



DUKE ENERGY FIELD SERVICES  
370 17th Street  
Suite 2500  
Denver, CO 80202

303 595 3331

November 30, 2004

Wayne Price  
New Mexico Oil Conservation Division  
1220 South Saint Francis Drive  
Santa Fe, New Mexico 87505

**Re: Stage 1 Abatement Plan  
PCA Junction  
Eddy County, New Mexico**

Dear Mr. Price:

Duke Energy Field Services, LP (DEFS) is submitting to the New Mexico Oil Conservation Division this Stage 1 Abatement Plan for PCA Junction located in Eddy County, New Mexico. In accordance with Subsection A of Section 20.6.2.4101 NMAC and per our conversation on October 20, 2004, DEFS has chosen to complete an Abatement Plan for the site as opposed to a Discharge Plan.

DEFS conducted additional investigation of known groundwater contamination at the site during a recent acquisition due diligence transaction. Details of the investigation are included in the attached plan. If you should have any questions regarding this plan please feel free to contact myself or Greg Nelson with ARCADIS at (720) 344-3500.

Sincerely,  
**Duke Energy Field Services, LP**

A handwritten signature in black ink that appears to read "Clayre Brown Jr." followed by "Robert Pearson".

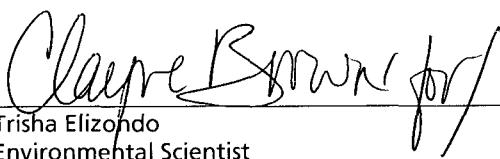
Robert Pearson  
Director, Environmental Assurance

cc:  
Greg Nelson, ARCADIS G&M, Inc.

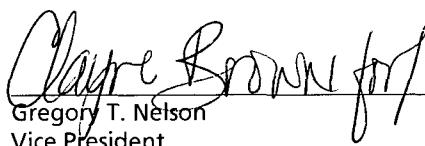
**Stage 1 Abatement Plan for  
PCA Junction**

Eddy County, New Mexico

November 2004



Trisha Elizondo  
Environmental Scientist



Gregory T. Nelson  
Vice President

Stage 1 Abatement Plan for  
PCA Junction

Eddy County, New Mexico

Prepared for:  
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Our Ref.:  
CO000889.2801

Date:  
November 18, 2004

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# **Stage 1 Abatement Plan for PCA Junction**

Eddy County, New Mexico

## **1. Introduction**

This report documents assessment activities and abatement plans for PCA Junction (“the site”). On March 10, 2004 the ownership of the PCA Junction was transferred from ConocoPhilips (COP) to Duke Energy Field Services, LP (DEFS). During the due diligence work prior to and post acquisition of the property, DEFS investigated known hydrocarbon contamination in the groundwater at the site. Per our conversation with Mr. Wayne Price, DEFS is submitting to the New Mexico Oil Conservation Division (OCD) this Stage 1 Abatement Plan to address hydrocarbon contamination at the site.

### **1.1 Site Description**

PCA Junction is located in the eastern portion of Eddy County, New Mexico. The site occupies approximately four acres of land in the southwest quadrant of Section 11, Township 20 South, Range 30 East of the New Mexico Meridian. A hand-held global positioning system (GPS) placed the site at latitude 32.70533° North and longitude 103.3066° West. The site is surrounded by undeveloped land. Figure 1 shows the site and surrounding area as shown on the USGS topographic map and Figure 2 shows the site on a 1997 aerial.

A petroleum release at the site was first discovered during a property transaction in which COP obtained ownership of the site in September 2000. Benzene was discovered in the soil and groundwater below the onsite tank battery. In 2002, phase separated hydrocarbons (PSH) were discovered on the water table. In March 2004, DEFS conducted additional environmental assessment of the site in support of its property transaction. The history of hydrocarbon contamination at the site is summarized below in Table A-1.

The site is a pipeline drip station and pigging station. Equipment at the facility is inactive with the exception of pigging.

The locations of equipment and other features at the site are presented in Figure 3.

### **1.2 Events Summary**

A summary of notable events related to discovery, reporting, assessment, and cleanup at PCA Junction is presented in Table A-1.

**Stage 1 Abatement  
Plan for PCA Junction**

Eddy County, New Mexico

**Table A-1. PCA Junction Events Summary**

Date	Event
September 2000	An environmental assessment is completed at the facility for COP. Hydrocarbons (specifically benzene) are found in the subsurface soil and groundwater at concentrations exceeding regulatory action levels.
2001	Additional groundwater and soil delineation takes place at the site through the addition of monitoring wells and soil vapor monitoring points.
March 2002	Phase separated hydrocarbons (PSH) are discovered floating on the water table.
September 2002	COP attains approval from OCD to remove PSH through the use of a skimmer pump.
December 2003	COP submits a letter requesting no further action for the site based on lack of receptors, poor groundwater quality, and limited mobility.
March 2004	OCD approves a plan submitted by COP allowing for annual monitoring of groundwater elevations and PSH thickness between 2004 and 2009 with sampling in 2009.
March 2004	A site assessment is conducted by DEFS in conjunction with a property transaction. DEFS subsurface investigation does not reveal indications of a perched zone (had been used to show limited mobility) or poor groundwater quality.
Summer 2004	DEFS contacts OCD to set a conference call regarding transfer of ownership and findings of site assessment.
Fall 2004	DEFS conducts conference call with OCD regarding findings and future work at southeast New Mexico assets including PCA Junction. DEFS prepares and submits a Stage 1 Abatement Plan.

## **2. Site Characteristics**

### **2.1 Geology**

The geology at PCA Junction consists of the Quartermaster and Rustler Formations. The Quartermaster Formation is made up of red sandstones and siltstones. The Rustler Formation consists of siltstone, gypsum, sandstone and dolomite.

### **2.2 Hydrogeology**

Based on subsurface soil investigations, approximate depth to groundwater is 22 to 23 ft bgs. The inferred groundwater table at the site is generally level. Soil borings have encountered poorly-graded sand with minor beds of caliche in the upper 20 ft of the soil column. At depths below 20 feet sand has been identified. DEFS' investigation did not reveal indications of a perched water table.

### **2.3 Soils**

Previous subsurface investigations show that the soil around the PCA Junction is comprised of sandy, deep to shallow caliche soils that are from wind-worked deposits of the Simona-Pajarito association.

According to the Eddy County Soil Survey, issued March 1971, soils at the PCA Junction are made up of the Simona-Pajarito association. This association consists mainly of calcareous upland soils and land types. Most of the association occurs as scattered areas east of the Pecos River, in valleys and on breaks, flats, ridges, and slopes. Simona soils generally area moderately dark colored, sandy, upland soils that are shallow over indurated caliche. The parent material consists of material derived from dissected, caliche-capped, exposed red beds on breaks; of wash material in valleys and on flats and slopes; and of shallow, sandy, wind-worked deposits over caliche on upland ridges and plains. Pajarito soils are deep, moderately dark colored, sandy soils that developed in material washed form red beds and deposited in drainage ways and on valley slopes.

## **Stage 1 Abatement Plan for PCA Junction**

Eddy County, New Mexico

### **2.4 Surface Water Bodies/Receptors**

It is not believed that surface water has been impacted by groundwater contamination at the site. The nearest waterway that would receive water from a surface spill or runoff is an unnamed intermittent watercourse located approximately 0.45 miles south-southwest of the site.

According to the New Mexico Office of the State Engineer there are no registered wells located within one mile of the site. However, in a report for COP by Maxim Technologies dated November 2003, there are two stock wells located in Section 3, adjacent northwest of the site. The depth of these two wells is 6 and 8.5 feet. The groundwater withdrawn from these wells has a reported TDS of <10,000 mg/L. Based on the limited movement of groundwater and the anticipated groundwater direction, these wells do not appear to be receptors to the contamination at PCA Junction but may indicate the quality of water in the area.

### **3. 2004 Site Investigation**

Three soil borings (SBA-1, SBA-5, and SB-6) were installed at the site in March 2004 to confirm the extent of contamination present and at the site prior to ownership transfer. Information from these soil borings was also used to further characterize geology at the site. Additionally, two of the soil borings were converted to monitoring wells to define the site hydrogeology and delineate the extent and nature of petroleum hydrocarbons in the groundwater. Soil boring and monitoring well locations are depicted on Figure 3.

#### **3.1 Soil Boring Completion and Sampling**

The soil borings/monitoring wells were installed to depths of approximately 60 ft bgs using an air rotary drilling method. Major sediment types in the soil column were identified using the Unified Soil Classification System (USCS). Secondary characteristics such as grain-size distribution, moisture content, density/plasticity, and visual/olfactory impacts were observed during soil sampling activities. Soil boring logs are presented in Appendix B.

An aliquot of soil from each sampling interval was prepared in the field for headspace analysis of volatile organic compounds (VOCs) using a photoionization detector (PID). If VOCs were detected in the soil boring, the soil sample exhibiting the highest PID reading above the water table was submitted to Severn Trent Laboratories in Austin, Texas for analysis of BTEX and TPH-GRO using USEPA-approved methodologies. If the soil sample PID reading indicated VOCs were at or below the background levels, the soil sample immediately above the saturated zone was submitted for analyses.

The soil analytical results from the March 2004 sampling event are summarized in Table 1, and the analytical laboratory reports are included in Appendix B. The analytical results can be summarized as follows:

- No BTEX or TPH-GRO was detected above the regulatory-reporting limit in any of the soil samples submitted for analysis.

#### **3.2 Groundwater Monitoring Well Installation and Sampling**

Groundwater monitoring wells MWA-1 and MWA-2 were completed during March 2004 in accordance with New Mexico standards using 2-inch diameter PVC casing and 15 ft of 0.020-inch mill-slotted screen. All monitoring well screens were placed to bracket the water table. Well completion details are presented in Appendix B.

## **Stage 1 Abatement Plan for PCA Junction**

Eddy County, New Mexico

Following well completion, the wells were developed using the surge and bail method until an appreciable reduction in fines was observed.

On March 21 and 26, 2004, fluid level measurements were collected from eight monitoring wells using an electronic oil/water interface probe to the nearest 0.01 ft. Phase separated hydrocarbons (PSH) were measured in one well. Depth to groundwater was approximately 20 ft bgs. The groundwater flow direction at the site is slightly northwest, with an average groundwater gradient of 0.00175 ft/ft.

Groundwater samples were collected from six existing wells and the two newly installed wells using dedicated disposable polyethylene bailers. Groundwater samples were not submitted from wells with PSH present. Groundwater samples were placed in laboratory-supplied containers, packed on ice, and shipped to Severn Trent Laboratories in Austin, Texas for analysis of BTEX, TPH-GRO, and selected natural attenuation factors using USEPA-approved methodologies.

The groundwater analytical results collected from the monitoring wells are summarized in Table B-2 and B-3, and the analytical laboratory reports are included in Appendix B. The analytical results can be summarized as follows:

- PSH was detected in MW-1 at a thickness of 1.93 ft.
- Benzene was detected above the regulatory reporting limit in MWA-1 at a concentration of 44 ug/L. Remaining monitoring wells submitted for analysis did not contain levels of benzene above laboratory reporting limits.
- Toluene, ethylbenzene, and xylenes were not detected above the regulatory reporting limit in any groundwater sample.
- TPH-GRO was detected above the laboratory-reporting limit in MWA-1 at a concentration of 560 ug/l.

Eddy County, New Mexico

## **4. Proposed Work Plan**

The benzene plume at the site has not been delineated. Prior to the selection of a remedial method, DEFS will delineate the plume and gather additional information on site geology and hydrogeology. Prior to work being initiated at the site, a site specific health and safety plan will be developed. Daily tailgate meetings will be conducted with any sub-contractors on the site prior to the initiation of field work. Because this site is located on an easement from BLM and is in an archeologically sensitive area, additional time will be needed for preparation and clearance prior to drilling.

### **4.1 Groundwater Delineation**

To fully delineate the contamination at the site two additional monitoring wells will be installed at the site (see Figure 3). Soils from soil borings will be logged by a qualified geologist. A PID will be used to field screen the soil from the wells for contamination and a minimum of one sample from each well location will be submitted for analysis. The submitted sample will be chosen by either the highest PID reading or the sample immediately above the saturated zone.

### **4.2 Sampling Method and Frequency**

Groundwater from newly installed wells, along with MW-1, MWA-1, and MW-6 will be sampled for BTEX and TPH-GRO. In addition, Monitored Natural Attenuation (MNA) factors including bicarbonate alkalinity, methane, nitrate/nitrite, and sulfate will be analyzed from wells without PSH to determine if the subsurface environment could promote microbial degradation of the dissolved hydrocarbons at the edges of the plume. In addition to laboratory analyzed constituents, pH, dissolved oxygen, and redox potential will be measured for each monitoring well in the field. Sampling and analytical techniques will be consistent with those listed in Subsection B of Section 20.6.2.3107 NMAC.

Proposed sampling will be completed on a quarterly basis for the five wells mentioned above. DEFS proposes annual reporting to OCD with results from the previous four quarters of monitoring events.

If it is determined that groundwater contamination may extend beyond the existing BLM easement, additional down-gradient monitoring wells will be installed pending land owner access.

# **Stage 1 Abatement Plan for PCA Junction**

Eddy County, New Mexico

## **5. Schedule**

### **5.1 Proposed Action Schedule**

The following schedule is proposed by DEFS to move toward closure of the site and the remediation of the known benzene contamination. OCD, land owners, and utility locates will be notified at least seven days prior to any field work being initiated.

<b>Estimated Date</b>	<b>Event</b>
December 2004	Submit Stage 1 Abatement Plan to New Mexico OCD for review and approval.
January/February 2005	DEFS will install additional wells at PCA Junction and submit samples for analysis of BTEX, TPH-GRO, and MNA.
March 2005	DEFS will submit a Stage 2 Abatement Plan pending the results of the Stage 1 sampling activities. The Stage 2 Abatement Plan will include a public notification proposal.
June 2005	DEFS will submit its first annual monitoring report to OCD.

### **5.2 Conclusion**

PSH and dissolved hydrocarbon contamination at the site have not been delineated. Subsurface conditions appear to differ from those presented to OCD by the previous site owner. Through the installation of additional monitoring wells and sampling activity, DEFS believes it will be able to properly delineate the benzene plume at the site including the site geology and hydrogeology.

DEFS respectfully requests approval of this Stage 1 Abatement Plan.

APPROVED: GN  
DRAFTER: PMW

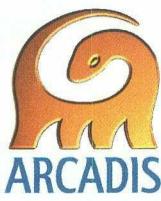
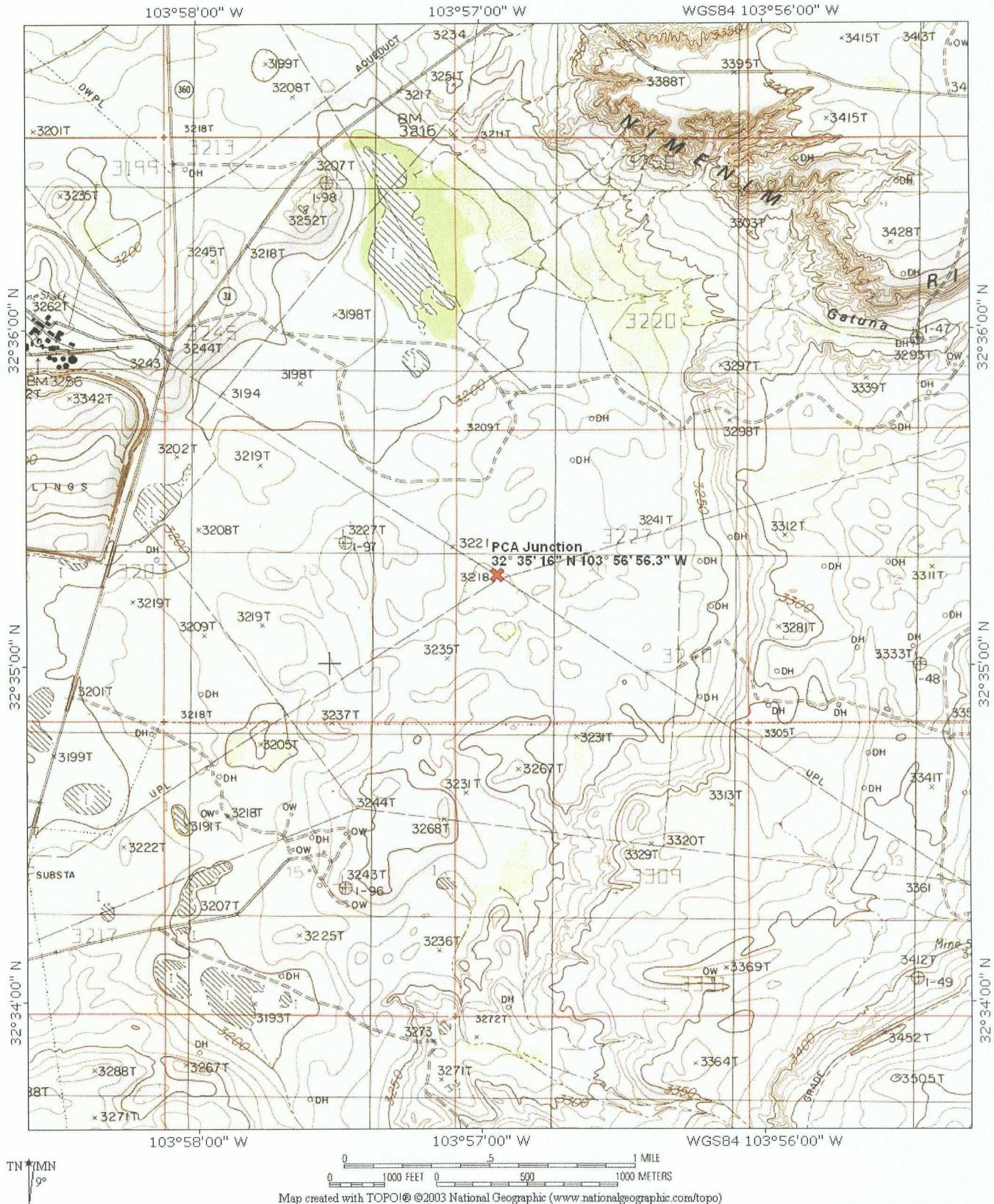
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WABE 511 E.

RECEIPT NO.: 00000880 3801

PRINT DATE: 11/17/04



## Site Location Map

PCA JUNCTION  
Eddy County, New Mexico

## FIGURE

1

DRAFTER: PMW

APPROVED: GN

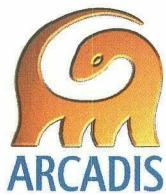
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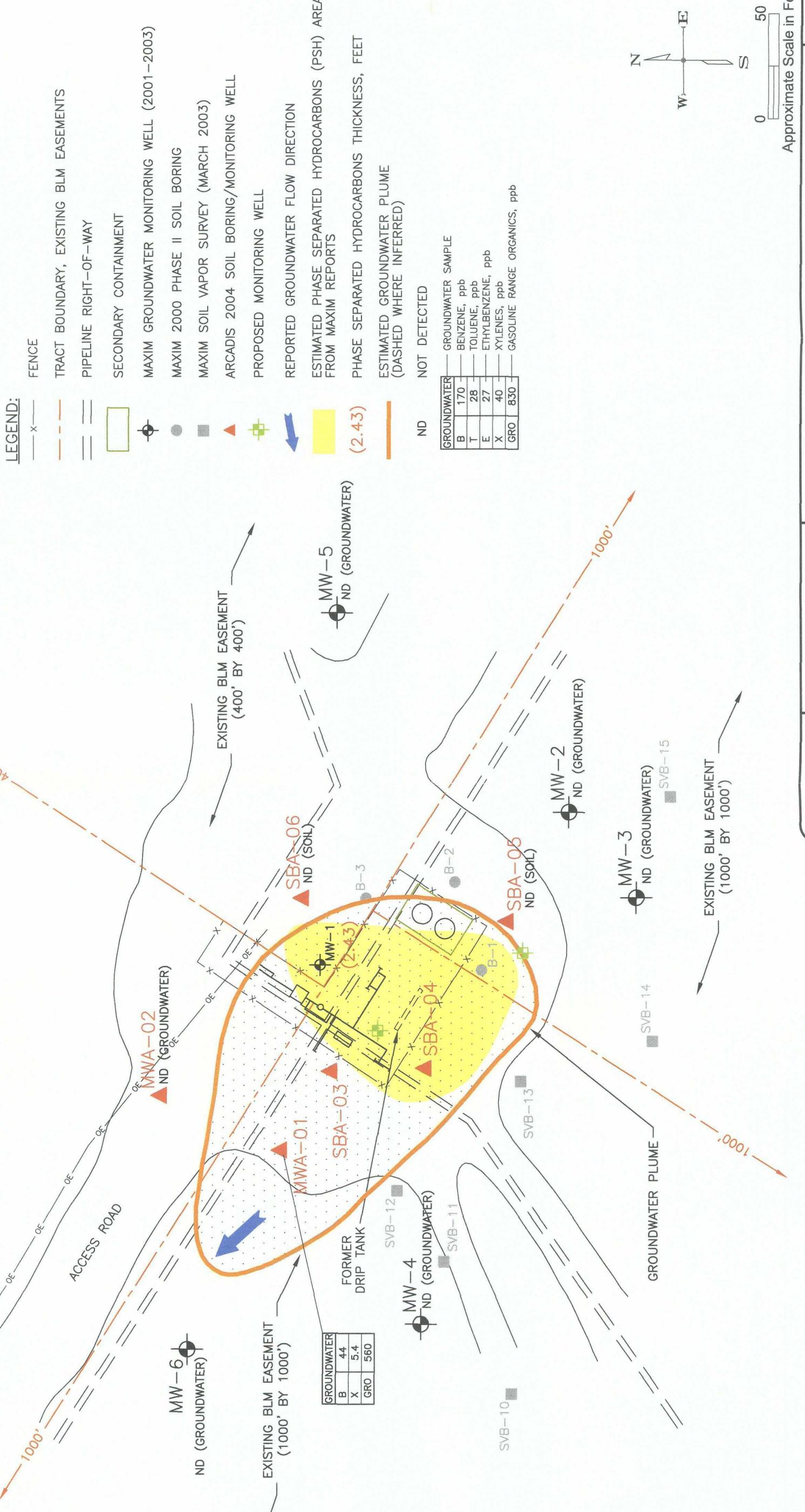


Aerial Photograph of Site

PCA JUNCTION  
Eddy County, New Mexico

FIGURE

2



Site Map

PCA JUNCTION  
Eddy County, New Mexico

FIGURE

3

Table B-1. Soil Organic Analytical Results - PCA Junction

Location	Depth	Date Collected	BTEX			Xylenes (total)	Gasoline Range Organics
			Benzene	Toluene	Ethylbenzene		
ft-bgs							
SBA-1	5-9	3/20/2004	<4.8	<4.8	<4.8	<4.8	<97
SBA-1	22	3/20/2004	<5	<5	<5	<5	<100
SBA-5	18-20	3/20/2004	<5	<5	<5	<5	<99
SBA-5	22	3/20/2004	<5	5.1	<5	<5	1200
SBA-6	18-20	3/20/2004	<4.9	<4.9	<4.9	<4.9	<98
SBA-6	24	3/20/2004	<5	<5	<5	<5	<99

Notes:

Samples analyzed by Severn Trent Laboratories, Austin. See I4C240296 and I4C300228 for full report.

ft-bgs - feet below ground surface

ug/kg - micrograms per kilograms

BTEX compounds analyzed using EPA Method 8021B

Gasoline Range Organics analyzed using EPA Method 8015B

**Table B-2. Groundwater Organic Analytical Results - PCA Junction**

Location	Date Collected	BTEX			Xylenes (total) ug/l	Gasoline Range Organics ug/l
		Benzene	Toluene	Ethylbenzene		
MW-2	3/26/2004	<1.0	<1.0	<1.0	<3.0	<100
MW-3	3/26/2004	<1.0	<1.0	<1.0	<3.0	<100
MW-4	3/26/2004	<1.0	<1.0	<1.0	<3.0	<100
MW-5	3/26/2004	<1.0	<1.0	<1.0	<3.0	<100
MW-6	3/26/2004	<1.0	<1.0	<1.0	<3.0	<100
MWA-1	3/21/2004	44	<1.0	<1.0	5.4	560
MWA-2	3/21/2004	<1.0	<1.0	<1.0	<3.0	<100
MW-1	3/25/2004			PSH 1.93'		

Notes:

Samples analyzed by Severn Trent laboratories, Austin. See I 14C300228 for full report.

ug/l - micrograms per liter

BTEX compounds analyzed using EPA Method 8021B

Gasoline Range Organics analyzed using EPA Method 8015B

PSH - Phase separated hydrocarbons

Table B-3 Groundwater Inorganic Analytical Results - PCA Junction

Location	Date Collected	Chloride	Nitrate	Nitrate-Nitrite	Sulfate	Total Alkalinity	Total Dissolved Solids	Methane ug/l
mg/kg								
MW-2	3/26/2004	NT	NT	48.5	1570	216	NT	0.52
MW-3	3/26/2004	NT	NT	10.3	1240	305	NT	<0.50
MW-4	3/26/2004	NT	NT	3.9	1230	249	NT	0.68
MW-5	3/26/2004	NT	NT	16.9	1550	173	NT	1.6
MW-6	3/26/2004	NT	NT	5.8	1300	230	NT	0.64
MWA-1	3/21/2004	268	3.3H	NT	1540	134	3240	0.68
MWA-2	3/21/2004	745	6.6H	NT	1550	86.8	4150	0.8

Notes:

Samples analyzed by Severn Trent laboratories, Austin. See I4C300228 for full report.

mg/l - milligrams per liter

ug/l - micrograms per liter

NT - not tested

Nitrate-Nitrite analyzed using EPA Method 353.2

Sulfate, Chloride, and Nitrate analyzed using EPA Method 300.0A

Total Alkalinity analyzed using EPA Method 310.1

Total Dissolved Solids analyzed using EPA Method 160.1

Methane analyzed using EPA Method SOP-175

H - The sample was prepared or analyzed after the EPA recommended holding time had been exceeded.

## **Appendix A**

Soil Boring Logs and Well  
Completion Logs



## **SOIL CORE / SAMPLING LOC**

Boring/Well	MWA 01	Project No.	CD 00899.2801	Page	1 of
Site Location	PCA Junction	Drilling Started	3/09/04	Drilling Completed	3/10/04
Drilling Contractor	Harrison & Cooper	Driller	Ken Harrison	Helper	
Drilling Fluid Used	Air	Drilling Method	Rotary		
Length and Diameter of Coring Device	2" 2"	Sampling Interval	10' Varies	feet	
Land-Surface Elev.	feet	<input type="checkbox"/> Surveyed	<input type="checkbox"/> Estimated	Datum	
Total Depth Drilled	65'	Feet	Hole Diameter	6 1/4"	Coring Device
Prepared By	Ralph Lance	Hammer Weight		Hammer Drop	ins.

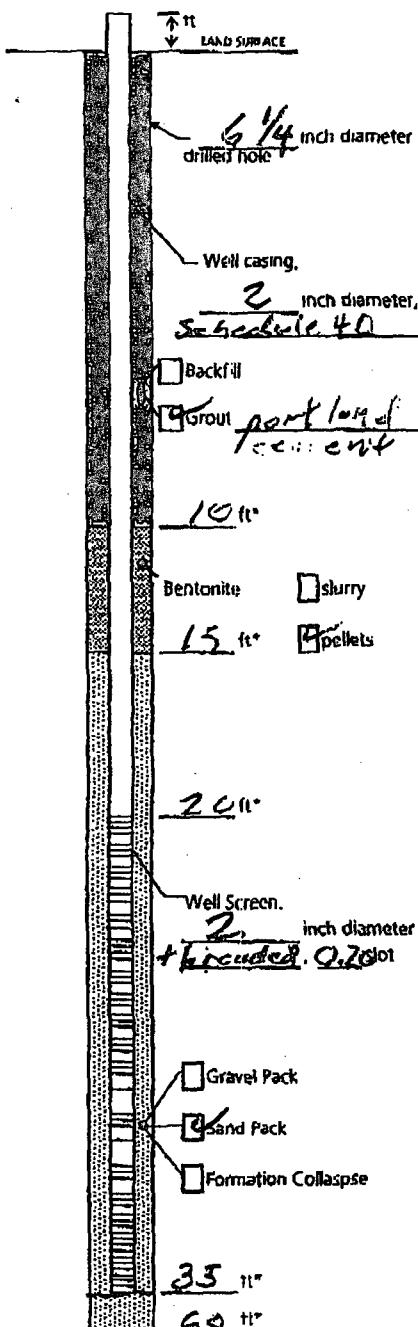
#### **Sampling Data:**

Depth	Grab/Composite	Time	Laboratory Analysis

#### **Soil Characterization:**



## WELL CONSTRUCTION LOG- UNCONSOLIDATED

Project C6 GO 899.2801 Well MWA01Town/City PCA JunctionCounty Eddy State NM

Permit No.

Land-Surface Elevation and Datum:

feet       Surveyed  
              Estimated

Installation Date(s) 3/20/04Drilling Method RotaryDrilling Contractor Harrison & CooperDrilling Fluid air

Development Technique(s) and Date(s)

Bailed 6 well volumes 3/20/04

Fluid Loss During Drilling \_\_\_\_\_ gallons

Water Removed During Development 6 gallons

Static Depth to Water \_\_\_\_\_ feet below M.P.

Pumping Depth to Water \_\_\_\_\_ feet below M.P.

Pumping Duration \_\_\_\_\_ hours

Yield \_\_\_\_\_ gpm      Date \_\_\_\_\_

Specific Capacity \_\_\_\_\_ gpm/ft

Well Purpose \_\_\_\_\_

Remarks P logger'd back to 35' with 1/8 bentonite chipsPrepared by Ralph L. G.

Boring/Well	<u>SB A 03</u>	Project/No.	<u>CO 00889, 2801</u>	Page	<u>      </u>	of
Site Location	<u>PCA Junction</u>		Drilling Started	<u>3/1/89</u>	Drilling Completed	<u>      </u>
Drilling Contractor	<u>Harrison Cooper</u>		Driller	<u>KC &amp; Cooper</u>	Helper	<u>      </u>
Drilling Fluid Used	<u>air</u>		Drilling Method	<u>      </u>		
Length and Diameter of Coring Device	<u>Split spoon 2" 2'</u>		Sampling Interval	<u>10</u>	feet	<u>      </u>
Land-Surface Elev.	<u>      </u>	feet	<input type="checkbox"/> Surveyed	<input type="checkbox"/> Estimated	Datum	<u>      </u>
Total Depth Drilled	<u>34</u>	Feet	Hole Diameter <u>10"</u>		Coring Device	<u>split spoon</u>
Prepared By	<u>Ralph Lang</u>		Hammer Weight	Hammer Drop <u>      </u> ins.		

### **Sampling Data:**

Depth	Grab/Composite	Time	Laboratory Analysis

#### **Soil Characterization:**

Boring/Well MWA 02 Project No. CO 00 889,2801 Page        of         
 Site Location PCA station Drilling Started 3/19/04 Drilling Completed               
 Drilling Contractor Harrison & Cooper Driller Ken Cooper Helper               
 Drilling Fluid Used Air Drilling Method rotary  
 Length and Diameter of Coring Device Sampling Interval Varies feet  
2" 2'  
 Land-Surface Elev. feet Surveyed  Estimated  Datum               
 Total Depth Drilled 54 Feet Hole Diameter 6 1/4" Coring Device Split Jason  
 Prepared By Ralph Lang Hammer Weight              Hammer Drop              ins.

**Sampling Data:**

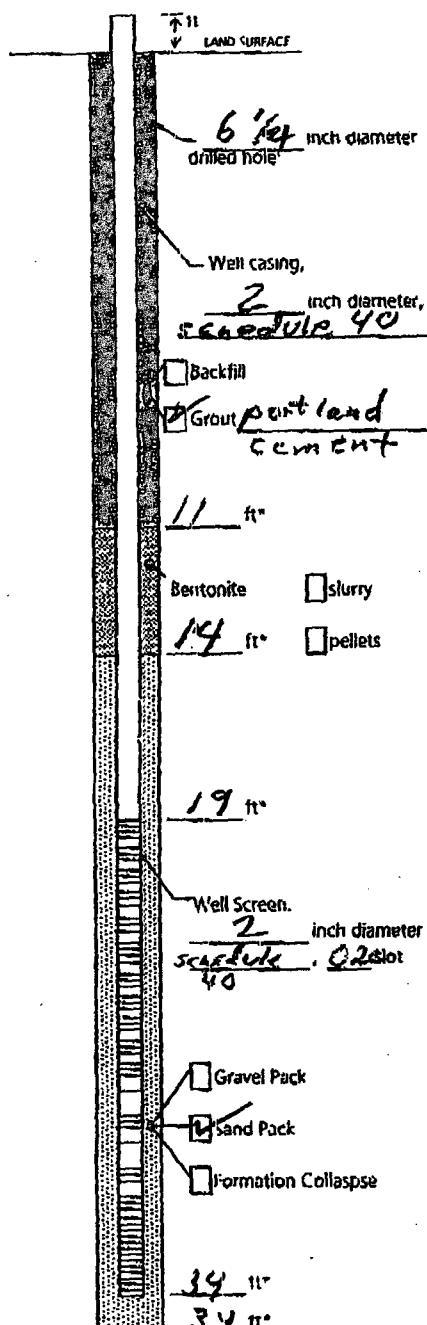
Depth	Grab/Composite	Time	Laboratory Analysis

## **Soil Characterization:**

Sample/Core Depth (Feet bds)		Core Recovery (Feet)	OVM Reading (ppm)	Blow Counts per 6 inches	Sample/Core Description
From	To				
C	5	Sh	NA		Hydralast
5	9	Sh	20.0		Sand 5 YR 8/3 pink, very fine grained Subangular well sorted loose 50%, 50% Caliche 5 YR 8/3 pink soft as interbeds
9	11	1.5	551.1		As above
11	13	5A	0.8		as above
13	17	1.6	551.5		SAND 5/6 Red, fine to very fine grained, subangular to subrounded, well sorted, dry
17	20	Sh	1.4		as above
20	22	551.0	2.2		as above
22	25	Sh	0.7		as above
25	30	Sh	0.4		as above moist
30	34	Sh	0.8		as above moist



WELL CONSTRUCTION LOG- UNCONSOLIDATED  
PCA Junction



Measuring Point is  
Top of Well Casing  
Unless Otherwise Noted.

\* Depth Below Land Surface

Project CO 00889.2801 Well MWA 02

Town/City

County Eddy State NM

Permit No.

Land-Surface Elevation and Datum:

feet  Surveyed

Estimated

Installation Date(s) 3/19/04

Drilling Method Rotary

Drilling Contractor Harrison & Cooper

Drilling Fluid Air

Development Technique(s) and Date(s)

3/19/04 bailed 6 gals  
6 casing volumes

Fluid Loss During Drilling 0 gallons

Water Removed During Development 6 gallons

Static Depth to Water \_\_\_\_\_ feet below M.P.

Pumping Depth to Water \_\_\_\_\_ feet below M.P.

Pumping Duration \_\_\_\_\_ hours

Yield \_\_\_\_\_ gpm Date \_\_\_\_\_

Specific Capacity \_\_\_\_\_ gpm/ft

Well Purpose Monitor

Remarks \_\_\_\_\_

Prepared by

Ralph H Lang



## **SOIL CORE / SAMPLING LOG**

Boring/Well SBA Q4 Project/No. C000899;1801 Page 1 of

Site Location PCA Junction Drilling Started 3/26/04 Drilling Completed

Drilling Contractor Harrison & Cooper Driller Ben Harn Helper

Drilling Fluid Used air Drilling Method Percutaneous

Length and Diameter of Coring Device      2<sup>1/2</sup>      2<sup>1/2</sup>      Sampling Interval Varies      feet

Land-Surface Elev. \_\_\_\_\_ feet  Surveyed  Estimated Datum \_\_\_\_\_

Total Depth Drilled \_\_\_\_\_ Feet Hole Diameter 6 1/4 Coring Device Split Spoon

Prepared B. H. Leng Hammer Hammer

By Napton County Weight \_\_\_\_\_ Drop \_\_\_\_\_ ins.

**Sampling Data:**

Depth      Grab/Composite      Time      Laboratory Analysis

5-9 Grab - BTEX, TPH,

— 1 —

Depth	Grab/Composite	Time	Laboratory Analysis
5-9	Grab	-	BTEX, TPH
2.0 - 2.2	Grab	-	BTEX, TPH

## **Soil Characterization:**



# ARCADIS

## **SOIL CORE / SAMPLING LOG**

Boring/Well	<u>S B A C G</u>	Project/No.	<u>C C C 99, 2801</u>	Page	<u>1</u>	of
Site Location	<u>PCA Junction</u>		Drilling Started	<u>3/20/04</u>	Drilling Completed	
Drilling Contractor	<u>Harrison &amp; Cooper</u>		Driller	<u>Ken Cooper</u>	Helper	
Drilling Fluid Used	<u>Air</u>		Drilling Method	<u>Rotary</u>		
Length and Diameter of Coring Device	<u>2' 2"</u>		Sampling Interval	<u>Variably</u> feet		
Land-Surface Elev.	<u>      </u> feet	<input type="checkbox"/> Surveyed	<input type="checkbox"/> Estimated	Datum _____		
Total Depth Drilled	<u>24</u> Feet	Hole Diameter <u>6 1/4</u>		Coring Device	<u>Split spoon</u>	
Prepared By	<u>Ralph Lang</u>		Hammer Weight	Hammer Drop _____ in.		

#### **Sampling Data:**

Depth	Grab/Composite	Time	Laboratory Analysis
18-20	Grab	—	TPH, BTEX
22-24	Grab	—	TPH, BTEX

## **Soil Characterization;**

## **Appendix B**

Lab Report

**Certificate of Analysis**

STL Austin • 14046 Summit Drive, Austin, TX 78728 • Tel 512 244 0855 • Fax 512 244 0160 • www.stlinc.com

**ANALYTICAL REPORT**

REVISED

PROJECT NO. C0000889.2800

SKNM

Lot #: I4C300228

Matt Findley

ARCADIS Geraghty & Miller Inc  
630 Plaza Drive  
Att: Denver Tech A/P  
Suite 200  
Highlands Ranch, CO 80129-2377

SEVERN TRENT LABORATORIES, INC.

A handwritten signature in black ink that reads "Neal J. Salcher".

Neal J. Salcher  
Project Manager

April 16, 2004

American Council of Independent Laboratories  
International Association of Environmental Testing Laboratories

April 14, 2004

STL LOT NUMBER: I4C300228  
PO/CONTRACT: DFS-APEX Compressor Station

Matt Findley  
ARCADIS Geraghty & Miller Inc  
630 Plaza Drive  
Att: Denver Tech A/P  
Suite 200  
Highlands Ranch, CO 80129-2377

Dear Matt Findley,

This report contains the analytical results for the 49 samples received under chain of custody by Severn Trent Laboratories (STL) on March 30, 2004. These samples are associated with your SENM project.

All applicable quality control procedures met method-specified acceptance criteria except as noted on the following page.

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

If you have any questions, please feel free to call me at (512) 244-0855.

Sincerely,



Neal Salcher  
Project Manager

cc: Project File

LOT NUMBER I4C300228

**Nonconformance 09-10478 - CLOSED**

**Affected Samples:**

I4C300228 (2):

I4C300228 (3):

I4C300228 (5):

I4C300228 (6):

I4C300228 (7):

I4C300228 (10):

I4C300228 (11):

I4C300228 (14):

I4C300228 (15):

I4C300228 (17):

I4C300228 (19):

I4C300228 (21):

I4C300228 (24):

I4C300228 (26):

I4C300228 (27):

I4C300228 (29):

I4C300228 (30):

**Affected Methods:**

8015B

**Case Narrative:**

*The surrogate recoveries for the mid-run CCV were outside control limits by 3%; however, a blank was analyzed after the CCV and the surrogate recovery met criteria. Another CCV was analyzed after all samples were analyzed and the surrogate recoveries met the CCV criteria.*

**Corrective Action:**

None.

**Nonconformance 09-10487 - CLOSED**

**Affected Samples:**

I4C300228 (49):

**Affected Methods:**

None specified.

**Case Narrative:**

*Surrogate recovery for DCB failed control limits. The raw data show clear evidence of matrix interference. All other calibration and QC criteria were met.*

**Corrective Action:**

None.

**Nonconformance 09-10524 - CLOSED****Affected Samples:**

I4C300228 (1):  
I4C300228 (4):  
I4C300228 (22):  
I4C300228 (28):  
I4C300228 (38):  
I4C300228 (39):  
I4C300228 (40):  
I4C300228 (41):  
I4C300228 (42):  
I4C300228 (43):  
I4C300228 (44):  
I4C300228 (45):  
I4C300228 (46):  
I4C300228 (47):

**Affected Methods:**

8015B

**Case Narrative:**

The MS/MSD was not reported because the sample amount was greater than five times the spike level. Acceptable LCS/LCSD analysis data demonstrate that the analytical system was operating in control. LCS/LCSD will serve as a measure of precision.

**Corrective Action:**

None.

**Nonconformance 09-10528 - CLOSED****Affected Samples:**

I4C300228 (8):  
I4C300228 (12):  
I4C300228 (31):  
I4C300228 (37):

**Affected Methods:**

8015B

**Case Narrative:**

Surrogate recovery for OTP and NC 32 failed control limits. The raw data shows clear evidence of matrix interference. All other calibration and QC criteria were met.

**Corrective Action:**

None.

## EXECUTIVE SUMMARY - Detection Highlights

**I4C300228**

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
<b>APMWAOB 03/25/04 09:50 001</b>				
Gasoline Range Organics	300	100	ug/L	SW846 8015B
Methane	54	0.50	ug/L	RSK SOP-175
Benzene	36	1.0	ug/L	SW846 8021B
Toluene	6.3	1.0	ug/L	SW846 8021B
Xylenes (total)	28	3.0	ug/L	SW846 8021B
Arsenic - DISSOLVED	0.016	0.010	mg/L	SW846 6010B
Barium - DISSOLVED	0.29	0.20	mg/L	SW846 6010B
Chromium - DISSOLVED	0.0053	0.0050	mg/L	SW846 6010B
Selenium - DISSOLVED	0.014	0.0050	mg/L	SW846 6010B
Nitrate-Nitrite	0.97	0.10	mg/L	MCAWW 353.2
Sulfate	81.9	20.0	mg/L	MCAWW 300.0A
Total Alkalinity	268	5.0	mg/L	MCAWW 310.1
<b>APEXRW-11 03/25/04 18:30 002</b>				
Methane	0.69	0.50	ug/L	RSK SOP-175
Arsenic - DISSOLVED	0.026	0.010	mg/L	SW846 6010B
Barium - DISSOLVED	0.21	0.20	mg/L	SW846 6010B
Chromium - DISSOLVED	0.0065	0.0050	mg/L	SW846 6010B
Lead - DISSOLVED	0.0082	0.0030	mg/L	SW846 6010B
Selenium - DISSOLVED	0.036	0.0050	mg/L	SW846 6010B
Nitrate-Nitrite	14.9	2.0	mg/L	MCAWW 353.2
Sulfate	87.4	20.0	mg/L	MCAWW 300.0A
Total Alkalinity	258	5.0	mg/L	MCAWW 310.1
<b>APMWAOC 03/25/04 09:30 003</b>				
Methane	0.84	0.50	ug/L	RSK SOP-175
Arsenic - DISSOLVED	0.018	0.010	mg/L	SW846 6010B
Chromium - DISSOLVED	0.0063	0.0050	mg/L	SW846 6010B
Selenium - DISSOLVED	0.022	0.0050	mg/L	SW846 6010B
Nitrate-Nitrite	3.5	1.0	mg/L	MCAWW 353.2
Sulfate	54.9	20.0	mg/L	MCAWW 300.0A
Total Alkalinity	191	5.0	mg/L	MCAWW 310.1
<b>APMWAOD 03/25/04 08:50 004</b>				
Gasoline Range Organics	8700	1000	ug/L	SW846 8015B
Methane	160	1.5	ug/L	RSK SOP-175
Benzene	600	10	ug/L	SW846 8021B
Ethylbenzene	250	10	ug/L	SW846 8021B
Toluene	880	10	ug/L	SW846 8021B
Xylenes (total)	1700	30	ug/L	SW846 8021B

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## EXECUTIVE SUMMARY - Detection Highlights

TAC300228

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
<b>APMWAOD 03/25/04 08:50 004</b>				
Arsenic - DISSOLVED	0.046	0.010	mg/L	SW846 6010B
Barium - DISSOLVED	1.3	0.20	mg/L	SW846 6010B
Chromium - DISSOLVED	0.0053	0.0050	mg/L	SW846 6010B
Lead - DISSOLVED	0.0032	0.0030	mg/L	SW846 6010B
Selenium - DISSOLVED	0.027	0.0050	mg/L	SW846 6010B
Nitrate-Nitrite	397	20.0	mg/L	MCAWW 353.2
Sulfate	23.3	20.0	mg/L	MCAWW 300.0A
Total Alkalinity	465	5.0	mg/L	MCAWW 310.1
<b>APEXRW-10 03/25/04 18:10 005</b>				
Methane	1.2	0.50	ug/L	RSK SOP-175
Toluene	2.3	1.0	ug/L	SW846 8021B
Arsenic - DISSOLVED	0.030	0.010	mg/L	SW846 6010B
Chromium - DISSOLVED	0.016	0.0050	mg/L	SW846 6010B
Lead - DISSOLVED	0.0072	0.0030	mg/L	SW846 6010B
Selenium - DISSOLVED	0.042	0.0050	mg/L	SW846 6010B
Nitrate-Nitrite	16.6	2.0	mg/L	MCAWW 353.2
Sulfate	246	20.0	mg/L	MCAWW 300.0A
Total Alkalinity	232	5.0	mg/L	MCAWW 310.1
<b>APEXMW-6 03/25/04 08:20 006</b>				
Methane	0.51	0.50	ug/L	RSK SOP-175
Arsenic - DISSOLVED	0.025	0.010	mg/L	SW846 6010B
Selenium - DISSOLVED	0.017	0.0050	mg/L	SW846 6010B
Nitrate-Nitrite	837	100	mg/L	MCAWW 353.2
Sulfate	65.0	20.0	mg/L	MCAWW 300.0A
Total Alkalinity	273	5.0	mg/L	MCAWW 310.1
<b>PCA WATER WASTE 03/21/04 16:30 007</b>				
Toluene	1.9	1.0	ug/L	SW846 8021B
Chloride	2000	1000	mg/L	MCAWW 300.0A
<b>PCA SOIL WASTE 03/21/04 16:30 008</b>				
Diesel Range Organics	160	15	mg/kg	SW846 8015B
Arsenic	2.0	0.99	mg/kg	SW846 6010B
Barium	163	19.8	mg/kg	SW846 6010B
Chromium	4.8	0.99	mg/kg	SW846 6010B
Lead	2.5	0.30	mg/kg	SW846 6010B

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## EXECUTIVE SUMMARY - Detection Highlights

I4C300228

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
<b>RAM SOIL WASTE 03/26/04 17:27 009</b>				
Arsenic	3.1	0.92	mg/kg	SW846 6010B
Barium	86.8	18.4	mg/kg	SW846 6010B
Chromium	12.5	0.92	mg/kg	SW846 6010B
Lead	4.5	0.28	mg/kg	SW846 6010B
<b>RAM WATER WASTE 03/26/04 17:27 010</b>				
Gasoline Range Organics	110	100	ug/L	SW846 8015B
Benzene	5.6	1.0	ug/L	SW846 8021B
Ethylbenzene	1.1	1.0	ug/L	SW846 8021B
Xylenes (total)	4.7	3.0	ug/L	SW846 8021B
Chloride	241	100	mg/L	MCAWW 300.0A
<b>HOB WATER WASTE 03/26/04 09:45 011</b>				
Chloride	25.8	20.0	mg/L	MCAWW 300.0A
<b>HOB SOIL WASTE 03/26/04 09:45 012</b>				
Diesel Range Organics	130	15	mg/kg	SW846 8015B
Arsenic	3.4	0.95	mg/kg	SW846 6010B
Barium	172	19.0	mg/kg	SW846 6010B
Chromium	7.4	0.95	mg/kg	SW846 6010B
Lead	6.7	0.28	mg/kg	SW846 6010B
<b>NEC SOIL WASTE 03/26/04 10:35 013</b>				
Arsenic	1.3	0.87	mg/kg	SW846 6010B
Barium	62.1	17.4	mg/kg	SW846 6010B
Chromium	7.5	0.87	mg/kg	SW846 6010B
Lead	2.8	0.26	mg/kg	SW846 6010B
<b>NEC WATER WASTE 03/26/04 10:35 014</b>				
Chloride	41.4	20.0	mg/L	MCAWW 300.0A
<b>ANTE HYDROBLAST WATER 03/24/04 15:35 015</b>				
Xylenes (total)	22	3.0	ug/L	SW846 8021B
Chloride	54.4	20.0	mg/L	MCAWW 300.0A

(Continued on next page)

