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SAMPLING OF THE ADAMSITE STORAGE VAULTS AT EDGEWOOD AREA, ABERDEEN PROVING,
MARYLAND

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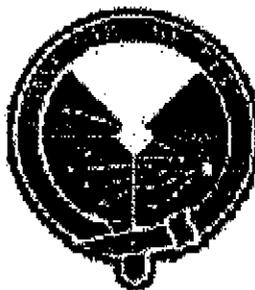
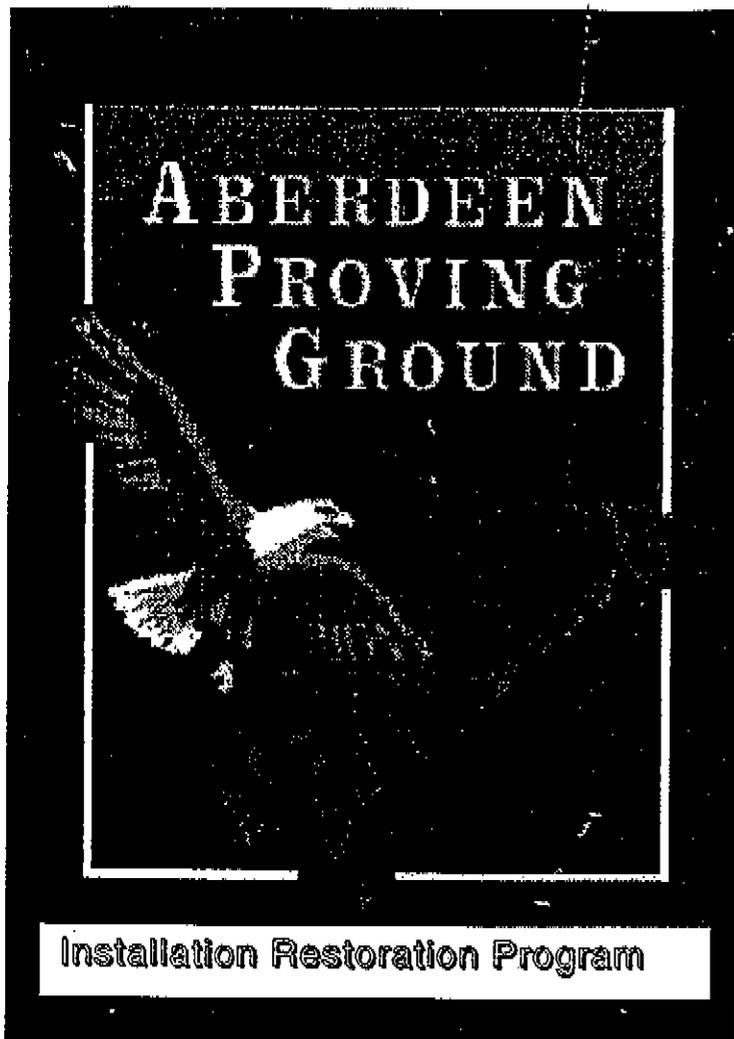
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ABSTRACT: This Field Investigation Report discusses the sampling activities performed at the Adamsite storage vaults in July and August 1993.

The objectives of the sampling activities at the Adamsite storage vaults were as follows:

- * To determine if contamination is present in the concrete of the vaults.
- * To determine if contamination is present in the subsurface soils and groundwater surrounding the vaults.
- * To characterize the water and sediment present in the vaults for disposal parameters.
- * To determine the tidal influence on the water level in the Northeast (NE) vault.



Installation Restoration Program
Draft Field Report
Sampling of the Adamsite Storage Vaults
at Edgewood Area
Aberdeen Proving Ground

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PRELIMINARY FIELD INVESTIGATION REPORT APPROVALS

**SAMPLING OF THE ADAMSITE STORAGE VAULTS
AT EDGEWOOD AREA,
ABERDEEN PROVING GROUND, MARYLAND**

**CONTRACT NO. DACA87-90-D-0031
DELIVERY ORDER NO. 10**

22 October 1993

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TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
1	INTRODUCTION	1-1
2	FIELD INVESTIGATION PROGRAM	2-1
2.1	Mobilization/Site Preparation	2-1
2.2	UXO Survey of Soil Boring/Monitoring Well Locations	2-1
2.3	Soil Boring and Monitoring Well Installation	2-2
2.4	Sampling Activities	2-4
2.4.1	Vault Concrete Sampling	2-5
2.4.2	Sediment and Water Sampling in the Vaults	2-6
2.5	Site Restoration and Demobilization	2-7
3	SUMMARY OF RESULTS	3-1
3.1	Site Hydrogeology	3-1
3.2	Summary of Analytical Results	3-2
3.2.1	Radiation Characterization	3-7
4	CONCLUSIONS AND RECOMMENDATIONS	4-1
4.1	Conclusions	4-1
4.2	Recommendations	4-3

LIST OF APPENDICES

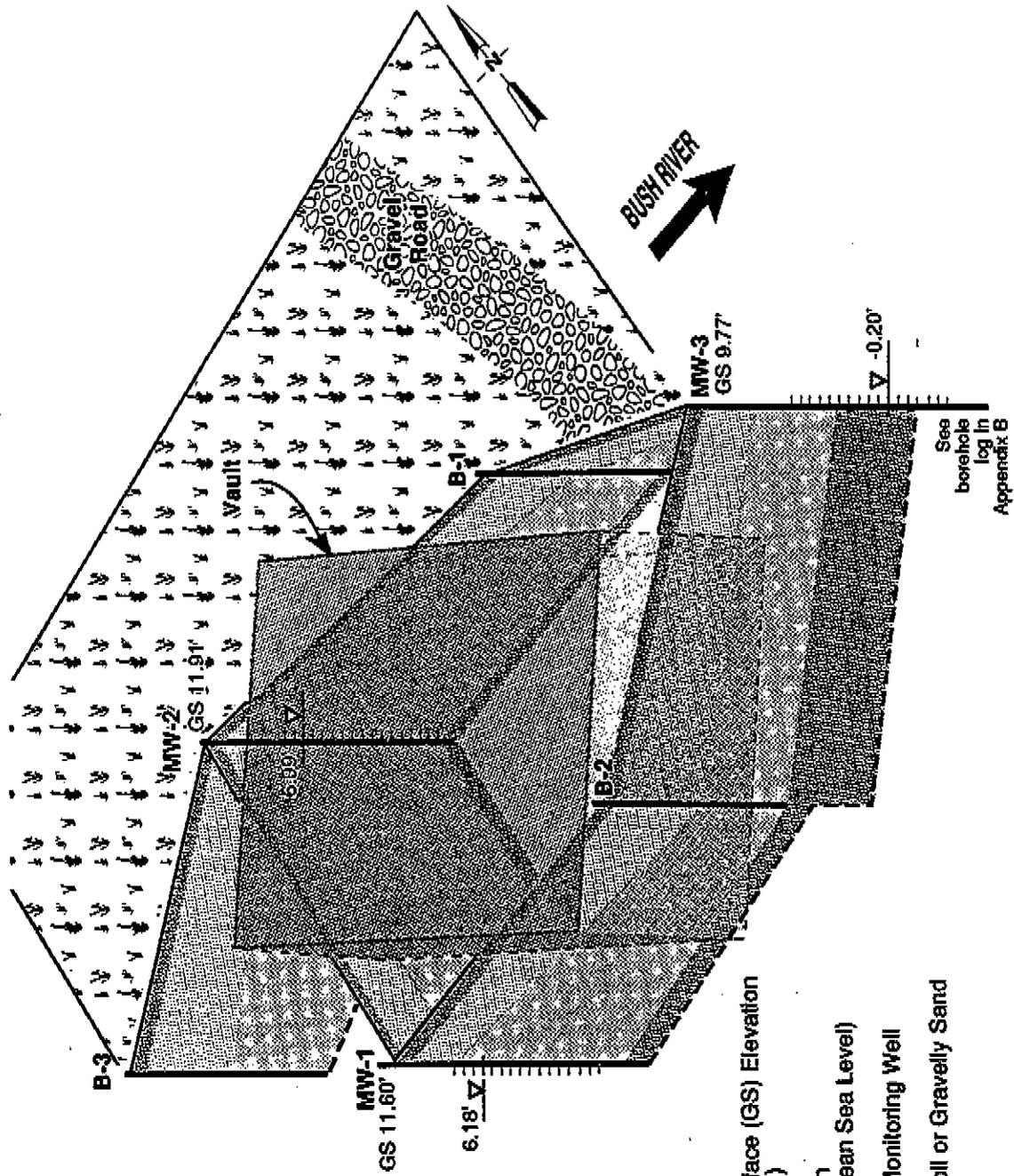
- APPENDIX A -- ACTIVITY HAZARD ANALYSIS
- APPENDIX B -- BOREHOLES LOGS AND WELL COMPLETION SUMMARIES
- APPENDIX C -- REFERENCES
- APPENDIX D -- STANDARD OPERATING PROCEDURE 013-COLLECTION OF MONITORING WELL SAMPLES
- APPENDIX E -- ANALYTICAL DATA FOR ALL SAMPLES

LIST OF TABLES

<u>Table No.</u>	<u>Title</u>	<u>Page</u>
3-1	Results of CSM Screening for Adamsite Vault Soil Samples	3-9
3-2	Summary of TCLP Analytical Results - Concrete Core Samples	3-11
3-3	Summary of TCLP Analytical Results - Vault Sediment Samples	3-13
3-4	Summary of TCLP Analytical Results - Vault Water	3-14
3-5	Summary of Analytical Results - Soil Boring Samples	3-15
3-6	Summary of Analytical Results - Monitoring Well Soil Samples	3-18
3-7	Summary of Analytical Results - Monitoring Well Groundwater Samples	3-22
3-8	Summary of TCLP Analytical Results - Drill Cuttings and Decon Water	3-23
3-9	Summary of TCLP Analytical Results - Soil Boring Tailings	3-24

LIST OF FIGURES

<u>Figure No.</u>	<u>Title</u>	<u>Page</u>
1-1	Site Location Map	1-2
1-2	Artist's Sketch of Drums Previous Stored in Building E-2370	1-3
2-1	Site Layout Map and Sampling Locations	2-3
3-1	Adamsite Vault 3-Dimensional Fence Diagram	3-3
3-2	Approximate Sampling Locations	3-5



Legend

- B-3 Soil Boring Estimated Ground Surface Elevation
- MW-3 GS 9.77' Monitoring Well Surveyed Ground Surface (GS) Elevation (Feet Mean Sea Level)
- 6.18' ∇ Groundwater Elevation (Feet Above Mean Sea Level)
- Screened Interval in Monitoring Well
- Surface Soils - Top Soil or Gravelly Sand
- Sandy Silt
- Silty Gravelly Sand
- Sandy Clayey Silt
- Ground Surface

Horizontal Scale - Sketch based on Figure 2-1
Not to Scale
Vertical Scale - 1 inch = 10 feet

See borehole log in Appendix B

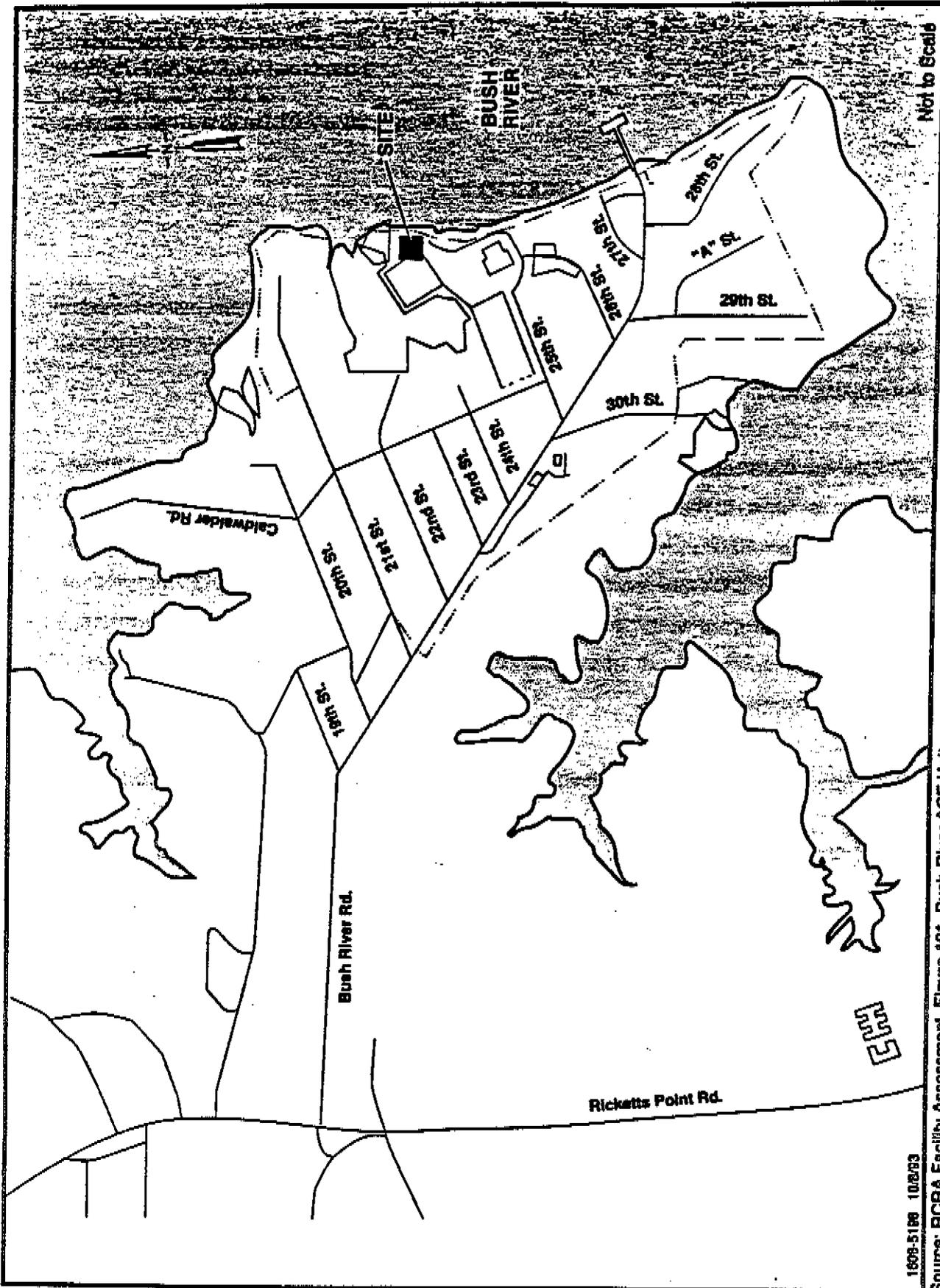
SECTION 1 INTRODUCTION

This Preliminary Field Investigation Report is being submitted to discuss the sampling activities performed at the Adamsite storage vaults by Roy F. Weston, Inc. (WESTON®) in July and August 1993.

WESTON has been contracted by the U.S. Army Corps of Engineers, Aberdeen Area Office (CEAAO) to provide environmental remediation services at the Edgewood Area of Aberdeen Proving Ground (APG-EA) under Contract No. DACA87-90-D-0031. In support of this effort, WESTON provided environmental investigations and installation of groundwater monitoring wells at the former Adamsite storage vaults. A site location map is included as Figure 1-1 and an artist's sketch of the vaults indicating previously stored drums is shown in Figure 1-2.

The objectives of the sampling activities at the Adamsite storage vaults were as follows:

- To determine if contamination is present in the concrete of the vaults.
- To determine if contamination is present in the subsurface soils and groundwater surrounding the vaults.
- To characterize the water and sediment present in the vaults for disposal parameters.
- To determine the tidal influence on the water level in the Northeast (NE) vault.

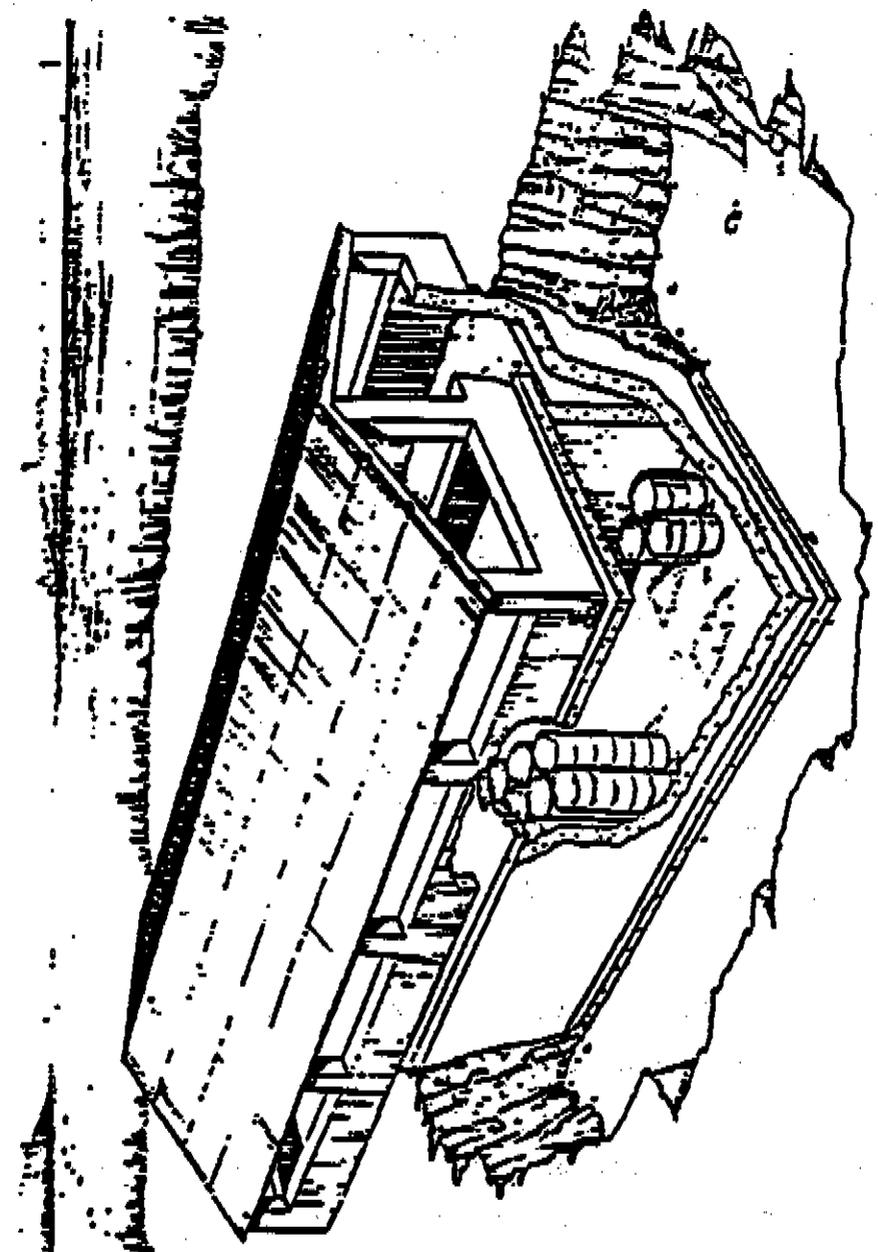


1808-5186 10/2/03

Source: RCRA Facility Assessment, Figure 161, Bush River ACE Units

FIGURE 1-1 SITE LOCATION MAP, BUSH RIVER RESEARCH OPERATION AREA, ADAMSITE STORAGE VAULTS, APG, MD

Not to Scale



1595-5088 8/17/83

Source: Baltimore District USACE Technical Report, ARCSL-TR-77050, June 1977

FIGURE 1-2 ARTIST'S SKETCH OF DRUMS PREVIOUSLY STORED IN BUILDING E-2370

**APG Environmental Remediation
Contract No. DACA87-90-D-0031
DO No. 10, Adamsite
Preliminary Field Investigation Report**

The following tasks were conducted in accordance with the approved site-specific sampling plan (SSSP) and are further discussed in Section 2 of this report:

- Mobilization consisting of baseline air monitoring, utilities verification, sample locations verification, and work zone delineation.
- Unexploded ordnance (UXO) survey of soil boring and monitoring well locations.
- Soil borings and monitoring well installation concurrent with retrieval of soil samples, groundwater samples, and groundwater elevations.
- Preparation of the Northeast (NE) and Southwest (SW) vaults for concrete sampling.
- Concrete sampling and analysis.
- NE vault water and sediment sampling and analysis; and SW vault sediment sampling and analysis.
- Site restoration and demobilization.

In preparation for the field activities at the Adamsite storage vaults, WESTON provided notification to applicable agencies within APG.

A field activity kickoff meeting was conducted on July 9, 1993, to review the project scope of work, schedule, UXO requirements, and sampling/analysis strategy. Representatives from the Directorate of Safety, Health, and Environment (DSHE), DSHE Safety, WESTON, and CEAAO were in attendance at the meeting.

Permits and approvals necessary for conducting the sampling were obtained from the State of Maryland (well permits) and from APG authorities (excavation permit). WESTON prepared an Activity Hazard Analysis for approval by CEAAO to evaluate each definable phase of work for specific safety hazards and to provide for actions to be taken to address potential hazards. This Activity Hazard Analysis was used as a guideline during safety

**APG Environmental Remediation
Contract No. DACA87-90-D-0031
DO No. 10, Adamsite
Preliminary Field Investigation Report**

briefings in conjunction with the SSSP to minimize the potential for accidents. The Activity Hazard Analysis is presented in Appendix A of this report.

APPENDIX A

SECTION 2
FIELD INVESTIGATION PROGRAM

2.1 MOBILIZATION/SITE PREPARATION

WESTON mobilized to the project site on July 9, 1993, to initiate site preparation activities, conduct baseline air monitoring, verify locations of utilities, and identify sampling locations. Baseline air monitoring was conducted both inside the vaults and in areas surrounding the vaults with a photoionization detector (PID), an organic vapor analyzer (OVA), an oxygen meter, a combustible gas indicator (CGI), a sodium iodide gamma scintillator, and a thin-end window radiation detector. No readings were recorded above background levels.

A utility search was conducted by the APG Department of Public Works (DPW) to locate underground utilities. No underground utilities were located; however, one overhead telephone line was removed to allow access by a drill rig.

Locations of samples, soil borings, and monitoring wells were selected with CEAAO representatives and based on discussions with DSHE.

2.2 UXO SURVEY OF SOIL BORING/MONITORING WELL LOCATIONS

Prior to installing soil borings and monitoring wells, a subsurface magnetometry survey was conducted at each preselected location to identify potential UXO. These surveys were conducted by WESTON's subcontractor, Human Factors Applications, Inc. (HFA), by obtaining downhole magnetometer readings at 2-ft increments to a depth of 4 ft. No UXO was located during these surveys.

2.3 SOIL BORING AND MONITORING WELL INSTALLATION

Between July 15 and July 21, 1993, six soil borings were drilled at locations surrounding the Adamsite vaults. Four-inch-diameter polyvinyl chloride (PVC) monitoring wells were installed in three of the soil borings in order to evaluate groundwater quality and water table elevation fluctuations. Figure 2-1 indicates the locations of soil borings B-1, B-2, and B-3 and monitoring wells MW-1, MW-2, and MW-3.

At each soil boring location, samples were collected at four discrete intervals. Soil samples were collected for chemical analyses at depths ranging from 0 to 6 inches, 6 inches to 2 ft, 4 ft to 6 ft, and 10 ft to 12 ft below ground surface (bgs).

Prior to borehole drilling, boreholes were cleared to 4 ft bgs by downhole magnetometry. Boreholes were completed using hollow-stem auger drilling techniques and continuous split-spoon sampling procedures. Analytical samples were collected in 3-inch-diameter split-spoons that were decontaminated, in accordance with the SSSP, between samples, while 2-inch-diameter split-spoons were used for soil description purposes. Three soil borings were advanced to 12 ft bgs and then backfilled with a cement/bentonite slurry.

The three monitoring well borings were drilled to depths ranging between 16 ft and 18 ft bgs in order to set the well screen across the water table. The screened intervals ranged from approximately 4 ft to 15 ft bgs. Monitoring well installation and completion methods followed the guidelines established in the SSSP and the Waterways Experimental Station (WES) standard operating procedures (SOPs) developed for DSHE. Borehole logs and well completion summaries are presented in Appendix B of this report.

The monitoring wells were surveyed and their elevations were determined. The elevations are included below for the ground surface, the top of inner PVC casing, and the top of the protective steel casing.

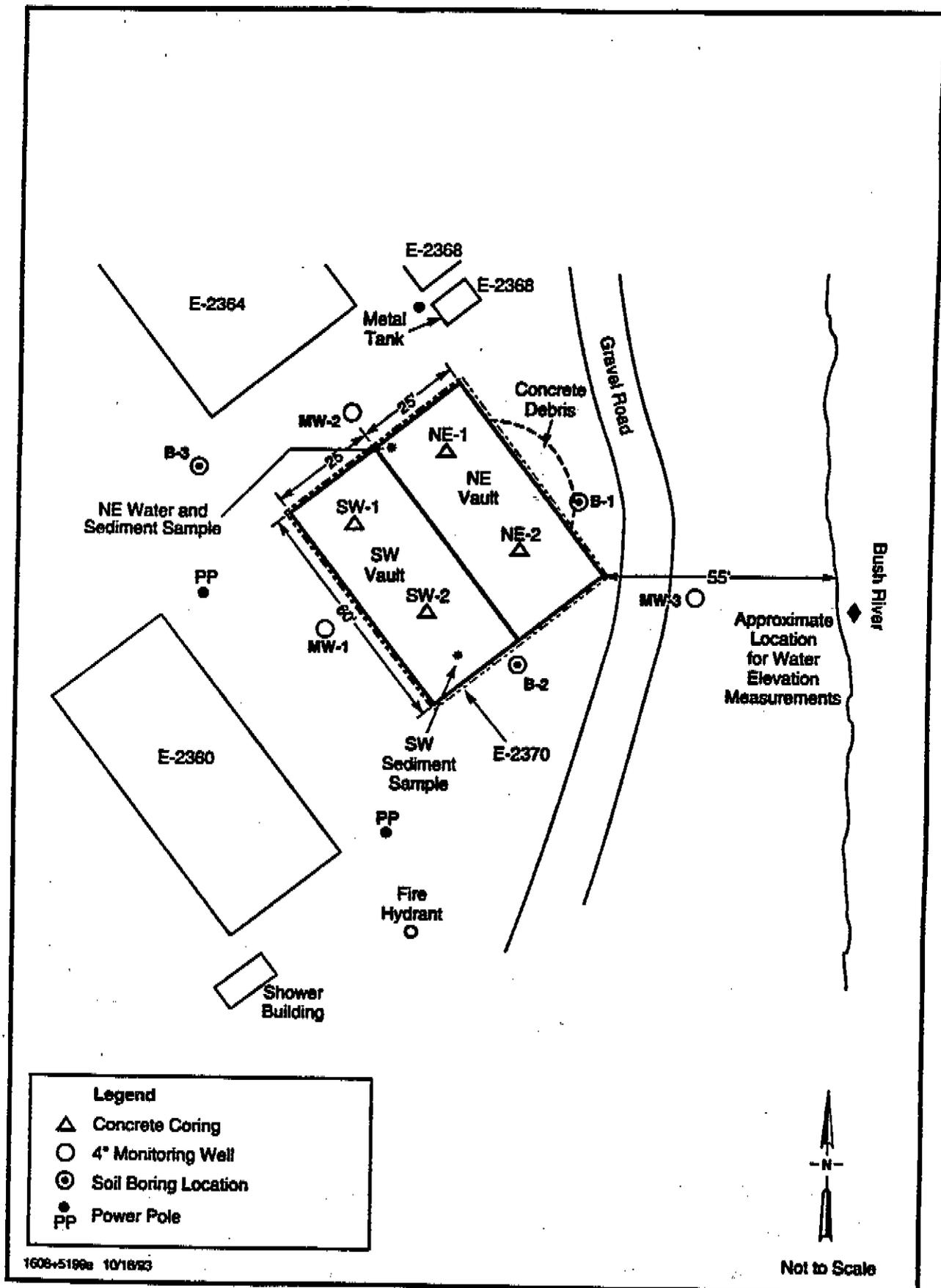


FIGURE 2-1 SITE LAYOUT MAP AND SAMPLING LOCATIONS

**APG Environmental Remediation
Contract No. DACA87-90-D-0031
DO No. 10, Adamsite
Preliminary Field Investigation Report**

Well Number	Top of Inner PVC Casing*	Top of Steel Casing*	Ground Elevation*
MW-1	13.90	14.14	11.60
MW-2	14.21	14.63	11.91
MW-3	12.02	12.35	9.77

*All elevations are recorded in feet above mean sea level and provided by Gilmore Associates.

The wells were developed using surge block and overpump techniques. Estimated well yields during development ranged from less than 0.5 gallons per minute (gpm) at MW-3 to 1.5 gpm at MW-1. The lower yield and slower recovery observed at MW-3 are believed to be the result of higher silt content and finer grained sediments.

2.4 SAMPLING ACTIVITIES

WESTON collected samples of concrete and sediment in the NE and SW vaults. Samples were also collected from accumulated water in the NE vault. At the time of sampling, there was no water in the SW vault, and therefore no water samples were obtained. Concrete, sediment, and vault water sampling activities are discussed in Subsections 2.4.1 and 2.4.2 of this report.

Soil samples for volatile organic analysis were collected with minimal disturbance. Samples for chemical surety materials (CSM), Target Compound List (TCL), and Target Analyte List (TAL) parameters were collected according to the procedures identified in the SSSP. Analytical results for the soil boring and monitoring well soils are presented in Section 3 of this report. The sampling locations are indicated in Figure 2-1.

The groundwater from each of the three monitoring wells was sampled and analyzed for CSM, TCL, and TAL parameters. Groundwater sampling was conducted on August 11, 1993. Groundwater samples were collected by removing at least three well volumes using

disposable teflon bailers. MW-3 was bailed dry and allowed to recover prior to sampling. Specific chemical parameters (as presented in Subsection 2.10 of the SSSP and in the WES SOPs in Appendix D) were measured during purging of the wells. These parameters were recorded, and sampling was conducted upon stabilization of the parameters. The analytical results from groundwater sampling are discussed in Section 3 of this report.

A two-phased sampling approach was used in an effort to clear all samples of CSM prior to off-site shipment. The first phase consisted of collecting samples, from the designated locations, for CSM headspace screening and CSM analysis. These samples were analyzed at the APG Chemical Transfer Facility (CTF) and SciTech Laboratory. Upon verification that no CSM were present in the samples, WESTON conducted the second sampling phase. These second-phase samples were obtained immediately adjacent to the sample collection points from the first phase. The second set of samples were shipped to the appropriate designated laboratory. General Physics (GP) Laboratory in Gaithersburg, MD, received the samples designated for analysis of environmental parameters. Teledyne Isotopes Laboratory in Westwood, NJ, received the samples designated for radiation analysis. The U.S. Army Corps of Engineers (USACE) Environmental Laboratory in Hubbardston, MA, received 10% of the field samples in duplicate for quality assurance (QA) analysis.

2.4.1 Vault Concrete Sampling

Several tasks were performed at the vaults prior to sampling the concrete. These tasks ensured that the necessary levels of safety were provided and that any spread of contamination was controlled. These tasks were as follows:

- Air monitoring was conducted to verify that radiation, organic vapors, and combustible atmospheric conditions did not exist above action levels within each vault.

**APG Environmental Remediation
Contract No. DAC87-90-D-0031
DO No. 10, Adamsite
Preliminary Field Investigation Report**

- A visual evaluation of the roof's structural integrity was conducted prior to entry into the vaults. The vault roof was determined to be structurally sound for the proposed activities and therefore was left intact.
- A temporary fixed ladder was installed and personnel retrieval systems were erected (i.e., tripods with lanyards) to facilitate a confined space entry.
- Sealed barriers were installed around the respective concrete sampling locations at the NE and SW vaults. The purpose of the barriers was to displace the existing vault water so that the concrete samples could be obtained. The barrier consisted of 3-ft-diameter by 3-ft-high corrugated metal piping that was lowered into the vault and sealed to the vault floor. The water remaining inside the barrier was pumped into the respective vault, resulting in a sampling area free of water, where the respective concrete chip sample was retrieved.

A pneumatically operated concrete chipping machine was used to obtain the concrete samples. Two composite concrete samples were taken from each vault. At each concrete sampling location, samples were collected at two discrete intervals. Concrete samples were collected for chemical analysis at depths ranging from 0 to 2 inches and from 2 to 6 inches below the surface of the vault floor. Parameters analyzed included CSM, CSM decomposition products, Toxicity Characteristic Leachate Procedure (TCLP) metals, TCLP volatiles, TCLP semivolatiles, TCLP pesticides, TCLP herbicides, reactivity, corrosivity, ignitability, and radiation. Analytical results for the concrete sampling are discussed in Section 3 of this report.

2.4.2 Sediment and Water Sampling in the Vaults

One grab sample of the water and two composite samples of the sediment were collected at the NE vault. Two composite sediment samples were collected at the SW vault. Parameters analyzed included CSM, CSM decomposition products, TCLP metals, TCLP volatiles, TCLP semivolatiles, TCLP pesticides, TCLP herbicides, reactivity, corrosivity,

ignitability, and radiation. Analytical results for the vault water and sediment sampling are discussed in Section 3 of this report.

2.5 SITE RESTORATION AND DEMOBILIZATION

The metal barriers erected for sampling the concrete were left in place to allow further sampling, if deemed necessary. All soil boring tailings and related materials were appropriately containerized, staged in a secure area adjacent to the vaults, and labeled. Nine 55-gallon drums of soil boring tailings, eight 55-gallon drums of well development water, and one 55-gallon drum of drill decontamination water were generated from the sampling activities. Samples of the soil boring tailings and drill decontamination water were collected from their respective drums. Parameters analyzed for included TCLP metals, TCLP volatiles, TCLP semivolatiles, TCLP pesticides, TCLP herbicides, reactivity, corrosivity, and ignitability. Following site restoration activities, WESTON demobilized all equipment, materials, and personnel. Restoration and demobilization activities at the Adamsite storage vaults were completed on August 18, 1993.

SECTION 3
SUMMARY OF RESULTS

3.1 SITE HYDROGEOLOGY

The results of drilling activities at the Adamsite storage vaults indicate that the site is underlain by Coastal Plain sediments of Recent Age. Although the shallow sediments appear to have been reworked based on interpretation of the boring logs, sediments below a depth of approximately 6 ft are in natural sequence. Borings were drilled to a maximum depth of 18 ft.

Site lithology consists of fine silts and sands, with some medium to coarse sands. The sediments closest to the Bush River are fine grain silts with apparent low permeability, as indicated by the borehole logs and well development data from MW-3 included in Appendix B of this report. A cross section (fence diagram) of the site lithology is presented in Figure 3-1. This diagram shows the relationship of the former storage vaults to the substrata.

Depth to groundwater ranges from approximately 6 to 7 ft bgs and is probably tidally influenced. In the vicinity of the vaults, groundwater appears to flow from west (MW-1 and MW-2) to east (MW-3) toward the Bush River, as indicated by the water level elevations in the site monitoring wells (see Figure 3-1). The water level elevations shown in Figure 3-1 were calculated from depth to water measurements collected on July 22, 1993. The apparent west to east gradient is based on head differences and is approximated. In addition, permeability differences in the sediments may also control groundwater movement.

3.2 SUMMARY OF ANALYTICAL RESULTS

As discussed in Section 2 of this report, WESTON collected samples from the soils surrounding the vaults at six soil boring/monitoring well installation locations, one groundwater sample from each of the three monitoring wells, one water sample and two sediment samples at the NE vault, two sediment samples at the SW vault, and concrete samples at two discrete intervals at two locations in each vault. The sampling locations are indicated in Figure 3-2. All analytical results for samples collected are included in the tables located at the end of this section and in Appendix E of this report.

The samples were analyzed for CSM, as discussed in Subsection 2.4 of this report. As shown in Table 3-1, all samples screened provided negative responses for Sarin (GB), Soman (GD), O-ethyl S-(2-diisopropylaminoethyl) -methylphosphonothioate (VX), and mustard (HD).

None of the compounds detected in the concrete chip, the vault sediment, and the vault water met the hazardous waste criteria defined in the Resource Conservation and Recovery Act (RCRA) 40 Code of Federal Regulations (CFR) 261. The analytical data for these samples are presented in Tables 3-2 through 3-4.

Review of the soil boring and monitoring well soil sample data indicated detectable levels of volatiles, pesticides/polychlorinated biphenyls (PCBs), and metals. The following summary indicates the parameter and the location detected above the RCRA Corrective Action Level. The specific analytical data for the soil boring and monitoring well soil samples are indicated in Tables 3-5 and 3-6.

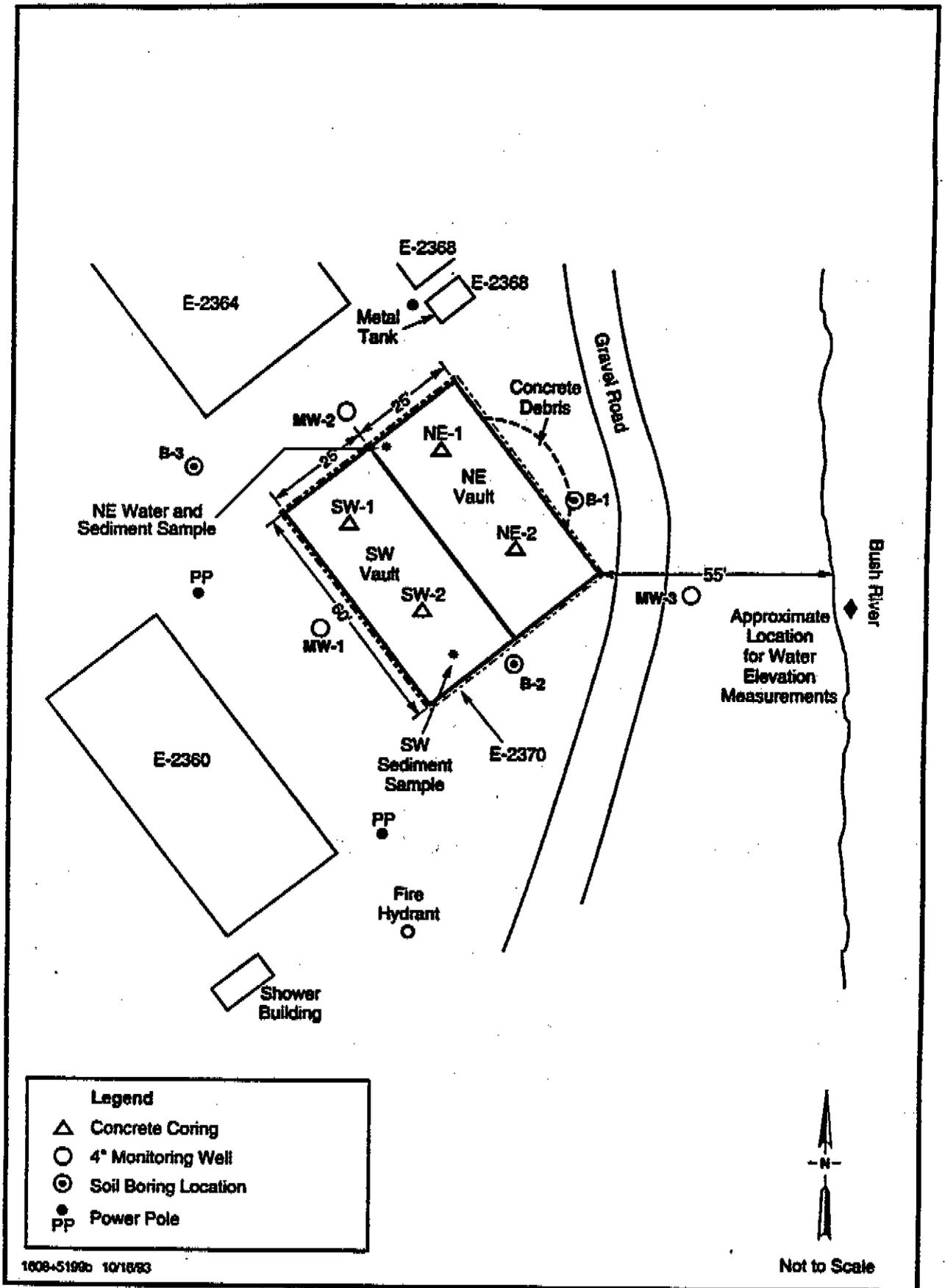


FIGURE 3-2 APPROXIMATE SAMPLING LOCATIONS

APG Environmental Remediation
Contract No. DACA87-90-D-0031
DO No. 10, Adamsite
Preliminary Field Investigation Report

Parameter	Soil Sample Location Detected Above RCRA Corrective Action Standard
Aroclor	MW-2-S (0 to 6 inches)
Arsenic	B-2-S (0 to 6 inches)
Beryllium	MW-1-S (0 to 6 inches, 6 inches to 2 ft, and 4 ft to 6 ft)
	MW-2-S (6 inches to 2 ft and 4 ft to 6 ft)
	MW-3-S (0 to 6 inches, 6 inches to 2 ft, 4 ft to 6 ft, 10 ft to 12 ft, and 10 ft to 12 ft DUP)
Mercury	B-3-S (0 to 6 inches, 4 ft to 6 ft, and 10 ft to 12 ft DUP)

Aroclor 1260 was detected above the RCRA Corrective Action Standard in the soil sample collected at MW-2-S (at an interval of 0 to 6 inches). The RCRA Corrective Action Standard for PCBs is 90 mg/kg.

Soil samples collected at MW-1 (at intervals of 0 to 6 inches, 6 inches to 2 ft, and 4 ft to 6 ft), at MW-2 (at intervals of 6 inches to 2 ft and 4 ft to 6 ft), and at all intervals at MW-3 exceeded the RCRA Corrective Action Standard for beryllium. The soil sample collected at soil boring B-2 (at an interval of 0 to 6 inches) exceeded the RCRA Corrective Action Standard for arsenic. The soil sample collected at soil boring B-3 (at intervals of 0 to 6 inches, 4 ft to 6 ft, and 10 ft to 12 ft) exceeded the RCRA Corrective Action Standard for mercury.

The analytical results collected from the groundwater at MW-1, MW-2, and MW-3 indicated detectable levels of volatiles and metals. The following summary indicates the parameters detected above the RCRA Corrective Action Standard for water and the respective monitoring well. The analytical data for the monitoring well groundwater samples are indicated in Table 3-7.

Parameter	Groundwater Sample Location Detected Above the RCRA Corrective Action Standard
Chloroform	MW-1
1,1,2,2-Tetrachloroethane	MW-2 and MW-3
Tetrachloroethane	MW-2 and MW-3
Trichloroethane	MW-2 and MW-3
Beryllium	MW-1
1,1,2-Trichloroethane	MW-2 and MW-3

Chloroform, 1,1,2,2-tetrachloroethane, tetrachloroethane, trichloroethane, 1,1,2-trichloroethane, and beryllium were detected at levels exceeding the RCRA Corrective Action Standard for water.

The analytical results collected from the decontamination water and soil boring/monitoring well drilling tailings indicated levels below those listed in 40 CFR 261 for characterizing RCRA hazardous wastes (see Tables 3-8 and 3-9).

3.2.1 Radiation Characterization

Two water, six sediment, and nine concrete chip samples from the Adamsite vaults were taken and analyzed for radionuclides. In general, no elevated levels of radionuclides were found, although the gross beta activity of the water sample is unusually high. Gross beta activity for the two water samples was 610 pCi/L and 550 pCi/L. These activities can be compared with the criteria contained in the Federal Drinking Water Standards, 40 CFR 141, although these regulations would certainly not apply to the water in the vaults. The regulation states that if the gross beta activity is greater than 50 pCi/L, it should be analyzed for specific radionuclides. This was done for the analyses that were performed for

APG Environmental Remediation
Contract No. DACA87-90-D-0031
DO No. 10, Adamsite
Preliminary Field Investigation Report

total uranium, carbon-14, tritium, and a gamma spectrum. The only specific radionuclide that was detected above detection limits was potassium -40 in one sample (299 pCi/L).

Potassium -40 is a naturally occurring radionuclide and a beta emitter, and may be the cause of the elevated gross beta activity.

In the vaults' sediment, the gross beta analysis varied from <3 pCi/g to 10 pCi/g, which is typical for soil. Four radionuclides were detected in the gamma spectrum analysis: beryllium -7 was identified in three samples with a maximum activity of 0.4 pCi/g; potassium -40 was identified in all six samples with a maximum activity of 8 pCi/g; cesium -137 was identified in all six samples with a maximum activity of 0.12 pCi/g; and thorium -228 was identified in three samples with a maximum activity of 0.16 pCi/g.

Potassium -40 and thorium -228 are naturally occurring radionuclides and the concentrations are typical of soil. The report Environmental Radiation Measurements (National Council on Radiation Protection and Measurements (NCRP), Report No. 50, 1976) gave an average activity for potassium -40 of 10 pCi/g and thorium -232 (the parent of thorium -228) of 06 pCi/g. Cesium -137 in these low concentrations is probably fallout from atomic bomb explosions. It has a 30-year half-life and would still exist in the soil (NCRP, Report No. 50). Beryllium -7 is produced in the atmosphere by cosmic rays.

Gross alpha and gross beta analyses were performed on the nine concrete chip samples. No alpha activity was detected, and the beta activity varied from 3.6 pCi/g to 18 pCi/g. These are typical values for soils (NCRP, Report No. 50).

APG Environmental Remediation
 Contract No. DACA87-90-D-0031
 DO No. 10, Adamsite
 Preliminary Field Investigation Report

Table 3-1

Results of CSM Screening for Adamsite Vault Soil Samples

Sample ID	Description of Sample Location	Agent Presence Detected At or Above the Given Concentration			
		GB at 20 ppb (ng/g)	GD at 20 ppb (ng/g)	VX at 20 ppb (ng/g)	HD at 200 ppb (ng/g)
A00969	B-1-S (0-6')	negative	negative	negative	negative
A00970	B-1-S (6'-2')	negative	negative	negative	negative
A00971	B-1-S (4-6')	negative	negative	negative	negative
A00972	B-1-S (10-12')	negative	negative	negative	negative
A00973	B-2-S (0-6')	negative	negative	negative	negative
A00974	B-2-S (6'-2')	negative	negative	negative	negative
A00975	B-2-S (4-6')	negative	negative	negative	negative
A00976	B-2-S (10-12')	negative	negative	negative	negative
A00977	B-3-S (0-6')	negative	negative	negative	negative
A00978	B-3-S (6'-2')	negative	negative	negative	negative
A00979	B-3-S (4-6')	negative	negative	negative	negative
A00980	B-3-S (10-12')	negative	negative	negative	negative
A00981	B-3-S (10-12') (DUP)	negative	negative	negative	negative
A00987	MW-2-S (0-6')	negative	negative	negative	negative
A00988	MW-2-S (6'-2')	negative	negative	negative	negative
A00989	MW-2-S (4-6')	negative	negative	negative	negative
A00983	MW-1-S (0-6')	negative	negative	negative	negative
A00990	MW-2-S (10-12')	negative	negative	negative	negative
A00984	MW-1-S (6'-2')	negative	negative	negative	negative
A00985	MW-1-S (4-6')	negative	negative	negative	negative
A00986	MW-1-S (10-12')	negative	negative	negative	negative
A00991	MW-3-S (0-6')	negative	negative	negative	negative

APG Environmental Remediation
Contract No. DACA87-90-D-0031
DO No. 10, Adamsite
Preliminary Field Investigation Report

Table 3-1

Results of CSM Screening for Adamsite Vault Soil Samples
(Continued)

Sample ID	Description of Sample Location	Agent Presence Detected At or Above the Given Concentration			
		GB at 20 ppb (ng/g)	GD at 20 ppb (ng/g)	VX at 20 ppb (ng/g)	HD at 200 ppb (ng/g)
A00992	MW-3-S (6'-2')	negative	negative	negative	negative
A00993	MW-3-S (4-6')	negative	negative	negative	negative
A00994	MW-3-S (10-12')	negative	negative	negative	negative
A00995	MW-3-S (10-12') (DUP)	negative	negative	negative	negative
01031	NE1-S-0	negative	negative	negative	negative
01030	NE2-S-0	negative	negative	negative	negative
01029	NE2-S-0 (DUP)	negative	negative	negative	negative
01033	SW1-S-0	negative	negative	negative	negative
01026	SW2-S-0	negative	negative	negative	negative
01068	MW-1-W-A	negative	negative	negative	negative
01069	MW-2-W-A	negative	negative	negative	negative
01070	MW-3-W-A	negative	negative	negative	negative
01071	MW-3-W-A (DUP)	negative	negative	negative	negative
01045	NEV-W-A	negative	negative	negative	negative
01046	NEV-W-A (DUP)	negative	negative	negative	negative

Table 3-2
 Summary of Toxicity Characteristic Leachate Procedure (TCLP) Analytical Results

Aberdeen Proving Ground
 Adamsite Storage Vaults
 Delivery Order No. 10
 Concrete Core Samples

Parameter	RCRA Haz. Waste Char. (40 CFR)	Sample # 00954 NE1-C(2-6')	Sample # 00955 NE2-C(0-2')	Sample # 00956 NE2-C(2-6')	Sample # 00957 NE2-C(2-6') (DUP)	Sample # 00820 Trip Blank
TCLP						
Metals						
- Barium (Total)	100,000 ug/L	213 ug/L	88.8 ug/L	104 ug/L	153 ug/L	-----
Volatiles	-----	ND	ND	ND	ND	ND
Semivolatiles	-----	ND	ND	ND	ND	-----
Herbicides	-----	ND	ND	ND	ND	-----
Pesticides	-----	ND	ND	ND	ND	-----
Reactivity						
- Cyanide (Total; Reactive)	-----	ND	ND	ND	ND	-----
- Sulfide	-----	ND	ND	ND	ND	-----
Corrosivity (pH)	< 2 or > 12.5	11.4	11.0	11.3	11.2	-----
Ignitibility	-----	No flash	No flash	No flash	No flash	-----

Table 3-2
 Summary of Toxicity Characteristic Leachate Procedure (TCLP) Analytical Results
 Aberdeen Proving Ground
 Adamsite Storage Vaults
 Delivery Order No. 10
 Concrete Core Samples

(Continued)

Parameter	RCRA Haz. Waste Char (40 CFR)	Sample # 00949 SW1-C(0-2')	Sample # 00950 SW1-C(2-6')	Sample # 00951 SW2-C(0-2')	Sample # 00952 SW2-C(2-6')	Sample # 00953 NE1-C(0-2')	Sample # 00819 Trip Blank
TCLP							
Metals							Water
- Barium (Total)	100,000 ug/L	82.5 ug/L	223 ug/L	103 ug/L	189 ug/L	88.6 ug/L	-----
Volatiles	-----	ND	ND	ND	ND	ND	ND
Semivolatiles	-----	ND	ND	ND	ND	ND	ND
Herbicides	-----	ND	ND	ND	ND	ND	-----
Pesticides	-----	ND	ND	ND	ND	ND	-----
Reactivity							-----
- Cyanide (Total; Reactive)	-----	ND	ND	ND	ND	ND	-----
- Sulfide	-----	ND	ND	ND	ND	ND	-----
Corrosivity (pH)	< 2 or > 12.5	11.2	11.4	11.3	11.0	11.1	-----
Ignitibility	-----	No flash	No flash	No flash	No flash	No flash	-----

Table 3--3

Summary of Toxicity Characteristic Leachate Procedure (TCLP) Analytical Results

Aberdeen Proving Ground

Adamsite Storage Vaults
 Delivery Order No. 10
 Vault Sediment Samples

Parameter TCLP	Haz. Waste Char. (40 CFR)	RCRA	Sample # 01035 NE2-S-0 (DUP)	Sample # 01036 NE2-S-0	Sample # 01037 NE1-S-0	Sample # 01039 SW2-S-0 (DUP)	Sample # 01040 SW2-S-0	Sample # 01041 SW1-S-0	Sample # TCLP Blank
Metals									
- Lead	5,000 ug/L		ND	275 ug/L	ND	2,790 ug/L	ND	2,060 ug/L	ND
- Barium (Total)	100,000 ug/L		523 ug/L	464 ug/L	310 ug/L	344 ug/L	313 ug/L	318 ug/L	ND
- Arsenic	5,000 ug/L		ND	ND	ND	375 ug/L	381 ug/L	147 ug/L	ND
Volatiles									
			ND	ND	ND	ND	ND	ND	ND
Semivolatiles									
	-----		ND	ND	ND	ND	ND	ND	ND
Herbicides									
	-----		ND	ND	ND	ND	ND	ND	ND
Pesticides									
	-----		ND	ND	ND	ND	ND	ND	ND
Reactivity									
- Cyanide (Total; Reactive)			ND	ND	ND	ND	ND	ND	ND
- Sulfide			13.1 mg/kg	ND	ND	16 mg/kg	ND	7.15 mg/kg	ND
Corrosivity (pH)			7.86	7.52	7.26	7.03	7.49	6.97	ND
	< 2 or > 12.5								
Ignitibility			No flash	No flash	No flash	No flash	No flash	No flash	No flash

Table 3-4

Summary of Toxicity Characteristic Leachate Procedure (TCLP) Analytical Results

Aberdeen Proving Ground

Adamsite Storage Vaults
 Delivery Order No. 10
 Vault Water

Parameter	RCRA Haz. Waste Char. (40 CFR)	Sample # 00824 Trip Blank	Sample # 00825 Trip Blank	Sample # 01051 NEV-W-A	Sample # 01052 NEV-W-A (DUP)
TCLP					
Metals					
- Barium (Total)	100,000 ug/L	-----	-----	214	214
Volatiles					
	-----	ND	ND	ND	ND
Semivolatiles					
	-----	-----	-----	ND	ND
Herbicides					
	-----	-----	-----	ND	ND
Pesticides					
	-----	-----	-----	ND	ND
Reactivity					
- Cyanide (Total; Reactive)	-----	-----	-----	ND	ND
- Sulfide	-----	-----	-----	ND	ND
Corrosivity (pH)	<2 or >12.5	-----	-----	6.9	6.9
Ignitibility	-----	-----	-----	No flash	No flash

Table 3-5
 Summary of Analytical Results
 Aberdeen Proving Ground
 Adamsite Storage Vaults
 Delivery Order No. 10
 Soil Boring Samples

Parameter	RCRA Corrective Action Standards ¹	Sample # 00997 B1-S (0'-6")	Sample # 00998 B1-S (0'-2')	Sample # 00999 B1-S (4'-6")	Sample # 01001 B1-S (10'-12")	Sample # 01002 B2-S (0'-6")	Sample # 01003 B2-S (6'-2')
ICL ANALYTES							
Volatiles							
- Acetone	8,000 ug/Kg	ND	ND	ND	ND	ND	ND
- Trichloroethene	60,000 ug/Kg	ND	114 ug/Kg	ND	ND	ND	ND
Pesticides/PCBs							
- 4,4' DDE	2,000 ug/Kg	0.93 ug/Kg	2.10 ug/Kg	ND	ND	ND	ND
- Endrin	20,000 ug/Kg	ND	ND	ND	ND	2.38 ug/Kg	ND
Semivolatiles (BNA)							
HALOGENATED							
Metals							
- Arsenic	80 mg/Kg	13 mg/Kg	3.6 mg/Kg	2.51 mg/Kg	2.16 mg/Kg	148 mg/Kg	10.8 mg/Kg
- Lead	No proposed level	127 mg/Kg	33.8 mg/Kg	15.3 mg/Kg	11.2 mg/Kg	543 mg/Kg	28.4 mg/Kg
- Potassium	---	731 mg/Kg	563 mg/Kg	874 mg/Kg	724 mg/Kg	455 mg/Kg	578 mg/Kg
- Sodium	---	ND	80.7 mg/Kg	82.6 mg/Kg	99.5 mg/Kg	92.8 mg/Kg	112 mg/Kg
- Aluminum	---	111 mg/Kg	129 mg/Kg	159 mg/Kg	83.6 mg/Kg	41.8 mg/Kg	119 mg/Kg
- Barium	---	0.655 mg/Kg	0.472 mg/Kg	0.386 mg/Kg	0.268 mg/Kg	0.497 mg/Kg	0.474 mg/Kg
- Beryllium	0.2 mg/Kg	0.004 mg/Kg	0.004 mg/Kg	0.005 mg/Kg	0.004 mg/Kg	ND	0.003 mg/Kg
- Cadmium	40 mg/Kg	ND	ND	ND	ND	0.087 mg/Kg	ND
- Calcium	---	11.6 mg/Kg	7.32 mg/Kg	1.82 mg/Kg	4.11 mg/Kg	16.1 mg/Kg	16.7 mg/Kg
- Cobalt	---	0.057 mg/Kg	0.059 mg/Kg	0.052 mg/Kg	0.302 mg/Kg	0.081 mg/Kg	0.051 mg/Kg
- Chromium	400 mg/Kg	0.170 mg/Kg	0.16 mg/Kg	0.226 mg/Kg	0.175 mg/Kg	1.07 mg/Kg	0.165 mg/Kg
- Copper	---	0.246 mg/Kg	0.093 mg/Kg	0.132 mg/Kg	0.102 mg/Kg	1.05 mg/Kg	0.097 mg/Kg
- Iron	---	192 mg/Kg	148 mg/Kg	188 mg/Kg	100 mg/Kg	1,360 mg/Kg	143 mg/Kg
- Magnesium	---	15.7 mg/Kg	14.8 mg/Kg	23.6 mg/Kg	9.81 mg/Kg	15.1 mg/Kg	14.6 mg/Kg
- Manganese	---	1.06 mg/Kg	0.78 mg/Kg	0.781 mg/Kg	3.36 mg/Kg	4.42 mg/Kg	0.904 mg/Kg
- Nickel	2,000 mg/Kg	0.084 mg/Kg	0.066 mg/Kg	0.064 mg/Kg	0.060 mg/Kg	0.276 mg/Kg	0.049 mg/Kg
- Vanadium	---	0.257 mg/Kg	0.246 mg/Kg	0.262 mg/Kg	0.286 mg/Kg	0.239 mg/Kg	0.234 mg/Kg
- Zinc	---	1.57 mg/Kg	0.481 mg/Kg	0.375 mg/Kg	0.231 mg/Kg	1.24 mg/Kg	1.35 mg/Kg

¹ Federal Register/Vol. 55, No. 145/Friday, July 27, 1990/Proposed Rules.
 ND - No analytes detected above the laboratory detection limits.

Table 3-5
 Summary of Analytical Results
 Aberdeen Proving Ground
 Adamsite Storage Vaults
 Delivery Order No. 10
 Soil Boring Samples
 (Continued)

Parameter	RCRA Corrective Action Standards ¹	Sample # 01004 B2-S(4-6)	Sample # 01005 B2-S(10-12)	Sample # 01084 Trip Blank	Sample # 01085 Trip Blank
TCL ANALYTES					
Volatiles	----	ND	ND	ND	ND
Pesticides/PCBs	----	ND	ND	----	----
Semivolatiles (BNA)	----	ND	ND	----	----
TAL ANALYTES					
Metals					
- Arsenic	80 mg/Kg	3.46 mg/Kg	1.48 mg/Kg		
- Lead	No proposed level	9.62 mg/Kg	8.56 mg/Kg		
- Mercury	20.0 mg/Kg	ND	ND		
- Potassium	----	638 mg/Kg	593 mg/Kg		
- Sodium	----	69.5 mg/Kg	113 mg/Kg		
- Aluminum	----	118 mg/Kg	60.7 mg/Kg		
- Barium	----	0.284 mg/Kg	0.373 mg/Kg		
- Beryllium	0.2 mg/Kg	0.003 mg/Kg	0.003 mg/Kg		
- Calcium	----	3.77 mg/Kg	4.16 mg/Kg		
- Cobalt	----	0.044 mg/Kg	0.037 mg/Kg		
- Chromium	400 mg/Kg	0.154 mg/Kg	0.197 mg/Kg		
- Copper	----	0.107 mg/Kg	0.087 mg/Kg		
- Iron	----	170 mg/Kg	31.3 mg/Kg		
- Magnesium	----	14.0 mg/Kg	7.91 mg/Kg		
- Manganese	----	0.550 mg/Kg	0.232 mg/Kg		
- Nickel	2,000 mg/Kg	0.039 mg/Kg	ND		
- Vanadium	----	0.271 mg/Kg	0.184 mg/Kg		
- Zinc	----	0.232 mg/Kg	0.191 mg/Kg		

¹ Federal Register/Vol. 55, No. 145/Friday, July 27, 1990/Proposed Rules.
 ND - No analytes detected above the laboratory detection limits.

Table 3-5

Summary of Analytical Results

Aberdeen Proving Ground

Adamsite Storage Vaults
 Delivery Order No. 10
 Soil Boring Samples
 (Continued)

Parameter	RCRA Corrective Action Standards ¹	Sample # 01006 B3-S10-67	Sample # 01007 B3-S16-21	Sample # 01008 B3-S14-67	Sample # 01009 B3-S10-12	Sample # 01010 B3-S10-12 (DUP)	Sample # 00811 Trip Blank	Sample # 00812 Trip Blank
TC/A ANALYTES								
Volatiles								
- Acetone	8,000,000 ug/kg	30.1 ug/kg	39.0 ug/kg	34.4 ug/kg	5,420 ug/kg	4,480 ug/kg	ND	ND
- Methylene Chloride	90,000 ug/kg	9.33 ug/kg	11.2 ug/kg	14.2 ug/kg	ND	ND	ND	ND
Politics/PCBs								
- 4,4' DDB	2,000 ug/kg	ND	ND	2.18 ug/kg	ND	ND	ND	ND
- 4,4' DDT	2,000 ug/kg	12.7 ug/kg	ND	ND	ND	ND	ND	ND
Semivolatiles (BNA)								
TC/A ANALYTES								
Metals								
- Arsenic	80 mg/kg	25.3 mg/kg	8.11 mg/kg	8.96 mg/kg	1.54 mg/kg	ND	ND	ND
- Lead	No proposed level	79.1 mg/kg	109 mg/kg	127 mg/kg	3.99 mg/kg	1.94 mg/kg	ND	ND
- Mercury	20.0 mg/kg	990 mg/kg	ND	309 mg/kg	ND	2,310 mg/kg	ND	ND
- Polonium	---	157 mg/kg	698 mg/kg	1,150 mg/kg	278 mg/kg	217 mg/kg	ND	ND
- Sodium	---	586 mg/kg	672 mg/kg	75.8 mg/kg	50.6 mg/kg	ND	ND	ND
- Aluminum	---	138 mg/kg	177 mg/kg	171 mg/kg	48.0 mg/kg	33.1 mg/kg	ND	ND
- Barium	---	0.198 mg/kg	0.452 mg/kg	0.390 mg/kg	0.123 mg/kg	0.081 mg/kg	ND	ND
- Beryllium	0.2 mg/kg	0.002 mg/kg	0.005 mg/kg	0.005 mg/kg	ND	ND	ND	ND
- Calcium	---	8,970 mg/kg	1,040 mg/kg	893 mg/kg	173 mg/kg	109 mg/kg	ND	ND
- Cobalt	---	0.370 mg/kg	0.062 mg/kg	0.044 mg/kg	ND	ND	ND	ND
- Chromium	400 mg/kg	1.21 mg/kg	0.249 mg/kg	0.267 mg/kg	0.066 mg/kg	0.049 mg/kg	ND	ND
- Copper	---	34.4 mg/kg	12.4 mg/kg	14.5 mg/kg	ND	ND	ND	ND
- Iron	---	244 mg/kg	234 mg/kg	224 mg/kg	40.3 mg/kg	28.7 mg/kg	ND	ND
- Manganese	---	89,600 mg/kg	3,080 mg/kg	3,120 mg/kg	362 mg/kg	345 mg/kg	ND	ND
- Nickel	---	476 mg/kg	76.2 mg/kg	80.9 mg/kg	70.6 mg/kg	35.1 mg/kg	ND	ND
- Vanadium	2,000 mg/kg	8.10 mg/kg	0.417 mg/kg	0.246 mg/kg	0.048 mg/kg	0.048 mg/kg	ND	ND
- Zinc	---	0.294 mg/kg	0.328 mg/kg	0.355 mg/kg	0.085 mg/kg	0.054 mg/kg	ND	ND
- Zinc	---	0.334 mg/kg	0.403 mg/kg	0.374 mg/kg	0.110 mg/kg	0.064 mg/kg	ND	ND

¹ Federal Register/Vol. 55, No. 145/Friday, July 27, 1990/Proposed Rules.
 ND - No analytes detected above the laboratory detection limits.

Table 3--6
 Summary of Analytical Results
 Aberdeen Proving Ground
 Adamsite Storage Vaults
 Delivery Order No. 10
 Monitoring Well Soil Samples

Parameter	RCRA Corrective Action Standards 1	Sample # 00809 Trip Blank	Sample # 00810 Trip Blank	Sample # 01012 MW 1-S(0-6")	Sample # 01013 MW 1-S(6"-2')	Sample # 01014 MW 1-S(4-6")	Sample # 01015 MW 1-S(10-12")
TCO ANALYTES							
Volatiles							
- Acetone	8,000,000 ug/Kg	ND	ND	ND	ND	ND	ND
- Methylene Chloride	90,000 ug/Kg	ND	ND	ND	ND	ND	ND
Pesticides/PCBs							
- 4,4' DDE	2,000 ug/Kg	---	---	3.83 ug/Kg	ND	ND	ND
- 4,4' DDT	2,000 ug/Kg	---	---	6.39 ug/Kg	ND	ND	ND
Semivolatiles (BNA)							
TAL ANALYTES							
Metals							
- Arsenic	80 mg/Kg	---	---	---	---	---	---
- Lead	No proposed level	---	---	7.50 mg/Kg	2.40 mg/Kg	2.70 mg/Kg	ND
- Potassium	---	---	---	48.3 mg/Kg	10.6 mg/Kg	7.30 mg/Kg	2.10 mg/Kg
- Silver	200 mg/Kg	---	---	4.47 mg/Kg	705 mg/Kg	555 mg/Kg	186 mg/Kg
- Sodium	---	---	---	40,290 mg/Kg	ND	ND	ND
- Aluminum	---	---	---	139 mg/Kg	253 mg/Kg	46.3 mg/Kg	ND
- Barium	---	---	---	8,460 mg/Kg	16,400 mg/Kg	10,600 mg/Kg	1,940 mg/Kg
- Beryllium	0.2 mg/Kg	---	---	53.7 mg/Kg	42.8 mg/Kg	30.6 mg/Kg	7.20 mg/Kg
- Calcium	---	---	---	0.23 mg/Kg	0.450 mg/Kg	0.34 mg/Kg	ND
- Cobalt	---	---	---	2,380 mg/Kg	851 mg/Kg	210 mg/Kg	75.1 mg/Kg
- Chromium	400 mg/Kg	---	---	13.1 mg/Kg	5.7 mg/Kg	3.90 mg/Kg	ND
- Copper	---	---	---	40.9 mg/Kg	20.3 mg/Kg	12.3 mg/Kg	2.60 mg/Kg
- Iron	---	---	---	25.3 mg/Kg	9.20 mg/Kg	7.80 mg/Kg	ND
- Magnesium	---	---	---	13,900 mg/Kg	19,200 mg/Kg	9,850 mg/Kg	2,260 mg/Kg
- Manganese	---	---	---	15,200 mg/Kg	1,840 mg/Kg	1,370 mg/Kg	258 mg/Kg
- Nickel	2,000 mg/Kg	---	---	210 mg/Kg	79.2 mg/Kg	59.4 mg/Kg	12.8 mg/Kg
- Vanadium	---	---	---	315 mg/Kg	13.1 mg/Kg	8.3 mg/Kg	ND
- Zinc	---	---	---	16.5 mg/Kg	30.7 mg/Kg	20.1 mg/Kg	ND
				51.9 mg/Kg	42.2 mg/Kg	26.1 mg/Kg	5.70 mg/Kg

1 Federal Register/Vol. 55, No. 145/Friday, July 27, 1990/Proposed Rules.
 ND - No analytes detected above the laboratory detection limits.

Table 3--6
 Summary of Analytical Results
 Aberdeen Proving Ground
 Adamsite Storage Vaults
 Delivery Order No. 10
 Monitoring Well Soil Samples
 (Continued)

Parameter	RCRA Corrective Action Standards ¹	Sample # 01M6 MW2-S(0-07)	Sample # 01M7 MW2-S(6-27)	Sample # 01M8 MW2-S(4-07)	Sample 01M9 MW2-S(10-12')
INORGANICS					
Volatiles					
- Acetone	8,000,000 ug/Kg	ND	ND	ND	ND
- Trichloroethene	60,000 ug/Kg	3.48 ug/Kg	ND	ND	ND
- 1,1,2,2-Tetrachloroethane	40,000 ug/Kg	ND	14.0 ug/Kg	11.0 ug/Kg	ND
- Xylene	2E+8 ug/Kg	ND	14.2 ug/Kg	ND	ND
Polychlorinated Biphenyls (PCBs)					
- 4,4' DDE	2,000 ug/Kg	ND	ND	ND	ND
- 4,4' DDT	2,000 ug/Kg	ND	ND	ND	ND
- Aroclor 1260	90 ug/Kg	1,990 ug/Kg	ND	ND	ND
- Semivolatiles (BVA)	-----	ND	ND	ND	ND
TRACED METALS					
Metals					
- Arsenic	80 mg/Kg	7.70 mg/Kg	4.1 mg/Kg	4.3 mg/Kg	ND
- Lead	No proposed level	120 mg/Kg	11.1 mg/Kg	8.3 mg/Kg	4.40 mg/Kg
- Potassium	-----	533 mg/Kg	600.0 mg/Kg	991 mg/Kg	270 mg/Kg
- Silver	200 mg/Kg	0.158 mg/Kg	ND	ND	ND
- Sodium	-----	135 mg/Kg	78.1 mg/Kg	119 mg/Kg	ND
- Aluminum	-----	6,070 mg/Kg	15,000 mg/Kg	15,900 mg/Kg	3,520 mg/Kg
- Barium	-----	50.9 mg/Kg	51.5 mg/Kg	36.4 mg/Kg	10.2 mg/Kg
- Beryllium	0.2 mg/Kg	0.180 mg/Kg	0.520 mg/Kg	0.660 mg/Kg	ND
- Cadmium	40 mg/Kg	2.40 mg/Kg	ND	ND	ND
- Calcium	-----	2,450 mg/Kg	301 mg/Kg	469 mg/Kg	134 mg/Kg
- Cobalt	-----	7.0 mg/Kg	5.9 mg/Kg	3.9 mg/Kg	ND
- Chromium	400 mg/Kg	27.6 mg/Kg	17.8 mg/Kg	22 mg/Kg	4.20 mg/Kg
- Copper	-----	31.6 mg/Kg	6.9 mg/Kg	12.1 mg/Kg	ND
- Iron	-----	23,500 mg/Kg	15,800 mg/Kg	19,000 mg/Kg	2,190 mg/Kg
- Magnesium	-----	2,560 mg/Kg	1,260 mg/Kg	1,990 mg/Kg	325 mg/Kg
- Manganese	-----	98.0 mg/Kg	65.1 mg/Kg	65.6 mg/Kg	24.7 mg/Kg
- Nickel	2,000 mg/Kg	24.6 mg/Kg	12.0 mg/Kg	11.1 mg/Kg	4.60 mg/Kg
- Vanadium	-----	14.2 mg/Kg	26.3 mg/Kg	36.4 mg/Kg	4.50 mg/Kg
- Zinc	-----	21.8 mg/Kg	34.0 mg/Kg	32.1 mg/Kg	8.90 mg/Kg

¹ Federal Register Vol. 55, No. 145/Friday, July 27, 1990/Proposed Rules.
 ND -- No analytes detected above the laboratory detection limits.

