso-di-n-propylamine	990	U
67-72-1	Hexachloroethane	990	U
98-95-3	Nitrobenzene	990	U
78-59-1	Isophorone	990	U
88-75-5	2-Nitrophenol	990	U
105-67-9	2,4-Dimethylphenol	990	U
111-91-1	bis(2-Chloroethoxy)methane	990	U
120-83-2	2,4-Dichlorophenol	990	U
120-82-1	1,2,4-Trichlorobenzene	990	U
91-20-3	Naphthalene	990	U
106-47-8	4-Chloroaniline	990	U
87-68-3	Hexachlorobutadiene	990	U
59-50-7	4-Chloro-3-methylphenol	990	U
91-57-6	2-Methylnaphthalene	990	U
77-47-4	Hexachlorocyclopentadiene	990	U
88-06-2	2,4,6-Trichlorophenol	990	U
95-95-4	2,4,5-Trichlorophenol	2400	U
91-58-7	2-Chloronaphthalene	990	U
88-74-4	2-Nitroaniline	2400	U
131-11-3	Dimethylphthalate	990	U
208-96-8	Acenaphthylene	990	U
606-20-2	2,6-Dinitrotoluene	990	U
99-09-2	3-Nitroaniline	2400	U
83-32-9	Acenaphthene	990	U

BG

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB00401

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385004

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN1999

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/22/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	2400	U
100-02-7	4-Nitrophenol	2400	U
132-64-9	Dibenzofuran	990	U
121-14-2	2,4-Dinitrotoluene	990	U
84-66-2	Diethylphthalate	990	U
7005-72-3	4-Chlorophenyl-phenylether	990	U
86-73-7	Fluorene	990	U
100-01-6	4-Nitroaniline	2400	U
534-52-1	4,6-Dinitro-2-methylphenol	2400	U
86-30-6	N-Nitrosodiphenylamine (1)	990	U
101-55-3	4-Bromophenyl-phenylether	990	U
118-74-1	Hexachlorobenzene	990	U
87-86-5	Pentachlorophenol	2400	U
85-01-8	Phenanthrene	990	U
120-12-7	Anthracene	990	U
86-74-8	Carbazole	990	U
84-74-2	Di-n-butylphthalate	990	U
206-44-0	Fluoranthene	990	U
129-00-0	Pyrene	990	U
85-68-7	Butylbenzylphthalate	990	U
91-94-1	3,3'-Dichlorobenzidine	990	U
56-55-3	Benzo(a)anthracene	990	U
218-01-9	Chrysene	990	U
117-81-7	bis(2-Ethylhexyl)phthalate	990	U
117-84-0	Di-n-octylphthalate	990	U
205-99-2	Benzo(b)fluoranthene	990	U
207-08-9	Benzo(k)fluoranthene	990	U
50-32-8	Benzo(a)pyrene	990	U
193-39-5	Indeno(1,2,3-cd)pyrene	990	U
53-70-3	Dibenz(a,h)anthracene	990	U
191-24-2	Benzo(g,h,i)perylene	990	U

(1) - Cannot be separated from Diphenylamine

B6

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

LSB00201

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385002

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN1997

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/22/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 12

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 930-68-7	2-CYCLOHEXEN-1-ONE	8.89	320	BJ
2. 111-90-0	ETHANOL, 2-(2-ETHOXYETHOXY)-	10.62	670	J
3.	UNKNOWN	11.14	2800	J
4. 931-17-9	1,2-CYCLOHEXANEDIOL	11.99	350	J
5.	UNKNOWN	14.35	250	J
6.	UNKNOWN	23.80	310	J
7.	UNKNOWN	26.29	980	J
8.	UNKNOWN	28.76	6400	J
9.	UNKNOWN	28.99	1500	J
10.	UNKNOWN	31.27	220	J
11.	UNKNOWN	35.59	600	J
12.	UNKNOWN	40.04	7000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S03053B1

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M3BN2051

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/24/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	800	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	800	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	800	U
83-32-9	Acenaphthene	330	U

B6

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S03053B1

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M3BN2051

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/24/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	800	U
100-02-7	4-Nitrophenol	800	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	800	U
534-52-1	4,6-Dinitro-2-methylphenol	800	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	800	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenz(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

B6

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S03053B1

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M3BN2051

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/24/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	11.09	68	J
2.	UNKNOWN	35.71	160	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S03053B2

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M3BN2066

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	800	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	800	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	800	U
83-32-9	Acenaphthene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S03053B2

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M3BN2066

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	800	U
100-02-7	4-Nitrophenol	800	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	800	U
534-52-1	4,6-Dinitro-2-methylphenol	800	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	800	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenz(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S03053B2

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M3BN2066

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	11.09	72	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S03183B3

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M3BN2076

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	800	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	800	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	800	U
83-32-9	Acenaphthene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S03183B3

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M3BN2076

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	800	U
100-02-7	4-Nitrophenol	800	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	800	U
534-52-1	4,6-Dinitro-2-methylphenol	800	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	800	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenz(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S03183B3

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M3BN2076

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.80	73	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S03053B1

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M1BN1867

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/27/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	800	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	800	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	800	U
83-32-9	Acenaphthene	330	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S03053B1

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M1BN1867

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/27/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	800	U
100-02-7	4-Nitrophenol	800	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	800	U
534-52-1	4,6-Dinitro-2-methylphenol	800	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	800	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenz(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S03053B1

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M1BN1867

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/27/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.48	290	J
2.	UNKNOWN	8.99	180	J
3.	UNKNOWN	9.52	440	J
4.	UNKNOWN	30.16	230	J

b6

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S03103B2

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M1BN1866

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/10/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/27/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	800	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	800	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	800	U
83-32-9	Acenaphthene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S03103B2

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M1BN1866

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/10/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/27/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	800	U
100-02-7	4-Nitrophenol	800	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	800	U
534-52-1	4,6-Dinitro-2-methylphenol	800	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	800	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenz(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S03103B2

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: METHOD-BLANK

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M1BN1866

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/10/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/27/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.38	280	J
2.	UNKNOWN	5.80	290	J
3. 112-36-7	ETHANE, 1,1'-OXYBIS[2-ETHOXY	9.05	180	BJ
4.	UNKNOWN	9.49	190	J
5. 541-02-6	CYCLOPENTASILOXANE, DECAMETH	11.72	190	BJ
6. 540-97-6	CYCLOHEXASILOXANE, DODECAMET	14.35	180	BJ

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB001-01L

Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410014

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 93M3BN2074

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4000	U
111-44-4	bis(2-Chloroethyl)ether	4000	U
95-57-8	2-Chlorophenol	4000	U
541-73-1	1,3-Dichlorobenzene	4000	U
106-46-7	1,4-Dichlorobenzene	4000	U
95-50-1	1,2-Dichlorobenzene	4000	U
95-48-7	2-Methylphenol	4000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	4000	U
106-44-5	4-Methylphenol	690	J
621-64-7	N-Nitroso-di-n-propylamine	4000	U
67-72-1	Hexachloroethane	4000	U
98-95-3	Nitrobenzene	4000	U
78-59-1	Isophorone	4000	U
88-75-5	2-Nitrophenol	4000	U
105-67-9	2,4-Dimethylphenol	4000	U
111-91-1	bis(2-Chloroethoxy)methane	4000	U
120-83-2	2,4-Dichlorophenol	4000	U
120-82-1	1,2,4-Trichlorobenzene	4000	U
91-20-3	Naphthalene	4000	U
106-47-8	4-Chloroaniline	4000	U
87-68-3	Hexachlorobutadiene	4000	U
59-50-7	4-Chloro-3-methylphenol	4000	U
91-57-6	2-Methylnaphthalene	4000	U
77-47-4	Hexachlorocyclopentadiene	4000	U
88-06-2	2,4,6-Trichlorophenol	4000	U
95-95-4	2,4,5-Trichlorophenol	9600	U
91-58-7	2-Chloronaphthalene	4000	U
88-74-4	2-Nitroaniline	9600	U
131-11-3	Dimethylphthalate	4000	U
208-96-8	Acenaphthylene	4000	U
606-20-2	2,6-Dinitrotoluene	4000	U
99-09-2	3-Nitroaniline	9600	U
83-32-9	Acenaphthene	4000	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB001-01L

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410014

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 93M3BN2074

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	9600	U
100-02-7	4-Nitrophenol	9600	U
132-64-9	Dibenzofuran	4000	U
121-14-2	2,4-Dinitrotoluene	4000	U
84-66-2	Diethylphthalate	4000	U
7005-72-3	4-Chlorophenyl-phenylether	4000	U
86-73-7	Fluorene	4000	U
100-01-6	4-Nitroaniline	9600	U
534-52-1	4,6-Dinitro-2-methylphenol	9600	U
86-30-6	N-Nitrosodiphenylamine (1)	4000	U
101-55-3	4-Bromophenyl-phenylether	4000	U
118-74-1	Hexachlorobenzene	4000	U
87-86-5	Pentachlorophenol	9600	U
85-01-8	Phenanthrene	4000	U
120-12-7	Anthracene	4000	U
86-74-8	Carbazole	4000	U
84-74-2	Di-n-butylphthalate	4000	U
206-44-0	Fluoranthene	4000	U
129-00-0	Pyrene	4000	U
85-68-7	Butylbenzylphthalate	4000	U
91-94-1	3,3'-Dichlorobenzidine	4000	U
56-55-3	Benzo(a)anthracene	4000	U
218-01-9	Chrysene	4000	U
117-81-7	bis(2-Ethylhexyl)phthalate	4000	U
117-84-0	Di-n-octylphthalate	4000	U
205-99-2	Benzo(b)fluoranthene	4000	U
207-08-9	Benzo(k)fluoranthene	4000	U
50-32-8	Benzo(a)pyrene	4000	U
193-39-5	Indeno(1,2,3-cd)pyrene	4000	U
53-70-3	Dibenz(a,h)anthracene	4000	U
191-24-2	Benzo(g,h,i)perylene	4000	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

LSB001-01L

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410014

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 93M3BN2074

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 107-88-0	1,3-BUTANEDIOL	4.77	4100	J
2. 107-92-6	BUTANOIC ACID	5.85	3900	J
3.	UNKNOWN	7.23	1100	J
4. 646-07-1	PENTANOIC ACID, 4-METHYL-	9.64	2900	J
5. 104-76-7	1-HEXANOL, 2-ETHYL-	11.10	1100	J
6. 616-04-6	2,4-IMIDAZOLIDINEDIONE, 1-ME	15.90	1200	J
7. 57-10-3	HEXADECANOIC ACID	26.36	1900	J
8.	UNKNOWN	35.74	1200	J
9.	UNKNOWN	39.96	5800	J

B6

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB007-01L

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410013

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 93M3BN2073

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4000	U
111-44-4	bis(2-Chloroethyl)ether	4000	U
95-57-8	2-Chlorophenol	4000	U
541-73-1	1,3-Dichlorobenzene	4000	U
106-46-7	1,4-Dichlorobenzene	4000	U
95-50-1	1,2-Dichlorobenzene	4000	U
95-48-7	2-Methylphenol	4000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	4000	U
106-44-5	4-Methylphenol	4000	U
621-64-7	N-Nitroso-di-n-propylamine	4000	U
67-72-1	Hexachloroethane	4000	U
98-95-3	Nitrobenzene	4000	U
78-59-1	Isophorone	4000	U
88-75-5	2-Nitrophenol	4000	U
105-67-9	2,4-Dimethylphenol	4000	U
111-91-1	bis(2-Chloroethoxy)methane	4000	U
120-83-2	2,4-Dichlorophenol	4000	U
120-82-1	1,2,4-Trichlorobenzene	4000	U
91-20-3	Naphthalene	4000	U
106-47-8	4-Chloroaniline	4000	U
87-68-3	Hexachlorobutadiene	4000	U
59-50-7	4-Chloro-3-methylphenol	4000	U
91-57-6	2-Methylnaphthalene	4000	U
77-47-4	Hexachlorocyclopentadiene	4000	U
88-06-2	2,4,6-Trichlorophenol	4000	U
95-95-4	2,4,5-Trichlorophenol	9600	U
91-58-7	2-Chloronaphthalene	4000	U
88-74-4	2-Nitroaniline	9600	U
131-11-3	Dimethylphthalate	4000	U
208-96-8	Acenaphthylene	4000	U
606-20-2	2,6-Dinitrotoluene	4000	U
99-09-2	3-Nitroaniline	9600	U
83-32-9	Acenaphthene	4000	U

BG

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB007-01L

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410013

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 93M3BN2073

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	9600	U
100-02-7	4-Nitrophenol	9600	U
132-64-9	Dibenzofuran	4000	U
121-14-2	2,4-Dinitrotoluene	4000	U
84-66-2	Diethylphthalate	4000	U
7005-72-3	4-Chlorophenyl-phenylether	4000	U
86-73-7	Fluorene	4000	U
100-01-6	4-Nitroaniline	9600	U
534-52-1	4,6-Dinitro-2-methylphenol	9600	U
86-30-6	N-Nitrosodiphenylamine (1)	4000	U
101-55-3	4-Bromophenyl-phenylether	4000	U
118-74-1	Hexachlorobenzene	4000	U
87-86-5	Pentachlorophenol	9600	U
85-01-8	Phenanthrene	4000	U
120-12-7	Anthracene	4000	U
86-74-8	Carbazole	4000	U
84-74-2	Di-n-butylphthalate	4000	U
206-44-0	Fluoranthene	4000	U
129-00-0	Pyrene	4000	U
85-68-7	Butylbenzylphthalate	4000	U
91-94-1	3,3'-Dichlorobenzidine	4000	U
56-55-3	Benzo(a)anthracene	4000	U
218-01-9	Chrysene	4000	U
117-81-7	bis(2-Ethylhexyl)phthalate	4000	U
117-84-0	Di-n-octylphthalate	4000	U
205-99-2	Benzo(b)fluoranthene	4000	U
207-08-9	Benzo(k)fluoranthene	4000	U
50-32-8	Benzo(a)pyrene	4000	U
193-39-5	Indeno(1,2,3-cd)pyrene	4000	U
53-70-3	Dibenz(a,h)anthracene	4000	U
191-24-2	Benzo(g,h,i)perylene	4000	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CLB007-01L

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410013

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 93M3BN2073

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 629-78-7	HEPTADECANE	22.75	14000	J
2. 1002-17-1	DECANE, 2,9-DIMETHYL-	23.64	5200	J
3.	UNKNOWN	23.74	5900	J
4. 544-63-8	TETRADECANOIC ACID	23.87	15000	J
5. 1002-84-2	PENTADECANOIC ACID	25.19	7800	J
6.	UNKNOWN	26.37	23000	J
7. 57-10-3	HEXADECANOIC ACID	26.64	69000	J
8.	UNKNOWN	27.71	3800	J
9.	UNKNOWN	28.86	120000	J
10. 57-11-4	OCTADECANOIC ACID	28.97	10000	J
11.	UNKNOWN	30.67	11000	J
12.	UNKNOWN	30.76	11000	J
13.	UNKNOWN	31.52	5400	J
14.	UNKNOWN	31.64	15000	J
15.	UNKNOWN	31.71	13000	J
16.	UNKNOWN	33.26	15000	J
17.	UNKNOWN	33.36	18000	J
18.	UNKNOWN	35.21	9300	J
19.	UNKNOWN	35.76	5600	J
20.	UNKNOWN	40.09	46000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB005-01L

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410012

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 93M3BN2072

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4000	U
111-44-4	bis(2-Chloroethyl)ether	4000	U
95-57-8	2-Chlorophenol	4000	U
541-73-1	1,3-Dichlorobenzene	4000	U
106-46-7	1,4-Dichlorobenzene	4000	U
95-50-1	1,2-Dichlorobenzene	4000	U
95-48-7	2-Methylphenol	4000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	4000	U
106-44-5	4-Methylphenol	4000	U
621-64-7	N-Nitroso-di-n-propylamine	4000	U
67-72-1	Hexachloroethane	4000	U
98-95-3	Nitrobenzene	4000	U
78-59-1	Isophorone	4000	U
88-75-5	2-Nitrophenol	4000	U
105-67-9	2,4-Dimethylphenol	4000	U
111-91-1	bis(2-Chloroethoxy)methane	4000	U
120-83-2	2,4-Dichlorophenol	4000	U
120-82-1	1,2,4-Trichlorobenzene	4000	U
91-20-3	Naphthalene	4000	U
106-47-8	4-Chloroaniline	4000	U
87-68-3	Hexachlorobutadiene	4000	U
59-50-7	4-Chloro-3-methylphenol	4000	U
91-57-6	2-Methylnaphthalene	4000	U
77-47-4	Hexachlorocyclopentadiene	4000	U
88-06-2	2,4,6-Trichlorophenol	4000	U
95-95-4	2,4,5-Trichlorophenol	9600	U
91-58-7	2-Chloronaphthalene	4000	U
88-74-4	2-Nitroaniline	9600	U
131-11-3	Dimethylphthalate	4000	U
208-96-8	Acenaphthylene	4000	U
606-20-2	2,6-Dinitrotoluene	4000	U
99-09-2	3-Nitroaniline	9600	U
83-32-9	Acenaphthene	4000	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB005-01L

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410012

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 93M3BN2072

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	9600	U
100-02-7	4-Nitrophenol	9600	U
132-64-9	Dibenzofuran	4000	U
121-14-2	2,4-Dinitrotoluene	4000	U
84-66-2	Diethylphthalate	4000	U
7005-72-3	4-Chlorophenyl-phenylether	4000	U
86-73-7	Fluorene	4000	U
100-01-6	4-Nitroaniline	9600	U
534-52-1	4,6-Dinitro-2-methylphenol	9600	U
86-30-6	N-Nitrosodiphenylamine (1)	4000	U
101-55-3	4-Bromophenyl-phenylether	4000	U
118-74-1	Hexachlorobenzene	4000	U
87-86-5	Pentachlorophenol	9600	U
85-01-8	Phenanthrene	4000	U
120-12-7	Anthracene	4000	U
86-74-8	Carbazole	4000	U
84-74-2	Di-n-butylphthalate	4000	U
206-44-0	Fluoranthene	4000	U
129-00-0	Pyrene	4000	U
85-68-7	Butylbenzylphthalate	4000	U
91-94-1	3,3'-Dichlorobenzidine	4000	U
56-55-3	Benzo(a)anthracene	4000	U
218-01-9	Chrysene	4000	U
117-81-7	bis(2-Ethylhexyl)phthalate	4000	U
117-84-0	Di-n-octylphthalate	4000	U
205-99-2	Benzo(b)fluoranthene	4000	U
207-08-9	Benzo(k)fluoranthene	4000	U
50-32-8	Benzo(a)pyrene	4000	U
193-39-5	Indeno(1,2,3-cd)pyrene	4000	U
53-70-3	Dibenz(a,h)anthracene	4000	U
191-24-2	Benzo(g,h,i)perylene	4000	U

(1) - Cannot be separated from Diphenylamine

BG

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CLB005-01L

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410012

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 93M3BN2072

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 18

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 107-88-0	1,3-BUTANEDIOL	4.73	1600	J
2. 4798-44-1	1-HEXEN-3-OL	9.95	880	J
3. 52097-85-5	CYCLOBUTENE, 2-PROPENYLIDENE	13.04	2300	J
4. 27154-43-4	PIPERIDINONE	14.59	1600	J
5. 629-78-7	HEPTADECANE	22.75	12000	J
6.	UNKNOWN	23.62	2600	J
7. 544-63-8	TETRADECANOIC ACID	23.77	6400	J
8. 1002-84-2	PENTADECANOIC ACID	25.09	1900	J
9.	UNKNOWN	26.24	6200	J
10.	UNKNOWN	26.34	7700	J
11. 57-10-3	HEXADECANOIC ACID	26.49	23000	J
12.	UNKNOWN	28.64	15000	J
13.	UNKNOWN	28.84	3300	J
14.	UNKNOWN	31.61	1100	J
15.	UNKNOWN	33.22	1300	J
16.	UNKNOWN	34.46	830	J
17.	UNKNOWN	35.74	2200	J
18.	UNKNOWN	39.99	25000	J

B6

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB007-01

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410011

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 93M3BN2071

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4000	U
111-44-4	bis(2-Chloroethyl)ether	4000	U
95-57-8	2-Chlorophenol	4000	U
541-73-1	1,3-Dichlorobenzene	4000	U
106-46-7	1,4-Dichlorobenzene	4000	U
95-50-1	1,2-Dichlorobenzene	4000	U
95-48-7	2-Methylphenol	4000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	4000	U
106-44-5	4-Methylphenol	4000	U
621-64-7	N-Nitroso-di-n-propylamine	4000	U
67-72-1	Hexachloroethane	4000	U
98-95-3	Nitrobenzene	4000	U
78-59-1	Isophorone	4000	U
88-75-5	2-Nitrophenol	4000	U
105-67-9	2,4-Dimethylphenol	4000	U
111-91-1	bis(2-Chloroethoxy)methane	4000	U
120-83-2	2,4-Dichlorophenol	4000	U
120-82-1	1,2,4-Trichlorobenzene	4000	U
91-20-3	Naphthalene	4000	U
106-47-8	4-Chloroaniline	4000	U
87-68-3	Hexachlorobutadiene	4000	U
59-50-7	4-Chloro-3-methylphenol	4000	U
91-57-6	2-Methylnaphthalene	4000	U
77-47-4	Hexachlorocyclopentadiene	4000	U
88-06-2	2,4,6-Trichlorophenol	4000	U
95-95-4	2,4,5-Trichlorophenol	9600	U
91-58-7	2-Chloronaphthalene	4000	U
88-74-4	2-Nitroaniline	9600	U
131-11-3	Dimethylphthalate	4000	U
208-96-8	Acenaphthylene	4000	U
606-20-2	2,6-Dinitrotoluene	4000	U
99-09-2	3-Nitroaniline	9600	U
83-32-9	Acenaphthene	4000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB007-01

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410011

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 93M3BN2071

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	9600	U
100-02-7	4-Nitrophenol	9600	U
132-64-9	Dibenzofuran	4000	U
121-14-2	2,4-Dinitrotoluene	4000	U
84-66-2	Diethylphthalate	4000	U
7005-72-3	4-Chlorophenyl-phenylether	4000	U
86-73-7	Fluorene	4000	U
100-01-6	4-Nitroaniline	9600	U
534-52-1	4,6-Dinitro-2-methylphenol	9600	U
86-30-6	N-Nitrosodiphenylamine (1)	4000	U
101-55-3	4-Bromophenyl-phenylether	4000	U
118-74-1	Hexachlorobenzene	4000	U
87-86-5	Pentachlorophenol	9600	U
85-01-8	Phenanthrene	4000	U
120-12-7	Anthracene	4000	U
86-74-8	Carbazole	4000	U
84-74-2	Di-n-butylphthalate	4000	U
206-44-0	Fluoranthene	4000	U
129-00-0	Pyrene	4000	U
85-68-7	Butylbenzylphthalate	4000	U
91-94-1	3,3'-Dichlorobenzidine	4000	U
56-55-3	Benzo(a)anthracene	4000	U
218-01-9	Chrysene	4000	U
117-81-7	bis(2-Ethylhexyl)phthalate	4000	U
117-84-0	Di-n-octylphthalate	4000	U
205-99-2	Benzo(b)fluoranthene	4000	U
207-08-9	Benzo(k)fluoranthene	4000	U
50-32-8	Benzo(a)pyrene	4000	U
193-39-5	Indeno(1,2,3-cd)pyrene	4000	U
53-70-3	Dibenz(a,h)anthracene	4000	U
191-24-2	Benzo(g,h,i)perylene	4000	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CLB007-01

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410011

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 93M3BN2071

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 107-88-0	1,3-BUTANEDIOL	4.77	3900	J
2. 629-62-9	PENTADECANE	22.75	990	J
3. 544-63-8	TETRADECANOIC ACID	23.74	2200	J
4.	UNKNOWN	26.19	1200	J
5.	UNKNOWN	26.31	2100	J
6. 57-10-3	HEXADECANOIC ACID	26.44	9400	J
7.	UNKNOWN	28.64	2400	J
8.	UNKNOWN	28.82	810	J
9.	UNKNOWN	35.76	1400	J
10.	UNKNOWN	39.96	8200	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB006-01

Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410010

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 93M3BN2070

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4000	U
111-44-4	bis(2-Chloroethyl)ether	4000	U
95-57-8	2-Chlorophenol	4000	U
541-73-1	1,3-Dichlorobenzene	4000	U
106-46-7	1,4-Dichlorobenzene	4000	U
95-50-1	1,2-Dichlorobenzene	4000	U
95-48-7	2-Methylphenol	4000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	4000	U
106-44-5	4-Methylphenol	4000	U
621-64-7	N-Nitroso-di-n-propylamine	4000	U
67-72-1	Hexachloroethane	4000	U
98-95-3	Nitrobenzene	4000	U
78-59-1	Isophorone	4000	U
88-75-5	2-Nitrophenol	4000	U
105-67-9	2,4-Dimethylphenol	4000	U
111-91-1	bis(2-Chloroethoxy)methane	4000	U
120-83-2	2,4-Dichlorophenol	4000	U
120-82-1	1,2,4-Trichlorobenzene	4000	U
91-20-3	Naphthalene	4000	U
106-47-8	4-Chloroaniline	4000	U
87-68-3	Hexachlorobutadiene	4000	U
59-50-7	4-Chloro-3-methylphenol	4000	U
91-57-6	2-Methylnaphthalene	4000	U
77-47-4	Hexachlorocyclopentadiene	4000	U
88-06-2	2,4,6-Trichlorophenol	4000	U
95-95-4	2,4,5-Trichlorophenol	9600	U
91-58-7	2-Chloronaphthalene	4000	U
88-74-4	2-Nitroaniline	9600	U
131-11-3	Dimethylphthalate	4000	U
208-96-8	Acenaphthylene	4000	U
606-20-2	2,6-Dinitrotoluene	4000	U
99-09-2	3-Nitroaniline	9600	U
83-32-9	Acenaphthene	4000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB006-01

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410010

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 93M3BN2070

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	9600	U
100-02-7	4-Nitrophenol	9600	U
132-64-9	Dibenzofuran	4000	U
121-14-2	2,4-Dinitrotoluene	4000	U
84-66-2	Diethylphthalate	4000	U
7005-72-3	4-Chlorophenyl-phenylether	4000	U
86-73-7	Fluorene	4000	U
100-01-6	4-Nitroaniline	9600	U
534-52-1	4,6-Dinitro-2-methylphenol	9600	U
86-30-6	N-Nitrosodiphenylamine (1)	4000	U
101-55-3	4-Bromophenyl-phenylether	4000	U
118-74-1	Hexachlorobenzene	4000	U
87-86-5	Pentachlorophenol	9600	U
85-01-8	Phenanthrene	4000	U
120-12-7	Anthracene	4000	U
86-74-8	Carbazole	4000	U
84-74-2	Di-n-butylphthalate	4000	U
206-44-0	Fluoranthene	4000	U
129-00-0	Pyrene	4000	U
85-68-7	Butylbenzylphthalate	4000	U
91-94-1	3,3'-Dichlorobenzidine	4000	U
56-55-3	Benzo(a)anthracene	4000	U
218-01-9	Chrysene	4000	U
117-81-7	bis(2-Ethylhexyl)phthalate	4000	U
117-84-0	Di-n-octylphthalate	4000	U
205-99-2	Benzo(b)fluoranthene	4000	U
207-08-9	Benzo(k)fluoranthene	4000	U
50-32-8	Benzo(a)pyrene	4000	U
193-39-5	Indeno(1,2,3-cd)pyrene	4000	U
53-70-3	Dibenz(a,h)anthracene	4000	U
191-24-2	Benzo(g,h,i)perylene	4000	U