## EXECUTIVE SUMMARY - Detection Highlights

I4C300228

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
<b>ANTE DILLING SOIL 03/25/04 15:10 016</b>				
Arsenic	1.0	0.89	mg/kg	SW846 6010B
Barium	38.1	17.8	mg/kg	SW846 6010B
Chromium	2.9	0.89	mg/kg	SW846 6010B
Lead	1.8	0.27	mg/kg	SW846 6010B
<b>STATELINE WATER WASTE 03/25/04 12:30 017</b>				
Chloride	10800	2000	mg/L	MCAWW 300.0A
<b>STATELINE SOIL WASTE 03/25/04 12:30 018</b>				
Arsenic	1.9	0.72	mg/kg	SW846 6010B
Barium	72.9	14.4	mg/kg	SW846 6010B
Chromium	10.9	0.72	mg/kg	SW846 6010B
Lead	2.3	0.22	mg/kg	SW846 6010B
<b>RATTLESNAKE WASTE 03/25/04 14:30 019</b>				
Gasoline Range Organics	120	100	ug/L	SW846 8015B
Ethylbenzene	12	1.0	ug/L	SW846 8021B
Toluene	24	1.0	ug/L	SW846 8021B
Xylenes (total)	4.3	3.0	ug/L	SW846 8021B
Chloride	1540	500	mg/L	MCAWW 300.0A
<b>RATTLESNAKE WASTE 03/25/04 14:30 020</b>				
Arsenic	3.7	0.98	mg/kg	SW846 6010B
Barium	1650	19.6	mg/kg	SW846 6010B
Chromium	9.0	0.98	mg/kg	SW846 6010B
Lead	3.2	0.29	mg/kg	SW846 6010B
<b>APEX 1 WATER 03/25/04 11:40 021</b>				
Gasoline Range Organics	670	100	ug/L	SW846 8015B
Benzene	68	1.0	ug/L	SW846 8021B
Toluene	56	1.0	ug/L	SW846 8021B
Xylenes (total)	68	3.0	ug/L	SW846 8021B
Chloride	172	50.0	mg/L	MCAWW 300.0A

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## EXECUTIVE SUMMARY - Detection Highlights

IAC300228

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
<b>APEX 2 WATER 03/25/04 11:40 022</b>				
Gasoline Range Organics	2600	200	ug/L	SW846 8015B
Benzene	10	2.0	ug/L	SW846 8021B
Ethylbenzene	28	2.0	ug/L	SW846 8021B
Toluene	11	2.0	ug/L	SW846 8021B
Xylenes (total)	440	6.0	ug/L	SW846 8021B
Chloride	115	50.0	mg/L	MCAWW 300.0A
<b>APEX SOIL 03/25/04 12:00 023</b>				
Diesel Range Organics	38	15	mg/kg	SW846 8015B
Arsenic	1.2	0.74	mg/kg	SW846 6010B
Barium	94.2	14.8	mg/kg	SW846 6010B
Chromium	3.7	0.74	mg/kg	SW846 6010B
Lead	1.3	0.22	mg/kg	SW846 6010B
<b>HOBBSGP-MWD 03/24/04 17:05 026</b>				
Methane	1.9	0.50	ug/L	RSK SOP-175
Arsenic - DISSOLVED	0.021	0.010	mg/L	SW846 6010B
Barium - DISSOLVED	0.30	0.20	mg/L	SW846 6010B
Chromium - DISSOLVED	0.026	0.0050	mg/L	SW846 6010B
Lead - DISSOLVED	0.0044	0.0030	mg/L	SW846 6010B
Selenium - DISSOLVED	0.031	0.0050	mg/L	SW846 6010B
Nitrate-Nitrite	822	100	mg/L	MCAWW 353.2
Sulfate	64.3	20.0	mg/L	MCAWW 300.0A
Total Alkalinity	166	5.0	mg/L	MCAWW 310.1
<b>HOBBSGP-MWC 03/24/04 18:10 027</b>				
Gasoline Range Organics	120	100	ug/L	SW846 8015B
Benzene	3.1	1.0	ug/L	SW846 8021B
Toluene	3.5	1.0	ug/L	SW846 8021B
Xylenes (total)	14	3.0	ug/L	SW846 8021B
<b>HOBBSGP-MWB 03/24/04 17:55 028</b>				
Gasoline Range Organics	1700	200	ug/L	SW846 8015B
Methane	2.5	0.50	ug/L	RSK SOP-175
Benzene	47	2.0	ug/L	SW846 8021B
Ethylbenzene	22	2.0	ug/L	SW846 8021B
Toluene	220	2.0	ug/L	SW846 8021B
Xylenes (total)	230	6.0	ug/L	SW846 8021B
Nitrate-Nitrite	298	20.0	mg/L	MCAWW 353.2

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## EXECUTIVE SUMMARY - Detection Highlights

I4C300228

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
<b>HOBBSGP-MWB 03/24/04 17:55 028</b>				
Sulfate	65.7	20.0	mg/L	MCAWW 300.0A
Total Alkalinity	212	5.0	mg/L	MCAWW 310.1
<b>HOBBSGP-MWA 03/24/04 17:35 029</b>				
Methane	1.6	0.50	ug/L	RSK SOP-175
Nitrate-Nitrite	22.2	5.0	mg/L	MCAWW 353.2
Sulfate	80.3	20.0	mg/L	MCAWW 300.0A
Total Alkalinity	165	5.0	mg/L	MCAWW 310.1
<b>APEX-MW-7 03/26/04 07:55 030</b>				
Gasoline Range Organics	830	100	ug/L	SW846 8015B
Methane	2300	25	ug/L	RSK SOP-175
Benzene	170	1.0	ug/L	SW846 8021B
Ethylbenzene	27	1.0	ug/L	SW846 8021B
Toluene	28	1.0	ug/L	SW846 8021B
Xylenes (total)	40	3.0	ug/L	SW846 8021B
Sulfate	539	20.0	mg/L	MCAWW 300.0A
Total Alkalinity	875	5.0	mg/L	MCAWW 310.1
<b>HOBSB-I 0-1' 03/23/04 10:30 031</b>				
Diesel Range Organics	18	15	mg/kg	SW846 8015B
Arsenic	6.1	0.78	mg/kg	SW846 6010B
Barium	142	15.6	mg/kg	SW846 6010B
Chromium	8.0	0.78	mg/kg	SW846 6010B
Lead	5.0	0.23	mg/kg	SW846 6010B
Selenium	0.47	0.39	mg/kg	SW846 6010B
<b>HOBSB-J 0-1' 03/23/04 10:40 032</b>				
Arsenic	6.1	0.81	mg/kg	SW846 6010B
Barium	173	16.2	mg/kg	SW846 6010B
Chromium	2.4	0.81	mg/kg	SW846 6010B
Lead	2.3	0.24	mg/kg	SW846 6010B
<b>HOBSB-J 1-1.5' 03/23/04 10:40 033</b>				
Arsenic	6.2	0.81	mg/kg	SW846 6010B
Barium	454	16.2	mg/kg	SW846 6010B
Chromium	1.4	0.81	mg/kg	SW846 6010B
Lead	0.41	0.24	mg/kg	SW846 6010B

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## EXECUTIVE SUMMARY - Detection Highlights

I4C300228

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
<b>HOBSB-J 1.5-2' 03/23/04 10:40 034</b>				
Arsenic	6.0	0.82	mg/kg	SW846 6010B
Barium	386	16.4	mg/kg	SW846 6010B
Chromium	1.6	0.82	mg/kg	SW846 6010B
Lead	0.81	0.25	mg/kg	SW846 6010B
<b>HOBSB-K 0-1' 03/23/04 10:50 035</b>				
Arsenic	6.6	0.83	mg/kg	SW846 6010B
Barium	277	16.6	mg/kg	SW846 6010B
Chromium	2.6	0.83	mg/kg	SW846 6010B
Lead	1.9	0.25	mg/kg	SW846 6010B
<b>HOBSB-L 0-1' 03/23/04 11:00 036</b>				
Arsenic	4.5	0.75	mg/kg	SW846 6010B
Barium	188	15.0	mg/kg	SW846 6010B
Chromium	3.5	0.75	mg/kg	SW846 6010B
Lead	2.0	0.22	mg/kg	SW846 6010B
<b>HOBSB-L 1-1.5' 03/23/04 11:00 037</b>				
Diesel Range Organics	22	15	mg/kg	SW846 8015B
Arsenic	3.2	0.74	mg/kg	SW846 6010B
Barium	102	14.8	mg/kg	SW846 6010B
Chromium	10.8	0.74	mg/kg	SW846 6010B
Lead	5.5	0.22	mg/kg	SW846 6010B
<b>PCAMW-5 03/26/04 15:11 038</b>				
Methane	1.6	0.50	ug/L	RSK SOP-175
Nitrate-Nitrite	16.9	2.0	mg/L	MCAWW 353.2
Sulfate	1550	100	mg/L	MCAWW 300.0A
Total Alkalinity	173	5.0	mg/L	MCAWW 310.1
<b>PCAMW-4 03/26/04 15:51 039</b>				
Methane	0.68	0.50	ug/L	RSK SOP-175
Nitrate-Nitrite	3.9	0.20	mg/L	MCAWW 353.2
Sulfate	1230	100	mg/L	MCAWW 300.0A
Total Alkalinity	249	5.0	mg/L	MCAWW 310.1

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## EXECUTIVE SUMMARY - Detection Highlights

I4C300228

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
<b>PCAMW-2 03/26/04 15:01 040</b>				
Methane	0.52	0.50	ug/L	RSK SOP-175
Nitrate-Nitrite	48.5	5.0	mg/L	MCAWW 353.2
Sulfate	1570	100	mg/L	MCAWW 300.0A
Total Alkalinity	216	5.0	mg/L	MCAWW 310.1
<b>PCAMW-6 03/26/04 15:32 041</b>				
Methane	0.64	0.50	ug/L	RSK SOP-175
Nitrate-Nitrite	5.8	1.0	mg/L	MCAWW 353.2
Sulfate	1300	100	mg/L	MCAWW 300.0A
Total Alkalinity	230	5.0	mg/L	MCAWW 310.1
<b>PCAMW-3 03/26/04 14:51 042</b>				
Nitrate-Nitrite	10.3	1.0	mg/L	MCAWW 353.2
Sulfate	1240	100	mg/L	MCAWW 300.0A
Total Alkalinity	305	5.0	mg/L	MCAWW 310.1
<b>RAMMW-A 03/26/04 16:32 043</b>				
Arsenic - DISSOLVED	0.021	0.010	mg/L	SW846 6010B
Chromium - DISSOLVED	0.0052	0.0050	mg/L	SW846 6010B
Lead - DISSOLVED	0.010	0.0030	mg/L	SW846 6010B
Selenium - DISSOLVED	0.031	0.0050	mg/L	SW846 6010B
Nitrate-Nitrite	10.2	1.0	mg/L	MCAWW 353.2
Sulfate	2280	100	mg/L	MCAWW 300.0A
<b>RAMSEY MW-6 03/26/04 17:30 044</b>				
Selenium - DISSOLVED	0.034	0.0050	mg/L	SW846 6010B
<b>RAMMW-B 03/26/04 16:45 046</b>				
Gasoline Range Organics	3400	500	ug/L	SW846 8015B
Benzene	400	5.0	ug/L	SW846 8021B
Ethylbenzene	67	5.0	ug/L	SW846 8021B
Xylenes (total)	150	15	ug/L	SW846 8021B
<b>RAMMW-F 03/26/04 17:00 047</b>				
Methane	3.6	0.50	ug/L	RSK SOP-175
Nitrate-Nitrite	30.1	2.0	mg/L	MCAWW 353.2
Sulfate	3370	100	mg/L	MCAWW 300.0A

(Continued on next page)

**EXECUTIVE SUMMARY - Detection Highlights****I4C300228**

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
<b>RAMMW-P 03/26/04 17:00 047</b>				
Total Alkalinity	666	5.0	mg/L	MCAWW 310.1
<b>ANTESWAB-2 03/23/04 08:49 049</b>				
Aroclor 1260	51 COL	1.0	ug/wipe	SW846 8082

## ANALYTICAL METHODS SUMMARY

I4C300228

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>
Alkalinity	MCAWW 310.1
Chloride	MCAWW 300.0A
Dissolved Gases in Water	RSK SOP-175
Extractable Petroleum Hydrocarbons	SW846 8015B
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A
Nitrate-Nitrite	MCAWW 353.2
PCBs by SW-846 8082	SW846 8082
Semivolatile Organic Compounds by GC/MS	SW846 8270C
Sulfate	MCAWW 300.0A
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B
Volatile Organics by GC/MS	SW846 8260B
Volatile Petroleum Hydrocarbons	SW846 8015B
Volatiles by GC	SW846 8021B

**References:**

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

RSK Sample Prep and Calculations for Dissolved Gas Analysis in Water Samples Using a GC Headspace Equilibration Technique, RSKSOP-175, REV. 0, 8/11/94, USEPA Research Lab

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

**SAMPLE SUMMARY**

I4C300228

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
GC673	001	APMWAOB	03/25/04	09:50
GC68W	002	APEXRW-11	03/25/04	18:30
GC685	003	APMWAOC	03/25/04	09:30
GC687	004	APMWAOD	03/25/04	08:50
GC689	005	APEXRW-10	03/25/04	18:10
GC69C	006	APEXMW-6	03/25/04	08:20
GC69E	007	PCA WATER WASTE	03/21/04	16:30
GC69J	008	PCA SOIL WASTE	03/21/04	16:30
GC69N	009	RAM SOIL WASTE	03/26/04	17:27
GC69W	010	RAM WATER WASTE	03/26/04	17:27
GC695	011	HOB WATER WASTE	03/26/04	09:45
GC697	012	HOB SOIL WASTE	03/26/04	09:45
GC7AF	013	NEC SOIL WASTE	03/26/04	10:35
GC7AJ	014	NEC WATER WASTE	03/26/04	10:35
GC7AN	015	ANTE HYDROBLAST WATER	03/24/04	15:35
GC7C5	016	ANTE DILLING SOIL	03/25/04	15:10
GC7DH	017	STATELINE WATER WASTE	03/25/04	12:30
GC7DJ	018	STATELINE SOIL WASTE	03/25/04	12:30
GC7DL	019	RATTLESNAKE WASTE	03/25/04	14:30
GC7DV	020	RATTLESNAKE WASTE	03/25/04	14:30
GC7EG	021	APEX 1 WATER	03/25/04	11:40
GC7EM	022	APEX 2 WATER	03/25/04	11:40
GC7EP	023	APEX SOIL	03/25/04	12:00
GC7E3	024	HOBBSGP-MWE	03/24/04	16:25
GC7FX	025	HOBBSGP-MWF	03/24/04	18:20
GC7F0	026	HOBBSGP-MWD	03/24/04	17:05
GC7GJ	027	HOBBSGP-MWC	03/24/04	18:10
GC7GT	028	HOBBSGP-MWB	03/24/04	17:55
GC7HQ	029	HOBBSGP-MWA	03/24/04	17:35
GC7H7	030	APEX-MW-7	03/26/04	07:55
GC7JE	031	HOBSB-I 0-1'	03/23/04	10:30
GC7J0	032	HOBSB-J 0-1'	03/23/04	10:40
GC7J5	033	HOBSB-J 1-1.5'	03/23/04	10:40
GC7KA	034	HOBSB-J 1.5-2'	03/23/04	10:40
GC7KK	035	HOBSB-K 0-1'	03/23/04	10:50
GC7KP	036	HOBSB-L 0-1'	03/23/04	11:00

(Continued on next page)

**SAMPLE SUMMARY**

I4C300228

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
GC7K1	037	HOBSB-L 1-1.5'	03/23/04	11:00
GC7LP	038	PCAMW-5	03/26/04	15:11
GC7MG	039	PCAMW-4	03/26/04	15:51
GC7MK	040	PCAMW-2	03/26/04	15:01
GC7MN	041	PCAMW-6	03/26/04	15:32
GC7NQ	042	PCAMW-3	03/26/04	14:51
GC7N0	043	RAMMW-A	03/26/04	16:32
GC7P0	044	RAMSEY MW-6	03/26/04	17:30
GC7QE	045	RAMMW-E	03/26/04	17:21
GC7QP	046	RAMMW-B	03/26/04	16:45
GC7QV	047	RAMMW-F	03/26/04	17:00
GC7Q0	048	ANTESWAB-1	03/23/04	08:49
GC7RC	049	ANTESWAB-2	03/23/04	08:49

**NOTE (S) :**

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

**QC DATA ASSOCIATION SUMMARY**

I4C300228

**Sample Preparation and Analysis Control Numbers**

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	WATER	MCAWW 353.2		4099278	4099133
	WATER	MCAWW 300.0A		4098195	4098093
	WATER	SW846 8015B		4097235	4097096
	WATER	RSK SOP-175		4097209	4097079
	WATER	SW846 7470A		4092480	4092218
	WATER	SW846 6010B		4100141	4100025
	WATER	SW846 8021B		4097248	4097107
	WATER	MCAWW 310.1		4094125	4094018
002	WATER	MCAWW 353.2		4099278	4099133
	WATER	MCAWW 300.0A		4098195	4098093
	WATER	SW846 8015B		4093410	4093159
	WATER	RSK SOP-175		4097209	4097079
	WATER	SW846 7470A		4092480	4092218
	WATER	SW846 6010B		4100141	4100025
	WATER	SW846 8021B		4093419	
	WATER	MCAWW 310.1		4094125	4094018
003	WATER	MCAWW 353.2		4099278	4099133
	WATER	MCAWW 300.0A		4098195	4098093
	WATER	SW846 8015B		4093410	4093159
	WATER	RSK SOP-175		4097209	4097079
	WATER	SW846 7470A		4092480	4092218
	WATER	SW846 6010B		4100141	4100025
	WATER	SW846 8021B		4093419	
	WATER	MCAWW 310.1		4094125	4094018
004	WATER	MCAWW 353.2		4099278	4099133
	WATER	MCAWW 300.0A		4098195	4098093
	WATER	SW846 8015B		4097235	4097096
	WATER	RSK SOP-175		4097209	4097079
	WATER	SW846 7470A		4092480	4092218
	WATER	SW846 6010B		4100141	4100025
	WATER	SW846 8021B		4097248	4097107
	WATER	MCAWW 310.1		4094125	4094018
005	WATER	MCAWW 353.2		4099278	4099133
	WATER	MCAWW 300.0A		4098195	4098093
	WATER	SW846 8015B		4093410	4093159
	WATER	RSK SOP-175		4097209	4097079
	WATER	SW846 7470A		4092480	4092218
	WATER	SW846 6010B		4100141	4100025
	WATER	SW846 8021B		4093419	

(Continued on next page)

**QC DATA ASSOCIATION SUMMARY**

I4C300228

**Sample Preparation and Analysis Control Numbers**

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
005	WATER	MCAWW 310.1		4094125	4094018
006	WATER	MCAWW 353.2		4099278	4099133
	WATER	MCAWW 300.0A		4098195	4098093
	WATER	SW846 8015B		4093410	4093159
	WATER	RSK SOP-175		4097209	4097079
	WATER	SW846 7470A		4092480	4092218
	WATER	SW846 6010B		4100141	4100025
	WATER	SW846 8021B		4093419	
	WATER	MCAWW 310.1		4094125	4094018
007	WATER	MCAWW 300.0A		4099353	4099177
	WATER	SW846 8015B		4093410	4093159
	WATER	SW846 8021B		4093419	
008	SOLID	SW846 8015B		4091424	4092050
	SOLID	SW846 7471A		4097173	4097046
	SOLID	SW846 6010B		4092199	4092080
	SOLID	SW846 8021B		4096214	4096092
009	SOLID	SW846 8015B		4091424	4092050
	SOLID	SW846 7471A		4097173	4097046
	SOLID	SW846 6010B		4092199	4092080
	SOLID	SW846 8021B		4096214	4096092
010	WATER	MCAWW 300.0A		4099353	4099177
	WATER	SW846 8015B		4093410	4093159
	WATER	SW846 8021B		4097395	4097185
011	WATER	MCAWW 300.0A		4099353	4099177
	WATER	SW846 8015B		4093410	4093159
	WATER	SW846 8021B		4093419	
012	SOLID	SW846 8015B		4091424	4092050
	SOLID	SW846 7471A		4097173	4097046
	SOLID	SW846 6010B		4092199	4092080
	SOLID	SW846 8021B		4096214	4096092
013	SOLID	SW846 8015B		4091424	4092050
	SOLID	SW846 7471A		4097173	4097046
	SOLID	SW846 6010B		4092199	4092080
	SOLID	SW846 8021B		4096214	4096092

(Continued on next page)

**QC DATA ASSOCIATION SUMMARY****I4C300228****Sample Preparation and Analysis Control Numbers**

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
014	WATER	MCAWW 300.0A		4099353	4099177
	WATER	SW846 8015B		4093410	4093159
	WATER	SW846 8021B		4093419	
015	WATER	MCAWW 300.0A		4099353	4099177
	WATER	SW846 8015B		4093410	4093159
	WATER	SW846 8021B		4093419	
016	SOLID	SW846 8015B		4091424	4092050
	SOLID	SW846 7471A		4097173	4097046
	SOLID	SW846 6010B		4092199	4092080
	SOLID	SW846 8021B		4096214	4096092
017	WATER	MCAWW 300.0A		4099353	4099177
	WATER	SW846 8015B		4093410	4093159
	WATER	SW846 8021B		4093419	
018	SOLID	SW846 8015B		4091424	4092050
	SOLID	SW846 7471A		4097173	4097046
	SOLID	SW846 6010B		4092199	4092080
	SOLID	SW846 8021B		4096214	4096092
019	WATER	MCAWW 300.0A		4099353	4099177
	WATER	SW846 8015B		4093410	4093159
	WATER	SW846 8021B		4093419	
020	SOLID	SW846 8015B		4091424	4092050
	SOLID	SW846 7471A		4097173	4097046
	SOLID	SW846 6010B		4092199	4092080
	SOLID	SW846 8021B		4096214	4096092
021	WATER	MCAWW 300.0A		4099353	4099177
	WATER	SW846 8015B		4093410	4093159
	WATER	SW846 8021B		4093419	
022	WATER	MCAWW 300.0A		4099353	4099177
	WATER	SW846 8015B		4097235	4097096
	WATER	SW846 8021B		4097248	4097107
023	SOLID	SW846 8015B		4091424	4092050
	SOLID	SW846 7471A		4097173	4097046
	SOLID	SW846 6010B		4092199	4092080
	SOLID	SW846 8021B		4096214	4096092

(Continued on next page)

**QC DATA ASSOCIATION SUMMARY****IAC300228****Sample Preparation and Analysis Control Numbers**

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
024	WATER	SW846 8015B		4093410	4093159
	WATER	SW846 8021B		4093419	
025	WATER	SW846 8260B		4097412	4105065
026	WATER	MCAWW 353.2		4099278	4099133
	WATER	MCAWW 300.0A		4098195	4098093
	WATER	SW846 8015B		4093410	4093159
	WATER	RSK SOP-175		4097209	4097079
	WATER	SW846 7470A		4092480	4092218
	WATER	SW846 8270C		4091417	
	WATER	SW846 6010B		4100141	4100025
	WATER	SW846 8021B		4093419	
	WATER	MCAWW 310.1		4094125	4094018
027	WATER	SW846 8015B		4093410	4093159
	WATER	SW846 8021B		4093419	
028	WATER	MCAWW 353.2		4099278	4099133
	WATER	MCAWW 300.0A		4098195	4098093
	WATER	SW846 8015B		4097235	4097096
	WATER	RSK SOP-175		4097209	4097079
	WATER	SW846 8021B		4097248	4097107
	WATER	MCAWW 310.1		4094125	4094018
029	WATER	MCAWW 353.2		4099278	4099133
	WATER	MCAWW 300.0A		4098195	4098093
	WATER	SW846 8015B		4093410	4093159
	WATER	RSK SOP-175		4097209	4097079
	WATER	SW846 8021B		4093419	
	WATER	MCAWW 310.1		4094125	4094018
030	WATER	MCAWW 353.2		4099278	4099133
	WATER	MCAWW 300.0A		4098195	4098093
	WATER	SW846 8015B		4093410	4093159
	WATER	RSK SOP-175		4097209	4097079
	WATER	SW846 8021B		4093419	
	WATER	MCAWW 310.1		4097275	4097120
031	SOLID	SW846 8015B		4091424	4092050
	SOLID	SW846 7471A		4097173	4097046
	SOLID	SW846 6010B		4092199	4092080
	SOLID	SW846 8021B		4096214	4096092

(Continued on next page)

# QC DATA ASSOCIATION SUMMARY

I4C300228

## Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
032	SOLID	SW846 8015B		4091424	4092050
	SOLID	SW846 7471A		4097173	4097046
	SOLID	SW846 6010B		4092199	4092080
	SOLID	SW846 8021B		4096214	4096092
033	SOLID	SW846 8015B		4091424	4092050
	SOLID	SW846 7471A		4097173	4097046
	SOLID	SW846 6010B		4092199	4092080
	SOLID	SW846 8021B		4096214	4096092
034	SOLID	SW846 8015B		4091424	4092050
	SOLID	SW846 7471A		4097173	4097046
	SOLID	SW846 6010B		4092199	4092080
	SOLID	SW846 8021B		4096214	4096092
035	SOLID	SW846 8015B		4091424	4092050
	SOLID	SW846 7471A		4097173	4097046
	SOLID	SW846 6010B		4092199	4092080
	SOLID	SW846 8021B		4096214	4096092
036	SOLID	SW846 8015B		4091424	4092050
	SOLID	SW846 7471A		4097173	4097046
	SOLID	SW846 6010B		4092199	4092080
	SOLID	SW846 8021B		4096214	4096092
037	SOLID	SW846 8015B		4091424	4092050
	SOLID	SW846 7471A		4097173	4097046
	SOLID	SW846 6010B		4092199	4092080
	SOLID	SW846 8021B		4096214	4096092
038	WATER	MCAWW 353.2		4099278	4099133
	WATER	MCAWW 300.0A		4098195	4098093
	WATER	SW846 8015B		4097235	4097096
	WATER	RSK SOP-175		4097209	4097079
	WATER	SW846 8021B		4097248	4097107
	WATER	MCAWW 310.1		4097275	4097120
039	WATER	MCAWW 353.2		4099278	4099133
	WATER	MCAWW 300.0A		4098195	4098093
	WATER	SW846 8015B		4097235	4097096
	WATER	RSK SOP-175		4097270	4097115
	WATER	SW846 8021B		4097248	4097107
	WATER	MCAWW 310.1		4097275	4097120

(Continued on next page)

**QC DATA ASSOCIATION SUMMARY**

I4C300228

**Sample Preparation and Analysis Control Numbers**

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
040	WATER	MCAWW 353.2		4099278	4099133
	WATER	MCAWW 300.0A		4098195	4098093
	WATER	SW846 8015B		4097235	4097096
	WATER	RSK SOP-175		4097270	4097115
	WATER	SW846 8021B		4097248	4097107
	WATER	MCAWW 310.1		4097275	4097120
041	WATER	MCAWW 353.2		4099278	4099133
	WATER	MCAWW 300.0A		4098195	4098093
	WATER	SW846 8015B		4097235	4097096
	WATER	RSK SOP-175		4097270	4097115
	WATER	SW846 8021B		4097248	4097107
	WATER	MCAWW 310.1		4097275	4097120
042	WATER	MCAWW 353.2		4099278	4099133
	WATER	MCAWW 300.0A		4098195	4098093
	WATER	SW846 8015B		4097235	4097096
	WATER	RSK SOP-175		4097270	4097115
	WATER	SW846 8021B		4097248	4097107
	WATER	MCAWW 310.1		4097275	4097120
043	WATER	MCAWW 353.2		4099278	4099133
	WATER	MCAWW 300.0A		4098195	4098093
	WATER	SW846 8015B		4097235	4097096
	WATER	SW846 7470A		4092480	4092218
	WATER	SW846 6010B		4100141	4100025
	WATER	SW846 8021B		4097248	4097107
	WATER	MCAWW 310.1		4097275	4097120
044	WATER	SW846 8015B		4097235	4097096
	WATER	SW846 7470A		4092480	4092218
	WATER	SW846 6010B		4100141	4100025
	WATER	SW846 8021B		4097248	4097107
045	WATER	SW846 8015B		4097235	4097096
	WATER	SW846 8021B		4097248	4097107
046	WATER	SW846 8015B		4097235	4097096
	WATER	SW846 8021B		4097248	4097107
047	WATER	MCAWW 353.2		4099278	4099133
	WATER	MCAWW 300.0A		4098195	4098093
	WATER	SW846 8015B		4097235	4097096

(Continued on next page)

**QC DATA ASSOCIATION SUMMARY**

I4C300228

## Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
047	WATER	RSK SOP-175		4097270	4097115
	WATER	SW846 8021B		4097248	4097107
	WATER	MCAWW 310.1		4097275	4097120
048	WIPE	SW846 8082		4092416	
049	WIPE	SW846 8082		4092416	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APMWAOB

## GC Volatiles

Lot-Sample #....: I4C300228-001 Work Order #....: GC6731AP Matrix.....: WATER  
Date Sampled...: 03/25/04 09:50 Date Received...: 03/30/04 MS Run #.....: 4097079  
Prep Date.....: 04/02/04 Analysis Date...: 04/03/04  
Prep Batch #....: 4097209 Analysis Time...: 14:28  
Dilution Factor: 1

Method.....: RSK SOP-175

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Methane	54	0.50	ug/L

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APMWAOB

## GC Volatiles

Lot-Sample #....: I4C300228-001 Work Order #....: GC6731AC Matrix.....: WATER  
Date Sampled...: 03/25/04 09:50 Date Received...: 03/30/04 MS Run #.....: 4097096  
Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
Prep Batch #....: 4097235 Analysis Time...: 14:25  
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	300	100	ug/L
SURROGATE	PERCENT	RECOVERY	LIMITS
4-Bromofluorobenzene (GRO)	97		(75 - 122)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APMWAOB

## GC Volatiles

Lot-Sample #....: I4C300228-001    Work Order #....: GC6731AA    Matrix.....: WATER  
 Date Sampled...: 03/25/04 09:50    Date Received...: 03/30/04    MS Run #.....: 4097107  
 Prep Date.....: 04/05/04    Analysis Date...: 04/05/04  
 Prep Batch #....: 4097248    Analysis Time...: 14:25  
 Dilution Factor: 1

Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	36	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	6.3	1.0	ug/L
Xylenes (total)	28	3.0	ug/L
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>
		<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	99	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	103	(73 - 135)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APMWAOB

## TOTAL Metals

Lot-Sample #...: I4C300228-001 Matrix.....: WATER  
Date Sampled...: 03/25/04 09:50 Date Received..: 03/30/04

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS				
Prep Batch #...: 4092480							
Mercury	ND	0.00020	mg/L	SW846 7470A	04/02/04	GC6731AL	
		Dilution Factor: 1		Analysis Time..: 00:00		MS Run #.....: 4092218	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APMWAOB

## DISSOLVED Metals

Lot-Sample #...: I4C300228-001

Matrix.....: WATER

Date Sampled...: 03/25/04 09:50 Date Received...: 03/30/04

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
<b>Prep Batch #...: 4100141</b>						
Silver	ND	0.0050	mg/L	SW846 6010B	04/09/04	GC6731C1
		Dilution Factor: 1		Analysis Time...: 10:45	MS Run #.....: 4100025	
Arsenic	0.016	0.010	mg/L	SW846 6010B	04/09/04	GC6731C2
		Dilution Factor: 1		Analysis Time...: 10:45	MS Run #.....: 4100025	
Barium	0.29	0.20	mg/L	SW846 6010B	04/09/04	GC6731C3
		Dilution Factor: 1		Analysis Time...: 10:45	MS Run #.....: 4100025	
Cadmium	ND	0.0020	mg/L	SW846 6010B	04/09/04	GC6731C4
		Dilution Factor: 1		Analysis Time...: 10:45	MS Run #.....: 4100025	
Chromium	0.0053	0.0050	mg/L	SW846 6010B	04/09/04	GC6731C5
		Dilution Factor: 1		Analysis Time...: 10:45	MS Run #.....: 4100025	
Lead	ND	0.0030	mg/L	SW846 6010B	04/09/04	GC6731C6
		Dilution Factor: 1		Analysis Time...: 10:45	MS Run #.....: 4100025	
Selenium	0.014	0.0050	mg/L	SW846 6010B	04/09/04	GC6731C7
		Dilution Factor: 1		Analysis Time...: 10:45	MS Run #.....: 4100025	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APMWAOB

## General Chemistry

Lot-Sample #...: I4C300228-001 Work Order #...: GC673 Matrix.....: WATER  
 Date Sampled...: 03/25/04 09:50 Date Received...: 03/30/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-		PREP #
					ANALYSIS DATE	BATCH #	
Nitrate-Nitrite	0.97	0.10	mg/L	MCAWW 353.2	04/08/04	4099278	
		Dilution Factor: 1		Analysis Time...: 10:00	MS Run #.....:	4099133	
Sulfate	81.9	20.0	mg/L	MCAWW 300.0A	04/06/04	4098195	
		Dilution Factor: 20		Analysis Time...: 09:19	MS Run #.....:	4098093	
Total Alkalinity	268	5.0	mg/L	MCAWW 310.1	04/02/04	4094125	
		Dilution Factor: 1		Analysis Time...: 14:00	MS Run #.....:	4094018	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEXRW-11

## GC Volatiles

Lot-Sample #....: I4C300228-002 Work Order #....: GC68W1AP

Date Sampled....: 03/25/04 18:30 Date Received...: 03/30/04

Prep Date.....: 04/02/04

Analysis Date...: 04/03/04

Prep Batch #....: 4097209

Analysis Time...: 14:33

Dilution Factor: 1

Matrix.....: WATER

MS Run #.....: 4097079

Method.....: RSK SOP-175

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Methane	0.69	0.50	ug/L

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEXRW-11

## GC Volatiles

Lot-Sample #....: I4C300228-002 Work Order #....: GC68W1AC Matrix.....: WATER  
Date Sampled....: 03/25/04 18:30 Date Received...: 03/30/04 MS Run #.....: 4093159  
Prep Date.....: 04/01/04 Analysis Date...: 04/01/04  
Prep Batch #....: 4093410 Analysis Time...: 17:16  
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/L
SURROGATE	PERCENT	RECOVERY	LIMITS
4-Bromofluorobenzene (GRO)	RECOVERY	(75 - 122)	96

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEXRW-11

## GC Volatiles

Lot-Sample #....: I4C300228-002 Work Order #....: GC68W1AA  
 Date Sampled....: 03/25/04 18:30 Date Received...: 03/30/04 Matrix.....: WATER  
 Prep Date.....: 04/01/04 Analysis Date...: 04/01/04 MS Run #.....:  
 Prep Batch #....: 4093419 Analysis Time...: 17:16  
 Dilution Factor: 1

Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY	
		LIMITS	
Bromofluorobenzene	99	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	94	(73 - 135)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEXRW-11

## TOTAL Metals

Lot-Sample #...: I4C300228-002

Date Sampled...: 03/25/04 18:30 Date Received..: 03/30/04

Matrix.....: WATER

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
Prep Batch #...: 4092480							
Mercury	ND	0.00020	mg/L	SW846 7470A	04/02/04	GC68W1AL	
		Dilution Factor: 1		Analysis Time..: 00:00		MS Run #.....:	4092218

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEXRW-11

## DISSOLVED Metals

Lot-Sample #....: I4C300228-002

Date Sampled....: 03/25/04 18:30 Date Received...: 03/30/04

Matrix.....: WATER

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
<b>Prep Batch #....: 4100141</b>							
Silver	ND	0.0050	mg/L	SW846 6010B	04/09/04	GC68W1AX	
		Dilution Factor: 1		Analysis Time...: 10:51	MS Run #.....: 4100025		
Arsenic	0.026	0.010	mg/L	SW846 6010B	04/09/04	GC68W1A0	
		Dilution Factor: 1		Analysis Time...: 10:51	MS Run #.....: 4100025		
Barium	0.21	0.20	mg/L	SW846 6010B	04/09/04	GC68W1A1	
		Dilution Factor: 1		Analysis Time...: 10:51	MS Run #.....: 4100025		
Cadmium	ND	0.0020	mg/L	SW846 6010B	04/09/04	GC68W1A2	
		Dilution Factor: 1		Analysis Time...: 10:51	MS Run #.....: 4100025		
Chromium	0.0065	0.0050	mg/L	SW846 6010B	04/09/04	GC68W1A3	
		Dilution Factor: 1		Analysis Time...: 10:51	MS Run #.....: 4100025		
Lead	0.0082	0.0030	mg/L	SW846 6010B	04/09/04	GC68W1A4	
		Dilution Factor: 1		Analysis Time...: 10:51	MS Run #.....: 4100025		
Selenium	0.036	0.0050	mg/L	SW846 6010B	04/09/04	GC68W1A5	
		Dilution Factor: 1		Analysis Time...: 10:51	MS Run #.....: 4100025		

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEXRW-11

## General Chemistry

Lot-Sample #....: I4C300228-002    Work Order #....: GC68W    Matrix.....: WATER  
 Date Sampled...: 03/25/04 18:30    Date Received..: 03/30/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite	14.9	2.0	mg/L	MCAWW 353.2	04/08/04	4099278
		Dilution Factor:	20	Analysis Time...: 10:00	MS Run #.....:	4099133
Sulfate	87.4	20.0	mg/L	MCAWW 300.0A	04/06/04	4098195
		Dilution Factor:	20	Analysis Time...: 09:59	MS Run #.....:	4098093
Total Alkalinity	258	5.0	mg/L	MCAWW 310.1	04/02/04	4094125
		Dilution Factor:	1	Analysis Time...: 14:00	MS Run #.....:	4094018

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APMWAOC

## GC Volatiles

Lot-Sample #....: I4C300228-003 Work Order #....: GC6851AP Matrix.....: WATER  
Date Sampled....: 03/25/04 09:30 Date Received...: 03/30/04 MS Run #.....: 4097079  
Prep Date.....: 04/02/04 Analysis Date...: 04/03/04  
Prep Batch #....: 4097209 Analysis Time...: 14:39  
Dilution Factor: 1

Method.....: RSK SOP-175

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Methane	0.84	0.50	ug/L

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APMWAOC

## GC Volatiles

Lot-Sample #....: I4C300228-003 Work Order #....: GC6851AC Matrix.....: WATER  
Date Sampled....: 03/25/04 09:30 Date Received...: 03/30/04 MS Run #.....: 4093159  
Prep Date.....: 04/01/04 Analysis Date...: 04/01/04  
Prep Batch #....: 4093410 Analysis Time...: 17:47  
Dilution Factor: 1

Method.....: SW846 8015B

<u>PARAMETER</u>	<u>REPORTING</u>		
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>
Gasoline Range Organics	ND	100	ug/L
<u>SURROGATE</u>			
4-Bromofluorobenzene (GRO)	<u>PERCENT</u>	<u>RECOVERY</u>	
	<u>RECOVERY</u>	<u>LIMITS</u>	(75 - 122)
	99		

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APMWAOC

## GC Volatiles

Lot-Sample #....: I4C300228-003 Work Order #....: GC6851AA Matrix.....: WATER  
 Date Sampled....: 03/25/04 09:30 Date Received...: 03/30/04 MS Run #.....:  
 Prep Date.....: 04/01/04 Analysis Date...: 04/01/04  
 Prep Batch #....: 4093419 Analysis Time...: 17:47  
 Dilution Factor: 1

Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	97	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	94	(73 - 135)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APMWAOC

**TOTAL Metals**

Lot-Sample #....: I4C300228-003

Matrix.....: WATER

Date Sampled....: 03/25/04 09:30 Date Received..: 03/30/04

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK	ORDER #
		LIMIT	UNITS	METHOD				
Prep Batch #....:	4092480							
Mercury	ND	0.00020	mg/L	SW846 7470A		04/02/04	GC6851AL	
		Dilution Factor:	1	Analysis Time..:	00:00	MS Run #.....:	4092218	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APMWAOC

## DISSOLVED Metals

Lot-Sample #...: I4C300228-003

Date Sampled...: 03/25/04 09:30 Date Received...: 03/30/04

Matrix.....: WATER

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
<b>Prep Batch #...: 4100141</b>							
Silver	ND	0.0050	mg/L	SW846 6010B	04/09/04	GC6851AT	
		Dilution Factor: 1		Analysis Time...: 10:56	MS Run #.....: 4100025		
Arsenic	0.018	0.010	mg/L	SW846 6010B	04/09/04	GC6851AU	
		Dilution Factor: 1		Analysis Time...: 10:56	MS Run #.....: 4100025		
Barium	ND	0.20	mg/L	SW846 6010B	04/09/04	GC6851AV	
		Dilution Factor: 1		Analysis Time...: 10:56	MS Run #.....: 4100025		
Cadmium	ND	0.0020	mg/L	SW846 6010B	04/09/04	GC6851AW	
		Dilution Factor: 1		Analysis Time...: 10:56	MS Run #.....: 4100025		
Chromium	0.0063	0.0050	mg/L	SW846 6010B	04/09/04	GC6851AX	
		Dilution Factor: 1		Analysis Time...: 10:56	MS Run #.....: 4100025		
Lead	ND	0.0030	mg/L	SW846 6010B	04/09/04	GC6851A0	
		Dilution Factor: 1		Analysis Time...: 10:56	MS Run #.....: 4100025		
Selenium	0.022	0.0050	mg/L	SW846 6010B	04/09/04	GC6851A1	
		Dilution Factor: 1		Analysis Time...: 10:56	MS Run #.....: 4100025		

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APMWAOC

## General Chemistry

Lot-Sample #....: I4C300228-003    Work Order #....: GC685    Matrix.....: WATER  
 Date Sampled...: 03/25/04 09:30    Date Received...: 03/30/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite	3.5	1.0	mg/L	MCAWW 353.2 Dilution Factor: 10	04/08/04 Analysis Time...: 10:00	4099278 MS Run #.....: 4099133
Sulfate	54.9	20.0	mg/L	MCAWW 300.0A Dilution Factor: 20	04/06/04 Analysis Time...: 10:13	4098195 MS Run #.....: 4098093
Total Alkalinity	191	5.0	mg/L	MCAWW 310.1 Dilution Factor: 1	04/02/04 Analysis Time...: 14:00	4094125 MS Run #.....: 4094018

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APMWAOD

## GC Volatiles

Lot-Sample #....: I4C300228-004 Work Order #....: GC6871AP  
Date Sampled...: 03/25/04 08:50 Date Received...: 03/30/04  
Prep Date.....: 04/02/04 Analysis Date...: 04/03/04  
Prep Batch #...: 4097209 Analysis Time...: 15:01  
Dilution Factor: 3

Matrix.....: WATER  
MS Run #....: 4097079

Method.....: RSK SOP-175

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Methane	160	1.5	ug/L

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APMWAOD

## GC Volatiles

Lot-Sample #....: I4C300228-004 Work Order #....: GC6871AC Matrix.....: WATER  
Date Sampled....: 03/25/04 08:50 Date Received...: 03/30/04 MS Run #.....: 4097096  
Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
Prep Batch #....: 4097235 Analysis Time...: 22:20  
Dilution Factor: 10 Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	8700	1000	ug/L
SURROGATE	PERCENT	RECOVERY	
	RECOVERY	LIMITS	
4-Bromofluorobenzene (GRO)	98	(75 - 122)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APMWAOD

## GC Volatiles

Lot-Sample #....: I4C300228-004 Work Order #....: GC6871AA Matrix.....: WATER  
 Date Sampled...: 03/25/04 08:50 Date Received...: 03/30/04 MS Run #.....: 4097107  
 Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
 Prep Batch #....: 4097248 Analysis Time...: 22:20  
 Dilution Factor: 10 Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	600	10	ug/L
Ethylbenzene	250	10	ug/L
Toluene	880	10	ug/L
Xylenes (total)	1700	30	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	102	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	113	(73 - 135)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APMWAOD

## TOTAL Metals

Lot-Sample #...: I4C300228-004

Date Sampled...: 03/25/04 08:50 Date Received...: 03/30/04

Matrix.....: WATER

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
Prep Batch #...:	4092480						
Mercury	ND	0.00020	mg/L	SW846 7470A	04/02/04	GC6871AL	
		Dilution Factor:	1	Analysis Time...: 00:00		MS Run #.....: 4092218	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APMWAOD

## DISSOLVED Metals

Lot-Sample #....: I4C300228-004

Date Sampled....: 03/25/04 08:50 Date Received...: 03/30/04

Matrix.....: WATER

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
<b>Prep Batch #....: 4100141</b>							
Silver	ND	0.0050	mg/L	SW846 6010B	04/09/04	GC6871AT	
		Dilution Factor: 1		Analysis Time...: 11:13	MS Run #.....:	4100025	
Arsenic	0.046	0.010	mg/L	SW846 6010B	04/09/04	GC6871AU	
		Dilution Factor: 1		Analysis Time...: 11:13	MS Run #.....:	4100025	
Barium	1.3	0.20	mg/L	SW846 6010B	04/09/04	GC6871AV	
		Dilution Factor: 1		Analysis Time...: 11:13	MS Run #.....:	4100025	
Cadmium	ND	0.0020	mg/L	SW846 6010B	04/09/04	GC6871AW	
		Dilution Factor: 1		Analysis Time...: 11:13	MS Run #.....:	4100025	
Chromium	0.0053	0.0050	mg/L	SW846 6010B	04/09/04	GC6871AX	
		Dilution Factor: 1		Analysis Time...: 11:13	MS Run #.....:	4100025	
Lead	0.0032	0.0030	mg/L	SW846 6010B	04/09/04	GC6871AO	
		Dilution Factor: 1		Analysis Time...: 11:13	MS Run #.....:	4100025	
Selenium	0.027	0.0050	mg/L	SW846 6010B	04/09/04	GC6871Al	
		Dilution Factor: 1		Analysis Time...: 11:13	MS Run #.....:	4100025	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APMWAOD

## General Chemistry

Lot-Sample #....: I4C300228-004 Work Order #....: GC687  
 Date Sampled...: 03/25/04 08:50 Date Received...: 03/30/04 Matrix.....: WATER

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite	397	20.0	mg/L	MCAWW 353.2	04/08/04	4099278
		Dilution Factor:	200	Analysis Time...: 10:00	MS Run #.....:	4099133
Sulfate	23.3	20.0	mg/L	MCAWW 300.0A	04/06/04	4098195
		Dilution Factor:	20	Analysis Time...: 10:26	MS Run #.....:	4098093
Total Alkalinity	465	5.0	mg/L	MCAWW 310.1	04/02/04	4094125
		Dilution Factor:	1	Analysis Time...: 14:00	MS Run #.....:	4094018

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEXRW-10

## GC Volatiles

Lot-Sample #....: I4C300228-005 Work Order #....: GC6891AP Matrix.....: WATER  
Date Sampled....: 03/25/04 18:10 Date Received...: 03/30/04 MS Run #.....: 4097079  
Prep Date.....: 04/02/04 Analysis Date...: 04/03/04  
Prep Batch #....: 4097209 Analysis Time...: 15:07  
Dilution Factor: 1

Method.....: RSK SOP-175

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Methane	1.2	0.50	ug/L

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEXRW-10

## GC Volatiles

Lot-Sample #....: I4C300228-005 Work Order #....: GC6891AC Matrix.....: WATER  
Date Sampled....: 03/25/04 18:10 Date Received...: 03/30/04 MS Run #.....: 4093159  
Prep Date.....: 04/01/04 Analysis Date...: 04/01/04  
Prep Batch #....: 4093410 Analysis Time...: 18:17  
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/L
SURROGATE	PERCENT	RECOVERY	LIMITS
4-Bromofluorobenzene (GRO)	RECOVERY	(75 - 122)	98

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEXRW-10

## GC Volatiles

Lot-Sample #....: I4C300228-005 Work Order #....: GC6891AA Matrix.....: WATER  
 Date Sampled....: 03/25/04 18:10 Date Received...: 03/30/04 MS Run #.....:  
 Prep Date.....: 04/01/04 Analysis Date...: 04/01/04  
 Prep Batch #....: 4093419 Analysis Time...: 18:17  
 Dilution Factor: 1 Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	2.3	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u>	
		<u>LIMITS</u>	
Bromofluorobenzene	99	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	100	(73 - 135)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEXRW-10

## TOTAL Metals

Lot-Sample #....: I4C300228-005

Matrix.....: WATER

Date Sampled....: 03/25/04 18:10 Date Received...: 03/30/04

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
Prep Batch #....:	4092480						
Mercury	ND	0.00020	mg/L	SW846 7470A	04/02/04	GC6891AL	
		Dilution Factor:	1	Analysis Time...: 00:00		MS Run #.....:	4092218

## ARCADIS GKRAGHTY &amp; MILLER INC

Client Sample ID: APEXRW-10

## DISSOLVED Metals

Lot-Sample #....: I4C300228-005

Date Sampled....: 03/25/04 18:10 Date Received..: 03/30/04

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #....:	4100141					
Silver	ND	0.0050	mg/L	SW846 6010B	04/09/04	GC6891AT
		Dilution Factor: 1		Analysis Time..: 11:18	MS Run #.....:	4100025
Arsenic	0.030	0.010	mg/L	SW846 6010B	04/09/04	GC6891AU
		Dilution Factor: 1		Analysis Time..: 11:18	MS Run #.....:	4100025
Barium	ND	0.20	mg/L	SW846 6010B	04/09/04	GC6891AV
		Dilution Factor: 1		Analysis Time..: 11:18	MS Run #.....:	4100025
Cadmium	ND	0.0020	mg/L	SW846 6010B	04/09/04	GC6891AW
		Dilution Factor: 1		Analysis Time..: 11:18	MS Run #.....:	4100025
Chromium	0.016	0.0050	mg/L	SW846 6010B	04/09/04	GC6891AX
		Dilution Factor: 1		Analysis Time..: 11:18	MS Run #.....:	4100025
Lead	0.0072	0.0030	mg/L	SW846 6010B	04/09/04	GC6891A0
		Dilution Factor: 1		Analysis Time..: 11:18	MS Run #.....:	4100025
Selenium	0.042	0.0050	mg/L	SW846 6010B	04/09/04	GC6891A1
		Dilution Factor: 1		Analysis Time..: 11:18	MS Run #.....:	4100025