Table 3-6
 Summary of Analytical Results
 Aberdeen Proving Ground
 Adamsite Storage Vaults
 Delivery Order No. 10
 Monitoring Well Soil Samples
 (Continued)

Parameter	RCRA Corrective Action Standards ¹	Sample #01020 MW3-S(0-6')	Sample #01021 MW3-S(6'-2')	Sample #00607 Trip Blank	Sample #00608 Trip Blank
TCL ANALYTES					
Volatiles					
- Acetone	80,000 ug/kg	ND	ND	13.1 ug/L	15.5 ug/L
Pesticides/FcBs	-----	ND	ND	-----	-----
Semivolatiles (BVA)	-----	ND	ND	-----	-----

Table 3-6 Cont'd: Summary of Metals Analytical Results

Parameter	RCRA Corrective Action Standards ¹	Sample #01020 MW3-S(0-6')	Sample #01021 MW3-S(6'-2')	Sample #01022 MW3-S(4-8')	Sample #01023 MW3-S(10-12')	Sample #01024 MW3-S(10-12') (mg/kg)(DUPL)	Sample #01079 Field Blank (mg/kg)
TAL ANALYTES							
Metals							
- Arsenic	80 mg/kg	4.44	7.14	2.09	ND	ND	ND
- Lead	No proposed level	138	12.7	8.28	30.8	11.4	ND
- Potassium	-----	545	500	844	735	670	2.13
- Sodium	-----	593	124	108	368.4	301	0.406
- Aluminum	-----	18,200	17,000	14,000	13,500	17,800	ND
- Barium	-----	68.5	50.8	35.1	62	60.9	ND
- Beryllium	0.2 mg/kg	0.313	0.437	0.405	0.882	0.443	ND
- Calcium	-----	7,380	1,160	398	737	695	161
- Cadmium	40 mg/kg	1.16	ND	ND	ND	ND	ND
- Cobalt	-----	12.3	7.1	4.89	8.14	9.29	ND
- Chromium	400 mg/kg	32.4	20.2	20.5	36.4	35.3	ND
- Copper	-----	95	9.21	10.4	16	13.3	ND
- Iron	-----	16,900	22,900	15,600	17,300	13,500	ND
- Magnesium	-----	3,980	1,880	2,040	2,300	2,120	ND
- Manganese	-----	239	86.9	62.8	55.4	71.9	ND
- Nickel	2,000 mg/kg	16.6	8.27	6.77	9.42	9.81	ND
- Vanadium	-----	33.5	30.6	29.5	48.7	36.4	ND
- Zinc	-----	484	51	35.4	34.5	32.6	ND

¹ Federal Register/Vol. 55, No. 145/Friday, July 27, 1990/Proposed Rules.
 ND - No analytes detected above the laboratory detection limits.

DACA87-90-D-0031
 Delivery Order No. 10 - Adamsite

Table 3-6
Summary of Analytical Results
Aberdeen Proving Ground
Adamsite Storage Vaults
Delivery Order No. 10
Monitoring Well Soil Samples
(Continued)

Parameter	RCRA Corrective Action Standards ¹	Sample # 01022 MW3-S(4-6)	Sample # 01023 MW3-S(10-12)	Sample # 01024 MW3-S(10-12)	Sample # 01079 Field Blank
TCL ANALYTES					
Volatiles					
- Acetone	8,000,000 ug/Kg	36.6 ug/Kg	342 ug/Kg	903 ug/Kg	14.1 ug/L
- Methylene Chloride	50,000 ug/Kg	10.1 ug/Kg	6.10 ug/Kg	ND	ND
Pesticides/PCBs	-----	ND	ND	ND	ND
Semivolatiles (BNA)	-----	ND	ND	ND	ND

¹ Federal Register/Vol. 55, No. 145/Friday, July 27, 1990/Proposed Rules.
 ND - No analytes detected above the laboratory detection limits.

Table 3-7

Summary of Analytical Results
 Aberdeen Proving Ground
 Adamsite Storage Vaults
 Delivery Order No. 10
 Monitoring Well Groundwater Samples

Parameter	RCRA Corrective Action Standards 1	Sample #				Sample #	Sample #	Sample #	Sample #
		MW-1-W-A	MW-2-W-A	01074	01075				
VOLATILES									
-Chloroform	6.0 ug/L	7.56 ug/L	ND	ND	ND	ND	ND	ND	ND
-Methylene Chloride	5.0 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
-1,1,2,2-Tetrachloroethane	2.0 ug/L	ND	82.7 ug/L	213 ug/L	236 ug/L	ND	ND	ND	ND
-Tetrachloroethene	0.7 ug/L	ND	46.8 ug/L	12.2 ug/L	12.4 ug/L	ND	ND	ND	ND
-Trichloroethene	5.0 ug/L	ND	6.04 ug/L	153 ug/L	151 ug/L	ND	ND	ND	ND
-1,1,2-Trichloroethane	6.0 ug/L	ND	ND	18.1 ug/L	16.8 ug/L	ND	ND	ND	ND
-Trans 1,2-Dichloroethene	-----	ND	ND	78.9 ug/L	76.2 ug/L	ND	ND	ND	ND
Pesticides/PCBs	-----	ND	ND	ND	ND	ND	ND	ND	ND
Semi-volatiles (BNA)	-----	ND	ND	ND	ND	ND	ND	ND	ND
TALANALYTES									
Metals									
-Lead	50.0 ug/L	25.4 ug/L	21.0 ug/L	20.5 ug/L	24.9 ug/L	24.9 ug/L	24.9 ug/L	24.9 ug/L	24.9 ug/L
-Potassium	-----	1,740 ug/L	1,610 ug/L	520 ug/L	2,150 ug/L	2,150 ug/L	2,150 ug/L	2,150 ug/L	2,150 ug/L
-Sodium	-----	8,190 ug/L	2,790 ug/L	3,610 ug/L	34,900 ug/L	34,900 ug/L	34,900 ug/L	34,900 ug/L	34,900 ug/L
-Aluminum	-----	11,800 ug/L	9,180 ug/L	418 ug/L	519 ug/L	519 ug/L	519 ug/L	519 ug/L	519 ug/L
-Barium	-----	84.4 ug/L	61.8 ug/L	52 ug/L	49.8 ug/L	49.8 ug/L	49.8 ug/L	49.8 ug/L	49.8 ug/L
-Beryllium	0.008 ug/L	0.869 ug/L	ND	ND	ND	ND	ND	ND	ND
-Calcium	-----	9,050 ug/L	18,200 ug/L	13,400 ug/L	12,800 ug/L	12,800 ug/L	12,800 ug/L	12,800 ug/L	12,800 ug/L
-Cobalt	-----	10.1 ug/L	ND	28.9 ug/L	27.9 ug/L	27.9 ug/L	27.9 ug/L	27.9 ug/L	27.9 ug/L
-Chromium	50.0 ug/L	30.7 ug/L	19.8 ug/L	6.64 ug/L	9.48 ug/L	9.48 ug/L	9.48 ug/L	9.48 ug/L	9.48 ug/L
-Iron	-----	21,800 ug/L	9,060 ug/L	2,810 ug/L	3,010 ug/L	3,010 ug/L	3,010 ug/L	3,010 ug/L	3,010 ug/L
-Magnesium	-----	6,340 ug/L	8,540 ug/L	5,750 ug/L	5,350 ug/L	5,350 ug/L	5,350 ug/L	5,350 ug/L	5,350 ug/L
-Manganese	-----	208 ug/L	182 ug/L	340 ug/L	323 ug/L	323 ug/L	323 ug/L	323 ug/L	323 ug/L
-Mercury	2.0 ug/L	0.420 ug/L	ND	ND	ND	ND	ND	ND	ND
-Nickel	700 ug/L	ND	ND	20.2 ug/L	29.6 ug/L	29.6 ug/L	29.6 ug/L	29.6 ug/L	29.6 ug/L
-Vanadium	-----	34.2 ug/L	15.7 ug/L	ND	ND	ND	ND	ND	ND
-Zinc	-----	83.6 ug/L	92.2 ug/L	58.0 ug/L	54.5 ug/L	54.5 ug/L	54.5 ug/L	54.5 ug/L	54.5 ug/L

1 Federal Register/Vol. 55, No. 145/Friday, July 27, 1990/Proposed Rules.
 ND - No analytes detected above the laboratory detection limit.

DACA87-90-D-0031
 Delivery Order 10 - Adamsite

Table 3-8

Summary of Toxicity Characteristic Leachate Procedure (TCLP) Analytical Results

Aberdeen Proving Ground

Adamsite Storage Vaults
 Delivery Order No. 10
 Drill Cuttings and Decon Water

Parameter	RCRA Haz. Waste Char. (40 CFR)	Sample #		Sample #		Sample #		Sample #		Sample #		Sample #	
		01082 Decon Water	01081 Decon (DUP)	01101 MW-1-T-Comp	01102 MW-2-T-Comp	01103 MW-3-T-Comp	00829 Trip Blank	00830 Trip Blank					
TCLP													
Metals	- Barium (Total)	100,000 ug/L	126 ug/L	76.2 ug/L	533 ug/L	472 ug/L	771 ug/L	472 ug/L	771 ug/L	---	---	---	---
	- Arsenic	5,000 ug/L	ND	ND	ND	144 ug/L	ND	ND	ND	---	---	---	---
Volatiles	-----	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	-----	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Semi-volatiles	-----	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	-----	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Herbicides	-----	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	-----	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides	-----	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	-----	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Reactivity	-----	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	- Cyanide	-----	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
- Sulfide	-----	ND	8.69 mg/kg	11.5 mg/kg	13.8 mg/kg	14.4 mg/kg	14.4 mg/kg	13.8 mg/kg	14.4 mg/kg	---	---	---	---
PCBs	-----	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	-----	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Conductivity (pH)	< 2 or > 12.5	7.78	7.66	5.9	5.55	5.86	5.86	5.55	5.86	---	---	---	---
	-----	No flash	No flash	No flash	No flash	No flash	No flash	No flash	No flash	---	---	---	---
Ignitibility	-----	No flash	No flash	No flash	No flash	No flash	No flash	No flash	No flash	---	---	---	---
	-----	0.091 mg/L	0.09 mg/L	0.09 mg/L	0.09 mg/L	0.09 mg/L	0.09 mg/L	0.09 mg/L	0.09 mg/L	---	---	---	---
Nitrate	-----	0.091 mg/L	0.09 mg/L	0.09 mg/L	0.09 mg/L	0.09 mg/L	0.09 mg/L	0.09 mg/L	0.09 mg/L	---	---	---	---
	-----	---	---	---	---	---	---	---	---	---	---	---	---

Table 3-9

Summary of Toxicity Characteristic Leachate Procedure (TCLP) Analytical Results
 Aberdeen Proving Ground
 Adamsite Storage Vaults
 Delivery Order No. 10
 Soil Boring Tailings

Parameter TCLP	RCRA Haz. Waste Char. (40 CFR)	Sample #		Sample #		Sample #		Sample #		TCLP Blank
		B-1-T-Comp	B-2-T-Comp	B-3-T-Comp	B-3-T-Comp (DUP)	Trip Blank	Trip Blank	Trip Blank		
Metals										
- Arsenic	5,000 ug/L	ND	216 ug/L	ND	ND	ND	ND	ND	ND	ND
- Barium (Total)	100,000 mg/L	624 ug/L	649 ug/L	178 ug/L	416 ug/L	ND	ND	ND	ND	ND
Volatiles	-----	ND	ND	ND	ND	ND	ND	ND	ND	ND
Semivolatiles	-----	ND	ND	ND	ND	ND	ND	ND	ND	ND
Herbicides	-----	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides	-----	ND	ND	ND	ND	ND	ND	ND	ND	ND
Reactivity										
- Cyanide	-----	ND	ND	ND	ND	ND	ND	ND	ND	ND
- Sulfide	-----	14.3 mg/kg	19.3 mg/kg	19.8 mg/kg	20.8 mg/kg	ND	ND	ND	ND	ND
Corrosivity (pH)	< 2 or > 12.5	4.72	7.21	6.17	5.64	No flash	No flash	No flash	No flash	No flash
Ignitibility	-----	No flash	No flash	No flash	No flash	No flash	No flash	No flash	No flash	No flash

SECTION 4
CONCLUSIONS AND RECOMMENDATIONS

The principle objective of the SSSP was to obtain analytical data to be used for determining the scope of Interim Remedial Measures (IRMs) necessary to mitigate the potential imminent threat, if any, that the Adamsite storage vaults pose to the environment.

4.1 CONCLUSIONS

The following paragraphs discuss WESTON's conclusions based on the information obtained from the field investigation activities, including drilling, well construction, sampling, and analysis of the sediments, soils, concrete, and groundwater.

- Depth to groundwater ranges from 6 ft to 7 ft bgs and is probably tidally influenced. The magnitude of tidal influence on site groundwater is not well defined at this point.
- Groundwater appears to flow from west to east toward the Bush River.
- Shallow sediments (to approximately 6 ft bgs) appear to have been reworked, possibly by past construction activity. Sediments below 6 ft bgs are in natural sequence and consist of fine silt and sand with some medium to coarse sand. Sediments appear to be fine grained with apparent lower permeability near the Bush River, as indicated by the lithologic log of MW-3.
- The existing sediments, water, and concrete in the vaults have been determined nonhazardous through sampling and analysis, as discussed in Section 3 of this report. This determination is based upon the CSM and TCLP analytical data contained in Tables 3-1 through 3-4. All of the analytical data for the sediment, water, and concrete samples indicate that these materials are characterized as nonhazardous waste as defined in 40 CFR 261.

**APG Environmental Remediation
Contract No. DACA87-90-D-0031
DO No. 10, Adamsite
Preliminary Field Investigation Report**

- Detectable levels of volatile organic compounds (VOCs), pesticides/PCBs, and/or metals are present in the soil samples taken from the soil borings (B-1, B-2, B-3, MW-1, MW-2, and MW-3), as discussed in Section 3 of this report. All VOCs that were detected in the soil samples taken from the soil borings were detected at levels below the RCRA Corrective Action Standard. PCBs, specifically Aroclor 1260, were detected above the RCRA Corrective Action Standard from 0 to 6 inches at MW-2.
- Soil samples collected at MW-1 (at intervals of 0 to 6 inches, 6 inches to 2 ft, and 4 ft to 6 ft), at MW-2 (at intervals of 6 inches to 2 ft and 4 ft to 6 ft), and at all intervals at MW-3 exceeded the RCRA Corrective Action Standard for beryllium. The soil sample collected at soil boring B-2 (at an interval of 0 to 6 inches) exceeded the RCRA Corrective Action Standard for arsenic. The soil sample collected at soil boring B-3 (at intervals of 0 to 6 inches, 4 ft to 6 ft, and 10 ft to 12 ft) exceeded the RCRA Corrective Action Standard for mercury.
- Detectable levels of VOCs and metals are present in the groundwater samples taken from the monitoring wells (MW-1, MW-2, and MW-3), as discussed in Section 3 of this report. Chloroform and beryllium were detected in the groundwater above the RCRA Corrective Action Standard at MW-1. 1,1,2,2-tetrachloroethane, tetrachloroethane, 1,1,2-trichloroethane, and trichloroethane were detected in the groundwater above the RCRA Corrective Action Standard at MW-2 and MW-3.
- Water levels in the vaults rise and fall on a daily basis, as evidenced in the SW vault. Approximately 1 ft of accumulated water was present in the SW vault on July 9, 1993. Visual inspection of the SW vault on July 19, 1993, revealed that there was no standing water in the SW vault. The source of the water is unknown, but may be a combination of stormwater and groundwater infiltration.

4.2 RECOMMENDATIONS

Based on the results and findings of the field investigation, WESTON recommends the following actions be taken at the site:

- Secure the vaults by filling with a flowable fill material (i.e., lightweight concrete). Prior to placing the flowable fill in each vault, the structural steel and roof should be dismantled and disposed as scrap metal. Accumulated water and sediment should be removed from the vaults and disposed as nonhazardous waste. The concrete surfaces (i.e., walls and floors) should be covered with a water-resistant epoxy to minimize groundwater infiltration. The concrete sidewalls of each vault that extend above the existing ground surface should be dismantled by breaking up the concrete and placing it into the vaults. The flowable fill material would then be placed into the vaults to approximately 12 inches below the surrounding ground surface and covered with gravel to an elevation similar to the existing grade.
- WESTON recommends that the soils in the area of MW-2 be removed to a depth of 2 ft since PCBs were detected at a level above the RCRA Corrective Action Standard in the soil boring interval from 0 to 6 inches. Eighteen inches of clean backfill would then be placed and compacted. A final 6-inch-thick cover layer of gravel would be placed to bring the area to the elevation of the existing grade.
- WESTON recommends that the soils in the area of B-2 be removed to a depth of 2 ft since arsenic was detected at a level above the RCRA Corrective Action Standard in the soil boring interval from 0 to 6 inches. Eighteen inches of clean backfill would then be placed and compacted. A final 6-inch-thick cover layer of gravel would be placed to bring the area to the elevation of the existing grade.
- WESTON recommends that any visually stained surface areas near the vaults be removed to a depth of 2 ft. Eighteen inches of clean backfill would then be placed and compacted. A final 6-inch-thick cover layer of gravel would be placed to bring the area to the elevation of the existing grade.
- Field screening methods should be investigated to ensure the removal of gross contamination.

**APG Environmental Remediation
Contract No. DACA87-90-D-0031
DO No. 10, Adamsite
Preliminary Field Investigation Report**

**APPENDIX A
ACTIVITY HAZARD ANALYSIS**

ACTIVITY HAZARD ANALYSIS

Mobilization

1. Contract No. DACAB7-90-D-0031	2. Project Ackmsite Storage Vaults	3. Facility Edgewood Area APG. MD
4. Date 7-1-93	5. Location Bush River Area	6. Estimated Start Date 7-6-93
7. Item 1)	8. Phase of work Mobilization of Equipment and Materials	9. Safety Hazard A.) Material Lifting and handling B.) Inclement Weather C.) Hand and Power Tools D.) Heat Stress/Cold Stress E.) Utility Search
		10. Precaution Action Taken A) Follow procedures in Attach B-1.6 and B-1.6 from Weston's SOP Manual. B) Follow procedures in Attach. B-1.8 from Weston's SOP C) Follow Procedures in Attach B-1.3 of SOP. D) Perform heat/cold stress monitoring as described in attach B-1.9 from SOP E) Obtained Approval (Excavation Permit) from PPUO
11. Contractor (signature & date) <i>Michael W. Nelson 6/30/93</i> Subcontractor (signature & date) <i>R. Ed J. Tully 7/8/93</i>		
12. Report discussed with contractor/superintendent on <u>7-2-93</u>  Corps of Engineers (signature)		

ACTIVITY HAZARD ANALYSIS

Soil Borings & Well Installation

1. Contract No. DAC87-90D-0031	2. Project Adamsite Storage Vaults	3. Facility Edgewood Area APG, MD
4. Date 7-1-93	5. Location Bush River Area	6. Estimated Start Date
7. Item	8. Phase of work	10. Precaution Action Take
1	9. Safety Hazard A) Unexploded Ordnance B) Chemical	A) Activities will be performed only in areas visually cleared of UXO. HFA, Inc. will use portable magnetometer during soil borings with instrumentation. B) Activities will be performed in areas where previous data collected indicates that the area is free of chemical hazards during non-intrus work

11. Contractor (signature & date)

Richard Wagoner 6/30/93

Subcontractor (signature & date)

Richard Wagoner 7/8/93

12. Report discussed with contractor/superintendent on

7-2-93

SL

Corps of Engineers (signature)

ACTIVITY HAZARD ANALYSIS

Soil Boring & Well Installation

1. Contract No. DACAB7-90-D-0031	2. Project Adamsite Storage Vaults	3. Facility Edgewood Area APG, MD
4. Date 7-1-93	5. Location Bush River Area	6. Estimated Start Date 7-6-93
7. Item	8. Phase of work	9. Safety Hazard
2.	UXO Clearance to 4' depth. - None intrusive - Intrusive	A) Unexploded Ordnance B) Chemical
1. Contractor (signature & date) <i>Richard M. Nelson 6/30/93</i>		10. Precaution Action Taken A) Follow UXO Sheip in attached B-1.1 of the Standard Supplement and section 2.5 of the SITE Specific Work plan B) Activities will be performed in areas where previous data collected indicates that the area is free of chemical hazards. ICAD's to be used for Detection of CSM.
2. Report discussed with contractor/superintendent on <i>[Signature]</i>		Subcontractor (signature & date) <i>[Signature]</i> 7/6/93 7-2-93

Corps of Engineers (signature)

ACTIVITY HAZARD ANALYSIS

Soil Borings & Well Installations

1. Contract No. DACAB7-70-D-0031	2. Project Adamsite Storage Vaults	3. Facility Edgewood Area AP6, MD.
4. Date 7-1-93	5. Location Bush River Area	6. Estimated Start Date 7-6-93
7. Item 3	8. Phase of work Well Drilling/Boring Installation - Borings - Well installations	9. Safety Hazard A. Unexploded Ordnance B. Chemical
10. Precaution Action Taken A.) Limit Activities to areas Previously Cleared of UXO. Follow UXO Strip attach B-1-1 and section 2.5 of workplan. B.) Perform Air Monitoring as described in section 3.4 of the site specific Workplan. Upgrade levels of protection as defined in table 3-3 of work-plan. Detection of CSM by ICA		

1. Contractor (signature & date)

Michael McPherson 6/30/93

Subcontractor (signature & date)

J. J. Smith 7/8/93

2. Report discussed with contractor/superintendent on 7-2-93



Corps of Engineers (signature)

ACTIVITY HAZARD ANALYSIS

Soil Boring / Well Installation

1. Contract No. DACA87-90-D-0031	2. Project Adamsite Storage Vaults	3. Facility Edgewood Area APG. Md.
4. Date	5. Location Bush River Area	6. Estimated Start Date 7-6-93
7. Item 3 (cont.)	8. Phase of work Well Drilling / Boring	9. Safety Hazard D) Biological - Ticks - Bees - Snakes E.) Heavy Equipment Operation F.) Pressure Washing
10. Precaution Action Taker D.) Apply insect repellent Spray and perform self inspection daily. E.) Follow procedures described in Sherp and attachment B-1.4 from SOP. F.) Follow Procedures as describe in attachment B-1.13 of SOP Splash Shields worn during pressure washing		11. Contractor (signature & date) Michael M. Taylor 6/23/93

Subcontractor (signature & date)

Seid J. Taylor 7/8/93

12. Report discussed with contractor/superintendent on 7-2-93



Corps of Engineers (signature)

ACTIVITY HAZARD ANALYSIS

Soil Borings & Well Installations

1. Contract No. DACA87-70-D-0031	2. Project Adamsite Storage Vaults	J. Facility Edgewood Area AP6, Mo
4. Date 7-1-93	3. Location Bush River Area	6. Estimated Start Date 7-6-93
7. Item 3 (cont.)	8. Phase of work Well Drilling / Borings	9. Safety Hazard J.) Slip trip falls K.) Ropes, Slings, Chains and hooks L.) Hand Signals
		10. Precaution Action Taken J.) Site and weather condition awareness to be discussed at morning safety briefings. K.) Follow procedures in Attach B-1.7 from SOP. L.) Follow procedures in attach B-1.10 from SOP.

11. Contractor (signature & date)

Michael Wagon 6/30/93

Subcontractor (signature & date)

12. Report discussed with contractor/superintendent on

7-2-93

[Signature]

Corps of Engineers (signature)

ACTIVITY HAZARD ANALYSIS

WELL DEVELOPMENT

1. Contract No. DACA87-90-D-0031	2. Project Adamsite Storage Vaults	3. Facility Edgewood Area APG, MD
4. Date 7-1-93	5. Location Bush River Area	6. Estimated Start Date
7. Item	8. Phase of work	10. Precaution Action Taken
1 (cont.)	<p>WELL DEVELOPMENT Ref. Section 3.6 of WESTON SOP and Attached "WELL DEVELOPMENT"</p> <p>9. Safety Hazard</p> <p>D.) Physical 1. Manual Lifting and Material Handling 2. Hand & Power Tools 3. Inherent Weather 4. Heat/Cold Stress</p> <p>E.) Decontamination 1. Personnel 2. Equipment</p>	<p>D.) 1. Follow procedures in Attach. B-1.5 and B-1.6. 2. Follow procedures in Attach. B-1.3 3. Follow procedures in Attach. B-1.8 4. Perform Heat/Cold Stress Monitoring as described in attach B-1.9</p> <p>E.) 1. Perform as described in Sec 3.6 of Site Specific work Plan 2. Perform as described in Section 3.6.3 of work plan</p>

II. Contractor (signature & date)

Michael Mayhew 6/30/93

Subcontractor (signature & date)

12. Report discussed with contractor/superintendent on

7-2-93

JL

Corps of Engineers (signature)

ORIGINAL

Pg. 1

ACTIVITY HAZARD ANALYSIS

Vault Sampling

1. Contract No. DNAB7-90-D-0031	2. Project Adamsite Storage Vaults	3. Facility Edgewood Area APB, Md
4. Date 7-1-93	5. Location Bush River Area	6. Estimated Start Date
7. Item 1	8. Phase of work Delineate Work Zones	9. Safety Hazard A.) Unexploded Ordnance B.) Chemical
		10. Precaution Action Take A.) Follow UXO Sherp in SOP, attachment B-1.1 and Section 2.5 of the Site Specific Work Plan B.) Perform Air Monitoring as described in section 3.4 of the Site Specific Work Plan Upgrade levels of protection as defined in table 3-3 of the work plan. Detection of GSM by ICAD's.

11. Contractor (signature & date)

Michael W. Weyden 6/30/93

Subcontractor (signature & date)

12. Report discussed with contractor/superintendent on

7-2-93

Corps of Engineers (signature)

ACTIVITY HAZARD ANALYSIS

Vault Sampling

1. Contract No. DNCA87-90-D-0031	2. Project Adamsite Storage Vaults	3. Facility Edgewood Area ARS, MD.
4. Date 7-1-93	5. Location Bush River Area	6. Estimated Start Date
7. Item 2	8. Phase of work Confined Space Entry	9. Safety Hazard A) Chemical B) Physical 1.) Entry Permit 2.) Safety Watch/ Rescue Response
11. Contractor (signature & date) <i>Michael Meyer 6/29/93</i>	10. Precaution Action Take A) Perform Continuous Air Monitoring as described in Section 3.4; table 3.2 of site specific Work Plan. B.) 1.) Perform and complete entry requirements as described in CEASO 385-1-1 section 06 and site specific Work Plan Fig. 2-3 Confined Space Entry Permit 2) Post safety watch and provide rescue response training Subcontractor (signature & date)	

12. Report discussed with contractor/superintendent on 7-2-93

[Signature]
Corps of Engineers (signature)

ACTIVITY HAZARD ANALYSIS

Vault Sampling

1. Contract No. DWA87-90-D-0031	2. Project Adamsite Storage Vaults	3. Facility Edgewood Area ARS, MD
4. Date 7-1-93	5. Location Bush River Area	6. Estimated Start Date
7. Item 8. Phase of work Confined Space Entry	9. Safety Hazard C) Increment Weather D.) Heat/cold Stress E.) Hand and Power Tools F.) Manual Lifting and Material Handling	10. Precaution Action Taken C.) Follow procedures described in attachment B-1.8. D.) Perform Heat/cold Stress Monitoring as described in attachment B-1.9 E.) Follow Procedures as described in attach B-1.3. F.) Follow Procedures in attach. B-1.5 and B-1.6 of SOP.
11. Contractor (signature & date) <i>Michael Wray</i> 6/30/93		Subcontractor (signature & date)

12. Report discussed with contractor/superintendent on 7-2-93

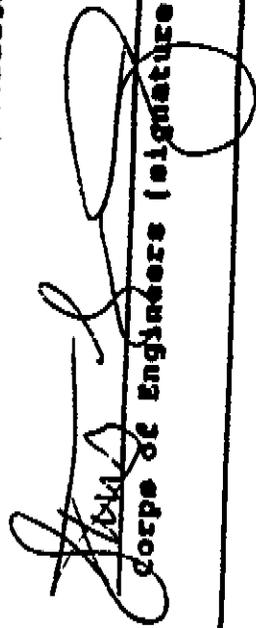
[Signature]
Corps of Engineers (signature)

ACTIVITY HAZARD ANALYSIS

Vault Sampling

1. Contract No. DACA87-90-D-0031	2. Project Adamsite Storage Vaults	3. Facility Edgewood Area. AP6. MD
4. Date 7-1-93	5. Location Bush River Area	6. Estimated Start Date
7. Item	8. Phase of work	10. Precaution Action Take
2 (cont.)	9. Safety Hazard I. Noise Protection J. Slip, trip, falls K. Ropes, Slings, Chains and hooks L. Hand Signals M. WATER SAFETY	I.) Follow procedures in Attach B-1.2 from SOP. J.) Site and weather condition awareness at morning Safety meetings. Awareness of under water items in North East Vault K.) Follow procedures in Attach. B-1.7 from SOP. L.) Follow procedures in Attach. B-1.10 from SOP. M) <i>WATER SAFETY TO BE USED BY PERSONNEL IN FIELD</i> Subcontractor (signature & date)
11. Contractor (signature & date) <i>Michael V. Nguyen 6/30/93</i>		

12. Report discussed with contractor/superintendent on 7-2-93


Corps of Engineers (signature)

**APG Environmental Remediation
Contract No. DACA87-90-D-0031
DO No. 10, Adamsite
Preliminary Field Investigation Report**

**APPENDIX B
BOREHOLE LOGS AND WELL COMPLETION SUMMARIES**

Borehole Location Data

ROY F. WESTON, Inc.

BOREHOLE ID : MW-1
BEGIN DATE : 07/19/93

SITE NAME/NO: CEAAO
END DATE : 07/20/93

LOGGER/COMPANY : L. SANSERVINO

BOREHOLE COMPLETED IN (<O>verburden edrock) : O

TOTAL DEPTH : 16.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 14.00 ft. BGS
METHOD : HSA FLUID : NONE
BOREHOLE DIAMETER #2: 2.00
INTERVAL: 14.00 ft. to 16.00 ft. BGS
METHOD : SPLIT SPOON SAMPLER FLUID : NONE
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : HARDIN-HUBER, INC.
DRILLER : CHAD CHISM
DRILL RIG TYPE : B-61

SURFACE ESTIMATED SURVEYED
ELEVATION : 0.000 11.600
N. COORDINATE : 0.0000
E. COORDINATE : 0.0000

WELL PERMIT.....(Y)es (N)o: Y PERMIT # : HA-92-0947

HOLE ABANDONED... (Y)es (N)o: N
WELL INSTALLED... (Y)es (N)o: Y
WELL CLUSTER..... (Y)es (N)o: N No. OF WELLS : 0
WELL NEST..... (Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED.. (Y)es (N)o: N

PURGE : TYPE DEPTH
SAMPLE : 0.00
0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS..... (Y)es (N)o: N
SLUG TESTS..... (Y)es (N)o: N
PACKER TESTS..... (Y)es (N)o: N
PUMPING TESTS..... (Y)es (N)o: N

COMMENTS :
Adamsite Vault Monitoring Well.

CLIENT CEAAO DRILLING FIRM HARDIN-HUBER, INC.
 SITE NAME APG - ADAMSITE VAULT INSPECTOR L. SANSERVINO

WELL ID MW-1 WATER LEVELS
 START DATE 07/19/93 7.72 FT (TOC) ON 07/22/93
 COMPLETION DATE 07/20/93

		DEPTH	ELEV.	DRILLING SUMMARY	
	2.30	TC	13.90	Driller	CHAD CHISM
	0.00	GS	11.60	Drilling Fluid	
				Well Type	SINGLE CASSED SCREENED
WELL DESIGN CONSTRUCTION					
Casing #1 Diameter:		4.00 inch	Interval:	0.00 to 3.85 ft.	
Type:		PVC SCH 40			
Stick Up Inner Casing:		2.30 ft.	Protective Casing:	2.54 ft.	
Casing Grout:		CENT/BENT	Interval:	0.00 to 2.00 ft.	
Seal Type:		BENTONITE PELLETS	Interval:	2.00 to 3.00 ft.	
Sand Pack Type : #1			Interval:	3.00 to 13.55 ft.	
Grain Size :		UNIFORM	Median Diameter:		
Screen Diameter:		4.00	Interval:	3.85 to 12.80 ft.	
Type :		PVC	Slots:	0.010 inches	
2.00	BN	9.60	Silt Trap Interval: 12.80 to 13.55 ft.		
3.00	SP	8.60	Backfill Type : CAVE-IN Interval: 13.55 to 14.00 ft.		
WELL DEVELOPMENT					
3.85	SC	7.75	Date	07/22/93	
			Method	Surge block & overpump	
			Yield	1.5 gpm	Purged Volume 105 gal
COMMENTS					
12.80	BS	-1.20	TC = Top of Casing	SP = Top Sand Pack	= Grout
			GS = Ground Surface	SC = Top Screen	= Seal
			BN = Top Seal	BS = Bottom Screen	= Sand Pack
13.55	TD	-1.95	TD = Total Depth		= Formation
Additional Comments:					

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

Borehole Log

ROY F. WESTON, Inc.

CLIENT : CEAAO
 SITE NAME : APG - ADAMSSITE VAULT
 WELL ID : MW-1
 NORTHING : 0.0000 estimated
 EASTING : 0.0000 estimated
 ELEVATION : 11.600 surveyed

TOTAL DEPTH : 16.00
 LOGGER : L. SANSERVINO
 DRILLING COMPANY : HARDIN-HUBER, INC.
 DRILLING RIG : B-61
 DATE STARTED : 07/19/93
 DATE COMPLETED : 07/20/93

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				SAND and GRAVEL, tr SILT	LT YELLOW BROWN	LSE	DRY		OVA 0.0 OVN 0.0	
10	1		100	SILT, sm SAND, lt CLAY, tr ORGANIC	GRAY	SFT	DRY	9 10.5 0	OVA 7.8 OVN 0.0	Charred organics (roots) present. Drove split spoon 1.5 ft.
				SILT, sm CLAY, lt SAND	YELLOW BROWN	SFT	MST		OVA 7.8 OVN 0.0	
9	2		75	SILT, lt SAND, lt CLAY	LT YELLOW BROWN	SFT	MST	3 5 8	OVA 9.8 OVN 0.0	
8	3			No Sample Recovered						
7	4		100	SAND, sm SILT, tr CLAY	YELLOW BROWN	SFT	MST	9 13 18 10	OVA 1.2 OVN 0.0	Wet at 5.7 ft.
6	5									
5	6		85	SAND, sm SILT, tr CLAY	LT BROWN GRAY	SFT	WET		OVA 0.2 OVN 0.0	
4	7			No Sample Recovered						
3	8		75	SAND, tr GRAVEL	BROWN YELLOW	LSE	SAT	1 1 4	OVA 0.0 OVN 0.0	
2	9			No Sample Recovered						
1	10		75	SAND, lt GRAVEL	LT GRAY	LSE	SAT		OVA 0.0 OVN 0.0	At 10-10.6' & 11.2-11.5' yellow brown coloration. 1% silt in composition from 11.2-11.5'.

BOREHOLE /WELL ID	SHP NUM	LTH NUM	LITHOLOGY (INT.) (FT BGS)	SAMPLING METHOD	GRAVEL SIZE	GRAVEL PCT.	GRAVEL SIZE	SAND SIZE	SAND PCT.	SILT PCT.	CLAY PCT.	ORGANIC PCT.	ROCK TYPE	PLAST SORT	SOFT STRENGTH	MOISTURE	STRAIT UNIT
RN-1	1	1	0.00	OTH	FN	35	CH	60	5	0	0	0	HA	POR	LSE	DRY	DISTURBED
RN-1	2	1	0.50	SPS			F	20	60	15	5	0	NON	MOD	SFT	DRY	DISTURBED
RN-1	3	2	1.20	SPS			F	15	65	20	0	0	LOW	WEL.	SFT	WST	DISTURBED
RN-1	3	1	2.00	SPS			F	15	70	15	0	0	NON	WEL.	SFT	WST	DISTURBED
RN-1	3	2	3.50	SPS			F	0	0	0	0	0	NON	WEL.	SFT	WST	DISTURBED
RN-1	4	1	4.00	SPS			F	70	27	3	0	0	NON	WEL	SFT	WST	DISTURBED
RN-1	5	1	6.00	SPS			F	65	32	3	0	0	NON	WEL	SFT	WET	SILTY SAND
RN-1	5	2	7.70	SPS				0	0	0	0	0	HA	POR	LSE	SAT	SAND
RN-1	6	1	8.00	SPS	F	5	CH	95	0	0	0	0	HA	POR	LSE	SAT	SAND
RN-1	6	2	9.50	SPS				0	0	0	0	0	HA	POR	LSE	SAT	SAND
RN-1	7	1	10.00	SPS	F	10	CH	90	0	0	0	0	HA	POR	LSE	SAT	SAND
RN-1	7	2	11.50	SPS				0	0	0	0	0	HA	MOD	SFT	SAT	SAND
RN-1	8	1	12.00	SPS			MFC	97	3	0	0	0	MOD	WEL	SFT	WET	CLAYEY SILT
RN-1	8	2	13.30	SPS			F	0	0	0	0	0	MOD	WEL	SFT	WET	CLAYEY SILT
RN-1	9	1	13.30	SPS				0	0	0	0	0	MOD	WEL	SFT	WET	CLAYEY SILT
RN-1	9	2	14.00	SPS				15	57	28	0	0	MOD	WEL	SFT	WET	CLAYEY SILT
RN-1	9	2	15.30	SPS				0	0	0	0	0	MOD	WEL	SFT	WET	CLAYEY SILT

Borehole Location Data**ROY F. WESTON, Inc.**

BOREHOLE ID : MW-2 SITE NAME/NO: CEAAO
BEGIN DATE : 07/19/93 END DATE : 07/19/93

LOGGER/COMPANY : L. SANSERVINO

BOREHOLE COMPLETED IN (<O>verburden edrock) : 0

TOTAL DEPTH : 16.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 15.00 ft. BGS
METHOD : HSA FLUID : NONE

BOREHOLE DIAMETER #2: 2.00
INTERVAL: 15.00 ft. to 16.00 ft. BGS
METHOD : SPLIT SPOON SAMPLER FLUID : NONE

BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : HARDIN-HUBER, INC.
DRILLER : CHAD CHISM
DRILL RIG TYPE : B-61

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	11.910
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT..... (Y)es (N)o: Y PERMIT # : HA-92-0946

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER..... (Y)es (N)o: N No. OF WELLS : 0

WELL NEST..... (Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N	TYPE	DEPTH
	PURGE :	0.00
	SAMPLE :	0.00

BOREHOLE TESTING

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

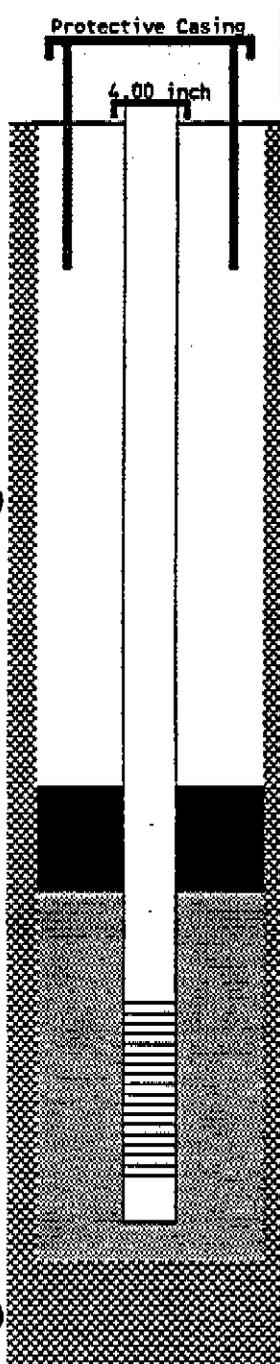
COMMENTS :

Adamsite Vault Monitoring Well.

CLIENT CEAAO DRILLING FIRM HARDIN-HUBER, INC.
 SITE NAME APG - ADAMSITE VAULT INSPECTOR L. SANSERVINO

WELL ID MW-2 WATER LEVELS
 START DATE 07/19/93 8.12 FT (TOC) ON 07/22/93
 COMPLETION DATE 07/19/93

DEPTH	TC	ELEV.	DRILLING SUMMARY	
			Driller	CHAD CHISM
2.30	TC	14.21	Drilling Fluid	
0.00	GS	11.91	Well Type	SINGLE CASSED SCREENED
WELL DESIGN CONSTRUCTION				
<p>Casing #1 Diameter: 4.00 inch Interval: 0.00 to 4.85 ft. Type: PVC SCH 40</p> <p>Stick Up Inner Casing: 2.30 ft. Protective Casing: 2.72 ft.</p> <p>Casing Grout: CEMENT Interval: 0.00 to 3.00 ft.</p> <p>Seal Type: BENTONITE PELLETS Interval: 3.00 to 4.00 ft.</p> <p>Sand Pack Type: #1 Interval: 4.00 to 14.80 ft. Grain Size: UNIFORM Median Diameter: Screen Diameter: 4.00 Interval: 4.85 to 13.80 ft. Type: PVC Slots: 0.010 inches</p> <p>Silt Trap Interval: 13.80 to 14.80 ft. Backfill Type: CAVE-IN Interval: 14.80 to 15.00 ft.</p>				
3.00	BN	8.91		
4.00	SP	7.91		
WELL DEVELOPMENT				
4.85	SC	7.06	Date	07/22/93
			Method	Surge block & overpump
			Yield	1 gpm
			Purged Volume	165 gal
COMMENTS				
13.80	BS	-1.89	TC = Top of Casing	SP = Top Sand Pack
			GS = Ground Surface	SC = Top Screen
			BN = Top Seal	BS = Bottom Screen
14.80	TD	-2.79	TD = Total Depth	
<p>Additional Comments:</p> <p style="text-align: right;"> = Grout = Seal = Sand Pack = Formation </p>				



NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

Borehole Log

ROY F. WESTON, Inc.

CLIENT : CEAAO
 SITE NAME : APG - ADAMSITE VAULT
 WELL ID : MW-2
 NORTHING : 0.0000 estimated
 EASTING : 0.0000 estimated
 ELEVATION : 11.910 surveyed

TOTAL DEPTH : 16.00
 LOGGER : L. SANSERVINO
 DRILLING COMPANY : HARDIN-HUBER, INC.
 DRILLING RIG : B-61
 DATE STARTED : 07/19/93
 DATE COMPLETED : 07/19/93

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				SAND, sm GRAVEL, lt SILT	V. DK GRAY BRN	LSE	DRY		OVA 0.0 OVM 0.0	Some dark coloration.
10	1		100	SILT, sm SAND, lt CLAY	BROWN	LSE	DRY	11 13 10 0	OVA 0.0 OVM 0.0	Color change to yellow brown; soft; slight moist beginning 1.1 ft; sand is very fine. Drove SS 1.5ft
9	2		70	SILT, sm SAND, lt CLAY	LT YELLOW BROWN	SFT	MST	2 0 0 0	OVA 0.0 OVM 0.0	Possible evidence of oxidation in soil seams.
8	3			No Sample Recovered						
7	4		100	SILT and SAND, lt CLAY	PALE BROWN	SFT	MST	11 14 16 18	OVA 0.0 OVM 0.0	Some yellow brown seams (possibly oxidation).
6	5									
5	6		85	SAND, sm SILT, tr CLAY	PALE BROWN	SFT	WET	4 8 10 7	OVA 1.1 OVM 0.0	Wet at 7.2'
4	7			No Sample Recovered						
3	8		60	SAND, tr GRAVEL	V. PALE BROWN	SFT	SAT	4 6 6 8	OVA 0.0 OVM 0.0	
2	9			No Sample Recovered						
1	10		100	SAND, tr GRAVEL	V. PALE BROWN	LSE	SAT	11 16 17 19	OVA 0.6 OVM 0.0	

Borehole Log

ROY F. WESTON, Inc.

CLIENT : CEAAD
 SITE NAME : APG - ADAMSITE VAULT
 WELL ID : MW-2
 NORTHING : 0.0000 estimated
 EASTING : 0.0000 estimated
 ELEVATION : 11.910 surveyed

TOTAL DEPTH : 16.00
 LOGGER : L. SANSERVINO
 DRILLING COMPANY : HARDIN-HUBER, INC.
 DRILLING RIG : B-61
 DATE STARTED : 07/19/93
 DATE COMPLETED : 07/19/93

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				SAND, tr GRAVEL	V. PALE BROWN	LSE	SAT		OVA 0.6 OVM 0.0	
0	11			SAND, tr SILT	V. PALE BROWN	SFT	SAT		OVA 0.6 OVM 0.0	
-1	12		70	SAND, tr SILT	V PALE BROWN	SFT	SAT		OVA 0.0 OVM 0.0	Silty sand layer at 13.2 to 13.4'
-2	13			No Sample Recovered						
-3	14		35	SAND, sm SILT, tr CLAY	LT GRAY	SFT	SAT		OVA 0.0 OVM 0.0	
-4	15			No Sample Recovered						
-5	16									
-6	17									
-7	18									
-8	19									
-9	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY (MT. (F1 BGS))	SAMPLING METHOD	GRAVEL SIZE	GRAVEL PCT.	SAND SIZE	SAND PCT.	SILT PCT.	CLAY PCT.	ORGANIC PCT.	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MU-2	1	1	0.00	0.50	0.50	30	CHF	60	10	0	0	0	MA	POR	LSE	DRY	DISTURBED
MU-2	2	1	0.50	2.00	2.00	0	F	20	65	15	0	0	NON	WEL	LSE	DRY	DISTURBED
MU-2	3	1	2.00	3.40	3.40	0	F	20	65	15	0	0	NON	WEL	SFT	MST	DISTURBED
MU-2	3	2	3.40	4.00	4.00	0	F	0	0	0	0	0	NON	WEL	SFT	MST	DISTURBED
MU-2	4	1	4.00	6.00	6.00	0	F	35	55	10	0	0	NON	WEL	SFT	MST	DISTURBED
MU-2	5	1	6.00	7.70	7.70	0	F	65	30	5	0	0	NON	WEL	SFT	WET	SILTY SAND
MU-2	5	2	7.70	8.00	8.00	0	F	0	0	0	0	0	MA	MOD	SFT	SAT	SAND
MU-2	6	1	8.00	9.20	9.20	0	CH	95	0	0	0	0	MA	MOD	SFT	SAT	SAND
MU-2	6	2	9.20	10.00	10.00	0	CH	0	0	0	0	0	MA	MOD	SFT	SAT	SAND
MU-2	7	1	10.00	10.90	10.90	0	CH	95	0	0	0	0	MA	POR	LSE	SAT	SAND
MU-2	7	2	10.90	12.00	12.00	0	HC	98	2	0	0	0	MA	WEL	SFT	SAT	SAND
MU-2	8	1	12.00	13.40	13.40	0	HC	98	2	0	0	0	MA	WEL	SFT	SAT	SAND
MU-2	8	2	13.40	14.00	14.00	0	F	0	0	0	0	0	LOW	WEL	SFT	SAT	SAND
MU-2	9	1	14.00	14.70	14.70	0	F	65	30	5	0	0	LOW	WEL	SFT	SAT	SAND
MU-2	9	2	14.70	16.00	16.00	0	F	0	0	0	0	0	LOW	WEL	SFT	SAT	SAND

Borehole Location Data**ROY F. WESTON, Inc.**

BOREHOLE ID : MW-3
 BEGIN DATE : 07/20/93

SITE NAME/NO: CEAAO
 END DATE : 07/20/93

LOGGER/COMPANY : L. SANSERVINO

BOREHOLE COMPLETED IN (<O>verburden edrock) : 0

TOTAL DEPTH : 18.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25
 INTERVAL: 0.00 ft. to 16.50 ft. BGS.
 METHOD : HSA FLUID : NONE

BOREHOLE DIAMETER #2: 2.00
 INTERVAL: 16.50 ft. to 18.00 ft. BGS
 METHOD : SPLIT SPOON SAMPLER FLUID : NONE

BOREHOLE DIAMETER #3:
 INTERVAL:
 METHOD : FLUID :

DRILLING COMPANY : HARDIN-HUBER, INC.
 DRILLER : CHAD CHISM
 DRILL RIG TYPE : B-61

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	9.770
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	
WELL PERMIT.....(Y)es (N)o: Y		PERMIT # : HA-92-0948
HOLE ABANDONED... (Y)es (N)o: N		
WELL INSTALLED... (Y)es (N)o: Y		
WELL CLUSTER..... (Y)es (N)o: N		No. OF WELLS : 0
WELL NEST..... (Y)es (N)o: N		No. OF WELLS : 0
PUMPS INSTALLED.. (Y)es (N)o: N		TYPE DEPTH
	PURGE :	0.00
	SAMPLE :	0.00

BOREHOLE TESTING

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N
 SLUG TESTS..... (Y)es (N)o: N
 PACKER TESTS..... (Y)es (N)o: N
 PUMPING TESTS..... (Y)es (N)o: N

COMMENTS :

Adamsite Vault Monitoring Well.

CLIENT CEA AO DRILLING FIRM HARDIN-HUBER, INC.
 SITE NAME APG - ADAMSITE VAULT INSPECTOR L. SANSERVINO

WELL ID MW-3 WATER LEVELS
 START DATE 07/20/93 9.97 FT (TOC) ON 07/22/93
 COMPLETION DATE 07/20/93

DEPTH	TC	ELEV.	DRILLING SUMMARY	
			2.25	12.02
0.00	9.77	Drilling Fluid		
		Well Type	SINGLE CASED SCREENED	
WELL DESIGN CONSTRUCTION				
<p>Casing #1 Diameter: 4.00 inch Interval: 0.00 to 6.30 ft. Type :</p> <p>Stick Up Inner Casing: 2.25 ft. Protective Casing: 2.58 ft.</p> <p>Casing Grout: CEMENT Interval: 0.00 to 3.00 ft.</p> <p>Seal Type: BENTONITE PELLETS Interval: 3.00 to 5.00 ft.</p> <p>Sand Pack Type : #1 Interval: 5.00 to 16.25 ft. Grain Size : UNIFORM Median Diameter: Screen Diameter: 4.00 Interval: 6.30 to 15.25 ft. Type : PVC Slots: 0.010 inches</p> <p>Silt Trap Interval: 15.25 to 16.25 ft. Backfill Type : CAVE-IN Interval: 16.25 to 16.50 ft.</p>				
3.00	BN	6.77	WELL DEVELOPMENT	
5.00	SP	4.77		
6.30	SC	3.47	<p>Date 07/23/93 Method Surge block & overpump Yield <.5 gpm Purged Volume 17 gal</p>	
15.25	BS	-5.48	COMMENTS	
16.25	TD	-6.33		
<p>TC = Top of Casing SP = Top Sand Pack = Grout GS = Ground Surface SC = Top Screen = Seal BN = Top Seal BS = Bottom Screen = Sand Pack TD = Total Depth = Formation</p> <p>Additional Comments:</p>				

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

Borehole Log

ROY F. WESTON, Inc.

CLIENT : CEAAO	TOTAL DEPTH : 18.00
SITE NAME : APG - ADAMSITE VAULT	LOGGER : L. SANSERVINO
WELL ID : MW-3	DRILLING COMPANY : HARDIN-HUBER, INC.
NORTHING : 0.0000 estimated	DRILLING RIG : B-61
EASTING : 0.0000 estimated	DATE STARTED : 07/20/93
ELEVATION : 9.770 surveyed	DATE COMPLETED : 07/20/93

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				SILT, sm SAND, lt CLAY, ff GRAVEL, ff ORGANIC	V DK GRAY BRN	SFT	MST		OVA 0.0 OVN 0.0	Moisture is from yesterday's precipitation
			66	SILT, lt SAND, lt CLAY	YELLOW BROWN	SFT	MST	5 10	OVA 0.0 OVN 0.0	Sand is very fine. Drove split spoon 1.5 ft.
8	1			No Sample Recovered						
			90	SILT, lt SAND, lt CLAY	YELLOW BROWN	SFT	MST	4 10	OVA 0.0 OVN 0.0	
7	2			No Sample Recovered						
			80	SAND and SILT	LT BROWN GRAY	SFT	MST	12 10 11	OVA 0.2 OVN 0.0	Coarsening downward (silt to sand); yellow brown color to 5 ft.
6	3			No Sample Recovered						
			90	SAND and SILT	YELLOW BROWN	SFT	MET	5 10 11	OVA 0.2 OVN 0.0	Met at 6.3 ft.; silt content increases toward bottom of interval.
5	4			No Sample Recovered						
			90	SAND, sm SILT	YELLOW BROWN	SFT	MET	6 10 9	OVA 6.8 OVN 0.4	
4	5			No Sample Recovered						
				SILT and CLAY	LT YELLOW BROWN	STF	MST		OVA 6.8 OVN 0.4	Variegated color is yellow brown.
3	6			No Sample Recovered						
			100	SILT and CLAY	YELLOW BROWN	STF	MST	4 4 11 18	OVA 2.2 OVN 0.0	Variegated color is light gray.
2	7			No Sample Recovered						
1	8			No Sample Recovered						
0	9			No Sample Recovered						
-1	10			No Sample Recovered						

BOREHOLE /WELL ID	SNP NUM	LTH NUM	LITHOLOGY (FT BGS)	INT.	SAMPLING METHOD	SIZE GRAVEL PCT.	GRAVEL SIZE	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST SORT	STRENGTH	MOISTURE	STRAT UNIT
MU-3	1	1	0.00	0.50	OTH	F	5	MF	20	60	10	5	LOH	FOR	SFT	MST	TOP SOIL
MU-3	2	1	0.50	1.50	SPS	0	0	F	15	70	15	0	NON	WEL	SFT	MST	DISTURBED
MU-3	2	2	1.50	2.00	SPS	0	0	0	0	0	0	0	NON	WEL	SFT	MST	DISTURBED
MU-3	3	1	2.00	3.80	SPS	0	0	F	15	70	15	0	NON	WEL	SFT	MST	DISTURBED
MU-3	3	2	3.80	4.00	SPS	0	0	F	60	40	0	0	NON	WEL	SFT	MST	SILTY SAND
MU-3	4	1	4.00	5.60	SPS	0	0	F	65	35	0	0	NON	WEL	SFT	WET	SILTY SAND
MU-3	4	2	5.60	6.80	SPS	0	0	F	70	30	0	0	NON	WEL	SFT	WET	SILTY SAND
MU-3	5	1	6.00	7.80	SPS	0	0	F	65	35	0	0	LOW	NA	STF	MST	CLAYEY SILT
MU-3	5	2	7.80	8.00	SPS	0	0	F	70	30	0	0	LOW	NA	STF	MST	CLAYEY SILT
MU-3	6	1	8.00	9.00	SPS	0	0	F	65	35	0	0	LOW	NA	STF	MST	CLAYEY SILT
MU-3	6	2	9.00	9.80	SPS	0	0	0	0	0	0	0	LOW	NA	STF	MST	CLAYEY SILT
MU-3	6	3	9.80	10.00	SPS	0	0	0	0	0	0	0	LOW	NA	STF	MST	CLAYEY SILT
MU-3	7	1	10.00	12.00	SPS	0	0	0	65	35	0	0	NON	WEL	SFT	WET	SILTY SAND
MU-3	8	1	12.00	13.20	SPS	0	0	F	20	50	30	0	NON	WEL	SFT	MST	CLAYEY SILT
MU-3	8	2	13.20	13.60	SPS	0	0	F	35	50	15	0	LOW	WEL	FRM	MST	SANDY SILT
MU-3	8	3	13.60	14.00	SPS	0	0	F	65	35	0	0	NON	WEL	SFT	WET	SILTY SAND
MU-3	9	1	14.00	15.40	SPS	0	0	0	0	0	0	0	MOD	NA	FRM	MST	SILTY CLAY
MU-3	9	2	15.40	16.00	SPS	0	0	0	0	0	0	0	MOD	NA	FRM	MST	SILTY CLAY
MU-3	10	1	16.00	17.80	SPS	0	0	0	0	35	65	0	MOD	NA	FRM	MST	SILTY CLAY
MU-3	10	2	17.80	18.00	SPS	0	0	0	0	0	0	0	MOD	NA	FRM	MST	SILTY CLAY

Borehole Location Data**ROY F. WESTON, Inc.**

BOREHOLE ID : B-1 SITE NAME/NO: CEAAO
 BEGIN DATE : 07/15/93 END DATE : 07/15/93

LOGGER/COMPANY : L. SANSERVINO

BOREHOLE COMPLETED IN (<O>verburden edrock) : O

TOTAL DEPTH : 12.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 9.00
 INTERVAL: 0.00 ft. to 10.00 ft. BGS
 METHOD : HSA FLUID : NONE

BOREHOLE DIAMETER #2: 3.00
 INTERVAL: 10.00 ft. to 12.00 ft. BGS
 METHOD : SPLIT SPOON SAMPLER FLUID : NONE

BOREHOLE DIAMETER #3:
 INTERVAL:
 METHOD : FLUID :

DRILLING COMPANY : HARDIN-HUBER, INC.
 DRILLER : CHAD CHISM
 DRILL RIG TYPE : B-61

	ESTIMATED	SURVEYED
SURFACE		
ELEVATION :	0.000	
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT..... (Y)es (N)o: N PERMIT # :

HOLE ABANDONED... (Y)es (N)o: Y

WELL INSTALLED... (Y)es (N)o: N

WELL CLUSTER..... (Y)es (N)o: N No. OF WELLS : 0

WELL NEST..... (Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N TYPE

PURGE :	DEPTH
SAMPLE :	0.00
	0.00

BOREHOLE TESTING

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

COMMENTS :

Adamsite Vault Boring.

Borehole Log

ROY F. WESTON, Inc.

CLIENT : CRAAO
 SITE NAME : APG - ADAMSITE VAULT
 WELL ID : B-1
 NORTHING : 0.0000 estimated
 EASTING : 0.0000 estimated
 ELEVATION : 0.000 estimated

TOTAL DEPTH : 12.00
 LOGGER : L. SANSERVINO
 DRILLING COMPANY : HARDIN-HUBER, INC.
 DRILLING RIG : B-61
 DATE STARTED : 07/15/93
 DATE COMPLETED : 07/15/93

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
-1	1		100	SILT, sm SAND, lf CLAY, lf GRAVEL	BROWN	SFT	MST	3	OVA 28.0 OVN 0.0	Moisture is from yesterday's precipitation
-1	1		100	SILT, sm SAND, lf CLAY, lf GRAVEL	BROWN	SFT	MST	3	OVA 0.0 OVN 0.0	Drove split spoon 1.5 ft.
-2	2		100	SILT, sm SAND, lf CLAY, lf GRAVEL	YELLOW BROWN	SFT	MST	4	OVA 0.0 OVN 0.0	Variegated colors are brown & light gray (silt); pancake & micro R=BKG.
-3	3		100	SILT, sm SAND, lf CLAY, lf GRAVEL	LT BROWN GRAY	SFT	MST	11	OVA 0.0 OVN 0.0	Moisture increase to wet at -5.9' where silty sand composition begins. Var. colors brown & ylw brown
-4	4		100	SILT, sm SAND, lf CLAY, lf GRAVEL	LT BROWN GRAY	SFT	MST	11	OVA 0.0 OVN 0.0	
-5	5		85	SAND, sm SILT, lf CLAY, lf GRAVEL	LT YELLOW BROWN	SFT	SAT	9	OVA 0.1 OVN 0.0	Pancake & micro R = BKG; layers w/gray coloration at 6.5-6.7' & 7.3-7.4'; soil appears less disturb
-6	6		85	SAND, sm SILT, lf CLAY, lf GRAVEL	LT YELLOW BROWN	SFT	SAT	10	OVA 0.1 OVN 0.0	
-7	7		50	No Sample Recovered				11		
-8	8		50	SAND, lf SILT	LT YELLOW BROWN	SFT	SAT	4	OVA 0.0 OVN 0.0	Pancake & micro R=BKG; soil is undisturbed.
-9	9		50	No Sample Recovered				7		
-10	10		75	SAND, lf SILT	LT YELLOW BROWN	SFT	SAT	4	OVA 0.0 OVN 0.0	

BREHOLE / WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)	SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
B-1	1	1	0.00	OTH	MF	5	MCF	30	60	5	0	NON	POR	SFT	MST	DISTURBED	
B-1	2	1	0.50	SPS	F	5	FMC	25	55	15	0	NON	POR	SFT	MST	DISTURBED	
B-1	3	1	2.00	SPS	F	3	FM	25	57	15	0	NON	POR	SFT	MST	DISTURBED	
B-1	4	1	4.00	SPS	MF	2	F	25	58	15	0	NON	POR	SFT	MST	DISTURBED	
B-1	5	1	6.00	SPS	F	1	MF	65	30	4	0	NON	MOD	SFT	SAT	SILTY SAND	
B-1	5	2	7.70	SPS		0		0	0	0	0	NON					
B-1	6	1	8.00	SPS		0	MF	65	15	0	0	NON	MEL	SFT	SAT	SILTY SAND	
B-1	6	2	9.00	SPS		0		0	0	0	0	NON					
B-1	7	1	10.00	SPS		0	MF	65	15	0	0	NON	MEL	SFT	SAT	SILTY SAND	
B-1	7	2	10.50	SPS		0	F	15	50	35	0	MOD	MEL	FRM	MST	CLAYEY SILT	
B-1	7	3	11.50	SPS		0		0	0	0	0						

Borehole Log

ROY F. WESTON, Inc.

CLIENT : CEAAO
 SITE NAME : APG - ADAMSITE VAULT
 WELL ID : B-2
 NORTHING : 0.0000 estimated
 EASTING : 0.0000 estimated
 ELEVATION : 0.000 estimated

TOTAL DEPTH : 12.00
 LOGGER : L. SANSERVINO
 DRILLING COMPANY : HARDIN-HUBER, INC.
 DRILLING RIG : B-61
 DATE STARTED : 07/16/93
 DATE COMPLETED : 07/16/93

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
-1	1		100	SILT and SAND, tr CLAY, tr GRAVEL	BROWN	SFT	MST	4 6 6 6 0	OVA 0.0 OVM 0.0	Moisture is from ground surface.
-2	2		55	SILT and SAND, tr CLAY, tr GRAVEL	YELLOW BROWN	SFT	MST	10 10 6	OVA 12.0 OVM 0.0	Varigated color is light gray. Drove split spoon 1.5 ft.
-3	3			No Sample Recovered						
-4	4		100	SILT, sm SAND, tr CLAY	LT OLIVE BROWN	SFT	MST	7 9 16 12	OVA 12.8 OVM 9.8	Pancake & micro R=BKG.
-5	5									
-6	6		80	SAND and SILT	GRAY	SFT	MET	6 10 13	OVA 1.6 OVM 0.0	Color change to yellow brown @ 5.5'; pancake & micro R=BKG; soil appears to be undisturbed.
-7	7			No Sample Recovered						
-8	8		70	SAND, tr SILT	LT YELLOW BROWN	SFT	SAT	9 11 10 6	OVA 8.0 OVM 0.0	Pancake & micro R=BKG; saturation @ 7'; gray c-sand @ 8-9'; & yellow brn t-gravel @ 9-9.2'.
-9	9			No Sample Recovered						
-10	10		100	SAND, tr SILT	LT BROWN GRAY	SFT	SAT	16 14 16	OVA 8.0 OVM 0.0	Varigated colors are pale brown & strong brown; layer w/more silt at 10.5 to 11'.

B-2	SHP	LTH	LITHOLOGY (HT. (FT BGS))	SAMPLING METHOD	GRAVEL SIZE	GRAVEL PCT.	SIZE	SAND	SILT	CLAY	ORGANIC	ROCK	PLAST	SORT	STRENGTH	MOISTURE	STRAT
8-2	1	1	0.00	0.50	MF	3	FN	35	55	7	0		NON	POR	SFT	MST	DISTURBED
8-2	2	1	0.50	2.00	F	3	MFC	35	55	5	0		NON	POR	SFT	MST	DISTURBED
8-2	3	1	2.00	3.10	F	1	FN	30	54	15	0		NON	POR	SFT	MST	DISTURBED
8-2	3	2	3.10	4.00		0		0	0	0	0		NON				
8-2	4	1	4.00	6.00	SPS	0	F	20	65	15	0		NON	MEL	SFT	MST	DISTURBED
8-2	5	1	6.00	7.60	SPS	0	FN	60	40	0	0		NON	MEL	SFT	WET	SELTLY SAND
8-2	5	2	7.60	8.00	SPS	0		0	0	0	0		NON	MEL	SFT	SAT	SELTLY SAND
8-2	6	1	8.00	9.40	SPS	0	MF	85	15	0	0		NON	MEL	SFT	SAT	SELTLY SAND
8-2	6	2	9.40	10.00	SPS	0		0	0	0	0		NON	MEL	SFT	SAT	SELTLY SAND
8-2	7	1	10.00	12.00	SPS	0	MF	85	15	0	0		NON	MEL	SFT	SAT	SELTLY SAND

Borehole Log

ROY F. WESTON, Inc.

CLIENT	: CEAAO	TOTAL DEPTH	: 12.00
SITE NAME	: APG - ADAMSITE VAULT	LOGGER	: L. SANSERVINO
WELL ID	: B-3	DRILLING COMPANY	: HARDIN-HUBER, INC.
NORTHING	: 0.0000 estimated	DRILLING RIG	: B-61
EASTING	: 0.0000 estimated	DATE STARTED	: 07/21/93
ELEVATION	: 0.000 estimated	DATE COMPLETED	: 07/21/93

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				SAND, sm GRAVEL, lt SILT	GRAY BROWN	LSE	DRY		OVA 0.0 OVM 0.0	Asphalt from 0 to 0.2 ft.
-1	1		100	SILT, sm CLAY, lt SAND	LT YELLOW BROWN	SFT	MST	9 11 0	OVA 0.0 OVM 0.0	Variegated color is yellow brown crushed sg-gravel (quartz) atop of interval. Drove split spoon 1.5 ft.
-2	2		40	SILT, sm CLAY, lt SAND	LT YELLOW BROWN	SFT	MST	2 2 2	OVA 0.0 OVM 0.0	
-3	3			No Sample Recovered						
-4	4		80	SILT and SAND, lt CLAY	YELLOW BROWN	SFT	MST	3 2 2	OVA 0.0 OVM 0.0	Wet at bottom of interval where sand content increases slightly.
-5	5			No Sample Recovered						
-6	6		90	SAND, sm SILT	PALE BROWN	SFT	WET	4 6 7	OVA 0.0 OVM 0.0	Saturated at bottom of interval.
-7	7			No Sample Recovered						
-8	8		80	SAND, lt GRAVEL	PALE YELLOW	LSE	SAT	2 3 6	OVA 0.0 OVM 0.0	
-9	9			No Sample Recovered						
-10	10		100	SAND, lt GRAVEL, lt SILT	PALE YELLOW	LSE	SAT	3 7 11	OVA 0.0 OVM 0.0	

BOREHOLE /WELL ID	SNP NUM	LTH NUM	LITHOLOGY (FT BGS)	INT.	SAMPLING METHOD	SIZE GRAVEL	SIZE GRAVEL PCT.	SIZE SAND	SIZE SAND PCT.	SILT PCT.	CLAY PCT.	ORGANIC PCT.	ROCK TYPE	PLAST SORT			STRENGTH			MOISTURE			STRAT UNIT		
														NA	PO	MA	LSE	SFT	SFT	LSE	SFT	SFT		DRY	MST
B-3	1	1	0.00		OTH	FM	25	CM	65	10	0	0	NA	PO	MA	LSE	SFT	SFT	LSE	SFT	SFT	DRY	MST	MST	DISTURBED
B-3	2	1	0.50		SPS		0	F	10	70	20	0	LOW	MA	MA	SFT						MST	MST	MST	DISTURBED
B-3	3	1	2.00		SPS		0	F	10	70	20	0	LOW	MA	MA	SFT						MST	MST	MST	DISTURBED
B-3	3	2	2.80		SPS		0	F	0	0	0	0	LOW	MA	MA	SFT						MST	MST	MST	DISTURBED
B-3	4	1	4.00		SPS		0	F	35	55	10	0	NOM	WEL	WEL	SFT						MST	MST	MST	DISTURBED
B-3	4	2	5.60		SPS		0	F	0	0	0	0	NOM	WEL	WEL	SFT						MST	MST	MST	DISTURBED
B-3	5	1	6.00		SPS		0	F	75	25	0	0	NOM	WEL	WEL	SFT						MST	MST	MST	SILTY SAND
B-3	5	2	7.80		SPS		0	F	0	0	0	0	MA	PO	PO	LSE						SAT	SAT	SAT	SAND
B-3	6	1	8.00		SPS	F	10	CM	90	0	0	0	MA	PO	PO	LSE						SAT	SAT	SAT	SAND
B-3	6	2	9.60		SPS		0	F	0	0	0	0	MA	PO	PO	LSE						SAT	SAT	SAT	SAND
B-3	7	1	10.00		SPS	F	13	CM	85	2	0	0	MA	PO	PO	LSE						SAT	SAT	SAT	SAND

**APG Environmental Remediation
Contract No. DACA87-90-D-0031
DO No. 10, Adamsite
Preliminary Field Investigation Report**

**APPENDIX C
REFERENCES**

APPENDIX C
REFERENCES

Barr, W. *Investigation to Identify and Remove Riot Control Agent DM from Building E-2370, Edgewood Arsenal, Aberdeen Proving Ground, Maryland.* Technical Report ARCSL-TR-77050 (EM-TR-77022). Munitions Division, U.S. ARRADCOM. June 1977.

NCRP. *Review of the Current State of Radiation Protection Philosophy.* Publication No. 43. 1975.

NCRP. *Environmental Radiation Measurements.* Report No. 50, 1976.

Nemeth, G. *RCRA Facility Assessment Report, Edgewood Area, Aberdeen Proving Ground, Maryland.* Waste Disposal Engineering Division, U.S. Army Environmental Hygiene Agency. November 1989.

Code of Federal Regulations (CFR), Title 40, "Protection of Environment."

Roy F. Weston, Inc. (WESTON). "Sample and Safety Plan for the Adamsite Storage Vaults at Edgewood Area, Aberdeen Proving Ground, Maryland." Delivery Order No. 10, April 16, 1993.

APPENDIX D

**STANDARD OPERATING PROCEDURE 013 —
COLLECTION OF MONITORING WELL SAMPLES**

STANDARD OPERATING PROCEDURE 013
COLLECTION OF MONITORING WELL SAMPLES

1.0 Scope and Application

The purpose of this standard operating procedure is to delineate protocols for the collection of groundwater samples from monitoring wells.

2.0 Material

- a. Conductivity meter
- b. Thermometer (optional)⁶
- c. pH meter with ORD probe
- d. Turbidity meter
- e. Dissolved Oxygen meter
- f. Water-level indicator
- g. Transparent bailer with a double check valve
- h. PVC bailer (for purging only)
- i. Stainless steel bailer (for purging and sampling)
- j. Polytetrafluoroethylene (PTFE) bailer with PTFE-coated stainless steel cable, double check valve top and controlled flow bottom discharge attachment⁷ for VOC sampling (40-mL vials), and top discharge attachment for collecting larger samples (1-L bottles) (for purging and sampling)
- k. Polypropylene rope
- l. Submersible pump and hose (for purging only)
- m. Peristaltic pump with tubing for filtering samples
- n. Variable speed, low flow submersible pump (e.g. Grundfos MP1 ground-water sampling pump) (for purging and sampling)
- o. Bladder pump (dedicated to one well only)
- p. 0.45 μ M filters
- q. Sample bottles and labels
- r. Logbook or book of field parameter forms
- s. Generator
- t. Tygon tubing
- u. Plastic sheeting
- v. Photoionization Detector (PID) Organic Vapor Analyzer

⁶ Temperature compensation and measurement capabilities are generally available as integral functions of pH meters and conductivity meters. If this is the case, a separate thermometer is not required.

⁷ Although use of a controlled flow bottom discharge valve is historically preferred, use of such a device can cause aeration of the sample. A preferred method of collecting a sample for VOA is to gently lower a large, sterile pipette into the bailer, allow it to fill naturally (no suction), remove the pipette, and fill sample vial from the pipette.

3.0 Procedure

- 3.1 General: Ground-water sampling will follow these general steps:
- Arrive on site
 - Set up apparatus (generators, pumps, etc.)
 - Glove
 - Perform all steps of SOP 010 - organic vapor check, water level and well depth measurements
 - Sample NAPLs (as required)
 - Begin purge procedure
 - If using bailer to purge and sample see § 3.6.
 - If using pump to purge and bailer to sample see § 3.7.
 - If using bladder or low-flow pump to purge and sample see § 3.8.
 - Decon/reglove
 - Take samples
 - If with bailer see § 3.6.5
 - If with bladder or low flow pumps see § 3.8
 - Decon/dispose of wastes, move equipment to next site.

3.2 General Rules for Groundwater Field Parameter Logbook (see SOP 016 for further procedures):

3.2.1 Only one site or installation per logbook, and only one sampling location per page or form (if using pre-printed forms). The same book maybe used for more than one sampling event.