(1) - Cannot be separated from Diphenylamine

B6

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CLB006-01

Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410010

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 93M3BN2070

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	9.95	1100	J
2.	27154-43-4	PIPERIDINONE	14.62	2400	J
3.	97-78-9	GLYCINE, N-METHYL-N-(1-OXODO	20.85	1700	J
4.	629-78-7	HEPTADECANE	22.75	31000	J
5.	1560-89-0	HEPTADECANE, 2-METHYL-	23.62	6600	J
6.	544-63-8	TETRADECANOIC ACID	23.79	9800	J
7.		UNKNOWN	24.45	1200	J
8.		UNKNOWN	24.59	1200	J
9.	1002-84-2	PENTADECANOIC ACID	25.11	3200	J
10.		UNKNOWN	26.26	9300	J
11.		UNKNOWN	26.39	16000	J
12.	57-10-3	HEXADECANOIC ACID	26.54	35000	J
13.		UNKNOWN	27.42	1600	J
14.	506-12-7	HEPTADECANOIC ACID	27.62	1800	J
15.		UNKNOWN	28.71	32000	J
16.		UNKNOWN	28.86	4700	J
17.		UNKNOWN	30.62	1400	J
18.		UNKNOWN	30.72	1400	J
19.		UNKNOWN	35.72	5300	J
20.		UNKNOWN	39.96	23000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB005-01

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410009

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 93M3BN2069

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4000	U
111-44-4	bis(2-Chloroethyl)ether	4000	U
95-57-8	2-Chlorophenol	4000	U
541-73-1	1,3-Dichlorobenzene	4000	U
106-46-7	1,4-Dichlorobenzene	4000	U
95-50-1	1,2-Dichlorobenzene	4000	U
95-48-7	2-Methylphenol	4000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	4000	U
106-44-5	4-Methylphenol	4000	U
621-64-7	N-Nitroso-di-n-propylamine	4000	U
67-72-1	Hexachloroethane	4000	U
98-95-3	Nitrobenzene	4000	U
78-59-1	Isophorone	4000	U
88-75-5	2-Nitrophenol	4000	U
105-67-9	2,4-Dimethylphenol	4000	U
111-91-1	bis(2-Chloroethoxy)methane	4000	U
120-83-2	2,4-Dichlorophenol	4000	U
120-82-1	1,2,4-Trichlorobenzene	4000	U
91-20-3	Naphthalene	4000	U
106-47-8	4-Chloroaniline	4000	U
87-68-3	Hexachlorobutadiene	4000	U
59-50-7	4-Chloro-3-methylphenol	4000	U
91-57-6	2-Methylnaphthalene	4000	U
77-47-4	Hexachlorocyclopentadiene	4000	U
88-06-2	2,4,6-Trichlorophenol	4000	U
95-95-4	2,4,5-Trichlorophenol	9600	U
91-58-7	2-Chloronaphthalene	4000	U
88-74-4	2-Nitroaniline	9600	U
131-11-3	Dimethylphthalate	4000	U
208-96-8	Acenaphthylene	4000	U
606-20-2	2,6-Dinitrotoluene	4000	U
99-09-2	3-Nitroaniline	9600	U
83-32-9	Acenaphthene	4000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB005-01

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410009

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 93M3BN2069

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	9600	U
100-02-7	4-Nitrophenol	9600	U
132-64-9	Dibenzofuran	4000	U
121-14-2	2,4-Dinitrotoluene	4000	U
84-66-2	Diethylphthalate	4000	U
7005-72-3	4-Chlorophenyl-phenylether	4000	U
86-73-7	Fluorene	4000	U
100-01-6	4-Nitroaniline	9600	U
534-52-1	4,6-Dinitro-2-methylphenol	9600	U
86-30-6	N-Nitrosodiphenylamine (1)	4000	U
101-55-3	4-Bromophenyl-phenylether	4000	U
118-74-1	Hexachlorobenzene	4000	U
87-86-5	Pentachlorophenol	9600	U
85-01-8	Phenanthrene	4000	U
120-12-7	Anthracene	4000	U
86-74-8	Carbazole	4000	U
84-74-2	Di-n-butylphthalate	4000	U
206-44-0	Fluoranthene	4000	U
129-00-0	Pyrene	4000	U
85-68-7	Butylbenzylphthalate	4000	U
91-94-1	3,3'-Dichlorobenzidine	4000	U
56-55-3	Benzo(a)anthracene	4000	U
218-01-9	Chrysene	4000	U
117-81-7	bis(2-Ethylhexyl)phthalate	4000	U
117-84-0	Di-n-octylphthalate	4000	U
205-99-2	Benzo(b)fluoranthene	4000	U
207-08-9	Benzo(k)fluoranthene	4000	U
50-32-8	Benzo(a)pyrene	4000	U
193-39-5	Indeno(1,2,3-cd)pyrene	4000	U
53-70-3	Dibenz(a,h)anthracene	4000	U
191-24-2	Benzo(g,h,i)perylene	4000	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CLB005-01

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410009

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 93M3BN2069

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 107-88-0	1,3-BUTANEDIOL	4.77	1900	J
2. 629-62-9	PENTADECANE	22.77	4500	J
3.	UNKNOWN	23.65	920	J
4. 544-63-8	TETRADECANOIC ACID	23.75	2800	J
5.	UNKNOWN	26.22	3000	J
6.	UNKNOWN	26.32	3100	J
7. 57-10-3	HEXADECANOIC ACID	26.46	9600	J
8.	UNKNOWN	28.67	6400	J
9.	UNKNOWN	28.82	830	J
10.	UNKNOWN	35.76	1700	J
11.	UNKNOWN	39.97	8700	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB004L

Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410008

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2077

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2000	U
111-44-4	bis(2-Chloroethyl)ether	2000	U
95-57-8	2-Chlorophenol	2000	U
541-73-1	1,3-Dichlorobenzene	2000	U
106-46-7	1,4-Dichlorobenzene	2000	U
95-50-1	1,2-Dichlorobenzene	2000	U
95-48-7	2-Methylphenol	2000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	2000	U
106-44-5	4-Methylphenol	2000	U
621-64-7	N-Nitroso-di-n-propylamine	2000	U
67-72-1	Hexachloroethane	2000	U
98-95-3	Nitrobenzene	2000	U
78-59-1	Isophorone	2000	U
88-75-5	2-Nitrophenol	2000	U
105-67-9	2,4-Dimethylphenol	2000	U
111-91-1	bis(2-Chloroethoxy)methane	2000	U
120-83-2	2,4-Dichlorophenol	2000	U
120-82-1	1,2,4-Trichlorobenzene	2000	U
91-20-3	Naphthalene	2000	U
106-47-8	4-Chloroaniline	2000	U
87-68-3	Hexachlorobutadiene	2000	U
59-50-7	4-Chloro-3-methylphenol	2000	U
91-57-6	2-Methylnaphthalene	2000	U
77-47-4	Hexachlorocyclopentadiene	2000	U
88-06-2	2,4,6-Trichlorophenol	2000	U
95-95-4	2,4,5-Trichlorophenol	4800	U
91-58-7	2-Chloronaphthalene	2000	U
88-74-4	2-Nitroaniline	4800	U
131-11-3	Dimethylphthalate	2000	U
208-96-8	Acenaphthylene	2000	U
606-20-2	2,6-Dinitrotoluene	2000	U
99-09-2	3-Nitroaniline	4800	U
83-32-9	Acenaphthene	2000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB004L

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410008

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2077

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	4800	U
100-02-7	4-Nitrophenol	4800	U
132-64-9	Dibenzofuran	2000	U
121-14-2	2,4-Dinitrotoluene	2000	U
84-66-2	Diethylphthalate	2000	U
7005-72-3	4-Chlorophenyl-phenylether	2000	U
86-73-7	Fluorene	2000	U
100-01-6	4-Nitroaniline	4800	U
534-52-1	4,6-Dinitro-2-methylphenol	4800	U
86-30-6	N-Nitrosodiphenylamine (1)	2000	U
101-55-3	4-Bromophenyl-phenylether	2000	U
118-74-1	Hexachlorobenzene	2000	U
87-86-5	Pentachlorophenol	4800	U
85-01-8	Phenanthrene	2000	U
120-12-7	Anthracene	2000	U
86-74-8	Carbazole	2000	U
84-74-2	Di-n-butylphthalate	2000	U
206-44-0	Fluoranthene	2000	U
129-00-0	Pyrene	2000	U
85-68-7	Butylbenzylphthalate	2000	U
91-94-1	3,3'-Dichlorobenzidine	2000	U
56-55-3	Benzo(a)anthracene	2000	U
218-01-9	Chrysene	2000	U
117-81-7	bis(2-Ethylhexyl)phthalate	2000	U
117-84-0	Di-n-octylphthalate	2000	U
205-99-2	Benzo(b)fluoranthene	2000	U
207-08-9	Benzo(k)fluoranthene	2000	U
50-32-8	Benzo(a)pyrene	2000	U
193-39-5	Indeno(1,2,3-cd)pyrene	2000	U
53-70-3	Dibenz(a,h)anthracene	2000	U
191-24-2	Benzo(g,h,i)perylene	2000	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CLB004L

Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410008

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2077

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 108-88-3	TOLUENE	4.25	62000	J
2. 107-88-0	1,3-BUTANEDIOL	4.82	4200	J
3. 107-88-0	1,3-BUTANEDIOL	5.08	1600	J
4.	UNKNOWN	14.82	1400	J
5.	UNKNOWN	16.64	920	J
6.	UNKNOWN	18.10	1700	J
7.	UNKNOWN	18.94	4700	J
8. 97-78-9	GLYCINE, N-METHYL-N-(1-OXODO	20.90	1100	J
9. 544-63-8	TETRADECANOIC ACID	23.70	5700	J
10. 544-63-8	TETRADECANOIC ACID	23.87	9600	J
11. 1002-84-2	PENTADECANOIC	25.17	3300	J
12.	UNKNOWN	26.37	37000	J
13. 57-10-3	HEXADECANOIC ACID	26.64	23000	J
14.	UNKNOWN	27.49	1300	J
15.	UNKNOWN	27.71	1700	J
16.	UNKNOWN	28.82	57000	J
17.	UNKNOWN	28.99	6400	J
18.	UNKNOWN	29.24	1400	J
19.	UNKNOWN	30.71	4200	J
20.	UNKNOWN	39.96	9100	J

BC

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB003L

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410007

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M1BN1870

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/27/93

Injection Volume: 2.0(uL) Dilution Factor: 50.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	50000	U
111-44-4	bis(2-Chloroethyl)ether	50000	U
95-57-8	2-Chlorophenol	50000	U
541-73-1	1,3-Dichlorobenzene	50000	U
106-46-7	1,4-Dichlorobenzene	50000	U
95-50-1	1,2-Dichlorobenzene	50000	U
95-48-7	2-Methylphenol	50000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	50000	U
106-44-5	4-Methylphenol	50000	U
621-64-7	N-Nitroso-di-n-propylamine	50000	U
67-72-1	Hexachloroethane	50000	U
98-95-3	Nitrobenzene	50000	U
78-59-1	Isophorone	50000	U
88-75-5	2-Nitrophenol	50000	U
105-67-9	2,4-Dimethylphenol	50000	U
111-91-1	bis(2-Chloroethoxy)methane	50000	U
120-83-2	2,4-Dichlorophenol	50000	U
120-82-1	1,2,4-Trichlorobenzene	50000	U
91-20-3	Naphthalene	50000	U
106-47-8	4-Chloroaniline	50000	U
87-68-3	Hexachlorobutadiene	50000	U
59-50-7	4-Chloro-3-methylphenol	50000	U
91-57-6	2-Methylnaphthalene	50000	U
77-47-4	Hexachlorocyclopentadiene	50000	U
88-06-2	2,4,6-Trichlorophenol	50000	U
95-95-4	2,4,5-Trichlorophenol	120000	U
91-58-7	2-Chloronaphthalene	50000	U
88-74-4	2-Nitroaniline	120000	U
131-11-3	Dimethylphthalate	50000	U
208-96-8	Acenaphthylene	50000	U
606-20-2	2,6-Dinitrotoluene	50000	U
99-09-2	3-Nitroaniline	120000	U
83-32-9	Acenaphthene	50000	U

B6

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB003L

Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410007

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M1BN1870

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/27/93

Injection Volume: 2.0 (uL) Dilution Factor: 50.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	120000	U
100-02-7	4-Nitrophenol	120000	U
132-64-9	Dibenzofuran	50000	U
121-14-2	2,4-Dinitrotoluene	50000	U
84-66-2	Diethylphthalate	50000	U
7005-72-3	4-Chlorophenyl-phenylether	50000	U
86-73-7	Fluorene	50000	U
100-01-6	4-Nitroaniline	120000	U
534-52-1	4,6-Dinitro-2-methylphenol	120000	U
86-30-6	N-Nitrosodiphenylamine (1)	50000	U
101-55-3	4-Bromophenyl-phenylether	50000	U
118-74-1	Hexachlorobenzene	50000	U
87-86-5	Pentachlorophenol	120000	U
85-01-8	Phenanthrene	50000	U
120-12-7	Anthracene	50000	U
86-74-8	Carbazole	50000	U
84-74-2	Di-n-butylphthalate	50000	U
206-44-0	Fluoranthene	50000	U
129-00-0	Pyrene	50000	U
85-68-7	Butylbenzylphthalate	50000	U
91-94-1	3,3'-Dichlorobenzidine	50000	U
56-55-3	Benzo(a)anthracene	50000	U
218-01-9	Chrysene	50000	U
117-81-7	bis(2-Ethylhexyl)phthalate	50000	U
117-84-0	Di-n-octylphthalate	50000	U
205-99-2	Benzo(b)fluoranthene	50000	U
207-08-9	Benzo(k)fluoranthene	50000	U
50-32-8	Benzo(a)pyrene	50000	U
193-39-5	Indeno(1,2,3-cd)pyrene	50000	U
53-70-3	Dibenz(a,h)anthracene	50000	U
191-24-2	Benzo(g,h,i)perylene	50000	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CLB003L

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410007

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M1BN1870

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/27/93

Injection Volume: 2.0(uL) Dilution Factor: 50.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 120-40-1	DODECANAMIDE, N,N-BIS(2-HYDR	17.59	58000	J
2.	UNKNOWN	19.82	230000	J
3. 544-63-8	TETRADECANOIC ACID	20.02	1000000	J
4. 1002-84-2	PENTADECANOIC ACID	20.70	160000	J
5. 1002-84-2	PENTADECANOIC ACID	21.12	370000	J
6. 109-29-5	OXACYCLOHEPTADECAN-2-ONE	22.09	2700000	J
7. 57-10-3	HEXADECANOIC ACID	22.30	3500000	J
8. 506-12-7	HEPTADECANOIC ACID	22.87	120000	J
9.	UNKNOWN	22.95	86000	J
10.	UNKNOWN	23.05	290000	J
11. 506-12-7	HEPTADECANOIC ACID	23.22	270000	J
12.	UNKNOWN	24.14	8800000	J
13. 57-11-4	OCTADECANOIC ACID	24.27	1300000	J
14.	UNKNOWN	25.14	44000	J
15.	UNKNOWN	25.59	490000	J
16.	UNKNOWN	25.66	490000	J
17.	UNKNOWN	25.76	440000	J
18.	UNKNOWN	26.02	45000	J
19.	UNKNOWN	27.57	53000	J
20. 57-88-5	CHOLESTEROL	33.31	1300000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB002L

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410006

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 93M1BN1869

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/10/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/27/93

Injection Volume: 2.0(uL) Dilution Factor: 25.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	50000	U
111-44-4	bis(2-Chloroethyl)ether	50000	U
95-57-8	2-Chlorophenol	50000	U
541-73-1	1,3-Dichlorobenzene	50000	U
106-46-7	1,4-Dichlorobenzene	50000	U
95-50-1	1,2-Dichlorobenzene	50000	U
95-48-7	2-Methylphenol	50000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	50000	U
106-44-5	4-Methylphenol	50000	U
621-64-7	N-Nitroso-di-n-propylamine	50000	U
67-72-1	Hexachloroethane	50000	U
98-95-3	Nitrobenzene	50000	U
78-59-1	Isophorone	50000	U
88-75-5	2-Nitrophenol	50000	U
105-67-9	2,4-Dimethylphenol	50000	U
111-91-1	bis(2-Chloroethoxy)methane	50000	U
120-83-2	2,4-Dichlorophenol	50000	U
120-82-1	1,2,4-Trichlorobenzene	50000	U
91-20-3	Naphthalene	50000	U
106-47-8	4-Chloroaniline	50000	U
87-68-3	Hexachlorobutadiene	50000	U
59-50-7	4-Chloro-3-methylphenol	50000	U
91-57-6	2-Methylnaphthalene	50000	U
77-47-4	Hexachlorocyclopentadiene	50000	U
88-06-2	2,4,6-Trichlorophenol	50000	U
95-95-4	2,4,5-Trichlorophenol	120000	U
91-58-7	2-Chloronaphthalene	50000	U
88-74-4	2-Nitroaniline	120000	U
131-11-3	Dimethylphthalate	50000	U
208-96-8	Acenaphthylene	50000	U
606-20-2	2,6-Dinitrotoluene	50000	U
99-09-2	3-Nitroaniline	120000	U
83-32-9	Acenaphthene	50000	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB002L

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410006

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 93M1BN1869

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/10/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/27/93

Injection Volume: 2.0(uL) Dilution Factor: 25.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	120000	U
100-02-7	4-Nitrophenol	120000	U
132-64-9	Dibenzofuran	50000	U
121-14-2	2,4-Dinitrotoluene	50000	U
84-66-2	Diethylphthalate	50000	U
7005-72-3	4-Chlorophenyl-phenylether	50000	U
86-73-7	Fluorene	50000	U
100-01-6	4-Nitroaniline	120000	U
534-52-1	4,6-Dinitro-2-methylphenol	120000	U
86-30-6	N-Nitrosodiphenylamine (1)	50000	U
101-55-3	4-Bromophenyl-phenylether	50000	U
118-74-1	Hexachlorobenzene	50000	U
87-86-5	Pentachlorophenol	120000	U
85-01-8	Phenanthrene	50000	U
120-12-7	Anthracene	50000	U
86-74-8	Carbazole	50000	U
84-74-2	Di-n-butylphthalate	50000	U
206-44-0	Fluoranthene	50000	U
129-00-0	Pyrene	50000	U
85-68-7	Butylbenzylphthalate	50000	U
91-94-1	3,3'-Dichlorobenzidine	50000	U
56-55-3	Benzo(a)anthracene	50000	U
218-01-9	Chrysene	50000	U
117-81-7	bis(2-Ethylhexyl)phthalate	50000	U
117-84-0	Di-n-octylphthalate	50000	U
205-99-2	Benzo(b)fluoranthene	50000	U
207-08-9	Benzo(k)fluoranthene	50000	U
50-32-8	Benzo(a)pyrene	50000	U
193-39-5	Indeno(1,2,3-cd)pyrene	50000	U
53-70-3	Dibenz(a,h)anthracene	50000	U
191-24-2	Benzo(g,h,i)perylene	50000	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CLB002L

Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410006

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 93M1BN1869

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/10/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/27/93

Injection Volume: 2.0(uL) Dilution Factor: 25.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 675-20-7	2-PIPERIDINONE	12.17	120000	J
2. 544-63-8	TETRADECANOIC ACID	19.94	170000	J
3.	UNKNOWN	20.65	52000	J
4. 1002-84-2	PENTADECANOIC ACID	21.05	100000	J
5. 109-29-5	OXACYCLOHEPTADECAN-2-ONE	21.99	540000	J
6. 57-10-3	HEXADECANOIC ACID	22.19	1900000	J
7. 506-12-7	HEPTADECANOIC ACID	22.80	70000	J
8.	UNKNOWN	22.97	110000	J
9. 506-12-7	HEPTADECANOIC ACID	23.15	140000	J
10. 74685-36-2	OXACYCLOTETRADECANE-2,11-DIO	23.99	2600000	J
11.	UNKNOWN	24.19	880000	J
12. 56728-10-0	1-HEXENE, 3,4,5-TRIMETHYL-	24.77	58000	J
13. 584-94-1	HEXANE, 2,3-DIMETHYL-	24.94	42000	J
14.	UNKNOWN	25.54	780000	J
15. 19812-64-7	1,14-TETRADECANEDIOL	25.79	85000	J
16.	UNKNOWN	26.52	130000	J
17.	UNKNOWN	27.87	210000	J
18.	UNKNOWN	29.59	180000	J
19.	UNKNOWN	29.76	49000	J
20. 57-88-5	CHOLESTEROL	33.27	2600000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB001L

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410005

Sample wt/vol: 3.0 (g/mL) G Lab File ID: 93M1BN1868

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/10/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/27/93

Injection Volume: 2.0(uL) Dilution Factor: 25.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	82000	U
111-44-4	bis(2-Chloroethyl)ether	82000	U
95-57-8	2-Chlorophenol	82000	U
541-73-1	1,3-Dichlorobenzene	82000	U
106-46-7	1,4-Dichlorobenzene	82000	U
95-50-1	1,2-Dichlorobenzene	82000	U
95-48-7	2-Methylphenol	82000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	82000	U
106-44-5	4-Methylphenol	82000	U
621-64-7	N-Nitroso-di-n-propylamine	82000	U
67-72-1	Hexachloroethane	82000	U
98-95-3	Nitrobenzene	82000	U
78-59-1	Isophorone	82000	U
88-75-5	2-Nitrophenol	82000	U
105-67-9	2,4-Dimethylphenol	82000	U
111-91-1	bis(2-Chloroethoxy)methane	82000	U
120-83-2	2,4-Dichlorophenol	82000	U
120-82-1	1,2,4-Trichlorobenzene	82000	U
91-20-3	Naphthalene	82000	U
106-47-8	4-Chloroaniline	82000	U
87-68-3	Hexachlorobutadiene	82000	U
59-50-7	4-Chloro-3-methylphenol	82000	U
91-57-6	2-Methylnaphthalene	82000	U
77-47-4	Hexachlorocyclopentadiene	82000	U
88-06-2	2,4,6-Trichlorophenol	82000	U
95-95-4	2,4,5-Trichlorophenol	200000	U
91-58-7	2-Chloronaphthalene	82000	U
88-74-4	2-Nitroaniline	200000	U
131-11-3	Dimethylphthalate	82000	U
208-96-8	Acenaphthylene	82000	U
606-20-2	2,6-Dinitrotoluene	82000	U
99-09-2	3-Nitroaniline	200000	U
83-32-9	Acenaphthene	82000	U

B6

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB001L

Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410005

Sample wt/vol: 3.0 (g/mL) G Lab File ID: 93M1BN1868

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/10/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/27/93

Injection Volume: 2.0(uL) Dilution Factor: 25.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	200000	U
100-02-7	4-Nitrophenol	200000	U
132-64-9	Dibenzofuran	82000	U
121-14-2	2,4-Dinitrotoluene	82000	U
84-66-2	Diethylphthalate	82000	U
7005-72-3	4-Chlorophenyl-phenylether	82000	U
86-73-7	Fluorene	82000	U
100-01-6	4-Nitroaniline	200000	U
534-52-1	4,6-Dinitro-2-methylphenol	200000	U
86-30-6	N-Nitrosodiphenylamine (1)	82000	U
101-55-3	4-Bromophenyl-phenylether	82000	U
118-74-1	Hexachlorobenzene	82000	U
87-86-5	Pentachlorophenol	200000	U
85-01-8	Phenanthrene	82000	U
120-12-7	Anthracene	82000	U
86-74-8	Carbazole	82000	U
84-74-2	Di-n-butylphthalate	82000	U
206-44-0	Fluoranthene	82000	U
129-00-0	Pyrene	82000	U
85-68-7	Butylbenzylphthalate	82000	U
91-94-1	3,3'-Dichlorobenzidine	82000	U
56-55-3	Benzo(a)anthracene	82000	U
218-01-9	Chrysene	82000	U
117-81-7	bis(2-Ethylhexyl)phthalate	82000	U
117-84-0	Di-n-octylphthalate	82000	U
205-99-2	Benzo(b)fluoranthene	82000	U
207-08-9	Benzo(k)fluoranthene	82000	U
50-32-8	Benzo(a)pyrene	82000	U
193-39-5	Indeno(1,2,3-cd)pyrene	82000	U
53-70-3	Dibenz(a,h)anthracene	82000	U
191-24-2	Benzo(g,h,i)perylene	82000	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CLB001L

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410005

Sample wt/vol: 3.0 (g/mL) G Lab File ID: 93M1BN1868

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/10/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/27/93

Injection Volume: 2.0(uL) Dilution Factor: 25.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	19.79	180000	J
2. 544-63-8	TETRADECANOIC ACID	20.04	1700000	J
3. 1002-84-2	PENTADECANOIC ACID	20.70	430000	J
4. 1002-84-2	PENTADECANOIC ACID	21.12	680000	J
5. 41446-67-7	3-TETRADECENE, (Z)-	21.32	260000	J
6. 109-29-5	OXACYCLOHEPTADECAN-2-ONE	22.10	4500000	J
7. 57-10-3	HEXADECANOIC ACID	22.27	6100000	J
8. 506-12-7	HEPTADECANOIC ACID	22.87	220000	J
9. 74685-36-2	OXACYCLOTETRADECANE-2,11-DIO	23.05	950000	J
10. 26265-99-6	HEPTADECENOIC ACID	23.22	400000	J
11.	UNKNOWN	24.12	15000000	J
12. 57-11-4	OCTADECANOIC ACID	24.27	1800000	J
13.	UNKNOWN	24.79	220000	J
14.	UNKNOWN	25.59	1600000	J
15. 74742-35-1	CYCLOHEXANE, 1,5-DIETHENYL-3	25.76	340000	J
16. 74685-36-2	OXACYCLOTETRADECANE-2,11-DIO	25.84	390000	J
17.	UNKNOWN	26.54	200000	J
18. 57-88-5	CHOLESTEROL	33.29	1800000	J
19. 1786-12-5	CYCLOTETRADECANE, 1,7,11-TRI	35.42	460000	J
20. 22393-86-8	9-OCTADECENOIC ACID (Z)-, HE	38.52	890000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB004

Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410004

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2068

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2000	U
111-44-4	bis(2-Chloroethyl)ether	2000	U
95-57-8	2-Chlorophenol	2000	U
541-73-1	1,3-Dichlorobenzene	2000	U
106-46-7	1,4-Dichlorobenzene	2000	U
95-50-1	1,2-Dichlorobenzene	2000	U
95-48-7	2-Methylphenol	2000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	2000	U
106-44-5	4-Methylphenol	2000	U
621-64-7	N-Nitroso-di-n-propylamine	2000	U
67-72-1	Hexachloroethane	2000	U
98-95-3	Nitrobenzene	2000	U
78-59-1	Isophorone	2000	U
88-75-5	2-Nitrophenol	2000	U
105-67-9	2,4-Dimethylphenol	2000	U
111-91-1	bis(2-Chloroethoxy)methane	2000	U
120-83-2	2,4-Dichlorophenol	2000	U
120-82-1	1,2,4-Trichlorobenzene	2000	U
91-20-3	Naphthalene	2000	U
106-47-8	4-Chloroaniline	2000	U
87-68-3	Hexachlorobutadiene	2000	U
59-50-7	4-Chloro-3-methylphenol	2000	U
91-57-6	2-Methylnaphthalene	2000	U
77-47-4	Hexachlorocyclopentadiene	2000	U
88-06-2	2,4,6-Trichlorophenol	2000	U
95-95-4	2,4,5-Trichlorophenol	4800	U
91-58-7	2-Chloronaphthalene	2000	U
88-74-4	2-Nitroaniline	4800	U
131-11-3	Dimethylphthalate	2000	U
208-96-8	Acenaphthylene	2000	U
606-20-2	2,6-Dinitrotoluene	2000	U
99-09-2	3-Nitroaniline	4800	U
83-32-9	Acenaphthene	2000	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB004

