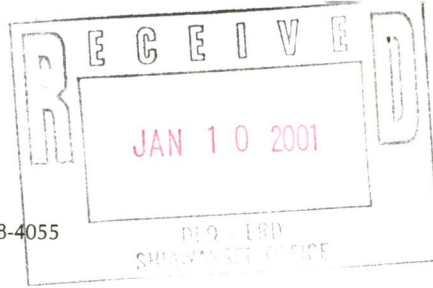




Roy F. Weston, Inc.
Suite 500
750 East Bunker Court
Vernon Hills, IL 60061-1450
847-918-4000 • Fax 847-918-4055
www.rfweston.com



9 January 2001

Mr. James Innes
Michigan Department of Environmental Quality
Shiawassee District Headquarters
10650 Bennett Drive
Morrice, MI 48857-9792

Work Order No.: 01138.079.003

Re: Annual Groundwater Sampling and Methane Monitoring
Linden Road Landfill Site
Flint Township, Michigan

Dear Mr. Innes:

Roy F. Weston, Inc. (WESTON), on behalf of General Motors Corporation GM), has completed the first annual groundwater sampling and methane monitoring activities at the Linden Road Landfill site located in Flint Township, Michigan. The groundwater sampling was performed to evaluate the groundwater quality after the placement of the soil cover system in Parcel # 1, as required by the Operation and Maintenance (O&M) Plan for the Linden Road Landfill site dated April 1999. The baseline groundwater sampling and the initial methane monitoring activities were completed in October 1999 and the findings were documented in a report dated 20 December 1999 submitted to the Michigan Department of Environmental Quality (MDEQ).

The following letter report presents the results of the first annual groundwater sampling and methane monitoring activities.

Groundwater Sampling

Groundwater sampling was conducted on October 18, 2000 by Weston personnel. The groundwater samples were collected from each of the nine (MW-1S, MW-3S, MW-5S, MW-6S, MW-7S, MW-10S, MW-11S, MW-12S, and MW-13S) shallow groundwater monitoring wells on site. A groundwater sample was not collected from Piezometer PZ-01, as it did not contain sufficient water for sampling.

The attached Figure 1 shows the locations of all the groundwater monitoring wells. A single groundwater sample was collected from each of the nine shallow groundwater-monitoring wells. A Field Duplicate sample was also collected from Monitoring Well MW-1S for quality assurance/quality control (QA/QC) purposes. All sampling and shipping procedures were consistent with those established in the sampling plan for the site. Temperature, conductivity, and pH measurements were not recorded due to equipment malfunction. A minimum of three times the volumes of water present in each well were purged prior to sampling.





Mr. James Innes
Michigan Department of Environmental Quality

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9 January 2001

The samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), "Michigan Ten Metals," and polychlorinated biphenyls (PCBs) by Fire & Environmental Consulting Laboratories, Inc. (FECL) of East Lansing, Michigan. A WESTON chemist, in accordance with applicable United States Environmental Protection Agency (U.S. EPA) procedures, validated the analytical data.

The attached Table 1 presents a summary of all the detected constituents and their respective concentrations for each sample. A copy of the complete laboratory report, including Laboratory QA/QC data, and the chain-of-custody documentation, is presented as Attachment A. Table 1 also compares the concentrations of the detected constituents in the groundwater samples to the MDEQ Generic Drinking Water Criteria for residential and industrial/commercial categories.

Among the VOCs detected, only the concentrations of trichloroethene, and cis-1, 2-dichloroethene in wells MW-1S and MW-5S, exceeded the MDEQ Generic Drinking Water Criteria for Residential and Industrial/Commercial properties. It should be noted that both the monitoring wells MW-1S and MW-5S are located along the western property boundary and in the upgradient direction. Presence of VOCs in these wells has been documented in past sampling events, and is believed to be migrating from the adjacent property to the west.

Bis(2-chloroisopropyl)ether, detected in the samples from well MW-1S (0.02 mg/L), and its duplicate MW-1S-Dup (0.02 mg/L) was the only SVOC detected in this sampling effort and was below the MDEQ generic drinking water criteria.

As shown in Table 1, trace concentrations of barium, zinc, and arsenic were detected in several samples. None of the detected metal concentrations exceeded MDEQ generic drinking water criteria.

PCBs were not detected in any of the samples.

Methane Monitoring

During this sampling event, Weston also screened the methane monitoring wells (M-1, M-2, M-3, M-4) shown in Figure 1 for methane gas. Methane screening was conducted using a combustible gas indicator (CGI), which measures the concentration of potential explosive gases based on the percentage of lower explosive limit (LEL). Screening results indicated that wells M-1, M-2, M-3, and M-4 registered LEL readings of 40 percent, 0 percent, 4 percent, and 2 percent respectively on the CGI. Baseline methane monitoring performed in October 1999 did not indicate elevated LEL in well M-1. Based upon the current LEL in well M-1, Weston, on behalf of GM proposes to perform methane monitoring on all four wells on a quarterly basis to identify any trends in the presence of methane. The quarterly monitoring will continue until LEL is consistently below 25 percent. Methane monitoring results will be submitted to the MDEQ



Mr. James Innes
Michigan Department of Environmental Quality

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9 January 2001

expeditiously. The next methane monitoring activity will be conducted during the last week of January 2001. The next annual groundwater sampling will occur in October 2001.

If you have any questions or require additional information, please call me at (847) 918-4018.

Very truly yours,

ROY F. WESTON, INC.

A handwritten signature in blue ink, appearing to read "S. Babusukumar".

S. Babusukumar, P.G.
Project Manager

cc: R. Metcalf, GM

Table 1
Comparison of Detected Compounds to MDEQ Generic Drinking Water Criteria
Groundwater Sampling Analytical Results
Linden Road Site
October 2000
(All Concentrations in mg/L)

Compound	MW-1S	MW-1S-Dup	MW-3S	MW-5S	MW-6S	MW-7S	MW-10S	MW-11S	MW-12S	MW-13S	MDEQ Generic Drinking Water Criteria	
											Residential	Industrial/Commercial
VOCs												
Trichloroethene	0.06	0.07	ND	1.16	ND	ND	0.001	ND	ND	0.001	0.005	0.005
1,1-Dichloroethane	ND	ND	0.017	ND	ND	ND	0.039	ND	ND	ND	0.88	2.5
cis-1,2-Dichloroethene	0.25	0.28	0.035	0.09	ND	ND	0.002	ND	ND	ND	0.07	0.07
1,2-Dichloropropane	ND	ND	0.001	ND	ND	ND	ND	ND	ND	ND	0.005	0.005
Trans-1,2-Dichloroethene	ND	ND	0.002	ND	ND	ND	ND	ND	ND	ND	0.100	0.100
1,3,5-Trimethylbenzene	0.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.0	2.9
SVOCs												
Bis(2-chloroisopropyl)ether	0.02	0.02	ND	ND	ND	ND	ND	ND	ND	ND	--	--
Total Metals												
Barium	0.08	.08	0.15	0.14	0.02	0.02	0.02	0.39	0.15	0.06	2.0	2.0
Zinc	ND	ND	ND	ND	0.02	ND	0.01	ND	ND	ND	2.4	5.0
Arsenic	ND	ND	0.007	ND	0.002	0.002	0.007	0.017	ND	ND	0.05	0.05

ND = Compound not detected above the laboratory method detection limit.

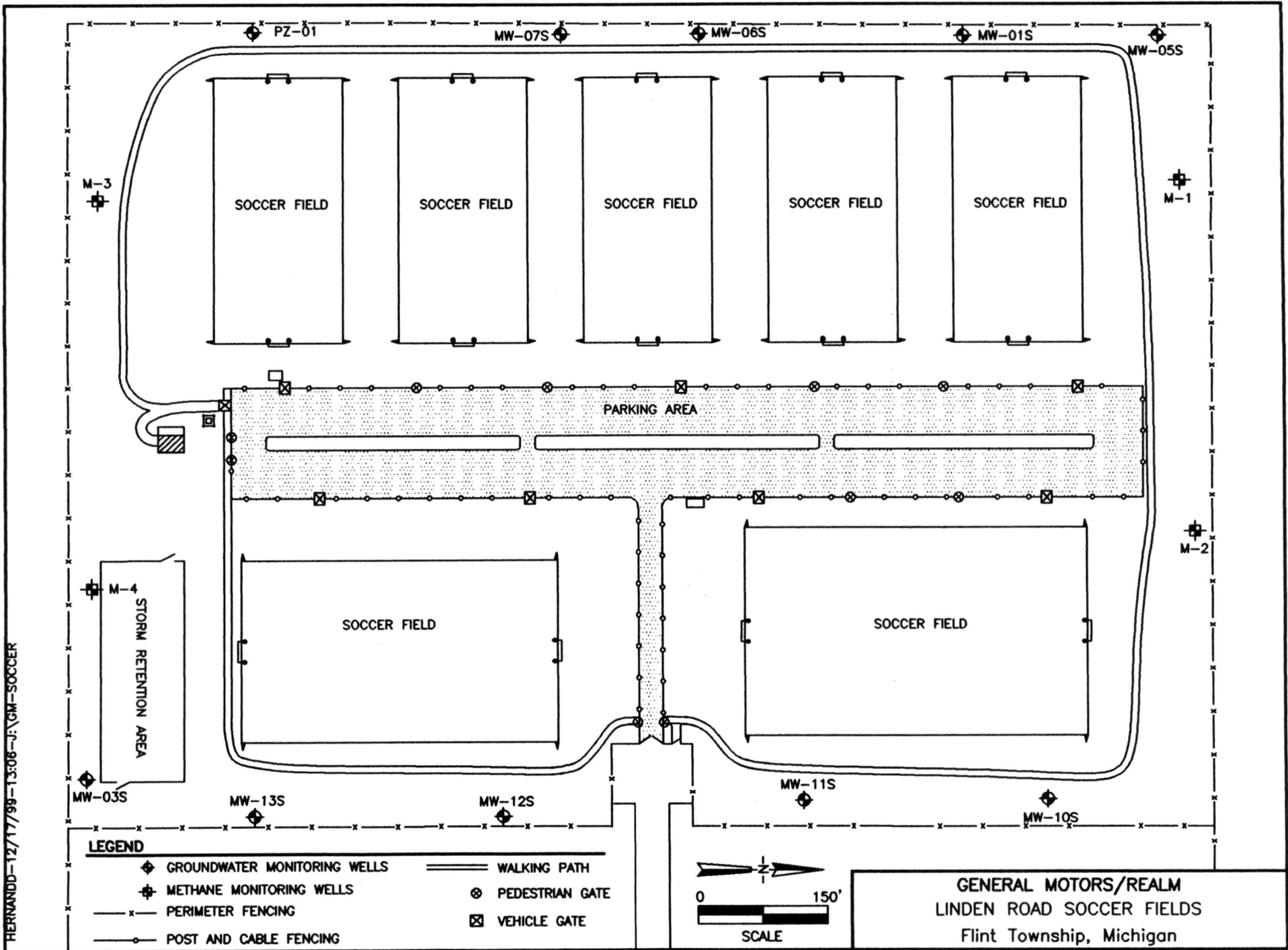
-- = No criteria available.