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEXRW-10

## General Chemistry

Lot-Sample #....: I4C300228-005 Work Order #....: GC689  
 Date Sampled...: 03/25/04 18:10 Date Received...: 03/30/04 Matrix.....: WATER

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite	16.6	2.0	mg/L	MCAWW 353.2 Analysis Time...: 10:00	04/08/04	4099278 MS Run #.....: 4099133
Sulfate	246	20.0	mg/L	MCAWW 300.0A Analysis Time...: 10:39	04/06/04	4098195 MS Run #.....: 4098093
Total Alkalinity	232	5.0	mg/L	MCAWW 310.1 Analysis Time...: 14:00	04/02/04	4094125 MS Run #.....: 4094018

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEXMW-6

## GC Volatiles

Lot-Sample #....: I4C300228-006 Work Order #....: GC69C1AP  
Date Sampled....: 03/25/04 08:20 Date Received...: 03/30/04  
Prep Date.....: 04/02/04 Analysis Date...: 04/03/04  
Prep Batch #....: 4097209 Analysis Time...: 15:12  
Dilution Factor: 1

Matrix.....: WATER  
MS Run #.....: 4097079

Method.....: RSK SOP-175

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	<u>LIMIT</u>	<u>UNITS</u>
Methane	0.51		0.50	ug/L

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEXMW-6

## GC Volatiles

Lot-Sample #....: I4C300228-006 Work Order #....: GC69C1AC Matrix.....: WATER  
Date Sampled...: 03/25/04 08:20 Date Received...: 03/30/04 MS Run #.....: 4093159  
Prep Date.....: 04/01/04 Analysis Date...: 04/01/04  
Prep Batch #....: 4093410 Analysis Time...: 18:46  
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/L
SURROGATE	PERCENT	RECOVERY	LIMITS
4-Bromofluorobenzene (GRO)	RECOVERY 96	(75 - 122)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEXMW-6

## GC Volatiles

Lot-Sample #....: I4C300228-006 Work Order #....: GC69C1AA  
 Date Sampled....: 03/25/04 08:20 Date Received...: 03/30/04  
 Prep Date.....: 04/01/04 Analysis Date...: 04/01/04  
 Prep Batch #....: 4093419 Analysis Time...: 18:46  
 Dilution Factor: 1

Matrix.....: WATER  
 MS Run #:.....:

Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	96	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	96	(73 - 135)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEXMW-6

## TOTAL Metals

Lot-Sample #...: I4C300228-006

Date Sampled...: 03/25/04 08:20 Date Received...: 03/30/04

Matrix.....: WATER

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
<b>Prep Batch #...: 4092480</b>							
Mercury	ND	0.00020	mg/L		SW846 7470A	04/02/04	GC69C1AL
		Dilution Factor:	1		Analysis Time...: 00:00		MS Run #.....: 4092218

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEXMW-6

## DISSOLVED Metals

Lot-Sample #....: I4C300228-006

Date Sampled....: 03/25/04 08:20 Date Received..: 03/30/04

Matrix.....: WATER

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
<b>Prep Batch #....: 4100141</b>							
Silver	ND	0.0050	mg/L	SW846 6010B	04/09/04	GC69C1AT	
		Dilution Factor: 1		Analysis Time..: 11:24	MS Run #.....: 4100025		
Arsenic	0.025	0.010	mg/L	SW846 6010B	04/09/04	GC69C1AU	
		Dilution Factor: 1		Analysis Time..: 11:24	MS Run #.....: 4100025		
Barium	ND	0.20	mg/L	SW846 6010B	04/09/04	GC69C1AV	
		Dilution Factor: 1		Analysis Time..: 11:24	MS Run #.....: 4100025		
Cadmium	ND	0.0020	mg/L	SW846 6010B	04/09/04	GC69C1AW	
		Dilution Factor: 1		Analysis Time..: 11:24	MS Run #.....: 4100025		
Chromium	ND	0.0050	mg/L	SW846 6010B	04/09/04	GC69C1AX	
		Dilution Factor: 1		Analysis Time..: 11:24	MS Run #.....: 4100025		
Lead	ND	0.0030	mg/L	SW846 6010B	04/09/04	GC69C1AO	
		Dilution Factor: 1		Analysis Time..: 11:24	MS Run #.....: 4100025		
Selenium	0.017	0.0050	mg/L	SW846 6010B	04/09/04	GC69C1AL	
		Dilution Factor: 1		Analysis Time..: 11:24	MS Run #.....: 4100025		

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APRXMW-6

## General Chemistry

Lot-Sample #....: I4C300228-006    Work Order #....: GC69C    Matrix.....: WATER  
 Date Sampled....: 03/25/04 08:20    Date Received...: 03/30/04

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
Nitrate-Nitrite	837	100	mg/L	MCAWW 353.2	04/08/04	4099278
		Dilution Factor:	1000	Analysis Time...: 10:00	MS Run #.....:	4099133
Sulfate	65.0	20.0	mg/L	MCAWW 300.0A	04/06/04	4098195
		Dilution Factor:	20	Analysis Time...: 10:53	MS Run #.....:	4098093
Total Alkalinity	273	5.0	mg/L	MCAWW 310.1	04/02/04	4094125
		Dilution Factor:	1	Analysis Time...: 14:00	MS Run #.....:	4094018

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCA WATER WASTE

## GC Volatiles

Lot-Sample #....: I4C300228-007 Work Order #....: GC69E1AD Matrix.....: WATER  
Date Sampled....: 03/21/04 16:30 Date Received...: 03/30/04 MS Run #.....: 4093159  
Prep Date.....: 04/01/04 Analysis Date...: 04/01/04  
Prep Batch #....: 4093410 Analysis Time...: 19:16  
Dilution Factor: 1

Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Gasoline Range Organics	ND	100	ug/L
SURROGATE	PERCENT	RECOVERY	LIMITS
4-Bromofluorobenzene (GRO)	RECOVERY	(75 - 122)	
	95		

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCA WATER WASTE

## GC Volatiles

Lot-Sample #....: I4C300228-007 Work Order #....: GC69E1AA Matrix.....: WATER  
Date Sampled....: 03/21/04 16:30 Date Received...: 03/30/04 MS Run #.....:  
Prep Date.....: 04/01/04 Analysis Date...: 04/01/04  
Prep Batch #....: 4093419 Analysis Time...: 19:16  
Dilution Factor: 1

Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	1.9	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Bromofluorobenzene	99	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	101	(73 - 135)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCA WATER WASTE

## General Chemistry

Lot-Sample #....: I4C300228-007 Work Order #....: GC69E Matrix.....: WATER  
Date Sampled....: 03/21/04 16:30 Date Received...: 03/30/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	2000	1000	mg/L	MCAWW 300.0A	04/07/04	4099353
		Dilution Factor:	1000	Analysis Time...: 13:23	MS Run #.....:	4099177

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCA SOIL WASTE

## GC Volatiles

Lot-Sample #....: I4C300228-008 Work Order #...: GC69J1AC      Matrix.....: SOLID  
 Date Sampled...: 03/21/04 16:30 Date Received...: 03/30/04      MS Run #.....: 4096092  
 Prep Date.....: 04/02/04 Analysis Date...: 04/02/04  
 Prep Batch #....: 4096214 Analysis Time...: 14:41  
 Dilution Factor: 0.98  
 % Moisture.....: Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	ND	4.9	ug/kg
Ethylbenzene	ND	4.9	ug/kg
Toluene	ND	4.9	ug/kg
Xylenes (total)	ND	4.9	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	91	(41 - 150)
a,a,a-Trifluorotoluene (TFT)	96	(43 - 165)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCA SOIL WASTE

## GC Semivolatiles

Lot-Sample #....: I4C300228-008 Work Order #....: GC69J1AL Matrix.....: SOLID  
 Date Sampled....: 03/21/04 16:30 Date Received...: 03/30/04 MS Run #.....: 4092050  
 Prep Date.....: 03/31/04 Analysis Date...: 04/08/04  
 Prep Batch #....: 4091424 Analysis Time...: 11:10  
 Dilution Factor: 1  
 % Moisture.....: Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Diesel Range Organics	160	15	mg/kg
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
o-Terphenyl	37 *	(39 - 139)	
Dotriacontane	20	(13 - 161)	

NOTE(S) :

- \* Surrogate recovery is outside stated control limits.

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCA SOIL WASTE

## TOTAL Metals

Lot-Sample #....: I4C300228-008

Date Sampled....: 03/21/04 16:30 Date Received...: 03/30/04

% Moisture.....:

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
<b>Prep Batch #....: 4092199</b>						
Silver	ND	0.99	mg/kg	SW846 6010B Dilution Factor: 0.99	03/31-04/01/04 Analysis Time...: 16:04	GC69J1AJ MS Run #.....: 4092080
Arsenic	2.0	0.99	mg/kg	SW846 6010B Dilution Factor: 0.99	03/31-04/01/04 Analysis Time...: 16:04	GC69J1AD MS Run #.....: 4092080
Barium	163	19.8	mg/kg	SW846 6010B Dilution Factor: 0.99	03/31-04/01/04 Analysis Time...: 16:04	GC69J1AE MS Run #.....: 4092080
Cadmium	ND	0.50	mg/kg	SW846 6010B Dilution Factor: 0.99	03/31-04/01/04 Analysis Time...: 16:04	GC69J1AF MS Run #.....: 4092080
Chromium	4.8	0.99	mg/kg	SW846 6010B Dilution Factor: 0.99	03/31-04/01/04 Analysis Time...: 16:04	GC69J1AK MS Run #.....: 4092080
Lead	2.5	0.30	mg/kg	SW846 6010B Dilution Factor: 0.99	03/31-04/01/04 Analysis Time...: 16:04	GC69J1AG MS Run #.....: 4092080
Selenium	ND	0.50	mg/kg	SW846 6010B Dilution Factor: 0.99	03/31-04/01/04 Analysis Time...: 16:04	GC69J1AH MS Run #.....: 4092080
<b>Prep Batch #....: 4097173</b>						
Mercury	ND	0.096	mg/kg	SW846 7471A Dilution Factor: 0.96	04/06-04/07/04 Analysis Time...: 15:34	GC69J1AA MS Run #.....: 4097046

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RAM SOIL WASTE

## GC Volatiles

Lot-Sample #....: I4C300228-009 Work Order #....: GC69N1AC      Matrix.....: SOLID  
 Date Sampled...: 03/26/04 17:27 Date Received...: 03/30/04      MS Run #.....: 4096092  
 Prep Date.....: 04/02/04      Analysis Date...: 04/02/04  
 Prep Batch #....: 4096214      Analysis Time...: 15:09  
 Dilution Factor: 0.99  
 % Moisture.....: Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
Xylenes (total)	ND	5.0	ug/kg

SURROGATE	PERCENT	RECOVERY	
		LIMITS	
Bromofluorobenzene	91	(41	- 150)
a,a,a-Trifluorotoluene (TFT)	101	(43	- 165)

## ARCADIS GERAGHTY &amp; MILLER INC

## Client Sample ID: RAM SOIL WASTE

## GC Semivolatiles

Lot-Sample #....: I4C300228-009 Work Order #....: GC69N1AL Matrix.....: SOLID  
Date Sampled...: 03/26/04 17:27 Date Received...: 03/30/04 MS Run #.....: 4092050  
Prep Date.....: 03/31/04 Analysis Date...: 04/07/04  
Prep Batch #....: 4091424 Analysis Time...: 23:03  
Dilution Factor: 1  
% Moisture.....:

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Diesel Range Organics	ND	15	mg/kg
SURROGATE	PERCENT	RECOVERY	
o-Terphenyl	RECOVERY	LIMITS	
Dotriacontane	92	(39 - 139)	
	81	(13 - 161)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RAM SOIL WASTE

## TOTAL Metals

Lot-Sample #....: I4C300228-009

Date Sampled....: 03/26/04 17:27 Date Received...: 03/30/04

% Moisture.....:

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
<b>Prep Batch #....: 4092199</b>						
Silver	ND	0.92	mg/kg	SW846 6010B	03/31-04/01/04	GC69N1AJ
		Dilution Factor: 0.92		Analysis Time...: 16:10	MS Run #.....:	4092080
Arsenic	3.1	0.92	mg/kg	SW846 6010B	03/31-04/01/04	GC69N1AD
		Dilution Factor: 0.92		Analysis Time...: 16:10	MS Run #.....:	4092080
Barium	86.8	18.4	mg/kg	SW846 6010B	03/31-04/01/04	GC69N1AK
		Dilution Factor: 0.92		Analysis Time...: 16:10	MS Run #.....:	4092080
Cadmium	ND	0.46	mg/kg	SW846 6010B	03/31-04/01/04	GC69N1AF
		Dilution Factor: 0.92		Analysis Time...: 16:10	MS Run #.....:	4092080
Chromium	12.5	0.92	mg/kg	SW846 6010B	03/31-04/01/04	GC69N1AK
		Dilution Factor: 0.92		Analysis Time...: 16:10	MS Run #.....:	4092080
Lead	4.5	0.28	mg/kg	SW846 6010B	03/31-04/01/04	GC69N1AG
		Dilution Factor: 0.92		Analysis Time...: 16:10	MS Run #.....:	4092080
Selenium	ND	0.46	mg/kg	SW846 6010B	03/31-04/01/04	GC69N1AH
		Dilution Factor: 0.92		Analysis Time...: 16:10	MS Run #.....:	4092080
<b>Prep Batch #....: 4097173</b>						
Mercury	ND	0.095	mg/kg	SW846 7471A	04/06-04/07/04	GC69N1AA
		Dilution Factor: 0.95		Analysis Time...: 15:39	MS Run #.....:	4097046

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RAM WATER WASTE

## GC Volatiles

Lot-Sample #....: I4C300228-010 Work Order #....: GC69W1AD Matrix.....: WATER  
Date Sampled....: 03/26/04 17:27 Date Received...: 03/30/04 MS Run #.....: 4093159  
Prep Date.....: 04/01/04 Analysis Date...: 04/01/04  
Prep Batch #....: 4093410 Analysis Time...: 19:45  
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING		UNITS
		LIMIT	PERCENT	
Gasoline Range Organics	110	100		ug/L
SURROGATE		RECOVERY	RECOVERY	
4-Bromofluorobenzene (GRO)	102	LIMITS	(75 - 122)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RAM WATER WASTE

## GC Volatiles

Lot-Sample #....: I4C300228-010 Work Order #....: GC69W2AA Matrix.....: WATER  
 Date Sampled....: 03/26/04 17:27 Date Received...: 03/30/04 MS Run #.....: 4097185  
 Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
 Prep Batch #....: 4097395 Analysis Time...: 18:05  
 Dilution Factor: 1

Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Benzene	5.6	1.0	ug/L
Ethylbenzene	1.1	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	4.7	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY	
		LIMITS	
Bromofluorobenzene	90	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	98	(73 - 135)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RAM WATER WASTE

## General Chemistry

Lot-Sample #....: I4C300228-010    Work Order #....: GC69W                      Matrix.....: WATER  
Date Sampled....: 03/26/04 17:27    Date Received...: 03/30/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
Chloride	241	100	mg/L	MCAWW 300.0A	ANALYSIS DATE	BATCH #
		Dilution Factor: 100		Analysis Time...: 10:29		MS Run #.....: 4099177

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOB WATER WASTE

## GC Volatiles

Lot-Sample #....: I4C300228-011 Work Order #....: GC6951AD

Matrix.....: WATER

Date Sampled...: 03/26/04 09:45 Date Received...: 03/30/04

MS Run #.....: 4093159

Prep Date.....: 04/01/04

Analysis Date...: 04/01/04

Prep Batch #....: 4093410

Analysis Time...: 20:15

Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/L
SURROGATE	PERCENT	RECOVERY	
	RECOVERY	LIMITS	
4-Bromofluorobenzene (GRO)	99	(75 - 122)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOB WATER WASTE

## GC Volatiles

Lot-Sample #....: I4C300228-011 Work Order #....: GC6951AA Matrix.....: WATER  
 Date Sampled...: 03/26/04 09:45 Date Received...: 03/30/04 MS Run #.....:  
 Prep Date.....: 04/01/04 Analysis Date...: 04/01/04  
 Prep Batch #....: 4093419 Analysis Time...: 20:15  
 Dilution Factor: 1 Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	101	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	96	(73 - 135)	

ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOB WATER WASTE

## General Chemistry

Lot-Sample #....: I4C300228-011 Work Order #....: GC695 Matrix.....: WATER  
Date Sampled...: 03/26/04 09:45 Date Received..: 03/30/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Chloride	25.8	20.0	mg/L	MCAWW 300.0A	04/07/04	4099353
		Dilution Factor: 20		Analysis Time..: 13:36	MS Run #.....:	4099177

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOB SOIL WASTE

## GC Volatiles

Lot-Sample #....: I4C300228-012 Work Order #....: GC6971AC Matrix.....: SOLID  
 Date Sampled...: 03/26/04 09:45 Date Received...: 03/30/04 MS Run #.....: 4096092  
 Prep Date.....: 04/02/04 Analysis Date...: 04/02/04  
 Prep Batch #....: 4096214 Analysis Time...: 15:37  
 Dilution Factor: 1  
 % Moisture.....: Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
Xylenes (total)	ND	5.0	ug/kg

SURROGATE	PERCENT	RECOVERY	
		LIMITS	
Bromofluorobenzene	64	(41 - 150)	
a,a,a-Trifluorotoluene (TFT)	90	(43 - 165)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOB SOIL WASTE

## GC Semivolatiles

Lot-Sample #....: I4C300228-012 Work Order #....: GC6971AL Matrix.....: SOLID  
 Date Sampled...: 03/26/04 09:45 Date Received...: 03/30/04 MS Run #.....: 4092050  
 Prep Date.....: 03/31/04 Analysis Date...: 04/08/04  
 Prep Batch #...: 4091424 Analysis Time...: 00:16  
 Dilution Factor: 1  
 % Moisture.....: Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Diesel Range Organics	130	15	mg/kg
SURROGATE		PERCENT	RECOVERY
o-Terphenyl	71	RECOVERY	LIMITS
Dotriacontane	210 *		(39 - 139)
			(13 - 161)

NOTE(S) :

- \* Surrogate recovery is outside stated control limits.

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOB SOIL WASTE

## TOTAL Metals

Lot-Sample #....: I4C300228-012 Matrix.....: SOLID  
 Date Sampled....: 03/26/04 09:45 Date Received...: 03/30/04  
 \* Moisture.....:

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
<b>Prep Batch #....: 4092199</b>						
Silver	ND	0.95	mg/kg	SW846 6010B	03/31-04/01/04	GC6971AJ
		Dilution Factor: 0.95		Analysis Time...: 16:15	MS Run #.....:	4092080
Arsenic	3.4	0.95	mg/kg	SW846 6010B	03/31-04/01/04	GC6971AD
		Dilution Factor: 0.95		Analysis Time...: 16:15	MS Run #.....:	4092080
Barium	172	19.0	mg/kg	SW846 6010B	03/31-04/01/04	GC6971AB
		Dilution Factor: 0.95		Analysis Time...: 16:15	MS Run #.....:	4092080
Cadmium	ND	0.48	mg/kg	SW846 6010B	03/31-04/01/04	GC6971AF
		Dilution Factor: 0.95		Analysis Time...: 16:15	MS Run #.....:	4092080
Chromium	7.4	0.95	mg/kg	SW846 6010B	03/31-04/01/04	GC6971AK
		Dilution Factor: 0.95		Analysis Time...: 16:15	MS Run #.....:	4092080
Lead	6.7	0.28	mg/kg	SW846 6010B	03/31-04/01/04	GC6971AG
		Dilution Factor: 0.95		Analysis Time...: 16:15	MS Run #.....:	4092080
Selenium	ND	0.48	mg/kg	SW846 6010B	03/31-04/01/04	GC6971AH
		Dilution Factor: 0.95		Analysis Time...: 16:15	MS Run #.....:	4092080
<b>Prep Batch #....: 4097173</b>						
Mercury	ND	0.071	mg/kg	SW846 7471A	04/06-04/07/04	GC6971AA
		Dilution Factor: 0.71		Analysis Time...: 15:41	MS Run #.....:	4097046

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: NEC SOIL WASTE

## GC Volatiles

Lot-Sample #....: I4C300228-013 Work Order #....: GC7AF1AC Matrix.....: SOLID  
 Date Sampled....: 03/26/04 10:35 Date Received...: 03/30/04 MS Run #.....: 4096092  
 Prep Date.....: 04/02/04 Analysis Date...: 04/02/04  
 Prep Batch #....: 4096214 Analysis Time...: 16:05  
 Dilution Factor: 1  
 % Moisture.....: Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
Xylenes (total)	ND	5.0	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	93	(41 - 150)
a,a,a-Trifluorotoluene (TFT)	103	(43 - 165)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: NEC SOIL WASTE

## GC Semivolatiles

Lot-Sample #....: I4C300228-013 Work Order #....: GC7AF1AL Matrix.....: SOLID  
Date Sampled....: 03/26/04 10:35 Date Received...: 03/30/04 MS Run #....: 4092050  
Prep Date.....: 03/31/04 Analysis Date...: 04/08/04  
Prep Batch #....: 4091424 Analysis Time...: 00:52  
Dilution Factor: 1  
% Moisture.....: Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Diesel Range Organics	ND	15	mg/kg
<hr/>			
SURROGATE	PERCENT	RECOVERY	LIMITS
o-Terphenyl	84	(39 - 139)	
Dotriacontane	88	(13 - 161)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: NEC SOIL WASTE

## TOTAL Metals

Lot-Sample #....: I4C300228-013

Matrix.....: SOLID

Date Sampled...: 03/26/04 10:35 Date Received...: 03/30/04

% Moisture.....:

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
<b>Prep Batch #....: 4092199</b>							
Silver	ND	0.87	mg/kg	SW846 6010B	Analysis Time...: 16:21	03/31-04/01/04	GC7AF1AJ MS Run #.....: 4092080
Arsenic	1.3	0.87	mg/kg	SW846 6010B	Analysis Time...: 16:21	03/31-04/01/04	GC7AF1AD MS Run #.....: 4092080
Barium	62.1	17.4	mg/kg	SW846 6010B	Analysis Time...: 16:21	03/31-04/01/04	GC7AF1AB MS Run #.....: 4092080
Cadmium	ND	0.44	mg/kg	SW846 6010B	Analysis Time...: 16:21	03/31-04/01/04	GC7AF1AF MS Run #.....: 4092080
Chromium	7.5	0.87	mg/kg	SW846 6010B	Analysis Time...: 16:21	03/31-04/01/04	GC7AF1AK MS Run #.....: 4092080
Lead	2.8	0.26	mg/kg	SW846 6010B	Analysis Time...: 16:21	03/31-04/01/04	GC7AF1AG MS Run #.....: 4092080
Selenium	ND	0.44	mg/kg	SW846 6010B	Analysis Time...: 16:21	03/31-04/01/04	GC7AF1AH MS Run #.....: 4092080
<b>Prep Batch #....: 4097173</b>							
Mercury	ND	0.095	mg/kg	SW846 7471A	Analysis Time...: 15:42	04/06-04/07/04	GC7AF1AA MS Run #.....: 4097046

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: NEC WATER WASTE

## GC Volatiles

Lot-Sample #....: I4C300228-014 Work Order #....: GC7AJ1AD Matrix.....: WATER  
Date Sampled....: 03/26/04 10:35 Date Received...: 03/30/04 MS Run #.....: 4093159  
Prep Date.....: 04/01/04 Analysis Date...: 04/01/04  
Prep Batch #....: 4093410 Analysis Time...: 20:44  
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/L
SURROGATE	PERCENT	RECOVERY	LIMITS
4-Bromofluorobenzene (GRO)	89		(75 - 122)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: NEC WATER WASTE

## GC Volatiles

Lot-Sample #....: I4C300228-014 Work Order #....: GC7AJ1AA Matrix.....: WATER  
 Date Sampled...: 03/26/04 10:35 Date Received..: 03/30/04 MS Run #.....:  
 Prep Date.....: 04/01/04 Analysis Date...: 04/01/04  
 Prep Batch #....: 4093419 Analysis Time...: 20:44  
 Dilution Factor: 1 Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	97	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	93	(73 - 135)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: NEC WATER WASTE

## General Chemistry

Lot-Sample #....: I4C300228-014 Work Order #....: GC7AJ Matrix.....: WATER  
Date Sampled...: 03/26/04 10:35 Date Received..: 03/30/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Chloride	41.4	20.0	mg/L	MCAWW 300.0A	04/07/04	4099353
		Dilution Factor: 20		Analysis Time.: 13:50	MS Run #.....:	4099177

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: ANTE HYDROBLAST WATER

## GC Volatiles

Lot-Sample #....: I4C300228-015 Work Order #....: GC7AN1AD Matrix.....: WATER  
Date Sampled....: 03/24/04 15:35 Date Received...: 03/30/04 MS Run #.....: 4093159  
Prep Date.....: 04/01/04 Analysis Date...: 04/01/04  
Prep Batch #....: 4093410 Analysis Time...: 21:14  
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/L
SURROGATE	PERCENT	RECOVERY	LIMITS
	RECOVERY		(75 - 122)
4-Bromofluorobenzene (GRO)	94		

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: ANTE HYDROBLAST WATER

## GC Volatiles

Lot-Sample #....: I4C300228-015 Work Order #....: GC7AN1AA Matrix.....: WATER  
 Date Sampled....: 03/24/04 15:35 Date Received...: 03/30/04 MS Run #.....:  
 Prep Date.....: 04/01/04 Analysis Date...: 04/01/04  
 Prep Batch #....: 4093419 Analysis Time...: 21:14  
 Dilution Factor: 1

Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	22	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	99		(81 - 119)
a,a,a-Trifluorotoluene (TFT)	95		(73 - 135)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: ANTR HYDROBLAST WATER

## General Chemistry

Lot-Sample #....: I4C300228-015    Work Order #....: GC7AN                      Matrix.....: WATER  
Date Sampled...: 03/24/04 15:35    Date Received...: 03/30/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Chloride	54.4	20.0	mg/L	MCAWW 300.0A	04/07/04	4099353
		Dilution Factor: 20		Analysis Time...: 15:53	MS Run #.....:	4099177

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: ANTR DILLING SOIL

## GC Volatiles

Lot-Sample #...: I4C300228-016 Work Order #...: GC7C51AC Matrix.....: SOLID  
 Date Sampled...: 03/25/04 15:10 Date Received...: 03/30/04 MS Run #.....: 4096092  
 Prep Date.....: 04/02/04 Analysis Date...: 04/02/04  
 Prep Batch #...: 4096214 Analysis Time...: 17:43  
 Dilution Factor: 0.99  
 % Moisture.....: Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
Xylenes (total)	ND	5.0	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	93	(41 - 150)	
a,a,a-Trifluorotoluene (TFT)	101	(43 - 165)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: ANTE DILLING SOIL

## GC Semivolatiles

Lot-Sample #....: I4C300228-016 Work Order #....: GC7C51AL Matrix.....: SOLID  
Date Sampled....: 03/25/04 15:10 Date Received...: 03/30/04 MS Run #.....: 4092050  
Prep Date.....: 03/31/04 Analysis Date...: 04/08/04  
Prep Batch #....: 4091424 Analysis Time...: 02:41  
Dilution Factor: 1  
% Moisture.....: Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	ND	15	mg/kg
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
o-Terphenyl	78	(39 - 139)	
Dotriacontane	88	(13 - 161)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: ANTE DILLING SOIL

## TOTAL Metals

Lot-Sample #....: I4C300228-016

Date Sampled....: 03/25/04 15:10 Date Received...: 03/30/04

% Moisture.....:

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 4092199						
Silver	ND	0.89	mg/kg	SW846 6010B	03/31-04/01/04	GC7C51AJ
		Dilution Factor: 0.89		Analysis Time...: 16:26	MS Run #.....:	4092080
Arsenic	1.0	0.89	mg/kg	SW846 6010B	03/31-04/01/04	GC7C51AD
		Dilution Factor: 0.89		Analysis Time...: 16:26	MS Run #.....:	4092080
Barium	38.1	17.8	mg/kg	SW846 6010B	03/31-04/01/04	GC7C51AB
		Dilution Factor: 0.89		Analysis Time...: 16:26	MS Run #.....:	4092080
Cadmium	ND	0.44	mg/kg	SW846 6010B	03/31-04/01/04	GC7C51AF
		Dilution Factor: 0.89		Analysis Time...: 16:26	MS Run #.....:	4092080
Chromium	2.9	0.89	mg/kg	SW846 6010B	03/31-04/01/04	GC7C51AK
		Dilution Factor: 0.89		Analysis Time...: 16:26	MS Run #.....:	4092080
Lead	1.8	0.27	mg/kg	SW846 6010B	03/31-04/01/04	GC7C51AG
		Dilution Factor: 0.89		Analysis Time...: 16:26	MS Run #.....:	4092080
Selenium	ND	0.44	mg/kg	SW846 6010B	03/31-04/01/04	GC7C51AH
		Dilution Factor: 0.89		Analysis Time...: 16:26	MS Run #.....:	4092080
Prep Batch #....: 4097173						
Mercury	ND	0.068	mg/kg	SW846 7471A	04/06-04/07/04	GC7C51AA
		Dilution Factor: 0.68		Analysis Time...: 15:46	MS Run #.....:	4097046

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: STATELINE WATER WASTE

## GC Volatiles

Lot-Sample #....: I4C300228-017 Work Order #....: GC7DH1AD Matrix.....: WATER  
Date Sampled...: 03/25/04 12:30 Date Received...: 03/30/04 MS Run #.....: 4093159  
Prep Date.....: 04/01/04 Analysis Date...: 04/01/04  
Prep Batch #....: 4093410 Analysis Time...: 21:44  
Dilution Factor: 1

Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Gasoline Range Organics	ND	100	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>
4-Bromofluorobenzene (GRO)	91	(75 - 122)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: STATELINE WATER WASTE

## GC Volatiles

Lot-Sample #....: I4C300228-017 Work Order #....: GC7DH1AA      Matrix.....: WATER  
 Date Sampled....: 03/25/04 12:30 Date Received...: 03/30/04      MS Run #.....:  
 Prep Date.....: 04/01/04      Analysis Date...: 04/01/04  
 Prep Batch #....: 4093419      Analysis Time...: 21:44  
 Dilution Factor: 1

Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	93	(73 - 135)

ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: STATELINE WATER WASTE

## General Chemistry

Lot-Sample #....: I4C300228-017 Work Order #....: GC7DH Matrix.....: WATER  
Date Sampled....: 03/25/04 12:30 Date Received...: 03/30/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Chloride	10800	2000	mg/L	MCAWW 300.0A	04/07/04	4099353
		Dilution Factor: 2000		Analysis Time..: 16:06		MS Run #.....: 4099177

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: STATELINE SOIL WASTE

## GC Volatiles

Lot-Sample #....: I4C300228-018 Work Order #....: GC7DJ1AC Matrix.....: SOLID  
 Date Sampled...: 03/25/04 12:30 Date Received...: 03/30/04 MS Run #.....: 4096092  
 Prep Date.....: 04/02/04 Analysis Date...: 04/02/04  
 Prep Batch #....: 4096214 Analysis Time...: 18:11  
 Dilution Factor: 1  
 % Moisture.....: Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
Xylenes (total)	ND	5.0	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u>	
		<u>LIMITS</u>	
Bromofluorobenzene	90	(41 - 150)	
a,a,a-Trifluorotoluene (TFT)	100	(43 - 165)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: STATELINE SOIL WASTE

## GC Semivolatiles

Lot-Sample #....: I4C300228-018 Work Order #....: GC7DJ1AL Matrix.....: SOLID  
 Date Sampled....: 03/25/04 12:30 Date Received...: 03/30/04 MS Run #.....: 4092050  
 Prep Date.....: 03/31/04 Analysis Date...: 04/08/04  
 Prep Batch #....: 4091424 Analysis Time...: 03:17  
 Dilution Factor: 1  
 % Moisture.....: Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Diesel Range Organics	ND	15	mg/kg
SURROGATE		PERCENT	RECOVERY
o-Terphenyl	94		(39 - 139)
Dotriacontane	98		(13 - 161)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: STATELINE SOIL WASTE

## TOTAL Metals

Lot-Sample #....: I4C300228-018   Matrix.....: SOLID  
 Date Sampled....: 03/25/04 12:30   Date Received..: 03/30/04  
 % Moisture.....:

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
<b>Prep Batch #....: 4092199</b>						
Silver	ND	0.72	mg/kg	SW846 6010B	03/31-04/01/04	GC7DJ1AJ
		Dilution Factor: 0.72		Analysis Time...: 17:39	MS Run #.....:	4092080
Arsenic	1.9	0.72	mg/kg	SW846 6010B	03/31-04/01/04	GC7DJ1AD
		Dilution Factor: 0.72		Analysis Time...: 17:39	MS Run #.....:	4092080
Barium	72.9	14.4	mg/kg	SW846 6010B	03/31-04/01/04	GC7DJ1AB
		Dilution Factor: 0.72		Analysis Time...: 17:39	MS Run #.....:	4092080
Cadmium	ND	0.36	mg/kg	SW846 6010B	03/31-04/01/04	GC7DJ1AF
		Dilution Factor: 0.72		Analysis Time...: 17:39	MS Run #.....:	4092080
Chromium	10.9	0.72	mg/kg	SW846 6010B	03/31-04/01/04	GC7DJ1AK
		Dilution Factor: 0.72		Analysis Time...: 17:39	MS Run #.....:	4092080
Lead	2.3	0.22	mg/kg	SW846 6010B	03/31-04/01/04	GC7DJ1AG
		Dilution Factor: 0.72		Analysis Time...: 17:39	MS Run #.....:	4092080
Selenium	ND	0.36	mg/kg	SW846 6010B	03/31-04/01/04	GC7DJ1AH
		Dilution Factor: 0.72		Analysis Time...: 17:39	MS Run #.....:	4092080
<b>Prep Batch #....: 4097173</b>						
Mercury	ND	0.096	mg/kg	SW846 7471A	04/06-04/07/04	GC7DJ1AA
		Dilution Factor: 0.96		Analysis Time...: 15:48	MS Run #.....:	4097046

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RATTLESNAKE WASTE

## GC Volatiles

Lot-Sample #....: I4C300228-019 Work Order #....: GC7DL1AD Matrix.....: WATER  
Date Sampled....: 03/25/04 14:30 Date Received...: 03/30/04 MS Run #.....: 4093159  
Prep Date.....: 04/01/04 Analysis Date...: 04/01/04  
Prep Batch #....: 4093410 Analysis Time...: 22:13  
Dilution Factor: 1 Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	120	100	ug/L
SURROGATE	PERCENT	RECOVERY	LIMITS
4-Bromofluorobenzene (GRO)	90		(75 - 122)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RATTLESNAKE WASTE

## GC Volatiles

Lot-Sample #....: I4C300228-019 Work Order #....: GC7DL1AA Matrix.....: WATER  
 Date Sampled....: 03/25/04 14:30 Date Received...: 03/30/04 MS Run #.....:  
 Prep Date.....: 04/01/04 Analysis Date...: 04/01/04  
 Prep Batch #....: 4093419 Analysis Time...: 22:13  
 Dilution Factor: 1

Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	12	1.0	ug/L
Toluene	24	1.0	ug/L
Xylenes (total)	4.3	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	103	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	108	(73 - 135)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RATTLESNAKE WASTE

## General Chemistry

Lot-Sample #....: I4C300228-019 Work Order #....: GC7DL Matrix.....: WATER  
Date Sampled....: 03/25/04 14:30 Date Received...: 03/30/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Chloride	1540	500	mg/L	MCAWW 300.0A	04/07/04	4099353
		Dilution Factor: 500		Analysis Time...: 16:19		MS Run #.....: 4099177

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RATTLESNAKE WASTE

## GC Volatiles

Lot-Sample #....: I4C300228-020 Work Order #....: GC7DV1AC Matrix.....: SOLID  
 Date Sampled....: 03/25/04 14:30 Date Received...: 03/30/04 MS Run #.....: 4096092  
 Prep Date.....: 04/02/04 Analysis Date...: 04/02/04  
 Prep Batch #....: 4096214 Analysis Time...: 18:40  
 Dilution Factor: 0.98  
 % Moisture.....: Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	4.9	ug/kg
Ethylbenzene	ND	4.9	ug/kg
Toluene	ND	4.9	ug/kg
Xylenes (total)	ND	4.9	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	92	(41 - 150)	
a,a,a-Trifluorotoluene (TFT)	95	(43 - 165)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RATTLESNAKE WASTE

## GC Semivolatiles

Lot-Sample #....: I4C300228-020 Work Order #....: GC7DV1AL Matrix.....: SOLID  
Date Sampled....: 03/25/04 14:30 Date Received...: 03/30/04 MS Run #.....: 4092050  
Prep Date.....: 03/31/04 Analysis Date...: 04/08/04  
Prep Batch #....: 4091424 Analysis Time...: 03:53  
Dilution Factor: 1  
% Moisture.....: Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	ND	15	mg/kg
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
o-Terphenyl	92	(39 - 139)	
Dotriacontane	88	(13 - 161)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RATTLESNAKE WASTE

## TOTAL Metals

Lot-Sample #....: I4C300228-020                                  Matrix.....: SOLID  
 Date Sampled...: 03/25/04 14:30    Date Received..: 03/30/04  
 % Moisture.....:

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
<b>Prep Batch #....: 4092199</b>						
Silver	ND	0.98	mg/kg	SW846 6010B	03/31-04/01/04	GC7DV1AJ
		Dilution Factor: 0.98		Analysis Time...: 17:45	MS Run #.....:	4092080
Arsenic	3.7	0.98	mg/kg	SW846 6010B	03/31-04/01/04	GC7DV1AD
		Dilution Factor: 0.98		Analysis Time...: 17:45	MS Run #.....:	4092080
Barium	1650	19.6	mg/kg	SW846 6010B	03/31-04/01/04	GC7DV1AE
		Dilution Factor: 0.98		Analysis Time...: 17:45	MS Run #.....:	4092080
Cadmium	ND	0.49	mg/kg	SW846 6010B	03/31-04/01/04	GC7DV1AF
		Dilution Factor: 0.98		Analysis Time...: 17:45	MS Run #.....:	4092080
Chromium	9.0	0.98	mg/kg	SW846 6010B	03/31-04/01/04	GC7DV1AK
		Dilution Factor: 0.98		Analysis Time...: 17:45	MS Run #.....:	4092080
Lead	3.2	0.29	mg/kg	SW846 6010B	03/31-04/01/04	GC7DV1AG
		Dilution Factor: 0.98		Analysis Time...: 17:45	MS Run #.....:	4092080
Selenium	ND	0.49	mg/kg	SW846 6010B	03/31-04/01/04	GC7DV1AH
		Dilution Factor: 0.98		Analysis Time...: 17:45	MS Run #.....:	4092080
<b>Prep Batch #....: 4097173</b>						
Mercury	ND	0.093	mg/kg	SW846 7471A	04/06-04/07/04	GC7DV1AA
		Dilution Factor: 0.93		Analysis Time...: 15:49	MS Run #.....:	4097046

## ARCADIS GURAGHTY &amp; MILLER INC

Client Sample ID: APEX 1 WATER

## GC Volatiles

Lot-Sample #....: I4C300228-021 Work Order #....: GC7EG1AD  
Date Sampled....: 03/25/04 11:40 Date Received...: 03/30/04  
Prep Date.....: 04/01/04 Analysis Date...: 04/02/04  
Prep Batch #....: 4093410 Analysis Time...: 03:22  
Dilution Factor: 1

Matrix.....: WATER  
MS Run #.....: 4093159

Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Gasoline Range Organics	670	100	ug/L
SURROGATE	PERCENT	RECOVERY	
4-Bromofluorobenzene (GRO)	RECOVERY	LIMITS	
	92	(75 - 122)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEX 1 WATER

## GC Volatiles

Lot-Sample #....: I4C300228-021 Work Order #....: GC7EG1AA Matrix.....: WATER  
 Date Sampled....: 03/25/04 11:40 Date Received...: 03/30/04 MS Run #.....:  
 Prep Date.....: 04/01/04 Analysis Date...: 04/02/04  
 Prep Batch #....: 4093419 Analysis Time...: 03:22  
 Dilution Factor: 1 Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	68	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	56	1.0	ug/L
Xylenes (total)	68	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	98	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	218 *	(73 - 135)

NOTE(S) :

- \* Surrogate recovery is outside stated control limits.
- Surrogates outside acceptance criteria due to coelution.
- Sample analyzed after clean blank that was analyzed 4/2/04 02:41.

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEX 1 WATER

## General Chemistry

Lot-Sample #....: I4C300228-021 Work Order #....: GC7EG Matrix.....: WATER  
Date Sampled....: 03/25/04 11:40 Date Received...: 03/30/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Chloride	172	50.0	mg/l	MCAWW 300.0A	04/07/04	4099353
		Dilution Factor: 50		Analysis Time...: 12:16	MS Run #.....:	4099177

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEX 2 WATER

## GC Volatiles

Lot-Sample #....: I4C300228-022 Work Order #....: GC7EM1AD Matrix.....: WATER  
Date Sampled....: 03/25/04 11:40 Date Received...: 03/30/04 MS Run #.....: 4097096  
Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
Prep Batch #....: 4097235 Analysis Time...: 22:49  
Dilution Factor: 2

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	2600	200	ug/L
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
4-Bromofluorobenzene (GRO)	113	(75 - 122)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEX 2 WATER

## GC Volatiles

Lot-Sample #....: I4C300228-022 Work Order #....: GC7EM1AA Matrix.....: WATER  
 Date Sampled....: 03/25/04 11:40 Date Received...: 03/30/04 MS Run #.....: 4097107  
 Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
 Prep Batch #....: 4097248 Analysis Time...: 22:49  
 Dilution Factor: 2 Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	10	2.0	ug/L
Ethylbenzene	28	2.0	ug/L
Toluene	11	2.0	ug/L
Xylenes (total)	440	6.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	102	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	103	(73 - 135)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEX 2 WATER

## General Chemistry

Lot-Sample #....: I4C300228-022 Work Order #....: GC7EM Matrix.....: WATER  
Date Sampled...: 03/25/04 11:40 Date Received...: 03/30/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Chloride	115	50.0	mg/L	MCAWW 300.0A	04/07/04	4099353
		Dilution Factor: 50		Analysis Time...: 12:29	MS Run #.....:	4099177

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEX SOIL

## GC Volatiles

Lot-Sample #....: I4C300228-023 Work Order #....: GC7EP1AC Matrix.....: SOLID  
 Date Sampled...: 03/25/04 12:00 Date Received...: 03/30/04 MS Run #.....: 4096092  
 Prep Date.....: 04/02/04 Analysis Date...: 04/02/04  
 Prep Batch #....: 4096214 Analysis Time...: 19:08  
 Dilution Factor: 0.98  
 % Moisture.....: Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	4.9	ug/kg
Ethylbenzene	ND	4.9	ug/kg
Toluene	ND	4.9	ug/kg
Xylenes (total)	ND	4.9	ug/kg
<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>	
		(41 - 150)	(43 - 165)
Bromofluorobenzene	88		
a,a,a-Trifluorotoluene (TFT)	101		

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEX SOIL

## GC Semivolatiles

Lot-Sample #...: I4C300228-023 Work Order #...: GC7EP1AL Matrix.....: SOLID  
Date Sampled...: 03/25/04 12:00 Date Received...: 03/30/04 MS Run #.....: 4092050  
Prep Date.....: 03/31/04 Analysis Date...: 04/08/04  
Prep Batch #...: 4091424 Analysis Time...: 04:30  
Dilution Factor: 1  
% Moisture.....: Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Diesel Range Organics	38	15	mg/kg
SURROGATE		PERCENT	RECOVERY
o-Terphenyl	107	(39 - 139)	
Dotriacontane	97	(13 - 161)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEX SOIL

## TOTAL Metals

Lot-Sample #....: I4C300228-023

Matrix.....: SOLID

Date Sampled...: 03/25/04 12:00 Date Received...: 03/30/04

% Moisture.....:

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
<b>Prep Batch #....: 4092199</b>						
Silver	ND	0.74	mg/kg	SW846 6010B	03/31-04/01/04	GC7EP1AJ
		Dilution Factor: 0.74		Analysis Time...: 17:51	MS Run #.....:	4092080
Arsenic	1.2	0.74	mg/kg	SW846 6010B	03/31-04/01/04	GC7EP1AD
		Dilution Factor: 0.74		Analysis Time...: 17:51	MS Run #.....:	4092080
Barium	94.2	14.8	mg/kg	SW846 6010B	03/31-04/01/04	GC7EP1AE
		Dilution Factor: 0.74		Analysis Time...: 17:51	MS Run #.....:	4092080
Cadmium	ND	0.37	mg/kg	SW846 6010B	03/31-04/01/04	GC7EP1AF
		Dilution Factor: 0.74		Analysis Time...: 17:51	MS Run #.....:	4092080
Chromium	3.7	0.74	mg/kg	SW846 6010B	03/31-04/01/04	GC7EP1AK
		Dilution Factor: 0.74		Analysis Time...: 17:51	MS Run #.....:	4092080
Lead	1.3	0.22	mg/kg	SW846 6010B	03/31-04/01/04	GC7EP1AG
		Dilution Factor: 0.74		Analysis Time...: 17:51	MS Run #.....:	4092080
Selenium	ND	0.37	mg/kg	SW846 6010B	03/31-04/01/04	GC7EP1AH
		Dilution Factor: 0.74		Analysis Time...: 17:51	MS Run #.....:	4092080
<b>Prep Batch #....: 4097173</b>						
Mercury	ND	0.076	mg/kg	SW846 7471A	04/06-04/07/04	GC7EP1AA
		Dilution Factor: 0.76		Analysis Time...: 15:50	MS Run #.....:	4097046

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBBSGP-MWB

## GC Volatiles

Lot-Sample #....: I4C300228-024 Work Order #....: GC7E31AC Matrix.....: WATER  
Date Sampled....: 03/24/04 16:25 Date Received...: 03/30/04 MS Run #.....: 4093159  
Prep Date.....: 04/01/04 Analysis Date...: 04/02/04  
Prep Batch #....: 4093410 Analysis Time...: 03:51  
Dilution Factor: 1 Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/L
SURROGATE	PERCENT	RECOVERY	LIMITS
	RECOVERY		(75 - 122)
4-Bromofluorobenzene (GRO)	93		

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBBSGP-MWE

## GC Volatiles

Lot-Sample #....: I4C300228-024 Work Order #....: GC7E31AA Matrix.....: WATER  
 Date Sampled....: 03/24/04 16:25 Date Received...: 03/30/04 MS Run #.....:  
 Prep Date.....: 04/01/04 Analysis Date...: 04/02/04  
 Prep Batch #....: 4093419 Analysis Time...: 03:51  
 Dilution Factor: 1

Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	98	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	95	(73 - 135)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBBSPGP-MWF

## GC/MS Volatiles

Lot-Sample #....: I4C300228-025 Work Order #....: GC7FX1AA Matrix.....: WATER  
 Date Sampled....: 03/24/04 18:20 Date Received...: 03/30/04 MS Run #.....: 4105065  
 Prep Date.....: 04/04/04 Analysis Date...: 04/04/04  
 Prep Batch #....: 4097412 Analysis Time...: 23:01  
 Dilution Factor: 1

Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	2.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chlorodibromomethane	ND	1.0	ug/L
Chloroethane	ND	2.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	2.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	2.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L

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## ARCADIS GURAGHTY &amp; MILLER INC

Client Sample ID: HOBBSGP-MWP

## GC/MS Volatiles

Lot-Sample #....: I4C300228-025 Work Order #....: GC7FX1AA Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Methylene chloride	ND	1.0	ug/L
Naphthalene	ND	2.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	2.0	ug/L
1,2,4-Trichloro- benzene	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Trichlorofluoromethane	ND	2.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Vinyl chloride	ND	2.0	ug/L
o-Xylene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	2.0	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	99	(75 - 135)
Toluene-d8	98	(91 - 128)
Dibromofluoromethane	98	(61 - 125)
1,2-Dichloroethane-d4	96	(57 - 116)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBBSGP-MWD

## GC/MS Semivolatiles

Lot-Sample #....: I4C300228-026 Work Order #....: GC7F01AR Matrix.....: WATER  
 Date Sampled....: 03/24/04 17:05 Date Received...: 03/30/04 MS Run #.....:  
 Prep Date.....: 03/31/04 Analysis Date...: 04/05/04  
 Prep Batch #....: 4091417 Analysis Time...: 20:12  
 Dilution Factor: 0.98 Method.....: SW846 8270C

