CAFB 03

DEPARTMENT OF THE AIR FORCE
27TH CIVIL ENGINEER SQUADRON (ACC)
CANNON AIR FORCE BASE NEW MEXICO

10 SEP 2003

Mr. Robert S. Pyeatt
Deputy Base Civil Engineer
506 N DL Ingram Blvd
Cannon AFB NM 88103-5003

Mr. Glenn von Gonten
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe NM 87505-6303

Dear Mr. von Gonten

Attached is a copy the analytical report for soil samples taken at solid waste management unit No. 95, N-E Drainage Ditch. During a 26 Aug 03 meeting with members of my Environmental Flight, you requested a copy of this report. As my staff told you, soil samples were taken along this ditch to determine the concentrations of various pollutants. A future project will install storm water piping within the ditch to reduce erosion.

If you have any questions regarding this project, please contact Mr. John Rebman, Environmental Flight, at (505) 784-1099.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or person who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely

ROBERT S. PYEATT

Attachment:
Report

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ANALYTICAL REPORT

Cannon AFB
Lot #: D2I130349

Richard Daddow

U.S. Geological Survey

STL DENVER

Karen Kuoppala
Project Manager

October 15, 2002

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Standard Deliverables with Supporting Documentation

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Supporting Documentation *(Note: A one-page "Description of Supporting Documentation" is provided at the beginning of this section.).*	**Check below when supporting documentation is present.**
• **Volatile GC/MS**	✓
• **Semivolatile GC/MS**	✓
• **Volatile GC**	
• **Semivolatile GC**	
• **LC/MS or HPLC**	
• **Metals**	✓
• **General Chemistry**	✓
• **Subcontracted Data**	

Case Narrative
D2I130349

With exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. All laboratory quality control samples analyzed in conjunction with the samples in this project were within established control limits.

The test results presented in this report meet all requirements of NELAC, and any exceptions are noted. This report shall not be reproduced, except in full, without written permission from the laboratory.

Sample Receiving

Twelve samples were received under chain of custody on September 13, 2002. The samples were received at the lab in good condition at a temperature of 0.8°C.

GC/MS Volatiles, SW846 8260B

The method blank contained methylene chloride at a concentration below the reporting limit, but above the method detection limit. The associated positive sample results have been flagged "B".

The MS/MSD was performed on a sample from another lot and/or client.

GC/MS Semi-Volatiles, SW846 8270C

The MS/MSD performed on D2I130349-001 was in control for all recoveries and RPDs.

The Initial Calibration Verification Standard (2nd source ICV) demonstrated a percent difference greater than 15% for p-phenylenediamine, 7,12-dimethylbenzidine, benzyl alcohol, and benzidine.

Metals, SW846 7471A, 6010B, 6020

The method 7471A MS/MSD was performed on a sample from another lot and/or client.

The method 6010B MS/MSD performed on sample D2I130349-001 demonstrated recoveries of barium above the upper control limit. In addition, the recovery of iron could not be calculated due to the high concentration in the unspiked sample.

The method 6020 MS/MSD performed on D2I130349-001 was in control for recoveries and RPDs.

General Chemistry, SW846 9071B, EPA 160.3

The method 9071B MS/MSD performed on sample D2I130349-003 was in control for HEM.

All other MS/MSDs were performed on samples from another lot and/or client.

The method 160.3 duplicate performed on sample D2I130349-012 was in control for % moisture.

The method 9060 MS/MSD performed on sample D2H190144-001 was in control for TOC.

Quality Control Definitions of Terms

Term	Definition
Batch	A set of up to 20 field samples plus associated laboratory QC samples that are similar in composition (matrix) and that are processed within the same time period with the same reagent and standard lots.
Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD)	A volume of regent water for aqueous samples or a contaminant-free solid matrix (Ottawa sand) for soil and sediment samples which is spiked with known amounts of representative target analytes and required surrogates. A LCS is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. An LCSD is a second Laboratory Control Sample.
Matrix Spike and Matrix Spike Duplicate (MS/MSD)	A field sample fortified with known quantities of target analytes that are also added to the LCS. Matrix spike duplicate is a second matrix spike sample. MSs/MSDs are carried throughout he entire analytical process and are used to determine sample matrix effect on accuracy of the measurement system. The accuracy and precision estimated using MS/MSD is only representative of the precision of the sample that was spiked.
Method Blank	A sample composed of all the reagents (in the same quantities) in reagent water carried through the entire analytical process. The method blank is used to monitor the level of contamination introduced during sample preparation steps.
Surrogate	Organic constituents not expected to be detected in environmental media and are added to every sample and QC at a known concentration. Surrogates are used to determine the efficiency of the sample preparation and the analytical process.
Sample Duplicate	A second aliquot of an environmental sample, taken form the same sample container when possible, that is processed independently with the first sample aliquot. The results are used to assess the effect of the sample matrix on the precision of the analytical process. The precision estimated using this sample is not necessarily representative to the precision for other samples in the batch.
Method Detection Limit "MDL"	The method detection limit is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from replicate analyses of low level standards in a typical representative matrix.
Reporting Limit "RL"	The STL reporting limit is normally the lowest level at which measurements become quantitatively meaningful, ie., the quantitation limit, which is approximately three times the MDL. Some projects require RLs that are less than the quantitation limit to achieve particular maximum contaminant levels (MCLs) or relevant and appropriate requirements (ARARs), but RLs cannot be less than the statistically determined MDL.

Quality Control Definitions of Qualifiers

Qualifier	Definition
*	Surrogate or Relative Percent Difference (RPD) is outside control limits.
a	Spiked analyte recovery is outside control limits.
B	Organics: Method blank contamination. The associated method blank contains the target analyte at a reportable level. Inorganics: Estimated result. Result is less than the RL
COL	More than 40% difference between the primary and confirmation detector results. The lower of the two results is reported.
DIL	The concentration is estimated or not reported due to dilution.
E	Estimated result. Result concentrations exceeds the calibration range.
G	Inorganics: Elevated reporting limit. The reporting limit is elevated due to matrix interference.
J	Organics: Estimated result. Result is less than RL Inorganics: Method blank contamination. The associated method blank contains the target analyte at a reportable level.
L	Serial dilution of a digestate in the analytical batch indicates that physical and chemical interferences are present
N	Spiked analyte recovery is outside stated control limits.
NC	The recovery and/or RPD were not calculated.
ND	Non-detect
p	Relative percent difference (RPD) is outside stated control limits.
Q	Elevated reporting limit. The reporting limit is elevated due to high analyte levels.
V	General Chemistry: Elevated reporting limit due to limited sample volume.
Wa	Post digestion spike recovery fell between 40-85% due to matrix interference.
Wb	Post digestion spike recovery fell between 115-150% due to matrix interference.
I	Percent recovery is estimated since the results exceeded the calibration range.
T1	A tentatively identified compound that did not generate a spectral match of 80% or greater. Typically called "unknown"
T2	A tentatively identified compound with a spectral match of 80% or better
T3	A tentatively identified compound that was calibrated for by the lab, but not on the client target analyte list.
IC	Diluted due to high inorganic chloride.

EXECUTIVE SUMMARY - Detection Highlights

D2I130349

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
STATION1-02 09/11/02 10:18 001				
Cadmium	170	100	ug/kg	SW846 6020
Lead	4800	100	ug/kg	SW846 6020
Mercury	0.0049 B	0.033	mg/kg	SW846 7471A
Barium	380	1.0	mg/kg	SW846 6010B
Chromium	7.7	1.0	mg/kg	SW846 6010B
Cobalt	3.6	1.0	mg/kg	SW846 6010B
Copper	4.1	2.0	mg/kg	SW846 6010B
Iron	6300	10	mg/kg	SW846 6010B
Nickel	6.9	4.0	mg/kg	SW846 6010B
Zinc	17	2.0	mg/kg	SW846 6010B
Methylene chloride	2.2 J,B	5.0	ug/kg	SW846 8260B
Acetonitrile	25 J,B	100	ug/kg	SW846 8260B
Percent Moisture	12	0.10	%	MCAWW 160.3 MOD
STATION2R-02 09/11/02 10:40 002				
Cadmium	250	100	ug/kg	SW846 6020
Lead	18000	100	ug/kg	SW846 6020
Mercury	0.0055 B	0.033	mg/kg	SW846 7471A
Barium	180	1.0	mg/kg	SW846 6010B
Chromium	10	1.0	mg/kg	SW846 6010B
Cobalt	3.9	1.0	mg/kg	SW846 6010B
Copper	6.3	2.0	mg/kg	SW846 6010B
Iron	8600	10	mg/kg	SW846 6010B
Nickel	8.0	4.0	mg/kg	SW846 6010B
Zinc	24	2.0	mg/kg	SW846 6010B
Methylene chloride	1.9 J,B	5.0	ug/kg	SW846 8260B
Percent Moisture	11	0.10	%	MCAWW 160.3 MOD
STATION3R-02 09/11/02 11:05 003				
Cadmium	190	100	ug/kg	SW846 6020
Lead	6600	100	ug/kg	SW846 6020
Mercury	0.0028 B	0.033	mg/kg	SW846 7471A
Barium	420	1.0	mg/kg	SW846 6010B
Chromium	8.6	1.0	mg/kg	SW846 6010B
Cobalt	3.8	1.0	mg/kg	SW846 6010B
Copper	5.9	2.0	mg/kg	SW846 6010B
Iron	7300	10	mg/kg	SW846 6010B
Nickel	8.3	4.0	mg/kg	SW846 6010B
Zinc	22	2.0	mg/kg	SW846 6010B
Methylene chloride	2.6 J,B	5.0	ug/kg	SW846 8260B
Percent Moisture	21	0.10	%	MCAWW 160.3 MOD

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

D2I130349

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
STATION3RR-02 09/11/02 11:20 004				
Cadmium	130	100	ug/kg	SW846 6020
Lead	1800	100	ug/kg	SW846 6020
Barium	990	1.0	mg/kg	SW846 6010B
Chromium	2.9	1.0	mg/kg	SW846 6010B
Cobalt	2.6	1.0	mg/kg	SW846 6010B
Copper	3.1	2.0	mg/kg	SW846 6010B
Iron	3400	10	mg/kg	SW846 6010B
Nickel	4.5	4.0	mg/kg	SW846 6010B
Zinc	8.7	2.0	mg/kg	SW846 6010B
Acetone	5.8 J	20	ug/kg	SW846 8260B
Methylene chloride	2.4 J,B	5.0	ug/kg	SW846 8260B
Percent Moisture	7.4	0.10	%	MCAWW 160.3 MOD
STATION4-02 09/11/02 11:40 005				
Cadmium	180	100	ug/kg	SW846 6020
Lead	3400	100	ug/kg	SW846 6020
Mercury	0.0033 B	0.033	mg/kg	SW846 7471A
Barium	210	1.0	mg/kg	SW846 6010B
Chromium	5.0	1.0	mg/kg	SW846 6010B
Cobalt	2.8	1.0	mg/kg	SW846 6010B
Copper	4.6	2.0	mg/kg	SW846 6010B
Iron	4300	10	mg/kg	SW846 6010B
Nickel	6.2	4.0	mg/kg	SW846 6010B
Zinc	13	2.0	mg/kg	SW846 6010B
Methylene chloride	2.3 J,B	5.0	ug/kg	SW846 8260B
Percent Moisture	13	0.10	%	MCAWW 160.3 MOD
STATION2L-02 09/11/02 12:05 006				
Cadmium	120	100	ug/kg	SW846 6020
Lead	6600	100	ug/kg	SW846 6020
Barium	310	1.0	mg/kg	SW846 6010B
Chromium	8.7	1.0	mg/kg	SW846 6010B
Cobalt	4.7	1.0	mg/kg	SW846 6010B
Copper	4.1	2.0	mg/kg	SW846 6010B
Iron	7900	10	mg/kg	SW846 6010B
Nickel	7.3	4.0	mg/kg	SW846 6010B
Zinc	20	2.0	mg/kg	SW846 6010B
Acetone	11 J	20	ug/kg	SW846 8260B
Methylene chloride	2.3 J,B	5.0	ug/kg	SW846 8260B
Percent Moisture	14	0.10	%	MCAWW 160.3 MOD

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

D2I130349

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
STATION5-02 09/11/02 12:30 007				
Cadmium	82 B	100	ug/kg	SW846 6020
Lead	3000	100	ug/kg	SW846 6020
Barium	140	1.0	mg/kg	SW846 6010B
Chromium	5.8	1.0	mg/kg	SW846 6010B
Cobalt	3.0	1.0	mg/kg	SW846 6010B
Copper	3.0	2.0	mg/kg	SW846 6010B
Iron	5400	10	mg/kg	SW846 6010B
Nickel	5.9	4.0	mg/kg	SW846 6010B
Zinc	12	2.0	mg/kg	SW846 6010B
Methylene chloride	2.5 J,B	5.0	ug/kg	SW846 8260B
Percent Moisture	18	0.10	%	MCAWW 160.3 MOD
STATION6-02 09/11/02 12:55 008				
Cadmium	85 B	100	ug/kg	SW846 6020
Lead	5700	100	ug/kg	SW846 6020
Mercury	0.0066 B	0.033	mg/kg	SW846 7471A
Barium	180	1.0	mg/kg	SW846 6010B
Chromium	14	1.0	mg/kg	SW846 6010B
Cobalt	4.0	1.0	mg/kg	SW846 6010B
Copper	7.3	2.0	mg/kg	SW846 6010B
Iron	11000	10	mg/kg	SW846 6010B
Nickel	10	4.0	mg/kg	SW846 6010B
Zinc	26	2.0	mg/kg	SW846 6010B
Methylene chloride	2.5 J,B	5.0	ug/kg	SW846 8260B
Acetonitrile	26 J,B	100	ug/kg	SW846 8260B
Percent Moisture	13	0.10	%	MCAWW 160.3 MOD
STATION7-02 09/11/02 13:07 009				
Cadmium	98 B	100	ug/kg	SW846 6020
Lead	7500	100	ug/kg	SW846 6020
Mercury	0.0066 B	0.033	mg/kg	SW846 7471A
Barium	78	1.0	mg/kg	SW846 6010B
Chromium	16	1.0	mg/kg	SW846 6010B
Cobalt	4.5	1.0	mg/kg	SW846 6010B
Copper	7.5	2.0	mg/kg	SW846 6010B
Iron	12000	10	mg/kg	SW846 6010B
Nickel	9.5	4.0	mg/kg	SW846 6010B
Zinc	36	2.0	mg/kg	SW846 6010B
Methylene chloride	2.2 J,B	5.0	ug/kg	SW846 8260B
Acetonitrile	26 J,B	100	ug/kg	SW846 8260B
Percent Moisture	12	0.10	%	MCAWW 160.3 MOD

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EXECUTIVE SUMMARY - Detection Highlights

D2I130349

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
STATION8-02 09/11/02 13:21 010				
Cadmium	120	100	ug/kg	SW846 6020
Lead	6000	100	ug/kg	SW846 6020
Mercury	0.0093 B	0.033	mg/kg	SW846 7471A
Barium	92	1.0	mg/kg	SW846 6010B
Chromium	13	1.0	mg/kg	SW846 6010B
Cobalt	4.0	1.0	mg/kg	SW846 6010B
Copper	8.6	2.0	mg/kg	SW846 6010B
Iron	11000	10	mg/kg	SW846 6010B
Nickel	11	4.0	mg/kg	SW846 6010B
Zinc	27	2.0	mg/kg	SW846 6010B
Methylene chloride	2.0 J,B	5.0	ug/kg	SW846 8260B
Acetonitrile	27 J,B	100	ug/kg	SW846 8260B
Percent Moisture	12	0.10	%	MCAWW 160.3 MOD
STATION9-02 09/11/02 13:33 011				
Cadmium	100	100	ug/kg	SW846 6020
Lead	5900	100	ug/kg	SW846 6020
Mercury	0.0086 B	0.033	mg/kg	SW846 7471A
Barium	180	1.0	mg/kg	SW846 6010B
Chromium	11	1.0	mg/kg	SW846 6010B
Cobalt	3.7	1.0	mg/kg	SW846 6010B
Copper	7.9	2.0	mg/kg	SW846 6010B
Iron	8900	10	mg/kg	SW846 6010B
Nickel	10	4.0	mg/kg	SW846 6010B
Zinc	22	2.0	mg/kg	SW846 6010B
Methylene chloride	2.6 J,B	5.0	ug/kg	SW846 8260B
Acetonitrile	26 J,B	100	ug/kg	SW846 8260B
Percent Moisture	13	0.10	%	MCAWW 160.3 MOD
STATION10-02 09/11/02 13:47 012				
Cadmium	62 B	100	ug/kg	SW846 6020
Lead	5900	100	ug/kg	SW846 6020
Mercury	0.012 B	0.033	mg/kg	SW846 7471A
Barium	150	1.0	mg/kg	SW846 6010B
Chromium	12	1.0	mg/kg	SW846 6010B
Cobalt	3.5	1.0	mg/kg	SW846 6010B
Copper	6.6	2.0	mg/kg	SW846 6010B
Iron	10000	10	mg/kg	SW846 6010B
Nickel	11	4.0	mg/kg	SW846 6010B
Zinc	29	2.0	mg/kg	SW846 6010B
Methylene chloride	2.6 J,B	5.0	ug/kg	SW846 8260B

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EXECUTIVE SUMMARY - Detection Highlights

D2I130349

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
STATION10-02 09/11/02 13:47 012				
Acetonitrile	25 J,B	100	ug/kg	SW846 8260B
Percent Moisture	12	0.10	%	MCAWW 160.3 MOD

METHODS SUMMARY

D2I130349

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
n-Hexane Ext. Material	SW846 9071B	SW846 9071B
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
ICP-MS (6020)	SW846 6020	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Semivolatile Organic Compounds by GC/MS	SW846 8270C	SW846 3550B
Volatile Organics by GC/MS	SW846 8260B	SW846 5030

References:

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

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

METHOD / ANALYST SUMMARY

D2I130349

ANALYTICAL METHOD	ANALYST	ANALYST ID
MCAWW 160.3 MOD	Melissa Hailey	009506
SW846 6010B	Lynn-Anne Trudell	006645
SW846 6010B	Steve Mustain	6720
SW846 6020	Royce Bruce	008595
SW846 7471A	Thomas Lill	006929
SW846 8260B	Dan Appelhans	001008
SW846 8270C	Tim O'Donnell	000443
SW846 9071B	Dave Elkin	000901

References:

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

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

SAMPLE SUMMARY

D2I130349

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
E7801	001	STATION1-02	09/11/02	10:18
E7802	002	STATION2R-02	09/11/02	10:40
E7803	003	STATION3R-02	09/11/02	11:05
E7804	004	STATION3RR-02	09/11/02	11:20
E7806	005	STATION4-02	09/11/02	11:40
E7807	006	STATION2L-02	09/11/02	12:05
E7809	007	STATION5-02	09/11/02	12:30
E781A	008	STATION6-02	09/11/02	12:55
E781C	009	STATION7-02	09/11/02	13:07
E781D	010	STATION8-02	09/11/02	13:21
E781E	011	STATION9-02	09/11/02	13:33
E781F	012	STATION10-02	09/11/02	13:47

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.

US GEOLOGICAL SURVEY

Client Sample ID: STATION1-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-001 **Work Order #...:** E78011AR **Matrix.....:** SO
Date Sampled...: 09/11/02 10:18 **Date Received..:** 09/13/02
Prep Date.....: 09/18/02 **Analysis Date..:** 09/18/02
Prep Batch #...: 2262339 **Analysis Time..:** 17:42
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	20	ug/kg	4.6
Acrolein	ND	100	ug/kg	17
Acrylonitrile	ND	100	ug/kg	15
Benzene	ND	5.0	ug/kg	0.89
Bromodichloromethane	ND	5.0	ug/kg	0.92
Bromoform	ND	5.0	ug/kg	0.91
Bromomethane	ND	10	ug/kg	1.2
2-Butanone (MEK)	ND	20	ug/kg	4.7
Carbon disulfide	ND	5.0	ug/kg	0.92
Carbon tetrachloride	ND	5.0	ug/kg	1.2
Chlorobenzene	ND	5.0	ug/kg	0.75
Chloroethane	ND	10	ug/kg	1.3
Chloroform	ND	10	ug/kg	0.90
Chloromethane	ND	10	ug/kg	1.5
Dibromochloromethane	ND	5.0	ug/kg	0.90
Dibromomethane	ND	5.0	ug/kg	1.3
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	0.92
Dichlorodifluoromethane	ND	10	ug/kg	1.6
1,1-Dichloroethane	ND	5.0	ug/kg	0.98
1,2-Dichloroethane	ND	5.0	ug/kg	0.99
1,1-Dichloroethene	ND	5.0	ug/kg	1.1
cis-1,2-Dichloroethene	ND	2.5	ug/kg	0.84
trans-1,2-Dichloroethene	ND	2.5	ug/kg	0.79
1,2-Dichloroethene (total)	ND	5.0	ug/kg	1.5
1,2-Dichloropropane	ND	5.0	ug/kg	1.2
cis-1,3-Dichloropropene	ND	5.0	ug/kg	0.96
trans-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
trans-1,4-Dichloro-2-butene	ND	5.0	ug/kg	1.1
1,4-Dioxane	ND	500	ug/kg	79
Ethylbenzene	ND	5.0	ug/kg	1.2
Ethyl methacrylate	ND	5.0	ug/kg	0.91
2-Hexanone	ND	20	ug/kg	4.6
Iodomethane	ND	5.0	ug/kg	0.83
Methylene chloride	**2.2 J,B**	**5.0**	**ug/kg**	**0.80**
4-Methyl-2-pentanone	ND	20	ug/kg	3.9
Styrene	ND	5.0	ug/kg	0.66

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION1-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-001 **Work Order #...:** E78011AR **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	1.1
Tetrachloroethene	ND	5.0	ug/kg	0.99
Toluene	ND	5.0	ug/kg	0.78
1,1,1-Trichloroethane	ND	5.0	ug/kg	0.98
1,1,2-Trichloroethane	ND	5.0	ug/kg	1.5
Trichloroethene	ND	5.0	ug/kg	0.87
Trichlorofluoromethane	ND	10	ug/kg	0.51
1,2,3-Trichloropropane	ND	5.0	ug/kg	1.5
Vinyl acetate	ND	10	ug/kg	2.4
Vinyl chloride	ND	5.0	ug/kg	1.1
Xylenes (total)	ND	5.0	ug/kg	2.8
Acetonitrile	**25 J,B**	**100**	**ug/kg**	**24**
Allyl chloride	ND	10	ug/kg	0.92
Chloroprene	ND	5.0	ug/kg	0.88
Propionitrile	ND	50	ug/kg	17
Methacrylonitrile	ND	50	ug/kg	14
Isobutyl alcohol	ND	200	ug/kg	42
Methyl methacrylate	ND	5.0	ug/kg	1.4
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	0.97
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg	1.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(82 - 122)
1,2-Dichloroethane-d4	98	(80 - 122)
4-Bromofluorobenzene	98	(78 - 121)
Toluene-d8	100	(77 - 118)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

STATION1-02

GC/MS Volatiles

Lot-Sample #: D2I130349-001 **Work Order #:** E78011AR **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

US GEOLOGICAL SURVEY

Client Sample ID: STATION2R-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-002 **Work Order #...:** E78021AR **Matrix.....:** SO
Date Sampled...: 09/11/02 10:40 **Date Received..:** 09/13/02
Prep Date.....: 09/18/02 **Analysis Date..:** 09/18/02
Prep Batch #...: 2262339 **Analysis Time..:** 18:05
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	20	ug/kg	4.6
Acrolein	ND	100	ug/kg	17
Acrylonitrile	ND	100	ug/kg	15
Benzene	ND	5.0	ug/kg	0.89
Bromodichloromethane	ND	5.0	ug/kg	0.92
Bromoform	ND	5.0	ug/kg	0.91
Bromomethane	ND	10	ug/kg	1.2
2-Butanone (MEK)	ND	20	ug/kg	4.7
Carbon disulfide	ND	5.0	ug/kg	0.92
Carbon tetrachloride	ND	5.0	ug/kg	1.2
Chlorobenzene	ND	5.0	ug/kg	0.75
Chloroethane	ND	10	ug/kg	1.3
Chloroform	ND	10	ug/kg	0.90
Chloromethane	ND	10	ug/kg	1.5
Dibromochloromethane	ND	5.0	ug/kg	0.90
Dibromomethane	ND	5.0	ug/kg	1.3
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	0.92
Dichlorodifluoromethane	ND	10	ug/kg	1.6
1,1-Dichloroethane	ND	5.0	ug/kg	0.98
1,2-Dichloroethane	ND	5.0	ug/kg	0.99
1,1-Dichloroethene	ND	5.0	ug/kg	1.1
cis-1,2-Dichloroethene	ND	2.5	ug/kg	0.84
trans-1,2-Dichloroethene	ND	2.5	ug/kg	0.79
1,2-Dichloroethene (total)	ND	5.0	ug/kg	1.5
1,2-Dichloropropane	ND	5.0	ug/kg	1.2
cis-1,3-Dichloropropene	ND	5.0	ug/kg	0.96
trans-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
trans-1,4-Dichloro-2-butene	ND	5.0	ug/kg	1.1
1,4-Dioxane	ND	500	ug/kg	79
Ethylbenzene	ND	5.0	ug/kg	1.2
Ethyl methacrylate	ND	5.0	ug/kg	0.91
2-Hexanone	ND	20	ug/kg	4.6
Iodomethane	ND	5.0	ug/kg	0.83
Methylene chloride	**1.9 J,B**	**5.0**	**ug/kg**	**0.80**
4-Methyl-2-pentanone	ND	20	ug/kg	3.9
Styrene	ND	5.0	ug/kg	0.66

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US GEOLOGICAL SURVEY

Client Sample ID: STATION2R-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-002 Work Order #...: E78021AR Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	1.1
Tetrachloroethene	ND	5.0	ug/kg	0.99
Toluene	ND	5.0	ug/kg	0.78
1,1,1-Trichloroethane	ND	5.0	ug/kg	0.98
1,1,2-Trichloroethane	ND	5.0	ug/kg	1.5
Trichloroethene	ND	5.0	ug/kg	0.87
Trichlorofluoromethane	ND	10	ug/kg	0.51
1,2,3-Trichloropropane	ND	5.0	ug/kg	1.5
Vinyl acetate	ND	10	ug/kg	2.4
Vinyl chloride	ND	5.0	ug/kg	1.1
Xylenes (total)	ND	5.0	ug/kg	2.8
Acetonitrile	ND	100	ug/kg	24
Allyl chloride	ND	10	ug/kg	0.92
Chloroprene	ND	5.0	ug/kg	0.88
Propionitrile	ND	50	ug/kg	17
Methacrylonitrile	ND	50	ug/kg	14
Isobutyl alcohol	ND	200	ug/kg	42
Methyl methacrylate	ND	5.0	ug/kg	1.4
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	0.97
1,2 Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg	1.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(82 - 122)
1,2-Dichloroethane-d4	96	(80 - 122)
4-Bromofluorobenzene	99	(78 - 121)
Toluene-d8	97	(77 - 118)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

STATION2R-02

GC/MS Volatiles

Lot-Sample #: D2I130349-002 **Work Order #:** E78021AR **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

US GEOLOGICAL SURVEY

Client Sample ID: STATION3R-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-003 **Work Order #...:** E78031AR **Matrix.....:** SO
Date Sampled...: 09/11/02 11:05 **Date Received..:** 09/13/02
Prep Date.....: 09/18/02 **Analysis Date..:** 09/18/02
Prep Batch #...: 2262339 **Analysis Time..:** 18:29
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	20	ug/kg	4.6
Acrolein	ND	100	ug/kg	17
Acrylonitrile	ND	100	ug/kg	15
Benzene	ND	5.0	ug/kg	0.89
Bromodichloromethane	ND	5.0	ug/kg	0.92
Bromoform	ND	5.0	ug/kg	0.91
Bromomethane	ND	10	ug/kg	1.2
2-Butanone (MEK)	ND	20	ug/kg	4.7
Carbon disulfide	ND	5.0	ug/kg	0.92
Carbon tetrachloride	ND	5.0	ug/kg	1.2
Chlorobenzene	ND	5.0	ug/kg	0.75
Chloroethane	ND	10	ug/kg	1.3
Chloroform	ND	10	ug/kg	0.90
Chloromethane	ND	10	ug/kg	1.5
Dibromochloromethane	ND	5.0	ug/kg	0.90
Dibromomethane	ND	5.0	ug/kg	1.3
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	0.92
Dichlorodifluoromethane	ND	10	ug/kg	1.6
1,1-Dichloroethane	ND	5.0	ug/kg	0.98
1,2-Dichloroethane	ND	5.0	ug/kg	0.99
1,1-Dichloroethene	ND	5.0	ug/kg	1.1
cis-1,2-Dichloroethene	ND	2.5	ug/kg	0.84
trans-1,2-Dichloroethene	ND	2.5	ug/kg	0.79
1,2-Dichloroethene (total)	ND	5.0	ug/kg	1.5
1,2-Dichloropropane	ND	5.0	ug/kg	1.2
cis-1,3-Dichloropropene	ND	5.0	ug/kg	0.96
trans-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
trans-1,4-Dichloro-2-butene	ND	5.0	ug/kg	1.1
1,4-Dioxane	ND	500	ug/kg	79
Ethylbenzene	ND	5.0	ug/kg	1.2
Ethyl methacrylate	ND	5.0	ug/kg	0.91
2-Hexanone	ND	20	ug/kg	4.6
Iodomethane	ND	5.0	ug/kg	0.83
Methylene chloride	**2.6 J,B**	**5.0**	**ug/kg**	**0.80**
4-Methyl-2-pentanone	ND	20	ug/kg	3.9
Styrene	ND	5.0	ug/kg	0.66

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US GEOLOGICAL SURVEY

Client Sample ID: STATION3R-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-003 **Work Order #...:** E78031AR **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	1.1
Tetrachloroethene	ND	5.0	ug/kg	0.99
Toluene	ND	5.0	ug/kg	0.78
1,1,1-Trichloroethane	ND	5.0	ug/kg	0.98
1,1,2-Trichloroethane	ND	5.0	ug/kg	1.5
Trichloroethene	ND	5.0	ug/kg	0.87
Trichlorofluoromethane	ND	10	ug/kg	0.51
1,2,3-Trichloropropane	ND	5.0	ug/kg	1.5
Vinyl acetate	ND	10	ug/kg	2.4
Vinyl chloride	ND	5.0	ug/kg	1.1
Xylenes (total)	ND	5.0	ug/kg	2.8
Acetonitrile	ND	100	ug/kg	24
Allyl chloride	ND	10	ug/kg	0.92
Chloroprene	ND	5.0	ug/kg	0.88
Propionitrile	ND	50	ug/kg	17
Methacrylonitrile	ND	50	ug/kg	14
Isobutyl alcohol	ND	200	ug/kg	42
Methyl methacrylate	ND	5.0	ug/kg	1.4
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	0.97
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg	1.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	100	(82 - 122)
1,2-Dichloroethane-d4	99	(80 - 122)
4-Bromofluorobenzene	102	(78 - 121)
Toluene-d8	88	(77 - 118)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

STATION3R-02

GC/MS Volatiles

Lot-Sample #: D2I130349-003 **Work Order #:** E78031AR **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