* = Duplicate of MW-1S.

Note: = Samples were also analyzed for PCBs, but were not detected.

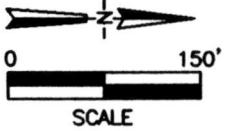
■ = Shaded areas indicate that concentrations exceed MDEQ Generic Drinking Water Criteria.

HERNAND-12/17/99-13:06-J:GM-SOCCER



LEGEND

- | | | | |
|-----|------------------------------|---|-----------------|
| ◆ | GROUNDWATER MONITORING WELLS | — | WALKING PATH |
| ⊕ | METHANE MONITORING WELLS | ⊗ | PEDESTRIAN GATE |
| —x— | PERIMETER FENCING | ⊠ | VEHICLE GATE |
| —○— | POST AND CABLE FENCING | | |



GENERAL MOTORS/REALM
LINDEN ROAD SOCCER FIELDS
Flint Township, Michigan

Attachment A
Laboratory Analytical Results

GM
Project 01130-079-003
Lab Set 3531

All samples were analyzed for volatile organics, semivolatile organics, PCBs, and metals. (Sample 11 was a trip blank that was analyzed for volatile analysis only).

FEC Lab No.	Sample Name	Date Collected
3531.01	MW-07S	10/18/00
3531.02	MW06S	10/18/00
3531.03	MW-01S	10/18/00
3531.04	MW-01S Dup	10/18/00
3531.05	MW-05S	10/18/00
3531.06	MW-11S	10/18/00
3531.07	MW-10S	10/18/00
3531.08	MW-12S	10/18/00
3531.09	MW-13S	10/18/00
3531.10	MW-03S	10/18/00
3531.11	Trip Blank	10/18/00

Volatile Organics:

1. Method Blank:

All 11 samples were initially analyzed on 10/29. No blank contamination was associated with these samples. Due to high target hits and/or suspect TCE carryover from a past run, six of the 11 samples were reanalyzed. The blank associated with the reanalysis contained the following compounds: (11/1 13:31pm) methylene chloride, 1,2,4-trimethylbenzene, and 1,4-dichlorobenzene. Based on clean blank results from the initial analysis and no methylene chloride detected in the initial sample results, the methylene chloride detected in reanalyzed sample 6 is due to laboratory contamination. Therefore, the result is less than 10 times the blank contamination and is flagged as nondetect, U. All other results are acceptable.

2. Surrogate Recovery

All surrogate recoveries were within required limits.

3. Matrix Spike/Matrix Spike Duplicate

Sample 11 was used as the MS/MSD. The following compounds had %RPDs outside the control limits: 4-methyl-2-pentanone (27.2), 2-hexanone (29), trans-1,3-dichloropropene (27), trans-1,4-dichloro-2-butene (49.5), 1,2,3-trichlorobenzene (36.3), and naphthalene (40.9). These compounds are flagged as estimated J. Non-detects are not qualified.

4. Instrument Performance Check

All performance check results are acceptable.

5. Internal Standards

All internal standard recoveries were within the control limits (50 to 200).

6. Calibration Check Compounds

The calibration check compounds indicated acceptable results.

GM
Project 01130-079-003
Lab Set 3531
Cont.

Semivolatiles:

1. Method Blank

The method blank compound was free of contamination.

2. Surrogate Recovery:

All surrogate recoveries were within required control limits.

3. Matrix Spike/Matrix Spike Duplicate

All MS/MSD recoveries were within required control limits.

4. Instrument Performance Check

All performance check results are acceptable. The performance compound check was acceptable.

5. Internal Standards

All internal standard recoveries were within the control limits (50 to 200).

6. Calibration Check Compounds

The calibration check compounds indicated acceptable results.

PCBs

1. Method Blank

The following compounds were detected in the blank: aroclor 1016 and 1260 were detected in the method blank. However, PBCs were not detected in any of the samples. Therefore, no qualifications are required.

2. Surrogate Recovery

All surrogate recoveries were acceptable.

3. Matrix Spike/Matrix Spike Duplicate

All MS/MSD recoveries were acceptable.

4. Initial Calibration

Calibration data supplies appears acceptable.

GM
Project 01130-079-003
Lab Set 3531
Cont.

Metals

1. Matrix Spike/Matrix Spike Duplicate
All MS/MSD recoveries were within the required control limits.
2. Relative Percent Difference
All %RPDs were acceptable.
3. Calibration
Initial calibration verification and blanks showed acceptable responses. The continuing calibration verifications and blanks indicated acceptable responses.
4. Laboratory Control Sample
All laboratory control sample results were within required ranges.

Mercury

1. Matrix Spike/Matrix Spike Duplicate
Sample 03 was used as the MS/MSD. All recoveries were acceptable.
2. Laboratory Control Sample
All laboratory control sample results were within control limits.
3. Initial and continuing calibration
The ICV and CCV recoveries were within the required control limits.
4. Other
It appears that a mercury standard or performance evaluation sample was run with this sample set. The % recovery was within the performance acceptance limits.

Data Reviewed by: T. Balla

Date: 12/5/00



Analytical Laboratory Report

Report ID: S03531.01(01)
Generated on 11/02/2000

Report to
Attention: Mr. Babusukumar
Roy F. Weston, Inc.
750 E. Bunker Ct. Ste. 500
Vernon Hills, IL 60061

Report produced by
Fire & Environmental Consulting Laboratories
1451 East Lansing Drive, Suite 222
Evanston, IL 60202

Phone: (517) 332-0167 FAX: (517) 332-6333

Phone: 847-918-4000 FAX: 847-918-4055

Report Summary

Lab Sample ID(s): S03531.01-S03531.11
Project: 01138 079 003
Submitted Date/Time: 10/19/2000 11:45
Sampled by: T. Carmichael
P.O. #:

Report Notes

Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
Results relate only to items tested.
Report shall not be reproduced except in full, without the written approval of FECL.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Lab Sample ID: S03531.01
 Sample Tag: MW-07S
 Collected Date/Time: 10/18/2000 09:30
 Matrix: Groundwater
 COC Reference: 002328

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40 ml Glass	None	Yes	4	3184
2	1 L Amber	None	Yes	4	3184
1	125ml Plastic	HNO3	Yes	4	3184

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Metals								
Digestion	Completed			varies	10/24/00	EMIL		
Arsenic	0.002	mg/L	0.001	200.8	10/24/00	EMIL	7440-38-2	
Barium	0.02	mg/L	0.01	200.8	10/24/00	EMIL	7440-39-3	
Cadmium	Not detected	mg/L	0.0002	200.8	10/24/00	EMIL	7440-43-9	
Chromium	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-47-3	
Copper	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-50-8	
Lead	Not detected	mg/L	0.003	200.8	10/24/00	EMIL	7439-92-1	
Mercury	Not detected	mg/L	0.0002	245.1M	10/25/00	EMIL	7439-97-6	
Selenium	Not detected	mg/L	0.005	200.8	10/24/00	EMIL	7782-49-2	
Silver	Not detected	mg/L	0.0005	200.8	10/24/00	EMIL	7440-22-4	
Zinc	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-66-6	
Organics								
BNA Extraction	Completed			3510	10/23/00	KJT		
Extraction, PCB	Completed			3510	10/23/00	JKB		
PCB								
PCB-1016	Not detected	mg/L	0.0001	8082	10/25/00	JANB	12674-11-2	
PCB-1221	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11104-28-2	
PCB-1232	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11141-16-5	
PCB-1248	Not detected	mg/L	0.0001	8082	10/25/00	JANB	12672-29-6	
PCB-1254	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11097-69-1	
PCB-1260	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11096-82-5	
PCB-1242	Not detected	mg/L	0.0001	8082	10/25/00	JANB	53469-21-9	
Total PCB	Not detected	mg/L	0.0001	8082	10/25/00	JANB		
Volatile Organics								
Benzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	71-43-2	
Bromodichloromethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-27-4	
Bromoform	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-25-2	
Bromomethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	74-83-9	
n-Butylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	104-51-8	
sec-Butylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	135-98-8	
tert-Butylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	98-06-6	
Carbon tetrachloride	Not detected	mg/L	0.001	8260	10/29/00	VFM	56-23-5	
Chlorobenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	108-90-7	
Chloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-00-3	
Chloroform	Not detected	mg/L	0.001	8260	10/29/00	VFM	67-66-3	
Chloromethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	74-87-3	
Dibromochloromethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	124-48-1	
1,2-Dichlorobenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	95-50-1	



Analytical Laboratory Report

Lab Sample ID: S03531.01 (continued)