3.2.2 First five pages will be reserved for index, general notes, etc. Sign and date each entry.

3.2.3 Last five pages will be reserved for recording calibration data for the pH, temperature, turbidity, ORD, DO, and conductivity meters. Use the page number or a separately recorded "Cal Reference Number" to refer to each calibration.

3.2.4 (As appropriate). Insert the cardboard flap under the form being filled out, so that writing does not go through to the pages below.

3.2.5 (As appropriate). Fill in the forms from front to back of the logbook, tearing out the white copy for each sample when the sample has been collected. This copy goes in the cooler with the sample, directly to the laboratory. The original copy must be torn out before you write on the back of the duplicate form.

3.2.6 (As appropriate). Duplicate copies, index pages, and calibration sheets remain intact.

3.3 Groundwater Sampling General Rules

3.3.1 Refer to SOPs 001-005, 008-012, 036, 037, and 039

- 3.3.2 Groundwater samples will be collected from the least contaminated wells first, progressing to the most contaminated¹.
- 3.3.3 Upon arrival at the well site, immediately set up and organize the purging, sampling, and filtration equipment. If needed, due to muddy or contaminated ground, remoteness from sampling vehicle, and/or for placement of hose(s) and/or power cord if a pump is used, place clean plastic sheeting at, or around the well, to serve as a clean staging area for purging and sampling equipment, as conditions warrant. Care must be exercised not to step on plastic sheeting.
- 3.3.4 If the well is remote from the sampling vehicle set up the filtration equipment and place rope, wrapped bailer, and pre-labeled sample containers on the plastic sheet, uphill of the well.
- 3.3.5 When a pump is to be used situate the portable generator on level ground approximately 15 feet away from and downwind from the well. All generator maintenance (oil and fueling) is to be performed off site. If the hose(s) and/or power cord of the pump are not on a reel, place the pump with its hose and power cord on the plastic sheeting downhill from the well.
- 3.3.6 Glove. Check well headspace for organic vapor which may pose a health and safety hazard and indicate the presence of LNAPL. Measure the depth to water and depth of well. From the water depth, well diameter, sand pack length, etc., calculate the equivalent volume (1 EV) of water in the well.

1 EV = volume in casing + volume in saturated sand pack. Therefore; if the water table lies below the top of the sandpack, use the following equation:

$$1 \text{ EV} = (\pi R_w^2 h_w + 0.30\pi(R_s^2 - R_w^2)h_s) * (0.0043)$$

If the water table lies above the top of the sandpack use this equation:

$$1 \text{ EV} = [(\pi R_w^2 + 0.30\pi(R_s^2 - R_w^2))] * (0.0043)h_s$$

where: R_s = radius of sandpack in inches
 R_w = radius of well casing in inches
 h_s = height of sandpack in inches
 h_w = water depth in inches

¹ First round samples are to be collected from upgradient wells first, moving to downgradient wells under the assumption that upgradient wells will be less contaminated than downgradient wells. Results of first round analysis may mandate a change in sampling sequence.

0.0043 gal/in³
Assumed filter pack porosity = 30%

Tables and graphs showing equivalent volumes for typical well constructions are available.

Alternate equations for calculating EV are acceptable, two alternates are given in SOP 010

- 3.3.7 Samples will always be collected in order of decreasing volatility (i.e., the samples to be analyzed for the volatile constituents should be collected first.) Deliver the VOC sample to the vial by allowing the water to trickle down the inside wall of the vial at a rate no greater than approximately 100 ml/min. Other samples may be delivered at a faster rate. Procedures for each class of samples are contained in Appendix A of the GWP, the QAPP, and SOP 039.
- 3.3.8 When collecting samples for volatile analysis care should be taken to prevent analyte loss by volatilization. The following procedures should be adhered to when collecting these samples:
- 3.3.8.1 Avoid excessive aeration and agitation of sample.
 - 3.3.8.2 Fill vial so that a reverse meniscus is present by adjusting the flow rate from the sampling device.
 - 3.3.8.3 Place septum on vial so that the PTFE side is in contact with the sample. After the cap is on the bottle, check for air bubbles in the sample. If air bubbles are present, properly dispose of that sample and recollect the sample in the vial.
 - 3.3.8.5 Make sure vial is labeled and immediately transfer the vial to the cooler with ice.
- 3.3.9 Filtered and unfiltered samples will be taken for inorganics (metals) analyses. The samples will be filtered by gravity through a 0.45 μ M membrane placed in a filter funnel. Use forceps to place the membrane into the funnel. and pour sample through funnel until appropriate volumes have been filtered.

If necessary, due to slow filtering, a peristaltic pump may be used to filter the sample through an in-line filter. Connect the pump to the generator, attach tygon tubing to the bottom discharge valve on the bailer. Start pump and collect sample from the end of the in-line filter directly into the proper container, preserved (as required by SOP 039), and placed in the cooler. Filtered samples will be preserved in the field with acid to a pH of less than 2.

Make sure sample bottle is labeled and the cap is on tightly. Then place in cooler with ice immediately.

-- or --

If a low flow pump is used collect the samples, filtered samples will be taken by installing a 0.45 μ M filter in-line and pumping the water through the filter. Collect sample from the end of the in-line filter directly into the proper container, preserved (as required by SOP 039), and placed in the cooler. Filtered samples will be preserved in the field with acid to a pH of less than 2. Make sure sample bottle is labeled and the cap is on tightly. Then place in cooler with ice immediately.

3.3.10 Unfiltered samples will be collected by slowly pouring the sample water into the appropriate sample container, being careful not to agitate or cause bubbles to form. Do not overfill bottles. Make sure sample bottle is labeled and the cap is on tightly. Then place the sample in cooler with ice immediately.

3.3.11 All samples will be delivered to the laboratory as soon as possible. If possible, samples will be shipped on the same day as they are collected. If samples must be retained due to weekend sampling (Friday through Sunday), the lab shall be notified as to the time sensitive nature of the samples.

3.3.12 Refer to SOP 1-5, 16, 31, and 39 .

3.4 Sampling of Non-Aqueous Phase Liquids

3.4.1 If NAPLs are detected in the well, a sample from all layers must be collected prior to any purging activities. Light non-aqueous phase liquids (LNAPLs) may be indicated by the presence of volatiles in the well headspace, and confirmed by the oil/water interface probe (see SOP 10 § 3.2 - 3.2.2.3). Potential dense non-aqueous phase liquids (DNAPLs) will have been detected during drilling, or by the interface probe.

3.4.1.1 Collecting LNAPLs will be accomplished using a transparent bailer with a double check valve. This bailer will be slowly lowered until the bottom of the bailer is 1-2 in. below the LNAPL-water interface, as determined in SOP 010 then slowly withdrawn. Verify that the interface was sampled by visual inspection of the bailer contents through the side of the bailer. Measure the thickness of the LNAPL in the bailer and note in the Field Notebook. Sample for laboratory analysis. An additional field verification may be performed by decanting the remainder of the contents of the bailer into a glass jar, allowing the sample to stand

overnight, and examining for interface and volatiles in the headspace the following day. Refer to following sections on purging and sample collection for set up and general operation.

- 3.4.1.2 Collecting dense non-aqueous phase liquids (DNAPLs) will be accomplished using a transparent bailer with a double check valve. The bailer must be lowered very slowly to the bottom of the well and raised slowly out of the well in a controlled fashion. Sample for analysis as above. The same field check described above may be employed for DNAPL. Refer to following sections on purging and sample collection for set up, and general operation.

3.5 Well Purging - General Rules

Water within the casing of a well will stagnate, degas, lose volatiles, possibly precipitate metals due to changes in redox potential, and may react with the screen and/or casing material. It is therefore necessary to purge a sufficient volume of this stagnant water from the well and/or casing to ensure that a representative sample of formation water can be obtained. Traditionally, the volume of water to be purged was arbitrarily set at 3 to 5 equivalent volumes. Recent advances in sampling technologies have caused a re-thinking of such arbitrary purge volumes. It is for this reason that Monitoring of select chemical and physical properties of the sample medium will be used instead of strict volumes to determine when a representative sample may be taken from a well.

3.5.1 Acceptable purge/sampling devices include: bailers, submersible pumps (purge only), and variable speed, low-flow pumps which include both submersible pumps (purge and sample), and dedicated bladder pumps (purge and sampling).

3.5.2 Peristaltic, gas-lift, and centrifugal pumps can cause volatilization, produce high pressure differentials, and can result in variability in the analysis of some analytes of interest. These types of pumps shall not be used to purge or sample wells.

3.5.3 To prevent ground-water from cascading down the sides of the screen in to an open hole, thereby aerating the sample, purge rates will closely match recharge rates. If the static water level is within the casing, the initial purge rates may be set high enough to lower the water level to the top of the screen, then reduced to maintain that level.

3.5.4 Purging will be accomplished with either a submersible pump, a low-flow (submersible or bladder) pump, or bailer. The choice of bailer or pump will be based on water table depth, volume to be purged, and permeability of the aquifer. If

the well recharges rapidly and/or has 20 gallons to be purged, water will be removed with a submersible pump or a low-flow pump. If the well recharges slowly and/or has less than 20 gallons to be purged, water will be removed with a bailer or a low-flow pump.

- 3.5.5 Purging will be accomplished with as minimal disturbance to the surrounding formation as possible.
- 3.5.6 Purge water will be containerized⁶ on site until analysis of samples is completed. At that time, if the samples are non-hazardous, the water may be disposed of through the waste water treatment plant on-post. If the purge water is found to be hazardous, it will be disposed of as hazardous waste in a licensed TSDP.
- 3.5.7 If the water level is within the screened interval and the well recharge rate is less than 0.1 L/min, the well may be purged to dryness, then sampled as soon as sufficient water volume is available. In this case, only samples for inorganics will be taken, and the event will be noted in the field log book, and reported to the APG project manager. If this low recharge problem consistently occurs in a given well, the well may be considered for re-development and/or replacement.

3.6 Purging and Sampling With Bailers

- 3.6.1 Bailers may be used for both purging and sampling wells if: a) the well recharge rate is less than 4 L/min, b) depth to the water table is less than 50 ft, and c) less than 20 gal are to be purged (5 EV < 20 gal).
- 3.6.2 When purging with a bailer, either a PVC, PTFE, or stainless steel bailer may be used. The bailer will be attached to either a spool of PTFE-coated stainless steel cable or polyethylene rope. If using cable, attach it to the bailer using stainless steel cable clamps. Thoroughly decon the cable after each use, prior to rewinding cable onto spool. Cable clamps and raw cable ends may serve to trap contamination. Exercise particular caution in deconning these areas. If using rope, attach the rope to the bailer using a bowline knot, dispense the needed length (a few feet more than the well depth) and cut the remainder away, then, at the end opposite the bailer, make a slip knot and place it around the well casing or protective posts to prevent

⁶ If, after two rounds of quarterly samples, the water has proven to be uncontaminated, and the purge volume does not exceed 10,000 Gal/day, the purge water may be discharged on the surface, at least 50 ft downhill from the well. If the water is contaminated but does not exceed 100 ppm total VOC, and other contaminants are non toxic to aquatic life as defined in COMAR 26.08.02.03-2, Table 1, MDE may be petitioned on a case-by case basis for a waiver for surface discharge. This letter will be drafted by the contractor for DSHE signature.

losing the bailer and rope down the well. The polypropylene rope will be not reused, it will be properly disposed of. Either type of bailer will be repeatedly lowered gently into the well until it fills with water, removed, and the water will be discharged into an appropriate container until purging is complete. Care must be taken not to unduly agitate the water, as this tends to aerate the sample, increase turbidity, makes stabilization of required parameters (3.6.3) difficult to achieve, and generally prolongs purging.

3.6.3 After purging 2 EV, obtain a sample of groundwater and measure the following stabilization parameters: temperature (SOP 009), conductivity (SOP 012), pH (SOP 008), turbidity (SOP 036), redox potential (Eh) (SOP 038), and dissolved oxygen level (SOP 037) at each successive half-well volume. When three of these stabilization parameters are in agreement within approximately 10% in three consecutive half-well volume samples, sufficient water has been purged from the well. The results of these tests should be recorded in the sampling logbook. Should these parameters not reach agreement, no more than five well volumes will be purged.

3.6.3.1 If the same PTFE or Stainless Steel bailer is used for purging and sampling, the bailer must be thoroughly decontaminated (SOP 005 § 3.3.1.1) after purging and prior to sampling.

3.6.4 Immediately upon completion of purging, collect samples for laboratory analysis using a PTFE bailer on a PTFE-coated stainless steel cable. The bailer will be equipped with double check valve top and controlled flow bottom discharge attachments for VOC sampling (40-mL vials), and top discharge attachment for collecting larger samples (1-L bottles).

3.6.5 Slowly, so as not to agitate the water, lower the bailer into the well, using a spool of PTFE-coated cable. Allow bailer to fill, withdraw smoothly. Refill bailer as needed.

3.6.5.1 Please see footnote 2. If the controlled flow bottom discharge attachment is used for VOC sampling, attach it to the bottom of the bailer. Using the stopcock valve on the bailer to control the flow, fill sample vials as described above in § 3.3.8.

3.6.5.2 Remove check valve top and pour unfiltered sample into inorganics sample bottles.

3.6.5.3 Collect filtered samples as described in § 3.3.9 (above).

3.6.6 Decon bailer and cable in accordance with SOP 005 § 3.3.1.1

3.7 Purging With Pump, Sampling With Bailer

- 3.7.1 If the recharge rate of the well is greater than 30 L/min, or the water level is deeper than 50 ft, or more than 20 gal or purge water will be generated (5 EV > 20 gal), then purging and sampling may be accomplished using a submersible pump / bailer combination.
- 3.7.2 When purging with a pump, gradually lower the intake until it is submerged, start pump, and slowly lower the pump as the water level continues to fall. Care should be exercised to lower the water column to the top of the screened interval but not below the top of the screen if possible. This will ensure that the stagnant layer has been removed, but should minimize the detrimental effects of over pumping the well. Secure hose(s) and/or power cord to casing and place discharge hose into the proper container, downhill and as far away from the well as possible. Determine and record the discharge rate.

Discharge rate = volume of container/time to fill container

The discharge rate will be established at approximately equal to or just greater than the well's recharge rate (determined from well development).

- 3.7.3 After purging 2 EV, obtain a sample of groundwater and measure the following stabilization parameters: temperature, conductivity, pH, turbidity, redox potential (Eh), and dissolved oxygen level at each successive half-well volume. When three of these stabilization parameters are in agreement within approximately 10% in three consecutive half-well volume samples, sufficient water has been purged from the well. The results of these tests should be recorded in the sampling logbook. Should these parameters not reach agreement, no more than five well volumes will be purged.
- 3.7.4 Immediately upon completion of purging, collect samples for laboratory analysis using a PTFE bailer on a PTFE-coated stainless steel cable. The bailer will be equipped with double check valve top and controlled flow bottom discharge attachments for VOC sampling (40-mL vials), and top discharge attachment for collecting larger samples (1-L bottles).
- 3.7.5 Slowly, so as not to agitate the water, lower the bailer into the well, using a spool of PTFE-coated cable. Allow bailer to fill, withdraw smoothly, fill sample containers as described above in § 3.6.5
- 3.7.6 Decon bailer and cable in accordance with SOP 005 § 3.3.1.1. Decon pump in accordance with SOP 005 § 3.3.1.2.

3.8 Purging and Sampling With Low-Flow Pump

To obtain representative samples, subsurface disturbances should be kept to a minimum, thereby preventing sample alteration due to sampling actions. The reasoning behind the use of low-flow pumps to purge and sample monitoring wells is that these pumps minimize physical disturbance (turbulence) at the sampling point and chemical changes (aeration) in the medium. For the purposes of this SOP, "low-flow pumps" are defined as either dedicated bladder pumps or variable speed submersible pumps. Practical operational flow rates for these sampling devices range from 0.1 L/min to 30 L/min.

3.8.1 Low-flow pumps may be used for purging and sampling any well having recharge greater than 0.1 L/min, which is the practical lower limit of pump performance. Below that pumping rate, pump inefficiencies and/or overheating may alter the physical and chemical properties of the sample. If the pump is continuously operated at sampling rates higher than the well recharge rate, the water level will be lowered in the well, possibly allowing aeration of the sample which is unacceptable sampling procedure. Low-flow pumps are suitable for sampling wells with recharge rates lower than 0.1 L/min if precautions are taken to avoid aeration of the sample.

3.8.2 Low flow submersible pumps will be used as follows:

3.8.2.1 Lower the pump into the well, slowly so as not to agitate the water, until the pump is at the mid-point of the screened interval.

3.8.2.2 Attach the pump's umbilical cord (which will consist of power cord and sampling tubing) to the protective casing, or lock the cord spool so that the pump cannot move vertically in the well during sampling.

3.8.2.3 Lower the water level probe into the well behind the pump. If the water level is below the screen top, lower the probe until it just touches water, if the water level is above the top of the screen, lower the probe to within 1" of the top of the screen. This will allow the sampler to monitor the water level while purging and sampling, and prevent the inadvertent drying of the well.

3.8.2.4 Begin purging at the pump's lowest setting, then gradually increase rate. If the water level is above the top of the screen, allow the pumping rate to slightly exceed recharge rate until the water level reaches the water level probe tip, then reduce pumping rate and continue purging. If the water level is below the top of the

screen, always keeping the purge rate lower than well's recharge rate. (Some sources indicate that the pumping rate should not exceed 1 L/min, with 0.5 L/min being preferable). The optimal purge rate is highly aquifer dependent, and may range from less than 0.5 L/min to greater than 10 L/min. The purge rate for a given well will, therefore, be a field decision, based on well development, purge, and sampling records rather than SOP mandate.

- 3.8.2.5 Monitor stabilization parameters listed in § 3.6.3 beginning immediately. Record measurements every 3-5 minutes, using an in-line monitoring system. When these parameters stabilize to within 10% over 3 consecutive readings, adjust flow rate to 0.1 L/min (if needed) and begin collecting VOC samples directly from the discharge line.
- 3.8.2.6 If the well recharges at a rate less than 0.1 L/min, purge until the water level is even with the top of the screen, allow the well to recover and sample immediately.
- 3.8.2.7 Remove and decon water level probe (SOP 005 § 3.3.1.5) and pump (SOP 005 § 3.3.1.2).
- 3.8.3 The length of tubing used in conjunction with the low-flow pump will be appropriate to the depth of the well (i.e. A 100 ft roll of tubing may not be used in sampling a 30 ft well. A 50 ft roll would be used instead, thereby generating less decon solution, and providing less opportunity for physical and chemical changes in the sample due to contact with the spooled tubing (see § 3.8.4)). This means that the contractor will have on hand a) spools of varying length (e.g. 25, 50, 75, and 100 ft spools) or several short e.g. 10 ft lengths of tubing with a secure means of connecting them end-to-end.
- 3.8.4 When a sampling event occurs during summer months, in full sun, shade will be provided for the spooled tubing. Otherwise the tubing will be an effective water heater, warming the ground-water sample, creating the potential for volatilization of organics.
- 3.8.5 Spooled tubing will be monitored to ensure that no air bubbles are trapped at the top of a coil. Trapped air bubbles can enhance volatilization of organics.
- 3.8.6 If a dedicated bladder pump is used, follow steps 3.8.2.3 through 3.8.2.5. for purging and sampling.

4.0 Maintenance

Refer to manufacturer's requirements for maintenance of pumps and generators.

5.0 Precautions

Refer to the HASP for appropriate PPE.

6.0 References

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APG Environmental Remediation
Contract No. DAC87-90-D-0031
DO No. 10, Adamsite
Preliminary Field Investigation Report

APPENDIX E
ANALYTICAL DATA FOR ALL SAMPLES

GP ID: 9307137-02A
 Client ID: 00998 B1-S-(611-2)
 Collected: 07/15/93
 Dilution: 1

Matrix: SOIL
 Method: 8240s
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/22/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.86	
1,1,2,2-Tetrachloroethane	BQL	5.86	
1,1,2-Trichloroethane	BQL	5.86	
1,1-Dichloroethane	BQL	5.86	
1,1-Dichloroethane	BQL	5.86	
1,2-Dichloroethane	BQL	5.86	
1,2-Dichloropropane	BQL	5.86	
2-Butanone	BQL	11.7	
2-Chloroethylvinyl ether	BQL	11.7	
2-Hexanone	BQL	11.7	
4-Methyl-2-pentanone	BQL	11.7	
Acetone	31.9	11.7	B
Benzene	BQL	5.86	
Bromodichloromethane	BQL	5.86	
Bromoform	BQL	5.86	
Bromomethane	BQL	11.7	
Carbon Disulfide	BQL	5.86	
Carbon tetrachloride	BQL	5.86	
Chlorobenzene	BQL	5.86	
Chloroethane	BQL	11.7	
Chloroform	BQL	5.86	
Chloromethane	BQL	11.7	
cis-1,3-Dichloropropene	BQL	5.86	
Dibromochloromethane	BQL	5.86	
Ethylbenzene	BQL	5.86	
Methylene chloride	30.6	5.86	B
Styrene	BQL	5.86	
Tetrachloroethene	BQL	5.86	
Toluene	BQL	5.86	
trans-1,2-Dichloroethene	BQL	5.86	
trans-1,3-Dichloropropene	BQL	5.86	
Trichloroethane	114.0	5.86	
Vinyl Acetate	BQL	11.7	
Vinyl chloride	BQL	11.7	
Xylenes	BQL	5.86	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307137-03A
 Client ID: 00999 81-8-(4-6)
 Collected: 07/15/93
 Dilution: 1

Matrix: SOIL
 Method: E240s
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/22/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.99	
1,1,2,2-Tetrachloroethane	BQL	5.99	
1,1,2-Trichloroethane	BQL	5.99	
1,1-Dichloroethane	BQL	5.99	
1,1-Dichloroethene	BQL	5.99	
1,2-Dichloroethane	BQL	5.99	
1,2-Dichloropropane	BQL	5.99	
2-Butanone	BQL	12.0	
2-Chloroethylvinyl ether	BQL	12.0	
2-Hexanone	BQL	12.0	
n-Methyl-2-pentanone	BQL	12.0	
Acetone	33.7	12.0	8
Benzene	BQL	5.99	
Bromodichloromethane	BQL	5.99	
Bromoform	BQL	5.99	
Bromomethane	BQL	12.0	
Carbon Disulfide	BQL	5.99	
Carbon tetrachloride	BQL	5.99	
Chlorobenzene	BQL	5.99	
Chloroethane	BQL	12.0	
Chloroform	BQL	5.99	
Chloromethane	BQL	12.0	
cis-1,3-Dichloropropene	BQL	5.99	
Dibromochloromethane	BQL	5.99	
Ethylbenzene	BQL	5.99	
Methylene chloride	33.3	5.99	8
Styrene	BQL	5.99	
Tetrachloroethene	BQL	5.99	
Toluene	BQL	5.99	
trans-1,2-Dichloroethene	BQL	5.99	
trans-1,3-Dichloropropene	BQL	5.99	
Trichloroethene	BQL	5.99	
Vinyl Acetate	BQL	12.0	
Vinyl chloride	BQL	12.0	
Xylenes	BQL	5.99	

GP ID: 9307137-04A
 Client ID: 01001 B1-S-(10-12)
 Collected: 07/15/93
 Dilution: 1

Matrix: SOIL
 Method: 8240e
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/22/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethene	BQL	6.12	
1,1,2,2-Tetrachloroethane	BQL	6.12	
1,1,2-Trichloroethane	BQL	6.12	
1,1-Dichloroethane	BQL	6.12	
1,1-Dichloroethene	BQL	6.12	
1,2-Dichloroethane	BQL	6.12	
1,2-Dichloropropane	BQL	6.12	
2-Butanone	BQL	12.2	
2-Chloroethylvinyl ether	BQL	12.2	
2-Hexanone	BQL	12.2	
4-Methyl-2-pentanone	BQL	12.2	
Acetone	27.1	12.2	B
Benzene	BQL	6.12	
Bromodichloromethane	BQL	6.12	
Bromoform	BQL	6.12	
Bromomethane	BQL	12.2	
Carbon Disulfide	BQL	6.12	
Carbon tetrachloride	BQL	6.12	
Chlorobenzene	BQL	6.12	
Chloroethane	BQL	12.2	
Chloroform	BQL	6.12	
Chloromethane	BQL	12.2	
cis-1,3-Dichloropropene	BQL	6.12	
Dibromochloromethane	BQL	6.12	
Ethylbenzene	BQL	6.12	
Methylene chloride	25.4	6.12	B
Styrene	BQL	6.12	
Tetrachloroethene	BQL	6.12	
Toluene	BQL	6.12	
trans-1,2-Dichloroethene	BQL	6.12	
trans-1,3-Dichloropropene	BQL	6.12	
Trichloroethene	BQL	6.12	
Vinyl Acetate	BQL	12.2	
Vinyl chloride	BQL	12.2	
Xylenes	BQL	6.12	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9307137-05A
Client ID: 01002 B2-S-(0-6)''
Collected: 07/16/93
Dilution: 1

Matrix: SOIL
Method: 8240c
Units: ug/Kg

Analyst: AD
Analyzed: 07/22/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.71	
1,1,2,2-Tetrachloroethane	BQL	5.71	
1,1,2-Trichloroethane	BQL	5.71	
1,1-Dichloroethane	BQL	5.71	
1,1-Dichloroethene	BQL	5.71	
1,2-Dichloroethane	BQL	5.71	
1,2-Dichloropropane	BQL	5.71	
2-Butanone	BQL	11.4	
2-Chloroethylvinyl ether	BQL	11.4	
2-Hexanone	BQL	11.4	
4-Methyl-2-pentanone	BQL	11.4	
Acetone	BQL	11.4	
Benzene	BQL	5.71	
Bromodichloromethane	BQL	5.71	
Bromoform	BQL	5.71	
Bromomethane	BQL	11.4	
Carbon Disulfide	BQL	5.71	
Carbon tetrachloride	BQL	5.71	
Chlorobenzene	BQL	5.71	
Chloroethane	BQL	11.4	
Chloroform	BQL	5.71	
Chloromethane	BQL	11.4	
cis-1,3-Dichloropropene	BQL	5.71	
Dibromochloromethane	BQL	5.71	
Ethylbenzene	BQL	5.71	
Methylene chloride	28.0	5.71	B
Styrene	BQL	5.71	
Tetrachloroethene	BQL	5.71	
Toluene	BQL	5.71	
trans-1,2-Dichloroethene	BQL	5.71	
trans-1,3-Dichloropropene	BQL	5.71	
Trichloroethene	BQL	5.71	
Vinyl Acetate	BQL	11.4	
Vinyl chloride	BQL	11.4	
Xylenes	BQL	5.71	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307137-06A
 Client ID: 01003 B2-S-(6''-2')
 Collected: 07/16/93
 Dilution: 1

Matrix: SOIL
 Method: 8240s
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/22/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	6.00	
1,1,2,2-Tetrachloroethane	BQL	6.00	
1,1,2-Trichloroethane	BQL	6.00	
1,1-Dichloroethane	BQL	6.00	
1,1-Dichloroethane	BQL	6.00	
1,2-Dichloroethane	BQL	6.00	
1,2-Dichloropropane	BQL	6.00	
2-Butanone	BQL	12.0	
2-Chloroethylvinyl ether	BQL	12.0	
2-Hexanone	BQL	12.0	
4-Methyl-2-pentanone	BQL	12.0	
Acetone	BQL	12.0	
Benzene	BQL	6.00	
Bromodichloromethane	BQL	6.00	
Bromoform	BQL	6.00	
Bromomethane	BQL	12.0	
Carbon Disulfide	BQL	6.00	
Carbon tetrachloride	BQL	6.00	
Chlorobenzene	BQL	6.00	
Chloroethene	BQL	12.0	
Chloroform	BQL	6.00	
Chloromethane	BQL	12.0	
cis-1,3-Dichloropropene	BQL	6.00	
Dibromochloromethane	BQL	6.00	
Ethylbenzene	BQL	6.00	
Methylene chloride	34.3	6.00	B
Styrene	BQL	6.00	
Tetrachloroethene	BQL	6.00	
Toluene	BQL	6.00	
trans-1,2-Dichloroethene	BQL	6.00	
trans-1,3-Dichloropropene	BQL	6.00	
Trichloroethene	BQL	6.00	
Vinyl Acetate	BQL	12.0	
Vinyl chloride	BQL	12.0	
Xylenes	BQL	6.00	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307137-07A
 Client ID: 01004 B2-S-(4-6)
 Collected: 07/16/93
 Dilution: 1

Matrix: SOIL
 Method: 8240s
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/22/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	6.14	
1,1,2,2-Tetrachloroethane	BQL	6.14	
1,1,2-Trichloroethane	BQL	6.14	
1,1-Dichloroethane	BQL	6.14	
1,1-Dichloroethene	BQL	6.14	
1,2-Dichloroethane	BQL	6.14	
1,2-Dichloropropane	BQL	6.14	
2-Butanone	BQL	12.3	
2-Chloroethyvinyl ether	BQL	12.3	
2-Hexanone	BQL	12.3	
4-Methyl-2-pentanone	BQL	12.3	
Acetone	60.8	12.3	B
Benzene	BQL	6.14	
Bromodichloromethane	BQL	6.14	
Bromoforn	BQL	6.14	
Bromomethane	BQL	12.3	
Carbon Disulfide	BQL	6.14	
Carbon tetrachloride	BQL	6.14	
Chlorobenzene	BQL	6.14	
Chloroethane	BQL	12.3	
Chloroform	BQL	6.14	
Chloromethane	BQL	12.3	
cis-1,3-Dichloropropene	BQL	6.14	
Dibromochloromethane	BQL	6.14	
Ethylbenzene	BQL	6.14	
Methylene chloride	18.9	6.14	B
Styrene	BQL	6.14	
Tetrachloroethene	BQL	6.14	
Toluene	BQL	6.14	
trans-1,2-Dichloroethene	BQL	6.14	
trans-1,3-Dichloropropene	BQL	6.14	
Trichloroethene	BQL	6.14	
Vinyl Acetate	BQL	12.3	
vinyl chloride	BQL	12.3	
Xylenes	BQL	6.14	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9307137-08A
 Client ID: 01005 B2-S-(10-12)
 Collected: 07/16/93
 Dilution: 1

Matrix: SOIL
 Method: 8240s
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/22/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	6.06	
1,1,2,2-Tetrachloroethane	BQL	6.06	
1,1,2-Trichloroethane	BQL	6.06	
1,1-Dichloroethane	BQL	6.06	
1,1-Dichloroethene	BQL	6.06	
1,2-Dichloroethane	BQL	6.06	
1,2-Dichloropropene	BQL	6.06	
2-Butanone	BQL	12.1	
2-Chloroethylvinyl ether	BQL	12.1	
2-Hexanone	BQL	12.1	
4-Methyl-2-pentanone	BQL	12.1	
Acetone	1070.0	12.1	B*
Benzene	BQL	6.06	
Bromodichloromethane	BQL	6.06	
Bromoform	BQL	6.06	
Bromomethane	BQL	12.1	
Carbon Disulfide	BQL	6.06	
Carbon tetrachloride	BQL	6.06	
Chlorobenzene	BQL	6.06	
Chloroethane	BQL	12.1	
Chloroform	BQL	6.06	
Chloromethane	BQL	12.1	
cis-1,3-Dichloropropene	BQL	6.06	
Dibromochloromethane	BQL	6.06	
Ethylbenzene	BQL	6.06	
Methylene chloride	16.2	6.06	B
Styrene	BQL	6.06	
Tetrachloroethene	BQL	6.06	
Toluene	BQL	6.06	
trans-1,2-Dichloroethene	BQL	6.06	
trans-1,3-Dichloropropene	BQL	6.06	
Trichloroethene	BQL	6.06	
vinyl Acetate	BQL	12.1	
Vinyl chloride	BQL	12.1	
Xylenes	BQL	6.06	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307137-09A
Client ID: 01084 TRIP BLANK
Collected: 07/15/93
Dilution: 1

Matrix: WATER
Method: 8240w
Units: ug/L

Analyst: NY
Analyzed: 07/23/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.00	
1,1,2,2-Tetrachloroethane	BQL	5.00	
1,1,2-Trichloroethane	BQL	5.00	
1,1-Dichloroethane	BQL	5.00	
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,2-Dichloropropane	BQL	5.00	
2-Butanone	BQL	10.0	
2-Chloroethylvinyl ether	BQL	10.0	
2-Hexanone	BQL	10.0	
4-Methyl-2-pentanone	BQL	10.0	
Acetone	BQL	10.0	
Benzene	BQL	5.00	
Bromodichloromethane	BQL	5.00	
Bromoform	BQL	5.00	
Bromomethane	BQL	10.0	
Carbon Disulfide	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroethane	BQL	10.0	
Chloroform	BQL	5.00	
Chloromethane	BQL	10.0	
cis-1,3-Dichloropropene	BQL	5.00	
Dibromochloromethane	BQL	5.00	
Ethylbenzene	BQL	5.00	
Methylene chloride	BQL	5.00	
Styrene	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Toluene	BQL	5.00	
trans-1,2-Dichloroethene	BQL	5.00	
trans-1,3-Dichloropropene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl Acetate	BQL	10.0	
Vinyl chloride	BQL	10.0	
Xylenes	BQL	5.00	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307137-10A
 Client ID: 01085 TRIP BLANK
 Collected: 07/15/93
 Dilution: 1

Matrix: WATER
 Method: 8240w
 Units: ug/L

Analyst: NY
 Analyzed: 07/23/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.00	
1,1,2,2-Tetrachloroethane	BQL	5.00	
1,1,2-Trichloroethane	BQL	5.00	
1,1-Dichloroethane	BQL	5.00	
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,2-Dichloropropane	BQL	5.00	
2-Butanone	BQL	10.0	
2-Chloroethylvinyl ether	BQL	10.0	
2-Hexanone	BQL	10.0	
4-Methyl-2-pentanone	BQL	10.0	
Acetone	BQL	10.0	
Benzene	BQL	5.00	
Bromodichloromethane	BQL	5.00	
Bromoform	BQL	5.00	
Bromomethane	BQL	10.0	
Carbon Disulfide	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroethane	BQL	10.0	
Chloroform	BQL	5.00	
Chloromethane	BQL	10.0	
cis-1,3-Dichloropropene	BQL	5.00	
Dibromochloromethane	BQL	5.00	
Ethylbenzene	BQL	5.00	
Methylene chloride	BQL	5.00	
Styrene	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Toluene	BQL	5.00	
trans-1,2-Dichloroethene	BQL	5.00	
trans-1,3-Dichloropropene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl Acetate	BQL	10.0	
Vinyl chloride	BQL	10.0	
Xylenes	BQL	5.00	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307137-018
Client ID: 00997 B1-S-(0-6)''
Collected: 07/15/93
Dilution: 1Matrix: SOIL
Method: SM846 8080
Units: ug/kgAnalyst: PS
Analyzed: 07/30/93
Prepared: 07/21/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.43	
4,4'-DDE	8.93	1.61	
4,4'-DDT	BQL	4.82	
Aldrin	BQL	1.61	
alpha-BHC	BQL	1.21	
Aroclor 1016	BQL	20.1	
Aroclor 1221	BQL	20.1	
Aroclor 1232	BQL	20.1	
Aroclor 1242	BQL	26.1	
Aroclor 1248	BQL	40.2	
Aroclor 1254	BQL	40.2	
Aroclor 1260	BQL	40.2	
beta-BHC	BQL	2.41	
Chlordane	BQL	5.63	
delta-BHC	BQL	3.62	
Dieldrin	BQL	0.804	
Endosulfan I	BQL	5.63	
Endosulfan II	BQL	1.61	
Endosulfan sulfate	BQL	26.5	
Endrin	BQL	2.41	
Endrin aldehyde	BQL	9.25	
gamma-BHC (Lindane)	BQL	1.61	
Heptachlor	BQL	1.21	
Heptachlor epoxide	BQL	33.4	
Methoxychlor	BQL	70.8	
Toxaphene	BQL	96.5	

GP ID: 9307137-02B
 Client ID: 00998 81-5-(6''-2)'
 Collected: 07/15/93
 Dilution: 1

Matrix: SOIL
 Method: SW846 8080
 Units: ug/Kg

Analyst: PS
 Analyzed: 07/30/93
 Prepared: 07/21/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.32	
4,4'-DDE	2.10	1.57	
4,4'-DDT	BQL	4.70	
Aldrin	BQL	1.57	
alpha-BHC	BQL	1.18	
Aroclor 1016	BQL	19.6	
Aroclor 1221	BQL	19.6	
Aroclor 1232	BQL	19.6	
Aroclor 1242	BQL	25.5	
Aroclor 1248	BQL	39.2	
Aroclor 1254	BQL	39.2	
Aroclor 1260	BQL	39.2	
beta-BHC	BQL	2.35	
Chlordane	BQL	5.49	
delta-BHC	BQL	3.53	
Dieldrin	BQL	0.784	
Endosulfan I	BQL	5.49	
Endosulfan II	BQL	1.57	
Endosulfan sulfate	BQL	25.9	
Endrin	BQL	2.35	
Endrin aldehyde	BQL	9.02	
gamma-BHC (Lindane)	BQL	1.57	
Heptachlor	BQL	1.18	
Heptachlor epoxide	BQL	32.5	
Methoxychlor	BQL	69.0	
Toxaphene	BQL	94.1	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307137-038
 Client ID: 00999 B1-S-(4-6)
 Collected: 07/15/93
 Dilution: 1

Matrix: SOIL
 Method: SM846 8080
 Units: ug/Kg

Analyst: PS
 Analyzed: 07/30/93
 Prepared: 07/21/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.39	
4,4'-DDE	BQL	1.59	
4,4'-DDT	BQL	4.78	
Aldrin	BQL	1.59	
alpha-BHC	BQL	1.20	
Aroclor 1016	BQL	19.9	
Aroclor 1221	BQL	19.9	
Aroclor 1232	BQL	19.9	
Aroclor 1242	BQL	25.9	
Aroclor 1248	BQL	39.9	
Aroclor 1254	BQL	39.9	
Aroclor 1260	BQL	39.9	
beta-BHC	BQL	2.39	
Chlordane	BQL	5.58	
delta-BHC	BQL	3.59	
Dieldrin	BQL	0.797	
Endosulfan I	BQL	5.58	
Endosulfan II	BQL	1.59	
Endosulfan sulfate	BQL	26.3	
Endrin	BQL	2.39	
Endrin aldehyde	BQL	9.17	
gamma-BHC (Lindane)	BQL	1.59	
Heptachlor	BQL	1.20	
Heptachlor epoxide	BQL	33.1	
Methoxychlor	BQL	70.2	
Toxaphene	BQL	95.7	

GP ID: 9307137-048
Client ID: 01001 B1-S-(10-12)
Collected: 07/15/93
Dilution: 1Matrix: SOIL
Method: SM846 8080
Units: ug/KgAnalyst: PS
Analyzed: 07/30/93
Prepared: 07/21/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.50	
4,4'-DDE	BQL	1.63	
4,4'-DDT	BQL	4.90	
Aldrin	BQL	1.63	
alpha-BHC	BQL	1.23	
Aroclor 1016	BQL	20.4	
Aroclor 1221	BQL	20.4	
Aroclor 1232	BQL	20.4	
Aroclor 1242	BQL	26.6	
Aroclor 1248	BQL	40.9	
Aroclor 1254	BQL	40.9	
Aroclor 1260	BQL	40.9	
beta-BHC	BQL	2.45	
Chlordane	BQL	5.72	
delta-BHC	BQL	3.68	
Dieldrin	BQL	0.817	
Endosulfan I	BQL	5.72	
Endosulfan II	BQL	1.63	
Endosulfan sulfate	BQL	27.0	
Endrin	BQL	2.45	
Endrin aldehyde	BQL	9.41	
gamma-BHC (Lindane)	BQL	1.63	
Heptachlor	BQL	1.23	
Heptachlor epoxide	BQL	33.9	
Methoxychlor	BQL	71.9	
Toxaphene	BQL	98.1	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307137-058
 Client ID: D1002 B2-S-(0-6)''
 Collected: 07/16/93
 Dilution: 1

Matrix: SOIL
 Method: SW846 8080
 Units: ug/Kg

Analyst: PS
 Analyzed: 07/30/93
 Prepared: 07/21/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.21	
4,4'-DDE	BQL	1.53	
4,4'-DDT	BQL	4.59	
Aldrin	BQL	1.53	
alpha-BHC	BQL	1.15	
Aroclor 1016	BQL	19.1	
Aroclor 1221	BQL	19.1	
Aroclor 1232	BQL	19.1	
Aroclor 1242	BQL	24.9	
Aroclor 1248	BQL	38.2	
Aroclor 1254	BQL	38.2	
Aroclor 1260	BQL	38.2	
beta-BHC	BQL	2.30	
Chlordane	BQL	5.36	
delta-BHC	BQL	3.45	
Dieldrin	BQL	0.765	
Endosulfan I	BQL	5.36	
Endosulfan II	BQL	1.53	
Endosulfan sulfate	BQL	25.2	
Endrin	2.38	2.30	
Endrin aldehyde	BQL	8.80	
gamma-BHC (Lindane)	BQL	1.53	
Heptachlor	BQL	1.15	
Heptachlor epoxide	BQL	31.8	
Methoxychlor	BQL	67.3	
Toxaphene	BQL	91.8	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307137-068
 Client ID: 01003 B2-S-(6''-2')
 Collected: 07/16/93
 Dilution: 1

Matrix: SOIL
 Method: SM846 8080
 Units: ug/Kg

Analyst: PS
 Analyzed: 07/30/93
 Prepared: 07/21/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.43	
4,4'-DDE	BQL	1.61	
4,4'-DDT	BQL	4.82	
Aldrin	BQL	1.61	
alpha-BHC	BQL	1.21	
Aroclor 1016	BQL	20.1	
Aroclor 1221	BQL	20.1	
Aroclor 1232	BQL	20.1	
Aroclor 1242	BQL	26.1	
Aroclor 1248	BQL	40.2	
Aroclor 1254	BQL	40.2	
Aroclor 1260	BQL	40.2	
beta-BHC	BQL	2.41	
Chlordane	BQL	5.63	
delta-BHC	BQL	3.62	
Dieldrin	BQL	0.804	
Endosulfan I	BQL	5.63	
Endosulfan II	BQL	1.61	
Endosulfan sulfate	BQL	26.5	
Endrin	BQL	2.41	
Endrin aldehyde	BQL	9.25	
gamma-BHC (Lindane)	BQL	1.61	
Heptachlor	BQL	1.21	
Heptachlor epoxide	BQL	33.4	
Methoxychlor	BQL	70.8	
Toxaphene	BQL	96.5	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307137-07B
 Client ID: 01004 82-S-(4-6)
 Collected: 07/16/93
 Dilution: 1

Matrix: SOIL
 Method: SMB46 8080
 Units: ug/Kg

Analyst: PS
 Analyzed: 07/30/93
 Prepared: 07/21/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.50	
4,4'-DDE	BQL	1.63	
4,4'-DDT	BQL	4.90	
Aldrin	BQL	1.63	
alpha-BHC	BQL	1.23	
Aroclor 1016	BQL	20.4	
Aroclor 1221	BQL	20.4	
Aroclor 1232	BQL	20.4	
Aroclor 1242	BQL	26.6	
Aroclor 1248	BQL	40.9	
Aroclor 1254	BQL	40.9	
Aroclor 1260	BQL	40.9	
beta-BHC	BQL	2.45	
Chlordane	BQL	5.72	
delta-BHC	BQL	3.68	
Dieldrin	BQL	0.817	
Endosulfan I	BQL	5.72	
Endosulfan II	BQL	1.63	
Endosulfan sulfate	BQL	27.0	
Endrin	BQL	2.45	
Endrin aldehyde	BQL	9.41	
gamma-BHC (Lindane)	BQL	1.63	
Heptachlor	BQL	1.23	
Heptachlor epoxide	BQL	33.9	
Methoxychlor	BQL	71.9	
Toxaphene	BQL	96.1	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9307137-088
Client ID: 01005 B2-S-(10-12)
Collected: 07/16/93
Dilution: 1

Matrix: SOIL
Method: SW846 8080
Units: ug/Kg

Analyst: PS
Analyzed: 07/30/93
Prepared: 07/21/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.46	
4,4'-DDE	BQL	1.62	
4,4'-DDT	BQL	4.86	
Aldrin	BQL	1.62	
alpha-BHC	BQL	1.22	
Aroclor 1016	BQL	20.3	
Aroclor 1221	BQL	20.3	
Aroclor 1232	BQL	20.3	
Aroclor 1242	BQL	26.4	
Aroclor 1248	BQL	40.5	
Aroclor 1254	BQL	40.5	
Aroclor 1260	BQL	40.5	
beta-BHC	BQL	2.43	
Chlordane	BQL	5.67	
delta-BHC	BQL	3.65	
Dieldrin	BQL	0.811	
Endosulfan I	BQL	5.67	
Endosulfan II	BQL	1.62	
Endosulfan sulfate	BQL	26.8	
Endrin	BQL	2.43	
Endrin aldehyde	BQL	9.33	
gamma-BHC (Lindane)	BQL	1.62	
Heptachlor	BQL	1.22	
Heptachlor epoxide	BQL	33.6	
Methoxychlor	BQL	71.3	
Toxaphene	BQL	97.3	

**GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS**

GP ID: 9307137-01

Matrix: SOIL

Client ID: 00997 B1-5-(0-6)''

Collected: 07/15/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	6.73	mg/Kg	1	08/05/93	08/09/93 FU
Arsenic	SW846 7060	13.0	0.889	mg/Kg	1	08/05/93	08/09/93 FU
Lead	SW846 7421	127.0	4.33	mg/Kg	10	08/05/93	08/09/93 MC
Mercury	SW846 7471	BQL	0.120	mg/Kg	1	08/12/93	08/12/93 AR
Potassium	SW846 7610	711.0	72.1	mg/Kg	1	08/05/93	08/09/93 DH
Selenium	SW846 7740	BQL	1.03	mg/Kg	1	08/05/93	08/09/93 FU
Silver	SW846 7761	BQL	0.144	mg/Kg	1	08/05/93	08/06/93 DH
Sodium	SW846 7770	BQL	45.7	mg/Kg	1	08/05/93	08/09/93 DH
Thallium	SW846 7841	BQL	1.32	mg/Kg	1	08/05/93	08/09/93 FU
Aluminum	SW846 6010	111.0	0.231	mg/Kg	1	08/05/93	08/06/93 MB
Barium	SW846 6010	0.655	0.026	mg/Kg	1	08/05/93	08/06/93 MB
Beryllium	SW846 6010	0.004	0.002	mg/Kg	1	08/05/93	08/06/93 MB
Calcium	SW846 6010	11.6	0.210	mg/Kg	1	08/05/93	08/06/93 MB
Cadmium	SW846 6010	BQL	0.007	mg/Kg	1	08/05/93	08/06/93 MB
Cobalt	SW846 6010	0.057	0.023	mg/Kg	1	08/05/93	08/06/93 MB
Chromium	SW846 6010	0.170	0.020	mg/Kg	1	08/05/93	08/06/93 MB
Copper	SW846 6010	0.246	0.049	mg/Kg	1	08/05/93	08/06/93 MB
Iron	SW846 6010	182.0	0.372	mg/Kg	5	08/05/93	08/06/93 MB
Magnesium	SW846 6010	15.7	0.109	mg/Kg	1	08/05/93	08/06/93 MB
Manganese	SW846 6010	1.06	0.012	mg/Kg	1	08/05/93	08/06/93 MB
Nickel	SW846 6010	0.084	0.037	mg/Kg	1	08/05/93	08/06/93 MB
Vanadium	SW846 6010	0.257	0.026	mg/Kg	1	08/05/93	08/06/93 MB
Zinc	SW846 6010	1.57	0.044	mg/Kg	1	08/05/93	08/06/93 MB

**GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS**

GP ID: 9307137-02

Matrix: SOIL

Client ID: 00998 B1-S-(6''-2)'

Collected: 07/15/93

Parameter	Method	Result	Det. Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	6.56	mg/Kg	1	08/05/93	08/09/93 FU
Arsenic	SW846 7060	3.60	0.867	mg/Kg	1	08/05/93	08/09/93 FU
Lead	SW846 7421	33.6	4.22	mg/Kg	10	08/05/93	08/09/93 NG
Mercury	SW846 7471	BQL	0.117	mg/Kg	1	08/12/93	08/12/93 AR
Potassium	SW846 7610	563.0	70.2	mg/Kg	1	08/05/93	08/09/93 DH
Selenium	SW846 7740	BQL	1.01	mg/Kg	1	08/05/93	08/09/93 FU
Silver	SW846 7761	BQL	0.140	mg/Kg	1	08/05/93	08/06/93 DH
Sodium	SW846 7770	80.7	44.5	mg/Kg	1	08/05/93	08/09/93 DH
Thallium	SW846 7841	BQL	1.29	mg/Kg	1	08/05/93	08/09/93 FU
Aluminum	SW846 6010	129.0	1.13	mg/Kg	5	08/05/93	08/06/93 MB
Barium	SW846 6010	0.472	0.026	mg/Kg	1	08/05/93	08/06/93 MB
Beryllium	SW846 6010	0.004	0.002	mg/Kg	1	08/05/93	08/06/93 MB
Calcium	SW846 6010	7.32	0.205	mg/Kg	1	08/05/93	08/06/93 MB
Cadmium	SW846 6010	BQL	0.007	mg/Kg	1	08/05/93	08/06/93 MB
Cobalt	SW846 6010	0.059	0.022	mg/Kg	1	08/05/93	08/06/93 MB
Chromium	SW846 6010	0.160	0.019	mg/Kg	1	08/05/93	08/06/93 MB
Copper	SW846 6010	0.093	0.048	mg/Kg	1	08/05/93	08/06/93 MB
Iron	SW846 6010	148.0	0.363	mg/Kg	5	08/05/93	08/06/93 MB
Magnesium	SW846 6010	14.8	0.106	mg/Kg	1	08/05/93	08/06/93 MB
Manganese	SW846 6010	0.780	0.011	mg/Kg	1	08/05/93	08/06/93 MB
Nickel	SW846 6010	0.066	0.036	mg/Kg	1	08/05/93	08/06/93 MB
Vanadium	SW846 6010	0.246	0.025	mg/Kg	1	08/05/93	08/06/93 MB
Zinc	SW846 6010	0.481	0.043	mg/Kg	1	08/05/93	08/06/93 MB

**GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS**

GP ID: 9307137-03
Client ID: 00999 81-5-(4-6)

Matrix: SOIL
Collected: 07/15/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	6.71	mg/Kg	1	08/05/93	08/09/93 FU
Arsenic	SW846 7060	2.51	0.887	mg/Kg	1	08/05/93	08/09/93 FU
Lead	SW846 7421	13.3	0.431	mg/Kg	1	08/05/93	08/09/93 MC
Mercury	SW846 7471	BQL	0.120	mg/Kg	1	08/12/93	08/12/93 AR
Potassium	SW846 7610	874.0	71.8	mg/Kg	1	08/05/93	08/09/93 DH
Selenium	SW846 7740	BQL	1.03	mg/Kg	1	08/05/93	08/09/93 FU
Silver	SW846 7761	BQL	0.144	mg/Kg	1	08/05/93	08/06/93 DH
Sodium	SW846 7770	82.6	45.5	mg/Kg	1	08/05/93	08/09/93 DH
Thallium	SW846 7841	BQL	1.32	mg/Kg	1	08/05/93	08/09/93 FU
Aluminum	SW846 6010	159.0	1.15	mg/Kg	5	08/05/93	08/06/93 MB
Barium	SW846 6010	0.386	0.026	mg/Kg	1	08/05/93	08/06/93 MB
Beryllium	SW846 6010	0.005	0.002	mg/Kg	1	08/05/93	08/06/93 MB
Calcium	SW846 6010	1.82	0.210	mg/Kg	1	08/05/93	08/06/93 MB
Cadmium	SW846 6010	BQL	0.007	mg/Kg	1	08/05/93	08/06/93 MB
Cobalt	SW846 6010	0.052	0.023	mg/Kg	1	08/05/93	08/06/93 MB
Chromium	SW846 6010	0.226	0.020	mg/Kg	1	08/05/93	08/06/93 MB
Copper	SW846 6010	0.132	0.049	mg/Kg	1	08/05/93	08/06/93 MB
Iron	SW846 6010	188.0	0.371	mg/Kg	5	08/05/93	08/06/93 MB
Magnesium	SW846 6010	23.6	0.109	mg/Kg	1	08/05/93	08/06/93 MB
Manganese	SW846 6010	0.781	0.011	mg/Kg	1	08/05/93	08/06/93 MB
Nickel	SW846 6010	0.064	0.037	mg/Kg	1	08/05/93	08/06/93 MB
Vanadium	SW846 6010	0.262	0.026	mg/Kg	1	08/05/93	08/06/93 MB
Zinc	SW846 6010	0.375	0.044	mg/Kg	1	08/05/93	08/06/93 MB

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS

GP ID: 9307137-04

Matrix: SOIL

Client ID: 01001 B1-S-(10-12)

Collected: 07/15/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	6.85	mg/Kg	1	08/05/93	08/09/93 FU
Arsenic	SW846 7060	2.16	0.906	mg/Kg	1	08/05/93	08/09/93 FU
Lead	SW846 7421	11.2	0.441	mg/Kg	1	08/05/93	08/09/93 NG
Mercury	SW846 7471	BQL	0.122	mg/Kg	1	08/12/93	08/12/93 AR
Potassium	SW846 7610	724.0	73.4	mg/Kg	1	08/05/93	08/09/93 DH
Selenium	SW846 7740	BQL	1.05	mg/Kg	1	08/05/93	08/09/93 FU
Silver	SW846 7761	BQL	0.147	mg/Kg	1	08/05/93	08/06/93 DH
Sodium	SW846 7770	99.5	46.5	mg/kg	1	08/05/93	08/09/93 DH
Thallium	SW846 7841	BQL	1.35	mg/Kg	1	08/05/93	08/09/93 FU
Aluminum	SW846 6010	83.6	0.235	mg/Kg	1	08/05/93	08/06/93 MB
Barium	SW846 6010	0.268	0.027	mg/Kg	1	08/05/93	08/06/93 MB
Beryllium	SW846 6010	0.004	0.002	mg/Kg	1	08/05/93	08/06/93 MB
Calcium	SW846 6010	4.11	0.214	mg/Kg	1	08/05/93	08/06/93 MB
Cadmium	SW846 6010	BQL	0.007	mg/Kg	1	08/05/93	08/06/93 MB
Cobalt	SW846 6010	0.302	0.024	mg/Kg	1	08/05/93	08/06/93 MB
Chromium	SW846 6010	0.175	0.020	mg/Kg	1	08/05/93	08/06/93 MB
Copper	SW846 6010	0.102	0.050	mg/Kg	1	08/05/93	08/06/93 MB
Iron	SW846 6010	100.0	0.379	mg/Kg	5	08/05/93	08/06/93 MB
Magnesium	SW846 6010	9.81	0.111	mg/Kg	1	08/05/93	08/06/93 MB
Manganese	SW846 6010	3.36	0.012	mg/Kg	1	08/05/93	08/06/93 MB
Nickel	SW846 6010	0.060	0.038	mg/Kg	1	08/05/93	08/06/93 MB
Vanadium	SW846 6010	0.286	0.026	mg/Kg	1	08/05/93	08/06/93 MB
Zinc	SW846 6010	0.231	0.045	mg/Kg	1	08/05/93	08/06/93 MB

**GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS**

GP ID: 9307137-05
Client ID: 01002 82-S-(0-6)**

Matrix: SOIL
Collected: 07/16/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	6.40	mg/Kg	1	08/05/93	08/09/93 FU
Arsenic	SW846 7060	148.0	8.45	mg/Kg	10	08/05/93	08/09/93 FU
Lead	SW846 7421	543.0	20.6	mg/Kg	50	08/05/93	08/09/93 MG
Mercury	SW846 7471	BQL	0.114	mg/Kg	1	08/12/93	08/12/93 AR
Potassium	SW846 7610	455.0	68.5	mg/Kg	1	08/05/93	08/09/93 DH
Selenium	SW846 7740	BQL	0.982	mg/Kg	1	08/05/93	08/09/93 FU
Silver	SW846 7761	BQL	0.137	mg/Kg	1	08/05/93	08/06/93 DH
Sodium	SW846 7770	92.8	43.4	mg/Kg	1	08/05/93	08/09/93 DH
Thallium	SW846 7841	BQL	1.26	mg/Kg	1	08/05/93	08/09/93 FU
Aluminum	SW846 6010	41.8	0.220	mg/Kg	1	08/05/93	08/06/93 MB
Barium	SW846 6010	0.497	0.025	mg/Kg	1	08/05/93	08/06/93 MB
Beryllium	SW846 6010	BQL	0.002	mg/Kg	1	08/05/93	08/06/93 MB
Calcium	SW846 6010	16.1	0.200	mg/Kg	1	08/05/93	08/06/93 MB
Cadmium	SW846 6010	0.087	0.007	mg/Kg	1	08/05/93	08/06/93 MB
Cobalt	SW846 6010	0.081	0.022	mg/Kg	1	08/05/93	08/06/93 MB
Chromium	SW846 6010	1.07	0.019	mg/Kg	1	08/05/93	08/06/93 MB
Copper	SW846 6010	1.05	0.046	mg/Kg	1	08/05/93	08/06/93 MB
Iron	SW846 6010	1360.0	3.54	mg/Kg	50	08/05/93	08/06/93 MB
Magnesium	SW846 6010	15.1	0.104	mg/Kg	1	08/05/93	08/06/93 MB
Manganese	SW846 6010	4.42	0.011	mg/Kg	1	08/05/93	08/06/93 MB
Nickel	SW846 6010	0.276	0.035	mg/Kg	1	08/05/93	08/06/93 MB
Vanadium	SW846 6010	0.239	0.024	mg/Kg	1	08/05/93	08/06/93 MB
Zinc	SW846 6010	1.24	0.042	mg/Kg	1	08/05/93	08/06/93 MB

**GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS**

GP ID: 9507137-06

Matrix: SOIL

Client ID: 01003 B2-S-(6''-2')

Collected: 07/16/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	6.72	mg/Kg	1	08/05/93	08/09/93 FU
Arsenic	SW846 7060	10.8	0.889	mg/Kg	1	08/05/93	08/09/93 FU
Lead	SW846 7421	28.4	1.73	mg/Kg	4	08/05/93	08/09/93 NG
Mercury	SW846 7471	BQL	0.120	mg/Kg	1	08/12/93	08/12/93 AR
Potassium	SW846 7610	578.0	72.0	mg/Kg	1	08/05/93	08/09/93 DH
Selenium	SW846 7740	BQL	1.03	mg/Kg	1	08/05/93	08/09/93 FU
Silver	SW846 7761	BQL	0.144	mg/Kg	1	08/05/93	08/06/93 DH
Sodium	SW846 7770	112.0	45.6	mg/kg	1	08/05/93	08/09/93 DH
Thallium	SW846 7841	BQL	1.32	mg/Kg	1	08/05/93	08/09/93 FU
Aluminum	SW846 6010	119.0	0.231	mg/Kg	1	08/05/93	08/06/93 MB
Barium	SW846 6010	0.474	0.026	mg/Kg	1	08/05/93	08/06/93 MB
Beryllium	SW846 6010	0.003	0.002	mg/Kg	1	08/05/93	08/06/93 MB
Calcium	SW846 6010	16.7	0.210	mg/Kg	1	08/05/93	08/06/93 MB
Cadmium	SW846 6010	BQL	0.007	mg/Kg	1	08/05/93	08/06/93 MB
Cobalt	SW846 6010	0.051	0.023	mg/Kg	1	08/05/93	08/06/93 MB
Chromium	SW846 6010	0.165	0.020	mg/Kg	1	08/05/93	08/06/93 MB
Copper	SW846 6010	0.097	0.049	mg/Kg	1	08/05/93	08/06/93 MB
Iron	SW846 6010	143.0	0.372	mg/Kg	5	08/05/93	08/06/93 MB
Magnesium	SW846 6010	14.6	0.109	mg/Kg	1	08/05/93	08/06/93 MB
Manganese	SW846 6010	0.904	0.012	mg/Kg	1	08/05/93	08/06/93 MB
Nickel	SW846 6010	0.049	0.037	mg/Kg	1	08/05/93	08/06/93 MB
Vanadium	SW846 6010	0.254	0.026	mg/Kg	1	08/05/93	08/06/93 MB
Zinc	SW846 6010	1.35	0.044	mg/Kg	1	08/05/93	08/06/93 MB

**GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS**

GP ID: 9307137-07

Client ID: 01004 B2-S-(4-6)'

Matrix: SOIL

Collected: 07/16/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	6.87	mg/Kg	1	08/05/93	08/09/93 FU
Arsenic	SW846 7060	3.46	0.908	mg/Kg	1	08/05/93	08/09/93 FU
Lead	SW846 7421	9.62	0.442	mg/Kg	1	08/05/93	08/09/93 NG
Mercury	SW846 7471	BQL	0.123	mg/Kg	1	08/12/93	08/12/93 AR
Potassium	SW846 7610	658.0	73.6	mg/Kg	1	08/05/93	08/09/93 DH
Selenium	SW846 7740	BQL	1.06	mg/Kg	1	08/05/93	08/09/93 FU
Silver	SW846 7761	BQL	0.147	mg/Kg	1	08/05/93	08/06/93 DH
Sodium	SW846 7770	69.5	46.6	mg/kg	1	08/05/93	08/09/93 DH
Thallium	SW846 7841	BQL	1.35	mg/Kg	1	08/05/93	08/09/93 FU
Aluminum	SW846 6010	118.0	0.236	mg/Kg	1	08/05/93	08/06/93 MB
Barium	SW846 6010	0.284	0.027	mg/Kg	1	08/05/93	08/06/93 MB
Beryllium	SW846 6010	0.003	0.002	mg/Kg	1	08/05/93	08/06/93 MB
Calcium	SW846 6010	3.77	0.215	mg/Kg	1	08/05/93	08/06/93 MB
Cadmium	SW846 6010	BQL	0.007	mg/Kg	1	08/05/93	08/06/93 MB
Cobalt	SW846 6010	0.044	0.024	mg/Kg	1	08/05/93	08/06/93 MB
Chromium	SW846 6010	0.154	0.020	mg/Kg	1	08/05/93	08/06/93 MB
Copper	SW846 6010	0.107	0.050	mg/Kg	1	08/05/93	08/06/93 MB
Iron	SW846 6010	170.0	0.380	mg/Kg	5	08/05/93	08/06/93 MB
Magnesium	SW846 6010	14.0	0.112	mg/Kg	1	08/05/93	08/06/93 MB
Manganese	SW846 6010	0.550	0.012	mg/Kg	1	08/05/93	08/06/93 MB
Nickel	SW846 6010	0.039	0.038	mg/Kg	1	08/05/93	08/06/93 MB
Vanadium	SW846 6010	0.271	0.026	mg/Kg	1	08/05/93	08/06/93 MB
Zinc	SW846 6010	0.232	0.045	mg/Kg	1	08/05/93	08/06/93 MB

**GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS**

GP ID: 9307137-08

Matrix: SOIL

Client ID: 01005 B2-S-(10-12)'

Collected: 07/16/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	6.78	mg/Kg	1	08/05/93	08/09/93 FU
Arsenic	SW846 7060	1.48	0.897	mg/Kg	1	08/05/93	08/09/93 FU
Lead	SW846 7421	8.56	0.436	mg/Kg	1	08/05/93	08/09/93 NG
Mercury	SW846 7471	BQL	0.121	mg/Kg	1	08/12/93	08/12/93 AR
Potassium	SW846 7610	583.0	72.7	mg/Kg	1	08/05/93	08/09/93 DH
Selenium	SW846 7740	BQL	1.04	mg/Kg	1	08/05/93	08/09/93 FU
Silver	SW846 7761	BQL	0.145	mg/Kg	1	08/05/93	08/06/93 DH
Sodium	SW846 7770	113.0	46.1	mg/kg	1	08/05/93	08/09/93 DH
Thallium	SW846 7841	BQL	1.33	mg/Kg	1	08/05/93	08/09/93 FU
Aluminum	SW846 6010	60.7	0.233	mg/Kg	1	08/05/93	08/06/93 MB
Barium	SW846 6010	0.273	0.027	mg/Kg	1	08/05/93	08/06/93 MB
Beryllium	SW846 6010	0.003	0.002	mg/Kg	1	08/05/93	08/06/93 MB
Calcium	SW846 6010	4.18	0.212	mg/Kg	1	08/05/93	08/06/93 MB
Cadmium	SW846 6010	BQL	0.007	mg/Kg	1	08/05/93	08/06/93 MB
Cobalt	SW846 6010	0.037	0.023	mg/Kg	1	08/05/93	08/06/93 MB
Chromium	SW846 6010	0.197	0.020	mg/Kg	1	08/05/93	08/06/93 MB
Copper	SW846 6010	0.087	0.049	mg/Kg	1	08/05/93	08/06/93 MB
Iron	SW846 6010	31.3	0.075	mg/Kg	1	08/05/93	08/06/93 MB
Magnesium	SW846 6010	7.91	0.110	mg/Kg	1	08/05/93	08/06/93 MB
Manganese	SW846 6010	0.232	0.012	mg/Kg	1	08/05/93	08/06/93 MB
Nickel	SW846 6010	BQL	0.038	mg/Kg	1	08/05/93	08/06/93 MB
Vanadium	SW846 6010	0.184	0.026	mg/Kg	1	08/05/93	08/06/93 MB
Zinc	SW846 6010	0.191	0.045	mg/Kg	1	08/05/93	08/06/93 MB

**GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS**

GP ID: 9307137-01
Client ID: 00997 B1-S-(0-6)''

Matrix: SOIL
Collected: 07/15/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	NCAW 160.3	83.2		%			07/26/93 SCT

GP ID: 9307137-02
Client ID: 00998 B1-S-(6''-2)'

Matrix: SOIL
Collected: 07/15/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	NCAW 160.3	85.4		%			07/26/93 SCT

GP ID: 9307137-03
Client ID: 00999 B1-S-(4-6)'

Matrix: SOIL
Collected: 07/15/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	NCAW 160.3	83.5		%			07/26/93 SCT

GP ID: 9307137-04
Client ID: 01001 B1-S-(10-12)'

Matrix: SOIL
Collected: 07/15/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	NCAW 160.3	81.7		%			07/26/93 SCT

GP ID: 9307137-05
Client ID: 01002 B2-S-(0-6)''

Matrix: SOIL
Collected: 07/16/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	NCAW 160.3	87.6		%			07/26/93 SCT

GP ID: 9307137-06
Client ID: 01003 B2-S-(6''-2)'

Matrix: SOIL
Collected: 07/16/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	NCAW 160.3	83.3		%			07/26/93 SCT

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS

GP ID: 9307137-07

Client ID: 01004 82-S-(4-6)'

Matrix: SOIL

Collected: 07/16/93

<u>Parameter</u>	<u>Method</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Units</u>	<u>Dil.</u>	<u>Prepared</u>	<u>Analyzed By</u>
Percent Solids	NCAW 160.3	81.5		%			07/26/93 SCT

GP ID: 9307137-08

Client ID: 01005 82-S-(10-12)'

Matrix: SOIL

Collected: 07/16/93

<u>Parameter</u>	<u>Method</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Units</u>	<u>Dil.</u>	<u>Prepared</u>	<u>Analyzed By</u>
Percent Solids	NCAW 160.3	82.5		%			07/26/93 SCT

GP ENVIRONMENTAL SERVICES

Possible notes and definitions for this report:

BQL = Below Quantitation Limit

J = An estimated value, below method detection limit

B = Indicates that the compound was found in the associated blank

E = Indicates that the concentration exceeded the calibration range of the instrument

U = Indicates that the compound was analyzed for but not detected, number indicates the detection limit

D = Indicates that the compound was found in a analysis at a secondary dilution factor

* = Value obtained from a 1:5 dilution

+ = Value obtained from a 1:10 dilution

= Value obtained from a 1:20 dilution

^ = Value obtained from a 1:50 dilution

- = Value obtained from a 1:100 dilution

! = Value obtained from a 1:250 dilution

@ = Value obtained from a 1:125 dilution (Medium Level)

\$ = Value obtained from a 1:1000 dilution

& = Value obtained from a 1:10000 dilution

N = Flashpoint not observed; heated to specified limit

R = Flammable at room temperature

TNTC = Too numerous to count

B.P. = Detection limit taken from boiling point

F.F. = Sample gave off flammable fumes

Custody Transfer Record/Lab Work Request

GP

Client: **GLEAO - DO# 10 - Adamsite**
 Est. Final Proj. Sampling Date: **03/28/93**
 Work Order #: **03286-011-009-0030-00**
 Project Contact/Phone #: **Don Klipes 410 612-8712**
 West Project Manager: **J. Cleary**
 Date Rec'd: _____ Date Due: _____
 Account #: _____

Refrigerator #	#Type Container	Liquid	Solid	Volume	Preservatives
		2 Glass 9148 9148	2 Glass 9148 9148	500ml	
				400ml	

Lab ID	Client ID/Description	Matrix QC Chosen (✓)	Matrix QC	Date Collected	Time Collected	WESTON Analytcs Use Only			
						ORGANIC	INORG	High	Low
00997 B1-S-(0-6)"		MS MSD	S	7-15-93	0955	X	X	X	X
00998 B1-S-(6"-2)		MS MSD	S	7-15-93	1015	X	X	X	X
00999 B1-S-(4'-6)"		MS MSD	S	7-15-93	1030	X	X	X	X
01000 B1-S-(10-12)"		MS MSD	S	7-15-93	1125	X	X	X	X
01002 B2-S-(0-6)"		MS MSD	S	7-16-93	0900	X	X	X	X
01003 B2-S-(6"-2)"		MS MSD	S	7-16-93	0905	X	X	X	X
01004 B2-S-(4'-6)"		MS MSD	S	7-16-93	0920	X	X	X	X
01005 B2-S-(10-12)"		MS MSD	S	7-16-93	0940	X	X	X	X
01084 TRIP BLANK		MS MSD	W	7-15-93	0955				
01085 TRIP BLANK		MS MSD	W	7-16-93	0920				

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Special Instructions:
 * Samples collected on 7-15-93 are on their 6th day of holding as of 7-20-93. They need analysis by 7-21-93 in order not to exceed their 7 day hold times.
 A - Trip Blank for TCL VOA
 * 30 day Turnaround *

DATE REVISIONS:
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____
 6. _____

Relinquished by	Received by	Date	Time
Don Klipes	M. Mike	7/16/93	1645
	Paul Bell	7/21/93	7:45A

Relinquished by: _____ Date: _____ Time: _____
 Received by: _____ Date: _____ Time: _____

Discrepancies Between Samples Labels and COC Record? Y or N
 NOTES:

WESTON Analytcs Use Only

Samples were:
 1) Shipped _____ or Hand Delivered _____
 2) Ambient or Chilled _____
 3) Received in Good Condition Y or N _____
 4) Labels Indicate Properly Preserved Y or N _____
 5) Received Within Holding Times Y or N _____

COC Taps was:
 1) Present on Outer Package Y or N _____
 2) Unbroken on Outer Package Y or N _____
 3) Present on Sample Y or N _____
 4) Unbroken on Sample Y or N _____
 COC Record Present Upon Sample Rec'l Y or N _____

GP Work Order # 9308131

SAMPLE ANALYSIS REPORT

Prepared For:

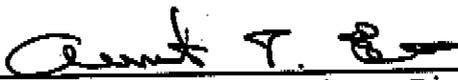
ROY F. WESTON
1 WESTON WAY
WEST CHESTER, PA 19380-1499

APG ADAMSITE

Prepared By:

GP Environmental Services, Inc.
202 Perry Parkway
Gaithersburg, Maryland 20877

September 15, 1993


Albert Ellis, Laboratory Director

MW w

CASE NARRATIVE

CLIENT: Weston

DATE: September 15, 1993

Work Order: 93-08-131

1. This batch comprises 4 water samples received at GP Environmental Services on August 18, 1993. The samples were analyzed for BNA, volatiles, pesticides/PCBs and TAL metals.
2. The samples were collected on 8/11/93 and received by laboratory personnel at 3:55PM on 8/18/93. Based on the collection times, the samples were past holding time for BNA and Pesticide/PCB extraction when they were received. The client was notified and the samples were extracted on 8/19/93.