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410004

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2068

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	4800	U
100-02-7	4-Nitrophenol	4800	U
132-64-9	Dibenzofuran	2000	U
121-14-2	2,4-Dinitrotoluene	2000	U
84-66-2	Diethylphthalate	2000	U
7005-72-3	4-Chlorophenyl-phenylether	2000	U
86-73-7	Fluorene	2000	U
100-01-6	4-Nitroaniline	4800	U
534-52-1	4,6-Dinitro-2-methylphenol	4800	U
86-30-6	N-Nitrosodiphenylamine (1)	2000	U
101-55-3	4-Bromophenyl-phenylether	2000	U
118-74-1	Hexachlorobenzene	2000	U
87-86-5	Pentachlorophenol	4800	U
85-01-8	Phenanthrene	2000	U
120-12-7	Anthracene	2000	U
86-74-8	Carbazole	2000	U
84-74-2	Di-n-butylphthalate	2000	U
206-44-0	Fluoranthene	2000	U
129-00-0	Pyrene	2000	U
85-68-7	Butylbenzylphthalate	2000	U
91-94-1	3,3'-Dichlorobenzidine	2000	U
56-55-3	Benzo(a)anthracene	2000	U
218-01-9	Chrysene	2000	U
117-81-7	bis(2-Ethylhexyl)phthalate	2000	U
117-84-0	Di-n-octylphthalate	2000	U
205-99-2	Benzo(b)fluoranthene	2000	U
207-08-9	Benzo(k)fluoranthene	2000	U
50-32-8	Benzo(a)pyrene	2000	U
193-39-5	Indeno(1,2,3-cd)pyrene	2000	U
53-70-3	Dibenz(a,h)anthracene	2000	U
191-24-2	Benzo(g,h,i)perylene	2000	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CLB004

Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410004

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2068

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 15

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 107-88-0	1,3-BUTANEDIOL	4.85	7000	J
2. 107-88-0	1,3-BUTANEDIOL	5.08	1500	J
3. 27154-43-4	PIPERIDINONE	14.55	940	J
4.	UNKNOWN	18.00	540	J
5.	UNKNOWN	18.92	5900	J
6. 97-78-9	GLYCINE, N-METHYL-N-(1-OXODO	20.84	420	J
7.	UNKNOWN	21.15	500	J
8.	UNKNOWN	23.62	550	J
9. 544-63-8	TETRADECANOIC ACID	23.75	2200	J
10.	UNKNOWN	26.21	3200	J
11.	UNKNOWN	26.29	2100	J
12.	UNKNOWN	26.46	5900	J
13.	UNKNOWN	28.67	6900	J
14.	UNKNOWN	28.82	1400	J
15.	UNKNOWN	39.92	2800	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB003

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410003

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2067

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2000	U
111-44-4	bis(2-Chloroethyl)ether	2000	U
95-57-8	2-Chlorophenol	2000	U
541-73-1	1,3-Dichlorobenzene	2000	U
106-46-7	1,4-Dichlorobenzene	2000	U
95-50-1	1,2-Dichlorobenzene	2000	U
95-48-7	2-Methylphenol	2000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	2000	U
106-44-5	4-Methylphenol	14000	
621-64-7	N-Nitroso-di-n-propylamine	2000	U
67-72-1	Hexachloroethane	2000	U
98-95-3	Nitrobenzene	2000	U
78-59-1	Isophorone	2000	U
88-75-5	2-Nitrophenol	2000	U
105-67-9	2,4-Dimethylphenol	2000	U
111-91-1	bis(2-Chloroethoxy)methane	2000	U
120-83-2	2,4-Dichlorophenol	2000	U
120-82-1	1,2,4-Trichlorobenzene	2000	U
91-20-3	Naphthalene	2000	U
106-47-8	4-Chloroaniline	2000	U
87-68-3	Hexachlorobutadiene	2000	U
59-50-7	4-Chloro-3-methylphenol	2000	U
91-57-6	2-Methylnaphthalene	2000	U
77-47-4	Hexachlorocyclopentadiene	2000	U
88-06-2	2,4,6-Trichlorophenol	2000	U
95-95-4	2,4,5-Trichlorophenol	4800	U
91-58-7	2-Chloronaphthalene	2000	U
88-74-4	2-Nitroaniline	4800	U
131-11-3	Dimethylphthalate	2000	U
208-96-8	Acenaphthylene	2000	U
606-20-2	2,6-Dinitrotoluene	2000	U
99-09-2	3-Nitroaniline	4800	U
83-32-9	Acenaphthene	2000	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB003

Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410003

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2067

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	4800	U
100-02-7	4-Nitrophenol	4800	U
132-64-9	Dibenzofuran	2000	U
121-14-2	2,4-Dinitrotoluene	2000	U
84-66-2	Diethylphthalate	2000	U
7005-72-3	4-Chlorophenyl-phenylether	2000	U
86-73-7	Fluorene	2000	U
100-01-6	4-Nitroaniline	4800	U
534-52-1	4,6-Dinitro-2-methylphenol	4800	U
86-30-6	N-Nitrosodiphenylamine (1)	2000	U
101-55-3	4-Bromophenyl-phenylether	2000	U
118-74-1	Hexachlorobenzene	2000	U
87-86-5	Pentachlorophenol	4800	U
85-01-8	Phenanthrene	2000	U
120-12-7	Anthracene	2000	U
86-74-8	Carbazole	2000	U
84-74-2	Di-n-butylphthalate	2000	U
206-44-0	Fluoranthene	2000	U
129-00-0	Pyrene	2000	U
85-68-7	Butylbenzylphthalate	2000	U
91-94-1	3,3'-Dichlorobenzidine	2000	U
56-55-3	Benzo(a)anthracene	2000	U
218-01-9	Chrysene	2000	U
117-81-7	bis(2-Ethylhexyl)phthalate	2000	U
117-84-0	Di-n-octylphthalate	2000	U
205-99-2	Benzo(b)fluoranthene	2000	U
207-08-9	Benzo(k)fluoranthene	2000	U
50-32-8	Benzo(a)pyrene	2000	U
193-39-5	Indeno(1,2,3-cd)pyrene	2000	U
53-70-3	Dibenz(a,h)anthracene	2000	U
191-24-2	Benzo(g,h,i)perylene	2000	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CLB003

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410003

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2067

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 107-88-0	1,3-BUTANEDIOL	4.77	1700	J
2. 1768-36-1	CYANIC ACID, PROPYL ESTER	7.20	720	J
3. 116-53-0	BUTANOIC ACID, 2-METHYL-	7.85	2700	J
4.	UNKNOWN	11.12	1200	J
5. 27154-43-4	PIPERIDINONE	14.62	2200	J
6. 27154-43-4	PIPERIDINONE	14.72	480	J
7.	UNKNOWN	15.89	1400	J
8.	UNKNOWN	18.92	3900	J
9.	UNKNOWN	23.65	550	J
10. 544-63-8	TETRADECANOIC ACID	23.77	2000	J
11.	UNKNOWN	26.24	1800	J
12.	UNKNOWN	26.36	3500	J
13. 57-10-3	HEXADECANOIC ACID	26.51	8500	J
14.	UNKNOWN	28.67	11000	J
15.	UNKNOWN	28.87	2400	J
16. 103-23-1	HEXADECANOIC ACID, BIS(2-ETH	31.41	1700	J
17.	UNKNOWN	34.24	730	J
18.	UNKNOWN	35.52	1100	J
19.	UNKNOWN	35.74	1500	J
20.	UNKNOWN	39.96	9000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB002

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410002

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2057

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2000	U
111-44-4	bis(2-Chloroethyl)ether	2000	U
95-57-8	2-Chlorophenol	2000	U
541-73-1	1,3-Dichlorobenzene	2000	U
106-46-7	1,4-Dichlorobenzene	2000	U
95-50-1	1,2-Dichlorobenzene	2000	U
95-48-7	2-Methylphenol	2000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	2000	U
106-44-5	4-Methylphenol	2000	U
621-64-7	N-Nitroso-di-n-propylamine	2000	U
67-72-1	Hexachloroethane	2000	U
98-95-3	Nitrobenzene	2000	U
78-59-1	Isophorone	2000	U
88-75-5	2-Nitrophenol	2000	U
105-67-9	2,4-Dimethylphenol	2000	U
111-91-1	bis(2-Chloroethoxy)methane	2000	U
120-83-2	2,4-Dichlorophenol	2000	U
120-82-1	1,2,4-Trichlorobenzene	2000	U
91-20-3	Naphthalene	2000	U
106-47-8	4-Chloroaniline	2000	U
87-68-3	Hexachlorobutadiene	2000	U
59-50-7	4-Chloro-3-methylphenol	2000	U
91-57-6	2-Methylnaphthalene	2000	U
77-47-4	Hexachlorocyclopentadiene	2000	U
88-06-2	2,4,6-Trichlorophenol	2000	U
95-95-4	2,4,5-Trichlorophenol	4800	U
91-58-7	2-Chloronaphthalene	2000	U
88-74-4	2-Nitroaniline	4800	U
131-11-3	Dimethylphthalate	2000	U
208-96-8	Acenaphthylene	2000	U
606-20-2	2,6-Dinitrotoluene	2000	U
99-09-2	3-Nitroaniline	4800	U
83-32-9	Acenaphthene	2000	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB002

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410002

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2057

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	4800	U
100-02-7	4-Nitrophenol	4800	U
132-64-9	Dibenzofuran	2000	U
121-14-2	2,4-Dinitrotoluene	2000	U
84-66-2	Diethylphthalate	2000	U
7005-72-3	4-Chlorophenyl-phenylether	2000	U
86-73-7	Fluorene	2000	U
100-01-6	4-Nitroaniline	4800	U
534-52-1	4,6-Dinitro-2-methylphenol	4800	U
86-30-6	N-Nitrosodiphenylamine (1)	2000	U
101-55-3	4-Bromophenyl-phenylether	2000	U
118-74-1	Hexachlorobenzene	2000	U
87-86-5	Pentachlorophenol	4800	U
85-01-8	Phenanthrene	2000	U
120-12-7	Anthracene	2000	U
86-74-8	Carbazole	2000	U
84-74-2	Di-n-butylphthalate	2000	U
206-44-0	Fluoranthene	2000	U
129-00-0	Pyrene	2000	U
85-68-7	Butylbenzylphthalate	2000	U
91-94-1	3,3'-Dichlorobenzidine	2000	U
56-55-3	Benzo(a)anthracene	2000	U
218-01-9	Chrysene	2000	U
117-81-7	bis(2-Ethylhexyl)phthalate	2000	U
117-84-0	Di-n-octylphthalate	2000	U
205-99-2	Benzo(b)fluoranthene	2000	U
207-08-9	Benzo(k)fluoranthene	2000	U
50-32-8	Benzo(a)pyrene	2000	U
193-39-5	Indeno(1,2,3-cd)pyrene	2000	U
53-70-3	Dibenz(a,h)anthracene	2000	U
191-24-2	Benzo(g,h,i)perylene	2000	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CLB002

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410002

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2057

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 107-88-0	1,3-BUTANEDIOL	4.73	580	J
2.	UNKNOWN	16.64	1100	J
3.	UNKNOWN	26.37	1400	J
4.	UNKNOWN	39.86	1800	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB001

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410001

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2056

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2000	U
111-44-4	bis(2-Chloroethyl)ether	2000	U
95-57-8	2-Chlorophenol	2000	U
541-73-1	1,3-Dichlorobenzene	2000	U
106-46-7	1,4-Dichlorobenzene	2000	U
95-50-1	1,2-Dichlorobenzene	2000	U
95-48-7	2-Methylphenol	2000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	2000	U
106-44-5	4-Methylphenol	2000	U
621-64-7	N-Nitroso-di-n-propylamine	2000	U
67-72-1	Hexachloroethane	2000	U
98-95-3	Nitrobenzene	2000	U
78-59-1	Isophorone	2000	U
88-75-5	2-Nitrophenol	2000	U
105-67-9	2,4-Dimethylphenol	2000	U
111-91-1	bis(2-Chloroethoxy)methane	2000	U
120-83-2	2,4-Dichlorophenol	2000	U
120-82-1	1,2,4-Trichlorobenzene	2000	U
91-20-3	Naphthalene	2000	U
106-47-8	4-Chloroaniline	2000	U
87-68-3	Hexachlorobutadiene	2000	U
59-50-7	4-Chloro-3-methylphenol	2000	U
91-57-6	2-Methylnaphthalene	2000	U
77-47-4	Hexachlorocyclopentadiene	2000	U
88-06-2	2,4,6-Trichlorophenol	2000	U
95-95-4	2,4,5-Trichlorophenol	4800	U
91-58-7	2-Chloronaphthalene	2000	U
88-74-4	2-Nitroaniline	4800	U
131-11-3	Dimethylphthalate	2000	U
208-96-8	Acenaphthylene	2000	U
606-20-2	2,6-Dinitrotoluene	2000	U
99-09-2	3-Nitroaniline	4800	U
83-32-9	Acenaphthene	2000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB001

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410001

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2056

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	4800	U
100-02-7	4-Nitrophenol	4800	U
132-64-9	Dibenzofuran	2000	U
121-14-2	2,4-Dinitrotoluene	2000	U
84-66-2	Diethylphthalate	2000	U
7005-72-3	4-Chlorophenyl-phenylether	2000	U
86-73-7	Fluorene	2000	U
100-01-6	4-Nitroaniline	4800	U
534-52-1	4,6-Dinitro-2-methylphenol	4800	U
86-30-6	N-Nitrosodiphenylamine (1)	2000	U
101-55-3	4-Bromophenyl-phenylether	2000	U
118-74-1	Hexachlorobenzene	2000	U
87-86-5	Pentachlorophenol	4800	U
85-01-8	Phenanthrene	2000	U
120-12-7	Anthracene	2000	U
86-74-8	Carbazole	2000	U
84-74-2	Di-n-butylphthalate	2000	U
206-44-0	Fluoranthene	2000	U
129-00-0	Pyrene	2000	U
85-68-7	Butylbenzylphthalate	2000	U
91-94-1	3,3'-Dichlorobenzidine	2000	U
56-55-3	Benzo(a)anthracene	2000	U
218-01-9	Chrysene	2000	U
117-81-7	bis(2-Ethylhexyl)phthalate	2000	U
117-84-0	Di-n-octylphthalate	2000	U
205-99-2	Benzo(b)fluoranthene	2000	U
207-08-9	Benzo(k)fluoranthene	2000	U
50-32-8	Benzo(a)pyrene	2000	U
193-39-5	Indeno(1,2,3-cd)pyrene	2000	U
53-70-3	Dibenz(a,h)anthracene	2000	U
191-24-2	Benzo(g,h,i)perylene	2000	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CLB001

Lab Name: CH2M HILL/LRD Contract: S35410

Lab Code: _____ Case No.: S35410 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35410001

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN2056

Level: (low/med) LOW Date Received: 03/19/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/05/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/25/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 13

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 107-88-0	1,3-BUTANEDIOL	4.80	2700	J
2. 104-76-7	1-HEXANOL, 2-ETHYL-	11.10	500	J
3. 27154-43-4	PIPERIDINONE	14.55	1300	J
4.	UNKNOWN	20.35	440	J
5.	UNKNOWN	22.75	510	J
6.	UNKNOWN	23.75	1600	J
7.	UNKNOWN	26.21	1700	J
8.	UNKNOWN	26.34	2400	J
9.	UNKNOWN	26.47	8000	J
10.	UNKNOWN	28.64	7300	J
11.	UNKNOWN	28.82	1400	J
12.	UNKNOWN	35.72	970	J
13.	UNKNOWN	39.84	2800	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK35305ZS1

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: SOLID Lab Sample ID: PBLKS1_02-23

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: decanted: (Y/N) Date Received:

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/23/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/21/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	9.9	U
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	9.9	U
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	5.1	U
5103-74-2	gamma-Chlordane	5.1	U
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	99	U
11096-82-5	Aroclor-1260	99	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK35305ZS2

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: SOLID Lab Sample ID: PBLKS2_03-01

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: decanted: (Y/N) Date Received:

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/21/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	9.9	U
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	9.9	U
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	5.1	U
5103-74-2	gamma-Chlordane	5.1	U
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	99	U
11096-82-5	Aroclor-1260	99	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK35305ZS3

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: SOLID Lab Sample ID: PBLKS3_03-01

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: decanted: (Y/N) Date Received:

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/24/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	9.9	U
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	9.9	U
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	5.1	U
5103-74-2	gamma-Chlordane	5.1	U
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	99	U
11096-82-5	Aroclor-1260	99	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK35305ZS4

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: SOLID Lab Sample ID: PBLKS4_03-03

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: decanted: (Y/N) Date Received:

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/03/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/25/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	9.9	U
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	9.9	U
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	5.1	U
5103-74-2	gamma-Chlordane	5.1	U
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	99	U
11096-82-5	Aroclor-1260	99	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PIBLK01

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: PIBLK01

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

% Moisture: decanted: (Y/N) Date Received:

Extraction: (SepF/Cont/Sonc) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 03/20/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PIBLK02

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: PIBLK02

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

% Moisture: decanted: (Y/N) Date Received:

Extraction: (SepF/Cont/Sonc) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 03/21/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PIBLK03

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: PIBLK03

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

% Moisture: decanted: (Y/N) Date Received:

Extraction: (SepF/Cont/Sonc) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 03/22/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PIBLK04

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: PIBLK04

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

% Moisture: decanted: (Y/N) Date Received:

Extraction: (SepF/Cont/Sonc) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 03/23/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PIBLK05

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: PIBLK05

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

% Moisture: decanted: (Y/N) Date Received:

Extraction: (SepF/Cont/Sonc) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 03/23/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PIBLK06

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: PIBLK06

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

% Moisture: decanted: (Y/N) Date Received:

Extraction: (SepF/Cont/Sonc) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 03/24/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PIBLK07

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: PIBLK07

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

% Moisture: decanted: (Y/N) Date Received:

Extraction: (SepF/Cont/Sonc) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 03/25/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PIBLK08

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: PIBLK08

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

% Moisture: decanted: (Y/N) Date Received:

Extraction: (SepF/Cont/Sonc) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 03/25/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PIBLK09

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: PIBLK09

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

% Moisture: decanted: (Y/N) Date Received:

Extraction: (SepF/Cont/Sonc) Date Extracted:

Concentrated Extract Volume: (uL) Date Analyzed: 03/25/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB005-01WDL

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FISH Lab Sample ID: 35305024DL

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/23/93

Injection Volume: 1.00 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	51	U
319-85-7	beta-BHC	51	U
319-86-8	delta-BHC	51	U
58-89-9	gamma-BHC (Lindane)	51	U
76-44-8	Heptachlor	51	U
309-00-2	Aldrin	51	U
1024-57-3	Heptachlor epoxide	51	U
959-98-8	Endosulfan I	51	U
60-57-1	Dieldrin	99	U*
72-55-9	4,4'-DDE	420	DP
72-20-8	Endrin	99	U
33213-65-9	Endosulfan II	99	U
72-54-8	4,4'-DDD	99	U
1031-07-8	Endosulfan sulfate	99	U
50-29-3	4,4'-DDT	99	U
72-43-5	Methoxychlor	510	U
53494-70-5	Endrin ketone	99	U
7421-36-3	Endrin aldehyde	99	U
5103-71-9	alpha-Chlordane	150	DP
5103-74-2	gamma-Chlordane	51	U*
8001-35-2	Toxaphene	5100	U
12674-11-2	Aroclor-1016	990	U
11104-28-2	Aroclor-1221	2000	U
11141-16-5	Aroclor-1232	990	U
53469-21-9	Aroclor-1242	990	U
12672-29-6	Aroclor-1248	990	U
11097-69-1	Aroclor-1254	3200	D
11096-82-5	Aroclor-1260	990	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB005-01W

ab Name: CH2M HILL/LRD Contract: ABB

ab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

atrix: FISH Lab Sample ID: 35305024

ample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/25/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U*
72-55-9	4,4'-DDE	340	
72-20-8	Endrin	9.9	U*
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	37	P
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U*
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	180	P
5103-74-2	gamma-Chlordane	5.1	U*
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	3300	PE
11096-82-5	Aroclor-1260	99	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB004-01W

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FISH Lab Sample ID: 35305023

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/24/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	69	
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	14	P
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	5.1	U
5103-74-2	gamma-Chlordane	5.1	U
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	130	
11096-82-5	Aroclor-1260	99	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB003-01W

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FISH Lab Sample ID: 35305022

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/24/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	27	
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	9.9	U
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	5.1	U
5103-74-2	gamma-Chlordane	5.1	U
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	130	
11096-82-5	Aroclor-1260	99	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB002-01W

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FISH Lab Sample ID: 35305021

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/24/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	19	
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	9.9	U
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	5.1	U
5103-74-2	gamma-Chlordane	5.1	U
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	140	
11096-82-5	Aroclor-1260	99	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB001-01W

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FISH Lab Sample ID: 35305020

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/24/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	54	
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	9.9	U
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	5.1	U
5103-74-2	gamma-Chlordane	5.1	U
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	250	
11096-82-5	Aroclor-1260	99	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB005-01FDL

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FILLET Lab Sample ID: 35305019DL

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/23/93

Injection Volume: 1.00 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	51	U
319-85-7	beta-BHC	51	U
319-86-8	delta-BHC	51	U
58-89-9	gamma-BHC (Lindane)	51	U
76-44-8	Heptachlor	51	U
309-00-2	Aldrin	51	U
1024-57-3	Heptachlor epoxide	51	U
959-98-8	Endosulfan I	51	U
60-57-1	Dieldrin	99	U*
72-55-9	4,4'-DDE	520	D
72-20-8	Endrin	99	U
33213-65-9	Endosulfan II	99	U*
72-54-8	4,4'-DDD	99	U
1031-07-8	Endosulfan sulfate	99	U
50-29-3	4,4'-DDT	99	U
72-43-5	Methoxychlor	510	U
53494-70-5	Endrin ketone	99	U
7421-36-3	Endrin aldehyde	99	U
5103-71-9	alpha-Chlordane	160	DP
5103-74-2	gamma-Chlordane	51	U*
8001-35-2	Toxaphene	5100	U
12674-11-2	Aroclor-1016	990	U
11104-28-2	Aroclor-1221	2000	U
11141-16-5	Aroclor-1232	990	U
53469-21-9	Aroclor-1242	990	U
12672-29-6	Aroclor-1248	990	U
11097-69-1	Aroclor-1254	3500	D
11096-82-5	Aroclor-1260	990	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB005-01F

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FILLET Lab Sample ID: 35305019

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/24/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U*
72-55-9	4,4'-DDE	370	
72-20-8	Endrin	9.9	U*
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	38	P
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U*
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	180	P
5103-74-2	gamma-Chlordane	5.1	U*
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	3200	E
11096-82-5	Aroclor-1260	99	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB004-01F

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FILLET Lab Sample ID: 35305018

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/23/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	7.2	J
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	9.9	U
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	5.1	U
5103-74-2	gamma-Chlordane	5.1	U
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	99	U
11096-82-5	Aroclor-1260	99	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB003-01F

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FILLET Lab Sample ID: 35305017

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/23/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	12	
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	9.9	U
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	5.1	U
5103-74-2	gamma-Chlordane	5.1	U
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	99	U
11096-82-5	Aroclor-1260	99	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB002-01F

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FILLET Lab Sample ID: 35305016

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/24/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	9.1	J
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	9.9	U
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	5.1	U
5103-74-2	gamma-Chlordane	5.1	U
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	59	J
11096-82-5	Aroclor-1260	99	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB001-01F

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FILLET Lab Sample ID: 35305015

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/23/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	15	
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	9.9	U
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	5.1	U
5103-74-2	gamma-Chlordane	5.1	U
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	110	
11096-82-5	Aroclor-1260	99	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB007-01W

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FISH Lab Sample ID: 35305014

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/23/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	100	
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	13	P
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	13	P
5103-74-2	gamma-Chlordane	5.1	U*
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	260	
11096-82-5	Aroclor-1260	99	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB006-01WDL

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FISH Lab Sample ID: 35305013DL

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/23/93

Injection Volume: 1.00 (uL) Dilution Factor: 5.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	26	U
319-85-7	beta-BHC	26	U
319-86-8	delta-BHC	26	U
58-89-9	gamma-BHC (Lindane)	26	U
76-44-8	Heptachlor	26	U
309-00-2	Aldrin	26	U
1024-57-3	Heptachlor epoxide	26	U
959-98-8	Endosulfan I	26	U
60-57-1	Dieldrin	50	U
72-55-9	4,4'-DDE	200	D
72-20-8	Endrin	50	U
33213-65-9	Endosulfan II	50	U
72-54-8	4,4'-DDD	23	DJP
1031-07-8	Endosulfan sulfate	50	U
50-29-3	4,4'-DDT	50	U
72-43-5	Methoxychlor	260	U
53494-70-5	Endrin ketone	50	U
7421-36-3	Endrin aldehyde	50	U
5103-71-9	alpha-Chlordane	30	DP
5103-74-2	gamma-Chlordane	26	U
8001-35-2	Toxaphene	2600	U
12674-11-2	Aroclor-1016	500	U
11104-28-2	Aroclor-1221	1000	U
11141-16-5	Aroclor-1232	500	U
53469-21-9	Aroclor-1242	500	U
12672-29-6	Aroclor-1248	500	U
11097-69-1	Aroclor-1254	590	DP
11096-82-5	Aroclor-1260	500	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB006-01W

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FISH Lab Sample ID: 35305013

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/25/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	180	PE
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	21	P
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	5.3	J
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	29	P
5103-74-2	gamma-Chlordane	5.1	U*
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	620	
11096-82-5	Aroclor-1260	99	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB005-01W

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FISH Lab Sample ID: 35305012

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/23/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	120	
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	12	P
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	5.1	U
5103-74-2	gamma-Chlordane	5.1	U*
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	340	
11096-82-5	Aroclor-1260	99	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB007-01F

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FILLET Lab Sample ID: 35305011

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/23/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	34	
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	9.9	U
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	3.0	JP
5103-74-2	gamma-Chlordane	5.1	U
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	120	
11096-82-5	Aroclor-1260	99	U

mfr

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB006-01F

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FILLET Lab Sample ID: 35305010

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/24/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	120	
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	12	P
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	13	P
5103-74-2	gamma-Chlordane	5.1	U*
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	390	
11096-82-5	Aroclor-1260	99	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB005-01F

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FILLET Lab Sample ID: 35305009

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/21/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	77	
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	9.9	U
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	6.7	P
5103-74-2	gamma-Chlordane	5.1	U*
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	260	
11096-82-5	Aroclor-1260	99	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB004W

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FISH Lab Sample ID: 35305008

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/21/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	72	
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	10	P
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	5.1	U
5103-74-2	gamma-Chlordane	5.1	U
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	180	
11096-82-5	Aroclor-1260	99	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB003G

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: GUTS Lab Sample ID: 35305007

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/21/93

Injection Volume: 1.00 (uL) Dilution Factor: 5.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	26	U
319-85-7	beta-BHC	26	U
319-86-8	delta-BHC	26	U
58-89-9	gamma-BHC (Lindane)	26	U
76-44-8	Heptachlor	26	U
309-00-2	Aldrin	26	U
1024-57-3	Heptachlor epoxide	26	U
959-98-8	Endosulfan I	26	U
60-57-1	Dieldrin	50	U
72-55-9	4,4'-DDE	230	
72-20-8	Endrin	50	U
33213-65-9	Endosulfan II	50	U
72-54-8	4,4'-DDD	30	JP
1031-07-8	Endosulfan sulfate	50	U
50-29-3	4,4'-DDT	50	U
72-43-5	Methoxychlor	260	U
53494-70-5	Endrin ketone	50	U
7421-36-3	Endrin aldehyde	50	U
5103-71-9	alpha-Chlordane	26	U
5103-74-2	gamma-Chlordane	26	U
8001-35-2	Toxaphene	2600	U
12674-11-2	Aroclor-1016	500	U
11104-28-2	Aroclor-1221	1000	U
11141-16-5	Aroclor-1232	500	U
53469-21-9	Aroclor-1242	500	U
12672-29-6	Aroclor-1248	500	U
11097-69-1	Aroclor-1254	760	
11096-82-5	Aroclor-1260	500	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB002G