Sample Tag: MW-07S

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
Volatile Organics (continued)								
1,3-Dichlorobenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	541-73-1	
1,4-Dichlorobenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	106-46-7	
1,1-Dichloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-34-3	
1,2-Dichloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	107-06-2	
1,1-Dichloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-35-4	
cis-1,2-Dichloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	156-59-2	
trans-1,2-Dichloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	156-60-5	
1,2-Dichloropropane	Not detected	mg/L	0.001	8260	10/29/00	VFM	78-87-5	
cis-1,3-Dichloropropene	Not detected	mg/L	0.001	8260	10/29/00	VFM	10061-01-5	
trans-1,3-Dichloropropene	Not detected	mg/L	0.001	8260	10/29/00	VFM	10061-02-6	
Ethylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	100-41-4	
Isopropylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	98-82-8	
p-Isopropyltoluene	Not detected	mg/L	0.001	8260	10/29/00	VFM	99-87-6	
Methylene chloride	Not detected	mg/L	0.005	8260	10/29/00	VFM	75-09-2	
Naphthalene	Not detected	mg/L	0.001	8260	10/29/00	VFM	91-20-3	
n-Propylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	103-65-1	
Styrene	Not detected	mg/L	0.001	8260	10/29/00	VFM	100-42-5	
1,1,2,2-Tetrachloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	79-34-5	
Tetrachloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	127-18-4	
Toluene	Not detected	mg/L	0.001	8260	10/29/00	VFM	108-88-3	
1,1,1-Trichloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	71-55-6	
1,1,2-Trichloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	79-00-5	
Trichloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	79-01-6	
1,2,4-Trimethylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	95-63-6	
1,3,5-Trimethylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	108-67-8	
Vinyl chloride	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-01-4	
o-Xylene	Not detected	mg/L	0.001	8260	10/29/00	VFM	95-47-6	
p,m-Xylene	Not detected	mg/L	0.001	8260	10/29/00	VFM	106-42-3	
Acetone	Not detected	mg/L	0.05	8260	10/29/00	VFM	67-64-1	
2-Butanone (MEK)	Not detected	mg/L	0.05	8260	10/29/00	VFM	78-93-3	
Carbon disulfide	Not detected	mg/L	0.05	8260	10/29/00	VFM	75-15-0	
2-Hexanone	Not detected	mg/L	0.05	8260	10/29/00	VFM	591-78-6	
4-Methyl-2-pentanone (MIBK)	Not detected	mg/L	0.05	8260	10/29/00	VFM	108-10-1	
GC/MS Semi-Volatile Organics								
Acenaphthene	Not detected	mg/L	0.01	8270	10/30/00	GCE	83-32-9	
Acenaphthylene	Not detected	mg/L	0.01	8270	10/30/00	GCE	208-96-8	
Anthracene	Not detected	mg/L	0.01	8270	10/30/00	GCE	120-12-7	
Benzo(a)anthracene	Not detected	mg/L	0.01	8270	10/30/00	GCE	56-55-3	
Benzo(b)fluoranthene	Not detected	mg/L	0.01	8270	10/30/00	GCE	205-99-2	
Benzo(k)fluoranthene	Not detected	mg/L	0.01	8270	10/30/00	GCE	207-08-9	
Benzo(ghi)perylene	Not detected	mg/L	0.01	8270	10/30/00	GCE	191-24-2	
Benzo(a)pyrene	Not detected	mg/L	0.01	8270	10/30/00	GCE	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	mg/L	0.01	8270	10/30/00	GCE	111-91-1	
bis(2-Chloroethyl)ether	Not detected	mg/L	0.01	8270	10/30/00	GCE	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	mg/L	0.01	8270	10/30/00	GCE	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	117-81-7	
4-Bromophenyl phenyl ether	Not detected	mg/L	0.01	8270	10/30/00	GCE	101-55-3	
Butyl benzyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	85-68-7	



Analytical Laboratory Report

Lab Sample ID: S03531.01 (continued)

Sample Tag: MW-07S

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
GC/MS Semi-Volatile Organics (continued)								
4-Chloroaniline	Not detected	mg/L	0.01	8270	10/30/00	GCE	106-47-8	
2-Chloronaphthalene	Not detected	mg/L	0.01	8270	10/30/00	GCE	91-58-7	
4-Chloro-3-methylphenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	59-50-7	
2-Chlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	mg/L	0.01	8270	10/30/00	GCE	7005-72-3	
Chrysene	Not detected	mg/L	0.01	8270	10/30/00	GCE	218-01-9	
p,m-Cresol	Not detected	mg/L	0.01	8270	10/30/00	GCE	106-44-5	
o-Cresol	Not detected	mg/L	0.01	8270	10/30/00	GCE	95-48-7	
Dibenzo(ah)anthracene	Not detected	mg/L	0.01	8270	10/30/00	GCE	53-70-3	
Dibenzofuran	Not detected	mg/L	0.01	8270	10/30/00	GCE	132-64-9	
di-n-Butyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	84-74-2	
1,2-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	95-50-1	
1,3-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	541-73-1	
1,4-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	106-46-7	
3,3'-Dichlorobenzidine	Not detected	mg/L	0.01	8270	10/30/00	GCE	91-94-1	
2,4-Dichlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	120-83-2	
Diethyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	84-66-2	
2,4-Dimethylphenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	105-67-9	
Dimethyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	534-52-1	
2,4-Dinitrophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	51-28-5	
2,4-Dinitrotoluene	Not detected	mg/L	0.01	8270	10/30/00	GCE	121-14-2	
2,6-Dinitrotoluene	Not detected	mg/L	0.01	8270	10/30/00	GCE	606-20-2	
di-n-Octyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	117-84-0	
Fluoranthene	Not detected	mg/L	0.01	8270	10/30/00	GCE	206-44-0	
Fluorene	Not detected	mg/L	0.01	8270	10/30/00	GCE	86-73-7	
Hexachlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	118-74-1	
Hexachlorobutadiene	Not detected	mg/L	0.01	8270	10/30/00	GCE	87-68-3	
Hexachlorocyclopentadiene	Not detected	mg/L	0.01	8270	10/30/00	GCE	77-47-4	
Hexachloroethane	Not detected	mg/L	0.01	8270	10/30/00	GCE	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	mg/L	0.01	8270	10/30/00	GCE	193-39-5	
Isophorone	Not detected	mg/L	0.01	8270	10/30/00	GCE	78-59-1	
2-Methylnaphthalene	Not detected	mg/L	0.01	8270	10/30/00	GCE	91-57-6	
Naphthalene	Not detected	mg/L	0.01	8270	10/30/00	GCE	91-20-3	
2-Nitroaniline	Not detected	mg/L	0.01	8270	10/30/00	GCE	88-74-4	
3-Nitroaniline	Not detected	mg/L	0.01	8270	10/30/00	GCE	99-09-2	
4-Nitroaniline	Not detected	mg/L	0.01	8270	10/30/00	GCE	100-01-6	
Nitrobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	98-95-3	
2-Nitrophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	88-75-5	
4-Nitrophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	100-02-7	
N-Nitrosodiphenylamine	Not detected	mg/L	0.01	8270	10/30/00	GCE	156-10-5	
N-Nitrosodi-n-propylamine	Not detected	mg/L	0.01	8270	10/30/00	GCE	621-64-7	
Pentachlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	87-86-5	
Phenanthrene	Not detected	mg/L	0.01	8270	10/30/00	GCE	85-01-8	
Phenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	108-95-2	
Pyrene	Not detected	mg/L	0.01	8270	10/30/00	GCE	129-00-0	
1,2,4-Trichlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	120-82-1	
2,4,5-Trichlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	95-95-4	
2,4,6-Trichlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	88-06-2	



Analytical Laboratory Report

Lab Sample ID: S03531.02
 Sample Tag: MW-06S
 Collected Date/Time: 10/18/2000 10:50
 Matrix: Groundwater
 COC Reference: 002328

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40 ml Glass	None	Yes	4	3184
2	1 L Amber	None	Yes	4	3184
1	125ml Plastic	HNO3	Yes	4	3184

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Metals								
Digestion	Completed			varies	10/24/00	EMIL		
Arsenic	0.002	mg/L	0.001	200.8	10/24/00	EMIL	7440-38-2	
Barium	0.02	mg/L	0.01	200.8	10/24/00	EMIL	7440-39-3	
Cadmium	Not detected	mg/L	0.0002	200.8	10/24/00	EMIL	7440-43-9	
Chromium	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-47-3	
Copper	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-50-8	
Lead	Not detected	mg/L	0.003	200.8	10/24/00	EMIL	7439-92-1	
Mercury	Not detected	mg/L	0.0002	245.1M	10/25/00	EMIL	7439-97-6	
Selenium	Not detected	mg/L	0.005	200.8	10/24/00	EMIL	7782-49-2	
Silver	Not detected	mg/L	0.0005	200.8	10/24/00	EMIL	7440-22-4	
Zinc	0.02	mg/L	0.01	200.8	10/24/00	EMIL	7440-66-6	
Organics								
BNA Extraction	Completed			3510	10/23/00	KJT		
Extraction, PCB	Completed			3510	10/23/00	JKB		
PCB								
PCB-1016	Not detected	mg/L	0.0001	8082	10/25/00	JANB	12674-11-2	
PCB-1221	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11104-28-2	
PCB-1232	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11141-16-5	
PCB-1248	Not detected	mg/L	0.0001	8082	10/25/00	JANB	12672-29-6	
PCB-1254	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11097-69-1	
PCB-1260	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11096-82-5	
PCB-1242	Not detected	mg/L	0.0001	8082	10/25/00	JANB	53469-21-9	
Total PCB	Not detected	mg/L	0.0001	8082	10/25/00	JANB		
Volatile Organics								
Benzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	71-43-2	
Bromodichloromethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-27-4	
Bromoform	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-25-2	
Bromomethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	74-83-9	
n-Butylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	104-51-8	
sec-Butylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	135-98-8	
tert-Butylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	98-06-6	
Carbon tetrachloride	Not detected	mg/L	0.001	8260	10/29/00	VFM	56-23-5	
Chlorobenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	108-90-7	
Chloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-00-3	
Chloroform	Not detected	mg/L	0.001	8260	10/29/00	VFM	67-66-3	
Chloromethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	74-87-3	
Dibromochloromethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	124-48-1	
1,2-Dichlorobenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	95-50-1	



Analytical Laboratory Report

Lab Sample ID: S03531.02 (continued)