**GP ENVIRONMENTAL SERVICES
ANALYTICAL RESULTS**

Project: APG ADAMSITE

ROY F. WESTON
1 WESTON WAY
WEST CHESTER, PA 19380-1499
Atten: JEANNE O'LEARY

GP ENVIRONMENTAL SERVICES
202 Perry Parkway
Gaithersburg, MD 20877

Atten: Client Services
Phone: (301) 926-6802

Certified by: *lf*

SAMPLE IDENTIFICATION

<u>GP ID</u>	<u>Client ID</u>
9308131 -01 A	01073 MW1-W-A
9308131 -01 B	
9308131 -01 C	
9308131 -01 D	
9308131 -01 E	
9308131 -02 A	01074 MW2-W-A
9308131 -02 B	
9308131 -02 C	
9308131 -02 D	
9308131 -02 E	
9308131 -03 A	01075 MW3-W-A
9308131 -03 B	
9308131 -03 C	
9308131 -03 D	
9308131 -03 E	
9308131 -04 A	01076 MW3-W-A (DUP)
9308131 -04 B	
9308131 -04 C	
9308131 -04 D	
9308131 -04 E	
9308131 -05 A	00840 TRIP BLANK
9308131 -06 A	00841 TRIP BLANK

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9308131-01C
Client ID: 01073 MU1-U-A
Collected: 08/11/93
Dilution: 1

Matrix: WATER
Method: 8270
Units: ug/L

Analyst: IM
Analyzed: 08/25/93
Prepared: 08/19/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	11.0	
1,2-Dichlorobenzene	BQL	11.0	
1,3-Dichlorobenzene	BQL	11.0	
1,4-Dichlorobenzene	BQL	11.0	
2,4,5-Trichlorophenol	BQL	11.0	
2,4,6-Trichlorophenol	BQL	11.0	
2,4-Dichlorophenol	BQL	11.0	
2,4-Dimethylphenol	BQL	11.0	
2,4-Dinitrophenol	BQL	55.0	
2,4-Dinitrotoluene	BQL	11.0	
2,6-Dinitrotoluene	BQL	11.0	
2-Chloronaphthalene	BQL	11.0	
2-Chlorophenol	BQL	11.0	
2-Methylnaphthalene	BQL	11.0	
2-Methylphenol	BQL	11.0	
2-Nitroaniline	BQL	55.0	
2-Nitrophenol	BQL	11.0	
3,3'-Dichlorobenzidine	BQL	22.0	
3-Nitroaniline	BQL	55.0	
4,6-Dinitro-2-methylphenol	BQL	55.0	
4-Bromophenyl-phenylether	BQL	11.0	
4-Chloro-3-methylphenol	BQL	22.0	
4-Chloroaniline	BQL	22.0	
4-Chlorophenyl phenyl ether	BQL	11.0	
4-Methylphenol	BQL	11.0	
4-Nitroaniline	BQL	55.0	
4-Nitrophenol	BQL	55.0	
Acenaphthene	BQL	11.0	
Acenaphthylene	BQL	11.0	
Anthracene	BQL	11.0	
Benzoic acid	BQL	55.0	
Benzo[a]anthracene	BQL	11.0	
Benzo[a]pyrene	BQL	11.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9308131-01C
Client ID: 01073 MW1-W-A
Collected: 08/11/93
Dilution: 1

Matrix: WATER
Method: 8270
Units: ug/L

Analyst: IN
Analyzed: 08/25/93
Prepared: 08/19/93

SEMIVOLATILE TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
Benzo[b]fluoranthene	BQL	11.0	
Benzo[g,h,i]perylene	BQL	11.0	
Benzo[k]fluoranthene	BQL	11.0	
Benzyl alcohol	BQL	22.0	
bis(2-Chloroethoxy) methane	BQL	11.0	
bis(2-Chloroethyl) ether	BQL	11.0	
bis(2-Chloroisopropyl) ether	BQL	11.0	
bis(2-Ethylhexyl)phthalate	BQL	11.0	
Butyl benzyl phthalate	BQL	11.0	
Chrysene	BQL	11.0	
di-n-Butylphthalate	BQL	11.0	
di-n-Octylphthalate	BQL	11.0	
Dibenzofuran	BQL	11.0	
Dibenz[a,h]anthracene	BQL	11.0	
Diethylphthalate	BQL	11.0	
Dimethyl phthalate	BQL	11.0	
Fluoranthene	BQL	11.0	
Fluorene	BQL	11.0	
Hexachlorobenzene	BQL	11.0	
Hexachlorobutadiene	BQL	11.0	
Hexachlorocyclopentadiene	BQL	11.0	
Hexachloroethane	BQL	11.0	
Indeno[1,2,3-cd]pyrene	BQL	11.0	
Isophorone	BQL	11.0	
N-Nitroso-di-n-propylamine	BQL	11.0	
N-nitrosodiphenylamine	BQL	11.0	
Naphthalene	BQL	11.0	
Nitrobenzene	BQL	11.0	
Pentachlorophenol	BQL	55.0	
Phenanthrene	BQL	11.0	
Phenol	BQL	11.0	
Pyrene	BQL	11.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9308131-01A
Client ID: 01073 MW1-W-A
Collected: 08/11/93
Dilution: 1

Matrix: WATER
Method: 8240w
Units: ug/L

Analyst: AD
Analyzed: 08/24/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.00	
1,1,2,2-Tetrachloroethane	BQL	5.00	
1,1,2-Trichloroethane	BQL	5.00	
1,1-Dichloroethane	BQL	5.00	
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,2-Dichloropropane	BQL	5.00	
2-Butanone	BQL	10.0	
2-Chloroethylvinyl ether	BQL	10.0	
2-Hexanone	BQL	10.0	
4-Methyl-2-pentanone	BQL	10.0	
Acetone	BQL	10.0	
Benzene	BQL	5.00	
Bromodichloromethane	BQL	5.00	
Bromoform	BQL	5.00	
Bromomethane	BQL	10.0	
Carbon Disulfide	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroethane	BQL	10.0	
Chloroform	7.56	5.00	
Chloromethane	BQL	10.0	
cis-1,3-Dichloropropene	BQL	5.00	
Dibromochloromethane	BQL	5.00	
Ethylbenzene	BQL	5.00	
Methylene chloride	BQL	5.00	
Styrene	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Toluene	BQL	5.00	
trans-1,2-Dichloroethene	BQL	5.00	
trans-1,3-Dichloropropene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl Acetate	BQL	10.0	
Vinyl chloride	BQL	10.0	
Xylenes	BQL	5.00	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308131-010
Client ID: 01073 MW1-W-A
Collected: 08/11/93
Dilution: 1Matrix: WATER
Method: SW846 8080
Units: ug/LAnalyst: PH
Analyzed: 09/07/93
Prepared: 08/19/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	0.122	
4,4'-DDE	BQL	0.044	
4,4'-DDT	BQL	0.133	
Aldrin	BQL	0.044	
alpha-BHC	BQL	0.033	
Aroclor 1016	BQL	0.555	
Aroclor 1221	BQL	0.555	
Aroclor 1232	BQL	0.555	
Aroclor 1242	BQL	0.722	
Aroclor 1248	BQL	1.11	
Aroclor 1254	BQL	1.11	
Aroclor 1260	BQL	1.11	
beta-BHC	BQL	0.067	
Chlordane	BQL	0.155	
delta-BHC	BQL	0.100	
Dieldrin	BQL	0.022	
Endosulfan I	BQL	0.155	
Endosulfan II	BQL	0.044	
Endosulfan sulfate	BQL	0.733	
Endrin	BQL	0.067	
Endrin aldehyde	BQL	0.255	
gamma-BHC (Lindane)	BQL	0.044	
Heptachlor	BQL	0.033	
Heptachlor epoxide	BQL	0.921	
Methoxychlor	BQL	1.95	
Toxaphene	BQL	2.66	

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS*Atomic absorption with cold vapor*

GP ID: 9308131-01

Client ID: 01073 MW1-W-A

Matrix: WATER

Collected: 08/11/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	MCAMW 204.2	BQL	28.0	ug/L	1	08/30/93	09/02/93 FU
Arsenic	MCAMW 206.2	BQL	3.70	ug/L	1	08/30/93	09/01/93 FU
Lead	MCAMW 239.2	25.4	1.80	ug/L	1	08/30/93	09/01/93 FU
Mercury (TOTAL)	MCAMW 245.1	0.420	0.200	ug/L	1	09/13/93	09/14/93 LL ←
Potassium	MCAMW 258.1	1.74	0.300	mg/L	1	08/30/93	09/14/93 FU
Selenium	MCAMW 270.2	BQL	4.30	ug/L	1	08/30/93	09/01/93 FU
Silver	MCAMW 272.2	BQL	0.600	ug/L	1	08/30/93	09/01/93 FU
Sodium	MCAMW 273.1	8.19	0.190	mg/L	1	08/30/93	09/14/93 FU
Thallium	MCAMW 279.2	BQL	5.10	ug/L	1	08/30/93	09/01/93 FU
Aluminum	MCAMW 200.7	11800.0	96.2	ug/L	1	08/30/93	08/31/93 MB
Barium	MCAMW 200.7	84.4	11.0	ug/L	1	08/30/93	08/31/93 MB
Beryllium	MCAMW 200.7	0.869	0.700	ug/L	1	08/30/93	08/31/93 MB
Calcium	MCAMW 200.7	9050.0	87.5	ug/L	1	08/30/93	08/31/93 MB
Cadmium	MCAMW 200.7	BQL	3.00	ug/L	1	08/30/93	08/31/93 MB
Cobalt	MCAMW 200.7	10.1	9.60	ug/L	1	08/30/93	08/31/93 MB
Chromium	MCAMW 200.7	30.7	8.21	ug/L	1	08/30/93	08/31/93 MB
Copper	MCAMW 200.7	BQL	20.4	ug/L	1	08/30/93	08/31/93 MB
Iron	MCAMW 200.7	21800.0	155.0	ug/L	5	08/30/93	08/31/93 MB
Magnesium	MCAMW 200.7	6340.0	45.5	ug/L	1	08/30/93	08/31/93 MB
Manganese	MCAMW 200.7	208.0	4.80	ug/L	1	08/30/93	08/31/93 MB
Nickel	MCAMW 200.7	BQL	15.5	ug/L	1	08/30/93	08/31/93 MB
Vanadium	MCAMW 200.7	34.2	10.7	ug/L	1	08/30/93	08/31/93 MB
Zinc	MCAMW 200.7	83.6	18.3	ug/L	1	08/30/93	09/02/93 TES

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9308131-02C
 Client ID: 01074 MW2-W-A
 Collected: 08/11/93
 Dilution: 1

Matrix: WATER
 Method: 8270
 Units: ug/L

Analyt: IM
 Analyzed: 08/25/93
 Prepared: 08/19/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	10.9	
1,2-Dichlorobenzene	BQL	10.9	
1,3-Dichlorobenzene	BQL	10.9	
1,4-Dichlorobenzene	BQL	10.9	
2,4,5-Trichlorophenol	BQL	10.9	
2,4,6-Trichlorophenol	BQL	10.9	
2,4-Dichlorophenol	BQL	10.9	
2,4-Dimethylphenol	BQL	10.9	
2,4-Dinitrophenol	BQL	54.5	
2,4-Dinitrotoluene	BQL	10.9	
2,6-Dinitrotoluene	BQL	10.9	
2-Chloronaphthalene	BQL	10.9	
2-Chlorophenol	BQL	10.9	
2-Methylnaphthalene	BQL	10.9	
2-Methylphenol	BQL	10.9	
2-Nitroaniline	BQL	54.5	
2-Nitrophenol	BQL	10.9	
3,3'-Dichlorobenzidine	BQL	21.8	
3-Nitroaniline	BQL	54.5	
4,6-Dinitro-2-methylphenol	BQL	54.5	
4-Bromophenyl-phenylether	BQL	10.9	
4-Chloro-3-methylphenol	BQL	21.8	
4-Chloroaniline	BQL	21.8	
4-Chlorophenyl phenyl ether	BQL	10.9	
4-Methylphenol	BQL	10.9	
4-Nitroaniline	BQL	54.5	
4-Nitrophenol	BQL	54.5	
Acenaphthene	BQL	10.9	
Acenaphthylene	BQL	10.9	
Anthracene	BQL	10.9	
Benzoic acid	BQL	54.5	
Benzo[a]anthracene	BQL	10.9	
Benzo[a]pyrene	BQL	10.9	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9308131-02C
Client ID: 01074 MW2-W-A
Collected: 08/11/93
Dilution: 1

Matrix: WATER
Method: 8270
Units: ug/L

Analyst: IM
Analyzed: 08/25/93
Prepared: 08/19/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo(b)fluoranthene	BQL	10.9	
Benzo(g,h,i)perylene	BQL	10.9	
Benzo(k)fluoranthene	BQL	10.9	
Benzyl alcohol	BQL	21.8	
bis(2-Chloroethoxy) methane	BQL	10.9	
bis(2-Chloroethyl) ether	BQL	10.9	
bis(2-Chloroisopropyl) ether	BQL	10.9	
bis(2-Ethylhexyl)phthalate	BQL	10.9	
Butyl benzyl phthalate	BQL	10.9	
Chrysene	BQL	10.9	
di-n-Butylphthalate	BQL	10.9	
di-n-Octylphthalate	BQL	10.9	
Dibenzofuran	BQL	10.9	
Dibenz(a,h)anthracene	BQL	10.9	
Diethylphthalate	BQL	10.9	
Dimethyl phthalate	BQL	10.9	
Fluoranthene	BQL	10.9	
Fluorene	BQL	10.9	
Hexachlorobenzene	BQL	10.9	
Hexachlorobutadiene	BQL	10.9	
Hexachlorocyclopentadiene	BQL	10.9	
Hexachloroethane	BQL	10.9	
Indeno(1,2,3-cd)pyrene	BQL	10.9	
Isophorone	BQL	10.9	
N-Nitroso-di-n-propylamine	BQL	10.9	
N-nitrosodiphenylamine	BQL	10.9	
Naphthalene	BQL	10.9	
Nitrobenzene	BQL	10.9	
Pentachlorophenol	BQL	54.5	
Phenanthrene	BQL	10.9	
Phenol	BQL	10.9	
Pyrene	BQL	10.9	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9308151-02A
Client ID: 01074 MW2-W-A
Collected: 08/11/93
Dilution: 1

Matrix: WATER
Method: 8240w
Units: ug/L

Analyst: NH
Analyzed: 08/23/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.00	
1,1,2,2-Tetrachloroethane	82.7	5.00	
1,1,2-Trichloroethane	6.04	5.00	
1,1-Dichloroethane	BQL	5.00	
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,2-Dichloropropane	BQL	5.00	
2-Butanone	BQL	10.0	
2-Chloroethylvinyl ether	BQL	10.0	
2-Hexanone	BQL	10.0	
4-Methyl-2-pentanone	BQL	10.0	
Acetone	BQL	10.0	
Benzene	BQL	5.00	
Bromodichloromethane	BQL	5.00	
Bromoform	BQL	5.00	
Bromomethane	BQL	10.0	
Carbon Disulfide	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroethane	BQL	10.0	
Chloroform	BQL	5.00	
Chloromethane	BQL	10.0	
cis-1,3-Dichloropropene	BQL	5.00	
Dibromochloromethane	BQL	5.00	
Ethylbenzene	BQL	5.00	
Methylene chloride	BQL	5.00	
Styrene	BQL	5.00	
Tetrachloroethene	6.25	5.00	
Toluene	BQL	5.00	
trans-1,2-Dichloroethene	BQL	5.00	
trans-1,3-Dichloropropene	BQL	5.00	
Trichloroethene	46.8	5.00	
Vinyl Acetate	BQL	10.0	
Vinyl chloride	BQL	10.0	
Xylenes	BQL	5.00	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308131-020
Client ID: 01074 MW2-W-A
Collected: 08/11/93
Dilution: 1Matrix: WATER
Method: SU846 8080
Units: ug/LAnalyst: PH
Analyzed: 09/07/93
Prepared: 08/19/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	0.118	
4,4'-DDE	BQL	0.043	
4,4'-DDT	BQL	0.129	
Aldrin	BQL	0.043	
alpha-BHC	BQL	0.032	
Aroclor 1016	BQL	0.538	
Aroclor 1221	BQL	0.538	
Aroclor 1232	BQL	0.538	
Aroclor 1242	BQL	0.699	
Aroclor 1248	BQL	1.08	
Aroclor 1254	BQL	1.08	
Aroclor 1260	BQL	1.08	
beta-BHC	BQL	0.064	
Chlordane	BQL	0.150	
delta-BHC	BQL	0.097	
Dieldrin	BQL	0.022	
Endosulfan I	BQL	0.150	
Endosulfan II	BQL	0.043	
Endosulfan sulfate	BQL	0.710	
Endrin	BQL	0.064	
Endrin aldehyde	BQL	0.247	
gamma-BHC (Lindane)	BQL	0.043	
Heptachlor	BQL	0.032	
Heptachlor epoxide	BQL	0.092	
Methoxychlor	BQL	1.89	
Toxaphene	BQL	2.58	

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS

GP ID: 9308131-02

Client ID: 01074 MW2-W-A

Matrix: WATER

Collected: 08/11/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	NCAW 204.2	BQL	28.0	ug/L	1	08/30/93	09/02/93 FU
Arsenic	NCAW 206.2	BQL	3.70	ug/L	1	08/30/93	09/01/93 FU
Lead	NCAW 239.2	21.0	1.80	ug/L	1	08/30/93	09/01/93 FU
Mercury	NCAW 245.1	BQL	0.200	ug/L	1	09/13/93	09/14/93 LL
Potassium	NCAW 258.1	1.61	0.300	mg/L	1	08/30/93	09/14/93 FU
Selenium	NCAW 270.2	BQL	4.30	ug/L	1	08/30/93	09/01/93 FU
Silver	NCAW 272.2	BQL	0.600	ug/L	1	08/30/93	09/01/93 FU
Sodium	NCAW 273.1	27.9	0.190	mg/L	1	08/30/93	09/14/93 FU
Thallium	NCAW 279.2	BQL	5.10	ug/L	1	08/30/93	09/01/93 FU
Aluminum	NCAW 200.7	9180.0	96.2	ug/L	1	08/30/93	08/31/93 MB
Barium	NCAW 200.7	61.8	11.0	ug/L	1	08/30/93	08/31/93 MB
Beryllium	NCAW 200.7	BQL	0.700	ug/L	1	08/30/93	08/31/93 MB
Calcium	NCAW 200.7	18200.0	87.5	ug/L	1	08/30/93	08/31/93 MB
Cadmium	NCAW 200.7	BQL	3.00	ug/L	1	08/30/93	08/31/93 MB
Cobalt	NCAW 200.7	BQL	9.60	ug/L	1	08/30/93	08/31/93 MB
Chromium	NCAW 200.7	19.8	8.21	ug/L	1	08/30/93	08/31/93 MB
Copper	NCAW 200.7	BQL	20.4	ug/L	1	08/30/93	08/31/93 MB
Iron	NCAW 200.7	9060.0	31.0	ug/L	1	08/30/93	08/31/93 MB
Magnesium	NCAW 200.7	8540.0	45.5	ug/L	1	08/30/93	08/31/93 MB
Manganese	NCAW 200.7	182.0	4.80	ug/L	1	08/30/93	08/31/93 MB
Nickel	NCAW 200.7	BQL	15.5	ug/L	1	08/30/93	08/31/93 MB
Vanadium	NCAW 200.7	15.7	10.7	ug/L	1	08/30/93	08/31/93 MB
Zinc	NCAW 200.7	42.2	18.3	ug/L	1	08/30/93	09/02/93 TES

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9308131-03C
Client ID: 01075 M&S-W-A
Collected: 08/11/93
Dilution: 1

Matrix: WATER
Method: 8270
Units: ug/L

Analyst: IM
Analyzed: 08/25/93
Prepared: 08/19/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	10.8	
1,2-Dichlorobenzene	BQL	10.8	
1,3-Dichlorobenzene	BQL	10.8	
1,4-Dichlorobenzene	BQL	10.8	
2,4,5-Trichlorophenol	BQL	10.8	
2,4,6-Trichlorophenol	BQL	10.8	
2,4-Dichlorophenol	BQL	10.8	
2,4-Dimethylphenol	BQL	10.8	
2,4-Dinitrophenol	BQL	54.0	
2,4-Dinitrotoluene	BQL	10.8	
2,6-Dinitrotoluene	BQL	10.8	
2-Chloronaphthalene	BQL	10.8	
2-Chlorophenol	BQL	10.8	
2-Methylnaphthalene	BQL	10.8	
2-Methylphenol	BQL	10.8	
2-Nitroaniline	BQL	54.0	
2-Nitrophenol	BQL	10.8	
3,3'-Dichlorobenzidine	BQL	21.6	
3-Nitroaniline	BQL	54.0	
4,6-Dinitro-2-methylphenol	BQL	54.0	
4-Bromophenyl-phenylether	BQL	10.8	
4-Chloro-3-methylphenol	BQL	21.6	
4-Chloroaniline	BQL	21.6	
4-Chlorophenyl phenyl ether	BQL	10.8	
4-Methylphenol	BQL	10.8	
4-Nitroaniline	BQL	54.0	
4-Nitrophenol	BQL	54.0	
Acenaphthene	BQL	10.8	
Acenaphthylene	BQL	10.8	
Anthracene	BQL	10.8	
Benzoic acid	BQL	54.0	
Benzo[a]anthracene	BQL	10.8	
Benzo[a]pyrene	BQL	10.8	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9308131-03C
Client ID: 01075 MW3-W-A
Collected: 08/11/93
Dilution: 1

Matrix: WATER
Method: 8270
Units: ug/L

Analyst: IM
Analyzed: 08/25/93
Prepared: 08/19/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo(b)fluoranthene	BQL	10.8	
Benzo(g,h,i)perylene	BQL	10.8	
Benzo(k)fluoranthene	BQL	10.8	
Benzyl alcohol	BQL	21.6	
bis(2-Chloroethoxy) methane	BQL	10.8	
bis(2-Chloroethyl) ether	BQL	10.8	
bis(2-Chloroisopropyl) ether	BQL	10.8	
bis(2-Ethylhexyl)phthalate	BQL	10.8	
Butyl benzyl phthalate	BQL	10.8	
Chrysene	BQL	10.8	
di-n-Butylphthalate	BQL	10.8	
di-n-Octylphthalate	BQL	10.8	
Dibenzofuran	BQL	10.8	
Dibenz(a,h)anthracene	BQL	10.8	
Diethylphthalate	BQL	10.8	
Dimethyl phthalate	BQL	10.8	
Fluoranthene	BQL	10.8	
Fluorene	BQL	10.8	
Hexachlorobenzene	BQL	10.8	
Hexachlorobutadiene	BQL	10.8	
Hexachlorocyclopentadiene	BQL	10.8	
Hexachloroethane	BQL	10.8	
Indeno(1,2,3-cd)pyrene	BQL	10.8	
Isophorone	BQL	10.8	
N-Nitroso-di-n-propylamine	BQL	10.8	
N-nitrosodiphenylamine	BQL	10.8	
Naphthalene	BQL	10.8	
Nitrobenzene	BQL	10.8	
Pentachlorophenol	BQL	54.0	
Phenanthrene	BQL	10.8	
Phenol	BQL	10.8	
Pyrene	BQL	10.8	

GP ID: 9308131-03A
 Client ID: 01075 M3-U-A
 Collected: 08/11/93
 Dilution: 1

Matrix: WATER
 Method: 8240w
 Units: ug/L

Analyst: MH
 Analyzed: 08/23/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.00	
1,1,2,2-Tetrachloroethane	213.0	5.00	*
1,1,2-Trichloroethane	18.1	5.00	
1,1-Dichloroethane	BQL	5.00	
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,2-Dichloropropene	BQL	5.00	
2-Butanone	BQL	10.0	
2-Chloroethylvinyl ether	BQL	10.0	
2-Hexanone	BQL	10.0	
4-Methyl-2-pentanone	BQL	10.0	
Acetone	BQL	10.0	
Benzene	BQL	5.00	
Bromodichloromethane	BQL	5.00	
Bromoform	BQL	5.00	
Bromomethane	BQL	10.0	
Carbon Disulfide	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroethane	BQL	10.0	
Chloroform	BQL	5.00	
Chloromethane	BQL	10.0	
cis-1,3-Dichloropropene	BQL	5.00	
Dibromochloromethane	BQL	5.00	
Ethylbenzene	BQL	5.00	
Methylene chloride	BQL	5.00	
Styrene	BQL	5.00	
Tetrachloroethene	12.2	5.00	
Toluene	BQL	5.00	
trans-1,2-Dichloroethene	78.9	5.00	
trans-1,3-Dichloropropene	BQL	5.00	
Trichloroethene	153.0	5.00	
Vinyl Acetate	BQL	10.0	
Vinyl chloride	BQL	10.0	
Xylenes	BQL	5.00	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308131-030
Client ID: 01075 MW3-W-A
Collected: 08/11/93
Dilution: 1Matrix: WATER
Method: SW846 8080
Units: ug/LAnalyst: PH
Analyzed: 09/07/93
Prepared: 08/19/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	0.120	
4,4'-DDE	BQL	0.044	
4,4'-DDT	BQL	0.131	
Aldrin	BQL	0.044	
alpha-BHC	BQL	0.033	
Aroclor 1016	BQL	0.545	
Aroclor 1221	BQL	0.545	
Aroclor 1232	BQL	0.545	
Aroclor 1242	BQL	0.708	
Aroclor 1248	BQL	1.09	
Aroclor 1254	BQL	1.09	
Aroclor 1260	BQL	1.09	
beta-BHC	BQL	0.065	
Chlordane	BQL	0.153	
delta-BHC	BQL	0.098	
Dieldrin	BQL	0.022	
Endosulfan I	BQL	0.153	
Endosulfan II	BQL	0.044	
Endosulfan sulfate	BQL	0.719	
Endrin	BQL	0.065	
Endrin aldehyde	BQL	0.251	
gamma-BHC (Lindane)	BQL	0.044	
Heptachlor	BQL	0.033	
Heptachlor epoxide	BQL	0.905	
Methoxychlor	BQL	1.92	
Toxaphene	BQL	2.62	

GP ID: 9308131-03
Client ID: 01075 MW3-W-AMatrix: WATER
Collected: 08/11/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	NCAMW 204.2	BQL	28.0	ug/L	1	08/30/93	09/02/93 FU
Arsenic	NCAMW 206.2	BQL	3.70	ug/L	1	08/30/93	09/01/93 FU
Lead	NCAMW 239.2	20.5	1.80	ug/L	1	08/30/93	09/01/93 FU
Mercury	NCAMW 245.1	BQL	0.200	ug/L	1	09/13/93	09/14/93 LL
Potassium	NCAMW 258.1	0.520	0.300	mg/L	1	08/30/93	09/14/93 FU
Selenium	NCAMW 270.2	BQL	4.30	ug/L	1	08/30/93	09/01/93 FU
Silver	NCAMW 272.2	BQL	0.600	ug/L	1	08/30/93	09/01/93 FU
Sodium	NCAMW 273.1	36.1	0.190	mg/L	1	08/30/93	09/14/93 FU
Thallium	NCAMW 279.2	BQL	5.10	ug/L	1	08/30/93	09/01/93 FU
Aluminum	NCAMW 200.7	418.0	121.0	ug/L	1	08/30/93	09/02/93 TES
Barium	NCAMW 200.7	52.0	11.0	ug/L	1	08/30/93	08/31/93 MB
Beryllium	NCAMW 200.7	BQL	0.700	ug/L	1	08/30/93	08/31/93 MB
Calcium	NCAMW 200.7	13400.0	87.5	ug/L	1	08/30/93	08/31/93 MB
Cadmium	NCAMW 200.7	BQL	3.00	ug/L	1	08/30/93	08/31/93 MB
Cobalt	NCAMW 200.7	28.9	9.60	ug/L	1	08/30/93	08/31/93 MB
Chromium	NCAMW 200.7	8.64	8.21	ug/L	1	08/30/93	08/31/93 MB
Copper	NCAMW 200.7	BQL	20.4	ug/L	1	08/30/93	08/31/93 MB
Iron	NCAMW 200.7	2810.0	31.0	ug/L	1	08/30/93	08/31/93 MB
Magnesium	NCAMW 200.7	5750.0	45.5	ug/L	1	08/30/93	08/31/93 MB
Manganese	NCAMW 200.7	340.0	4.80	ug/L	1	08/30/93	08/31/93 MB
Nickel	NCAMW 200.7	20.2	15.5	ug/L	1	08/30/93	08/31/93 MB
Vanadium	NCAMW 200.7	BQL	10.7	ug/L	1	08/30/93	08/31/93 MB
Zinc	NCAMW 200.7	58.0	18.3	ug/L	1	08/30/93	09/02/93 TES

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9308131-04C
 Client ID: 01076 M/S-W-A (DUP)
 Collected: 08/11/93
 Dilution: 1

Matrix: WATER
 Method: 8270
 Units: ug/L

Analyst: IM
 Analyzed: 08/26/93
 Prepared: 08/19/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	10.6	
1,2-Dichlorobenzene	BQL	10.6	
1,3-Dichlorobenzene	BQL	10.6	
1,4-Dichlorobenzene	BQL	10.6	
2,4,5-Trichlorophenol	BQL	10.6	
2,4,6-Trichlorophenol	BQL	10.6	
2,4-Dichlorophenol	BQL	10.6	
2,4-Dimethylphenol	BQL	10.6	
2,4-Dinitrophenol	BQL	53.0	
2,4-Dinitrotoluene	BQL	10.6	
2,6-Dinitrotoluene	BQL	10.6	
2-Chloronaphthalene	BQL	10.6	
2-Chlorophenol	BQL	10.6	
2-Methylnaphthalene	BQL	10.6	
2-Methylphenol	BQL	10.6	
2-Nitroaniline	BQL	53.0	
2-Nitrophenol	BQL	10.6	
3,3'-Dichlorobenzidine	BQL	21.2	
3-Nitroaniline	BQL	53.0	
4,6-Dinitro-2-methylphenol	BQL	53.0	
4-Bromophenyl-phenylether	BQL	10.6	
4-Chloro-3-methylphenol	BQL	21.2	
4-Chloroaniline	BQL	21.2	
4-Chlorophenyl phenyl ether	BQL	10.6	
4-Methylphenol	BQL	10.6	
4-Nitroaniline	BQL	53.0	
4-Nitrophenol	BQL	53.0	
Acenaphthene	BQL	10.6	
Acenaphthylene	BQL	10.6	
Anthracene	BQL	10.6	
Benzoic acid	BQL	53.0	
Benzo(a)anthracene	BQL	10.6	
Benzo(a)pyrene	BQL	10.6	

GP ID: 9308131-04C
 Client ID: D1076 MW3-W-A (DUP)
 Collected: 08/11/93
 Dilution: 1

Matrix: WATER
 Method: 8270
 Units: ug/L

Analyst: IM
 Analyzed: 08/26/93
 Prepared: 08/19/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo(b)fluoranthene	BQL	10.6	
Benzo(g,h,i)perylene	BQL	10.6	
Benzo(k)fluoranthene	BQL	10.6	
Benzyl alcohol	BQL	21.2	
bis(2-Chloroethoxy) methane	BQL	10.6	
bis(2-Chloroethyl) ether	BQL	10.6	
bis(2-Chloroisopropyl) ether	BQL	10.6	
bis(2-Ethylhexyl)phthalate	BQL	10.6	
Butyl benzyl phthalate	BQL	10.6	
Chrysene	BQL	10.6	
di-n-Butylphthalate	BQL	10.6	
di-n-Octylphthalate	BQL	10.6	
Dibenzofuran	BQL	10.6	
Dibenz(a,h)anthracene	BQL	10.6	
Diethylphthalate	BQL	10.6	
Dimethyl phthalate	BQL	10.6	
Fluoranthene	BQL	10.6	
Fluorene	BQL	10.6	
Hexachlorobenzene	BQL	10.6	
Hexachlorobutadiene	BQL	10.6	
Hexachlorocyclopentadiene	BQL	10.6	
Hexachloroethane	BQL	10.6	
Indeno[1,2,3-cd]pyrene	BQL	10.6	
Isophorone	BQL	10.6	
N-Nitroso-di-n-propylamine	BQL	10.6	
N-nitrosodiphenylamine	BQL	10.6	
Naphthalene	BQL	10.6	
Nitrobenzene	BQL	10.6	
Pentachlorophenol	BQL	53.0	
Phenanthrene	BQL	10.6	
Phenol	BQL	10.6	
Pyrene	BQL	10.6	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9308131-04A
 Client ID: 01076 MW3-W-A (DUP)
 Collected: 08/11/93
 Dilution: 1

Matrix: WATER
 Method: 8240w
 Units: ug/L

Analyst: MH
 Analyzed: 08/23/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.00	
1,1,2,2-Tetrachloroethane	236.0	5.00	*
1,1,2-Trichloroethane	16.8	5.00	
1,1-Dichloroethane	BQL	5.00	
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,2-Dichloropropane	BQL	5.00	
2-Butanone	BQL	10.0	
2-Chloroethylvinyl ether	BQL	10.0	
2-Hexanone	BQL	10.0	
4-Methyl-2-pentanone	BQL	10.0	
Acetone	BQL	10.0	
Benzene	BQL	5.00	
Bromodichloromethane	BQL	5.00	
Bromoform	BQL	5.00	
Bromomethane	BQL	10.0	
Carbon Disulfide	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroethane	BQL	10.0	
Chloroform	BQL	5.00	
Chloromethane	BQL	10.0	
cis-1,3-Dichloropropene	BQL	5.00	
Dibromochloromethane	BQL	5.00	
Ethylbenzene	BQL	5.00	
Methylene chloride	BQL	5.00	
Styrene	BQL	5.00	
Tetrachloroethene	12.4	5.00	
Toluene	BQL	5.00	
trans-1,2-Dichloroethene	76.2	5.00	
trans-1,3-Dichloropropene	BQL	5.00	
Trichloroethene	151.0	5.00	
Vinyl Acetate	BQL	10.0	
Vinyl chloride	BQL	10.0	
Xylenes	BQL	5.00	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308131-04D
Client ID: 01076 MW3-W-A (DUP)
Collected: 08/11/93
Dilution: 1Matrix: WATER
Method: SW846 8080
Units: ug/LAnalyst: PH
Analyzed: 09/07/93
Prepared: 08/19/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	0.116	
4,4'-DDE	BQL	0.042	
4,4'-DDT	BQL	0.126	
Aldrin	BQL	0.042	
alpha-BHC	BQL	0.032	
Aroclor 1016	BQL	0.525	
Aroclor 1221	BQL	0.525	
Aroclor 1232	BQL	0.525	
Aroclor 1242	BQL	0.682	
Aroclor 1248	BQL	1.05	
Aroclor 1254	BQL	1.05	
Aroclor 1260	BQL	1.05	
beta-BHC	BQL	0.063	
Chlordane	BQL	0.147	
delta-BHC	BQL	0.094	
Dieldrin	BQL	0.021	
Endosulfan I	BQL	0.147	
Endosulfan II	BQL	0.042	
Endosulfan sulfate	BQL	0.693	
Endrin	BQL	0.063	
Endrin aldehyde	BQL	0.242	
gamma-BHC (Lindane)	BQL	0.042	
Heptachlor	BQL	0.032	
Heptachlor epoxide	BQL	0.872	
Methoxychlor	BQL	1.85	
Toxaphene	BQL	2.52	

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS

GP ID: 9308131-04

Client ID: 01076 MW3-W-A (DUP)

Matrix: WATER

Collected: 08/11/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	MCAW 204.2	BQL	28.0	ug/L	1	08/30/93	09/02/93 FU
Arsenic	MCAW 206.2	BQL	3.70	ug/L	1	08/30/93	09/01/93 FU
Lead	MCAW 239.2	24.9	1.80	ug/L	1	08/30/93	09/01/93 FU
Mercury	MCAW 245.1	BQL	0.200	ug/L	1	09/13/93	09/14/93 LL
Potassium	MCAW 258.1	2.15	0.300	mg/L	1	08/30/93	09/14/93 FU
Selenium	MCAW 270.2	BQL	4.30	ug/L	1	08/30/93	09/01/93 FU
Silver	MCAW 272.2	BQL	0.600	ug/L	1	08/30/93	09/01/93 FU
Sodium	MCAW 273.1	34.9	0.190	mg/L	1	08/30/93	09/14/93 FU
Thallium	MCAW 279.2	BQL	5.10	ug/L	1	08/30/93	09/01/93 FU
Aluminum	MCAW 200.7	519.0	96.2	ug/L	1	08/30/93	09/03/93 MB
Barium	MCAW 200.7	49.6	11.0	ug/L	1	08/30/93	08/31/93 MB
Beryllium	MCAW 200.7	BQL	0.700	ug/L	1	08/30/93	08/31/93 MB
Calcium	MCAW 200.7	12800.0	87.5	ug/L	1	08/30/93	08/31/93 MB
Cadmium	MCAW 200.7	BQL	3.00	ug/L	1	08/30/93	08/31/93 MB
Cobalt	MCAW 200.7	27.9	9.60	ug/L	1	08/30/93	08/31/93 MB
Chromium	MCAW 200.7	9.48	8.21	ug/L	1	08/30/93	08/31/93 MB
Copper	MCAW 200.7	BQL	20.4	ug/L	1	08/30/93	08/31/93 MB
Iron	MCAW 200.7	3010.0	31.0	ug/L	1	08/30/93	08/31/93 MB
Magnesium	MCAW 200.7	5350.0	45.5	ug/L	1	08/30/93	08/31/93 MB
Manganese	MCAW 200.7	323.0	4.80	ug/L	1	08/30/93	08/31/93 MB
Nickel	MCAW 200.7	29.6	15.5	ug/L	1	08/30/93	08/31/93 MB
Vanadium	MCAW 200.7	BQL	10.7	ug/L	1	08/30/93	08/31/93 MB
Zinc	MCAW 200.7	54.5	18.4	ug/L	1	08/30/93	09/03/93 MB

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9308131-05A
Client ID: 00840 TRIP BLANK
Collected: 08/11/93
Dilution: 1

Matrix: WATER
Method: 8240w
Units: ug/L

Analyst: MN
Analyzed: 08/23/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.00	
1,1,2,2-Tetrachloroethane	BQL	5.00	
1,1,2-Trichloroethane	BQL	5.00	
1,1-Dichloroethane	BQL	5.00	
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,2-Dichloropropane	BQL	5.00	
2-Butanone	BQL	10.0	
2-Chloroethylvinyl ether	BQL	10.0	
2-Hexanone	BQL	10.0	
4-Methyl-2-pentanone	BQL	10.0	
Acetone	BQL	10.0	
Benzene	BQL	5.00	
Bromodichloromethane	BQL	5.00	
Bromoform	BQL	5.00	
Bromomethane	BQL	10.0	
Carbon Disulfide	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroethane	BQL	10.0	
Chloroform	BQL	5.00	
Chloromethane	BQL	10.0	
cis-1,3-Dichloropropene	BQL	5.00	
Dibromochloromethane	BQL	5.00	
Ethylbenzene	BQL	5.00	
Methylene chloride	5.31	5.00	B
Styrene	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Toluene	BQL	5.00	
trans-1,2-Dichloroethene	BQL	5.00	
trans-1,3-Dichloropropene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl Acetate	BQL	10.0	
Vinyl chloride	BQL	10.0	
Xylenes	BQL	5.00	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9308131-06A
Client ID: 00841 TRIP BLANK
Collected: 08/11/93
Dilution: 1

Matrix: WATER
Method: 8240w
Units: ug/L

Analyst: MH
Analyzed: 08/23/93
Prepared:

VOLATILE TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
1,1,1-Trichloroethane	BQL	5.00	
1,1,2,2-Tetrachloroethane	BQL	5.00	
1,1,2-Trichloroethane	BQL	5.00	
1,1-Dichloroethane	BQL	5.00	
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,2-Dichloropropane	BQL	5.00	
2-Butanone	BQL	10.0	
2-Chloroethylvinyl ether	BQL	10.0	
2-Hexanone	BQL	10.0	
4-Methyl-2-pentanone	BQL	10.0	
Acetone	BQL	10.0	
Benzene	BQL	5.00	
Bromodichloromethane	BQL	5.00	
Bromoform	BQL	5.00	
Bromomethane	BQL	10.0	
Carbon Disulfide	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroethane	BQL	10.0	
Chloroform	BQL	5.00	
Chloromethane	BQL	10.0	
cis-1,3-Dichloropropene	BQL	5.00	
Dibromochloromethane	BQL	5.00	
Ethylbenzene	BQL	5.00	
Methylene chloride	BQL	5.00	
Styrene	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Toluene	BQL	5.00	
trans-1,2-Dichloroethene	BQL	5.00	
trans-1,3-Dichloropropene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl Acetate	BQL	10.0	
Vinyl chloride	BQL	10.0	
Xylenes	BQL	5.00	

GP Work Order # 9308083

SAMPLE ANALYSIS REPORT

Prepared For:

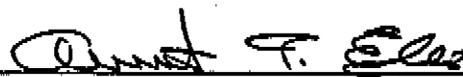
ROY F. WESTON
1 WESTON WAY
WEST CHESTER, PA 19380-1499

APG ADAMSITE DO# 10

Prepared By:

GP Environmental Services, Inc.
202 Perry Parkway
Gaithersburg, Maryland 20877

September 10, 1993


Albert F. Ellis
Albert Ellis, Laboratory Director

RECON
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Project: APG ADAMSITE DOW 10

ROY F. WESTON
1 WESTON WAY
WEST CHESTER, PA 19380-1499
Atten: JEANNE O'LEARYGP ENVIRONMENTAL SERVICES
202 Perry Parkway
Gaithersburg, MD 20877Atten: Client Services
Phone: (301) 926-6802Certified by: lp

SAMPLE IDENTIFICATION

GP ID			Client ID
9308083	-01	A	00829 TRIP BLANK
9308083	-02	A	00830 TRIP BLANK
9308083	-03	A	01082 DECON H2O
9308083	-03	B	
9308083	-03	C	
9308083	-03	D	
9308083	-03	E	
9308083	-03	F	
9308083	-03	G	
9308083	-03	H	
9308083	-03	I	
9308083	-03	J	
9308083	-04	A	01081 DECON H2O (DUP)
9308083	-04	B	
9308083	-04	C	
9308083	-04	D	
9308083	-04	E	
9308083	-04	F	
9308083	-04	G	
9308083	-04	H	

SAMPLE IDENTIFICATION

<u>GP ID</u>		<u>Client ID</u>
9308083	-04	I
9308083	-04	J
9308083	-05	A 01101 MW1-T-COMP
9308083	-05	B
9308083	-06	A 01102 MW2-T-COMP
9308083	-06	B
9308083	-07	A 01103 MW3-T-COMP
9308083	-07	B
9308083	-08	A 01104 B1-T-COMP
9308083	-08	B
9308083	-09	A 01105 B2-T-COMP
9308083	-09	B
9308083	-10	A 01106 B3-T-COMP
9308083	-10	B
9308083	-11	A 01107 B3-T-COMP (DUP)
9308083	-11	B
9308083	-12	A 00834 TRIP BLANK
9308083	-13	A 00835 TRIP BLANK
9308083	-14	A TCLP BLANK

GP Work Order # 9307228

SAMPLE ANALYSIS REPORT

Prepared For:

ROY F. WESTON
1 WESTON WAY
WEST CHESTER, PA 19380-1499

ADAMSITE D.O.#10

Prepared By:

GP Environmental Services, Inc.
202 Perry Parkway
Gaithersburg, Maryland 20877

August 27, 1993



Albert Ellis, Laboratory Director

Where is Reactivity-cyanide
for SW1-S-0?

Project: ADAMSITE D.O.#10

ROY F. WESTON
1 WESTON WAY
WEST CHESTER, PA 19380-1499
Atten: JEANNE O'LEARYGP ENVIRONMENTAL SERVICES
202 Perry Parkway
Gaithersburg, MD 20877Atten: Client Services
Phone: (301) 926-6802Certified by: T. T.

SAMPLE IDENTIFICATION

GP ID			Client ID
9307228	-01	A	00819 TRIP BLANK -
9307228	-02	A	00949 SW1-C-(0-2)**
9307228	-02	B	
9307228	-03	A	00950 SW1-C-(2-6)**
9307228	-03	B	
9307228	-04	A	00951 SW2-C-(0-2)**
9307228	-04	B	
9307228	-05	A	00952 SW2-C-(2-6)**
9307228	-05	B	
9307228	-06	A	00953 NE1-C-(0-2)**
9307228	-06	B	
9307228	-07	A	00954 NE1-C-(2-6)**
9307228	-07	B	
9307228	-08	A	00955 NE2-C-(0-2)**
9307228	-08	B	
9307228	-09	A	00956 NE2-C-(2-6)**
9307228	-09	B	
9307228	-10	A	00957 NE2-C-(2-6)** (DUP)
9307228	-10	B	
9307228	-11	A	00820 TRIP BLANK
9307228	-12	A	01035 NE2-S-0 (DUP)
9307228	-12	B	
9307228	-13	A	01036 NE2-S-0
9307228	-13	B	
9307228	-14	A	01037 NE1-S-0
9307228	-14	B	
9307228	-15	A	01039 SW2-S-0 (DUP)
9307228	-15	B	
9307228	-16	A	01040 SW2-S-0
9307228	-16	B	
9307228	-17	A	01041 SW1-S-0
9307228	-17	B	
9307228	-18	A	TCLP BLANK

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9307228-01A
 Client ID: 00819 TRIP BLANK
 Collected: 07/26/93
 Dilution: 1

Matrix: WATER
 Method: 8240 TCLP
 Units: ug/L

Analyst: DR
 Analyzed: 08/07/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,4-Dichlorobenzene	BQL	5.00	
2-Butanone	BQL	10.0	
Benzene	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroform	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl chloride	BQL	10.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-02A
Client ID: 00949 SW1-C-(0-2)''
Collected: 07/26/93
Dilution: 1Matrix: CEMENT
Method: 8270 TCLP
Units: ug/LAnalyst: MB
Analyzed: 08/11/93
Prepared: 08/04/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307228-028
 Client ID: 00949 SW1-C-(0-2)''
 Collected: 07/26/93
 Dilution: 10

Matrix: CEMENT
 Method: 8240 TCLP
 Units: ug/L

Analyst: DR
 Analyzed: 08/05/93
 Prepared:

VOLATILE TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-02A
Client ID: 00949 SW1-C-(0-2)''
Collected: 07/26/93
Dilution: 1Matrix: CEMENT
Method: 8080 TCLP
Units: ug/LAnalyst: TS
Analyzed: 08/23/93
Prepared: 08/09/93

GC TARGET COMPOUNDS - Herb

Parameter	Result	Det.Lim.	Qualifier
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-02A
Client ID: 00949 SW1-C-(0-2)''
Collected: 07/26/93
Dilution: 1Matrix: CEMENT
Method: 8150 TCLP
Units: ug/LAnalyst: TS
Analyzed: 08/13/93
Prepared: 08/06/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

ORGANIC ANALYSIS RESULTS

GP ID: 9307228-02

Client ID: 00949 SU1-C-(0-2)''

Matrix: CEMENT

Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Flash point	1010	N	100.0	Deg. C			08/23/93 KF

GP ID: 9307228-02
Client ID: 00949 SW1-C-(0-2)''Matrix: CEMENT
Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
TCLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Barium	SW846 6010	82.5	13.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/06/93	08/26/93 MB
TCLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Mercury	SW846 7470	BQL	0.200	ug/L	1	08/06/93	08/24/93 AR
TCLP Lead	SW846 6010	BQL	141.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/06/93	08/26/93 MB

OF ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS

GP ID: 9307228-02

Client ID: 00949 SW1-C-(0-2)''

Matrix: CEMENT

Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Reactive Cyanide	SW 846 7.3.3	BQL	0.075	mg/Kg	1		08/11/93 ST
Total Cyanide	SDW390/335.2	BQL	2.16	mg/Kg	1		08/05/93 SCT
pH	SW846 9045	11.2	0.001	pH	1		08/10/93 JS
Reactive Sulfide	SW 846 7.3.4	BQL	7.47	mg/Kg			08/11/93 JS

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-03A
Client ID: 00950 SW1-C-(2-6)''
Collected: 07/26/93
Dilution: 1Matrix: CEMENT
Method: 8270 TCLP
Units: ug/LAnalyst: MB
Analyzed: 08/11/93
Prepared: 08/04/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

GP ID: 9307228-03B
Client ID: 00950 SW1-C-(2-6)''
Collected: 07/26/93
Dilution: 10

Matrix: CEMENT
Method: 8240 TCLP
Units: ug/L

Analyst: DR
Analyzed: 08/05/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307228-03A
 Client ID: 00950 SW1-C-(2-6)''
 Collected: 07/26/93
 Dilution: 1

Matrix: CEMENT
 Method: 8080 TCLP
 Units: ug/L

Analyst: TS
 Analyzed: 08/23/93
 Prepared: 08/09/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9307228-03A
Client ID: 00950 SW1-C-(2-6)''
Collected: 07/26/93
Dilution: 1

Matrix: CEMENT
Method: 8150 TCLP
Units: ug/L

Analyst: TS
Analyzed: 08/13/93
Prepared: 08/06/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-03
Client ID: 00950 SV1-C-(2-6)''Matrix: CEMENT
Collected: 07/26/93

<u>Parameter</u>	<u>Method</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Units</u>	<u>Dil.</u>	<u>Prepared</u>	<u>Analyzed By</u>
Flash point	1010	N	100.0	Deg. C			08/23/93 KF

GP ID: 9307228-03

Client ID: 00950 SW1-C-(2-6)''

Matrix: CEMENT

Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
TCLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Barium	SW846 6010	223.0	13.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/06/93	08/26/93 MB
TCLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Mercury	SW846 7470	BQL	0.200	ug/L	1	08/06/93	08/24/93 AR
TCLP Lead	SW846 6010	BQL	141.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/06/93	08/26/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTSGP ID: 9307228-03
Client ID: 00950 SW1-C-(2-6)''Matrix: CEMENT
Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Reactive Cyanide	SW 846 7.3.3		BQL	0.074 mg/Kg	1		08/11/93 ST
Total Cyanide	SOW390/335.2		BQL	2.01 mg/Kg	1		08/05/93 SCT
pH	SW846 9045	11.4		0.001 pH	1		08/10/93 JS
Reactive Sulfide	SW 846 7.3.4		BQL	7.39 mg/Kg			08/11/93 JS

GP ID: 9307228-04A
Client ID: 00951 SW2-C-(0-2)''
Collected: 07/26/93
Dilution: 1

Matrix: CEMENT
Method: 8270 TCLP
Units: ug/L

Analyst: MB
Analyzed: 08/13/93
Prepared: 08/04/93

SEMIVOLATILE TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307228-04B
 Client ID: 00951 SW2-C-(0-2)''
 Collected: 07/26/93
 Dilution: 10

Matrix: CEMENT
 Method: 8240 TCLP
 Units: ug/L

Analyst: DR
 Analyzed: 08/05/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

GP Work Order # 9307137

SAMPLE ANALYSIS REPORT

Prepared For:

ROY F. WESTON
1 WESTON WAY
WEST CHESTER, PA 19380-1499

ADAMSITE D.O. #10

Prepared By:

GP Environmental Services, Inc.
202 Perry Parkway
Gaithersburg, Maryland 20877

August 17, 1993


Albert Ellis, Laboratory Director

Project: ADAMSITE D.O. #10

ROY F. WESTON
1 WESTON WAY
WEST CHESTER, PA 19380-1499
Atten: JEANNE O'LEARYGP ENVIRONMENTAL SERVICES
202 Perry Parkway
Gaithersburg, MD 20877Atten: Client Services
Phone: (301) 926-6802Certified by: Die

SAMPLE IDENTIFICATION

GP ID			Client ID
9307137	-01	A	00997 B1-S-(0-6)''
9307137	-01	B	
9307137	-02	A	00998 B1-S-(6''-2)'
9307137	-02	B	
9307137	-03	A	00999 B1-S-(4-6)'
9307137	-03	B	
9307137	-04	A	01001 B1-S-(10-12)'
9307137	-04	B	
9307137	-05	A	01002 B2-S-(0-6)''
9307137	-05	B	
9307137	-06	A	01003 B2-S-(6''-2)'
9307137	-06	B	
9307137	-07	A	01004 B2-S-(4-6)'
9307137	-07	B	
9307137	-08	A	01005 B2-S-(10-12)'
9307137	-08	B	
9307137	-09	A	01084 TRIP BLANK
9307137	-10	A	01085 TRIP BLANK

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307137-01B
 Client ID: 00997 81-S-(0-6)''
 Collected: 07/15/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: NS
 Analyzed: 07/26/93
 Prepared: 07/21/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	396.0	
1,2-Dichlorobenzene	BQL	396.0	
1,3-Dichlorobenzene	BQL	396.0	
1,4-Dichlorobenzene	BQL	396.0	
2,4,5-Trichlorophenol	BQL	396.0	
2,4,6-Trichlorophenol	BQL	396.0	
2,4-Dichlorophenol	BQL	396.0	
2,4-Dimethylphenol	BQL	396.0	
2,4-Dinitrophenol	BQL	1980.0	
2,4-Dinitrotoluene	BQL	396.0	
2,6-Dinitrotoluene	BQL	396.0	
2-Chloronaphthalene	BQL	396.0	
2-Chlorophenol	BQL	396.0	
2-Methylnaphthalene	BQL	396.0	
2-Methylphenol	BQL	396.0	
2-Nitroaniline	BQL	1980.0	
2-Nitrophenol	BQL	396.0	
3,3'-Dichlorobenzidine	BQL	792.0	
3-Nitroaniline	BQL	1980.0	
4,6-Dinitro-2-methylphenol	BQL	1980.0	
4-Bromophenyl-phenylether	BQL	396.0	
4-Chloro-3-methylphenol	BQL	792.0	
4-Chloroaniline	BQL	792.0	
4-Chlorophenyl phenyl ether	BQL	396.0	
4-Methylphenol	BQL	396.0	
4-Nitroaniline	BQL	1980.0	
4-Nitrophenol	BQL	1980.0	
Acenaphthene	BQL	396.0	
Acenaphthylene	BQL	396.0	
Anthracene	BQL	396.0	
Benzoic acid	BQL	1980.0	
Benzo(a)anthracene	BQL	396.0	
Benzo(a)pyrene	BQL	396.0	

GP ID: 9307137-01B
 Client ID: 00997 B1-S-(0-6)**
 Collected: 07/15/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MB
 Analyzed: 07/26/93
 Prepared: 07/21/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo[b]fluoranthene	BQL	396.0	
Benzo[ghi]perylene	BQL	396.0	
Benzo[k]fluoranthene	BQL	396.0	
Benzyl alcohol	BQL	792.0	
bis(2-Chloroethoxy) methane	BQL	396.0	
bis(2-Chloroethyl) ether	BQL	396.0	
bis(2-Chloroisopropyl) ether	BQL	396.0	
bis(2-Ethylhexyl)phthalate	BQL	396.0	
Butyl benzyl phthalate	BQL	396.0	
Chrysene	BQL	396.0	
di-n-Butylphthalate	BQL	396.0	
di-n-Octylphthalate	BQL	396.0	
Dibenzofuran	BQL	396.0	
Dibenz[ah]anthracene	BQL	396.0	
Diethylphthalate	BQL	396.0	
Dimethyl phthalate	BQL	396.0	
Fluoranthene	BQL	396.0	
Fluorene	BQL	396.0	
Hexachlorobenzene	BQL	396.0	
Hexachlorobutadiene	BQL	396.0	
Hexachlorocyclopentadiene	BQL	396.0	
Hexachloroethane	BQL	396.0	
Indeno[1,2,3-cd]pyrene	BQL	396.0	
Isophorone	BQL	396.0	
N-Nitroso-di-n-propylamine	BQL	396.0	
N-nitrosodiphenylamine	BQL	396.0	
Naphthalene	BQL	396.0	
Nitrobenzene	BQL	396.0	
Pentachlorophenol	BQL	1980.0	
Phenanthrene	BQL	396.0	
Phenol	BQL	396.0	
Pyrene	BQL	396.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307137-028
Client ID: 00998 81-S-(6''-2)'
Collected: 07/15/93
Dilution: 1

Matrix: SOIL
Method: 8270
Units: ug/Kg

Analyst: MB
Analyzed: 07/26/93
Prepared: 07/21/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det. Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	386.0	
1,2-Dichlorobenzene	BQL	386.0	
1,3-Dichlorobenzene	BQL	386.0	
1,4-Dichlorobenzene	BQL	386.0	
2,4,5-Trichlorophenol	BQL	386.0	
2,4,6-Trichlorophenol	BQL	386.0	
2,4-Dichlorophenol	BQL	386.0	
2,4-Dimethylphenol	BQL	386.0	
2,4-Dinitrophenol	BQL	1930.0	
2,4-Dinitrotoluene	BQL	386.0	
2,6-Dinitrotoluene	BQL	386.0	
2-Chloronaphthalene	BQL	386.0	
2-Chlorophenol	BQL	386.0	
2-Methylnaphthalene	BQL	386.0	
2-Methylphenol	BQL	386.0	
2-Nitroaniline	BQL	1930.0	
2-Nitrophenol	BQL	386.0	
3,3'-Dichlorobenzidine	BQL	772.0	
3-Nitroaniline	BQL	1930.0	
4,6-Dinitro-2-methylphenol	BQL	1930.0	
4-Bromophenyl-phenylether	BQL	386.0	
4-Chloro-3-methylphenol	BQL	772.0	
4-Chloroaniline	BQL	772.0	
4-Chlorophenyl phenyl ether	BQL	386.0	
4-Methylphenol	BQL	386.0	
4-Nitroaniline	BQL	1930.0	
4-Nitrophenol	BQL	1930.0	
Acenaphthene	BQL	386.0	
Acenaphthylene	BQL	386.0	
Anthracene	BQL	386.0	
Benzoic acid	BQL	1930.0	
Benzo(a)anthracene	BQL	386.0	
Benzo(a)pyrene	BQL	386.0	

GP ID: 9307137-028
 Client ID: 00998 81-5-(611-2)
 Collected: 07/15/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MB
 Analyzed: 07/26/93
 Prepared: 07/21/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det. Lim.	Qualifier
Benzo[b]fluoranthene	BQL	386.0	
Benzo[g,h,i]perylene	BQL	386.0	
Benzo[k]fluoranthene	BQL	386.0	
Benzyl alcohol	BQL	772.0	
bis(2-Chloroethoxy) methane	BQL	386.0	
bis(2-Chloroethyl) ether	BQL	386.0	
bis(2-Chloroisopropyl) ether	BQL	386.0	
bis(2-Ethylhexyl)phthalate	BQL	386.0	
Butyl benzyl phthalate	BQL	386.0	
Chrysene	BQL	386.0	
di-n-Butylphthalate	BQL	386.0	
di-n-Octylphthalate	BQL	386.0	
Dibenzofuran	BQL	386.0	
Dibenz[a,h]anthracene	BQL	386.0	
Diethylphthalate	BQL	386.0	
Dimethyl phthalate	BQL	386.0	
Fluoranthene	BQL	386.0	
Fluorene	BQL	386.0	
Hexachlorobenzene	BQL	386.0	
Hexachlorobutadiene	BQL	386.0	
Hexachlorocyclopentadiene	BQL	386.0	
Hexachloroethane	BQL	386.0	
Indeno[1,2,3-cd]pyrene	BQL	386.0	
Isophorone	BQL	386.0	
N-Nitroso-di-n-propylamine	BQL	386.0	
N-nitrosodiphenylamine	BQL	386.0	
Naphthalene	BQL	386.0	
Nitrobenzene	BQL	386.0	
Pentachlorophenol	BQL	1930.0	
Phenanthrene	BQL	386.0	
Phenol	BQL	386.0	
Pyrene	BQL	386.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307137-03a
 Client ID: 00999 B1-S-(4-6)
 Collected: 07/15/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MB
 Analyzed: 07/26/93
 Prepared: 07/21/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det. Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	396.0	
1,2-Dichlorobenzene	BQL	396.0	
1,3-Dichlorobenzene	BQL	396.0	
1,4-Dichlorobenzene	BQL	396.0	
2,4,5-Trichlorophenol	BQL	396.0	
2,4,6-Trichlorophenol	BQL	396.0	
2,4-Dichlorophenol	BQL	396.0	
2,4-Dimethylphenol	BQL	396.0	
2,4-Dinitrophenol	BQL	1980.0	
2,4-Dinitrotoluene	BQL	396.0	
2,6-Dinitrotoluene	BQL	396.0	
2-Chloronaphthalene	BQL	396.0	
2-Chlorophenol	BQL	396.0	
2-Methylnaphthalene	BQL	396.0	
2-Methylphenol	BQL	396.0	
2-Nitroaniline	BQL	1980.0	
2-Nitrophenol	BQL	396.0	
3,3'-Dichlorobenzidine	BQL	792.0	
3-Nitroaniline	BQL	1980.0	
4,6-Dinitro-2-methylphenol	BQL	1980.0	
4-Bromophenyl-phenylether	BQL	396.0	
4-Chloro-3-methylphenol	BQL	792.0	
4-Chloroaniline	BQL	792.0	
4-Chlorophenyl phenyl ether	BQL	396.0	
4-Methylphenol	BQL	396.0	
4-Nitroaniline	BQL	1980.0	
4-Nitrophenol	BQL	1980.0	
Acenaphtene	BQL	396.0	
Acenaphthylene	BQL	396.0	
Anthracene	BQL	396.0	
Benzoic acid	BQL	1980.0	
Benzo[a]anthracene	BQL	396.0	
Benzo[a]pyrene	BQL	396.0	

GP ID: 9307137-038
 Client ID: 00999 #1-S-(4-6)
 Collected: 07/15/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MB
 Analyzed: 07/26/93
 Prepared: 07/21/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det. Lim.	Qualifier
Benzo[b]fluoranthene	BQL	396.0	
Benzo[g,h,i]perylene	BQL	396.0	
Benzo[k]fluoranthene	BQL	396.0	
Benzyl alcohol	BQL	792.0	
bis(2-Chloroethoxy) methane	BQL	396.0	
bis(2-Chloroethyl) ether	BQL	396.0	
bis(2-Chloroisopropyl) ether	BQL	396.0	
bis(2-Ethylhexyl)phthalate	BQL	396.0	
Butyl benzyl phthalate	BQL	396.0	
Chrycene	BQL	396.0	
di-n-Butylphthalate	BQL	396.0	
di-n-Octylphthalate	BQL	396.0	
Dibenzofuran	BQL	396.0	
Dibenz[a,h]anthracene	BQL	396.0	
Diethylphthalate	BQL	396.0	
Dimethyl phthalate	BQL	396.0	
Fluoranthene	BQL	396.0	
Fluorene	BQL	396.0	
Hexachlorobenzene	BQL	396.0	
Hexachlorobutadiene	BQL	396.0	
Hexachlorocyclopentadiene	BQL	396.0	
Hexachloroethane	BQL	396.0	
Indeno[1,2,3-cd]pyrene	BQL	396.0	
Isophorone	BQL	396.0	
N-Nitroso-di-n-propylamine	BQL	396.0	
N-nitrosodiphenylamine	BQL	396.0	
Naphthalene	BQL	396.0	
Nitrobenzene	BQL	396.0	
Pentachlorophenol	BQL	1980.0	
Phenanthrene	BQL	396.0	
Phenol	BQL	396.0	
Pyrene	BQL	396.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307137-048
 Client ID: 01001 B1-S-(10-12)
 Collected: 07/15/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MB
 Analyzed: 07/26/93
 Prepared: 07/21/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	403.0	
1,2-Dichlorobenzene	BQL	403.0	
1,3-Dichlorobenzene	BQL	403.0	
1,4-Dichlorobenzene	BQL	403.0	
2,4,5-Trichlorophenol	BQL	403.0	
2,4,6-Trichlorophenol	BQL	403.0	
2,4-Dichlorophenol	BQL	403.0	
2,4-Dimethylphenol	BQL	403.0	
2,4-Dinitrophenol	BQL	2010.0	
2,4-Dinitrotoluene	BQL	403.0	
2,6-Dinitrotoluene	BQL	403.0	
2-Chloronaphthalene	BQL	403.0	
2-Chlorophenol	BQL	403.0	
2-Methylnaphthalene	BQL	403.0	
2-Methylphenol	BQL	403.0	
2-Nitroaniline	BQL	2010.0	
2-Nitrophenol	BQL	403.0	
3,3'-Dichlorobenzidine	BQL	805.0	
3-Nitroaniline	BQL	2010.0	
4,6-Dinitro-2-methylphenol	BQL	2010.0	
4-Bromophenyl-phenylether	BQL	403.0	
4-Chloro-3-methylphenol	BQL	805.0	
4-Chloroaniline	BQL	805.0	
4-Chlorophenyl phenyl ether	BQL	403.0	
4-Methylphenol	BQL	403.0	
4-Nitroaniline	BQL	2010.0	
4-Nitrophenol	BQL	2010.0	
Acenaphthene	BQL	403.0	
Acenaphthylene	BQL	403.0	
Anthracene	BQL	403.0	
Benzoic acid	BQL	2010.0	
Benzo[a]anthracene	BQL	403.0	
Benzo[a]pyrene	BQL	403.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307137-048
Client ID: 01001 B1-S-(10-12)
Collected: 07/15/93
Dilution: 1

Matrix: SOIL
Method: 8270
Units: ug/Kg

Analyst: MB
Analyzed: 07/26/93
Prepared: 07/21/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo[b]fluoranthene	BQL	403.0	
Benzo[g,h,i]perylene	BQL	403.0	
Benzo[k]fluoranthene	BQL	403.0	
Benzyl alcohol	BQL	805.0	
bis(2-Chloroethoxy) methane	BQL	403.0	
bis(2-Chloroethyl) ether	BQL	403.0	
bis(2-Chloroisopropyl) ether	BQL	403.0	
bis(2-Ethylhexyl)phthalate	BQL	403.0	
Butyl benzyl phthalate	BQL	403.0	
Chrysene	BQL	403.0	
di-n-Butylphthalate	BQL	403.0	
di-n-Octylphthalate	BQL	403.0	
Dibenzofuran	BQL	403.0	
Dibenz[a,h]anthracene	BQL	403.0	
Diethylphthalate	BQL	403.0	
Dimethyl phthalate	BQL	403.0	
Fluoranthene	BQL	403.0	
Fluorene	BQL	403.0	
Hexachlorobenzene	BQL	403.0	
Hexachlorobutadiene	BQL	403.0	
Hexachlorocyclopentadiene	BQL	403.0	
Hexachloroethane	BQL	403.0	
Indeno[1,2,3-cd]pyrene	BQL	403.0	
isophorone	BQL	403.0	
N-Nitroso-di-n-propylamine	BQL	403.0	
N-nitrosodiphenylamine	BQL	403.0	
Naphthalene	BQL	403.0	
Nitrobenzene	BQL	403.0	
Pentachlorophenol	BQL	2010.0	
Phenanthrene	BQL	403.0	
Phenol	BQL	403.0	
Pyrene	BQL	403.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9507137-058
Client ID: 01002 82-S-(0-6)''
Collected: 07/16/93
Dilution: 1

Matrix: SOIL
Method: 8270
Units: ug/Kg

Analyst: MS
Analyzed: 07/26/93
Prepared: 07/21/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4 Trichlorobenzene	BQL	376.0	
1,2-Dichlorobenzene	BQL	376.0	
1,3-Dichlorobenzene	BQL	376.0	
1,4-Dichlorobenzene	BQL	376.0	
2,4,5-Trichlorophenol	BQL	376.0	
2,4,6-Trichlorophenol	BQL	376.0	
2,4-Dichlorophenol	BQL	376.0	
2,4-Dimethylphenol	BQL	376.0	
2,4-Dinitrophenol	BQL	1880.0	
2,4-Dinitrotoluene	BQL	376.0	
2,6-Dinitrotoluene	BQL	376.0	
2-Chloronaphthalene	BQL	376.0	
2-Chlorophenol	BQL	376.0	
2-Methylnaphthalene	BQL	376.0	
2-Methylphenol	BQL	376.0	
2-Nitroaniline	BQL	1880.0	
2-Nitrophenol	BQL	376.0	
3,3'-Dichlorobenzidine	BQL	752.0	
3-Nitroaniline	BQL	1880.0	
4,6-Dinitro-2-methylphenol	BQL	1880.0	
4-Bromophenyl-phenylether	BQL	376.0	
4-Chloro-3-methylphenol	BQL	752.0	
4-Chloroaniline	BQL	752.0	
4-Chlorophenyl phenyl ether	BQL	376.0	
4-Methylphenol	BQL	376.0	
4-Nitroaniline	BQL	1880.0	
4-Nitrophenol	BQL	1880.0	
Acenaphthene	BQL	376.0	
Acenaphthylene	BQL	376.0	
Anthracene	BQL	376.0	
Benzoic acid	BQL	1880.0	
Benzo[a]anthracene	BQL	376.0	
Benzo[a]pyrene	BQL	376.0	

GP ID: 9307137-05a
 Client ID: 01002 82-S-(0-6)11
 Collected: 07/16/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MB
 Analyzed: 07/26/93
 Prepared: 07/21/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo[b]fluoranthene	BQL	376.0	
Benzo[g,h,i]perylene	BQL	376.0	
Benzo[k]fluoranthene	BQL	376.0	
Benzyl alcohol	BQL	752.0	
bis(2-Chloroethoxy) methane	BQL	376.0	
bis(2-Chloroethyl) ether	BQL	376.0	
bis(2-Chloroisopropyl) ether	BQL	376.0	
bis(2-Ethylhexyl)phthalate	BQL	376.0	
Butyl benzyl phthalate	BQL	376.0	
Chrysene	BQL	376.0	
di-n-Butylphthalate	BQL	376.0	
di-n-Octylphthalate	BQL	376.0	
Dibenzofuran	BQL	376.0	
Dibenz[a,h]anthracene	BQL	376.0	
Diethylphthalate	BQL	376.0	
Dimethyl phthalate	BQL	376.0	
Fluoranthene	BQL	376.0	
Fluorene	BQL	376.0	
Hexachlorobenzene	BQL	376.0	
Hexachlorobutadiene	BQL	376.0	
Hexachlorocyclopentadiene	BQL	376.0	
Hexachloroethane	BQL	376.0	
Indeno[1,2,3-cd]pyrene	BQL	376.0	
Isophorone	BQL	376.0	
N-Nitroso-di-n-propylamine	BQL	376.0	
N-nitrosodiphenylamine	BQL	376.0	
Naphthalene	BQL	376.0	
Nitrobenzene	BQL	376.0	
Pentachlorophenol	BQL	1880.0	
Phenanthrene	BQL	376.0	
Phenol	BQL	376.0	
Pyrene	BQL	376.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307137-068
 Client ID: 01003 82-S-(6''-2')
 Collected: 07/16/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MB
 Analyzed: 07/26/93
 Prepared: 07/21/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	396.0	
1,2-Dichlorobenzene	BQL	396.0	
1,3-Dichlorobenzene	BQL	396.0	
1,4-Dichlorobenzene	BQL	396.0	
2,4,5-Trichlorophenol	BQL	396.0	
2,4,6-Trichlorophenol	BQL	396.0	
2,4-Dichlorophenol	BQL	396.0	
2,4-Dimethylphenol	BQL	396.0	
2,4-Dinitrophenol	BQL	1980.0	
2,4-Dinitrotoluene	BQL	396.0	
2,6-Dinitrotoluene	BQL	396.0	
2-Chloronaphthalene	BQL	396.0	
2-Chlorophenol	BQL	396.0	
2-Methylnaphthalene	BQL	396.0	
2-Methylphenol	BQL	396.0	
2-Nitroaniline	BQL	1980.0	
2-Nitrophenol	BQL	396.0	
3,3'-Dichlorobenzidine	BQL	792.0	
3-Nitroaniline	BQL	1980.0	
4,6-Dinitro-2-methylphenol	BQL	1980.0	
4-Bromophenyl-phenylether	BQL	396.0	
4-Chloro-3-methylphenol	BQL	792.0	
4-Chloroaniline	BQL	792.0	
4-Chlorophenyl phenyl ether	BQL	396.0	
4-Methylphenol	BQL	396.0	
4-Nitroaniline	BQL	1980.0	
4-Nitrophenol	BQL	1980.0	
Acenaphthene	BQL	396.0	
Acenaphthylene	BQL	396.0	
Anthracene	BQL	396.0	
Benzoic acid	BQL	1980.0	
Benzo(a)anthracene	BQL	396.0	
Benzo(a)pyrene	BQL	396.0	