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Acenaphthene	ND	9.8	ug/L
Acenaphthylene	ND	9.8	ug/L
Anthracene	ND	9.8	ug/L
Benz(a)anthracene	ND	9.8	ug/L
Benzo(b)fluoranthene	ND	9.8	ug/L
Benzo(k)fluoranthene	ND	9.8	ug/L
Benzo(ghi)perylene	ND	9.8	ug/L
Benzo(a)pyrene	ND	9.8	ug/L
bis(2-Chloroethoxy) methane	ND	9.8	ug/L
bis(2-Chloroethyl)- ether	ND	9.8	ug/L
bis(2-Chloroisopropyl) ether	ND	9.8	ug/L
bis(2-Ethylhexyl) phthalate	ND	9.8	ug/L
4-Bromophenyl phenyl ether	ND	9.8	ug/L
Butyl benzyl phthalate	ND	9.8	ug/L
4-Chloroaniline	ND	9.8	ug/L
4-Chloro-3-methylphenol	ND	9.8	ug/L
2-Chloronaphthalene	ND	9.8	ug/L
2-Chlorophenol	ND	9.8	ug/L
4-Chlorophenyl phenyl ether	ND	9.8	ug/L
Chrysene	ND	9.8	ug/L
Dibenz(a,h)anthracene	ND	9.8	ug/L
Dibenzofuran	ND	9.8	ug/L
Di-n-butyl phthalate	ND	9.8	ug/L
1,2-Dichlorobenzene	ND	9.8	ug/L
1,3-Dichlorobenzene	ND	9.8	ug/L
1,4-Dichlorobenzene	ND	9.8	ug/L
3,3'-Dichlorobenzidine	ND	49	ug/L
2,4-Dichlorophenol	ND	9.8	ug/L
Diethyl phthalate	ND	9.8	ug/L
2,4-Dimethylphenol	ND	9.8	ug/L
Dimethyl phthalate	ND	9.8	ug/L
4,6-Dinitro- 2-methylphenol	ND	49	ug/L

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## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBBSGP-MWD

## GC/MS Semivolatiles

Lot-Sample #....: I4C300228-026 Work Order #....: GC7F01AR Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
2,4-Dinitrophenol	ND	49	ug/L
2,4-Dinitrotoluene	ND	9.8	ug/L
2,6-Dinitrotoluene	ND	9.8	ug/L
Di-n-octyl phthalate	ND	9.8	ug/L
Fluoranthene	ND	9.8	ug/L
Fluorene	ND	9.8	ug/L
Hexachlorobenzene	ND	9.8	ug/L
Hexachlorobutadiene	ND	9.8	ug/L
Hexachlorocyclopenta- diene	ND	49	ug/L
Hexachloroethane	ND	9.8	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.8	ug/L
Isophorone	ND	9.8	ug/L
2-Methylnaphthalene	ND	9.8	ug/L
2-Methylphenol	ND	9.8	ug/L
4-Methylphenol	ND	20	ug/L
Naphthalene	ND	9.8	ug/L
2-Nitroaniline	ND	49	ug/L
3-Nitroaniline	ND	49	ug/L
4-Nitroaniline	ND	49	ug/L
Nitrobenzene	ND	9.8	ug/L
2-Nitrophenol	ND	9.8	ug/L
4-Nitrophenol	ND	49	ug/L
N-Nitrosodiphenylamine	ND	9.8	ug/L
N-Nitrosodi-n-propyl- amine	ND	9.8	ug/L
Pentachlorophenol	ND	49	ug/L
Phenanthrene	ND	9.8	ug/L
Phenol	ND	9.8	ug/L
Pyrene	ND	9.8	ug/L
1,2,4-Trichloro- benzene	ND	9.8	ug/L
2,4,5-Trichloro- phenol	ND	9.8	ug/L
2,4,6-Trichloro- phenol	ND	9.8	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Nitrobenzene-d5	94	(60 - 110)
2-Fluorobiphenyl	95	(59 - 117)
Terphenyl-d14	97	(63 - 120)
2-Fluorophenol	88	(38 - 122)
Phenol-d5	94	(36 - 124)
2,4,6-Tribromophenol	105	(52 - 133)

ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBBSGP-MWD

## GC Volatiles

Lot-Sample #....: I4C300228-026 Work Order #....: GC7F01AP Matrix.....: WATER  
Date Sampled....: 03/24/04 17:05 Date Received...: 03/30/04 MS Run #.....: 4097079  
Prep Date.....: 04/02/04 Analysis Date...: 04/03/04  
Prep Batch #....: 4097209 Analysis Time...: 15:16  
Dilution Factor: 1 Method.....: RSK SOP-175

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Methane	1.9	0.50	ug/L

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBBSGP-MWD

## GC Volatiles

Lot-Sample #....: I4C300228-026 Work Order #....: GC7F01AC Matrix.....: WATER  
Date Sampled....: 03/24/04 17:05 Date Received...: 03/30/04 MS Run #.....: 4093159  
Prep Date.....: 04/01/04 Analysis Date...: 04/02/04  
Prep Batch #....: 4093410 Analysis Time...: 04:49  
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/L
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	(75 - 122)
	88		

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBBSPG-MWD

## GC Volatiles

Lot-Sample #....: I4C300228-026 Work Order #....: GC7F01AA Matrix.....: WATER  
 Date Sampled....: 03/24/04 17:05 Date Received...: 03/30/04 MS Run #.....:  
 Prep Date.....: 04/01/04 Analysis Date...: 04/02/04  
 Prep Batch #....: 4093419 Analysis Time...: 04:20  
 Dilution Factor: 1 Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	95	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	91	(73 - 135)

ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBBSGP-MWD

## TOTAL Metals

Lot-Sample #....: I4C300228-026 Matrix.....: WATER  
Date Sampled...: 03/24/04 17:05 Date Received...: 03/30/04

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK	ANALYSIS DATE	ORDER #
		LIMIT	UNITS						
Prep Batch #....:	4092480								
Mercury	ND	0.00020	mg/L		SW846 7470A		04/02/04		GC7F01AL
		Dilution Factor:	1		Analysis Time...:	00:00		MS Run #.....:	4092218

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBBSGP-MWD

## DISSOLVED Metals

Lot-Sample #....: I4C300228-026

Matrix.....: WATER

Date Sampled....: 03/24/04 17:05 Date Received...: 03/30/04

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
<b>Prep Batch #....: 4100141</b>						
Silver	ND	0.0050	mg/L	SW846 6010B	04/09/04	GC7F01AU
		Dilution Factor: 1		Analysis Time...: 11:30	MS Run #.....:	4100025
Arsenic	0.021	0.010	mg/L	SW846 6010B	04/09/04	GC7F01AV
		Dilution Factor: 1		Analysis Time...: 11:30	MS Run #.....:	4100025
Barium	0.30	0.20	mg/L	SW846 6010B	04/09/04	GC7F01AW
		Dilution Factor: 1		Analysis Time...: 11:30	MS Run #.....:	4100025
Cadmium	ND	0.0020	mg/L	SW846 6010B	04/09/04	GC7F01AX
		Dilution Factor: 1		Analysis Time...: 11:30	MS Run #.....:	4100025
Chromium	0.026	0.0050	mg/L	SW846 6010B	04/09/04	GC7F01A0
		Dilution Factor: 1		Analysis Time...: 11:30	MS Run #.....:	4100025
Lead	0.0044	0.0030	mg/L	SW846 6010B	04/09/04	GC7F01A1
		Dilution Factor: 1		Analysis Time...: 11:30	MS Run #.....:	4100025
Selenium	0.031	0.0050	mg/L	SW846 6010B	04/09/04	GC7F01A2
		Dilution Factor: 1		Analysis Time...: 11:30	MS Run #.....:	4100025

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBBSGP-MWD

## General Chemistry

Lot-Sample #....: I4C300228-026    Work Order #....: GC7F0              Matrix.....: WATER  
 Date Sampled...: 03/24/04 17:05    Date Received...: 03/30/04

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Nitrate-Nitrite	822	100	mg/L	MCAWW 353.2	04/08/04	4099278
		Dilution Factor:	1000	Analysis Time...: 10:00	MS Run #.....:	4099133
Sulfate	64.3	20.0	mg/L	MCAWW 300.0A	04/06/04	4098195
		Dilution Factor:	20	Analysis Time...: 11:33	MS Run #.....:	4098093
Total Alkalinity	166	5.0	mg/L	MCAWW 310.1	04/02/04	4094125
		Dilution Factor:	1	Analysis Time...: 14:00	MS Run #.....:	4094018

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBBSGP-MWC

## GC Volatiles

Lot-Sample #....: I4C300228-027 Work Order #....: GC7GJ1AC Matrix.....: WATER  
Date Sampled...: 03/24/04 18:10 Date Received...: 03/30/04 MS Run #.....: 4093159  
Prep Date.....: 04/01/04 Analysis Date...: 04/02/04  
Prep Batch #....: 4093410 Analysis Time...: 05:18  
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	REPORTING		
	RESULT	LIMIT	UNITS
Gasoline Range Organics	120	100	ug/L
SURROGATE	PERCENT	RECOVERY	
	RECOVERY	LIMITS	(75 - 122)
4-Bromofluorobenzene (GRO)	94		

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBBSGP-MWC

## GC Volatiles

Lot-Sample #....: I4C300228-027 Work Order #....: GC7GJ1AA Matrix.....: WATER  
 Date Sampled...: 03/24/04 18:10 Date Received...: 03/30/04 MS Run #.....:  
 Prep Date.....: 04/01/04 Analysis Date...: 04/02/04  
 Prep Batch #....: 4093419 Analysis Time...: 05:18  
 Dilution Factor: 1 Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	3.1	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	3.5	1.0	ug/L
Xylenes (total)	14	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	94	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	140 *	(73 - 135)

## NOTE(S) :

- Surrogate recovery is outside stated control limits.
- Sample analyzed after clean blank that was analyzed 4/2/04 02:41.  
Surrogates outside acceptance criteria due to coelution.

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBBSGP-MWB

## GC Volatiles

Lot-Sample #....: I4C300228-028 Work Order #....: GC7GT1AF Matrix.....: WATER  
Date Sampled....: 03/24/04 17:55 Date Received...: 03/30/04 MS Run #.....: 4097079  
Prep Date.....: 04/02/04 Analysis Date...: 04/03/04  
Prep Batch #....: 4097209 Analysis Time...: 15:22  
Dilution Factor: 1

Method.....: RSK SOP-175

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Methane	2.5	0.50	ug/L

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBBSGP-MWB

## GC Volatiles

Lot-Sample #....: I4C300228-028 Work Order #....: GC7GT1AC Matrix.....: WATER  
Date Sampled...: 03/24/04 17:55 Date Received...: 03/30/04 MS Run #.....: 4097096  
Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
Prep Batch #....: 4097235 Analysis Time...: 23:17  
Dilution Factor: 2

Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Gasoline Range Organics	1700	200	ug/L
<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u>	
		<u>LIMITS</u>	
4-Bromofluorobenzene (GRO)	97	(75 - 122)	

## ARCADIS GURAGHTY &amp; MILLER INC

Client Sample ID: HOBBSGP-MWB

## GC Volatiles

Lot-Sample #....: I4C300228-028 Work Order #....: GC7GT1AA Matrix.....: WATER  
 Date Sampled....: 03/24/04 17:55 Date Received...: 03/30/04 MS Run #.....: 4097107  
 Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
 Prep Batch #....: 4097248 Analysis Time...: 23:17  
 Dilution Factor: 2

Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>
Benzene	47	2.0 ug/L
Ethylbenzene	22	2.0 ug/L
Toluene	220	2.0 ug/L
Xylenes (total)	230	6.0 ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	100	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	103	(73 - 135)

ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBBSGP-MWB

## General Chemistry

Lot-Sample #....: I4C300228-028    Work Order #....: GC7GT                Matrix.....: WATER  
 Date Sampled...: 03/24/04 17:55    Date Received..: 03/30/04

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Nitrate-Nitrite	298	20.0	mg/L	MCAWW 353.2	04/08/04	4099278
		Dilution Factor:	200	Analysis Time...: 10:00	MS Run #.....:	4099133
Sulfate	65.7	20.0	mg/L	MCAWW 300.0A	04/06/04	4098195
		Dilution Factor:	20	Analysis Time...: 11:46	MS Run #.....:	4098093
Total Alkalinity	212	5.0	mg/L	MCAWW 310.1	04/02/04	4094125
		Dilution Factor:	1	Analysis Time...: 14:00	MS Run #.....:	4094018

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBBSGP-MWA

## GC Volatiles

Lot-Sample #....: I4C300228-029 Work Order #....: GC7HQ1AF Matrix.....: WATER  
Date Sampled...: 03/24/04 17:35 Date Received...: 03/30/04 MS Run #.....: 4097079  
Prep Date.....: 04/02/04 Analysis Date...: 04/03/04  
Prep Batch #...: 4097209 Analysis Time...: 15:31  
Dilution Factor: 1

Method.....: RSK SOP-175

PARAMETER	RESULT	REPORTING		UNITS
		LIMIT		
Methane	1.6	0.50		ug/L

ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBBSGP-MWA

**GC Volatiles**

Lot-Sample #....: I4C300228-029 Work Order #....: GC7HQ1AC Matrix.....: WATER  
Date Sampled....: 03/24/04 17:35 Date Received...: 03/30/04 MS Run #.....: 4093159  
Prep Date.....: 04/01/04 Analysis Date...: 04/02/04  
Prep Batch #....: 4093410 Analysis Time...: 05:47  
Dilution Factor: 1 Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/L
SURROGATE	PERCENT	RECOVERY	LIMITS
4-Bromofluorobenzene (GRO)	RECOVERY 91	(75 - 122)	

## ARCADIS GERRAGHTY &amp; MILLER INC

Client Sample ID: HOBBSGP-MWA

## GC Volatiles

Lot-Sample #....: I4C300228-029 Work Order #....: GC7HQ1AA Matrix.....: WATER  
Date Sampled....: 03/24/04 17:35 Date Received...: 03/30/04 MS Run #.....:  
Prep Date.....: 04/01/04 Analysis Date...: 04/02/04  
Prep Batch #....: 4093419 Analysis Time...: 05:47  
Dilution Factor: 1 Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Bromofluorobenzene	95	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	93	(73 - 135)	

ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBBSGP-MWA

## General Chemistry

Lot-Sample #....: I4C300228-029    Work Order #....: GC7HQ              Matrix.....: WATER  
 Date Sampled...: 03/24/04 17:35    Date Received...: 03/30/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	
					ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite	22.2	5.0	mg/L	MCAWW 353.2	04/08/04	4099278
		Dilution Factor:	50	Analysis Time...: 10:00	MS Run #.....:	4099133
Sulfate	80.3	20.0	mg/L	MCAWW 300.0A	04/06/04	4098195
		Dilution Factor:	20	Analysis Time...: 11:59	MS Run #.....:	4098093
Total Alkalinity	165	5.0	mg/L	MCAWW 310.1	04/02/04	4094125
		Dilution Factor:	1	Analysis Time...: 14:00	MS Run #.....:	4094018

ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APRX-MW-7

## GC Volatiles

Lot-Sample #....: I4C300228-030 Work Order #....: GC7H71AF Matrix.....: WATER  
Date Sampled...: 03/26/04 07:55 Date Received..: 03/30/04 MS Run #.....: 4097079  
Prep Date.....: 04/02/04 Analysis Date...: 04/03/04  
Prep Batch #....: 4097209 Analysis Time...: 16:05  
Dilution Factor: 50

Method.....: RSK SOP-175

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Methane	2300	25	ug/L

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APEX-MW-7

## GC Volatiles

Lot-Sample #....: I4C300228-030 Work Order #....: GC7H71AC Matrix.....: WATER  
Date Sampled...: 03/26/04 07:55 Date Received...: 03/30/04 MS Run #.....: 4093159  
Prep Date.....: 04/01/04 Analysis Date...: 04/02/04  
Prep Batch #....: 4093410 Analysis Time...: 06:16  
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	830	100	ug/L
SURROGATE	PERCENT	RECOVERY	LIMITS
4-Bromofluorobenzene (GRO)	RECOVERY	(75 - 122)	
	97		

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: APRX-MW-7

## GC Volatiles

Lot-Sample #...: I4C300228-030 Work Order #...: GC7H71AA Matrix.....: WATER  
 Date Sampled...: 03/26/04 07:55 Date Received...: 03/30/04 MS Run #:.....:  
 Prep Date.....: 04/01/04 Analysis Date...: 04/02/04  
 Prep Batch #...: 4093419 Analysis Time..: 06:16  
 Dilution Factor: 1 Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	170	1.0	ug/L
Ethylbenzene	27	1.0	ug/L
Toluene	28	1.0	ug/L
Xylenes (total)	40	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u>	
		<u>LIMITS</u>	
Bromofluorobenzene	99	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	128	(73 - 135)	

## NOTE(S) :

Sample analyzed after clean blank that was analyzed 4/2/04 02:41.

ARCADIS GURAGHTY &amp; MILLER INC

Client Sample ID: APEX-MW-7

## General Chemistry

Lot-Sample #....: I4C300228-030    Work Order #....: GC7H7                Matrix.....: WATER  
 Date Sampled....: 03/26/04 07:55    Date Received...: 03/30/04

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Nitrate-Nitrite	ND	0.10	mg/L	MCAWW 353.2	04/08/04	4099278
		Dilution Factor:	1	Analysis Time...: 10:00	MS Run #.....:	4099133
Sulfate	539	20.0	mg/L	MCAWW 300.0A	04/06/04	4098195
		Dilution Factor:	20	Analysis Time...: 12:13	MS Run #.....:	4098093
Total Alkalinity	875	5.0	mg/L	MCAWW 310.1	04/06/04	4097275
		Dilution Factor:	1	Analysis Time...: 10:00	MS Run #.....:	4097120

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBSB-I 0-1'

## GC Volatiles

Lot-Sample #....: I4C300228-031 Work Order #....: GC7JE1AC Matrix.....: SOLID  
 Date Sampled...: 03/23/04 10:30 Date Received...: 03/30/04 MS Run #.....: 4096092  
 Prep Date.....: 04/02/04 Analysis Date...: 04/02/04  
 Prep Batch #....: 4096214 Analysis Time...: 19:36  
 Dilution Factor: 0.97  
 % Moisture.....: Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	4.8	ug/kg
Ethylbenzene	ND	4.8	ug/kg
Toluene	ND	4.8	ug/kg
Xylenes (total)	ND	4.8	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u>	
		<u>LIMITS</u>	
Bromofluorobenzene	83	(41 - 150)	
a,a,a-Trifluorotoluene (TFT)	108	(43 - 165)	

## ARCADIS GERRAGHTY &amp; MILLER INC

Client Sample ID: HOBSB-I 0-1'

## GC Semivolatiles

Lot-Sample #....: I4C300228-031 Work Order #....: GC7JE1AL Matrix.....: SOLID  
 Date Sampled....: 03/23/04 10:30 Date Received...: 03/30/04 MS Run #.....: 4092050  
 Prep Date.....: 03/31/04 Analysis Date...: 04/08/04  
 Prep Batch #....: 4091424 Analysis Time...: 05:06  
 Dilution Factor: 1  
 % Moisture.....: Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Diesel Range Organics	18	15	mg/kg
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
o-Terphenyl	65	(39 - 139)	
Dotriacontane	199 *	(13 - 161)	

NOTE(S) :

- \* Surrogate recovery is outside stated control limits.

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOSSB-I 0-1'

## TOTAL Metals

Lot-Sample #....: I4C300228-031  
 Date Sampled....: 03/23/04 10:30 Date Received..: 03/30/04  
 % Moisture.....:

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
<b>Prep Batch #....: 4092199</b>						
Silver	ND	0.78	mg/kg	SW846 6010B	03/31-04/01/04	GC7JE1AJ
		Dilution Factor: 0.78		Analysis Time...: 17:56	MS Run #.....:	4092080
Arsenic	6.1	0.78	mg/kg	SW846 6010B	03/31-04/01/04	GC7JE1AD
		Dilution Factor: 0.78		Analysis Time...: 17:56	MS Run #.....:	4092080
Barium	142	15.6	mg/kg	SW846 6010B	03/31-04/01/04	GC7JE1AE
		Dilution Factor: 0.78		Analysis Time...: 17:56	MS Run #.....:	4092080
Cadmium	ND	0.39	mg/kg	SW846 6010B	03/31-04/01/04	GC7JE1AF
		Dilution Factor: 0.78		Analysis Time...: 17:56	MS Run #.....:	4092080
Chromium	8.0	0.78	mg/kg	SW846 6010B	03/31-04/01/04	GC7JE1AK
		Dilution Factor: 0.78		Analysis Time...: 17:56	MS Run #.....:	4092080
Lead	5.0	0.23	mg/kg	SW846 6010B	03/31-04/01/04	GC7JE1AG
		Dilution Factor: 0.78		Analysis Time...: 17:56	MS Run #.....:	4092080
Selenium	0.47	0.39	mg/kg	SW846 6010B	03/31-04/01/04	GC7JE1AH
		Dilution Factor: 0.78		Analysis Time...: 17:56	MS Run #.....:	4092080
<b>Prep Batch #....: 4097173</b>						
Mercury	ND	0.070	mg/kg	SW846 7471A	04/06-04/07/04	GC7JE1AA
		Dilution Factor: 0.7		Analysis Time...: 15:51	MS Run #.....:	4097046

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBSB-J 0-1'

## GC Volatiles

Lot-Sample #....: I4C300228-032   Work Order #....: GC7J01AC   Matrix.....: SOLID  
 Date Sampled....: 03/23/04 10:40   Date Received...: 03/30/04   MS Run #.....: 4096092  
 Prep Date.....: 04/02/04   Analysis Date...: 04/02/04  
 Prep Batch #....: 4096214   Analysis Time...: 20:04  
 Dilution Factor: 1.01  
 % Moisture.....: Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
Xylenes (total)	ND	5.0	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u>	
		<u>LIMITS</u>	
Bromofluorobenzene	84	(41 - 150)	
a,a,a-Trifluorotoluene (TFT)	104	(43 - 165)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBSB-J 0-1'

## GC Semivolatiles

Lot-Sample #....: I4C300228-032 Work Order #....: GC7J01AL Matrix.....: SOLID  
Date Sampled....: 03/23/04 10:40 Date Received...: 03/30/04 MS Run #.....: 4092050  
Prep Date.....: 03/31/04 Analysis Date...: 04/08/04  
Prep Batch #....: 4091424 Analysis Time...: 05:42  
Dilution Factor: 1  
% Moisture.....: Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Diesel Range Organics	ND	15	mg/kg
<hr/>			
SURROGATE	PERCENT	RECOVERY	LIMITS
o-Terphenyl	65	(39 - 139)	
Dotriacontane	155	(13 - 161)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBSB-J 0-1'

## TOTAL Metals

Lot-Sample #....: I4C300228-032

Date Sampled....: 03/23/04 10:40 Date Received...: 03/30/04

% Moisture.....:

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
<b>Prep Batch #....: 4092199</b>							
Silver	ND	0.81	mg/kg	SW846 6010B	Analysis Time...: 18:02	03/31-04/01/04 GC7J01AJ	MS Run #.....: 4092080
		Dilution Factor: 0.81					
Arsenic	6.1	0.81	mg/kg	SW846 6010B	Analysis Time...: 18:02	03/31-04/01/04 GC7J01AD	MS Run #.....: 4092080
		Dilution Factor: 0.81					
Barium	173	16.2	mg/kg	SW846 6010B	Analysis Time...: 18:02	03/31-04/01/04 GC7J01AE	MS Run #.....: 4092080
		Dilution Factor: 0.81					
Cadmium	ND	0.40	mg/kg	SW846 6010B	Analysis Time...: 18:02	03/31-04/01/04 GC7J01AF	MS Run #.....: 4092080
		Dilution Factor: 0.81					
Chromium	2.4	0.81	mg/kg	SW846 6010B	Analysis Time...: 18:02	03/31-04/01/04 GC7J01AK	MS Run #.....: 4092080
		Dilution Factor: 0.81					
Lead	2.3	0.24	mg/kg	SW846 6010B	Analysis Time...: 18:02	03/31-04/01/04 GC7J01AG	MS Run #.....: 4092080
		Dilution Factor: 0.81					
Selenium	ND	0.40	mg/kg	SW846 6010B	Analysis Time...: 18:02	03/31-04/01/04 GC7J01AH	MS Run #.....: 4092080
		Dilution Factor: 0.81					
<b>Prep Batch #....: 4097173</b>							
Mercury	ND	0.083	mg/kg	SW846 7471A	Analysis Time...: 15:53	04/06-04/07/04 GC7J01AA	MS Run #.....: 4097046
		Dilution Factor: 0.83					

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBSB-J 1-1.5'

## GC Volatiles

Lot-Sample #....: I4C300228-033 Work Order #....: GC7J51AC Matrix.....: SOLID  
Date Sampled....: 03/23/04 10:40 Date Received...: 03/30/04 MS Run #.....: 4096092  
Prep Date.....: 04/02/04 Analysis Date...: 04/02/04  
Prep Batch #....: 4096214 Analysis Time...: 20:33  
Dilution Factor: 1  
% Moisture.....: Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
Xylenes (total)	ND	5.0	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	90	(41 - 150)
a,a,a-Trifluorotoluene (TFT)	98	(43 - 165)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBSB-J 1-1.5'

## GC Semivolatiles

Lot-Sample #....: I4C300228-033 Work Order #....: GC7J51AL Matrix.....: SOLID  
 Date Sampled....: 03/23/04 10:40 Date Received...: 03/30/04 MS Run #.....: 4092050  
 Prep Date.....: 03/31/04 Analysis Date...: 04/08/04  
 Prep Batch #....: 4091424 Analysis Time...: 06:18  
 Dilution Factor: 1  
 \* Moisture.....: Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Diesel Range Organics	ND	15	mg/kg
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
o-Terphenyl	64	(39 - 139)	
Dotriacontane	109	(13 - 161)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBSB-J 1-1.5'

## TOTAL Metals

Lot-Sample #....: I4C300228-033  
 Date Sampled...: 03/23/04 10:40 Date Received..: 03/30/04  
 % Moisture.....:

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
<b>Prep Batch #....: 4092199</b>						
Silver	ND	0.81	mg/kg	SW846 6010B	03/31-04/01/04	GC7J51AJ
		Dilution Factor: 0.81		Analysis Time...: 18:07	MS Run #.....:	4092080
Arsenic	6.2	0.81	mg/kg	SW846 6010B	03/31-04/01/04	GC7J51AD
		Dilution Factor: 0.81		Analysis Time...: 18:07	MS Run #.....:	4092080
Barium	454	16.2	mg/kg	SW846 6010B	03/31-04/01/04	GC7J51AB
		Dilution Factor: 0.81		Analysis Time...: 18:07	MS Run #.....:	4092080
Cadmium	ND	0.40	mg/kg	SW846 6010B	03/31-04/01/04	GC7J51AF
		Dilution Factor: 0.81		Analysis Time...: 18:07	MS Run #.....:	4092080
Chromium	1.4	0.81	mg/kg	SW846 6010B	03/31-04/01/04	GC7J51AK
		Dilution Factor: 0.81		Analysis Time...: 18:07	MS Run #.....:	4092080
Lead	0.41	0.24	mg/kg	SW846 6010B	03/31-04/01/04	GC7J51AG
		Dilution Factor: 0.81		Analysis Time...: 18:07	MS Run #.....:	4092080
Selenium	ND	0.40	mg/kg	SW846 6010B	03/31-04/01/04	GC7J51AH
		Dilution Factor: 0.81		Analysis Time...: 18:07	MS Run #.....:	4092080
<b>Prep Batch #....: 4097173</b>						
Mercury	ND	0.10	mg/kg	SW846 7471A	04/06-04/07/04	GC7J51AA
		Dilution Factor: 1		Analysis Time...: 15:54	MS Run #.....:	4097046

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBSB-J 1.5-2'

## GC Volatiles

Lot-Sample #....: I4C300228-034 Work Order #....: GC7KA1AC Matrix.....: SOLID  
 Date Sampled....: 03/23/04 10:40 Date Received...: 03/30/04 MS Run #.....: 4096092  
 Prep Date.....: 04/02/04 Analysis Date...: 04/02/04  
 Prep Batch #....: 4096214 Analysis Time...: 21:01  
 Dilution Factor: 0.97  
 % Moisture.....:

Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	ND	4.8	ug/kg
Ethylbenzene	ND	4.8	ug/kg
Toluene	ND	4.8	ug/kg
Xylenes (total)	ND	4.8	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	88	(41 - 150)
a,a,a-Trifluorotoluene (TFT)	100	(43 - 165)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBSB-J 1.5-2'

## GC Semivolatiles

Lot-Sample #....: I4C300228-034 Work Order #....: GC7KA1AL Matrix.....: SOLID  
 Date Sampled...: 03/23/04 10:40 Date Received...: 03/30/04 MS Run #.....: 4092050  
 Prep Date.....: 03/31/04 Analysis Date...: 04/08/04  
 Prep Batch #....: 4091424 Analysis Time...: 06:55  
 Dilution Factor: 10  
 % Moisture.....: Method.....: SW846 8015B

<u>PARAMETER</u>	<u>REPORTING</u>		
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>
Diesel Range Organics	ND	150	mg/kg
<hr/>			
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
	<u>RECOVERY</u>	<u>LIMITS</u>	
o-Terphenyl	64	(39 - 139)	
Dotriacontane	119	(13 - 161)	

NOTE(S) :

Elevated reporting limit due to presence of lube oil.

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBSB-J 1.5-2'

## TOTAL Metals

Lot-Sample #....: I4C300228-034

Matrix.....: SOLID

Date Sampled...: 03/23/04 10:40 Date Received..: 03/30/04

\* Moisture.....:

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
<b>Prep Batch #....: 4092199</b>						
Silver	ND	0.82	mg/kg	SW846 6010B	03/31-04/01/04	GC7KA1AJ
		Dilution Factor: 0.82		Analysis Time...: 18:13	MS Run #.....:	4092080
Arsenic	6.0	0.82	mg/kg	SW846 6010B	03/31-04/01/04	GC7KA1AD
		Dilution Factor: 0.82		Analysis Time...: 18:13	MS Run #.....:	4092080
Barium	386	16.4	mg/kg	SW846 6010B	03/31-04/01/04	GC7KA1AB
		Dilution Factor: 0.82		Analysis Time...: 18:13	MS Run #.....:	4092080
Cadmium	ND	0.41	mg/kg	SW846 6010B	03/31-04/01/04	GC7KA1AF
		Dilution Factor: 0.82		Analysis Time...: 18:13	MS Run #.....:	4092080
Chromium	1.6	0.82	mg/kg	SW846 6010B	03/31-04/01/04	GC7KA1AK
		Dilution Factor: 0.82		Analysis Time...: 18:13	MS Run #.....:	4092080
Lead	0.81	0.25	mg/kg	SW846 6010B	03/31-04/01/04	GC7KA1AG
		Dilution Factor: 0.82		Analysis Time...: 18:13	MS Run #.....:	4092080
Selenium	ND	0.41	mg/kg	SW846 6010B	03/31-04/01/04	GC7KA1AH
		Dilution Factor: 0.82		Analysis Time...: 18:13	MS Run #.....:	4092080
<b>Prep Batch #....: 4097173</b>						
Mercury	ND	0.088	mg/kg	SW846 7471A	04/06-04/07/04	GC7KA1AA
		Dilution Factor: 0.88		Analysis Time...: 15:55	MS Run #.....:	4097046

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBSB-K 0-1'

## GC Volatiles

Lot-Sample #....: I4C300228-035 Work Order #....: GC7KK1AC Matrix.....: SOLID  
 Date Sampled...: 03/23/04 10:50 Date Received...: 03/30/04 MS Run #.....: 4096092  
 Prep Date.....: 04/02/04 Analysis Date...: 04/02/04  
 Prep Batch #....: 4096214 Analysis Time...: 21:29  
 Dilution Factor: 0.99  
 % Moisture.....: Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	<u>UNITS</u>
Benzene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
Xylenes (total)	ND	5.0	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	91	(41 - 150)	
a,a,a-Trifluorotoluene (TFT)	100	(43 - 165)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBSB-K 0-1'

## GC Semivolatiles

Lot-Sample #....: I4C300228-035 Work Order #....: GC7KK1AL Matrix.....: SOLID  
Date Sampled...: 03/23/04 10:50 Date Received...: 03/30/04 MS Run #.....: 4092050  
Prep Date.....: 03/31/04 Analysis Date...: 04/08/04  
Prep Batch #....: 4091424 Analysis Time...: 07:31  
Dilution Factor: 1  
% Moisture.....: Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Diesel Range Organics	ND	15	mg/kg
SURROGATE	PERCENT	RECOVERY	LIMITS
o-Terphenyl	78	(39 - 139)	
Dotriacontane	95	(13 - 161)	

## ARCADIS GURAGHTY &amp; MILLER INC

Client Sample ID: HOBSB-K 0-1'

## TOTAL Metals

Lot-Sample #....:	I4C300228-035	Matrix.....:	SOLID
Date Sampled....:	03/23/04 10:50	Date Received...:	03/30/04
% Moisture.....:			
<b>PARAMETER</b>			
	<b>RESULT</b>	<b>REPORTING LIMIT</b>	<b>UNITS</b>
			<b>METHOD</b>
<b>PREPARATION- ANALYSIS DATE</b>			
<b>WORK ORDER #</b>			
<b>Prep Batch #....: 4092199</b>			
Silver	ND	0.83	mg/kg
		Dilution Factor: 0.83	SW846 6010B
			Analysis Time...: 18:18
			MS Run #.....: 4092080
Arsenic	6.6	0.83	mg/kg
		Dilution Factor: 0.83	SW846 6010B
			Analysis Time...: 18:18
			MS Run #.....: 4092080
Barium	277	16.6	mg/kg
		Dilution Factor: 0.83	SW846 6010B
			Analysis Time...: 18:18
			MS Run #.....: 4092080
Cadmium	ND	0.42	mg/kg
		Dilution Factor: 0.83	SW846 6010B
			Analysis Time...: 18:18
			MS Run #.....: 4092080
Chromium	2.6	0.83	mg/kg
		Dilution Factor: 0.83	SW846 6010B
			Analysis Time...: 18:18
			MS Run #.....: 4092080
Lead	1.9	0.25	mg/kg
		Dilution Factor: 0.83	SW846 6010B
			Analysis Time...: 18:18
			MS Run #.....: 4092080
Selenium	ND	0.42	mg/kg
		Dilution Factor: 0.83	SW846 6010B
			Analysis Time...: 18:18
			MS Run #.....: 4092080
<b>Prep Batch #....: 4097173</b>			
Mercury	ND	0.098	mg/kg
		Dilution Factor: 0.98	SW846 7471A
			Analysis Time...: 15:57
			MS Run #.....: 4097046

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBSS-L 0-1'

## GC Volatiles

Lot-Sample #....: I4C300228-036 Work Order #....: GC7KP1AC Matrix.....: SOLID  
 Date Sampled...: 03/23/04 11:00 Date Received...: 03/30/04 MS Run #.....: 4096092  
 Prep Date.....: 04/02/04 Analysis Date...: 04/02/04  
 Prep Batch #....: 4096214 Analysis Time...: 21:57  
 Dilution Factor: 0.97  
 % Moisture.....: Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	ND	4.8	ug/kg
Ethylbenzene	ND	4.8	ug/kg
Toluene	ND	4.8	ug/kg
Xylenes (total)	ND	4.8	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	86	(41 - 150)
a,a,a-Trifluorotoluene (TFT)	101	(43 - 165)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBSB-L 0-1'

## GC Semivolatiles

Lot-Sample #....: I4C300228-036 Work Order #....: GC7KP1AL Matrix.....: SOLID  
Date Sampled....: 03/23/04 11:00 Date Received...: 03/30/04 MS Run #.....: 4092050  
Prep Date.....: 03/31/04 Analysis Date...: 04/08/04  
Prep Batch #....: 4091424 Analysis Time...: 08:07  
Dilution Factor: 1  
% Moisture.....: Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Diesel Range Organics	ND	15	mg/kg
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
o-Terphenyl	77	(39 - 139)	
Dotriacontane	154	(13 - 161)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBSB-L 0-1'

## TOTAL Metals

Lot-Sample #....: I4C300228-036

Matrix.....: SOLID

Date Sampled...: 03/23/04 11:00 Date Received...: 03/30/04

% Moisture.....:

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
<b>Prep Batch #....: 4092199</b>						
Silver	ND	0.75	mg/kg	SW846 6010B	03/31-04/01/04	GC7KP1AJ
		Dilution Factor: 0.75		Analysis Time..: 18:24	MS Run #.....:	4092080
Arsenic	4.5	0.75	mg/kg	SW846 6010B	03/31-04/01/04	GC7KP1AD
		Dilution Factor: 0.75		Analysis Time..: 18:24	MS Run #.....:	4092080
Barium	188	15.0	mg/kg	SW846 6010B	03/31-04/01/04	GC7KP1AK
		Dilution Factor: 0.75		Analysis Time..: 18:24	MS Run #.....:	4092080
Cadmium	ND	0.38	mg/kg	SW846 6010B	03/31-04/01/04	GC7KP1AF
		Dilution Factor: 0.75		Analysis Time..: 18:24	MS Run #.....:	4092080
Chromium	3.5	0.75	mg/kg	SW846 6010B	03/31-04/01/04	GC7KP1AK
		Dilution Factor: 0.75		Analysis Time..: 18:24	MS Run #.....:	4092080
Lead	2.0	0.22	mg/kg	SW846 6010B	03/31-04/01/04	GC7KP1AG
		Dilution Factor: 0.75		Analysis Time..: 18:24	MS Run #.....:	4092080
Selenium	ND	0.38	mg/kg	SW846 6010B	03/31-04/01/04	GC7KP1AH
		Dilution Factor: 0.75		Analysis Time..: 18:24	MS Run #.....:	4092080
<b>Prep Batch #....: 4097173</b>						
Mercury	ND	0.092	mg/kg	SW846 7471A	04/06-04/07/04	GC7KP1AA
		Dilution Factor: 0.92		Analysis Time..: 15:58	MS Run #.....:	4097046

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBSB-L 1-1.5'

## GC Volatiles

Lot-Sample #....: I4C300228-037 Work Order #....: GC7K11AC Matrix.....: SOLID  
Date Sampled...: 03/23/04 11:00 Date Received...: 03/30/04 MS Run #.....: 4096092  
Prep Date.....: 04/02/04 Analysis Date...: 04/02/04  
Prep Batch #....: 4096214 Analysis Time...: 22:26  
Dilution Factor: 0.97  
% Moisture.....: Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	ND	4.8	ug/kg
Ethylbenzene	ND	4.8	ug/kg
Toluene	ND	4.8	ug/kg
Xylenes (total)	ND	4.8	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	78	(41 - 150)
a,a,a-Trifluorotoluene (TFT)	121	(43 - 165)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBSB-L 1-1.5'

## GC Semivolatiles

Lot-Sample #....: I4C300228-037 Work Order #....: GC7K11AL Matrix.....: SOLID  
 Date Sampled....: 03/23/04 11:00 Date Received...: 03/30/04 MS Run #.....: 4092050  
 Prep Date.....: 03/31/04 Analysis Date...: 04/08/04  
 Prep Batch #....: 4091424 Analysis Time...: 08:44  
 Dilution Factor: 1  
 % Moisture.....: Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Diesel Range Organics	22	15	mg/kg
SURROGATE		PERCENT	RECOVERY
o-Terphenyl	81		(39 - 139)
Dotriacontane	464 *		(13 - 161)

NOTE(S):

\* Surrogate recovery is outside stated control limits.

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: HOBSB-L 1-1.5'

## TOTAL Metals

Lot-Sample #....: I4C300228-037

Matrix.....: SOLID

Date Sampled....: 03/23/04 11:00 Date Received...: 03/30/04

% Moisture.....:

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
<b>Prep Batch #....: 4092199</b>							
Silver	ND	0.74	mg/kg	SW846 6010B	Analysis Time...: 18:41	03/31-04/01/04	GC7K11AJ
		Dilution Factor: 0.74				MS Run #.....:	4092080
Arsenic	3.2	0.74	mg/kg	SW846 6010B	Analysis Time...: 18:41	03/31-04/01/04	GC7K11AD
		Dilution Factor: 0.74				MS Run #.....:	4092080
Barium	102	14.8	mg/kg	SW846 6010B	Analysis Time...: 18:41	03/31-04/01/04	GC7K11AE
		Dilution Factor: 0.74				MS Run #.....:	4092080
Cadmium	ND	0.37	mg/kg	SW846 6010B	Analysis Time...: 18:41	03/31-04/01/04	GC7K11AF
		Dilution Factor: 0.74				MS Run #.....:	4092080
Chromium	10.8	0.74	mg/kg	SW846 6010B	Analysis Time...: 18:41	03/31-04/01/04	GC7K11AK
		Dilution Factor: 0.74				MS Run #.....:	4092080
Lead	5.5	0.22	mg/kg	SW846 6010B	Analysis Time...: 18:41	03/31-04/01/04	GC7K11AG
		Dilution Factor: 0.74				MS Run #.....:	4092080
Selenium	ND	0.37	mg/kg	SW846 6010B	Analysis Time...: 18:41	03/31-04/01/04	GC7K11AH
		Dilution Factor: 0.74				MS Run #.....:	4092080
<b>Prep Batch #....: 4097173</b>							
Mercury	ND	0.10	mg/kg	SW846 7471A	Analysis Time...: 16:03	04/06-04/07/04	GC7K11AA
		Dilution Factor: 1				MS Run #.....:	4097046

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCAMW-5

## GC Volatiles

Lot-Sample #....: I4C300228-038 Work Order #....: GC7LP1AF Matrix.....: WATER  
Date Sampled...: 03/26/04 15:11 Date Received...: 03/30/04 MS Run #.....: 4097079  
Prep Date.....: 04/02/04 Analysis Date...: 04/03/04  
Prep Batch #....: 4097209 Analysis Time...: 16:09  
Dilution Factor: 1

Method.....: RSK SOP-175

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Methane	1.6	0.50	ug/L

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCAMW-5

## GC Volatiles

Lot-Sample #....: I4C300228-038 Work Order #....: GC7LP1AC Matrix.....: WATER  
Date Sampled....: 03/26/04 15:11 Date Received...: 03/30/04 MS Run #.....: 4097096  
Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
Prep Batch #....: 4097235 Analysis Time...: 16:12  
Dilution Factor: 1 Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/L
SURROGATE	PERCENT	RECOVERY	LIMITS
4-Bromofluorobenzene (GRO)	99		(75 - 122)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCAMW-5

## GC Volatiles

Lot-Sample #....: I4C300228-038 Work Order #....: GC7LP1AA Matrix.....: WATER  
 Date Sampled...: 03/26/04 15:11 Date Received...: 03/30/04 MS Run #.....: 4097107  
 Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
 Prep Batch #....: 4097248 Analysis Time...: 16:12  
 Dilution Factor: 1

Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	100	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	102	(73 - 135)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCAMW-5

## General Chemistry

Lot-Sample #....: I4C300228-038    Work Order #....: GC7LP              Matrix.....: WATER  
Date Sampled...: 03/26/04 15:11    Date Received..: 03/30/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite	16.9	2.0	mg/L	MCAWW 353.2	04/08/04	4099278
		Dilution Factor:	20	Analysis Time...: 10:00	MS Run #.....:	4099133
Sulfate	1550	100	mg/L	MCAWW 300.0A	04/06/04	4098195
		Dilution Factor:	100	Analysis Time...: 15:07	MS Run #.....:	4098093
Total Alkalinity	173	5.0	mg/L	MCAWW 310.1	04/06/04	4097275
		Dilution Factor:	1	Analysis Time...: 00:00	MS Run #.....:	4097120

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCAMW-4

## GC Volatiles

Lot-Sample #....: I4C300228-039 Work Order #....: GC7MG1AF  
Date Sampled....: 03/26/04 15:51 Date Received...: 03/30/04 Matrix.....: WATER  
Prep Date.....: 04/04/04 Analysis Date...: 04/04/04 MS Run #.....: 4097115  
Prep Batch #....: 4097270 Analysis Time...: 13:41  
Dilution Factor: 1

Method.....: RSK SOP-175

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Methane	0.68	0.50	ug/L

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCAMW-4

## GC Volatiles

Lot-Sample #....: I4C300228-039 Work Order #....: GC7MG1AC Matrix.....: WATER  
Date Sampled....: 03/26/04 15:51 Date Received...: 03/30/04 MS Run #.....: 4097096  
Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
Prep Batch #....: 4097235 Analysis Time...: 16:41  
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/L
SURROGATE	PERCENT	RECOVERY	LIMITS
4-Bromofluorobenzene (GRO)	96	(75 - 122)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCAMW-4

## GC Volatiles

Lot-Sample #....: I4C300228-039 Work Order #....: GC7MG1AA Matrix.....: WATER  
 Date Sampled...: 03/26/04 15:51 Date Received...: 03/30/04 MS Run #.....: 4097107  
 Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
 Prep Batch #....: 4097248 Analysis Time...: 16:41  
 Dilution Factor: 1

Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>
Bromofluorobenzene		RECOVERY	LIMITS
a,a,a-Trifluorotoluene (TFT)		99	(81 - 119)
		102	(73 - 135)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCAMW-4

## General Chemistry

Lot-Sample #....: I4C300228-039    Work Order #....: GC7MG                Matrix.....: WATER  
Date Sampled....: 03/26/04 15:51    Date Received...: 03/30/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Nitrate-Nitrite	3.9	0.20	mg/L	MCAWW 353.2	04/08/04	4099278
		Dilution Factor: 2		Analysis Time...: 10:00	MS Run #.....:	4099133
Sulfate	1230	100	mg/L	MCAWW 300.0A	04/06/04	4098195
		Dilution Factor: 100		Analysis Time...: 15:20	MS Run #.....:	4098093
Total Alkalinity	249	5.0	mg/L	MCAWW 310.1	04/06/04	4097275
		Dilution Factor: 1		Analysis Time...: 10:00	MS Run #.....:	4097120

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCAMW-2

## GC Volatiles

Lot-Sample #....: I4C300228-040 Work Order #....: GC7MK1AF Matrix.....: WATER  
Date Sampled....: 03/26/04 15:01 Date Received...: 03/30/04 MS Run #.....: 4097115  
Prep Date.....: 04/04/04 Analysis Date...: 04/04/04  
Prep Batch #....: 4097270 Analysis Time...: 14:20  
Dilution Factor: 1

Method.....: RSK SOP-175

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>UNITS</u>
		<u>LIMIT</u>		
Methane	0.52	0.50		ug/L

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCAMW-2

## GC Volatiles

Lot-Sample #....: I4C300228-040 Work Order #....: GC7MK1AC Matrix.....: WATER  
Date Sampled....: 03/26/04 15:01 Date Received...: 03/30/04 MS Run #.....: 4097096  
Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
Prep Batch #....: 4097235 Analysis Time...: 17:09  
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/L
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
4-Bromofluorobenzene (GRO)	98	(75 - 122)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCAMW-2

## GC Volatiles

Lot-Sample #....: I4C300228-040 Work Order #....: GC7MK1AA Matrix.....: WATER  
 Date Sampled...: 03/26/04 15:01 Date Received...: 03/30/04 MS Run #.....: 4097107  
 Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
 Prep Batch #....: 4097248 Analysis Time...: 17:09  
 Dilution Factor: 1

Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u>	
		<u>LIMITS</u>	
Bromofluorobenzene	99	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	102	(73 - 135)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCAMW-2

## General Chemistry

Lot-Sample #....: I4C300228-040    Work Order #....: GC7MK              Matrix.....: WATER  
Date Sampled...: 03/26/04 15:01    Date Received...: 03/30/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite	48.5	5.0	mg/L	MCAWW 353.2 Dilution Factor: 50	04/08/04 Analysis Time...: 10:00	4099278 MS Run #.....: 4099133
Sulfate	1570	100	mg/L	MCAWW 300.0A Dilution Factor: 100	04/06/04 Analysis Time...: 15:33	4098195 MS Run #.....: 4098093
Total Alkalinity	216	5.0	mg/L	MCAWW 310.1 Dilution Factor: 1	04/06/04 Analysis Time...: 10:00	4097275 MS Run #.....: 4097120

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCAMW-6

## GC Volatiles

Lot-Sample #....: I4C300228-041 Work Order #....: GC7MN1AF Matrix.....: WATER  
Date Sampled...: 03/26/04 15:32 Date Received...: 03/30/04 MS Run #.....: 4097115  
Prep Date.....: 04/04/04 Analysis Date...: 04/04/04  
Prep Batch #....: 4097270 Analysis Time...: 15:31  
Dilution Factor: 1

Method.....: RSK SOP-175

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Methane	0.64	0.50	ug/L

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCAMW-6

## GC Volatiles

Lot-Sample #....: I4C300228-041 Work Order #....: GC7MN1AC Matrix.....: WATER  
Date Sampled....: 03/26/04 15:32 Date Received...: 03/30/04 MS Run #.....: 4097096  
Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
Prep Batch #....: 4097235 Analysis Time...: 17:37  
Dilution Factor: 1 Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/L
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
4-Bromofluorobenzene (GRO)	97	(75 - 122)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCAMW-6

## GC Volatiles

Lot-Sample #....: I4C300228-041 Work Order #....: GC7MN1AA Matrix.....: WATER  
 Date Sampled....: 03/26/04 15:32 Date Received...: 03/30/04 MS Run #.....: 4097107  
 Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
 Prep Batch #....: 4097248 Analysis Time...: 17:37  
 Dilution Factor: 1

Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
Bromofluorobenzene	99	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	102	(73 - 135)	