US GEOLOGICAL SURVEY

Client Sample ID: STATION3RR-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-004 **Work Order #...:** E78041AR **Matrix.....:** SO
Date Sampled...: 09/11/02 11:20 **Date Received..:** 09/13/02
Prep Date.....: 09/18/02 **Analysis Date..:** 09/18/02
Prep Batch #...: 2262339 **Analysis Time..:** 18:52
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**5.8 J**	**20**	**ug/kg**	**4.6**
Acrolein	ND	100	ug/kg	17
Acrylonitrile	ND	100	ug/kg	15
Benzene	ND	5.0	ug/kg	0.89
Bromodichloromethane	ND	5.0	ug/kg	0.92
Bromoform	ND	5.0	ug/kg	0.91
Bromomethane	ND	10	ug/kg	1.2
2-Butanone (MEK)	ND	20	ug/kg	4.7
Carbon disulfide	ND	5.0	ug/kg	0.92
Carbon tetrachloride	ND	5.0	ug/kg	1.2
Chlorobenzene	ND	5.0	ug/kg	0.75
Chloroethane	ND	10	ug/kg	1.3
Chloroform	ND	10	ug/kg	0.90
Chloromethane	ND	10	ug/kg	1.5
Dibromochloromethane	ND	5.0	ug/kg	0.90
Dibromomethane	ND	5.0	ug/kg	1.3
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	0.92
Dichlorodifluoromethane	ND	10	ug/kg	1.6
1,1-Dichloroethane	ND	5.0	ug/kg	0.98
1,2-Dichloroethane	ND	5.0	ug/kg	0.99
1,1-Dichloroethene	ND	5.0	ug/kg	1.1
cis-1,2-Dichloroethene	ND	2.5	ug/kg	0.84
trans-1,2-Dichloroethene	ND	2.5	ug/kg	0.79
1,2-Dichloroethene (total)	ND	5.0	ug/kg	1.5
1,2-Dichloropropane	ND	5.0	ug/kg	1.2
cis-1,3-Dichloropropene	ND	5.0	ug/kg	0.96
trans-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
trans 1,4-Dichloro-2-butene	ND	5.0	ug/kg	1.1
1,4-Dioxane	ND	500	ug/kg	79
Ethylbenzene	ND	5.0	ug/kg	1.2
Ethyl methacrylate	ND	5.0	ug/kg	0.91
2-Hexanone	ND	20	ug/kg	4.6
Iodomethane	ND	5.0	ug/kg	0.83
Methylene chloride	**2.4 J,B**	**5.0**	**ug/kg**	**0.80**
4-Methyl-2-pentanone	ND	20	ug/kg	3.9
Styrene	ND	5.0	ug/kg	0.66

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US GEOLOGICAL SURVEY

Client Sample ID: STATION3RR-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-004 **Work Order #...:** E78041AR **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	1.1
Tetrachloroethene	ND	5.0	ug/kg	0.99
Toluene	ND	5.0	ug/kg	0.78
1,1,1-Trichloroethane	ND	5.0	ug/kg	0.98
1,1,2-Trichloroethane	ND	5.0	ug/kg	1.5
Trichloroethene	ND	5.0	ug/kg	0.87
Trichlorofluoromethane	ND	10	ug/kg	0.51
1,2,3-Trichloropropane	ND	5.0	ug/kg	1.5
Vinyl acetate	ND	10	ug/kg	2.4
Vinyl chloride	ND	5.0	ug/kg	1.1
Xylenes (total)	ND	5.0	ug/kg	2.8
Acetonitrile	ND	100	ug/kg	24
Allyl chloride	ND	10	ug/kg	0.92
Chloroprene	ND	5.0	ug/kg	0.88
Propionitrile	ND	50	ug/kg	17
Methacrylonitrile	ND	50	ug/kg	14
Isobutyl alcohol	ND	200	ug/kg	42
Methyl methacrylate	ND	5.0	ug/kg	1.4
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	0.97
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg	1.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(82 - 122)
1,2-Dichloroethane-d4	99	(80 - 122)
4-Bromofluorobenzene	100	(78 - 121)
Toluene-d8	99	(77 - 118)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

STATION3RR-02

GC/MS Volatiles

Lot-Sample #: D2I130349-004 **Work Order #:** E78041AR **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		20 J	M	14.269	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: STATION4-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-005 **Work Order #...:** E78061AR **Matrix.....:** SO
Date Sampled...: 09/11/02 11:40 **Date Received..:** 09/13/02
Prep Date.....: 09/18/02 **Analysis Date..:** 09/18/02
Prep Batch #...: 2262339 **Analysis Time..:** 19:15
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	20	ug/kg	4.6
Acrolein	ND	100	ug/kg	17
Acrylonitrile	ND	100	ug/kg	15
Benzene	ND	5.0	ug/kg	0.89
Bromodichloromethane	ND	5.0	ug/kg	0.92
Bromoform	ND	5.0	ug/kg	0.91
Bromomethane	ND	10	ug/kg	1.2
2-Butanone (MEK)	ND	20	ug/kg	4.7
Carbon disulfide	ND	5.0	ug/kg	0.92
Carbon tetrachloride	ND	5.0	ug/kg	1.2
Chlorobenzene	ND	5.0	ug/kg	0.75
Chloroethane	ND	10	ug/kg	1.3
Chloroform	ND	10	ug/kg	0.90
Chloromethane	ND	10	ug/kg	1.5
Dibromochloromethane	ND	5.0	ug/kg	0.90
Dibromomethane	ND	5.0	ug/kg	1.3
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	0.92
Dichlorodifluoromethane	ND	10	ug/kg	1.6
1,1-Dichloroethane	ND	5.0	ug/kg	0.98
1,2-Dichloroethane	ND	5.0	ug/kg	0.99
1,1-Dichloroethene	ND	5.0	ug/kg	1.1
cis-1,2-Dichloroethene	ND	2.5	ug/kg	0.84
trans-1,2-Dichloroethene	ND	2.5	ug/kg	0.79
1,2-Dichloroethene (total)	ND	5.0	ug/kg	1.5
1,2-Dichloropropane	ND	5.0	ug/kg	1.2
cis-1,3-Dichloropropene	ND	5.0	ug/kg	0.96
trans-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
trans-1,4-Dichloro-2-butene	ND	5.0	ug/kg	1.1
1,4-Dioxane	ND	500	ug/kg	79
Ethylbenzene	ND	5.0	ug/kg	1.2
Ethyl methacrylate	ND	5.0	ug/kg	0.91
2-Hexanone	ND	20	ug/kg	4.6
Iodomethane	ND	5.0	ug/kg	0.83
Methylene chloride	**2.3 J,B**	**5.0**	**ug/kg**	**0.80**
4-Methyl-2-pentanone	ND	20	ug/kg	3.9
Styrene	ND	5.0	ug/kg	0.66

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US GEOLOGICAL SURVEY

Client Sample ID: STATION4-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-005 **Work Order #...:** E78061AR **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	1.1
Tetrachloroethene	ND	5.0	ug/kg	0.99
Toluene	ND	5.0	ug/kg	0.78
1,1,1-Trichloroethane	ND	5.0	ug/kg	0.98
1,1,2-Trichloroethane	ND	5.0	ug/kg	1.5
Trichloroethene	ND	5.0	ug/kg	0.87
Trichlorofluoromethane	ND	10	ug/kg	0.51
1,2,3-Trichloropropane	ND	5.0	ug/kg	1.5
Vinyl acetate	ND	10	ug/kg	2.4
Vinyl chloride	ND	5.0	ug/kg	1.1
Xylenes (total)	ND	5.0	ug/kg	2.8
Acetonitrile	ND	100	ug/kg	24
Allyl chloride	ND	10	ug/kg	0.92
Chloroprene	ND	5.0	ug/kg	0.88
Propionitrile	ND	50	ug/kg	17
Methacrylonitrile	ND	50	ug/kg	14
Isobutyl alcohol	ND	200	ug/kg	42
Methyl methacrylate	ND	5.0	ug/kg	1.4
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	0.97
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg	1.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(82 - 122)
1,2-Dichloroethane-d4	94	(80 - 122)
4-Bromofluorobenzene	97	(78 - 121)
Toluene-d8	96	(77 - 118)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

STATION4-02

GC/MS Volatiles

Lot-Sample #: D2I130349-005 **Work Order #:** E78061AR **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

US GEOLOGICAL SURVEY

Client Sample ID: STATION2L-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-006 **Work Order #...:** E78071AR **Matrix.....:** SO
Date Sampled...: 09/11/02 12:05 **Date Received..:** 09/13/02
Prep Date.....: 09/18/02 **Analysis Date..:** 09/18/02
Prep Batch #...: 2262339 **Analysis Time..:** 19:38
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**11 J**	**20**	**ug/kg**	**4.6**
Acrolein	ND	100	ug/kg	17
Acrylonitrile	ND	100	ug/kg	15
Benzene	ND	5.0	ug/kg	0.89
Bromodichloromethane	ND	5.0	ug/kg	0.92
Bromoform	ND	5.0	ug/kg	0.91
Bromomethane	ND	10	ug/kg	1.2
2-Butanone (MEK)	ND	20	ug/kg	4.7
Carbon disulfide	ND	5.0	ug/kg	0.92
Carbon tetrachloride	ND	5.0	ug/kg	1.2
Chlorobenzene	ND	5.0	ug/kg	0.75
Chloroethane	ND	10	ug/kg	1.3
Chloroform	ND	10	ug/kg	0.90
Chloromethane	ND	10	ug/kg	1.5
Dibromochloromethane	ND	5.0	ug/kg	0.90
Dibromomethane	ND	5.0	ug/kg	1.3
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	0.92
Dichlorodifluoromethane	ND	10	ug/kg	1.6
1,1-Dichloroethane	ND	5.0	ug/kg	0.98
1,2-Dichloroethane	ND	5.0	ug/kg	0.99
1,1-Dichloroethene	ND	5.0	ug/kg	1.1
cis-1,2-Dichloroethene	ND	2.5	ug/kg	0.84
trans-1,2-Dichloroethene	ND	2.5	ug/kg	0.79
1,2-Dichloroethene (total)	ND	5.0	ug/kg	1.5
1,2-Dichloropropane	ND	5.0	ug/kg	1.2
cis-1,3-Dichloropropene	ND	5.0	ug/kg	0.96
trans-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
trans-1,4-Dichloro-2-butene	ND	5.0	ug/kg	1.1
1,4-Dioxane	ND	500	ug/kg	79
Ethylbenzene	ND	5.0	ug/kg	1.2
Ethyl methacrylate	ND	5.0	ug/kg	0.91
2-Hexanone	ND	20	ug/kg	4.6
Iodomethane	ND	5.0	ug/kg	0.83
Methylene chloride	**2.3 J,B**	**5.0**	**ug/kg**	**0.80**
4-Methyl-2-pentanone	ND	20	ug/kg	3.9
Styrene	ND	5.0	ug/kg	0.66

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US GEOLOGICAL SURVEY

Client Sample ID: STATION2L-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-006 **Work Order #...:** E78071AR **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	1.1
Tetrachloroethene	ND	5.0	ug/kg	0.99
Toluene	ND	5.0	ug/kg	0.78
1,1,1-Trichloroethane	ND	5.0	ug/kg	0.98
1,1,2-Trichloroethane	ND	5.0	ug/kg	1.5
Trichloroethene	ND	5.0	ug/kg	0.87
Trichlorofluoromethane	ND	10	ug/kg	0.51
1,2,3-Trichloropropane	ND	5.0	ug/kg	1.5
Vinyl acetate	ND	10	ug/kg	2.4
Vinyl chloride	ND	5.0	ug/kg	1.1
Xylenes (total)	ND	5.0	ug/kg	2.8
Acetonitrile	ND	100	ug/kg	24
Allyl chloride	ND	10	ug/kg	0.92
Chloroprene	ND	5.0	ug/kg	0.88
Propionitrile	ND	50	ug/kg	17
Methacrylonitrile	ND	50	ug/kg	14
Isobutyl alcohol	ND	200	ug/kg	42
Methyl methacrylate	ND	5.0	ug/kg	1.4
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	0.97
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg	1.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(82 - 122)
1,2-Dichloroethane-d4	98	(80 - 122)
4-Bromofluorobenzene	100	(78 - 121)
Toluene-d8	100	(77 - 118)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

STATION2L-02

GC/MS Volatiles

Lot-Sample #: D2I130349-006 **Work Order #:** E78071AR **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		6.4 J	M	14.27	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: STATION5-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-007 **Work Order #...:** E78091AR **Matrix.....:** SO
Date Sampled...: 09/11/02 12:30 **Date Received..:** 09/13/02
Prep Date.....: 09/18/02 **Analysis Date..:** 09/18/02
Prep Batch #...: 2262339 **Analysis Time..:** 20:01
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	20	ug/kg	4.6
Acrolein	ND	100	ug/kg	17
Acrylonitrile	ND	100	ug/kg	15
Benzene	ND	5.0	ug/kg	0.89
Bromodichloromethane	ND	5.0	ug/kg	0.92
Bromoform	ND	5.0	ug/kg	0.91
Bromomethane	ND	10	ug/kg	1.2
2-Butanone (MEK)	ND	20	ug/kg	4.7
Carbon disulfide	ND	5.0	ug/kg	0.92
Carbon tetrachloride	ND	5.0	ug/kg	1.2
Chlorobenzene	ND	5.0	ug/kg	0.75
Chloroethane	ND	10	ug/kg	1.3
Chloroform	ND	10	ug/kg	0.90
Chloromethane	ND	10	ug/kg	1.5
Dibromochloromethane	ND	5.0	ug/kg	0.90
Dibromomethane	ND	5.0	ug/kg	1.3
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	0.92
Dichlorodifluoromethane	ND	10	ug/kg	1.6
1,1-Dichloroethane	ND	5.0	ug/kg	0.98
1,2-Dichloroethane	ND	5.0	ug/kg	0.99
1,1-Dichloroethene	ND	5.0	ug/kg	1.1
cis-1,2-Dichloroethene	ND	2.5	ug/kg	0.84
trans-1,2-Dichloroethene	ND	2.5	ug/kg	0.79
1,2-Dichloroethene (total)	ND	5.0	ug/kg	1.5
1,2-Dichloropropane	ND	5.0	ug/kg	1.2
cis-1,3-Dichloropropene	ND	5.0	ug/kg	0.96
trans-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
trans-1,4-Dichloro-2-butene	ND	5.0	ug/kg	1.1
1,4-Dioxane	ND	500	ug/kg	79
Ethylbenzene	ND	5.0	ug/kg	1.2
Ethyl methacrylate	ND	5.0	ug/kg	0.91
2-Hexanone	ND	20	ug/kg	4.6
Iodomethane	ND	5.0	ug/kg	0.83
Methylene chloride	**2.5 J,B**	**5.0**	**ug/kg**	**0.80**
4-Methyl-2-pentanone	ND	20	ug/kg	3.9
Styrene	ND	5.0	ug/kg	0.66

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION5-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-007 **Work Order #...:** E78091AR **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	1.1
Tetrachloroethene	ND	5.0	ug/kg	0.99
Toluene	ND	5.0	ug/kg	0.78
1,1,1-Trichloroethane	ND	5.0	ug/kg	0.98
1,1,2-Trichloroethane	ND	5.0	ug/kg	1.5
Trichloroethene	ND	5.0	ug/kg	0.87
Trichlorofluoromethane	ND	10	ug/kg	0.51
1,2,3-Trichloropropane	ND	5.0	ug/kg	1.5
Vinyl acetate	ND	10	ug/kg	2.4
Vinyl chloride	ND	5.0	ug/kg	1.1
Xylenes (total)	ND	5.0	ug/kg	2.8
Acetonitrile	ND	100	ug/kg	24
Allyl chloride	ND	10	ug/kg	0.92
Chloroprene	ND	5.0	ug/kg	0.88
Propionitrile	ND	50	ug/kg	17
Methacrylonitrile	ND	50	ug/kg	14
Isobutyl alcohol	ND	200	ug/kg	42
Methyl methacrylate	ND	5.0	ug/kg	1.4
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	0.97
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg	1.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(82 - 122)
1,2-Dichloroethane-d4	98	(80 - 122)
4-Bromofluorobenzene	99	(78 - 121)
Toluene-d8	96	(77 - 118)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

STATION5-02

GC/MS Volatiles

Lot-Sample #: D2I130349-007 **Work Order #:** E78091AR **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

US GEOLOGICAL SURVEY

Client Sample ID: STATION6-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-008 **Work Order #...:** E781A1AR **Matrix.....:** SO
Date Sampled...: 09/11/02 12:55 **Date Received..:** 09/13/02
Prep Date.....: 09/18/02 **Analysis Date..:** 09/18/02
Prep Batch #...: 2262339 **Analysis Time..:** 20:24
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	20	ug/kg	4.6
Acrolein	ND	100	ug/kg	17
Acrylonitrile	ND	100	ug/kg	15
Benzene	ND	5.0	ug/kg	0.89
Bromodichloromethane	ND	5.0	ug/kg	0.92
Bromoform	ND	5.0	ug/kg	0.91
Bromomethane	ND	10	ug/kg	1.2
2-Butanone (MEK)	ND	20	ug/kg	4.7
Carbon disulfide	ND	5.0	ug/kg	0.92
Carbon tetrachloride	ND	5.0	ug/kg	1.2
Chlorobenzene	ND	5.0	ug/kg	0.75
Chloroethane	ND	10	ug/kg	1.3
Chloroform	ND	10	ug/kg	0.90
Chloromethane	ND	10	ug/kg	1.5
Dibromochloromethane	ND	5.0	ug/kg	0.90
Dibromomethane	ND	5.0	ug/kg	1.3
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	0.92
Dichlorodifluoromethane	ND	10	ug/kg	1.6
1,1-Dichloroethane	ND	5.0	ug/kg	0.98
1,2-Dichloroethane	ND	5.0	ug/kg	0.99
1,1-Dichloroethene	ND	5.0	ug/kg	1.1
cis-1,2-Dichloroethene	ND	2.5	ug/kg	0.84
trans-1,2-Dichloroethene	ND	2.5	ug/kg	0.79
1,2-Dichloroethene (total)	ND	5.0	ug/kg	1.5
1,2-Dichloropropane	ND	5.0	ug/kg	1.2
cis-1,3-Dichloropropene	ND	5.0	ug/kg	0.96
trans-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
trans-1,4-Dichloro-2-butene	ND	5.0	ug/kg	1.1
1,4-Dioxane	ND	500	ug/kg	79
Ethylbenzene	ND	5.0	ug/kg	1.2
Ethyl methacrylate	ND	5.0	ug/kg	0.91
2-Hexanone	ND	20	ug/kg	4.6
Iodomethane	ND	5.0	ug/kg	0.83
Methylene chloride	**2.5 J,B**	**5.0**	**ug/kg**	**0.80**
4-Methyl-2-pentanone	ND	20	ug/kg	3.9
Styrene	ND	5.0	ug/kg	0.66

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US GEOLOGICAL SURVEY

Client Sample ID: STATION6-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-008 **Work Order #...:** E781A1AR **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	1.1
Tetrachloroethene	ND	5.0	ug/kg	0.99
Toluene	ND	5.0	ug/kg	0.78
1,1,1-Trichloroethane	ND	5.0	ug/kg	0.98
1,1,2-Trichloroethane	ND	5.0	ug/kg	1.5
Trichloroethene	ND	5.0	ug/kg	0.87
Trichlorofluoromethane	ND	10	ug/kg	0.51
1,2,3-Trichloropropane	ND	5.0	ug/kg	1.5
Vinyl acetate	ND	10	ug/kg	2.4
Vinyl chloride	ND	5.0	ug/kg	1.1
Xylenes (total)	ND	5.0	ug/kg	2.8
Acetonitrile	**26 J,B**	**100**	**ug/kg**	**24**
Allyl chloride	ND	10	ug/kg	0.92
Chloroprene	ND	5.0	ug/kg	0.88
Propionitrile	ND	50	ug/kg	17
Methacrylonitrile	ND	50	ug/kg	14
Isobutyl alcohol	ND	200	ug/kg	42
Methyl methacrylate	ND	5.0	ug/kg	1.4
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	0.97
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg	1.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(82 - 122)
1,2-Dichloroethane-d4	105	(80 - 122)
4-Bromofluorobenzene	102	(78 - 121)
Toluene-d8	98	(77 - 118)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

STATION6-02

GC/MS Volatiles

Lot-Sample #: D2I130349-008 **Work Order #:** E781A1AR **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

US GEOLOGICAL SURVEY

Client Sample ID: STATION7-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-009 **Work Order #...:** E781C1AR **Matrix.....:** SO
Date Sampled...: 09/11/02 13:07 **Date Received..:** 09/13/02
Prep Date.....: 09/18/02 **Analysis Date..:** 09/18/02
Prep Batch #...: 2262339 **Analysis Time..:** 20:47
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	20	ug/kg	4.6
Acrolein	ND	100	ug/kg	17
Acrylonitrile	ND	100	ug/kg	15
Benzene	ND	5.0	ug/kg	0.89
Bromodichloromethane	ND	5.0	ug/kg	0.92
Bromoform	ND	5.0	ug/kg	0.91
Bromomethane	ND	10	ug/kg	1.2
2-Butanone (MEK)	ND	20	ug/kg	4.7
Carbon disulfide	ND	5.0	ug/kg	0.92
Carbon tetrachloride	ND	5.0	ug/kg	1.2
Chlorobenzene	ND	5.0	ug/kg	0.75
Chloroethane	ND	10	ug/kg	1.3
Chloroform	ND	10	ug/kg	0.90
Chloromethane	ND	10	ug/kg	1.5
Dibromochloromethane	ND	5.0	ug/kg	0.90
Dibromomethane	ND	5.0	ug/kg	1.3
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	0.92
Dichlorodifluoromethane	ND	10	ug/kg	1.6
1,1-Dichloroethane	ND	5.0	ug/kg	0.98
1,2-Dichloroethane	ND	5.0	ug/kg	0.99
1,1-Dichloroethene	ND	5.0	ug/kg	1.1
cis-1,2-Dichloroethene	ND	2.5	ug/kg	0.84
trans-1,2-Dichloroethene	ND	2.5	ug/kg	0.79
1,2-Dichloroethene (total)	ND	5.0	ug/kg	1.5
1,2-Dichloropropane	ND	5.0	ug/kg	1.2
cis-1,3-Dichloropropene	ND	5.0	ug/kg	0.96
trans-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
trans-1,4-Dichloro-2-butene	ND	5.0	ug/kg	1.1
1,4-Dioxane	ND	500	ug/kg	79
Ethylbenzene	ND	5.0	ug/kg	1.2
Ethyl methacrylate	ND	5.0	ug/kg	0.91
2-Hexanone	ND	20	ug/kg	4.6
Iodomethane	ND	5.0	ug/kg	0.83
Methylene chloride	**2.2 J,B**	**5.0**	**ug/kg**	**0.80**
4-Methyl-2-pentanone	ND	20	ug/kg	3.9
Styrene	ND	5.0	ug/kg	0.66

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US GEOLOGICAL SURVEY

Client Sample ID: STATION7-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-009 **Work Order #...:** E781C1AR **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	1.1
Tetrachloroethene	ND	5.0	ug/kg	0.99
Toluene	ND	5.0	ug/kg	0.78
1,1,1-Trichloroethane	ND	5.0	ug/kg	0.98
1,1,2-Trichloroethane	ND	5.0	ug/kg	1.5
Trichloroethene	ND	5.0	ug/kg	0.87
Trichlorofluoromethane	ND	10	ug/kg	0.51
1,2,3-Trichloropropane	ND	5.0	ug/kg	1.5
Vinyl acetate	ND	10	ug/kg	2.4
Vinyl chloride	ND	5.0	ug/kg	1.1
Xylenes (total)	ND	5.0	ug/kg	2.8
Acetonitrile	**26 J,B**	**100**	**ug/kg**	**24**
Allyl chloride	ND	10	ug/kg	0.92
Chloroprene	ND	5.0	ug/kg	0.88
Propionitrile	ND	50	ug/kg	17
Methacrylonitrile	ND	50	ug/kg	14
Isobutyl alcohol	ND	200	ug/kg	42
Methyl methacrylate	ND	5.0	ug/kg	1.4
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	0.97
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg	1.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(82 - 122)
1,2-Dichloroethane-d4	105	(80 - 122)
4-Bromofluorobenzene	97	(78 - 121)
Toluene-d8	94	(77 - 118)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

STATION7-02

GC/MS Volatiles

Lot-Sample #: D2I130349-009 **Work Order #:** E781C1AR **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

US GEOLOGICAL SURVEY

Client Sample ID: STATION8-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-010 **Work Order #...:** E781D1AR **Matrix.....:** SO
Date Sampled...: 09/11/02 13:21 **Date Received..:** 09/13/02
Prep Date.....: 09/18/02 **Analysis Date..:** 09/18/02
Prep Batch #...: 2262339 **Analysis Time..:** 21:10
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	20	ug/kg	4.6
Acrolein	ND	100	ug/kg	17
Acrylonitrile	ND	100	ug/kg	15
Benzene	ND	5.0	ug/kg	0.89
Bromodichloromethane	ND	5.0	ug/kg	0.92
Bromoform	ND	5.0	ug/kg	0.91
Bromomethane	ND	10	ug/kg	1.2
2-Butanone (MEK)	ND	20	ug/kg	4.7
Carbon disulfide	ND	5.0	ug/kg	0.92
Carbon tetrachloride	ND	5.0	ug/kg	1.2
Chlorobenzene	ND	5.0	ug/kg	0.75
Chloroethane	ND	10	ug/kg	1.3
Chloroform	ND	10	ug/kg	0.90
Chloromethane	ND	10	ug/kg	1.5
Dibromochloromethane	ND	5.0	ug/kg	0.90
Dibromomethane	ND	5.0	ug/kg	1.3
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	0.92
Dichlorodifluoromethane	ND	10	ug/kg	1.6
1,1-Dichloroethane	ND	5.0	ug/kg	0.98
1,2-Dichloroethane	ND	5.0	ug/kg	0.99
1,1-Dichloroethene	ND	5.0	ug/kg	1.1
cis-1,2-Dichloroethene	ND	2.5	ug/kg	0.84
trans-1,2-Dichloroethene	ND	2.5	ug/kg	0.79
1,2-Dichloroethene (total)	ND	5.0	ug/kg	1.5
1,2-Dichloropropane	ND	5.0	ug/kg	1.2
cis-1,3-Dichloropropene	ND	5.0	ug/kg	0.96
trans-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
trans-1,4-Dichloro-2-butene	ND	5.0	ug/kg	1.1
1,4-Dioxane	ND	500	ug/kg	79
Ethylbenzene	ND	5.0	ug/kg	1.2
Ethyl methacrylate	ND	5.0	ug/kg	0.91
2-Hexanone	ND	20	ug/kg	4.6
Iodomethane	ND	5.0	ug/kg	0.83
Methylene chloride	**2.0 J,B**	**5.0**	**ug/kg**	**0.80**
4-Methyl-2-pentanone	ND	20	ug/kg	3.9
Styrene	ND	5.0	ug/kg	0.66

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION8-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-010 **Work Order #...:** E781D1AR **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	1.1
Tetrachloroethene	ND	5.0	ug/kg	0.99
Toluene	ND	5.0	ug/kg	0.78
1,1,1-Trichloroethane	ND	5.0	ug/kg	0.98
1,1,2-Trichloroethane	ND	5.0	ug/kg	1.5
Trichloroethene	ND	5.0	ug/kg	0.87
Trichlorofluoromethane	ND	10	ug/kg	0.51
1,2,3-Trichloropropane	ND	5.0	ug/kg	1.5
Vinyl acetate	ND	10	ug/kg	2.4
Vinyl chloride	ND	5.0	ug/kg	1.1
Xylenes (total)	ND	5.0	ug/kg	2.8
Acetonitrile	**27 J,B**	**100**	**ug/kg**	**24**
Allyl chloride	ND	10	ug/kg	0.92
Chloroprene	ND	5.0	ug/kg	0.88
Propionitrile	ND	50	ug/kg	17
Methacrylonitrile	ND	50	ug/kg	14
Isobutyl alcohol	ND	200	ug/kg	42
Methyl methacrylate	ND	5.0	ug/kg	1.4
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	0.97
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg	1.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(82 - 122)
1,2-Dichloroethane-d4	105	(80 - 122)
4-Bromofluorobenzene	100	(78 - 121)
Toluene-d8	92	(77 - 118)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

STATION8-02

GC/MS Volatiles

Lot-Sample #: D2I130349-010 **Work Order #:** E781D1AR **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		5.6 J	M	5.5087	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: STATION9-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-011 **Work Order #...:** E781E1AR **Matrix.....:** SO
Date Sampled...: 09/11/02 13:33 **Date Received..:** 09/13/02
Prep Date.....: 09/18/02 **Analysis Date..:** 09/18/02
Prep Batch #...: 2262339 **Analysis Time..:** 21:33
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	20	ug/kg	4.6
Acrolein	ND	100	ug/kg	17
Acrylonitrile	ND	100	ug/kg	15
Benzene	ND	5.0	ug/kg	0.89
Bromodichloromethane	ND	5.0	ug/kg	0.92
Bromoform	ND	5.0	ug/kg	0.91
Bromomethane	ND	10	ug/kg	1.2
2-Butanone (MEK)	ND	20	ug/kg	4.7
Carbon disulfide	ND	5.0	ug/kg	0.92
Carbon tetrachloride	ND	5.0	ug/kg	1.2
Chlorobenzene	ND	5.0	ug/kg	0.75
Chloroethane	ND	10	ug/kg	1.3
Chloroform	ND	10	ug/kg	0.90
Chloromethane	ND	10	ug/kg	1.5
Dibromochloromethane	ND	5.0	ug/kg	0.90
Dibromomethane	ND	5.0	ug/kg	1.3
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	0.92
Dichlorodifluoromethane	ND	10	ug/kg	1.6
1,1-Dichloroethane	ND	5.0	ug/kg	0.98
1,2-Dichloroethane	ND	5.0	ug/kg	0.99
1,1-Dichloroethene	ND	5.0	ug/kg	1.1
cis-1,2-Dichloroethene	ND	2.5	ug/kg	0.84
trans-1,2-Dichloroethene	ND	2.5	ug/kg	0.79
1,2-Dichloroethene (total)	ND	5.0	ug/kg	1.5
1,2-Dichloropropane	ND	5.0	ug/kg	1.2
cis-1,3-Dichloropropene	ND	5.0	ug/kg	0.96
trans-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
trans-1,4-Dichloro-2-butene	ND	5.0	ug/kg	1.1
1,4-Dioxane	ND	500	ug/kg	79
Ethylbenzene	ND	5.0	ug/kg	1.2
Ethyl methacrylate	ND	5.0	ug/kg	0.91
2-Hexanone	ND	20	ug/kg	4.6
Iodomethane	ND	5.0	ug/kg	0.83
Methylene chloride	**2.6 J,B**	**5.0**	**ug/kg**	**0.80**
4-Methyl-2-pentanone	ND	20	ug/kg	3.9
Styrene	ND	5.0	ug/kg	0.66