GP ID: 9307137-068
 Client ID: D1003 82-S-(6''-2')
 Collected: 07/16/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MR
 Analyzed: 07/26/93
 Prepared: 07/21/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo(b)fluoranthene	BQL	396.0	
Benzo(g,h,i)perylene	BQL	396.0	
Benzo(k)fluoranthene	BQL	396.0	
Benzyl alcohol	BQL	792.0	
bis(2-Chloroethoxy) methane	BQL	396.0	
bis(2-Chloroethyl) ether	BQL	396.0	
bis(2-Chloroisopropyl) ether	BQL	396.0	
bis(2-Ethylhexyl)phthalate	BQL	396.0	
Butyl benzyl phthalate	BQL	396.0	
Chrysene	BQL	396.0	
di-n-Butylphthalate	BQL	396.0	
di-n-Octylphthalate	BQL	396.0	
Dibenzofuran	BQL	396.0	
Dibenz[a,h]anthracene	BQL	396.0	
Diethylphthalate	BQL	396.0	
Dimethyl phthalate	BQL	396.0	
Fluoranthene	BQL	396.0	
Fluorene	BQL	396.0	
Hexachlorobenzene	BQL	396.0	
Hexachlorobutadiene	BQL	396.0	
Hexachlorocyclopentadiene	BQL	396.0	
Hexachloroethane	BQL	396.0	
Indeno[1,2,3-cd]pyrene	BQL	396.0	
Isophorone	BQL	396.0	
N-Nitroso-di-n-propylamine	BQL	396.0	
N-nitrosodiphenylamine	BQL	396.0	
Naphthalene	BQL	396.0	
Nitrobenzene	BQL	396.0	
Pentachlorophenol	BQL	1980.0	
Phenanthrene	BQL	396.0	
Phenol	BQL	396.0	
Pyrene	BQL	396.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9307137-07B
Client ID: 01004 B2-S-(4-6)
Collected: 07/16/93
Dilution: 1

Matrix: SOIL
Method: 8270
Units: ug/Kg

Analyst: MB
Analyzed: 07/26/93
Prepared: 07/21/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det. Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	406.0	
1,2-Dichlorobenzene	BQL	406.0	
1,3-Dichlorobenzene	BQL	406.0	
1,4-Dichlorobenzene	BQL	406.0	
2,4,5-Trichlorophenol	BQL	406.0	
2,4,6-Trichlorophenol	BQL	406.0	
2,4-Dichlorophenol	BQL	406.0	
2,4-Dimethylphenol	BQL	406.0	
2,4-Dinitrophenol	BQL	2030.0	
2,4-Dinitrotoluene	BQL	406.0	
2,6-Dinitrotoluene	BQL	406.0	
2-Chloronaphthalene	BQL	406.0	
2-Chlorophenol	BQL	406.0	
2-Methylnaphthalene	BQL	406.0	
2-Methylphenol	BQL	406.0	
2-Nitroaniline	BQL	2030.0	
2-Nitrophenol	BQL	406.0	
3,3'-Dichlorobenzidine	BQL	812.0	
3-Nitroaniline	BQL	2030.0	
4,6-Dinitro-2-methylphenol	BQL	2030.0	
4-Bromophenyl-phenylether	BQL	406.0	
4-Chloro-3-methylphenol	BQL	812.0	
4-Chloroaniline	BQL	812.0	
4-Chlorophenyl phenyl ether	BQL	406.0	
4-Methylphenol	BQL	406.0	
4-Nitroaniline	BQL	2030.0	
4-Nitrophenol	BQL	2030.0	
Acenaphthene	BQL	406.0	
Acenaphthylene	BQL	406.0	
Anthracene	BQL	406.0	
Benzoic acid	BQL	2030.0	
Benzo[a]anthracene	BQL	406.0	
Benzo[a]pyrene	BQL	406.0	

GP ID: 9307137-078
 Client ID: 01004 B2-S-(4-6)
 Collected: 07/16/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MB
 Analyzed: 07/26/93
 Prepared: 07/21/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo[b]fluoranthene	BQL	406.0	
Benzo[g,h,i]perylene	BQL	406.0	
Benzo[k]fluoranthene	BQL	406.0	
Benzyl alcohol	BQL	812.0	
bis(2-Chloroethoxy) methane	BQL	406.0	
bis(2-Chloroethyl) ether	BQL	406.0	
bis(2-Chloroisopropyl) ether	BQL	406.0	
bis(2-Ethylhexyl)phthalate	BQL	406.0	
Butyl benzyl phthalate	BQL	406.0	
Chrysene	BQL	406.0	
di-n-Butylphthalate	BQL	406.0	
di-n-Octylphthalate	BQL	406.0	
Dibenzofuran	BQL	406.0	
Dibenz[a,h]anthracene	BQL	406.0	
Diethylphthalate	BQL	406.0	
Dimethyl phthalate	BQL	406.0	
Fluoranthene	BQL	406.0	
Fluorene	BQL	406.0	
Hexachlorobenzene	BQL	406.0	
Hexachlorobutadiene	BQL	406.0	
Hexachlorocyclopentadiene	BQL	406.0	
Hexachloroethane	BQL	406.0	
Indeno[1,2,3-cd]pyrene	BQL	406.0	
Isophorone	BQL	406.0	
N-Nitroso-di-n-propylamine	BQL	406.0	
N-nitrosodiphenylamine	BQL	406.0	
Naphthalene	BQL	406.0	
Nitrobenzene	BQL	406.0	
Pentachlorophenol	BQL	2030.0	
Phenanthrene	BQL	406.0	
Phenol	BQL	406.0	
Pyrene	BQL	406.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307137-088
 Client ID: 01005 B2-S-(10-12)
 Collected: 07/16/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MB
 Analyzed: 07/27/93
 Prepared: 07/21/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	399.0	
1,2-Dichlorobenzene	BQL	399.0	
1,3-Dichlorobenzene	BQL	399.0	
1,4-Dichlorobenzene	BQL	399.0	
2,4,5-Trichlorophenol	BQL	399.0	
2,4,6-Trichlorophenol	BQL	399.0	
2,4-Dichlorophenol	BQL	399.0	
2,4-Dimethylphenol	BQL	399.0	
2,4-Dinitrophenol	BQL	2000.0	
2,4-Dinitrotoluene	BQL	399.0	
2,6-Dinitrotoluene	BQL	399.0	
2-Chloronaphthalene	BQL	399.0	
2-Chlorophenol	BQL	399.0	
2-Methylnaphthalene	BQL	399.0	
2-Methylphenol	BQL	399.0	
2-Nitroaniline	BQL	2000.0	
2-Nitrophenol	BQL	399.0	
3,3'-Dichlorobenzidine	BQL	799.0	
3-Nitroaniline	BQL	2000.0	
4,6-Dinitro-2-methylphenol	BQL	2000.0	
4-Bromophenyl-phenylether	BQL	399.0	
4-Chloro-3-methylphenol	BQL	799.0	
4-Chloroaniline	BQL	799.0	
4 Chlorophenyl phenyl ether	BQL	399.0	
4-Methylphenol	BQL	399.0	
4-Nitroaniline	BQL	2000.0	
4-Nitrophenol	BQL	2000.0	
Acenaphthene	BQL	399.0	
Acenaphthylene	BQL	399.0	
Anthracene	BQL	399.0	
Benzoic acid	BQL	2000.0	
Benzo[a]anthracene	BQL	399.0	
Benzo[a]pyrene	BQL	399.0	

GP ID: 9307137-088
 Client ID: 01005 82-5-(10-12)
 Collected: 07/16/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MB
 Analyzed: 07/27/93
 Prepared: 07/21/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo[b]fluoranthene	BQL	399.0	
Benzo[g,h,i]perylene	BQL	399.0	
Benzo[k]fluoranthene	BQL	399.0	
Benzyl alcohol	BQL	799.0	
bis(2-Chloroethoxy) methane	BQL	399.0	
bis(2-Chloroethyl) ether	BQL	399.0	
bis(2-Chloroisopropyl) ether	BQL	399.0	
bis(2-Ethylhexyl)phthalate	BQL	399.0	
Butyl benzyl phthalate	BQL	399.0	
Chrysene	BQL	399.0	
di-n-Butylphthalate	BQL	399.0	
di-n-Octylphthalate	BQL	399.0	
Dibenzofuran	BQL	399.0	
Dibenz[a,h]anthracene	BQL	399.0	
Diethylphthalate	BQL	399.0	
Dimethyl phthalate	BQL	399.0	
Fluoranthene	BQL	399.0	
Fluorene	BQL	399.0	
Hexachlorobenzene	BQL	399.0	
Hexachlorobutadiene	BQL	399.0	
Hexachlorocyclopentadiene	BQL	399.0	
Hexachloroethene	BQL	399.0	
Indeno[1,2,3-cd]pyrene	BQL	399.0	
Isophorone	BQL	399.0	
N-Nitroso-di-n-propylamine	BQL	399.0	
N-nitrosodiphenylamine	BQL	399.0	
Naphthalene	BQL	399.0	
Nitrobenzene	BQL	399.0	
Pentachlorophenol	BQL	2000.0	
Phenanthrene	BQL	399.0	
Phenol	BQL	399.0	
Pyrene	BQL	399.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307137-01A
 Client ID: 00997 B1-S-(0-6)''
 Collected: 07/15/93
 Dilution: 1

Matrix: SOIL
 Method: 8240s
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/21/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det. Lim.	Qualifier
1,1,1-Trichloroethane	BQL	6.01	
1,1,2,2-Tetrachloroethane	BQL	6.01	
1,1,2-Trichloroethane	BQL	6.01	
1,1-Dichloroethane	BQL	6.01	
1,1-Dichloroethene	BQL	6.01	
1,2-Dichloroethane	BQL	6.01	
1,2-Dichloropropane	BQL	6.01	
2-Butanone	BQL	12.0	
2-Chloroethylvinyl ether	BQL	12.0	
2-Hexanone	BQL	12.0	
4-Methyl-2-pentanone	BQL	12.0	
Acetone	BQL	12.0	
Benzene	BQL	6.01	
Bromodichloromethane	BQL	6.01	
Bromoform	BQL	6.01	
Bromomethane	BQL	12.0	
Carbon Disulfide	BQL	6.01	
Carbon tetrachloride	BQL	6.01	
Chlorobenzene	BQL	6.01	
Chloroethane	BQL	12.0	
Chloroform	BQL	6.01	
Chloromethane	BQL	12.0	
cis-1,3-Dichloropropene	BQL	6.01	
Dibromochloromethane	BQL	6.01	
Ethylbenzene	BQL	6.01	
Methylene chloride	BQL	6.01	
Styrene	BQL	6.01	
Tetrachloroethene	BQL	6.01	
Toluene	BQL	6.01	
trans-1,2-Dichloroethene	BQL	6.01	
trans-1,3-Dichloropropene	BQL	6.01	
Trichloroethene	BQL	6.01	
Vinyl Acetate	BQL	12.0	
Vinyl chloride	BQL	12.0	
Xylenes	BQL	6.01	

GP ID: 9307228-04A
Client ID: 00951 SW2-C-(0-2)''
Collected: 07/26/93
Dilution: 1

Matrix: CEMENT
Method: 8080 TCLP
Units: ug/L

Analyst: TS
Analyzed: 08/23/93
Prepared: 08/09/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-04A
Client ID: 00951 SW2-C-(0-2)''
Collected: 07/26/93
Dilution: 1Matrix: CEMENT
Method: 8150 TCLP
Units: ug/LAnalyst: TS
Analyzed: 08/13/93
Prepared: 08/06/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

GP ID: 9307228-04

Client ID: 00951 SW2-C-(0-2)''

Matrix: CEMENT

Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Flash point	1010	N	100.0	Deg. C			08/23/93 KF

**GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS**

GP ID: 9307228-04
Client ID: 00951 SW2-C-(0-2)''

Matrix: CEMENT
Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
TCLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Barium	SW846 6010	103.0	13.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/06/93	08/26/93 MB
TCLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Mercury	SW846 7470	BQL	0.200	ug/L	1	08/06/93	08/24/93 AR
TCLP Lead	SW846 6010	BQL	141.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/06/93	08/26/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS

GP ID: 930722B-04

Client ID: 00951 SW2-C-(0-2)11

Matrix: CEMENT

Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Reactive Cyanide	SW 846 7.3.3	BQL	0.071	mg/Kg	1		08/11/93 ST
Total Cyanide	SOW390/335.2	BQL	2.37	mg/Kg	1		08/05/93 SCT
pH	SW846 9045	11.3	0.001	pH	1		08/10/93 JS
Reactive Sulfide	SW 846 7.3.4	BQL	7.14	mg/Kg			08/11/93 JS

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307228-05A
 Client ID: 00952 SW2-C-(2-6)**
 Collected: 07/26/93
 Dilution: 1

Matrix: CEMENT
 Method: 8270 TCLP
 Units: ug/L

Analyst: MB
 Analyzed: 08/13/93
 Prepared: 08/04/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

GP ID: 9307228-058
Client ID: 00952 SU2-C-(2-6)**
Collected: 07/26/93
Dilution: 10

Matrix: CEMENT
Method: 8240 TCLP
Units: ug/L

Analyst: AD
Analyzed: 08/10/93
Prepared:

VOLATILE TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-05A
Client ID: 00952 SW2-C-(2-6)''
Collected: 07/26/93
Dilution: 1Matrix: CEMENT
Method: 8080 TCLP
Units: ug/LAnalyst: TS
Analyzed: 08/23/93
Prepared: 08/09/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

GP ID: 9307228-05A
Client ID: 00952 SW2-C-(2-6)''
Collected: 07/26/93
Dilution: 1

Matrix: CEMENT
Method: 8150 TCLP
Units: ug/L

Analyst: TS
Analyzed: 08/13/93
Prepared: 08/06/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-05
Client ID: 00952 SW2-C-(2-6)''Matrix: CEMENT
Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Flash point	1010	N	100.0	Deg. C			08/23/93 KF

GP ID: 9307228-05

Client ID: 00952 SW2-C-(2-6)''

Matrix: CEMENT

Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
TCLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Barium	SW846 6010	189.0	13.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/06/93	08/26/93 MB
TCLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Mercury	SW846 7470	BQL	0.200	ug/L	1	08/06/93	08/24/93 AR
TCLP Lead	SW846 6010	BQL	141.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/06/93	08/26/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS

GP ID: 9307228-05
Client ID: 00952 SW2-C-(2-6)**

Matrix: CEMENT
Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Reactive Cyanide	SW 846 7.3.3		BQL	0.070 mg/Kg	1		08/11/93 ST
Total Cyanide	SW390/335.2		BQL	2.26 mg/Kg	1		08/05/93 SCT
pH	SW846 9045	11.0		0.001 pH	1		08/10/93 JS
Reactive Sulfide	SW 846 7.3.4		BQL	6.99 mg/Kg			08/11/93 JS

GP ID: 9307228-06A
Client ID: 00953 ME1-C-(0-2)11
Collected: 07/27/93
Dilution: 1

Matrix: CEMENT
Method: 8270 TCLP
Units: ug/L

Analyst: MB
Analyzed: 08/13/93
Prepared: 08/04/93

SEMIVOLATILE TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

GP ENVIRONMENTAL SERVICES
 ORGANIC ANALYSIS RESULTS

GP ID: 9307228-068
 Client ID: 00953 NE1-C-(0-2)**
 Collected: 07/27/93
 Dilution: 10

Matrix: CEMENT
 Method: 8240 TCLP
 Units: ug/L

Analyst: AD
 Analyzed: 08/10/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

GP ID: 9307228-06A
Client ID: 00953 NE1-C-(0-2)''
Collected: 07/27/93
Dilution: 1

Matrix: CEMENT
Method: 8080 TCLP
Units: ug/L

Analyst: TS
Analyzed: 08/23/93
Prepared: 08/09/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307228-06A
 Client ID: 00953 NE1-C-(0-2)''
 Collected: 07/27/93
 Dilution: 1

Matrix: CEMENT
 Method: 8150 TCLP
 Units: ug/L

Analyst: TS
 Analyzed: 08/13/93
 Prepared: 08/06/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

GP ID: 9307228-06

Client ID: 00953 NE1-C-(0-2)**

Matrix: CEMENT

Collected: 07/27/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Flash point	1010		N	100.0	Deg. C		08/23/93 KF

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS

GP ID: 9307228-06
Client ID: 00953 NE1-C-(0-2)''

Matrix: CEMENT
Collected: 07/27/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
TCLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Barium	SW846 6010	88.6	13.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/06/93	08/26/93 MB
TCLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Mercury	SW846 7470	BQL	0.200	ug/L	1	08/06/93	08/24/93 AR
TCLP Lead	SW846 6010	BQL	141.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/06/93	08/26/93 MB

WET CHEMISTRY ANALYSIS RESULTS

GP ID: 9307228-06

Client ID: 00953 NE1-C-(0-2)''

Matrix: CEMENT

Collected: 07/27/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Reactive Cyanide	SW 846 7.3.3	BQL	0.072	mg/Kg	1		08/11/93 ST
Total Cyanide	SO4390/335.2	BQL	2.43	mg/Kg	1		08/05/93 SCT
pH	SW846 9045	11.1	0.001	pH	1		08/10/93 JS
Reactive Sulfide	SW 846 7.3.4	BQL	7.24	mg/Kg			08/11/93 JS

GP ID: 9307228-07A
Client ID: D0954 NE1-C-(2-6)''
Collected: 07/27/93
Dilution: 1Matrix: CEMENT
Method: 8270 TCLP
Units: ug/LAnalyst: MB
Analyzed: 08/13/93
Prepared: 08/04/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

GP ID: 9307228-07B
Client ID: 00954 NE1-C-(2-6)''
Collected: 07/27/93
Dilution: 10

Matrix: CEMENT
Method: 8240 TCLP
Units: ug/L

Analyst: DR
Analyzed: 08/05/93
Prepared:

VOLATILE TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307228-07A
 Client ID: 00954 NE1-C-(2-6)**
 Collected: 07/27/93
 Dilution: 1

Matrix: CEMENT
 Method: 8080 TCLP
 Units: ug/L

Analyst: TS
 Analyzed: 08/23/93
 Prepared: 08/09/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-07A
Client ID: 00954 NE1-C-(2-6)''
Collected: 07/27/93
Dilution: 1Matrix: CEMENT
Method: 8150 TCLP
Units: ug/LAnalyst: TS
Analyzed: 08/13/93
Prepared: 08/06/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307228-07
Client ID: 00954 NE1-C-(2-6)''

Matrix: CEMENT
Collected: 07/27/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Flash point	1010		N	100.0	Deg. C		08/23/93 KF

GP ID: 9307228-07

Client ID: 00954 NE1-C-(2-6)''

Matrix: CEMENT

Collected: 07/27/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
TCLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Barium	SW846 6010	213.0	13.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/06/93	08/26/93 MB
TCLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Mercury	SW846 7470	BQL	0.200	ug/L	1	08/06/93	08/24/93 AR
TCLP Lead	SW846 6010	BQL	141.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/06/93	08/26/93 MB

GP ENVIRONMENTAL SERVICES
 WET CHEMISTRY ANALYSIS RESULTS

GP ID: 9307228-07
 Client ID: 00954 NE1-C-(2-6)''

Matrix: CEMENT
 Collected: 07/27/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Reactive Cyanide	SW 846 7.3.3	BQL	0.069	mg/Kg	1		08/11/93 ST
Total Cyanide	S04390/335.2	BQL	2.34	mg/Kg	1		08/05/93 SCT
pH	SV846 9045	11.4	0.001	pH	1		08/10/93 JS
Reactive Sulfide	SW 846 7.3.4	BQL	6.91	mg/Kg			08/11/93 JS

GP ID: 9307228-08A
Client ID: 00955 NE2-C-(D-2)''
Collected: 07/27/93
Dilution: 1

Matrix: CEMENT
Method: 8270 TCLP
Units: ug/L

Analyst: MB
Analyzed: 08/12/93
Prepared: 08/04/93

SEMIVOLATILE TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-088
Client ID: 00955 ME2-C-(0-2)''
Collected: 07/27/93
Dilution: 10Matrix: CEMENT
Method: 8240 TCLP
Units: ug/LAnalyst: AD
Analyzed: 08/06/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

GP ID: 9307228-08A
Client ID: 00955 NE2-C-(0-2)**
Collected: 07/27/93
Dilution: 1

Matrix: CEMENT
Method: 8080 TCLP
Units: ug/L

Analyst: TS
Analyzed: 08/23/93
Prepared: 08/09/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307228-08A
 Client ID: 00955 ME2-C-(0-2)''
 Collected: 07/27/93
 Dilution: 1

Matrix: CEMENT
 Method: 8150 TCLP
 Units: ug/L

Analyst: TS
 Analyzed: 08/13/93
 Prepared: 08/06/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

GP ID: 9307228-08

Matrix: CEMENT

Client ID: 00955 NE2-C-(0-2)''

Collected: 07/27/93

<u>Parameter</u>	<u>Method</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Units</u>	<u>Dil.</u>	<u>Prepared</u>	<u>Analyzed By</u>
Flash point	1010		N	100.0	Deg. C		08/23/93 KF

**GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS**

GP ID: 9307228-08

Client ID: 00955 NE2-C-(0-2)''

Matrix: CEMENT

Collected: 07/27/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
TCLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Barium	SW846 6010	88.8	13.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/06/93	08/26/93 MB
TCLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Mercury	SW846 7470	BQL	0.200	ug/L	1	08/06/93	08/24/93 AR
TCLP Lead	SW846 6010	BQL	141.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/06/93	08/26/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS

GP ID: 9307228-08

Matrix: CEMENT

Client ID: 00955 NE2-C-(0-2)''

Collected: 07/27/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Reactive Cyanide	SW 846 7.3.3	BQL	0.074	mg/Kg	1		08/11/93 ST
Total Cyanide	SOW390/335.2	BQL	2.01	mg/Kg	1		08/05/93 SCT
pH	SW846 9045	11.0	0.001	pH	1		08/10/93 JS
Reactive Sulfide	SW 846 7.3.4	BQL	7.45	mg/Kg			08/11/93 JS

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-09A
Client ID: 00956 ME2-C-(2-6)''
Collected: 07/27/93
Dilution: 1Matrix: CEMENT
Method: 8270 TCLP
Units: ug/LAnalyst: MB
Analyzed: 08/12/93
Prepared: 08/04/93

SEMI-VOLATILE TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-098
Client ID: 00956 NE2-C-(2-6)**
Collected: 07/27/93
Dilution: 10Matrix: CEMENT
Method: 8240 TCLP
Units: ug/LAnalyst: DR
Analyzed: 08/07/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det. Lim.	Qualifier
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-09A
Client ID: 00956 NE2-C-(2-6)''
Collected: 07/27/93
Dilution: 1Matrix: CEMENT
Method: 8080 TCLP
Units: ug/LAnalyst: TS
Analyzed: 08/23/93
Prepared: 08/09/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-09A
Client ID: 00956 NE2-C-(2-6)11
Collected: 07/27/93
Dilution: 1Matrix: CEMENT
Method: 8150 TCLP
Units: ug/LAnalyst: TS
Analyzed: 08/13/93
Prepared: 08/06/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

GP ID: 9307228-09

Matrix: CEMENT

Client ID: 00956 NE2-C-(2-6)''

Collected: 07/27/93

<u>Parameter</u>	<u>Method</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Units</u>	<u>Dil.</u>	<u>Prepared</u>	<u>Analyzed By</u>
Flash point	1010		N	100.0	Deg. C		08/23/93 KF

GP ID: 9307228-09

Client ID: 00956 NE2-C-(2-6)''

Matrix: CEMENT

Collected: 07/27/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
TCLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Barium	SW846 6010	104.0	13.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/06/93	08/26/93 MB
TCLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Mercury	SW846 7470	BQL	0.200	ug/L	1	08/06/93	08/24/93 AR
TCLP Lead	SW846 6010	BQL	141.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/06/93	08/26/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS

GP ID: 9307228-09

Matrix: CEMENT

Client ID: 00956 NE2-C-(2-6)''

Collected: 07/27/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Reactive Cyanide	SW 846 7.3.3	BQL	0.071	mg/Kg	1		08/11/93 ST
Total Cyanide	SON390/335.2	BQL	2.03	mg/Kg	1		08/05/93 SCT
pH	SW846 9045	11.3	0.001	pH	1		08/10/93 JS
Reactive Sulfide	SW 846 7.3.4	BQL	7.09	mg/Kg			08/11/93 JS

GP ID: 9307228-10A
Client ID: 00957 NE2-C-(2-6)'' (DUP)
Collected: 07/27/93
Dilution: 1

Matrix: CEMENT
Method: 8270 TCLP
Units: ug/L

Analyst: MB
Analyzed: 08/12/93
Prepared: 08/04/93

SEMIVOLATILE TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-108
Client ID: 00957 NE2-C-(2-6)'' (DUP)
Collected: 07/27/93
Dilution: 10Matrix: CEMENT
Method: 8240 TCLP
Units: ug/LAnalyst: DR
Analyzed: 08/07/93
Prepared:

VOLATILE TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

GP ID: 9307228-10A
Client ID: 00957 NE2-C-(2-6)'' (DUP)
Collected: 07/27/93
Dilution: 1

Matrix: CEMENT
Method: 8080 TCLP
Units: ug/L

Analyst: TS
Analyzed: 08/24/93
Prepared: 08/09/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

GP ENVIRONMENTAL SERVICES
 ORGANIC ANALYSIS RESULTS

GP ID: 9307228-10A
 Client ID: 00957 NE2-C-(2-6)'' (DUP)
 Collected: 07/27/93
 Dilution: 1

Matrix: CEMENT
 Method: 8150 TCLP
 Units: ug/L

Analyst: TS
 Analyzed: 08/13/93
 Prepared: 08/06/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

GP ID: 9307228-10

Client ID: 00957 NE2-C-(2-6)'' (DUP)

Matrix: CEMENT

Collected: 07/27/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Flash point	1010		N	100.0	Deg. C		08/23/93 KF

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS

GP ID: 9307228-10

Client ID: 00957 NE2-C-(2-6)'' (DUP)

Matrix: CEMENT

Collected: 07/27/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
TCLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Barium	SW846 6010	153.0	13.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/06/93	08/26/93 MB
TCLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Mercury	SW846 7470	BQL	0.200	ug/L	1	08/06/93	08/24/93 AR
TCLP Lead	SW846 6010	BQL	141.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/06/93	08/26/93 MB

GP ID: 9307228-10

Client ID: 00957 NE2-C-(2-6)'' (DUP)

Matrix: CEMENT

Collected: 07/27/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Reactive Cyanide	SW 846 7.3.3	BQL	0.072	mg/Kg	1		08/11/93 ST
Total Cyanide	SO4390/335.2	BQL	2.23	mg/Kg	1		08/05/93 SCT
pH	SW846 9045	11.2	0.001	pH	1		08/10/93 JS
Reactive Sulfide	SW 846 7.3.4	BQL	7.24	mg/Kg			08/11/93 JS

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307228-11A
 Client ID: 00820 TRIP BLANK
 Collected: 07/27/93
 Dilution: 1

Matrix: WATER
 Method: 8240 TCLP
 Units: ug/L

Analyst: DR
 Analyzed: 08/07/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,4-Dichlorobenzene	BQL	5.00	
2-Butanone	BQL	10.0	
Benzene	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroform	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl chloride	BQL	10.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-12A
Client ID: 01035 NE2-5-0 (DUP)
Collected: 07/26/93
Dilution: 1Matrix: SOLID
Method: 8270 TCLP
Units: ug/LAnalyst: MB
Analyzed: 08/12/93
Prepared: 08/04/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-128
Client ID: 01035 NE2-S-D (DUP)
Collected: 07/26/93
Dilution: 10Matrix: SOLID
Method: 8240 TCLP
Units: ug/LAnalyst: DR
Analyzed: 08/07/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

GP ID: 9307228-12A
Client ID: 01035 ME2-S-D (DUP)
Collected: 07/26/93
Dilution: 1

Matrix: SOLID
Method: 8080 TCLP
Units: ug/L

Analyst: TS
Analyzed: 08/24/93
Prepared: 08/09/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-12A
Client ID: 01035 NEZ-S-0 (DUP)
Collected: 07/26/93
Dilution: 1Matrix: SOLID
Method: 8150 TCLP
Units: ug/LAnalyst: TS
Analyzed: 08/13/93
Prepared: 08/06/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

GP ID: 9307228-12
Client ID: 01035 NE2-S-D (DUP)Matrix: SOLID
Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Flash point	1010		N	100.0	deg. C		08/23/93 KF

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS

GP ID: 9307228-12

Matrix: SOLID

Client ID: 01035 NE2-S-0 (DUP)

Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
TCLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Barium	SW846 6010	523.0	13.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/06/93	08/26/93 MB
TCLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Mercury	SW846 7470	BQL	0.200	ug/L	1	08/06/93	08/24/93 AR
TCLP Lead	SW846 6010	BQL	141.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/06/93	08/26/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS

GP ID: 9307228-12

Client ID: 01035 NE2-S-O (DUP)

Matrix: SOLID

Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Reactive Cyanide	SW 846 7.3.3	BQL	0.073	mg/Kg	1		08/11/93 ST
Total Cyanide	SW846 9045	BQL	2.50	mg/Kg	1		08/05/93 SCT
pH	SW846 9045	7.86	0.001	pH	1		08/10/93 JS
Reactive Sulfide	SW 846 7.3.4	13.1	7.28	mg/Kg			08/11/93 JS

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-13A
Client ID: 01036 NEZ-S-0
Collected: 07/26/93
Dilution: 1Matrix: SOLID
Method: 8270 TCLP
Units: ug/LAnalyst: MB
Analyzed: 08/13/93
Prepared: 08/04/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

GP ID: 9307228-138
Client ID: 01036 NE2-S-0
Collected: 07/26/93
Dilution: 10Matrix: SOLID
Method: 8240 TCLP
Units: ug/LAnalyst: DR
Analyzed: 08/07/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-13A
Client ID: 01036 NE2-S-0
Collected: 07/26/93
Dilution: 1Matrix: SOLID
Method: 8080 TCLP
Units: ug/LAnalyst: TS
Analyzed: 08/24/93
Prepared: 08/09/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307228-13A
Client ID: 01036 NE2-S-0
Collected: 07/26/93
Dilution: 1

Matrix: SOLID
Method: 8150 TCLP
Units: ug/L

Analyst: TS
Analyzed: 08/19/93
Prepared: 08/06/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307228-13
Client ID: 01036 NE2-S-0

Matrix: SOLID
Collected: 07/26/93

<u>Parameter</u>	<u>Method</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Units</u>	<u>Dil.</u>	<u>Prepared</u>	<u>Analyzed By</u>
Flash point	1010		N 100.0	Deg. C			08/23/93 KF

GP ID: 9307228-13

Client ID: 01036 NE2-S-0

Matrix: SOLID

Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
TCLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Barium	SW846 6010	464.0	13.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/06/93	08/26/93 MB
TCLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Mercury	SW846 7470	BQL	0.200	ug/L	1	08/06/93	08/24/93 AR
TCLP Lead	SW846 6010	275.0	141.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/06/93	08/26/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTSGP ID: 9307228-13
Client ID: 01036 NE2-S-0Matrix: SOLID
Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Reactive Cyanide	SW 846 7.3.3	BQL	0.071	mg/Kg	1		08/11/93 ST
Total Cyanide	SOW390/335.2	BQL	2.48	mg/Kg	1		08/05/93 SCT
pH	SW846 9045	7.52	0.001	pH	1		08/10/93 JS
Reactive Sulfide	SW 846 7.3.4	BQL	7.10	mg/Kg			08/11/93 JS

GP ID: 9307228-14A
Client ID: 01037 WE1-5-0
Collected: 07/26/93
Dilution: 1

Matrix: SOLID
Method: 8270 TCLP
Units: ug/L

Analyst: MB
Analyzed: 08/13/93
Prepared: 08/04/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

GP ID: 9307228-148
Client ID: 01037 ME1-S-0
Collected: 07/26/93
Dilution: 10

Matrix: SOLID
Method: 8240 TCLP
Units: ug/L

Analyst: DR
Analyzed: 08/07/93
Prepared:

VOLATILE TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307228-14A
 Client ID: 01037 NE1-S-0
 Collected: 07/26/93
 Dilution: 1

Matrix: SOLID
 Method: 8080 TCLP
 Units: ug/L

Analyt: TS
 Analyzed: 08/24/93
 Prepared: 08/09/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307228-14A
 Client ID: 01037 NE1-S-0
 Collected: 07/26/93
 Dilution: 1

Matrix: SOLID
 Method: B150 TCLP
 Units: ug/L

Analyst: TS
 Analyzed: 08/13/93
 Prepared: 08/06/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
2,4-d	BQL	60.0	
Silvex	BQL	8.50	

GP ID: 9307228-14

Client ID: 01037 NE1-S-0

Matrix: SOLID

Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Flash point	1010		N	100.0	Deg. C		08/23/93 KF

GP ID: 9307228-14
Client ID: 01037 NE1-S-0Matrix: SOLID
Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
TCLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Barium	SW846 6010	310.0	13.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/06/93	08/26/93 MB
TCLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Mercury	SW846 7470	BQL	0.200	ug/L	1	08/06/93	08/24/93 AR
TCLP Lead	SW846 6010	BQL	141.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/06/93	08/26/93 MB

GP ID: 9307228-14

Client ID: D1037 NE1-S-0

Matrix: SOLID

Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Reactive Cyanide	SW 846 7.3.3	BQL	0.071	mg/Kg	1		08/11/93 ST
Total Cyanide	SOW390/335.2	BQL	2.51	mg/Kg	1		08/05/93 SCT
pH	SW846 9045	7.26	0.001	pH	1		08/10/93 JS
Reactive Sulfide	SW 846 7.3.4	BQL	7.12	mg/Kg			08/11/93 JS

GP ID: 9307228-15A
Client ID: 01039 SW2-S-0 (DUP)
Collected: 07/26/93
Dilution: 1

Matrix: SOLID
Method: 8270 TCLP
Units: ug/L

Analyst: MB
Analyzed: 08/12/93
Prepared: 08/04/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

GP ID: 9307228-158
Client ID: 01039 SW2-5-0 (DUP)
Collected: 07/26/93
Dilution: 10

Matrix: SOLID
Method: 8240 TCLP
Units: ug/L

Analyst: DR
Analyzed: 08/07/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-15A
Client ID: 01039 SW2-S-0 (DUP)
Collected: 07/26/93
Dilution: 1Matrix: SOLID
Method: 8080 TCLP
Units: ug/LAnalyst: TS
Analyzed: 08/24/93
Prepared: 08/09/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

GP ID: 9307228-15A
Client ID: 01039 SW2-S-0 (DUP)
Collected: 07/26/93
Dilution: 1

Matrix: SOLID
Method: 8150 TCLP
Units: ug/L

Analyst: TS
Analyzed: 08/13/93
Prepared: 08/06/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

GP ID: 9307228-15
Client ID: 01039 SW2-S-0 (DUP)Matrix: SOLID
Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Flash point	1010		N 100.0	Deg. C			08/23/93 KF

GP ID: 9307228-15

Client ID: 01039 SW2-S-0 (DUP)

Matrix: SOLID

Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
TCLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Arsenic	SW846 6010	375.0	138.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Barium	SW846 6010	344.0	13.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/06/93	08/26/93 MB
TCLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Mercury	SW846 7470	BQL	0.200	ug/L	1	08/06/93	08/24/93 AR
TCLP Lead	SW846 6010	2790.0	141.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/06/93	08/26/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTSGP ID: 9307228-15
Client ID: 01039 SW2-S-O (DUP)Matrix: SOLID
Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Reactive Cyanide	SW 846 7.3.3	BQL	0.073	mg/Kg	1		08/11/93 ST
Total Cyanide	SOL390/335.2	BQL	2.98	mg/Kg	1		08/05/93 SCT
pH	SW846 9045	7.03	0.001	pH	1		08/10/93 JS
Reactive Sulfide	SW 846 7.3.4	16.0	7.27	mg/Kg			08/11/93 JS

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-16A
Client ID: 01040 SU2-S-0
Collected: 07/26/93
Dilution: 1Matrix: SOLID
Method: 8270 TCLP
Units: ug/LAnalyst: MB
Analyzed: 08/12/93
Prepared: 08/04/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-168
Client ID: 01040 SW2-S-0
Collected: 07/26/93
Dilution: 10Matrix: SOLID
Method: 8240 TCLP
Units: ug/LAnalyst: DR
Analyzed: 08/08/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

GP ID: 9307228-16A
Client ID: 01040 SW2-S-0
Collected: 07/26/93
Dilution: 1Matrix: SOLID
Method: 8080 TCLP
Units: ug/LAnalyst: TS
Analyzed: 08/24/93
Prepared: 08/09/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307228-16A
 Client ID: 01040 SW2-S-0
 Collected: 07/26/93
 Dilution: 1

Matrix: SOLID
 Method: 8150 TCLP
 Units: ug/L

Analyst: TS
 Analyzed: 08/13/93
 Prepared: 08/06/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

GP ID: 9307228-16
Client ID: 01040 SW2-S-0Matrix: SOLID
Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Flash point	1010		N 100.0	Deg. C			08/23/93 KF

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTSGP ID: 9307228-16
Client ID: 01040 SW2-S-0Matrix: SOLID
Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
TCLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Arsenic	SW846 6010	381.0	138.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Barium	SW846 6010	313.0	13.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/06/93	08/26/93 MB
TCLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Mercury	SW846 7470	BQL	0.200	ug/L	1	08/06/93	08/24/93 AR
TCLP Lead	SW846 6010	BQL	141.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/06/93	08/26/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTSGP ID: 9307228-16
Client ID: 01040 SW2-S-0Matrix: SOLID
Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Reactive Cyanide	SW 846 7.3.3	BQL	0.074	mg/Kg	1		08/11/93 ST
Total Cyanide	SW390/335.2	BQL	2.61	mg/Kg	1		08/05/93 SCT
pH	SW846 9045	7.49	0.001	pH	1		08/10/93 JS
Reactive Sulfide	SW 846 7.3.4	BQL	7.37	mg/Kg			08/11/93 JS

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307228-17A
 Client ID: 01041 SW1-S-0
 Collected: 07/26/93
 Dilution: 1

Matrix: SOLID
 Method: 8270 TCLP
 Units: ug/L

Analyst: MB
 Analyzed: 08/12/93
 Prepared: 08/04/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

GP ID: 9307228-178
Client ID: 01041 SU1-S-0
Collected: 07/26/93
Dilution: 10Matrix: SOLID
Method: 8240 TCLP
Units: ug/LAnalyst: DR
Analyzed: 08/08/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-17A
Client ID: 01041 SW1-S-0
Collected: 07/26/93
Dilution: 1Matrix: SOLID
Method: 8080 TCLP
Units: ug/LAnalyst: TS
Analyzed: 08/24/93
Prepared: 08/09/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-17A
Client ID: 01041 SW1-S-0
Collected: 07/26/93
Dilution: 1Matrix: SOLID
Method: 8150 TCLP
Units: ug/LAnalyst: TS
Analyzed: 08/13/93
Prepared: 08/06/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-17
Client ID: 01041 SW1-S-0Matrix: SOLID
Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Flash point	1010	N	100.0	Deg. C			08/23/93 KF

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS

GP ID: 9307228-17

Client ID: 01041 SW1-S-0

Matrix: SOLID

Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
TCLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Arsenic	SW846 6010	147.0	138.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Barium	SW846 6010	318.0	13.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/06/93	08/26/93 MB
TCLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Mercury	SW846 7470	BQL	0.200	ug/L	1	08/06/93	08/24/93 AR
TCLP Lead	SW846 6010	2060.0	141.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/06/93	08/26/93 MB

GP ENVIRONMENTAL SERVICES
 WET CHEMISTRY ANALYSIS RESULTS

GP ID: 9307228-17
 Client ID: 01041 SW1-S-0

Matrix: SOLID
 Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Reactive Cyanide	SW 846 7.3.3	80L	0.072	mg/Kg	1		08/11/93 ST
Total Cyanide	SOW390/335.2						
pH	SW846 9045	6.97	0.001	pH	1		08/10/93 JS
Reactive Sulfide	SU 846 7.3.4	7.15	7.15	mg/Kg			08/11/93 JS

GP ID: 9307228-18A
Client ID: TCLP BLANK
Collected: 07/30/93
Dilution: 1Matrix:
Method: 8270 TCLP
Units: ug/LAnalyst: MB
Analyzed: 08/12/93
Prepared: 08/04/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-18A
Client ID: TCLP BLANK
Collected: 07/30/93
Dilution: 10Matrix:
Method: 8240 TCLP
Units: ug/LAnalyst: AD
Analyzed: 08/06/93
Prepared:

VOLATILE TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-18A
Client ID: TCLP BLANK
Collected: 07/30/93
Dilution: 1Matrix:
Method: 8080 TCLP
Units: ug/LAnalyst: TS
Analyzed: 08/24/93
Prepared: 08/09/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307228-12A
Client ID: TCLP BLANK
Collected: 07/30/93
Dilution: 1Matrix:
Method: 8150 TCLP
Units: ug/LAnalyst: TS
Analyzed: 08/13/93
Prepared: 08/06/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

GP ID: 9307228-18
Client ID: TCLP BLANKMatrix:
Collected: 07/30/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
TCLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/06/93	08/26/93 MB
TCLP Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/06/93	08/26/93 MB
TCLP Barium	SW846 6010	BQL	13.0	ug/L	1	08/06/93	08/26/93 AR
TCLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/06/93	08/26/93 AR
TCLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/06/93	08/26/93 AR
TCLP Mercury	SW846 7470	BQL	0.200	ug/L	1	08/06/93	08/24/93 AR
TCLP Lead	SW846 6010	BQL	141.0	ug/L	1	08/06/93	08/26/93 AR
TCLP Selenium	SW846 6010	BQL	23.7	ug/L	1	08/06/93	08/26/93 AR

GP ENVIRONMENTAL SERVICES

Possible notes and definitions for this report:

- BQL = Below Quantitation Limit
- J = An estimated value, below method detection limit
- B = Indicates that the compound was found in the associated blank
- E = Indicates that the concentration exceeded the calibration range of the instrument
- U = Indicates that the compound was analyzed for but not detected, number indicates the detection limit
- D = Indicates that the compound was found in a analysis at a secondary dilution factor
- * = Value obtained from a 1:5 dilution
- + = Value obtained from a 1:10 dilution
- # = Value obtained from a 1:20 dilution
- ^ = Value obtained from a 1:50 dilution
- ~ = Value obtained from a 1:100 dilution
- ! = Value obtained from a 1:250 dilution
- @ = Value obtained from a 1:125 dilution (Medium Level)
- \$ = Value obtained from a 1:1000 dilution
- & = Value obtained from a 1:10000 dilution
- M = Flashpoint not observed; heated to specified limit
- R = Flammable at room temperature
- TNTC = Too numerous to count
- B.P. = Detection limit taken from boiling point
- F.F. = Sample gave off flammable fumes

GP Work Order # 9307164

SAMPLE ANALYSIS REPORT

Prepared For:

ROY F. WESTON
1 WESTON WAY
WEST CHESTER, PA 19380-1499

WESTON APG ADAMSITE DO#10

Prepared By:

GP Environmental Services, Inc.
202 Perry Parkway
Gaithersburg, Maryland 20877

August 19, 1993



Albert Ellis, Laboratory Director

MWS

Project: WESTON APG ADAMSITE DOW10

ROY F. WESTON
1 WESTON WAY
WEST CHESTER, PA 19380-1499
Atten: JEANNE O'LEARYGP ENVIRONMENTAL SERVICES
202 Perry Parkway
Gaithersburg, MD 20877Atten: Client Services
Phone: (301) 926-6802Certified by: T. T.

SAMPLE IDENTIFICATION

GP ID		Client ID
9307164	-01	A 00807 TRIP BLANK
9307164	-02	A 00808 TRIP BLANK
9307164	-03	A 01020 M/S-S-(0-6)''
9307164	-03	B
9307164	-04	A 01021 M/S-S-(6''-2')
9307164	-04	B
9307164	-05	A 01022 M/S-S-(4-6)'
9307164	-05	B
9307164	-06	A 01023 M/S-S-(10-12)'
9307164	-06	B
9307164	-07	A 01024 M/S-S-(10-12)'DUP
9307164	-07	B
9307164	-08	A 01079 FIELD BLANK #20
9307164	-08	B
9307164	-08	C
9307164	-08	D
9307164	-08	E
9307164	-08	F

GP ID: 9307164-038
 Client ID: 01020 MW3-S-(0-6)''
 Collected: 07/20/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: IM
 Analyzed: 07/28/93
 Prepared: 07/26/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	422.0	
1,2-Dichlorobenzene	BQL	422.0	
1,3-Dichlorobenzene	BQL	422.0	
1,4-Dichlorobenzene	BQL	422.0	
2,4,5-Trichlorophenol	BQL	422.0	
2,4,6-Trichlorophenol	BQL	422.0	
2,4-Dichlorophenol	BQL	422.0	
2,4-Dimethylphenol	BQL	422.0	
2,4-Dinitrophenol	BQL	2110.0	
2,4-Dinitrotoluene	BQL	422.0	
2,6-Dinitrotoluene	BQL	422.0	
2-Chloronaphthalene	BQL	422.0	
2-Chlorophenol	BQL	422.0	
2-Methylnaphthalene	BQL	422.0	
2-Methylphenol	BQL	422.0	
2-Nitroaniline	BQL	2110.0	
2-Nitrophenol	BQL	422.0	
3,3'-Dichlorobenzidine	BQL	845.0	
3-Nitroaniline	BQL	2110.0	
4,6-Dinitro-2-methylphenol	BQL	2110.0	
4-Bromophenyl-phenylether	BQL	422.0	
4-Chloro-3-methylphenol	BQL	845.0	
4-Chloroaniline	BQL	845.0	
4-Chlorophenyl phenyl ether	BQL	422.0	
4-Methylphenol	BQL	422.0	
4-Nitroaniline	BQL	2110.0	
4-Nitrophenol	BQL	2110.0	
Acenaphthene	BQL	422.0	
Acenaphthylene	BQL	422.0	
Anthracene	BQL	422.0	
Benzoic acid	BQL	2110.0	
Benzo(a)anthracene	BQL	422.0	
Benzo(a)pyrene	BQL	422.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9307164-038
 Client ID: 01020 MW3-S-(0-6)11
 Collected: 07/20/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: IM
 Analyzed: 07/28/93
 Prepared: 07/26/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo[b]fluoranthene	BQL	422.0	
Benzo[g,h,i]perylene	BQL	422.0	
Benzo[k]fluoranthene	BQL	422.0	
Benzyl alcohol	BQL	845.0	
bis(2-Chloroethoxy) methane	BQL	422.0	
bis(2-Chloroethyl) ether	BQL	422.0	
bis(2-Chloroisopropyl) ether	BQL	422.0	
bis(2-Ethylhexyl)phthalate	BQL	422.0	
Butyl benzyl phthalate	BQL	422.0	
Chrysene	BQL	422.0	
di-n-Butylphthalate	BQL	422.0	
di-n-Octylphthalate	BQL	422.0	
Dibenzofuran	BQL	422.0	
Dibenz[a,h]anthracene	BQL	422.0	
Diethylphthalate	BQL	422.0	
Dimethyl phthalate	BQL	422.0	
Fluoranthene	BQL	422.0	
Fluorene	BQL	422.0	
Hexachlorobenzene	BQL	422.0	
Hexachlorobutadiene	BQL	422.0	
Hexachlorocyclopentadiene	BQL	422.0	
Hexachloroethane	BQL	422.0	
Indeno[1,2,3-cd]pyrene	BQL	422.0	
Isophorone	BQL	422.0	
N-Nitroso-di-n-propylamine	BQL	422.0	
N-nitrosodiphenylamine	BQL	422.0	
Naphthalene	BQL	422.0	
Nitrobenzene	BQL	422.0	
Pentachlorophenol	BQL	2110.0	
Phenanthrene	BQL	422.0	
Phenol	BQL	422.0	
Pyrene	BQL	422.0	

GP ID: 9307164-04B
 Client ID: 01021 MW3-S-(6''-2')
 Collected: 07/20/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: IM
 Analyzed: 07/28/93
 Prepared: 07/26/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	389.0	
1,2-Dichlorobenzene	BQL	389.0	
1,3-Dichlorobenzene	BQL	389.0	
1,4-Dichlorobenzene	BQL	389.0	
2,4,5-Trichlorophenol	BQL	389.0	
2,4,6-Trichlorophenol	BQL	389.0	
2,4-Dichlorophenol	BQL	389.0	
2,4-Dimethylphenol	BQL	389.0	
2,4-Dinitrophenol	BQL	1950.0	
2,4-Dinitrotoluene	BQL	389.0	
2,6-Dinitrotoluene	BQL	389.0	
2-Chloronaphthalene	BQL	389.0	
2-Chlorophenol	BQL	389.0	
2-Methylnaphthalene	BQL	389.0	
2-Methylphenol	BQL	389.0	
2-Nitroaniline	BQL	1950.0	
2-Nitrophenol	BQL	389.0	
3,3'-Dichlorobenzidine	BQL	779.0	
3-Nitroaniline	BQL	1950.0	
4,6-Dinitro-2-methylphenol	BQL	1950.0	
4-Bromophenyl-phenylether	BQL	389.0	
4-Chloro-3-methylphenol	BQL	779.0	
4-Chloroaniline	BQL	779.0	
4-Chlorophenyl phenyl ether	BQL	389.0	
4-Methylphenol	BQL	389.0	
4-Nitroaniline	BQL	1950.0	
4-Nitrophenol	BQL	1950.0	
Acenaphthene	BQL	389.0	
Acenaphthylene	BQL	389.0	
Anthracene	BQL	389.0	
Benzoic acid	BQL	1950.0	
Benzo[a]anthracene	BQL	389.0	
Benzo[a]pyrene	BQL	389.0	

GP ID: 9307164-048
 Client ID: 01021 M3-S-(6''-2')
 Collected: 07/20/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: IM
 Analyzed: 07/28/93
 Prepared: 07/26/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det. Lim.	Qualifier
Benzo[b]fluoranthene	BQL	389.0	
Benzo[g,h,i]perylene	BQL	389.0	
Benzo[k]fluoranthene	BQL	389.0	
Benzyl alcohol	BQL	779.0	
bis(2-Chloroethoxy) methane	BQL	389.0	
bis(2-Chloroethyl) ether	BQL	389.0	
bis(2-Chloroisopropyl) ether	BQL	389.0	
bis(2-Ethylhexyl)phthalate	BQL	389.0	
Butyl benzyl phthalate	BQL	389.0	
Chrysene	BQL	389.0	
di-n-Butylphthalate	BQL	389.0	
di-n-Octylphthalate	BQL	389.0	
Dibenzofuran	BQL	389.0	
Dibenz[a,h]anthracene	BQL	389.0	
Diethylphthalate	BQL	389.0	
Dimethyl phthalate	BQL	389.0	
Fluoranthene	BQL	389.0	
Fluorene	BQL	389.0	
Hexachlorobenzene	BQL	389.0	
Hexachlorobutadiene	BQL	389.0	
Hexachlorocyclopentadiene	BQL	389.0	
Hexachloroethane	BQL	389.0	
Indeno[1,2,3-cd]pyrene	BQL	389.0	
Isophorone	BQL	389.0	
N-Nitroso-di-n-propylamine	BQL	389.0	
N-nitrosodiphenylamine	BQL	389.0	
Naphthalene	BQL	389.0	
Nitrobenzene	BQL	389.0	
Pentachlorophenol	BQL	1950.0	
Phenanthrene	BQL	389.0	
Phenol	BQL	389.0	
Pyrene	BQL	389.0	

GP ID: 9307164-058
 Client ID: 01022 M/S-S-(4-6)
 Collected: 07/20/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: JM
 Analyzed: 07/28/93
 Prepared: 07/26/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	380.0	
1,2-Dichlorobenzene	BQL	380.0	
1,3-Dichlorobenzene	BQL	380.0	
1,4-Dichlorobenzene	BQL	380.0	
2,4,5-Trichlorophenol	BQL	380.0	
2,4,6-Trichlorophenol	BQL	380.0	
2,4-Dichlorophenol	BQL	380.0	
2,4-Dimethylphenol	BQL	380.0	
2,4-Dinitrophenol	BQL	1900.0	
2,4-Dinitrotoluene	BQL	380.0	
2,6-Dinitrotoluene	BQL	380.0	
2-Chloronaphthalene	BQL	380.0	
2-Chlorophenol	BQL	380.0	
2-Methylnaphthalene	BQL	380.0	
2-Methylphenol	BQL	380.0	
2-Nitroaniline	BQL	1900.0	
2-Nitrophenol	BQL	380.0	
3,3'-Dichlorobenzidine	BQL	759.0	
3-Nitroaniline	BQL	1900.0	
4,6-Dinitro-2-methylphenol	BQL	1900.0	
4-Bromophenyl-phenylether	BQL	380.0	
4-Chloro-3-methylphenol	BQL	759.0	
4-Chloroaniline	BQL	759.0	
4-Chlorophenyl phenyl ether	BQL	380.0	
4-Methylphenol	BQL	380.0	
4-Nitroaniline	BQL	1900.0	
4-Nitrophenol	BQL	1900.0	
Acenaphthene	BQL	380.0	
Acenaphthylene	BQL	380.0	
Anthracene	BQL	380.0	
Benzoic acid	BQL	1900.0	
Benzo(a)anthracene	BQL	380.0	
Benzo(a)pyrene	BQL	380.0	

GP ID: 9307164-05B
 Client ID: 01022 M&S-S-(4-6)
 Collected: 07/20/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: IM
 Analyzed: 07/28/93
 Prepared: 07/26/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo[b]fluoranthene	BQL	380.0	
Benzo[g,h,i]perylene	BQL	380.0	
Benzo[k]fluoranthene	BQL	380.0	
Benzyl alcohol	BQL	759.0	
bis(2-Chloroethoxy) methane	BQL	380.0	
bis(2-Chloroethyl) ether	BQL	380.0	
bis(2-Chloroisopropyl) ether	BQL	380.0	
bis(2-Ethylhexyl)phthalate	BQL	380.0	
Butyl benzyl phthalate	BQL	380.0	
Chrysene	BQL	380.0	
di-n-Butylphthalate	BQL	380.0	
di-n-Octylphthalate	BQL	380.0	
Dibenzofuran	BQL	380.0	
Dibenz[a,h]anthracene	BQL	380.0	
Diethylphthalate	BQL	380.0	
Dimethyl phthalate	BQL	380.0	
Fluoranthene	BQL	380.0	
Fluorene	BQL	380.0	
Hexachlorobenzene	BQL	380.0	
Hexachlorobutadiene	BQL	380.0	
Hexachlorocyclopentadiene	BQL	380.0	
Hexachloroethane	BQL	380.0	
Indeno[1,2,3-cd]pyrene	BQL	380.0	
Isophorone	BQL	380.0	
N-Nitroso-di-n-propylamine	BQL	380.0	
N-nitrosodiphenylamine	BQL	380.0	
Naphthalene	BQL	380.0	
Nitrobenzene	BQL	380.0	
Pentachlorophenol	BQL	1900.0	
Phenanthrene	BQL	380.0	
Phenol	BQL	380.0	
Pyrene	BQL	380.0	

GP ID: 9307164-068
 Client ID: 01023 MW3-S-(10-12)
 Collected: 07/20/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: IM
 Analyzed: 07/28/93
 Prepared: 07/26/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det. Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	396.0	
1,2-Dichlorobenzene	BQL	396.0	
1,3-Dichlorobenzene	BQL	396.0	
1,4-Dichlorobenzene	BQL	396.0	
2,4,5-Trichlorophenol	BQL	396.0	
2,4,6-Trichlorophenol	BQL	396.0	
2,4-Dichlorophenol	BQL	396.0	
2,4-Dimethylphenol	BQL	396.0	
2,4-Dinitrophenol	BQL	1980.0	
2,4-Dinitrotoluene	BQL	396.0	
2,6-Dinitrotoluene	BQL	396.0	
2-Chloronaphthalene	BQL	396.0	
2-Chlorophenol	BQL	396.0	
2-Methylnaphthalene	BQL	396.0	
2-Methylphenol	BQL	396.0	
2-Nitroaniline	BQL	1980.0	
2-Nitrophenol	BQL	396.0	
3,3'-Dichlorobenzidine	BQL	792.0	
3-Nitroaniline	BQL	1980.0	
4,6-Dinitro-2-methylphenol	BQL	1980.0	
4-Bromophenyl-phenylether	BQL	396.0	
4-Chloro-3-methylphenol	BQL	792.0	
4-Chloroaniline	BQL	792.0	
4-Chlorophenyl phenyl ether	BQL	396.0	
4-Methylphenol	BQL	396.0	
4-Nitroaniline	BQL	1980.0	
4-Nitrophenol	BQL	1980.0	
Acenaphthene	BQL	396.0	
Acenaphthylene	BQL	396.0	
Anthracene	BQL	396.0	
Benzoic acid	BQL	1980.0	
Benzo[a]anthracene	BQL	396.0	
Benzo[a]pyrene	BQL	396.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307164-068
 Client ID: 01023 M3-S-(10-12)
 Collected: 07/20/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: IM
 Analyzed: 07/28/93
 Prepared: 07/26/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo[b]fluoranthene	BQL	396.0	
Benzo[g,h,i]perylene	BQL	396.0	
Benzo[k]fluoranthene	BQL	396.0	
Benzyl alcohol	BQL	792.0	
bis(2-Chloroethoxy) methane	BQL	396.0	
bis(2-Chloroethyl) ether	BQL	396.0	
bis(2-Chloroisopropyl) ether	BQL	396.0	
bis(2-Ethylhexyl)phthalate	BQL	396.0	
Butyl benzyl phthalate	BQL	396.0	
Chrysene	BQL	396.0	
di-n-Butylphthalate	BQL	396.0	
di-n-Octylphthalate	BQL	396.0	
Dibenzofuran	BQL	396.0	
Dibenzo[a,h]anthracene	BQL	396.0	
Diethylphthalate	BQL	396.0	
Dimethyl phthalate	BQL	396.0	
Fluoranthene	BQL	396.0	
Fluorene	BQL	396.0	
Hexachlorobenzene	BQL	396.0	
Hexachlorobutadiene	BQL	396.0	
Hexachlorocyclopentadiene	BQL	396.0	
Hexachloroethane	BQL	396.0	
Indeno[1,2,3-cd]pyrene	BQL	396.0	
Isophorone	BQL	396.0	
N-Nitroso-di-n-propylamine	BQL	396.0	
N-nitrosodiphenylamine	BQL	396.0	
Naphthalene	BQL	396.0	
Nitrobenzene	BQL	396.0	
Pentachlorophenol	BQL	1980.0	
Phenanthrene	BQL	396.0	
Phenol	BQL	396.0	
Pyrene	BQL	396.0	

Year	Value	Description
1950	100	...
1951	100	...
1952	100	...
1953	100	...
1954	100	...
1955	100	...
1956	100	...
1957	100	...
1958	100	...
1959	100	...
1960	100	...
1961	100	...
1962	100	...
1963	100	...
1964	100	...
1965	100	...
1966	100	...
1967	100	...
1968	100	...
1969	100	...
1970	100	...
1971	100	...
1972	100	...
1973	100	...
1974	100	...
1975	100	...
1976	100	...
1977	100	...
1978	100	...
1979	100	...
1980	100	...
1981	100	...
1982	100	...
1983	100	...
1984	100	...
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1987	100	...
1988	100	...
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2006	100	...
2007	100	...
2008	100	...
2009	100	...
2010	100	...
2011	100	...
2012	100	...
2013	100	...
2014	100	...
2015	100	...
2016	100	...
2017	100	...
2018	100	...
2019	100	...
2020	100	...
2021	100	...
2022	100	...
2023	100	...
2024	100	...
2025	100	...
2026	100	...
2027	100	...
2028	100	...
2029	100	...
2030	100	...

GP ID: 9307164-07B
 Client ID: 01024 MW3-5-(10-12)*DUP
 Collected: 07/20/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: IM
 Analyzed: 07/28/93
 Prepared: 07/26/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	393.0	
1,2-Dichlorobenzene	BQL	393.0	
1,3-Dichlorobenzene	BQL	393.0	
1,4-Dichlorobenzene	BQL	393.0	
2,4,5-Trichlorophenol	BQL	393.0	
2,4,6-Trichlorophenol	BQL	393.0	
2,4-Dichlorophenol	BQL	393.0	
2,4-Dimethylphenol	BQL	393.0	
2,4-Dinitrophenol	BQL	1960.0	
2,4-Dinitrotoluene	BQL	393.0	
2,6-Dinitrotoluene	BQL	393.0	
2-Chloronaphthalene	BQL	393.0	
2-Chlorophenol	BQL	393.0	
2-Methylnaphthalene	BQL	393.0	
2-Methylphenol	BQL	393.0	
2-Nitroaniline	BQL	1960.0	
2-Nitrophenol	BQL	393.0	
3,3'-Dichlorobenzidine	BQL	785.0	
3-Nitroaniline	BQL	1960.0	
4,6-Dinitro-2-methylphenol	BQL	1960.0	
4-Bromophenyl-phenylether	BQL	393.0	
4-Chloro-3-methylphenol	BQL	785.0	
4-Chloroaniline	BQL	785.0	
4-Chlorophenyl phenyl ether	BQL	393.0	
4-Methylphenol	BQL	393.0	
4-Nitroaniline	BQL	1960.0	
4-Nitrophenol	BQL	1960.0	
Acenaphthene	BQL	393.0	
Acenaphthylene	BQL	393.0	
Anthracene	BQL	393.0	
Benzoic acid	BQL	1960.0	
Benzo[a]anthracene	BQL	393.0	
Benzo[a]pyrene	BQL	393.0	

GP ID: 9307164-078
 Client ID: 01024 M/S-5-(10-12)'DUP
 Collected: 07/20/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: IM
 Analyzed: 07/28/93
 Prepared: 07/26/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo[b]fluoranthene	BQL	393.0	
Benzo[g,h,i]perylene	BQL	393.0	
Benzo[k]fluoranthene	BQL	393.0	
Benzyl alcohol	BQL	785.0	
bis(2-Chloroethoxy) methane	BQL	393.0	
bis(2-Chloroethyl) ether	BQL	393.0	
bis(2-Chloroisopropyl) ether	BQL	393.0	
bis(2-Ethylhexyl)phthalate	BQL	393.0	
Butyl benzyl phthalate	BQL	393.0	
Chrysene	BQL	393.0	
di-n-Butylphthalate	BQL	393.0	
di-n-Octylphthalate	BQL	393.0	
Dibenzofuran	BQL	393.0	
Dibenz[a,h]anthracene	BQL	393.0	
Diethylphthalate	BQL	393.0	
Dimethyl phthalate	BQL	393.0	
Fluoranthene	BQL	393.0	
Fluorene	BQL	393.0	
Hexachlorobenzene	BQL	393.0	
Hexachlorobutadiene	BQL	393.0	
Hexachlorocyclopentadiene	BQL	393.0	
Hexachloroethane	BQL	393.0	
Indeno[1,2,3-cd]pyrene	BQL	393.0	
Isophorene	BQL	393.0	
N-Nitroso-di-n-propylamine	BQL	393.0	
N-nitrosodiphenylamine	BQL	393.0	
Naphthalene	BQL	393.0	
Nitrobenzene	BQL	393.0	
Pentachlorophenol	BQL	1960.0	
Phenanthrene	BQL	393.0	
Phenol	BQL	393.0	
Pyrene	BQL	393.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307164-08C
Client ID: D1079 FIELD BLANK N20
Collected: 07/21/93
Dilution: 1

Matrix: WATER
Method: 8270
Units: ug/L

Analyst: MS
Analyzed: 08/01/93
Prepared: 07/27/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	10.4	
1,2-Dichlorobenzene	BQL	10.4	
1,3-Dichlorobenzene	BQL	10.4	
1,4-Dichlorobenzene	BQL	10.4	
2,4,5-Trichlorophenol	BQL	10.4	
2,4,6-Trichlorophenol	BQL	10.4	
2,4-Dichlorophenol	BQL	10.4	
2,4-Dimethylphenol	BQL	10.4	
2,4-Dinitrophenol	BQL	52.0	
2,4-Dinitrotoluene	BQL	10.4	
2,6-Dinitrotoluene	BQL	10.4	
2-Chloronaphthalene	BQL	10.4	
2-Chlorophenol	BQL	10.4	
2-Methylnaphthalene	BQL	10.4	
2-Methylphenol	BQL	10.4	
2-Nitroaniline	BQL	52.0	
2-Nitrophenol	BQL	10.4	
3,3'-Dichlorobenzidine	BQL	20.8	
3-Nitroaniline	BQL	52.0	
4,6-Dinitro-2-methylphenol	BQL	52.0	
4-Bromophenyl-phenylether	BQL	10.4	
4-Chloro-3-methylphenol	BQL	20.8	
4-Chloroaniline	BQL	20.8	
4-Chlorophenyl phenyl ether	BQL	10.4	
4-Methylphenol	BQL	10.4	
4-Nitroaniline	BQL	52.0	
4-Nitrophenol	BQL	52.0	
Acenaphthene	BQL	10.4	
Acenaphthylene	BQL	10.4	
Anthracene	BQL	10.4	
Benzoic acid	BQL	52.0	
Benzo(a)anthracene	BQL	10.4	
Benzo(a)pyrene	BQL	10.4	

GP ID: 9307164-08C
 Client ID: 01079 FIELD BLANK H2O
 Collected: 07/21/93
 Dilution: 1

Matrix: WATER
 Method: 8270
 Units: ug/L

Analyst: MS
 Analyzed: 08/01/93
 Prepared: 07/27/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo[b]fluoranthene	BQL	10.4	
Benzo[g,h,i]perylene	BQL	10.4	
Benzo[k]fluoranthene	BQL	10.4	
Benzyl alcohol	BQL	20.8	
bis(2-Chloroethoxy) methane	BQL	10.4	
bis(2-Chloroethyl) ether	BQL	10.4	
bis(2-Chloroisopropyl) ether	BQL	10.4	
bis(2-Ethylhexyl)phthalate	BQL	10.4	
Butyl benzyl phthalate	BQL	10.4	
Chrysene	BQL	10.4	
di-n-Butylphthalate	BQL	10.4	
di-n-Octylphthalate	BQL	10.4	
Dibenzofuran	BQL	10.4	
Dibenz[a,h]anthracene	BQL	10.4	
Diethylphthalate	BQL	10.4	
Dimethyl phthalate	BQL	10.4	
Fluoranthene	BQL	10.4	
Fluorene	BQL	10.4	
Hexachlorobenzene	BQL	10.4	
Hexachlorobutadiene	BQL	10.4	
Hexachlorocyclopentadiene	BQL	10.4	
Hexachloroethane	BQL	10.4	
Indeno[1,2,3-cd]pyrene	BQL	10.4	
Isophorone	BQL	10.4	
N-Nitroso-di-n-propylamine	BQL	10.4	
N-nitrosodiphenylamine	BQL	10.4	
Naphthalene	BQL	10.4	
Nitrobenzene	BQL	10.4	
Pentachlorophenol	BQL	52.0	
Phenanthrene	BQL	10.4	
Phenol	BQL	10.4	
Pyrene	BQL	10.4	

GP ID: 9307164-01A
 Client ID: 00807 TRIP BLANK
 Collected: 07/21/93
 Dilution: 1

Matrix: WATER
 Method: 8240u
 Units: ug/L

Analyst: HY
 Analyzed: 07/29/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.00	
1,1,2,2-Tetrachloroethane	BQL	5.00	
1,1,2-Trichloroethane	BQL	5.00	
1,1-Dichloroethane	BQL	5.00	
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,2-Dichloropropane	BQL	5.00	
2-Butanone	BQL	10.0	
2-Chloroethylvinyl ether	BQL	10.0	
2-Hexanone	BQL	10.0	
4-Methyl-2-pentanone	BQL	10.0	
Acetone	13.1	10.0	
Benzene	BQL	5.00	
Bromodichloromethane	BQL	5.00	
Bromoform	BQL	5.00	
Bromomethane	BQL	10.0	
Carbon Disulfide	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroethane	BQL	10.0	
Chloroform	BQL	5.00	
Chloromethane	BQL	10.0	
cis-1,3-Dichloropropene	BQL	5.00	
Dibromochloromethane	BQL	5.00	
Ethylbenzene	BQL	5.00	
Methylene chloride	BQL	5.00	
Styrene	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Toluene	BQL	5.00	
trans-1,2-Dichloroethane	BQL	5.00	
trans-1,3-Dichloropropene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl Acetate	BQL	10.0	
Vinyl chloride	BQL	10.0	
Xylenes	BQL	5.00	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307164-02A
Client ID: 00808 TRIP BLANK
Collected: 07/21/93
Dilution: 1

Matrix: WATER
Method: 8240w
Units: ug/L

Analyst: NY
Analyzed: 07/29/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.00	
1,1,2,2-Tetrachloroethane	BQL	5.00	
1,1,2-Trichloroethane	BQL	5.00	
1,1-Dichloroethane	BQL	5.00	
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,2-Dichloropropane	BQL	5.00	
2-Butanone	BQL	10.0	
2-Chloroethyl(vinyl ether	BQL	10.0	
2-Hexanone	BQL	10.0	
4-Methyl-2-pentanone	BQL	10.0	
Acetone	15.5	10.0	
Benzene	BQL	5.00	
Bromodichloromethane	BQL	5.00	
Bromoform	BQL	5.00	
Bromomethane	BQL	10.0	
Carbon Disulfide	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroethane	BQL	10.0	
Chloroform	BQL	5.00	
Chloromethane	BQL	10.0	
cis-1,3-Dichloropropene	BQL	5.00	
Dibromochloromethane	BQL	5.00	
Ethylbenzene	BQL	5.00	
Methylene chloride	BQL	5.00	
Styrene	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Toluene	BQL	5.00	
trans-1,2-Dichloroethene	BQL	5.00	
trans-1,3-Dichloropropene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl Acetate	BQL	10.0	
Vinyl chloride	BQL	10.0	
Xylenes	BQL	5.00	

GP ID: 9307164-03A
 Client ID: 01020 MW3-S-(0-6)''
 Collected: 07/20/93
 Dilution: 1

Matrix: SOIL
 Method: 8240s
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/23/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	6.40	
1,1,2,2-Tetrachloroethane	BQL	6.40	
1,1,2-Trichloroethane	BQL	6.40	
1,1-Dichloroethane	BQL	6.40	
1,1-Dichloroethene	BQL	6.40	
1,2-Dichloroethane	BQL	6.40	
1,2-Dichloropropane	BQL	6.40	
2-Butanone	BQL	12.8	
2-Chloroethylvinyl ether	BQL	12.8	
2-Hexanone	BQL	12.8	
4-Methyl-2-pentanone	BQL	12.8	
Acetone	BQL	12.8	
Benzene	BQL	6.40	
Bromodichloromethane	BQL	6.40	
Bromoform	BQL	6.40	
Bromomethane	BQL	12.8	
Carbon Disulfide	BQL	6.40	
Carbon tetrachloride	BQL	6.40	
Chlorobenzene	BQL	6.40	
Chloroethane	BQL	12.8	
Chloroform	BQL	6.40	
Chloromethane	BQL	12.8	
cis-1,3-Dichloropropene	BQL	6.40	
Dibromochloromethane	BQL	6.40	
Ethylbenzene	BQL	6.40	
Methylene chloride	5.56	6.40	B
Styrene	BQL	6.40	
Tetrachloroethane	BQL	6.40	
Toluene	BQL	6.40	
trans-1,2-Dichloroethene	BQL	6.40	
trans-1,3-Dichloropropene	BQL	6.40	
Trichloroethene	BQL	6.40	
Vinyl Acetate	BQL	12.8	
Vinyl chloride	BQL	12.8	
Xylenes	BQL	6.40	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307164-04A
 Client ID: 01021 NUS-S-(6''-2')
 Collected: 07/20/93
 Dilution: 1