Sample Tag: MW-06S

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
Volatile Organics (continued)								
1,3-Dichlorobenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	541-73-1	
1,4-Dichlorobenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	106-46-7	
1,1-Dichloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-34-3	
1,2-Dichloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	107-06-2	
1,1-Dichloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-35-4	
cis-1,2-Dichloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	156-59-2	
trans-1,2-Dichloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	156-60-5	
1,2-Dichloropropane	Not detected	mg/L	0.001	8260	10/29/00	VFM	78-87-5	
cis-1,3-Dichloropropene	Not detected	mg/L	0.001	8260	10/29/00	VFM	10061-01-5	
trans-1,3-Dichloropropene	Not detected	mg/L	0.001	8260	10/29/00	VFM	10061-02-6	
Ethylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	100-41-4	
Isopropylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	98-82-8	
p-Isopropyltoluene	Not detected	mg/L	0.001	8260	10/29/00	VFM	99-87-6	
Methylene chloride	Not detected	mg/L	0.005	8260	10/29/00	VFM	75-09-2	
Naphthalene	Not detected	mg/L	0.001	8260	10/29/00	VFM	91-20-3	
n-Propylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	103-65-1	
Styrene	Not detected	mg/L	0.001	8260	10/29/00	VFM	100-42-5	
1,1,2,2-Tetrachloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	79-34-5	
Tetrachloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	127-18-4	
Toluene	Not detected	mg/L	0.001	8260	10/29/00	VFM	108-88-3	
1,1,1-Trichloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	71-55-6	
1,1,2-Trichloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	79-00-5	
Trichloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	79-01-6	
1,2,4-Trimethylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	95-63-6	
1,3,5-Trimethylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	108-67-8	
Vinyl chloride	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-01-4	
o-Xylene	Not detected	mg/L	0.001	8260	10/29/00	VFM	95-47-6	
p,m-Xylene	Not detected	mg/L	0.001	8260	10/29/00	VFM	106-42-3	
Acetone	Not detected	mg/L	0.05	8260	10/29/00	VFM	67-64-1	
2-Butanone (MEK)	Not detected	mg/L	0.05	8260	10/29/00	VFM	78-93-3	
Carbon disulfide	Not detected	mg/L	0.05	8260	10/29/00	VFM	75-15-0	
2-Hexanone	Not detected	mg/L	0.05	8260	10/29/00	VFM	591-78-6	
4-Methyl-2-pentanone (MIBK)	Not detected	mg/L	0.05	8260	10/29/00	VFM	108-10-1	
GC/MS Semi-Volatile Organics								
Acenaphthene	Not detected	mg/L	0.01	8270	10/30/00	GCE	83-32-9	
Acenaphthylene	Not detected	mg/L	0.01	8270	10/30/00	GCE	208-96-8	
Anthracene	Not detected	mg/L	0.01	8270	10/30/00	GCE	120-12-7	
Benzo(a)anthracene	Not detected	mg/L	0.01	8270	10/30/00	GCE	56-55-3	
Benzo(b)fluoranthene	Not detected	mg/L	0.01	8270	10/30/00	GCE	205-99-2	
Benzo(k)fluoranthene	Not detected	mg/L	0.01	8270	10/30/00	GCE	207-08-9	
Benzo(ghi)perylene	Not detected	mg/L	0.01	8270	10/30/00	GCE	191-24-2	
Benzo(a)pyrene	Not detected	mg/L	0.01	8270	10/30/00	GCE	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	mg/L	0.01	8270	10/30/00	GCE	111-91-1	
bis(2-Chloroethyl)ether	Not detected	mg/L	0.01	8270	10/30/00	GCE	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	mg/L	0.01	8270	10/30/00	GCE	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	117-81-7	
4-Bromophenyl phenyl ether	Not detected	mg/L	0.01	8270	10/30/00	GCE	101-55-3	
Butyl benzyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	85-68-7	



Analytical Laboratory Report

Lab Sample ID: S03531.02 (continued)

Sample Tag: MW-06S

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
GC/MS Semi-Volatile Organics (continued)								
4-Chloroaniline	Not detected	mg/L	0.01	8270	10/30/00	GCE	106-47-8	
2-Chloronaphthalene	Not detected	mg/L	0.01	8270	10/30/00	GCE	91-58-7	
4-Chloro-3-methylphenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	59-50-7	
2-Chlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	mg/L	0.01	8270	10/30/00	GCE	7005-72-3	
Chrysene	Not detected	mg/L	0.01	8270	10/30/00	GCE	218-01-9	
p,m-Cresol	Not detected	mg/L	0.01	8270	10/30/00	GCE	106-44-5	
o-Cresol	Not detected	mg/L	0.01	8270	10/30/00	GCE	95-48-7	
Dibenzo(ah)anthracene	Not detected	mg/L	0.01	8270	10/30/00	GCE	53-70-3	
Dibenzofuran	Not detected	mg/L	0.01	8270	10/30/00	GCE	132-64-9	
di-n-Butyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	84-74-2	
1,2-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	95-50-1	
1,3-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	541-73-1	
1,4-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	106-46-7	
3,3'-Dichlorobenzidine	Not detected	mg/L	0.01	8270	10/30/00	GCE	91-94-1	
2,4-Dichlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	120-83-2	
Diethyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	84-66-2	
2,4-Dimethylphenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	105-67-9	
Dimethyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	534-52-1	
2,4-Dinitrophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	51-28-5	
2,4-Dinitrotoluene	Not detected	mg/L	0.01	8270	10/30/00	GCE	121-14-2	
2,6-Dinitrotoluene	Not detected	mg/L	0.01	8270	10/30/00	GCE	606-20-2	
di-n-Octyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	117-84-0	
Fluoranthene	Not detected	mg/L	0.01	8270	10/30/00	GCE	206-44-0	
Fluorene	Not detected	mg/L	0.01	8270	10/30/00	GCE	86-73-7	
Hexachlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	118-74-1	
Hexachlorobutadiene	Not detected	mg/L	0.01	8270	10/30/00	GCE	87-68-3	
Hexachlorocyclopentadiene	Not detected	mg/L	0.01	8270	10/30/00	GCE	77-47-4	
Hexachloroethane	Not detected	mg/L	0.01	8270	10/30/00	GCE	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	mg/L	0.01	8270	10/30/00	GCE	193-39-5	
Isophorone	Not detected	mg/L	0.01	8270	10/30/00	GCE	78-59-1	
2-Methylnaphthalene	Not detected	mg/L	0.01	8270	10/30/00	GCE	91-57-6	
Naphthalene	Not detected	mg/L	0.01	8270	10/30/00	GCE	91-20-3	
2-Nitroaniline	Not detected	mg/L	0.01	8270	10/30/00	GCE	88-74-4	
3-Nitroaniline	Not detected	mg/L	0.01	8270	10/30/00	GCE	99-09-2	
4-Nitroaniline	Not detected	mg/L	0.01	8270	10/30/00	GCE	100-01-6	
Nitrobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	98-95-3	
2-Nitrophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	88-75-5	
4-Nitrophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	100-02-7	
N-Nitrosodiphenylamine	Not detected	mg/L	0.01	8270	10/30/00	GCE	156-10-5	
N-Nitrosodi-n-propylamine	Not detected	mg/L	0.01	8270	10/30/00	GCE	621-64-7	
Pentachlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	87-86-5	
Phenanthrene	Not detected	mg/L	0.01	8270	10/30/00	GCE	85-01-8	
Phenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	108-95-2	
Pyrene	Not detected	mg/L	0.01	8270	10/30/00	GCE	129-00-0	
1,2,4-Trichlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	120-82-1	
2,4,5-Trichlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	95-95-4	
2,4,6-Trichlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	88-06-2	



Analytical Laboratory Report

Lab Sample ID: S03531.03
 Sample Tag: MW-01S
 Collected Date/Time: 10/18/2000 11:30
 Matrix: Groundwater
 COC Reference: 002328

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40 ml Glass	None	Yes	4	3184
2	1 L Amber	None	Yes	4	3184
1	125ml Plastic	HNO3	Yes	4	3184

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Metals								
Digestion	Completed			varies	10/24/00	EMIL		
Arsenic	Not detected	mg/L	0.001	200.8	10/24/00	EMIL	7440-38-2	
Barium	0.08	mg/L	0.01	200.8	10/24/00	EMIL	7440-39-3	
Cadmium	Not detected	mg/L	0.0002	200.8	10/24/00	EMIL	7440-43-9	
Chromium	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-47-3	
Copper	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-50-8	
Lead	Not detected	mg/L	0.003	200.8	10/24/00	EMIL	7439-92-1	
Mercury	Not detected	mg/L	0.0002	245.1M	10/25/00	EMIL	7439-97-6	
Selenium	Not detected	mg/L	0.005	200.8	10/24/00	EMIL	7782-49-2	
Silver	Not detected	mg/L	0.0005	200.8	10/24/00	EMIL	7440-22-4	
Zinc	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-66-6	
Organics								
BNA Extraction	Completed			3510	10/23/00	KJT		
Extraction, PCB	Completed			3510	10/23/00	JKB		
PCB								
PCB-1016	Not detected	mg/L	0.0001	8082	10/25/00	JANB	12674-11-2	
PCB-1221	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11104-28-2	
PCB-1232	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11141-16-5	
PCB-1248	Not detected	mg/L	0.0001	8082	10/25/00	JANB	12672-29-6	
PCB-1254	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11097-69-1	
PCB-1260	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11096-82-5	
PCB-1242	Not detected	mg/L	0.0001	8082	10/25/00	JANB	53469-21-9	
Total PCB	Not detected	mg/L	0.0001	8082	10/25/00	JANB		
Volatile Organics								
Benzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	71-43-2	C
Bromodichloromethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	75-27-4	C
Bromoform	Not detected	mg/L	0.01	8260	11/01/00	VFM	75-25-2	C
Bromomethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	74-83-9	C
n-Butylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	104-51-8	C
sec-Butylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	135-98-8	C
tert-Butylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	98-06-6	C
Carbon tetrachloride	Not detected	mg/L	0.01	8260	11/01/00	VFM	56-23-5	C
Chlorobenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	108-90-7	C
Chloroethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	75-00-3	C
Chloroform	Not detected	mg/L	0.01	8260	11/01/00	VFM	67-66-3	C
Chloromethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	74-87-3	C
Dibromochloromethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	124-48-1	C

C-Higher detection limit due to high target concentration.