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US GEOLOGICAL SURVEY

Client Sample ID: STATION9-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-011 **Work Order #...:** E781E1AR **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	1.1
Tetrachloroethene	ND	5.0	ug/kg	0.99
Toluene	ND	5.0	ug/kg	0.78
1,1,1-Trichloroethane	ND	5.0	ug/kg	0.98
1,1,2-Trichloroethane	ND	5.0	ug/kg	1.5
Trichloroethene	ND	5.0	ug/kg	0.87
Trichlorofluoromethane	ND	10	ug/kg	0.51
1,2,3-Trichloropropane	ND	5.0	ug/kg	1.5
Vinyl acetate	ND	10	ug/kg	2.4
Vinyl chloride	ND	5.0	ug/kg	1.1
Xylenes (total)	ND	5.0	ug/kg	2.8
Acetonitrile	**26 J,B**	**100**	**ug/kg**	**24**
Allyl chloride	ND	10	ug/kg	0.92
Chloroprene	ND	5.0	ug/kg	0.88
Propionitrile	ND	50	ug/kg	17
Methacrylonitrile	ND	50	ug/kg	14
Isobutyl alcohol	ND	200	ug/kg	42
Methyl methacrylate	ND	5.0	ug/kg	1.4
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	0.97
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg	1.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	107	(82 - 122)
1,2-Dichloroethane-d4	110	(80 - 122)
4-Bromofluorobenzene	104	(78 - 121)
Toluene-d8	90	(77 - 118)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

STATION9-02

GC/MS Volatiles

Lot-Sample #: D2I130349-011 **Work Order #:** E781E1AR **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		17 J	M	5.5376	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: STATION10-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-012 **Work Order #...:** E781F1AR **Matrix.....:** SO
Date Sampled...: 09/11/02 13:47 **Date Received..:** 09/13/02
Prep Date.....: 09/18/02 **Analysis Date..:** 09/18/02
Prep Batch #...: 2262339 **Analysis Time..:** 21:56
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	20	ug/kg	4.6
Acrolein	ND	100	ug/kg	17
Acrylonitrile	ND	100	ug/kg	15
Benzene	ND	5.0	ug/kg	0.89
Bromodichloromethane	ND	5.0	ug/kg	0.92
Bromoform	ND	5.0	ug/kg	0.91
Bromomethane	ND	10	ug/kg	1.2
2-Butanone (MEK)	ND	20	ug/kg	4.7
Carbon disulfide	ND	5.0	ug/kg	0.92
Carbon tetrachloride	ND	5.0	ug/kg	1.2
Chlorobenzene	ND	5.0	ug/kg	0.75
Chloroethane	ND	10	ug/kg	1.3
Chloroform	ND	10	ug/kg	0.90
Chloromethane	ND	10	ug/kg	1.5
Dibromochloromethane	ND	5.0	ug/kg	0.90
Dibromomethane	ND	5.0	ug/kg	1.3
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	0.92
Dichlorodifluoromethane	ND	10	ug/kg	1.6
1,1-Dichloroethane	ND	5.0	ug/kg	0.98
1,2-Dichloroethane	ND	5.0	ug/kg	0.99
1,1-Dichloroethene	ND	5.0	ug/kg	1.1
cis-1,2-Dichloroethene	ND	2.5	ug/kg	0.84
trans-1,2-Dichloroethene	ND	2.5	ug/kg	0.79
1,2-Dichloroethene (total)	ND	5.0	ug/kg	1.5
1,2-Dichloropropane	ND	5.0	ug/kg	1.2
cis-1,3-Dichloropropene	ND	5.0	ug/kg	0.96
trans-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
trans-1,4-Dichloro-2-butene	ND	5.0	ug/kg	1.1
1,4-Dioxane	ND	500	ug/kg	79
Ethylbenzene	ND	5.0	ug/kg	1.2
Ethyl methacrylate	ND	5.0	ug/kg	0.91
2-Hexanone	ND	20	ug/kg	4.6
Iodomethane	ND	5.0	ug/kg	0.83
Methylene chloride	**2.6 J,B**	**5.0**	**ug/kg**	**0.80**
4-Methyl-2-pentanone	ND	20	ug/kg	3.9
Styrene	ND	5.0	ug/kg	0.66

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US GEOLOGICAL SURVEY

Client Sample ID: STATION10-02

GC/MS Volatiles

Lot-Sample #...: D2I130349-012 **Work Order #...:** E781F1AR **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	1.1
Tetrachloroethene	ND	5.0	ug/kg	0.99
Toluene	ND	5.0	ug/kg	0.78
1,1,1-Trichloroethane	ND	5.0	ug/kg	0.98
1,1,2-Trichloroethane	ND	5.0	ug/kg	1.5
Trichloroethene	ND	5.0	ug/kg	0.87
Trichlorofluoromethane	ND	10	ug/kg	0.51
1,2,3-Trichloropropane	ND	5.0	ug/kg	1.5
Vinyl acetate	ND	10	ug/kg	2.4
Vinyl chloride	ND	5.0	ug/kg	1.1
Xylenes (total)	ND	5.0	ug/kg	2.8
Acetonitrile	**25 J,B**	**100**	**ug/kg**	**24**
Allyl chloride	ND	10	ug/kg	0.92
Chloroprene	ND	5.0	ug/kg	0.88
Propionitrile	ND	50	ug/kg	17
Methacrylonitrile	ND	50	ug/kg	14
Isobutyl alcohol	ND	200	ug/kg	42
Methyl methacrylate	ND	5.0	ug/kg	1.4
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	0.97
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg	1.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	102	(82 - 122)
1,2-Dichloroethane-d4	107	(80 - 122)
4-Bromofluorobenzene	99	(78 - 121)
Toluene-d8	95	(77 - 118)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

STATION10-02

GC/MS Volatiles

Lot-Sample #: D2I130349-012 **Work Order #:** E781F1AR **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/kg

US GEOLOGICAL SURVEY

Client Sample ID: STATION1-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-001 Work Order #...: E78011AE Matrix.....: SO
Date Sampled...: 09/11/02 10:18 Date Received..: 09/13/02
Prep Date.....: 09/19/02 Analysis Date..: 09/20/02
Prep Batch #...: 2262151 Analysis Time..: 14:29
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
o-Toluidine	ND	660	ug/kg	98
4-Dimethylaminoazobenzene	ND	660	ug/kg	56
2-sec-Butyl-4,6-dinitro-phenol	ND	660	ug/kg	42
Diphenylamine	ND	330	ug/kg	52
2,2'-oxybis(1-Chloropropane)	ND	330	ug/kg	43
Acenaphthene	ND	330	ug/kg	45
Acenaphthylene	ND	330	ug/kg	43
Aniline	ND	330	ug/kg	190
Anthracene	ND	330	ug/kg	65
Benzo(a)anthracene	ND	330	ug/kg	39
Benzo(a)pyrene	ND	330	ug/kg	51
Benzo(b)fluoranthene	ND	330	ug/kg	63
Benzo(ghi)perylene	ND	330	ug/kg	41
Benzo(k)fluoranthene	ND	330	ug/kg	68
Benzyl alcohol	ND	330	ug/kg	82
4-Bromophenyl phenyl ether	ND	330	ug/kg	55
Butyl benzyl phthalate	ND	330	ug/kg	64
4-Chloroaniline	ND	330	ug/kg	240
bis(2-Chloroethoxy) methane	ND	330	ug/kg	55
bis(2-Chloroethyl)-ether	ND	330	ug/kg	63
4-Chloro-3-methylphenol	ND	330	ug/kg	50
2-Chloronaphthalene	ND	330	ug/kg	41
2-Chlorophenol	ND	330	ug/kg	53
4-Chlorophenyl phenyl ether	ND	330	ug/kg	48
Chrysene	ND	330	ug/kg	34
Dibenz(a,h)anthracene	ND	330	ug/kg	62
Dibenzofuran	ND	330	ug/kg	50
Di-n-butyl phthalate	ND	330	ug/kg	62
1,2-Dichlorobenzene	ND	330	ug/kg	46
1,3-Dichlorobenzene	ND	330	ug/kg	42
1,4-Dichlorobenzene	ND	330	ug/kg	51
3,3'-Dichlorobenzidine	ND	1600	ug/kg	270
2,4-Dichlorophenol	ND	330	ug/kg	56

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US GEOLOGICAL SURVEY

Client Sample ID: STATION1-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-001 **Work Order #...:** E78011AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	660	ug/kg	33
2,4-Dimethylphenol	ND	330	ug/kg	46
Dimethyl phthalate	ND	330	ug/kg	43
4,6-Dinitro-2-methylphenol	ND	1600	ug/kg	120
2,4-Dinitrophenol	ND	1600	ug/kg	370
2,4-Dinitrotoluene	ND	330	ug/kg	45
2,6-Dinitrotoluene	ND	330	ug/kg	67
Di-n-octyl phthalate	ND	330	ug/kg	52
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	70
Fluoranthene	ND	330	ug/kg	39
Fluorene	ND	330	ug/kg	54
Hexachlorobenzene	ND	330	ug/kg	61
Hexachlorobutadiene	ND	330	ug/kg	38
Hexachlorocyclopentadiene	ND	1600	ug/kg	43
Hexachloroethane	ND	330	ug/kg	65
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	44
Isophorone	ND	330	ug/kg	46
2-Methylnaphthalene	ND	330	ug/kg	35
2-Methylphenol	ND	330	ug/kg	89
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	56
Naphthalene	ND	330	ug/kg	42
2-Nitroaniline	ND	1600	ug/kg	48
3-Nitroaniline	ND	1600	ug/kg	73
4-Nitroaniline	ND	1600	ug/kg	60
Nitrobenzene	ND	330	ug/kg	74
2-Nitrophenol	ND	330	ug/kg	44
4-Nitrophenol	ND	1600	ug/kg	390
N-Nitrosodimethylamine	ND	330	ug/kg	63
N-Nitrosodiphenylamine	ND	330	ug/kg	39
N-Nitrosodi-n-propylamine	ND	330	ug/kg	72
Pentachlorophenol	ND	1600	ug/kg	64
Phenanthrene	ND	330	ug/kg	41
Phenol	ND	330	ug/kg	54
Pyrene	ND	330	ug/kg	56
Pyridine	ND	660	ug/kg	130
1,2,4-Trichlorobenzene	ND	330	ug/kg	36
2,4,5-Trichlorophenol	ND	330	ug/kg	46

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION1-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-001 **Work Order #...:** E78011AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4,6-Trichloro-phenol	ND	330	ug/kg	41
Acetophenone	ND	330	ug/kg	34
2-Acetylaminofluorene	ND	3300	ug/kg	33
4-Aminobiphenyl	ND	1600	ug/kg	330
Aramite	ND	660	ug/kg	43
2,6-Dichlorophenol	ND	330	ug/kg	52
7,12-Dimethylbenz(a)-anthracene	ND	660	ug/kg	50
3,3'-Dimethylbenzidine	ND	660	ug/kg	400
alpha,alpha-Dimethylphenethylamine	ND	1600	ug/kg	330
1,3-Dinitrobenzene	ND	330	ug/kg	110
Ethyl methanesulfonate	ND	330	ug/kg	44
Hexachloropropene	ND	3300	ug/kg	43
Isosafrole	ND	660	ug/kg	37
Methapyrilene	ND	1600	ug/kg	41
3-Methylcholanthrene	ND	660	ug/kg	39
Methyl methanesulfonate	ND	330	ug/kg	53
1,4-Naphthoquinone	ND	1600	ug/kg	33
1-Naphthylamine	ND	330	ug/kg	84
2-Naphthylamine	ND	330	ug/kg	78
5-Nitro-o-toluidine	ND	660	ug/kg	59
N-Nitrosodiethylamine	ND	330	ug/kg	47
N-Nitrosodi-n-butylamine	ND	330	ug/kg	56
N-Nitrosomethylethylamine	ND	330	ug/kg	40
N-Nitrosomorpholine	ND	330	ug/kg	53
N-Nitrosopiperidine	ND	330	ug/kg	69
N-Nitrosopyrrolidine	ND	330	ug/kg	43
Pentachlorobenzene	ND	330	ug/kg	40
Pentachloroethane	ND	1600	ug/kg	51
Pentachloronitrobenzene	ND	1600	ug/kg	56
Phenacetin	ND	660	ug/kg	49
2-Picoline	ND	660	ug/kg	48
Pronamide	ND	660	ug/kg	50
Safrole	ND	1600	ug/kg	49
1,2,4,5-Tetrachloro-benzene	ND	330	ug/kg	34
2,3,4,6-Tetrachlorophenol	ND	1600	ug/kg	410
1,3,5-Trinitrobenzene	ND	1600	ug/kg	40

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION1-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-001 **Work Order #...:** E78011AE **Matrix.....:** SO

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	66	(39 - 92)
Phenol-d5	65	(34 - 95)
Nitrobenzene-d5	65	(40 - 94)
2-Fluorobiphenyl	57	(40 - 91)
2,4,6-Tribromophenol	54	(34 - 97)
Terphenyl-d14	60	(37 - 99)

US GEOLOGICAL SURVEY

STATION1-02

GC/MS Semivolatiles

Lot-Sample #: D2I130349-001 **Work Order #:** E78011AE **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		250 J	M	3.6241	ug/kg
Unknown		3700 J	M	3.6614	ug/kg
Unknown aldol condensate		78000 J	M	3.8688	ug/kg
Unknown		270 J	M	4.1295	ug/kg
Unknown		3500 J	M	4.4061	ug/kg
Unknown		370 J	M	4.9328	ug/kg
Hexanedioic acid, bis(2-ethylh	103-23-1	430 J	M	10.944	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: STATION2R-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-002 **Work Order #...:** E78021AE **Matrix.....:** SO
Date Sampled...: 09/11/02 10:40 **Date Received..:** 09/13/02
Prep Date.....: 09/19/02 **Analysis Date..:** 09/20/02
Prep Batch #...: 2262151 **Analysis Time..:** 15:41
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
o-Toluidine	ND	660	ug/kg	98
4-Dimethylaminoazobenzene	ND	660	ug/kg	56
2-sec-Butyl-4,6-dinitro-phenol	ND	660	ug/kg	42
Diphenylamine	ND	330	ug/kg	52
2,2'-oxybis(1-Chloropropane)	ND	330	ug/kg	43
Acenaphthene	ND	330	ug/kg	45
Acenaphthylene	ND	330	ug/kg	43
Aniline	ND	330	ug/kg	190
Anthracene	ND	330	ug/kg	65
Benzo(a)anthracene	ND	330	ug/kg	39
Benzo(a)pyrene	ND	330	ug/kg	51
Benzo(b)fluoranthene	ND	330	ug/kg	63
Benzo(ghi)perylene	ND	330	ug/kg	41
Benzo(k)fluoranthene	ND	330	ug/kg	68
Benzyl alcohol	ND	330	ug/kg	82
4-Bromophenyl phenyl ether	ND	330	ug/kg	55
Butyl benzyl phthalate	ND	330	ug/kg	64
4-Chloroaniline	ND	330	ug/kg	240
bis(2-Chloroethoxy) methane	ND	330	ug/kg	55
bis(2-Chloroethyl)-ether	ND	330	ug/kg	63
4-Chloro-3-methylphenol	ND	330	ug/kg	50
2-Chloronaphthalene	ND	330	ug/kg	41
2-Chlorophenol	ND	330	ug/kg	53
4-Chlorophenyl phenyl ether	ND	330	ug/kg	48
Chrysene	ND	330	ug/kg	34
Dibenz(a,h)anthracene	ND	330	ug/kg	62
Dibenzofuran	ND	330	ug/kg	50
Di-n-butyl phthalate	ND	330	ug/kg	62
1,2-Dichlorobenzene	ND	330	ug/kg	46
1,3-Dichlorobenzene	ND	330	ug/kg	42
1,4-Dichlorobenzene	ND	330	ug/kg	51
3,3'-Dichlorobenzidine	ND	1600	ug/kg	270
2,4-Dichlorophenol	ND	330	ug/kg	56

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US GEOLOGICAL SURVEY

Client Sample ID: STATION2R-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-002 **Work Order #...:** E78021AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	660	ug/kg	33
2,4-Dimethylphenol	ND	330	ug/kg	46
Dimethyl phthalate	ND	330	ug/kg	43
4,6-Dinitro-2-methylphenol	ND	1600	ug/kg	120
2,4-Dinitrophenol	ND	1600	ug/kg	370
2,4-Dinitrotoluene	ND	330	ug/kg	45
2,6-Dinitrotoluene	ND	330	ug/kg	67
Di-n-octyl phthalate	ND	330	ug/kg	52
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	70
Fluoranthene	ND	330	ug/kg	39
Fluorene	ND	330	ug/kg	54
Hexachlorobenzene	ND	330	ug/kg	61
Hexachlorobutadiene	ND	330	ug/kg	38
Hexachlorocyclopentadiene	ND	1600	ug/kg	43
Hexachloroethane	ND	330	ug/kg	65
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	44
Isophorone	ND	330	ug/kg	46
2-Methylnaphthalene	ND	330	ug/kg	35
2-Methylphenol	ND	330	ug/kg	89
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	56
Naphthalene	ND	330	ug/kg	42
2-Nitroaniline	ND	1600	ug/kg	48
3-Nitroaniline	ND	1600	ug/kg	73
4-Nitroaniline	ND	1600	ug/kg	60
Nitrobenzene	ND	330	ug/kg	74
2-Nitrophenol	ND	330	ug/kg	44
4-Nitrophenol	ND	1600	ug/kg	390
N-Nitrosodimethylamine	ND	330	ug/kg	63
N-Nitrosodiphenylamine	ND	330	ug/kg	39
N-Nitrosodi-n-propylamine	ND	330	ug/kg	72
Pentachlorophenol	ND	1600	ug/kg	64
Phenanthrene	ND	330	ug/kg	41
Phenol	ND	330	ug/kg	54
Pyrene	ND	330	ug/kg	56
Pyridine	ND	660	ug/kg	130
1,2,4-Trichlorobenzene	ND	330	ug/kg	36
2,4,5-Trichlorophenol	ND	330	ug/kg	46

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION2R-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-002 **Work Order #...:** E78021AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4,6-Trichloro-phenol	ND	330	ug/kg	41
Acetophenone	ND	330	ug/kg	34
2-Acetylaminofluorene	ND	3300	ug/kg	33
4-Aminobiphenyl	ND	1600	ug/kg	330
Aramite	ND	660	ug/kg	43
2,6-Dichlorophenol	ND	330	ug/kg	52
7,12-Dimethylbenz(a)-anthracene	ND	660	ug/kg	50
3,3'-Dimethylbenzidine	ND	660	ug/kg	400
alpha,alpha-Dimethylphenethylamine	ND	1600	ug/kg	330
1,3-Dinitrobenzene	ND	330	ug/kg	110
Ethyl methanesulfonate	ND	330	ug/kg	44
Hexachloropropene	ND	3300	ug/kg	43
Isosafrole	ND	660	ug/kg	37
Methapyrilene	ND	1600	ug/kg	41
3-Methylcholanthrene	ND	660	ug/kg	39
Methyl methanesulfonate	ND	330	ug/kg	53
1,4-Naphthoquinone	ND	1600	ug/kg	33
1-Naphthylamine	ND	330	ug/kg	84
2-Naphthylamine	ND	330	ug/kg	78
5-Nitro-o-toluidine	ND	660	ug/kg	59
N-Nitrosodiethylamine	ND	330	ug/kg	47
N-Nitrosodi-n-butylamine	ND	330	ug/kg	56
N-Nitrosomethylethylamine	ND	330	ug/kg	40
N-Nitrosomorpholine	ND	330	ug/kg	53
N-Nitrosopiperidine	ND	330	ug/kg	69
N-Nitrosopyrrolidine	ND	330	ug/kg	43
Pentachlorobenzene	ND	330	ug/kg	40
Pentachloroethane	ND	1600	ug/kg	51
Pentachloronitrobenzene	ND	1600	ug/kg	56
Phenacetin	ND	660	ug/kg	49
2-Picoline	ND	660	ug/kg	48
Pronamide	ND	660	ug/kg	50
Safrole	ND	1600	ug/kg	49
1,2,4,5-Tetrachloro-benzene	ND	330	ug/kg	34
2,3,4,6-Tetrachlorophenol	ND	1600	ug/kg	410
1,3,5-Trinitrobenzene	ND	1600	ug/kg	40

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION2R-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-002 **Work Order #...:** E78021AE **Matrix.....:** SO

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	61	(39 - 92)
Phenol-d5	59	(34 - 95)
Nitrobenzene-d5	58	(40 - 94)
2-Fluorobiphenyl	54	(40 - 91)
2,4,6-Tribromophenol	56	(34 - 97)
Terphenyl-d14	64	(37 - 99)

US GEOLOGICAL SURVEY

STATION2R-02

GC/MS Semivolatiles

Lot-Sample #: D2I130349-002 **Work Order #:** E78021AE **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		3800 J	M	3.6173	ug/kg
Unknown aldol condensate		75000 J	M	3.8567	ug/kg
Unknown		360 J	M	4.1174	ug/kg
Unknown		3400 J	M	4.3993	ug/kg
Unknown		490 J	M	4.926	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: STATION3R-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-003 **Work Order #...:** E78031AE **Matrix.....:** SO
Date Sampled...: 09/11/02 11:05 **Date Received..:** 09/13/02
Prep Date.....: 09/19/02 **Analysis Date..:** 09/20/02
Prep Batch #...: 2262151 **Analysis Time..:** 16:05
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
o-Toluidine	ND	660	ug/kg	98
4-Dimethylaminoazobenzene	ND	660	ug/kg	56
2-sec-Butyl-4,6-dinitro-phenol	ND	660	ug/kg	42
Diphenylamine	ND	330	ug/kg	52
2,2'-oxybis(1-Chloropropane)	ND	330	ug/kg	43
Acenaphthene	ND	330	ug/kg	45
Acenaphthylene	ND	330	ug/kg	43
Aniline	ND	330	ug/kg	190
Anthracene	ND	330	ug/kg	65
Benzo(a)anthracene	ND	330	ug/kg	39
Benzo(a)pyrene	ND	330	ug/kg	51
Benzo(b)fluoranthene	ND	330	ug/kg	63
Benzo(ghi)perylene	ND	330	ug/kg	41
Benzo(k)fluoranthene	ND	330	ug/kg	68
Benzyl alcohol	ND	330	ug/kg	82
4-Bromophenyl phenyl ether	ND	330	ug/kg	55
Butyl benzyl phthalate	ND	330	ug/kg	64
4-Chloroaniline	ND	330	ug/kg	240
bis(2-Chloroethoxy) methane	ND	330	ug/kg	55
bis(2-Chloroethyl)-ether	ND	330	ug/kg	63
4-Chloro-3-methylphenol	ND	330	ug/kg	50
2-Chloronaphthalene	ND	330	ug/kg	41
2-Chlorophenol	ND	330	ug/kg	53
4-Chlorophenyl phenyl ether	ND	330	ug/kg	48
Chrysene	ND	330	ug/kg	34
Dibenz(a,h)anthracene	ND	330	ug/kg	62
Dibenzofuran	ND	330	ug/kg	50
Di-n-butyl phthalate	ND	330	ug/kg	62
1,2-Dichlorobenzene	ND	330	ug/kg	46
1,3-Dichlorobenzene	ND	330	ug/kg	42
1,4-Dichlorobenzene	ND	330	ug/kg	51
3,3'-Dichlorobenzidine	ND	1600	ug/kg	270
2,4-Dichlorophenol	ND	330	ug/kg	56

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION3R-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-003 **Work Order #...:** E78031AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	660	ug/kg	33
2,4-Dimethylphenol	ND	330	ug/kg	46
Dimethyl phthalate	ND	330	ug/kg	43
4,6-Dinitro-2-methylphenol	ND	1600	ug/kg	120
2,4-Dinitrophenol	ND	1600	ug/kg	370
2,4-Dinitrotoluene	ND	330	ug/kg	45
2,6-Dinitrotoluene	ND	330	ug/kg	67
Di-n-octyl phthalate	ND	330	ug/kg	52
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	70
Fluoranthene	ND	330	ug/kg	39
Fluorene	ND	330	ug/kg	54
Hexachlorobenzene	ND	330	ug/kg	61
Hexachlorobutadiene	ND	330	ug/kg	38
Hexachlorocyclopentadiene	ND	1600	ug/kg	43
Hexachloroethane	ND	330	ug/kg	65
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	44
Isophorone	ND	330	ug/kg	46
2-Methylnaphthalene	ND	330	ug/kg	35
2-Methylphenol	ND	330	ug/kg	89
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	56
Naphthalene	ND	330	ug/kg	42
2-Nitroaniline	ND	1600	ug/kg	48
3-Nitroaniline	ND	1600	ug/kg	73
4-Nitroaniline	ND	1600	ug/kg	60
Nitrobenzene	ND	330	ug/kg	74
2-Nitrophenol	ND	330	ug/kg	44
4-Nitrophenol	ND	1600	ug/kg	390
N-Nitrosodimethylamine	ND	330	ug/kg	63
N-Nitrosodiphenylamine	ND	330	ug/kg	39
N-Nitrosodi-n-propylamine	ND	330	ug/kg	72
Pentachlorophenol	ND	1600	ug/kg	64
Phenanthrene	ND	330	ug/kg	41
Phenol	ND	330	ug/kg	54
Pyrene	ND	330	ug/kg	56
Pyridine	ND	660	ug/kg	130
1,2,4-Trichlorobenzene	ND	330	ug/kg	36
2,4,5-Trichlorophenol	ND	330	ug/kg	46

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION3R-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-003 **Work Order #...:** E78031AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4,6-Trichloro-phenol	ND	330	ug/kg	41
Acetophenone	ND	330	ug/kg	34
2-Acetylaminofluorene	ND	3300	ug/kg	33
4-Aminobiphenyl	ND	1600	ug/kg	330
Aramite	ND	660	ug/kg	43
2,6-Dichlorophenol	ND	330	ug/kg	52
7,12-Dimethylbenz(a)-anthracene	ND	660	ug/kg	50
3,3'-Dimethylbenzidine	ND	660	ug/kg	400
alpha,alpha-Dimethylphenethylamine	ND	1600	ug/kg	330
1,3-Dinitrobenzene	ND	330	ug/kg	110
Ethyl methanesulfonate	ND	330	ug/kg	44
Hexachloropropene	ND	3300	ug/kg	43
Isosafrole	ND	660	ug/kg	37
Methapyrilene	ND	1600	ug/kg	41
3-Methylcholanthrene	ND	660	ug/kg	39
Methyl methanesulfonate	ND	330	ug/kg	53
1,4-Naphthoquinone	ND	1600	ug/kg	33
1-Naphthylamine	ND	330	ug/kg	84
2-Naphthylamine	ND	330	ug/kg	78
5-Nitro-o-toluidine	ND	660	ug/kg	59
N-Nitrosodiethylamine	ND	330	ug/kg	47
N-Nitrosodi-n-butylamine	ND	330	ug/kg	56
N-Nitrosomethylethylamine	ND	330	ug/kg	40
N-Nitrosomorpholine	ND	330	ug/kg	53
N-Nitrosopiperidine	ND	330	ug/kg	69
N-Nitrosopyrrolidine	ND	330	ug/kg	43
Pentachlorobenzene	ND	330	ug/kg	40
Pentachloroethane	ND	1600	ug/kg	51
Pentachloronitrobenzene	ND	1600	ug/kg	56
Phenacetin	ND	660	ug/kg	49
2-Picoline	ND	660	ug/kg	48
Pronamide	ND	660	ug/kg	50
Safrole	ND	1600	ug/kg	49
1,2,4,5-Tetrachloro-benzene	ND	330	ug/kg	34
2,3,4,6-Tetrachlorophenol	ND	1600	ug/kg	410
1,3,5-Trinitrobenzene	ND	1600	ug/kg	40

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION3R-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-003 **Work Order #...:** E78031AE **Matrix.....:** SO

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	69	(39 - 92)
Phenol-d5	68	(34 - 95)
Nitrobenzene-d5	68	(40 - 94)
2-Fluorobiphenyl	62	(40 - 91)
2,4,6-Tribromophenol	61	(34 - 97)
Terphenyl-d14	68	(37 - 99)

US GEOLOGICAL SURVEY

STATION3R-02

GC/MS Semivolatiles

Lot-Sample #: D2I130349-003 **Work Order #:** E78031AE **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		150 J	M	3.0309	ug/kg
Unknown		390 J	M	3.6161	ug/kg
Unknown		3500 J	M	3.6427	ug/kg
Unknown aldol condensate		77000 J	M	3.8555	ug/kg
Unknown		280 J	M	4.1215	ug/kg
Unknown		3600 J	M	4.3981	ug/kg
Unknown		420 J	M	4.9301	ug/kg
Hexanedioic acid, bis(2-ethylh	103-23-1	340 J	M	10.946	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: STATION3RR-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-004 Work Order #...: E78041AE Matrix.....: SO
Date Sampled...: 09/11/02 11:20 Date Received..: 09/13/02
Prep Date.....: 09/19/02 Analysis Date..: 09/20/02
Prep Batch #...: 2262151 Analysis Time..: 16:29
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
o-Toluidine	ND	660	ug/kg	98
4-Dimethylaminoazobenzene	ND	660	ug/kg	56
2-sec-Butyl-4,6-dinitro-phenol	ND	660	ug/kg	42
Diphenylamine	ND	330	ug/kg	52
2,2'-oxybis(1-Chloropropane)	ND	330	ug/kg	43
Acenaphthene	ND	330	ug/kg	45
Acenaphthylene	ND	330	ug/kg	43
Aniline	ND	330	ug/kg	190
Anthracene	ND	330	ug/kg	65
Benzo(a)anthracene	ND	330	ug/kg	39
Benzo(a)pyrene	ND	330	ug/kg	51
Benzo(b)fluoranthene	ND	330	ug/kg	63
Benzo(ghi)perylene	ND	330	ug/kg	41
Benzo(k)fluoranthene	ND	330	ug/kg	68
Benzyl alcohol	ND	330	ug/kg	82
4-Bromophenyl phenyl ether	ND	330	ug/kg	55
Butyl benzyl phthalate	ND	330	ug/kg	64
4-Chloroaniline	ND	330	ug/kg	240
bis(2-Chloroethoxy) methane	ND	330	ug/kg	55
bis(2-Chloroethyl)-ether	ND	330	ug/kg	63
4-Chloro-3-methylphenol	ND	330	ug/kg	50
2-Chloronaphthalene	ND	330	ug/kg	41
2-Chlorophenol	ND	330	ug/kg	53
4-Chlorophenyl phenyl ether	ND	330	ug/kg	48
Chrysene	ND	330	ug/kg	34
Dibenz(a,h)anthracene	ND	330	ug/kg	62
Dibenzofuran	ND	330	ug/kg	50
Di-n-butyl phthalate	ND	330	ug/kg	62
1,2-Dichlorobenzene	ND	330	ug/kg	46
1,3-Dichlorobenzene	ND	330	ug/kg	42
1,4-Dichlorobenzene	ND	330	ug/kg	51
3,3'-Dichlorobenzidine	ND	1600	ug/kg	270
2,4-Dichlorophenol	ND	330	ug/kg	56