Matrix: SOIL
 Method: 8240s
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/23/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det. Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.88	
1,1,2,2-Tetrachloroethane	BQL	5.88	
1,1,2-Trichloroethane	BQL	5.88	
1,1-Dichloroethane	BQL	5.88	
1,1-Dichloroethene	BQL	5.88	
1,2-Dichloroethane	BQL	5.88	
1,2-Dichloropropane	BQL	5.88	
2-Butanone	BQL	11.8	
2-Chloroethylvinyl ether	BQL	11.8	
2-Hexanone	BQL	11.8	
4-Methyl-2-pentanone	BQL	11.8	
Acetone	BQL	11.8	
Benzene	BQL	5.88	
Bromodichloromethane	BQL	5.88	
Bromoform	BQL	5.88	
Bromomethane	BQL	11.8	
Carbon Disulfide	BQL	5.88	
Carbon tetrachloride	BQL	5.88	
Chlorobenzene	BQL	5.88	
Chloroethane	BQL	11.8	
Chloroform	BQL	5.88	
Chloromethane	BQL	11.8	
cis-1,3-Dichloropropene	BQL	5.88	
Dibromochloromethane	BQL	5.88	
Ethylbenzene	BQL	5.88	
Methylene chloride	5.98	5.88	B
Styrene	BQL	5.88	
Tetrachloroethene	BQL	5.88	
Toluene	BQL	5.88	
trans-1,2-Dichloroethene	BQL	5.88	
trans-1,3-Dichloropropene	BQL	5.88	
Trichloroethene	BQL	5.88	
Vinyl Acetate	BQL	11.8	
Vinyl chloride	BQL	11.8	
Xylenes	BQL	5.88	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9307164-05A
 Client ID: 01022 M&S-S-(4-6)
 Collected: 07/20/93
 Dilution: 1

Matrix: SOIL
 Method: 8240s
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/27/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.78	
1,1,2,2-Tetrachloroethane	BQL	5.78	
1,1,2-Trichloroethane	BQL	5.78	
1,1-Dichloroethane	BQL	5.78	
1,1-Dichloroethene	BQL	5.78	
1,2-Dichloroethane	BQL	5.78	
1,2-Dichloropropane	BQL	5.78	
2-Butanone	BQL	11.6	
2-Chloroethylvinyl ether	BQL	11.6	
2-Hexanone	BQL	11.6	
4-Methyl-2-pentanone	BQL	11.6	
Acetone	36.6	11.6	
Benzene	BQL	5.78	
Bromodichloromethane	BQL	5.78	
Bromoform	BQL	5.78	
Bromomethane	BQL	11.6	
Carbon Disulfide	BQL	5.78	
Carbon tetrachloride	BQL	5.78	
Chlorobenzene	BQL	5.78	
Chloroethane	BQL	11.6	
Chloroform	BQL	5.78	
Chloromethane	BQL	11.6	
cis-1,3-Dichloropropene	BQL	5.78	
Dibromochloromethane	BQL	5.78	
Ethylbenzene	BQL	5.78	
Methylene chloride	10.1	5.78	
Styrene	BQL	5.78	
Tetrachloroethene	BQL	5.78	
Toluene	BQL	5.78	
trans-1,2-Dichloroethene	BQL	5.78	
trans-1,3-Dichloropropene	BQL	5.78	
Trichloroethene	BQL	5.78	
Vinyl Acetate	BQL	11.6	
Vinyl chloride	BQL	11.6	
xyleneS	BQL	5.78	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307164-06A
 Client ID: 01023 MMS-S-(10-12)
 Collected: 07/20/93
 Dilution: 1

Matrix: SOIL
 Method: 8240s
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/23/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	6.07	
1,1,2,2-Tetrachloroethane	BQL	6.07	
1,1,2-Trichloroethane	BQL	6.07	
1,1-Dichloroethane	BQL	6.07	
1,1-Dichloroethene	BQL	6.07	
1,2-Dichloroethane	BQL	6.07	
1,2-Dichloropropane	BQL	6.07	
2-Butanone	BQL	12.1	
2-Chloroethylvinyl ether	BQL	12.1	
2-Hexanone	BQL	12.1	
4-Methyl-2-pentanone	BQL	12.1	
Acetone	342.0	12.1	+
Benzene	BQL	6.07	
Bromodichloromethane	BQL	6.07	
Bromoform	BQL	6.07	
Bromomethane	BQL	12.1	
Carbon Disulfide	BQL	6.07	
Carbon tetrachloride	BQL	6.07	
Chlorobenzene	BQL	6.07	
Chloroethane	BQL	12.1	
Chloroform	BQL	6.07	
Chloromethane	BQL	12.1	
cis-1,3-Dichloropropene	BQL	6.07	
Dibromochloromethane	BQL	6.07	
Ethylbenzene	BQL	6.07	
Methylene chloride	6.10	6.07	
Styrene	BQL	6.07	
Tetrachloroethene	BQL	6.07	
Toluene	BQL	6.07	
trans-1,2-Dichloroethene	BQL	6.07	
trans-1,3-Dichloropropene	BQL	6.07	
Trichloroethene	BQL	6.07	
Vinyl Acetate	BQL	12.1	
Vinyl chloride	BQL	12.1	
Xylenes	BQL	6.07	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307164-07A
 Client ID: 01024 MW3-S-(10-12)*DUP
 Collected: 07/20/93
 Dilution: 1

Matrix: SOIL
 Method: 8240s
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/23/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.94	
1,1,2,2-Tetrachloroethane	BQL	5.94	
1,1,2-Trichloroethane	BQL	5.94	
1,1-Dichloroethane	BQL	5.94	
1,1-Dichloroethene	BQL	5.94	
1,2-Dichloroethane	BQL	5.94	
1,2-Dichloropropane	BQL	5.94	
2-Butanone	BQL	11.9	
2-Chloroethylvinyl ether	BQL	11.9	
2-Hexanone	BQL	11.9	
4-Methyl-2-pentanone	BQL	11.9	
Acetone	903.0	11.9	+
Benzene	BQL	5.94	
Bromodichloromethane	BQL	5.94	
Bromoform	BQL	5.94	
Bromomethane	BQL	11.9	
Carbon Disulfide	BQL	5.94	
Carbon tetrachloride	BQL	5.94	
Chlorobenzene	BQL	5.94	
Chloroethane	BQL	11.9	
Chloroform	BQL	5.94	
Chloromethane	BQL	11.9	
cis-1,3-Dichloropropene	BQL	5.94	
Dibromochloromethane	BQL	5.94	
Ethylbenzene	BQL	5.94	
Methylene chloride	BQL	5.94	
Styrene	BQL	5.94	
Tetrachloroethene	BQL	5.94	
Toluene	BQL	5.94	
trans-1,2-Dichloroethene	BQL	5.94	
trans-1,3-Dichloropropene	BQL	5.94	
Trichloroethene	BQL	5.94	
Vinyl Acetate	BQL	11.9	
Vinyl chloride	BQL	11.9	
Xylenes	BQL	5.94	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9307164-08A
 Client ID: 01079 FIELD BLANK H2O
 Collected: 07/21/93
 Dilution: 1

Matrix: WATER
 Method: 8240w
 Units: ug/L

Analyst: HY
 Analyzed: 07/29/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.00	
1,1,2,2-Tetrachloroethane	BQL	5.00	
1,1,2-Trichloroethane	BQL	5.00	
1,1-Dichloroethane	BQL	5.00	
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,2-Dichloropropane	BQL	5.00	
2-Butanone	BQL	10.0	
2-Chloroethylvinyl ether	BQL	10.0	
2-Hexanone	BQL	10.0	
4-Methyl-2-pentanone	BQL	10.0	
Acetone	14.1	10.0	
Benzene	BQL	5.00	
Bromodichloromethane	BQL	5.00	
Bromoform	BQL	5.00	
Bromomethane	BQL	10.0	
Carbon Disulfide	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroethane	BQL	10.0	
Chloroform	BQL	5.00	
Chloromethane	BQL	10.0	
cis-1,3-Dichloropropene	BQL	5.00	
Dibromochloromethane	BQL	5.00	
Ethylbenzene	BQL	5.00	
Methylene chloride	BQL	5.00	
Styrene	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Toluene	BQL	5.00	
trans-1,2-Dichloroethene	BQL	5.00	
trans-1,3-Dichloropropene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl Acetate	BQL	10.0	
Vinyl chloride	BQL	10.0	
Xylenes	BQL	5.00	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307164-03B
Client ID: 01020 MW3-S-(0-6)11
Collected: 07/20/93
Dilution: 1Matrix: SOIL
Method: SUB46 8080
Units: ug/KgAnalyst: PH
Analyzed: 08/13/93
Prepared: 07/26/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.72	
4,4'-DDE	BQL	1.72	
4,4'-DDT	BQL	5.14	
Aldrin	BQL	1.72	
alpha-BHC	BQL	1.29	
Aroclor 1016	BQL	21.4	
Aroclor 1221	BQL	21.4	
Aroclor 1232	BQL	21.4	
Aroclor 1242	BQL	27.9	
Aroclor 1248	BQL	42.9	
Aroclor 1254	BQL	42.9	
Aroclor 1260	BQL	42.9	
beta-BHC	BQL	2.57	
Chlordane	BQL	6.00	
delta-BHC	BQL	3.86	
Dieldrin	BQL	0.858	
Endosulfan I	BQL	6.00	
Endosulfan II	BQL	1.72	
Endosulfan sulfate	BQL	28.3	
Endrin	BQL	2.57	
Endrin aldehyde	BQL	9.87	
gamma-BHC (Lindane)	BQL	1.72	
Heptachlor	BQL	1.29	
Heptachlor epoxide	BQL	35.6	
Methoxychlor	BQL	75.5	
Toxaphene	BQL	103.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307164-048
 Client ID: 01021 MW3-S-(6''-2')
 Collected: 07/20/93
 Dilution: 1

Matrix: SOIL
 Method: SW846 8080
 Units: ug/Kg

Analyst: PH
 Analyzed: 08/14/93
 Prepared: 07/26/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.35	
4,4'-DDE	BQL	1.58	
4,4'-DDT	BQL	4.74	
Aldrin	BQL	1.58	
alpha-BHC	BQL	1.19	
Aroclor 1016	BQL	19.8	
Aroclor 1221	BQL	19.8	
Aroclor 1232	BQL	19.8	
Aroclor 1242	BQL	25.7	
Aroclor 1248	BQL	39.5	
Aroclor 1254	BQL	39.5	
Aroclor 1260	BQL	39.5	
beta-BHC	BQL	2.37	
Chlordane	BQL	5.53	
delta-BHC	BQL	3.56	
Dieldrin	BQL	0.791	
Endosulfan I	BQL	5.53	
Endosulfan II	BQL	1.58	
Endosulfan sulfate	BQL	26.1	
Endrin	BQL	2.37	
Endrin aldehyde	BQL	9.10	
gamma-BHC (Lindane)	BQL	1.58	
Heptachlor	BQL	1.19	
Heptachlor epoxide	BQL	32.8	
Methoxychlor	BQL	69.6	
Toxaphene	BQL	94.9	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307164-05B
Client ID: 01022 MW3-S-(4-6)
Collected: 07/20/93
Dilution: 1Matrix: SOIL
Method: SU846 8080
Units: ug/KgAnalyst: PH
Analyzed: 08/14/93
Prepared: 07/26/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.24	
4,4'-DDE	BQL	1.54	
4,4'-DDT	BQL	4.62	
Aldrin	BQL	1.54	
alpha-BHC	BQL	1.16	
Aroclor 1016	BQL	19.3	
Aroclor 1221	BQL	19.3	
Aroclor 1232	BQL	19.3	
Aroclor 1242	BQL	25.0	
Aroclor 1248	BQL	38.5	
Aroclor 1254	BQL	38.5	
Aroclor 1260	BQL	38.5	
beta-BHC	BQL	2.31	
Chlordane	BQL	5.39	
delta-BHC	BQL	3.47	
Dieldrin	BQL	0.770	
Endosulfan I	BQL	5.39	
Endosulfan II	BQL	1.54	
Endosulfan sulfate	BQL	25.4	
Endrin	BQL	2.31	
Endrin aldehyde	BQL	8.87	
gamma-BHC (Lindane)	BQL	1.54	
Keptachlor	BQL	1.16	
Keptachlor epoxide	BQL	32.0	
Methoxychlor	BQL	67.8	
Toxaphene	BQL	92.5	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9307164-068
 Client ID: 01023 MMS-S-(10-12)
 Collected: 07/20/93
 Dilution: 1

Matrix: SOIL
 Method: SW846 8080
 Units: ug/Kg

Analyst: PH
 Analyzed: 08/14/93
 Prepared: 07/26/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.46	
4,4'-DDE	BQL	1.62	
4,4'-DDT	BQL	4.86	
Aldrin	BQL	1.62	
alpha-BHC	BQL	1.22	
Aroclor 1016	BQL	20.3	
Aroclor 1221	BQL	20.3	
Aroclor 1232	BQL	20.3	
Aroclor 1242	BQL	26.4	
Aroclor 1248	BQL	40.5	
Aroclor 1254	BQL	40.5	
Aroclor 1260	BQL	40.5	
beta-BHC	BQL	2.43	
Chlordane	BQL	5.67	
delta-BHC	BQL	3.65	
Dieldrin	BQL	0.811	
Endosulfan I	BQL	5.67	
Endosulfan II	BQL	1.62	
Endosulfan sulfate	BQL	26.8	
Endrin	BQL	2.43	
Endrin aldehyde	BQL	9.33	
gamma-BHC (Lindane)	BQL	1.62	
Heptachlor	BQL	1.22	
Heptachlor epoxide	BQL	33.6	
Methoxychlor	BQL	71.3	
Toxaphene	BQL	97.3	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307164-07B
Client ID: 01024 MW3-S-(10-12)*DUP
Collected: 07/20/93
Dilution: 1Matrix: SOIL
Method: SW846 8080
Units: ug/KgAnalyst: PH
Analyzed: 08/14/93
Prepared: 07/26/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.39	
4,4'-DDE	BQL	1.59	
4,4'-DDT	BQL	4.78	
Aldrin	BQL	1.59	
alpha-BHC	BQL	1.20	
Aroclor 1016	BQL	19.9	
Aroclor 1221	BQL	19.9	
Aroclor 1232	BQL	19.9	
Aroclor 1242	BQL	25.9	
Aroclor 1248	BQL	39.9	
Aroclor 1254	BQL	39.9	
Aroclor 1260	BQL	39.9	
beta-BHC	BQL	2.39	
Chlordane	BQL	5.58	
delta-BHC	BQL	3.59	
Dieldrin	BQL	0.797	
Endosulfan I	BQL	5.58	
Endosulfan II	BQL	1.59	
Endosulfan sulfate	BQL	26.3	
Endrin	BQL	2.39	
Endrin aldehyde	BQL	9.17	
gamma-BHC (Lindane)	BQL	1.59	
Heptachlor	BQL	1.20	
Heptachlor epoxide	BQL	33.1	
Methoxychlor	BQL	70.2	
Toxaphene	BQL	95.7	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307164-080
 Client ID: 01079 FIELD BLANK H2O
 Collected: 07/21/93
 Dilution: 1

Matrix: WATER
 Method: SW846 8080
 Units: ug/L

Analyst: PH
 Analyzed: 08/14/93
 Prepared: 07/27/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	0.114	
4,4'-DDE	BQL	0.042	
4,4'-DDT	BQL	0.125	
Aldrin	BQL	0.042	
alpha-BHC	BQL	0.031	
Aroclor 1016	BQL	0.520	
Aroclor 1221	BQL	0.520	
Aroclor 1232	BQL	0.520	
Aroclor 1242	BQL	0.676	
Aroclor 1248	BQL	1.04	
Aroclor 1254	BQL	1.04	
Aroclor 1260	BQL	1.04	
beta-BHC	BQL	0.062	
Chlordane	BQL	0.146	
delta-BHC	BQL	0.094	
Dieldrin	BQL	0.021	
Endosulfan I	BQL	0.146	
Endosulfan II	BQL	0.042	
Endosulfan sulfate	BQL	0.686	
Endrin	BQL	0.062	
Endrin aldehyde	BQL	0.239	
gamma-BHC (Lindane)	BQL	0.042	
Heptachlor	BQL	0.031	
Heptachlor epoxide	BQL	0.863	
Methoxychlor	BQL	1.83	
Toxaphene	BQL	2.50	

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS

ID: 9307164-03
ient ID: 01020 MW3-S-(0-6)''

Matrix: SOIL
Collected: 07/20/93

Element	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	7.17	mg/Kg	1	08/05/93	08/09/93 FU
Arsenic	SW846 7060	4.44	0.948	mg/Kg	1	08/05/93	08/09/93 FU
Cadmium	SW846 7421	138.0	6.92	mg/Kg	10	08/05/93	08/09/93 MG
Mercury	SW846 7471	BQL	0.128	mg/Kg	1	08/17/93	08/17/93 DH
Cesium	SW846 7610	545.0	76.8	mg/Kg	1	08/05/93	08/09/93 DH
Chromium	SW846 7740	BQL	1.10	mg/Kg	1	08/05/93	08/09/93 FU
Copper	SW846 7761	BQL	0.154	mg/Kg	1	08/05/93	08/06/93 DH
Barium	SW846 7770	593.0	48.6	mg/kg	1	08/05/93	08/09/93 DH
Lead	SW846 7841	BQL	1.41	mg/Kg	1	08/05/93	08/09/93 FU
Aluminum	SW846 6010	18200.0	123.0	mg/Kg	5		08/06/93 MB
Boron	SW846 6010	68.5	2.82	mg/Kg	1		08/06/93 MB
Strontium	SW846 6010	0.313	0.179	mg/Kg	1		08/06/93 MB
Calcium	SW846 6010	7390.0	22.4	mg/Kg	1		08/06/93 MB
Zinc	SW846 6010	1.16	0.768	mg/Kg	1		08/06/93 MB
Salt	SW846 6010	12.3	2.46	mg/Kg	1		08/06/93 MB
Sodium	SW846 6010	32.4	2.10	mg/Kg	1		08/06/93 MB
Chlorine	SW846 6010	95.0	5.22	mg/Kg	1		08/06/93 MB
Iron	SW846 6010	16900.0	39.7	mg/Kg	5		08/06/93 MB
Magnesium	SW846 6010	3980.0	11.6	mg/Kg	1		08/06/93 MB
Manganese	SW846 6010	239.0	1.23	mg/Kg	1		08/06/93 MB
Nickel	SW846 6010	16.6	3.97	mg/Kg	1		08/06/93 MB
Radium	SW846 6010	33.5	2.74	mg/Kg	1		08/06/93 MB
Thorium	SW846 6010	484.0	4.71	mg/Kg	1		08/06/93 MB

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS

IP ID: 9307164-04

Matrix: SOIL

Client ID: 01021 MW3-5-(6''-2')

Collected: 07/20/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	6.58	ng/Kg	1	08/05/93	08/09/93 FU
Arsenic	SW846 7060	7.14	0.869	ng/Kg	1	08/05/93	08/09/93 FU
Lead	SW846 7421	12.7	0.634	ng/Kg	1	08/05/93	08/09/93 MG
Mercury	SW846 7471	BQL	0.118	ng/Kg	1	08/17/93	08/17/93 DH
Potassium	SW846 7610	500.0	70.5	ng/Kg	1	08/05/93	08/09/93 DH
Selenium	SW846 7740	BQL	1.01	ng/Kg	1	08/05/93	08/09/93 FU
Silver	SW846 7761	BQL	0.141	ng/Kg	1	08/05/93	08/06/93 DH
Sodium	SW846 7770	124.0	44.6	ng/Kg	1	08/05/93	08/09/93 DH
Thallium	SW846 7841	BQL	1.29	ng/Kg	1	08/05/93	08/09/93 FU
Aluminum	SW846 6010	17000.0	113.0	ng/Kg	5		08/06/93 MB
Barium	SW846 6010	50.8	2.58	ng/Kg	1		08/06/93 MB
Beryllium	SW846 6010	0.437	0.164	ng/Kg	1		08/06/93 MB
Calcium	SW846 6010	1160.0	20.6	ng/Kg	1		08/06/93 MB
Cadmium	SW846 6010	BQL	0.705	ng/Kg	1		08/06/93 MB
Cobalt	SW846 6010	7.10	2.26	ng/Kg	1		08/06/93 MB
Chromium	SW846 6010	20.2	1.93	ng/Kg	1		08/06/93 MB
Copper	SW846 6010	9.21	4.79	ng/Kg	1		08/06/93 MB
Iron	SW846 6010	22500.0	36.4	ng/Kg	5		08/06/93 MB
Magnesium	SW846 6010	1880.0	10.7	ng/Kg	1		08/06/93 MB
Manganese	SW846 6010	86.9	1.13	ng/Kg	1		08/06/93 MB
Nickel	SW846 6010	8.27	3.64	ng/Kg	1		08/06/93 MB
Vanadium	SW846 6010	30.6	2.51	ng/Kg	1		08/06/93 MB
Zinc	SW846 6010	51.0	4.32	ng/Kg	1		08/06/93 MB

**GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS**

ID: 9307164-05
 ent ID: 01022 MW3-S-(4-6)

Matrix: SOIL
 Collected: 07/20/93

Element	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	6.48	mg/Kg	1	08/05/93	08/09/93 FU
Barium	SW846 7060	2.09	0.856	mg/Kg	1	08/05/93	08/09/93 FU
Bismuth	SW846 7421	8.28	0.625	mg/Kg	1	08/05/93	08/09/93 MB
Mercury	SW846 7471	BQL	0.116	mg/Kg	1	08/17/93	08/17/93 DH
Cesium	SW846 7610	844.0	69.4	mg/Kg	1	08/05/93	08/09/93 DH
Chromium	SW846 7740	BQL	0.995	mg/Kg	1	08/05/93	08/09/93 FU
Copper	SW846 7761	BQL	0.139	mg/Kg	1	08/05/93	08/06/93 DH
Fluorine	SW846 7770	108.0	44.0	mg/kg	1	08/05/93	08/09/93 DH
Gallium	SW846 7841	BQL	1.27	mg/Kg	1	08/05/93	08/09/93 FU
Germanium	SW846 6010	14600.0	111.0	mg/Kg	5		08/06/93 MB
Iron	SW846 6010	35.1	2.55	mg/Kg	1		08/06/93 MB
Lithium	SW846 6010	0.405	0.162	mg/Kg	1		08/06/93 MB
Lead	SW846 6010	398.0	20.2	mg/Kg	1		08/06/93 MB
Magnesium	SW846 6010	BQL	0.694	mg/Kg	1		08/06/93 MB
Manganese	SW846 6010	4.89	2.22	mg/Kg	1		08/06/93 MB
Nickel	SW846 6010	20.5	1.90	mg/Kg	1		08/06/93 MB
Vanadium	SW846 6010	10.4	4.72	mg/Kg	1		08/06/93 MB
Zinc	SW846 6010	15600.0	35.9	mg/Kg	5		08/06/93 MB
Aluminum	SW846 6010	2040.0	10.5	mg/Kg	1		08/06/93 MB
Boron	SW846 6010	62.8	1.11	mg/Kg	1		08/06/93 MB
Cadmium	SW846 6010	6.77	3.59	mg/Kg	1		08/06/93 MB
Chromium	SW846 6010	29.5	2.48	mg/Kg	1		08/06/93 MB
Cobalt	SW846 6010	35.4	4.26	mg/Kg	1		08/06/93 MB

**GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS**

GP ID: 9307164-06

Matrix: SOIL

Client ID: 01023 MW3-S-(10-12)'

Collected: 07/20/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	6.80	mg/Kg	1	08/05/93	08/09/93 FU
Arsenic	SW846 7060	BQL	0.898	mg/Kg	1	08/05/93	08/09/93 FU
Lead	SW846 7421	10.8	0.655	mg/Kg	1	08/05/93	08/09/93 MG
Mercury	SW846 7471	BQL	0.121	mg/Kg	1	08/17/93	08/17/93 DH
Potassium	SW846 7610	785.0	72.8	mg/Kg	1	08/05/93	08/09/93 DH
Selenium	SW846 7740	BQL	1.04	mg/Kg	1	08/05/93	08/09/93 FU
Silver	SW846 7761	BQL	0.146	mg/Kg	1	08/05/93	08/06/93 DH
Sodium	SW846 7770	368.0	46.1	mg/kg	1	08/05/93	08/09/93 DH
Thallium	SW846 7841	BQL	1.34	mg/Kg	1	08/05/93	08/09/93 FU
Aluminum	SW846 6010	13500.0	117.0	mg/Kg	5		08/06/93 MB
Barium	SW846 6010	62.0	2.67	mg/Kg	1		08/06/93 MB
Beryllium	SW846 6010	0.882	0.170	mg/Kg	1		08/06/93 MB
Calcium	SW846 6010	737.0	21.2	mg/Kg	1		08/06/93 MB
Cadmium	SW846 6010	BQL	0.728	mg/Kg	1		08/06/93 MB
Cobalt	SW846 6010	8.14	2.33	mg/Kg	1		08/06/93 MB
Chromium	SW846 6010	36.4	1.99	mg/Kg	1		08/06/93 MB
Copper	SW846 6010	16.0	4.95	mg/Kg	1		08/06/93 MB
Iron	SW846 6010	17300.0	37.6	mg/Kg	5		08/06/93 MB
Magnesium	SW846 6010	2300.0	11.0	mg/Kg	1		08/06/93 MB
Manganese	SW846 6010	55.4	1.16	mg/Kg	1		08/06/93 MB
Nickel	SW846 6010	9.42	3.76	mg/Kg	1		08/06/93 MB
Vanadium	SW846 6010	48.7	2.60	mg/Kg	1		08/06/93 MB
Zinc	SW846 6010	34.5	4.47	mg/Kg	1		08/06/93 MB

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS

ID: 9307164-07
ient ID: 01024 M3-S-(10-12)*DUP

Matrix: SOIL
Collected: 07/20/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	6.65	mg/Kg	1	08/05/93	08/09/93 FU
Asenic	SW846 7060	BQL	0.879	mg/Kg	1	08/05/93	08/09/93 FU
Barium	SW846 7421	11.4	0.641	mg/Kg	1	08/05/93	08/09/93 MG
Mercury	SW846 7471	BQL	0.119	mg/Kg	1	08/17/93	08/17/93 DH
Cassium	SW846 7610	670.0	71.2	mg/Kg	1	08/05/93	08/09/93 DH
Lead	SW846 7740	BQL	1.02	mg/Kg	1	08/05/93	08/09/93 FU
Copper	SW846 7761	BQL	0.142	mg/Kg	1	08/05/93	08/06/93 DH
Chromium	SW846 7770	301.0	45.1	mg/kg	1	08/05/93	08/09/93 DH
Aluminum	SW846 7841	BQL	1.31	mg/Kg	1	08/05/93	08/09/93 FU
Zinc	SW846 6010	17800.0	114.0	mg/Kg	5		08/06/93 MB
Iron	SW846 6010	60.9	2.61	mg/Kg	1		08/06/93 MB
Strontium	SW846 6010	0.443	0.166	mg/Kg	1		08/06/93 MB
Cadmium	SW846 6010	695.0	20.8	mg/Kg	1		08/06/93 MB
Chromium	SW846 6010	BQL	0.712	mg/Kg	1		08/06/93 MB
Barium	SW846 6010	9.29	2.28	mg/Kg	1		08/06/93 MB
Chromium	SW846 6010	35.3	1.95	mg/Kg	1		08/06/93 MB
Copper	SW846 6010	13.3	4.84	mg/Kg	1		08/06/93 MB
Chromium	SW846 6010	13500.0	36.8	mg/Kg	5		08/06/93 MB
Magnesium	SW846 6010	2120.0	10.8	mg/Kg	1		08/06/93 MB
Manganese	SW846 6010	71.9	1.14	mg/Kg	1		08/06/93 MB
Nickel	SW846 6010	9.81	3.68	mg/Kg	1		08/06/93 MB
Sodium	SW846 6010	36.4	2.54	mg/Kg	1		08/06/93 MB
Zinc	SW846 6010	32.6	4.37	mg/Kg	1		08/06/93 MB

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS

IP ID: 9307164-08

Client ID: 01079 FIELD BLANK H2O

Matrix: WATER

Collected: 07/21/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	28.0	ug/L	1	08/05/93	08/09/93 FU
Arsenic	SW846 7060	BQL	3.70	ug/L	1	08/05/93	08/09/93 FU
Lead	SW846 7421	BQL	1.80	ug/L	1	08/05/93	08/06/93 DH
Mercury	SW846 7471	BQL	0.200	ug/L	1	08/17/93	08/17/93 DH
Potassium	SW846 7610	2.13	0.300	mg/L	1	08/05/93	08/09/93 DH
Selenium	SW846 7740	BQL	5.11	ug/L	1	08/05/93	08/09/93 FU
Silver	SW846 7761	BQL	0.600	ug/L	1	08/05/93	08/06/93 DH
Sodium	SW846 7770	0.406	0.190	mg/L	1	08/05/93	08/09/93 DH
Thallium	SW846 7841	BQL	5.50	ug/L	1	08/05/93	08/09/93 FU
Aluminum	SW846 6010	BQL	96.2	ug/L	1		08/06/93 MB
Barium	SW846 6010	BQL	11.0	ug/L	1		08/06/93 MB
Beryllium	SW846 6010	BQL	0.700	ug/L	1		08/06/93 MB
Calcium	SW846 6010	161.0	87.5	ug/L	1		08/06/93 MB
Cadmium	SW846 6010	BQL	3.00	ug/L	1		08/06/93 MB
Cobalt	SW846 6010	BQL	9.60	ug/L	1		08/06/93 MB
Chromium	SW846 6010	BQL	8.21	ug/L	1		08/06/93 MB
Copper	SW846 6010	BQL	20.4	ug/L	1		08/06/93 MB
Iron	SW846 6010	BQL	31.0	ug/L	1		08/06/93 MB
Magnesium	SW846 6010	BQL	45.5	ug/L	1		08/06/93 MB
Manganese	SW846 6010	BQL	4.80	ug/L	1		08/06/93 MB
Nickel	SW846 6010	BQL	15.5	ug/L	1		08/06/93 MB
Vanadium	SW846 6010	BQL	10.7	ug/L	1		08/06/93 MB
Zinc	SW846 6010	BQL	18.4	ug/L	1		08/06/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS

ID: 9307164-03
ent ID: 01020 MW3-S-(0-6)''

Matrix: SOIL
Collected: 07/20/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	NCAAW 160.3	78.1		%			07/26/93 SCT

ID: 9307164-04
ent ID: 01021 MW3-S-(6''-2')

Matrix: SOIL
Collected: 07/20/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	NCAAW 160.3	85.1		%			07/26/93 SCT

ID: 9307164-05
ent ID: 01022 MW3-S-(4-6)'

Matrix: SOIL
Collected: 07/20/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	NCAAW 160.3	86.4		%			07/26/93 SCT

ID: 9307164-06
ent ID: 01023 MW3-S-(10-12)'

Matrix: SOIL
Collected: 07/20/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	NCAAW 160.3	82.4		%			07/26/93 SCT

ID: 9307164-07
ent ID: 01024 MW3-S-(10-12)*DUP

Matrix: SOIL
Collected: 07/20/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	NCAAW 160.3	84.2		%			07/26/93 SCT

GP ENVIRONMENTAL SERVICES

Possible notes and definitions for this report:

BQL = Below Quantitation Limit

J = An estimated value, below method detection limit

B = Indicates that the compound was found in the associated blank

E = Indicates that the concentration exceeded the calibration range of the instrument

U = Indicates that the compound was analyzed for but not detected, number indicates the detection limit

D = Indicates that the compound was found in a analysis at a secondary dilution factor

- = Value obtained from a 1:5 dilution

* = Value obtained from a 1:10 dilution

= Value obtained from a 1:20 dilution

^ = Value obtained from a 1:50 dilution

" = Value obtained from a 1:100 dilution

! = Value obtained from a 1:250 dilution

@ = Value obtained from a 1:125 dilution (Medium Level)

\$ = Value obtained from a 1:1000 dilution

& = Value obtained from a 1:10000 dilution

N = Flashpoint not observed; heated to specified limit

R = Flammable at room temperature

TNTC = Too numerous to count

B.P. = Detection limit taken from boiling point

F.F. = Sample gave off flammable fumes

Client: **WESTON APG - Adamsite** ID# 10
 Est. Final Proj. Sampling Date
 Work Order # **03886-07-008-0030-00**
 Project Contact/Phone # **Don Krebs (410) 612-0712**
 AD Project Manager **J. O'Leary**

Date Rec'd _____ Date Due _____
 Account # _____

MATRIX CODES: S - Soil SE - Sediment SO - Soil SW - Water O - Other A - Air DS - Drum P - Solids L - Liquid E - EPCRP W - Waste F - Fish	Lab ID	Client ID/Description	Matrix QC Chosen (✓) MS MSD	Matrix	Date Collected	Time Collected	ANALYSES REQUESTED		Herb	Metal	Zn
							VOA	ORGANIC			
	00807	TRIP BLANK		W	7-21-93	1130					
	00808	TRIP BLANK		W	7-21-93	1130					
	01020	MW3-S-(0-6)		S	7-20-93	0953	X	X		X	
	01021	MW3-S-(6-12)		S	7-20-93	0955	X	X		X	
	01022	MW3-S-(4-6)		S	7-20-93	1015	X	X		X	
	01023	MW3-S-(10-12)		S	7-20-93	1040	X	X		X	
	01024	MW3-S-(10-12) DP		S	7-20-93	1040	X	X		X	
	01079	Field Blank H2O		W	7-21-93	1130	X	X		X	

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Special Instructions:

A-TRIP BLANK for TCL VOA

Relinquished by	Received by	Date	Time
<i>M. Wilson</i>	<i>M. Wilson</i>	7/21/93	1445
<i>A. O'Leary</i>	<i>P. O'Leary</i>	7/21/93	7:50A

RFW 21-21-001A-7191

Refrigerator #	#/Type Container	Liquid	Solid	Volume	Preservatives	ANALYSES REQUESTED	Herb	Metal	Zn
		glass	glass	glass	glass				
		plastic	plastic	plastic	plastic				
		1 Ltr	1 Ltr	1 Ltr	1 Ltr				
		500	500	500	500				
		INORG	INORG	INORG	INORG				

WESTON Analyticals Use Only

Matrix	Date Collected	Time Collected	MS	MSD	VOA	ORGANIC	Herb	Metal	Zn
W	7-21-93	1130							
W	7-21-93	1130							
S	7-20-93	0953	X	X	X	X		X	
S	7-20-93	0955	X	X	X	X		X	
S	7-20-93	1015	X	X	X	X		X	
S	7-20-93	1040	X	X	X	X		X	
S	7-20-93	1040	X	X	X	X		X	
W	7-21-93	1130	X	X	X	X		X	

DATE REVISIONS:
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____
 6. _____

WESTON Analyticals Use Only

Samples were:
 1) Shipped _____ or
 Hand Delivered _____
 Airbill # _____
 2) Ambient or Chilled _____
 3) Received in Good Condition Y or N
 4) Labels Indicate Properly Preserved Y or N
 5) Received Within Holding Times Y or N

COC Tape was:
 1) Present on Outer Package Y or N
 2) Unbroken on Outer Package Y or N
 3) Present on Sample Y or N
 4) Unbroken on Sample Y or N
 COC Record Present Upon Sample Ract Y or N

Discrepancies Between Samples Labels and COC Record? Y or N
NOTES:

RFW 21-21-001A-7191 L372 L373 L375 L377 L378 Rel# Cooler# 381-51

GP ENVIRONMENTAL SERVICES, INC.

202 Perry Parkway
Gaithersburg, Maryland 20877
(301) 926-6802 FAX (301) 840-1209

September 16, 1993

TO: Jeanne O'Leary
FROM: Tom Truong
SUBJECT: GP Work Order Number 93-07-177

Enclosed is a revised report of GP Work Order Number 9307177.

Revisions were made for volatile, semivolatile and pesticides/PCBs results. All estimated results have been changed to BQL (Below Quantitation Limit) on the report.

Due to instrumental problems, some of the metal results previously reported are incorrect. This report contains results that have been recalculated and corrected.

mws update

GP Work Order # 9307177

SAMPLE ANALYSIS REPORT

Prepared For:

ROY F. WESTON
1 WESTON WAY
WEST CHESTER, PA 19380-1499

ADAMISTE D.O. #10

Prepared By:

GP Environmental Services, Inc.
202 Perry Parkway
Gaithersburg, Maryland 20877

September 16, 1993



Albert Ellis, Laboratory Director

**GP ENVIRONMENTAL SERVICES
ANALYTICAL RESULTS**

TO: ADAMISTE D.O. #10

WESTON
ON WAY
HESTER, PA 19380-1499
JEANNE O'LEARY

GP ENVIRONMENTAL SERVICES
202 Perry Parkway
Gaithersburg, MD 20877

Attn: Client Services
Phone: (301) 926-6802

Certified by: T. T.

SAMPLE IDENTIFICATION

GP ID			Client ID
9307177	-01	A	00809 TRIP BLANK
9307177	-02	A	00810 TRIP BLANK
9307177	-03	A	01012 MW1-S-(0-6)'
9307177	-03	B	
9307177	-04	A	01013 MW1-S-(6'-2)'
9307177	-04	B	
9307177	-05	A	01014 MW1-S-(4-6)'
9307177	-05	B	
9307177	-06	A	01015 MW1-S-(10-12)'
9307177	-06	B	
9307177	-07	A	01016 MW2-S-(0-6)'
9307177	-07	B	
9307177	-08	A	01017 MW2-S-(6'-2)'
9307177	-08	B	
9307177	-09	A	01018 MW2-S-(4-6)'
9307177	-09	B	
9307177	-10	A	01019 MW2-S-(10-12)'
9307177	-10	B	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-01A
Client ID: 00809 TRIP BLANK
Collected: 07/19/93
Dilution: 1

Matrix: WATER
Method: 8240w
Units: ug/L

Analyst: MH
Analyzed: 08/02/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.00	
1,1,2,2-Tetrachloroethane	BQL	5.00	
1,1,2-Trichloroethane	BQL	5.00	
1,1-Dichloroethane	BQL	5.00	
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,2-Dichloropropane	BQL	5.00	
2-Butanone	BQL	10.0	
2-Chloroethylvinyl ether	BQL	10.0	
2-Hexanone	BQL	10.0	
4-Methyl-2-pentanone	BQL	10.0	
Acetone	BQL	10.0	
Benzene	BQL	5.00	
Bromodichloromethane	BQL	5.00	
Bromoform	BQL	5.00	
Bromomethane	BQL	10.0	
Carbon Disulfide	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroethane	BQL	10.0	
Chloroform	BQL	5.00	
Chloromethane	BQL	10.0	
cis-1,3-Dichloropropene	BQL	5.00	
Dibromochloromethane	BQL	5.00	
Ethylbenzene	BQL	5.00	
Methylene chloride	BQL	5.00	
Styrene	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Toluene	BQL	5.00	
trans-1,2-Dichloroethene	BQL	5.00	
trans-1,3-Dichloropropene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl Acetate	BQL	10.0	
Vinyl chloride	BQL	10.0	
Xylenes	BQL	5.00	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-02A
 Client ID: 00810 TRIP BLANK
 Collected: 07/19/93
 Dilution: 1

Matrix: WATER
 Method: 8240w
 Units: ug/L

Analyst: MH
 Analyzed: 08/02/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.00	
1,1,2,2-Tetrachloroethane	BQL	5.00	
1,1,2-Trichloroethane	BQL	5.00	
1,1-Dichloroethane	BQL	5.00	
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,2-Dichloropropane	BQL	5.00	
2-Butanone	BQL	10.0	
2-Chloroethylvinyl ether	BQL	10.0	
2-Hexanone	BQL	10.0	
4-Methyl-2-pentanone	BQL	10.0	
Acetone	BQL	10.0	
Benzene	BQL	5.00	
Bromodichloromethane	BQL	5.00	
Bromoform	BQL	5.00	
Bromomethane	BQL	10.0	
Carbon Disulfide	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroethane	BQL	10.0	
Chloroform	BQL	5.00	
Chloromethane	BQL	10.0	
cis-1,3-Dichloropropene	BQL	5.00	
Dibromochloromethane	BQL	5.00	
Ethylbenzene	BQL	5.00	
Methylene chloride	5.33	5.00	B
Styrene	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Toluene	BQL	5.00	
trans-1,2-Dichloroethene	BQL	5.00	
trans-1,3-Dichloropropene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl Acetate	BQL	10.0	
Vinyl chloride	BQL	10.0	
Xylenes	BQL	5.00	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-038
 Client ID: 01012 MW1-S-(0-6)11
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MS
 Analyzed: 08/04/93
 Prepared: 08/02/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	363.0	
1,2-Dichlorobenzene	BQL	363.0	
1,3-Dichlorobenzene	BQL	363.0	
1,4-Dichlorobenzene	BQL	363.0	
2,4,5-Trichlorophenol	BQL	363.0	
2,4,6-Trichlorophenol	BQL	363.0	
2,4-Dichlorophenol	BQL	363.0	
2,4-Dimethylphenol	BQL	363.0	
2,4-Dinitrophenol	BQL	1820.0	
2,4-Dinitrotoluene	BQL	363.0	
2,6-Dinitrotoluene	BQL	363.0	
2-Chloronaphthalene	BQL	363.0	
2-Chlorophenol	BQL	363.0	
2-Methylnaphthalene	BQL	363.0	
2-Methylphenol	BQL	363.0	
2-Nitroaniline	BQL	1820.0	
2-Nitrophenol	BQL	363.0	
3,3'-Dichlorobenzidine	BQL	726.0	
3-Nitroaniline	BQL	1820.0	
4,6-Dinitro-2-methylphenol	BQL	1820.0	
4-Bromophenyl-phenylether	BQL	363.0	
4-Chloro-3-methylphenol	BQL	726.0	
4-Chloroaniline	BQL	726.0	
4-Chlorophenyl phenyl ether	BQL	363.0	
4-Methylphenol	BQL	363.0	
4-Nitroaniline	BQL	1820.0	
4-Nitrophenol	BQL	1820.0	
Acenaphthene	BQL	363.0	
Acenaphthylene	BQL	363.0	
Anthracene	BQL	363.0	
Benzoic acid	BQL	1820.0	
Benzo[a]anthracene	BQL	363.0	
Benzo[a]pyrene	BQL	363.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-038
Client ID: 01012 MW1-S-(0-6)''
Collected: 07/19/93
Dilution: 1

Matrix: SOIL
Method: 8270
Units: ug/Kg

Analyst: MS
Analyzed: 08/04/93
Prepared: 08/02/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo(b)fluoranthene	BQL	363.0	
Benzo(g,h,i)perylene	BQL	363.0	
Benzo(k)fluoranthene	BQL	363.0	
Benzyl alcohol	BQL	726.0	
bis(2-Chloroethoxy) methane	BQL	363.0	
bis(2-Chloroethyl) ether	BQL	363.0	
bis(2-Chloroisopropyl) ether	BQL	363.0	
bis(2-Ethylhexyl)phthalate	BQL	363.0	
Butyl benzyl phthalate	BQL	363.0	
Chrysene	BQL	363.0	
di-n-Butylphthalate	BQL	363.0	
di-n-Octylphthalate	BQL	363.0	
Dibenzofuran	BQL	363.0	
Dibenz(a,h)anthracene	BQL	363.0	
Diethylphthalate	BQL	363.0	
Dimethyl phthalate	BQL	363.0	
Fluoranthene	BQL	363.0	
Fluorene	BQL	363.0	
Hexachlorobenzene	BQL	363.0	
Hexachlorobutadiene	BQL	363.0	
Hexachlorocyclopentadiene	BQL	363.0	
Hexachloroethane	BQL	363.0	
Indeno(1,2,3-cd)pyrene	BQL	363.0	
Isophorone	BQL	363.0	
N-Nitroso-di-n-propylamine	BQL	363.0	
N-nitrosodiphenylamine	BQL	363.0	
Naphthalene	BQL	363.0	
Nitrobenzene	BQL	363.0	
Pentachlorophenol	BQL	1820.0	
Phenanthrene	BQL	363.0	
Phenol	BQL	363.0	
Pyrene	BQL	363.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9307177-03A
Client ID: 01012 MW1-5-(0-6)**
Collected: 07/19/93
Dilution: 1

Matrix: SOIL
Method: 8240s
Units: ug/Kg

Analyst: AD
Analyzed: 07/28/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.56	
1,1,2,2-Tetrachloroethane	BQL	5.56	
1,1,2-Trichloroethane	BQL	5.56	
1,1-Dichloroethane	BQL	5.56	
1,1-Dichloroethene	BQL	5.56	
1,2-Dichloroethane	BQL	5.56	
1,2-Dichloropropane	BQL	5.56	
2-Butanone	BQL	11.1	
2-Chloroethylvinyl ether	BQL	11.1	
2-Hexanone	BQL	11.1	
4-Methyl-2-pentanone	BQL	11.1	
Acetone	17.7	11.1	B
Benzene	BQL	5.56	
Bromodichloromethane	BQL	5.56	
Bromoform	BQL	5.56	
Bromomethane	BQL	11.1	
Carbon Disulfide	BQL	5.56	
Carbon tetrachloride	BQL	5.56	
Chlorobenzene	BQL	5.56	
Chloroethane	BQL	11.1	
Chloroform	BQL	5.56	
Chloromethane	BQL	11.1	
cis-1,3-Dichloropropene	BQL	5.56	
Dibromochloromethane	BQL	5.56	
Ethylbenzene	BQL	5.56	
Methylene chloride	29.6	5.56	B
Styrene	BQL	5.56	
Tetrachloroethene	BQL	5.56	
Toluene	BQL	5.56	
trans-1,2-Dichloroethene	BQL	5.56	
trans-1,3-Dichloropropene	BQL	5.56	
Trichloroethene	BQL	5.56	
Vinyl Acetate	BQL	11.1	
Vinyl chloride	BQL	11.1	
Xylenes	BQL	5.56	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-038
 Client ID: 01012 MW1-S-(0-6)''
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: SW846 8080
 Units: ug/Kg

Analyst: TS
 Analyzed: 08/17/93
 Prepared: 08/02/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.10	
4,4'-DDE	3.82	1.49	
4,4'-DDT	6.39	4.46	
Aldrin	BQL	1.49	
alpha-BHC	BQL	1.12	
Aroclor 1016	BQL	18.6	
Aroclor 1221	BQL	18.6	
Aroclor 1232	BQL	18.6	
Aroclor 1242	BQL	24.2	
Aroclor 1248	BQL	37.2	
Aroclor 1254	BQL	37.2	
Aroclor 1260	BQL	37.2	
beta-BHC	BQL	2.23	
Chlordane	BQL	5.20	
delta-BHC	BQL	3.35	
Dieldrin	BQL	0.744	
Endosulfan I	BQL	5.20	
Endosulfan II	BQL	1.49	
Endosulfan sulfate	BQL	24.5	
Endrin	BQL	2.23	
Endrin aldehyde	BQL	8.56	
gamma-BHC (Lindane)	BQL	1.49	
Heptachlor	BQL	1.12	
Heptachlor epoxide	BQL	30.9	
Methoxychlor	BQL	65.4	
Toxaphene	BQL	89.2	

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS

ID: 9307177-03
ent ID: 01012 MW1-S-(0-6)''

Matrix: SOIL
Collected: 07/19/93

Element	Method	Result	Det. Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	6.23	mg/Kg	1	08/06/93	08/20/93 MG
Barium	SW846 7060	7.50	0.823	mg/Kg	1	08/06/93	08/22/93 MG
Bismuth	SW846 7421	46.2	8.01	mg/Kg	20	08/06/93	08/22/93 MG
Cadmium	SW846 7471	BQL	0.111	mg/Kg	1	08/06/93	08/23/93 DH
Cesium	SW846 7610	442.0	66.7	mg/Kg	1	08/06/93	08/24/93 DH
Chromium	SW846 7740	BQL	0.957	mg/Kg	1	08/06/93	08/21/93 MG
Copper	SW846 7761	0.290	0.134	mg/Kg	1	08/06/93	08/20/93 MG
Cobalt	SW846 7770	138.0	42.3	mg/Kg	1	08/06/93	08/24/93 DH
Lead	SW846 7841	BQL	1.22	mg/Kg	1	08/06/93	08/21/93 MG
Mercury	SW846 6010	8460.0	21.4	mg/Kg	1	08/06/93	08/09/93 MB
Manganese	SW846 6010	53.7	2.45	mg/Kg	1	08/06/93	08/09/93 MB
Molybdenum	SW846 6010	0.230	0.156	mg/Kg	1	08/06/93	08/09/93 MB
Nickel	SW846 6010	2580.0	19.5	mg/Kg	1	08/24/93	08/25/93 MB
Vanadium	SW846 6010	BQL	0.667	mg/Kg	1	08/06/93	08/09/93 MB
Chromium	SW846 6010	13.1	2.14	mg/Kg	1	08/06/93	08/09/93 MB
Selenium	SW846 6010	40.9	1.82	mg/Kg	1	08/06/93	08/09/93 MB
Strontium	SW846 6010	25.3	4.54	mg/Kg	1	08/24/93	08/25/93 MB
Thallium	SW846 6010	13900.0	34.5	mg/Kg	5	08/06/93	08/10/93 MB
Tungsten	SW846 6010	15200.0	50.6	mg/Kg	5	08/24/93	08/25/93 MB
Zinc	SW846 6010	210.0	1.07	mg/Kg	1	08/24/93	08/25/93 MB
Vanadium	SW846 6010	315.0	3.45	mg/Kg	1	08/06/93	08/09/93 MB
Uranium	SW846 6010	16.5	2.38	mg/Kg	1	08/06/93	08/09/93 MB
Chromium	SW846 6010	51.9	4.09	mg/Kg	1	08/06/93	08/09/93 MB

**GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS**

GP ID: 9307177-03
Client ID: 01012 MW1-S-(0-6)''

Matrix: SOIL
Collected: 07/19/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	NCAAW 160.3	89.9		%			07/29/93 JS

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-048
 Client ID: 01013 MW1-S-(6''-2)'
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MS
 Analyzed: 08/04/93
 Prepared: 08/02/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	380.0	
1,2-Dichlorobenzene	BQL	380.0	
1,3-Dichlorobenzene	BQL	380.0	
1,4-Dichlorobenzene	BQL	380.0	
2,4,5-Trichlorophenol	BQL	380.0	
2,4,6-Trichlorophenol	BQL	380.0	
2,4-Dichlorophenol	BQL	380.0	
2,4-Dimethylphenol	BQL	380.0	
2,4-Dinitrophenol	BQL	1900.0	
2,4-Dinitrotoluene	BQL	380.0	
2,6-Dinitrotoluene	BQL	380.0	
2-Chloronaphthalene	BQL	380.0	
2-Chlorophenol	BQL	380.0	
2-Methylnaphthalene	BQL	380.0	
2-Methylphenol	BQL	380.0	
2-Nitroaniline	BQL	1900.0	
2-Nitrophenol	BQL	380.0	
3,3'-Dichlorobenzidine	BQL	759.0	
3-Nitroaniline	BQL	1900.0	
4,6-Dinitro-2-methylphenol	BQL	1900.0	
4-Bromophenyl-phenylether	BQL	380.0	
4-Chloro-3-methylphenol	BQL	759.0	
4-Chloroaniline	BQL	759.0	
4-Chlorophenyl phenyl ether	BQL	380.0	
4-Methylphenol	BQL	380.0	
4-Nitroaniline	BQL	1900.0	
4-Nitrophenol	BQL	1900.0	
Acenaphthene	BQL	380.0	
Acenaphthylene	BQL	380.0	
Anthracene	BQL	380.0	
Benzoic acid	BQL	1900.0	
Benzo[a]anthracene	BQL	380.0	
Benzo[a]pyrene	BQL	380.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-048
Client ID: 01013 MW1-S-(611-2)
Collected: 07/19/93
Dilution: 1

Matrix: SOIL
Method: 8270
Units: ug/Kg

Analyst: MS
Analyzed: 08/04/93
Prepared: 08/02/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo[b]fluoranthene	BQL	380.0	
Benzo[g,h,i]perylene	BQL	380.0	
Benzo[k]fluoranthene	BQL	380.0	
Benzyl alcohol	BQL	759.0	
bis(2-Chloroethoxy) methane	BQL	380.0	
bis(2-Chloroethyl) ether	BQL	380.0	
bis(2-Chloroisopropyl) ether	BQL	380.0	
bis(2-Ethylhexyl)phthalate	BQL	380.0	
Butyl benzyl phthalate	BQL	380.0	
Chrysene	BQL	380.0	
di-n-Butylphthalate	BQL	380.0	
di-n-Octylphthalate	BQL	380.0	
Dibenzofuran	BQL	380.0	
Dibenz[a,h]anthracene	BQL	380.0	
Diethylphthalate	BQL	380.0	
Dimethyl phthalate	BQL	380.0	
Fluoranthene	BQL	380.0	
Fluorene	BQL	380.0	
Hexachlorobenzene	BQL	380.0	
Hexachlorobutadiene	BQL	380.0	
Hexachlorocyclopentadiene	BQL	380.0	
Hexachloroethane	BQL	380.0	
Indeno[1,2,3-cd]pyrene	BQL	380.0	
Isophorone	BQL	380.0	
N-Nitroso-di-n-propylamine	BQL	380.0	
N-nitrosodiphenylamine	BQL	380.0	
Naphthalene	BQL	380.0	
Nitrobenzene	BQL	380.0	
Pentachlorophenol	BQL	1900.0	
Phenanthrene	BQL	380.0	
Phenol	BQL	380.0	
Pyrene	BQL	380.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-04A
 Client ID: 01013 MWI-S-(611-2)
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: 8240s
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/28/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.74	
1,1,2,2-Tetrachloroethane	BQL	5.74	
1,1,2-Trichloroethane	BQL	5.74	
1,1-Dichloroethane	BQL	5.74	
1,1-Dichloroethene	BQL	5.74	
1,2-Dichloroethane	BQL	5.74	
1,2-Dichloropropane	BQL	5.74	
2-Butanone	BQL	11.5	
2-Chloroethylvinyl ether	BQL	11.5	
2-Hexanone	BQL	11.5	
4-Methyl-2-pentanone	BQL	11.5	
Acetone	38.1	11.5	B
Benzene	BQL	5.74	
Bromodichloromethane	BQL	5.74	
Bromoform	BQL	5.74	
Bromomethane	BQL	11.5	
Carbon Disulfide	BQL	5.74	
Carbon tetrachloride	BQL	5.74	
Chlorobenzene	BQL	5.74	
Chloroethane	BQL	11.5	
Chloroform	BQL	5.74	
Chloromethane	BQL	11.5	
cis-1,3-Dichloropropene	BQL	5.74	
Dibromochloromethane	BQL	5.74	
Ethylbenzene	BQL	5.74	
Methylene chloride	9.74	5.74	B
Styrene	BQL	5.74	
Tetrachloroethene	BQL	5.74	
Toluene	BQL	5.74	
trans-1,2-Dichloroethene	BQL	5.74	
trans-1,3-Dichloropropene	BQL	5.74	
Trichloroethene	BQL	5.74	
Vinyl Acetate	BQL	11.5	
Vinyl chloride	BQL	11.5	
Xylenes	BQL	5.74	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-048
 Client ID: 01013 MW1-S-(6''-2)'
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: SU846 8080
 Units: ug/Kg

Analyst: TS
 Analyzed: 08/17/93
 Prepared: 08/02/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.24	
4,4'-DDE	BQL	1.54	
4,4'-DDT	BQL	4.62	
Aldrin	BQL	1.54	
alpha-BHC	BQL	1.16	
Aroclor 1016	BQL	19.3	
Aroclor 1221	BQL	19.3	
Aroclor 1232	BQL	19.3	
Aroclor 1242	BQL	25.0	
Aroclor 1248	BQL	38.5	
Aroclor 1254	BQL	38.5	
Aroclor 1260	BQL	38.5	
beta-BHC	BQL	2.31	
Chlordane	BQL	5.39	
delta-BHC	BQL	3.47	
Dieldrin	BQL	0.770	
Endosulfan I	BQL	5.39	
Endosulfan II	BQL	1.54	
Endosulfan sulfate	BQL	25.4	
Endrin	BQL	2.31	
Endrin aldehyde	BQL	8.87	
gamma-BHC (Lindane)	BQL	1.54	
Heptachlor	BQL	1.16	
Heptachlor epoxide	BQL	32.0	
Methoxychlor	BQL	67.8	
Toxaphene	BQL	92.5	

**GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS**

ID: 9307177-04

Matrix: SOIL

ent ID: 01013 MW1-S-(611-2)

Collected: 07/19/93

Element	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Iron	SW846 7041	BQL	6.42	mg/Kg	1	08/06/93	08/20/93 MG
Chromium	SW846 7060	9.40	0.848	mg/Kg	1	08/06/93	08/22/93 MG
Lead	SW846 7421	10.6	0.413	mg/Kg	1	08/06/93	08/20/93 MG
Cadmium	SW846 7471	BQL	0.115	mg/Kg	1	08/06/93	08/23/93 DH
Potassium	SW846 7610	705.0	68.8	mg/Kg	1	08/06/93	08/24/93 DH
Strontium	SW846 7740	BQL	0.986	mg/Kg	1	08/06/93	08/21/93 MG
Mercury	SW846 7761	BQL	0.138	mg/Kg	1	08/06/93	08/20/93 MG
Barium	SW846 7770	255.0	43.6	mg/Kg	1	08/06/93	08/24/93 DH
Lithium	SW846 7841	BQL	1.26	mg/Kg	1	08/06/93	08/21/93 MG
Manganese	SW846 6010	16400.0	110.0	mg/Kg	5	08/06/93	08/10/93 MB
Copper	SW846 6010	42.8	2.52	mg/Kg	1	08/06/93	08/09/93 MB
Zinc	SW846 6010	0.450	0.160	mg/Kg	1	08/06/93	08/09/93 MB
Selenium	SW846 6010	851.0	20.1	mg/Kg	1	08/24/93	08/25/93 MB
Nickel	SW846 6010	BQL	0.688	mg/Kg	1	08/06/93	08/09/93 MB
Vanadium	SW846 6010	5.70	2.20	mg/Kg	1	08/06/93	08/09/93 MB
Chromium	SW846 6010	20.3	1.88	mg/Kg	1	08/06/93	08/09/93 MB
Mercury	SW846 6010	9.20	4.68	mg/Kg	1	08/24/93	08/25/93 MB
Lead	SW846 6010	19200.0	35.6	mg/Kg	5	08/06/93	08/10/93 MB
Residual	SW846 6010	1840.0	10.4	mg/Kg	1	08/24/93	08/25/93 MB
Gallium	SW846 6010	79.2	1.10	mg/Kg	1	08/24/93	08/25/93 MB
Kel	SW846 6010	13.1	3.56	mg/Kg	1	08/06/93	08/09/93 MB
adium	SW846 6010	30.7	2.45	mg/Kg	1	08/06/93	08/09/93 MB
c	SW846 6010	42.2	4.22	mg/Kg	1	08/06/93	08/09/93 MB

**GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS**

GP ID: 9307177-04

Matrix: SOIL

Client ID: 01013 MW1-S-(6''-2)'

Collected: 07/19/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	MCAW 160.3	87.2		%			07/29/93 JS

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-058
 Client ID: 01014 MW1-S-(4-6)
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MS
 Analyzed: 08/04/93
 Prepared: 08/02/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	396.0	
1,2-Dichlorobenzene	BQL	396.0	
1,3-Dichlorobenzene	BQL	396.0	
1,4-Dichlorobenzene	BQL	396.0	
2,4,5-Trichlorophenol	BQL	396.0	
2,4,6-Trichlorophenol	BQL	396.0	
2,4-Dichlorophenol	BQL	396.0	
2,4-Dimethylphenol	BQL	396.0	
2,4-Dinitrophenol	BQL	1980.0	
2,4-Dinitrotoluene	BQL	396.0	
2,6-Dinitrotoluene	BQL	396.0	
2-Chloronaphthalene	BQL	396.0	
2-Chlorophenol	BQL	396.0	
2-Methylnaphthalene	BQL	396.0	
2-Methylphenol	BQL	396.0	
2-Nitroaniline	BQL	1980.0	
2-Nitrophenol	BQL	396.0	
3,3'-Dichlorobenzidine	BQL	792.0	
3-Nitroaniline	BQL	1980.0	
4,6-Dinitro-2-methylphenol	BQL	1980.0	
4-Bromophenyl-phenylether	BQL	396.0	
4-Chloro-3-methylphenol	BQL	792.0	
4-Chloroaniline	BQL	792.0	
4-Chlorophenyl phenyl ether	BQL	396.0	
4-Methylphenol	BQL	396.0	
4-Nitroaniline	BQL	1980.0	
4-Nitrophenol	BQL	1980.0	
Acenaphthene	BQL	396.0	
Acenaphthylene	BQL	396.0	
Anthracene	BQL	396.0	
Benzoic acid	BQL	1980.0	
Benzo[a]anthracene	BQL	396.0	
Benzo[a]pyrene	BQL	396.0	

GP ID: 9307177-058
 Client ID: 01014 MW1-S-(4-6)
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MS
 Analyzed: 08/04/93
 Prepared: 08/02/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo[b]fluoranthene	BQL	396.0	
Benzo[g,h,i]perylene	BQL	396.0	
Benzo[k]fluoranthene	BQL	396.0	
Benzyl alcohol	BQL	792.0	
bis(2-Chloroethoxy) methane	BQL	396.0	
bis(2-Chloroethyl) ether	BQL	396.0	
bis(2-Chloroisopropyl) ether	BQL	396.0	
bis(2-Ethylhexyl)phthalate	BQL	396.0	
Butyl benzyl phthalate	BQL	396.0	
Chrysene	BQL	396.0	
di-n-Butylphthalate	BQL	396.0	
di-n-Octylphthalate	BQL	396.0	
Dibenzofuran	BQL	396.0	
Dibenz[a,h]anthracene	BQL	396.0	
Diethylphthalate	BQL	396.0	
Dimethyl phthalate	BQL	396.0	
Fluoranthene	BQL	396.0	
Fluorene	BQL	396.0	
Hexachlorobenzene	BQL	396.0	
Hexachlorobutadiene	BQL	396.0	
Hexachlorocyclopentadiene	BQL	396.0	
Hexachloroethane	BQL	396.0	
Indeno[1,2,3-cd]pyrene	BQL	396.0	
Isophorone	BQL	396.0	
N-Nitroso-di-n-propylamine	BQL	396.0	
N-nitrosodiphenylamine	BQL	396.0	
Naphthalene	BQL	396.0	
Nitrobenzene	BQL	396.0	
Pentachlorophenol	BQL	1980.0	
Phenanthrene	BQL	396.0	
Phenol	BQL	396.0	
Pyrene	BQL	396.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-05A
Client ID: 01014 MW1-5-(4-6)
Collected: 07/19/93
Dilution: 1

Matrix: SOIL
Method: 8240s
Units: ug/Kg

Analyst: AD
Analyzed: 07/28/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	6.04	
1,1,2,2-Tetrachloroethane	BQL	6.04	
1,1,2-Trichloroethane	BQL	6.04	
1,1-Dichloroethane	BQL	6.04	
1,1-Dichloroethene	BQL	6.04	
1,2-Dichloroethane	BQL	6.04	
1,2-Dichloropropane	BQL	6.04	
2-Butanone	BQL	12.1	
2-Chloroethylvinyl ether	BQL	12.1	
2-Hexanone	BQL	12.1	
4-Methyl-2-pentanone	BQL	12.1	
Acetone	14.2	12.1	B
Benzene	BQL	6.04	
Bromodichloromethane	BQL	6.04	
Bromoform	BQL	6.04	
Bromomethane	BQL	12.1	
Carbon Disulfide	BQL	6.04	
Carbon tetrachloride	BQL	6.04	
Chlorobenzene	BQL	6.04	
Chloroethane	BQL	12.1	
Chloroform	BQL	6.04	
Chloromethane	BQL	12.1	
cis-1,3-Dichloropropene	BQL	6.04	
Dibromochloromethane	BQL	6.04	
Ethylbenzene	BQL	6.04	
Methylene chloride	28.3	6.04	B
Styrene	BQL	6.04	
Tetrachloroethene	BQL	6.04	
Toluene	BQL	6.04	
trans-1,2-Dichloroethene	BQL	6.04	
trans-1,3-Dichloropropene	BQL	6.04	
Trichloroethene	BQL	6.04	
Vinyl Acetate	BQL	12.1	
Vinyl chloride	BQL	12.1	
Xylenes	BQL	6.04	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-058
Client ID: 01014 MW1-5-(4-6)
Collected: 07/19/93
Dilution: 1

Matrix: SOIL
Method: SU846 8080
Units: ug/Kg

Analyst: TS
Analyzed: 08/17/93
Prepared: 08/02/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.46	
4,4'-DDE	BQL	1.62	
4,4'-DDT	BQL	4.86	
Aldrin	BQL	1.62	
alpha-BHC	BQL	1.22	
Aroclor 1016	BQL	20.3	
Aroclor 1221	BQL	20.3	
Aroclor 1232	BQL	20.3	
Aroclor 1242	BQL	26.4	
Aroclor 1248	BQL	40.5	
Aroclor 1254	BQL	40.5	
Aroclor 1260	BQL	40.5	
beta-BHC	BQL	2.43	
Chlordane	BQL	5.67	
delta-BHC	BQL	3.65	
Dieldrin	BQL	0.811	
Endosulfan I	BQL	5.67	
Endosulfan II	BQL	1.62	
Endosulfan sulfate	BQL	26.8	
Endrin	BQL	2.43	
Endrin aldehyde	BQL	9.33	
gamma-BHC (Lindane)	BQL	1.62	
Heptachlor	BQL	1.22	
Heptachlor epoxide	BQL	33.6	
Methoxychlor	BQL	71.3	
Toxaphene	BQL	97.3	

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS

ID: 9307177-05

Matrix: SDIL

ent ID: 01014 MWI-5-(4-6)

Collected: 07/19/93

Element	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	6.76	mg/Kg	1	08/06/93	08/20/93 MG
Barium	SW846 7060	2.70	0.894	mg/Kg	1	08/06/93	08/22/93 MG
Bismuth	SW846 7421	7.30	0.435	mg/Kg	1	08/06/93	08/20/93 MG
Cadmium	SW846 7471	BQL	0.121	mg/Kg	1	08/06/93	08/23/93 DH
Cesium	SW846 7610	555.0	72.5	mg/Kg	1	08/06/93	08/24/93 DH
Copper	SW846 7740	BQL	1.04	mg/Kg	1	08/06/93	08/21/93 MG
Chromium	SW846 7761	BQL	0.145	mg/Kg	1	08/06/93	08/20/93 MG
Cobalt	SW846 7770	46.3	45.9	mg/Kg	1	08/06/93	08/24/93 DH
Lithium	SW846 7841	BQL	1.33	mg/Kg	1	08/06/93	08/21/93 MG
Manganese	SW846 6010	10600.0	23.2	mg/Kg	1	08/06/93	08/09/93 MB
Mercury	SW846 6010	30.6	2.66	mg/Kg	1	08/06/93	08/09/93 MB
Nickel	SW846 6010	0.340	0.169	mg/Kg	1	08/06/93	08/09/93 MB
Lead	SW846 6010	210.0	21.1	mg/Kg	1	08/24/93	08/25/93 MB
Vanadium	SW846 6010	BQL	0.725	mg/Kg	1	08/06/93	08/09/93 MB
Aluminum	SW846 6010	3.90	2.32	mg/Kg	1	08/06/93	08/09/93 MB
Selenium	SW846 6010	12.3	1.98	mg/Kg	1	08/06/93	08/09/93 MB
Zinc	SW846 6010	7.80	4.93	mg/Kg	1	08/24/93	08/25/93 MB
Silver	SW846 6010	9850.0	37.4	mg/Kg	5	08/06/93	08/10/93 MB
Sodium	SW846 6010	1370.0	11.0	mg/Kg	1	08/24/93	08/25/93 MB
Zirconium	SW846 6010	59.4	1.16	mg/Kg	1	08/24/93	08/25/93 MB
Chlorine	SW846 6010	8.30	3.74	mg/Kg	1	08/06/93	08/09/93 MB
Strontium	SW846 6010	20.1	2.58	mg/Kg	1	08/06/93	08/09/93 MB
Chromium	SW846 6010	28.1	4.44	mg/Kg	1	08/06/93	08/09/93 MB

**GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS**

GP ID: 9307177-05

Matrix: SOIL

Client ID: 01014 NW1-S-(4-6)'

Collected: 07/19/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	MCAW 160.3	82.8		%			07/29/93 JS

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-068
 Client ID: 01015 MW1-S-(10-12)
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MS
 Analyzed: 08/04/93
 Prepared: 08/02/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	412.0	
1,2-Dichlorobenzene	BQL	412.0	
1,3-Dichlorobenzene	BQL	412.0	
1,4-Dichlorobenzene	BQL	412.0	
2,4,5-Trichlorophenol	BQL	412.0	
2,4,6-Trichlorophenol	BQL	412.0	
2,4-Dichlorophenol	BQL	412.0	
2,4-Dimethylphenol	BQL	412.0	
2,4-Dinitrophenol	BQL	2060.0	
2,4-Dinitrotoluene	BQL	412.0	
2,6-Dinitrotoluene	BQL	412.0	
2-Chloronaphthalene	BQL	412.0	
2-Chlorophenol	BQL	412.0	
2-Methylnaphthalene	BQL	412.0	
2-Methylphenol	BQL	412.0	
2-Nitroaniline	BQL	2060.0	
2-Nitrophenol	BQL	412.0	
3,3'-Dichlorobenzidine	BQL	825.0	
3-Nitroaniline	BQL	2060.0	
4,6-Dinitro-2-methylphenol	BQL	2060.0	
4-Bromophenyl-phenylether	BQL	412.0	
4-Chloro-3-methylphenol	BQL	825.0	
4-Chloroaniline	BQL	825.0	
4-Chlorophenyl phenyl ether	BQL	412.0	
4-Methylphenol	BQL	412.0	
4-Nitroaniline	BQL	2060.0	
4-Nitrophenol	BQL	2060.0	
Acenaphthene	BQL	412.0	
Acenaphthylene	BQL	412.0	
Anthracene	BQL	412.0	
Benzoic acid	BQL	2060.0	
Benzo[a]anthracene	BQL	412.0	
Benzo[a]pyrene	BQL	412.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-068
 Client ID: 01015 MW1-S-(10-12)
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MS
 Analyzed: 08/04/93
 Prepared: 08/02/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo[b]fluoranthene	BQL	412.0	
Benzo[g,h,i]perylene	BQL	412.0	
Benzo[k]fluoranthene	BQL	412.0	
Benzyl alcohol	BQL	825.0	
bis(2-Chloroethoxy) methane	BQL	412.0	
bis(2-Chloroethyl) ether	BQL	412.0	
bis(2-Chloroisopropyl) ether	BQL	412.0	
bis(2-Ethylhexyl)phthalate	BQL	412.0	
Butyl benzyl phthalate	BQL	412.0	
Chrysene	BQL	412.0	
di-n-Butylphthalate	BQL	412.0	
di-n-Octylphthalate	BQL	412.0	
Dibenzofuran	BQL	412.0	
Dibenz(a,h)anthracene	BQL	412.0	
Diethylphthalate	BQL	412.0	
Dimethyl phthalate	BQL	412.0	
Fluoranthene	BQL	412.0	
Fluorene	BQL	412.0	
Hexachlorobenzene	BQL	412.0	
Hexachlorobutadiene	BQL	412.0	
Hexachlorocyclopentadiene	BQL	412.0	
Hexachloroethane	BQL	412.0	
Indeno[1,2,3-cd]pyrene	BQL	412.0	
Isophorone	BQL	412.0	
N-Nitroso-di-n-propylamine	BQL	412.0	
N-nitrosodiphenylamine	BQL	412.0	
Naphthalene	BQL	412.0	
Nitrobenzene	BQL	412.0	
Pentachlorophenol	BQL	2060.0	
Phenanthrene	BQL	412.0	
Phenol	BQL	412.0	
Pyrene	BQL	412.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-06A
 Client ID: 01015 MW1-S-(10-12)
 Collected: 07/19/93
 Dilution: 1