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 35305006

Sample wt/vol: 5.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/01/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/21/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	10	U
319-85-7	beta-BHC	10	U
319-86-8	delta-BHC	10	U
58-89-9	gamma-BHC (Lindane)	10	U
76-44-8	Heptachlor	10	U
309-00-2	Aldrin	10	U
1024-57-3	Heptachlor epoxide	10	U
959-98-8	Endosulfan I	10	U
60-57-1	Dieldrin	20	U
72-55-9	4,4'-DDE	150	
72-20-8	Endrin	20	U
33213-65-9	Endosulfan II	20	U
72-54-8	4,4'-DDD	20	U
1031-07-8	Endosulfan sulfate	20	U
50-29-3	4,4'-DDT	20	U
72-43-5	Methoxychlor	100	U
53494-70-5	Endrin ketone	20	U
7421-36-3	Endrin aldehyde	20	U
5103-71-9	alpha-Chlordane	10	U
5103-74-2	gamma-Chlordane	10	U
8001-35-2	Toxaphene	1000	U
12674-11-2	Aroclor-1016	200	U
11104-28-2	Aroclor-1221	400	U
11141-16-5	Aroclor-1232	200	U
53469-21-9	Aroclor-1242	200	U
12672-29-6	Aroclor-1248	200	U
11097-69-1	Aroclor-1254	420	
11096-82-5	Aroclor-1260	200	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB001GDL

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: GUTS Lab Sample ID: 35305005DL

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/23/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/23/93

Injection Volume: 1.00 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	51	U
319-85-7	beta-BHC	51	U
319-86-8	delta-BHC	51	U
58-89-9	gamma-BHC (Lindane)	51	U
76-44-8	Heptachlor	51	U
309-00-2	Aldrin	51	U
1024-57-3	Heptachlor epoxide	51	U
959-98-8	Endosulfan I	51	U
60-57-1	Dieldrin	99	U
72-55-9	4,4'-DDE	850	D
72-20-8	Endrin	99	U
33213-65-9	Endosulfan II	99	U*
72-54-8	4,4'-DDD	99	U
1031-07-8	Endosulfan sulfate	99	U
50-29-3	4,4'-DDT	99	U
72-43-5	Methoxychlor	510	U
53494-70-5	Endrin ketone	99	U
7421-36-3	Endrin aldehyde	99	U
5103-71-9	alpha-Chlordane	51	U
5103-74-2	gamma-Chlordane	51	U
8001-35-2	Toxaphene	5100	U
12674-11-2	Aroclor-1016	990	U
11104-28-2	Aroclor-1221	2000	U
11141-16-5	Aroclor-1232	990	U
53469-21-9	Aroclor-1242	990	U
12672-29-6	Aroclor-1248	990	U
11097-69-1	Aroclor-1254	2800	D
11096-82-5	Aroclor-1260	990	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB001G

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: GUTS Lab Sample ID: 35305005

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/23/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/25/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	430	PE
72-20-8	Endrin	9.9	U*
33213-65-9	Endosulfan II	9.9	U*
72-54-8	4,4'-DDD	81	P
1031-07-8	Endosulfan sulfate	9.9	U*
50-29-3	4,4'-DDT	9.9	U*
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	48	P
5103-74-2	gamma-Chlordane	5.1	U*
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	2700	P
11096-82-5	Aroclor-1260	99	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB004

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FILLET Lab Sample ID: 35305004

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/23/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/21/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	15	
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	9.9	U
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	5.1	U
5103-74-2	gamma-Chlordane	5.1	U
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	53	JP
11096-82-5	Aroclor-1260	99	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB003

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FILLET Lab Sample ID: 35305003

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/23/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/21/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	10	
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	9.9	U
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	5.1	U
5103-74-2	gamma-Chlordane	5.1	U
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	43	J
11096-82-5	Aroclor-1260	99	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB002

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FILLET Lab Sample ID: 35305002

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/23/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/21/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	13	
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U
72-54-8	4,4'-DDD	9.9	U
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	5.1	U
5103-74-2	gamma-Chlordane	5.1	U
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	46	J
11096-82-5	Aroclor-1260	99	U

FORM I PEST 3/90

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CLB001F

Lab Name: CH2M HILL/LRD Contract: ABB

Lab Code: CH2M Case No.: 35305 SAS No.: SDG No.:

Matrix: FILLET Lab Sample ID: 35305001

Sample wt/vol: 10.0 (g/mL) G Lab File ID:

% Moisture: 0 decanted: (Y/N) N Date Received: 03/10/93

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 02/23/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/21/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	5.1	U
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	9.9	U
72-55-9	4,4'-DDE	39	
72-20-8	Endrin	9.9	U
33213-65-9	Endosulfan II	9.9	U*
72-54-8	4,4'-DDD	9.9	U
1031-07-8	Endosulfan sulfate	9.9	U
50-29-3	4,4'-DDT	9.9	U
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	9.9	U
7421-36-3	Endrin aldehyde	9.9	U
5103-71-9	alpha-Chlordane	5.1	U
5103-74-2	gamma-Chlordane	5.1	U
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	99	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	99	U
53469-21-9	Aroclor-1242	99	U
12672-29-6	Aroclor-1248	99	U
11097-69-1	Aroclor-1254	130	P
11096-82-5	Aroclor-1260	99	U

FORM I PEST

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

LSB00401

Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385004

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN1999

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/22/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 107-88-0	1,3-BUTANEDIOL	4.78	380	J
2. 107-88-0	1,3-BUTANEDIOL	5.08	780	J
3.	UNKNOWN	7.80	460	J
4. 930-68-7	2-CYCLOHEXEN-1-ONE	8.90	350	BJ
5.	UNKNOWN	10.04	340	J
6. 505-10-2	1-PROPANOL, 3-(METHYLTHIO)-	10.09	360	J
7.	UNKNOWN	11.15	3300	J
8. 931-17-9	1,2-CYCLOHEXANEDIOL	12.00	410	J
9. 27154-43-4	PIPERIDINONE	14.67	410	J
10.	UNKNOWN	16.69	600	J
11.	UNKNOWN	18.84	520	J
12.	UNKNOWN	19.05	7100	J
13.	UNKNOWN	20.50	490	J
14. 544-63-8	TETRADECANOIC ACID	23.84	1900	J
15.	UNKNOWN	26.32	4400	J
16.	UNKNOWN	26.46	2300	J
17. 57-10-3	HEXADECANOIC ACID	26.61	8200	J
18.	UNKNOWN	28.82	12000	J
19. 57-11-4	OCTADECANOIC ACID	29.06	920	J
20.	UNKNOWN	40.01	2500	J

BG

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB00301

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385003

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN1998

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/22/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	990	U
111-44-4	bis(2-Chloroethyl)ether	990	U
95-57-8	2-Chlorophenol	990	U
541-73-1	1,3-Dichlorobenzene	990	U
106-46-7	1,4-Dichlorobenzene	990	U
95-50-1	1,2-Dichlorobenzene	990	U
95-48-7	2-Methylphenol	990	U
108-60-1	2,2'-oxybis(1-Chloropropane)	990	U
106-44-5	4-Methylphenol	990	U
621-64-7	N-Nitroso-di-n-propylamine	990	U
67-72-1	Hexachloroethane	990	U
98-95-3	Nitrobenzene	990	U
78-59-1	Isophorone	990	U
88-75-5	2-Nitrophenol	990	U
105-67-9	2,4-Dimethylphenol	990	U
111-91-1	bis(2-Chloroethoxy)methane	990	U
120-83-2	2,4-Dichlorophenol	990	U
120-82-1	1,2,4-Trichlorobenzene	990	U
91-20-3	Naphthalene	990	U
106-47-8	4-Chloroaniline	990	U
87-68-3	Hexachlorobutadiene	990	U
59-50-7	4-Chloro-3-methylphenol	990	U
91-57-6	2-Methylnaphthalene	990	U
77-47-4	Hexachlorocyclopentadiene	990	U
88-06-2	2,4,6-Trichlorophenol	990	U
95-95-4	2,4,5-Trichlorophenol	2400	U
91-58-7	2-Chloronaphthalene	990	U
88-74-4	2-Nitroaniline	2400	U
131-11-3	Dimethylphthalate	990	U
208-96-8	Acenaphthylene	990	U
606-20-2	2,6-Dinitrotoluene	990	U
99-09-2	3-Nitroaniline	2400	U
83-32-9	Acenaphthene	990	U

BG

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB00301

Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385003

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN1998

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/22/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	2400	U
100-02-7	4-Nitrophenol	2400	U
132-64-9	Dibenzofuran	990	U
121-14-2	2,4-Dinitrotoluene	990	U
84-66-2	Diethylphthalate	990	U
7005-72-3	4-Chlorophenyl-phenylether	990	U
86-73-7	Fluorene	990	U
100-01-6	4-Nitroaniline	2400	U
534-52-1	4,6-Dinitro-2-methylphenol	2400	U
86-30-6	N-Nitrosodiphenylamine (1)	990	U
101-55-3	4-Bromophenyl-phenylether	990	U
118-74-1	Hexachlorobenzene	990	U
87-86-5	Pentachlorophenol	2400	U
85-01-8	Phenanthrene	990	U
120-12-7	Anthracene	990	U
86-74-8	Carbazole	990	U
84-74-2	Di-n-butylphthalate	990	U
206-44-0	Fluoranthene	990	U
129-00-0	Pyrene	990	U
85-68-7	Butylbenzylphthalate	990	U
91-94-1	3,3'-Dichlorobenzidine	990	U
56-55-3	Benzo(a)anthracene	990	U
218-01-9	Chrysene	990	U
117-81-7	bis(2-Ethylhexyl)phthalate	990	U
117-84-0	Di-n-octylphthalate	990	U
205-99-2	Benzo(b)fluoranthene	990	U
207-08-9	Benzo(k)fluoranthene	990	U
50-32-8	Benzo(a)pyrene	990	U
193-39-5	Indeno(1,2,3-cd)pyrene	990	U
53-70-3	Dibenz(a,h)anthracene	990	U
191-24-2	Benzo(g,h,i)perylene	990	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

LSB00301

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385003

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN1998

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/22/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	11.15	3600	J
2. 27154-43-4	PIPERIDINONE	14.80	2200	J
3. 544-63-8	TETRADECANOIC ACID	23.92	3400	J
4.	UNKNOWN	24.77	720	J
5. 1002-84-2	PENTADECANOIC ACID	25.27	1600	J
6.	UNKNOWN	26.37	3400	J
7.	UNKNOWN	26.47	7100	J
8.	UNKNOWN	26.59	5600	J
9. 57-10-3	HEXADECANOIC ACID	26.81	25000	J
10.	UNKNOWN	27.72	1400	J
11. 506-12-7	HEPTADECANOIC ACID	27.91	1100	J
12.	UNKNOWN	28.54	980	J
13.	UNKNOWN	29.02	1100000	J
14. 57-11-4	OCTADECANOIC ACID	29.24	210000	J
15.	UNKNOWN	29.62	100000	J
16.	UNKNOWN	30.94	110000	J
17.	UNKNOWN	32.92	53000	J
18.	UNKNOWN	33.16	32000	J
19.	UNKNOWN	35.86	1100	J
20.	UNKNOWN	40.12	11000	J

B6

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB00201

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385002

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN1997

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/22/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	990	U
111-44-4	bis(2-Chloroethyl)ether	990	U
95-57-8	2-Chlorophenol	990	U
541-73-1	1,3-Dichlorobenzene	990	U
106-46-7	1,4-Dichlorobenzene	990	U
95-50-1	1,2-Dichlorobenzene	990	U
95-48-7	2-Methylphenol	990	U
108-60-1	2,2'-oxybis(1-Chloropropane)	990	U
106-44-5	4-Methylphenol	990	U
621-64-7	N-Nitroso-di-n-propylamine	990	U
67-72-1	Hexachloroethane	990	U
98-95-3	Nitrobenzene	990	U
78-59-1	Isophorone	990	U
88-75-5	2-Nitrophenol	990	U
105-67-9	2,4-Dimethylphenol	990	U
111-91-1	bis(2-Chloroethoxy)methane	990	U
120-83-2	2,4-Dichlorophenol	990	U
120-82-1	1,2,4-Trichlorobenzene	990	U
91-20-3	Naphthalene	990	U
106-47-8	4-Chloroaniline	990	U
87-68-3	Hexachlorobutadiene	990	U
59-50-7	4-Chloro-3-methylphenol	990	U
91-57-6	2-Methylnaphthalene	990	U
77-47-4	Hexachlorocyclopentadiene	990	U
88-06-2	2,4,6-Trichlorophenol	990	U
95-95-4	2,4,5-Trichlorophenol	2400	U
91-58-7	2-Chloronaphthalene	990	U
88-74-4	2-Nitroaniline	2400	U
131-11-3	Dimethylphthalate	990	U
208-96-8	Acenaphthylene	990	U
606-20-2	2,6-Dinitrotoluene	990	U
99-09-2	3-Nitroaniline	2400	U
83-32-9	Acenaphthene	990	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSB00201

Lab Name: CH2M HILL/LRD Contract: S35385

Lab Code: _____ Case No.: S35385 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) FISH Lab Sample ID: 35385002

Sample wt/vol: 10.0 (g/mL) G Lab File ID: 93M3BN1997

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) N Date Extracted: 03/01/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/22/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	2400	U
100-02-7	4-Nitrophenol	2400	U
132-64-9	Dibenzofuran	990	U
121-14-2	2,4-Dinitrotoluene	990	U
84-66-2	Diethylphthalate	990	U
7005-72-3	4-Chlorophenyl-phenylether	990	U
86-73-7	Fluorene	990	U
100-01-6	4-Nitroaniline	2400	U
534-52-1	4,6-Dinitro-2-methylphenol	2400	U
86-30-6	N-Nitrosodiphenylamine (1)	990	U
101-55-3	4-Bromophenyl-phenylether	990	U
118-74-1	Hexachlorobenzene	990	U
87-86-5	Pentachlorophenol	2400	U
85-01-8	Phenanthrene	990	U
120-12-7	Anthracene	990	U
86-74-8	Carbazole	990	U
84-74-2	Di-n-butylphthalate	250	J
206-44-0	Fluoranthene	990	U
129-00-0	Pyrene	990	U
85-68-7	Butylbenzylphthalate	990	U
91-94-1	3,3'-Dichlorobenzidine	990	U
56-55-3	Benzo(a)anthracene	990	U
218-01-9	Chrysene	990	U
117-81-7	bis(2-Ethylhexyl)phthalate	990	U
117-84-0	Di-n-octylphthalate	990	U
205-99-2	Benzo(b)fluoranthene	990	U
207-08-9	Benzo(k)fluoranthene	990	U
50-32-8	Benzo(a)pyrene	990	U
193-39-5	Indeno(1,2,3-cd)pyrene	990	U
53-70-3	Dibenz(a,h)anthracene	990	U
191-24-2	Benzo(g,h,i)perylene	990	U

(1) - Cannot be separated from Diphenylamine

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: CH2M HILL/WGM Contract: _____

Lab Code: CH2M Case No.: 23946 SAS No.: _____ SDG No.: _____

Matrix (soil/water) SOIL Lab Sample ID: 23946001

Sample wt (g): 31.0 g ml: 3 Lab File ID: _____

% Moisture: 21 decanted (Y/N) N Date Received: 10/04/93

Extraction: SepF/Cont/Sonc SONC Date Extracted: 10/18/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 10/25/93

Injection Volume: 1.00 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: ____ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	34	U
319-85-7	beta-BHC	34	U
319-86-8	delta-BHC	34	U
58-89-9	gamma-BHC (Lindane)	34	U
76-44-8	Heptachlor	34	U
309-00-2	Aldrin	34	U
1024-57-3	Heptachlor epoxide	34	U
959-98-8	Endosulfan I	34	U
60-57-1	Dieldrin	66	U
72-55-9	4,4'-DDE	74	
72-20-8	Endrin	66	U
33213-65-9	Endosulfan II	66	U
72-54-8	4,4'-DDD	66	U
1031-07-8	Endosulfan sulfate	66	U
50-29-3	4,4'-DDT	66	U
72-43-5	Methoxychlor	340	U
53494-70-5	Endrin ketone	66	U
7421-36-3	Endrin aldehyde	66	U
5103-71-9	alpha-Chlordane	34	U
5103-74-2	gamma-Chlordane	34	U
8001-35-2	Toxaphene	3400	U
12674-11-2	Aroclor-1016	660	U
11104-28-2	Aroclor-1221	1300	U
11141-16-5	Aroclor-1232	660	U
53469-21-9	Aroclor-1242	660	U
12672-29-6	Aroclor-1248	660	U
11097-69-1	Aroclor-1254	410	J
11096-82-5	Aroclor-1260	660	U

JWS

FORM I PEST 000311 3/90

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: CH2M HILL/NSM Contract: _____

Lab Code: CH2M Case No.: 23946 SAS No.: _____ SDG No. _____

Matrix (soil/water) WATER Lab Sample ID: 23946002

Sample wt/vol: 1000 g/mL ML Lab File ID: _____

% Moisture _____ decanted (Y/N) ___ Date Received: 02/24/93

Extraction (SepF/Cont/Sonc) SEPF Date Extracted: 02/24/93

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/04/93

Injection Volume: 1.00 uL Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH _____ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SDG No.

Lab Name: CH2M HILL MGM Contract: _____

Lab Code: CH2M Case No.: 23946 SAS No.: _____ SDG No.: _____

Matrix (soil/water): SOIL Lab Sample ID: 23946003

Sample wt/vol: 30.1 g Lab File ID: _____

% Moisture: 36 decanted (Y/N): N Date Received: 02/04/93

Extraction: SepF/Cont/Sonc: SONC Date Extracted: 02/09/93

Concentrated Extract Volume: 5000 uL Date Analyzed: 03/05/93

Injection Volume: 1.00 uL Dilution Factor: 10.1

GPC Cleanup (Y/N): Y pH: _____ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	27	U
319-85-7	beta-BHC	27	U
319-86-8	delta-BHC	27	U
58-89-9	gamma-BHC (Lindane)	27	U
76-44-8	Heptachlor	27	U
309-00-2	Aldrin	27	U
1024-57-3	Heptachlor epoxide	27	U
959-98-8	Endosulfan I	27	U
60-57-1	Dieldrin	52	U
72-55-9	4,4'-DDE	9.5	J
72-20-8	Endrin	52	U
33213-65-9	Endosulfan II	52	U
72-54-8	4,4'-DDD	18	JP
1031-07-8	Endosulfan sulfate	52	U
50-29-3	4,4'-DDT	52	U
72-43-5	Methoxychlor	270	U
53494-70-5	Endrin ketone	52	U
7421-36-3	Endrin aldehyde	52	U
5103-71-9	alpha-Chlordane	33	
5103-74-2	gamma-Chlordane	30	P
8001-35-2	Toxaphene	2700	U
12674-11-2	Aroclor-1016	520	U
11104-28-2	Aroclor-1221	1000	U
11141-16-5	Aroclor-1232	520	U
53469-21-9	Aroclor-1242	520	U
12672-29-6	Aroclor-1248	520	U
11097-69-1	Aroclor-1254	520	U
11096-82-5	Aroclor-1260	520	U

FORM I PEST 3/90

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name CH2M HILL/MGM Contract

Lab Code. CH2M Case No.: 23946 SAS No.: SDG No.:

Matrix (soil/water) WATER Lab Sample ID: 23946004

Sample wt/vol: 1000 g/mL ML Lab File ID

% Moisture decanted (Y/N) Date Received

Extraction SepF/Cont/Sonc SEPF Date Extracted

Concentrated Extract Volume 10000 uL) Date Analyzed:

Injection Volume: 1.0 uL Dilution Factor 1.0

GPC Cleanup (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name CH2M HILL/MGM Contract

Lab Code: CH2M Case No.: 23946 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 23946005

Sample wt/vol 31.2 g Ml 3 Lab File ID:

% Moisture 88 decanted (Y/N) N Date Received 10/14/93

Extraction: SepF/Cont/Sonc SONC Date Extracted: 10/18/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 10/25/93

Injection Volume: 1.00 (uL) Dilution Factor 2.11

GPC Cleanup: (Y/N) Y pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	31	U
319-85-7	beta-BHC	31	U
319-86-8	delta-BHC	31	U
58-89-9	gamma-BHC (Lindane)	31	U
76-44-8	Heptachlor	31	U
309-00-2	Aldrin	31	U
1024-57-3	Heptachlor epoxide	31	U
959-98-8	Endosulfan I	31	U
60-57-1	Dieldrin	60	U
72-55-9	4,4'-DDE	51	J
72-20-8	Endrin	60	U
33213-65-9	Endosulfan II	60	U
72-54-8	4,4'-DDD	60	U
1031-07-8	Endosulfan sulfate	60	U
50-29-3	4,4'-DDT	60	U
72-43-5	Methoxychlor	310	U
53494-70-5	Endrin ketone	60	U
7421-36-3	Endrin aldehyde	60	U
5103-71-9	alpha-Chlordane	31	U
5103-74-2	gamma-Chlordane	31	U
8001-35-2	Toxaphene	3100	U
12674-11-2	Aroclor-1016	600	U
11104-28-2	Aroclor-1221	1200	U
11141-16-5	Aroclor-1232	600	U
53469-21-9	Aroclor-1242	600	U
12672-29-6	Aroclor-1248	600	U
11097-69-1	Aroclor-1254	230	J
11096-82-5	Aroclor-1260	600	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE

Lab Name: CH2M HILL/MGM Contract

Lab Code: CH2M Case No.: 23946 SAS No.: SDG No.:

Matrix (soil/water) WATER Lab Sample ID: 23946006

Sample wt/vol 1000 (g/mL) ML Lab File ID

% Moisture decanted: (Y/N) Date Received: 10/24/91

Extraction: SepF/Cont Sonc SEPF Date Extracted: 10/28/91

Concentrated Extract Volume 10000 (uL) Date Analyzed: 11/1/91

Injection Volume: 1.00 (uL) Dilution Factor 1.00

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name CH2M HILL/MGM Contract: _____

Lab Code: CH2M Case No.: 23946 SAS No.: _____ SDG No.: _____

Matrix (soil/water) WATER Lab Sample ID: 23946007

Sample wt (g) 1000 g or ml ML Lab File ID _____

% Moisture _____ decanted (Y/N) ___ Date Received 10/24/91

Extraction: SepF Cont/Sonc SEPF Date Extracted 10/28/91

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/29/91

Injection Volume: 1.00 uL Dilution Factor: 1.0

GPC Cleanup (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE

Lab Name: CH2M HILL VGM Contract: _____

Lab Code: CH2M Case No.: 23946 SAS No.: _____ SDG No.: _____

Matrix (soil/water): WATER Lab Sample ID: 23946008

Sample wt/vol: 1000 g/mL ML Lab File ID: _____

% Moisture: _____ decanted: Y/N ___ Date Received: 10/24/90

Extraction: Sep.F.Cont/Sonc SEPF Date Extracted: 10/28/90

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/4/90

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: CH2M HILL/MGM Contract: _____ LSDP No.: _____

Lab Code: CH2M Case No.: 23946 SAS No.: _____ SDG No.: _____

Matrix (soil/water): SOIL Lab Sample ID: 23946009

Sample wt/vol: 30.0 g/mL: G Lab File ID: _____

% Moisture: 38 decanted (Y/N): N Date Received: 02/14/91

Extraction (SepF/Cont/Sonc): SONC Date Extracted: 02/28/91

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/08/91

Injection Volume: 1.00 (uL) Dilution Factor: 2.00

GPC Cleanup (Y/N): Y pH: ____ Sulfur Cleanup: (Y/N): Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.5	U
319-85-7	beta-BHC	5.5	U
319-86-8	delta-BHC	5.5	U
58-89-9	gamma-BHC (Lindane)	5.5	U
76-44-8	Heptachlor	5.5	U
309-00-2	Aldrin	5.5	U
1024-57-3	Heptachlor epoxide	5.5	U
959-98-8	Endosulfan I	5.5	U
60-57-1	Dieldrin	11	U
72-55-9	4,4'-DDE	3.2	J
72-20-8	Endrin	11	U
33213-65-9	Endosulfan II	11	U
72-54-8	4,4'-DDD	11	U
1031-07-8	Endosulfan sulfate	11	U
50-29-3	4,4'-DDT	11	U
72-43-5	Methoxychlor	55	U
53494-70-5	Endrin ketone	11	U
7421-36-3	Endrin aldehyde	11	U
5103-71-9	alpha-Chlordane	5.5	U
5103-74-2	gamma-Chlordane	5.5	U
8001-35-2	Toxaphene	550	U
12674-11-2	Aroclor-1016	110	U
11104-28-2	Aroclor-1221	220	U
11141-16-5	Aroclor-1232	110	U
53469-21-9	Aroclor-1242	110	U
12672-29-6	Aroclor-1248	110	U
11097-69-1	Aroclor-1254	110	U
11096-82-5	Aroclor-1260	110	U

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1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

[illegible]

Lab Name: CH2M HILL/MGM Contract: _____

Lab Code: CH2M Case No.: 23946 SAS No.: _____ SDG No.: _____

Matrix (soil/water): SOIL Lab Sample ID: 23946010

Sample wt/vol: 30.0 g/mL: G Lab File ID: _____

% Moisture: 19 decanted (Y/N): N Date Received: 02/04/93

Extraction: SepF/Cont/Sonc: SONC Date Extracted: 02/04/[illegible]

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/05/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: ____ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.7	U
319-85-7	beta-BHC	2.7	U
319-86-8	delta-BHC	2.7	U
58-89-9	gamma-BHC (Lindane)	2.7	U
76-44-8	Heptachlor	2.7	U
309-00-2	Aldrin	2.7	U
1024-57-3	Heptachlor epoxide	2.7	U
959-98-8	Endosulfan I	2.7	U
60-57-1	Dieldrin	5.3	U
72-55-9	4,4'-DDE	2.0	JP
72-20-8	Endrin	5.3	U
33213-65-9	Endosulfan II	5.3	U
72-54-8	4,4'-DDD	5.3	U
1031-07-8	Endosulfan sulfate	5.3	U
50-29-3	4,4'-DDT	5.3	U
72-43-5	Methoxychlor	27	U
53494-70-5	Endrin ketone	5.3	U
7421-36-3	Endrin aldehyde	5.3	U
5103-71-9	alpha-Chlordane	2.7	U
5103-74-2	gamma-Chlordane	2.7	U
8001-35-2	Toxaphene	270	U
12674-11-2	Aroclor-1016	53	U
11104-28-2	Aroclor-1221	110	U
11141-16-5	Aroclor-1232	53	U
53469-21-9	Aroclor-1242	53	U
12672-29-6	Aroclor-1248	53	U
11097-69-1	Aroclor-1254	53	U
11096-82-5	Aroclor-1260	53	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

[illegible]

Lab Name CH2M HILL MGM Contract _____

Lab Code: CH2M Case No.: 23946 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 23946011