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US GEOLOGICAL SURVEY

Client Sample ID: STATION3RR-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-004 **Work Order #...:** E78041AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	660	ug/kg	33
2,4-Dimethylphenol	ND	330	ug/kg	46
Dimethyl phthalate	ND	330	ug/kg	43
4,6-Dinitro-2-methylphenol	ND	1600	ug/kg	120
2,4-Dinitrophenol	ND	1600	ug/kg	370
2,4-Dinitrotoluene	ND	330	ug/kg	45
2,6-Dinitrotoluene	ND	330	ug/kg	67
Di-n-octyl phthalate	ND	330	ug/kg	52
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	70
Fluoranthene	ND	330	ug/kg	39
Fluorene	ND	330	ug/kg	54
Hexachlorobenzene	ND	330	ug/kg	61
Hexachlorobutadiene	ND	330	ug/kg	38
Hexachlorocyclopentadiene	ND	1600	ug/kg	43
Hexachloroethane	ND	330	ug/kg	65
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	44
Isophorone	ND	330	ug/kg	46
2-Methylnaphthalene	ND	330	ug/kg	35
2-Methylphenol	ND	330	ug/kg	89
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	56
Naphthalene	ND	330	ug/kg	42
2-Nitroaniline	ND	1600	ug/kg	48
3-Nitroaniline	ND	1600	ug/kg	73
4-Nitroaniline	ND	1600	ug/kg	60
Nitrobenzene	ND	330	ug/kg	74
2-Nitrophenol	ND	330	ug/kg	44
4-Nitrophenol	ND	1600	ug/kg	390
N-Nitrosodimethylamine	ND	330	ug/kg	63
N-Nitrosodiphenylamine	ND	330	ug/kg	39
N-Nitrosodi-n-propylamine	ND	330	ug/kg	72
Pentachlorophenol	ND	1600	ug/kg	64
Phenanthrene	ND	330	ug/kg	41
Phenol	ND	330	ug/kg	54
Pyrene	ND	330	ug/kg	56
Pyridine	ND	660	ug/kg	130
1,2,4-Trichlorobenzene	ND	330	ug/kg	36
2,4,5-Trichlorophenol	ND	330	ug/kg	46

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION3RR-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-004 **Work Order #...:** E78041AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4,6-Trichloro-phenol	ND	330	ug/kg	41
Acetophenone	ND	330	ug/kg	34
2-Acetylaminofluorene	ND	3300	ug/kg	33
4-Aminobiphenyl	ND	1600	ug/kg	330
Aramite	ND	660	ug/kg	43
2,6-Dichlorophenol	ND	330	ug/kg	52
7,12-Dimethylbenz(a)-anthracene	ND	660	ug/kg	50
3,3'-Dimethylbenzidine	ND	660	ug/kg	400
alpha,alpha-Dimethylphenethylamine	ND	1600	ug/kg	330
1,3-Dinitrobenzene	ND	330	ug/kg	110
Ethyl methanesulfonate	ND	330	ug/kg	44
Hexachloropropene	ND	3300	ug/kg	43
Isosafrole	ND	660	ug/kg	37
Methapyrilene	ND	1600	ug/kg	41
3-Methylcholanthrene	ND	660	ug/kg	39
Methyl methanesulfonate	ND	330	ug/kg	53
1,4-Naphthoquinone	ND	1600	ug/kg	33
1-Naphthylamine	ND	330	ug/kg	84
2-Naphthylamine	ND	330	ug/kg	78
5-Nitro-o-toluidine	ND	660	ug/kg	59
N-Nitrosodiethylamine	ND	330	ug/kg	47
N-Nitrosodi-n-butylamine	ND	330	ug/kg	56
N-Nitrosomethylethylamine	ND	330	ug/kg	40
N-Nitrosomorpholine	ND	330	ug/kg	53
N-Nitrosopiperidine	ND	330	ug/kg	69
N-Nitrosopyrrolidine	ND	330	ug/kg	43
Pentachlorobenzene	ND	330	ug/kg	40
Pentachloroethane	ND	1600	ug/kg	51
Pentachloronitrobenzene	ND	1600	ug/kg	56
Phenacetin	ND	660	ug/kg	49
2-Picoline	ND	660	ug/kg	48
Pronamide	ND	660	ug/kg	50
Safrole	ND	1600	ug/kg	49
1,2,4,5-Tetrachloro-benzene	ND	330	ug/kg	34
2,3,4,6-Tetrachlorophenol	ND	1600	ug/kg	410
1,3,5-Trinitrobenzene	ND	1600	ug/kg	40

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION3RR-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-004 **Work Order #...:** E78041AE **Matrix.....:** SO

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	60	(39 - 92)
Phenol-d5	59	(34 - 95)
Nitrobenzene-d5	58	(40 - 94)
2-Fluorobiphenyl	52	(40 - 91)
2,4,6-Tribromophenol	51	(34 - 97)
Terphenyl-d14	61	(37 - 99)

US GEOLOGICAL SURVEY

STATION3RR-02

GC/MS Semivolatiles

Lot-Sample #: D2I130349-004 **Work Order #:** E78041AE **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		3600 J	M	3.6334	ug/kg
Unknown aldol condensate		75000 J	M	3.8462	ug/kg
Unknown		330 J	M	4.1175	ug/kg
Unknown		3000 J	M	4.3941	ug/kg
Unknown		360 J	M	4.9261	ug/kg
Hexanedioic acid, bis(2-ethylh	103-23-1	540 J	M	10.958	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: STATION4-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-005 **Work Order #...:** E78061AE **Matrix.....:** SO
Date Sampled...: 09/11/02 11:40 **Date Received..:** 09/13/02
Prep Date.....: 09/19/02 **Analysis Date..:** 09/20/02
Prep Batch #...: 2262151 **Analysis Time..:** 16:52
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
o-Toluidine	ND	660	ug/kg	98
4-Dimethylaminoazobenzene	ND	660	ug/kg	56
2-sec-Butyl-4,6-dinitro-phenol	ND	660	ug/kg	42
Diphenylamine	ND	330	ug/kg	52
2,2'-oxybis(1-Chloropropane)	ND	330	ug/kg	43
Acenaphthene	ND	330	ug/kg	45
Acenaphthylene	ND	330	ug/kg	43
Aniline	ND	330	ug/kg	190
Anthracene	ND	330	ug/kg	65
Benzo(a)anthracene	ND	330	ug/kg	39
Benzo(a)pyrene	ND	330	ug/kg	51
Benzo(b)fluoranthene	ND	330	ug/kg	63
Benzo(ghi)perylene	ND	330	ug/kg	41
Benzo(k)fluoranthene	ND	330	ug/kg	68
Benzyl alcohol	ND	330	ug/kg	82
4-Bromophenyl phenyl ether	ND	330	ug/kg	55
Butyl benzyl phthalate	ND	330	ug/kg	64
4-Chloroaniline	ND	330	ug/kg	240
bis(2-Chloroethoxy) methane	ND	330	ug/kg	55
bis(2-Chloroethyl)-ether	ND	330	ug/kg	63
4-Chloro-3-methylphenol	ND	330	ug/kg	50
2-Chloronaphthalene	ND	330	ug/kg	41
2-Chlorophenol	ND	330	ug/kg	53
4-Chlorophenyl phenyl ether	ND	330	ug/kg	48
Chrysene	ND	330	ug/kg	34
Dibenz(a,h)anthracene	ND	330	ug/kg	62
Dibenzofuran	ND	330	ug/kg	50
Di-n-butyl phthalate	ND	330	ug/kg	62
1,2-Dichlorobenzene	ND	330	ug/kg	46
1,3-Dichlorobenzene	ND	330	ug/kg	42
1,4-Dichlorobenzene	ND	330	ug/kg	51
3,3'-Dichlorobenzidine	ND	1600	ug/kg	270
2,4-Dichlorophenol	ND	330	ug/kg	56

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US GEOLOGICAL SURVEY

Client Sample ID: STATION4-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-005 **Work Order #...:** E78061AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	660	ug/kg	33
2,4-Dimethylphenol	ND	330	ug/kg	46
Dimethyl phthalate	ND	330	ug/kg	43
4,6-Dinitro-2-methylphenol	ND	1600	ug/kg	120
2,4-Dinitrophenol	ND	1600	ug/kg	370
2,4-Dinitrotoluene	ND	330	ug/kg	45
2,6-Dinitrotoluene	ND	330	ug/kg	67
Di-n-octyl phthalate	ND	330	ug/kg	52
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	70
Fluoranthene	ND	330	ug/kg	39
Fluorene	ND	330	ug/kg	54
Hexachlorobenzene	ND	330	ug/kg	61
Hexachlorobutadiene	ND	330	ug/kg	38
Hexachlorocyclopentadiene	ND	1600	ug/kg	43
Hexachloroethane	ND	330	ug/kg	65
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	44
Isophorone	ND	330	ug/kg	46
2-Methylnaphthalene	ND	330	ug/kg	35
2-Methylphenol	ND	330	ug/kg	89
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	56
Naphthalene	ND	330	ug/kg	42
2-Nitroaniline	ND	1600	ug/kg	48
3-Nitroaniline	ND	1600	ug/kg	73
4-Nitroaniline	ND	1600	ug/kg	60
Nitrobenzene	ND	330	ug/kg	74
2-Nitrophenol	ND	330	ug/kg	44
4-Nitrophenol	ND	1600	ug/kg	390
N-Nitrosodimethylamine	ND	330	ug/kg	63
N-Nitrosodiphenylamine	ND	330	ug/kg	39
N-Nitrosodi-n-propylamine	ND	330	ug/kg	72
Pentachlorophenol	ND	1600	ug/kg	64
Phenanthrene	ND	330	ug/kg	41
Phenol	ND	330	ug/kg	54
Pyrene	ND	330	ug/kg	56
Pyridine	ND	660	ug/kg	130
1,2,4-Trichlorobenzene	ND	330	ug/kg	36
2,4,5-Trichlorophenol	ND	330	ug/kg	46

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION4-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-005 **Work Order #...:** E78061AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4,6-Trichloro-phenol	ND	330	ug/kg	41
Acetophenone	ND	330	ug/kg	34
2-Acetylaminofluorene	ND	3300	ug/kg	33
4-Aminobiphenyl	ND	1600	ug/kg	330
Aramite	ND	660	ug/kg	43
2,6-Dichlorophenol	ND	330	ug/kg	52
7,12-Dimethylbenz(a)-anthracene	ND	660	ug/kg	50
3,3'-Dimethylbenzidine	ND	660	ug/kg	400
alpha,alpha-Dimethylphenethylamine	ND	1600	ug/kg	330
1,3-Dinitrobenzene	ND	330	ug/kg	110
Ethyl methanesulfonate	ND	330	ug/kg	44
Hexachloropropene	ND	3300	ug/kg	43
Isosafrole	ND	660	ug/kg	37
Methapyrilene	ND	1600	ug/kg	41
3-Methylcholanthrene	ND	660	ug/kg	39
Methyl methanesulfonate	ND	330	ug/kg	53
1,4-Naphthoquinone	ND	1600	ug/kg	33
1-Naphthylamine	ND	330	ug/kg	84
2-Naphthylamine	ND	330	ug/kg	78
5-Nitro-o-toluidine	ND	660	ug/kg	59
N-Nitrosodiethylamine	ND	330	ug/kg	47
N-Nitrosodi-n-butylamine	ND	330	ug/kg	56
N-Nitrosomethylethylamine	ND	330	ug/kg	40
N-Nitrosomorpholine	ND	330	ug/kg	53
N-Nitrosopiperidine	ND	330	ug/kg	69
N-Nitrosopyrrolidine	ND	330	ug/kg	43
Pentachlorobenzene	ND	330	ug/kg	40
Pentachloroethane	ND	1600	ug/kg	51
Pentachloronitrobenzene	ND	1600	ug/kg	56
Phenacetin	ND	660	ug/kg	49
2-Picoline	ND	660	ug/kg	48
Pronamide	ND	660	ug/kg	50
Safrole	ND	1600	ug/kg	49
1,2,4,5-Tetrachloro-benzene	ND	330	ug/kg	34
2,3,4,6-Tetrachlorophenol	ND	1600	ug/kg	410
1,3,5-Trinitrobenzene	ND	1600	ug/kg	40

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION4-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-005 **Work Order #...:** E78061AE **Matrix.....:** SO

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	61	(39 - 92)
Phenol-d5	61	(34 - 95)
Nitrobenzene-d5	57	(40 - 94)
2-Fluorobiphenyl	53	(40 - 91)
2,4,6-Tribromophenol	49	(34 - 97)
Terphenyl-d14	60	(37 - 99)

US GEOLOGICAL SURVEY

STATION4-02

GC/MS Semivolatiles

Lot-Sample #: D2I130349-005 **Work Order #:** E78061AE **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		3300 J	M	3.6332	ug/kg
Unknown aldol condensate		70000 J	M	3.846	ug/kg
Unknown		230 J	M	4.1226	ug/kg
Unknown		2900 J	M	4.3993	ug/kg
Unknown		300 J	M	4.9312	ug/kg
Unknown		180 J	M	10.969	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: STATION2L-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-006 **Work Order #...:** E78071AE **Matrix.....:** SO
Date Sampled...: 09/11/02 12:05 **Date Received..:** 09/13/02
Prep Date.....: 09/19/02 **Analysis Date..:** 09/20/02
Prep Batch #...: 2262151 **Analysis Time..:** 17:16
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
o-Toluidine	ND	660	ug/kg	98
4-Dimethylaminoazobenzene	ND	660	ug/kg	56
2-sec-Butyl-4,6-dinitro-phenol	ND	660	ug/kg	42
Diphenylamine	ND	330	ug/kg	52
2,2'-oxybis(1-Chloropropane)	ND	330	ug/kg	43
Acenaphthene	ND	330	ug/kg	45
Acenaphthylene	ND	330	ug/kg	43
Aniline	ND	330	ug/kg	190
Anthracene	ND	330	ug/kg	65
Benzo(a)anthracene	ND	330	ug/kg	39
Benzo(a)pyrene	ND	330	ug/kg	51
Benzo(b)fluoranthene	ND	330	ug/kg	63
Benzo(ghi)perylene	ND	330	ug/kg	41
Benzo(k)fluoranthene	ND	330	ug/kg	68
Benzyl alcohol	ND	330	ug/kg	82
4-Bromophenyl phenyl ether	ND	330	ug/kg	55
Butyl benzyl phthalate	ND	330	ug/kg	64
4-Chloroaniline	ND	330	ug/kg	240
bis(2-Chloroethoxy) methane	ND	330	ug/kg	55
bis(2-Chloroethyl)-ether	ND	330	ug/kg	63
4-Chloro-3-methylphenol	ND	330	ug/kg	50
2-Chloronaphthalene	ND	330	ug/kg	41
2-Chlorophenol	ND	330	ug/kg	53
4-Chlorophenyl phenyl ether	ND	330	ug/kg	48
Chrysene	ND	330	ug/kg	34
Dibenz(a,h)anthracene	ND	330	ug/kg	62
Dibenzofuran	ND	330	ug/kg	50
Di-n-butyl phthalate	ND	330	ug/kg	62
1,2-Dichlorobenzene	ND	330	ug/kg	46
1,3-Dichlorobenzene	ND	330	ug/kg	42
1,4-Dichlorobenzene	ND	330	ug/kg	51
3,3'-Dichlorobenzidine	ND	1600	ug/kg	270
2,4-Dichlorophenol	ND	330	ug/kg	56

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION2L-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-006 **Work Order #...:** E78071AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	660	ug/kg	33
2,4-Dimethylphenol	ND	330	ug/kg	46
Dimethyl phthalate	ND	330	ug/kg	43
4,6-Dinitro-2-methylphenol	ND	1600	ug/kg	120
2,4-Dinitrophenol	ND	1600	ug/kg	370
2,4-Dinitrotoluene	ND	330	ug/kg	45
2,6-Dinitrotoluene	ND	330	ug/kg	67
Di-n-octyl phthalate	ND	330	ug/kg	52
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	70
Fluoranthene	ND	330	ug/kg	39
Fluorene	ND	330	ug/kg	54
Hexachlorobenzene	ND	330	ug/kg	61
Hexachlorobutadiene	ND	330	ug/kg	38
Hexachlorocyclopentadiene	ND	1600	ug/kg	43
Hexachloroethane	ND	330	ug/kg	65
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	44
Isophorone	ND	330	ug/kg	46
2-Methylnaphthalene	ND	330	ug/kg	35
2-Methylphenol	ND	330	ug/kg	89
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	56
Naphthalene	ND	330	ug/kg	42
2-Nitroaniline	ND	1600	ug/kg	48
3-Nitroaniline	ND	1600	ug/kg	73
4-Nitroaniline	ND	1600	ug/kg	60
Nitrobenzene	ND	330	ug/kg	74
2-Nitrophenol	ND	330	ug/kg	44
4-Nitrophenol	ND	1600	ug/kg	390
N-Nitrosodimethylamine	ND	330	ug/kg	63
N-Nitrosodiphenylamine	ND	330	ug/kg	39
N-Nitrosodi-n-propylamine	ND	330	ug/kg	72
Pentachlorophenol	ND	1600	ug/kg	64
Phenanthrene	ND	330	ug/kg	41
Phenol	ND	330	ug/kg	54
Pyrene	ND	330	ug/kg	56
Pyridine	ND	660	ug/kg	130
1,2,4-Trichlorobenzene	ND	330	ug/kg	36
2,4,5-Trichlorophenol	ND	330	ug/kg	46

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION2L-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-006 **Work Order #...:** E78071AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4,6-Trichloro-phenol	ND	330	ug/kg	41
Acetophenone	ND	330	ug/kg	34
2-Acetylaminofluorene	ND	3300	ug/kg	33
4-Aminobiphenyl	ND	1600	ug/kg	330
Aramite	ND	660	ug/kg	43
2,6-Dichlorophenol	ND	330	ug/kg	52
7,12-Dimethylbenz(a)-anthracene	ND	660	ug/kg	50
3,3'-Dimethylbenzidine	ND	660	ug/kg	400
alpha,alpha-Dimethylphenethylamine	ND	1600	ug/kg	330
1,3-Dinitrobenzene	ND	330	ug/kg	110
Ethyl methanesulfonate	ND	330	ug/kg	44
Hexachloropropene	ND	3300	ug/kg	43
Isosafrole	ND	660	ug/kg	37
Methapyrilene	ND	1600	ug/kg	41
3-Methylcholanthrene	ND	660	ug/kg	39
Methyl methanesulfonate	ND	330	ug/kg	53
1,4-Naphthoquinone	ND	1600	ug/kg	33
1-Naphthylamine	ND	330	ug/kg	84
2-Naphthylamine	ND	330	ug/kg	78
5-Nitro-o-toluidine	ND	660	ug/kg	59
N-Nitrosodiethylamine	ND	330	ug/kg	47
N-Nitrosodi-n-butylamine	ND	330	ug/kg	56
N-Nitrosomethylethylamine	ND	330	ug/kg	40
N-Nitrosomorpholine	ND	330	ug/kg	53
N-Nitrosopiperidine	ND	330	ug/kg	69
N-Nitrosopyrrolidine	ND	330	ug/kg	43
Pentachlorobenzene	ND	330	ug/kg	40
Pentachloroethane	ND	1600	ug/kg	51
Pentachloronitrobenzene	ND	1600	ug/kg	56
Phenacetin	ND	660	ug/kg	49
2-Picoline	ND	660	ug/kg	48
Pronamide	ND	660	ug/kg	50
Safrole	ND	1600	ug/kg	49
1,2,4,5-Tetrachloro-benzene	ND	330	ug/kg	34
2,3,4,6-Tetrachlorophenol	ND	1600	ug/kg	410
1,3,5-Trinitrobenzene	ND	1600	ug/kg	40

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION2L-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-006 **Work Order #...:** E78071AE **Matrix.....:** SO

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	60	(39 - 92)
Phenol-d5	59	(34 - 95)
Nitrobenzene-d5	56	(40 - 94)
2-Fluorobiphenyl	54	(40 - 91)
2,4,6-Tribromophenol	51	(34 - 97)
Terphenyl-d14	61	(37 - 99)

US GEOLOGICAL SURVEY

STATION2L-02

GC/MS Semivolatiles

Lot-Sample #: D2I130349-006 **Work Order #:** E78071AE **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		3100 J	M	3.6335	ug/kg
Unknown aldol condensate		65000 J	M	3.8463	ug/kg
Unknown		260 J	M	4.1229	ug/kg
Unknown		2700 J	M	4.3942	ug/kg
Unknown		280 J	M	4.9315	ug/kg
Hexanedioic acid, bis(2-ethylh	103-23-1	390 J	M	10.926	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: STATION5-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-007 Work Order #...: E78091AE Matrix.....: SO
Date Sampled...: 09/11/02 12:30 Date Received..: 09/13/02
Prep Date.....: 09/19/02 Analysis Date..: 09/20/02
Prep Batch #...: 2262151 Analysis Time..: 17:40
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
o-Toluidine	ND	660	ug/kg	98
4-Dimethylaminoazobenzene	ND	660	ug/kg	56
2-sec-Butyl-4,6-dinitro-phenol	ND	660	ug/kg	42
Diphenylamine	ND	330	ug/kg	52
2,2'-oxybis(1-Chloropropane)	ND	330	ug/kg	43
Acenaphthene	ND	330	ug/kg	45
Acenaphthylene	ND	330	ug/kg	43
Aniline	ND	330	ug/kg	190
Anthracene	ND	330	ug/kg	65
Benzo(a)anthracene	ND	330	ug/kg	39
Benzo(a)pyrene	ND	330	ug/kg	51
Benzo(b)fluoranthene	ND	330	ug/kg	63
Benzo(ghi)perylene	ND	330	ug/kg	41
Benzo(k)fluoranthene	ND	330	ug/kg	68
Benzyl alcohol	ND	330	ug/kg	82
4-Bromophenyl phenyl ether	ND	330	ug/kg	55
Butyl benzyl phthalate	ND	330	ug/kg	64
4-Chloroaniline	ND	330	ug/kg	240
bis(2-Chloroethoxy) methane	ND	330	ug/kg	55
bis(2-Chloroethyl)-ether	ND	330	ug/kg	63
4-Chloro-3-methylphenol	ND	330	ug/kg	50
2-Chloronaphthalene	ND	330	ug/kg	41
2-Chlorophenol	ND	330	ug/kg	53
4-Chlorophenyl phenyl ether	ND	330	ug/kg	48
Chrysene	ND	330	ug/kg	34
Dibenz(a,h)anthracene	ND	330	ug/kg	62
Dibenzofuran	ND	330	ug/kg	50
Di-n-butyl phthalate	ND	330	ug/kg	62
1,2-Dichlorobenzene	ND	330	ug/kg	46
1,3-Dichlorobenzene	ND	330	ug/kg	42
1,4-Dichlorobenzene	ND	330	ug/kg	51
3,3'-Dichlorobenzidine	ND	1600	ug/kg	270
2,4-Dichlorophenol	ND	330	ug/kg	56

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US GEOLOGICAL SURVEY

Client Sample ID: STATION5-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-007 **Work Order #...:** E78091AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	660	ug/kg	33
2,4-Dimethylphenol	ND	330	ug/kg	46
Dimethyl phthalate	ND	330	ug/kg	43
4,6-Dinitro-2-methylphenol	ND	1600	ug/kg	120
2,4-Dinitrophenol	ND	1600	ug/kg	370
2,4-Dinitrotoluene	ND	330	ug/kg	45
2,6-Dinitrotoluene	ND	330	ug/kg	67
Di-n-octyl phthalate	ND	330	ug/kg	52
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	70
Fluoranthene	ND	330	ug/kg	39
Fluorene	ND	330	ug/kg	54
Hexachlorobenzene	ND	330	ug/kg	61
Hexachlorobutadiene	ND	330	ug/kg	38
Hexachlorocyclopentadiene	ND	1600	ug/kg	43
Hexachloroethane	ND	330	ug/kg	65
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	44
Isophorone	ND	330	ug/kg	46
2-Methylnaphthalene	ND	330	ug/kg	35
2-Methylphenol	ND	330	ug/kg	89
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	56
Naphthalene	ND	330	ug/kg	42
2-Nitroaniline	ND	1600	ug/kg	48
3-Nitroaniline	ND	1600	ug/kg	73
4-Nitroaniline	ND	1600	ug/kg	60
Nitrobenzene	ND	330	ug/kg	74
2-Nitrophenol	ND	330	ug/kg	44
4-Nitrophenol	ND	1600	ug/kg	390
N-Nitrosodimethylamine	ND	330	ug/kg	63
N-Nitrosodiphenylamine	ND	330	ug/kg	39
N-Nitrosodi-n-propylamine	ND	330	ug/kg	72
Pentachlorophenol	ND	1600	ug/kg	64
Phenanthrene	ND	330	ug/kg	41
Phenol	ND	330	ug/kg	54
Pyrene	ND	330	ug/kg	56
Pyridine	ND	660	ug/kg	130
1,2,4-Trichlorobenzene	ND	330	ug/kg	36
2,4,5-Trichlorophenol	ND	330	ug/kg	46

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION5-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-007 **Work Order #...:** E78091AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4,6-Trichloro-phenol	ND	330	ug/kg	41
Acetophenone	ND	330	ug/kg	34
2-Acetylaminofluorene	ND	3300	ug/kg	33
4-Aminobiphenyl	ND	1600	ug/kg	330
Aramite	ND	660	ug/kg	43
2,6-Dichlorophenol	ND	330	ug/kg	52
7,12-Dimethylbenz(a)-anthracene	ND	660	ug/kg	50
3,3'-Dimethylbenzidine	ND	660	ug/kg	400
alpha,alpha-Dimethylphenethylamine	ND	1600	ug/kg	330
1,3-Dinitrobenzene	ND	330	ug/kg	110
Ethyl methanesulfonate	ND	330	ug/kg	44
Hexachloropropene	ND	3300	ug/kg	43
Isosafrole	ND	660	ug/kg	37
Methapyrilene	ND	1600	ug/kg	41
3-Methylcholanthrene	ND	660	ug/kg	39
Methyl methanesulfonate	ND	330	ug/kg	53
1,4-Naphthoquinone	ND	1600	ug/kg	33
1-Naphthylamine	ND	330	ug/kg	84
2-Naphthylamine	ND	330	ug/kg	78
5-Nitro-o-toluidine	ND	660	ug/kg	59
N-Nitrosodiethylamine	ND	330	ug/kg	47
N-Nitrosodi-n-butylamine	ND	330	ug/kg	56
N-Nitrosomethylethylamine	ND	330	ug/kg	40
N-Nitrosomorpholine	ND	330	ug/kg	53
N-Nitrosopiperidine	ND	330	ug/kg	69
N-Nitrosopyrrolidine	ND	330	ug/kg	43
Pentachlorobenzene	ND	330	ug/kg	40
Pentachloroethane	ND	1600	ug/kg	51
Pentachloronitrobenzene	ND	1600	ug/kg	56
Phenacetin	ND	660	ug/kg	49
2-Picoline	ND	660	ug/kg	48
Pronamide	ND	660	ug/kg	50
Safrole	ND	1600	ug/kg	49
1,2,4,5-Tetrachloro-benzene	ND	330	ug/kg	34
2,3,4,6-Tetrachlorophenol	ND	1600	ug/kg	410
1,3,5-Trinitrobenzene	ND	1600	ug/kg	40

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US GEOLOGICAL SURVEY

Client Sample ID: STATION5-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-007 **Work Order #...:** E78091AE **Matrix.....:** SO

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	61	(39 - 92)
Phenol-d5	60	(34 - 95)
Nitrobenzene-d5	58	(40 - 94)
2-Fluorobiphenyl	54	(40 - 91)
2,4,6-Tribromophenol	55	(34 - 97)
Terphenyl-d14	65	(37 - 99)

US GEOLOGICAL SURVEY

STATION5-02

GC/MS Semivolatiles

Lot-Sample #: D2I130349-007 **Work Order #:** E78091AE **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		3200 J	M	3.6384	ug/kg
Unknown aldol condensate		69000 J	M	3.8459	ug/kg
Unknown		210 J	M	4.1225	ug/kg
Unknown		2800 J	M	4.3991	ug/kg
Unknown		280 J	M	4.9364	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: STATION6-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-008 **Work Order #...:** E781A1AE **Matrix.....:** SO
Date Sampled...: 09/11/02 12:55 **Date Received..:** 09/13/02
Prep Date.....: 09/19/02 **Analysis Date..:** 09/20/02
Prep Batch #...: 2262151 **Analysis Time..:** 18:04
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
o-Toluidine	ND	660	ug/kg	98
4-Dimethylaminoazobenzene	ND	660	ug/kg	56
2-sec-Butyl-4,6-dinitro-phenol	ND	660	ug/kg	42
Diphenylamine	ND	330	ug/kg	52
2,2'-oxybis(1-Chloropropane)	ND	330	ug/kg	43
Acenaphthene	ND	330	ug/kg	45
Acenaphthylene	ND	330	ug/kg	43
Aniline	ND	330	ug/kg	190
Anthracene	ND	330	ug/kg	65
Benzo(a)anthracene	ND	330	ug/kg	39
Benzo(a)pyrene	ND	330	ug/kg	51
Benzo(b)fluoranthene	ND	330	ug/kg	63
Benzo(ghi)perylene	ND	330	ug/kg	41
Benzo(k)fluoranthene	ND	330	ug/kg	68
Benzyl alcohol	ND	330	ug/kg	82
4-Bromophenyl phenyl ether	ND	330	ug/kg	55
Butyl benzyl phthalate	ND	330	ug/kg	64
4-Chloroaniline	ND	330	ug/kg	240
bis(2-Chloroethoxy) methane	ND	330	ug/kg	55
bis(2-Chloroethyl)-ether	ND	330	ug/kg	63
4-Chloro-3-methylphenol	ND	330	ug/kg	50
2-Chloronaphthalene	ND	330	ug/kg	41
2-Chlorophenol	ND	330	ug/kg	53
4-Chlorophenyl phenyl ether	ND	330	ug/kg	48
Chrysene	ND	330	ug/kg	34
Dibenz(a,h)anthracene	ND	330	ug/kg	62
Dibenzofuran	ND	330	ug/kg	50
Di-n-butyl phthalate	ND	330	ug/kg	62
1,2-Dichlorobenzene	ND	330	ug/kg	46
1,3-Dichlorobenzene	ND	330	ug/kg	42
1,4-Dichlorobenzene	ND	330	ug/kg	51
3,3'-Dichlorobenzidine	ND	1600	ug/kg	270
2,4-Dichlorophenol	ND	330	ug/kg	56

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION6-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-008 **Work Order #...:** E781A1AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	660	ug/kg	33
2,4-Dimethylphenol	ND	330	ug/kg	46
Dimethyl phthalate	ND	330	ug/kg	43
4,6-Dinitro-2-methylphenol	ND	1600	ug/kg	120
2,4-Dinitrophenol	ND	1600	ug/kg	370
2,4-Dinitrotoluene	ND	330	ug/kg	45
2,6-Dinitrotoluene	ND	330	ug/kg	67
Di-n-octyl phthalate	ND	330	ug/kg	52
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	70
Fluoranthene	ND	330	ug/kg	39
Fluorene	ND	330	ug/kg	54
Hexachlorobenzene	ND	330	ug/kg	61
Hexachlorobutadiene	ND	330	ug/kg	38
Hexachlorocyclopentadiene	ND	1600	ug/kg	43
Hexachloroethane	ND	330	ug/kg	65
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	44
Isophorone	ND	330	ug/kg	46
2-Methylnaphthalene	ND	330	ug/kg	35
2-Methylphenol	ND	330	ug/kg	89
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	56
Naphthalene	ND	330	ug/kg	42
2-Nitroaniline	ND	1600	ug/kg	48
3-Nitroaniline	ND	1600	ug/kg	73
4-Nitroaniline	ND	1600	ug/kg	60
Nitrobenzene	ND	330	ug/kg	74
2-Nitrophenol	ND	330	ug/kg	44
4-Nitrophenol	ND	1600	ug/kg	390
N-Nitrosodimethylamine	ND	330	ug/kg	63
N-Nitrosodiphenylamine	ND	330	ug/kg	39
N-Nitrosodi-n-propylamine	ND	330	ug/kg	72
Pentachlorophenol	ND	1600	ug/kg	64
Phenanthrene	ND	330	ug/kg	41
Phenol	ND	330	ug/kg	54
Pyrene	ND	330	ug/kg	56
Pyridine	ND	660	ug/kg	130
1,2,4-Trichlorobenzene	ND	330	ug/kg	36
2,4,5-Trichlorophenol	ND	330	ug/kg	46