## ARCADIS GURAGHTY &amp; MILLER INC

Client Sample ID: PCAMW-6

## General Chemistry

Lot-Sample #....: I4C300228-041 Work Order #....: GC7MN Matrix.....: WATER  
Date Sampled...: 03/26/04 15:32 Date Received...: 03/30/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite	5.8	1.0	mg/L	MCAWW 353.2	04/08/04	4099278
		Dilution Factor:	10	Analysis Time...: 10:00	MS Run #.....:	4099133
Sulfate	1300	100	mg/L	MCAWW 300.0A	04/06/04	4098195
		Dilution Factor:	100	Analysis Time...: 15:47	MS Run #.....:	4098093
Total Alkalinity	230	5.0	mg/L	MCAWW 310.1	04/06/04	4097275
		Dilution Factor:	1	Analysis Time...: 10:00	MS Run #.....:	4097120

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCAMW-3

## GC Volatiles

Lot-Sample #....: I4C300228-042 Work Order #....: GC7NQ1AF Matrix.....: WATER  
Date Sampled...: 03/26/04 14:51 Date Received...: 03/30/04 MS Run #.....: 4097115  
Prep Date.....: 04/04/04 Analysis Date...: 04/04/04  
Prep Batch #....: 4097270 Analysis Time...: 15:57  
Dilution Factor: 1

Method.....: RSK SOP-175

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Methane	ND	0.50	ug/L

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCAMW-3

## GC Volatiles

Lot-Sample #....: I4C300228-042 Work Order #....: GC7NQ1AC Matrix.....: WATER  
Date Sampled...: 03/26/04 14:51 Date Received...: 03/30/04 MS Run #.....: 4097096  
Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
Prep Batch #....: 4097235 Analysis Time...: 18:05  
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/L
SURROGATE	PERCENT	RECOVERY	LIMITS
4-Bromofluorobenzene (GRO)	97		(75 - 122)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCAMW-3

## GC Volatiles

Lot-Sample #....: I4C300228-042 Work Order #....: GC7NQ1AA Matrix.....: WATER  
 Date Sampled....: 03/26/04 14:51 Date Received...: 03/30/04 MS Run #.....: 4097107  
 Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
 Prep Batch #....: 4097248 Analysis Time...: 18:05  
 Dilution Factor: 1

Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L
<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>	
		(81 - 119)	(73 - 135)
Bromofluorobenzene	99		
a,a,a-Trifluorotoluene (TFT)	102		

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: PCAMW-3

## General Chemistry

Lot-Sample #....: I4C300228-042    Work Order #....: GC7NQ                Matrix.....: WATER  
Date Sampled....: 03/26/04 14:51    Date Received..: 03/30/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite	10.3	1.0	mg/L	MCAWW 353.2	04/08/04	4099278
		Dilution Factor:	10	Analysis Time...: 10:00	MS Run #.....:	4099133
Sulfate	1240	100	mg/L	MCAWW 300.0A	04/06/04	4098195
		Dilution Factor:	100	Analysis Time...: 16:00	MS Run #.....:	4098093
Total Alkalinity	305	5.0	mg/L	MCAWW 310.1	04/06/04	4097275
		Dilution Factor:	1	Analysis Time...: 10:00	MS Run #.....:	4097120

## ARCADIS GURAGHTY &amp; MILLER INC

Client Sample ID: RAMMW-A

## GC Volatiles

Lot-Sample #....: I4C300228-043 Work Order #....: GC7N01AC Matrix.....: WATER  
Date Sampled...: 03/26/04 16:32 Date Received...: 03/30/04 MS Run #.....: 4097096  
Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
Prep Batch #....: 4097235 Analysis Time...: 18:34  
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/L
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
4-Bromofluorobenzene (GRO)	96	(75 - 122)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RAMMW-A

## GC Volatiles

Lot-Sample #....: I4C300228-043 Work Order #....: GC7N01AA Matrix.....: WATER  
Date Sampled....: 03/26/04 16:32 Date Received...: 03/30/04 MS Run #.....: 4097107  
Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
Prep Batch #....: 4097248 Analysis Time...: 18:34  
Dilution Factor: 1

Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u>	
		<u>LIMITS</u>	
Bromofluorobenzene	99	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	102	(73 - 135)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RAMMW-A

## TOTAL Metals

Lot-Sample #....: I4C300228-043

Date Sampled....: 03/26/04 16:32 Date Received...: 03/30/04

Matrix.....: WATER

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK	ORDER #
		LIMIT	UNITS					
<b>Prep Batch #....: 4092480</b>								
Mercury	ND	0.00020	mg/L		SW846 7470A	04/02/04	GC7N01AL	
		Dilution Factor: 1			Analysis Time...: 00:00		MS Run #.....:	4092218

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RAMMW-A

## DISSOLVED Metals

Lot-Sample #...: I4C300228-043                           Matrix.....: WATER  
 Date Sampled...: 03/26/04 16:32 Date Received..: 03/30/04

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
<b>Prep Batch #...: 4100141</b>						
Silver	ND	0.0050	mg/L	SW846 6010B	04/09/04	GC7N01AR
		Dilution Factor: 1		Analysis Time..: 11:35	MS Run #.....:	4100025
Arsenic	0.021	0.010	mg/L	SW846 6010B	04/09/04	GC7N01AT
		Dilution Factor: 1		Analysis Time..: 11:35	MS Run #.....:	4100025
Barium	ND	0.20	mg/L	SW846 6010B	04/09/04	GC7N01AU
		Dilution Factor: 1		Analysis Time..: 11:35	MS Run #.....:	4100025
Cadmium	ND	0.0020	mg/L	SW846 6010B	04/09/04	GC7N01AV
		Dilution Factor: 1		Analysis Time..: 11:35	MS Run #.....:	4100025
Chromium	0.0052	0.0050	mg/L	SW846 6010B	04/09/04	GC7N01AW
		Dilution Factor: 1		Analysis Time..: 11:35	MS Run #.....:	4100025
Lead	0.010	0.0030	mg/L	SW846 6010B	04/09/04	GC7N01AX
		Dilution Factor: 1		Analysis Time..: 11:35	MS Run #.....:	4100025
Selenium	0.031	0.0050	mg/L	SW846 6010B	04/09/04	GC7N01AO
		Dilution Factor: 1		Analysis Time..: 11:35	MS Run #.....:	4100025

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RAMMW-A

## General Chemistry

Lot-Sample #....: I4C300228-043 Work Order #....: GC7N0 Matrix.....: WATER  
 Date Sampled....: 03/26/04 16:32 Date Received...: 03/30/04

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Nitrate-Nitrite	10.2	1.0	mg/L	MCAWW 353.2	04/08/04	4099278
		Dilution Factor:	10	Analysis Time...: 10:00	MS Run #.....:	4099133
Sulfate	2280	100	mg/L	MCAWW 300.0A	04/06/04	4098195
		Dilution Factor:	100	Analysis Time...: 16:13	MS Run #.....:	4098093
Total Alkalinity	ND	5.0	mg/L	MCAWW 310.1	04/06/04	4097275
		Dilution Factor:	1	Analysis Time...: 10:00	MS Run #.....:	4097120

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RAMSEY MW-6

## GC Volatiles

Lot-Sample #....: I4C300228-044 Work Order #....: GC7P01AC Matrix.....: WATER  
Date Sampled...: 03/26/04 17:30 Date Received...: 03/30/04 MS Run #....: 4097096  
Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
Prep Batch #....: 4097235 Analysis Time...: 19:02  
Dilution Factor: 1 Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/L
SURROGATE	PERCENT	RECOVERY	LIMITS
4-Bromofluorobenzene (GRO)	96		(75 - 122)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RAMSEY MW-6

## GC Volatiles

Lot-Sample #....: I4C300228-044 Work Order #....: GC7P01AA Matrix.....: WATER  
 Date Sampled....: 03/26/04 17:30 Date Received...: 03/30/04 MS Run #.....: 4097107  
 Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
 Prep Batch #....: 4097248 Analysis Time...: 19:02  
 Dilution Factor: 1

Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u>	
		<u>LIMITS</u>	
Bromofluorobenzene	99	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	103	(73 - 135)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RAMSEY MW-6

## TOTAL Metals

Lot-Sample #....: I4C300228-044

Matrix.....: WATER

Date Sampled....: 03/26/04 17:30 Date Received...: 03/30/04

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS			
Prep Batch #....: 4092480						
Mercury	ND	0.00020	mg/L	SW846 7470A	04/02/04	GC7P01AL
		Dilution Factor:	1	Analysis Time...: 00:00		MS Run #.....: 4092218

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RAMSEY MW-6

## DISSOLVED Metals

Lot-Sample #....: I4C300228-044

Matrix.....: WATER

Date Sampled...: 03/26/04 17:30 Date Received..: 03/30/04

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
<b>Prep Batch #....: 4100141</b>							
Silver	ND	0.0050	mg/L	SW846 6010B	04/09/04	GC7P01AM	
		Dilution Factor: 1		Analysis Time...: 11:41	MS Run #.....:	4100025	
Arsenic	ND	0.010	mg/L	SW846 6010B	04/09/04	GC7P01AN	
		Dilution Factor: 1		Analysis Time...: 11:41	MS Run #.....:	4100025	
Barium	ND	0.20	mg/L	SW846 6010B	04/09/04	GC7P01AP	
		Dilution Factor: 1		Analysis Time...: 11:41	MS Run #.....:	4100025	
Cadmium	ND	0.0020	mg/L	SW846 6010B	04/09/04	GC7P01AQ	
		Dilution Factor: 1		Analysis Time...: 11:41	MS Run #.....:	4100025	
Chromium	ND	0.0050	mg/L	SW846 6010B	04/09/04	GC7P01AR	
		Dilution Factor: 1		Analysis Time...: 11:41	MS Run #.....:	4100025	
Lead	ND	0.0030	mg/L	SW846 6010B	04/09/04	GC7P01AT	
		Dilution Factor: 1		Analysis Time...: 11:41	MS Run #.....:	4100025	
Selenium	0.034	0.0050	mg/L	SW846 6010B	04/09/04	GC7P01AU	
		Dilution Factor: 1		Analysis Time...: 11:41	MS Run #.....:	4100025	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RAMMW-E

## GC Volatiles

Lot-Sample #....: I4C300228-045 Work Order #....: GC7QE1AC Matrix.....: WATER  
Date Sampled....: 03/26/04 17:21 Date Received...: 03/30/04 MS Run #.....: 4097096  
Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
Prep Batch #....: 4097235 Analysis Time...: 19:30  
Dilution Factor: 1 Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/L
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
4-Bromofluorobenzene (GRO)	101	(75 - 122)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RAMMW-E

## GC Volatiles

Lot-Sample #....: I4C300228-045 Work Order #....: GC7QE1AA Matrix.....: WATER  
 Date Sampled....: 03/26/04 17:21 Date Received...: 03/30/04 MS Run #.....: 4097107  
 Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
 Prep Batch #....: 4097248 Analysis Time...: 19:30  
 Dilution Factor: 1 Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
Bromofluorobenzene	99	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	103	(73 - 135)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RAMMW-B

## GC Volatiles

Lot-Sample #....: I4C300228-046 Work Order #....: GC7QP1AC Matrix.....: WATER  
Date Sampled...: 03/26/04 16:45 Date Received...: 03/30/04 MS Run #.....: 4097096  
Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
Prep Batch #...: 4097235 Analysis Time..: 23:45  
Dilution Factor: 5

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	3400	500	ug/L
SURROGATE		PERCENT	RECOVERY
4-Bromofluorobenzene (GRO)	101	RECOVERY	LIMITS
			(75 - 122)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RAMMW-B

## GC Volatiles

Lot-Sample #....: I4C300228-046 Work Order #....: GC7QP1AA Matrix.....: WATER  
 Date Sampled...: 03/26/04 16:45 Date Received...: 03/30/04 MS Run #.....: 4097107  
 Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
 Prep Batch #....: 4097248 Analysis Time...: 23:45  
 Dilution Factor: 5

Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	400	5.0	ug/L
Ethylbenzene	67	5.0	ug/L
Toluene	ND	5.0	ug/L
Xylenes (total)	150	15	ug/L

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u>	
		<u>LIMITS</u>	
Bromofluorobenzene	99	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	107	(73 - 135)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RAMMW-P

## GC Volatiles

Lot-Sample #....: I4C300228-047 Work Order #....: GC7QV1AF Matrix.....: WATER  
Date Sampled....: 03/26/04 17:00 Date Received...: 03/30/04 MS Run #.....: 4097115  
Prep Date.....: 04/04/04 Analysis Date...: 04/04/04  
Prep Batch #....: 4097270 Analysis Time...: 16:16  
Dilution Factor: 1

Method.....: RSK SOP-175

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Methane	3.6	0.50	ug/L

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RAMMW-F

## GC Volatiles

Lot-Sample #....: I4C300228-047 Work Order #....: GC7QV1AC Matrix.....: WATER  
Date Sampled....: 03/26/04 17:00 Date Received...: 03/30/04 MS Run #.....: 4097096  
Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
Prep Batch #....: 4097235 Analysis Time...: 19:59  
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/L
SURROGATE	PERCENT	RECOVERY	
	RECOVERY	LIMITS	
4-Bromofluorobenzene (GRO)	98	(75 - 122)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RAMMW-F

## GC Volatiles

Lot-Sample #....: I4C300228-047 Work Order #....: GC7QV1AA Matrix.....: WATER  
Date Sampled...: 03/26/04 17:00 Date Received...: 03/30/04 MS Run #.....: 4097107  
Prep Date.....: 04/05/04 Analysis Date...: 04/05/04  
Prep Batch #....: 4097248 Analysis Time...: 19:59  
Dilution Factor: 1

Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY	
		LIMITS	
Bromofluorobenzene	100	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	102	(73 - 135)	

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: RAMMW-F

## General Chemistry

Lot-Sample #....: I4C300228-047    Work Order #....: GC7QV              Matrix.....: WATER  
 Date Sampled....: 03/26/04 17:00    Date Received...: 03/30/04

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate-Nitrite	30.1	2.0	mg/L	MCAWW 353.2 Dilution Factor: 20	04/08/04 Analysis Time...: 10:00	4099278 MS Run #.....: 4099133
Sulfate	3370	100	mg/L	MCAWW 300.0A Dilution Factor: 100	04/06/04 Analysis Time...: 16:53	4098195 MS Run #.....: 4098093
Total Alkalinity	666	5.0	mg/L	MCAWW 310.1 Dilution Factor: 1	04/06/04 Analysis Time...: 10:00	4097275 MS Run #.....: 4097120

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: ANTESWAB-1

## GC Semivolatiles

Lot-Sample #....: I4C300228-048 Work Order #....: GC7Q01AA Matrix.....: WIPE  
 Date Sampled....: 03/23/04 08:49 Date Received...: 03/30/04 MS Run #.....:  
 Prep Date.....: 04/01/04 Analysis Date...: 04/02/04  
 Prep Batch #....: 4092416 Analysis Time...: 22:52  
 Dilution Factor: 1 Method.....: SW846 8082

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Aroclor 1016	ND	1.0	ug/wipe
Aroclor 1221	ND	1.0	ug/wipe
Aroclor 1232	ND	1.0	ug/wipe
Aroclor 1242	ND	1.0	ug/wipe
Aroclor 1248	ND	1.0	ug/wipe
Aroclor 1254	ND	1.0	ug/wipe
Aroclor 1260	ND	1.0	ug/wipe

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Tetrachloro-m-xylene	102	(70 - 130)
Decachlorobiphenyl	110	(70 - 130)

## ARCADIS GERAGHTY &amp; MILLER INC

Client Sample ID: ANTESWAB-2

## GC Semivolatiles

Lot-Sample #....: I4C300228-049 Work Order #....: GC7RC1AA Matrix.....: WIPE  
 Date Sampled...: 03/23/04 08:49 Date Received...: 03/30/04 MS Run #.....:  
 Prep Date.....: 04/01/04 Analysis Date...: 04/02/04  
 Prep Batch #....: 4092416 Analysis Time...: 23:13  
 Dilution Factor: 1

Method.....: SW846 8082

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Aroclor 1016	ND	1.0	ug/wipe
Aroclor 1221	ND	1.0	ug/wipe
Aroclor 1232	ND	1.0	ug/wipe
Aroclor 1242	ND	1.0	ug/wipe
Aroclor 1248	ND	1.0	ug/wipe
Aroclor 1254	ND	1.0	ug/wipe
Aroclor 1260	51 COL	1.0	ug/wipe

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
		(70 - 130)	(70 - 130)
Tetrachloro-m-xylene	74		
Decachlorobiphenyl	181 *		

NOTE(S) :

\* Surrogate recovery is outside stated control limits.

COL More than 40% RPD between primary and confirmation column results. The lower of the two results is reported.

Surrogates outside acceptance criteria due to demonstrated matrix effect.

## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #....: I4C300228  
 MB Lot-Sample #: I4D060000-412  
 Analysis Date...: 04/04/04  
 Dilution Factor: 1

Work Order #....: GDL1V1AA  
 Prep Date.....: 04/04/04  
 Prep Batch #:....: 4097412

Matrix.....: WATER  
 Analysis Time...: 20:58

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Chlorodibromomethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	2.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B

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## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #....: I4C300228

Work Order #....: GDL1V1AA

Matrix.....: WATER

<u>PARAMETER</u>	REPORTING			
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichlorobenzene	ND	2.0	ug/L	SW846 8260B
1,2,4-Trichloro- benzene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
<u>SURROGATE</u>	<u>PERCENT</u>	RECOVERY		
	<u>RECOVERY</u>	<u>LIMITS</u>		
4-Bromofluorobenzene	95	(75 - 135)		
Toluene-d8	98	(91 - 128)		
Dibromofluoromethane	97	(61 - 125)		
1,2-Dichloroethane-d4	93	(57 - 116)		

## NOTE(S) :

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

## METHOD BLANK REPORT

## GC/MS Semivolatiles

Client Lot #....: I4C300228  
 MB Lot-Sample #: I4C310000-417  
 Analysis Date...: 04/05/04  
 Dilution Factor: 1

Work Order #....: GC9GL1AA  
 Prep Date.....: 03/31/04  
 Prep Batch #:....: 4091417

Matrix.....: WATER  
 Analysis Time...: 15:04

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
Acenaphthene	ND	10	ug/L	SW846 8270C
Acenaphthylene	ND	10	ug/L	SW846 8270C
Anthracene	ND	10	ug/L	SW846 8270C
Benz(a)anthracene	ND	10	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	10	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	10	ug/L	SW846 8270C
Benzo(a)pyrene	ND	10	ug/L	SW846 8270C
bis(2-Chloroethoxy) methane	ND	10	ug/L	SW846 8270C
bis(2-Chloroethyl)- ether	ND	10	ug/L	SW846 8270C
bis(2-Chloroisopropyl) ether	ND	10	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	SW846 8270C
4-Bromophenyl phenyl ether	ND	10	ug/L	SW846 8270C
Butyl benzyl phthalate	ND	10	ug/L	SW846 8270C
4-Chloroaniline	ND	10	ug/L	SW846 8270C
4-Chloro-3-methylphenol	ND	10	ug/L	SW846 8270C
2-Chloronaphthalene	ND	10	ug/L	SW846 8270C
2-Chlorophenol	ND	10	ug/L	SW846 8270C
4-Chlorophenyl phenyl ether	ND	10	ug/L	SW846 8270C
Chrysene	ND	10	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	10	ug/L	SW846 8270C
Dibenzofuran	ND	10	ug/L	SW846 8270C
Di-n-butyl phthalate	ND	10	ug/L	SW846 8270C
1,2-Dichlorobenzene	ND	10	ug/L	SW846 8270C
1,3-Dichlorobenzene	ND	10	ug/L	SW846 8270C
1,4-Dichlorobenzene	ND	10	ug/L	SW846 8270C
3,3'-Dichlorobenzidine	ND	50	ug/L	SW846 8270C
2,4-Dichlorophenol	ND	10	ug/L	SW846 8270C
Diethyl phthalate	ND	10	ug/L	SW846 8270C
2,4-Dimethylphenol	ND	10	ug/L	SW846 8270C
Dimethyl phthalate	ND	10	ug/L	SW846 8270C
4,6-Dinitro- 2-methylphenol	ND	50	ug/L	SW846 8270C
2,4-Dinitrophenol	ND	50	ug/L	SW846 8270C
2,4-Dinitrotoluene	ND	10	ug/L	SW846 8270C

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## METHOD BLANK REPORT

## GC/MS Semivolatiles

Client Lot #...: I4C300228

Work Order #...: GC9GL1AA

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
2,6-Dinitrotoluene	ND	10	ug/L	SW846 8270C
Di-n-octyl phthalate	ND	10	ug/L	SW846 8270C
Fluoranthene	ND	10	ug/L	SW846 8270C
Fluorene	ND	10	ug/L	SW846 8270C
Hexachlorobenzene	ND	10	ug/L	SW846 8270C
Hexachlorobutadiene	ND	10	ug/L	SW846 8270C
Hexachlorocyclopenta-diene	ND	50	ug/L	SW846 8270C
Hexachloroethane	ND	10	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	SW846 8270C
Isophorone	ND	10	ug/L	SW846 8270C
2-Methylnaphthalene	ND	10	ug/L	SW846 8270C
2-Methylphenol	ND	10	ug/L	SW846 8270C
4-Methylphenol	ND	20	ug/L	SW846 8270C
Naphthalene	ND	10	ug/L	SW846 8270C
2-Nitroaniline	ND	50	ug/L	SW846 8270C
3-Nitroaniline	ND	50	ug/L	SW846 8270C
4-Nitroaniline	ND	50	ug/L	SW846 8270C
Nitrobenzene	ND	10	ug/L	SW846 8270C
2-Nitrophenol	ND	10	ug/L	SW846 8270C
4-Nitrophenol	ND	50	ug/L	SW846 8270C
N-Nitrosodiphenylamine	ND	10	ug/L	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	10	ug/L	SW846 8270C
Pentachlorophenol	ND	50	ug/L	SW846 8270C
Phenanthrene	ND	10	ug/L	SW846 8270C
Phenol	ND	10	ug/L	SW846 8270C
Pyrene	ND	10	ug/L	SW846 8270C
1,2,4-Trichlorobenzene	ND	10	ug/L	SW846 8270C
2,4,5-Trichlorophenol	ND	10	ug/L	SW846 8270C
2,4,6-Trichlorophenol	ND	10	ug/L	SW846 8270C

<u>SURROGATE</u>	<u>PERCENT</u>	RECOVERY	
		<u>RECOVERY</u>	<u>LIMITS</u>
Nitrobenzene-d5	89	(60 - 110)	
2-Fluorobiphenyl	91	(59 - 117)	
Terphenyl-d14	93	(63 - 120)	
2-Fluorophenol	84	(38 - 122)	
Phenol-d5	90	(36 - 124)	
2,4,6-Tribromophenol	102	(52 - 133)	

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**METHOD BLANK REPORT****GC/MS Semivolatiles****Client Lot #....: I4C300228****Work Order #....: GC9GL1AA****Matrix.....: WATER****NOTE(S) :**

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

@ - Result quantitated against a one point calibration at or below the reporting limit.

**METHOD BLANK REPORT****GC Volatiles**

**Client Lot #....:** I4C300228      **Work Order #....:** GDK181AA      **Matrix.....:** WATER  
**MB Lot-Sample #:** I4D060000-209  
**Analysis Date..:** 04/02/04      **Prep Date.....:** 04/02/04      **Analysis Time..:** 23:09  
**Dilution Factor:** 1      **Prep Batch #....:** 4097209

<b>PARAMETER</b>	<b>REPORTING</b>			<b>METHOD</b>
	<b>RESULT</b>	<b>LIMIT</b>	<b>UNITS</b>	
Methane	ND	0.50	ug/L	RSK SOP-175

**NOTE(S) :**

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

**METHOD BLANK REPORT****GC Volatiles**

**Client Lot #...:** I4C300228      **Work Order #...:** GDK801AA      **Matrix.....:** WATER  
**MB Lot-Sample #:** I4D060000-270  
**Analysis Date..:** 04/04/04      **Prep Date.....:** 04/04/04      **Analysis Time..:** 13:01  
**Dilution Factor:** 1      **Prep Batch #...:** 4097270

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	<b>LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>
Methane	ND		0.50	ug/L	RSK SOP-175

**NOTE(S) :**

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

## METHOD BLANK REPORT

## GC Volatiles

Client Lot #...: I4C300228      Work Order #...: GDFMM1AA      Matrix.....: WATER  
MB Lot-Sample #: I4D020000-410  
Analysis Date..: 04/01/04      Prep Date.....: 04/01/04      Analysis Time..: 14:08  
Dilution Factor: 1      Prep Batch #...: 4093410

PARAMETER	RESULT	REPORTING			METHOD
		LIMIT	UNITS		
Gasoline Range Organics	ND	100	ug/L		SW846 8015B
SURROGATE	PERCENT	RECOVERY			
	RECOVERY	LIMITS			
4-Bromofluorobenzene (GRO)	99	(75 - 122)			

## NOTE (S) :

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

## METHOD BLANK REPORT

## GC Volatiles

Client Lot #....: I4C300228  
MB Lot-Sample #: I4D060000-235  
  
Analysis Date..: 04/05/04  
Dilution Factor: 1

Work Order #....: GDK6A1AA

Matrix.....: WATER

Prep Date.....: 04/05/04  
Prep Batch #....: 4097235

Analysis Time..: 13:42

PARAMETER	REPORTING			METHOD
	RESULT	LIMIT	UNITS	
Gasoline Range Organics	ND	100	ug/L	SW846 8015B
SURROGATE	PERCENT	RECOVERY		
4-Bromofluorobenzene (GRO)	RECOVERY	LIMITS		
	97	(75 - 122)		

## NOTE(S) :

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

## METHOD BLANK REPORT

## GC Volatiles

Client Lot #....: I4C300228      Work Order #....: GDFQP1AA      Matrix.....: WATER  
 MB Lot-Sample #: I4D020000-419  
 Analysis Date...: 04/01/04      Prep Date.....: 04/01/04      Analysis Time..: 14:08  
 Dilution Factor: 1      Prep Batch #: 4093419

<u>PARAMETER</u>	<u>REPORTING</u>			
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	1.8	1.0	ug/L	SW846 8021B
Ethylbenzene	ND	1.0	ug/L	SW846 8021B
Toluene	ND	1.0	ug/L	SW846 8021B
Xylenes (total)	ND	3.0	ug/L	SW846 8021B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	98	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	97	(73 - 135)	

NOTE(S) :

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

**METHOD BLANK REPORT****GC Volatiles**

**Client Lot #....:** I4C300228      **Work Order #....:** GDFQP1AE      **Matrix.....:** WATER  
**MB Lot-Sample #:** I4D020000-419  
**Analysis Date...:** 04/02/04      **Prep Date.....:** 04/01/04      **Analysis Time..:** 02:41  
**Dilution Factor:** 1      **Prep Batch #....:** 4093419

<u>PARAMETER</u>	<u>REPORTING</u>		
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	96	(81 - 119)
a,a,a-Trifluorotoluene (TFT)	92	(73 - 135)

**NOTE(S) :**

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

## METHOD BLANK REPORT

## GC Volatiles

**Client Lot #....:** I4C300228      **Work Order #....:** GDH3X1AA      **Matrix.....:** SOLID  
**MB Lot-Sample #:** I4D050000-214  
**Analysis Date...:** 04/02/04      **Prep Date.....:** 04/02/04      **Analysis Time..:** 13:54  
**Dilution Factor:** 1      **Prep Batch #....:** 4096214

<u>PARAMETER</u>	<u>REPORTING</u>			<u>METHOD</u>
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	
Benzene	ND	5.0	ug/kg	SW846 8021B
Ethylbenzene	ND	5.0	ug/kg	SW846 8021B
Toluene	ND	5.0	ug/kg	SW846 8021B
Xylenes (total)	ND	5.0	ug/kg	SW846 8021B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>		<u>LIMITS</u>
		<u>RECOVERY</u>	<u>LIMITS</u>	
Bromofluorobenzene	92	(41	- 150)	
a,a,a-Trifluorotoluene (TFT)	100	(43	- 165)	

**NOTE(S) :**

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

**METHOD BLANK REPORT****GC Volatiles**

Client Lot #...: I4C300228      Work Order #...: GDK7T1AA      Matrix.....: WATER  
MB Lot-Sample #: I4D060000-248  
  
Analysis Date...: 04/05/04      Prep Date.....: 04/05/04      Analysis Time..: 13:42  
Dilution Factor: 1      Prep Batch #: 4097248

<u>PARAMETER</u>	<u>REPORTING</u>		
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	99	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	102	(73 - 135)	

**NOTE(S) :**

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

## METHOD BLANK REPORT

## GC Volatiles

Client Lot #....: I4C300228  
 MB Lot-Sample #: I4D060000-395  
 Analysis Date...: 04/05/04  
 Dilution Factor: 1

Work Order #....: GDL0F1AA  
 Prep Date.....: 04/05/04  
 Prep Batch #: 4097395

Matrix.....: WATER  
 Analysis Time..: 14:26

<u>PARAMETER</u>	REPORTING			
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	1.0	ug/L	SW846 8021B
Ethylbenzene	ND	1.0	ug/L	SW846 8021B
Toluene	ND	1.0	ug/L	SW846 8021B
Xylenes (total)	ND	3.0	ug/L	SW846 8021B

<u>SURROGATE</u>	PERCENT		RECOVERY
	<u>RECOVERY</u>	<u>LIMITS</u>	
Bromofluorobenzene	91	(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	97	(73 - 135)	

NOTE(S) :

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

**METHOD BLANK REPORT****GC Semivolatiles**

**Client Lot #...:** I4C300228      **Work Order #...:** GDARA1AA      **Matrix.....:** SOLID  
**MB Lot-Sample #:** I4C310000-424  
**Analysis Date..:** 04/07/04      **Prep Date.....:** 03/31/04      **Analysis Time..:** 21:12  
**Dilution Factor:** 1      **Prep Batch #...:** 4091424

<b>PARAMETER</b>	<b>REPORTING</b>			<b>METHOD</b>
	<b>RESULT</b>	<b>LIMIT</b>	<b>UNITS</b>	
Diesel Range Organics	ND	15	mg/kg	SW846 8015B
<hr/>				
SURROGATE	PERCENT	<b>RECOVERY</b>		
o-Terphenyl	RECOVERY	<b>LIMITS</b>		
Dotriacontane	55	(39 - 139)		
	66	(13 - 161)		

**NOTE(S) :**

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

**METHOD BLANK REPORT****GC Semivolatiles**

**Client Lot #...:** I4C300228  
**MB Lot-Sample #:** I4D010000-416  
**Analysis Date..:** 04/02/04  
**Dilution Factor:** 1

**Work Order #...:** GDCV41AA  
**Prep Date.....:** 04/01/04  
**Prep Batch #...:** 4092416

**Matrix.....:** WIPE  
**Analysis Time..:** 20:02

<b>PARAMETER</b>	<b>REPORTING</b>			
	<b>RESULT</b>	<b>LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>
Aroclor 1016	ND	1.0	ug/wipe	SW846 8082
Aroclor 1221	ND	1.0	ug/wipe	SW846 8082
Aroclor 1232	ND	1.0	ug/wipe	SW846 8082
Aroclor 1242	ND	1.0	ug/wipe	SW846 8082
Aroclor 1248	ND	1.0	ug/wipe	SW846 8082
Aroclor 1254	ND	1.0	ug/wipe	SW846 8082
Aroclor 1260	ND	1.0	ug/wipe	SW846 8082

<b>SURROGATE</b>	<b>PERCENT</b>	<b>RECOVERY</b>	
		<b>RECOVERY</b>	<b>LIMITS</b>
Tetrachloro-m-xylene	107	(70 - 130)	
Decachlorobiphenyl	110	(70 - 130)	

**NOTE (S) :**

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

## METHOD BLANK REPORT

## TOTAL Metals

Client Lot #...: I4C300228

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
<b>MB Lot-Sample #: I4D010000-199 Prep Batch #...: 4092199</b>						
Arsenic	ND	1.0	mg/kg	SW846 6010B	03/31-04/01/04	GDAWH1AA
Dilution Factor: 1						
Analysis Time...: 15:53						
Barium	ND	20.0	mg/kg	SW846 6010B	03/31-04/01/04	GDAWH1AC
Dilution Factor: 1						
Analysis Time...: 15:53						
Cadmium	ND	0.50	mg/kg	SW846 6010B	03/31-04/01/04	GDAWH1AD
Dilution Factor: 1						
Analysis Time...: 15:53						
Chromium	ND	1.0	mg/kg	SW846 6010B	03/31-04/01/04	GDAWH1AH
Dilution Factor: 1						
Analysis Time...: 15:53						
Lead	ND	0.30	mg/kg	SW846 6010B	03/31-04/02/04	GDAWH1AE
Dilution Factor: 1						
Analysis Time...: 10:27						
Selenium	ND	0.50	mg/kg	SW846 6010B	03/31-04/01/04	GDAWH1AF
Dilution Factor: 1						
Analysis Time...: 15:53						
Silver	ND	1.0	mg/kg	SW846 6010B	03/31-04/01/04	GDAWH1AG
Dilution Factor: 1						
Analysis Time...: 15:53						
<b>MB Lot-Sample #: I4D060000-173 Prep Batch #...: 4097173</b>						
Mercury	ND	0.10	mg/kg	SW846 7471A	04/06-04/07/04	GDKXD1AA
Dilution Factor: 1						
Analysis Time...: 15:30						

## NOTE(S) :

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

## METHOD BLANK REPORT

## TOTAL Metals

Client Lot #....: I4C300228

Matrix.....: WATER

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK	ORDER #
		LIMIT	UNITS					
<b>MB Lot-Sample #: I4D010000-480 Prep Batch #...: 4092480</b>								
Mercury	ND	0.00020	mg/L	SW846 7470A		04/02/04		GDDAV1AA
Dilution Factor: 1								
Analysis Time...: 00:00								

## NOTE(S) :

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

## METHOD BLANK REPORT

## DISSOLVED Metals

Client Lot #...: I4C300228

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
<b>MB Lot-Sample #: I4D090000-141 Prep Batch #...: 4100141</b>						
Arsenic	ND	0.010	mg/L	SW846 6010B	04/09/04	GDVCK1AC
		Dilution Factor: 1				
		Analysis Time...: 10:06				
Barium	ND	0.20	mg/L	SW846 6010B	04/09/04	GDVCK1AD
		Dilution Factor: 1				
		Analysis Time...: 10:06				
Cadmium	ND	0.0020	mg/L	SW846 6010B	04/09/04	GDVCK1AE
		Dilution Factor: 1				
		Analysis Time...: 10:06				
Chromium	ND	0.0050	mg/L	SW846 6010B	04/09/04	GDVCK1AF
		Dilution Factor: 1				
		Analysis Time...: 10:06				
Lead	ND	0.0030	mg/L	SW846 6010B	04/09/04	GDVCK1AG
		Dilution Factor: 1				
		Analysis Time...: 10:06				
Selenium	ND	0.0050	mg/L	SW846 6010B	04/09/04	GDVCK1AH
		Dilution Factor: 1				
		Analysis Time...: 10:06				
Silver	ND	0.0050	mg/L	SW846 6010B	04/09/04	GDVCK1AA
		Dilution Factor: 1				
		Analysis Time...: 10:06				

**NOTE(S) :**

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

## METHOD BLANK REPORT

## General Chemistry

Client Lot #....: I4C300228

Matrix.....: WATER

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
		LIMIT	UNITS				
Chloride	ND	Work Order #: GDRV01AA	MB Lot-Sample #:	I4D080000-353			
		1.0	mg/L	MCAWW 300.0A		04/07/04	4099353
		Dilution Factor:	1				
		Analysis Time...:	09:09				
Nitrate-Nitrite	ND	Work Order #: GDRCR1AA	MB Lot-Sample #:	I4D080000-278			
		0.10	mg/L	MCAWW 353.2		04/08/04	4099278
		Dilution Factor:	1				
		Analysis Time...:	10:00				
Sulfate	ND	Work Order #: GDNPNIAA	MB Lot-Sample #:	I4D070000-195			
		1.0	mg/L	MCAWW 300.0A		04/06/04	4098195
		Dilution Factor:	1				
		Analysis Time...:	08:52				
Total Alkalinity	ND	Work Order #: GDGX21AA	MB Lot-Sample #:	I4D030000-125			
		5.0	mg/L	MCAWW 310.1		04/02/04	4094125
		Dilution Factor:	1				
		Analysis Time...:	14:00				
Total Alkalinity	ND	Work Order #: GDLA31AA	MB Lot-Sample #:	I4D060000-275			
		5.0	mg/L	MCAWW 310.1		04/06/04	4097275
		Dilution Factor:	1				
		Analysis Time...:	10:00				

## NOTE(S) :

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

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #....: I4C300228      Work Order #....: GDL1V1AD      Matrix.....: WATER  
 LCS Lot-Sample#: I4D060000-412  
 Prep Date.....: 04/04/04      Analysis Date...: 04/04/04  
 Prep Batch #....: 4097412      Analysis Time...: 12:43  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Benzene	115	(75 - 131)	SW846 8260B
Bromobenzene	109	(70 - 130)	SW846 8260B
Bromochloromethane	90	(70 - 130)	SW846 8260B
Bromodichloromethane	92	(73 - 124)	SW846 8260B
Bromoform	85	(49 - 144)	SW846 8260B
Bromomethane	68	(20 - 126)	SW846 8260B
n-Butylbenzene	126	(61 - 144)	SW846 8260B
sec-Butylbenzene	118	(70 - 130)	SW846 8260B
tert-Butylbenzene	122	(70 - 130)	SW846 8260B
Carbon tetrachloride	121	(42 - 154)	SW846 8260B
<b>Chlorobenzene</b>	<b>97</b>	<b>(84 - 112)</b>	<b>SW846 8260B</b>
Chlorodibromomethane	89	(77 - 119)	SW846 8260B
Chloroethane	99	(46 - 139)	SW846 8260B
Chloroform	107	(69 - 129)	SW846 8260B
Chloromethane	79	(32 - 126)	SW846 8260B
2-Chlorotoluene	120	(70 - 130)	SW846 8260B
4-Chlorotoluene	119	(70 - 130)	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	68 a	(70 - 130)	SW846 8260B
1,2-Dibromoethane	89	(70 - 130)	SW846 8260B
Dibromomethane	93	(70 - 130)	SW846 8260B
1,2-Dichlorobenzene	94	(71 - 111)	SW846 8260B
1,3-Dichlorobenzene	106	(77 - 112)	SW846 8260B
1,4-Dichlorobenzene	102	(79 - 113)	SW846 8260B
Dichlorodifluoromethane	59 a	(70 - 130)	SW846 8260B
1,1-Dichloroethane	111	(67 - 132)	SW846 8260B
1,2-Dichloroethane	102	(49 - 129)	SW846 8260B
1,1-Dichloroethene	113	(76 - 123)	SW846 8260B
cis-1,2-Dichloroethene	108	(70 - 124)	SW846 8260B
trans-1,2-Dichloroethene	113	(78 - 121)	SW846 8260B
1,2-Dichloropropane	96	(69 - 123)	SW846 8260B
1,3-Dichloropropane	93	(70 - 130)	SW846 8260B
2,2-Dichloropropane	126	(70 - 130)	SW846 8260B
1,1-Dichloropropene	114	(70 - 130)	SW846 8260B

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## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #....: I4C300228    Work Order #....: GDL1V1AD    Matrix.....: WATER  
 LCS Lot-Sample#: I4D060000-412

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Ethylbenzene	108	(75 - 132)	<b>SW846</b> 8260B
Hexachlorobutadiene	73	(70 - 130)	<b>SW846</b> 8260B
Isopropylbenzene	97	(75 - 118)	<b>SW846</b> 8260B
p-Isopropyltoluene	114	(70 - 130)	<b>SW846</b> 8260B
Methylene chloride	91	(74 - 113)	<b>SW846</b> 8260B
Naphthalene	53 a	(70 - 130)	<b>SW846</b> 8260B
n-Propylbenzene	121	(69 - 134)	<b>SW846</b> 8260B
Styrene	80	(74 - 111)	<b>SW846</b> 8260B
1,1,1,2-Tetrachloroethane	91	(70 - 130)	<b>SW846</b> 8260B
1,1,2,2-Tetrachloroethane	71	(64 - 109)	<b>SW846</b> 8260B
Tetrachloroethene	106	(73 - 134)	<b>SW846</b> 8260B
Toluene	110	(75 - 123)	<b>SW846</b> 8260B
1,2,3-Trichlorobenzene	52	(10 - 166)	<b>SW846</b> 8260B
1,2,4-Trichloro- benzene	56 a	(70 - 130)	<b>SW846</b> 8260B
1,1,1-Trichloroethane	117	(37 - 145)	<b>SW846</b> 8260B
1,1,2-Trichloroethane	84	(70 - 113)	<b>SW846</b> 8260B
Trichloroethene	<b>104</b>	(84 - 123)	<b>SW846</b> 8260B
Trichlorofluoromethane	146	(36 - 162)	<b>SW846</b> 8260B
1,2,3-Trichloropropane	98	(47 - 131)	<b>SW846</b> 8260B
1,2,4-Trimethylbenzene	120	(60 - 127)	<b>SW846</b> 8260B
1,3,5-Trimethylbenzene	119	(61 - 129)	<b>SW846</b> 8260B
Vinyl chloride	72	(55 - 119)	<b>SW846</b> 8260B
o-Xylene	92	(70 - 130)	<b>SW846</b> 8260B
m-Xylene & p-Xylene	204 a	(70 - 130)	<b>SW846</b> 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	104	(75 - 135)
Toluene-d8	99	(91 - 128)
Dibromofluoromethane	93	(61 - 125)
1,2-Dichloroethane-d4	91	(57 - 116)

**NOTE(S) :**

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

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #....: I4C300228      Work Order #....: GDL1VIAD      Matrix.....: WATER  
 LCS Lot-Sample#: I4D060000-412  
 Prep Date.....: 04/04/04      Analysis Date...: 04/04/04  
 Prep Batch #....: 4097412      Analysis Time..: 12:43  
 Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Benzene	10.0	11.5	ug/L	115	SW846 8260B
Bromobenzene	10.0	10.9	ug/L	109	SW846 8260B
Bromochloromethane	10.0	8.96	ug/L	90	SW846 8260B
Bromodichloromethane	10.0	9.21	ug/L	92	SW846 8260B
Bromoform	10.0	8.48	ug/L	85	SW846 8260B
Bromomethane	10.0	6.84	ug/L	68	SW846 8260B
n-Butylbenzene	10.0	12.6	ug/L	126	SW846 8260B
sec-Butylbenzene	10.0	11.8	ug/L	118	SW846 8260B
tert-Butylbenzene	10.0	12.2	ug/L	122	SW846 8260B
Carbon tetrachloride	10.0	12.1	ug/L	121	SW846 8260B
Chlorobenzene	10.0	9.74	ug/L	97	SW846 8260B
Chlorodibromomethane	10.0	8.88	ug/L	89	SW846 8260B
Chloroethane	10.0	9.87	ug/L	99	SW846 8260B
Chloroform	10.0	10.7	ug/L	107	SW846 8260B
Chloromethane	10.0	7.87	ug/L	79	SW846 8260B
2-Chlorotoluene	10.0	12.0	ug/L	120	SW846 8260B
4-Chlorotoluene	10.0	11.9	ug/L	119	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	10.0	6.79 a	ug/L	68	SW846 8260B
1,2-Dibromoethane	10.0	8.87	ug/L	89	SW846 8260B
Dibromomethane	10.0	9.28	ug/L	93	SW846 8260B
1,2-Dichlorobenzene	10.0	9.44	ug/L	94	SW846 8260B
1,3-Dichlorobenzene	10.0	10.6	ug/L	106	SW846 8260B
1,4-Dichlorobenzene	10.0	10.2	ug/L	102	SW846 8260B
Dichlorodifluoromethane	10.0	5.94 a	ug/L	59	SW846 8260B
1,1-Dichloroethane	10.0	11.1	ug/L	111	SW846 8260B
1,2-Dichloroethane	10.0	10.2	ug/L	102	SW846 8260B
1,1-Dichloroethene	10.0	11.3	ug/L	113	SW846 8260B
cis-1,2-Dichloroethene	10.0	10.8	ug/L	108	SW846 8260B
trans-1,2-Dichloroethene	10.0	11.3	ug/L	113	SW846 8260B
1,2-Dichloropropane	10.0	9.60	ug/L	96	SW846 8260B
1,3-Dichloropropane	10.0	9.27	ug/L	93	SW846 8260B
2,2-Dichloropropane	10.0	12.6	ug/L	126	SW846 8260B
1,1-Dichloropropene	10.0	11.4	ug/L	114	SW846 8260B

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## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: I4C300228    Work Order #...: GDL1V1AD    Matrix.....: WATER  
 LCS Lot-Sample#: I4D060000-412

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Ethylbenzene	10.0	10.8	ug/L	108	SW846 8260B
Hexachlorobutadiene	10.0	7.34	ug/L	73	SW846 8260B
Isopropylbenzene	10.0	9.67	ug/L	97	SW846 8260B
p-Isopropyltoluene	10.0	11.4	ug/L	114	SW846 8260B
Methylene chloride	10.0	9.11	ug/L	91	SW846 8260B
Naphthalene	10.0	5.29 a	ug/L	53	SW846 8260B
n-Propylbenzene	10.0	12.1	ug/L	121	SW846 8260B
Styrene	10.0	7.96	ug/L	80	SW846 8260B
1,1,1,2-Tetrachloroethane	10.0	9.14	ug/L	91	SW846 8260B
1,1,2,2-Tetrachloroethane	10.0	7.14	ug/L	71	SW846 8260B
Tetrachloroethene	10.0	10.6	ug/L	106	SW846 8260B
Toluene	10.0	11.0	ug/L	110	SW846 8260B
1,2,3-Trichlorobenzene	10.0	5.20	ug/L	52	SW846 8260B
1,2,4-Trichloro- benzene	10.0	5.57 a	ug/L	56	SW846 8260B
1,1,1-Trichloroethane	10.0	11.7	ug/L	117	SW846 8260B
1,1,2-Trichloroethane	10.0	8.41	ug/L	84	SW846 8260B
Trichloroethene	10.0	10.4	ug/L	104	SW846 8260B
Trichlorofluoromethane	10.0	14.6	ug/L	146	SW846 8260B
1,2,3-Trichloropropane	10.0	9.81	ug/L	98	SW846 8260B
1,2,4-Trimethylbenzene	10.0	12.0	ug/L	120	SW846 8260B
1,3,5-Trimethylbenzene	10.0	11.9	ug/L	119	SW846 8260B
Vinyl chloride	10.0	7.16	ug/L	72	SW846 8260B
o-Xylene	10.0	9.17	ug/L	92	SW846 8260B
m-Xylene & p-Xylene	10.0	20.4 a	ug/L	204	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	104	(75 - 135)
Toluene-d8	99	(91 - 128)
Dibromofluoromethane	93	(61 - 125)
1,2-Dichloroethane-d4	91	(57 - 116)

## NOTE(S) :

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

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Semivolatiles

Client Lot #....: I4C300228      Work Order #....: GC9GL1AC-LCS      Matrix.....: WATER  
 LCS Lot-Sample#: I4C310000-417      GC9GL1AD-LCSD  
 Prep Date.....: 03/31/04      Analysis Date...: 04/05/04  
 Prep Batch #....: 4091417      Analysis Time...: 15:35  
 Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	88	(64 - 111)			SW846 8270C
	89	(64 - 111)	0.99	(0-20)	SW846 8270C
Acenaphthylene	85	(63 - 109)			SW846 8270C
	86	(63 - 109)	0.99	(0-20)	SW846 8270C
Anthracene	87	(63 - 110)			SW846 8270C
	87	(63 - 110)	0.88	(0-20)	SW846 8270C
Benz (a)anthracene	91	(66 - 108)			SW846 8270C
	90	(66 - 108)	0.58	(0-20)	SW846 8270C
Benzo (b)fluoranthene	88	(53 - 107)			SW846 8270C
	91	(53 - 107)	3.4	(0-20)	SW846 8270C
Benzo (k)fluoranthene	91	(61 - 123)			SW846 8270C
	89	(61 - 123)	1.7	(0-20)	SW846 8270C
Benzo (ghi)perylene	80	(52 - 121)			SW846 8270C
	79	(52 - 121)	1.2	(0-20)	SW846 8270C
Benzo (a)pyrene	86	(60 - 112)			SW846 8270C
	86	(60 - 112)	0.020	(0-20)	SW846 8270C
bis(2-Chloroethoxy) methane	90	(65 - 107)			SW846 8270C
	91	(65 - 107)	1.3	(0-20)	SW846 8270C
bis(2-Chloroethyl)- ether	86	(59 - 101)			SW846 8270C
	84	(59 - 101)	2.1	(0-20)	SW846 8270C
bis(2-Chloroisopropyl) ether	84	(53 - 111)			SW846 8270C
	84	(53 - 111)	0.18	(0-20)	SW846 8270C
bis(2-Ethylhexyl) phthalate	91	(52 - 123)			SW846 8270C
	90	(52 - 123)	0.97	(0-20)	SW846 8270C
4-Bromophenyl phenyl ether	95	(66 - 114)			SW846 8270C
	100	(66 - 114)	5.6	(0-20)	SW846 8270C
Butyl benzyl phthalate	97	(65 - 110)			SW846 8270C
	96	(65 - 110)	0.63	(0-20)	SW846 8270C
4-Chloroaniline	89	(28 - 127)			SW846 8270C
	89	(28 - 127)	0.54	(0-20)	SW846 8270C