Sample wt/vol 30.1 g/mL 3 Lab File ID _____

% Moisture 58 decanted (Y/N) N Date Received 10/4/11

Extraction SepF Cont.Sonc SONC Date Extracted 10/19/11

Concentrated Extract Volume: 5000 uL Date Analyzed 11/15/11

Injection Volume 1.00 uL Dilution Factor: 1.00

GPC Cleanup (Y/N) Y pH: ____ Sulfur Cleanup (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	4.0	U
319-85-7	beta-BHC	4.0	U
319-86-8	delta-BHC	4.0	U
58-89-9	gamma-BHC (Lindane)	4.0	U
76-44-8	Heptachlor	4.0	U
309-00-2	Aldrin	4.0	U
1024-57-3	Heptachlor epoxide	4.0	U
959-98-8	Endosulfan I	4.0	U
60-57-1	Dieldrin	7.9	U
72-55-9	4,4'-DDE	7.3	J
72-20-8	Endrin	7.9	U
33213-65-9	Endosulfan II	7.9	U
72-54-8	4,4'-DDD	7.9	U
1031-07-8	Endosulfan sulfate	7.9	U
50-29-3	4,4'-DDT	7.9	U
72-43-5	Methoxychlor	40	U
53494-70-5	Endrin ketone	7.9	U
7421-36-3	Endrin aldehyde	7.9	U
5103-71-9	alpha-Chlordane	4.0	U
5103-74-2	gamma-Chlordane	4.0	U
8001-35-2	Toxaphene	400	U
12674-11-2	Aroclor-1016	79	U
11104-28-2	Aroclor-1221	160	U
11141-16-5	Aroclor-1232	79	U
53469-21-9	Aroclor-1242	79	U
12672-29-6	Aroclor-1248	79	U
11097-69-1	Aroclor-1254	83	
11096-82-5	Aroclor-1260	79	U

FORM I PEST

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: CH2M HILL/MGM Contract: _____

Lab Code: CH2M Case No.: 23946 SAS No.: _____ SDG No.: _____

Matrix (soil/water): SOIL Lab Sample ID: 23946010

Sample wt/vol: 30.0 g/ml: G Lab File ID: _____

% Moisture: 27 decanted: (Y/N) N Date Received: 10/04/93

Extraction: SepF/Cont/Sonc: SONC Date Extracted: 10/08/93

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/15/94

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: ____ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.3	U
319-85-7	beta-BHC	2.3	U
319-86-8	delta-BHC	2.3	U
58-89-9	gamma-BHC (Lindane)	2.3	U
76-44-8	Heptachlor	2.3	U
309-00-2	Aldrin	2.3	U
1024-57-3	Heptachlor epoxide	2.3	U
959-98-8	Endosulfan I	2.3	U
60-57-1	Dieldrin	4.5	U
72-55-9	4,4'-DDE	4.5	U
72-20-8	Endrin	4.5	U
33213-65-9	Endosulfan II	4.5	U
72-54-8	4,4'-DDD	4.5	U
1031-07-8	Endosulfan sulfate	4.5	U
50-29-3	4,4'-DDT	4.5	U
72-43-5	Methoxychlor	23	U
53494-70-5	Endrin ketone	4.5	U
7421-36-3	Endrin aldehyde	4.5	U
5103-71-9	alpha-Chlordane	2.3	U
5103-74-2	gamma-Chlordane	2.3	U
8001-35-2	Toxaphene	230	U
12674-11-2	Aroclor-1016	45	U
11104-28-2	Aroclor-1221	92	U
11141-16-5	Aroclor-1232	45	U
53469-21-9	Aroclor-1242	45	U
12672-29-6	Aroclor-1248	45	U
11097-69-1	Aroclor-1254	45	U
11096-82-5	Aroclor-1260	45	U

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1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

[illegible]

Lab Name CH2M HILL/MEM Contract _____ [illegible]

Lab Code: CH2M Case No.: 23946 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 23946014

Sample wt/vol: 1000 g/mL ML Lab File ID _____

% Moisture _____ decanted: (Y/N) ___ Date Received: 10/14/91

Extraction: SepF Cont/Sonc SEPF Date Extracted: 10/18/91

Concentrated Extract Volume 10000 (uL) Date Analyzed: 10/25/91

Injection Volume 1.00 (uL) Dilution Factor 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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FORM I PEST

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: CH2M HILL/MGM Contract: _____

Lab Code: CH2M Case No.: 23946 SAS No.: _____ SDG No.: _____

Matrix (soil/water) WATER Lab Sample ID 23946015

Sample wt (vol) 1000 g/ML ML Lab File ID _____

% Moisture _____ decanted: (Y/N) ___ Date Received: 02/04/93

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted 02/18/93

Concentrated Extract Volume: 10000 uL Date Analyzed: 03/05/93

Injection Volume: 1.00 uL Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

000125

FORM I PEST 3/90

000350

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

[illegible]

Lab Name: CH2M HILL/MGM Contract: _____

Lab Code: CH2M Case No.: 23946 SAS No.: _____ SDG No.: _____

Matrix (soil/water) WATER Lab Sample ID: 23946016

Sample wt/vol 1000 g/mL ML Lab File ID: _____

% Moisture _____ decanted Y/N ___ Date Received [illegible]

Extraction SepF/Cont/Sonc SEPF Date Extracted [illegible]

Concentrated Extract Volume: 10000 uL) Date Analyzed [illegible]

Injection Volume: 1.00 uL) Dilution Factor 1.00

GPC Cleanup (Y/N) N pH. ____ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PEST

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name CH2M HILL/MGM Contract

Lab Code: CH2M Case No.: 23946 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 23946017

Sample wt/vol 1000 g/mL ML Lab File ID

% Moisture: decanted: Y/N Date Received

Extraction: SepF Cont/Sonc SEPF Date Extracted

Concentrated Extract Volume: 10000 (uL) Date Analyzed.

Injection Volume: 1.00 uL Dilution Factor

GPC Cleanup: (Y/N) N pH Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PEST

3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE REC./RPD

Lab Name: CHEM TECH NEW Contract: _____

Lab Code: CH2M Case No.: 23946 SAS No.: _____ SDG No.: _____

Matrix Spike - EPA Sample No.: LSSD0101D

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC
gamma-BHC (Lindane)	26.900	0	21.2	79	46-127
Heptachlor	26.900	0	20.3	85	35-130
Aldrin	26.900	0	21.2	79	34-132
Dieldrin	53.700	0	50.3	94	31-134
Endrin	53.700	0	48.0	89	42-139
4,4'-DDT	53.700	0	44.4	83	23-134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	26.900	20.7	77	3	50	46-127
Heptachlor	26.900	21.8	81	5	31	35-130
Aldrin	26.900	22.0	82	4	43	34-132
Dieldrin	53.700	49.0	91	3	38	31-134
Endrin	53.700	48.6	90	1	45	42-139
4,4'-DDT	53.700	44.3	82	1	50	23-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO

CLSD0101

Lab Name: CH2M_HILL_MGM_____ Contract: 23946_____

Lab Code: NA____ Case No.: 23946_ SAS No.: 23946_ SDG No.: 23946_

Matrix (soil/water) SOIL_ Lab Sample ID 23946001__

Level (low/med) LOW__ Date Received 10/04/93

% Solids: __9.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	15800	_		P_
7440-36-0	Antimony_	35.3	U		P_
7440-38-2	Arsenic__	91.1	_		F_
7440-39-3	Barium___	104	B		P_
7440-41-7	Beryllium	2.2	B		P_
7440-43-9	Cadmium__	8.3	B		P_
7440-70-2	Calcium__	7390	B		P_
7440-47-3	Chromium_	43.4	_		P_
7440-48-4	Cobalt___	6.9	B		P_
7440-50-8	Copper___	262	_		P_
7439-89-6	Iron_____	55200	_		P_
7439-92-1	Lead_____	492	_		F_
7439-95-4	Magnesium	1530	B		P_
7439-96-5	Manganese	55.6	_		P_
7439-97-6	Mercury__	0.16	B		CV
7440-02-0	Nickel___	20.2	U		P_
7440-09-7	Potassium	2010	U		P_
7782-49-2	Selenium_	4.0	U		F_
7440-22-4	Silver___	4.3	U		P_
7440-23-5	Sodium___	2350	B		P_
7440-28-0	Thallium_	5.0	U		F_
7440-62-2	Vanadium_	59.1	B		P_
7440-66-6	Zinc_____	637	_		P_
5955-70-0	Cyanide__	1.5	U		CA

Color Before: BROWN____ Clarity Before: N/A___ Texture: MUD___

Color After: YELLOW___ Clarity After: N/A___ Artifacts: YES___

Comments:
ARTIFACTS_CONSIST_OF_PLANT_MATTER.

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO

CLSW0101

Lab Name: CH2M_HILL_MGM_____ Contract: 23946_____

Lab Code: NA____ Case No.: 23946_ SAS No.: 23946_ SDG No.: 23946_

Matrix (soil/water) WATER Lab Sample ID 23946002__

Level (low/med) : LOW__ Date Received: 02/04/93

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	35.2	B		P_	
7440-36-0	Antimony_	16.4	U		P_	
7440-38-2	Arsenic__	1.7	B	PGH	F_	U1
7440-39-3	Barium___	42.6	B		P_	
7440-41-7	Beryllium	0.26	U		P_	UJ2
7440-43-9	Cadmium__	2.8	U		P_	
7440-70-2	Calcium__	23200			P_	
7440-47-3	Chromium_	2.8	U		P_	
7440-48-4	Cobalt___	2.6	U		P_	
7440-50-8	Copper___	1.2	U		P_	
7439-89-6	Iron_____	334			P_	
7439-92-1	Lead_____	1.7	U		F_	
7439-95-4	Magnesium	6500			P_	
7439-96-5	Manganese	6.7	B		P_	
7439-97-6	Mercury__	0.07	U		CV	
7440-02-0	Nickel___	9.4	U		P_	
7440-09-7	Potassium	3230	B		P_	
7782-49-2	Selenium_	1.8	U		F_	
7440-22-4	Silver___	2.0	U		P_	
7440-23-5	Sodium___	6440			P_	
7440-28-0	Thallium_	2.3	U		F_	
7440-62-2	Vanadium_	2.6	U		P_	
7440-66-6	Zinc_____	9.0	U		P_	
5955-70-0	Cyanide__	3.7	B		CA	

Color Before: CLEAR____ Clarity Before: CLEAR_ Texture: N/A___

Color After: CLEAR____ Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO

CLSD0001

Lab Name: CH2M_HILL_MGM_____ Contract: 23946_____

Lab Code: NA____ Case No.: 23946_ SAS No.: 23946_ SDG No.: 23946_

Matrix (soil/water) SOIL_ Lab Sample ID: 23946003__

Level (low/med) LOW__ Date Received: 02/04/93

% Solids: _83.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	1100			P	
7440-36-0	Antimony	6.1	U		P	
7440-38-2	Arsenic	3.6	B		F	
7440-39-3	Barium	17.8	B		P	
7440-41-7	Beryllium	0.21	~~B~~	PBH	P	U1
7440-43-9	Cadmium	1.0	U		P	
7440-70-2	Calcium	3080			P	
7440-47-3	Chromium	3.3	B		P	
7440-48-4	Cobalt	0.99	U		P	
7440-50-8	Copper	6.8	B		P	
7439-89-6	Iron	6140			P	
7439-92-1	Lead	691			F	
7439-95-4	Magnesium	354	B		P	
7439-96-5	Manganese	27.2			P	
7439-97-6	Mercury	0.01	U		CV	
7440-02-0	Nickel	3.5	U		P	
7440-09-7	Potassium	349	U		P	
7782-49-2	Selenium	0.69	U		F	
7440-22-4	Silver	0.75	U		P	
7440-23-5	Sodium	361	~~B~~	PBM	P	U1
7440-28-0	Thallium	0.87	U		F	
7440-62-2	Vanadium	5.0	B		P	
7440-66-6	Zinc	51.1			P	
5955-70-0	Cyanide	0.26	U		CA	

Color Before: BROWN____ Clarity Before: N/A___ Texture: MUD___

Color After: YELLOW___ Clarity After: N/A___ Artifacts: YES___

Comments:
ARTIFACTS_CONSIST_OF_PLANT_MATTER.

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U.S. EPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CLSW0201

Lab Name: CH2M_HILL_MGM_____ Contract: 23946_____

Lab Code: NA____ Case No.: 23946_ SAS No.: 23946_ SDG No.: 23946_

Matrix (soil/water) WATER Lab Sample ID: 23946004__

Level (low/med): LOW__ Date Received: 08/04/93

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	45.4	B		P_	
7440-36-0	Antimony_	16.4	U		P_	
7440-38-2	Arsenic__	1.4	B	PBH	F_	U1
7440-39-3	Barium___	49.6	B		P_	
7440-41-7	Beryllium	0.26	U		P_	UJ2
7440-43-9	Cadmium__	2.8	U		P_	
7440-70-2	Calcium__	24300			P_	
7440-47-3	Chromium_	2.8	U		P_	
7440-48-4	Cobalt___	2.6	U		P_	
7440-50-8	Copper___	1.2	U		P_	
7439-89-6	Iron_____	791			P_	
7439-92-1	Lead_____	3.3			F_	
7439-95-4	Magnesium	6590			P_	
7439-96-5	Manganese	9.2	B		P_	
7439-97-6	Mercury__	0.08	B		CV	
7440-02-0	Nickel___	9.4	U		P_	
7440-09-7	Potassium	3180	B		P_	
7782-49-2	Selenium_	1.8	U		F_	
7440-22-4	Silver___	2.0	U		P_	
7440-23-5	Sodium___	6750			P_	
7440-28-0	Thallium_	2.3	U		F_	
7440-62-2	Vanadium_	2.6	U		P_	
7440-66-6	Zinc_____	9.0	U		P_	
5955-70-0	Cyanide__	1.4	U		CA	

Color Before: CLEAR____ Clarity Before: CLEAR_ Texture: N/A___

Color After: CLEAR____ Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO

CLSD0301

Lab Name: CH2M_HILL_MGM_____ Contract: 23946_____

Lab Code: NA____ Case No.: 23946_ SAS No.: 23946_ SDG No.: 23946_

Matrix (soil/water) SOIL_ Lab Sample ID 23946003__

Level (low/med): LOW__ Date Received: 02/04/93

% Solids: _10.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	12000	_		P_
7440-36-0	Antimony_	31.8	U		P_
7440-38-2	Arsenic__	50.8	_		F_
7440-39-3	Barium___	93.0	B		P_
7440-41-7	Beryllium	1.1	B		P_
7440-43-9	Cadmium__	5.4	U		P_
7440-70-2	Calcium__	7460	B		P_
7440-47-3	Chromium_	33.4	_		P_
7440-48-4	Cobalt___	5.1	U		P_
7440-50-8	Copper___	236	_		P_
7439-89-6	Iron_____	43700	_		P_
7439-92-1	Lead_____	261	_		F_
7439-95-4	Magnesium	1220	B		P_
7439-96-5	Manganese	77.2	_		P_
7439-97-6	Mercury__	0.12	B		CV
7440-02-0	Nickel___	19.0	B		P_
7440-09-7	Potassium	1810	U		P_
7782-49-2	Selenium_	3.6	U		F_
7440-22-4	Silver___	3.9	U		P_
7440-23-5	Sodium___	1980	B		P_
7440-28-0	Thallium_	4.5	U		F_
7440-62-2	Vanadium_	40.9	B		P_
7440-66-6	Zinc_____	377	_		P_
5955-70-0	Cyanide__	1.4	U		CA

Color Before: BROWN____ Clarity Before: N/A___ Texture: MUD___

Color After: YELLOW___ Clarity After: N/A___ Artifacts: YES___

Comments:
ARTIFACTS_CONSIST_OF_PLANT_MATTER._____

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U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CLSW0301

Lab Name: CH2M_HILL_MGM Contract: 23946

Lab Code: NA Case No.: 23946 SAS No.: 23946 SDG No.: 23946

Matrix (soil/water) WATER Lab Sample ID 23946004

Level (low/med) LOW Date Received 08/04/93

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight) UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	39.7	B		P	
7440-36-0	Antimony	16.4	U		P	
7440-38-2	Arsenic	2.0	~~B~~	POH	F	U1
7440-39-3	Barium	43.2	B		P	
7440-41-7	Beryllium	0.26	U		P	UT2
7440-43-9	Cadmium	2.8	U		P	
7440-70-2	Calcium	23500			P	
7440-47-3	Chromium	2.8	U		P	
7440-48-4	Cobalt	2.6	U		P	
7440-50-8	Copper	3.2	B		P	
7439-89-6	Iron	292			P	
7439-92-1	Lead	1.7	U		F	
7439-95-4	Magnesium	6530			P	
7439-96-5	Manganese	6.8	B		P	
7439-97-6	Mercury	0.07	U		CV	
7440-02-0	Nickel	9.4	U		P	
7440-09-7	Potassium	3340	B		P	
7782-49-2	Selenium	1.9	B		F	
7440-22-4	Silver	2.0	U		P	
7440-23-5	Sodium	6590			P	
7440-28-0	Thallium	2.3	U		F	
7440-62-2	Vanadium	2.6	U		P	
7440-66-6	Zinc	9.8	B		P	
5955-70-0	Cyanide	1.4	U		CA	

Color Before: CLEAR Clarity Before: CLEAR Texture: N/A

Color After: CLEAR Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO

P159RB1101

Lab Name: CH2M_HILL_MGM_____ Contract: 23946_____

Lab Code: NA____ Case No.: 23946_ SAS No.: 23946_ SDG No.: 23946_

Matrix (soil/water) WATER Lab Sample ID 23946007__

Level (low/med) LOW__ Date Received 02/04/93

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	25.2	B		P_	
7440-36-0	Antimony_	16.4	U		P_	
7440-38-2	Arsenic__	0.68	U		F_	
7440-39-3	Barium___	0.84	B	PGH	P_	U1
7440-41-7	Beryllium	0.26	U		P_	UJ2
7440-43-9	Cadmium__	3.6	B		P_	
7440-70-2	Calcium__	204	B	PGH	P_	U1
7440-47-3	Chromium_	2.8	U		P_	
7440-48-4	Cobalt___	2.6	U		P_	
7440-50-8	Copper___	3.5	B		P_	
7439-89-6	Iron_____	27.9	B	PGH	P_	U1
7439-92-1	Lead_____	1.7	U		F_	
7439-95-4	Magnesium	18.7	B		P_	
7439-96-5	Manganese	0.55	B	PGH	P_	U1
7439-97-6	Mercury__	0.10	B		CV	
7440-02-0	Nickel___	9.7	B		P_	
7440-09-7	Potassium	934	U		P_	
7782-49-2	Selenium_	1.8	U		F_	
7440-22-4	Silver___	2.0	U		P_	
7440-23-5	Sodium___	1010	B		P_	U1
7440-28-0	Thallium_	2.3	U		F_	
7440-62-2	Vanadium_	2.6	U		P_	
7440-66-6	Zinc_____	9.0	U		P_	
5955-70-0	Cyanide__	1.4	U		CA	

Color Before: CLEAR____ Clarity Before: CLEAR_ Texture: N/A___

Color After: CLEAR____ Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO

P159RB1201

Lab Name: CH2M_HILL_MGM_____ Contract: 23946_____

Lab Code: NA____ Case No.: 23946_ SAS No.: 23946_ SDG No.: 23946_

Matrix (soil/water) WATER Lab Sample ID: 23946008__

Level (low/med): LOW__ Date Received: 02/04/93

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	24.3	U		P_	
7440-36-0	Antimony_	16.4	U		P_	
7440-38-2	Arsenic__	0.98	B	PBH	F_	U1
7440-39-3	Barium___	0.84	B	PBH	P_	U1
7440-41-7	Beryllium	0.26	U		P_	U12
7440-43-9	Cadmium__	2.8	U		P_	
7440-70-2	Calcium__	248	B	PBH	P_	U1
7440-47-3	Chromium_	2.8	U		P_	
7440-48-4	Cobalt___	2.6	U		P_	
7440-50-8	Copper___	3.7	B		P_	
7439-89-6	Iron_____	30.5	B	PBH	P_	U1
7439-92-1	Lead_____	1.7	U		F_	
7439-95-4	Magnesium	15.3	U		P_	
7439-96-5	Manganese	0.64	B	PBH	P_	U1
7439-97-6	Mercury__	0.07	U		CV	
7440-02-0	Nickel___	9.4	U		P_	
7440-09-7	Potassium	934	U		P_	
7782-49-2	Selenium_	1.8	U		F_	
7440-22-4	Silver___	2.0	U		P_	
7440-23-5	Sodium___	1030	B	PBH	P_	U1
7440-28-0	Thallium_	2.3	U		F_	
7440-62-2	Vanadium_	2.6	U		P_	
7440-66-6	Zinc_____	9.7	B		P_	
5955-70-0	Cyanide__	1.4	U		CA	

Color Before: CLEAR____ Clarity Before: CLEAR_ Texture: N/A___

Color After: CLEAR____ Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO

LSSD0101

Lab Name: CH2M_HILL_MGM_____ Contract: 23946_____

Lab Code: NA____ Case No.: 23946_ SAS No.: 23946_ SDG No.: 23946_

Matrix soil/water SOIL_ Lab Sample ID 23946009__

Level low med LOW__ Date Received 02/04/93

% Solids. _57.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	1420	_		P_	
7440-36-0	Antimony_	5.7	U		P_	
7440-38-2	Arsenic__	0.68	B		F_	
7440-39-3	Barium___	5.6	B		P_	
7440-41-7	Beryllium	0.22	~~B~~	PBH	P_	U1
7440-43-9	Cadmium__	0.96	U		P_	
7440-70-2	Calcium__	536	B		P_	
7440-47-3	Chromium_	4.4			P_	
7440-48-4	Cobalt___	0.92	U		P_	
7440-50-8	Copper___	22.3	_		P_	
7439-89-6	Iron_____	925	_		P_	
7439-92-1	Lead_____	38.4	_		F_	
7439-95-4	Magnesium	132	B		P_	
7439-96-5	Manganese	3.7	B		P_	
7439-97-6	Mercury__	0.01	B		CV	
7440-02-0	Nickel___	3.5	B		P_	
7440-09-7	Potassium	323	U		P_	
7782-49-2	Selenium_	0.63	U		F_	
7440-22-4	Silver___	0.69	U		P_	
7440-23-5	Sodium___	373	~~B~~	[illegible]	P_	U1
7440-28-0	Thallium_	0.80	U		F_	
7440-62-2	Vanadium_	2.4	B		P_	
7440-66-6	Zinc_____	24.1			P_	
5955-70-0	Cyanide__	0.24	U		CA	

Color Before: BROWN____ Clarity Before: N/A___ Texture: MUD___

Color After: YELLOW___ Clarity After: N/A___ Artifacts: YES___

Comments:
ARTIFACTS_CONSIST_OF_PLANT_MATTER._____

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO

LSSD0101D

Lab Name: CH2M_HILL_MGM_____ Contract: 23946_____

Lab Code: NA____ Case No.: 23946_ SAS No.: 23946_ SDG No.: 23946_

Matrix (soil/water) SOIL_ Lab Sample ID: 23946010__

Level (low/med) : LOW__ Date Received: 02/04/93

% Solids: _56.2

Concentration Units (ug/L or mg/kg dry weight): MG KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	1240	_		P_	
7440-36-0	Antimony_	5.8	U		P_	
7440-38-2	Arsenic__	0.71	B		F_	
7440-39-3	Barium___	5.3	B		P_	
7440-41-7	Beryllium	0.15	B	PBH	P_	C1
7440-43-9	Cadmium__	1.1	B		P_	
7440-70-2	Calcium__	421	B		P_	
7440-47-3	Chromium_	3.7	_		P_	
7440-48-4	Cobalt___	0.94	U		P_	
7440-50-8	Copper___	20.4	_		P_	
7439-89-6	Iron_____	899	_		P_	
7439-92-1	Lead_____	40.0	_		F_	
7439-95-4	Magnesium	109	B		P_	
7439-96-5	Manganese	3.3	B		P_	
7439-97-6	Mercury__	0.01	B		CV	
7440-02-0	Nickel___	3.3	U		P_	
7440-09-7	Potassium	332	U		P_	
7782-49-2	Selenium_	0.65	U		F_	
7440-22-4	Silver___	0.71	U		P_	
7440-23-5	Sodium___	374	B	[illegible]	P_	C1
7440-28-0	Thallium_	0.83	U		F_	
7440-62-2	Vanadium_	2.2	B		P_	
7440-66-6	Zinc_____	19.7	_		P_	
57-12-5	Cyanide__	0.25	U		CA	

Color Before: BROWN____ Clarity Before: N/A___ Texture: MUD___

Color After: YELLOW___ Clarity After: N/A___ Artifacts: YES___

Comments:
ARTIFACTS_CONSIST_OF_PLANT_MATTER.