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION6-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-008 **Work Order #...:** E781A1AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4,6-Trichloro-phenol	ND	330	ug/kg	41
Acetophenone	ND	330	ug/kg	34
2-Acetylaminofluorene	ND	3300	ug/kg	33
4-Aminobiphenyl	ND	1600	ug/kg	330
Aramite	ND	660	ug/kg	43
2,6-Dichlorophenol	ND	330	ug/kg	52
7,12-Dimethylbenz(a)-anthracene	ND	660	ug/kg	50
3,3'-Dimethylbenzidine	ND	660	ug/kg	400
alpha,alpha-Dimethylphenethylamine	ND	1600	ug/kg	330
1,3-Dinitrobenzene	ND	330	ug/kg	110
Ethyl methanesulfonate	ND	330	ug/kg	44
Hexachloropropene	ND	3300	ug/kg	43
Isosafrole	ND	660	ug/kg	37
Methapyrilene	ND	1600	ug/kg	41
3-Methylcholanthrene	ND	660	ug/kg	39
Methyl methanesulfonate	ND	330	ug/kg	53
1,4-Naphthoquinone	ND	1600	ug/kg	33
1-Naphthylamine	ND	330	ug/kg	84
2-Naphthylamine	ND	330	ug/kg	78
5-Nitro-o-toluidine	ND	660	ug/kg	59
N-Nitrosodiethylamine	ND	330	ug/kg	47
N-Nitrosodi-n-butylamine	ND	330	ug/kg	56
N-Nitrosomethylethylamine	ND	330	ug/kg	40
N-Nitrosomorpholine	ND	330	ug/kg	53
N-Nitrosopiperidine	ND	330	ug/kg	69
N-Nitrosopyrrolidine	ND	330	ug/kg	43
Pentachlorobenzene	ND	330	ug/kg	40
Pentachloroethane	ND	1600	ug/kg	51
Pentachloronitrobenzene	ND	1600	ug/kg	56
Phenacetin	ND	660	ug/kg	49
2-Picoline	ND	660	ug/kg	48
Pronamide	ND	660	ug/kg	50
Safrole	ND	1600	ug/kg	49
1,2,4,5-Tetrachloro-benzene	ND	330	ug/kg	34
2,3,4,6-Tetrachlorophenol	ND	1600	ug/kg	410
1,3,5-Trinitrobenzene	ND	1600	ug/kg	40

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION6-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-008 **Work Order #...:** E781A1AE **Matrix.....:** SO

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	65	(39 - 92)
Phenol-d5	64	(34 - 95)
Nitrobenzene-d5	63	(40 - 94)
2-Fluorobiphenyl	58	(40 - 91)
2,4,6-Tribromophenol	55	(34 - 97)
Terphenyl-d14	64	(37 - 99)

US GEOLOGICAL SURVEY

STATION6-02

GC/MS Semivolatiles

Lot-Sample #: D2I130349-008 **Work Order #:** E781A1AE **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		140 J	M	3.0333	ug/kg
Unknown		260 J	M	3.6184	ug/kg
Unknown		3500 J	M	3.645	ug/kg
Unknown aldol condensate		78000 J	M	3.8578	ug/kg
Unknown		320 J	M	4.1238	ug/kg
Unknown		3200 J	M	4.4004	ug/kg
Unknown		320 J	M	4.9324	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: STATION7-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-009 **Work Order #...:** E781C1AE **Matrix.....:** SO
Date Sampled...: 09/11/02 13:07 **Date Received..:** 09/13/02
Prep Date.....: 09/19/02 **Analysis Date..:** 09/20/02
Prep Batch #...: 2262151 **Analysis Time..:** 18:28
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
o-Toluidine	ND	660	ug/kg	98
4-Dimethylaminoazobenzene	ND	660	ug/kg	56
2-sec-Butyl-4,6-dinitro-phenol	ND	660	ug/kg	42
Diphenylamine	ND	330	ug/kg	52
2,2'-oxybis(1-Chloropropane)	ND	330	ug/kg	43
Acenaphthene	ND	330	ug/kg	45
Acenaphthylene	ND	330	ug/kg	43
Aniline	ND	330	ug/kg	190
Anthracene	ND	330	ug/kg	65
Benzo(a)anthracene	ND	330	ug/kg	39
Benzo(a)pyrene	ND	330	ug/kg	51
Benzo(b)fluoranthene	ND	330	ug/kg	63
Benzo(ghi)perylene	ND	330	ug/kg	41
Benzo(k)fluoranthene	ND	330	ug/kg	68
Benzyl alcohol	ND	330	ug/kg	82
4-Bromophenyl phenyl ether	ND	330	ug/kg	55
Butyl benzyl phthalate	ND	330	ug/kg	64
4-Chloroaniline	ND	330	ug/kg	240
bis(2-Chloroethoxy) methane	ND	330	ug/kg	55
bis(2-Chloroethyl)-ether	ND	330	ug/kg	63
4-Chloro-3-methylphenol	ND	330	ug/kg	50
2-Chloronaphthalene	ND	330	ug/kg	41
2-Chlorophenol	ND	330	ug/kg	53
4-Chlorophenyl phenyl ether	ND	330	ug/kg	48
Chrysene	ND	330	ug/kg	34
Dibenz(a,h)anthracene	ND	330	ug/kg	62
Dibenzofuran	ND	330	ug/kg	50
Di-n-butyl phthalate	ND	330	ug/kg	62
1,2-Dichlorobenzene	ND	330	ug/kg	46
1,3-Dichlorobenzene	ND	330	ug/kg	42
1,4-Dichlorobenzene	ND	330	ug/kg	51
3,3'-Dichlorobenzidine	ND	1600	ug/kg	270
2,4-Dichlorophenol	ND	330	ug/kg	56

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION7-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-009 **Work Order #...:** E781C1AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	660	ug/kg	33
2,4-Dimethylphenol	ND	330	ug/kg	46
Dimethyl phthalate	ND	330	ug/kg	43
4,6-Dinitro-2-methylphenol	ND	1600	ug/kg	120
2,4-Dinitrophenol	ND	1600	ug/kg	370
2,4-Dinitrotoluene	ND	330	ug/kg	45
2,6-Dinitrotoluene	ND	330	ug/kg	67
Di-n-octyl phthalate	ND	330	ug/kg	52
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	70
Fluoranthene	ND	330	ug/kg	39
Fluorene	ND	330	ug/kg	54
Hexachlorobenzene	ND	330	ug/kg	61
Hexachlorobutadiene	ND	330	ug/kg	38
Hexachlorocyclopentadiene	ND	1600	ug/kg	43
Hexachloroethane	ND	330	ug/kg	65
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	44
Isophorone	ND	330	ug/kg	46
2-Methylnaphthalene	ND	330	ug/kg	35
2-Methylphenol	ND	330	ug/kg	89
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	56
Naphthalene	ND	330	ug/kg	42
2-Nitroaniline	ND	1600	ug/kg	48
3-Nitroaniline	ND	1600	ug/kg	73
4-Nitroaniline	ND	1600	ug/kg	60
Nitrobenzene	ND	330	ug/kg	74
2-Nitrophenol	ND	330	ug/kg	44
4-Nitrophenol	ND	1600	ug/kg	390
N-Nitrosodimethylamine	ND	330	ug/kg	63
N-Nitrosodiphenylamine	ND	330	ug/kg	39
N-Nitrosodi-n-propylamine	ND	330	ug/kg	72
Pentachlorophenol	ND	1600	ug/kg	64
Phenanthrene	ND	330	ug/kg	41
Phenol	ND	330	ug/kg	54
Pyrene	ND	330	ug/kg	56
Pyridine	ND	660	ug/kg	130
1,2,4-Trichlorobenzene	ND	330	ug/kg	36
2,4,5-Trichlorophenol	ND	330	ug/kg	46

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION7-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-009 **Work Order #...:** E781C1AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4,6-Trichloro-phenol	ND	330	ug/kg	41
Acetophenone	ND	330	ug/kg	34
2-Acetylaminofluorene	ND	3300	ug/kg	33
4-Aminobiphenyl	ND	1600	ug/kg	330
Aramite	ND	660	ug/kg	43
2,6-Dichlorophenol	ND	330	ug/kg	52
7,12-Dimethylbenz(a)-anthracene	ND	660	ug/kg	50
3,3'-Dimethylbenzidine	ND	660	ug/kg	400
alpha,alpha-Dimethylphenethylamine	ND	1600	ug/kg	330
1,3-Dinitrobenzene	ND	330	ug/kg	110
Ethyl methanesulfonate	ND	330	ug/kg	44
Hexachloropropene	ND	3300	ug/kg	43
Isosafrole	ND	660	ug/kg	37
Methapyrilene	ND	1600	ug/kg	41
3-Methylcholanthrene	ND	660	ug/kg	39
Methyl methanesulfonate	ND	330	ug/kg	53
1,4-Naphthoquinone	ND	1600	ug/kg	33
1-Naphthylamine	ND	330	ug/kg	84
2-Naphthylamine	ND	330	ug/kg	78
5-Nitro-o-toluidine	ND	660	ug/kg	59
N-Nitrosodiethylamine	ND	330	ug/kg	47
N-Nitrosodi-n-butylamine	ND	330	ug/kg	56
N-Nitrosomethylethylamine	ND	330	ug/kg	40
N-Nitrosomorpholine	ND	330	ug/kg	53
N-Nitrosopiperidine	ND	330	ug/kg	69
N-Nitrosopyrrolidine	ND	330	ug/kg	43
Pentachlorobenzene	ND	330	ug/kg	40
Pentachloroethane	ND	1600	ug/kg	51
Pentachloronitrobenzene	ND	1600	ug/kg	56
Phenacetin	ND	660	ug/kg	49
2-Picoline	ND	660	ug/kg	48
Pronamide	ND	660	ug/kg	50
Safrole	ND	1600	ug/kg	49
1,2,4,5-Tetrachloro-benzene	ND	330	ug/kg	34
2,3,4,6-Tetrachlorophenol	ND	1600	ug/kg	410
1,3,5-Trinitrobenzene	ND	1600	ug/kg	40

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION7-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-009 **Work Order #...:** E781C1AE **Matrix.....:** SO

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	66	(39 - 92)
Phenol-d5	64	(34 - 95)
Nitrobenzene-d5	63	(40 - 94)
2-Fluorobiphenyl	58	(40 - 91)
2,4,6-Tribromophenol	57	(34 - 97)
Terphenyl-d14	65	(37 - 99)

US GEOLOGICAL SURVEY

STATION7-02

GC/MS Semivolatiles

Lot-Sample #: D2I130349-009 **Work Order #:** E781C1AE **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		140 J	M	3.0331	ug/kg
Unknown		3600 J	M	3.6342	ug/kg
Unknown aldol condensate		78000 J	M	3.847	ug/kg
Unknown		300 J	M	4.1183	ug/kg
Unknown		3000 J	M	4.3949	ug/kg
Unknown		310 J	M	4.9322	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: STATION8-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-010 **Work Order #...:** E781D1AE **Matrix.....:** SO
Date Sampled...: 09/11/02 13:21 **Date Received..:** 09/13/02
Prep Date.....: 09/19/02 **Analysis Date..:** 09/20/02
Prep Batch #...: 2262151 **Analysis Time..:** 18:51
Dilution Factor: 1
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
o-Toluidine	ND	660	ug/kg	98
4-Dimethylaminoazobenzene	ND	660	ug/kg	56
2-sec-Butyl-4,6-dinitro-phenol	ND	660	ug/kg	42
Diphenylamine	ND	330	ug/kg	52
2,2'-oxybis(1-Chloropropane)	ND	330	ug/kg	43
Acenaphthene	ND	330	ug/kg	45
Acenaphthylene	ND	330	ug/kg	43
Aniline	ND	330	ug/kg	190
Anthracene	ND	330	ug/kg	65
Benzo(a)anthracene	ND	330	ug/kg	39
Benzo(a)pyrene	ND	330	ug/kg	51
Benzo(b)fluoranthene	ND	330	ug/kg	63
Benzo(ghi)perylene	ND	330	ug/kg	41
Benzo(k)fluoranthene	ND	330	ug/kg	68
Benzyl alcohol	ND	330	ug/kg	82
4-Bromophenyl phenyl ether	ND	330	ug/kg	55
Butyl benzyl phthalate	ND	330	ug/kg	64
4-Chloroaniline	ND	330	ug/kg	240
bis(2-Chloroethoxy) methane	ND	330	ug/kg	55
bis(2-Chloroethyl)-ether	ND	330	ug/kg	63
4-Chloro-3-methylphenol	ND	330	ug/kg	50
2-Chloronaphthalene	ND	330	ug/kg	41
2-Chlorophenol	ND	330	ug/kg	53
4-Chlorophenyl phenyl ether	ND	330	ug/kg	48
Chrysene	ND	330	ug/kg	34
Dibenz(a,h)anthracene	ND	330	ug/kg	62
Dibenzofuran	ND	330	ug/kg	50
Di-n-butyl phthalate	ND	330	ug/kg	62
1,2-Dichlorobenzene	ND	330	ug/kg	46
1,3-Dichlorobenzene	ND	330	ug/kg	42
1,4-Dichlorobenzene	ND	330	ug/kg	51
3,3'-Dichlorobenzidine	ND	1600	ug/kg	270
2,4-Dichlorophenol	ND	330	ug/kg	56

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION8-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-010 **Work Order #...:** E781D1AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	660	ug/kg	33
2,4-Dimethylphenol	ND	330	ug/kg	46
Dimethyl phthalate	ND	330	ug/kg	43
4,6-Dinitro-2-methylphenol	ND	1600	ug/kg	120
2,4-Dinitrophenol	ND	1600	ug/kg	370
2,4-Dinitrotoluene	ND	330	ug/kg	45
2,6-Dinitrotoluene	ND	330	ug/kg	67
Di-n-octyl phthalate	ND	330	ug/kg	52
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	70
Fluoranthene	ND	330	ug/kg	39
Fluorene	ND	330	ug/kg	54
Hexachlorobenzene	ND	330	ug/kg	61
Hexachlorobutadiene	ND	330	ug/kg	38
Hexachlorocyclopentadiene	ND	1600	ug/kg	43
Hexachloroethane	ND	330	ug/kg	65
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	44
Isophorone	ND	330	ug/kg	46
2-Methylnaphthalene	ND	330	ug/kg	35
2-Methylphenol	ND	330	ug/kg	89
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	56
Naphthalene	ND	330	ug/kg	42
2-Nitroaniline	ND	1600	ug/kg	48
3-Nitroaniline	ND	1600	ug/kg	73
4-Nitroaniline	ND	1600	ug/kg	60
Nitrobenzene	ND	330	ug/kg	74
2-Nitrophenol	ND	330	ug/kg	44
4-Nitrophenol	ND	1600	ug/kg	390
N-Nitrosodimethylamine	ND	330	ug/kg	63
N-Nitrosodiphenylamine	ND	330	ug/kg	39
N-Nitrosodi-n-propylamine	ND	330	ug/kg	72
Pentachlorophenol	ND	1600	ug/kg	64
Phenanthrene	ND	330	ug/kg	41
Phenol	ND	330	ug/kg	54
Pyrene	ND	330	ug/kg	56
Pyridine	ND	660	ug/kg	130
1,2,4-Trichlorobenzene	ND	330	ug/kg	36
2,4,5-Trichlorophenol	ND	330	ug/kg	46

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION8-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-010 Work Order #...: E781D1AE Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4,6-Trichloro-phenol	ND	330	ug/kg	41
Acetophenone	ND	330	ug/kg	34
2-Acetylaminofluorene	ND	3300	ug/kg	33
4-Aminobiphenyl	ND	1600	ug/kg	330
Aramite	ND	660	ug/kg	43
2,6-Dichlorophenol	ND	330	ug/kg	52
7,12-Dimethylbenz(a)-anthracene	ND	660	ug/kg	50
3,3'-Dimethylbenzidine	ND	660	ug/kg	400
alpha,alpha-Dimethylphenethylamine	ND	1600	ug/kg	330
1,3-Dinitrobenzene	ND	330	ug/kg	110
Ethyl methanesulfonate	ND	330	ug/kg	44
Hexachloropropene	ND	3300	ug/kg	43
Isosafrole	ND	660	ug/kg	37
Methapyrilene	ND	1600	ug/kg	41
3-Methylcholanthrene	ND	660	ug/kg	39
Methyl methanesulfonate	ND	330	ug/kg	53
1,4-Naphthoquinone	ND	1600	ug/kg	33
1-Naphthylamine	ND	330	ug/kg	84
2-Naphthylamine	ND	330	ug/kg	78
5-Nitro-o-toluidine	ND	660	ug/kg	59
N-Nitrosodiethylamine	ND	330	ug/kg	47
N-Nitrosodi-n-butylamine	ND	330	ug/kg	56
N-Nitrosomethylethylamine	ND	330	ug/kg	40
N-Nitrosomorpholine	ND	330	ug/kg	53
N-Nitrosopiperidine	ND	330	ug/kg	69
N-Nitrosopyrrolidine	ND	330	ug/kg	43
Pentachlorobenzene	ND	330	ug/kg	40
Pentachloroethane	ND	1600	ug/kg	51
Pentachloronitrobenzene	ND	1600	ug/kg	56
Phenacetin	ND	660	ug/kg	49
2-Picoline	ND	660	ug/kg	48
Pronamide	ND	660	ug/kg	50
Safrole	ND	1600	ug/kg	49
1,2,4,5-Tetrachloro-benzene	ND	330	ug/kg	34
2,3,4,6-Tetrachlorophenol	ND	1600	ug/kg	410
1,3,5-Trinitrobenzene	ND	1600	ug/kg	40

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION8-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-010 **Work Order #...:** E781D1AE **Matrix.....:** SO

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	58	(39 - 92)
Phenol-d5	57	(34 - 95)
Nitrobenzene-d5	56	(40 - 94)
2-Fluorobiphenyl	52	(40 - 91)
2,4,6-Tribromophenol	50	(34 - 97)
Terphenyl-d14	61	(37 - 99)

US GEOLOGICAL SURVEY

STATION8-02

GC/MS Semivolatiles

Lot-Sample #: D2I130349-010 **Work Order #:** E781D1AE **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		3100 J	M	3.6311	ug/kg
Unknown aldol condensate		69000 J	M	3.8439	ug/kg
Unknown		220 J	M	4.1206	ug/kg
Unknown		2600 J	M	4.3972	ug/kg
Unknown		260 J	M	4.9292	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: STATION9-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-011 **Work Order #...:** E781E1AE **Matrix.....:** SO
Date Sampled...: 09/11/02 13:33 **Date Received..:** 09/13/02
Prep Date.....: 09/19/02 **Analysis Date..:** 09/20/02
Prep Batch #...: 2262151 **Analysis Time..:** 19:15
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
o-Toluidine	ND	660	ug/kg	98
4-Dimethylaminoazobenzene	ND	660	ug/kg	56
2-sec-Butyl-4,6-dinitro-phenol	ND	660	ug/kg	42
Diphenylamine	ND	330	ug/kg	52
2,2'-oxybis(1-Chloropropane)	ND	330	ug/kg	43
Acenaphthene	ND	330	ug/kg	45
Acenaphthylene	ND	330	ug/kg	43
Aniline	ND	330	ug/kg	190
Anthracene	ND	330	ug/kg	65
Benzo(a)anthracene	ND	330	ug/kg	39
Benzo(a)pyrene	ND	330	ug/kg	51
Benzo(b)fluoranthene	ND	330	ug/kg	63
Benzo(ghi)perylene	ND	330	ug/kg	41
Benzo(k)fluoranthene	ND	330	ug/kg	68
Benzyl alcohol	ND	330	ug/kg	82
4-Bromophenyl phenyl ether	ND	330	ug/kg	55
Butyl benzyl phthalate	ND	330	ug/kg	64
4-Chloroaniline	ND	330	ug/kg	240
bis(2-Chloroethoxy) methane	ND	330	ug/kg	55
bis(2-Chloroethyl)-ether	ND	330	ug/kg	63
4-Chloro-3-methylphenol	ND	330	ug/kg	50
2-Chloronaphthalene	ND	330	ug/kg	41
2-Chlorophenol	ND	330	ug/kg	53
4-Chlorophenyl phenyl ether	ND	330	ug/kg	48
Chrysene	ND	330	ug/kg	34
Dibenz(a,h)anthracene	ND	330	ug/kg	62
Dibenzofuran	ND	330	ug/kg	50
Di-n-butyl phthalate	ND	330	ug/kg	62
1,2-Dichlorobenzene	ND	330	ug/kg	46
1,3-Dichlorobenzene	ND	330	ug/kg	42
1,4-Dichlorobenzene	ND	330	ug/kg	51
3,3'-Dichlorobenzidine	ND	1600	ug/kg	270
2,4-Dichlorophenol	ND	330	ug/kg	56

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION9-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-011 **Work Order #...:** E781E1AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	660	ug/kg	33
2,4-Dimethylphenol	ND	330	ug/kg	46
Dimethyl phthalate	ND	330	ug/kg	43
4,6-Dinitro-2-methylphenol	ND	1600	ug/kg	120
2,4-Dinitrophenol	ND	1600	ug/kg	370
2,4-Dinitrotoluene	ND	330	ug/kg	45
2,6-Dinitrotoluene	ND	330	ug/kg	67
Di-n-octyl phthalate	ND	330	ug/kg	52
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	70
Fluoranthene	ND	330	ug/kg	39
Fluorene	ND	330	ug/kg	54
Hexachlorobenzene	ND	330	ug/kg	61
Hexachlorobutadiene	ND	330	ug/kg	38
Hexachlorocyclopentadiene	ND	1600	ug/kg	43
Hexachloroethane	ND	330	ug/kg	65
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	44
Isophorone	ND	330	ug/kg	46
2-Methylnaphthalene	ND	330	ug/kg	35
2-Methylphenol	ND	330	ug/kg	89
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	56
Naphthalene	ND	330	ug/kg	42
2-Nitroaniline	ND	1600	ug/kg	48
3-Nitroaniline	ND	1600	ug/kg	73
4-Nitroaniline	ND	1600	ug/kg	60
Nitrobenzene	ND	330	ug/kg	74
2-Nitrophenol	ND	330	ug/kg	44
4-Nitrophenol	ND	1600	ug/kg	390
N-Nitrosodimethylamine	ND	330	ug/kg	63
N-Nitrosodiphenylamine	ND	330	ug/kg	39
N-Nitrosodi-n-propylamine	ND	330	ug/kg	72
Pentachlorophenol	ND	1600	ug/kg	64
Phenanthrene	ND	330	ug/kg	41
Phenol	ND	330	ug/kg	54
Pyrene	ND	330	ug/kg	56
Pyridine	ND	660	ug/kg	130
1,2,4-Trichlorobenzene	ND	330	ug/kg	36
2,4,5-Trichlorophenol	ND	330	ug/kg	46

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION9-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-011 **Work Order #...:** E781E1AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4,6-Trichloro-phenol	ND	330	ug/kg	41
Acetophenone	ND	330	ug/kg	34
2-Acetylaminofluorene	ND	3300	ug/kg	33
4-Aminobiphenyl	ND	1600	ug/kg	330
Aramite	ND	660	ug/kg	43
2,6-Dichlorophenol	ND	330	ug/kg	52
7,12-Dimethylbenz(a)-anthracene	ND	660	ug/kg	50
3,3' Dimethylbenzidine	ND	660	ug/kg	400
alpha,alpha-Dimethylphenethylamine	ND	1600	ug/kg	330
1,3-Dinitrobenzene	ND	330	ug/kg	110
Ethyl methanesulfonate	ND	330	ug/kg	44
Hexachloropropene	ND	3300	ug/kg	43
Isosafrole	ND	660	ug/kg	37
Methapyrilene	ND	1600	ug/kg	41
3-Methylcholanthrene	ND	660	ug/kg	39
Methyl methanesulfonate	ND	330	ug/kg	53
1,4-Naphthoquinone	ND	1600	ug/kg	33
1-Naphthylamine	ND	330	ug/kg	84
2-Naphthylamine	ND	330	ug/kg	78
5-Nitro-o-toluidine	ND	660	ug/kg	59
N-Nitrosodiethylamine	ND	330	ug/kg	47
N-Nitrosodi-n-butylamine	ND	330	ug/kg	56
N-Nitrosomethylethylamine	ND	330	ug/kg	40
N-Nitrosomorpholine	ND	330	ug/kg	53
N-Nitrosopiperidine	ND	330	ug/kg	69
N-Nitrosopyrrolidine	ND	330	ug/kg	43
Pentachlorobenzene	ND	330	ug/kg	40
Pentachloroethane	ND	1600	ug/kg	51
Pentachloronitrobenzene	ND	1600	ug/kg	56
Phenacetin	ND	660	ug/kg	49
2-Picoline	ND	660	ug/kg	48
Pronamide	ND	660	ug/kg	50
Safrole	ND	1600	ug/kg	49
1,2,4,5-Tetrachloro-benzene	ND	330	ug/kg	34
2,3,4,6-Tetrachlorophenol	ND	1600	ug/kg	410
1,3,5-Trinitrobenzene	ND	1600	ug/kg	40

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION9-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-011 **Work Order #...:** E781E1AE **Matrix.....:** SO

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	51	(39 - 92)
Phenol-d5	50	(34 - 95)
Nitrobenzene-d5	49	(40 - 94)
2-Fluorobiphenyl	44	(40 - 91)
2,4,6-Tribromophenol	44	(34 - 97)
Terphenyl-d14	54	(37 - 99)

US GEOLOGICAL SURVEY

STATION9-02

GC/MS Semivolatiles

Lot-Sample #: D2I130349-011 **Work Order #:** E781E1AE **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		1900 J	M	3.6548	ug/kg
Unknown aldol condensate		56000 J	M	3.857	ug/kg
Unknown		200 J	M	4.1389	ug/kg
Unknown		1500 J	M	4.4102	ug/kg
Unknown		160 J	M	4.9422	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: STATION10-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-012 **Work Order #...:** E781F1AE **Matrix.....:** SO
Date Sampled...: 09/11/02 13:47 **Date Received..:** 09/13/02
Prep Date.....: 09/19/02 **Analysis Date..:** 09/20/02
Prep Batch #...: 2262151 **Analysis Time..:** 19:38
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
o-Toluidine	ND	660	ug/kg	98
4-Dimethylaminoazobenzene	ND	660	ug/kg	56
2-sec-Butyl-4,6-dinitro-phenol	ND	660	ug/kg	42
Diphenylamine	ND	330	ug/kg	52
2,2'-oxybis(1-Chloropropane)	ND	330	ug/kg	43
Acenaphthene	ND	330	ug/kg	45
Acenaphthylene	ND	330	ug/kg	43
Aniline	ND	330	ug/kg	190
Anthracene	ND	330	ug/kg	65
Benzo(a)anthracene	ND	330	ug/kg	39
Benzo(a)pyrene	ND	330	ug/kg	51
Benzo(b)fluoranthene	ND	330	ug/kg	63
Benzo(ghi)perylene	ND	330	ug/kg	41
Benzo(k)fluoranthene	ND	330	ug/kg	68
Benzyl alcohol	ND	330	ug/kg	82
4-Bromophenyl phenyl ether	ND	330	ug/kg	55
Butyl benzyl phthalate	ND	330	ug/kg	64
4-Chloroaniline	ND	330	ug/kg	240
bis(2-Chloroethoxy) methane	ND	330	ug/kg	55
bis(2-Chloroethyl)-ether	ND	330	ug/kg	63
4-Chloro-3-methylphenol	ND	330	ug/kg	50
2-Chloronaphthalene	ND	330	ug/kg	41
2-Chlorophenol	ND	330	ug/kg	53
4-Chlorophenyl phenyl ether	ND	330	ug/kg	48
Chrysene	ND	330	ug/kg	34
Dibenz(a,h)anthracene	ND	330	ug/kg	62
Dibenzofuran	ND	330	ug/kg	50
Di-n-butyl phthalate	ND	330	ug/kg	62
1,2-Dichlorobenzene	ND	330	ug/kg	46
1,3-Dichlorobenzene	ND	330	ug/kg	42
1,4-Dichlorobenzene	ND	330	ug/kg	51
3,3'-Dichlorobenzidine	ND	1600	ug/kg	270
2,4-Dichlorophenol	ND	330	ug/kg	56

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION10-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-012 **Work Order #...:** E781F1AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	660	ug/kg	33
2,4-Dimethylphenol	ND	330	ug/kg	46
Dimethyl phthalate	ND	330	ug/kg	43
4,6-Dinitro-2-methylphenol	ND	1600	ug/kg	120
2,4-Dinitrophenol	ND	1600	ug/kg	370
2,4-Dinitrotoluene	ND	330	ug/kg	45
2,6-Dinitrotoluene	ND	330	ug/kg	67
Di-n-octyl phthalate	ND	330	ug/kg	52
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	70
Fluoranthene	ND	330	ug/kg	39
Fluorene	ND	330	ug/kg	54
Hexachlorobenzene	ND	330	ug/kg	61
Hexachlorobutadiene	ND	330	ug/kg	38
Hexachlorocyclopentadiene	ND	1600	ug/kg	43
Hexachloroethane	ND	330	ug/kg	65
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	44
Isophorone	ND	330	ug/kg	46
2-Methylnaphthalene	ND	330	ug/kg	35
2-Methylphenol	ND	330	ug/kg	89
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	56
Naphthalene	ND	330	ug/kg	42
2-Nitroaniline	ND	1600	ug/kg	48
3-Nitroaniline	ND	1600	ug/kg	73
4-Nitroaniline	ND	1600	ug/kg	60
Nitrobenzene	ND	330	ug/kg	74
2-Nitrophenol	ND	330	ug/kg	44
4-Nitrophenol	ND	1600	ug/kg	390
N-Nitrosodimethylamine	ND	330	ug/kg	63
N-Nitrosodiphenylamine	ND	330	ug/kg	39
N-Nitrosodi-n-propylamine	ND	330	ug/kg	72
Pentachlorophenol	ND	1600	ug/kg	64
Phenanthrene	ND	330	ug/kg	41
Phenol	ND	330	ug/kg	54
Pyrene	ND	330	ug/kg	56
Pyridine	ND	660	ug/kg	130
1,2,4-Trichlorobenzene	ND	330	ug/kg	36
2,4,5-Trichlorophenol	ND	330	ug/kg	46