Analytical Laboratory Report

Lab Sample ID: S03531.03 (continued)

Sample Tag: MW-01S

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
Volatile Organics (continued)								
1,2-Dichlorobenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	95-50-1	C
1,3-Dichlorobenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	541-73-1	C
1,4-Dichlorobenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	106-46-7	C
1,1-Dichloroethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	75-34-3	C
1,2-Dichloroethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	107-06-2	C
1,1-Dichloroethene	Not detected	mg/L	0.01	8260	11/01/00	VFM	75-35-4	C
cis-1,2-Dichloroethene	0.25	mg/L	0.01	8260	11/01/00	VFM	156-59-2	C
trans-1,2-Dichloroethene	Not detected	mg/L	0.01	8260	11/01/00	VFM	156-60-5	C
1,2-Dichloropropane	Not detected	mg/L	0.01	8260	11/01/00	VFM	78-87-5	C
cis-1,3-Dichloropropene	Not detected	mg/L	0.01	8260	11/01/00	VFM	10061-01-5	C
trans-1,3-Dichloropropene	Not detected	mg/L	0.01	8260	11/01/00	VFM	10061-02-6	C
Ethylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	100-41-4	C
Isopropylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	98-82-8	C
p-Isopropyltoluene	Not detected	mg/L	0.01	8260	11/01/00	VFM	99-87-6	C
Methylene chloride	Not detected	mg/L	0.05	8260	11/01/00	VFM	75-09-2	C
Naphthalene	Not detected	mg/L	0.01	8260	11/01/00	VFM	91-20-3	C
n-Propylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	103-65-1	C
Styrene	Not detected	mg/L	0.01	8260	11/01/00	VFM	100-42-5	C
1,1,2,2-Tetrachloroethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	79-34-5	C
Tetrachloroethene	Not detected	mg/L	0.01	8260	11/01/00	VFM	127-18-4	C
Toluene	Not detected	mg/L	0.01	8260	11/01/00	VFM	108-88-3	C
1,1,1-Trichloroethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	71-55-6	C
1,1,2-Trichloroethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	79-00-5	C
Trichloroethene	0.06	mg/L	0.01	8260	11/01/00	VFM	79-01-6	C
1,2,4-Trimethylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	95-63-6	C
1,3,5-Trimethylbenzene	0.02	mg/L	0.01	8260	11/01/00	VFM	108-67-8	C
Vinyl chloride	Not detected	mg/L	0.01	8260	11/01/00	VFM	75-01-4	C
o-Xylene	Not detected	mg/L	0.01	8260	11/01/00	VFM	95-47-6	C
p,m-Xylene	Not detected	mg/L	0.01	8260	11/01/00	VFM	106-42-3	C
Acetone	Not detected	mg/L	0.5	8260	11/01/00	VFM	67-64-1	C
2-Butanone (MEK)	Not detected	mg/L	0.5	8260	11/01/00	VFM	78-93-3	C
Carbon disulfide	Not detected	mg/L	0.5	8260	11/01/00	VFM	75-15-0	C
2-Hexanone	Not detected	mg/L	0.5	8260	11/01/00	VFM	591-78-6	C
4-Methyl-2-pentanone (MIBK)	Not detected	mg/L	0.5	8260	11/01/00	VFM	108-10-1	C
GC/MS Semi-Volatile Organics								
Acenaphthene	Not detected	mg/L	0.01	8270	10/30/00	GCE	83-32-9	
Acenaphthylene	Not detected	mg/L	0.01	8270	10/30/00	GCE	208-96-8	
Anthracene	Not detected	mg/L	0.01	8270	10/30/00	GCE	120-12-7	
Benzo(a)anthracene	Not detected	mg/L	0.01	8270	10/30/00	GCE	56-55-3	
Benzo(b)fluoranthene	Not detected	mg/L	0.01	8270	10/30/00	GCE	205-99-2	
Benzo(k)fluoranthene	Not detected	mg/L	0.01	8270	10/30/00	GCE	207-08-9	
Benzo(ghi)perylene	Not detected	mg/L	0.01	8270	10/30/00	GCE	191-24-2	
Benzo(a)pyrene	Not detected	mg/L	0.01	8270	10/30/00	GCE	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	mg/L	0.01	8270	10/30/00	GCE	111-91-1	
bis(2-Chloroethyl)ether	Not detected	mg/L	0.01	8270	10/30/00	GCE	111-44-4	
bis(2-Chloroisopropyl)ether	0.02	mg/L	0.01	8270	10/30/00	GCE	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	117-81-7	

C-Higher detection limit due to high target concentration.



Analytical Laboratory Report

Lab Sample ID: S03531.03 (continued)

Sample Tag: MW-01S

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
GC/MS Semi-Volatile Organics (continued)								
4-Bromophenyl phenyl ether	Not detected	mg/L	0.01	8270	10/30/00	GCE	101-55-3	
Butyl benzyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	85-68-7	
4-Chloroaniline	Not detected	mg/L	0.01	8270	10/30/00	GCE	106-47-8	
2-Chloronaphthalene	Not detected	mg/L	0.01	8270	10/30/00	GCE	91-58-7	
4-Chloro-3-methylphenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	59-50-7	
2-Chlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	mg/L	0.01	8270	10/30/00	GCE	7005-72-3	
Chrysene	Not detected	mg/L	0.01	8270	10/30/00	GCE	218-01-9	
p,m-Cresol	Not detected	mg/L	0.01	8270	10/30/00	GCE	106-44-5	
o-Cresol	Not detected	mg/L	0.01	8270	10/30/00	GCE	95-48-7	
Dibenzo(ah)anthracene	Not detected	mg/L	0.01	8270	10/30/00	GCE	53-70-3	
Dibenzofuran	Not detected	mg/L	0.01	8270	10/30/00	GCE	132-64-9	
di-n-Butyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	84-74-2	
1,2-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	95-50-1	
1,3-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	541-73-1	
1,4-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	106-46-7	
3,3'-Dichlorobenzidine	Not detected	mg/L	0.01	8270	10/30/00	GCE	91-94-1	
2,4-Dichlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	120-83-2	
Diethyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	84-66-2	
2,4-Dimethylphenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	105-67-9	
Dimethyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	534-52-1	
2,4-Dinitrophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	51-28-5	
2,4-Dinitrotoluene	Not detected	mg/L	0.01	8270	10/30/00	GCE	121-14-2	
2,6-Dinitrotoluene	Not detected	mg/L	0.01	8270	10/30/00	GCE	606-20-2	
di-n-Octyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	117-84-0	
Fluoranthene	Not detected	mg/L	0.01	8270	10/30/00	GCE	206-44-0	
Fluorene	Not detected	mg/L	0.01	8270	10/30/00	GCE	86-73-7	
Hexachlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	118-74-1	
Hexachlorobutadiene	Not detected	mg/L	0.01	8270	10/30/00	GCE	87-68-3	
Hexachlorocyclopentadiene	Not detected	mg/L	0.01	8270	10/30/00	GCE	77-47-4	
Hexachloroethane	Not detected	mg/L	0.01	8270	10/30/00	GCE	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	mg/L	0.01	8270	10/30/00	GCE	193-39-5	
Isophorone	Not detected	mg/L	0.01	8270	10/30/00	GCE	78-59-1	
2-Methylnaphthalene	Not detected	mg/L	0.01	8270	10/30/00	GCE	91-57-6	
Naphthalene	Not detected	mg/L	0.01	8270	10/30/00	GCE	91-20-3	
2-Nitroaniline	Not detected	mg/L	0.01	8270	10/30/00	GCE	88-74-4	
3-Nitroaniline	Not detected	mg/L	0.01	8270	10/30/00	GCE	99-09-2	
4-Nitroaniline	Not detected	mg/L	0.01	8270	10/30/00	GCE	100-01-6	
Nitrobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	98-95-3	
2-Nitrophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	88-75-5	
4-Nitrophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	100-02-7	
N-Nitrosodiphenylamine	Not detected	mg/L	0.01	8270	10/30/00	GCE	156-10-5	
N-Nitrosodi-n-propylamine	Not detected	mg/L	0.01	8270	10/30/00	GCE	621-64-7	
Pentachlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	87-86-5	
Phenanthrene	Not detected	mg/L	0.01	8270	10/30/00	GCE	85-01-8	
Phenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	108-95-2	
Pyrene	Not detected	mg/L	0.01	8270	10/30/00	GCE	129-00-0	
1,2,4-Trichlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	120-82-1	



Analytical Laboratory Report

Lab Sample ID: S03531.03 (continued)

Sample Tag: MW-01S

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
GC/MS Semi-Volatile Organics (continued)								
2,4,5-Trichlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	95-95-4	
2,4,6-Trichlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	88-06-2	



Analytical Laboratory Report

Lab Sample ID: S03531.04
 Sample Tag: MW-01S Dup
 Collected Date/Time: 10/18/2000 11:30
 Matrix: Groundwater
 COC Reference: 002328

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40 ml Glass	None	Yes	4	3184
2	1 L Amber	None	Yes	4	3184
1	125ml Plastic	HNO3	Yes	4	3184

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Metals								
Digestion	Completed			varies	10/24/00	EMIL		
Arsenic	Not detected	mg/L	0.001	200.8	10/24/00	EMIL	7440-38-2	
Barium	0.08	mg/L	0.01	200.8	10/24/00	EMIL	7440-39-3	
Cadmium	Not detected	mg/L	0.0002	200.8	10/24/00	EMIL	7440-43-9	
Chromium	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-47-3	
Copper	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-50-8	
Lead	Not detected	mg/L	0.003	200.8	10/24/00	EMIL	7439-92-1	
Mercury	Not detected	mg/L	0.0002	245.1M	10/25/00	EMIL	7439-97-6	
Selenium	Not detected	mg/L	0.005	200.8	10/24/00	EMIL	7782-49-2	
Silver	Not detected	mg/L	0.0005	200.8	10/24/00	EMIL	7440-22-4	
Zinc	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-66-6	
Organics								
BNA Extraction	Completed			3510	10/23/00	KJT		
Extraction, PCB	Completed			3510	10/23/00	JKB		
PCB								
PCB-1016	Not detected	mg/L	0.0001	8082	10/25/00	JANB	12674-11-2	
PCB-1221	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11104-28-2	
PCB-1232	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11141-16-5	
PCB-1248	Not detected	mg/L	0.0001	8082	10/25/00	JANB	12672-29-6	
PCB-1254	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11097-69-1	
PCB-1260	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11096-82-5	
PCB-1242	Not detected	mg/L	0.0001	8082	10/25/00	JANB	53469-21-9	
Total PCB	Not detected	mg/L	0.0001	8082	10/25/00	JANB		
Volatile Organics								
Benzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	71-43-2	C
Bromodichloromethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	75-27-4	C
Bromoform	Not detected	mg/L	0.01	8260	11/01/00	VFM	75-25-2	C
Bromomethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	74-83-9	C
n-Butylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	104-51-8	C
sec-Butylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	135-98-8	C
tert-Butylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	98-06-6	C
Carbon tetrachloride	Not detected	mg/L	0.01	8260	11/01/00	VFM	56-23-5	C
Chlorobenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	108-90-7	C
Chloroethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	75-00-3	C
Chloroform	Not detected	mg/L	0.01	8260	11/01/00	VFM	67-66-3	C
Chloromethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	74-87-3	C
Dibromochloromethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	124-48-1	C

C-Higher detection limit due to high target concentration.