Matrix: SDIL
 Method: 8240s
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/28/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	6.26	
1,1,2,2-Tetrachloroethane	BQL	6.26	
1,1,2-Trichloroethane	BQL	6.26	
1,1-Dichloroethane	BQL	6.26	
1,1-Dichloroethene	BQL	6.26	
1,2-Dichloroethane	BQL	6.26	
1,2-Dichloropropane	BQL	6.26	
2-Butanone	BQL	12.5	
2-Chloroethylvinyl ether	BQL	12.5	
2-Hexanone	BQL	12.5	
4-Methyl-2-pentanone	BQL	12.5	
Acetone	64.5	12.5	B
Benzene	BQL	6.26	
Bromodichloromethane	BQL	6.26	
Bromoform	BQL	6.26	
Bromomethane	BQL	12.5	
Carbon Disulfide	BQL	6.26	
Carbon tetrachloride	BQL	6.26	
Chlorobenzene	BQL	6.26	
Chloroethane	BQL	12.5	
Chloroform	BQL	6.26	
Chloromethane	BQL	12.5	
cis-1,3-Dichloropropene	BQL	6.26	
Dibromochloromethane	BQL	6.26	
Ethylbenzene	BQL	6.26	
Methylene chloride	29.9	6.26	B
Styrene	BQL	6.26	
Tetrachloroethene	BQL	6.26	
Toluene	BQL	6.26	
trans-1,2-Dichloroethene	BQL	6.26	
trans-1,3-Dichloropropene	BQL	6.26	
Trichloroethene	BQL	6.26	
Vinyl Acetate	BQL	12.5	
Vinyl chloride	BQL	12.5	
Xylenes	BQL	6.26	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-068
 Client ID: 01015 MW1-S-(10-12)
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: SU846 8080
 Units: ug/Kg

Analyst: TS
 Analyzed: 08/17/93
 Prepared: 08/02/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.61	
4,4'-DDE	BQL	1.68	
4,4'-DDT	BQL	5.02	
Aldrin	BQL	1.68	
alpha-BHC	BQL	1.26	
Aroclor 1016	BQL	20.9	
Aroclor 1221	BQL	20.9	
Aroclor 1232	BQL	20.9	
Aroclor 1242	BQL	27.2	
Aroclor 1248	BQL	41.9	
Aroclor 1254	BQL	41.9	
Aroclor 1260	BQL	41.9	
beta-BHC	BQL	2.51	
Chlordane	BQL	5.86	
delta-BHC	BQL	3.78	
Dieldrin	BQL	0.838	
Endosulfan I	BQL	5.86	
Endosulfan II	BQL	1.68	
Endosulfan sulfate	BQL	27.6	
Endrin	BQL	2.51	
Endrin aldehyde	BQL	9.64	
gamma-BHC (Lindane)	BQL	1.68	
Heptachlor	BQL	1.26	
Heptachlor epoxide	BQL	34.8	
Methoxychlor	BQL	73.7	
Toxaphene	BQL	100.0	

**GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS**

ID: 9307177-06
ent ID: 01015 MW1-S-(10-12)

Matrix: SOIL
Collected: 07/19/93

Element	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	7.01	mg/Kg	1	08/06/93	08/20/93 MG
Barium	SW846 7060	BQL	0.927	mg/Kg	1	08/06/93	08/22/93 MG
Bismuth	SW846 7421	2.10	0.451	mg/Kg	1	08/06/93	08/20/93 MG
Boron	SW846 7471	BQL	0.125	mg/Kg	1	08/06/93	08/23/93 DH
Cadmium	SW846 7610	186.0	75.2	mg/Kg	1	08/06/93	08/24/93 DH
Caesium	SW846 7740	BQL	1.08	mg/Kg	1	08/06/93	08/21/93 MG
Chromium	SW846 7761	BQL	0.150	mg/Kg	1	08/06/93	08/20/93 MG
Cobalt	SW846 7770	BQL	47.6	mg/Kg	1	08/06/93	08/24/93 DH
Copper	SW846 7841	BQL	1.38	mg/Kg	1	08/06/93	08/21/93 MG
Lead	SW846 6010	1940.0	24.1	mg/Kg	1	08/06/93	08/09/93 MB
Lithium	SW846 6010	7.20	2.76	mg/Kg	1	08/06/93	08/09/93 MB
Magnesium	SW846 6010	BQL	0.175	mg/Kg	1	08/06/93	08/09/93 MB
Manganese	SW846 6010	75.1	21.9	mg/Kg	1	08/24/93	08/25/93 MB
Mercury	SW846 6010	BQL	0.752	mg/Kg	1	08/06/93	08/09/93 MB
Molybdenum	SW846 6010	BQL	2.41	mg/Kg	1	08/06/93	08/09/93 MB
Nickel	SW846 6010	2.60	2.06	mg/Kg	1	08/06/93	08/09/93 MB
Niobium	SW846 6010	BQL	5.11	mg/Kg	1	08/24/93	08/25/93 MB
Platinum	SW846 6010	2260.0	7.77	mg/Kg	1	08/06/93	08/09/93 MB
Polonium	SW846 6010	258.0	11.4	mg/Kg	1	08/24/93	08/25/93 MB
Rhodium	SW846 6010	12.8	1.20	mg/Kg	1	08/24/93	08/25/93 MB
Selenium	SW846 6010	BQL	3.88	mg/Kg	1	08/06/93	08/09/93 MB
Silver	SW846 6010	BQL	2.68	mg/Kg	1	08/06/93	08/09/93 MB
Sodium	SW846 6010	5.70	4.61	mg/Kg	1	08/06/93	08/09/93 MB
Zinc	SW846 6010	BQL		mg/Kg	1	08/06/93	08/09/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS

GP ID: 9307177-06

Matrix: SOIL

Client ID: 01015 MW1-S-(10-12)

Collected: 07/19/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	NCAW 160.3	79.8		%			07/29/93 JS

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-07B
 Client ID: 01016 MU2-S-(0-6)''
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MS
 Analyzed: 08/05/93
 Prepared: 08/02/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det. Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	360.0	
1,2-Dichlorobenzene	BQL	360.0	
1,3-Dichlorobenzene	BQL	360.0	
1,4-Dichlorobenzene	BQL	360.0	
2,4,5-Trichlorophenol	BQL	360.0	
2,4,6-Trichlorophenol	BQL	360.0	
2,4-Dichlorophenol	BQL	360.0	
2,4-Dimethylphenol	BQL	360.0	
2,4-Dinitrophenol	BQL	1800.0	
2,4-Dinitrotoluene	BQL	360.0	
2,6-Dinitrotoluene	BQL	360.0	
2-Chloronaphthalene	BQL	360.0	
2-Chlorophenol	BQL	360.0	
2-Methylnaphthalene	BQL	360.0	
2-Methylphenol	BQL	360.0	
2-Nitroaniline	BQL	1800.0	
2-Nitrophenol	BQL	360.0	
3,3'-Dichlorobenzidine	BQL	719.0	
3-Nitroaniline	BQL	1800.0	
4,6-Dinitro-2-methylphenol	BQL	1800.0	
4-Bromophenyl-phenylether	BQL	360.0	
4-Chloro-3-methylphenol	BQL	719.0	
4-Chloroaniline	BQL	719.0	
4-Chlorophenyl phenyl ether	BQL	360.0	
4-Methylphenol	BQL	360.0	
4-Nitroaniline	BQL	1800.0	
4-Nitrophenol	BQL	1800.0	
Acenaphthene	BQL	360.0	
Acenaphthylene	BQL	360.0	
Anthracene	BQL	360.0	
Benzoic acid	BQL	1800.0	
Benzo(a)anthracene	BQL	360.0	
Benzo(a)pyrene	BQL	360.0	

GP ID: 9307177-07B
 Client ID: 01016 MW2-S-(0-6)''
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyt: MS
 Analyzed: 08/05/93
 Prepared: 08/02/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo[b]fluoranthene	BQL	360.0	
Benzo[g,h,i]perylene	BQL	360.0	
Benzo[k]fluoranthene	BQL	360.0	
Benzyl alcohol	BQL	719.0	
bis(2-Chloroethoxy) methane	BQL	360.0	
bis(2-Chloroethyl) ether	BQL	360.0	
bis(2-Chloroisopropyl) ether	BQL	360.0	
bis(2-Ethylhexyl)phthalate	BQL	360.0	
Butyl benzyl phthalate	BQL	360.0	
Chrysene	BQL	360.0	
di-n-Butylphthalate	BQL	360.0	
di-n-Octylphthalate	BQL	360.0	
Dibenzofuran	BQL	360.0	
Dibenz[a,h]anthracene	BQL	360.0	
Diethylphthalate	BQL	360.0	
Dimethyl phthalate	BQL	360.0	
Fluoranthene	BQL	360.0	
Fluorene	BQL	360.0	
Hexachlorobenzene	BQL	360.0	
Hexachlorobutadiene	BQL	360.0	
Hexachlorocyclopentadiene	BQL	360.0	
Hexachloroethane	BQL	360.0	
Indeno[1,2,3-cd]pyrene	BQL	360.0	
Isophorone	BQL	360.0	
N-Nitroso-di-n-propylamine	BQL	360.0	
N-nitrosodiphenylamine	BQL	360.0	
Naphthalene	BQL	360.0	
Nitrobenzene	BQL	360.0	
Pentachlorophenol	BQL	1800.0	
Phenanthrene	BQL	360.0	
Phenol	BQL	360.0	
Pyrene	BQL	360.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-07A
 Client ID: 01016 MW2-S-(0-6)''
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: 8240s
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/28/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.44	
1,1,2,2-Tetrachloroethane	BQL	5.44	
1,1,2-Trichloroethane	BQL	5.44	
1,1-Dichloroethane	BQL	5.44	
1,1-Dichloroethene	BQL	5.44	
1,2-Dichloroethane	BQL	5.44	
1,2-Dichloropropane	BQL	5.44	
2-Butanone	BQL	10.9	
2-Chloroethylvinyl ether	BQL	10.9	
2-Hexanone	BQL	10.9	
4-Methyl-2-pentanone	BQL	10.9	
Acetone	BQL	10.9	
Benzene	BQL	5.44	
Bromodichloromethane	BQL	5.44	
Bromoform	BQL	5.44	
Bromomethane	BQL	10.9	
Carbon Disulfide	BQL	5.44	
Carbon tetrachloride	BQL	5.44	
Chlorobenzene	BQL	5.44	
Chloroethane	BQL	10.9	
Chloroform	BQL	5.44	
Chloromethane	BQL	10.9	
cis-1,3-Dichloropropene	BQL	5.44	
Dibromochloromethane	BQL	5.44	
Ethylbenzene	BQL	5.44	
Methylene chloride	25.2	5.44	
Styrene	BQL	5.44	
Tetrachloroethene	BQL	5.44	
Toluene	BQL	5.44	
trans-1,2-Dichloroethene	BQL	5.44	
trans-1,3-Dichloropropene	BQL	5.44	
Trichloroethene	8.48	5.44	
Vinyl Acetate	BQL	10.9	
Vinyl chloride	BQL	10.9	
Xylenes	BQL	5.44	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9307177-078
 Client ID: 01016 MW2-S-(0-6)**
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: SW846 8080
 Units: ug/Kg

Analyst: TS
 Analyzed: 08/18/93
 Prepared: 08/02/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	20.1	
4,4'-DDE	BQL	7.30	
4,4'-DDT	BQL	21.9	
Aldrin	BQL	7.30	
alpha-BHC	BQL	5.50	
Aroclor 1016	BQL	91.3	
Aroclor 1221	BQL	91.3	
Aroclor 1232	BQL	91.3	
Aroclor 1242	BQL	119.0	
Aroclor 1248	BQL	182.0	
Aroclor 1254	BQL	182.0	
Aroclor 1260	1590.0	182.0	
beta-BHC	BQL	11.0	
Chlordane	BQL	25.6	
delta-BHC	BQL	16.4	
Dieldrin	BQL	3.65	
Endosulfan I	BQL	25.6	
Endosulfan II	BQL	7.30	
Endosulfan sulfate	BQL	120.0	
Endrin	BQL	11.0	
Endrin aldehyde	BQL	42.0	
gamma-BHC (Lindane)	BQL	7.30	
Heptachlor	BQL	5.50	
Heptachlor epoxide	BQL	152.0	
Methoxychlor	BQL	321.0	
Toxaphene	BQL	438.0	

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS

ID: 9307177-07
 Permit ID: 01016 MW2-S-(0-6)''

Matrix: SOIL
 Collected: 07/19/93

Element	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	6.10	mg/Kg	1	08/06/93	08/20/93 MG
Barium	SW846 7060	7.70	0.805	mg/Kg	1	08/06/93	08/22/93 MG
Bismuth	SW846 7421	120.0	39.2	mg/Kg	100	08/06/93	08/22/93 MG
Boron	SW846 7471	BQL	0.109	mg/Kg	1	08/06/93	08/23/93 DH
Cadmium	SW846 7610	533.0	65.3	mg/Kg	1	08/06/93	08/24/93 DH
Calcium	SW846 7740	BQL	0.936	mg/Kg	1	08/06/93	08/21/93 MG
Chromium	SW846 7761	0.158	0.131	mg/Kg	1	08/06/93	08/20/93 MG
Cobalt	SW846 7770	135.0	41.3	mg/Kg	1	08/06/93	08/24/93 DH
Copper	SW846 7841	BQL	1.20	mg/Kg	1	08/06/93	08/21/93 MG
Lead	SW846 6010	6070.0	20.9	mg/Kg	1	08/06/93	08/09/93 MB
Lithium	SW846 6010	50.9	2.39	mg/Kg	1	08/06/93	08/09/93 MB
Magnesium	SW846 6010	0.180	0.152	mg/Kg	1	08/06/93	08/09/93 MB
Manganese	SW846 6010	2450.0	19.0	mg/Kg	1	08/24/93	08/25/93 MB
Mercury	SW846 6010	2.40	0.653	mg/Kg	1	08/06/93	08/09/93 MB
Molybdenum	SW846 6010	7.00	2.09	mg/Kg	1	08/06/93	08/09/93 MB
Nickel	SW846 6010	27.6	1.78	mg/Kg	1	08/06/93	08/09/93 MB
Niobium	SW846 6010	31.6	4.44	mg/Kg	1	08/24/93	08/25/93 MB
Phosphorus	SW846 6010	23500.0	67.5	mg/Kg	10	08/06/93	08/10/93 MB
Potassium	SW846 6010	2560.0	9.90	mg/Kg	1	08/24/93	08/25/93 MB
Selenium	SW846 6010	98.0	1.04	mg/Kg	1	08/24/93	08/25/93 MB
Silver	SW846 6010	24.6	3.37	mg/Kg	1	08/06/93	08/09/93 MB
Sodium	SW846 6010	14.2	2.33	mg/Kg	1	08/06/93	08/09/93 MB
Zinc	SW846 6010	71.8	4.00	mg/Kg	1	08/06/93	08/09/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS

SP ID: 9307177-07

Matrix: SOIL

Client ID: 01016 MU2-S-(0-6)11

Collected: 07/19/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	MCAW 160.3	91.9		%			07/29/93 JS

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-088
 Client ID: 01017 MW2-S-(6''-2'')
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MS
 Analyzed: 08/04/93
 Prepared: 08/02/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det. Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	396.0	
1,2-Dichlorobenzene	BQL	396.0	
1,3-Dichlorobenzene	BQL	396.0	
1,4-Dichlorobenzene	BQL	396.0	
2,4,5-Trichlorophenol	BQL	396.0	
2,4,6-Trichlorophenol	BQL	396.0	
2,4-Dichlorophenol	BQL	396.0	
2,4-Dimethylphenol	BQL	396.0	
2,4-Dinitrophenol	BQL	1980.0	
2,4-Dinitrotoluene	BQL	396.0	
2,6-Dinitrotoluene	BQL	396.0	
2-Chloronaphthalene	BQL	396.0	
2-Chlorophenol	BQL	396.0	
2-Methylnaphthalene	BQL	396.0	
2-Methylphenol	BQL	396.0	
2-Nitroaniline	BQL	1980.0	
2-Nitrophenol	BQL	396.0	
3,3'-Dichlorobenzidine	BQL	792.0	
3-Nitroaniline	BQL	1980.0	
4,6-Dinitro-2-methylphenol	BQL	1980.0	
4-Bromophenyl-phenylether	BQL	396.0	
4-Chloro-3-methylphenol	BQL	792.0	
4-Chloroaniline	BQL	792.0	
4-Chlorophenyl phenyl ether	BQL	396.0	
4-Methylphenol	BQL	396.0	
4-Nitroaniline	BQL	1980.0	
4-Nitrophenol	BQL	1980.0	
Acenaphthene	BQL	396.0	
Acenaphthylene	BQL	396.0	
Anthracene	BQL	396.0	
Benzoic acid	BQL	1980.0	
Benzo[a]anthracene	BQL	396.0	
Benzo[a]pyrene	BQL	396.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-088
Client ID: 01017 MW2-S-(6''-2')
Collected: 07/19/93
Dilution: 1

Matrix: SOIL
Method: 8270
Units: ug/Kg

Analyst: MS
Analyzed: 08/04/93
Prepared: 08/02/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo[b]fluoranthene	BQL	396.0	
Benzo[g,h,i]perylene	BQL	396.0	
Benzo[k]fluoranthene	BQL	396.0	
Benzyl alcohol	BQL	792.0	
bis(2-Chloroethoxy) methane	BQL	396.0	
bis(2-Chloroethyl) ether	BQL	396.0	
bis(2-Chloroisopropyl) ether	BQL	396.0	
bis(2-Ethylhexyl)phthalate	BQL	396.0	
Butyl benzyl phthalate	BQL	396.0	
Chrysene	BQL	396.0	
di-n-Butylphthalate	BQL	396.0	
di-n-Octylphthalate	BQL	396.0	
Dibenzofuran	BQL	396.0	
Dibenz[a,h]anthracene	BQL	396.0	
Diethylphthalate	BQL	396.0	
Dimethyl phthalate	BQL	396.0	
Fluoranthene	BQL	396.0	
Fluorene	BQL	396.0	
Hexachlorobenzene	BQL	396.0	
Hexachlorobutadiene	BQL	396.0	
Hexachlorocyclopentadiene	BQL	396.0	
Hexachloroethane	BQL	396.0	
Indeno[1,2,3-cd]pyrene	BQL	396.0	
Isophorone	BQL	396.0	
N-Nitroso-di-n-propylamine	BQL	396.0	
N-nitrosodiphenylamine	BQL	396.0	
Naphthalene	BQL	396.0	
Nitrobenzene	BQL	396.0	
Pentachlorophenol	BQL	1980.0	
Phenanthrene	BQL	396.0	
Phenol	BQL	396.0	
Pyrene	BQL	396.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-08A
 Client ID: 01017 MW2-5-(6''-2'')
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: 8240e
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/28/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.98	
1,1,2,2-Tetrachloroethane	14.0	5.98	
1,1,2-Trichloroethane	BQL	5.98	
1,1-Dichloroethane	BQL	5.98	
1,1-Dichloroethene	BQL	5.98	
1,2-Dichloroethane	BQL	5.98	
1,2-Dichloropropene	BQL	5.98	
2-Butanone	BQL	12.0	
2-Chloroethylvinyl ether	BQL	12.0	
2-Hexanone	BQL	12.0	
4-Methyl-2-pentanone	BQL	12.0	
Acetone	117.0	12.0	B
Benzene	BQL	5.98	
Bromodichloromethane	BQL	5.98	
Bromoform	BQL	5.98	
Bromomethane	BQL	12.0	
Carbon Disulfide	BQL	5.98	
Carbon tetrachloride	BQL	5.98	
Chlorobenzene	BQL	5.98	
Chloroethane	BQL	12.0	
Chloroform	BQL	5.98	
Chloromethane	BQL	12.0	
cis-1,3-Dichloropropene	BQL	5.98	
Dibromochloromethane	BQL	5.98	
Ethylbenzene	BQL	5.98	
Methylene chloride	26.1	5.98	B
Styrene	BQL	5.98	
Tetrachloroethene	BQL	5.98	
Toluene	BQL	5.98	
trans-1,2-Dichloroethene	BQL	5.98	
trans-1,3-Dichloropropene	BQL	5.98	
Trichloroethene	BQL	5.98	
Vinyl Acetate	BQL	12.0	
Vinyl chloride	BQL	12.0	
Xylenes	14.2	5.98	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-088
 Client ID: D1017 MW2-S-(6''-2'')
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: SW846 8080
 Units: ug/Kg

Analyst: TS
 Analyzed: 08/17/93
 Prepared: 08/02/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.39	
4,4'-DDE	BQL	1.59	
4,4'-DDT	BQL	4.78	
Aldrin	BQL	1.59	
alpha-BHC	BQL	1.20	
Aroclor 1016	BQL	19.9	
Aroclor 1221	BQL	19.9	
Aroclor 1232	BQL	19.9	
Aroclor 1242	BQL	25.9	
Aroclor 1248	BQL	39.9	
Aroclor 1254	BQL	39.9	
Aroclor 1260	BQL	39.9	
beta-BHC	BQL	2.39	
Chlordane	BQL	5.58	
delta-BHC	BQL	3.59	
Dieldrin	BQL	0.797	
Endosulfan I	BQL	5.58	
Endosulfan II	BQL	1.59	
Endosulfan sulfate	BQL	26.3	
Endrin	BQL	2.39	
Endrin aldehyde	BQL	9.17	
gamma-BHC (Lindane)	BQL	1.59	
Heptachlor	BQL	1.20	
Heptachlor epoxide	BQL	33.1	
Methoxychlor	BQL	70.2	
Toxaphene	BQL	95.7	

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS

ID: 9307177-08
ent ID: 01017 MW2-S-(6''-2')

Matrix: SOIL
Collected: 07/19/93

Element	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	6.69	mg/Kg	1	08/06/93	08/20/93 MG
Barium	SW846 7060	4.30	0.884	mg/Kg	1	08/06/93	08/22/93 MG
Bismuth	SW846 7421	11.1	0.430	mg/Kg	1	08/06/93	08/20/93 MG
Boron	SW846 7471	BQL	0.119	mg/Kg	1	08/06/93	08/23/93 DH
Cadmium	SW846 7610	660.0	71.7	mg/Kg	1	08/06/93	08/24/93 DH
Calcium	SW846 7740	BQL	1.03	mg/Kg	1	08/06/93	08/21/93 MG
Chromium	SW846 7761	BQL	0.143	mg/Kg	1	08/06/93	08/20/93 MG
Cobalt	SW846 7770	75.1	45.4	mg/Kg	1	08/06/93	08/24/93 DH
Copper	SW846 7841	BQL	1.31	mg/Kg	1	08/06/93	08/21/93 MG
Lead	SW846 6010	15000.0	115.0	mg/Kg	5	08/06/93	08/10/93 MB
Lithium	SW846 6010	51.5	2.63	mg/Kg	1	08/06/93	08/09/93 MB
Magnesium	SW846 6010	0.520	0.167	mg/Kg	1	08/06/93	08/09/93 MB
Manganese	SW846 6010	301.0	20.9	mg/Kg	1	08/24/93	08/25/93 MB
Mercury	SW846 6010	BQL	0.717	mg/Kg	1	08/06/93	08/09/93 MB
Molybdenum	SW846 6010	5.90	2.29	mg/Kg	1	08/06/93	08/09/93 MB
Nickel	SW846 6010	17.8	1.96	mg/Kg	1	08/06/93	08/09/93 MB
Phosphorus	SW846 6010	6.90	4.87	mg/Kg	1	08/24/93	08/25/93 MB
Potassium	SW846 6010	15800.0	37.0	mg/Kg	5	08/06/93	08/10/93 MB
Selenium	SW846 6010	1260.0	10.9	mg/Kg	1	08/24/93	08/25/93 MB
Silver	SW846 6010	65.1	1.15	mg/Kg	1	08/24/93	08/25/93 MB
Sulfur	SW846 6010	12.0	3.70	mg/Kg	1	08/06/93	08/09/93 MB
Sodium	SW846 6010	26.3	2.56	mg/Kg	1	08/06/93	08/09/93 MB
Zinc	SW846 6010	36.0	4.40	mg/Kg	1	08/06/93	08/09/93 MB

**GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS**

SP ID: 9307177-08

Matrix: SOIL

Client ID: 01017 MW2-S-(6''-2')

Collected: 07/19/93

Parameter	Method	Result	Det. Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	MCAW 160.3	83.7		%			07/29/93 JS

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-098
 Client ID: 01018 MW2-S-(4-6)
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MS
 Analyzed: 08/04/93
 Prepared: 08/02/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	396.0	
1,2-Dichlorobenzene	BQL	396.0	
1,3-Dichlorobenzene	BQL	396.0	
1,4-Dichlorobenzene	BQL	396.0	
2,4,5-Trichlorophenol	BQL	396.0	
2,4,6-Trichlorophenol	BQL	396.0	
2,4-Dichlorophenol	BQL	396.0	
2,4-Dimethylphenol	BQL	396.0	
2,4-Dinitrophenol	BQL	1980.0	
2,4-Dinitrotoluene	BQL	396.0	
2,6-Dinitrotoluene	BQL	396.0	
2-Chloronaphthalene	BQL	396.0	
2-Chlorophenol	BQL	396.0	
2-Methylnaphthalene	BQL	396.0	
2-Methylphenol	BQL	396.0	
2-Nitroaniline	BQL	1980.0	
2-Nitrophenol	BQL	396.0	
3,3'-Dichlorobenzidine	BQL	792.0	
3-Nitroaniline	BQL	1980.0	
4,6-Dinitro-2-methylphenol	BQL	1980.0	
4-Bromophenyl-phenylether	BQL	396.0	
4-Chloro-3-methylphenol	BQL	792.0	
4-Chloroaniline	BQL	792.0	
4-Chlorophenyl phenyl ether	BQL	396.0	
4-Methylphenol	BQL	396.0	
4-Nitroaniline	BQL	1980.0	
4-Nitrophenol	BQL	1980.0	
Acenaphthene	BQL	396.0	
Acenaphthylene	BQL	396.0	
Anthracene	BQL	396.0	
Benzoic acid	BQL	1980.0	
Benzo[a]anthracene	BQL	396.0	
Benzo[a]pyrene	BQL	396.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-098
Client ID: 01018 MW2-5-(4-6)
Collected: 07/19/93
Dilution: 1

Matrix: SOIL
Method: 8270
Units: ug/Kg

Analyst: MS
Analyzed: 08/04/93
Prepared: 08/02/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo[b]fluoranthene	BQL	396.0	
Benzo[g,h,i]perylene	BQL	396.0	
Benzo[k]fluoranthene	BQL	396.0	
Benzyl alcohol	BQL	792.0	
bis(2-Chloroethoxy) methane	BQL	396.0	
bis(2-Chloroethyl) ether	BQL	396.0	
bis(2-Chloroisopropyl) ether	BQL	396.0	
bis(2-Ethylhexyl)phthalate	BQL	396.0	
Butyl benzyl phthalate	BQL	396.0	
Chrysene	BQL	396.0	
di-n-Butylphthalate	BQL	396.0	
di-n-Octylphthalate	BQL	396.0	
Dibenzofuran	BQL	396.0	
Dibenz[a,h]anthracene	BQL	396.0	
Diethylphthalate	BQL	396.0	
Dimethyl phthalate	BQL	396.0	
Fluoranthene	BQL	396.0	
Fluorene	BQL	396.0	
Hexachlorobenzene	BQL	396.0	
Hexachlorobutadiene	BQL	396.0	
Hexachlorocyclopentadiene	BQL	396.0	
Hexachloroethane	BQL	396.0	
Indeno[1,2,3-cd]pyrene	BQL	396.0	
Isophorone	BQL	396.0	
N-Nitroso-di-n-propylamine	BQL	396.0	
N-nitrosodiphenylamine	BQL	396.0	
Naphthalene	BQL	396.0	
Nitrobenzene	BQL	396.0	
Pentachlorophenol	BQL	1980.0	
Phenanthrene	BQL	396.0	
Phenol	BQL	396.0	
Pyrene	BQL	396.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-09A
 Client ID: 01018 MW2-S-(4-6)
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: 8240s
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/28/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.95	
1,1,2,2-Tetrachloroethane	11.0	5.95	
1,1,2-Trichloroethane	BQL	5.95	
1,1-Dichloroethane	BQL	5.95	
1,1-Dichloroethene	BQL	5.95	
1,2-Dichloroethane	BQL	5.95	
1,2-Dichloropropane	BQL	5.95	
2-Butanone	BQL	11.9	
2-Chloroethylvinyl ether	BQL	11.9	
2-Hexanone	BQL	11.9	
4-Methyl-2-pentanone	BQL	11.9	
Acetone	29.2	11.9	B
Benzene	BQL	5.95	
Bromodichloromethane	BQL	5.95	
Bromoform	BQL	5.95	
Bromomethane	BQL	11.9	
Carbon Disulfide	BQL	5.95	
Carbon tetrachloride	BQL	5.95	
Chlorobenzene	BQL	5.95	
Chloroethane	BQL	11.9	
Chloroform	BQL	5.95	
Chloromethane	BQL	11.9	
cis-1,3-Dichloropropene	BQL	5.95	
Dibromochloromethane	BQL	5.95	
Ethylbenzene	BQL	5.95	
Methylene chloride	30.8	5.95	B
Styrene	BQL	5.95	
Tetrachloroethene	BQL	5.95	
Toluene	BQL	5.95	
trans-1,2-Dichloroethene	BQL	5.95	
trans-1,3-Dichloropropene	BQL	5.95	
Trichloroethene	BQL	5.95	
Vinyl Acetate	BQL	11.9	
Vinyl chloride	BQL	11.9	
Xylenes	BQL	5.95	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-09B
 Client ID: 01018 MW2-S-(4-6)
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: SW846 8080
 Units: ug/Kg

Analyst: TS
 Analyzed: 08/17/93
 Prepared: 08/02/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.39	
4,4'-DDE	BQL	1.59	
4,4'-DDT	BQL	4.78	
Aldrin	BQL	1.59	
alpha-BHC	BQL	1.20	
Aroclor 1016	BQL	19.9	
Aroclor 1221	BQL	19.9	
Aroclor 1232	BQL	19.9	
Aroclor 1242	BQL	25.9	
Aroclor 1248	BQL	39.9	
Aroclor 1254	BQL	39.9	
Aroclor 1260	BQL	39.9	
beta-BHC	BQL	2.39	
Chlordane	BQL	5.58	
delta-BHC	BQL	3.59	
Dieldrin	BQL	0.797	
Endosulfan I	BQL	5.58	
Endosulfan II	BQL	1.59	
Endosulfan sulfate	BQL	26.3	
Endrin	BQL	2.39	
Endrin aldehyde	BQL	9.17	
gamma-BHC (Lindane)	BQL	1.59	
Heptachlor	BQL	1.20	
Heptachlor epoxide	BQL	33.1	
Methoxychlor	BQL	70.2	
Toxaphene	BQL	95.7	

**GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS**

ID: 9307177-09
 ent ID: 01018 MW2-S-(4-6)'

Matrix: SOIL
 Collected: 07/19/93

Element	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
imony	SW846 7041	BQL	6.67	mg/Kg	1	08/06/93	08/20/93 MG
enic	SW846 7060	4.30	0.881	mg/Kg	1	08/06/93	08/22/93 MG
d	SW846 7421	8.30	0.428	mg/Kg	1	08/06/93	08/20/93 MG
cury	SW846 7471	BQL	0.119	mg/Kg	1	08/06/93	08/23/93 DH
assium	SW846 7610	991.0	71.4	mg/Kg	1	08/06/93	08/24/93 DH
enium	SW846 7740	BQL	1.02	mg/Kg	1	08/06/93	08/21/93 MG
ver	SW846 7761	BQL	0.143	mg/Kg	1	08/06/93	08/20/93 MG
lithium	SW846 7770	119.0	45.2	mg/Kg	1	08/06/93	08/24/93 DH
llium	SW846 7841	BQL	1.31	mg/Kg	1	08/06/93	08/21/93 MG
minium	SW846 6010	15900.0	114.0	mg/Kg	5	08/06/93	08/10/93 MB
ium	SW846 6010	36.4	2.62	mg/Kg	1	08/06/93	08/09/93 MB
yllium	SW846 6010	0.560	0.167	mg/Kg	1	08/06/93	08/09/93 MB
cium	SW846 6010	469.0	20.8	mg/Kg	1	08/24/93	08/25/93 MB
mium	SW846 6010	BQL	0.714	mg/Kg	1	08/06/93	08/09/93 MB
elt	SW846 6010	3.90	2.28	mg/Kg	1	08/06/93	08/09/93 MB
omium	SW846 6010	22.0	1.95	mg/Kg	1	08/06/93	08/09/93 MB
per	SW846 6010	12.1	4.86	mg/Kg	1	08/24/93	08/25/93 MB
n	SW846 6010	19000.0	36.9	mg/Kg	5	08/06/93	08/10/93 MB
nesium	SW846 6010	1930.0	10.8	mg/Kg	1	08/24/93	08/25/93 MB
ganese	SW846 6010	65.6	1.14	mg/Kg	1	08/24/93	08/25/93 MB
kel	SW846 6010	11.1	3.69	mg/Kg	1	08/06/93	08/09/93 MB
odium	SW846 6010	36.4	2.55	mg/Kg	1	08/06/93	08/09/93 MB
c	SW846 6010	32.1	4.38	mg/Kg	1	08/06/93	08/09/93 MB

**GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS**

P ID: 9307177-09
Client ID: 01018 MW2-S-(4-6)'

Matrix: SOIL
Collected: 07/19/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	MCAW 160.3	84.0		%			07/29/93 JS

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-108
 Client ID: 01019 MW2-S-(10-12)
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MS
 Analyzed: 08/04/93
 Prepared: 08/02/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	426.0	
1,2-Dichlorobenzene	BQL	426.0	
1,3-Dichlorobenzene	BQL	426.0	
1,4-Dichlorobenzene	BQL	426.0	
2,4,5-Trichlorophenol	BQL	426.0	
2,4,6-Trichlorophenol	BQL	426.0	
2,4-Dichlorophenol	BQL	426.0	
2,4-Dimethylphenol	BQL	426.0	
2,4-Dinitrophenol	BQL	2130.0	
2,4-Dinitrotoluene	BQL	426.0	
2,6-Dinitrotoluene	BQL	426.0	
2-Chloronaphthalene	BQL	426.0	
2-Chlorophenol	BQL	426.0	
2-Methylnaphthalene	BQL	426.0	
2-Methylphenol	BQL	426.0	
2-Nitroaniline	BQL	2130.0	
2-Nitrophenol	BQL	426.0	
3,3'-Dichlorobenzidine	BQL	851.0	
3-Nitroaniline	BQL	2130.0	
4,6-Dinitro-2-methylphenol	BQL	2130.0	
4-Bromophenyl-phenylether	BQL	426.0	
4-Chloro-3-methylphenol	BQL	851.0	
4-Chloroaniline	BQL	851.0	
4-Chlorophenyl phenyl ether	BQL	426.0	
4-Methylphenol	BQL	426.0	
4-Nitroaniline	BQL	2130.0	
4-Nitrophenol	BQL	2130.0	
Acenaphthene	BQL	426.0	
Acenaphthylene	BQL	426.0	
Anthracene	BQL	426.0	
Benzoic acid	BQL	2130.0	
Benzo[a]anthracene	BQL	426.0	
Benzo[a]pyrene	BQL	426.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-108
 Client ID: 01019 MW2-S-(10-12)
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: MS
 Analyzed: 08/04/93
 Prepared: 08/02/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo[b]fluoranthene	BQL	426.0	
Benzo[g,h,i]perylene	BQL	426.0	
Benzo[k]fluoranthene	BQL	426.0	
Benzyl alcohol	BQL	851.0	
bis(2-Chloroethoxy) methane	BQL	426.0	
bis(2-Chloroethyl) ether	BQL	426.0	
bis(2-Chloroisopropyl) ether	BQL	426.0	
bis(2-Ethylhexyl)phthalate	BQL	426.0	
Butyl benzyl phthalate	BQL	426.0	
Chrysene	BQL	426.0	
di-n-Butylphthalate	BQL	426.0	
di-n-Octylphthalate	BQL	426.0	
Dibenzofuran	BQL	426.0	
Dibenz[a,h]anthracene	BQL	426.0	
Diethylphthalate	BQL	426.0	
Dimethyl phthalate	BQL	426.0	
Fluoranthene	BQL	426.0	
Fluorene	BQL	426.0	
Hexachlorobenzene	BQL	426.0	
Hexachlorobutadiene	BQL	426.0	
Hexachlorocyclopentadiene	BQL	426.0	
Hexachloroethane	BQL	426.0	
Indeno[1,2,3-cd]pyrene	BQL	426.0	
Isophorone	BQL	426.0	
N-Nitroso-di-n-propylamine	BQL	426.0	
N-nitrosodiphenylamine	BQL	426.0	
Naphthalene	BQL	426.0	
Nitrobenzene	BQL	426.0	
Pentachlorophenol	BQL	2130.0	
Phenanthrene	BQL	426.0	
Phenol	BQL	426.0	
Pyrene	BQL	426.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-10A
 Client ID: 01019 MW2-S-(10-12)
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: 8240s
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/28/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det. Lim.	Qualifier
1,1,1-Trichloroethane	BQL	6.42	
1,1,2,2-Tetrachloroethane	BQL	6.42	
1,1,2-Trichloroethane	BQL	6.42	
1,1-Dichloroethane	BQL	6.42	
1,1-Dichloroethene	BQL	6.42	
1,2-Dichloroethane	BQL	6.42	
1,2-Dichloropropane	BQL	6.42	
2-Butanone	BQL	12.8	
2-Chloroethylvinyl ether	BQL	12.8	
2-Hexanone	BQL	12.8	
4-Methyl-2-pentanone	BQL	12.8	
Acetone	48.8	12.8	B
Benzene	BQL	6.42	
Bromodichloromethane	BQL	6.42	
Bromoform	BQL	6.42	
Bromomethane	BQL	12.8	
Carbon Disulfide	BQL	6.42	
Carbon tetrachloride	BQL	6.42	
Chlorobenzene	BQL	6.42	
Chloroethane	BQL	12.8	
Chloroform	BQL	6.42	
Chloromethane	BQL	12.8	
cis-1,3-Dichloropropene	BQL	6.42	
Dibromochloromethane	BQL	6.42	
Ethylbenzene	BQL	6.42	
Methylene chloride	30.9	6.42	B
Styrene	BQL	6.42	
Tetrachloroethene	BQL	6.42	
Toluene	BQL	6.42	
trans-1,2-Dichloroethene	BQL	6.42	
trans-1,3-Dichloropropene	BQL	6.42	
Trichloroethene	BQL	6.42	
Vinyl Acetate	BQL	12.8	
Vinyl chloride	BQL	12.8	
Xylenes	BQL	6.42	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307177-108
 Client ID: 01019 MW2-S-(10-12)
 Collected: 07/19/93
 Dilution: 1

Matrix: SOIL
 Method: SW846 8080
 Units: ug/Kg

Analyst: TS
 Analyzed: 08/17/93
 Prepared: 08/02/93

GC TARGET COMPOUNDS

Parameter	Result	Det. Lim.	Qualifier
4,4'-DDD	BQL	4.72	
4,4'-DDE	BQL	1.72	
4,4'-DDT	BQL	5.14	
Aldrin	BQL	1.72	
alpha-BHC	BQL	1.29	
Aroclor 1016	BQL	21.4	
Aroclor 1221	BQL	21.4	
Aroclor 1232	BQL	21.4	
Aroclor 1242	BQL	27.9	
Aroclor 1248	BQL	42.9	
Aroclor 1254	BQL	42.9	
Aroclor 1260	BQL	42.9	
beta-BHC	BQL	2.57	
Chlordane	BQL	6.00	
delta-BHC	BQL	3.86	
Dieldrin	BQL	0.858	
Endosulfan I	BQL	6.00	
Endosulfan II	BQL	1.72	
Endosulfan sulfate	BQL	28.3	
Endrin	BQL	2.57	
Endrin aldehyde	BQL	9.87	
gamma-BHC (Lindane)	BQL	1.72	
Heptachlor	BQL	1.29	
Heptachlor epoxide	BQL	35.6	
Methoxychlor	BQL	75.5	
Toxaphene	BQL	103.0	

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS

ID: 9307177-10
ent ID: 01019 MW2-S-(10-12)'

Matrix: SOIL
Collected: 07/19/93

element	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
iron	SW846 7041	BQL	7.19	mg/Kg	1	08/06/93	08/20/93 MB
nickel	SW846 7060	BQL	0.950	mg/Kg	1	08/06/93	08/22/93 MB
lead	SW846 7421	4.40	0.462	mg/Kg	1	08/06/93	08/20/93 MB
mercury	SW846 7471	BQL	0.128	mg/Kg	1	08/06/93	08/23/93 DH
potassium	SW846 7610	270.0	77.0	mg/Kg	1	08/06/93	08/24/93 DH
vanadium	SW846 7740	BQL	1.10	mg/Kg	1	08/06/93	08/21/93 MB
zinc	SW846 7761	BQL	0.154	mg/Kg	1	08/06/93	08/20/93 MB
barium	SW846 7770	BQL	48.8	mg/Kg	1	08/06/93	08/24/93 DH
chromium	SW846 7841	BQL	1.41	mg/Kg	1	08/06/93	08/21/93 MB
cadmium	SW846 6010	3520.0	24.7	mg/Kg	1	08/06/93	08/09/93 MB
cobalt	SW846 6010	10.2	2.82	mg/Kg	1	08/06/93	08/09/93 MB
barium	SW846 6010	BQL	0.180	mg/Kg	1	08/06/93	08/09/93 MB
calcium	SW846 6010	134.0	22.5	mg/Kg	1	08/24/93	08/25/93 MB
chromium	SW846 6010	BQL	0.770	mg/Kg	1	08/06/93	08/09/93 MB
nickel	SW846 6010	BQL	2.46	mg/Kg	1	08/06/93	08/09/93 MB
vanadium	SW846 6010	4.20	2.10	mg/Kg	1	08/06/93	08/09/93 MB
zinc	SW846 6010	BQL	5.24	mg/Kg	1	08/24/93	08/25/93 MB
barium	SW846 6010	2190.0	7.96	mg/Kg	1	08/06/93	08/09/93 MB
cadmium	SW846 6010	325.0	11.7	mg/Kg	1	08/24/93	08/25/93 MB
chromium	SW846 6010	24.7	1.23	mg/Kg	1	08/24/93	08/25/93 MB
nickel	SW846 6010	4.60	3.98	mg/Kg	1	08/06/93	08/09/93 MB
vanadium	SW846 6010	4.50	2.75	mg/Kg	1	08/06/93	08/09/93 MB
zinc	SW846 6010	8.90	4.72	mg/Kg	1	08/06/93	08/09/93 MB

**GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS**

GP ID: 9307177-10

Matrix: SOIL

Client ID: 01019 MW2-S-(10-12)

Collected: 07/19/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	MCAW 160.3	77.9		%			07/29/93 JS

GP ENVIRONMENTAL SERVICES

Possible notes and definitions for this report:

- BQL = Below Quantitation Limit
- J = An estimated value, below method detection limit
- B = Indicates that the compound was found in the associated blank
- E = Indicates that the concentration exceeded the calibration range of the instrument
- U = Indicates that the compound was analyzed for but not detected, number indicates the detection limit
- D = Indicates that the compound was found in a analysis at a secondary dilution factor
- * = Value obtained from a 1:2 dilution
- + = Value obtained from a 1:10 dilution
- # = Value obtained from a 1:20 dilution
- ^ = Value obtained from a 1:50 dilution
- = Value obtained from a 1:100 dilution
- ! = Value obtained from a 1:250 dilution
- @ = Value obtained from a 1:125 dilution (Medium Level)
- \$ = Value obtained from a 1:1000 dilution
- & = Value obtained from a 1:10000 dilution
- M = Flashpoint not observed; heated to specified limit
- R = Flammable at room temperature
- TMTC = Too numerous to count
- B.P. = Detection limit taken from boiling point
- F.F. = Sample gave off flammable fumes

GP ID: 9308083-01A
Client ID: 00829 TRIP BLANK
Collected: 08/10/93
Dilution: 1

Matrix: WATER
Method: 8240 TCLP
Units: ug/L

Analyst: HY
Analyzed: 08/17/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,4-Dichlorobenzene	BQL	5.00	
2-Butanone	BQL	10.0	
Benzene	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroform	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl chloride	BQL	10.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

IP ID: 9308083-02A
 Client ID: 00830 TRIP BLANK
 Collected: 08/10/93
 Dilution: 1

Matrix: WATER
 Method: 8240 TCLP
 Units: ug/L

Analyst: NY
 Analyzed: 08/17/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,4-Dichlorobenzene	BQL	5.00	
2-Butanone	BQL	10.0	
Benzene	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroform	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl chloride	BQL	10.0	

ORGANIC ANALYSIS RESULTS

GP ID: 9308083-03F
Client ID: 01082 DECON H2O
Collected: 08/10/93
Dilution: 1

Matrix: WATER
Method: 8270 TCLP
Units: ug/L

Analyst: IM
Analyzed: 08/24/93
Prepared: 08/18/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,4-Dichlorobenzene	BQL	20.0	
2,4,5-Trichlorophenol	BQL	20.0	
2,4,6-Trichlorophenol	BQL	20.0	
2,4-Dinitrotoluene	BQL	20.0	
Hexachlorobenzene	BQL	20.0	
Hexachlorobutadiene	BQL	20.0	
Hexachloroethane	BQL	20.0	
m + p-Cresol	BQL	20.0	
Nitrobenzene	BQL	20.0	
o-Cresol	BQL	20.0	
Pentachlorophenol	BQL	100.0	
Pyridine	BQL	20.0	

GP ID: 9308083-03A
Client ID: 01082 DECON H2O
Collected: 08/10/93
Dilution: 1

Matrix: WATER
Method: 8240 TCLP
Units: ug/L

Analyst: NY
Analyzed: 08/16/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,4-Dichlorobenzene	BQL	5.00	
2-Butanone	BQL	10.0	
Benzene	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroform	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl chloride	BQL	10.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9308083-03J
 Client ID: 01082 DECON H20
 Collected: 08/10/93
 Dilution: 1

Matrix: WATER
 Method: SL846 8080
 Units: ug/L

Analyst: PH
 Analyzed: 08/20/93
 Prepared: 08/17/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Aroclor 1016	BQL	0.510	
Aroclor 1221	BQL	0.510	
Aroclor 1232	BQL	0.510	
Aroclor 1242	BQL	0.663	
Aroclor 1248	BQL	1.02	
Aroclor 1254	BQL	1.02	
Aroclor 1260	BQL	1.02	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308083-030
Client ID: 01082 DECON H2O
Collected: 08/10/93
Dilution: 1Matrix: WATER
Method: 8080 TCLP
Units: ug/LAnalyst: PH
Analyzed: 09/01/93
Prepared: 08/18/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
Chlordane	BQL	0.280	
Endrin	BQL	0.120	
gamma-BHC (Lindane)	BQL	0.080	
Heptachlor	BQL	0.060	
Heptachlor epoxide	BQL	1.66	
Methoxychlor	BQL	3.52	
Toxaphene	BQL	4.80	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9308083-03E
Client ID: 01082 DECON H2O
Collected: 08/10/93
Dilution: 1

Matrix: WATER
Method: 8150 TCLP
Units: ug/L

Analyst: PR
Analyzed: 08/31/93
Prepared: 08/18/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
2,4-D	BQL	12.4	
Silvex	BQL	1.75	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSID: 9308083-03
ent ID: 01082 DECON H2OMatrix: WATER
Collected: 08/10/93

<u>Parameter</u>	<u>Method</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Units</u>	<u>Dil.</u>	<u>Prepared</u>	<u>Analyzed By</u>
Flash point	1010		B.P.	98.0	Deg. C		08/31/93 KF

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS

GP ID: 9308083-03

Client ID: 01082 DECON H2O

Matrix: WATER

Collected: 08/10/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
TCLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/23/93	08/30/93 MB
TCLP Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/23/93	08/30/93 MB
TCLP Barium	SW846 6010	126.0	13.0	ug/L	1	08/23/93	08/30/93 MB
TCLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/23/93	08/30/93 MB
TCLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/23/93	08/30/93 MB
TCLP Mercury	SW846 7470	BQL	20.0	ug/L	100	08/23/93	08/26/93 AR
TCLP Lead	SW846 6010	BQL	141.0	ug/L	1	08/23/93	08/30/93 MB
TCLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/23/93	08/30/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTSID: 9308083-03
Int ID: 01082 DECON H20Matrix: WATER
Collected: 08/10/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Active Cyanide	SW 846 7.3.3	BQL	0.010	mg/Kg	1		08/19/93 SCT
Rate	MCAW 353.2	0.091	0.050	mg/L	1		08/13/93 YS
	SW846 9040	7.78	0.001	pH	1		08/13/93 JES
Active Sulfide	SW 846 7.3.4	BQL	7.40	mg/Kg	1		08/23/93 JS

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308083-04F
Client ID: 01081 DECON H2O (DUP)
Collected: 08/10/93
Dilution: 1Matrix: WATER
Method: 8270 TCLP
Units: ug/LAnalyst: MB
Analyzed: 08/25/93
Prepared: 08/18/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,4-Dichlorobenzene	BQL	20.0	
2,4,5-Trichlorophenol	BQL	20.0	
2,4,6-Trichlorophenol	BQL	20.0	
2,4-Dinitrotoluene	BQL	20.0	
Hexachlorobenzene	BQL	20.0	
Hexachlorobutadiene	BQL	20.0	
Hexachloroethane	BQL	20.0	
m + p-Cresol	BQL	20.0	
Nitrobenzene	BQL	20.0	
o-Cresol	BQL	20.0	
Pentachlorophenol	BQL	100.0	
Pyridine	BQL	20.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308083-04A
Client ID: 01081 DECON H2O (DUP)
Collected: 08/10/93
Dilution: 1Matrix: WATER
Method: 8240 TCLP
Units: ug/LAnalyst: HY
Analyzed: 08/16/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,4-Dichlorobenzene	BQL	5.00	
2-Butanone	BQL	10.0	
Benzene	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroform	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl chloride	BQL	10.0	

GP ID: 9308083-04J
Client ID: 01081 DECON W20 (DUP)
Collected: 08/10/93
Dilution: 1

Matrix: WATER
Method: SW846 8080
Units: ug/L

Analyst: PH
Analyzed: 08/20/93
Prepared: 08/17/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Aroclor 1016	BQL	1.11	
Aroclor 1221	BQL	1.11	
Aroclor 1232	BQL	1.11	
Aroclor 1242	BQL	1.44	
Aroclor 1248	BQL	2.22	
Aroclor 1254	BQL	2.22	
Aroclor 1260	BQL	2.22	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9308083-040
Client ID: 01081 DECON H2O (DUP)
Collected: 08/10/93
Dilution: 1

Matrix: WATER
Method: 8080 TCLP
Units: ug/L

Analyst: PH
Analyzed: 09/01/93
Prepared: 08/18/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
Chlordane	BQL	0.286	
Endrin	BQL	0.122	
gamma-BHC (Lindane)	BQL	0.082	
Heptachlor	BQL	0.061	
Heptachlor epoxide	BQL	1.69	
Methoxychlor	BQL	3.59	
Toxaphene	BQL	4.90	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9308083-04E
 Client ID: 01081 DECON H2O (DUP)
 Collected: 08/10/93
 Dilution: 1

Matrix: WATER
 Method: 8150 TELP
 Units: ug/L

Analyst: PH
 Analyzed: 08/31/93
 Prepared: 08/18/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
2,4-D	BQL	12.7	
Silvex	BQL	1.80	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSD: 9308083-04
nt ID: 01081 DECON W20 (DUP)Matrix: WATER
Collected: 08/10/93

meter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
h point	1010		B.P.	98.0	Deg. C		08/31/93 KF

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS

P ID: 9308083-04

Client ID: 01081 DECON H2O (DUP)

Matrix: WATER

Collected: 08/10/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
CLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/23/93	08/30/93 MB
CLP Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/23/93	08/30/93 MB
CLP Barium	SW846 6010	76.2	13.0	ug/L	1	08/23/93	08/30/93 MB
CLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/23/93	08/30/93 MB
CLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/23/93	08/30/93 MB
CLP Mercury	SW846 7470	BQL	20.0	ug/L	100	08/23/93	08/26/93 AR
CLP Lead	SW846 6010	BQL	141.0	ug/L	1	08/23/93	08/30/93 MB
CLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/23/93	08/30/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS

ID: 9308083-04

Event ID: 01081 DECON H2O (DUP)

Matrix: WATER

Collected: 08/10/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Active Cyanide	SW 846 7.3.3	BQL	0.010	mg/Kg	1		08/19/93 SCT
Rate	MCAW 353.2	0.091	0.050	mg/L	1		08/13/93 YS
	SW846 9040	7.66	0.001	pH	1		08/13/93 JES
Active Sulfide	SW 846 7.3.4	8.69	7.24	mg/Kg	1		08/23/93 JS



GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308083-05A
Client ID: 01101 MW1-T-COMP
Collected: 08/10/93
Dilution: 1Matrix: SOIL
Method: 8270 TCLP
Units: ug/LAnalyst: JM
Analyzed: 08/24/93
Prepared: 08/18/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

GP ID: 9308083-058
Client ID: 01101 MW1-T-COMP
Collected: 08/10/93
Dilution: 1

Matrix: SOIL
Method: 8240 TCLP
Units: ug/L

Analyst: NY
Analyzed: 08/16/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,4-Dichlorobenzene	BQL	5.00	
2-Butanone	BQL	10.0	
Benzene	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroform	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl chloride	BQL	10.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9308083-05A
Client ID: 01101 MW1-T-COMP
Collected: 08/10/93
Dilution: 1

Matrix: SOIL
Method: 8080 TCLP
Units: ug/L

Analyst: PH
Analyzed: 09/01/93
Prepared: 08/18/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9308083-05A
Client ID: 01101 MW1-T-COMP
Collected: 08/10/93
Dilution: 1

Matrix: SOIL
Method: 8150 TCLP
Units: ug/L

Analyst: PR
Analyzed: 08/31/93
Prepared: 08/18/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSID: 9308083-05
ent ID: 01101 MW1-T-COMPMatrix: SOIL
Collected: 08/10/93

Parameter	Method	Result	Det. Lim.	Units	Dil.	Prepared	Analyzed By
ameter sh point	1010		N	100.0	Deg. C		08/31/93 KF

IP ID: 9308083-05

Matrix: SOIL

Client ID: 01101 MW1-T-COMP

Collected: 08/10/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
TCLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/23/93	08/30/93 MB
TCLP Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/23/93	08/30/93 MB
TCLP Barium	SW846 6010	533.0	13.0	ug/L	1	08/23/93	08/30/93 MB
TCLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/23/93	08/30/93 MB
TCLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/23/93	08/30/93 MB
TCLP Mercury	SW846 7470	BQL	20.0	ug/L	100	08/23/93	08/26/93 AR
TCLP Lead	SW846 6010	BQL	141.0	ug/L	1	08/23/93	08/30/93 MB
TCLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/23/93	08/30/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTSID: 9308083-05
ent ID: 01101 MW1-T-COMPMatrix: SOIL
Collected: 08/10/93

parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Active Cyanide	SW 846 7.3.3	BQL	0.247	mg/Kg	1		08/19/93 SCT
	SW846 9045	5.90	0.001	pH			08/23/93 JS
Active Sulfide	SW 846 7.3.4	11.5	7.20	mg/Kg	1		08/23/93 JS
Percent Solids	MCAW 160.3	84.2		%			08/17/93 JS

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308083-06A
Client ID: 01102 MW2-T-COMP
Collected: 08/10/93
Dilution: 1Matrix: SOIL
Method: 8270 TCLP
Units: ug/LAnalyst: IM
Analyzed: 08/24/93
Prepared: 08/18/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

OF ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9308083-068
Client ID: 01102 MW2-T-COMP
Collected: 08/10/93
Dilution: 10

Matrix: SOIL
Method: 8240 TCLP
Units: ug/L

Analyst: HY
Analyzed: 08/19/93
Prepared:

VOLATILE TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

GP ID: 9308083-06A
Client ID: 01102 MW2-T-COMP
Collected: 08/10/93
Dilution: 1

Matrix: SOIL
Method: 8080 TCLP
Units: ug/L

Analyst: PH
Analyzed: 09/01/93
Prepared: 08/18/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

OF ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9308083-06A
Client ID: 01102 MW2-T-COMP
Collected: 08/10/93
Dilution: 1

Matrix: SOIL
Method: 8150 TCLP
Units: ug/L

Analyst: PH
Analyzed: 08/31/93
Prepared: 08/18/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

ID: 9308083-06
ient ID: 01102 MW2-T-COMP

Matrix: SOIL
Collected: 08/10/93

Parameter	Method	Result	Det. Lim.	Units	Dil.	Prepared	Analyzed By
ash point	1010		K	100.0	Deg. C		08/31/93 KF

D: 9308083-06
nt ID: 01102 MW2-T-COMPMatrix: SOIL
Collected: 08/10/93

Element	Method	Result	Det. Lim.	Units	Dil.	Prepared	Analyzed By
Silver	SW846 6010	BQL	22.5	ug/L	1	08/23/93	08/30/93 MB
Arsenic	SW846 6010	144.0	138.0	ug/L	1	08/23/93	08/30/93 MB
Barium	SW846 6010	472.0	13.0	ug/L	1	08/23/93	08/30/93 MB
Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/23/93	08/30/93 MB
Chromium	SW846 6010	BQL	12.5	ug/L	1	08/23/93	08/30/93 MB
Mercury	SW846 7470	BQL	20.0	ug/L	100	09/09/93	09/09/93 LL
Lead	SW846 6010	BQL	141.0	ug/L	1	08/23/93	08/30/93 MB
Selenium	SW846 6010	BQL	83.7	ug/L	1	08/23/93	08/30/93 MB

GP ENVIRONMENTAL SERVICES
 WET CHEMISTRY ANALYSIS RESULTS

WP ID: 9308083-06

Matrix: SOIL

Client ID: 01102 MW2-T-COMP

Collected: 08/10/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Reactive Cyanide	SW 846 7.3.3	BQL	0.241	mg/Kg	1		08/19/93 SCT
pH	SW846 9045	5.55	0.001	pH			08/23/93 JS
Reactive Sulfide	SW 846 7.3.4	13.8	6.89	mg/Kg	1		08/23/93 JS
Percent Solids	MCAW 160.3	84.6		%			08/17/93 JS

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308083-07A
Client ID: 01103 MW3-T-COMP
Collected: 08/10/93
Dilution: 1Matrix: SOIL
Method: 8270 TCLP
Units: ug/LAnalyst: IM
Analyzed: 08/24/93
Prepared: 08/18/93

SEMIVOLATILE TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

GP ID: 9308083-078
Client ID: 01103 MW3-T-COMP
Collected: 08/10/93
Dilution: 10

Matrix: SOIL
Method: 8240 TCLP
Units: ug/L

Analyst: HY
Analyzed: 08/19/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308083-07A
Client ID: 01103 MWS-T-COMP
Collected: 08/10/93
Dilution: 1Matrix: SOIL
Method: 8080 TCLP
Units: ug/LAnalyst: PK
Analyzed: 09/01/93
Prepared: 08/18/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308083-07A
Client ID: 01103 MW3-T-COMP
Collected: 08/10/93
Dilution: 1Matrix: SOIL
Method: 8150 TCLP
Units: ug/LAnalyst: PH
Analyzed: 08/31/93
Prepared: 08/18/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSID: 9308083-07
ent ID: 01103 MW3-T-COMPMatrix: SOIL
Collected: 08/10/93

<u>Parameter</u>	<u>Method</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Units</u>	<u>Dil.</u>	<u>Prepared</u>	<u>Analyzed By</u>
sh point	1010		N	100.0	deg. C		08/31/93 KF

P ID: 9308083-07

Client ID: 01103 MW3-T-COMP

Matrix: SOIL

Collected: 08/10/93

parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
CLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/23/93	08/30/93 MB
CLP Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/23/93	08/30/93 MB
CLP Barium	SW846 6010	771.0	13.0	ug/L	1	08/23/93	08/30/93 MB
CLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/23/93	08/30/93 MB
CLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/23/93	08/30/93 MB
CLP Mercury	SW846 7470	BQL	20.0	ug/L	100	08/23/93	08/26/93 AR
CLP Lead	SW846 6010	BQL	141.0	ug/L	1	08/23/93	08/30/93 MB
CLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/23/93	08/30/93 MB

GF ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTSID: 9308083-07
ent ID: 01103 MW3-T-COMPMatrix: SOIL
Collected: 08/10/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Active Cyanide	SW 846 7.3.3	BQL	0.240	mg/Kg	1		08/19/93 SCT
	SW846 9045	5.86	0.001	pH			08/23/93 JS
Active Sulfide	SW 846 7.3.4	14.4	7.22	mg/Kg	1		08/23/93 JS
Percent Solids	MCAW 160.3	85.7		%			08/17/93 JS

GP ID: 9308083-08A
Client ID: 01104 B1-T-COMP
Collected: 08/10/93
Dilution: 1

Matrix: SOIL
Method: 8270 TCLP
Units: ug/L

Analyst: IM
Analyzed: 08/25/93
Prepared: 08/18/93

SEMIVOLATILE TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

GP ENVIRONMENTAL SERVICES
 ORGANIC ANALYSIS RESULTS

GP ID: 9308083-088
 Client ID: 01104 B1-T-COMP
 Collected: 08/10/93
 Dilution: 10

Matrix: SOIL
 Method: 8240 TCLP
 Units: ug/L

Analyst: NY
 Analyzed: 08/19/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308083-08A
Client ID: 01104 81-T-COMP
Collected: 08/10/93
Dilution: 1Matrix: SOIL
Method: 8080 TCLP
Units: ug/LAnalyst: PH
Analyzed: 09/01/93
Prepared: 08/18/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9308083-08A
Client ID: 01104 B1-T-COMP
Collected: 08/10/93
Dilution: 1

Matrix: SOIL
Method: 8150 TCLP
Units: ug/L

Analyst: PH
Analyzed: 08/31/93
Prepared: 08/18/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

GP ENVIRONMENTAL SERVICES
 ORGANIC ANALYSIS RESULTS

GP ID: 9308083-08
 Client ID: 01104 B1-T-COMP

Matrix: SOIL
 Collected: 08/10/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Flash point	1010		N	100.0	Deg. C		08/31/93 KF

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTSD: 9308083-08
nt ID: 01104 B1-T-COMPMatrix: SOIL
Collected: 08/10/93

meter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Silver	SW846 6010	BQL	22.5	ug/L	1	08/23/93	08/30/93 MB
Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/23/93	08/30/93 MB
Barium	SW846 6010	624.0	13.0	ug/L	1	08/23/93	08/30/93 MB
Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/23/93	08/30/93 MB
Chromium	SW846 6010	BQL	12.5	ug/L	1	08/23/93	08/30/93 MB
Mercury	SW846 7470	BQL	20.0	ug/L	100	08/23/93	08/26/93 AR
Lead	SW846 6010	BQL	141.0	ug/L	1	08/23/93	08/30/93 MB
Selenium	SW846 6010	BQL	83.7	ug/L	1	08/23/93	08/30/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS

IP ID: 9308083-08

Matrix: SOIL

Client ID: 01104 B1-T-COMP

Collected: 08/10/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
reactive Cyanide	SW 846 7.3.3	BQL	0.240	mg/Kg	1		08/19/93 SCT
pH	SW846 9045	4.72	0.001	pH			08/23/93 JS
reactive Sulfide	SW 846 7.3.4	14.3	7.16	mg/Kg	1		08/23/93 JS
Percent Solids	NCAW 160.3	83.1		%			08/17/93 JS

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308083-09A
Client ID: 01105 B2-T-COMP
Collected: 08/10/93
Dilution: 1Matrix: SOIL
Method: 8270 TCLP
Units: ug/LAnalyst: IM
Analyzed: 08/25/93
Prepared: 08/18/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

GP ID: 9308083-098
Client ID: 01105 B2-T-COMP
Collected: 08/10/93
Dilution: 10

Matrix: SOIL
Method: 8240 TCLP
Units: ug/L

Analyst: HY
Analyzed: 08/19/93
Prepared:

VOLATILE TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308083-09A
Client ID: 01105 B2-T-COMP
Collected: 08/10/93
Dilution: 1Matrix: SOIL
Method: 8080 TCLP
Units: ug/LAnalyst: PH
Analyzed: 09/01/93
Prepared: 08/18/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308083-09A
Client ID: 01105 B2-T-COMP
Collected: 08/10/93
Dilution: 1Matrix: SOIL
Method: 8150 TCLP
Units: ug/LAnalyst: PH
Analyzed: 08/31/93
Prepared: 08/18/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSID: 9308083-09
ent ID: 01105 82-T-COMPMatrix: SOIL
Collected: 08/10/93

Parameter	Method	Result	Det. Lim.	Units	Dil.	Prepared	Analyzed By
ash point	1010		N 100.0	Deg. C			08/31/93 KF

P ID: 9308083-09

Client ID: 01105 82-T-COMP

Matrix: SOIL

Collected: 08/10/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
CLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/23/93	08/30/93 MB
CLP Arsenic	SW846 6010	276.0	138.0	ug/L	1	08/23/93	08/30/93 MB
CLP Barium	SW846 6010	649.0	13.0	ug/L	1	08/23/93	08/30/93 MB
CLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/23/93	08/30/93 MB
CLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/23/93	08/30/93 MB
CLP Mercury	SW846 7470	BQL	20.0	ug/L	100	08/23/93	08/26/93 AR
CLP Lead	SW846 6010	BQL	141.0	ug/L	1	08/23/93	08/30/93 MB
CLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/23/93	08/30/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTSID: 9308083-09
ent ID: 01105 82-T-COMPMatrix: SOIL
Collected: 08/10/93

parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Active Cyanide	SW 846 7.3.3	BQL	0.247	mg/Kg	1		08/19/93 SCT
	SW846 9045	7.21	0.001	pH			08/23/93 JS
Active Sulfide	SW 846 7.3.4	19.3	7.42	mg/Kg	1		08/23/93 JS
Percent Solids	MCAW 160.3	88.8		%			08/17/93 JS

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9308083-10A
Client ID: 01106 B3-T-COMP
Collected: 08/10/93
Dilution: 1

Matrix: SOIL
Method: 8270 TCLP
Units: ug/L

Analyst: IM
Analyzed: 08/25/93
Prepared: 08/18/93

SEMI-VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308083-108
Client Id: 01106 B3-T-COMP
Collected: 08/10/93
Dilution: 10Matrix: SOIL
Method: 8240 TCLP
Units: ug/LAnalyst: NY
Analyzed: 08/19/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det. Lim.	Qualifier
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9308083-10A
 Client ID: 01106 83-T-COMP
 Collected: 08/10/93
 Dilution: 1

Matrix: SOIL
 Method: 8080 TCLP
 Units: ug/L

Analyst: PH
 Analyzed: 09/02/93
 Prepared: 08/18/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308083-10A
Client ID: 01106 B3-T-COMP
Collected: 08/10/93
Dilution: 1Matrix: SOIL
Method: 8150 TCLP
Units: ug/LAnalyst: PH
Analyzed: 08/31/93
Prepared: 08/18/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

GP ID: 9308083-10
Client ID: 01106 B3-T-COMPMatrix: SOIL
Collected: 08/10/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Flash point	1010	N	100.0	Deg. C			08/31/93 KF

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS

Project ID: 9308083-10
Site ID: 01106 E3-T-COMP

Matrix: SOIL
Collected: 08/10/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Silver	SW846 6010	BQL	22.5	ug/L	1	08/23/93	08/30/93 MB
Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/23/93	08/30/93 MB
Barium	SW846 6010	178.0	13.0	ug/L	1	08/23/93	08/30/93 MB
Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/23/93	08/30/93 MB
Chromium	SW846 6010	BQL	12.5	ug/L	1	08/23/93	08/30/93 MB
Mercury	SW846 7470	BQL	20.0	ug/L	100	08/23/93	08/26/93 AR
Lead	SW846 6010	BQL	141.0	ug/L	1	08/23/93	08/30/93 MB
Selenium	SW846 6010	BQL	83.7	ug/L	1	08/23/93	08/30/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS

P ID: 9308083-10

Matrix: SOIL

Client ID: 01106 B3-1-COMP

Collected: 08/10/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Reactive Cyanide	SW 846 7.3.3	BQL	0.235	mg/Kg	1		08/19/93 SCT
pH	SW846 9045	6.17	0.001	pH			08/23/93 JS
Reactive Sulfide	SW 846 7.3.4	19.8	7.06	mg/Kg	1		08/23/93 JS
Percent Solids	MCAW 160.3	82.2		%			08/17/93 JS

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308083-11A
Client ID: 01107 B3-T-COMP (DUP)
Collected: 08/10/93
Dilution: 1Matrix: SOIL
Method: 8270 TCLP
Units: ug/LAnalyst: MB
Analyzed: 08/25/93
Prepared: 08/18/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9308083-11B
 Client ID: 01107 83-T-COMP (DUP)
 Collected: 08/10/93
 Dilution: 10

Matrix: SOIL
 Method: 8240 TCLP
 Units: ug/L

Analyst: HY
 Analyzed: 08/16/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308083-11A
Client ID: 01107 83-T-COMP (DUP)
Collected: 08/10/93
Dilution: 1Matrix: SOIL
Method: 8080 TCLP
Units: ug/LAnalyst: PH
Analyzed: 09/02/93
Prepared: 08/18/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9308083-11A
 Client ID: 01107 83-T-COMP (DUP)
 Collected: 08/10/93
 Dilution: 1

Matrix: SOIL
 Method: 8150 TCLP
 Units: ug/L

Analyst: PH
 Analyzed: 08/31/93
 Prepared: 08/18/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

D: 9308083-11

Matrix: SOIL

nt ID: 01107 B3-T-COMP (DUP)

Collected: 08/10/93

meter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
h point	1010		N 100.0	Deg. C			08/31/93 KF

P ID: 9308083-11

Matrix: SOIL

Client ID: 01107 B3-T-COMP (DUP)

Collected: 08/10/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
CLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/23/93	08/30/93 MB
CLP Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/23/93	08/30/93 MB
CLP Barium	SW846 6010	416.0	13.0	ug/L	1	08/23/93	08/30/93 MB
CLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/23/93	08/30/93 MB
CLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/23/93	08/30/93 MB
CLP Mercury	SW846 7470	BQL	20.0	ug/L	100	08/23/93	08/26/93 AR
CLP Lead	SW846 6010	BQL	141.0	ug/L	1	08/23/93	08/30/93 MB
CLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/23/93	08/30/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTSID: 9308083-11
Ident ID: 01107 83-T-COMP (DUP)Matrix: SOIL
Collected: 08/10/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
active Cyanide	SW 846 7.3.3	BOL	0.232	mg/Kg	1		08/19/93 SCT
	SW846 9045	5.64	0.001	pH			08/23/93 JS
active Sulfide	SW 846 7.3.4	20.8	6.95	mg/Kg	1		08/23/93 JS
Percent Solids	MCAWW 160.3	82.6		%			08/17/93 JS

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9308083-12A
Client ID: 00834 TRIP BLANK
Collected: 08/10/93
Dilution: 1

Matrix: WATER
Method: 8240 TCLP
Units: ug/L

Analyst: NY
Analyzed: 08/16/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,4-Dichlorobenzene	BQL	5.00	
2-Butanone	BQL	10.0	
Benzene	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroform	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl chloride	BQL	10.0	

GP ID: 9308083-13A
Client ID: 00835 TRIP BLANK
Collected: 08/10/93
Dilution: 1

Matrix: WATER
Method: 8240 TCLP
Units: ug/L

Analyst: NY
Analyzed: 08/16/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,4-Dichlorobenzene	BQL	5.00	
2-Butanone	BQL	10.0	
Benzene	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroform	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl chloride	BQL	10.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308083-14A
Client ID: TCLP BLANK
Collected: / /
Dilution: 1Matrix: EXTRACT
Method: 8270 TCLP
Units: ug/LAnalyst: IM
Analyzed: 08/24/93
Prepared: 08/18/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,4-Dichlorobenzene	BQL	50.0	
2,4,5-Trichlorophenol	BQL	50.0	
2,4,6-Trichlorophenol	BQL	50.0	
2,4-Dinitrotoluene	BQL	50.0	
Hexachlorobenzene	BQL	50.0	
Hexachlorobutadiene	BQL	50.0	
Hexachloroethane	BQL	50.0	
m + p-Cresol	BQL	50.0	
Nitrobenzene	BQL	50.0	
o-Cresol	BQL	50.0	
Pentachlorophenol	BQL	250.0	
Pyridine	BQL	50.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308083-14A
Client ID: TCLP BLANK
Collected: / /
Dilution: 10Matrix: EXTRACT
Method: 8240 TCLP
Units: ug/LAnalyst: HY
Analyzed: 08/19/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det. Lim.	Qualifier
1,1-Dichloroethene	BQL	50.0	
1,2-Dichloroethane	BQL	50.0	
1,4-Dichlorobenzene	BQL	50.0	
2-Butanone	BQL	100.0	
Benzene	BQL	50.0	
Carbon tetrachloride	BQL	50.0	
Chlorobenzene	BQL	50.0	
Chloroform	BQL	50.0	
Tetrachloroethene	BQL	50.0	
Trichloroethene	BQL	50.0	
Vinyl chloride	BQL	100.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308083-14A
Client ID: TCLP BLANK
Collected: / /
Dilution: 1Matrix: EXTRACT
Method: 8080 TCLP
Units: ug/LAnalyst: PH
Analyzed: 09/02/93
Prepared: 08/18/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Chlordane	BQL	0.700	
Endrin	BQL	0.300	
gamma-BHC (Lindane)	BQL	0.200	
Heptachlor	BQL	0.150	
Heptachlor epoxide	BQL	4.15	
Methoxychlor	BQL	8.80	
Toxaphene	BQL	12.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308083-14A
Client ID: TCLP BLANK
Collected: / /
Dilution: 1Matrix: EXTRACT
Method: 8150 TCLP
Units: ug/LAnalyst: PH
Analyzed: 08/31/93
Prepared: 08/18/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
2,4-D	BQL	60.0	
Silvex	BQL	8.50	

P ID: 9308083-14
Client ID: TCLP BLANKMatrix: EXTRACT
Collected: / /

Parameter	Method	Result	Det. Lim.	Units	Dil.	Prepared	Analyzed By
TCLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/23/93	08/30/93 MB
TCLP Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/23/93	08/30/93 MB
TCLP Barium	SW846 6010	BQL	13.0	ug/L	1	08/23/93	08/30/93 MB
TCLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/23/93	08/30/93 MB
TCLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/23/93	08/30/93 MB
TCLP Mercury	SW846 7470	BQL	0.200	ug/L	1	09/09/93	09/09/93 LL
TCLP Lead	SW846 6010	BQL	141.0	ug/L	1	08/23/93	08/30/93 MB
TCLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/23/93	08/30/93 MB

Client: **WESTON AP&I Adams**
 Est. Final Proj. Sampling Date: _____
 Work Order # **03886-07-1-009**
 Project Completion # **DOB Kleber 4**
 AD Project Manager: **J. DeLaney**
 OC: _____ Del: _____ TAT: _____

Date Rec'd: _____ Date Dns: _____
 Account # _____

- MATRIX CODE 3:
 S - Soil
 SE - Sediment
 SO - Solid
 SL - Sludge
 W - Water
 O - Oil
 L - Liquefied
 DL - Drum
 L - Liquid
 L - Lachete
 WL - Waste
 X - Other
 F - Filler

Lab ID	Client ID/Description	Matrix (OC, TVI, ASD)	Matrix (OC, TVI, ASD)
01101	MA3-T-1	S	S
01102	MA3-T-1	S	S
01103	MA3-T-2	S	S
01104	BA-T-1	S	S
01105	B2-T-1	S	S
01106	B2-T-1	S	S
01107	B3-T-1	S	S
00884	TRIP BLA		
00885	TRIP BLA		

LAB PERSONNEL COMPLETION
 Date of last calibration: _____

A - TCLP metals, pesticides, semi-volatiles (3), ign. metals
 B - TCLP volatiles

Refrigerator #	#Type Container	Volume	ANALYSIS REQUIRED	Time Collected	Time Collected
	1000			1000	
	1000			1000	
	1000			1000	
	1000			1000	
	1000			1000	

Matrix	OC	TVI	ASD	Time Collected	Time Collected
S				1000	
S				1000	
S				1000	
S				1000	
S				1000	
S				1000	

WESTON Analyticals Usa Only
 Storage and Handling: 1) Sealed in Original Package 2) Unbroken on Original Package 3) Preserved in Shimlock Container Y or N
 Shipping: 1) Labelled in duplicate 2) Properly packaged 3) Received in Working Order Y or N

Prepared by	Received by	Date	Time
<i>[Signature]</i>	<i>[Signature]</i>	12/18	9:05a

GP Work Order # 9307182

SAMPLE ANALYSIS REPORT

Prepared For:

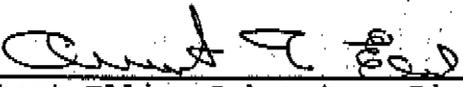
ROY F. WESTON
1 WESTON WAY
WEST CHESTER, PA 19380-1499

ADAMSITE DO NO. 10

Prepared By:

GP Environmental Services, Inc.
202 Perry Parkway
Gaithersburg, Maryland 20877

August 25, 1993



Albert Ellis, Laboratory Director

BS

**GP ENVIRONMENTAL SERVICES
ANALYTICAL RESULTS**

ADAMSITE DO NO. 10

WESTON
ON WAY
HESTER, PA 19380-1499
JEANNE O'LEARY

GP ENVIRONMENTAL SERVICES
202 Perry Parkway
Gaithersburg, MD 20877

Atten: Client Services
Phone: (301) 926-6802

Certified by: T. T.