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: STATION10-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-012 **Work Order #...:** E781F1AE **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4,6-Trichloro-phenol	ND	330	ug/kg	41
Acetophenone	ND	330	ug/kg	34
2-Acetylaminofluorene	ND	3300	ug/kg	33
4-Aminobiphenyl	ND	1600	ug/kg	330
Aramite	ND	660	ug/kg	43
2,6-Dichlorophenol	ND	330	ug/kg	52
7,12-Dimethylbenz(a)-anthracene	ND	660	ug/kg	50
3,3'-Dimethylbenzidine	ND	660	ug/kg	400
alpha,alpha-Dimethylphenethylamine	ND	1600	ug/kg	330
1,3-Dinitrobenzene	ND	330	ug/kg	110
Ethyl methanesulfonate	ND	330	ug/kg	44
Hexachloropropene	ND	3300	ug/kg	43
Isosafrole	ND	660	ug/kg	37
Methapyrilene	ND	1600	ug/kg	41
3-Methylcholanthrene	ND	660	ug/kg	39
Methyl methanesulfonate	ND	330	ug/kg	53
1,4-Naphthoquinone	ND	1600	ug/kg	33
1-Naphthylamine	ND	330	ug/kg	84
2-Naphthylamine	ND	330	ug/kg	78
5-Nitro-o-toluidine	ND	660	ug/kg	59
N-Nitrosodiethylamine	ND	330	ug/kg	47
N-Nitrosodi-n-butylamine	ND	330	ug/kg	56
N-Nitrosomethylethylamine	ND	330	ug/kg	40
N-Nitrosomorpholine	ND	330	ug/kg	53
N-Nitrosopiperidine	ND	330	ug/kg	69
N-Nitrosopyrrolidine	ND	330	ug/kg	43
Pentachlorobenzene	ND	330	ug/kg	40
Pentachloroethane	ND	1600	ug/kg	51
Pentachloronitrobenzene	ND	1600	ug/kg	56
Phenacetin	ND	660	ug/kg	49
2-Picoline	ND	660	ug/kg	48
Pronamide	ND	660	ug/kg	50
Safrole	ND	1600	ug/kg	49
1,2,4,5-Tetrachloro-benzene	ND	330	ug/kg	34
2,3,4,6-Tetrachlorophenol	ND	1600	ug/kg	410
1,3,5-Trinitrobenzene	ND	1600	ug/kg	40

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US GEOLOGICAL SURVEY

Client Sample ID: STATION10-02

GC/MS Semivolatiles

Lot-Sample #...: D2I130349-012 **Work Order #...:** E781F1AE **Matrix.....:** SO

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	56	(39 - 92)
Phenol-d5	55	(34 - 95)
Nitrobenzene-d5	52	(40 - 94)
2-Fluorobiphenyl	49	(40 - 91)
2,4,6-Tribromophenol	49	(34 - 97)
Terphenyl-d14	59	(37 - 99)

US GEOLOGICAL SURVEY

STATION10-02

GC/MS Semivolatiles

Lot-Sample #: D2I130349-012 **Work Order #:** E781F1AE **Matrix:** SO

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		3400 J	M	3.6381	ug/kg
Unknown aldol condensate		74000 J	M	3.8509	ug/kg
Unknown		280 J	M	4.1222	ug/kg
Unknown		2900 J	M	4.3935	ug/kg
Unknown		310 J	M	4.9308	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: STATION1-02

TOTAL Metals

Lot-Sample #...: D2I130349-001 Matrix.....: SO
Date Sampled...: 09/11/02 10:18 Date Received..: 09/13/02

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2259171						
Mercury	**0.0049 B**	**0.033**	**mg/kg**	**SW846 7471A**	**09/19/02**	**E78011AQ**
		Dilution Factor: 1		Analysis Time..: 19:21	MDL.....: 0.0025	
Prep Batch #...: 2260316						
Barium	**380**	**1.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E78011AH**
		Dilution Factor: 1		Analysis Time..: 19:08	MDL.....: 0.34	
Chromium	7.7	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E78011AJ
		Dilution Factor: 1		Analysis Time..: 19:08	MDL.....: 0.072	
Cobalt	**3.6**	**1.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E78011AK**
		Dilution Factor: 1		Analysis Time..: 19:08	MDL.....: 0.072	
Copper	**4.1**	**2.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E78011AL**
		Dilution Factor: 1		Analysis Time..: 19:08	MDL.....: 0.19	
Iron	**6300**	**10**	**mg/kg**	**SW846 6010B**	**09/20-09/24/02**	**E78011AM**
		Dilution Factor: 1		Analysis Time..: 21:34	MDL.....: 1.6	
Nickel	**6.9**	**4.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E78011AN**
		Dilution Factor: 1		Analysis Time..: 19:08	MDL.....: 0.18	
Zinc	**17**	**2.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E78011AP**
		Dilution Factor: 1		Analysis Time..: 19:08	MDL.....: 0.53	
Prep Batch #...: 2266449						
Cadmium	**170**	**100**	**ug/kg**	**SW846 6020**	**10/01-10/08/02**	**E78011AF**
		Dilution Factor: 1		Analysis Time..: 16:11	MDL.....: 1.4	
Lead	**4800**	**100**	**ug/kg**	**SW846 6020**	**10/01-10/08/02**	**E78011AG**
		Dilution Factor: 1		Analysis Time..: 16:11	MDL.....: 4.2	

NOTE(S):

B Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

Client Sample ID: STATION2R-02

TOTAL Metals

Lot-Sample #...: D2I130349-002 **Matrix.....:** SO
Date Sampled...: 09/11/02 10:40 **Date Received..:** 09/13/02

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2259171						
Mercury	**0.0055 B**	**0.033**	**mg/kg**	**SW846 7471A**	**09/19/02**	**E78021AQ**
		Dilution Factor: 1		Analysis Time..: 19:23	MDL.....: 0.0025	
Prep Batch #...: 2260316						
Barium	**180**	**1.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E78021AH**
		Dilution Factor: 1		Analysis Time..: 19:26	MDL.....: 0.34	
Chromium	**10**	**1.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E78021AJ**
		Dilution Factor: 1		Analysis Time..: 19:26	MDL.....: 0.072	
Cobalt	**3.9**	**1.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E78021AK**
		Dilution Factor: 1		Analysis Time..: 19:26	MDL.....: 0.072	
Copper	**6.3**	**2.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E78021AL**
		Dilution Factor: 1		Analysis Time..: 19:26	MDL.....: 0.19	
Iron	**8600**	**10**	**mg/kg**	**SW846 6010B**	**09/20-09/24/02**	**E78021AM**
		Dilution Factor: 1		Analysis Time..: 21:49	MDL.....: 1.6	
Nickel	8.0	4.0	mg/kg	SW846 6010B	09/20-10/01/02	E78021AN
		Dilution Factor: 1		Analysis Time..: 19:26	MDL.....: 0.18	
Zinc	**24**	**2.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E78021AP**
		Dilution Factor: 1		Analysis Time..: 19:26	MDL.....: 0.53	
Prep Batch #...: 2266449						
Cadmium	**250**	**100**	**ug/kg**	**SW846 6020**	**10/01-10/08/02**	**E78021AF**
		Dilution Factor: 1		Analysis Time..: 16:40	MDL.....: 1.4	
Lead	**18000**	**100**	**ug/kg**	**SW846 6020**	**10/01-10/08/02**	**E78021AG**
		Dilution Factor: 1		Analysis Time..: 16:40	MDL.....: 4.2	

NOTE(S):

B Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

Client Sample ID: STATION3R-02

TOTAL Metals

Lot-Sample #...: D2I130349-003 Matrix.....: SO
Date Sampled...: 09/11/02 11:05 Date Received..: 09/13/02

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2259171						
Mercury	0.0028 B	0.033	mg/kg	SW846 7471A	09/19/02	E78031AQ
		Dilution Factor: 1		Analysis Time..: 19:25	MDL.....: 0.0025	
Prep Batch #...: 2260316						
Barium	420	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E78031AH
		Dilution Factor: 1		Analysis Time..: 19:30	MDL.....: 0.34	
Chromium	8.6	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E78031AJ
		Dilution Factor: 1		Analysis Time..: 19:30	MDL.....: 0.072	
Cobalt	3.8	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E78031AK
		Dilution Factor: 1		Analysis Time..: 19:30	MDL.....: 0.072	
Copper	5.9	2.0	mg/kg	SW846 6010B	09/20-10/01/02	E78031AL
		Dilution Factor: 1		Analysis Time..: 19:30	MDL.....: 0.19	
Iron	7300	10	mg/kg	SW846 6010B	09/20-09/24/02	E78031AM
		Dilution Factor: 1		Analysis Time..: 21:52	MDL.....: 1.6	
Nickel	8.3	4.0	mg/kg	SW846 6010B	09/20-10/01/02	E78031AN
		Dilution Factor: 1		Analysis Time..: 19:30	MDL.....: 0.18	
Zinc	22	2.0	mg/kg	SW846 6010B	09/20-10/01/02	E78031AP
		Dilution Factor: 1		Analysis Time..: 19:30	MDL.....: 0.53	
Prep Batch #...: 2266449						
Cadmium	190	100	ug/kg	SW846 6020	10/01-10/08/02	E78031AF
		Dilution Factor: 1		Analysis Time..: 16:44	MDL.....: 1.4	
Lead	6600	100	ug/kg	SW846 6020	10/01-10/08/02	E78031AG
		Dilution Factor: 1		Analysis Time..: 16:44	MDL.....: 4.2	

NOTE(S):

B Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

Client Sample ID: STATION3RR-02

TOTAL Metals

Lot-Sample #...: D2I130349-004 **Matrix.....:** SO
Date Sampled...: 09/11/02 11:20 **Date Received..:** 09/13/02

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2259171						
Mercury	ND	0.033	mg/kg	SW846 7471A	09/19/02	E78041AQ
		Dilution Factor: 1		Analysis Time..: 19:27	MDL.....: 0.0025	
Prep Batch #...: 2260316						
Barium	**990**	**1.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E78041AH**
		Dilution Factor: 1		Analysis Time..: 19:35	MDL.....: 0.34	
Chromium	**2.9**	**1.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E78041AJ**
		Dilution Factor: 1		Analysis Time..: 19:35	MDL.....: 0.072	
Cobalt	**2.6**	**1.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E78041AK**
		Dilution Factor: 1		Analysis Time..: 19:35	MDL.....: 0.072	
Copper	**3.1**	**2.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E78041AL**
		Dilution Factor: 1		Analysis Time..: 19:35	MDL.....: 0.19	
Iron	**3400**	**10**	**mg/kg**	**SW846 6010B**	**09/20-09/24/02**	**E78041AM**
		Dilution Factor: 1		Analysis Time..: 21:56	MDL.....: 1.6	
Nickel	**4.5**	**4.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E78041AN**
		Dilution Factor: 1		Analysis Time..: 19:35	MDL.....: 0.18	
Zinc	8.7	2.0	mg/kg	SW846 6010B	09/20-10/01/02	E78041AP
		Dilution Factor: 1		Analysis Time..: 19:35	MDL.....: 0.53	
Prep Batch #...: 2266449						
Cadmium	**130**	**100**	**ug/kg**	**SW846 6020**	**10/01-10/08/02**	**E78041AF**
		Dilution Factor: 1		Analysis Time..: 16:48	MDL.....: 1.4	
Lead	**1800**	**100**	**ug/kg**	**SW846 6020**	**10/01-10/08/02**	**E78041AG**
		Dilution Factor: 1		Analysis Time..: 16:48	MDL.....: 4.2	

US GEOLOGICAL SURVEY

Client Sample ID: STATION4-02

TOTAL Metals

Lot-Sample #...: D2I130349-005 Matrix.....: SO
Date Sampled...: 09/11/02 11:40 Date Received..: 09/13/02

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2259171						
Mercury	0.0033 B	0.033	mg/kg	SW846 7471A	09/19/02	E78061AQ
		Dilution Factor: 1		Analysis Time..: 19:29	MDL.....: 0.0025	
Prep Batch #...: 2260316						
Barium	210	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E78061AH
		Dilution Factor: 1		Analysis Time..: 19:48	MDL.....: 0.34	
Chromium	5.0	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E78061AJ
		Dilution Factor: 1		Analysis Time..: 19:48	MDL.....: 0.072	
Cobalt	2.8	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E78061AK
		Dilution Factor: 1		Analysis Time..: 19:48	MDL.....: 0.072	
Copper	4.6	2.0	mg/kg	SW846 6010B	09/20-10/01/02	E78061AL
		Dilution Factor: 1		Analysis Time..: 19:48	MDL.....: 0.19	
Iron	4300	10	mg/kg	SW846 6010B	09/20-09/24/02	E78061AM
		Dilution Factor: 1		Analysis Time..: 22:00	MDL.....: 1.6	
Nickel	6.2	4.0	mg/kg	SW846 6010B	09/20-10/01/02	E78061AN
		Dilution Factor: 1		Analysis Time..: 19:48	MDL.....: 0.18	
Zinc	13	2.0	mg/kg	SW846 6010B	09/20-10/01/02	E78061AP
		Dilution Factor: 1		Analysis Time..: 19:48	MDL.....: 0.53	
Prep Batch #...: 2266449						
Cadmium	180	100	ug/kg	SW846 6020	10/01-10/08/02	E78061AF
		Dilution Factor: 1		Analysis Time..: 16:52	MDL.....: 1.4	
Lead	3400	100	ug/kg	SW846 6020	10/01-10/08/02	E78061AG
		Dilution Factor: 1		Analysis Time..: 16:52	MDL.....: 4.2	

NOTE(S):

B Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

Client Sample ID: STATION2L-02

TOTAL Metals

Lot-Sample #...: D2I130349-006 Matrix.....: SO
Date Sampled...: 09/11/02 12:05 Date Received..: 09/13/02

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2259171						
Mercury	ND	0.033	mg/kg	SW846 7471A	09/19/02	E78071AQ
		Dilution Factor: 1		Analysis Time..: 19:30	MDL.....: 0.0025	
Prep Batch #...: 2260316						
Barium	310	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E78071AH
		Dilution Factor: 1		Analysis Time..: 19:53	MDL.....: 0.34	
Chromium	8.7	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E78071AJ
		Dilution Factor: 1		Analysis Time..: 19:53	MDL.....: 0.072	
Cobalt	4.7	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E78071AK
		Dilution Factor: 1		Analysis Time..: 19:53	MDL.....: 0.072	
Copper	4.1	2.0	mg/kg	SW846 6010B	09/20-10/01/02	E78071AL
		Dilution Factor: 1		Analysis Time..: 19:53	MDL.....: 0.19	
Iron	7900	10	mg/kg	SW846 6010B	09/20-09/24/02	E78071AM
		Dilution Factor: 1		Analysis Time..: 22:03	MDL.....: 1.6	
Nickel	7.3	4.0	mg/kg	SW846 6010B	09/20-10/01/02	E78071AN
		Dilution Factor: 1		Analysis Time..: 19:53	MDL.....: 0.18	
Zinc	20	2.0	mg/kg	SW846 6010B	09/20-10/01/02	E78071AP
		Dilution Factor: 1		Analysis Time..: 19:53	MDL.....: 0.53	
Prep Batch #...: 2266449						
Cadmium	120	100	ug/kg	SW846 6020	10/01-10/08/02	E78071AF
		Dilution Factor: 1		Analysis Time..: 16:56	MDL.....: 1.4	
Lead	6600	100	ug/kg	SW846 6020	10/01-10/08/02	E78071AG
		Dilution Factor: 1		Analysis Time..: 16:56	MDL.....: 4.2	

US GEOLOGICAL SURVEY

Client Sample ID: STATION5-02

TOTAL Metals

Lot-Sample #...: D2I130349-007 **Matrix.....:** SO
Date Sampled...: 09/11/02 12:30 **Date Received..:** 09/13/02

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2259171						
Mercury	ND	0.033	mg/kg	SW846 7471A	09/19/02	E78091AQ
		Dilution Factor: 1		Analysis Time..: 19:36	MDL.....: 0.0025	
Prep Batch #...: 2260316						
Barium	**140**	**1.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E78091AH**
		Dilution Factor: 1		Analysis Time..: 19:57	MDL.....: 0.34	
Chromium	**5.8**	**1.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E78091AJ**
		Dilution Factor: 1		Analysis Time..: 19:57	MDL.....: 0.072	
Cobalt	**3.0**	**1.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E78091AK**
		Dilution Factor: 1		Analysis Time..: 19:57	MDL.....: 0.072	
Copper	**3.0**	**2.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E78091AL**
		Dilution Factor: 1		Analysis Time..: 19:57	MDL.....: 0.19	
Iron	**5400**	**10**	**mg/kg**	**SW846 6010B**	**09/20-09/24/02**	**E78091AM**
		Dilution Factor: 1		Analysis Time..: 22:07	MDL.....: 1.6	
Nickel	**5.9**	**4.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E78091AN**
		Dilution Factor: 1		Analysis Time..: 19:57	MDL.....: 0.18	
Zinc	**12**	**2.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E78091AP**
		Dilution Factor: 1		Analysis Time..: 19:57	MDL.....: 0.53	
Prep Batch #...: 2266449						
Cadmium	**82 B**	**100**	**ug/kg**	**SW846 6020**	**10/01-10/08/02**	**E78091AF**
		Dilution Factor: 1		Analysis Time..: 17:09	MDL.....: 1.4	
Lead	**3000**	**100**	**ug/kg**	**SW846 6020**	**10/01-10/08/02**	**E78091AG**
		Dilution Factor: 1		Analysis Time..: 17:09	MDL.....: 4.2	

NOTE(S):

B Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

Client Sample ID: STATION6-02

TOTAL Metals

Lot-Sample #...: D2I130349-008 **Matrix.....:** SO
Date Sampled...: 09/11/02 12:55 **Date Received..:** 09/13/02

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2259171						
Mercury	**0.0066 B**	**0.033**	**mg/kg**	**SW846 7471A**	**09/19/02**	**E781A1AQ**
		Dilution Factor: 1		Analysis Time..: 19:38	MDL.....: 0.0025	
Prep Batch #...: 2260316						
Barium	**180**	**1.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E781A1AH**
		Dilution Factor: 1		Analysis Time..: 20:02	MDL.....: 0.34	
Chromium	**14**	**1.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E781A1AJ**
		Dilution Factor: 1		Analysis Time..: 20:02	MDL.....: 0.072	
Cobalt	**4.0**	**1.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E781A1AK**
		Dilution Factor: 1		Analysis Time..: 20:02	MDL.....: 0.072	
Copper	**7.3**	**2.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E781A1AL**
		Dilution Factor: 1		Analysis Time..: 20:02	MDL.....: 0.19	
Iron	**11000**	**10**	**mg/kg**	**SW846 6010B**	**09/20-09/24/02**	**E781A1AM**
		Dilution Factor: 1		Analysis Time..: 22:18	MDL.....: 1.6	
Nickel	10	**4.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E781A1AN**
		Dilution Factor: 1		Analysis Time..: 20:02	MDL.....: 0.18	
Zinc	**26**	**2.0**	**mg/kg**	**SW846 6010B**	**09/20-10/01/02**	**E781A1AP**
		Dilution Factor: 1		Analysis Time..: 20:02	MDL.....: 0.53	
Prep Batch #...: 2266449						
Cadmium	**85 B**	**100**	**ug/kg**	**SW846 6020**	**10/01-10/08/02**	**E781A1AF**
		Dilution Factor: 1		Analysis Time..: 17:13	MDL.....: 1.4	
Lead	**5700**	**100**	**ug/kg**	**SW846 6020**	**10/01-10/08/02**	**E781A1AG**
		Dilution Factor: 1		Analysis Time..: 17:13	MDL.....: 4.2	

NOTE(S):

B Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

Client Sample ID: STATION7-02

TOTAL Metals

Lot-Sample #...: D2I130349-009 Matrix.....: SO
Date Sampled...: 09/11/02 13:07 Date Received..: 09/13/02

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2259171						
Mercury	0.0066 B	0.033	mg/kg	SW846 7471A	09/19/02	E781C1AQ
		Dilution Factor: 1		Analysis Time..: 19:40	MDL.....: 0.0025	
Prep Batch #...: 2260316						
Barium	78	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E781C1AH
		Dilution Factor: 1		Analysis Time..: 20:06	MDL.....: 0.34	
Chromium	16	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E781C1AJ
		Dilution Factor: 1		Analysis Time..: 20:06	MDL.....: 0.072	
Cobalt	4.5	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E781C1AK
		Dilution Factor: 1		Analysis Time..: 20:06	MDL.....: 0.072	
Copper	7.5	2.0	mg/kg	SW846 6010B	09/20-10/01/02	E781C1AL
		Dilution Factor: 1		Analysis Time..: 20:06	MDL.....: 0.19	
Iron	12000	10	mg/kg	SW846 6010B	09/20-09/24/02	E781C1AM
		Dilution Factor: 1		Analysis Time..: 22:22	MDL.....: 1.6	
Nickel	9.5	4.0	mg/kg	SW846 6010B	09/20-10/01/02	E781C1AN
		Dilution Factor: 1		Analysis Time..: 20:06	MDL.....: 0.18	
Zinc	36	2.0	mg/kg	SW846 6010B	09/20-10/01/02	E781C1AP
		Dilution Factor: 1		Analysis Time..: 20:06	MDL.....: 0.53	
Prep Batch #...: 2266449						
Cadmium	98 B	100	ug/kg	SW846 6020	10/01-10/08/02	E781C1AF
		Dilution Factor: 1		Analysis Time..: 17:17	MDL.....: 1.4	
Lead	7500	100	ug/kg	SW846 6020	10/01-10/08/02	E781C1AG
		Dilution Factor: 1		Analysis Time..: 17:17	MDL.....: 4.2	

NOTE(S):

B Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

Client Sample ID: STATION8-02

TOTAL Metals

Lot-Sample #...: D2I130349-010 Matrix.....: SO
Date Sampled...: 09/11/02 13:21 Date Received..: 09/13/02

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2259171						
Mercury	0.0093 B	0.033	mg/kg	SW846 7471A	09/19/02	E781D1AQ
		Dilution Factor: 1		Analysis Time..: 19:42	MDL.....: 0.0025	
Prep Batch #...: 2260316						
Barium	92	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E781D1AH
		Dilution Factor: 1		Analysis Time..: 20:11	MDL.....: 0.34	
Chromium	13	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E781D1AJ
		Dilution Factor: 1		Analysis Time..: 20:11	MDL.....: 0.072	
Cobalt	4.0	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E781D1AK
		Dilution Factor: 1		Analysis Time..: 20:11	MDL.....: 0.072	
Copper	8.6	2.0	mg/kg	SW846 6010B	09/20-10/01/02	E781D1AL
		Dilution Factor: 1		Analysis Time..: 20:11	MDL.....: 0.19	
Iron	11000	10	mg/kg	SW846 6010B	09/20-09/24/02	E781D1AM
		Dilution Factor: 1		Analysis Time..: 22:26	MDL.....: 1.6	
Nickel	11	4.0	mg/kg	SW846 6010B	09/20-10/01/02	E781D1AN
		Dilution Factor: 1		Analysis Time..: 20:11	MDL.....: 0.18	
Zinc	27	2.0	mg/kg	SW846 6010B	09/20-10/01/02	E781D1AP
		Dilution Factor: 1		Analysis Time..: 20:11	MDL.....: 0.53	
Prep Batch #...: 2266449						
Cadmium	120	100	ug/kg	SW846 6020	10/01-10/08/02	E781D1AF
		Dilution Factor: 1		Analysis Time..: 17:21	MDL.....: 1.4	
Lead	6000	100	ug/kg	SW846 6020	10/01-10/08/02	E781D1AG
		Dilution Factor: 1		Analysis Time..: 17:21	MDL.....: 4.2	

NOTE(S):

B Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

Client Sample ID: STATION9-02

TOTAL Metals

Lot-Sample #...: D2I130349-011 Matrix.....: SO
Date Sampled...: 09/11/02 13:33 Date Received..: 09/13/02

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2259171						
Mercury	0.0086 B	0.033	mg/kg	SW846 7471A	09/19/02	E781E1AQ
		Dilution Factor: 1		Analysis Time..: 19:44	MDL.....: 0.0025	
Prep Batch #...: 2260316						
Barium	180	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E781E1AH
		Dilution Factor: 1		Analysis Time..: 20:15	MDL.....: 0.34	
Chromium	11	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E781E1AJ
		Dilution Factor: 1		Analysis Time..: 20:15	MDL.....: 0.072	
Cobalt	3.7	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E781E1AK
		Dilution Factor: 1		Analysis Time..: 20:15	MDL.....: 0.072	
Copper	7.9	2.0	mg/kg	SW846 6010B	09/20-10/01/02	E781E1AL
		Dilution Factor: 1		Analysis Time..: 20:15	MDL.....: 0.19	
Iron	8900	10	mg/kg	SW846 6010B	09/20-09/24/02	E781E1AM
		Dilution Factor: 1		Analysis Time..: 22:30	MDL.....: 1.6	
Nickel	10	4.0	mg/kg	SW846 6010B	09/20-10/01/02	E781E1AN
		Dilution Factor: 1		Analysis Time..: 20:15	MDL.....: 0.18	
Zinc	22	2.0	mg/kg	SW846 6010B	09/20-10/01/02	E781E1AP
		Dilution Factor: 1		Analysis Time..: 20:15	MDL.....: 0.53	
Prep Batch #...: 2266449						
Cadmium	100	100	ug/kg	SW846 6020	10/01-10/08/02	E781E1AF
		Dilution Factor: 1		Analysis Time..: 17:25	MDL.....: 1.4	
Lead	5900	100	ug/kg	SW846 6020	10/01-10/08/02	E781E1AG
		Dilution Factor: 1		Analysis Time..: 17:25	MDL.....: 4.2	

NOTE(S):

B Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

Client Sample ID: STATION10-02

TOTAL Metals

Lot-Sample #...: D2I130349-012 Matrix.....: SO
Date Sampled...: 09/11/02 13:47 Date Received..: 09/13/02

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 2259171						
Mercury	0.012 B	0.033	mg/kg	SW846 7471A	09/19/02	E781F1AQ
		Dilution Factor: 1		Analysis Time..: 19:45	MDL.....: 0.0025	
Prep Batch #...: 2260316						
Barium	150	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E781F1AH
		Dilution Factor: 1		Analysis Time..: 20:20	MDL.....: 0.34	
Chromium	12	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E781F1AJ
		Dilution Factor: 1		Analysis Time..: 20:20	MDL.....: 0.072	
Cobalt	3.5	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E781F1AK
		Dilution Factor: 1		Analysis Time..: 20:20	MDL.....: 0.072	
Copper	6.6	2.0	mg/kg	SW846 6010B	09/20-10/01/02	E781F1AL
		Dilution Factor: 1		Analysis Time..: 20:20	MDL.....: 0.19	
Iron	10000	10	mg/kg	SW846 6010B	09/20-09/24/02	E781F1AM
		Dilution Factor: 1		Analysis Time..: 22:33	MDL.....: 1.6	
Nickel	11	4.0	mg/kg	SW846 6010B	09/20-10/01/02	E781F1AN
		Dilution Factor: 1		Analysis Time..: 20:20	MDL.....: 0.18	
Zinc	29	2.0	mg/kg	SW846 6010B	09/20-10/01/02	E781F1AP
		Dilution Factor: 1		Analysis Time..: 20:20	MDL.....: 0.53	
Prep Batch #...: 2266449						
Cadmium	62 B	100	ug/kg	SW846 6020	10/01-10/08/02	E781F1AF
		Dilution Factor: 1		Analysis Time..: 17:29	MDL.....: 1.4	
Lead	5900	100	ug/kg	SW846 6020	10/01-10/08/02	E781F1AG
		Dilution Factor: 1		Analysis Time..: 17:29	MDL.....: 4.2	

NOTE(S):

B Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

Client Sample ID: STATION1-02

General Chemistry

Lot-Sample #...: D2I130349-001 **Work Order #...:** E7801 **Matrix.....:** SO
Date Sampled...: 09/11/02 10:18 **Date Received..:** 09/13/02

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
n-Hexane Extractable Material	ND	500	mg/kg	SW846 9071B	10/03/02	2277476
		Dilution Factor: 1		Analysis Time..: 15:00	MDL.....: 160	
Percent Moisture	**12**	**0.10**	**%**	**MCAWW 160.3 MOD**	**10/05/02**	**2280354**
		Dilution Factor: 1		Analysis Time..: 13:45	MDL.....:	

US GEOLOGICAL SURVEY

Client Sample ID: STATION2R-02

General Chemistry

Lot-Sample #...: D2I130349-002 **Work Order #...:** E7802 **Matrix.....:** SO
Date Sampled...: 09/11/02 10:40 **Date Received..:** 09/13/02

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
n-Hexane Extractable Material	ND	500	mg/kg	SW846 9071B	10/03/02	2277476
		Dilution Factor: 1		Analysis Time..: 15:00	MDL.....: 160	
Percent Moisture	**11**	**0.10**	**%**	**MCAWW 160.3 MOD**	**10/05/02**	**2280354**
		Dilution Factor: 1		Analysis Time..: 13:45	MDL.....:	

US GEOLOGICAL SURVEY

Client Sample ID: STATION3R-02

General Chemistry

Lot-Sample #...: D2I130349-003 **Work Order #...:** E7803 **Matrix.....:** SO
Date Sampled...: 09/11/02 11:05 **Date Received..:** 09/13/02

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
n-Hexane Extractable Material	ND	500	mg/kg	SW846 9071B	10/07/02	2282145
		Dilution Factor: 1		Analysis Time..: 15:00	MDL.....: 160	
Percent Moisture	**21**	**0.10**	**%**	**MCAWW 160.3 MOD**	**10/05/02**	**2280354**
		Dilution Factor: 1		Analysis Time..: 13:45	MDL.....:	

US GEOLOGICAL SURVEY

Client Sample ID: STATION3RR-02

General Chemistry

Lot-Sample #...: D2I130349-004 **Work Order #...:** E7804 **Matrix.....:** SO
Date Sampled...: 09/11/02 11:20 **Date Received..:** 09/13/02

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
n-Hexane Extractable Material	ND	500	mg/kg	SW846 9071B	10/07/02	2282145
		Dilution Factor: 1		Analysis Time..: 15:00	MDL.....: 160	
Percent Moisture	**7.4**	**0.10**	**%**	**MCAWW 160.3 MOD**	**10/05/02**	**2280354**
		Dilution Factor: 1		Analysis Time..: 13:45	MDL.....:	

US GEOLOGICAL SURVEY

Client Sample ID: STATION4-02

General Chemistry

Lot-Sample #...: D2I130349-005 **Work Order #...:** E7806 **Matrix.....:** SO
Date Sampled...: 09/11/02 11:40 **Date Received..:** 09/13/02

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
n-Hexane Extractable Material	ND	500	mg/kg	SW846 9071B	10/07/02	2282145
		Dilution Factor: 1		Analysis Time..: 15:00	MDL.....: 160	
Percent Moisture	**13**	**0.10**	**%**	**MCAWW 160.3 MOD**	**10/05/02**	**2280354**
		Dilution Factor: 1		Analysis Time..: 13:45	MDL.....:	