Analytical Laboratory Report

Lab Sample ID: S03531.04 (continued)

Sample Tag: MW-01S Dup

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
Volatile Organics (continued)								
1,2-Dichlorobenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	95-50-1	C
1,3-Dichlorobenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	541-73-1	C
1,4-Dichlorobenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	106-46-7	C
1,1-Dichloroethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	75-34-3	C
1,2-Dichloroethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	107-06-2	C
1,1-Dichloroethene	Not detected	mg/L	0.01	8260	11/01/00	VFM	75-35-4	C
cis-1,2-Dichloroethene	0.28	mg/L	0.01	8260	11/01/00	VFM	156-59-2	C
trans-1,2-Dichloroethene	Not detected	mg/L	0.01	8260	11/01/00	VFM	156-60-5	C
1,2-Dichloropropane	Not detected	mg/L	0.01	8260	11/01/00	VFM	78-87-5	C
cis-1,3-Dichloropropene	Not detected	mg/L	0.01	8260	11/01/00	VFM	10061-01-5	C
trans-1,3-Dichloropropene	Not detected	mg/L	0.01	8260	11/01/00	VFM	10061-02-6	C
Ethylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	100-41-4	C
Isopropylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	98-82-8	C
p-Isopropyltoluene	Not detected	mg/L	0.01	8260	11/01/00	VFM	99-87-6	C
Methylene chloride	Not detected	mg/L	0.05	8260	11/01/00	VFM	75-09-2	C
Naphthalene	Not detected	mg/L	0.01	8260	11/01/00	VFM	91-20-3	C
n-Propylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	103-65-1	C
Styrene	Not detected	mg/L	0.01	8260	11/01/00	VFM	100-42-5	C
1,1,2,2-Tetrachloroethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	79-34-5	C
Tetrachloroethene	Not detected	mg/L	0.01	8260	11/01/00	VFM	127-18-4	C
Toluene	Not detected	mg/L	0.01	8260	11/01/00	VFM	108-88-3	C
1,1,1-Trichloroethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	71-55-6	C
1,1,2-Trichloroethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	79-00-5	C
Trichloroethene	0.07	mg/L	0.01	8260	11/01/00	VFM	79-01-6	C
1,2,4-Trimethylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	95-63-6	C
1,3,5-Trimethylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	108-67-8	C
Vinyl chloride	Not detected	mg/L	0.01	8260	11/01/00	VFM	75-01-4	C
o-Xylene	Not detected	mg/L	0.01	8260	11/01/00	VFM	95-47-6	C
p,m-Xylene	Not detected	mg/L	0.01	8260	11/01/00	VFM	106-42-3	C
Acetone	Not detected	mg/L	0.5	8260	11/01/00	VFM	67-64-1	C
2-Butanone (MEK)	Not detected	mg/L	0.5	8260	11/01/00	VFM	78-93-3	C
Carbon disulfide	Not detected	mg/L	0.5	8260	11/01/00	VFM	75-15-0	C
2-Hexanone	Not detected	mg/L	0.5	8260	11/01/00	VFM	591-78-6	C
4-Methyl-2-pentanone (MIBK)	Not detected	mg/L	0.5	8260	11/01/00	VFM	108-10-1	C
GC/MS Semi-Volatile Organics								
Acenaphthene	Not detected	mg/L	0.01	8270	10/30/00	GCE	83-32-9	
Acenaphthylene	Not detected	mg/L	0.01	8270	10/30/00	GCE	208-96-8	
Anthracene	Not detected	mg/L	0.01	8270	10/30/00	GCE	120-12-7	
Benzo(a)anthracene	Not detected	mg/L	0.01	8270	10/30/00	GCE	56-55-3	
Benzo(b)fluoranthene	Not detected	mg/L	0.01	8270	10/30/00	GCE	205-99-2	
Benzo(k)fluoranthene	Not detected	mg/L	0.01	8270	10/30/00	GCE	207-08-9	
Benzo(ghi)perylene	Not detected	mg/L	0.01	8270	10/30/00	GCE	191-24-2	
Benzo(a)pyrene	Not detected	mg/L	0.01	8270	10/30/00	GCE	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	mg/L	0.01	8270	10/30/00	GCE	111-91-1	
bis(2-Chloroethyl)ether	Not detected	mg/L	0.01	8270	10/30/00	GCE	111-44-4	
bis(2-Chloroisopropyl)ether	0.02	mg/L	0.01	8270	10/30/00	GCE	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	117-81-7	

C-Higher detection limit due to high target concentration.



Analytical Laboratory Report

Lab Sample ID: S03531.04 (continued)

Sample Tag: MWV-01S Dup

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
GC/MS Semi-Volatile Organics (continued)								
4-Bromophenyl phenyl ether	Not detected	mg/L	0.01	8270	10/30/00	GCE	101-55-3	
Butyl benzyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	85-68-7	
4-Chloroaniline	Not detected	mg/L	0.01	8270	10/30/00	GCE	106-47-8	
2-Chloronaphthalene	Not detected	mg/L	0.01	8270	10/30/00	GCE	91-58-7	
4-Chloro-3-methylphenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	59-50-7	
2-Chlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	mg/L	0.01	8270	10/30/00	GCE	7005-72-3	
Chrysene	Not detected	mg/L	0.01	8270	10/30/00	GCE	218-01-9	
p,m-Cresol	Not detected	mg/L	0.01	8270	10/30/00	GCE	106-44-5	
o-Cresol	Not detected	mg/L	0.01	8270	10/30/00	GCE	95-48-7	
Dibenzo(ah)anthracene	Not detected	mg/L	0.01	8270	10/30/00	GCE	53-70-3	
Dibenzofuran	Not detected	mg/L	0.01	8270	10/30/00	GCE	132-64-9	
di-n-Butyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	84-74-2	
1,2-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	95-50-1	
1,3-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	541-73-1	
1,4-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	106-46-7	
3,3'-Dichlorobenzidine	Not detected	mg/L	0.01	8270	10/30/00	GCE	91-94-1	
2,4-Dichlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	120-83-2	
Diethyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	84-66-2	
2,4-Dimethylphenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	105-67-9	
Dimethyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	534-52-1	
2,4-Dinitrophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	51-28-5	
2,4-Dinitrotoluene	Not detected	mg/L	0.01	8270	10/30/00	GCE	121-14-2	
2,6-Dinitrotoluene	Not detected	mg/L	0.01	8270	10/30/00	GCE	606-20-2	
di-n-Octyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	117-84-0	
Fluoranthene	Not detected	mg/L	0.01	8270	10/30/00	GCE	206-44-0	
Fluorene	Not detected	mg/L	0.01	8270	10/30/00	GCE	86-73-7	
Hexachlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	118-74-1	
Hexachlorobutadiene	Not detected	mg/L	0.01	8270	10/30/00	GCE	87-68-3	
Hexachlorocyclopentadiene	Not detected	mg/L	0.01	8270	10/30/00	GCE	77-47-4	
Hexachloroethane	Not detected	mg/L	0.01	8270	10/30/00	GCE	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	mg/L	0.01	8270	10/30/00	GCE	193-39-5	
Isophorone	Not detected	mg/L	0.01	8270	10/30/00	GCE	78-59-1	
2-Methylnaphthalene	Not detected	mg/L	0.01	8270	10/30/00	GCE	91-57-6	
Naphthalene	Not detected	mg/L	0.01	8270	10/30/00	GCE	91-20-3	
2-Nitroaniline	Not detected	mg/L	0.01	8270	10/30/00	GCE	88-74-4	
3-Nitroaniline	Not detected	mg/L	0.01	8270	10/30/00	GCE	99-09-2	
4-Nitroaniline	Not detected	mg/L	0.01	8270	10/30/00	GCE	100-01-6	
Nitrobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	98-95-3	
2-Nitrophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	88-75-5	
4-Nitrophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	100-02-7	
N-Nitrosodiphenylamine	Not detected	mg/L	0.01	8270	10/30/00	GCE	156-10-5	
N-Nitrosodi-n-propylamine	Not detected	mg/L	0.01	8270	10/30/00	GCE	621-64-7	
Pentachlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	87-86-5	
Phenanthrene	Not detected	mg/L	0.01	8270	10/30/00	GCE	85-01-8	
Phenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	108-95-2	
Pyrene	Not detected	mg/L	0.01	8270	10/30/00	GCE	129-00-0	
1,2,4-Trichlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	120-82-1	



Analytical Laboratory Report

Lab Sample ID: S03531.04 (continued)

Sample Tag: MW-01S Dup

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
GC/MS Semi-Volatile Organics (continued)								
2,4,5-Trichlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	95-95-4	
2,4,6-Trichlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	88-06-2	



Analytical Laboratory Report

Lab Sample ID: S03531.05
 Sample Tag: MW-05S
 Collected Date/Time: 10/18/2000 12:15
 Matrix: Groundwater
 COC Reference: 002328

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40 ml Glass	None	Yes	4	3184
2	1 L Amber	None	Yes	4	3184
1	125ml Plastic	HNO3	Yes	4	3184

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Metals								
Digestion	Completed			varies	10/24/00	EMIL		
Arsenic	Not detected	mg/L	0.001	200.8	10/24/00	EMIL	7440-38-2	
Barium	0.14	mg/L	0.01	200.8	10/24/00	EMIL	7440-39-3	
Cadmium	Not detected	mg/L	0.0002	200.8	10/24/00	EMIL	7440-43-9	
Chromium	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-47-3	
Copper	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-50-8	
Lead	Not detected	mg/L	0.003	200.8	10/24/00	EMIL	7439-92-1	
Mercury	Not detected	mg/L	0.0002	245.1M	10/25/00	EMIL	7439-97-6	
Selenium	Not detected	mg/L	0.005	200.8	10/24/00	EMIL	7782-49-2	
Silver	Not detected	mg/L	0.0005	200.8	10/24/00	EMIL	7440-22-4	
Zinc	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-66-6	
Organics								
BNA Extraction	Completed			3510	10/23/00	KJT		
Extraction, PCB	Completed			3510	10/23/00	JKB		
PCB								
PCB-1016	Not detected	mg/L	0.0001	8082	10/25/00	JANB	12674-11-2	
PCB-1221	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11104-28-2	
PCB-1232	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11141-16-5	
PCB-1248	Not detected	mg/L	0.0001	8082	10/25/00	JANB	12672-29-6	
PCB-1254	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11097-69-1	
PCB-1260	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11096-82-5	
PCB-1242	Not detected	mg/L	0.0001	8082	10/25/00	JANB	53469-21-9	
Total PCB	Not detected	mg/L	0.0001	8082	10/25/00	JANB		
Volatile Organics								
Benzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	71-43-2	C
Bromodichloromethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	75-27-4	C
Bromoform	Not detected	mg/L	0.01	8260	11/01/00	VFM	75-25-2	C
Bromomethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	74-83-9	C
n-Butylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	104-51-8	C
sec-Butylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	135-98-8	C
tert-Butylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	98-06-6	C
Carbon tetrachloride	Not detected	mg/L	0.01	8260	11/01/00	VFM	56-23-5	C
Chlorobenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	108-90-7	C
Chloroethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	75-00-3	C
Chloroform	Not detected	mg/L	0.01	8260	11/01/00	VFM	67-66-3	C
Chloromethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	74-87-3	C
Dibromochloromethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	124-48-1	C

C-Higher detection limit due to high target concentration.