SAMPLE IDENTIFICATION

GP ID			Client ID
9307182	-01	A	01006 B3-S-(0-6')
9307182	-01	B	
9307182	-02	A	01007 B3-S-(6'-2')
9307182	-02	B	
9307182	-03	A	01008 B3-S-(4'-6')
9307182	-03	B	
9307182	-04	A	01009 B3-S-(10'-12')
9307182	-04	B	
9307182	-05	A	01010 B3-S-(10'-12')DUP
9307182	-05	B	
9307182	-06	A	00811 TRIP BLANK
9307182	-07	A	00812 TRIP BLANK

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307182-018
 Client ID: 01006 B3-5-(0-6'')
 Collected: 07/21/93
 Dilution: 5

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: YY
 Analyzed: 08/03/93
 Prepared: 07/27/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det. Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	1740.0	
1,2-Dichlorobenzene	BQL	1740.0	
1,3-Dichlorobenzene	BQL	1740.0	
1,4-Dichlorobenzene	BQL	1740.0	
2,4,5-Trichlorophenol	BQL	1740.0	
2,4,6-Trichlorophenol	BQL	1740.0	
2,4-Dichlorophenol	BQL	1740.0	
2,4-Dimethylphenol	BQL	1740.0	
2,4-Dinitrophenol	BQL	8730.0	
2,4-Dinitrotoluene	BQL	1740.0	
2,6-Dinitrotoluene	BQL	1740.0	
2-Chloronaphthalene	BQL	1740.0	
2-Chlorophenol	BQL	1740.0	
2-Methylnaphthalene	BQL	1740.0	
2-Methylphenol	BQL	1740.0	
2-Nitroaniline	BQL	8730.0	
2-Nitrophenol	BQL	1740.0	
3,3'-Dichlorobenzidine	BQL	3490.0	
3-Nitroaniline	BQL	8730.0	
4,6-Dinitro-2-methylphenol	BQL	8730.0	
4-Bromophenyl-phenylether	BQL	1740.0	
4-Chloro-3-methylphenol	BQL	3490.0	
4-Chloroaniline	BQL	3490.0	
4-Chlorophenyl phenyl ether	BQL	1740.0	
4-Methylphenol	BQL	1740.0	
4-Nitroaniline	BQL	8730.0	
4-Nitrophenol	BQL	8730.0	
Acenaphthene	BQL	1740.0	
Acenaphthylene	BQL	1740.0	
Anthracene	BQL	1740.0	
Benzoic acid	BQL	8730.0	
Benzo[a]anthracene	BQL	1740.0	
Benzo[a]pyrene	BQL	1740.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307182-018
 Client ID: 01806 B3-S-(0-6'')
 Collected: 07/21/93
 Dilution: 5

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: YY
 Analyzed: 08/03/93
 Prepared: 07/27/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo[b]fluoranthene	BQL	1740.0	
Benzo[g,h,i]perylene	BQL	1740.0	
Benzo[k]fluoranthene	BQL	1740.0	
Benzyl alcohol	BQL	3490.0	
bis(2-Chloroethoxy) methane	BQL	1740.0	
bis(2-Chloroethyl) ether	BQL	1740.0	
bis(2-Chloroisopropyl) ether	BQL	1740.0	
bis(2-Ethylhexyl)phthalate	BQL	1740.0	
Butyl benzyl phthalate	BQL	1740.0	
Chrysene	BQL	1740.0	
di-n-Butylphthalate	BQL	1740.0	
di-n-Octylphthalate	BQL	1740.0	
Dibenzofuran	BQL	1740.0	
Dibenz[e,h]anthracene	BQL	1740.0	
Diethylphthalate	BQL	1740.0	
Dimethyl phthalate	BQL	1740.0	
Fluoranthene	BQL	1740.0	
Fluorene	BQL	1740.0	
Hexachlorobenzene	BQL	1740.0	
Hexachlorobutadiene	BQL	1740.0	
Hexachlorocyclopentadiene	BQL	1740.0	
Hexachloroethane	BQL	1740.0	
Indeno[1,2,3-cd]pyrene	BQL	1740.0	
Isophorone	BQL	1740.0	
N-Nitroso-di-n-propylamine	BQL	1740.0	
N-nitrosodiphenylamine	BQL	1740.0	
Naphthalene	BQL	1740.0	
Nitrobenzene	BQL	1740.0	
Pentachlorophenol	BQL	8730.0	
Phenanthrene	BQL	1740.0	
Phenol	BQL	1740.0	
Pyrene	BQL	1740.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307182-01A
Client ID: 01006 B3-S-(0-6'')
Collected: 07/21/93
Dilution: 1

Matrix: SOIL
Method: 8240s
Units: ug/Kg

Analyst: AD
Analyzed: 07/27/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.30	
1,1,2,2-Tetrachloroethane	BQL	5.30	
1,1,2-Trichloroethane	BQL	5.30	
1,1-Dichloroethane	BQL	5.30	
1,1-Dichloroethene	BQL	5.30	
1,2-Dichloroethane	BQL	5.30	
1,2-Dichloropropane	BQL	5.30	
2-Butanone	BQL	10.6	
2-Chloroethylvinyl ether	BQL	10.6	
2-Hexanone	BQL	10.6	
4-Methyl-2-pentanone	BQL	10.6	
Acetone	30.1	10.6	
Benzene	BQL	5.30	
Bromodichloromethane	BQL	5.30	
Bromoform	BQL	5.30	
Bromomethane	BQL	10.6	
Carbon Disulfide	BQL	5.30	
Carbon tetrachloride	BQL	5.30	
Chlorobenzene	BQL	5.30	
Chloroethane	BQL	10.6	
Chloroform	BQL	5.30	
Chloromethane	BQL	10.6	
cis-1,3-Dichloropropene	BQL	5.30	
Dibromochloromethane	BQL	5.30	
Ethylbenzene	BQL	5.30	
Methylene chloride	9.93	5.30	
Styrene	BQL	5.30	
Tetrachloroethene	BQL	5.30	
Toluene	BQL	5.30	
trans-1,2-Dichloroethene	BQL	5.30	
trans-1,3-Dichloropropene	BQL	5.30	
Trichloroethene	BQL	5.30	
Vinyl Acetate	BQL	10.6	
Vinyl chloride	BQL	10.6	
Xylenes	BQL	5.30	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9307182-01B
Client ID: 01006 B3-S-(0-6'')
Collected: 07/21/93
Dilution: 1

Matrix: SOIL
Method: SW846 8080
Units: ug/Kg

Analyst: YS
Analyzed: 08/18/93
Prepared: 07/27/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	3.91	
4,4'-DDE	BQL	1.42	
4,4'-DDT	12.7	4.26	
Aldrin	BQL	1.42	
alpha-BHC	BQL	1.07	
Aroclor 1016	BQL	17.8	
Aroclor 1221	BQL	17.8	
Aroclor 1232	BQL	17.8	
Aroclor 1242	BQL	23.1	
Aroclor 1248	BQL	35.5	
Aroclor 1254	BQL	35.5	
Aroclor 1260	BQL	35.5	
beta-BHC	BQL	2.13	
Chlordane	BQL	4.97	
delta-BHC	BQL	3.20	
Dieldrin	BQL	0.710	
Endosulfan I	BQL	4.97	
Endosulfan II	BQL	1.42	
Endosulfan sulfate	BQL	23.4	
Endrin	BQL	2.13	
Endrin aldehyde	BQL	8.17	
gamma-BHC (Lindane)	BQL	1.42	
Heptachlor	BQL	1.07	
Heptachlor epoxide	BQL	29.5	
Methoxychlor	BQL	62.5	
Toxaphene	BQL	85.2	

**GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS**

LD: 9307182-01
 mt ID: 01006 B3-S-(0-6'')

Matrix: SOIL
 Collected: 07/21/93

Element	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Barium	SW846 7041	BQL	5.93	mg/Kg	1	08/06/93	08/20/93 MG
Bismuth	SW846 7060	25.3	3.92	mg/Kg	5	08/06/93	08/22/93 MG
Boron	SW846 7421	79.1	38.1	mg/Kg	100	08/06/93	08/22/93 MG
Cadmium (TOTAL)	SW846 7471	990.0	106.0	mg/Kg	1	08/06/93	08/23/93 DH ←
Cesium	SW846 7610	157.0	63.6	mg/Kg	1	08/06/93	08/24/93 DH
Cobalt	SW846 7740	BQL	0.911	mg/Kg	1	08/06/93	08/21/93 MG
Copper	SW846 7761	BQL	0.127	mg/Kg	1	08/06/93	08/20/93 MG
Chromium	SW846 7770	586.0	40.2	mg/kg	1	08/06/93	08/24/93 DH
Chlorine	SW846 7841	BQL	1.16	mg/Kg	1	08/06/93	08/21/93 MG
Aluminum	SW846 6010	138.0	1.02	mg/Kg	5	08/06/93	08/10/93 MB
Iron	SW846 6010	0.198	0.023	mg/Kg	1	08/06/93	08/09/93 MB
Lithium	SW846 6010	0.002	0.001	mg/Kg	1	08/06/93	08/09/93 MB
Lead	SW846 6010	8970.0	18.5	mg/Kg	1	08/06/93	08/25/93 MB
Nickel	SW846 6010	BQL	0.006	mg/Kg	1	08/06/93	08/09/93 MB
Silver	SW846 6010	0.370	0.020	mg/Kg	1	08/06/93	08/09/93 MB
Manganese	SW846 6010	1.21	0.017	mg/Kg	1	08/06/93	08/09/93 MB
Mercury	SW846 6010	34.4	4.32	mg/Kg	1	08/24/93	08/25/93 MB
Vanadium	SW846 6010	244.0	0.657	mg/Kg	10	08/06/93	08/10/93 MB
Selenium	SW846 6010	89600.0	96.4	mg/Kg	10	08/24/93	08/25/93 MB
Zinc	SW846 6010	476.0	1.02	mg/Kg	1	08/24/93	08/25/93 MB
Chlorine	SW846 6010	8.10	0.164	mg/Kg	5	08/06/93	08/10/93 MB
Sodium	SW846 6010	0.294	0.023	mg/Kg	1	08/06/93	08/09/93 MB
Fluorine	SW846 6010	0.334	0.039	mg/Kg	1	08/06/93	08/09/93 MB

Inorganic + Organic Mercury = TOTAL

**GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS**

P ID: 9307182-01

Matrix: SOIL

Client ID: 01006 B3-S-(0-6'')

Collected: 07/21/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	MCALM 160.3	94.4		%			07/29/93 JS

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307182-028
Client ID: 01007 BS-S-(6''-2'')
Collected: 07/21/93
Dilution: 1

Matrix: SOIL
Method: 8270
Units: ug/kg

Analyst: YY
Analyzed: 08/03/93
Prepared: 07/27/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	399.0	
1,2-Dichlorobenzene	BQL	399.0	
1,3-Dichlorobenzene	BQL	399.0	
1,4-Dichlorobenzene	BQL	399.0	
2,4,5-Trichlorophenol	BQL	399.0	
2,4,6-Trichlorophenol	BQL	399.0	
2,4-Dichlorophenol	BQL	399.0	
2,4-Dimethylphenol	BQL	399.0	
2,4-Dinitrophenol	BQL	2000.0	
2,4-Dinitrotoluene	BQL	399.0	
2,6-Dinitrotoluene	BQL	399.0	
2-Chloronaphthalene	BQL	399.0	
2-Chlorophenol	BQL	399.0	
2-Methylnaphthalene	BQL	399.0	
2-Methylphenol	BQL	399.0	
2-Nitroaniline	BQL	2000.0	
2-Nitrophenol	BQL	399.0	
3,3'-Dichlorobenzidine	BQL	799.0	
3-Nitroaniline	BQL	2000.0	
4,6-Dinitro-2-methylphenol	BQL	2000.0	
4-Bromophenyl-phenylether	BQL	399.0	
4-Chloro-3-methylphenol	BQL	799.0	
4-Chloroaniline	BQL	799.0	
4-Chlorophenyl phenyl ether	BQL	399.0	
4-Methylphenol	BQL	399.0	
4-Nitroaniline	BQL	2000.0	
4-Nitrophenol	BQL	2000.0	
Acenaphthene	BQL	399.0	
Acenaphthylene	BQL	399.0	
Anthracene	BQL	399.0	
Benzoic acid	BQL	2000.0	
Benzo[a]anthracene	BQL	399.0	
Benzo[a]pyrene	BQL	399.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307182-02B
Client ID: 01007 B3-S-(6''-2')
Collected: 07/21/93
Dilution: 1

Matrix: SOIL
Method: 8270
Units: ug/Kg

Analyst: YY
Analyzed: 08/03/93
Prepared: 07/27/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det. Lim.	Qualifier
Benzo[b]fluoranthene	BQL	399.0	
Benzo[g,h,i]perylene	BQL	399.0	
Benzo[k]fluoranthene	BQL	399.0	
Benzyl alcohol	BQL	799.0	
bis(2-Chloroethoxy) methane	BQL	399.0	
bis(2-Chloroethyl) ether	BQL	399.0	
bis(2-Chloroisopropyl) ether	BQL	399.0	
bis(2-Ethylhexyl)phthalate	BQL	399.0	
Butyl benzyl phthalate	BQL	399.0	
Chrysene	BQL	399.0	
di-n-Butylphthalate	BQL	399.0	
di-n-Octylphthalate	BQL	399.0	
Dibenzofuran	BQL	399.0	
Dibenz[a,h]anthracene	BQL	399.0	
Diethylphthalate	BQL	399.0	
Dimethyl phthalate	BQL	399.0	
Fluoranthene	BQL	399.0	
Fluorene	BQL	399.0	
Hexachlorobenzene	BQL	399.0	
Hexachlorobutadiene	BQL	399.0	
Hexachlorocyclopentadiene	BQL	399.0	
Hexachloroethane	BQL	399.0	
Indeno[1,2,3-cd]pyrene	BQL	399.0	
Isophorone	BQL	399.0	
N-Nitroso-di-n-propylamine	BQL	399.0	
N-nitrosodiphenylamine	BQL	399.0	
Naphthalene	BQL	399.0	
Nitrobenzene	BQL	399.0	
Pentachlorophenol	BQL	2000.0	
Phenanthrene	BQL	399.0	
Phenol	BQL	399.0	
Pyrene	BQL	399.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307182-02A
 Client ID: 01007 B3-S-(611-21)
 Collected: 07/21/93
 Dilution: 1

Matrix: SOIL
 Method: 8240s
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/27/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	6.08	
1,1,2,2-Tetrachloroethane	BQL	6.08	
1,1,2-Trichloroethane	BQL	6.08	
1,1-Dichloroethane	BQL	6.08	
1,1-Dichloroethene	BQL	6.08	
1,2-Dichloroethane	BQL	6.08	
1,2-Dichloropropane	BQL	6.08	
2-Butanone	BQL	12.2	
2-Chloroethylvinyl ether	BQL	12.2	
2-Hexanone	BQL	12.2	
4-Methyl-2-pentanone	BQL	12.2	
Acetone	39.0	12.2	
Benzene	BQL	6.08	
Bromodichloromethane	BQL	6.08	
Bromoform	BQL	6.08	
Bromomethane	BQL	12.2	
Carbon Disulfide	BQL	6.08	
Carbon tetrachloride	BQL	6.08	
Chlorobenzene	BQL	6.08	
Chloroethane	BQL	12.2	
Chloroform	BQL	6.08	
Chloromethane	BQL	12.2	
cis-1,3-Dichloropropene	BQL	6.08	
Dibromochloromethane	BQL	6.08	
Ethylbenzene	BQL	6.08	
Methylene chloride	11.2	6.08	
Styrene	BQL	6.08	
Tetrachloroethene	BQL	6.08	
Toluene	BQL	6.08	
trans-1,2-Dichloroethene	BQL	6.08	
trans-1,3-Dichloropropene	BQL	6.08	
Trichloroethene	BQL	6.08	
Vinyl Acetate	BQL	12.2	
Vinyl chloride	BQL	12.2	
Xylenes	BQL	6.08	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307182-028
 Client ID: 01007 B3-S-(611-21)
 Collected: 07/21/93
 Dilution: 1

Matrix: SOIL
 Method: SW846 8080
 Units: ug/Kg

Analyst: TS
 Analyzed: 08/18/93
 Prepared: 07/27/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.50	
4,4'-DDE	BQL	1.63	
4,4'-DDT	BQL	4.90	
Aldrin	BQL	1.63	
alpha-BHC	BQL	1.23	
Aroclor 1016	BQL	20.4	
Aroclor 1221	BQL	20.4	
Aroclor 1232	BQL	20.4	
Aroclor 1242	BQL	26.6	
Aroclor 1248	BQL	40.9	
Aroclor 1254	BQL	40.9	
Aroclor 1260	BQL	40.9	
beta-BHC	BQL	2.45	
Chlordane	BQL	5.72	
delta-BHC	BQL	3.68	
Dieldrin	BQL	0.817	
Endosulfan I	BQL	5.72	
Endosulfan II	BQL	1.63	
Endosulfan sulfate	BQL	27.0	
Endrin	BQL	2.45	
Endrin aldehyde	BQL	9.41	
gamma-BHC (Lindene)	BQL	1.63	
Heptachlor	BQL	1.23	
Heptachlor epoxide	BQL	33.9	
Methoxychlor	BQL	71.9	
Toxaphene	BQL	98.1	

**GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS**

ID: 9307182-02

Matrix: SOIL

Int ID: 01007 B3-S-(611-21)

Collected: 07/21/93

Element	Method	Result	Det. Lim.	Units	Dil.	Prepared	Analyzed By
Barium	SW846 7041	BQL	6.80	mg/Kg	1	08/06/93	08/20/93 MG
Bismuth	SW846 7060	8.11	0.899	mg/Kg	1	08/06/93	08/22/93 MG
Boron	SW846 7421	109.0	43.7	mg/Kg	100	08/06/93	08/22/93 MG
Cadmium	SW846 7471	BQL	122.0	mg/Kg	1	08/06/93	08/23/93 DH
Caesium	SW846 7610	898.0	72.9	mg/Kg	1	08/06/93	08/24/93 DH
Chromium	SW846 7740	BQL	1.04	mg/Kg	1	08/06/93	08/21/93 MG
Cobalt	SW846 7761	BQL	0.146	mg/Kg	1	08/06/93	08/20/93 MG
Copper	SW846 7770	672.0	46.2	mg/kg	1	08/06/93	08/24/93 DH
Fluorine	SW846 7841	BQL	1.34	mg/Kg	1	08/06/93	08/21/93 MG
Iron	SW846 6010	177.0	1.17	mg/Kg	5	08/06/93	08/10/93 MB
Lead	SW846 6010	0.452	0.027	mg/Kg	1	08/06/93	08/09/93 MB
Lithium	SW846 6010	0.005	0.002	mg/Kg	1	08/06/93	08/09/93 MB
Magnesium	SW846 6010	1040.0	21.3	mg/Kg	1	08/06/93	08/25/93 MB
Manganese	SW846 6010	BQL	0.007	mg/Kg	1	08/06/93	08/09/93 MB
Mercury	SW846 6010	0.062	0.023	mg/Kg	1	08/06/93	08/09/93 MB
Molybdenum	SW846 6010	0.249	0.020	mg/Kg	1	08/06/93	08/09/93 MB
Nickel	SW846 6010	12.4	4.96	mg/Kg	1	08/24/93	08/25/93 MB
Vanadium	SW846 6010	234.0	0.377	mg/Kg	5	08/06/93	08/10/93 MB
Zinc	SW846 6010	3080.0	11.0	mg/Kg	1	08/24/93	08/25/93 MB
Antimony	SW846 6010	76.2	1.17	mg/Kg	1	08/24/93	08/25/93 MB
Selenium	SW846 6010	0.417	0.038	mg/Kg	1	08/06/93	08/09/93 MB
Sodium	SW846 6010	0.328	0.026	mg/Kg	1	08/06/93	08/09/93 MB
Thallium	SW846 6010	0.403	0.045	mg/Kg	1	08/06/93	08/09/93 MB

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307182-038
 Client ID: 01008 B3-S-(4'-6')
 Collected: 07/21/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: YY
 Analyzed: 08/03/93
 Prepared: 07/27/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	399.0	
1,2-Dichlorobenzene	BQL	399.0	
1,3-Dichlorobenzene	BQL	399.0	
1,4-Dichlorobenzene	BQL	399.0	
2,4,5-Trichlorophenol	BQL	399.0	
2,4,6-Trichlorophenol	BQL	399.0	
2,4-Dichlorophenol	BQL	399.0	
2,4-Dimethylphenol	BQL	399.0	
2,4-Dinitrophenol	BQL	2000.0	
2,4-Dinitrotoluene	BQL	399.0	
2,6-Dinitrotoluene	BQL	399.0	
2-Chloronaphthalene	BQL	399.0	
2-Chlorophenol	BQL	399.0	
2-Methylnaphthalene	BQL	399.0	
2-Methylphenol	BQL	399.0	
2-Nitroaniline	BQL	2000.0	
2-Nitrophenol	BQL	399.0	
3,3'-Dichlorobenzidine	BQL	799.0	
3-Nitroaniline	BQL	2000.0	
4,6-Dinitro-2-methylphenol	BQL	2000.0	
4-Bromophenyl-phenylether	BQL	399.0	
4-Chloro-3-methylphenol	BQL	799.0	
4-Chloroaniline	BQL	799.0	
4-Chlorophenyl phenyl ether	BQL	399.0	
4-Methylphenol	BQL	399.0	
4-Nitroaniline	BQL	2000.0	
4-Nitrophenol	BQL	2000.0	
Acenaphthene	BQL	399.0	
Acenaphthylene	BQL	399.0	
Anthracene	BQL	399.0	
Benzoic acid	BQL	2000.0	
Benzo[a]anthracene	BQL	399.0	
Benzo[a]pyrene	BQL	399.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307182-038
Client ID: 01008 B3-S-(4'-6')
Collected: 07/21/93
Dilution: 1

Matrix: SOIL
Method: 8270
Units: ug/Kg

Analyst: YY
Analyzed: 08/03/93
Prepared: 07/27/93

SEMI-VOLATILE TARGET COMPOUNDS

Parameter	Result	Det. Lim.	Qualifier
Benzo[b]fluoranthene	BQL	399.0	
Benzo[g,h,i]perylene	BQL	399.0	
Benzo[k]fluoranthene	BQL	399.0	
Benzyl alcohol	BQL	799.0	
bis(2-Chloroethoxy) methane	BQL	399.0	
bis(2-Chloroethyl) ether	BQL	399.0	
bis(2-Chloroisopropyl) ether	BQL	399.0	
bis(2-Ethylhexyl)phthalate	BQL	399.0	
Butyl benzyl phthalate	BQL	399.0	
Chrysene	BQL	399.0	
di-n-Butylphthalate	BQL	399.0	
di-n-Octylphthalate	BQL	399.0	
Dibenzofuran	BQL	399.0	
Dibenz[a,h]anthracene	BQL	399.0	
Diethylphthalate	BQL	399.0	
Dimethyl phthalate	BQL	399.0	
Fluoranthene	BQL	399.0	
Fluorene	BQL	399.0	
Hexachlorobenzene	BQL	399.0	
Hexachlorobutadiene	BQL	399.0	
Hexachlorocyclopentadiene	BQL	399.0	
Hexachloroethane	BQL	399.0	
Indeno[1,2,3-cd]pyrene	BQL	399.0	
Isophorone	BQL	399.0	
N-Nitroso-di-n-propylamine	BQL	399.0	
N-nitrosodiphenylamine	BQL	399.0	
Naphthalene	BQL	399.0	
Nitrobenzene	BQL	399.0	
Pentachlorophenol	BQL	2000.0	
Phenanthrene	BQL	399.0	
Phenol	BQL	399.0	
Pyrene	BQL	399.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307182-03A
 Client ID: 01008 83-S-(4'-6')
 Collected: 07/21/93
 Dilution: 1

Matrix: SOIL
 Method: 8240s
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/27/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	6.03	
1,1,2,2-Tetrachloroethane	BQL	6.03	
1,1,2-Trichloroethane	BQL	6.03	
1,1-Dichloroethane	BQL	6.03	
1,1-Dichloroethene	BQL	6.03	
1,2-Dichloroethane	BQL	6.03	
1,2-Dichloropropene	BQL	6.03	
2-Butanone	BQL	12.1	
2-Chloroethylvinyl ether	BQL	12.1	
2-Hexanone	BQL	12.1	
4-Methyl-2-pentanone	BQL	12.1	
Acetone	36.4	12.1	
Benzene	BQL	6.03	
Bromodichloromethane	BQL	6.03	
Bromoform	BQL	6.03	
Bromomethane	BQL	12.1	
Carbon Disulfide	BQL	6.03	
Carbon tetrachloride	BQL	6.03	
Chlorobenzene	BQL	6.03	
Chloroethane	BQL	12.1	
Chloroform	BQL	6.03	
Chloromethane	BQL	12.1	
cis-1,3-Dichloropropene	BQL	6.03	
Dibromochloromethane	BQL	6.03	
Ethylbenzene	BQL	6.03	
Methylene chloride	14.2	6.03	
Styrene	BQL	6.03	
Tetrachloroethene	BQL	6.03	
Toluene	BQL	6.03	
trans-1,2-Dichloroethene	BQL	6.03	
trans-1,3-Dichloropropene	BQL	6.03	
Trichloroethene	BQL	6.03	
Vinyl Acetate	BQL	12.1	
Vinyl chloride	BQL	12.1	
Xylenes	BQL	6.03	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307182-038
Client ID: 01008 83-S-(4'-6')
Collected: 07/21/93
Dilution: 1

Matrix: SOIL
Method: SU846 8080
Units: ug/Kg

Analyst: TS
Analyzed: 08/18/93
Prepared: 07/27/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.46	
4,4'-DDE	2.18	1.62	
4,4'-DDT	BQL	4.86	
Aldrin	BQL	1.62	
alpha-BHC	BQL	1.22	
Aroclor 1016	BQL	20.3	
Aroclor 1221	BQL	20.3	
Aroclor 1232	BQL	20.3	
Aroclor 1242	BQL	26.4	
Aroclor 1248	BQL	40.5	
Aroclor 1254	BQL	40.5	
Aroclor 1260	BQL	40.5	
beta-BHC	BQL	2.43	
Chlordane	BQL	5.67	
delta-BHC	BQL	3.65	
Dieldrin	BQL	0.811	
Endosulfan I	BQL	5.67	
Endosulfan II	BQL	1.62	
Endosulfan sulfate	BQL	26.8	
Endrin	BQL	2.43	
Endrin aldehyde	BQL	9.33	
gamma-BHC (Lindane)	BQL	1.62	
Heptachlor	BQL	1.22	
Heptachlor epoxide	BQL	33.6	
Methoxychlor	BQL	71.3	
Toxaphene	BQL	97.3	

**GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS**

GP ID: 9307182-03

Matrix: SOIL

Client ID: 01008 B3-S-(4'-6')

Collected: 07/21/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	6.76	mg/Kg	1	08/06/93	08/20/93 MG
Arsenic	SW846 7060	8.96	0.893	mg/Kg	1	08/06/93	08/22/93 MG
Lead	SW846 7421	127.0	43.4	mg/Kg	100	08/06/93	08/22/93 MG
Mercury	SW846 7471	309.0	121.0	mg/Kg	1	08/06/93	08/23/93 DH
Potassium	SW846 7610	1150.0	72.4	mg/Kg	1	08/06/93	08/24/93 DH
Selenium	SW846 7740	BQL	1.04	mg/Kg	1	08/06/93	08/21/93 MG
Silver	SW846 7761	BQL	0.145	mg/Kg	1	08/06/93	08/20/93 MG
Sodium	SW846 7770	75.8	45.8	mg/kg	1	08/06/93	08/24/93 DH
Thallium	SW846 7841	BQL	1.33	mg/Kg	1	08/06/93	08/21/93 MG
Aluminum	SW846 6010	171.0	1.16	mg/Kg	5	08/06/93	08/10/93 MB
Barium	SW846 6010	0.380	0.026	mg/Kg	1	08/06/93	08/09/93 MB
Beryllium	SW846 6010	0.005	0.002	mg/Kg	1	08/06/93	08/09/93 MB
Calcium	SW846 6010	893.0	21.1	mg/Kg	1	08/06/93	08/25/93 MB
Cadmium	SW846 6010	BQL	0.007	mg/Kg	1	08/06/93	08/09/93 MB
Cobalt	SW846 6010	0.044	0.023	mg/Kg	1	08/06/93	08/09/93 MB
Chromium	SW846 6010	0.267	0.020	mg/Kg	1	08/06/93	08/09/93 MB
Copper	SW846 6010	14.5	4.92	mg/Kg	1	08/24/93	08/25/93 MB
Iron	SW846 6010	224.0	0.374	mg/Kg	5	08/06/93	08/10/93 MB
Magnesium	SW846 6010	3120.0	11.0	mg/Kg	1	08/24/93	08/25/93 MB
Manganese	SW846 6010	80.9	1.16	mg/Kg	1	08/24/93	08/25/93 MB
Nickel	SW846 6010	0.246	0.037	mg/Kg	1	08/06/93	08/09/93 MB
Vanadium	SW846 6010	0.355	0.026	mg/Kg	1	08/06/93	08/09/93 MB
Zinc	SW846 6010	0.374	0.044	mg/Kg	1	08/06/93	08/09/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTSID: 9307182-03
ent ID: 01008 E3-5-(4'-6')Matrix: SOIL
Collected: 07/21/93

<u>parameter</u>	<u>Method</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Units</u>	<u>Dil.</u>	<u>Prepared</u>	<u>Analyzed By</u>
cent Solids	MCAW 160.3	82.9		%			07/29/93 JS

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307182-048
Client ID: 01009 83-S-(10'-12')
Collected: 07/21/93
Dilution: 1

Matrix: SOIL
Method: 8270
Units: ug/Kg

Analyst: YF
Analyzed: 08/03/93
Prepared: 07/27/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det. Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	436.0	
1,2-Dichlorobenzene	BQL	436.0	
1,3-Dichlorobenzene	BQL	436.0	
1,4-Dichlorobenzene	BQL	436.0	
2,4,5-Trichlorophenol	BQL	436.0	
2,4,6-Trichlorophenol	BQL	436.0	
2,4-Dichlorophenol	BQL	436.0	
2,4-Dimethylphenol	BQL	436.0	
2,4-Dinitrophenol	BQL	2180.0	
2,4-Dinitrotoluene	BQL	436.0	
2,6-Dinitrotoluene	BQL	436.0	
2-Chloronaphthalene	BQL	436.0	
2-Chlorophenol	BQL	436.0	
2-Methylnaphthalene	BQL	436.0	
2-Methylphenol	BQL	436.0	
2-Nitroaniline	BQL	2180.0	
2-Nitrophenol	BQL	436.0	
3,3'-Dichlorobenzidine	BQL	871.0	
3-Nitroaniline	BQL	2180.0	
4,6-Dinitro-2-methylphenol	BQL	2180.0	
4-Bromophenyl-phenylether	BQL	436.0	
4-Chloro-3-methylphenol	BQL	871.0	
4-Chloroaniline	BQL	871.0	
4-Chlorophenyl phenyl ether	BQL	436.0	
4-Methylphenol	BQL	436.0	
4-Nitroaniline	BQL	2180.0	
4-Nitrophenol	BQL	2180.0	
Acenaphthene	BQL	436.0	
Acenaphthylene	BQL	436.0	
Anthracene	BQL	436.0	
Benzoic acid	BQL	2180.0	
Benzo(a)anthracene	BQL	436.0	
Benzo(a)pyrene	BQL	436.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307182-048
 Client ID: 01009 83-5-(10'-12')
 Collected: 07/21/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: YY
 Analyzed: 08/03/93
 Prepared: 07/27/93

SEMIVOLATILE TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
Benzo[b]fluoranthene	BQL	436.0	
Benzo[g,h,i]perylene	BQL	436.0	
Benzo[k]fluoranthene	BQL	436.0	
Benzyl alcohol	BQL	871.0	
bis(2-Chloroethoxy) methane	BQL	436.0	
bis(2-Chloroethyl) ether	BQL	436.0	
bis(2-Chloroisopropyl) ether	BQL	436.0	
bis(2-Ethylhexyl)phthalate	BQL	436.0	
Butyl benzyl phthalate	BQL	436.0	
Chrysene	BQL	436.0	
di-n-Butylphthalate	BQL	436.0	
di-n-Octylphthalate	BQL	436.0	
Dibenzofuran	BQL	436.0	
Dibenz[a,h]anthracene	BQL	436.0	
Diethylphthalate	BQL	436.0	
Dimethyl phthalate	BQL	436.0	
Fluoranthene	BQL	436.0	
Fluorene	BQL	436.0	
Hexachlorobenzene	BQL	436.0	
Hexachlorobutadiene	BQL	436.0	
Hexachlorocyclopentadiene	BQL	436.0	
Hexachloroethane	BQL	436.0	
Indeno[1,2,3-cd]pyrene	BQL	436.0	
Isophorone	BQL	436.0	
N-Nitroso-di-n-propylamine	BQL	436.0	
N-nitrosodiphenylamine	BQL	436.0	
Naphthalene	BQL	436.0	
Nitrobenzene	BQL	436.0	
Pentachlorophenol	BQL	2180.0	
Phenanthrene	BQL	436.0	
Phenol	BQL	436.0	
Pyrene	BQL	436.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307182-04A
 Client ID: 01009 E3-S-(10'-12')
 Collected: 07/21/93
 Dilution: 5

Matrix: SOIL
 Method: 8240e
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/28/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det. Lim.	Qualifier
1,1,1-Trichloroethane	BQL	33.1	
1,1,2,2-Tetrachloroethane	BQL	33.1	
1,1,2-Trichloroethane	BQL	33.1	
1,1-Dichloroethane	BQL	33.1	
1,1-Dichloroethene	BQL	33.1	
1,2-Dichloroethane	BQL	33.1	
1,2-Dichloropropane	BQL	33.1	
2-Butanone	BQL	66.1	
2-Chloroethylvinyl ether	BQL	66.1	
2-Hexanone	BQL	66.1	
4-Methyl-2-pentanone	BQL	66.1	
Acetone	5420.0	66.1	B
Benzene	BQL	33.1	
Bromodichloromethane	BQL	33.1	
Bromoform	BQL	33.1	
Bromomethane	BQL	66.1	
Carbon Disulfide	BQL	33.1	
Carbon tetrachloride	BQL	33.1	
Chlorobenzene	BQL	33.1	
Chloroethane	BQL	66.1	
Chloroform	BQL	33.1	
Chloromethane	BQL	66.1	
cis-1,3-Dichloropropene	BQL	33.1	
Dibromochloromethane	BQL	33.1	
Ethylbenzene	BQL	33.1	
Methylene chloride	BQL	33.1	
Styrene	BQL	33.1	
Tetrachloroethene	BQL	33.1	
Toluene	BQL	33.1	
trans-1,2-Dichloroethene	BQL	33.1	
trans-1,3-Dichloropropene	BQL	33.1	
Trichloroethene	BQL	33.1	
Vinyl Acetate	BQL	66.1	
Vinyl chloride	BQL	66.1	
Xylenes	BQL	33.1	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307182-048
 Client ID: 01009 83-5-(10'-12')
 Collected: 07/21/93
 Dilution: 1

Matrix: SDIL
 Method: SM846 8080
 Units: ug/Kg

Analyst: TS
 Analyzed: 08/18/93
 Prepared: 07/27/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.87	
4,4'-DDE	BQL	1.77	
4,4'-DDT	BQL	5.31	
Aldrin	BQL	1.77	
alpha-BHC	BQL	1.33	
Aroclor 1016	BQL	22.1	
Aroclor 1221	BQL	22.1	
Aroclor 1232	BQL	22.1	
Aroclor 1242	BQL	28.7	
Aroclor 1248	BQL	44.2	
Aroclor 1254	BQL	44.2	
Aroclor 1260	BQL	44.2	
beta-BHC	BQL	2.65	
Chlordane	BQL	6.19	
delta-BHC	BQL	3.99	
Dieldrin	BQL	0.884	
Endosulfan I	BQL	6.19	
Endosulfan II	BQL	1.77	
Endosulfan sulfate	BQL	29.2	
Endrin	BQL	2.65	
Endrin aldehyde	BQL	10.2	
gamma-BHC (Lindene)	BQL	1.77	
Heptachlor	BQL	1.33	
Heptachlor epoxide	BQL	36.7	
Methoxychlor	BQL	77.8	
Toxaphene	BQL	106.0	

SP ID: 9307182-04

Matrix: SOIL

Client ID: 01009 B3-S-(10'-12')

Collected: 07/21/93

Parameter	Method	Result	Det. Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	7.40	mg/Kg	1	08/06/93	08/20/93 NG
Arsenic	SW846 7060	1.56	0.978	mg/Kg	1	08/06/93	08/22/93 NG
Lead	SW846 7421	3.99	0.476	mg/Kg	1	08/06/93	08/20/93 NG
Mercury	SW846 7471	BQL	132.0	ng/Kg	1	08/06/93	08/23/93 DH
Potassium	SW846 7610	278.0	79.4	mg/Kg	1	08/06/93	08/24/93 DH
Selenium	SW846 7740	BQL	1.14	mg/Kg	1	08/06/93	08/21/93 NG
Silver	SW846 7761	BQL	0.159	mg/Kg	1	08/06/93	08/20/93 NG
Sodium	SW846 7770	50.6	50.3	mg/kg	1	08/06/93	08/24/93 DH
Thallium	SW846 7841	BQL	1.46	mg/Kg	1	08/06/93	08/21/93 NG
Aluminum	SW846 6010	48.0	0.254	mg/Kg	1	08/06/93	08/09/93 MB
Barium	SW846 6010	0.123	0.029	mg/Kg	1	08/06/93	08/09/93 MB
Beryllium	SW846 6010	BQL	0.002	mg/Kg	1	08/06/93	08/09/93 MB
Calcium	SW846 6010	175.0	23.1	mg/Kg	1	08/06/93	08/25/93 MB
Cadmium	SW846 6010	BQL	0.008	mg/Kg	1	08/06/93	08/09/93 MB
Cobalt	SW846 6010	BQL	0.025	mg/Kg	1	08/06/93	08/09/93 MB
Chromium	SW846 6010	0.066	0.022	mg/Kg	1	08/06/93	08/09/93 MB
Copper	SW846 6010	BQL	5.40	mg/Kg	1	08/24/93	08/25/93 MB
Iron	SW846 6010	40.3	0.082	mg/Kg	1	08/06/93	08/09/93 MB
Magnesium	SW846 6010	362.0	12.0	mg/Kg	1	08/24/93	08/25/93 MB
Manganese	SW846 6010	70.6	1.27	mg/Kg	1	08/24/93	08/25/93 MB
Nickel	SW846 6010	0.048	0.041	mg/Kg	1	08/06/93	08/09/93 MB
Vanadium	SW846 6010	0.085	0.028	mg/Kg	1	08/06/93	08/09/93 MB
Zinc	SW846 6010	0.110	0.049	mg/Kg	1	08/06/93	08/09/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTSID: 9307182-04
ent ID: 01009 B3-S-(10'-12')Matrix: SOIL
Collected: 07/21/93

Parameter	Method	Result	Det. Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	MCAW 160.3	75.6		%			07/29/93 JS

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307182-058
 Client ID: 01010 R3-5-(10''-12'')DUP
 Collected: 07/21/93
 Dilution: 1

Matrix: SOIL
 Method: 8270
 Units: ug/Kg

Analyst: YY
 Analyzed: 08/03/93
 Prepared: 07/27/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,2,4-Trichlorobenzene	BQL	399.0	
1,2-Dichlorobenzene	BQL	399.0	
1,3-Dichlorobenzene	BQL	399.0	
1,4-Dichlorobenzene	BQL	399.0	
2,4,5-Trichlorophenol	BQL	399.0	
2,4,6-Trichlorophenol	BQL	399.0	
2,4-Dichlorophenol	BQL	399.0	
2,4-Dimethylphenol	BQL	399.0	
2,4-Dinitrophenol	BQL	2000.0	
2,4-Dinitrotoluene	BQL	399.0	
2,6-Dinitrotoluene	BQL	399.0	
2-Chloronaphthalene	BQL	399.0	
2-Chlorophenol	BQL	399.0	
2-Methylnaphthalene	BQL	399.0	
2-Methylphenol	BQL	399.0	
2-Nitroaniline	BQL	2000.0	
2-Nitrophenol	BQL	399.0	
3,3'-Dichlorobenzidine	BQL	799.0	
3-Nitroaniline	BQL	2000.0	
4,6-Dinitro-2-methylphenol	BQL	2000.0	
4-Bromophenyl-phenylether	BQL	399.0	
4-Chloro-3-methylphenol	BQL	799.0	
4-Chloroaniline	BQL	799.0	
4-Chlorophenyl phenyl ether	BQL	399.0	
4-Methylphenol	BQL	399.0	
4-Nitroaniline	BQL	2000.0	
4-Nitrophenol	BQL	2000.0	
Acenaphthene	BQL	399.0	
Acenaphthylene	BQL	399.0	
Anthracene	BQL	399.0	
Benzoic acid	BQL	2000.0	
Benzo(a)anthracene	BQL	399.0	
Benzo(a)pyrene	BQL	399.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307182-058
Client ID: 01010 83-5-(10'-12')DUP
Collected: 07/21/93
Dilution: 1

Matrix: SOIL
Method: 8270
Units: ug/Kg

Analyst: YY
Analyzed: 08/03/93
Prepared: 07/27/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Benzo[b]fluoranthene	BQL	399.0	
Benzo[g,h,i]perylene	BQL	399.0	
Benzo[k]fluoranthene	BQL	399.0	
Benzyl alcohol	BQL	799.0	
bis(2-Chloroethoxy) methane	BQL	399.0	
bis(2-Chloroethyl) ether	BQL	399.0	
bis(2-Chloroisopropyl) ether	BQL	399.0	
bis(2-Ethylhexyl)phthalate	BQL	399.0	
Butyl benzyl phthalate	BQL	399.0	
Chrysene	BQL	399.0	
di-n-Butylphthalate	BQL	399.0	
di-n-Octylphthalate	BQL	399.0	
Dibenzofuran	BQL	399.0	
Dibenz[a,h]anthracene	BQL	399.0	
Diethylphthalate	BQL	399.0	
Dimethyl phthalate	BQL	399.0	
Fluoranthene	BQL	399.0	
Fluorene	BQL	399.0	
Hexachlorobenzene	BQL	399.0	
Hexachlorobutadiene	BQL	399.0	
Hexachlorocyclopentadiene	BQL	399.0	
Hexachloroethane	BQL	399.0	
Indeno[1,2,3-cd]pyrene	BQL	399.0	
Isophorone	BQL	399.0	
N-Nitroso-di-n-propylamine	BQL	399.0	
N-nitrosodiphenylamine	BQL	399.0	
Naphthalene	BQL	399.0	
Nitrobenzene	BQL	399.0	
Pentachlorophenol	BQL	2000.0	
Phenanthrene	BQL	399.0	
Phenol	BQL	399.0	
Pyrene	BQL	399.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307182-05A
 Client ID: 01010 B3-S-(10'-12')DUP
 Collected: 07/21/93
 Dilution: 5

Matrix: SOIL
 Method: 8240s
 Units: ug/Kg

Analyst: AD
 Analyzed: 07/28/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	30.3	
1,1,2,2-Tetrachloroethane	BQL	30.3	
1,1,2-Trichloroethane	BQL	30.3	
1,1-Dichloroethane	BQL	30.3	
1,1-Dichloroethene	BQL	30.3	
1,2-Dichloroethane	BQL	30.3	
1,2-Dichloropropane	BQL	30.3	
2-Butanone	BQL	60.6	
2-Chloroethylvinyl ether	BQL	60.6	
2-Hexanone	BQL	60.6	
4-Methyl-2-pentanone	BQL	60.6	
Acetone	4480.0	60.6	B ⁺
Benzene	BQL	30.3	
Bromodichloromethane	BQL	30.3	
Bromoform	BQL	30.3	
Bromomethane	BQL	60.6	
Carbon Disulfide	BQL	30.3	
Carbon tetrachloride	BQL	30.3	
Chlorobenzene	BQL	30.3	
Chloroethane	BQL	60.6	
Chloroform	BQL	30.3	
Chloromethane	BQL	60.6	
cis-1,3-Dichloropropene	BQL	30.3	
Dibromochloromethane	BQL	30.3	
Ethylbenzene	BQL	30.3	
Methylene chloride	82.8	30.3	B
Styrene	BQL	30.3	
Tetrachloroethene	BQL	30.3	
Toluene	BQL	30.3	
trans-1,2-Dichloroethene	BQL	30.3	
trans-1,3-Dichloropropene	BQL	30.3	
Trichloroethene	BQL	30.3	
Vinyl Acetate	BQL	60.6	
Vinyl chloride	BQL	60.6	
Xylenes	BQL	30.3	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9307182-058
Client ID: 01010 83-S-(10'-12')DUP
Collected: 07/21/93
Dilution: 1Matrix: SOIL
Method: SW846 8080
Units: ug/KgAnalyst: TS
Analyzed: 08/18/93
Prepared: 07/27/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
4,4'-DDD	BQL	4.46	
4,4'-DDE	BQL	1.62	
4,4'-DDT	BQL	4.86	
Aldrin	BQL	1.62	
alpha-BHC	BQL	1.22	
Aroclor 1016	BQL	20.3	
Aroclor 1221	BQL	20.3	
Aroclor 1232	BQL	20.3	
Aroclor 1242	BQL	26.4	
Aroclor 1248	BQL	40.5	
Aroclor 1254	BQL	40.5	
Aroclor 1260	BQL	40.5	
beta-BHC	BQL	2.43	
Chlordane	BQL	5.67	
delta-BHC	BQL	3.65	
Dieldrin	BQL	0.811	
Endosulfan I	BQL	5.67	
Endosulfan II	BQL	1.62	
Endosulfan sulfate	BQL	26.8	
Endrin	BQL	2.43	
Endrin aldehyde	BQL	9.33	
gamma-BHC (Lindane)	BQL	1.62	
Heptachlor	BQL	1.22	
Heptachlor epoxide	BQL	33.6	
Methoxychlor	BQL	71.3	
Toxaphene	BQL	97.3	

**GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS**

SP ID: 9307182-05

Matrix: SOIL

Client ID: 01010 B3-S-(10'-12')DUP

Collected: 07/21/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Antimony	SW846 7041	BQL	6.79	mg/Kg	1	08/06/93	08/20/93 MG
Arsenic	SW846 7060	BQL	0.897	mg/Kg	1	08/06/93	08/22/93 MG
Lead	SW846 7421	1.94	0.436	mg/Kg	1	08/06/93	08/20/93 MG
Mercury	SW846 7471	2310.0	121.0	mg/Kg	1	08/06/93	08/23/93 DH
Potassium	SW846 7610	217.0	72.7	mg/Kg	1	08/06/93	08/24/93 DH
Selenium	SW846 7740	BQL	1.04	mg/Kg	1	08/06/93	08/21/93 MG
Silver	SW846 7761	BQL	0.146	mg/Kg	1	08/06/93	08/20/93 MG
Sodium	SW846 7770	BQL	46.1	mg/Kg	1	08/06/93	08/24/93 DH
Thallium	SW846 7841	BQL	1.33	mg/Kg	1	08/06/93	08/21/93 MG
Aluminum	SW846 6010	33.1	0.233	mg/Kg	1	08/06/93	08/09/93 MB
Barium	SW846 6010	0.081	0.027	mg/Kg	1	08/06/93	08/09/93 MB
Beryllium	SW846 6010	BQL	0.002	mg/Kg	1	08/06/93	08/09/93 MB
Calcium	SW846 6010	109.0	21.2	mg/Kg	1	08/06/93	08/25/93 MB
Cadmium	SW846 6010	BQL	0.007	mg/Kg	1	08/06/93	08/09/93 MB
Cobalt	SW846 6010	BQL	0.023	mg/Kg	1	08/06/93	08/09/93 MB
Chromium	SW846 6010	0.049	0.020	mg/Kg	1	08/06/93	08/09/93 MB
Copper	SW846 6010	BQL	4.94	mg/Kg	1	08/24/93	08/25/93 MB
Iron	SW846 6010	28.7	0.075	mg/Kg	1	08/06/93	08/09/93 MB
Magnesium	SW846 6010	345.0	11.0	mg/Kg	1	08/24/93	08/25/93 MB
Manganese	SW846 6010	35.1	1.16	mg/Kg	1	08/24/93	08/25/93 MB
Nickel	SW846 6010	0.048	0.038	mg/Kg	1	08/06/93	08/09/93 MB
Vanadium	SW846 6010	0.054	0.026	mg/Kg	1	08/06/93	08/09/93 MB
Zinc	SW846 6010	0.064	0.045	mg/Kg	1	08/06/93	08/09/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS

ID: 9307182-05

Matrix: SOIL

Sample ID: 01010 83-5-(10'-12')DUP

Collected: 07/21/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Percent Solids	MCAW 160.3	82.5		%			07/29/93 JS

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307182-06A
 Client ID: 00811 TRIP BLANK
 Collected: 07/21/93
 Dilution: 1

Matrix: WATER
 Method: 8240w
 Units: ug/L

Analyst: MH
 Analyzed: 07/28/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1,1-Trichloroethane	BQL	5.00	
1,1,2,2-Tetrachloroethane	BQL	5.00	
1,1,2-Trichloroethane	BQL	5.00	
1,1-Dichloroethane	BQL	5.00	
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,2-Dichloropropane	BQL	5.00	
2-Butanone	BQL	10.0	
2-Chloroethylvinyl ether	BQL	10.0	
2-Hexanone	BQL	10.0	
4-Methyl-2-pentanone	BQL	10.0	
Acetone	BQL	10.0	
Benzene	BQL	5.00	
Bromodichloromethane	BQL	5.00	
Bromoform	BQL	5.00	
Bromomethane	BQL	10.0	
Carbon Disulfide	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroethane	BQL	10.0	
Chloroform	BQL	5.00	
Chloromethane	BQL	10.0	
cis-1,3-Dichloropropene	BQL	5.00	
Dibromochloromethane	BQL	5.00	
Ethylbenzene	BQL	5.00	
Methylene chloride	BQL	5.00	
Styrene	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Toluene	BQL	5.00	
trans-1,2-Dichloroethene	BQL	5.00	
trans-1,3-Dichloropropene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl Acetate	BQL	10.0	
Vinyl chloride	BQL	10.0	
Xylenes	BQL	5.00	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9307182-07A
Client ID: 00812 TRIP BLANK
Collected: 07/21/93
Dilution: 1

Matrix: WATER
Method: 8240M
Units: ug/L

Analyst: MM
Analyzed: 07/28/93
Prepared:

VOLATILE TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
1,1,1-Trichloroethane	BQL	5.00	
1,1,2,2-Tetrachloroethane	BQL	5.00	
1,1,2-Trichloroethane	BQL	5.00	
1,1-Dichloroethane	BQL	5.00	
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,2-Dichloropropane	BQL	5.00	
2-Butanone	BQL	10.0	
2-Chloroethylvinyl ether	BQL	10.0	
2-Hexanone	BQL	10.0	
4-Methyl-2-pentanone	BQL	10.0	
Acetone	BQL	10.0	
Benzene	BQL	5.00	
Bromodichloromethane	BQL	5.00	
Bromoform	BQL	5.00	
Bromomethane	BQL	10.0	
Carbon Disulfide	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroethane	BQL	10.0	
Chloroform	BQL	5.00	
Chloromethane	BQL	10.0	
cis-1,3-Dichloropropene	BQL	5.00	
Dibromochloromethane	BQL	5.00	
Ethylbenzene	BQL	5.00	
Methylene chloride	BQL	5.00	
Styrene	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Toluene	BQL	5.00	
trans-1,2-Dichloroethene	BQL	5.00	
trans-1,3-Dichloropropene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl Acetate	BQL	10.0	
Vinyl chloride	BQL	10.0	
Xylenes	BQL	5.00	

GP ENVIRONMENTAL SERVICES

Possible notes and definitions for this report:

- BQL = Below Quantitation Limit
- J = An estimated value, below method detection limit
- B = Indicates that the compound was found in the associated blank
- E = Indicates that the concentration exceeded the calibration range of the instrument
- U = Indicates that the compound was analyzed for but not detected, number indicates the detection limit
- D = Indicates that the compound was found in a analysis at a secondary dilution factor
 - * = Value obtained from a 1:5 dilution
 - + = Value obtained from a 1:10 dilution
 - # = Value obtained from a 1:20 dilution
 - ^ = Value obtained from a 1:50 dilution
 - = Value obtained from a 1:100 dilution
 - ! = Value obtained from a 1:250 dilution
 - @ = Value obtained from a 1:125 dilution (Medium Level)
 - \$ = Value obtained from a 1:1000 dilution
 - & = Value obtained from a 1:10000 dilution
- M = Flashpoint not observed; heated to specified limit
- R = Flammable at room temperature
- TMYC = Too numerous to count
- B.P. = Detection limit taken from boiling point
- F.F. = Sample gave off flammable fumes

GP Work Order # 9308013

SAMPLE ANALYSIS REPORT

Prepared For:

ROY F. WESTON
1 WESTON WAY
WEST CHESTER, PA 19380-1499

ADAMSITE DO. #10

Prepared By:

GP Environmental Services, Inc.
202 Perry Parkway
Gaithersburg, Maryland 20877

August 31, 1993


Albert Ellis, Laboratory Director

VW

SITE DO. #10

GP ENVIRONMENTAL SERVICES
202 Perry Parkway
Gaithersburg, MD 20877TON
Y
R, PA 19380-1499
INE O'LEARYAtten: Client Services
Phone: (301) 926-6802Certified by: I. L.

SAMPLE IDENTIFICATION

GP ID			Client ID
9308013	-01	A	00824 TRIP BLANK
9308013	-02	A	00825 TRIP BLANK
9308013	-03	A	01051 NEV-W-A
9308013	-03	B	
9308013	-03	C	
9308013	-03	D	
9308013	-03	E	
9308013	-03	F	
9308013	-03	G	
9308013	-03	H	
9308013	-03	I	
9308013	-04	A	01052 NEV-W-A(DUP)
9308013	-04	B	
9308013	-04	C	
9308013	-04	D	
9308013	-04	E	
9308013	-04	F	
9308013	-04	G	
9308013	-04	H	
9308013	-04	I	
9308013	-05	A	TCLP BLANK

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS

GP ID: 9308013-01A
Client ID: 00824 TRIP BLANK
Collected: 07/26/93
Dilution: 1

Matrix: WATER
Method: 8240 TCLP
Units: ug/L

Analyst: AD
Analyzed: 08/04/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,4-Dichlorobenzene	BQL	5.00	
2-Butanone	BQL	10.0	
Benzene	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroform	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl chloride	BQL	10.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308013-02A
Client ID: 00825 TRIP BLANK
Collected: 07/26/93
Dilution: 1Matrix: WATER
Method: 8240 TCLP
Units: ug/LAnalyst: AD
Analyzed: 08/04/93
Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,4-Dichlorobenzene	BQL	5.00	
2-Butanone	BQL	10.0	
Benzene	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroform	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl chloride	BQL	10.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308013-03F
Client ID: 01051 NEV-W-A
Collected: 07/26/93
Dilution: 1Matrix: WATER
Method: 8270 TCLP
Units: ug/LAnalyst: IM
Analyzed: 08/24/93
Prepared: 08/09/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,4-Dichlorobenzene	BQL	12.5	
2,4,5-Trichlorophenol	BQL	12.5	
2,4,6-Trichlorophenol	BQL	12.5	
2,4-Dinitrotoluene	BQL	12.5	
Hexachlorobenzene	BQL	12.5	
Hexachlorobutadiene	BQL	12.5	
Hexachloroethane	BQL	12.5	
m + p-Cresol	BQL	12.5	
Nitrobenzene	BQL	12.5	
o-Cresol	BQL	12.5	
Pentachlorophenol	BQL	62.5	
Pyridine	BQL	12.5	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308013-03A
Client ID: 01051 NEV-M-A
Collected: 07/26/93
Dilution: 1Matrix: WATER
Method: 8240 TCLP
Units: ug/LAnalyst: AD
Analyzed: 08/04/93
Prepared:

VOLATILE TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,4-Dichlorobenzene	BQL	5.00	
2-Butanone	BQL	10.0	
Benzene	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroform	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl chloride	BQL	10.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9308013-030
 Client ID: 01051 NEV-W-A
 Collected: 07/26/93
 Dilution: 1

Matrix: WATER
 Method: 8080 TCLP
 Units: ug/L

Analyst: TS
 Analyzed: 08/25/93
 Prepared: 08/09/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
Chlordane	BQL	0.140	
Endrin	BQL	0.060	
gamma-BHC (Lindane)	BQL	0.040	
Heptachlor	BQL	0.030	
Heptachlor epoxide	BQL	0.830	
Methoxychlor	BQL	1.76	
Toxaphene	BQL	2.40	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308013-03E
Client ID: 01051 MEV-W-A
Collected: 07/26/93
Dilution: 1Matrix: WATER
Method: 8150 TCLP
Units: ug/LAnalyst: PS
Analyzed: 08/19/93
Prepared: 08/10/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
2,4-D	BQL	20.0	
Silvex	BQL	2.84	

GP ENVIRONMENTAL SERVICES
 ORGANIC ANALYSIS RESULTS

SP ID: 9308013-03
 Client ID: 01051 NEV-W-A

Matrix: WATER
 Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Flash point	1010	B.P.	98.0	Deg. C			08/11/93 KF

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTSD: 9308013-03
nt ID: 01051 NEV-W-AMatrix: WATER
Collected: 07/26/93

Element	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Silver	SW846 6010	BQL	22.5	ug/L	1	08/09/93	08/12/93 MB
Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/09/93	08/12/93 MB
Barium	SW846 6010	214.0	13.0	ug/L	1	08/09/93	08/12/93 MB
Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/09/93	08/12/93 MB
Chromium	SW846 6010	BQL	12.5	ug/L	1	08/09/93	08/12/93 MB
Mercury	SW846 7470	BQL	2000.0	ug/L	100	08/26/93	08/26/93 AR
Lead	SW846 6010	BQL	141.0	ug/L	1	08/09/93	08/12/93 MB
Selenium	SW846 6010	BQL	83.7	ug/L	1	08/09/93	08/12/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTS

P ID: 9308013-03

Matrix: WATER

Client ID: 01051 NEV-M-A

Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Free Cyanide	SW 846 7.3.3	BQL	0.073	mg/Kg	1		08/05/93 SCT
Chloride	MCAW 353.2	BQL	0.050	mg/L	1		08/13/93 YS
pH	SW846 9040	6.90	0.001	pH			08/04/93 SCT
Free Sulfide	SW 846 7.3.4	BQL	7.32	mg/Kg	1		08/04/93 JS

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308013-04F
Client ID: 01052 NEV-W-A(DUP)
Collected: 07/26/93
Dilution: 1Matrix: WATER
Method: 8270 TCLP
Units: ug/LAnalyst: IM
Analyzed: 08/24/93
Prepared: 08/09/93

SEMIVOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,4-Dichlorobenzene	BQL	20.0	
2,4,5-Trichlorophenol	BQL	20.0	
2,4,6-Trichlorophenol	BQL	20.0	
2,4-Dinitrotoluene	BQL	20.0	
Hexachlorobenzene	BQL	20.0	
Hexachlorobutadiene	BQL	20.0	
Hexachloroethane	BQL	20.0	
m + p-Cresol	BQL	20.0	
Nitrobenzene	BQL	20.0	
o-Cresol	BQL	20.0	
Pentachlorophenol	BQL	100.0	
Pyridine	BQL	20.0	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9308013-04A
 Client ID: 01052 NEV-W-A(DUP)
 Collected: 07/26/93
 Dilution: 1

Matrix: WATER
 Method: 8240 TCLP
 Units: ug/L

Analyst: AD
 Analyzed: 08/04/93
 Prepared:

VOLATILE TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
1,1-Dichloroethene	BQL	5.00	
1,2-Dichloroethane	BQL	5.00	
1,4-Dichlorobenzene	BQL	5.00	
2-Butanone	BQL	10.0	
Benzene	BQL	5.00	
Carbon tetrachloride	BQL	5.00	
Chlorobenzene	BQL	5.00	
Chloroform	BQL	5.00	
Tetrachloroethene	BQL	5.00	
Trichloroethene	BQL	5.00	
Vinyl chloride	BQL	10.0	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTSGP ID: 9308013-04D
Client ID: 01052 NEV-W-A(DUP)
Collected: 07/26/93
Dilution: 1Matrix: WATER
Method: 8080 TCLP
Units: ug/LAnalyst: TS
Analyzed: 08/26/93
Prepared: 08/09/93

GC TARGET COMPOUNDS

<u>Parameter</u>	<u>Result</u>	<u>Det.Lim.</u>	<u>Qualifier</u>
Chlordane	BQL	0.140	
Endrin	BQL	0.060	
gamma-BHC (Lindane)	BQL	0.040	
Heptachlor	BQL	0.030	
Heptachlor epoxide	BQL	0.830	
Methoxychlor	BQL	1.76	
Toxaphene	BQL	2.40	

**GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS**

GP ID: 9308013-04E
 Client ID: 01052 REV-W-A(DUP)
 Collected: 07/26/93
 Dilution: 1

Matrix: WATER
 Method: 8150 TCLP
 Units: ug/L

Analyst: PS
 Analyzed: 08/19/93
 Prepared: 08/10/93

GC TARGET COMPOUNDS

Parameter	Result	Det.Lim.	Qualifier
2,4-D	BQL	30.0	
Silvex	BQL	4.25	

GP ENVIRONMENTAL SERVICES
ORGANIC ANALYSIS RESULTS): 9308013-04
1t ID: 01052 NEV-W-A(DUP)Matrix: WATER
Collected: 07/26/93

meter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
1 point	1010	B.P.	98.0	Deg. C			08/11/93 KF

GP ENVIRONMENTAL SERVICES
METALS ANALYSIS RESULTS

IP ID: 9308013-04

Matrix: WATER

Client ID: 01052 NEV-W-A(DUP)

Collected: 07/26/93

Parameter	Method	Result	Det. Lim.	Units	Dil.	Prepared	Analyzed By
CLP Silver	SW846 6010	BQL	22.5	ug/L	1	08/09/93	08/12/93 MB
CLP Arsenic	SW846 6010	BQL	138.0	ug/L	1	08/09/93	08/12/93 MB
CLP Barium	SW846 6010	214.0	13.0	ug/L	1	08/09/93	08/12/93 MB
CLP Cadmium	SW846 6010	BQL	9.00	ug/L	1	08/09/93	08/12/93 MB
CLP Chromium	SW846 6010	BQL	12.5	ug/L	1	08/09/93	08/12/93 MB
CLP Mercury	SW846 7470	BQL	2000.0	ug/L	100	08/26/93	08/26/93 AR
CLP Lead	SW846 6010	BQL	141.0	ug/L	1	08/09/93	08/12/93 MB
CLP Selenium	SW846 6010	BQL	83.7	ug/L	1	08/09/03	08/12/93 MB

GP ENVIRONMENTAL SERVICES
WET CHEMISTRY ANALYSIS RESULTSID: 9308013-04
ent ID: 01052 NEV-W-A(DUP)Matrix: WATER
Collected: 07/26/93

Parameter	Method	Result	Det.Lim.	Units	Dil.	Prepared	Analyzed By
Active Cyanide	SW 846 7.3.3	BQL	0.073	mg/Kg	1		08/05/93 SCT
rate	NCAMM 353.2	BQL	0.050	mg/L	1		08/13/93 YS
	SW846 9040	6.90	0.001	pH			08/04/93 SCT
Active Sulfide	SW 846 7.3.4	BQL	7.32	mg/Kg	1		08/04/93 JS



DEPARTMENT OF THE ARMY
U.S. ARMY ABERDEEN PROVING GROUND SUPPORT ACTIVITY
ABERDEEN PROVING GROUND, MARYLAND 21005-5001
March 29, 1995



REPLY TO
ATTENTION OF

Directorate of Safety,
Health and Environment

Mr. Kim Lemaster
Maryland Department of the Environment
2500 Broening Highway
Baltimore, Maryland 21224

Dear Mr. Lemaster:

Enclosed for your review and information are the following documents: 1) Boat Club Area Fill Sites (Cluster 7) Work Plan; 2) Addendum 2 to the Removal Action at School Fields Training Areas; 3) Work Plan for Geophysical Surveys in the Lauderick Creek Area Cluster 5; 4) ~~Draft Field Report for Sampling of the Adamsite Storage Vaults.~~

Request you return the enclosed receipt acknowledgement form. If you have any questions or comments concerning these documents please contact Mr. Don Green, Environmental Conservation and Restoration Division, 410-671-4841.

Sincerely,

Kenneth P. Stachiw
Kenneth Stachiw
Chief, Environmental Conservation
and Restoration Division

Enclosures

Copy Furnished: Mr. Steve Hirsh, Environmental Protection Agency



MARYLAND DEPARTMENT OF THE ENVIRONMENT
2500 Broening Highway • Baltimore, Maryland 21224
(410) 631-3000

Parris N. Glendening
Governor

Jane Nishida
Secretary

May 9, 1995

Mr. Don Green
Directorate of Safety, Health and Environment
U.S. Army Aberdeen Proving Ground Support Activity
Aberdeen Proving Ground, MD 21005-5001

Re: Draft Field Report, Sampling of the Adamsite Storage Vaults at Edgewood Area, APG.

Dear Mr. Green:

Enclosed are comments from the Maryland Department of the Environment, Waste Management Administration (MDE/WAS) on the above referenced document.

If you should have any questions, please contact me at (410) 631-3440 or 3490.

Sincerely,

Kim Lemaster
Remedial Project Manager
Federal/NPL Superfund Division

:kl

Enclosure

cc: Mr. Steve Hirsh, U.S. EPA
Ms. Helen Richick
Mr. Richard Collins
Mr. Robert DeMarco
Ms. Hilary Miller

Maryland Department of the Environment
Waste Management Administration
Environmental Response and Restoration Program

Comments on the
Draft Field Report,
Sampling of the Adamsite Storage Vaults
at Edgewood Area, APG.

1. Section 3.2, page 3-2

An explanation of the rationale for excluding Adamsite (DM) from the parameters for CSM screening is needed.

2. Section 3.2, pages 3-2 to 3-7

This data provided in this report is useful and pertinent. However, the rationale for comparison of the soil and groundwater samples to the proposed Corrective Action Levels promulgated under RCRA is not clear. As you know, the need for action for this CERCLA NPL site cannot be determined by comparing site-related samples exclusively to proposed Corrective Action Levels.



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
U.S. ARMY GARRISON, ABERDEEN PROVING GROUND
2201 ABERDEEN BOULEVARD
ABERDEEN PROVING GROUND MD 21005-5001
August 19, 1996

Directorate of Safety,
Health and Environment

Mr. Steve Hirsh
U.S. Environmental Protection
Agency, Region III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

Dear Mr. Hirsh:

Enclosed for your information is Draft Report for the sampling of the Adamsite Storage Vaults dated from 1993.

If you have any questions or comments concerning this document please contact Mr. Don Green or Mr. Jerry L. Burgess, Environmental Conservation and Restoration Division, 410-612-7315.

Sincerely,

A handwritten signature in cursive script that reads "Kenneth P. Stachiw".

Kenneth P. Stachiw
Chief, Environmental Conservation
and Restoration Division

enclosure

Copy Furnished (w/enclosure)

Mr. Kim Lemaster, Maryland Department of the Environment