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO

LSSD0201

Lab Name: CH2M_HILL_MGM_____ Contract: 23946_____

Lab Code: NA____ Case No.: 23946_ SAS No.: 23946_ SDG No.: 23946_

Matrix (soil/water) SOIL_ Lab Sample ID: 23946011__

Level (low/med) : LOW__ Date Received: 02/04/93

% Solids: _36.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	16300			P_	
7440-36-0	Antimony_	9.0	U		P_	
7440-38-2	Arsenic__	1.9	B		F_	
7440-39-3	Barium___	41.7	B		P_	
7440-41-7	Beryllium	0.49	B	PBH	P_	U1
7440-43-9	Cadmium__	1.9	B		P_	
7440-70-2	Calcium__	1520	B		P_	
7440-47-3	Chromium_	26.7			P_	
7440-48-4	Cobalt___	1.4	U		P_	
7440-50-8	Copper___	94.0			P_	
7439-89-6	Iron____	5550			P_	
7439-92-1	Lead____	106			F_	
7439-95-4	Magnesium	849	B		P_	
7439-96-5	Manganese	14.6			P_	
7439-97-6	Mercury__	0.04	B		CV	
7440-02-0	Nickel___	10.7	B		P_	
7440-09-7	Potassium	510	U		P_	
7782-49-2	Selenium_	1.0	U		F_	
7440-22-4	Silver___	2.7	B		P_	
7440-23-5	Sodium___	630	B	PBH	P_	U1
7440-28-0	Thallium_	1.3	U		F_	
7440-62-2	Vanadium_	18.0	B		P_	
7440-66-6	Zinc____	131			P_	
5955-70-0	Cyanide__	0.39	U		CA	

Color Before: BROWN____ Clarity Before: N/A___ Texture: MUD___

Color After: YELLOW___ Clarity After: N/A___ Artifacts: YES___

Comments:
ARTIFACTS_CONSIST_OF_PLANT_MATTER._____

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO

LSSD0301

Lab Name: CH2M_HILL_MGM_____ Contract: 23946____

Lab Code: NA____ Case No.: 23946_ SAS No.: 23946_ SDG No.: 23946_

Matrix (soil/water) SOIL_ Lab Sample ID 23946012__

Level (low/med) : LOW__ Date Received: 02/04/93

% Solids: _66.3

Concentration Units (ug/L or mg/kg dry weight) : MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	542	_		P_	
7440-36-0	Antimony_	4.9	U		P_	
7440-38-2	Arsenic__	0.36	B		F_	
7440-39-3	Barium___	2.5	B		P_	
7440-41-7	Beryllium	0.12	~~B~~	PBH	P_	U1
7440-43-9	Cadmium__	0.84	U		P_	
7440-70-2	Calcium__	189	~~B~~	PBH	P_	U1
7440-47-3	Chromium_	2.1	B		P_	
7440-48-4	Cobalt___	0.80	U		P_	
7440-50-8	Copper___	4.8	B		P_	
7439-89-6	Iron_____	339	_		P_	
7439-92-1	Lead_____	7.8	_		F_	
7439-95-4	Magnesium	54.2	B		P_	
7439-96-5	Manganese	4.1	B		P_	
7439-97-6	Mercury__	0.01	U		CV	
7440-02-0	Nickel___	2.8	U		P_	
7440-09-7	Potassium	282	U		P_	
7782-49-2	Selenium_	0.55	U		F_	
7440-22-4	Silver___	0.60	U		P_	
7440-23-5	Sodium___	290	~~B~~	PBH	P_	U1
7440-28-0	Thallium_	0.70	U		F_	
7440-62-2	Vanadium_	1.2	B		P_	
7440-66-6	Zinc_____	7.6			P_	
5955-70-0	Cyanide__	0.74	B		CA	

Color Before: BROWN____ Clarity Before: N/A___ Texture: MUD___

Color After: YELLOW___ Clarity After: N/A___ Artifacts: YES___

Comments:
ARTIFACTS_CONSIST_OF_PLANT_MATTER._____

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

LSSW0101

Lab Name: CH2M_HILL_MGM_____ Contract: 23946_____

Lab Code: NA____ Case No.: 23946_ SAS No.: 23946_ SDG No.: 23946_

Matrix (soil/water) WATER Lab Sample ID: 23946014__

Level (low/med) LOW__ Date Received: 02/04/90

% Solids 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	51.1	B		P	
7440-36-0	Antimony	16.4	U		P	
7440-38-2	Arsenic	1.7	~~B~~	PGH	F	U1
7440-39-3	Barium	37.2	B		P	
7440-41-7	Beryllium	0.26	U		P	UJ1
7440-43-9	Cadmium	2.8	U		P	
7440-70-2	Calcium	23200			P	
7440-47-3	Chromium	2.8	U		P	
7440-48-4	Cobalt	2.6	U		P	
7440-50-8	Copper	4.0	B		P	
7439-89-6	Iron	243			P	
7439-92-1	Lead	4.7			F	
7439-95-4	Magnesium	11700			P	
7439-96-5	Manganese	3.8	B		P	
7439-97-6	Mercury	0.07	U		CV	
7440-02-0	Nickel	9.4	U		P	
7440-09-7	Potassium	1520	B		P	
7782-49-2	Selenium	1.8	U		F	
7440-22-4	Silver	2.0	U		P	
7440-23-5	Sodium	8290			P	
7440-28-0	Thallium	2.3	U		F	
7440-62-2	Vanadium	2.6	U		P	
7440-66-6	Zinc	14.6	B		P	
5955-70-0	Cyanide	1.4	U		CA	

Color Before: CLEAR____ Clarity Before: CLEAR_ Texture: N/A___

Color After: CLEAR____ Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

LSSW0101D

Lab Name: CH2M_HILL_MGM_____ Contract: 23946_____

Lab Code: NA____ Case No.: 23946_ SAS No.: 23946_ SDG No.: 23946_

Matrix (soil/water) WATER Lab Sample ID 23946015__

Level (low/med) LOW__ Date Received 02/04/90

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	51.9	B		P_	
7440-36-0	Antimony_	16.4	U		P_	
7440-38-2	Arsenic__	1.8	~~B~~	PBH	F_	U1
7440-39-3	Barium___	36.3	B		P_	
7440-41-7	Beryllium	0.26	U		P_	UJ2
7440-43-9	Cadmium__	2.8	U		P_	
7440-70-2	Calcium__	23000			P_	
7440-47-3	Chromium_	2.8	U		P_	
7440-48-4	Cobalt___	2.6	U		P_	
7440-50-8	Copper___	3.5	B		P_	
7439-89-6	Iron____	214			P_	
7439-92-1	Lead____	5.4			F_	
7439-95-4	Magnesium	11500			P_	
7439-96-5	Manganese	3.3	B		P_	
7439-97-6	Mercury__	0.07	U		CV	
7440-02-0	Nickel___	9.4	U		P_	
7440-09-7	Potassium	1420	B		P_	
7782-49-2	Selenium_	1.8	U		F_	
7440-22-4	Silver___	2.0	U		P_	
7440-23-5	Sodium___	8200			P_	
7440-28-0	Thallium_	2.3	U		F_	
7440-62-2	Vanadium_	2.6	U		P_	
7440-66-6	Zinc____	12.3	B		P_	
5955-70-0	Cyanide__	1.4	U		CA	

Color Before: CLEAR____ Clarity Before: CLEAR_ Texture: N/A___

Color After: CLEAR____ Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

LSSW0201

Lab Name: CH2M_HILL_MGM_____ Contract: 23946_____

Lab Code: NA____ Case No.: 23946_ SAS No.: 23946_ SDG No.: 23946_

Matrix (soil/water) WATER Lab Sample ID: 23946016__

Level (low/med.) LOW__ Date Received: 02/04/93

% Solids __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	41.4	B		P_	
7440-36-0	Antimony_	16.4	U		P_	
7440-38-2	Arsenic__	1.4	~~B~~	PDH	F_	U1
7440-39-3	Barium___	36.9	B		P_	
7440-41-7	Beryllium	0.26	U		P_	UJ 2
7440-43-9	Cadmium__	2.8	U		P_	
7440-70-2	Calcium__	23200			P_	
7440-47-3	Chromium_	2.8	U		P_	
7440-48-4	Cobalt___	2.6	U		P_	
7440-50-8	Copper___	3.5	B		P_	
7439-89-6	Iron_____	275			P_	
7439-92-1	Lead_____	4.2			F_	
7439-95-4	Magnesium	11700			P_	
7439-96-5	Manganese	3.9	B		P_	
7439-97-6	Mercury__	0.07	U		CV	
7440-02-0	Nickel___	9.4	U		P_	
7440-09-7	Potassium	1500	B		P_	
7782-49-2	Selenium_	1.8	U		F_	
7440-22-4	Silver___	2.0	U		P_	
7440-23-5	Sodium___	8300			P_	
7440-28-0	Thallium_	2.3	U		F_	
7440-62-2	Vanadium_	2.6	U		P_	
7440-66-6	Zinc_____	9.0	U		P_	
5955-70-0	Cyanide__	1.4	U		CA	

Color Before: CLEAR____ Clarity Before: CLEAR_ Texture: N/A___

Color After: CLEAR____ Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

LSSW0301

Lab Name: CH2M_HILL_MGM_____ Contract: 23946_____

Lab Code: NA____ Case No.: 23946_ SAS No.: 23946_ SDG No.: 23946_

Matrix (soil/water) WATER Lab Sample ID: 23946017__

Level (low/med) LOW__ Date Received: 03/04/93

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum_	38.9	B		P_	
7440-36-0	Antimony_	16.4	U		P_	
7440-38-2	Arsenic__	0.76	~~B~~	PCR	F_	U1
7440-39-3	Barium___	37.4	B		P_	
7440-41-7	Beryllium	0.26	U		P_	U12
7440-43-9	Cadmium__	2.8	U		P_	
7440-70-2	Calcium__	23500			P_	
7440-47-3	Chromium_	2.8	U		P_	
7440-48-4	Cobalt___	2.6	U		P_	
7440-50-8	Copper___	2.9	B		P_	
7439-89-6	Iron_____	241			P_	
7439-92-1	Lead_____	4.3			F_	
7439-95-4	Magnesium	11700			P_	
7439-96-5	Manganese	3.4	B		P_	
7439-97-6	Mercury__	0.07	U		CV	
7440-02-0	Nickel___	9.4	U		P_	
7440-09-7	Potassium	1170	B		P_	
7782-49-2	Selenium_	1.8	U		F_	
7440-22-4	Silver___	2.0	U		P_	
7440-23-5	Sodium___	8320			P_	
7440-28-0	Thallium_	2.3	U		F_	
7440-62-2	Vanadium_	2.6	U		P_	
7440-66-6	Zinc_____	11.4	B		P_	
57-12-5	Cyanide__	1.4	U		CA	

Color Before: CLEAR____ Clarity Before: CLEAR_ Texture: N/A___

Color After: CLEAR____ Clarity After: CLEAR_ Artifacts: _____

Comments:

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: CHOM MILL LGN Contract: _____

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) SOIL Lab Sample ID: 01311001

Sample wt/vol: 5.1 g/ml 2 Lab File ID: [illegible]

Level: (low/med) LOW Date Received: [illegible]

% Moisture: not dec 39 Date Analyzed: [illegible]

GC Column: CAP ID: 0.531 mm Dilution Factor: 1

Soil Extract Volume: _____ (ul) Soil Aliquot Volume: _____ (ul)

CAS NO	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	91	U
74-83-9	Bromomethane	91	U
75-01-4	Vinyl Chloride	91	U
75-00-3	Chloroethane	91	U
75-09-2	Methylene Chloride	91	U
67-64-1	Acetone	150	B U
75-15-0	Carbon Disulfide	91	U
75-35-4	1,1-Dichloroethene	91	U
75-34-3	1,1-Dichloroethane	91	U
540-59-0	1,2-Dichloroethene (total)	91	U
67-66-3	Chloroform	91	U
107-06-2	1,2-Dichloroethane	91	U
78-93-3	2-Butanone	91	U
71-55-6	1,1,1-Trichloroethane	91	U
56-23-5	Carbon Tetrachloride	91	U
75-27-4	Bromodichloromethane	91	U
78-87-5	1,2-Dichloropropane	91	U
10061-01-5	cis-1,3-Dichloropropene	91	U
79-01-6	Trichloroethene	91	U
124-48-1	Dibromochloromethane	91	U
79-00-5	1,1,2-Trichloroethane	91	U
71-43-2	Benzene	91	U
10061-02-6	trans-1,3-Dichloropropene	91	U
75-25-2	Bromoform	91	U
108-10-1	4-Methyl-2-Pentanone	91	U
591-78-6	2-Hexanone	91	U
127-18-4	Tetrachloroethene	91	U
79-34-5	1,1,2,2-Tetrachloroethane	91	U
108-88-3	Toluene	91	U
108-90-7	Chlorobenzene	91	U
100-41-4	Ethylbenzene	91	U
100-42-5	Styrene	91	U
1330-20-7	Xylene (total)	91	U

FORM I VOA

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

[illegible]

Lab Name [illegible] Contract [illegible]

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) SOIL Lab Sample ID: 01311001

Sample wt/vol 5.1 g ml 3 Lab File ID [illegible]

Level (low/med) LOW Date Received [illegible]

% Moisture: not dec. 89 Date Analyzed. 10 16 93

GC Column CAP ID. 0.531 mm Dilution Factor: 1

Soil Extract Volume _____ uL Soil Aliquot Volume [illegible]

Number TICs found: 0

CONCENTRATION UNITS.
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: [illegible] Contract: _____

Lab Code: _____ Case No.: ABBFS SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) WATER Lab Sample ID: 01311002

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: [illegible]

Level: (low/med) LOW Date Received: [illegible]

% Moisture: not dec. ____ Date Analyzed: [illegible]

GC Column: CAP ID: .530 (mm) Dilution Factor: 1

Soil Extract Volume: _____ (ml) Soil Aliquot Volume: _____ (ml)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

.E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: [illegible] Contract: _____ SDG No.: _____

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) WATER Lab Sample ID: 01311002

Sample wt/vol: 5.0 g/ml ML Lab File ID: [illegible]

Level: (low/med) LOW Date Received: [illegible]

% Moisture: not dec ____ Date Analyzed: [illegible]

GC Column: DB ____ ID: 0.530 (mm) Dilution Factor: 1

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

01871

Lab Name [illegible] Contract

Lab Code. Case No.: ABBES SAS No.: SDG No.: 01311

Matrix (soil/water) SOIL Lab Sample ID. 01311003

Sample wt/vol: 5.1 g ml Lab File ID [illegible]

Level: (low/med) LOW Date Received [illegible]

% Moisture: not dec. 37 Date Analyzed [illegible]

GC Column: DB-624 ID: 0.531 mm Dilution Factor 1.0

Soil Extract Volume: ml Soil Aliquot Volume ml

CAS NO	COMPOUND	CONCENTRATION UNITS. (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	16	U
74-83-9	Bromomethane	16	U
75-01-4	Vinyl Chloride	16	U
75-00-3	Chloroethane	16	U
75-09-2	Methylene Chloride	16	U
67-64-1	Acetone	16 ~~12~~	~~BJ~~ U
75-15-0	Carbon Disulfide	16	U
75-35-4	1,1-Dichloroethene	16	U
75-34-3	1,1-Dichloroethane	16	U
540-59-0	1,2-Dichloroethene (total)	16	U
67-66-3	Chloroform	16	U
107-06-2	1,2-Dichloroethane	16	U
78-93-3	2-Butanone	16	U
71-55-6	1,1,1-Trichloroethane	16	U
56-23-5	Carbon Tetrachloride	16	U
75-27-4	Bromodichloromethane	16	U
78-87-5	1,2-Dichloropropane	16	U
10061-01-5	cis-1,3-Dichloropropene	16	U
79-01-6	Trichloroethene	16	U
124-48-1	Dibromochloromethane	16	U
79-00-5	1,1,2-Trichloroethane	16	U
71-43-2	Benzene	16	U
10061-02-6	trans-1,3-Dichloropropene	16	U
75-25-2	Bromoform	16	U
108-10-1	4-Methyl-2-Pentanone	16	U
591-78-6	2-Hexanone	16	U
127-18-4	Tetrachloroethene	16	U
79-34-5	1,1,2,2-Tetrachloroethane	16	U
108-88-3	Toluene	16	U
108-90-7	Chlorobenzene	16	U
100-41-4	Ethylbenzene	16	U
100-42-5	Styrene	16	U
1330-20-7	Xylene (total)	16	U

FORM I VOA

3/90

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE

Lab Name: [illegible] Contract: _____

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) SOIL Lab Sample ID: 01311003

Sample wt/vol: 5.0 g/ml g Lab File ID: [illegible]

Level: (low/med) LOW Date Received: [illegible]

% Moisture: not dec. 37 Date Analyzed: [illegible]

GC Column: CAP ID: 0.530 mm Dilution Factor: 1

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ uL

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

3/90

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: CH2M HILL LGN Contract: _____

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix (soil/water) WATER Lab Sample ID: 01311004

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: 01B111.D

Level (low/med) LOW Date Received: 02/05/91

% Moisture: not dec. _____ Date Analyzed: 02/10/91

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (ul) Soil Aliquot Volume: _____ (ul)

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

FORM I VOA

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE

DISTRICT

Lab Name: [illegible] Contract: _____

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) WATER Lab Sample ID: 01311004

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: [illegible]

Level: (low/med) LOW Date Received: [illegible]

% Moisture: not dec. _____ Date Analyzed: [illegible]

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (ul) Soil Aliquot Volume: _____ (ul)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

3/90

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: CHEM TECH LGN Contract: _____

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix (soil/water): SOIL Lab Sample ID: 01311005

Sample wt/vol: 5.0 (g/ml) G Lab File ID: 018147.1

Level: (low/med) LOW Date Received: 02/05

% Moisture: not dec. 39 Date Analyzed: 02/16/91

GC Column: CAP ID: 0.531 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (ul) Soil Aliquot Volume: _____ (ul)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	91	U
74-83-9	Bromomethane	91	U
75-01-4	Vinyl Chloride	91	U
75-00-3	Chloroethane	91	U
75-09-2	Methylene Chloride	91	U
67-64-1	Acetone	41 ~~73~~	~~BJ~~ U
75-15-0	Carbon Disulfide	91	U
75-35-4	1,1-Dichloroethene	91	U
75-34-3	1,1-Dichloroethane	91	U
540-59-0	1,2-Dichloroethene (total)	91	U
67-66-3	Chloroform	91	U
107-06-2	1,2-Dichloroethane	91	U
78-93-3	2-Butanone	91	U
71-55-6	1,1,1-Trichloroethane	91	U
56-23-5	Carbon Tetrachloride	91	U
75-27-4	Bromodichloromethane	91	U
78-87-5	1,2-Dichloropropane	91	U
10061-01-5	cis-1,3-Dichloropropene	91	U
79-01-6	Trichloroethene	91	U
124-48-1	Dibromochloromethane	91	U
79-00-5	1,1,2-Trichloroethane	91	U
71-43-2	Benzene	91	U
10061-02-6	trans-1,3-Dichloropropene	91	U
75-25-2	Bromoform	91	U
108-10-1	4-Methyl-2-Pentanone	91	U
591-78-6	2-Hexanone	91	U
127-18-4	Tetrachloroethene	91	U
79-34-5	1,1,2,2-Tetrachloroethane	91	U
108-88-3	Toluene	91	U
108-90-7	Chlorobenzene	91	U
100-41-4	Ethylbenzene	91	U
100-42-5	Styrene	91	U
1330-20-7	Xylene (total)	91	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: CHEM FIELD LAB Contract: _____

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) SOIL Lab Sample ID. 01311005

Sample wt/vol 5.0 g/mL G Lab File ID 03B14304

Level low/med LOW Date Received 12/18/91

% Moisture not dec. 88 Date Analyzed 12/16/91

GC Column: CAP ID: 0.530 mm Dilution Factor 1.

Soil Extract Volume: _____ uL Soil Aliquot Volume: _____ uL

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: [illegible] Contract: _____

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) WATER Lab Sample ID: 01311006

Sample wt/vol: 5.0 g/ml ML Lab File ID: [illegible]

Level: (low/med) LOW Date Received: [illegible]

% Moisture: not dec. _____ Date Analyzed: [illegible]

GC Column: CAP ID: 1.530 mm Dilution Factor: 1.0

Soil Extract Volume: _____ uL Soil Aliquot Volume: _____ uL

CAS NO.	COMPOUND	CONCENTRATION UNITS. (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

FORM I VOA 3/90

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

[illegible]

Lab Name [illegible] Contract: _____

Lab Code: _____ Case No.: ABBES SAS No. _____ SDG No.: 01311

Matrix: (soil/water) WATER Lab Sample ID. 01311006

Sample wt/vol: 5.0 (g/ml) ML Lab File ID [illegible]

Level (low/med) LOW Date Received [illegible]

% Moisture: not dec. ____ Date Analyzed [illegible]

GC Column: DB-[illegible] ID: 0.53 (mm) Dilution Factor 1.1

Soil Extract Volume: _____ (ul) Soil Aliquot Volume _____ (ul)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

3/90

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

[illegible]

Lab Name: [illegible] Contract: _____

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) WATER Lab Sample ID: 01311007

Sample wt/vol: 5.0 g/ml ML Lab File ID: [illegible]

Level: low/med LOW Date Received: [illegible]

% Moisture: not dec. ____ Date Analyzed: [illegible]

GC Column: [illegible] ID: [illegible] mm Dilution Factor: [illegible]

Soil Extract Volume: _____ L Soil Aliquot Volume: ____ L

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

FORM I VOA 3/90

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

[illegible]

Lab Name [illegible] Contract: _____

Lab Code _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) WATER Lab Sample ID: 01311007

Sample wt/vol: 5.0 g/mL ML Lab File ID: [illegible]

Level: (low/med) LOW Date Received: [illegible]

% Moisture: not dec. ____ Date Analyzed: [illegible]

GC Column: DB ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

3/90

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

[illegible]

Lab Name: [illegible] Contract: [illegible]

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) WATER Lab Sample ID: 01311008

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: [illegible]

Level: (low/med) LOW Date Received: [illegible]

% Moisture: not dec. ____ Date Analyzed: [illegible]

GC Column: DB[illegible] ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (ul) Soil Aliquot Volume: [illegible]

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

[illegible]

Lab Name: [illegible] Contract: [illegible]

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No. 01311

Matrix: (soil/water) WATER Lab Sample ID: 01311006

Sample wt/vol: 5.0 g/ml ML Lab File ID: [illegible]

Level (low/med) LOW Date Received: [illegible]

% Moisture: not dec. ____ Date Analyzed: [illegible]

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1

Soil Extract Volume: _____ (ul) Soil Aliquot Volume: _____ (ul)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

3/90

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: [illegible] Contract: _____

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) SOIL Lab Sample ID: 01311009

Sample wt/vol: 5.0 g/ml G Lab File ID: [illegible]

Level: (low/med) LOW Date Received: [illegible]

% Moisture: not dec. 43 Date Analyzed: [illegible]

GC Column: DB-624 ID: 0.530 mm Dilution Factor: 1

Soil Extract Volume: _____ ml Soil Aliquot Volume: _____ ul

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	19	U
74-83-9	Bromomethane	19	U
75-01-4	Vinyl Chloride	19	U
75-00-3	Chloroethane	19	U
75-09-2	Methylene Chloride	19	U
67-64-1	Acetone	19 ~~12~~	~~B~~ U
75-15-0	Carbon Disulfide	19	U
75-35-4	1,1-Dichloroethene	19	U
75-34-3	1,1-Dichloroethane	19	U
540-59-0	1,2-Dichloroethene (total)	19	U
67-66-3	Chloroform	19	U
107-06-2	1,2-Dichloroethane	19	U
78-93-3	2-Butanone	19	U
71-55-6	1,1,1-Trichloroethane	19	U
56-23-5	Carbon Tetrachloride	19	U
75-27-4	Bromodichloromethane	19	U
78-87-5	1,2-Dichloropropane	19	U
10061-01-5	cis-1,3-Dichloropropene	19	U
79-01-6	Trichloroethene	19	U
124-48-1	Dibromochloromethane	19	U
79-00-5	1,1,2-Trichloroethane	19	U
71-43-2	Benzene	19	U
10061-02-6	trans-1,3-Dichloropropene	19	U
75-25-2	Bromoform	19	U
108-10-1	4-Methyl-2-Pentanone	19	U
591-78-6	2-Hexanone	19	U
127-18-4	Tetrachloroethene	19	U
79-34-5	1,1,2,2-Tetrachloroethane	19	U
108-88-3	Toluene	19	U
108-90-7	Chlorobenzene	19	U
100-41-4	Ethylbenzene	19	U
100-42-5	Styrene	19	U
1330-20-7	Xylene (total)	19	U

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

[illegible]

Lab Name [illegible] Contract [illegible]

Lab Code. _____ Case No.: ABBES SAS No.: _____ SDG No 01311

Matrix: (soil/water) SOIL Lab Sample ID. 01311009

Sample wt/vol 5.0 g/ml G Lab File ID [illegible]

Level (low/med) LOW Date Received [illegible]

% Moisture: not dec 48 Date Analyzed: [illegible]

GC Column: DB5 ID: 0.530 (mm) Dilution Factor 1.0

Soil Extract Volume: _____ (ml) Soil Aliquot Volume _____ (ul)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

[illegible]

Lab Name: [illegible] Contract: _____

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix (soil/water): SOIL Lab Sample ID: 01311010

Sample wt/vol: [illegible] g/ml 3 Lab File ID: [illegible]

Level (low/med): LOW Date Received: [illegible]

% Moisture: not dec. 50 Date Analyzed: [illegible]

GC Column: [illegible] ID: [illegible] mm Dilution Factor: [illegible]

Soil Extract Volume: _____ ul Soil Aliquot Volume: [illegible] ul

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	21	U
74-83-9	Bromomethane	21	U
75-01-4	Vinyl Chloride	21	U
75-00-3	Chloroethane	21	U
75-09-2	Methylene Chloride	21	U
67-64-1	Acetone	21	U
75-15-0	Carbon Disulfide	21	U
75-35-4	1,1-Dichloroethene	21	U
75-34-3	1,1-Dichloroethane	21	U
540-59-0	1,2-Dichloroethene (total)	21	U
67-66-3	Chloroform	21	U
107-06-2	1,2-Dichloroethane	21	U
78-93-3	2-Butanone	21	U
71-55-6	1,1,1-Trichloroethane	21	U
56-23-5	Carbon Tetrachloride	21	U
75-27-4	Bromodichloromethane	21	U
78-87-5	1,2-Dichloropropane	21	U
10061-01-5	cis-1,3-Dichloropropene	21	U
79-01-6	Trichloroethene	21	U
124-48-1	Dibromochloromethane	21	U
79-00-5	1,1,2-Trichloroethane	21	U
71-43-2	Benzene	21	U
10061-02-6	trans-1,3-Dichloropropene	21	U
75-25-2	Bromoform	21	U
108-10-1	4-Methyl-2-Pentanone	21	U
591-78-6	2-Hexanone	21	U
127-18-4	Tetrachloroethene	21	U
79-34-5	1,1,2,2-Tetrachloroethane	21	U
108-88-3	Toluene	21	U
108-90-7	Chlorobenzene	21	U
100-41-4	Ethylbenzene	21	U
100-42-5	Styrene	21	U
1330-20-7	Xylene (total)	21	U

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1B
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

[illegible]

Lab Name: [illegible] Contract: _____

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) SOIL Lab Sample ID: 01311010

Sample wt/vol: 5.2 g/ml g Lab File ID: [illegible]

Level: (low/med) LOW Date Received: [illegible]

% Moisture: not dec. 50 Date Analyzed: [illegible]

GC Column: TAP ID: 0.530 (mm) Dilution Factor: [illegible]

Soil Extract Volume: _____ ul Soil Aliquot Volume: [illegible]

Number TICs found: 0

CONCENTRATION UNITS
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: [illegible] Contract: [illegible]

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) SOIL Lab Sample ID: 01311011

Sample wt/vol: 5.0 g/ml G Lab File ID: [illegible]

Level: Low/Med. LOW Date Received: [illegible]

% Moisture: not dec. 57 Date Analyzed: [illegible]

GC Column: DB ID: 1.81 mm Dilution Factor: [illegible]

Soil Extract Volume: _____ ml Soil Aliquot Volume: [illegible] ml

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	23	U
74-83-9	Bromomethane	23	U
75-01-4	Vinyl Chloride	23	U
75-00-3	Chloroethane	23	U
75-09-2	Methylene Chloride	23	U
67-64-1	Acetone	59	~~B~~ U
75-15-0	Carbon Disulfide	23	U
75-35-4	1,1-Dichloroethene	23	U
75-34-3	1,1-Dichloroethane	23	U
540-59-0	1,2-Dichloroethene (total)	23	U
67-66-3	Chloroform	23	U
107-06-2	1,2-Dichloroethane	23	U
78-93-3	2-Butanone	16	J
71-55-6	1,1,1-Trichloroethane	23	U
56-23-5	Carbon Tetrachloride	23	U
75-27-4	Bromodichloromethane	23	U
78-87-5	1,2-Dichloropropane	23	U
10061-01-5	cis-1,3-Dichloropropene	23	U
79-01-6	Trichloroethene	23	U
124-48-1	Dibromochloromethane	23	U
79-00-5	1,1,2-Trichloroethane	23	U
71-43-2	Benzene	23	U
10061-02-6	trans-1,3-Dichloropropene	23	U
75-25-2	Bromoform	23	U
108-10-1	4-Methyl-2-Pentanone	4	J
591-78-6	2-Hexanone	23	U
127-18-4	Tetrachloroethene	23	U
79-34-5	1,1,2,2-Tetrachloroethane	23	U
108-88-3	Toluene	23	U
108-90-7	Chlorobenzene	23	U
100-41-4	Ethylbenzene	23	U
100-42-5	Styrene	23	U
1330-20-7	Xylene (total)	23	U

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE No.

[illegible]

Lab Name: [illegible] Contract: [illegible]

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) SOIL Lab Sample ID: 01311011

Sample wt/vol: 5.0 g/ml G Lab File ID: [illegible]

Level: (low/med) LOW Date Received: [illegible]

% Moisture: not dec. 57 Date Analyzed: [illegible]

GC Column: CAP ID: 0.530 mm Dilution Factor: 1.0

Soil Extract Volume: _____ (ul) Soil Aliquot Volume: _____ (ul)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE No.