Analytical Laboratory Report

Lab Sample ID: S03531.05 (continued)
Sample Tag: MW-05S

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
Volatile Organics (continued)								
1,2-Dichlorobenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	95-50-1	C
1,3-Dichlorobenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	541-73-1	C
1,4-Dichlorobenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	106-46-7	C
1,1-Dichloroethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	75-34-3	C
1,2-Dichloroethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	107-06-2	C
1,1-Dichloroethene	Not detected	mg/L	0.01	8260	11/01/00	VFM	75-35-4	C
cis-1,2-Dichloroethene	0.09	mg/L	0.01	8260	11/01/00	VFM	156-59-2	C
trans-1,2-Dichloroethene	Not detected	mg/L	0.01	8260	11/01/00	VFM	156-60-5	C
1,2-Dichloropropane	Not detected	mg/L	0.01	8260	11/01/00	VFM	78-87-5	C
cis-1,3-Dichloropropene	Not detected	mg/L	0.01	8260	11/01/00	VFM	10061-01-5	C
trans-1,3-Dichloropropene	Not detected	mg/L	0.01	8260	11/01/00	VFM	10061-02-6	C
Ethylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	100-41-4	C
Isopropylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	98-82-8	C
p-Isopropyltoluene	Not detected	mg/L	0.01	8260	11/01/00	VFM	99-87-6	C
Methylene chloride	Not detected	mg/L	0.05	8260	11/01/00	VFM	75-09-2	C
Naphthalene	Not detected	mg/L	0.01	8260	11/01/00	VFM	91-20-3	C
n-Propylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	103-65-1	C
Styrene	Not detected	mg/L	0.01	8260	11/01/00	VFM	100-42-5	C
1,1,2,2-Tetrachloroethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	79-34-5	C
Tetrachloroethene	Not detected	mg/L	0.01	8260	11/01/00	VFM	127-18-4	C
Toluene	Not detected	mg/L	0.01	8260	11/01/00	VFM	108-88-3	C
1,1,1-Trichloroethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	71-55-6	C
1,1,2-Trichloroethane	Not detected	mg/L	0.01	8260	11/01/00	VFM	79-00-5	C
Trichloroethene	1.16	mg/L	0.01	8260	11/01/00	VFM	79-01-6	C
1,2,4-Trimethylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	95-63-6	C
1,3,5-Trimethylbenzene	Not detected	mg/L	0.01	8260	11/01/00	VFM	108-67-8	C
Vinyl chloride	Not detected	mg/L	0.01	8260	11/01/00	VFM	75-01-4	C
o-Xylene	Not detected	mg/L	0.01	8260	11/01/00	VFM	95-47-6	C
p,m-Xylene	Not detected	mg/L	0.01	8260	11/01/00	VFM	106-42-3	C
Acetone	Not detected	mg/L	0.5	8260	11/01/00	VFM	67-64-1	C
2-Butanone (MEK)	Not detected	mg/L	0.5	8260	11/01/00	VFM	78-93-3	C
Carbon disulfide	Not detected	mg/L	0.5	8260	11/01/00	VFM	75-15-0	C
2-Hexanone	Not detected	mg/L	0.5	8260	11/01/00	VFM	591-78-6	C
4-Methyl-2-pentanone (MIBK)	Not detected	mg/L	0.5	8260	11/01/00	VFM	108-10-1	C
GC/MS Semi-Volatile Organics								
Acenaphthene	Not detected	mg/L	0.01	8270	10/30/00	GCE	83-32-9	
Acenaphthylene	Not detected	mg/L	0.01	8270	10/30/00	GCE	208-96-8	
Anthracene	Not detected	mg/L	0.01	8270	10/30/00	GCE	120-12-7	
Benzo(a)anthracene	Not detected	mg/L	0.01	8270	10/30/00	GCE	56-55-3	
Benzo(b)fluoranthene	Not detected	mg/L	0.01	8270	10/30/00	GCE	205-99-2	
Benzo(k)fluoranthene	Not detected	mg/L	0.01	8270	10/30/00	GCE	207-08-9	
Benzo(ghi)perylene	Not detected	mg/L	0.01	8270	10/30/00	GCE	191-24-2	
Benzo(a)pyrene	Not detected	mg/L	0.01	8270	10/30/00	GCE	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	mg/L	0.01	8270	10/30/00	GCE	111-91-1	
bis(2-Chloroethyl)ether	Not detected	mg/L	0.01	8270	10/30/00	GCE	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	mg/L	0.01	8270	10/30/00	GCE	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	117-81-7	

C-Higher detection limit due to high target concentration.



Analytical Laboratory Report

Lab Sample ID: S03531.05 (continued)

Sample Tag: MW-05S

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
GC/MS Semi-Volatile Organics (continued)								
4-Bromophenyl phenyl ether	Not detected	mg/L	0.01	8270	10/30/00	GCE	101-55-3	
Butyl benzyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	85-68-7	
4-Chloroaniline	Not detected	mg/L	0.01	8270	10/30/00	GCE	106-47-8	
2-Chloronaphthalene	Not detected	mg/L	0.01	8270	10/30/00	GCE	91-58-7	
4-Chloro-3-methylphenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	59-50-7	
2-Chlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	mg/L	0.01	8270	10/30/00	GCE	7005-72-3	
Chrysene	Not detected	mg/L	0.01	8270	10/30/00	GCE	218-01-9	
p,m-Cresol	Not detected	mg/L	0.01	8270	10/30/00	GCE	106-44-5	
o-Cresol	Not detected	mg/L	0.01	8270	10/30/00	GCE	95-48-7	
Dibenzo(ah)anthracene	Not detected	mg/L	0.01	8270	10/30/00	GCE	53-70-3	
Dibenzofuran	Not detected	mg/L	0.01	8270	10/30/00	GCE	132-64-9	
di-n-Butyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	84-74-2	
1,2-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	95-50-1	
1,3-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	541-73-1	
1,4-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	106-46-7	
3,3'-Dichlorobenzidine	Not detected	mg/L	0.01	8270	10/30/00	GCE	91-94-1	
2,4-Dichlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	120-83-2	
Diethyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	84-66-2	
2,4-Dimethylphenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	105-67-9	
Dimethyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	534-52-1	
2,4-Dinitrophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	51-28-5	
2,4-Dinitrotoluene	Not detected	mg/L	0.01	8270	10/30/00	GCE	121-14-2	
2,6-Dinitrotoluene	Not detected	mg/L	0.01	8270	10/30/00	GCE	606-20-2	
di-n-Octyl phthalate	Not detected	mg/L	0.01	8270	10/30/00	GCE	117-84-0	
Fluoranthene	Not detected	mg/L	0.01	8270	10/30/00	GCE	206-44-0	
Fluorene	Not detected	mg/L	0.01	8270	10/30/00	GCE	86-73-7	
Hexachlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	118-74-1	
Hexachlorobutadiene	Not detected	mg/L	0.01	8270	10/30/00	GCE	87-68-3	
Hexachlorocyclopentadiene	Not detected	mg/L	0.01	8270	10/30/00	GCE	77-47-4	
Hexachloroethane	Not detected	mg/L	0.01	8270	10/30/00	GCE	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	mg/L	0.01	8270	10/30/00	GCE	193-39-5	
Isophorone	Not detected	mg/L	0.01	8270	10/30/00	GCE	78-59-1	
2-Methylnaphthalene	Not detected	mg/L	0.01	8270	10/30/00	GCE	91-57-6	
Naphthalene	Not detected	mg/L	0.01	8270	10/30/00	GCE	91-20-3	
2-Nitroaniline	Not detected	mg/L	0.01	8270	10/30/00	GCE	88-74-4	
3-Nitroaniline	Not detected	mg/L	0.01	8270	10/30/00	GCE	99-09-2	
4-Nitroaniline	Not detected	mg/L	0.01	8270	10/30/00	GCE	100-01-6	
Nitrobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	98-95-3	
2-Nitrophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	88-75-5	
4-Nitrophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	100-02-7	
N-Nitrosodiphenylamine	Not detected	mg/L	0.01	8270	10/30/00	GCE	156-10-5	
N-Nitrosodi-n-propylamine	Not detected	mg/L	0.01	8270	10/30/00	GCE	621-64-7	
Pentachlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	87-86-5	
Phenanthrene	Not detected	mg/L	0.01	8270	10/30/00	GCE	85-01-8	
Phenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	108-95-2	
Pyrene	Not detected	mg/L	0.01	8270	10/30/00	GCE	129-00-0	
1,2,4-Trichlorobenzene	Not detected	mg/L	0.01	8270	10/30/00	GCE	120-82-1	



Analytical Laboratory Report

Lab Sample ID: S03531.05 (continued)

Sample Tag: MW-05S

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
GC/MS Semi-Volatile Organics (continued)								
2,4,5-Trichlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	95-95-4	
2,4,6-Trichlorophenol	Not detected	mg/L	0.01	8270	10/30/00	GCE	88-06-2	