US GEOLOGICAL SURVEY

Client Sample ID: STATION2L-02

General Chemistry

Lot-Sample #...: D2I130349-006 **Work Order #...:** E7807 **Matrix.....:** SO
Date Sampled...: 09/11/02 12:05 **Date Received..:** 09/13/02

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
n-Hexane Extractable Material	ND	500	mg/kg	SW846 9071B	10/07/02	2282145
		Dilution Factor: 1		Analysis Time..: 15:00	MDL.....: 160	
Percent Moisture	**14**	**0.10**	**%**	**MCAWW 160.3 MOD**	**10/05/02**	**2280354**
		Dilution Factor: 1		Analysis Time..: 13:45	MDL.....:	

US GEOLOGICAL SURVEY

Client Sample ID: STATION5-02

General Chemistry

Lot-Sample #...: D2I130349-007 **Work Order #...:** E7809 **Matrix.....:** SO
Date Sampled...: 09/11/02 12:30 **Date Received..:** 09/13/02

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
n-Hexane Extractable Material	ND	500	mg/kg	SW846 9071B	10/07/02	2282145
		Dilution Factor: 1		Analysis Time..: 15:00	MDL.....: 160	
Percent Moisture	**18**	**0.10**	**%**	**MCAWW 160.3 MOD**	**10/05/02**	**2280354**
		Dilution Factor: 1		Analysis Time..: 13:45	MDL.....:	

US GEOLOGICAL SURVEY

Client Sample ID: STATION6-02

General Chemistry

Lot-Sample #...: D2I130349-008 **Work Order #...:** E781A **Matrix.....:** SO
Date Sampled...: 09/11/02 12:55 **Date Received..:** 09/13/02

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
n-Hexane Extractable Material	ND	500	mg/kg	SW846 9071B	10/07/02	2282145
		Dilution Factor: 1		Analysis Time..: 15:00	MDL.....: 160	
Percent Moisture	**13**	**0.10**	**%**	**MCAWW 160.3 MOD**	**10/05/02**	**2280354**
		Dilution Factor: 1		Analysis Time..: 13:45	MDL.....:	

US GEOLOGICAL SURVEY

Client Sample ID: STATION7-02

General Chemistry

Lot-Sample #...: D2I130349-009 **Work Order #...:** E781C **Matrix.....:** SO
Date Sampled...: 09/11/02 13:07 **Date Received..:** 09/13/02

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
n-Hexane Extractable Material	ND	500	mg/kg	SW846 9071B	10/07/02	2282145
		Dilution Factor: 1		Analysis Time..: 15:00	MDL.....: 160	
Percent Moisture	**12**	**0.10**	**%**	**MCAWW 160.3 MOD**	**10/05/02**	**2280354**
		Dilution Factor: 1		Analysis Time..: 13:45	MDL.....:	

US GEOLOGICAL SURVEY

Client Sample ID: STATION8-02

General Chemistry

Lot-Sample #...: D2I130349-010 **Work Order #...:** E781D **Matrix.....:** SO
Date Sampled...: 09/11/02 13:21 **Date Received..:** 09/13/02

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
n-Hexane Extractable Material	ND	500	mg/kg	SW846 9071B	10/07/02	2282145
		Dilution Factor: 1		Analysis Time..: 15:00	MDL.....: 160	
Percent Moisture	**12**	**0.10**	**%**	**MCAWW 160.3 MOD**	**10/05/02**	**2280354**
		Dilution Factor: 1		Analysis Time..: 13:45	MDL.....:	

US GEOLOGICAL SURVEY

Client Sample ID: STATION9-02

General Chemistry

Lot-Sample #...: D2I130349-011 **Work Order #...:** E781E **Matrix.....:** SO
Date Sampled...: 09/11/02 13:33 **Date Received..:** 09/13/02

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
n-Hexane Extractable Material	ND	500	mg/kg	SW846 9071B	10/07/02	2282145
		Dilution Factor: 1		Analysis Time..: 15:00	MDL.....: 160	
Percent Moisture	**13**	**0.10**	**%**	**MCAWW 160.3 MOD**	**10/05/02**	**2280354**
		Dilution Factor: 1		Analysis Time..: 13:45	MDL.....:	

US GEOLOGICAL SURVEY

Client Sample ID: STATION10-02

General Chemistry

Lot-Sample #...: D2I130349-012 **Work Order #...:** E781F **Matrix.....:** SO
Date Sampled...: 09/11/02 13:47 **Date Received..:** 09/13/02

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
n-Hexane Extractable Material	ND	500	mg/kg	SW846 9071B	10/07/02	2282145
		Dilution Factor: 1		Analysis Time..: 15:00	MDL.....: 160	
Percent Moisture	**12**	**0.10**	**%**	**MCAWW 160.3 MOD**	**10/05/02**	**2280354**
		Dilution Factor: 1		Analysis Time..: 13:45	MDL.....:	

QC DATA ASSOCIATION SUMMARY

D2I130349

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SO	SW846 9071B		2277476	2280066
	SO	SW846 6020		2266449	2267016
	SO	SW846 7471A		2259171	2259066
	SO	SW846 8260B		2262339	2262150
	SO	SW846 8270C		2262151	2262042
	SO	SW846 6010B		2260316	2260137
	SO	MCAWW 160.3 MOD		2280354	2280166
002	SO	SW846 9071B		2277476	2280066
	SO	SW846 6020		2266449	2267016
	SO	SW846 7471A		2259171	2259066
	SO	SW846 8260B		2262339	2262150
	SO	SW846 8270C		2262151	2262042
	SO	SW846 6010B		2260316	2260137
	SO	MCAWW 160.3 MOD		2280354	2280166
003	SO	SW846 9071B		2282145	2282045
	SO	SW846 6020		2266449	2267016
	SO	SW846 7471A		2259171	2259066
	SO	SW846 8260B		2262339	2262150
	SO	SW846 8270C		2262151	2262042
	SO	SW846 6010B		2260316	2260137
	SO	MCAWW 160.3 MOD		2280354	2280166
004	SO	SW846 9071B		2282145	2282045
	SO	SW846 6020		2266449	2267016
	SO	SW846 7471A		2259171	2259066
	SO	SW846 8260B		2262339	2262150
	SO	SW846 8270C		2262151	2262042
	SO	SW846 6010B		2260316	2260137
	SO	MCAWW 160.3 MOD		2280354	2280166
005	SO	SW846 9071B		2282145	2282045
	SO	SW846 6020		2266449	2267016
	SO	SW846 7471A		2259171	2259066
	SO	SW846 8260B		2262339	2262150
	SO	SW846 8270C		2262151	2262042
	SO	SW846 6010B		2260316	2260137
	SO	MCAWW 160.3 MOD		2280354	2280166
006	SO	SW846 9071B		2282145	2282045
	SO	SW846 6020		2266449	2267016
	SO	SW846 7471A		2259171	2259066

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QC DATA ASSOCIATION SUMMARY

D2I130349

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
006	SO	SW846 8260B		2262339	2262150
	SO	SW846 8270C		2262151	2262042
	SO	SW846 6010B		2260316	2260137
	SO	MCAWW 160.3 MOD		2280354	2280166
007	SO	SW846 9071B		2282145	2282045
	SO	SW846 6020		2266449	2267016
	SO	SW846 7471A		2259171	2259066
	SO	SW846 8260B		2262339	2262150
	SO	SW846 8270C		2262151	2262042
	SO	SW846 6010B		2260316	2260137
	SO	MCAWW 160.3 MOD		2280354	2280166
008	SO	SW846 9071B		2282145	2282045
	SO	SW846 6020		2266449	2267016
	SO	SW846 7471A		2259171	2259066
	SO	SW846 8260B		2262339	2262150
	SO	SW846 8270C		2262151	2262042
	SO	SW846 6010B		2260316	2260137
	SO	MCAWW 160.3 MOD		2280354	2280166
009	SO	SW846 9071B		2282145	2282045
	SO	SW846 6020		2266449	2267016
	SO	SW846 7471A		2259171	2259066
	SO	SW846 8260B		2262339	2262150
	SO	SW846 8270C		2262151	2262042
	SO	SW846 6010B		2260316	2260137
	SO	MCAWW 160.3 MOD		2280354	2280166
010	SO	SW846 9071B		2282145	2282045
	SO	SW846 6020		2266449	2267016
	SO	SW846 7471A		2259171	2259066
	SO	SW846 8260B		2262339	2262150
	SO	SW846 8270C		2262151	2262042
	SO	SW846 6010B		2260316	2260137
	SO	MCAWW 160.3 MOD		2280354	2280166
011	SO	SW846 9071B		2282145	2282045
	SO	SW846 6020		2266449	2267016
	SO	SW846 7471A		2259171	2259066
	SO	SW846 8260B		2262339	2262150
	SO	SW846 8270C		2262151	2262042
	SO	SW846 6010B		2260316	2260137

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QC DATA ASSOCIATION SUMMARY

D2I130349

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
011	SO	MCAWW 160.3 MOD		2280354	2280166
012	SO	SW846 9071B		2282145	2282045
	SO	SW846 6020		2266449	2267016
	SO	SW846 7471A		2259171	2259066
	SO	SW846 8260B		2262339	2262150
	SO	SW846 8270C		2262151	2262042
	SO	SW846 6010B		2260316	2260137
	SO	MCAWW 160.3 MOD		2280354	2280166

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D2I130349 **Work Order #...:** E8HV01AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: D2I190000-339 E8HV01AD-LCSD
Prep Date.....: 09/18/02 **Analysis Date..:** 09/18/02
Prep Batch #...: 2262339 **Analysis Time..:** 12:49
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**111**	**(80 - 120)**			**SW846 8260B**
	106	**(80 - 120)**	**4.1**	**(0-25)**	**SW846 8260B**
Chlorobenzene	**108**	**(73 - 113)**			**SW846 8260B**
	109	**(73 - 113)**	**0.21**	**(0-25)**	**SW846 8260B**
1,1 Dichloroethene	**86**	**(72 - 119)**			**SW846 8260B**
	92	**(72 - 119)**	**7.5**	**(0-25)**	**SW846 8260B**
Toluene	**101**	**(74 - 114)**			**SW846 8260B**
	105	**(74 - 114)**	**4.1**	**(0-25)**	**SW846 8260B**
Trichloroethene	**101**	**(77 - 117)**			**SW846 8260B**
	103	**(77 - 117)**	**2.5**	**(0-25)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	103	(82 - 122)
	96	(82 - 122)
1,2-Dichloroethane-d4	107	(80 - 122)
	96	(80 - 122)
4-Bromofluorobenzene	101	(78 - 121)
	99	(78 - 121)
Toluene-d8	93	(77 - 118)
	99	(77 - 118)

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 Volatiles

Client Lot #...: D2I130349 **Work Order #...:** E8HV01AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: D2I190000-339 E8HV01AD-LCSD
Prep Date.....: 09/18/02 **Analysis Date..:** 09/18/02
Prep Batch #...: 2262339 **Analysis Time..:** 12:49
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Benzene	**50.0**	**55.4**	**ug/kg**	**111**		**SW846 8260B**
	50.0	**53.2**	**ug/kg**	**106**	**4.1**	**SW846 8260B**
Chlorobenzene	**50.0**	**54.2**	**ug/kg**	**108**		**SW846 8260B**
	50.0	**54.3**	**ug/kg**	**109**	**0.21**	**SW846 8260B**
1,1-Dichloroethene	**50.0**	**42.8**	**ug/kg**	**86**		**SW846 8260B**
	50.0	**46.2**	**ug/kg**	**92**	**7.5**	**SW846 8260B**
Toluene	**50.0**	**50.3**	**ug/kg**	**101**		**SW846 8260B**
	50.0	**52.4**	**ug/kg**	**105**	**4.1**	**SW846 8260B**
Trichloroethene	**50.0**	**50.3**	**ug/kg**	**101**		**SW846 8260B**
	50.0	**51.6**	**ug/kg**	**103**	**2.5**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	103	(82 - 122)
	96	(82 - 122)
1,2-Dichloroethane-d4	107	(80 - 122)
	96	(80 - 122)
4-Bromofluorobenzene	101	(78 - 121)
	99	(78 - 121)
Toluene-d8	93	(77 - 118)
	99	(77 - 118)

NOTE(S):

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

Bold print denotes control parameters

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: D2I130349 **Work Order #...:** E8HV01AA **Matrix.....:** SOLID
MB Lot-Sample #: D2I190000-339

Prep Date.....: 09/18/02 **Analysis Time..:** 13:12
Analysis Date..: 09/18/02 **Prep Batch #...:** 2262339
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	20	ug/kg	SW846 8260B
Acrolein	ND	100	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
2-Butanone (MEK)	ND	20	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Chloroform	ND	10	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
Dibromomethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
trans-1,4-Dichloro-2-butene	ND	5.0	ug/kg	SW846 8260B
1,4-Dioxane	ND	500	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Ethyl methacrylate	ND	5.0	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
Iodomethane	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	**4.1 J**	**5.0**	**ug/kg**	**SW846 8260B**
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: D2I130349 **Work Order #...:** E8HV01AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
Vinyl acetate	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
Acetonitrile	**39 J**	**100**	**ug/kg**	**SW846 8260B**
Allyl chloride	ND	10	ug/kg	SW846 8260B
Chloroprene	ND	5.0	ug/kg	SW846 8260B
Propionitrile	ND	50	ug/kg	SW846 8260B
Methacrylonitrile	ND	50	ug/kg	SW846 8260B
Isobutyl alcohol	ND	200	ug/kg	SW846 8260B
Methyl methacrylate	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	98	(82 - 122)
1,2-Dichloroethane-d4	101	(80 - 122)
4-Bromofluorobenzene	99	(78 - 121)
Toluene-d8	93	(77 - 118)

NOTE(S):

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

J Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

Method Blank Report

GC/MS Volatiles

Lot-Sample #: D2I190000-339 B **Work Order #:** E8HV01AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		8.9 J	M	15.028	ug/kg
Acetic Acid, 2-ethylhexyl este	103-09-3	28 J	M	15.836	ug/kg
Unknown		9.8 J	M	17.423	ug/kg
Unknown		6.3 J	M	18.162	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D2I130349 **Work Order #...:** E75K61AD-MS **Matrix.....:** SOLID
MS Lot-Sample #: D2I120222-001 E75K61AE-MSD
Date Sampled...: 09/11/02 09:25 **Date Received..:** 09/12/02
Prep Date.....: 09/18/02 **Analysis Date..:** 09/18/02
Prep Batch #...: 2262339 **Analysis Time..:** 14:39
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**106**	**(80 - 120)**			**SW846 8260B**
	106	**(80 - 120)**	**0.08**	**(0-25)**	**SW846 8260B**
Chlorobenzene	108	(73 - 113)			**SW846 8260B**
	114 a	**(73 - 113)**	**5.4**	**(0-25)**	**SW846 8260B**
1,1-Dichloroethene	**93**	**(72 - 119)**			**SW846 8260B**
	95	**(72 - 119)**	**2.5**	**(0-25)**	**SW846 8260B**
Toluene	**106**	**(74 - 114)**			**SW846 8260B**
	109	**(74 - 114)**	**2.4**	**(0-25)**	**SW846 8260B**
Trichloroethene	**102**	**(77 - 117)**			**SW846 8260B**
	101	**(77 - 117)**	**0.64**	**(0-25)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(82 - 122)
	93	(82 - 122)
1,2-Dichloroethane-d4	95	(80 - 122)
	98	(80 - 122)
4-Bromofluorobenzene	100	(78 - 121)
	105	(78 - 121)
Toluene-d8	98	(77 - 118)
	99	(77 - 118)

NOTE(S):

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

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: D2I130349 **Work Order #...:** E75K61AD-MS **Matrix.....:** SOLID
MS Lot-Sample #: D2I120222-001 E75K61AE-MSD
Date Sampled...: 09/11/02 09:25 **Date Received..:** 09/12/02
Prep Date.....: 09/18/02 **Analysis Date..:** 09/18/02
Prep Batch #...: 2262339 **Analysis Time..:** 14:39
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Benzene	**ND**	**50.6**	**53.7**	**ug/kg**	**106**		**SW846 8260B**
	ND	**50.6**	**53.7**	**ug/kg**	**106**	**0.08**	**SW846 8260B**
Chlorobenzene	**ND**	**50.6**	**54.7**	**ug/kg**	**108**		**SW846 8260B**
	ND	**50.6**	**57.7**	**ug/kg**	**114 a**	**5.4**	**SW846 8260B**
1,1-Dichloroethene	**ND**	**50.6**	**47.1**	**ug/kg**	**93**		**SW846 8260B**
	ND	**50.6**	**48.3**	**ug/kg**	**95**	**2.5**	**SW846 8260B**
Toluene	**ND**	**50.6**	**53.6**	**ug/kg**	**106**		**SW846 8260B**
	ND	**50.6**	**54.9**	**ug/kg**	**109**	**2.4**	**SW846 8260B**
Trichloroethene	**ND**	**50.6**	**51.6**	**ug/kg**	**102**		**SW846 8260B**
	ND	**50.6**	**51.2**	**ug/kg**	**101**	**0.64**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(82 - 122)
	93	(82 - 122)
1,2-Dichloroethane-d4	95	(80 - 122)
	98	(80 - 122)
4-Bromofluorobenzene	100	(78 - 121)
	105	(78 - 121)
Toluene-d8	98	(77 - 118)
	99	(77 - 118)

NOTE(S):

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

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: D2I130349 Work Order #...: E8GN81AC-LCS Matrix.....: SOLID
LCS Lot-Sample#: D2I190000-151 E8GN81AD-LCSD
Prep Date.....: 09/19/02 Analysis Date..: 09/20/02
Prep Batch #...: 2262151 Analysis Time..: 13:17
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	61	(51 - 87)			SW846 8270C
	58	(51 - 87)	4.8	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	69	(50 - 92)			SW846 8270C
	67	(50 - 92)	3.7	(0-40)	SW846 8270C
2-Chlorophenol	65	(50 - 88)			SW846 8270C
	62	(50 - 88)	3.8	(0-36)	SW846 8270C
1,4-Dichlorobenzene	60	(47 - 83)			SW846 8270C
	54	(47 - 83)	11	(0-40)	SW846 8270C
2,4-Dinitrotoluene	67	(49 - 99)			SW846 8270C
	61	(49 - 99)	9.3	(0-40)	SW846 8270C
4-Nitrophenol	65	(32 - 94)			SW846 8270C
	56	(32 - 94)	15	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	63	(45 - 90)			SW846 8270C
	59	(45 - 90)	7.1	(0-40)	SW846 8270C
Pentachlorophenol	62	(35 - 95)			SW846 8270C
	58	(35 - 95)	8.0	(0-40)	SW846 8270C
Phenol	64	(48 - 90)			SW846 8270C
	63	(48 - 90)	2.5	(0-37)	SW846 8270C
Pyrene	63	(48 - 95)			SW846 8270C
	59	(48 - 95)	6.8	(0-40)	SW846 8270C
1,2,4-Trichloro-benzene	60	(50 - 87)			SW846 8270C
	55	(50 - 87)	8.8	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	68	(39 - 92)
	65	(39 - 92)
Phenol-d5	66	(34 - 95)
	65	(34 - 95)
Nitrobenzene-d5	64	(40 - 94)
	60	(40 - 94)
2-Fluorobiphenyl	61	(40 - 91)
	59	(40 - 91)
2,4,6-Tribromophenol	69	(34 - 97)
	65	(34 - 97)
Terphenyl-d14	70	(37 - 99)

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: D2I130349 **Work Order #...:** E8GN81AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: D2I190000-151 E8GN81AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
	68	(37 - 99)

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 #...: D2I130349 Work Order #...: E8GN81AC-LCS Matrix.....: SOLID
LCS Lot-Sample#: D2I190000-151 E8GN81AD-LCSD
Prep Date.....: 09/19/02 Analysis Date..: 09/20/02
Prep Batch #...: 2262151 Analysis Time..: 13:17
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Acenaphthene	3330	2040	ug/kg	61		SW846 8270C
	3330	1950	ug/kg	58	4.8	SW846 8270C
4-Chloro-3-methylphenol	5000	3450	ug/kg	69		SW846 8270C
	5000	3330	ug/kg	67	3.7	SW846 8270C
2-Chlorophenol	5000	3230	ug/kg	65		SW846 8270C
	5000	3110	ug/kg	62	3.8	SW846 8270C
1,4-Dichlorobenzene	3330	2000	ug/kg	60		SW846 8270C
	3330	1790	ug/kg	54	11	SW846 8270C
2,4-Dinitrotoluene	3330	2240	ug/kg	67		SW846 8270C
	3330	2040	ug/kg	61	9.3	SW846 8270C
4-Nitrophenol	5000	3250	ug/kg	65		SW846 8270C
	5000	2790	ug/kg	56	15	SW846 8270C
N-Nitrosodi-n-propyl-amine	3330	2110	ug/kg	63		SW846 8270C
	3330	1970	ug/kg	59	7.1	SW846 8270C
Pentachlorophenol	5000	3110	ug/kg	62		SW846 8270C
	5000	2880	ug/kg	58	8.0	SW846 8270C
Phenol	5000	3210	ug/kg	64		SW846 8270C
	5000	3130	ug/kg	63	2.5	SW846 8270C
Pyrene	3330	2110	ug/kg	63		SW846 8270C
	3330	1980	ug/kg	59	6.8	SW846 8270C
1,2,4-Trichloro-benzene	3330	2000	ug/kg	60		SW846 8270C
	3330	1830	ug/kg	55	8.8	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	68	(39 - 92)
	65	(39 - 92)
Phenol-d5	66	(34 - 95)
	65	(34 - 95)
Nitrobenzene-d5	64	(40 - 94)
	60	(40 - 94)
2-Fluorobiphenyl	61	(40 - 91)
	59	(40 - 91)
2,4,6-Tribromophenol	69	(34 - 97)
	65	(34 - 97)
Terphenyl-d14	70	(37 - 99)

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: D2I130349 **Work Order #...:** E8GN81AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: D2I190000-151 E8GN81AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
	68	(37 - 99)

NOTE(S):

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

Bold print denotes control parameters

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: D2I130349 **Work Order #...:** E8GN81AA **Matrix.....:** SOLID
MB Lot-Sample #: D2I190000-151

Prep Date.....: 09/19/02 **Analysis Time..:** 12:54
Analysis Date..: 09/20/02 **Prep Batch #...:** 2262151
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
4-Dimethylaminoazobenzene	ND	660	ug/kg	SW846 8270C
2-sec-Butyl-4,6-dinitro-phenol	ND	660	ug/kg	SW846 8270C
Diphenylamine	ND	330	ug/kg	SW846 8270C
o-Toluidine	ND	660	ug/kg	SW846 8270C
2,2'-oxybis(1-Chloropropa	ND	330	ug/kg	SW846 8270C
Acenaphthene	ND	330	ug/kg	SW846 8270C
Acenaphthylene	ND	330	ug/kg	SW846 8270C
Aniline	ND	330	ug/kg	SW846 8270C
Anthracene	ND	330	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	330	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	330	ug/kg	SW846 8270C
Benzo(b)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	330	ug/kg	SW846 8270C
Benzo(k)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzyl alcohol	ND	330	ug/kg	SW846 8270C
4-Bromophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
Butyl benzyl phthalate	ND	330	ug/kg	SW846 8270C
4-Chloroaniline	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethoxy) methane	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethyl)-ether	ND	330	ug/kg	SW846 8270C
4-Chloro-3-methylphenol	ND	330	ug/kg	SW846 8270C
2-Chloronaphthalene	ND	330	ug/kg	SW846 8270C
2-Chlorophenol	ND	330	ug/kg	SW846 8270C
4-Chlorophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
Chrysene	ND	330	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	ND	330	ug/kg	SW846 8270C
Dibenzofuran	ND	330	ug/kg	SW846 8270C
Di-n-butyl phthalate	ND	330	ug/kg	SW846 8270C
1,2-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,3-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,4-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
3,3'-Dichlorobenzidine	ND	1600	ug/kg	SW846 8270C
2,4-Dichlorophenol	ND	330	ug/kg	SW846 8270C
Diethyl phthalate	ND	660	ug/kg	SW846 8270C
2,4-Dimethylphenol	ND	330	ug/kg	SW846 8270C
Dimethyl phthalate	ND	330	ug/kg	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: D2I130349 **Work Order #...:** E8GN81AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
4,6-Dinitro-2-methylphenol	ND	1600	ug/kg	SW846 8270C
2,4-Dinitrophenol	ND	1600	ug/kg	SW846 8270C
2,4-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
2,6-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
Di-n-octyl phthalate	ND	330	ug/kg	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	SW846 8270C
Fluoranthene	ND	330	ug/kg	SW846 8270C
Fluorene	ND	330	ug/kg	SW846 8270C
Hexachlorobenzene	ND	330	ug/kg	SW846 8270C
Hexachlorobutadiene	ND	330	ug/kg	SW846 8270C
Hexachlorocyclopentadiene	ND	1600	ug/kg	SW846 8270C
Hexachloroethane	ND	330	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	SW846 8270C
Isophorone	ND	330	ug/kg	SW846 8270C
2-Methylnaphthalene	ND	330	ug/kg	SW846 8270C
2-Methylphenol	ND	330	ug/kg	SW846 8270C
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	SW846 8270C
Naphthalene	ND	330	ug/kg	SW846 8270C
2-Nitroaniline	ND	1600	ug/kg	SW846 8270C
3-Nitroaniline	ND	1600	ug/kg	SW846 8270C
4-Nitroaniline	ND	1600	ug/kg	SW846 8270C
Nitrobenzene	ND	330	ug/kg	SW846 8270C
2-Nitrophenol	ND	330	ug/kg	SW846 8270C
4-Nitrophenol	ND	1600	ug/kg	SW846 8270C
N-Nitrosodimethylamine	ND	330	ug/kg	SW846 8270C
N-Nitrosodiphenylamine	ND	330	ug/kg	SW846 8270C
N-Nitrosodi-n-propylamine	ND	330	ug/kg	SW846 8270C
Pentachlorophenol	ND	1600	ug/kg	SW846 8270C
Phenanthrene	ND	330	ug/kg	SW846 8270C
Phenol	ND	330	ug/kg	SW846 8270C
Pyrene	ND	330	ug/kg	SW846 8270C
Pyridine	ND	660	ug/kg	SW846 8270C
1,2,4-Trichlorobenzene	ND	330	ug/kg	SW846 8270C
2,4,5-Trichlorophenol	ND	330	ug/kg	SW846 8270C
2,4,6-Trichlorophenol	ND	330	ug/kg	SW846 8270C
Acetophenone	ND	330	ug/kg	SW846 8270C
2-Acetylaminofluorene	ND	3300	ug/kg	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: D2I130349 **Work Order #...:** E8GN81AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
4-Aminobiphenyl	ND	1600	ug/kg	SW846 8270C
Aramite	ND	660	ug/kg	SW846 8270C
2,6-Dichlorophenol	ND	330	ug/kg	SW846 8270C
7,12-Dimethylbenz(a)-anthracene	ND	660	ug/kg	SW846 8270C
3,3'-Dimethylbenzidine	ND	660	ug/kg	SW846 8270C
alpha,alpha-Dimethylphene	ND	1600	ug/kg	SW846 8270C
1,3-Dinitrobenzene	ND	330	ug/kg	SW846 8270C
Ethyl methanesulfonate	ND	330	ug/kg	SW846 8270C
Hexachloropropene	ND	3300	ug/kg	SW846 8270C
Isosafrole	ND	660	ug/kg	SW846 8270C
Methapyrilene	ND	1600	ug/kg	SW846 8270C
3-Methylcholanthrene	ND	660	ug/kg	SW846 8270C
Methyl methanesulfonate	ND	330	ug/kg	SW846 8270C
1,4-Naphthoquinone	ND	1600	ug/kg	SW846 8270C
1-Naphthylamine	ND	330	ug/kg	SW846 8270C
2-Naphthylamine	ND	330	ug/kg	SW846 8270C
5-Nitro-o-toluidine	ND	660	ug/kg	SW846 8270C
N-Nitrosodiethylamine	ND	330	ug/kg	SW846 8270C
N-Nitrosodi-n-butylamine	ND	330	ug/kg	SW846 8270C
N-Nitrosomethylethylamine	ND	330	ug/kg	SW846 8270C
N-Nitrosomorpholine	ND	330	ug/kg	SW846 8270C
N-Nitrosopiperidine	ND	330	ug/kg	SW846 8270C
N-Nitrosopyrrolidine	ND	330	ug/kg	SW846 8270C
Pentachlorobenzene	ND	330	ug/kg	SW846 8270C
Pentachloroethane	ND	1600	ug/kg	SW846 8270C
Pentachloronitrobenzene	ND	1600	ug/kg	SW846 8270C
Phenacetin	ND	660	ug/kg	SW846 8270C
2-Picoline	ND	660	ug/kg	SW846 8270C
Pronamide	ND	660	ug/kg	SW846 8270C
Safrole	ND	1600	ug/kg	SW846 8270C
1,2,4,5-Tetrachloro-benzene	ND	330	ug/kg	SW846 8270C
2,3,4,6-Tetrachlorophenol	ND	1600	ug/kg	SW846 8270C
1,3,5-Trinitrobenzene	ND	1600	ug/kg	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	68	(39 - 92)
Phenol-d5	66	(34 - 95)
Nitrobenzene-d5	65	(40 - 94)
2-Fluorobiphenyl	59	(40 - 91)
2,4,6-Tribromophenol	60	(34 - 97)
Terphenyl-d14	67	(37 - 99)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: D2I130349 **Work Order #...:** E8GN81AA **Matrix.....:** SOLID

NOTE(S):

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

US GEOLOGICAL SURVEY

Method Blank Report

GC/MS Semivolatiles

Lot-Sample #: D2I190000-151 B **Work Order #:** E8GN81AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		4900 J	M	3.6303	ug/kg
Unknown aldol condensate		95000 J	M	3.8591	ug/kg
Unknown		380 J	M	4.1197	ug/kg
Unknown		4500 J	M	4.4017	ug/kg
Unknown		710 J	M	4.9283	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: D2I130349 **Work Order #...:** E78011CR-MS **Matrix.....:** SO
MS Lot-Sample #: D2I130349-001 E78011CT-MSD
Date Sampled...: 09/11/02 10:18 **Date Received..:** 09/13/02
Prep Date.....: 09/19/02 **Analysis Date..:** 09/20/02
Prep Batch #...: 2262151 **Analysis Time..:** 14:53
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	60	(51 - 87)			SW846 8270C
	57	(51 - 87)	4.9	(0-40)	SW846 8270C
4-Chloro-3-methylphenol	69	(50 - 92)			SW846 8270C
	64	(50 - 92)	7.1	(0-40)	SW846 8270C
2-Chlorophenol	67	(50 - 88)			SW846 8270C
	63	(50 - 88)	5.6	(0-36)	SW846 8270C
1,4-Dichlorobenzene	61	(47 - 83)			SW846 8270C
	59	(47 - 83)	3.7	(0-40)	SW846 8270C
2,4-Dinitrotoluene	72	(49 - 99)			SW846 8270C
	64	(49 - 99)	11	(0-40)	SW846 8270C
4-Nitrophenol	60	(32 - 94)			SW846 8270C
	56	(32 - 94)	6.4	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	65	(45 - 90)			SW846 8270C
	63	(45 - 90)	2.8	(0-40)	SW846 8270C
Pentachlorophenol	48	(35 - 95)			SW846 8270C
	35	(35 - 95)	30	(0-40)	SW846 8270C
Phenol	66	(48 - 90)			SW846 8270C
	63	(48 - 90)	5.2	(0-37)	SW846 8270C
Pyrene	64	(48 - 95)			SW846 8270C
	58	(48 - 95)	10	(0-40)	SW846 8270C
1,2,4-Trichloro-benzene	60	(50 - 87)			SW846 8270C
	57	(50 - 87)	4.3	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	67	(39 - 92)
	67	(39 - 92)
Phenol-d5	67	(34 - 95)
	65	(34 - 95)
Nitrobenzene-d5	66	(40 - 94)
	66	(40 - 94)
2-Fluorobiphenyl	57	(40 - 91)
	57	(40 - 91)
2,4,6-Tribromophenol	64	(34 - 97)
	59	(34 - 97)