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Semivolatiles

**Client Lot #....:** I4C300228      **Work Order #....:** GC9GL1AC-LCS      **Matrix.....:** WATER  
**LCS Lot-Sample#:** I4C310000-417      GC9GL1AD-LCSD

PARAMETER	PERCENT	RECOVERY	RPD	RPD	METHOD
	RECOVERY	LIMITS		LIMITS	
4-Chloro-3-methylphenol	90	(61 - 118)			SW846 8270C
	91	(61 - 118)	0.52	(0-20)	SW846 8270C
2-Chloronaphthalene	91	(63 - 113)			SW846 8270C
	91	(63 - 113)	0.070	(0-20)	SW846 8270C
2-Chlorophenol	84	(63 - 110)			SW846 8270C
	84	(63 - 110)	0.19	(0-20)	SW846 8270C
4-Chlorophenyl phenyl ether	96	(65 - 113)			SW846 8270C
	97	(65 - 113)	1.6	(0-20)	SW846 8270C
Chrysene	92	(66 - 111)			SW846 8270C
	91	(66 - 111)	0.25	(0-20)	SW846 8270C
Dibenz(a,h)anthracene	81	(54 - 119)			SW846 8270C
	81	(54 - 119)	0.53	(0-20)	SW846 8270C
Dibenzofuran	90	(64 - 110)			SW846 8270C
	91	(64 - 110)	0.65	(0-20)	SW846 8270C
Di-n-butyl phthalate	87	(63 - 112)			SW846 8270C
	89	(63 - 112)	2.5	(0-20)	SW846 8270C
1,2-Dichlorobenzene	82	(61 - 106)			SW846 8270C
	82	(61 - 106)	0.41	(0-20)	SW846 8270C
1,3-Dichlorobenzene	84	(59 - 106)			SW846 8270C
	84	(59 - 106)	0.65	(0-20)	SW846 8270C
1,4-Dichlorobenzene	86	(60 - 105)			SW846 8270C
	84	(60 - 105)	1.7	(0-20)	SW846 8270C
3,3'-Dichlorobenzidine	63	(1.0 - 128)			SW846 8270C
	64	(1.0 - 128)	1.7	(0-20)	SW846 8270C
2,4-Dichlorophenol	91	(66 - 114)			SW846 8270C
	92	(66 - 114)	0.19	(0-20)	SW846 8270C
Diethyl phthalate	95	(57 - 113)			SW846 8270C
	90	(57 - 113)	5.4	(0-20)	SW846 8270C
2,4-Dimethylphenol	70	(27 - 99)			SW846 8270C
	66	(27 - 99)	6.7	(0-20)	SW846 8270C
Dimethyl phthalate	97	(60 - 116)			SW846 8270C
	98	(60 - 116)	0.96	(0-20)	SW846 8270C
4,6-Dinitro-2-methylphenol	96	(60 - 141)			SW846 8270C
	101	(60 - 141)	5.8	(0-20)	SW846 8270C
2,4-Dinitrophenol	90	(52 - 132)			SW846 8270C
	97	(52 - 132)	7.9	(0-20)	SW846 8270C
2,4-Dinitrotoluene	96	(62 - 117)			SW846 8270C
	94	(62 - 117)	1.5	(0-20)	SW846 8270C

(Continued on next page)

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Semivolatiles

Client Lot #....: I4C300228      Work Order #....: GC9GL1AC-LCS      Matrix.....: WATER  
 LCS Lot-Sample#: I4C310000-417      GC9GL1AD-LCSD

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
2,6-Dinitrotoluene	86	(59 - 114)			SW846 8270C
	83	(59 - 114)	3.8	(0-20)	SW846 8270C
Di-n-octyl phthalate	93	(53 - 117)			SW846 8270C
	94	(53 - 117)	1.1	(0-20)	SW846 8270C
Fluoranthene	88	(65 - 113)			SW846 8270C
	91	(65 - 113)	3.5	(0-20)	SW846 8270C
Fluorene	92	(60 - 113)			SW846 8270C
	92	(60 - 113)	0.25	(0-20)	SW846 8270C
Hexachlorobenzene	89	(66 - 115)			SW846 8270C
	94	(66 - 115)	4.8	(0-20)	SW846 8270C
Hexachlorobutadiene	89	(63 - 110)			SW846 8270C
	89	(63 - 110)	0.51	(0-20)	SW846 8270C
Hexachlorocyclopenta-diene	18	(1.0- 73)			SW846 8270C
	18	(1.0- 73)	2.5	(0-20)	SW846 8270C
Hexachloroethane	87	(59 - 105)			SW846 8270C
	86	(59 - 105)	1.0	(0-20)	SW846 8270C
Indeno(1,2,3-cd)pyrene	80	(55 - 119)			SW846 8270C
	80	(55 - 119)	0.090	(0-20)	SW846 8270C
Isophorone	87	(64 - 107)			SW846 8270C
	88	(64 - 107)	1.7	(0-20)	SW846 8270C
2-Methylnaphthalene	88	(60 - 116)			SW846 8270C
	89	(60 - 116)	1.4	(0-20)	SW846 8270C
2-Methylphenol	85	(60 - 108)			SW846 8270C
	84	(60 - 108)	0.50	(0-20)	SW846 8270C
Naphthalene	86	(65 - 106)			SW846 8270C
	86	(65 - 106)	0.64	(0-20)	SW846 8270C
2-Nitroaniline	91	(59 - 113)			SW846 8270C
	92	(59 - 113)	0.35	(0-20)	SW846 8270C
3-Nitroaniline	87	(29 - 158)			SW846 8270C
	85	(29 - 158)	2.9	(0-20)	SW846 8270C
4-Nitroaniline	88	(32 - 149)			SW846 8270C
	88	(32 - 149)	0.48	(0-20)	SW846 8270C
Nitrobenzene	86	(64 - 108)			SW846 8270C
	85	(64 - 108)	0.47	(0-20)	SW846 8270C
2-Nitrophenol	92	(67 - 115)			SW846 8270C
	92	(67 - 115)	0.020	(0-20)	SW846 8270C
4-Nitrophenol	79	(41 - 120)			SW846 8270C
	80	(41 - 120)	0.91	(0-20)	SW846 8270C
N-Nitrosodiphenylamine	70	(31 - 109)			SW846 8270C
	66	(31 - 109)	5.9	(0-20)	SW846 8270C

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## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Semivolatiles

Client Lot #....: I4C300228      Work Order #....: GC9GL1AC-LCS      Matrix.....: WATER  
 LCS Lot-Sample#: I4C310000-417                                    GC9GL1AD-LCSD

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
<b>N-Nitrosodi-n-propyl-amine</b>	<b>88</b>	<b>(50 - 125)</b>			<b>SW846 8270C</b>
	<b>88</b>	<b>(50 - 125)</b>	<b>0.12</b>	<b>(0-20)</b>	<b>SW846 8270C</b>
<b>Pentachlorophenol</b>	<b>92</b>	<b>(47 - 129)</b>			<b>SW846 8270C</b>
	<b>96</b>	<b>(47 - 129)</b>	<b>4.7</b>	<b>(0-20)</b>	<b>SW846 8270C</b>
<b>Phenanthrene</b>	<b>88</b>	<b>(62 - 116)</b>			<b>SW846 8270C</b>
	<b>91</b>	<b>(62 - 116)</b>	<b>3.5</b>	<b>(0-20)</b>	<b>SW846 8270C</b>
<b>Phenol</b>	<b>95</b>	<b>(56 - 110)</b>			<b>SW846 8270C</b>
	<b>95</b>	<b>(56 - 110)</b>	<b>0.39</b>	<b>(0-20)</b>	<b>SW846 8270C</b>
<b>Pyrene</b>	<b>90</b>	<b>(66 - 109)</b>			<b>SW846 8270C</b>
	<b>88</b>	<b>(66 - 109)</b>	<b>2.5</b>	<b>(0-20)</b>	<b>SW846 8270C</b>
<b>1,2,4-Trichloro-benzene</b>	<b>87</b>	<b>(64 - 107)</b>			<b>SW846 8270C</b>
	<b>88</b>	<b>(64 - 107)</b>	<b>1.0</b>	<b>(0-20)</b>	<b>SW846 8270C</b>
<b>2,4,5-Trichloro-phenol</b>	<b>92</b>	<b>(61 - 121)</b>			<b>SW846 8270C</b>
	<b>92</b>	<b>(61 - 121)</b>	<b>0.33</b>	<b>(0-20)</b>	<b>SW846 8270C</b>
<b>2,4,6-Trichloro-phenol</b>	<b>95</b>	<b>(61 - 119)</b>			<b>SW846 8270C</b>
	<b>94</b>	<b>(61 - 119)</b>	<b>0.37</b>	<b>(0-20)</b>	<b>SW846 8270C</b>

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
<b>Nitrobenzene-d5</b>	<b>101</b>	<b>(65 - 117)</b>
	<b>101</b>	<b>(65 - 117)</b>
<b>2-Fluorobiphenyl</b>	<b>106</b>	<b>(63 - 119)</b>
	<b>106</b>	<b>(63 - 119)</b>
<b>Terphenyl-d14</b>	<b>109</b>	<b>(63 - 115)</b>
	<b>105</b>	<b>(63 - 115)</b>
<b>2-Fluorophenol</b>	<b>100</b>	<b>(64 - 112)</b>
	<b>99</b>	<b>(64 - 112)</b>
<b>Phenol-d5</b>	<b>105</b>	<b>(62 - 110)</b>
	<b>103</b>	<b>(62 - 110)</b>
<b>2,4,6-Tribromophenol</b>	<b>115</b>	<b>(64 - 132)</b>
	<b>119</b>	<b>(64 - 132)</b>

**NOTE (S) :**

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

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Semivolatiles

Client Lot #....: I4C300228      Work Order #....: GC9GL1AC-LCS      Matrix.....: WATER  
 LCS Lot-Sample#: I4C310000-417      GC9GL1AD-LCSD  
 Prep Date.....: 03/31/04      Analysis Date..: 04/05/04  
 Prep Batch #....: 4091417      Analysis Time..: 15:35  
 Dilution Factor: 1

PARAMETER	SPIKE	MEASURED		PERCENT	RPD	METHOD
	AMOUNT	AMOUNT	UNITS	RECOVERY		
Acenaphthene	100	88.2	ug/L	88		SW846 8270C
	100	89.0	ug/L	89	0.99	SW846 8270C
Acenaphthylene	100	85.1	ug/L	85		SW846 8270C
	100	85.9	ug/L	86	0.99	SW846 8270C
Anthracene	100	86.5	ug/L	87		SW846 8270C
	100	87.3	ug/L	87	0.88	SW846 8270C
Benz(a)anthracene	100	91.0	ug/L	91		SW846 8270C
	100	90.5	ug/L	90	0.58	SW846 8270C
Benzo(b)fluoranthene	100	87.8	ug/L	88		SW846 8270C
	100	90.8	ug/L	91	3.4	SW846 8270C
Benzo(k)fluoranthene	100	90.8	ug/L	91		SW846 8270C
	100	89.3	ug/L	89	1.7	SW846 8270C
Benzo(ghi)perylene	100	79.5	ug/L	80		SW846 8270C
	100	78.5	ug/L	79	1.2	SW846 8270C
Benzo(a)pyrene	100	86.2	ug/L	86		SW846 8270C
	100	86.2	ug/L	86	0.020	SW846 8270C
bis(2-Chloroethoxy) methane	100	89.7	ug/L	90		SW846 8270C
	100	90.9	ug/L	91	1.3	SW846 8270C
bis(2-Chloroethyl)- ether	100	86.3	ug/L	86		SW846 8270C
	100	84.5	ug/L	84	2.1	SW846 8270C
bis(2-Chloroisopropyl) ether	100	83.9	ug/L	84		SW846 8270C
	100	83.8	ug/L	84	0.18	SW846 8270C
bis(2-Ethylhexyl) phthalate	100	91.0	ug/L	91		SW846 8270C
	100	90.1	ug/L	90	0.97	SW846 8270C
4-Bromophenyl phenyl ether	100	95.0	ug/L	95		SW846 8270C
	100	100	ug/L	100	5.6	SW846 8270C
Butyl benzyl phthalate	100	96.9	ug/L	97		SW846 8270C
	100	96.3	ug/L	96	0.63	SW846 8270C
4-Chloroaniline	100	89.1	ug/L	89		SW846 8270C
	100	88.6	ug/L	89	0.54	SW846 8270C

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**LABORATORY CONTROL SAMPLE DATA REPORT**

## GC/MS Semivolatiles

PARAMETER	SPIKE	MEASURED		PERCENT	RPD	METHOD
	AMOUNT	AMOUNT	UNITS	RECOVERY		
<b>4-Chloro-3-methylphenol</b>	100	90.4	ug/L	90		<b>SW846 8270C</b>
	100	90.8	ug/L	91	0.52	<b>SW846 8270C</b>
<b>2-Chloronaphthalene</b>	100	90.8	ug/L	91		<b>SW846 8270C</b>
	100	90.7	ug/L	91	0.070	<b>SW846 8270C</b>
<b>2-Chlorophenol</b>	100	84.0	ug/L	84		<b>SW846 8270C</b>
	100	83.9	ug/L	84	0.19	<b>SW846 8270C</b>
<b>4-Chlorophenyl phenyl ether</b>	100	95.8	ug/L	96		<b>SW846 8270C</b>
	100	97.3	ug/L	97	1.6	<b>SW846 8270C</b>
<b>Chrysene</b>	100	91.7	ug/L	92		<b>SW846 8270C</b>
<b>Dibenz(a,h)anthracene</b>	100	91.4	ug/L	91	0.25	<b>SW846 8270C</b>
	100	80.5	ug/L	81		<b>SW846 8270C</b>
<b>Dibenzofuran</b>	100	80.9	ug/L	81	0.53	<b>SW846 8270C</b>
	100	90.0	ug/L	90		<b>SW846 8270C</b>
<b>Di-n-butyl phthalate</b>	100	90.6	ug/L	91	0.65	<b>SW846 8270C</b>
	100	86.7	ug/L	87		<b>SW846 8270C</b>
<b>1,2-Dichlorobenzene</b>	100	88.9	ug/L	89	2.5	<b>SW846 8270C</b>
	100	82.0	ug/L	82		<b>SW846 8270C</b>
<b>1,3-Dichlorobenzene</b>	100	82.4	ug/L	82	0.41	<b>SW846 8270C</b>
	100	84.3	ug/L	84		<b>SW846 8270C</b>
<b>1,4-Dichlorobenzene</b>	100	83.8	ug/L	84	0.65	<b>SW846 8270C</b>
	100	85.9	ug/L	86		<b>SW846 8270C</b>
<b>3,3'-Dichlorobenzidine</b>	100	84.5	ug/L	84	1.7	<b>SW846 8270C</b>
	100	62.9	ug/L	63		<b>SW846 8270C</b>
<b>2,4-Dichlorophenol</b>	100	64.0	ug/L	64	1.7	<b>SW846 8270C</b>
	100	91.4	ug/L	91		<b>SW846 8270C</b>
<b>Diethyl phthalate</b>	100	91.6	ug/L	92	0.19	<b>SW846 8270C</b>
	100	95.5	ug/L	95		<b>SW846 8270C</b>
<b>2,4-Dimethylphenol</b>	100	90.4	ug/L	90	5.4	<b>SW846 8270C</b>
	100	70.5	ug/L	70		<b>SW846 8270C</b>
<b>Dimethyl phthalate</b>	100	65.9	ug/L	66	6.7	<b>SW846 8270C</b>
	100	97.0	ug/L	97		<b>SW846 8270C</b>
<b>4,6-Dinitro-2-methylphenol</b>	100	98.0	ug/L	98	0.96	<b>SW846 8270C</b>
	100	95.7	ug/L	96		<b>SW846 8270C</b>
	100	101	ug/L	101	5.8	<b>SW846 8270C</b>
<b>2,4-Dinitrophenol</b>	100	89.5	ug/L	90		<b>SW846 8270C</b>
<b>2,4-Dinitrotoluene</b>	100	96.9	ug/L	97	7.9	<b>SW846 8270C</b>
	100	95.5	ug/L	96		<b>SW846 8270C</b>
	100	94.1	ug/L	94	1.5	<b>SW846 8270C</b>

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**LABORATORY CONTROL SAMPLE DATA REPORT**

## GC/MS Semivolatiles

PARAMETER	SPIKE	MEASURED		PERCENT	METHOD
	AMOUNT	AMOUNT	UNITS	RECOVERY	
2,6-Dinitrotoluene	100	86.1	ug/L	86	SW846 8270C
	100	82.9	ug/L	83	SW846 8270C
Di-n-octyl phthalate	100	93.4	ug/L	93	SW846 8270C
	100	94.4	ug/L	94	SW846 8270C
Fluoranthene	100	88.3	ug/L	88	SW846 8270C
	100	91.4	ug/L	91	SW846 8270C
Fluorene	100	92.0	ug/L	92	SW846 8270C
	100	92.2	ug/L	92	SW846 8270C
Hexachlorobenzene	100	89.2	ug/L	89	SW846 8270C
	100	93.6	ug/L	94	SW846 8270C
Hexachlorobutadiene	100	88.7	ug/L	89	SW846 8270C
	100	89.2	ug/L	89	SW846 8270C
Hexachlorocyclopenta-diene	100		ug/L	18	SW846 8270C
	100		ug/L	18	SW846 8270C
Hexachloroethane	100	86.7	ug/L	87	SW846 8270C
	100	85.8	ug/L	86	1.0 SW846 8270C
Indeno(1,2,3-cd)pyrene	100	80.0	ug/L	80	SW846 8270C
	100	79.9	ug/L	80	0.090 SW846 8270C
Isophorone	100	86.9	ug/L	87	SW846 8270C
	100	88.4	ug/L	88	1.7 SW846 8270C
2-Methylnaphthalene	100	88.0	ug/L	88	SW846 8270C
	100	89.2	ug/L	89	1.4 SW846 8270C
2-Methylphenol	100	84.6	ug/L	85	SW846 8270C
	100	84.2	ug/L	84	0.50 SW846 8270C
Naphthalene	100	85.8	ug/L	86	SW846 8270C
	100	86.4	ug/L	86	0.64 SW846 8270C
2-Nitroaniline	100	91.3	ug/L	91	SW846 8270C
	100	91.6	ug/L	92	0.35 SW846 8270C
3-Nitroaniline	100	87.1	ug/L	87	SW846 8270C
	100	84.6	ug/L	85	2.9 SW846 8270C
4-Nitroaniline	100	87.6	ug/L	88	SW846 8270C
	100	88.1	ug/L	88	0.48 SW846 8270C
Nitrobenzene	100	85.6	ug/L	86	SW846 8270C
	100	85.2	ug/L	85	0.47 SW846 8270C
2-Nitrophenol	100	92.3	ug/L	92	SW846 8270C
	100	92.2	ug/L	92	0.020 SW846 8270C
4-Nitrophenol	100	78.9	ug/L	79	SW846 8270C
	100	79.7	ug/L	80	0.91 SW846 8270C
N-Nitrosodiphenylamine	100	70.4	ug/L	70	SW846 8270C
	100	66.3	ug/L	66	5.9 SW846 8270C

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## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Semivolatiles

Client Lot #....: I4C300228      Work Order #....: GC9GL1AC-LCS      Matrix.....: WATER  
 LCS Lot-Sample#: I4C310000-417      GC9GL1AD-LCSD

PARAMETER	SPIKE	MEASURED	PERCENT	METHOD
	AMOUNT	AMOUNT	RECOVERY	
<b>N-Nitrosodi-n-propyl-amine</b>	<b>100</b>	<b>88.5</b>	<b>88</b>	<b>SW846 8270C</b>
	100	88.4	88	SW846 8270C
<b>Pentachlorophenol</b>	<b>100</b>	<b>91.7</b>	<b>92</b>	<b>SW846 8270C</b>
	100	96.1	96	SW846 8270C
<b>Phenanthrene</b>	<b>100</b>	<b>88.2</b>	<b>88</b>	<b>SW846 8270C</b>
	100	91.3	91	SW846 8270C
<b>Phenol</b>	<b>100</b>	<b>95.5</b>	<b>95</b>	<b>SW846 8270C</b>
	100	95.1	95	SW846 8270C
<b>Pyrene</b>	<b>100</b>	<b>90.2</b>	<b>90</b>	<b>SW846 8270C</b>
	100	88.0	88	SW846 8270C
<b>1,2,4-Trichloro-benzene</b>	<b>100</b>	<b>87.2</b>	<b>87</b>	<b>SW846 8270C</b>
	100	88.1	88	SW846 8270C
<b>2,4,5-Trichloro-phenol</b>	<b>100</b>	<b>91.8</b>	<b>92</b>	<b>SW846 8270C</b>
	100	92.1	92	SW846 8270C
<b>2,4,6-Trichloro-phenol</b>	<b>100</b>	<b>94.7</b>	<b>95</b>	<b>SW846 8270C</b>
	100	94.3	94	SW846 8270C
<b>SURROGATE</b>		PERCENT	RECOVERY	
		RECOVERY	LIMITS	
<b>Nitrobenzene-d5</b>		101	(65 - 117)	
		101	(65 - 117)	
<b>2-Fluorobiphenyl</b>		106	(63 - 119)	
		106	(63 - 119)	
<b>Terphenyl-d14</b>		109	(63 - 115)	
		105	(63 - 115)	
<b>2-Fluorophenol</b>		100	(64 - 112)	
		99	(64 - 112)	
<b>Phenol-d5</b>		105	(62 - 110)	
		103	(62 - 110)	
<b>2,4,6-Tribromophenol</b>		115	(64 - 132)	
		119	(64 - 132)	

**NOTE (S) :**

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

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC Volatiles

Client Lot #....: I4C300228      Work Order #....: GDK181AE      Matrix.....: WATER  
LCS Lot-Sample#: I4D060000-209  
Prep Date.....: 04/02/04      Analysis Date...: 04/02/04  
Prep Batch #....: 4097209      Analysis Time...: 23:13  
Dilution Factor: 1

PARAMETER	PERCENT	RECOVERY	METHOD
	RECOVERY	LIMITS	
<b>Methane</b>	<b>94</b>	(57 - 118)	RSK SOP-175

NOTE (S) :

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

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC Volatiles

Client Lot #....: I4C300228      Work Order #....: GDK181AE      Matrix.....: WATER  
LCS Lot-Sample#: I4D060000-209  
Prep Date.....: 04/02/04      Analysis Date...: 04/02/04  
Prep Batch #....: 4097209      Analysis Time...: 23:13  
Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCENT</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>RECOVERY</u>	
	17.3	16.3	ug/L	94
<b>Methane</b>				RSK SOP-175

NOTE(S) :

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

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC Volatiles

Client Lot #...: I4C300228      Work Order #...: GDK801AC      Matrix.....: WATER  
LCS Lot-Sample#: I4D060000-270  
Prep Date.....: 04/04/04      Analysis Date...: 04/04/04  
Prep Batch #...: 4097270      Analysis Time...: 13:22  
Dilution Factor: 1

PARAMETER	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>	METHOD
Methane	89	(57 - 118)	RSK SOP-175

## NOTE(S) :

*Calculations are performed before rounding to avoid round-off errors in calculated results.*

**Bold print denotes control parameters**

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC Volatiles

Client Lot #....: I4C300228      Work Order #....: GDK801AC      Matrix.....: WATER  
LCS Lot-Sample#: I4D060000-270  
Prep Date.....: 04/04/04      Analysis Date...: 04/04/04  
Prep Batch #....: 4097270      Analysis Time..: 13:22  
Dilution Factor: 1

PARAMETER	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT <u>RECOVERY</u>	METHOD
<b>Methane</b>	<b>18.1</b>	<b>16.1</b>	ug/L	<b>89</b>	RSK SOP-175

**NOTE(S) :**

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

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC Volatiles

Client Lot #....: I4C300228      Work Order #....: GDFMM1AC-LCS      Matrix.....: WATER  
LCS Lot-Sample#: I4D020000-410      GDFMM1AD-LCSD  
Prep Date.....: 04/01/04      Analysis Date...: 04/01/04  
Prep Batch #....: 4093410      Analysis Time...: 12:21  
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	LIMITS	METHOD
<b>Gasoline Range Organics</b>	93	(85 - 115)			<b>SW846 8015B</b>
	88	(85 - 115)	6.1	(0-20)	<b>SW846 8015B</b>
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS			
4-Bromofluorobenzene (GRO)	95	(81 - 123)			
	82	(81 - 123)			

NOTE(S) :

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

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC Volatiles

Client Lot #...: I4C300228      Work Order #...: GDFMM1AC-LCS      Matrix.....: WATER  
 LCS Lot-Sample#: I4D020000-410      GDFMM1AD-LCSD  
 Prep Date.....: 04/01/04      Analysis Date..: 04/01/04  
 Prep Batch #...: 4093410      Analysis Time..: 12:21  
 Dilution Factor: 1

PARAMETER	SPIKE	MEASURED		PERCENT	RPD	METHOD
	AMOUNT	AMOUNT	UNITS	RECOVERY		
Gasoline Range Organics	2000	1860	ug/L	93		SW846 8015B
	2000	1750	ug/L	88	6.1	SW846 8015B
 SURROGATE		PERCENT		RECOVERY		
4-Bromofluorobenzene (GRO)		RECOVERY		LIMITS		
		95		(81 - 123)		
		82		(81 - 123)		

## NOTE (S) :

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

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC Volatiles

Client Lot #....: I4C300228      Work Order #....: GDK6A1AD-LCS      Matrix.....: WATER  
LCS Lot-Sample#: I4D060000-235                                 GDK6A1AE-LCSD  
Prep Date.....: 04/05/04      Analysis Date...: 04/05/04  
Prep Batch #....: 4097235      Analysis Time...: 12:58  
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	LIMITS	METHOD
Gasoline Range Organics	91	(85 - 115)			SW846 8015B
	90	(85 - 115)	0.74	(0-20)	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene (GRO)	97	(81 - 123)
	97	(81 - 123)

NOTE(S) :

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

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC Volatiles

**Client Lot #....:** I4C300228    **Work Order #....:** GDK6A1AD-LCS    **Matrix.....:** WATER  
**LCS Lot-Sample#:** I4D060000-235                                    **GDK6A1AE-LCSD**  
**Prep Date.....:** 04/05/04    **Analysis Date..:** 04/05/04  
**Prep Batch #....:** 4097235    **Analysis Time..:** 12:58  
**Dilution Factor:** 1

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>		<u>PERCENT</u>	<u>RPD</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECOVERY</u>		
<b>Gasoline Range Organics</b>	<b>2000</b>	<b>1820</b>	<b>ug/L</b>	<b>91</b>		<b>SW846 8015B</b>
	<b>2000</b>	<b>1810</b>	<b>ug/L</b>	<b>90</b>	<b>0.74</b>	<b>SW846 8015B</b>
<u>SURROGATE</u>				<u>PERCENT</u>	<u>RECOVERY</u>	
4-Bromofluorobenzene (GRO)				<u>RECOVERY</u>	<u>LIMITS</u>	
				<b>97</b>	<b>(81 - 123)</b>	
				<b>97</b>	<b>(81 - 123)</b>	

NOTE (S) :

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

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC Volatiles

Client Lot #...: I4C300228      Work Order #...: GDFQP1AC-LCS      Matrix.....: WATER  
 LCS Lot-Sample#: I4D020000-419      GDFQP1AD-LCSD  
 Prep Date.....: 04/01/04      Analysis Date..: 04/01/04  
 Prep Batch #...: 4093419      Analysis Time..: 10:52  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>			
Ethylbenzene	108	(85 - 115)			SW846 8021B
	106	(85 - 115)	1.8	(0-20)	SW846 8021B
Xylenes (total)	104	(85 - 115)			SW846 8021B
	99	(85 - 115)	5.1	(0-20)	SW846 8021B
Benzene	107	(85 - 115)			SW846 8021B
	108	(85 - 115)	0.68	(0-20)	SW846 8021B
Toluene	98	(85 - 115)			SW846 8021B
	95	(85 - 115)	3.5	(0-20)	SW846 8021B
<hr/>					
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>			
	<u>RECOVERY</u>	<u>LIMITS</u>			
Bromofluorobenzene	98	(85 - 111)			
a,a,a-Trifluorotoluene	99	(85 - 111)			
(TFT)	97	(84 - 114)			
	100	(84 - 114)			

NOTE (S) :

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

Bold print denotes control parameters

## **LABORATORY CONTROL SAMPLE DATA REPORT**

GC Volatiles

PARAMETER	SPIKE	MEASURED		PERCENT		METHOD
	AMOUNT	AMOUNT	UNITS	RECOVERY	RPD	
Ethylbenzene	20.0	21.6	ug/L	108		SW846 8021B
	20.0	21.2	ug/L	106	1.8	SW846 8021B
Xylenes (total)	60.0	62.4	ug/L	104		SW846 8021B
	60.0	59.3	ug/L	99	5.1	SW846 8021B
Benzene	20.0	21.4	ug/L	107		SW846 8021B
	20.0	21.5	ug/L	108	0.68	SW846 8021B
Toluene	20.0	19.6	ug/L	98		SW846 8021B
	20.0	19.0	ug/L	95	3.5	SW846 8021B
 SURROGATE		PERCENT	RECOVERY		 LIMITS	
Bromofluorobenzene		98	(85 - 111)			
		99	(85 - 111)			
a,a,a-Trifluorotoluene (TFT)		97	(84 - 114)			
		100	(84 - 114)			

**NOTE (S) :**

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

**Bold print denotes control parameters**

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC Volatiles

Client Lot #...: I4C300228      Work Order #...: GDH3X1AC      Matrix.....: SOLID  
LCS Lot-Sample#: I4D050000-214  
Prep Date.....: 04/02/04      Analysis Date...: 04/02/04  
Prep Batch #:...: 4096214      Analysis Time...: 10:48  
Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
Benzene	95	(73 - 128)	<b>SW846 8021B</b>
Ethylbenzene	91	(73 - 136)	<b>SW846 8021B</b>
Toluene	94	(71 - 129)	<b>SW846 8021B</b>
Xylenes (total)	92	(74 - 130)	<b>SW846 8021B</b>

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	93	(71 - 133)
a,a,a-Trifluorotoluene (TFT)	101	(67 - 125)

NOTE(S) :

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

**Bold** print denotes control parameters

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC Volatiles

**Client Lot #....:** I4C300228      **Work Order #....:** GDH3X1AC      **Matrix.....:** SOLID  
**LCS Lot-Sample#:** I4D050000-214  
**Prep Date.....:** 04/02/04      **Analysis Date...:** 04/02/04  
**Prep Batch #....:** 4096214      **Analysis Time..:** 10:48  
**Dilution Factor:** 1

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCENT</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>RECOVERY</u>	
Benzene	20.0	19.0	95	SW846 8021B
Ethylbenzene	20.0	18.2	91	SW846 8021B
Toluene	20.0	18.9	94	SW846 8021B
Xylenes (total)	60.0	55.1	92	SW846 8021B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	93	(71 - 133)
a,a,a-Trifluorotoluene (TFT)	101	(67 - 125)

**NOTE(S) :**

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

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC Volatiles

Client Lot #...: I4C300228      Work Order #...: GDK7T1AC      Matrix.....: WATER  
LCS Lot-Sample#: I4D060000-248  
Prep Date.....: 04/05/04      Analysis Date...: 04/05/04  
Prep Batch #...: 4097248      Analysis Time...: 11:23  
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	99	(85 - 115)	SW846 8021B
Ethylbenzene	101	(85 - 115)	SW846 8021B
Toluene	107	(85 - 115)	SW846 8021B
Xylenes (total)	100	(85 - 115)	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	102	(85 - 111)
a,a,a-Trifluorotoluene (TFT)	103	(84 - 114)

NOTE(S) :

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

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC Volatiles

**Client Lot #....:** I4C300228    **Work Order #....:** GDK7T1AC    **Matrix.....:** WATER  
**LCS Lot-Sample#:** I4D060000-248  
**Prep Date.....:** 04/05/04    **Analysis Date...:** 04/05/04  
**Prep Batch #....:** 4097248    **Analysis Time..:** 11:23  
**Dilution Factor:** 1

<u>PARAMETER</u>	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT <u>RECOVERY</u>	METHOD
Benzene	20.0	19.9	ug/L	99	SW846 8021B
Ethylbenzene	20.0	20.2	ug/L	101	SW846 8021B
Toluene	20.0	21.4	ug/L	107	SW846 8021B
Xylenes (total)	60.0	59.9	ug/L	100	SW846 8021B

<u>SURROGATE</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
Bromofluorobenzene	102	(85 - 111)
a,a,a-Trifluorotoluene (TFT)	103	(84 - 114)

**NOTE(S) :**

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

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC Volatiles

Client Lot #....: I4C300228      Work Order #....: GDL0F1AC      Matrix.....: WATER  
LCS Lot-Sample#: I4D060000-395  
Prep Date.....: 04/05/04      Analysis Date...: 04/05/04  
Prep Batch #....: 4097395      Analysis Time...: 10:26  
Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
Benzene	99	(85 - 115)	SW846 8021B
Ethylbenzene	99	(85 - 115)	SW846 8021B
Toluene	91	(85 - 115)	SW846 8021B
Xylenes (total)	92	(85 - 115)	SW846 8021B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	94	(85 - 111)
a,a,a-Trifluorotoluene (TFT)	95	(84 - 114)

NOTE(S) :

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

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC Volatiles

**Client Lot #...**: I4C300228    **Work Order #...**: GDL0F1AC    **Matrix.....**: WATER  
**LCS Lot-Sample#**: I4D060000-395  
**Prep Date.....**: 04/05/04    **Analysis Date...**: 04/05/04  
**Prep Batch #...**: 4097395    **Analysis Time...**: 10:26  
**Dilution Factor**: 1

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>UNITS</u>	<u>PERCENT</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>		<u>RECOVERY</u>	
Benzene	20.0	19.8	ug/L	99	SW846 8021B
Ethylbenzene	20.0	19.9	ug/L	99	SW846 8021B
Toluene	20.0	18.2	ug/L	91	SW846 8021B
Xylenes (total)	60.0	55.5	ug/L	92	SW846 8021B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	94	(85 - 111)
a,a,a-Trifluorotoluene (TFT)	95	(84 - 114)

NOTE(S) :

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

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC Semivolatiles

Client Lot #....: I4C300228      Work Order #....: GDARA1AC      Matrix.....: SOLID  
LCS Lot-Sample#: I4C310000-424  
Prep Date.....: 03/31/04      Analysis Date..: 04/07/04  
Prep Batch #....: 4091424      Analysis Time..: 21:49  
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Diesel Range Organics	89	(38 - 139)	SW846 8015B
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
o-Terphenyl	77	(40 - 144)	
Dotriacontane	95	(42 - 159)	

**NOTE (S) :**

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

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC Semivolatiles

Client Lot #...: I4C300228      Work Order #...: GDARA1AC      Matrix.....: SOLID  
LCS Lot-Sample#: I4C310000-424  
Prep Date.....: 03/31/04      Analysis Date...: 04/07/04  
Prep Batch #...: 4091424      Analysis Time...: 21:49  
Dilution Factor: 1

PARAMETER	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT RECOVERY	METHOD
Diesel Range Organics	33.3	29.8	mg/kg	89	SW846 8015B
<u>SURROGATE</u>		PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>		
o-Terphenyl		77	(40 - 144)		
Dotriacontane		95	(42 - 159)		

NOTE(S) :

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

Bold print denotes control parameters

**LABORATORY CONTROL SAMPLE EVALUATION REPORT**

### GC Semivolatiles

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
<b>Aroclor 1016</b>	123	(70 - 130)			<b>SW846 8082</b>
	124	(70 - 130)	0.93	(0-30)	<b>SW846 8082</b>
<b>Aroclor 1260</b>	127	(70 - 130)			<b>SW846 8082</b>
	127	(70 - 130)	0.050	(0-30)	<b>SW846 8082</b>

<u>SURROGATE</u>	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	106	(70 - 130)
	106	(70 - 130)
Decachlorobiphenyl	109	(70 - 130)
	110	(70 - 130)

**NOTE (S) :**

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

**Bold print** denotes control parameters

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC Semivolatiles

Client Lot #...: I4C300228      Work Order #...: GDCV41AC-LCS      Matrix.....: WIPE  
 LCS Lot-Sample#: I4D010000-416      GDCV41AD-LCSD  
 Prep Date.....: 04/01/04      Analysis Date...: 04/02/04  
 Prep Batch #...: 4092416      Analysis Time...: 20:23  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>		<u>PERCENT</u>	<u>RPD</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECOVERY</u>		
<b>Aroclor 1016</b>	2.50	3.08	ug/wipe	123		<b>SW846 8082</b>
	2.50	3.11	ug/wipe	124	0.93	<b>SW846 8082</b>
<b>Aroclor 1260</b>	2.50	3.17	ug/wipe	127		<b>SW846 8082</b>
	2.50	3.17	ug/wipe	127	0.050	<b>SW846 8082</b>

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Tetrachloro-m-xylene	106	(70 - 130)
	106	(70 - 130)
Decachlorobiphenyl	109	(70 - 130)
	110	(70 - 130)

NOTE(S) :

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

Bold print denotes control parameters

**LABORATORY CONTROL SAMPLE EVALUATION REPORT**

### TOTAL Metals

**Client Lot #....: I4C300228** **Matrix.....: SOLID**

**Matrix.....: SOLID**

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
<b>LCS Lot-Sample#:</b> I4D010000-199 <b>Prep Batch #</b> ...: 4092199					
Arsenic	91	(80 - 120)	SW846 6010B	03/31-04/01/04	GDAWH1AJ
		Dilution Factor: 1		Analysis Time...:	15:59
Barium	94	(80 - 120)	SW846 6010B	03/31-04/01/04	GDAWH1AK
		Dilution Factor: 1		Analysis Time...:	15:59
Cadmium	93	(80 - 120)	SW846 6010B	03/31-04/01/04	GDAWH1AL
		Dilution Factor: 1		Analysis Time...:	15:59
Lead	92	(80 - 120)	SW846 6010B	03/31-04/01/04	GDAWH1AM
		Dilution Factor: 1		Analysis Time...:	15:59
Selenium	90	(80 - 120)	SW846 6010B	03/31-04/01/04	GDAWH1AN
		Dilution Factor: 1		Analysis Time...:	15:59
Silver	95	(80 - 120)	SW846 6010B	03/31-04/01/04	GDAWH1AP
		Dilution Factor: 1		Analysis Time...:	15:59
Chromium	91	(80 - 120)	SW846 6010B	03/31-04/01/04	GDAWH1AQ
		Dilution Factor: 1		Analysis Time...:	15:59
<b>LCS Lot-Sample#:</b> I4D060000-173 <b>Prep Batch #</b> ...: 4097173					
Mercury	104	(80 - 120)	SW846 7471A	04/06-04/07/04	GDKXD1AC
		Dilution Factor: 1		Analysis Time...:	15:32

**NOTE(S) :**

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

## LABORATORY CONTROL SAMPLE DATA REPORT

## TOTAL Metals

Client Lot #....: I4C300228

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	PREPARATION- ANALYSIS DATE	WORK ORDER #
<b>LCS Lot-Sample#: I4D010000-199 Prep Batch #....: 4092199</b>						
Arsenic	50.0	45.6	mg/kg	91 Dilution Factor: 1	SW846 6010B Analysis Time...: 15:59	03/31-04/01/04 GDAWH1AJ
Barium	50.0	46.9	mg/kg	94 Dilution Factor: 1	SW846 6010B Analysis Time...: 15:59	03/31-04/01/04 GDAWH1AK
Cadmium	50.0	46.3	mg/kg	93 Dilution Factor: 1	SW846 6010B Analysis Time...: 15:59	03/31-04/01/04 GDAWH1AL
Lead	50.0	46.0	mg/kg	92 Dilution Factor: 1	SW846 6010B Analysis Time...: 15:59	03/31-04/01/04 GDAWH1AM
Selenium	50.0	44.8	mg/kg	90 Dilution Factor: 1	SW846 6010B Analysis Time...: 15:59	03/31-04/01/04 GDAWH1AN
Silver	10.0	9.51	mg/kg	95 Dilution Factor: 1	SW846 6010B Analysis Time...: 15:59	03/31-04/01/04 GDAWH1AP
Chromium	50.0	45.3	mg/kg	91 Dilution Factor: 1	SW846 6010B Analysis Time...: 15:59	03/31-04/01/04 GDAWH1AQ
<b>LCS Lot-Sample#: I4D060000-173 Prep Batch #....: 4097173</b>						
Mercury	0.417	0.433	mg/kg	104 Dilution Factor: 1	SW846 7471A Analysis Time...: 15:32	04/06-04/07/04 GDKXD1AC

**NOTE(S) :**

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

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## TOTAL Metals

Client Lot #....: I4C300228

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#:	I4D010000-480	Prep Batch #...:	4092480		
Mercury	101	(80 - 120)	SW846 7470A	04/02/04	GDDAV1AC
		Dilution Factor: 1		Analysis Time...: .00:00	

## NOTE(S) :

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

## LABORATORY CONTROL SAMPLE DATA REPORT

## TOTAL Metals

Client Lot #....: I4C300228

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	PREPARATION- METHOD	WORK ANALYSIS DATE	ORDER #
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LCS Lot-Sample#: I4D010000-480 Prep Batch #...: 4092480

Mercury 0.00500 0.00504 mg/L 101 SW846 7470A 04/02/04 GDDAV1AC

Dilution Factor: 1 Analysis Time...: 00:00

## NOTE(S) :

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

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## DISSOLVED Metals

Client Lot #....: I4C300228

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
<b>LCS Lot-Sample#:</b> I4D090000-141 <b>Prep Batch #:</b> 4100141					
Silver	103	(80 - 120)	SW846 6010B	04/09/04	GDVCK1AJ
		Dilution Factor: 1		Analysis Time...: 10:12	
Arsenic	100	(80 - 120)	SW846 6010B	04/09/04	GDVCK1AK
		Dilution Factor: 1		Analysis Time...: 10:12	
Barium	100	(80 - 120)	SW846 6010B	04/09/04	GDVCK1AL
		Dilution Factor: 1		Analysis Time...: 10:12	
Cadmium	99	(80 - 120)	SW846 6010B	04/09/04	GDVCK1AM
		Dilution Factor: 1		Analysis Time...: 10:12	
Chromium	97	(80 - 120)	SW846 6010B	04/09/04	GDVCK1AN
		Dilution Factor: 1		Analysis Time...: 10:12	
Lead	101	(80 - 120)	SW846 6010B	04/09/04	GDVCK1AP
		Dilution Factor: 1		Analysis Time...: 10:12	
Selenium	104	(80 - 120)	SW846 6010B	04/09/04	GDVCK1AQ
		Dilution Factor: 1		Analysis Time...: 10:12	

NOTE (S) :

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

## LABORATORY CONTROL SAMPLE DATA REPORT

## DISSOLVED Metals

Client Lot #...: I4C300228

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	PREPARATION- METHOD	WORK ANALYSIS DATE	WORK ORDER #
<b>LCS Lot-Sample#: I4D090000-141 Prep Batch #...: 4100141</b>							
Silver	0.100	0.103	mg/L	103	SW846 6010B	04/09/04	GDVCK1AJ
			Dilution Factor: 1		Analysis Time...: 10:12		
Arsenic	0.500	0.498	mg/L	100	SW846 6010B	04/09/04	GDVCK1AK
			Dilution Factor: 1		Analysis Time...: 10:12		
Barium	0.500	0.501	mg/L	100	SW846 6010B	04/09/04	GDVCK1AL
			Dilution Factor: 1		Analysis Time...: 10:12		
Cadmium	0.500	0.497	mg/L	99	SW846 6010B	04/09/04	GDVCK1AM
			Dilution Factor: 1		Analysis Time...: 10:12		
Chromium	0.500	0.487	mg/L	97	SW846 6010B	04/09/04	GDVCK1AN
			Dilution Factor: 1		Analysis Time...: 10:12		
Lead	0.500	0.504	mg/L	101	SW846 6010B	04/09/04	GDVCK1AP
			Dilution Factor: 1		Analysis Time...: 10:12		
Selenium	0.500	0.520	mg/L	104	SW846 6010B	04/09/04	GDVCK1AQ
			Dilution Factor: 1		Analysis Time...: 10:12		

NOTE(S) :

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

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## General Chemistry

Lot-Sample #....: I4C300228

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Total Alkalinity		WO#: GDGX21AC-LCS/GDGX21AD-LCSD	LCS	Lot-Sample#: I4D030000-125			
	95	(80 - 120)			MCAWW 310.1	04/02/04	4094125
	95	(80 - 120)	0.31	(0-20)	MCAWW 310.1	04/02/04	4094125
		Dilution Factor: 1			Analysis Time...: 14:00		
Total Alkalinity		WO#: GDLA31AC-LCS/GDLA31AD-LCSD	LCS	Lot-Sample#: I4D060000-275			
	97	(80 - 120)			MCAWW 310.1	04/06/04	4097275
	100	(80 - 120)	3.3	(0-20)	MCAWW 310.1	04/06/04	4097275
		Dilution Factor: 1			Analysis Time...: 10:00		

NOTE(S) :

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

## LABORATORY CONTROL SAMPLE DATA REPORT

## General Chemistry

Lot-Sample #....: I4C300228

Matrix.....: WATER

PARAMETER	SPIKE	MEASURED	PERCNT			METHOD	PREPARATION-	PREP
	AMOUNT	AMOUNT	UNITS	RECVRY	RPD		ANALYSIS DATE	BATCH #
Total Alkalinity			WO#:GDGX21AC-LCS/GDGX21AD-LCSD			LCS	Lot-Sample#:	I4D030000-125
	100	95.3	mg/L	95		MCAWW 310.1	04/02/04	4094125
	100	95.0	mg/L	95	0.31	MCAWW 310.1	04/02/04	4094125
			Dilution Factor: 1			Analysis Time..: 14:00		
Total Alkalinity			WO#:GDLA31AC-LCS/GDLA31AD-LCSD			LCS	Lot-Sample#:	I4D060000-275
	100	96.8	mg/L	97		MCAWW 310.1	04/06/04	4097275
	100	100	mg/L	100	3.3	MCAWW 310.1	04/06/04	4097275
			Dilution Factor: 1			Analysis Time..: 10:00		

NOTE(S) :

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

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## General Chemistry

Client Lot #...: I4C300228                           Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Chloride	97	Work Order #: GDRV01AC (85 - 106)	LCS Lot-Sample#: MCAWW 300.0A	04/07/04	Analysis Time...: 09:23 4099353
Nitrate-Nitrite	98	Work Order #: GDRCR1AC (90 - 110)	LCS Lot-Sample#: MCAWW 353.2	04/08/04	Analysis Time...: 10:00 4099278
Sulfate	96	Work Order #: GDNPN1AC (88 - 107)	LCS Lot-Sample#: MCAWW 300.0A	04/06/04	Analysis Time...: 09:06 4098195

NOTE(S) :

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

## LABORATORY CONTROL SAMPLE DATA REPORT

## General Chemistry

Client Lot #....: I4C300228

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	PREPARATION- METHOD	PREP ANALYSIS DATE	BATCH #
Chloride				Work Order #: GDRV01AC	LCS Lot-Sample#: I4D080000-353		
	3.00	2.91	mg/L	97	MCAWW 300.0A	04/07/04	4099353
				Dilution Factor: 1	Analysis Time...: 09:23		
Nitrate-Nitrite				Work Order #: GDRCR1AC	LCS Lot-Sample#: I4D080000-278		
	1.00	0.978	mg/L	98	MCAWW 353.2	04/08/04	4099278
				Dilution Factor: 1	Analysis Time...: 10:00		
Sulfate				Work Order #: GDNPNIAC	LCS Lot-Sample#: I4D070000-195		
	15.0	14.4	mg/L	96	MCAWW 300.0A	04/06/04	4098195
				Dilution Factor: 1	Analysis Time...: 09:06		

NOTE(S) :

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

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #...: I4C300228      Work Order #...: GC91K1AN-MS      Matrix.....: WATER  
 MS Lot-Sample #: I4C310305-001      GC91K1AP-MSD  
 Date Sampled...: 03/25/04 11:33 Date Received..: 03/31/04      MS Run #.....: 4105065  
 Prep Date.....: 04/04/04      Analysis Date..: 04/04/04  
 Prep Batch #...: 4097412      Analysis Time..: 15:11  
 Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	101	(75 - 131)			SW846 8260B
	106	(75 - 131)	5.7	(0-20)	SW846 8260B
Bromobenzene	93	(70 - 130)			SW846 8260B
	103	(70 - 130)	9.4	(0-20)	SW846 8260B
Bromochloromethane	79	(70 - 130)			SW846 8260B
	83	(70 - 130)	5.3	(0-20)	SW846 8260B
Bromodichloromethane	78	(73 - 124)			SW846 8260B
	84	(73 - 124)	7.3	(0-20)	SW846 8260B
Bromoform	71	(49 - 144)			SW846 8260B
	73	(49 - 144)	4.0	(0-20)	SW846 8260B
Bromomethane	61	(20 - 126)			SW846 8260B
	62	(20 - 126)	2.7	(0-20)	SW846 8260B
n-Butylbenzene	111	(61 - 144)			SW846 8260B
	117	(61 - 144)	5.5	(0-20)	SW846 8260B
sec-Butylbenzene	103	(70 - 130)			SW846 8260B
	110	(70 - 130)	6.9	(0-20)	SW846 8260B
tert-Butylbenzene	106	(70 - 130)			SW846 8260B
	114	(70 - 130)	7.8	(0-20)	SW846 8260B
Carbon tetrachloride	106	(42 - 154)			SW846 8260B
	112	(42 - 154)	5.8	(0-20)	SW846 8260B
Chlorobenzene	84	(84 - 112)			SW846 8260B
	90	(84 - 112)	7.2	(0-20)	SW846 8260B
Chlorodibromomethane	74 a	(77 - 119)			SW846 8260B
	78	(77 - 119)	5.3	(0-20)	SW846 8260B
Chloroethane	86	(46 - 139)			SW846 8260B
	91	(46 - 139)	6.3	(0-20)	SW846 8260B
Chloroform	93	(69 - 129)			SW846 8260B
	99	(69 - 129)	5.8	(0-20)	SW846 8260B
Chloromethane	69	(32 - 126)			SW846 8260B
	73	(32 - 126)	6.4	(0-20)	SW846 8260B
2-Chlorotoluene	104	(70 - 130)			SW846 8260B
	113	(70 - 130)	8.5	(0-20)	SW846 8260B
4-Chlorotoluene	102	(70 - 130)			SW846 8260B
	110	(70 - 130)	7.1	(0-20)	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	60 a	(70 - 130)			SW846 8260B
	62 a	(70 - 130)	2.7	(0-20)	SW846 8260B
1,2-Dibromoethane	76	(70 - 130)			SW846 8260B
	84	(70 - 130)	10	(0-20)	SW846 8260B