[illegible]

Lab Name: CHEM SOLL LOA Contract: _____

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) SOIL Lab Sample ID: 01311012

Sample wt/vol: 5 g/mL 5 Lab File ID: [illegible]

Level: (low/med) LOW Date Received: [illegible]

% Moisture: not dec. 03 Date Analyzed: [illegible]

GC Column: [illegible] ID: [illegible] mm Dilution Factor: 1

Soil Extract Volume: _____ uL Soil Aliquot Volume: [illegible] uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	14	U
67-64-1	Acetone	14	U
75-15-0	Carbon Disulfide	14	U
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	14	U
540-59-0	1,2-Dichloroethene (total)	14	U
67-66-3	Chloroform	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	14	U
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	14	U
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
100-42-5	Styrene	14	U
1330-20-7	Xylene (total)	14	U

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

[illegible]

Lab Name: [illegible] Contract: _____

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) SOIL Lab Sample ID: 01311012

Sample wt/vol: 5.0 g/mL G Lab File ID: B3B16810

Level: (low/med) LOW Date Received: 10/05/93

% Moisture: not dec. 23 Date Analyzed: 10/16/93

GC Column: DB-624 ID: 0.531 mm Dilution Factor: 1.0

Soil Extract Volume: _____ uL Soil Aliquot Volume: _____ uL

Number TICs found: 0

CONCENTRATION UNITS
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: [illegible] Contract: _____

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: [illegible]

Matrix: (soil/water) WATER Lab Sample ID: 01311013

Sample wt/vol: [illegible] g/mL ML Lab File ID: [illegible]

Level: (low/med) LOW Date Received: [illegible]

% Moisture: not dec. _____ Date Analyzed: [illegible]

GC Column: CAP ID: [illegible] mm Dilution Factor: [illegible]

Soil Extract Volume: _____ ul Soil Aliquot Volume: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	1	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

FORM I VOA

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: [illegible] Contract: _____

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) WATER Lab Sample ID: 01311013

Sample wt/vol: 5.0 g/mL ML Lab File ID: [illegible]

Level: low/med LOW Date Received: 12/5/91

% Moisture: not dec. _____ Date Analyzed: 12/12/91

GC Column: SAP ID: 0.531 (mm) Dilution Factor: 1.1

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ uL

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

[illegible]

Lab Name: [illegible] Contract: _____

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) WATER Lab Sample ID: 01311014

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: [illegible]

Level: (low/med) LOW Date Received: [illegible]

% Moisture: not dec. ____ Date Analyzed: [illegible]

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (ml) Soil Aliquot Volume: _____ (ul)

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

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1B
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

[illegible]

Lab Name: [illegible] Contract: _____

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) WATER Lab Sample ID: 01311014

Sample wt/vol: 5.0 g/mL ML Lab File ID: [illegible]

Level: (low/med) LOW Date Received: [illegible]

% Moisture: not dec. ____ Date Analyzed: [illegible]

GC Column: DB ID: 0.530 mm Dilution Factor: 1.0

Soil Extract Volume: _____ uL Soil Aliquot Volume: _____ uL

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE

Lab Name: [illegible] Contract: _____

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix (soil/water): WATER Lab Sample ID: 01311015

Sample wt/vol: [illegible] g/ml ML Lab File ID: [illegible]

Level: LOW/MED LOW Date Received: [illegible]

% Moisture: not dec. _____ Date Analyzed: [illegible]

GC Column: [illegible] ID: [illegible] mm Dilution Factor: [illegible]

Soil Extract Volume: _____ ul Soil Aliquot Volume: _____ ul

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

FORM I VOA

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

[illegible]

Lab Name: [illegible] Contract: _____

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) WATER Lab Sample ID: 01311015

Sample wt/vol: 5.0 g/mL ML Lab File ID: [illegible]

Level: (low/med) LOW Date Received: [illegible]

% Moisture: not dec. ____ Date Analyzed: [illegible]

GC Column: [illegible] ID: [illegible] mm Dilution Factor: 1

Soil Extract Volume: _____ uL Soil Aliquot Volume: [illegible] uL

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

[illegible]

Lab Name: CHEM HILL LGN Contract: [illegible]

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No. 01311

Matrix (soil/water) WATER Lab Sample ID 01311016

Sample wt/vol: 5.0 g/mL (ml) Lab File ID [illegible]

Level (low/med) LOW Date Received [illegible]

% Moisture: not dec. ____ Date Analyzed [illegible]

GC Column: SAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (ml) Soil Aliquot Volume: _____ (ml)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

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1B
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: SHOW HILL LRN Contract: _____ Lab No.

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) WATER Lab Sample ID 01311016

Sample wt/vol: 5.0 g ml ML Lab File ID A3B112.D

Level: low med LOW Date Received 10/8/91

% Moisture: not dec ____ Date Analyzed 10/10/91

GC Column: CAP ID: 0.530 (mm) Dilution Factor 1.0

Soil Extract Volume: _____ (ml) Soil Aliquot Volume _____ (ul)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

3/90

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE

SDG

Lab Name [illegible] Contract

Lab Code. Case No.: ABEES SAS No.: SDG No.: 01311

Matrix: (soil/water) WATER Lab Sample ID: 01311017

Sample wt/vol: [illegible] g/ml ML Lab File ID: [illegible]

Level: (low/med) LOW Date Received: [illegible]

% Moisture: not dec. Date Analyzed: [illegible]

GC Column: [illegible] ID: [illegible] mm Dilution Factor: 1.1

Soil Extract Volume: ml Soil Aliquot Volume: ml

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

FORM I VOA 3/90

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: [illegible] Contract: _____ SMO _____

Lab Code: _____ Case No.: ABBES SAS No.: _____ SDG No.: 01311

Matrix: (soil/water) WATER Lab Sample ID: 01311017

Sample wt/vol: 5.0 g/mL ML Lab File ID: [illegible]

Level: (low/med) LOW Date Received: [illegible]

% Moisture: not dec. ____ Date Analyzed: [illegible]

GC Column: CAP ID: 0.530 mm Dilution Factor: 1

Soil Extract Volume: _____ uL Soil Aliquot Volume: _____ uL

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

3/90

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: CH2M HILL/LRD Contract: S35360

Lab Code: _____ Case No.: S35360 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) SOIL Lab Sample ID: 35360001

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 90MBM1974

Level: (low/med) LOW Date Received: 03/13/90

% Moisture: 90 decanted: (Y/N) N Date Extracted: 03/19/90

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/20/90

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	3300	U
111-44-4	bis(2-Chloroethyl)ether	3300	U
95-57-8	2-Chlorophenol	3300	U
541-73-1	1,3-Dichlorobenzene	3300	U
106-46-7	1,4-Dichlorobenzene	3300	U
95-50-1	1,2-Dichlorobenzene	3300	U
95-48-7	2-Methylphenol	3300	U
108-60-1	2,2'-oxybis(1-Chloropropane)	3300	U
106-44-5	4-Methylphenol	3300	U
621-64-7	N-Nitroso-di-n-propylamine	3300	U
67-72-1	Hexachloroethane	3300	U
98-95-3	Nitrobenzene	3300	U
78-59-1	Isophorone	3300	U
88-75-5	2-Nitrophenol	3300	U
105-67-9	2,4-Dimethylphenol	3300	U
111-91-1	bis(2-Chloroethoxy)methane	3300	U
120-83-2	2,4-Dichlorophenol	3300	U
120-82-1	1,2,4-Trichlorobenzene	3300	U
91-20-3	Naphthalene	3300	U
106-47-8	4-Chloroaniline	3300	U
87-68-3	Hexachlorobutadiene	3300	U
59-50-7	4-Chloro-3-methylphenol	3300	U
91-57-6	2-Methylnaphthalene	3300	U
77-47-4	Hexachlorocyclopentadiene	3300	U
88-06-2	2,4,6-Trichlorophenol	3300	U
95-95-4	2,4,5-Trichlorophenol	8000	U
91-58-7	2-Chloronaphthalene	3300	U
88-74-4	2-Nitroaniline	8000	U
131-11-3	Dimethylphthalate	3300	U
208-96-8	Acenaphthylene	3300	U
606-20-2	2,6-Dinitrotoluene	3300	U
99-09-2	3-Nitroaniline	8000	U
83-32-9	Acenaphthene	3300	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

[illegible]

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix (soil/water) SOIL Lab Sample ID: 35380001

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 90M3BM1974

Level: (low/med) LOW Date Received: 02/18/93

% Moisture: 90 decanted: (Y/N) N Date Extracted: 02/19/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 02/20/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	8000	U
100-02-7	4-Nitrophenol	8000	U
132-64-9	Dibenzofuran	3300	U
121-14-2	2,4-Dinitrotoluene	3300	U
84-66-2	Diethylphthalate	3300	U
7005-72-3	4-Chlorophenyl-phenylether	3300	U
86-73-7	Fluorene	3300	U
100-01-6	4-Nitroaniline	8000	U
534-52-1	4,6-Dinitro-2-methylphenol	8000	U
86-30-6	N-Nitrosodiphenylamine (1)	3300	U
101-55-3	4-Bromophenyl-phenylether	3300	U
118-74-1	Hexachlorobenzene	3300	U
87-86-5	Pentachlorophenol	8000	U
85-01-8	Phenanthrene	3300	U
120-12-7	Anthracene	3300	U
86-74-8	Carbazole	3300	U
84-74-2	Di-n-butylphthalate	3300 ~~2200~~	~~BJ~~ U 6
206-44-0	Fluoranthene	440	J
129-00-0	Pyrene	430	J
85-68-7	Butylbenzylphthalate	3300	U
91-94-1	3,3'-Dichlorobenzidine	3300	U
56-55-3	Benzo(a)anthracene	3300	U
218-01-9	Chrysene	3300	U
117-81-7	bis(2-Ethylhexyl)phthalate	1200	J J 5
117-84-0	Di-n-octylphthalate	3300	U
205-99-2	Benzo(b)fluoranthene	440	J
207-08-9	Benzo(k)fluoranthene	380	J
50-32-8	Benzo(a)pyrene	3300	U
193-39-5	Indeno(1,2,3-cd)pyrene	3300	U
53-70-3	Dibenz(a,h)anthracene	3300	U
191-24-2	Benzo(g,h,i)perylene	3300	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

[illegible]

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) SOIL Lab Sample ID: 35380001

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M3EN1974

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: 90 decanted: (Y/N) N Date Extracted: 02/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/30/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ____

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 108-88-3	TOLUENE	4.30	~~5500~~	~~BJ~~ K 7
2.	UNKNOWN	5.82	~~16000~~	~~J~~
3. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.70	~~190000~~	~~BJ~~
4.	UNKNOWN	8.47	~~4700~~	~~J~~
5.	UNKNOWN	8.85	4100	J
6.	UNKNOWN	9.37	~~11000~~	~~J~~ R 7
7. 18641-71-9	3-HEPTANONE, 2,4-DIMETHYL-	10.39	5800	J
8.	UNKNOWN	11.70	5000	J
9.	UNKNOWN	27.79	7000	J
10.	UNKNOWN	34.42	3400	J
11.	UNKNOWN	34.69	4600	J
12.	UNKNOWN	34.81	2700	J
13.	UNKNOWN	35.02	3200	J
14.	UNKNOWN	35.81	3800	J
15.	UNKNOWN	36.36	3700	J
16.	UNKNOWN	38.71	4500	J
17.	UNKNOWN	39.92	4000	J
18.	UNKNOWN	40.97	3800	J
19.	UNKNOWN	42.14	2900	J
20.	UNKNOWN	43.76	9700	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: CH2M HILL/LRD Contract: S35330

Lab Code: _____ Case No.: S35330 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35330003

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 93M18M1801

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 03/19/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/19/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380000

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 90M1BN1801

Level: (low/med) LOW Date Received: 03/18/90

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 03/19/90

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/19/90

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10 ~~2~~ ~~BJ~~ L	J
84-74-2	Di-n-butylphthalate	10 ~~2~~ ~~BJ~~ L	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10 ~~1~~ ~~BJ~~ L	J
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10 ~~2~~ ~~BJ~~ L	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

000066

FORM I SV-2

000112 3/90

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: CH2M HILL/LPD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380002

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 93M1BM1801

Level: (low/med) LOW Date Received: 02/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 02/10/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/19/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.48	~~7~~	~~J~~
2.	UNKNOWN	5.88	11	J
3. 822-67-3	2-CYCLOHEXEN-1-OL	6.60	5	J
4. 927-83-3	DIAZENE, BIS(1,1-DIMETHYLETH	7.05	~~8~~	~~J~~
5. 930-68-7	2-CYCLOHEXEN-1-ONE	7.62	~~6~~	~~BJ~~
6.	UNKNOWN	9.12	~~12~~	~~J~~

1B
SEMI VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) SOIL Lab Sample ID: 35380003

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M03N1959

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: 23 decanted: (Y/N) N Date Extracted: 03/19/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/19/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	520	U
111-44-4	bis(2-Chloroethyl)ether	520	U
95-57-8	2-Chlorophenol	520	U
541-73-1	1,3-Dichlorobenzene	520	U
106-46-7	1,4-Dichlorobenzene	520	U
95-50-1	1,2-Dichlorobenzene	520	U
95-48-7	2-Methylphenol	520	U
108-60-1	2,2'-oxybis(1-Chloropropane)	520	U
106-44-5	4-Methylphenol	520	U
621-64-7	N-Nitroso-di-n-propylamine	520	U
67-72-1	Hexachloroethane	520	U
98-95-3	Nitrobenzene	520	U
78-59-1	Isophorone	520	U
88-75-5	2-Nitrophenol	520	U
105-67-9	2,4-Dimethylphenol	520	U
111-91-1	bis(2-Chloroethoxy)methane	520	U
120-83-2	2,4-Dichlorophenol	520	U
120-82-1	1,2,4-Trichlorobenzene	520	U
91-20-3	Naphthalene	520	U
106-47-8	4-Chloroaniline	520	U
87-68-3	Hexachlorobutadiene	520	U
59-50-7	4-Chloro-3-methylphenol	520	U
91-57-6	2-Methylnaphthalene	520	U
77-47-4	Hexachlorocyclopentadiene	520	U
88-06-2	2,4,6-Trichlorophenol	520	U
95-95-4	2,4,5-Trichlorophenol	1200	U
91-58-7	2-Chloronaphthalene	520	U
88-74-4	2-Nitroaniline	1200	U
131-11-3	Dimethylphthalate	520	U
208-96-8	Acenaphthylene	520	U
606-20-2	2,6-Dinitrotoluene	520	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	520	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) SOIL Lab Sample ID: 35380003

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93MOBM1959

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: 26 decanted: (Y/N) N Date Extracted: 02/10/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/19/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	1200	~~U~~ UJ	4
100-02-7	4-Nitrophenol	1200	U	
132-64-9	Dibenzofuran	520	U	
121-14-2	2,4-Dinitrotoluene	520	U	
84-66-2	Diethylphthalate	520	U	
7005-72-3	4-Chlorophenyl-phenylether	520	U	
86-73-7	Fluorene	520	U	
100-01-6	4-Nitroaniline	1200	U	
534-52-1	4,6-Dinitro-2-methylphenol	1200	U	
86-30-6	N-Nitrosodiphenylamine (1)	520	U	
101-55-3	4-Bromophenyl-phenylether	520	U	
118-74-1	Hexachlorobenzene	520	U	
87-86-5	Pentachlorophenol	1200	U	
85-01-8	Phenanthrene	500	J	
120-12-7	Anthracene	63	J	
86-74-8	Carbazole	170	J	
84-74-2	Di-n-butylphthalate	520 ~~210~~	~~BJ~~ U	6
206-44-0	Fluoranthene	1900		
129-00-0	Pyrene	1500		
85-68-7	Butylbenzylphthalate	66	J	
91-94-1	3,3'-Dichlorobenzidine	520	U	
56-55-3	Benzo(a)anthracene	880		
218-01-9	Chrysene	1300		
117-81-7	bis(2-Ethylhexyl)phthalate	660	J	3
117-84-0	Di-n-octylphthalate	520	U	
205-99-2	Benzo(b)fluoranthene	1300		
207-08-9	Benzo(k)fluoranthene	1200		
50-32-8	Benzo(a)pyrene	790		
193-39-5	Indeno(1,2,3-cd)pyrene	650		
53-70-3	Dibenz(a,h)anthracene	520	U	
191-24-2	Benzo(g,h,i)perylene	270	J	

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

CLS03201

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) SOIL Lab Sample ID: 35380003

Sample wt/vol: 30.0 (g/ML) G Lab File ID: 93M3BN1959

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: 36 decanted: (Y/N) N Date Extracted: 02/10/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/19/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ____

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 108-88-3	TOLUENE	4.27	~~1000~~	~~BJ~~ L 7
2.	UNKNOWN	5.82	~~3000~~	~~J~~
3. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.73	~~34000~~	~~BJ~~
4.	UNKNOWN	8.47	~~920~~	~~J~~
5.	UNKNOWN	8.84	1500	J
6.	UNKNOWN	9.35	~~1600~~	~~J~~ L 7
7.	UNKNOWN	10.39	~~1400~~	~~J~~ L 7
8.	UNKNOWN	11.70	1300	J
9. 629-62-9	PENTADECANE	22.79	430	J
10.	UNKNOWN	25.32	470	J
11.	UNKNOWN	30.29	610	J
12.	UNKNOWN	34.39	750	J
13.	UNKNOWN	35.06	720	J
14.	UNKNOWN	35.79	580	J
15.	UNKNOWN	36.32	2700	J
16. 205-82-3	BENZO[J]FLUORANTHENE	36.87	670	J
17.	UNKNOWN	38.67	960	J
18.	UNKNOWN	42.11	900	J
19.	UNKNOWN	42.34	610	J
20.	UNKNOWN	43.73	990	J

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380004

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 93M13V1821

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 02/10/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/20/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380004

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 93M1BN1801

Level: (low/med) LOW Date Received: 02/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 02/19/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/20/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25 ~~25~~	~~U~~ UE
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

D/K 04/23/93

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CLSW0001

Lab Name: CH2M HILL/LPD Contract: 35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380004

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 93M1BN1321

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 03/19/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/20/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.47	~~7~~	~~J~~ R ?
2.	UNKNOWN	5.87	4	J
3. 822-67-3	2-CYCLOHEXEN-1-OL	6.58	5	J
4. 111-76-2	ETHANOL, 2-BUTOXY-	7.03	~~8~~	~~J~~ R
5. 930-68-7	2-CYCLOHEXEN-1-ONE	7.60	6	J
6. 105-57-7	ETHANE, 1,1-DIETHOXY-	9.10	~~12~~	~~J~~ R ?
7. 931-17-9	1,2-CYCLOHEXANEDIOL	10.17	~~9~~	~~BJ~~
8. 541-02-6	CYCLOPENTASILOXANE, DECAMETH	11.70	~~9~~	~~BJ~~
9. 540-97-6	CYCLOHEXASILOXANE, DODECAMET	14.40	~~8~~	~~BJ~~

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

[illegible]

Lab Name: CH2M HILL/LPD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) SOIL Lab Sample ID: 35380005

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 93M3BN1947

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: 39 decanted: (Y/N) N Date Extracted: 03/19/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/19/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	3000	U
111-44-4	bis(2-Chloroethyl)ether	3000	U
95-57-8	2-Chlorophenol	3000	U
541-73-1	1,3-Dichlorobenzene	3000	U
106-46-7	1,4-Dichlorobenzene	3000	U
95-50-1	1,2-Dichlorobenzene	3000	U
95-48-7	2-Methylphenol	3000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	3000	U
106-44-5	4-Methylphenol	3000	U
621-64-7	N-Nitroso-di-n-propylamine	3000	U
67-72-1	Hexachloroethane	3000	U
98-95-3	Nitrobenzene	3000	U
78-59-1	Isophorone	3000	U
88-75-5	2-Nitrophenol	3000	U
105-67-9	2,4-Dimethylphenol	3000	U
111-91-1	bis(2-Chloroethoxy)methane	3000	U
120-83-2	2,4-Dichlorophenol	3000	U
120-82-1	1,2,4-Trichlorobenzene	3000	U
91-20-3	Naphthalene	3000	U
106-47-8	4-Chloroaniline	3000	U
87-68-3	Hexachlorobutadiene	3000	U
59-50-7	4-Chloro-3-methylphenol	3000	U
91-57-6	2-Methylnaphthalene	3000	U
77-47-4	Hexachlorocyclopentadiene	3000	U
88-06-2	2,4,6-Trichlorophenol	3000	U
95-95-4	2,4,5-Trichlorophenol	7300	U
91-58-7	2-Chloronaphthalene	3000	U
88-74-4	2-Nitroaniline	7300	U
131-11-3	Dimethylphthalate	3000	U
208-96-8	Acenaphthylene	3000	U
606-20-2	2,6-Dinitrotoluene	3000	U
99-09-2	3-Nitroaniline	7300	U
83-32-9	Acenaphthene	3000	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) SOIL Lab Sample ID: 35380005

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93MOBM1947

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: 39 decanted: (Y/N) N Date Extracted: 03/19/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/18/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	7300	U
100-02-7	4-Nitrophenol	7300	U
132-64-9	Dibenzofuran	3000	U
121-14-2	2,4-Dinitrotoluene	3000	U
84-66-2	Diethylphthalate	3000	U
7005-72-3	4-Chlorophenyl-phenylether	3000	U
86-73-7	Fluorene	3000	U
100-01-6	4-Nitroaniline	7300	U
534-52-1	4,6-Dinitro-2-methylphenol	7300	U
86-30-6	N-Nitrosodiphenylamine (1)	3000	U
101-55-3	4-Bromophenyl-phenylether	3000	U
118-74-1	Hexachlorobenzene	3000	U
87-86-5	Pentachlorophenol	7300	U
85-01-8	Phenanthrene	3000	U
120-12-7	Anthracene	3000	U
86-74-8	Carbazole	3000	U
84-74-2	Di-n-butylphthalate	3000 ~~1400~~	~~BJ~~ B 6
206-44-0	Fluoranthene	420	J
129-00-0	Pyrene	3000	U
85-68-7	Butylbenzylphthalate	3000	U
91-94-1	3,3'-Dichlorobenzidine	3000	U
56-55-3	Benzo(a)anthracene	3000	U
218-01-9	Chrysene	3000	U
117-81-7	bis(2-Ethylhexyl)phthalate	590	J
117-84-0	Di-n-octylphthalate	3000	U
205-99-2	Benzo(b)fluoranthene	320	J
207-08-9	Benzo(k)fluoranthene	3000	U
50-32-8	Benzo(a)pyrene	3000	U
193-39-5	Indeno(1,2,3-cd)pyrene	3000	U
53-70-3	Dibenz(a,h)anthracene	3000	U
191-24-2	Benzo(g,h,i)perylene	3000	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

01301111

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) SOIL Lab Sample ID: 35380005

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93MDBM1947

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: 39 decanted: (Y/N) N Date Extracted: 03/11/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/18/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ____

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 108-88-3	TOLUENE	4.32	~~12000~~	~~J~~
2.	UNKNOWN	5.88	~~36000~~	~~J~~
3. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.78	~~520000~~	~~J~~
4.	UNKNOWN	8.50	~~9600~~	~~J~~
5.	UNKNOWN	8.85	8600	J
6.	UNKNOWN	9.39	~~21000~~	~~J~~
7.	UNKNOWN	9.60	~~5200~~	~~J~~
8. 18641-71-9	3-HEPTANONE, 2,4-DIMETHYL-	10.42	~~10000~~	~~J~~
9.	UNKNOWN	11.52	~~3700~~	~~J~~
10.	UNKNOWN	11.74	~~11000~~	~~J~~
11. 629-62-9	PENTADECANE	22.79	3800	J
12.	UNKNOWN	27.76	3800	J
13. 3913-02-8	1-OCTANOL, 2-BUTYL-	34.36	3800	J
14.	UNKNOWN	35.76	4300	J
15. 3913-02-8	1-OCTANOL, 2-BUTYL-	36.27	4800	J
16.	UNKNOWN	37.06	4600	J
17.	UNKNOWN	38.19	6200	J
18.	UNKNOWN	38.59	5800	J
19.	UNKNOWN	40.87	4900	J
20.	UNKNOWN	43.59	16000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380006

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 93M1BN1828

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 02/10/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/20/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GLS[illegible]

Lab Name: CH2M HILL/LPD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380006

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 93M1BN1322

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 03/10/93

Concentrated Extract Volume: 1100 (uL) Date Analyzed: 03/20/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CLS-0001

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380006

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 93M13N1800

Level: (low/med) LOW Date Received: 03/13/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 02/10/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/20/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.32	~~14~~	~~J~~ R 7
2.	UNKNOWN	5.73	13	J
3. 822-67-3	2-CYCLOHEXEN-1-OL	6.50	10	J
4. 927-83-3	DIAZENE, BIS(1,1-DIMETHYLETH	6.97	7	J
5. 930-68-7	2-CYCLOHEXEN-1-ONE	7.53	8	J
6.	UNKNOWN	9.07	~~11~~	~~J~~ R 7
7.	UNKNOWN	11.69	5	J
8. 541-02-6	CYCLOPENTASILOXANE, DECAMETH	11.75	~~4~~	~~BJ~~ R 7
9. 540-97-6	CYCLOHEXASILOXANE, DODECAMET	14.42	~~7~~	~~BJ~~ R 7

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

[illegible]

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380K07

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 90M1BM1804

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 03/10/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/19/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P159FB1101

Lab Name: CHEM HILL LPO Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380K07

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 93M1EN1304

Level: (low med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 03/19/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/19/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10 ~~1~~ ~~BJ~~ U	6
84-74-2	Di-n-butylphthalate	10 ~~2~~ ~~BJ~~ U	6
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10 ~~2~~ ~~BJ~~ U	6
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P159PB1101

Lab Name: CH2M HILL LPC Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380K07

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 93M1BN1804

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 02/10/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/19/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.42	~~6~~	~~J~~
2. 24070-77-7	CYCLOPENTANOL, 2-METHYL-	6.52	23	J
3.	UNKNOWN	6.65	~~7~~	~~J~~
4. 111-76-2	ETHANOL, 2-BUTOXY-	7.03	~~4~~	~~BJ~~
5.	UNKNOWN	9.09	~~12~~	~~J~~
6. 931-17-9	1,2-CYCLOHEXANEDIOL	10.17	~~5~~	~~BJ~~

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P150PB1D11

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380K08

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 93M1BN1323

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 03/19/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/20/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

P1[illegible]

Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380K08

Sample wt/vol: 1000 (g/ml) ML Lab File ID: 93M1BM1[illegible]

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 03/19/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/20/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

P159PF100.