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: D2I130349 **Work Order #...:** E78011CR-MS **Matrix.....:** SO
MS Lot-Sample #: D2I130349-001 E78011CT-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	66	(37 - 99)
	63	(37 - 99)

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/MS Semivolatiles

Client Lot #...: D2I130349 Work Order #...: E78011CR-MS Matrix.....: SO
MS Lot-Sample #: D2I130349-001 E78011CT-MSD
Date Sampled...: 09/11/02 10:18 Date Received..: 09/13/02
Prep Date.....: 09/19/02 Analysis Date..: 09/20/02
Prep Batch #...: 2262151 Analysis Time..: 14:53
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Acenaphthene	ND	3330	2000	ug/kg	60		SW846 8270C
	ND	3330	1910	ug/kg	57	4.9	SW846 8270C
4-Chloro-3-methylphenol	ND	5000	3450	ug/kg	69		SW846 8270C
	ND	5000	3210	ug/kg	64	7.1	SW846 8270C
2-Chlorophenol	ND	5000	3330	ug/kg	67		SW846 8270C
	ND	5000	3150	ug/kg	63	5.6	SW846 8270C
1,4-Dichlorobenzene	ND	3330	2030	ug/kg	61		SW846 8270C
	ND	3330	1950	ug/kg	59	3.7	SW846 8270C
2,4-Dinitrotoluene	ND	3330	2380	ug/kg	72		SW846 8270C
	ND	3330	2150	ug/kg	64	11	SW846 8270C
4-Nitrophenol	ND	5000	2980	ug/kg	60		SW846 8270C
	ND	5000	2790	ug/kg	56	6.4	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	3330	2160	ug/kg	65		SW846 8270C
	ND	3330	2100	ug/kg	63	2.8	SW846 8270C
Pentachlorophenol	ND	5000	2390	ug/kg	48		SW846 8270C
	ND	5000	1760	ug/kg	35	30	SW846 8270C
Phenol	ND	5000	3320	ug/kg	66		SW846 8270C
	ND	5000	3150	ug/kg	63	5.2	SW846 8270C
Pyrene	ND	3330	2140	ug/kg	64		SW846 8270C
	ND	3330	1930	ug/kg	58	10	SW846 8270C
1,2,4-Trichloro-benzene	ND	3330	1990	ug/kg	60		SW846 8270C
	ND	3330	1900	ug/kg	57	4.3	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	67	(39 - 92)
	67	(39 - 92)
Phenol-d5	67	(34 - 95)
	65	(34 - 95)
Nitrobenzene-d5	66	(40 - 94)
	66	(40 - 94)
2-Fluorobiphenyl	57	(40 - 91)
	57	(40 - 91)
2,4,6-Tribromophenol	64	(34 - 97)
	59	(34 - 97)

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MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: D2I130349 **Work Order #...:** E78011CR-MS **Matrix.....:** SO
MS Lot-Sample #: D2I130349-001 E78011CT-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	66	(37 - 99)
	63	(37 - 99)

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

Lot-Sample #...: D2I130349 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Mercury	99	(82 - 113)			SW846 7471A	09/19/02	2259171
	100	(82 - 113)	1.6	(0-20)	SW846 7471A	09/19/02	2259171
		Dilution Factor: 1			Analysis Time..: 18:59		
Barium	98	(87 - 110)			SW846 6010B	09/20-10/01/02	2260316
	95	(87 - 110)	4.0	(0-20)	SW846 6010B	09/20-10/01/02	2260316
		Dilution Factor: 1			Analysis Time..: 18:59		
Chromium	100	(83 - 110)			SW846 6010B	09/20-10/01/02	2260316
	96	(83 - 110)	4.2	(0-20)	SW846 6010B	09/20-10/01/02	2260316
		Dilution Factor: 1			Analysis Time..: 18:59		
Cobalt	98	(83 - 104)			SW846 6010B	09/20-10/01/02	2260316
	94	(83 - 104)	4.4	(0-20)	SW846 6010B	09/20-10/01/02	2260316
		Dilution Factor: 1			Analysis Time..: 18:59		
Copper	95	(84 - 110)			SW846 6010B	09/20-10/01/02	2260316
	92	(84 - 110)	3.9	(0-20)	SW846 6010B	09/20-10/01/02	2260316
		Dilution Factor: 1			Analysis Time..: 18:59		
Iron	96	(86 - 110)			SW846 6010B	09/20-09/24/02	2260316
	96	(86 - 110)	0.05	(0-20)	SW846 6010B	09/20-09/24/02	2260316
		Dilution Factor: 1			Analysis Time..: 21:00		
Nickel	97	(86 - 108)			SW846 6010B	09/20-10/01/02	2260316
	93	(86 - 108)	4.0	(0-20)	SW846 6010B	09/20-10/01/02	2260316
		Dilution Factor: 1			Analysis Time..: 18:59		
Zinc	104	(82 - 107)			SW846 6010B	09/20-10/01/02	2260316
	93	(82 - 107)	11	(0-20)	SW846 6010B	09/20-10/01/02	2260316
		Dilution Factor: 1			Analysis Time..: 18:59		
Cadmium	97	(84 - 109)			SW846 6020	10/01-10/08/02	2266449
	94	(84 - 109)	2.7	(0-20)	SW846 6020	10/01-10/08/02	2266449
		Dilution Factor: 1			Analysis Time..: 16:03		
Lead	97	(86 - 112)			SW846 6020	10/01-10/08/02	2266449
	96	(86 - 112)	0.89	(0-20)	SW846 6020	10/01-10/08/02	2266449
		Dilution Factor: 1			Analysis Time..: 16:03		

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: D2I130349 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #

NOTE(S):

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

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Lot-Sample #...: D2I130349 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Mercury	0.417	0.411	mg/kg	99		SW846 7471A	09/19/02	2259171
	0.417	0.417	mg/kg	100	1.6	SW846 7471A	09/19/02	2259171
			Dilution Factor: 1			Analysis Time..: 18:59		
Barium	200	197	mg/kg	98		SW846 6010B	09/20-10/01/02	2260316
	200	189	mg/kg	95	4.0	SW846 6010B	09/20-10/01/02	2260316
			Dilution Factor: 1			Analysis Time..: 18:59		
Chromium	20.0	20.0	mg/kg	100		SW846 6010B	09/20-10/01/02	2260316
	20.0	19.1	mg/kg	96	4.2	SW846 6010B	09/20-10/01/02	2260316
			Dilution Factor: 1			Analysis Time..: 18:59		
Cobalt	50.0	48.9	mg/kg	98		SW846 6010B	09/20-10/01/02	2260316
	50.0	46.8	mg/kg	94	4.4	SW846 6010B	09/20-10/01/02	2260316
			Dilution Factor: 1			Analysis Time..: 18:59		
Copper	25.0	23.9	mg/kg	95		SW846 6010B	09/20-10/01/02	2260316
	25.0	22.9	mg/kg	92	3.9	SW846 6010B	09/20-10/01/02	2260316
			Dilution Factor: 1			Analysis Time..: 18:59		
Iron	100	96.4	mg/kg	96		SW846 6010B	09/20-09/24/02	2260316
	100	96.5	mg/kg	96	0.05	SW846 6010B	09/20-09/24/02	2260316
			Dilution Factor: 1			Analysis Time..: 21:00		
Nickel	50.0	48.4	mg/kg	97		SW846 6010B	09/20-10/01/02	2260316
	50.0	46.5	mg/kg	93	4.0	SW846 6010B	09/20-10/01/02	2260316
			Dilution Factor: 1			Analysis Time..: 18:59		
Zinc	50.0	51.8	mg/kg	104		SW846 6010B	09/20-10/01/02	2260316
	50.0	46.6	mg/kg	93	11	SW846 6010B	09/20-10/01/02	2260316
			Dilution Factor: 1			Analysis Time..: 18:59		
Cadmium	20000	19400	ug/kg	97		SW846 6020	10/01-10/08/02	2266449
	20000	18800	ug/kg	94	2.7	SW846 6020	10/01-10/08/02	2266449
			Dilution Factor: 1			Analysis Time..: 16:03		
Lead	20000	19400	ug/kg	97		SW846 6020	10/01-10/08/02	2266449
	20000	19200	ug/kg	96	0.89	SW846 6020	10/01-10/08/02	2266449
			Dilution Factor: 1			Analysis Time..: 16:03		

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Lot-Sample #...: D2I130349 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #

NOTE(S):

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

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: D2I130349 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: D2I160000-171 **Prep Batch #...:** 2259171						
Mercury	ND	0.033	mg/kg	SW846 7471A	09/19/02	E79VE1AA
		Dilution Factor: 1				
		Analysis Time..: 18:57				
MB Lot-Sample #: D2I170000-316 **Prep Batch #...:** 2260316						
Barium	ND	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E8C431AA
		Dilution Factor: 1				
		Analysis Time..: 18:54				
Chromium	ND	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E8C431AC
		Dilution Factor: 1				
		Analysis Time..: 18:54				
Cobalt	ND	1.0	mg/kg	SW846 6010B	09/20-10/01/02	E8C431AD
		Dilution Factor: 1				
		Analysis Time..: 18:54				
Copper	ND	2.0	mg/kg	SW846 6010B	09/20-10/01/02	E8C431AE
		Dilution Factor: 1				
		Analysis Time..: 18:54				
Iron	ND	10	mg/kg	SW846 6010B	09/20-09/24/02	E8C431AF
		Dilution Factor: 1				
		Analysis Time..: 20:56				
Nickel	ND	4.0	mg/kg	SW846 6010B	09/20-10/01/02	E8C431AG
		Dilution Factor: 1				
		Analysis Time..: 18:54				
Zinc	ND	2.0	mg/kg	SW846 6010B	09/20-10/01/02	E8C431AH
		Dilution Factor: 1				
		Analysis Time..: 18:54				
MB Lot-Sample #: D2I230000-449 **Prep Batch #...:** 2266449						
Cadmium	ND	100	ug/kg	SW846 6020	10/01-10/08/02	E8PR61AA
		Dilution Factor: 1				
		Analysis Time..: 15:59				
Lead	ND	100	ug/kg	SW846 6020	10/01-10/08/02	E8PR61AC
		Dilution Factor: 1				
		Analysis Time..: 15:59				

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: D2I130349

Matrix.....: SOLID

NOTE(S):

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: D2I130349 **Matrix.....:** SOLID
Date Sampled...: 09/12/02 11:00 **Date Received..:** 09/13/02

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D2I130177-002 **Prep Batch #...:** 2259171							
Mercury	96	(82 - 113)			SW846 7471A	09/19/02	E77KF1C1
	98	(82 - 113)	2.2	(0-20)	SW846 7471A	09/19/02	E77KF1C2

Dilution Factor: 1
Analysis Time..: 19:17

NOTE(S):

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

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: D2I130349 **Matrix.....:** SOLID
Date Sampled...: 09/12/02 11:00 **Date Received..:** 09/13/02

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D2I130177-002 **Prep Batch #...:** 2259171									
Mercury									
	0.016	0.657	0.647	mg/kg	96		SW846 7471A	09/19/02	E77KF1C1
	0.016	0.657	0.662	mg/kg	98	2.2	SW846 7471A	09/19/02	E77KF1C2

Dilution Factor: 1
Analysis Time..: 19:17

NOTE(S):

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

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: D2I130349 **Matrix.....:** SO
Date Sampled...: 09/11/02 10:18 **Date Received..:** 09/13/02

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D2I130349-001 **Prep Batch #...:** 2260316							
Barium	190 N	(87 - 110)			SW846 6010B	09/20-10/01/02	E78011AT
	172 N	(87 - 110)	4.8	(0-20)	SW846 6010B	09/20-10/01/02	E78011AU
		Dilution Factor: 1					
		Analysis Time..: 19:17					
Chromium	89	(83 - 110)			SW846 6010B	09/20-10/01/02	E78011AV
	109	(83 - 110)	15	(0-20)	SW846 6010B	09/20-10/01/02	E78011AW
		Dilution Factor: 1					
		Analysis Time..: 19:17					
Cobalt	93	(83 - 104)			SW846 6010B	09/20-10/01/02	E78011AX
	94	(83 - 104)	1.7	(0-20)	SW846 6010B	09/20-10/01/02	E78011A0
		Dilution Factor: 1					
		Analysis Time..: 19:17					
Copper	107	(84 - 110)			SW846 6010B	09/20-10/01/02	E78011A1
	109	(84 - 110)	1.7	(0-20)	SW846 6010B	09/20-10/01/02	E78011A2
		Dilution Factor: 1					
		Analysis Time..: 19:17					
Iron	NC,MSB	(86 - 110)			SW846 6010B	09/20-09/24/02	E78011A3
	NC,MSB	(86 - 110)		(0-20)	SW846 6010B	09/20-09/24/02	E78011A4
		Dilution Factor: 1					
		Analysis Time..: 21:41					
Nickel	90	(86 - 108)			SW846 6010B	09/20-10/01/02	E78011A5
	94	(86 - 108)	4.1	(0-20)	SW846 6010B	09/20-10/01/02	E78011A6
		Dilution Factor: 1					
		Analysis Time..: 19:17					
Zinc	92	(82 - 107)			SW846 6010B	09/20-10/01/02	E78011A7
	103	(82 - 107)	8.8	(0-20)	SW846 6010B	09/20-10/01/02	E78011A8
		Dilution Factor: 1					
		Analysis Time..: 19:17					
MS Lot-Sample #: D2I130349-001 **Prep Batch #...:** 2266449							
Cadmium	92	(84 - 109)			SW846 6020	10/01-10/08/02	E78011CU
	91	(84 - 109)	0.20	(0-20)	SW846 6020	10/01-10/08/02	E78011CV
		Dilution Factor: 1					
		Analysis Time..: 16:23					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: D2I130349 **Matrix.....:** SO
Date Sampled...: 09/11/02 10:18 **Date Received..:** 09/13/02

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	95	(86 - 112)			SW846 6020	10/01-10/08/02	E78011CW
	94	(86 - 112)	1.2	(0-20)	SW846 6020	10/01-10/08/02	E78011CX

Dilution Factor: 1
Analysis Time..: 16:23

NOTE(S):

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

N Spiked analyte recovery is outside stated control limits.

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: D2I130349 **Matrix.....:** SO
Date Sampled...: 09/11/02 10:18 **Date Received..:** 09/13/02

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D2I130349-001 **Prep Batch #...:** 2260316									
Barium									
	380	200	760 N	mg/kg	190		SW846 6010B	09/20-10/01/02	E78011AT
	380	200	724 N	mg/kg	172	4.8	SW846 6010B	09/20-10/01/02	E78011AU
			Dilution Factor: 1						
			Analysis Time..: 19:17						
Chromium									
	7.7	20.0	25.5	mg/kg	89		SW846 6010B	09/20-10/01/02	E78011AV
	7.7	20.0	29.5	mg/kg	109	15	SW846 6010B	09/20-10/01/02	E78011AW
			Dilution Factor: 1						
			Analysis Time..: 19:17						
Cobalt									
	3.6	50.0	49.9	mg/kg	93		SW846 6010B	09/20-10/01/02	E78011AX
	3.6	50.0	50.8	mg/kg	94	1.7	SW846 6010B	09/20-10/01/02	E78011A0
			Dilution Factor: 1						
			Analysis Time..: 19:17						
Copper									
	4.1	25.0	30.8	mg/kg	107		SW846 6010B	09/20-10/01/02	E78011A1
	4.1	25.0	31.3	mg/kg	109	1.7	SW846 6010B	09/20-10/01/02	E78011A2
			Dilution Factor: 1						
			Analysis Time..: 19:17						
Iron									
	6300	100	5440	mg/kg			SW846 6010B	09/20-09/24/02	E78011A3
			Qualifiers: NC,MSB						
	6300	100	7800	mg/kg			SW846 6010B	09/20-09/24/02	E78011A4
			Qualifiers: NC,MSB						
			Dilution Factor: 1						
			Analysis Time..: 21:41						
Nickel									
	6.9	50.0	52.0	mg/kg	90		SW846 6010B	09/20-10/01/02	E78011A5
	6.9	50.0	54.1	mg/kg	94	4.1	SW846 6010B	09/20-10/01/02	E78011A6
			Dilution Factor: 1						
			Analysis Time..: 19:17						
Zinc									
	17	50.0	62.4	mg/kg	92		SW846 6010B	09/20-10/01/02	E78011A7
	17	50.0	68.1	mg/kg	103	8.8	SW846 6010B	09/20-10/01/02	E78011A8
			Dilution Factor: 1						
			Analysis Time..: 19:17						

MS Lot-Sample #: D2I130349-001 **Prep Batch #...:** 2266449

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: D2I130349 **Matrix.....:** SO
Date Sampled...: 09/11/02 10:18 **Date Received..:** 09/13/02

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Cadmium									
	170	20000	18500	ug/kg	92		SW846 6020	10/01-10/08/02	E78011CU
	170	20000	18500	ug/kg	91	0.20	SW846 6020	10/01-10/08/02	E78011CV
			Dilution Factor: 1						
			Analysis Time..: 16:23						
Lead									
	4800	20000	23900	ug/kg	95		SW846 6020	10/01-10/08/02	E78011CW
	4800	20000	23600	ug/kg	94	1.2	SW846 6020	10/01-10/08/02	E78011CX
			Dilution Factor: 1						
			Analysis Time..: 16:23						

NOTE(S):

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

N Spiked analyte recovery is outside stated control limits.

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: D2I130349 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
n-Hexane Extractable Material		WO#:E9HEF1AC-LCS/E9HEF1AD-LCSD				LCS Lot-Sample#: D2J040000-476	
	80	(74 - 105)			SW846 9071B	10/03/02	2277476
	76	(74 - 105)	5.1	(0-20)	SW846 9071B	10/03/02	2277476
		Dilution Factor: 1			Analysis Time..: 15:00		
n-Hexane Extractable Material		WO#:E9LW61AC-LCS/E9LW61AD-LCSD				LCS Lot-Sample#: D2J090000-145	
	86	(74 - 105)			SW846 9071B	10/07/02	2282145
	96	(74 - 105)	12	(0-20)	SW846 9071B	10/07/02	2282145
		Dilution Factor: 1			Analysis Time..: 15:00		

NOTE(S):

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

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #...: D2I130349 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
n-Hexane Extractable Material		WO#:E9HEF1AC-LCS/E9HEF1AD-LCSD				LCS Lot-Sample#: D2J040000-476		
	2000	1600	mg/kg	80		SW846 9071B	10/03/02	2277476
	2000	1520	mg/kg	76	5.1	SW846 9071B	10/03/02	2277476
		Dilution Factor: 1				Analysis Time..: 15:00		
n-Hexane Extractable Material		WO#:E9LW61AC-LCS/E9LW61AD-LCSD				LCS Lot-Sample#: D2J090000-145		
	2000	1710	mg/kg	86		SW846 9071B	10/07/02	2282145
	2000	1920	mg/kg	96	12	SW846 9071B	10/07/02	2282145
		Dilution Factor: 1				Analysis Time..: 15:00		

NOTE(S):

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

METHOD BLANK REPORT

General Chemistry

Client Lot #...: D2I130349 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
n-Hexane Extractable Material		Work Order #: E9HEF1AA		MB Lot-Sample #:	D2J040000-476	
	ND	500	mg/kg	SW846 9071B	10/03/02	2277476
		Dilution Factor: 1				
		Analysis Time..: 15:00				
n-Hexane Extractable Material		Work Order #: E9LW61AA		MB Lot-Sample #:	D2J090000-145	
	ND	500	mg/kg	SW846 9071B	10/07/02	2282145
		Dilution Factor: 1				
		Analysis Time..: 15:00				

NOTE(S):

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: D2I130349 **Matrix.....:** SOLID
Date Sampled...: 09/16/02 16:30 **Date Received..:** 09/17/02

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
n-Hexane Extractable Material		WO#: E8C861AN-MS/E8C861AP-MSD				MS Lot-Sample #: D2I170184-002	
	81	(74 - 105)			SW846 9071B	10/03/02	2277476
	79	(74 - 105)	2.7	(0-20)	SW846 9071B	10/03/02	2277476

Dilution Factor: 1
Analysis Time..: 15:00

NOTE(S):

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

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: D2I130349 **Matrix.....:** SOLID
Date Sampled...: 09/16/02 16:30 **Date Received..:** 09/17/02

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
n-Hexane Extractable Material			WO#: E8C861AN-MS/E8C861AP-MSD				MS Lot-Sample #: D2I170184-002		
	ND	3060	2720	mg/kg	81		SW846 9071B	10/03/02	2277476
	ND	3060	2640	mg/kg	79	2.7	SW846 9071B	10/03/02	2277476

Dilution Factor: 1
Analysis Time..: 15:00

NOTE(S):

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

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: D2I130349 **Matrix.....:** SO
Date Sampled...: 09/11/02 11:05 **Date Received..:** 09/13/02

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
n-Hexane Extractable Material		WO#: E78031AT-MS/E78031AU-MSD				MS Lot-Sample #: D2I130349-003	
	92	(74 - 105)			SW846 9071B	10/07/02	2282145
	93	(74 - 105)	1.3	(0-20)	SW846 9071B	10/07/02	2282145

Dilution Factor: 1
Analysis Time..: 15:00

NOTE(S):

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

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: D2I130349 **Matrix.....:** SO
Date Sampled...: 09/11/02 11:05 **Date Received..:** 09/13/02

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
n-Hexane Extractable Material	WO#: E78031AT-MS/E78031AU-MSD						MS Lot-Sample #: D2I130349-003		
	ND	2000	1860	mg/kg	92		SW846 9071B	10/07/02	2282145
	ND	2000	1880	mg/kg	93	1.3	SW846 9071B	10/07/02	2282145

Dilution Factor: 1
Analysis Time..: 15:00

NOTE(S):

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

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: D2I130349 **Work Order #...:** E781F-SMP E781F-DUP **Matrix.....:** SO

Date Sampled...: 09/11/02 13:47 **Date Received..:** 09/13/02

% Moisture.....: 12

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture						SD Lot-Sample #:	D2I130349-012	
	12	12	%	2.4	(0-20)	MCAWW 160.3 MOD	10/05/02	2280354

Dilution Factor: 1 Analysis Time..: 13:45

V-8 C
DS
9/13

U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION, NEW MEXICO DISTRICT
ANALYTICAL REQUEST/CHAIN OF CUSTODY

Project Name & Number: CAnnon Air Force Base Drilling 463536006	PACKING AND SHIPPING DETAILS
Sampling Location: Cannon Air Force Base, New Mexico NE DRAINAGE DITCH	Packed and Sealed for Shipping by: Fred Gebhardt — Seal Number: 331258
Team Leader: Fredrick E. Gebhardt	Delivered to Shipper by: Fred Gebhardt — Airbill Number: 8324 3545 8271
	Sampling Status: [X] Done [ ] Continuing

Sample Date	Sample Time	Field Sample Number	Sample Type	No. of Containers	Analytical Methods (Parameters)	Remarks
9/11/02	1018	STATION 1 - 02	Soil	2	VOC-SW8260B, Semi-VOA SW8270C, TPH SW9071B, Metals 6010B/6020 (Ba, Cd, Co, Cr, Cu, Fe, Ni, Pb, Zn), and 7471A (Mecury)	Environmental Sample
"	1040	STATION 2R-02	"	2	"	"
"	1105	STATION 3R-02	"	2	"	"
"	1120	STATION 3RR-02	"	2	"	"
"	1140	STATION 4 - 02	"	2	"	"

Additional Comments

CHAIN OF CUSTODY RECORD				LABORATORY LOG-IN OF SAMPLE SHIPPING CONTAINER	
Relinquished by (signed)	Received by (signed)	Date	Time	Analytical Laboratory	Seal Intact upon Receipt [ ] Yes [ ] No
Fredrick E. Gebhardt	TO FEDERAL EXPRESS	9/12/02	1200	Severn Trent Services 4955 Yarrow Street Arvada, CO 80002 ph: (303) 736-0184 Attention: Karen Kuoppala	Condition of Contents
	[signature]	9/13/02	0900		Contents Temperature
					Laboratory Project Number

U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION, NEW MEXICO DISTRICT
ANALYTICAL REQUEST/CHAIN OF CUSTODY

Project Name & Number		PACKING AND SHIPPING DETAILS	
CAnnon Air Force Base Drilling	463536006	Packed and Sealed for Shipping by Fred Gebhardt	Seal Number 331258
Sampling Location Cannon Air Force Base, New Mexico NE DRAINAGE DITCH		Delivered to Shipper by Fred Gebhardt	Airbill Number 8324 3545 8271
Team Leader Fredrick E. Gebhardt		Sampling Status [X] Done [ ] Continuing	

Sample Date	Sample Time	Field Sample Number	Sample Type	No. of Containers	Analytical Methods (Parameters)	Remarks
9/11/02	1205	STATION 2L-02	Soil	2	VOC-SW8260B, Semi-VOA SW8270C, TPH SW9071B, Metals 6010B/6020 (Ba, Cd, Co, Cr, Cu, Fe, Ni, Pb, Zn), and 7471A (Mecury)	Environmental Sample
"	1230	STATION 5-02	"	2	"	"
"	1255	STATION 6-02	"	2	"	"
"	1307	STATION 7-02	"	2	"	"
"	1321	STATION 8-02	"	2	"	"

Additional Comments

CHAIN OF CUSTODY RECORD				LABORATORY LOG-IN OF SAMPLE SHIPPING CONTAINER	
Relinquished by (signed)	Received by (signed)	Date	Time	Analytical Laboratory	Seal Intact upon Receipt [ ] Yes [ ] No
Fredrick E. Gebhardt	TO FEDERAL EXPRESS	9/12/02	1200	Severn Trent Services 4955 Yarrow Street Arvada, CO 80002 ph: (303) 736-0184 Attention: Karen Kuoppala	Condition of Contents
	[signature]	9/13/02	0906		Contents Temperature
					Laboratory Project Number

U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION, NEW MEXICO DISTRICT
ANALYTICAL REQUEST/CHAIN OF CUSTODY

Project Name & Number: CAnnon Air Force Base Drilling 463536006	PACKING AND SHIPPING DETAILS
Sampling Location: Cannon Air Force Base, New Mexico NE DRAINAGE DITCH	Packed and Sealed for Shipping by: Fred Gebhardt — Seal Number: 331258
Team Leader: Fredrick E. Gebhardt	Delivered to Shipper by: Fred Gebhardt — Airbill Number: 8324 3545 8271
	Sampling Status: [X] Done [ ] Continuing

Sample Date	Sample Time	Field Sample Number	Sample Type	No. of Containers	Analytical Methods (Parameters)	Remarks
9/11/02	1333	STATION 9-02	Soil	2	VOC-SW8260B, Semi-VOA SW8270C, TPH SW9071B, Metals 6010B/6020 (Ba, Cd, Co, Cr, Cu, Fe, Ni, Pb, Zn), and 7471A (Mecury)	Environmental Sample
9/11/02	1347	STATION 10-02	"	2	"	"

Additional Comments

CHAIN OF CUSTODY RECORD				LABORATORY LOG-IN OF SAMPLE SHIPPING CONTAINER	
Relinquished by (signed)	Received by (signed)	Date	Time	Analytical Laboratory	Seal Intact upon Receipt [ ] Yes [ ] No
Fredrick E. Gebhardt	TO FEDERAL EXPRESS	9/12/02	1200	Severn Trent Services 4955 Yarrow Street Arvada, CO 80002 ph: (303) 736-0184 Attention: Karen Kuoppala	Condition of Contents
	[signature]	9/13/02	0900		Contents Temperature
					Laboratory Project Number

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STL Denver

Sample Receiving Checklist

Lot #: D2I130349 Date/Time Received: 9/13/02 0400

Company Name & Sampling Site: USGS / Cannon AFB

*Cooler #(s): 1

Temperatures (°C): 0.8°

PM to Complete This Section: *Yes* *No*

Residual chlorine check required: ☐ ☐

Time Zone:

• EDT/EST • CDT/CST • MDT/MST • PDT/PST • OTHER

25228

Unpacking & Labeling Check Points:

N/A	Yes	No		Initials
☐	☑	☐	1. Cooler seals intact. (N/A if hand delivered)	
	☑	☐	2. Chain of custody present.	
	☐	☑	3. Bottles broken and/or are leaking, comment if yes.	
	☐	☑	4. Multiphase samples present? If yes, comment below.	
			PHOTOGRAPH BROKEN BOTTLES/MULTIPHASE SAMPLES	
	☑	☐	5. Proper container & preservatives used (ref. Attachment D of SOP# DEN-QA-0003)	
☑	☐	☐	6. pH of all samples checked and meet requirements, note exceptions.	
	☑	☐	7. Chain of custody includes "received by" and "relinquished" by signatures, dates, and times.	
	☐	☑	8. Receipt date(s) > 48 hours past the collection date(s)? If yes, notify PA/PM.	
	☑	☐	9. Chain of custody agrees with bottle count, comment if no.	
	☑	☐	10. Chain of custody agrees with labels, comment if no.	
☑	☐	☐	11. VOA samples filled completely, comment if no.	
☑	☐	☐	12. VOA vials preserved, check label. Preservative ☐HCl ☐4±2°C ☐Sodium Thiosulfate	
	☐	☑	13. Did samples require preservation with sodium thiosulfate?	
☑	☐	☐	14. If yes to #12, did the samples contain residual chlorine?	
☑	☐	☐	15. Sediment present in dissolved/filtered bottles.	
	☐	☑	16. Are analyses with short holding times requested?	
	☐	☑	17. Was a quick Turn Around (TAT) requested?	
☑	☐	☐	18. Is extra sample volume provided for MS, MSD or matrix duplicates?	
			DOUBLECHECK METALS,SAMPLE LABELS & SUBCONTRACT	
☑	☐	☐	19. Subcontract COC signed and sent with samples to bottle prep?	
	☑	☐	20. Were sample labels double-checked by a second person?	
☑	☐	☐	21. Were sample bottles and COC double checked for dissolved/filtered metals by a second person?	
☑	☐	☐	22. If applicable, were AFCEE Metals placed in the walkin refrigerator?	

Document any problems or discrepancies and the actions taken to resolve them on a Condition Upon Receipt Anomaly Report (CUR).

This portion can be removed for Recipient's records

te 9/12/02 Fed Ex Tracking Number [illegible]71

nder's me FRED GERJARDT 7978

Company US GEOLOGICAL SURVEY

Address 5338 MONTGOMERY RD NE STE 400

Dept./Floor/Suite/Room

ALBUQUERQUE State NM ZIP 87109

ur Internal Billing Reference 463536006