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## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #...: I4C300228      Work Order #...: GC91K1AN-MS      Matrix.....: WATER  
 MS Lot-Sample #: I4C310305-001      GC91K1AP-MSD

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
Dibromomethane	79	(70 - 130)			SW846 8260B
	85	(70 - 130)	6.9	(0-20)	SW846 8260B
1,2-Dichlorobenzene	77	(71 - 111)			SW846 8260B
	88	(71 - 111)	13	(0-20)	SW846 8260B
1,3-Dichlorobenzene	90	(77 - 112)			SW846 8260B
	98	(77 - 112)	8.7	(0-20)	SW846 8260B
1,4-Dichlorobenzene	87	(79 - 113)			SW846 8260B
	94	(79 - 113)	8.4	(0-20)	SW846 8260B
Dichlorodifluoromethane	53 a	(70 - 130)			SW846 8260B
	57 a	(70 - 130)	7.3	(0-20)	SW846 8260B
1,1-Dichloroethane	97	(67 - 132)			SW846 8260B
	103	(67 - 132)	6.6	(0-20)	SW846 8260B
1,2-Dichloroethane	87	(49 - 129)			SW846 8260B
	91	(49 - 129)	4.7	(0-20)	SW846 8260B
1,1-Dichloroethene	100	(76 - 123)			SW846 8260B
	106	(76 - 123)	5.2	(0-20)	SW846 8260B
cis-1,2-Dichloroethene	92	(70 - 124)			SW846 8260B
	99	(70 - 124)	7.1	(0-20)	SW846 8260B
trans-1,2-Dichloroethene	97	(78 - 121)			SW846 8260B
	102	(78 - 121)	5.5	(0-20)	SW846 8260B
1,2-Dichloropropane	83	(69 - 123)			SW846 8260B
	89	(69 - 123)	6.7	(0-15)	SW846 8260B
1,3-Dichloropropane	79	(70 - 130)			SW846 8260B
	84	(70 - 130)	6.8	(0-20)	SW846 8260B
2,2-Dichloropropane	113	(70 - 130)			SW846 8260B
	117	(70 - 130)	3.7	(0-20)	SW846 8260B
1,1-Dichloropropene	99	(70 - 130)			SW846 8260B
	105	(70 - 130)	6.0	(0-20)	SW846 8260B
Ethylbenzene	94	(75 - 132)			SW846 8260B
	102	(75 - 132)	7.8	(0-20)	SW846 8260B
Hexachlorobutadiene	64 a	(70 - 130)			SW846 8260B
	72	(70 - 130)	12	(0-20)	SW846 8260B
Isopropylbenzene	80	(75 - 118)			SW846 8260B
	88	(75 - 118)	9.5	(0-40)	SW846 8260B
p-Isopropyltoluene	100	(70 - 130)			SW846 8260B
	106	(70 - 130)	5.6	(0-20)	SW846 8260B
Methylene chloride	76	(74 - 113)			SW846 8260B
	79	(74 - 113)	4.8	(0-20)	SW846 8260B
Naphthalene	37 a	(70 - 130)			SW846 8260B
	52 a,p	(70 - 130)	34	(0-20)	SW846 8260B
n-Propylbenzene	104	(69 - 134)			SW846 8260B
	110	(69 - 134)	5.6	(0-20)	SW846 8260B

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## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #....: I4C300228      Work Order #....: GC91K1AN-MS      Matrix.....: WATER  
 MS Lot-Sample #: I4C310305-001    GC91K1AP-MSD

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
Styrene	64 a 68 a	(74 - 111) (74 - 111)			SW846 8260B SW846 8260B
1,1,1,2-Tetrachloroethane	78 84	(70 - 130) (70 - 130)	6.2 7.9	(0-20) (0-40)	SW846 8260B SW846 8260B
1,1,2,2-Tetrachloroethane	57 a 66	(64 - 109) (64 - 109)			SW846 8260B SW846 8260B
Tetrachloroethene	92 99	(73 - 134) (73 - 134)			SW846 8260B SW846 8260B
Toluene	95 103	(75 - 123) (75 - 123)	15 7.6	(0-20)	SW846 8260B SW846 8260B
1,2,3-Trichlorobenzene	32	(10 - 166)			SW846 8260B
1,2,4-Trichloro-benzene	55 p 44 a 55 a,p	(10 - 166) (70 - 130) (70 - 130)	52 21	(0-20)	SW846 8260B SW846 8260B SW846 8260B
1,1,1-Trichloroethane	103 108	(37 - 145) (37 - 145)			SW846 8260B SW846 8260B
1,1,2-Trichloroethane	71 77	(70 - 113) (70 - 113)			SW846 8260B SW846 8260B
Trichloroethene	90 95	(84 - 123) (84 - 123)	6.2	(0-20)	SW846 8260B SW846 8260B
Trichlorofluoromethane	128 136	(36 - 162) (36 - 162)			SW846 8260B SW846 8260B
1,2,3-Trichloropropane	83 88	(47 - 131) (47 - 131)			SW846 8260B SW846 8260B
1,2,4-Trimethylbenzene	103 110	(60 - 127) (60 - 127)			SW846 8260B SW846 8260B
1,3,5-Trimethylbenzene	101 109	(61 - 129) (61 - 129)			SW846 8260B SW846 8260B
Vinyl chloride	60 65	(55 - 119) (55 - 119)			SW846 8260B SW846 8260B
o-Xylene	77	(70 - 130)			SW846 8260B
m-Xylene & p-Xylene	83 176 a 189 a	(70 - 130) (70 - 130) (70 - 130)	6.6 8.4 7.4	(0-20)	SW846 8260B SW846 8260B SW846 8260B
<u>SURROGATE</u>		<u>PERCENT RECOVERY</u>		<u>RECOVERY LIMITS</u>	
4-Bromofluorobenzene		101 106		(75 - 135) (75 - 135)	

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## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #....: I4C300228      Work Order #....: GC91K1AN-MS      Matrix.....: WATER  
MS Lot-Sample #: I4C310305-001      GC91K1AP-MSD

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Toluene-d8	97	(91 - 128)
	99	(91 - 128)
Dibromofluoromethane	93	(61 - 125)
	94	(61 - 125)
1,2-Dichloroethane-d4	93	(57 - 116)
	93	(57 - 116)

NOTE(S) :

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

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

p Relative percent difference (RPD) is outside stated control limits.

## MATRIX SPIKE SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: I4C300228      Work Order #...: GC91K1AN-MS      Matrix.....: WATER  
 MS Lot-Sample #: I4C310305-001      GC91K1AP-MSD  
 Date Sampled...: 03/25/04 11:33 Date Received...: 03/31/04      MS Run #.....: 4105065  
 Prep Date.....: 04/04/04      Analysis Date...: 04/04/04  
 Prep Batch #...: 4097412      Analysis Time...: 15:11  
 Dilution Factor: 1

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCNT	RECVRY	RPD	METHOD
	AMOUNT	AMT	AMOUNT					
Benzene	ND	10.0	10.1	ug/L	101	SW846	8260B	
	ND	10.0	10.6	ug/L	106	SW846	8260B	
Bromobenzene	ND	10.0	9.34	ug/L	93	SW846	8260B	
	ND	10.0	10.3	ug/L	103	SW846	8260B	
Bromochloromethane	ND	10.0	7.87	ug/L	79	SW846	8260B	
	ND	10.0	8.30	ug/L	83	SW846	8260B	
Bromodichloromethane	ND	10.0	7.79	ug/L	78	SW846	8260B	
	ND	10.0	8.38	ug/L	84	SW846	8260B	
Bromoform	ND	10.0	7.05	ug/L	71	SW846	8260B	
	ND	10.0	7.35	ug/L	73	SW846	8260B	
Bromomethane	ND	10.0	6.08	ug/L	61	SW846	8260B	
	ND	10.0	6.24	ug/L	62	SW846	8260B	
n-Butylbenzene	ND	10.0	11.1	ug/L	111	SW846	8260B	
	ND	10.0	11.7	ug/L	117	SW846	8260B	
sec-Butylbenzene	ND	10.0	10.3	ug/L	103	SW846	8260B	
	ND	10.0	11.0	ug/L	110	SW846	8260B	
tert-Butylbenzene	ND	10.0	10.6	ug/L	106	SW846	8260B	
	ND	10.0	11.4	ug/L	114	SW846	8260B	
Carbon tetrachloride	ND	10.0	10.6	ug/L	106	SW846	8260B	
	ND	10.0	11.2	ug/L	112	SW846	8260B	
Chlorobenzene	ND	10.0	8.39	ug/L	84	SW846	8260B	
	ND	10.0	9.02	ug/L	90	SW846	8260B	
Chlorodibromomethane	ND	10.0	7.44	ug/L	74 a	SW846	8260B	
	ND	10.0	7.84	ug/L	78	SW846	8260B	
Chloroethane	ND	10.0	8.58	ug/L	86	SW846	8260B	
	ND	10.0	9.13	ug/L	91	SW846	8260B	
Chloroform	ND	10.0	9.33	ug/L	93	SW846	8260B	
	ND	10.0	9.88	ug/L	99	SW846	8260B	
Chloromethane	ND	10.0	6.89	ug/L	69	SW846	8260B	
	ND	10.0	7.35	ug/L	73	SW846	8260B	
2-Chlorotoluene	ND	10.0	10.4	ug/L	104	SW846	8260B	
	ND	10.0	11.3	ug/L	113	SW846	8260B	
4-Chlorotoluene	ND	10.0	10.2	ug/L	102	SW846	8260B	
	ND	10.0	11.0	ug/L	110	SW846	8260B	
1,2-Dibromo-3-chloropropane (DBCP)	ND	10.0	6.03	ug/L	60 a	SW846	8260B	
	ND	10.0	6.19	ug/L	62 a	SW846	8260B	
1,2-Dibromoethane	ND	10.0	7.62	ug/L	76	SW846	8260B	
	ND	10.0	8.44	ug/L	84	SW846	8260B	

(Continued on next page)

## MATRIX SPIKE SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #....: I4C300228      Work Order #....: GC91K1AN-MS      Matrix.....: WATER  
 MS Lot-Sample #: I4C310305-001      GC91K1AP-MSD

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCNT		
	AMOUNT	AMT	AMOUNT		RECVRY	RPD	METHOD
Dibromomethane	ND	10.0	7.93	ug/L	79		SW846 8260B
	ND	10.0	8.49	ug/L	85	6.9	SW846 8260B
1,2-Dichlorobenzene	ND	10.0	7.73	ug/L	77		SW846 8260B
	ND	10.0	8.80	ug/L	88	13	SW846 8260B
1,3-Dichlorobenzene	ND	10.0	8.99	ug/L	90		SW846 8260B
	ND	10.0	9.81	ug/L	98	8.7	SW846 8260B
1,4-Dichlorobenzene	ND	10.0	8.68	ug/L	87		SW846 8260B
	ND	10.0	9.44	ug/L	94	8.4	SW846 8260B
Dichlorodifluoromethane	ND	10.0	5.29	ug/L	53 a		SW846 8260B
	ND	10.0	5.70	ug/L	57 a	7.3	SW846 8260B
1,1-Dichloroethane	ND	10.0	9.68	ug/L	97		SW846 8260B
	ND	10.0	10.3	ug/L	103	6.6	SW846 8260B
1,2-Dichloroethane	ND	10.0	8.73	ug/L	87		SW846 8260B
	ND	10.0	9.15	ug/L	91	4.7	SW846 8260B
1,1-Dichloroethene	ND	10.0	10.0	ug/L	100		SW846 8260B
	ND	10.0	10.6	ug/L	106	5.2	SW846 8260B
cis-1,2-Dichloroethene	ND	10.0	9.22	ug/L	92		SW846 8260B
	ND	10.0	9.90	ug/L	99	7.1	SW846 8260B
trans-1,2-Dichloroethene	ND	10.0	9.66	ug/L	97		SW846 8260B
	ND	10.0	10.2	ug/L	102	5.5	SW846 8260B
1,2-Dichloropropane	ND	10.0	8.30	ug/L	83		SW846 8260B
	ND	10.0	8.88	ug/L	89	6.7	SW846 8260B
1,3-Dichloropropane	ND	10.0	7.87	ug/L	79		SW846 8260B
	ND	10.0	8.42	ug/L	84	6.8	SW846 8260B
2,2-Dichloropropane	ND	10.0	11.3	ug/L	113		SW846 8260B
	ND	10.0	11.7	ug/L	117	3.7	SW846 8260B
1,1-Dichloropropene	ND	10.0	9.92	ug/L	99		SW846 8260B
	ND	10.0	10.5	ug/L	105	6.0	SW846 8260B
Ethylbenzene	ND	10.0	9.39	ug/L	94		SW846 8260B
	ND	10.0	10.2	ug/L	102	7.8	SW846 8260B
Hexachlorobutadiene	ND	10.0	6.40	ug/L	64 a		SW846 8260B
	ND	10.0	7.23	ug/L	72	12	SW846 8260B
Isopropylbenzene	ND	10.0	8.01	ug/L	80		SW846 8260B
	ND	10.0	8.81	ug/L	88	9.5	SW846 8260B
p-Isopropyltoluene	ND	10.0	10.0	ug/L	100		SW846 8260B
	ND	10.0	10.6	ug/L	106	5.6	SW846 8260B
Methylene chloride	ND	10.0	7.56	ug/L	76		SW846 8260B
	ND	10.0	7.94	ug/L	79	4.8	SW846 8260B
Naphthalene	ND	10.0	3.69	ug/L	37 a		SW846 8260B
	ND	10.0	5.20	ug/L	52 a,p 34		SW846 8260B
n-Propylbenzene	ND	10.0	10.4	ug/L	104		SW846 8260B
	ND	10.0	11.0	ug/L	110	5.6	SW846 8260B

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## MATRIX SPIKE SAMPLE DATA REPORT

## GC/MS Volatiles

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Styrene	ND	10.0	6.43	ug/L	64 a		SW846 8260B
	ND	10.0	6.84	ug/L	68 a	6.2	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	10.0	7.79	ug/L	78		SW846 8260B
	ND	10.0	8.43	ug/L	84	7.9	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	10.0	5.68	ug/L	57 a		SW846 8260B
	ND	10.0	6.59	ug/L	66	15	SW846 8260B
Tetrachloroethene	ND	10.0	9.20	ug/L	92		SW846 8260B
	ND	10.0	9.93	ug/L	99	7.6	SW846 8260B
Toluene	ND	10.0	9.47	ug/L	95		SW846 8260B
	ND	10.0	10.3	ug/L	103	8.4	SW846 8260B
1,2,3-Trichlorobenzene	ND	10.0	3.23	ug/L	32		SW846 8260B
	ND	10.0	5.49	ug/L	55 p	52	SW846 8260B
1,2,4-Trichloro- benzene	ND	10.0	4.41	ug/L	44 a		SW846 8260B
	ND	10.0	5.46	ug/L	55 a,p	21	SW846 8260B
1,1,1-Trichloroethane	ND	10.0	10.3	ug/L	103		SW846 8260B
	ND	10.0	10.8	ug/L	108	4.8	SW846 8260B
1,1,2-Trichloroethane	ND	10.0	7.13	ug/L	71		SW846 8260B
	ND	10.0	7.65	ug/L	77	7.0	SW846 8260B
Trichloroethene	ND	10.0	8.97	ug/L	90		SW846 8260B
	ND	10.0	9.54	ug/L	95	6.2	SW846 8260B
Trichlorofluoromethane	ND	10.0	12.8	ug/L	128		SW846 8260B
	ND	10.0	13.6	ug/L	136	6.0	SW846 8260B
1,2,3-Trichloroproppane	ND	10.0	8.28	ug/L	83		SW846 8260B
	ND	10.0	8.84	ug/L	88	6.6	SW846 8260B
1,2,4-Trimethylbenzene	ND	10.0	10.3	ug/L	103		SW846 8260B
	ND	10.0	11.0	ug/L	110	7.0	SW846 8260B
1,3,5-Trimethylbenzene	ND	10.0	10.1	ug/L	101		SW846 8260B
	ND	10.0	10.9	ug/L	109	7.5	SW846 8260B
Vinyl chloride	ND	10.0	6.04	ug/L	60		SW846 8260B
	ND	10.0	6.55	ug/L	65	8.1	SW846 8260B
o-Xylene	ND	10.0	7.68	ug/L	77		SW846 8260B
	ND	10.0	8.35	ug/L	83	8.4	SW846 8260B
m-Xylene & p-Xylene	ND	10.0	17.6	ug/L	176 a		SW846 8260B
	ND	10.0	18.9	ug/L	189 a	7.4	SW846 8260B
<u>SURROGATE</u>				PERCENT RECOVERY	RECOVERY LIMITS		
4-Bromofluorobenzene				101	(75 - 135)		
				106	(75 - 135)		

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## MATRIX SPIKE SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #....: I4C300228      Work Order #....: GC91K1AN-MS      Matrix.....: WATER  
MS Lot-Sample #: I4C310305-001      GC91K1AP-MSD

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Toluene-d8	97	(91 - 128)
	99	(91 - 128)
Dibromofluoromethane	93	(61 - 125)
	94	(61 - 125)
1,2-Dichloroethane-d4	93	(57 - 116)
	93	(57 - 116)

## NOTE(S) :

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

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

p Relative percent difference (RPD) is outside stated control limits.

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC Volatiles

Client Lot #....: I4C300228      Work Order #....: GC6731CV-MS      Matrix.....: WATER  
MS Lot-Sample #: I4C300228-001      GC6731CW-MSD  
Date Sampled...: 03/25/04 09:50 Date Received..: 03/30/04      MS Run #.....: 4097079  
Prep Date.....: 04/02/04      Analysis Date..: 04/03/04  
Prep Batch #....: 4097209      Analysis Time..: 17:00  
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	LIMITS	METHOD
Methane	39	(27 - 156)			RSK SOP-175
	66	(27 - 156)	7.6	(0-31)	RSK SOP-175

## NOTE(S) :

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

Bold print denotes control parameters

## MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

PARAMETER	SAMPLE	SPike	MEASRD	PERCNT			METHOD
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	
<b>Methane</b>	54	20.1	61.9	ug/L	39		RSK SOP-175
	54	19.5	66.7	ug/L	66	7.6	RSK SOP-175

**NOTE (S) :**

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

**Bold print denotes control parameters**

## MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
<b>Methane</b>	<b>85</b>	<b>(27 - 156)</b>			RSK SOP-175
	<b>82</b>	<b>(27 - 156)</b>	<b>5.1</b>	<b>(0-31)</b>	RSK SOP-175

**NOTE (S) :**

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

**Bold print denotes control parameters**

## MATRIX SPIKE SAMPLE DATA REPORT

## GC Volatiles

Client Lot #....: I4C300228      Work Order #....: GC7MG1AJ-MS      Matrix.....: WATER  
MS Lot-Sample #: I4C300228-039                                 GC7MG1AK-MSD  
Date Sampled....: 03/26/04 15:51 Date Received...: 03/30/04      MS Run #.....: 4097115  
Prep Date.....: 04/04/04      Analysis Date..: 04/04/04  
Prep Batch #....: 4097270      Analysis Time..: 16:39  
Dilution Factor: 1

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCNT			METHOD
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	
Methane	0.68	17.6	15.6	ug/L	85		RSK SOP-175
	0.68	17.3	14.8	ug/L	82	5.1	RSK SOP-175

NOTE(S) :

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

Bold print denotes control parameters

## MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
<b>Gasoline Range Organics</b>	<b>78 a, MSC</b>	<b>(79 - 124)</b>			<b>SW846 8015B</b>
	<b>99 p</b>	<b>(79 - 124)</b>	<b>25</b>	<b>(0-20)</b>	<b>SW846 8015B</b>
<u>SURROGATE</u>		<u>PERCENT RECOVERY</u>		<u>RECOVERY LIMITS</u>	
4-Bromofluorobenzene (GRO)		90		(75 - 122)	
		87		(75 - 122)	

**NOTE (S) :**

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

**Bold print denotes control parameters**

p Relative percent difference (RPD) is outside stated control limits.

a Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

## MATRIX SPIKE SAMPLE DATA REPORT

## GC Volatiles

Client Lot #....: I4C300228      Work Order #....: GC68W1AT-MS      Matrix.....: WATER  
 MS Lot-Sample #: I4C300228-002      GC68W1AU-MSD  
 Date Sampled...: 03/25/04 18:30 Date Received...: 03/30/04      MS Run #.....: 4093159  
 Prep Date.....: 04/01/04      Analysis Date...: 04/02/04  
 Prep Batch #....: 4093410      Analysis Time...: 09:37  
 Dilution Factor: 1

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCNT		
	AMOUNT	AMT	AMOUNT	RECVRY	RPD	METHOD
Gasoline Range Organics	ND	2000	1550	78		SW846 8015B
		Qualifiers: a, MSC				
	ND	2000	1990	99 p	25	SW846 8015B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
4-Bromofluorobenzene (GRO)	90	(75 - 122)
	87	(75 - 122)

NOTE (S) :

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

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

a Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC Volatiles

Client Lot #....: I4C300228      Work Order #....: GC7KK1AM-MS      Matrix.....: SOLID  
 MS Lot-Sample #: I4C300228-035      GC7KK1AN-MSD  
 Date Sampled....: 03/23/04 10:50      Date Received...: 03/30/04      MS Run #.....: 4096092  
 Prep Date.....: 04/02/04      Analysis Date...: 04/03/04  
 Prep Batch #....: 4096214      Analysis Time...: 01:16  
 Dilution Factor: 0.98      % Moisture.....:

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	LIMITS	METHOD
Benzene	81	(73 - 128)			SW846 8021B
	87	(73 - 128)	6.9	(0-30)	SW846 8021B
Ethylbenzene	75	(73 - 136)			SW846 8021B
	79	(73 - 136)	5.0	(0-30)	SW846 8021B
Toluene	75	(71 - 129)			SW846 8021B
	79	(71 - 129)	4.1	(0-30)	SW846 8021B
Xylenes (total)	77	(74 - 130)			SW846 8021B
	81	(74 - 130)	5.1	(0-30)	SW846 8021B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	93	(41 - 150)
a,a,a-Trifluorotoluene (TFT)	98	(43 - 165)
	98	(43 - 165)

NOTE (S) :

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

Bold print denotes control parameters

## MATRIX SPIKE SAMPLE DATA REPORT

## GC Volatiles

Client Lot #....: I4C300228      Work Order #....: GC7KK1AM-MS      Matrix.....: SOLID  
 MS Lot-Sample #: I4C300228-035      GC7KK1AN-MSD  
 Date Sampled...: 03/23/04 10:50      Date Received...: 03/30/04      MS Run #.....: 4096092  
 Prep Date.....: 04/02/04      Analysis Date...: 04/03/04  
 Prep Batch #....: 4096214      Analysis Time...: 01:16  
 Dilution Factor: 0.98      % Moisture....:

PARAMETER	SAMPLE	SPIKE	MEASRD		PERCNT		
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	METHOD
Benzene	ND	19.7	15.9	ug/kg	81		SW846 8021B
	ND	19.6	17.1	ug/kg	87	6.9	SW846 8021B
Ethylbenzene	ND	19.7	14.7	ug/kg	75		SW846 8021B
	ND	19.6	15.5	ug/kg	79	5.0	SW846 8021B
Toluene	ND	19.7	14.7	ug/kg	75		SW846 8021B
	ND	19.6	15.4	ug/kg	79	4.1	SW846 8021B
Xylenes (total)	ND	59.1	45.4	ug/kg	77		SW846 8021B
	ND	58.7	47.8	ug/kg	81	5.1	SW846 8021B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Bromo fluoro benzene	93	(41 - 150)
a,a,a-Trifluorotoluene	93	(41 - 150)
(TFT)	98	(43 - 165)
	98	(43 - 165)

NOTE(S) :

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

Bold print denotes control parameters

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC Volatiles

Client Lot #....: I4C300228      Work Order #....: GC7QP1AD-MS      Matrix.....: WATER  
 MS Lot-Sample #: I4C300228-046      GC7QP1AE-MSD  
 Date Sampled...: 03/26/04 16:45 Date Received..: 03/30/04      MS Run #.....: 4097107  
 Prep Date.....: 04/05/04      Analysis Date..: 04/06/04  
 Prep Batch #....: 4097248      Analysis Time..: 00:13  
 Dilution Factor: 5

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
Benzene	97	(85 - 115)			SW846 8021B
	73 a, MSC	(85 - 115)	5.0	(0-20)	SW846 8021B
Ethylbenzene	97	(85 - 115)			SW846 8021B
	96	(85 - 115)	0.47	(0-20)	SW846 8021B
Toluene	123 a, MSC	(85 - 115)			SW846 8021B
	121 a, MSC	(85 - 115)	1.9	(0-20)	SW846 8021B
Xylenes (total)	304 a, MSC	(85 - 115)			SW846 8021B
	299 a, MSC	(85 - 115)	1.1	(0-20)	SW846 8021B
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>			
Bromofluorobenzene	101	(81 - 119)			
	100	(81 - 119)			
a,a,a-Trifluorotoluene (TFT)	116	(73 - 135)			
	104	(73 - 135)			

NOTE (S) :

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

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

## MATRIX SPIKE SAMPLE DATA REPORT

## GC Volatiles

Client Lot #....: I4C300228      Work Order #....: GC7QP1AD-MS      Matrix.....: WATER  
 MS Lot-Sample #: I4C300228-046      GC7QP1AE-MSD  
 Date Sampled....: 03/26/04 16:45 Date Received...: 03/30/04      MS Run #.....: 4097107  
 Prep Date.....: 04/05/04 Analysis Date...: 04/06/04  
 Prep Batch #....: 4097248 Analysis Time...: 00:13  
 Dilution Factor: 5

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCNT		
	AMOUNT	AMT	AMOUNT		RECVRY	RPD	METHOD
Benzene	400	100	496	ug/L	97		SW846 8021B
	400	100	471	ug/L	73	5.0	SW846 8021B
	Qualifiers: a, MSC						
Ethylbenzene	67	100	164	ug/L	97		SW846 8021B
	67	100	163	ug/L	96	0.47	SW846 8021B
Toluene	ND	100	123	ug/L	123		SW846 8021B
	Qualifiers: a, MSC						
	ND	100	121	ug/L	121	1.9	SW846 8021B
	Qualifiers: a, MSC						
Xylenes (total)	150	100	449	ug/L	304		SW846 8021B
	Qualifiers: a, MSC						
	150	100	445	ug/L	299	1.1	SW846 8021B
	Qualifiers: a, MSC						

SURROGATE	PERCENT		RECOVERY	LIMITS
	RECOVERY			
Bromofluorobenzene	101		(81 - 119)	
	100		(81 - 119)	
a,a,a-Trifluorotoluene (TFT)	116		(73 - 135)	
	104		(73 - 135)	

**NOTE(S) :**

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

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

## MATRIX SPIKE SAMPLE EVALUATION REPORT

### GC Volatiles

PARAMETER	PERCENT	RECOVERY	RPD	RPD	METHOD
	RECOVERY	LIMITS	RPD	LIMITS	
<b>Benzene</b>	721 a	(85 - 115)	0.71	(0-20)	SW846 8021B
	716 a	(85 - 115)			SW846 8021B
<b>Ethylbenzene</b>	228 a	(85 - 115)	5.1	(0-20)	SW846 8021B
	240 a, MSC	(85 - 115)			SW846 8021B
<b>Toluene</b>	526 a	(85 - 115)	1.1	(0-20)	SW846 8021B
	532 a	(85 - 115)			SW846 8021B
<b>Xylenes (total)</b>	86	(85 - 115)	2.0	(0-20)	SW846 8021B
	98	(85 - 115)			SW846 8021B
SURROGATE	PERCENT	RECOVERY	RPD	RPD	METHOD
	RECOVERY	LIMITS	RPD	LIMITS	
<b>Bromofluorobenzene</b>	99	(81 - 119)	0.71	(0-20)	SW846 8021B
	98				SW846 8021B
<b>a,a,a-Trifluorotoluene (TFT)</b>	111	(73 - 135)	0.71	(0-20)	SW846 8021B
	109				SW846 8021B

**NOTE (S) :**

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

**Bold print** denotes control parameters

a Spiked analyte recovery is outside stated control limits.

**MSC** The percent recovery of this analyte in the associated laboratory control sample is within control limits.

## MATRIX SPIKE SAMPLE DATA REPORT

## GC Volatiles

Client Lot #....: I4C300228      Work Order #....: GC4AF1AG-MS      Matrix.....: WATER  
 MS Lot-Sample #: I4C290105-003                                         GC4AF1AH-MSD  
 Date Sampled...: 03/25/04 14:05 Date Received...: 03/26/04      MS Run #.....: 4097185  
 Prep Date.....: 04/05/04      Analysis Date...: 04/05/04  
 Prep Batch #....: 4097395      Analysis Time...: 22:26  
 Dilution Factor: 10

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCNT			METHOD
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	
Benzene		200	1440	ug/L	721	a	SW846 8021B
		200	1430	ug/L	716	a	0.71 SW846 8021B
Ethylbenzene		200	456	ug/L	228	a	SW846 8021B
		200	479	ug/L	240	5.1	SW846 8021B
Qualifiers: a, MSC							
Toluene		200	1050	ug/L	526	a	SW846 8021B
		200	1060	ug/L	532	a	1.1 SW846 8021B
Xylenes (total)	3000	600	3550	ug/L	86		SW846 8021B
	3000	600	3620	ug/L	98	2.0	SW846 8021B
SURROGATE			PERCENT	RECOVERY			
			RECOVERY	LIMITS			
Bromofluorobenzene			99	(81 - 119)			
			98	(81 - 119)			
a,a,a-Trifluorotoluene (TFT)			111	(73 - 135)			
			109	(73 - 135)			

NOTE (S) :

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

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC Semivolatiles

Client Lot #...: I4C300228      Work Order #...: GC7AF1AM-MS      Matrix.....: SOLID  
 MS Lot-Sample #: I4C300228-013                                         GC7AF1AN-MSD  
 Date Sampled...: 03/26/04 10:35 Date Received...: 03/30/04      MS Run #.....: 4092050  
 Prep Date.....: 03/31/04      Analysis Date...: 04/08/04  
 Prep Batch #...: 4091424      Analysis Time...: 01:29  
 Dilution Factor: 1      % Moisture....:

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>			
Diesel Range Organics	69	(40 - 126)			SW846 8015B
	61	(40 - 126)	7.2	(0-30)	SW846 8015B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
o-Terphenyl	74		(39 - 139)
	77		(39 - 139)
Dotriacontane	76		(13 - 161)
	79		(13 - 161)

NOTE (S) :

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

Bold print denotes control parameters

## MATRIX SPIKE SAMPLE DATA REPORT

## GC Semivolatiles

Client Lot #....: I4C300228      Work Order #....: GC7AF1AM-MS      Matrix.....: SOLID  
 MS Lot-Sample #: I4C300228-013      GC7AF1AN-MSD  
 Date Sampled....: 03/26/04 10:35      Date Received...: 03/30/04      MS Run #.....: 4092050  
 Prep Date.....: 03/31/04      Analysis Date...: 04/08/04  
 Prep Batch #....: 4091424      Analysis Time...: 01:29  
 Dilution Factor: 1      % Moisture.....:

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCNT			METHOD
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	
Diesel Range Organics	ND	33.3	34.4	mg/kg	69		SW846 8015B
	ND	33.3	32.0	mg/kg	61	7.2	SW846 8015B

SURROGATE	PERCENT		RECOVERY	LIMITS
	RECOVERY			
<i>o</i> -Terphenyl	74		(39 - 139)	
	77		(39 - 139)	
Dotriacontane	76		(13 - 161)	
	79		(13 - 161)	

NOTE(S) :

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

Bold print denotes control parameters

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## TOTAL Metals

Client Lot #....: I4C300228

Matrix.....: SOLID

Date Sampled....: 03/25/04 15:10 Date Received...: 03/30/04

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
<b>MS Lot-Sample #: I4C300228-016 Prep Batch #....: 4092199</b>							
Arsenic	91	(75 - 125)			SW846 6010B	03/31-04/01/04	GC7C51AM
	90	(75 - 125) 5.7 (0-20)			SW846 6010B	03/31-04/01/04	GC7C51AN
		Dilution Factor: 0.97					
		Analysis Time...: 16:43					
		MS Run #.....: 4092080					
Barium	161 N	(75 - 125)			SW846 6010B	03/31-04/01/04	GC7C51AP
	171 N	(75 - 125) 0.61 (0-20)			SW846 6010B	03/31-04/01/04	GC7C51AQ
		Dilution Factor: 0.97					
		Analysis Time...: 16:43					
		MS Run #.....: 4092080					
Cadmium	90	(75 - 125)			SW846 6010B	03/31-04/01/04	GC7C51AR
	90	(75 - 125) 5.3 (0-20)			SW846 6010B	03/31-04/01/04	GC7C51AT
		Dilution Factor: 0.97					
		Analysis Time...: 16:43					
		MS Run #.....: 4092080					
Chromium	91	(75 - 125)			SW846 6010B	03/31-04/01/04	GC7C51A2
	90	(75 - 125) 4.6 (0-20)			SW846 6010B	03/31-04/01/04	GC7C51A3
		Dilution Factor: 0.97					
		Analysis Time...: 16:43					
		MS Run #.....: 4092080					
Lead	92	(75 - 125)			SW846 6010B	03/31-04/01/04	GC7C51AU
	91	(75 - 125) 5.9 (0-20)			SW846 6010B	03/31-04/01/04	GC7C51AV
		Dilution Factor: 0.97					
		Analysis Time...: 16:43					
		MS Run #.....: 4092080					
Selenium	89	(75 - 125)			SW846 6010B	03/31-04/01/04	GC7C51AW
	87	(75 - 125) 6.9 (0-20)			SW846 6010B	03/31-04/01/04	GC7C51AX
		Dilution Factor: 0.97					
		Analysis Time...: 16:43					
		MS Run #.....: 4092080					
Silver	97	(75 - 125)			SW846 6010B	03/31-04/01/04	GC7C51A0
	96	(75 - 125) 5.2 (0-20)			SW846 6010B	03/31-04/01/04	GC7C51A1
		Dilution Factor: 0.97					
		Analysis Time...: 16:43					
		MS Run #.....: 4092080					

**NOTE(S) :**

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

N Spiked analytic recovery is outside stated control limits.

## MATRIX SPIKE SAMPLE DATA REPORT

## TOTAL Metals

Client Lot #....: I4C300228

Matrix.....: SOLID

Date Sampled...: 03/25/04 15:10 Date Received..: 03/30/04

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCNT			PREPARATION-	WORK
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD		

MS Lot-Sample #: I4C300228-016 Prep Batch #....: 4092199

## % Moisture.....:

## Arsenic

1.0	48.5	45.0	mg/kg	91		SW846 6010B	03/31-04/01/04	GC7C51AM
1.0	46.3	42.5	mg/kg	90	5.7	SW846 6010B	03/31-04/01/04	GC7C51AN
Dilution Factor: 0.97								
Analysis Time...: 16:43								
MS Run #.....: 4092080								

## Barium

38.1	48.5	116 N	mg/kg	161		SW846 6010B	03/31-04/01/04	GC7C51AP
38.1	46.3	117 N	mg/kg	171	0.61	SW846 6010B	03/31-04/01/04	GC7C51AQ
Dilution Factor: 0.97								
Analysis Time...: 16:43								
MS Run #.....: 4092080								

## Cadmium

ND	48.5	43.7	mg/kg	90		SW846 6010B	03/31-04/01/04	GC7C51AR
ND	46.3	41.5	mg/kg	90	5.3	SW846 6010B	03/31-04/01/04	GC7C51AT
Dilution Factor: 0.97								
Analysis Time...: 16:43								
MS Run #.....: 4092080								

## Chromium

2.9	48.5	46.9	mg/kg	91		SW846 6010B	03/31-04/01/04	GC7C51A2
2.9	46.3	44.8	mg/kg	90	4.6	SW846 6010B	03/31-04/01/04	GC7C51A3
Dilution Factor: 0.97								
Analysis Time...: 16:43								
MS Run #.....: 4092080								

## Lead

1.8	48.5	46.6	mg/kg	92		SW846 6010B	03/31-04/01/04	GC7C51AU
1.8	46.3	43.9	mg/kg	91	5.9	SW846 6010B	03/31-04/01/04	GC7C51AV
Dilution Factor: 0.97								
Analysis Time...: 16:43								
MS Run #.....: 4092080								

## Selenium

ND	48.5	43.1	mg/kg	89		SW846 6010B	03/31-04/01/04	GC7C51AW
ND	46.3	40.2	mg/kg	87	6.9	SW846 6010B	03/31-04/01/04	GC7C51AX
Dilution Factor: 0.97								
Analysis Time...: 16:43								
MS Run #.....: 4092080								

(Continued on next page)

## MATRIX SPIKE SAMPLE DATA REPORT

## TOTAL Metals

Client Lot #...: I4C300228

Matrix.....: SOLID

Date Sampled...: 03/25/04 15:10 Date Received..: 03/30/04

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCNT			PREPARATION-	WORK	ORDER #
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD			
<b>Silver</b>									
	ND	9.71	9.39	mg/kg	97		SW846	6010B	03/31-04/01/04 GC7C51A0
	ND	9.26	8.91	mg/kg	96	5.2	SW846	6010B	03/31-04/01/04 GC7C51A1
Dilution Factor: 0.97									
Analysis Time...: 16:43									
MS Run #.....: 4092080									

## NOTE(S) :

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

N Spiked analyte recovery is outside stated control limits.

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## TOTAL Metals

Client Lot #....: I4C300228

Matrix.....: WATER

Date Sampled...: 03/19/04 10:25 Date Received..: 03/24/04

PARAMETER	PERCENT	RECOVERY	RPD	METHOD	PREPARATION-	WORK
	RECOVERY	LIMITS	RPD		ANALYSIS DATE	ORDER #
<b>MS Lot-Sample #:</b> I4C240185-001 <b>Prep Batch #:</b> 4092480						
Mercury	84	(75 - 125)		SW846 7470A	04/02/04	GCR541AR
	86	(75 - 125)	2.3 (0-20)	SW846 7470A	04/02/04	GCR541AT
		Dilution Factor:	1			
		Analysis Time..:	00:00			
		MS Run #.....:	4092218			

**NOTE (S) :**

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

## MATRIX SPIKE SAMPLE DATA REPORT

## TOTAL Metals

Client Lot #...: I4C300228

Matrix.....: WATER

Date Sampled...: 03/19/04 10:25 Date Received..: 03/24/04

SAMPLE PARAMETER	SPIKE AMOUNT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: I4C240185-001 Prep Batch #...: 4092480

Mercury

ND	0.00200	0.00168	mg/L	84		SW846 7470A	04/02/04	GCR541AR
ND	0.00200	0.00172	mg/L	86	2.3	SW846 7470A	04/02/04	GCR541AT

Dilution Factor: 1

Analysis Time...: 00:00

MS Run #.....: 4092218

## NOTE(S) :

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

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## TOTAL Metals

Client Lot #....: I4C300228

Matrix.....: SOLID

Date Sampled....: 03/21/04 16:30 Date Received..: 03/30/04

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-	WORK
						ANALYSIS DATE	ORDER #

MS Lot-Sample #: I4C300228-008 Prep Batch #...: 4097173

± Moisture.....:

Mercury	74 N	(75 - 125)	SW846	7471A	04/06-04/07/04 GC69J1AM
	83	(75 - 125) 8.5 (0-20)	SW846	7471A	04/06-04/07/04 GC69J1AN
Dilution Factor: 0.93					
Analysis Time...: 15:37					
MS Run #.....: 4097046					

NOTE(S) :

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

N Spiked analyte recovery is outside stated control limits.

## MATRIX SPIKE SAMPLE DATA REPORT

## TOTAL Metals

Client Lot #...: I4C300228

Matrix.....: SOLID

Date Sampled...: 03/21/04 16:30 Date Received..: 03/30/04

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCNT			PREPARATION-	WORK	ORDER #
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD			

MS Lot-Sample #: I4C300228-008 Prep Batch #...: 4097173

% Moisture....:

## Mercury

ND	0.156	0.118 N	mg/kg	74	SW846	7471A	04/06-04/07/04	GC69J1AM	
ND	0.152	0.129	mg/kg	83	8.5	SW846	7471A	04/06-04/07/04	GC69J1AN
Dilution Factor: 0.93									
Analysis Time...: 15:37									
MS Run #.....: 4097046									

## NOTE(S) :

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

N Spiked analyte recovery is outside stated control limits.

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## DISSOLVED Metals

Client Lot #....: I4C300228

Matrix.....: WATER

Date Sampled...: 03/22/04 17:45 Date Received...: 03/24/04

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
<b>MS Lot-Sample #: I4C240287-002 Prep Batch #....: 4100141</b>							
Arsenic	101	(75 - 125)		SW846 6010B		04/09/04	GCTXE1A0
	102	(75 - 125) 1.2 (0-20)		SW846 6010B		04/09/04	GCTXE1A1
Dilution Factor: 1							
Analysis Time...: 10:28							
MS Run #.....: 4100025							
Barium	90	(75 - 125)		SW846 6010B		04/09/04	GCTXE1A2
	90	(75 - 125) 0.61 (0-20)		SW846 6010B		04/09/04	GCTXE1A3
Dilution Factor: 1							
Analysis Time...: 10:28							
MS Run #.....: 4100025							
Cadmium	72 N	(75 - 125)		SW846 6010B		04/09/04	GCTXE1A4
	74 N	(75 - 125) 2.5 (0-20)		SW846 6010B		04/09/04	GCTXE1A5
Dilution Factor: 1							
Analysis Time...: 10:28							
MS Run #.....: 4100025							
Chromium	79	(75 - 125)		SW846 6010B		04/09/04	GCTXE1A6
	81	(75 - 125) 2.8 (0-20)		SW846 6010B		04/09/04	GCTXE1A7
Dilution Factor: 1							
Analysis Time...: 10:28							
MS Run #.....: 4100025							
Lead	82	(75 - 125)		SW846 6010B		04/09/04	GCTXE1A8
	85	(75 - 125) 2.5 (0-20)		SW846 6010B		04/09/04	GCTXE1A9
Dilution Factor: 1							
Analysis Time...: 10:28							
MS Run #.....: 4100025							
Selenium	111	(75 - 125)		SW846 6010B		04/09/04	GCTXE1CA
	112	(75 - 125) 0.55 (0-20)		SW846 6010B		04/09/04	GCTXE1CC
Dilution Factor: 1							
Analysis Time...: 10:28							
MS Run #.....: 4100025							
Silver	124	(75 - 125)		SW846 6010B		04/09/04	GCTXE1AW
	124	(75 - 125) 0.15 (0-20)		SW846 6010B		04/09/04	GCTXE1AX
Dilution Factor: 1							
Analysis Time...: 10:28							
MS Run #.....: 4100025							

NOTE (S) :

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

N Spiked analyte recovery is outside stated control limits.

## MATRIX SPIKE SAMPLE DATA REPORT

## DISSOLVED Metals

Client Lot #....: I4C300228

Matrix.....: WATER

Date Sampled...: 03/22/04 17:45 Date Received...: 03/24/04

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCNT			PREPARATION-	WORK	ORDER #			
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD						
<b>MS Lot-Sample #: I4C240287-002 Prep Batch #....: 4100141</b>												
Arsenic												
	0.033	0.500	0.536	mg/L	101		SW846	6010B	04/09/04			
	0.033	0.500	0.543	mg/L	102	1.2	SW846	6010B	04/09/04			
	Dilution Factor: 1											
	Analysis Time...: 10:28											
	MS Run #.....: 4100025											
Barium												
	ND	0.500	0.548	mg/L	90		SW846	6010B	04/09/04			
	ND	0.500	0.545	mg/L	90	0.61	SW846	6010B	04/09/04			
	Dilution Factor: 1											
	Analysis Time...: 10:28											
	MS Run #.....: 4100025											
Cadmium												
	0.0076	0.500	0.369 N	mg/L	72		SW846	6010B	04/09/04			
	0.0076	0.500	0.378 N	mg/L	74	2.5	SW846	6010B	04/09/04			
	Dilution Factor: 1											
	Analysis Time...: 10:28											
	MS Run #.....: 4100025											
Chromium												
	0.012	0.500	0.405	mg/L	79		SW846	6010B	04/09/04			
	0.012	0.500	0.416	mg/L	81	2.8	SW846	6010B	04/09/04			
	Dilution Factor: 1											
	Analysis Time...: 10:28											
	MS Run #.....: 4100025											
Lead												
	0.020	0.500	0.431	mg/L	82		SW846	6010B	04/09/04			
	0.020	0.500	0.442	mg/L	85	2.5	SW846	6010B	04/09/04			
	Dilution Factor: 1											
	Analysis Time...: 10:28											
	MS Run #.....: 4100025											
Selenium												
	0.15	0.500	0.706	mg/L	111		SW846	6010B	04/09/04			
	0.15	0.500	0.710	mg/L	112	0.55	SW846	6010B	04/09/04			
	Dilution Factor: 1											
	Analysis Time...: 10:28											
	MS Run #.....: 4100025											

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## MATRIX SPIKE SAMPLE DATA REPORT

## DISSOLVED Metals

Client Lot #....: I4C300228

Matrix.....: WATER

Date Sampled....: 03/22/04 17:45 Date Received...: 03/24/04

PARAMETER	SAMPLE	SPIKE	MEASRD		PERCNT			PREPARATION-		WORK
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	METHOD	ANALYSIS	DATE	ORDER #
<b>Silver</b>										
	ND	0.100	0.124	mg/L	124		SW846 6010B		04/09/04	GCTXE1AW
	ND	0.100	0.124	mg/L	124	0.15	SW846 6010B		04/09/04	GCTXE1AX
Dilution Factor: 1										
Analysis Time...: 10:28										
MS Run #.....: 4100025										

## NOTE(S) :

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

N Spiked analyte recovery is outside stated control limits.

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## General Chemistry

Client Lot #....: I4C300228

Matrix.....: WATER

Date Sampled...: 03/25/04 14:05 Date Received..: 03/26/04

PARAMETER	PERCENT RECOVERY	RPD		PREPARATION-	PREP
	RECOVERY LIMITS	RPD	LIMITS	ANALYSIS DATE	BATCH #
Chloride		WO#: GC1891D1-MS/GC1891D2-MSD	MS	Lot-Sample #:	I4C260299-001
	92	(85 - 106)	MCAWW 300.0A	04/07/04	4099353
	93	(85 - 106)	0.41 (0-22) MCAWW 300.0A	04/07/04	4099353
		Dilution Factor: 1			
		Analysis Time...: 16:46			
		MS Run #.....: 4099177			
Nitrate-Nitrite		WO#: GCWJD1A4-MS/GCWJD1A5-MSD	MS	Lot-Sample #:	I4C250203-010
	89 N	(90 - 110)	MCAWW 353.2	04/08/04	4099278
	91	(90 - 110)	1.4 (0-20) MCAWW 353.2	04/08/04	4099278
		Dilution Factor: 1			
		Analysis Time...: 10:00			
		MS Run #.....: 4099133			
Nitrate-Nitrite		WO#: GC68W1AV-MS/GC68W1AW-MSD	MS	Lot-Sample #:	I4C300228-002
	85 N	(90 - 110)	MCAWW 353.2	04/08/04	4099278
	84 N	(90 - 110)	0.81 (0-20) MCAWW 353.2	04/08/04	4099278
		Dilution Factor: 1			
		Analysis Time...: 10:00			
		MS Run #.....: 4099133			
Sulfate		WO#: GC6731CX-MS/GC6731C0-MSD	MS	Lot-Sample #:	I4C300228-001
	92	(88 - 107)	MCAWW 300.0A	04/06/04	4098195
	95	(88 - 107)	2.1 (0-26) MCAWW 300.0A	04/06/04	4098195
		Dilution Factor: 1			
		Analysis Time...: 09:33			
		MS Run #.....: 4098093			

NOTE(S) :

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

N Spiked analyte recovery is outside stated control limits.