Lab Name: CHEM HILL LPD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380K08

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 93M1BN1323

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 02/10/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/20/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.45	~~5~~	~~J~~
2. 927-83-3	DIAZENE, BIS(1,1-DIMETHYLETH	7.03	~~5~~	~~J~~
3.	UNKNOWN	9.10	~~14~~	~~J~~
4. 931-17-9	1,2-CYCLOHEXANEDIOL	10.19	~~8~~	~~BJ~~
5. 541-02-6	CYCLOPENTASILOXANE, DECAMETH	11.75	~~7~~	~~BJ~~
6. 540-97-6	CYCLOHEXASILOXANE, DODECAMET	14.42	~~6~~	~~BJ~~

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

[illegible]

Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) SOIL Lab Sample ID: 35380009

Sample wt./vol: 30.0 (g/mL) G Lab File ID: 93M03M1946

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: 33 decanted: (Y/N) N Date Extracted: 03/19/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/19/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	530	U
111-44-4	bis(2-Chloroethyl)ether	530	U
95-57-8	2-Chlorophenol	530	U
541-73-1	1,3-Dichlorobenzene	530	U
106-46-7	1,4-Dichlorobenzene	530	U
95-50-1	1,2-Dichlorobenzene	530	U
95-48-7	2-Methylphenol	530	U
108-60-1	2,2'-oxybis(1-Chloropropane)	530	U
106-44-5	4-Methylphenol	530	U
621-64-7	N-Nitroso-di-n-propylamine	530	U
67-72-1	Hexachloroethane	530	U
98-95-3	Nitrobenzene	530	U
78-59-1	Isophorone	530	U
88-75-5	2-Nitrophenol	530	U
105-67-9	2,4-Dimethylphenol	530	U
111-91-1	bis(2-Chloroethoxy)methane	530	U
120-83-2	2,4-Dichlorophenol	530	U
120-82-1	1,2,4-Trichlorobenzene	530	U
91-20-3	Naphthalene	530	U
106-47-8	4-Chloroaniline	530	U
87-68-3	Hexachlorobutadiene	530	U
59-50-7	4-Chloro-3-methylphenol	530	U
91-57-6	2-Methylnaphthalene	530	U
77-47-4	Hexachlorocyclopentadiene	530	U
88-06-2	2,4,6-Trichlorophenol	530	U
95-95-4	2,4,5-Trichlorophenol	1300	U
91-58-7	2-Chloronaphthalene	530	U
88-74-4	2-Nitroaniline	1300	U
131-11-3	Dimethylphthalate	530	U
208-96-8	Acenaphthylene	530	U
606-20-2	2,6-Dinitrotoluene	530	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	530	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: CH2M HILL/LPD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) SOIL Lab Sample ID: 35380009

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M3BN1946

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: 38 decanted: (Y/N) N Date Extracted: 03/10/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/18/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1300	U
100-02-7	4-Nitrophenol	1300	U
132-64-9	Dibenzofuran	530	U
121-14-2	2,4-Dinitrotoluene	530	U
84-66-2	Diethylphthalate	530	U
7005-72-3	4-Chlorophenyl-phenylether	530	U
86-73-7	Fluorene	530	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	530	U
101-55-3	4-Bromophenyl-phenylether	530	U
118-74-1	Hexachlorobenzene	530	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	70	J
120-12-7	Anthracene	530	U
86-74-8	Carbazole	530	U
84-74-2	Di-n-butylphthalate	530 ~~300~~	~~BJ~~ U 6
206-44-0	Fluoranthene	190	J
129-00-0	Pyrene	130	J
85-68-7	Butylbenzylphthalate	530	U
91-94-1	3,3'-Dichlorobenzidine	530	U
56-55-3	Benzo(a)anthracene	110	J
218-01-9	Chrysene	120	J
117-81-7	bis(2-Ethylhexyl)phthalate	470	J
117-84-0	Di-n-octylphthalate	530	U
205-99-2	Benzo(b)fluoranthene	120	J
207-08-9	Benzo(k)fluoranthene	87	J
50-32-8	Benzo(a)pyrene	87	J
193-39-5	Indeno(1,2,3-cd)pyrene	530	U
53-70-3	Dibenz(a,h)anthracene	530	U
191-24-2	Benzo(g,h,i)perylene	530	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

LSSD[illegible]

Lab Name: CH2M HILL, LFD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) SOIL Lab Sample ID: 35380009

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93MS3N1946

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: 38 decanted: (Y/N) N Date Extracted: 02/10/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/18/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ____

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	108-88-3	TOLUENE	4.30	~~2200~~	~~J~~ R
2.		UNKNOWN	5.88	~~6600~~	~~J~~
3.	123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.78	~~92000~~	~~J~~
4.	921-47-1	HEXANE, 2,3,4-TRIMETHYL-	7.00	~~340~~	~~J~~
5.	2216-33-3	OCTANE, 3-METHYL-	7.20	~~330~~	~~J~~
6.		UNKNOWN	8.50	~~1600~~	~~J~~
7.		UNKNOWN	8.87	3100	J
8.		UNKNOWN	9.40	~~3800~~	~~J~~ R
9.		UNKNOWN	9.62	~~300~~	~~J~~ R
10.	123-54-6	2,4-PENTANEDIONE	10.42	~~2900~~	~~J~~ R
11.		UNKNOWN	10.94	810	J
12.		UNKNOWN	11.54	~~1900~~	~~J~~ R
13.		UNKNOWN	12.92	410	J
14.	10042-59-8	1-HEPTANOL, 2-PROPYL-	22.79	740	J
15.		UNKNOWN	34.81	2100	J
16.		UNKNOWN	34.94	1300	J
17.		UNKNOWN	35.19	720	J
18.		UNKNOWN	36.27	500	J
19.		UNKNOWN	39.81	1100	J
20.		UNKNOWN	43.46	760	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

35380010

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) SOIL Lab Sample ID: 35380010

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 90M3BN1945

Level: (low/med) LOW Date Received: 03/13/90

% Moisture: 33 decanted: (Y/N) N Date Extracted: 03/16/90

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/18/90

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	530	U
111-44-4	bis(2-Chloroethyl)ether	530	U
95-57-8	2-Chlorophenol	530	U
541-73-1	1,3-Dichlorobenzene	530	U
106-46-7	1,4-Dichlorobenzene	530	U
95-50-1	1,2-Dichlorobenzene	530	U
95-48-7	2-Methylphenol	530	U
108-60-1	2,2'-oxybis(1-Chloropropane)	530	U
106-44-5	4-Methylphenol	530	U
621-64-7	N-Nitroso-di-n-propylamine	530	U
67-72-1	Hexachloroethane	530	U
98-95-3	Nitrobenzene	530	U
78-59-1	Isophorone	530	U
88-75-5	2-Nitrophenol	530	U
105-67-9	2,4-Dimethylphenol	530	U
111-91-1	bis(2-Chloroethoxy)methane	530	U
120-83-2	2,4-Dichlorophenol	530	U
120-82-1	1,2,4-Trichlorobenzene	530	U
91-20-3	Naphthalene	530	U
106-47-8	4-Chloroaniline	530	U
87-68-3	Hexachlorobutadiene	530	U
59-50-7	4-Chloro-3-methylphenol	530	U
91-57-6	2-Methylnaphthalene	530	U
77-47-4	Hexachlorocyclopentadiene	530	U
88-06-2	2,4,6-Trichlorophenol	530	U
95-95-4	2,4,5-Trichlorophenol	1300	U
91-58-7	2-Chloronaphthalene	530	U
88-74-4	2-Nitroaniline	1300	U
131-11-3	Dimethylphthalate	530	U
208-96-8	Acenaphthylene	530	U
606-20-2	2,6-Dinitrotoluene	530	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	530	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

LSS01.010

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) SOIL Lab Sample ID: 35380010

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 90M3BM1945

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: 38 decanted: (Y/N) N Date Extracted: 03/10/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/18/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1300	U
100-02-7	4-Nitrophenol	1300	U
132-64-9	Dibenzofuran	530	U
121-14-2	2,4-Dinitrotoluene	530	U
84-66-2	Diethylphthalate	530	U
7005-72-3	4-Chlorophenyl-phenylether	530	U
86-73-7	Fluorene	530	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	530	U
101-55-3	4-Bromophenyl-phenylether	530	U
118-74-1	Hexachlorobenzene	530	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	530	U
120-12-7	Anthracene	530	U
86-74-8	Carbazole	530	U
84-74-2	Di-n-butylphthalate	530 ~~420~~ ~~BJ~~ U	6
206-44-0	Fluoranthene	78	J
129-00-0	Pyrene	57	J
85-68-7	Butylbenzylphthalate	530	U
91-94-1	3,3'-Dichlorobenzidine	530	U
56-55-3	Benzo(a)anthracene	530	U
218-01-9	Chrysene	530	U
117-81-7	bis(2-Ethylhexyl)phthalate	66	J
117-84-0	Di-n-octylphthalate	530	U
205-99-2	Benzo(b)fluoranthene	530	U
207-08-9	Benzo(k)fluoranthene	530	U
50-32-8	Benzo(a)pyrene	530	U
193-39-5	Indeno(1,2,3-cd)pyrene	530	U
53-70-3	Dibenz(a,h)anthracene	530	U
191-24-2	Benzo(g,h,i)perylene	530	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

LSF[illegible]

Lab Name: CH2M HILL/LPD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) SOIL Lab Sample ID: 35380010

Sample wt vol: 30.0 (g/mL) G Lab File ID: 93MSBM1945

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: 38 decanted: (Y/N) N Date Extracted: 03/10/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/18/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ____

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 108-88-3	TOLUENE	4.32	~~2500~~	~~J~~ R ?
2.	UNKNOWN	5.90	~~6600~~	~~J~~
3. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.80	~~94000~~	~~J~~
4. 2216-34-4	OCTANE, 4-METHYL-	7.00	~~390~~	~~J~~
5. 2216-33-3	OCTANE, 3-METHYL-	7.20	~~400~~	~~J~~
6.	UNKNOWN	8.50	~~1600~~	~~J~~
7.	UNKNOWN	8.87	4200	J
8.	UNKNOWN	9.40	~~3400~~	~~J~~ R ?
9.	UNKNOWN	9.62	~~280~~	~~J~~
10.	UNKNOWN	10.44	~~2800~~	~~J~~
11. 4401-11-0	ETHANONE, 1-OXIRANYL-	10.94	850	J
12. 7379-12-6	3-HEXANONE, 2-METHYL-	11.55	~~1500~~	~~J~~ L ?
13.	UNKNOWN	12.92	370	J
14.	UNKNOWN	22.79	660	J
15.	UNKNOWN	34.81	1700	J
16.	UNKNOWN	34.94	1000	J
17.	UNKNOWN	36.27	660	J
18.	UNKNOWN	38.16	850	J
19.	UNKNOWN	39.81	2400	J
20.	UNKNOWN	43.44	590	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) SOIL Lab Sample ID: 35380011

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 90MOBN1944

Level: (low/med) LOW Date Received: 02/13/93

% Moisture: 53 decanted: (Y/N) N Date Extracted: 02/10/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 02/18/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	790	U
111-44-4	bis(2-Chloroethyl)ether	790	U
95-57-8	2-Chlorophenol	790	U
541-73-1	1,3-Dichlorobenzene	790	U
106-46-7	1,4-Dichlorobenzene	790	U
95-50-1	1,2-Dichlorobenzene	790	U
95-48-7	2-Methylphenol	790	U
108-60-1	2,2'-oxybis(1-Chloropropane)	790	U
106-44-5	4-Methylphenol	790	U
621-64-7	N-Nitroso-di-n-propylamine	790	U
67-72-1	Hexachloroethane	790	U
98-95-3	Nitrobenzene	790	U
78-59-1	Isophorone	790	U
88-75-5	2-Nitrophenol	790	U
105-67-9	2,4-Dimethylphenol	790	U
111-91-1	bis(2-Chloroethoxy)methane	790	U
120-83-2	2,4-Dichlorophenol	790	U
120-82-1	1,2,4-Trichlorobenzene	790	U
91-20-3	Naphthalene	790	U
106-47-8	4-Chloroaniline	790	U
87-68-3	Hexachlorobutadiene	790	U
59-50-7	4-Chloro-3-methylphenol	790	U
91-57-6	2-Methylnaphthalene	790	U
77-47-4	Hexachlorocyclopentadiene	790	U
88-06-2	2,4,6-Trichlorophenol	790	U
95-95-4	2,4,5-Trichlorophenol	1900	U
91-58-7	2-Chloronaphthalene	790	U
88-74-4	2-Nitroaniline	1900	U
131-11-3	Dimethylphthalate	790	U
208-96-8	Acenaphthylene	790	U
606-20-2	2,6-Dinitrotoluene	790	U
99-09-2	3-Nitroaniline	1900	U
83-32-9	Acenaphthene	790	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SSB001

Lab Name: CH2M HILL/IPD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) SOIL Lab Sample ID: 35380011

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 90M03N1944

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: 53 decanted: (Y/N) N Date Extracted: 03/19/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/18/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1900	U
100-02-7	4-Nitrophenol	1900	U
132-64-9	Dibenzofuran	790	U
121-14-2	2,4-Dinitrotoluene	790	U
84-66-2	Diethylphthalate	790	U
7005-72-3	4-Chlorophenyl-phenylether	790	U
86-73-7	Fluorene	790	U
100-01-6	4-Nitroaniline	1900	U
534-52-1	4,6-Dinitro-2-methylphenol	1900	U
86-30-6	N-Nitrosodiphenylamine (1)	790	U
101-55-3	4-Bromophenyl-phenylether	790	U
118-74-1	Hexachlorobenzene	790	U
87-86-5	Pentachlorophenol	1900	U
85-01-8	Phenanthrene	790	U
120-12-7	Anthracene	790	U
86-74-8	Carbazole	790	U
84-74-2	Di-n-butylphthalate	750 ~~140~~	~~BJ~~ U
206-44-0	Fluoranthene	140	J
129-00-0	Pyrene	110	J
85-68-7	Butylbenzylphthalate	790	U
91-94-1	3,3'-Dichlorobenzidine	790	U
56-55-3	Benzo(a)anthracene	790	U
218-01-9	Chrysene	110	J
117-81-7	bis(2-Ethylhexyl)phthalate	970	
117-84-0	Di-n-octylphthalate	790	U
205-99-2	Benzo(b)fluoranthene	120	J
207-08-9	Benzo(k)fluoranthene	94	J
50-32-8	Benzo(a)pyrene	99	J
193-39-5	Indeno(1,2,3-cd)pyrene	110	J
53-70-3	Dibenz(a,h)anthracene	790	U
191-24-2	Benzo(g,h,i)perylene	790	U

(1) - Cannot be separated from Diphenylamine

000093

FORM I SV-2

000188/90

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

LSB001 1

Lab Name: CHEM HELL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) SOIL Lab Sample ID: 35380011

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M3BN1944

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: 53 decanted: (Y/N) N Date Extracted: 03/19/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/18/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1. 108-88-3	TOLUENE	4.30	2900	J	7
2.	UNKNOWN	5.88	~~9100~~	~~J~~	
3. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.78	~~130000~~	~~J~~	
4.	UNKNOWN	8.50	~~2200~~	~~J~~	
5.	UNKNOWN	8.87	~~2400~~	~~J~~	
6.	UNKNOWN	9.40	~~5000~~	~~J~~	
7.	UNKNOWN	9.62	700	J	
8.	UNKNOWN	10.42	~~4000~~	~~J~~	7
9.	UNKNOWN	10.94	730	J	
10.	UNKNOWN	11.52	~~890~~	~~J~~	7
11.	UNKNOWN	11.74	~~3200~~	~~J~~	7
12.	UNKNOWN	22.80	2400	J	
13.	UNKNOWN	27.77	1800	J	
14.	UNKNOWN	34.82	12000	J	
15.	UNKNOWN	35.02	3200	J	
16.	UNKNOWN	35.19	1100	J	
17.	UNKNOWN	35.26	1200	J	
18.	UNKNOWN	35.41	1000	J	
19.	UNKNOWN	39.81	1300	J	
20.	UNKNOWN	43.58	1700	J	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

[illegible]

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) SOIL Lab Sample ID: 35380012

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93MOBN1943

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: 27 decanted: (Y/N) N Date Extracted: 03/10/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/18/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	450	U
111-44-4	bis(2-Chloroethyl)ether	450	U
95-57-8	2-Chlorophenol	450	U
541-73-1	1,3-Dichlorobenzene	450	U
106-46-7	1,4-Dichlorobenzene	450	U
95-50-1	1,2-Dichlorobenzene	450	U
95-48-7	2-Methylphenol	450	U
108-60-1	2,2'-oxybis(1-Chloropropane)	450	U
106-44-5	4-Methylphenol	450	U
621-64-7	N-Nitroso-di-n-propylamine	450	U
67-72-1	Hexachloroethane	450	U
98-95-3	Nitrobenzene	450	U
78-59-1	Isophorone	450	U
88-75-5	2-Nitrophenol	450	U
105-67-9	2,4-Dimethylphenol	450	U
111-91-1	bis(2-Chloroethoxy)methane	450	U
120-83-2	2,4-Dichlorophenol	450	U
120-82-1	1,2,4-Trichlorobenzene	450	U
91-20-3	Naphthalene	450	U
106-47-8	4-Chloroaniline	450	U
87-68-3	Hexachlorobutadiene	450	U
59-50-7	4-Chloro-3-methylphenol	450	U
91-57-6	2-Methylnaphthalene	450	U
77-47-4	Hexachlorocyclopentadiene	450	U
88-06-2	2,4,6-Trichlorophenol	450	U
95-95-4	2,4,5-Trichlorophenol	1100	U
91-58-7	2-Chloronaphthalene	450	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	450	U
208-96-8	Acenaphthylene	450	U
606-20-2	2,6-Dinitrotoluene	450	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	450	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

[illegible]

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) SOIL Lab Sample ID: 35380012

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93MOBN1943

Level: (low/med) LOW Date Received: 03/16/93

% Moisture: 27 decanted: (Y/N) N Date Extracted: 03/10/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/18/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1100	U
100-02-7	4-Nitrophenol	1100	U
132-64-9	Dibenzofuran	450	U
121-14-2	2,4-Dinitrotoluene	450	U
84-66-2	Diethylphthalate	450	U
7005-72-3	4-Chlorophenyl-phenylether	450	U
86-73-7	Fluorene	450	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	450	U
101-55-3	4-Bromophenyl-phenylether	450	U
118-74-1	Hexachlorobenzene	450	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	450	U
120-12-7	Anthracene	450	U
86-74-8	Carbazole	450	U
84-74-2	Di-n-butylphthalate	450 ~~110~~ ~~BJ~~	U
206-44-0	Fluoranthene	450	U
129-00-0	Pyrene	450	U
85-68-7	Butylbenzylphthalate	450	U
91-94-1	3,3'-Dichlorobenzidine	450	U
56-55-3	Benzo(a)anthracene	450	U
218-01-9	Chrysene	450	U
117-81-7	bis(2-Ethylhexyl)phthalate	450	U
117-84-0	Di-n-octylphthalate	450	U
205-99-2	Benzo(b)fluoranthene	450	U
207-08-9	Benzo(k)fluoranthene	450	U
50-32-8	Benzo(a)pyrene	450	U
193-39-5	Indeno(1,2,3-cd)pyrene	450	U
53-70-3	Dibenz(a,h)anthracene	450	U
191-24-2	Benzo(g,h,i)perylene	450	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

LS3E0001

Lab Name: CHEM HILL LPC Contract: S5000

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) SOIL Lab Sample ID: 35380012

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 93M3BN1940

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: 27 decanted: (Y/N) N Date Extracted: 03/19/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 03/18/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ____

Number TICs found: 19

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1. 108-88-3	TOLUENE	4.32	~~1600~~	~~J~~	7
2. 763-93-9	3-HEXEN-2-ONE	5.25	~~170~~	~~J~~	
3.	UNKNOWN	5.87	~~4700~~	~~J~~	
4. 926-82-9	HEPTANE, 3,5-DIMETHYL-	6.18	93	J	
5. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.78	~~64000~~	~~J~~	7
6. 2216-34-4	OCTANE, 4-METHYL-	7.00	~~220~~	J	
7. 2216-33-3	OCTANE, 3-METHYL-	7.20	~~250~~	J	
8.	UNKNOWN	8.50	~~1100~~	~~J~~	
9.	UNKNOWN	8.85	1700	J	
10.	UNKNOWN	9.40	~~3500~~	~~J~~	7
11.	UNKNOWN	9.62	~~170~~	~~J~~	
12. 123-54-6	2,4-PENTANEDIONE	10.42	~~2100~~	~~J~~	
13. 4401-11-0	ETHANONE, 1-OXIRANYL-	10.94	670	J	
14.	UNKNOWN	11.54	~~580~~	~~J~~	7
15.	UNKNOWN	11.75	~~2400~~	~~J~~	7
16.	UNKNOWN	14.22	120	J	
17. 95-16-9	BENZOTHIAZOLE	15.39	140	J	
18. 1072-16-8	OCTANE, 2,7-DIMETHYL-	22.79	130	J	
19.	UNKNOWN	34.82	100	J	

FORM I SV-TIC

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

[illegible]

Lab Name: CH2M HILL/LPD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380014

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 93M1BN1824

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 03/10/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/20/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

[illegible]

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380014

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 93M13M1804

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 02/10/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/20/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

LSSW0101

Lab Name: CHEM HILL/LFD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380014

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 93M13M1324

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 02/10/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/20/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.02	~~12~~	~~J~~
2.	UNKNOWN	5.47	6	J
3.	UNKNOWN	5.87	12	J
4. 822-67-3	2-CYCLOHEXEN-1-OL	6.58	6	J
5. 111-76-2	ETHANOL, 2-BUTOXY-	7.03	~~6~~	~~J~~
6. 930-68-7	2-CYCLOHEXEN-1-ONE	7.60	6	J
7.	UNKNOWN	9.10	~~14~~	~~J~~
8. 541-02-6	CYCLOPENTASILOXANE, DECAMETH	11.72	~~10~~	~~BJ~~
9. 540-97-6	CYCLOHEXASILOXANE, DODECAMET	14.40	~~6~~	~~BJ~~

FORM I SV-TIC

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380015

Sample wt/vol: 1010 (g/mL) ML Lab File ID: 93M1BN1325

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 03/19/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/20/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

[illegible]

Lab Name: CH2M HILL/LPD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380015

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 93M1BM1325

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 03/19/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/20/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	1	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	2	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

LSSW01012

Lab Name: [illegible] Contract: [illegible]

Lab Code: _____ Case No.: S35330 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380015

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 93M1BN1305

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 03/10/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/20/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.45	~~16~~	~~J~~ R ?
2.	UNKNOWN	5.87	4	J
3. 822-67-3	2-CYCLOHEXEN-1-OL	6.58	5	J
4. 927-83-3	DIAZENE, BIS(1,1-DIMETHYLETH	7.05	~~6~~	~~J~~ R ?
5. 2170-03-8	2,5-FURANDIONE, DIHYDRO-3-ME	7.60	5	J
6.	UNKNOWN	9.10	~~15~~	~~J~~ R
7. 931-17-9	1,2-CYCLOHEXANEDIOL	10.19	~~6~~	~~BJ~~
8. 541-02-6	CYCLOPENTASILOXANE, DECAMETH	11.75	~~9~~	~~BJ~~
9. 540-97-6	CYCLOHEXASILOXANE, DODECAMET	14.42	~~6~~	~~BJ~~

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

[illegible]

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380016

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 93M1BM1308

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 03/19/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/20/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

93M1001

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380016

Sample wt/vol: 1000 (g/ML) ML Lab File ID: 93M18N1808

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: ____ decanted: (Y/N) ___ Date Extracted: 03/19/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/20/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10 ~~2~~	~~BJ~~ U 6
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10 ~~2~~	~~BJ~~ U 6
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10 ~~7~~	~~BJ~~ U 6
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

LSSW0001

Lab Name: CH2M HILL/LPD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380016

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 93M1BM1808

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 03/19/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/20/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.45	~~8~~	~~J~~ N ?
2. 108-93-0	CYCLOHEXANOL (ACN)	6.52	150	J
3.	UNKNOWN	9.07	~~9~~	~~J~~ N ?
4.	UNKNOWN	11.75	~~4~~	~~J~~ N ?

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LSS[illegible]

Lab Name: CH2M HILL/LPO Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380017

Sample wt/vol: 1000 (g/ml) ML Lab File ID: 93MLBM1809

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 02/10/93

Concentrated Extract Volume: 1000 (ul) Date Analyzed: 03/20/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

10

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

LSSW0001

Lab Name: CH2M HILL/LRD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380017

Sample wt/vol: 1000 (g/ml) ML Lab File ID: 93M1BN1800

Level: (low/med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 02/10/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/20/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10 ~~2~~	~~BJ~~ U 6
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10 ~~3~~	~~BJ~~ U 6
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

LS5W001

Lab Name: CHEM FILL LPD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix: (soil/water) WATER Lab Sample ID: 35380017

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 93M1BN1809

Level: (low med) LOW Date Received: 03/18/93

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 03/19/93

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/30/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.45	~~17~~	~~J~~
2.	UNKNOWN	5.87	10	J
3.	UNKNOWN	6.58	6	J
4.	UNKNOWN	7.03	~~7~~	~~J~~
5. 930-68-7	2-CYCLOHEXEN-1-ONE	7.60	~~6~~	~~BJ~~
6.	UNKNOWN	9.09	~~12~~	~~J~~
7. 1112-35-2	1,4-PENTADIENE, 3,3-DIMETHYL	10.12	~~4~~	~~J~~
8. 541-02-6	CYCLOPENTASILOXANE, DECAMETH	11.77	~~6~~	~~BJ~~

FORM I SV-TIC

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: CH2M HILL/LPD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: GC-MS

Matrix Spike - EPA Sample No.: LSSD0101D Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	4030	0	2892	72	26- 90
2-Chlorophenol	4030	0	2548	63	25-102
1,4-Dichlorobenzene	2690	0	1731	64	28-104
N-Nitroso-di-n-prop.(1)	2690	0	2186	81	41-126
1,2,4-Trichlorobenzene	2690	0	2150	80	38-107
4-Chloro-3-methylphenol	4030	0	3290	82	26-103
Acenaphthene	2690	0	1876	70	31-137
4-Nitrophenol	4030	0	3613	90	11-114
2,4-Dinitrotoluene	2690	0	2242	83	28- 89
Pentachlorophenol	4030	0	5215	129 *	17-109
Pyrene	2690	56.98	2247	81	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	4030	3177	79	9	35	26- 90
2-Chlorophenol	4030	2747	68	8	50	25-102
1,4-Dichlorobenzene	2690	1812	67	5	27	28-104
N-Nitroso-di-n-prop.(1)	2690	2430	90	11	38	41-126
1,2,4-Trichlorobenzene	2690	2322	86	7	23	38-107
4-Chloro-3-methylphenol	4030	3924	97	17	33	26-103
Acenaphthene	2690	2129	79	12	19	31-137
4-Nitrophenol	4030	4381	109	19	50	11-114
2,4-Dinitrotoluene	2690	2742	102 *	21	47	28- 89
Pentachlorophenol	4030	6397	159 *	21	47	17-109
Pyrene	2690	2591	94	15	36	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 3 out of 22 outside limits

COMMENTS: CLP,S35380,,CLIN ID,L,S,35380010,S,EPA,

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: CHEM HILL/LPD Contract: S35380

Lab Code: _____ Case No.: S35380 SAS No.: _____ SDG No.: CC-MS

Matrix Spike - EPA Sample No.: LSSW0101D

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC
Phenol	75.00	0	49.10	65	12-111
2-Chlorophenol	75.00	0	48.70	65	27-123
1,4-Dichlorobenzene	50.00	0	25.60	51	36- 97
N-Nitroso-di-n-prop.(1)	50.00	0	35.10	70	41-116
1,2,4-Trichlorobenzene	50.00	0	29.90	58	39- 98
4-Chloro-3-methylphenol	75.00	0	58.00	77	23- 97
Acenaphthene	50.00	0	34.70	69	46-118
4-Nitrophenol	75.00	0	60.40	81 *	10- 80
2,4-Dinitrotoluene	50.00	0	36.00	72	24- 96
Pentachlorophenol	75.00	0	58.80	78	9-103
Pyrene	50.00	0	35.30	71	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	75.00	46.10	61	6	42	12-111
2-Chlorophenol	75.00	45.30	60	8	40	27-123
1,4-Dichlorobenzene	50.00	23.30	47	8	28	36- 97
N-Nitroso-di-n-prop.(1)	50.00	33.10	66	6	38	41-116
1,2,4-Trichlorobenzene	50.00	27.20	54	7	28	39- 98
4-Chloro-3-methylphenol	75.00	54.00	72	7	42	23- 97
Acenaphthene	50.00	32.50	65	6	31	46-118
4-Nitrophenol	75.00	67.00	89 *	9	50	10- 80
2,4-Dinitrotoluene	50.00	35.30	71	1	38	24- 96
Pentachlorophenol	75.00	61.50	82	5	50	9-103
Pyrene	50.00	34.00	68	4	31	26-127

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 2 out of 22 outside limits

COMMENTS: CLP,S35380,,LSSW0101D,L,W,35380015,S,EPA, B2