## MATRIX SPIKE SAMPLE DATA REPORT

## General Chemistry

Client Lot #....: I4C300228

Matrix.....: WATER

Date Sampled...: 03/25/04 14:05 Date Received..: 03/26/04

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCNT			METHOD	PREPARATION-	PREP
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD		ANALYSIS DATE	BATCH #
<b>Chloride</b> WO#: GC1891D1-MS/GC1891D2-MSD MS Lot-Sample #: I4C260299-001									
	241	300	517	mg/L	92		MCAWW 300.0A	04/07/04	4099353
	241	300	519	mg/L	93	0.41	MCAWW 300.0A	04/07/04	4099353
			Dilution Factor: 1						
			Analysis Time...: 16:46						
			MS Run #.....: 4099177						
<b>Nitrate-Nitrite</b> WO#: GCWJD1A4-MS/GCWJD1A5-MSD MS Lot-Sample #: I4C250203-010									
	14.7	20.0	32.4 N	mg/L	89		MCAWW 353.2	04/08/04	4099278
	14.7	20.0	32.8	mg/L	91	1.4	MCAWW 353.2	04/08/04	4099278
			Dilution Factor: 1						
			Analysis Time...: 10:00						
			MS Run #.....: 4099133						
<b>Nitrate-Nitrite</b> WO#: GC68W1AV-MS/GC68W1AW-MSD MS Lot-Sample #: I4C300228-002									
	14.9	20.0	32.0 N	mg/L	85		MCAWW 353.2	04/08/04	4099278
	14.9	20.0	31.7 N	mg/L	84	0.81	MCAWW 353.2	04/08/04	4099278
			Dilution Factor: 1						
			Analysis Time...: 10:00						
			MS Run #.....: 4099133						
<b>Sulfate</b> WO#: GC6731CX-MS/GC6731C0-MSD MS Lot-Sample #: I4C300228-001									
	81.9	300	358	mg/L	92		MCAWW 300.0A	04/06/04	4098195
	81.9	300	366	mg/L	95	2.1	MCAWW 300.0A	04/06/04	4098195
			Dilution Factor: 1						
			Analysis Time...: 09:33						
			MS Run #.....: 4098093						

**NOTE(S) :**

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

N Spiked analyte recovery is outside stated control limits.

## SAMPLE DUPLICATE EVALUATION REPORT

## General Chemistry

Client Lot #....: I4C300228      Work Order #....: GC189-SMP      Matrix.....: WATER  
    GC189-DUP

Date Sampled....: 03/25/04 14:05    Date Received...: 03/26/04

PARAM	RESULT	DUPLICATE		RPD	LIMIT	METHOD	PREPARATION-		PREP BATCH #
		RESULT	UNITS				ANALYSIS DATE		
Total Alkalinity	387	397	mg/L	2.6	(0-20)	MCAWW 310.1	SD Lot-Sample #: I4C260299-001 Analysis Time...: 14:00	04/02/04	4094125 MS Run Number...: 4094018
			Dilution Factor: 1						

## SAMPLE DUPLICATE EVALUATION REPORT

## General Chemistry

Client Lot #....: I4C300228      Work Order #....: GC7HQ-SMP  
    GC7HQ-DUP

Date Sampled...: 03/24/04 17:35    Date Received...: 03/30/04

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Total Alkalinity	165	169	mg/L	1.8	(0-20)	SD Lot-Sample #: I4C300228-029 MCAWW 310.1	04/02/04	4094125
			Dilution Factor: 1			Analysis Time...: 14:00	MS Run Number...: 4094018	

## SAMPLE DUPLICATE EVALUATION REPORT

## General Chemistry

Client Lot #....: I4C300228      Work Order #....: GC4EA-SMP      Matrix.....: WATER  
    GC4EA-DUP

Date Sampled....: 03/26/04 08:40    Date Received..: 03/27/04

PARAM	RESULT	DUPLICATE		RPD	LIMIT	METHOD	PREPARATION-	PREP	BATCH #
		RESULT	UNITS						
Total Alkalinity	730	741	mg/L	1.5	(0-20)	MCAWW 310.1	SD Lot-Sample #: I4C290114-004	04/06/04	4097275
			Dilution Factor: 1				Analysis Time..: 10:00		MS Run Number..: 4097120

## SAMPLE DUPLICATE EVALUATION REPORT

## General Chemistry

**Client Lot #....: I4C300228      Work Order #....: GC4FM-SMP      Matrix.....: WATER**

Date Sampled...: 03/25/04 15:35 Date Received..: 03/27/04

		DUPLICATE		RPD		PREPARATION-	PREP		
PARAM	RESULT	RESULT	UNITS	RPD	LIMIT	METHOD	ANALYSIS DATE	BATCH #	
Total Alkalinity	362	368	mg/L	1.7	(0-20)	SD Lot-Sample #: MCAWW 310.1	I4C290114-016	04/06/04	4097275
		Dilution Factor: 1		Analysis Time...: 10:00			MS Run Number...: 4097120		

### Report Attachment

Note that if this report contains tests performed for the following methods, the associated method deviations are applicable.

EPA 410.1 COD: Laboratory uses different analytical wavelength as specified by instrument manufacturer.

EPA 340.2 Fluoride: Preliminary Bellack distillation not performed.

EPA 8151A: Laboratory utilizes alternate extraction solvent.

Iowa OA-1: Benzene, toluene, ethylbenzene and xylenes (BTEX) not analyzed along with Gasoline Range Organics if client does not require BTEX.

EPA TO-12: Samples are not analyzed in duplicate.

EPA TO-14A and TO-15: Zero humidified nitrogen is used in place of air for method blanks.

### TRRP Reporting Requirements

If this package contains reports requiring TRRP (Texas Risk Reduction Program) reporting criteria, the following information applies.

The REPORTING LIMIT is equivalent to the TRRP acronym MQL (method quantitation limit).

The MDL is equivalent to the TRRP acronym SQL (sample quantitation limit).

SEVERN  
TRENT

STL

## CHAIN-OF-CUSTODY ADDENDUM

RECEIVED BY: LSTLot No: I4C300228DATE/TIME RECEIVED: 3-30-04 / 0815COC NUMBER: 9UNPACKED DATE/TIME: 3-30-04 / 0830QUOTE PROFILE: 57889CLIENT/PROJECT: AradisSAMPLES LOGGED IN: CC LOG-IN REVIEWED: LSTNumber of Shipping Containers Received  
with Chain of Custody 16VOC AIR / FILTER SAMPLES  YES SEE SECTIONS 1.0, 2.0, & 6.01.0 CONTAINERS EXAMINED UPON RECEIPT: LST

Container Sealed:  YES  NO      Custody Seal Signed/Dated:  YES  NO  
 Custody Seal Present:  YES  NO      Containers checked for radioactivity:  YES  NO  N/A  
 If seal not intact or Geiger counter reading >0.5 mR/hr, list air bill number of that container(s): \_\_\_\_\_

2.0 VOC CANISTERS EXAMINED UPON RECEIPT: \_\_\_\_\_

Canister Valves Closed:	<input type="checkbox"/> YES <input type="checkbox"/> NO	Samples Received Match Chain:	<input type="checkbox"/> YES <input type="checkbox"/> NO
Canister Valves Capped:	<input type="checkbox"/> YES <input type="checkbox"/> NO	See Additional Comments (Section 5.0 and / or 7.0)	<input type="checkbox"/> YES <input type="checkbox"/> NO
Packing Material Used: (circle)	Chain-of-Custody form properly maintained: <input type="checkbox"/> YES <input type="checkbox"/> NO		
None / Absorbent / Paper / Bubble Wrap	Can Size: <input type="checkbox"/> 6L <input type="checkbox"/> 15L Other _____		

3.0 SAMPLE TEMPERATURE UPON RECEIPT: LST IR THERMOMETER #: P-5

The temperature of the container(s) is: \_\_\_\_\_ [acceptable tolerance 4°C ± 2°; (NC, WI: 1-4.4°C)]

3°C	5°C	3°C	40°C	2°C	3°C					

If temperature is outside acceptable tolerance, Project Manager was notified (\_\_\_\_ PM). Date: \_\_\_\_ Time: \_\_\_\_

Samples received do not require cooling \_\_\_\_\_ OK to analyze samples:  YES  NOPRESERVATION OF SAMPLES REQUIRED:  NA  YES VERIFIED BY: LSTBase samples are >pH 12:  YES  NO Acid preserved are <pH 2:  YES  NO

Cyanide samples checked \_\_\_\_\_ Sulfide samples appear \_\_\_\_\_

for sulfides:  YES to be preserved with zinc acetate:  YES  NOSamples checked for chlorine \_\_\_\_\_ Free chlorine present:  YES  NOper specification:  YES

If sample preservation is outside acceptable tolerance, Project Manager was notified (\_\_\_\_ PM)

Date: \_\_\_\_\_ Time: \_\_\_\_\_  see pH adjustment formVOLATILE SAMPLES FILLED COMPLETELY, IF NOT, LIST ID AND HEADSPACE OF VOAs CONTAINING  
BUBBLES EXCEEDING 6MM IN DIAMETER:

Sample ID	mm Headspace
PCA Water Waste	7mm
RAM Water Waste	7mm, 11mm
PCA MW-2	7mm
PCA MW-3	8mm

Sample ID	mm Headspace
RAM MW-F	8mm

**4.0 CONDITION OF BOTTLES/CONTAINERS**

VERIFIED BY: \_\_\_\_\_

Samples received match COC:

 YES  NO

Bottles received intact:

 YES  NO

See additional discrepancies/comments section:

 YES  NO

Samples received from USDA restricted area:

 YES  NO

Chain-of-Custody form properly maintained:

 YES  NO

VOA trip blanks included:

 YES  NO N/A**5.0 ADDITIONAL DISCREPANCIES**

Appears on COC		Appears on Label		
Sample ID	Date/Time	Sample ID	Date/Time	Comments
PCA MW-5	3-24 / 1511	MW-5 (site PCA)	3-25 01 / 1532	103 per COC
" - 4	3-26 / 1551	MW-4 "	3-25 01 / 1551	
" - 2	3-26 / 1501	MW-2 "	3-25 01 / 1501	
" - 6	3-26 / 1532	MW-6 "	3-25 01 / 1532	
" - 3	3-26 / 1451	MW-3 "	3-25 01 / 1451	
Ramsey MW-6	3-26 / 1730	MW-6 (site Ramsey)	3-26 01 / 1720	
RAMMW-B	3-26 / 1645	MW-B K3 "	3-26 01 / 1645	
RAMMW-F	3-26 / 1700	MW-F "	3-26 01 / 1700	

**6.0 SHIPPING DOCUMENTATION:**Air/freight bill is available and attached to COC:  YES  NO Air bill #: \_\_\_\_\_

Hand-delivered Carrier: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

**7.0 OTHER COMMENTS:**

See Attached page

**CORRECTIVE ACTION:**

Client's Name: \_\_\_\_\_ Informed verbally on: \_\_\_\_\_ By: \_\_\_\_\_

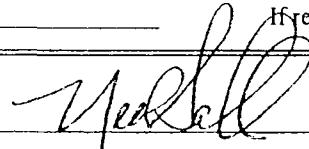
Client's Name: \_\_\_\_\_ Informed verbally on: \_\_\_\_\_ By: \_\_\_\_\_

Sample(s) processed "as is" comments: \_\_\_\_\_

Samples(s) on hold until: \_\_\_\_\_ If released, notify: \_\_\_\_\_

**REVIEW:**

Project Management: \_\_\_\_\_ Date: \_\_\_\_\_



4/14/04

**SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE**

Sample Received for Arcadis

APMWAOB, APMWADC, APMWOD: 9x40mL, 250mL (HNO<sub>3</sub>),  
125mL (H<sub>2</sub>SO<sub>4</sub>), 2x125mL

APEX RW-II, APEX RW-10: 1x40mL, 250mL (HNO<sub>3</sub>), 50mL (H<sub>2</sub>SO<sub>4</sub>)  
2x250mL

APEX MW-6: 9x40mL, 250mL (HNO<sub>3</sub>), 125mL (H<sub>2</sub>SO<sub>4</sub>), 2x250mL  
(40mL for TPH, BTEX, +Methane; HNO<sub>3</sub> for Metals; H<sub>2</sub>SO<sub>4</sub> for Nitrate;  
n/a/pres. for sulfate + alkalinity)

PCA Water Waste, RAM water waste, Hobbs water waste, NEC water waste:  
3x40mL (HCl), 2x1L (none), 125mL (none) (40mL for BTEX; 1L for DRD;  
125mL for Cl<sup>-</sup>)

PCA soil waste, RAM soil waste, Hobbs soil waste, NEC soil waste:

Ante Drilling 3-25-04  
1535 1x60mL, 1x120mL

Ante Drilling 3-25-04  
1570 Rattle Snake 3-25-04 (Ante Hydroblast water, Stateline water waste, Rattlesnake waste, Apeex water,  
4403 1450)

Apeex 1-2 3-25-04  
1170 Apeex 2 water 3x40mL (HCl), 2x1L (none), 1x250mL (none)  
Apeex soil 3-25-04  
1200 (40mL for BTEX; 1L for DRD; 250mL for Cl<sup>-</sup>)

Ante Drilling Soil, Stateline soil waste, Rattle Snake waste soil, Apeex soil  
2x120mL

Hobbs GP MWG/Hobbs GP-MWF: 6x40mL (40mL for TPH + BTEX)

Hobbs GP-MWF: 3x40mL (HCl) (40mL for 8260 vol) 125mL (H<sub>2</sub>SO<sub>4</sub>)

Hobbs GP-MWD: 9x40mL (HCl), 1x250mL (HNO<sub>3</sub>), 2x125mL, 12x1L  
(40mL for TPH, BTEX, + Methane; 250mL for metals; 125mL (n/a) for  
sulfate & Alkalinity; 125mL H<sub>2</sub>SO<sub>4</sub> for Nitrate/Nitrite, 2x1L for SARC)

Hobbs GP-MWB: 9x40mL (HCl), 125mL (H<sub>2</sub>SO<sub>4</sub>), 500mL (none)

(40mL for TPH, BTEX, + Methane; 125mL for Nitrate/Nitrite, 500mL  
for sulfate & Alkalinity)

Sample Received for Arcadis (cont.)

Hobbs GP-MWA: 9x40 mL (HCl), 125 mL (H<sub>2</sub>SO<sub>4</sub>), 2x500 mL (none)  
 (40 mL for TPH, BTEX, + Methane; 125 mL for NO<sub>x</sub>/NO<sub>2</sub>; 500 mL for SO<sub>4</sub> + Alkalinity)

APEX-mw-7: 9x40 mL (HCl), 500 mL (H<sub>2</sub>SO<sub>4</sub>), 2x250 mL (none)

(40 mL for TPH, BTEX, + Methane; 500 mL for NO<sub>x</sub>/NO<sub>2</sub>; 250 mL for sulfate + Alkalinity)

HOBSB-I 0-1', HOBSB-J 0-1', HOBSB-J 1-1.5', HOBSB-J 1.5-2', HOBSB-K 0-1'

HOBSB-L 0-1', HOBSB-L 1-1.5': 3x120 mL (120 mL (none) for TPH, BTEX, + metals)

Anteswab-1, Anteswab-2: 1x60 mL (for PCB's) 3-23-04 /0849

PCA MW-6, PCA MW-5, PCA MW-4, PCA MW-2, PCA MW-3: 9x40 mL (HCl),

2x250 mL, 500 mL (H<sub>2</sub>SO<sub>4</sub>)

(40 mL for TPH, BTEX, + Methane; 250 mL for sulfate + Alkalinity;  
 500 mL for NO<sub>x</sub>/NO<sub>2</sub>)

RAMMW-A: 6x40 mL (HCl), 2x125 mL, 1x125 mL (H<sub>2</sub>SO<sub>4</sub>), 250 mL (HNO<sub>3</sub>)

(40 mL for TPH + BTEX; 125 mL (none) for sulfate + Alkalinity; 125 mL  
 (H<sub>2</sub>SO<sub>4</sub>) for NO<sub>x</sub>/NO<sub>2</sub>; 250 mL for metals)

RAMMW-B, RAMMW-E, RAMMW-B: 6x40 mL (HCl) (40 mL for TPH + BTEX)

RAMMW-F: 9x40 mL (HCl), 2x125 mL, 1x125 mL (H<sub>2</sub>SO<sub>4</sub>)

(40 mL for TPH, BTEX, + Methane, 125 mL (none) for sulfate + Alkalinity;  
 125 mL (H<sub>2</sub>SO<sub>4</sub>) for NO<sub>x</sub>/NO<sub>2</sub>)



ARCADIS GERAGHTY &amp; MILLER

Project Number/20000000000000000000 Laboratory Task Order No./P.O. No.**CHAIN-OF-CUSTODY RECORD**Page — of —Project Location StearnsLaboratory STL - HastingsProject Manager Steve TischSampler(s)/Affiliation Brad/S**ANALYSIS / METHOD / SIZE**

Sample ID/Location	Matrix	Date/Time Sampled	Date/Time Lab'd	Remarks
APMVAOC	L	3/26	9:50	3
AIR ENV-11	L	3/25	18:30	3
APMVAOC	L	3/25	9:50	3
APMVAOD	L	3/25	8:50	3
APERYRIV-10	L	3/25	18:10	3
AFFX env-6	L	3/26	8:00	3

Sample Matrix:	L = Liquid;	S = Solid;	A = Air
Relinquished by:	<u>John J. Hayes</u>	Organization:	<u>STL</u>
Received by:	<u>John J. Hayes</u>	Organization:	<u>STL</u>
Relinquished by:	<u>John J. Hayes</u>	Organization:	<u>STL</u>
Received by:	<u>John J. Hayes</u>	Organization:	<u>STL</u>
Special Instructions/Remarks:	<u>15</u>		

Total No. of Bottles/Containers 78

Sample Matrix: L = Liquid; S = Solid; A = Air

Relinquished by:	<u>John J. Hayes</u>	Organization:	<u>STL</u>	Date <u>3/27/04</u> Time <u>10:50</u>	Seal Intact? <u>Yes</u> No N/A
Received by:	<u>John J. Hayes</u>	Organization:	<u>STL</u>	Date <u>3/20/04</u> Time <u>08:55</u>	Seal Intact? <u>Yes</u> No N/A
Relinquished by:	<u>John J. Hayes</u>	Organization:	<u>STL</u>	Date <u>—</u> Time <u>—</u>	Seal Intact? <u>Yes</u> No N/A
Received by:	<u>John J. Hayes</u>	Organization:	<u>STL</u>	Date <u>—</u> Time <u>—</u>	Seal Intact? <u>Yes</u> No N/A

303

Delivery Method:  In Person  Common Carrier  Lab Courier  Other \_\_\_\_\_

SPECIFY

AG-05-97



ARCADIS GERAGHTY &amp; MILLER

Project Number/Name 00000889.2800Project Location SENMLaboratory STZ - AustinProject Manager Steve TicknerSampler(s)/Affiliation Airadis

## CHAIN-OF-CUSTODY RECORD

Page \_\_\_\_\_ of \_\_\_\_\_

Sample ID/Location		Matrix	Date/Time Sampled	Lab ID	ANALYSIS / METHOD / SIZE	Total	Remarks			
Anne	Hydrochloric Acid	L		1	3	2				
Anne	Diluting Soln	S								
Anne	Sampling Waste	L	3/25/04 12:30	1	3	2				
Anne	Soil	S	3/25/04 12:30		1	1				
Anne	Port sample bottle	L		1	3	2				
Anne	Port sample waste	S								
Anne	1 liter	L		1	3	2				
Anne	2 liter	L		1	3	2				
Anne	Soil	S								
Sample Matrix: L = Liquid; S = Solid; A = Air.										
Relinquished by:	<u>Steve Tickner</u>	Organization:	<u>SL</u>	Date:	<u>3/29/04</u>	Time:	<u>1:30</u>			
Received by:	<u>Steve Tickner</u>	Organization:	<u>SL</u>	Date:	<u>3/30/04</u>	Time:	<u>2:15</u>			
Relinquished by:		Organization:		Date:	<u>1</u>	Time:				
Received by:		Organization:		Date:	<u>1</u>	Time:				
Special Instructions/Remarks:										
Delivery Method:	<input type="checkbox"/> In Person	<input checked="" type="checkbox"/> Common Carrier	<input type="checkbox"/> Lab Courier	<input type="checkbox"/> Other	SPECIFY _____					
					SPECIFY _____					
Total No. of Bottles/Containers <u>38</u>										
Seal Intact?										
Yes	No	N/A								
Seal Intact?										
Yes	No	N/A								





**ARCADIS GERAHTY & MILLER**

Laboratory Task One  
-881. 25/00

**CHAIN-OF-CUSTODY RECORD** Page \_\_\_\_ of \_\_\_\_

**CHAIN-OF-CUSTODY RECORD**

Project Number/Name 00000881. 2500

Project Location PRA S-71-A

Laboratory St. Paul - Section 15  
Project Manager Stuart Tisch

Samplers(Affiliation)

Sample ID/Location	Matrix	Date/TIME Sampled	Time/ Lab#	Remarks	Total
PCA min - S	L	3/12/6	15:07	30C / 27 / 3-30-04	12
PCA min - E	L	3/12/6	15:51		12
PCA min - Z	L	3/12/6	15:01		12
PCA min - B	L	3/12/6	15:32		12
PCA min - S	L	3/12/6	14:51		12
Ramon - A	L	3/12/6	16:32		12
Ramon - M	L	3/12/6	17:30		12
Ram min - E	L	3/12/6	17:21		6
Ram min - B	L	3/12/6	16:45		6
Ram min - F	L	3/12/6	17:00		12

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Relinquished by: <u>John Doe</u>		Organization: <u>SIL</u>	Date <u>1-21-02</u>	Time <u>12:00</u>	Seal Intact? <u>Yes</u>
Received by: <u>Jane Doe</u>		Organization: <u>SIL</u>	Date <u>3-12-02</u>	Time <u>0815</u>	No N/A
Relinquished by: <u>John Doe</u>		Organization: <u>SIL</u>	Date <u>1-1-02</u>	Time <u>1:00</u>	Seal Intact? <u>Yes</u>
Received by: <u>Jane Doe</u>		Organization: <u>SIL</u>	Date <u>1-1-02</u>	Time <u>1:00</u>	No N/A
Special Instructions/Remarks:					

Delivery Method:  In Person  Common Carrier  Lab Courier  
Specify \_\_\_\_\_

Lab Companion

Lab Counter       Duffer       SPECIFY \_\_\_\_\_

SEVERN  
TRENT **STL**

**Certificate of Analysis**

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**ANALYTICAL REPORT**

PROJECT NO. C0000889.2801

PCA Junction

Lot #: I4C240296

**Matt Findley**

ARCADIS Geraghty & Miller Inc  
630 Plaza Drive  
Att: Denver Tech A/P  
Suite 200  
Highlands Ranch, CO 80129-2377

SEVERN TRENT LABORATORIES, INC.



**Neal J. Salcher**  
Project Manager

March 29, 2004

American Council of Independent Laboratories  
International Association of Environmental Testing Laboratories

March 29, 2004

STL LOT NUMBER: **I4C240296**  
PO/CONTRACT: DFS-PCA Junction

Matt Findley  
ARCADIS Geraghty & Miller Inc  
630 Plaza Drive  
Att: Denver Tech A/P  
Suite 200  
Highlands Ranch, CO 80129-2377

Dear Matt Findley,

This report contains the analytical results for the six samples received under chain of custody by Severn Trent Laboratories (STL) on March 24, 2004. These samples are associated with your PCA Junction project.

All applicable quality control procedures met method-specified (SOP) acceptance criteria.

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

If you have any questions, please feel free to call me at (512) 244-0855.

Sincerely,



Neal Salcher  
Project Manager

cc: Project File

**EXECUTIVE SUMMARY - Detection Highlights****I4C240296**

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
<b>SBA05@22 03/20/04 12:10 001</b>				
Toluene	5.1	5.0	ug/kg	SW846 8021B

## ANALYTICAL METHODS SUMMARY

I4C240296

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>
Volatile Petroleum Hydrocarbons	SW846 8015B
Volatiles by GC	SW846 8021B

**References:**

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

**SAMPLE SUMMARY****I4C240296**

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
GCTX2	001	SBA05@22	03/20/04	12:10
GCTX7	002	SBA05@18-20	03/20/04	12:15
GCT0A	003	SBA01@22	03/20/04	11:40
GCT0D	004	SBA01@5-9	03/20/04	11:45
GCT0E	005	SBA06@18-20	03/20/04	13:10
GCT0G	006	SBA06@24	03/20/04	13:00

**NOTE(S) :**

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

**QC DATA ASSOCIATION SUMMARY****I4C240296****Sample Preparation and Analysis Control Numbers**

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	SOLID	SW846 8015B		4089260	4089132
	SOLID	SW846 8021B		4089254	4089126
002	SOLID	SW846 8015B		4089260	4089132
	SOLID	SW846 8021B		4089254	4089126
003	SOLID	SW846 8015B		4089260	4089132
	SOLID	SW846 8021B		4089254	4089126
004	SOLID	SW846 8015B		4089260	4089132
	SOLID	SW846 8021B		4089254	4089126
005	SOLID	SW846 8015B		4089260	4089132
	SOLID	SW846 8021B		4089254	4089126
006	SOLID	SW846 8015B		4089260	4089132
	SOLID	SW846 8021B		4089254	4089126

## ARCADIS GERAGHTY &amp; MILLER, INC

Client Sample ID: SBA05@22

## GC Volatiles

Lot-Sample #....: I4C240296-001 Work Order #....: GCTX21AA Matrix.....: SOLID  
Date Sampled....: 03/20/04 12:10 Date Received...: 03/24/04 MS Run #.....: 4089132  
Prep Date.....: 03/25/04 Analysis Date...: 03/25/04  
Prep Batch #....: 4089260 Analysis Time...: 19:32  
Dilution Factor: 1  
% Moisture.....:

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	ND	100	ug/kg
SURROGATE	PERCENT	RECOVERY	LIMITS
4-Bromofluorobenzene (GRO)	97	(37 - 153)	

## ARCADIS GERAGHTY &amp; MILLER, INC

Client Sample ID: SBA05@22

## GC Volatiles

Lot-Sample #....: I4C240296-001 Work Order #....: GCTX21AC Matrix.....: SOLID  
 Date Sampled...: 03/20/04 12:10 Date Received...: 03/24/04 MS Run #.....: 4089126  
 Prep Date.....: 03/25/04 Analysis Date...: 03/25/04  
 Prep Batch #....: 4089254 Analysis Time...: 19:32  
 Dilution Factor: 1  
 % Moisture.....:

Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Toluene	5.1	5.0	ug/kg
Xylenes (total)	ND	5.0	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	90	(41 - 150)
a,a,a-Trifluorotoluene (TFT)	97	(43 - 165)

**ARCADIS GERAGHTY & MILLER, INC****Client Sample ID: SBA05@18-20****GC Volatiles**

Lot-Sample #....: I4C240296-002 Work Order #....: GCTX71AA Matrix.....: SOLID  
Date Sampled...: 03/20/04 12:15 Date Received...: 03/24/04 MS Run #.....: 4089132  
Prep Date.....: 03/25/04 Analysis Date...: 03/25/04  
Prep Batch #....: 4089260 Analysis Time...: 20:01  
Dilution Factor: 0.99  
% Moisture.....:

Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Gasoline Range Organics	ND	99	ug/kg
<hr/>			
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
	<u>RECOVERY</u>	<u>LIMITS</u>	
4-Bromofluorobenzene (GRO)	91	(37 - 153)	

## ARCADIS GERAGHTY &amp; MILLER, INC

Client Sample ID: SBA05@18-20

## GC Volatiles

Lot-Sample #....: I4C240296-002 Work Order #....: GCTX71AC Matrix.....: SOLID  
 Date Sampled....: 03/20/04 12:15 Date Received...: 03/24/04 MS Run #.....: 4089126  
 Prep Date.....: 03/25/04 Analysis Date...: 03/25/04  
 Prep Batch #....: 4089254 Analysis Time...: 20:01  
 Dilution Factor: 0.99  
 % Moisture.....: Method.....: SW846 8021B

PARAMETER	REPORTING		
	RESULT	LIMIT	UNITS
Benzene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
Xylenes (total)	ND	5.0	ug/kg

SURROGATE	PERCENT RECOVERY		RECOVERY
	RECOVERY	LIMITS	LIMITS
Bromofluorobenzene	89	(41 - 150)	
a,a,a-Trifluorotoluene (TFT)	98	(43 - 165)	

## ARCADIS GERAGHTY &amp; MILLER, INC

Client Sample ID: SBA01@22

## GC Volatiles

Lot-Sample #....: I4C240296-003 Work Order #....: GCT0A1AA Matrix.....: SOLID  
Date Sampled...: 03/20/04 11:40 Date Received...: 03/24/04 MS Run #.....: 4089132  
Prep Date.....: 03/25/04 Analysis Date...: 03/25/04  
Prep Batch #....: 4089260 Analysis Time...: 20:29  
Dilution Factor: 1  
% Moisture.....:

Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Gasoline Range Organics	ND	100	ug/kg
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
	<u>RECOVERY</u>	<u>LIMITS</u>	
4-Bromofluorobenzene (GRO)	103	(37 - 153)	

## ARCADIS GERAGHTY &amp; MILLER, INC

Client Sample ID: SBA01@22

## GC Volatiles

Lot-Sample #....: I4C240296-003 Work Order #....: GCT0A1AC      Matrix.....: SOLID  
 Date Sampled....: 03/20/04 11:40 Date Received...: 03/24/04      MS Run #.....: 4089126  
 Prep Date.....: 03/25/04    Analysis Date...: 03/25/04  
 Prep Batch #....: 4089254    Analysis Time...: 20:29  
 Dilution Factor: 1  
 % Moisture.....:    Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
Benzene	ND	5.0 ug/kg	
Ethylbenzene	ND	5.0 ug/kg	
Toluene	ND	5.0 ug/kg	
Xylenes (total)	ND	5.0 ug/kg	
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
Bromofluorobenzene	91	(41 - 150)	
a,a,a-Trifluorotoluene (TFT)	95	(43 - 165)	

## ARCADIS GERAGHTY &amp; MILLER, INC

Client Sample ID: SBA01@5-9

## GC Volatiles

Lot-Sample #....: I4C240296-004 Work Order #....: GCT0D1AA Matrix.....: SOLID  
Date Sampled...: 03/20/04 11:45 Date Received...: 03/24/04 MS Run #.....: 4089132  
Prep Date.....: 03/25/04 Analysis Date...: 03/25/04  
Prep Batch #....: 4089260 Analysis Time...: 20:57  
Dilution Factor: 0.97  
% Moisture.....:

Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Gasoline Range Organics	ND	97	ug/kg
<hr/>			
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>
4-Bromofluorobenzene (GRO)	94	(37 - 153)	

## ARCADIS GERAGHTY &amp; MILLER, INC

Client Sample ID: SBA01@5-9

## GC Volatiles

Lot-Sample #....: I4C240296-004 Work Order #....: GCT0D1AC      Matrix.....: SOLID  
 Date Sampled...: 03/20/04 11:45 Date Received...: 03/24/04      MS Run #.....: 4089126  
 Prep Date.....: 03/25/04      Analysis Date...: 03/25/04  
 Prep Batch #....: 4089254      Analysis Time...: 20:57  
 Dilution Factor: 0.97  
 % Moisture.....: Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	ND	4.8	ug/kg
Ethylbenzene	ND	4.8	ug/kg
Toluene	ND	4.8	ug/kg
Xylenes (total)	ND	4.8	ug/kg
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
Bromofluorobenzene	93	(41 - 150)	
a,a,a-Trifluorotoluene (TFT)	102	(43 - 165)	

## ARCADIS GERAGHTY &amp; MILLER, INC

Client Sample ID: SBA06@18-20

## GC Volatiles

Lot-Sample #....: I4C240296-005 Work Order #....: GCT0E1AA Matrix.....: SOLID  
Date Sampled....: 03/20/04 13:10 Date Received...: 03/24/04 MS Run #.....: 4089132  
Prep Date.....: 03/25/04 Analysis Date...: 03/25/04  
Prep Batch #....: 4089260 Analysis Time...: 21:25  
Dilution Factor: 0.98  
% Moisture.....:

Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Gasoline Range Organics	ND	98	ug/kg
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
4-Bromofluorobenzene (GRO)	102	(37 - 153)	

## ARCADIS GERAGHTY &amp; MILLER, INC

Client Sample ID: SBA06@18-20

## GC Volatiles

Lot-Sample #....: I4C240296-005 Work Order #....: GCT0E1AC  
 Date Sampled....: 03/20/04 13:10 Date Received...: 03/24/04  
 Prep Date.....: 03/25/04 Analysis Date...: 03/25/04  
 Prep Batch #....: 4089254 Analysis Time...: 21:25  
 Dilution Factor: 0.98  
 % Moisture.....: Method.....: SW846 8021B

Matrix.....: SOLID  
 MS Run #....: 4089126

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	4.9	ug/kg
Ethylbenzene	ND	4.9	ug/kg
Toluene	ND	4.9	ug/kg
Xylenes (total)	ND	4.9	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u>	
		<u>LIMITS</u>	
Bromofluorobenzene	92	(41 - 150)	
a,a,a-Trifluorotoluene (TFT)	96	(43 - 165)	

## ARCADIS GERAGHTY &amp; MILLER, INC

Client Sample ID: SBA06@24

## GC Volatiles

Lot-Sample #....: I4C240296-006 Work Order #....: GCT0G1AA Matrix.....: SOLID  
Date Sampled....: 03/20/04 13:00 Date Received...: 03/24/04 MS Run #.....: 4089132  
Prep Date.....: 03/25/04 Analysis Date...: 03/25/04  
Prep Batch #....: 4089260 Analysis Time...: 21:53  
Dilution Factor: 0.99  
% Moisture.....:

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Gasoline Range Organics	ND	99	ug/kg
SURROGATE	PERCENT	RECOVERY	LIMITS
	RECOVERY	(37 - 153)	
4-Bromofluorobenzene (GRO)	105		

## ARCADIS GERAGHTY &amp; MILLER, INC

Client Sample ID: SBA06@24

## GC Volatiles

Lot-Sample #....: I4C240296-006 Work Order #....: GCT0G1AC  
 Date Sampled...: 03/20/04 13:00 Date Received...: 03/24/04  
 Prep Date.....: 03/25/04 Analysis Date...: 03/25/04  
 Prep Batch #....: 4089254 Analysis Time...: 21:53  
 Dilution Factor: 0.99  
 % Moisture.....: Method.....: SW846 8021B

Matrix.....: SOLID  
 MS Run #.....: 4089126

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg
Xylenes (total)	ND	5.0	ug/kg
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	92	(41 - 150)	
a,a,a-Trifluorotoluene (TFT)	94	(43 - 165)	

**METHOD BLANK REPORT****GC Volatiles**

Client Lot #....: I4C240296  
MB Lot-Sample #: I4C290000-260  
Analysis Date...: 03/25/04  
Dilution Factor: 1

Work Order #....: GC4LM1AA  
Prep Date.....: 03/25/04  
Prep Batch #....: 4089260

Matrix.....: SOLID  
Analysis Time..: 12:31

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
Gasoline Range Organics	ND	100	ug/kg	SW846 8015B
SURROGATE	PERCENT RECOVERY	RECOVERY		LIMITS
		(37 - 153)		

**NOTE(S) :**

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

**METHOD BLANK REPORT****GC Volatiles**

**Client Lot #....:** I4C240296  
**MB Lot-Sample #:** I4C290000-254  
**Analysis Date..:** 03/25/04  
**Dilution Factor:** 1

**Work Order #....:** GC4KF1AA  
**Prep Date.....:** 03/25/04  
**Prep Batch #....:** 4089254

**Matrix.....:** SOLID  
**Analysis Time...:** 12:31

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	5.0	ug/kg	SW846 8021B
Ethylbenzene	ND	5.0	ug/kg	SW846 8021B
Toluene	ND	5.0	ug/kg	SW846 8021B
Xylenes (total)	ND	5.0	ug/kg	SW846 8021B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>
			<u>RECOVERY</u>
Bromofluorobenzene	93	(41 - 150)	
a,a,a-Trifluorotoluene (TFT)	99	(43 - 165)	

**NOTE (S) :**

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

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC Volatiles

Client Lot #....: I4C240296      Work Order #....: GC4LM1AC      Matrix.....: SOLID  
LCS Lot-Sample#: I4C290000-260  
Prep Date.....: 03/25/04      Analysis Date...: 03/25/04  
Prep Batch #....: 4089260      Analysis Time...: 11:44  
Dilution Factor: 1

PARAMETER	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>	METHOD
Gasoline Range Organics	89	(66 - 129)	SW846 8015B
SURROGATE	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>	
4-Bromofluorobenzene (GRO)	95	(49 - 147)	

NOTE(S) :

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

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC Volatiles

Client Lot #....: I4C240296      Work Order #....: GC4LM1AC      Matrix.....: SOLID  
LCS Lot-Sample#: I4C290000-260  
Prep Date.....: 03/25/04      Analysis Date...: 03/25/04  
Prep Batch #....: 4089260      Analysis Time..: 11:44  
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Gasoline Range Organics	2000	1780	ug/kg	89	SW846 8015B
SURROGATE		PERCENT RECOVERY	RECOVERY LIMITS		
4-Bromofluorobenzene (GRO)		95	(49 - 147)		

## NOTE(S) :

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

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC Volatiles

**Client Lot #...**: I4C240296    **Work Order #...**: GC4KF1AC    **Matrix.....**: SOLID  
**LCS Lot-Sample#**: I4C290000-254  
**Prep Date.....**: 03/25/04    **Analysis Date..**: 03/25/04  
**Prep Batch #...**: 4089254    **Analysis Time..**: 10:10  
**Dilution Factor:** 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Benzene	<b>103</b>	(73 - 128)	<b>SW846 8021B</b>
Ethylbenzene	<b>98</b>	(73 - 136)	<b>SW846 8021B</b>
Toluene	<b>102</b>	(71 - 129)	<b>SW846 8021B</b>
Xylenes (total)	<b>99</b>	(74 - 130)	<b>SW846 8021B</b>

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	94	(71 - 133)
a,a,a-Trifluorotoluene (TFT)	100	(67 - 125)

NOTE (S) :

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

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC Volatiles

**Client Lot #....:** I4C240296    **Work Order #....:** GC4KF1AC    **Matrix.....:** SOLID  
**LCS Lot-Sample#:** I4C290000-254  
**Prep Date.....:** 03/25/04    **Analysis Date..:** 03/25/04  
**Prep Batch #....:** 4089254    **Analysis Time..:** 10:10  
**Dilution Factor:** 1

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>UNITS</u>	<u>PERCENT</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>		<u>RECOVERY</u>	
Benzene	20.0	20.5	ug/kg	103	SW846 8021B
Ethylbenzene	20.0	19.5	ug/kg	98	SW846 8021B
Toluene	20.0	20.3	ug/kg	102	SW846 8021B
Xylenes (total)	60.0	59.3	ug/kg	99	SW846 8021B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	94	(71 - 133)
a,a,a-Trifluorotoluene (TFT)	100	(67 - 125)

NOTE(S) :

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

Bold print denotes control parameters

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC Volatiles

**Client Lot #....:** I4C240296      **Work Order #....:** GCR8M1AG-MS      **Matrix.....:** SOLID  
**MS Lot-Sample #:** I4C240194-001      GCR8M1AH-MSD  
**Date Sampled....:** 03/20/04 09:00      **Date Received...:** 03/23/04      **MS Run #.....:** 4089132  
**Prep Date.....:** 03/25/04      **Analysis Date...:** 03/26/04  
**Prep Batch #....:** 4089260      **Analysis Time...:** 00:42  
**Dilution Factor:** 0.99      **% Moisture.....:** 100

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
<u>Gasoline Range Organics</u>	<u>RECOVERY</u>	<u>LIMITS</u>			
	<b>96</b>	(66 - 129)			<b>SW846 8015B</b>
	<b>94</b>	(66 - 129)	<b>1.4</b>	(0-30)	<b>SW846 8015B</b>

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
<b>4-Bromofluorobenzene (GRO)</b>	97	(37 - 153)	
	93	(37 - 153)	

**NOTE(S) :**

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

Bold print denotes control parameters

## MATRIX SPIKE SAMPLE DATA REPORT

## GC Volatiles

Client Lot #...: I4C240296      Work Order #...: GCR8M1AG-MS      Matrix.....: SOLID  
 MS Lot-Sample #: I4C240194-001                                    GCR8M1AH-MSD  
 Date Sampled...: 03/20/04 09:00 Date Received...: 03/23/04      MS Run #.....: 4089132  
 Prep Date.....: 03/25/04      Analysis Date...: 03/26/04  
 Prep Batch #...: 4089260      Analysis Time...: 00:42  
 Dilution Factor: 0.99      % Moisture.....: 100

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCNT			
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	METHOD
Gasoline Range Organics	ND	<b>1980</b>	<b>1890</b>	ug/kg	96		SW846 8015B
	ND	<b>1980</b>	<b>1870</b>	ug/kg	94	1.4	SW846 8015B

SURROGATE	PERCENT		RECOVERY	
	RECOVERY	LIMITS	(37 - 153)	(37 - 153)
4-Bromofluorobenzene (GRO)	97			
	93			

**NOTE(S) :**

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

Bold print denotes control parameters

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC Volatiles

Client Lot #...: I4C240296      Work Order #...: GCR8M1AE-MS      Matrix.....: SOLID  
 MS Lot-Sample #: I4C240194-001    GCR8M1AF-MSD  
 Date Sampled...: 03/20/04 09:00 Date Received...: 03/23/04      MS Run #.....: 4089126  
 Prep Date.....: 03/25/04      Analysis Date...: 03/25/04  
 Prep Batch #...: 4089254      Analysis Time...: 23:46  
 Dilution Factor: 1      % Moisture.....: 100

<u>PARAMETER</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>	RPD	<u>LIMITS</u>	METHOD
Benzene	103	(73 - 128)	11	(0-30)	SW846 8021B
	92	(73 - 128)			SW846 8021B
Ethylbenzene	97	(73 - 136)	12	(0-30)	SW846 8021B
	86	(73 - 136)			SW846 8021B
Toluene	99	(71 - 129)	8.6	(0-30)	SW846 8021B
	91	(71 - 129)			SW846 8021B
Xylenes (total)	97	(74 - 130)	12	(0-30)	SW846 8021B
	86	(74 - 130)			SW846 8021B

<u>SURROGATE</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
Bromofluorobenzene	96	(41 - 150)
a,a,a-Trifluorotoluene (TFT)	93 104 110	(41 - 150) (43 - 165) (43 - 165)

NOTE (S) :

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

Bold print denotes control parameters

## MATRIX SPIKE SAMPLE DATA REPORT

## GC Volatiles

**Client Lot #....:** I4C240296      **Work Order #....:** GCR8M1AE-MS      **Matrix.....:** SOLID  
**MS Lot-Sample #:** I4C240194-001      GCR8M1AF-MSD  
**Date Sampled....:** 03/20/04 09:00      **Date Received...:** 03/23/04      **MS Run #.....:** 4089126  
**Prep Date.....:** 03/25/04      **Analysis Date...:** 03/25/04  
**Prep Batch #....:** 4089254      **Analysis Time...:** 23:46  
**Dilution Factor:** 1      **% Moisture.....:** 100

<u>PARAMETER</u>	<u>SAMPLE</u>	<u>SPIKE</u>	<u>MEASRD</u>	<u>PERCNT</u>			<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECVRY</u>	<u>RPD</u>	
Benzene	ND	20.1	20.7	ug/kg	103	11	SW846 8021B
	ND	20.1	18.5	ug/kg	92	11	SW846 8021B
Ethylbenzene	ND	20.1	19.5	ug/kg	97		SW846 8021B
	ND	20.1	17.4	ug/kg	86	12	SW846 8021B
Toluene	ND	20.1	19.9	ug/kg	99		SW846 8021B
	ND	20.1	18.3	ug/kg	91	8.6	SW846 8021B
Xylenes (total)	ND	60.2	58.6	ug/kg	97		SW846 8021B
	ND	60.4	52.2	ug/kg	86	12	SW846 8021B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>
	<u>RECOVERY</u>		
Bromofluorobenzene	96		(41 - 150)
	93		(41 - 150)
a,a,a-Trifluorotoluene (TFT)	104		(43 - 165)
	110		(43 - 165)

**NOTE(S) :**

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

Bold print denotes control parameters

SEVERN  
TRENT

STL

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Page 1 of 2

CHAIN-OF-CUSTODY ADDENDUM

RECEIVED BY: *RH*

DATE/TIME RECEIVED: 3-24-04 0830

UNPACKED DATE/TIME: 3-24-04 0900

CLIENT/PROJECT: Arcadis

Number of Shipping Containers Received  
with Chain of Custody 2

Lot No: I4CZ40296

COC NUMBER: \_\_\_\_\_

QUOTE/PROFILE: 57817

SAMPLES LOGGED IN: CC LOG-IN REVIEWED: PN

VOC AIR / FILTER SAMPLES  YES SEE SECTIONS 1.0, 2.0, & 6.0

1.0 CONTAINERS EXAMINED UPON RECEIPT: CC

Container Sealed:  YES  NO Custody Seal Signed/Dated:  YES  NO

Custody Seal Present:  YES  NO Containers checked for radioactivity:  YES  NO  N/A

If seal not intact or Geiger counter reading >0.5 mR/hr, list air bill number of that container(s): \_\_\_\_\_

2.0 VOC CANISTERS EXAMINED UPON RECEIPT: \_\_\_\_\_

Canister Valves Closed:  YES  NO Samples Received Match Chain:  YES  NO

Canister Valves Capped:  YES  NO See Additional Comments (Section 5.0 and / or 7.0)  YES  NO

Packing Material Used: (circle) Chain-of-Custody form properly maintained:  YES  NO

None / Absorbent / Paper / Bubble Wrap Can Size:  6L  15L Other \_\_\_\_\_

3.0 SAMPLE TEMPERATURE UPON RECEIPT: CC IR THERMOMETER #: PS

The temperature of the container(s) is: 32 32°C [acceptable tolerance 4°C ± 2°; (NC, WI: 1-4.4°C)]

If temperature is outside acceptable tolerance, Project Manager was notified (\_\_\_\_ PM). Date: \_\_\_\_ Time: \_\_\_\_

Samples received do not require cooling CC OK to analyze samples:  YES  NO

PRESERVATION OF SAMPLES REQUIRED:  NA  YES VERIFIED BY: CC

Base samples are >pH 12:  YES  NO Acid preserved are <pH 2:  YES  NO

Cyanide samples checked CC Sulfide samples appear \_\_\_\_\_

for sulfides:  YES to be preserved with zinc acetate:  YES  NO

Samples checked for chlorine CC Free chlorine present:  YES  NO

per specification:  YES

If sample preservation is outside acceptable tolerance, Project Manager was notified (\_\_\_\_ PM)

Date: \_\_\_\_\_ Time: \_\_\_\_\_  see pH adjustment form

VOLATILE SAMPLES FILLED COMPLETELY, IF NOT, LIST ID AND HEADSPACE OF VOAs CONTAINING  
BUBBLES EXCEEDING 6MM IN DIAMETER:

Sample ID	mm Headspace

Sample ID	mm Headspace

**4.0 CONDITION OF BOTTLES/CONTAINERS**VERIFIED BY: *CC*

Samples received match COC:

 YES  NO

Bottles received intact:

 YES  NO

See additional discrepancies/comments section:

 YES  NO

Samples received from USDA restricted area:

 YES  NO

Chain-of-Custody form properly maintained:

 YES  NO

VOA trip blanks included:

 YES  NO  N/A**5.0 ADDITIONAL DISCREPANCIES**

Appears on COC		Appears on Label		
Sample ID	Date/Time	Sample ID	Date/Time	Comments

**6.0 SHIPPING DOCUMENTATION:**

Air/freight bill is available and attached to COC:

*CC* YES  NOAir bill #: *3432 0023 0281*

Hand-delivered Carrier:

Date:

Time:

**7.0 OTHER COMMENTS:***per sample 2x120ml***CORRECTIVE ACTION:**

Client's Name: \_\_\_\_\_

Informed verbally on: \_\_\_\_\_

By: \_\_\_\_\_

Client's Name: \_\_\_\_\_

Informed verbally on: \_\_\_\_\_

By: \_\_\_\_\_

Sample(s) processed "as is" comments: \_\_\_\_\_

Samples(s) on hold until: \_\_\_\_\_

If released, notify: \_\_\_\_\_

**REVIEW:**

Project Management: \_\_\_\_\_

*Mark Sall*Date: *3/28/04***SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE**

CARCIS

Laboratory Task Order No./P.O. No. -

**CHAIN-OFF-CUSTODY RECORD**

Project Number/Name *C:\dok\099.2201*

### Project Location

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Sample ID/Location Date/Time Matrix Standard

Sample Matrix: L = Liquid; S = Solid; A = Air

Relinquished by:	<i>Jill S. S.</i>	Organization:	<i>AM/ADHS</i>	Date	<i>12/31/04</i>	Time	<i>1000</i>	Seal Intact?	<i>No N/A</i>
Received by:	<i>Jill S. S.</i>	Organization:	<i>SJL</i>	Date	<i>3/24/05</i>	Time	<i>0850</i>	<i>Yes</i>	<i>No N/A</i>
Relinquished by:		Organization:		Date	/	Time	/	Seal Intact?	
Received by:		Organization:		Date	/	Time	/	Yes	No N/A

Outline Method

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