Analytical Laboratory Report

Lab Sample ID: S03531.06
 Sample Tag: MW-11S
 Collected Date/Time: 10/18/2000 14:00
 Matrix: Groundwater
 COC Reference: 002328

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40 ml Glass	None	Yes	4	3184
2	1 L Amber	None	Yes	4	3184
1	125ml Plastic	HNO3	Yes	4	3184

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Metals								
Digestion	Completed			varies	10/24/00	EMIL		
Arsenic	0.017	mg/L	0.001	200.8	10/24/00	EMIL	7440-38-2	
Barium	0.39	mg/L	0.01	200.8	10/24/00	EMIL	7440-39-3	
Cadmium	Not detected	mg/L	0.0002	200.8	10/24/00	EMIL	7440-43-9	
Chromium	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-47-3	
Copper	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-50-8	
Lead	Not detected	mg/L	0.003	200.8	10/24/00	EMIL	7439-92-1	
Mercury	Not detected	mg/L	0.0002	245.1M	10/25/00	EMIL	7439-97-6	
Selenium	Not detected	mg/L	0.005	200.8	10/24/00	EMIL	7782-49-2	
Silver	Not detected	mg/L	0.0005	200.8	10/24/00	EMIL	7440-22-4	
Zinc	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-66-6	
Organics								
BNA Extraction	Completed			3510	10/23/00	KJT		
Extraction, PCB	Completed			3510	10/23/00	JKB		
PCB								
PCB-1016	Not detected	mg/L	0.0001	8082	10/25/00	JANB	12674-11-2	
PCB-1221	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11104-28-2	
PCB-1232	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11141-16-5	
PCB-1248	Not detected	mg/L	0.0001	8082	10/25/00	JANB	12672-29-6	
PCB-1254	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11097-69-1	
PCB-1260	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11096-82-5	
PCB-1242	Not detected	mg/L	0.0001	8082	10/25/00	JANB	53469-21-9	
Total PCB	Not detected	mg/L	0.0001	8082	10/25/00	JANB		
Volatile Organics								
Benzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	71-43-2	
Bromodichloromethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	75-27-4	
Bromoform	Not detected	mg/L	0.001	8260	11/01/00	VFM	75-25-2	
Bromomethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	74-83-9	
n-Butylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	104-51-8	
sec-Butylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	135-98-8	
tert-Butylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	98-06-6	
Carbon tetrachloride	Not detected	mg/L	0.001	8260	11/01/00	VFM	56-23-5	
Chlorobenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	108-90-7	
Chloroethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	75-00-3	
Chloroform	Not detected	mg/L	0.001	8260	11/01/00	VFM	67-66-3	
Chloromethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	74-87-3	
Dibromochloromethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	124-48-1	
1,2-Dichlorobenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	95-50-1	



Analytical Laboratory Report

Lab Sample ID: S03531.06 (continued)

Sample Tag: MW-11S

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
Volatile Organics (continued)								
1,3-Dichlorobenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	541-73-1	
1,4-Dichlorobenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	106-46-7	
1,1-Dichloroethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	75-34-3	
1,2-Dichloroethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	107-06-2	
1,1-Dichloroethene	Not detected	mg/L	0.001	8260	11/01/00	VFM	75-35-4	
cis-1,2-Dichloroethene	Not detected	mg/L	0.001	8260	11/01/00	VFM	156-59-2	
trans-1,2-Dichloroethene	Not detected	mg/L	0.001	8260	11/01/00	VFM	156-60-5	
1,2-Dichloropropane	Not detected	mg/L	0.001	8260	11/01/00	VFM	78-87-5	
cis-1,3-Dichloropropene	Not detected	mg/L	0.001	8260	11/01/00	VFM	10061-01-5	
trans-1,3-Dichloropropene	Not detected	mg/L	0.001	8260	11/01/00	VFM	10061-02-6	
Ethylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	100-41-4	
Isopropylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	98-82-8	
p-Isopropyltoluene	Not detected	mg/L	0.001	8260	11/01/00	VFM	99-87-6	
Methylene chloride	0.006	u mg/L	0.005	8260	11/01/00	VFM	75-09-2	
Naphthalene	Not detected	mg/L	0.001	8260	11/01/00	VFM	91-20-3	
n-Propylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	103-65-1	
Styrene	Not detected	mg/L	0.001	8260	11/01/00	VFM	100-42-5	
1,1,2,2-Tetrachloroethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	79-34-5	
Tetrachloroethene	Not detected	mg/L	0.001	8260	11/01/00	VFM	127-18-4	
Toluene	Not detected	mg/L	0.001	8260	11/01/00	VFM	108-88-3	
1,1,1-Trichloroethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	71-55-6	
1,1,2-Trichloroethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	79-00-5	
Trichloroethene	Not detected	mg/L	0.001	8260	11/01/00	VFM	79-01-6	
1,2,4-Trimethylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	95-63-6	
1,3,5-Trimethylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	108-67-8	
Vinyl chloride	Not detected	mg/L	0.001	8260	11/01/00	VFM	75-01-4	
o-Xylene	Not detected	mg/L	0.001	8260	11/01/00	VFM	95-47-6	
p,m-Xylene	Not detected	mg/L	0.001	8260	11/01/00	VFM	106-42-3	
Acetone	Not detected	mg/L	0.05	8260	11/01/00	VFM	67-64-1	
2-Butanone (MEK)	Not detected	mg/L	0.05	8260	11/01/00	VFM	78-93-3	
Carbon disulfide	Not detected	mg/L	0.05	8260	11/01/00	VFM	75-15-0	
2-Hexanone	Not detected	mg/L	0.05	8260	11/01/00	VFM	591-78-6	
4-Methyl-2-pentanone (MIBK)	Not detected	mg/L	0.05	8260	11/01/00	VFM	108-10-1	
GC/MS Semi-Volatile Organics								
Acenaphthene	Not detected	mg/L	0.01	8270	10/31/00	GCE	83-32-9	
Acenaphthylene	Not detected	mg/L	0.01	8270	10/31/00	GCE	208-96-8	
Anthracene	Not detected	mg/L	0.01	8270	10/31/00	GCE	120-12-7	
Benzo(a)anthracene	Not detected	mg/L	0.01	8270	10/31/00	GCE	56-55-3	
Benzo(b)fluoranthene	Not detected	mg/L	0.01	8270	10/31/00	GCE	205-99-2	
Benzo(k)fluoranthene	Not detected	mg/L	0.01	8270	10/31/00	GCE	207-08-9	
Benzo(ghi)perylene	Not detected	mg/L	0.01	8270	10/31/00	GCE	191-24-2	
Benzo(a)pyrene	Not detected	mg/L	0.01	8270	10/31/00	GCE	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	mg/L	0.01	8270	10/31/00	GCE	111-91-1	
bis(2-Chloroethyl)ether	Not detected	mg/L	0.01	8270	10/31/00	GCE	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	mg/L	0.01	8270	10/31/00	GCE	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	117-81-7	
4-Bromophenyl phenyl ether	Not detected	mg/L	0.01	8270	10/31/00	GCE	101-55-3	
Butyl benzyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	85-68-7	

TB
1/5/01



Analytical Laboratory Report

Lab Sample ID: S03531.06 (continued)

Sample Tag: MW-11S

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
GC/MS Semi-Volatile Organics (continued)								
4-Chloroaniline	Not detected	mg/L	0.01	8270	10/31/00	GCE	106-47-8	
2-Chloronaphthalene	Not detected	mg/L	0.01	8270	10/31/00	GCE	91-58-7	
4-Chloro-3-methylphenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	59-50-7	
2-Chlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	mg/L	0.01	8270	10/31/00	GCE	7005-72-3	
Chrysene	Not detected	mg/L	0.01	8270	10/31/00	GCE	218-01-9	
p,m-Cresol	Not detected	mg/L	0.01	8270	10/31/00	GCE	106-44-5	
o-Cresol	Not detected	mg/L	0.01	8270	10/31/00	GCE	95-48-7	
Dibenzo(ah)anthracene	Not detected	mg/L	0.01	8270	10/31/00	GCE	53-70-3	
Dibenzofuran	Not detected	mg/L	0.01	8270	10/31/00	GCE	132-64-9	
di-n-Butyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	84-74-2	
1,2-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	95-50-1	
1,3-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	541-73-1	
1,4-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	106-46-7	
3,3'-Dichlorobenzidine	Not detected	mg/L	0.01	8270	10/31/00	GCE	91-94-1	
2,4-Dichlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	120-83-2	
Diethyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	84-66-2	
2,4-Dimethylphenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	105-67-9	
Dimethyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	534-52-1	
2,4-Dinitrophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	51-28-5	
2,4-Dinitrotoluene	Not detected	mg/L	0.01	8270	10/31/00	GCE	121-14-2	
2,6-Dinitrotoluene	Not detected	mg/L	0.01	8270	10/31/00	GCE	606-20-2	
di-n-Octyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	117-84-0	
Fluoranthene	Not detected	mg/L	0.01	8270	10/31/00	GCE	206-44-0	
Fluorene	Not detected	mg/L	0.01	8270	10/31/00	GCE	86-73-7	
Hexachlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	118-74-1	
Hexachlorobutadiene	Not detected	mg/L	0.01	8270	10/31/00	GCE	87-68-3	
Hexachlorocyclopentadiene	Not detected	mg/L	0.01	8270	10/31/00	GCE	77-47-4	
Hexachloroethane	Not detected	mg/L	0.01	8270	10/31/00	GCE	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	mg/L	0.01	8270	10/31/00	GCE	193-39-5	
Isophorone	Not detected	mg/L	0.01	8270	10/31/00	GCE	78-59-1	
2-Methylnaphthalene	Not detected	mg/L	0.01	8270	10/31/00	GCE	91-57-6	
Naphthalene	Not detected	mg/L	0.01	8270	10/31/00	GCE	91-20-3	
2-Nitroaniline	Not detected	mg/L	0.01	8270	10/31/00	GCE	88-74-4	
3-Nitroaniline	Not detected	mg/L	0.01	8270	10/31/00	GCE	99-09-2	
4-Nitroaniline	Not detected	mg/L	0.01	8270	10/31/00	GCE	100-01-6	
Nitrobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	98-95-3	
2-Nitrophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	88-75-5	
4-Nitrophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	100-02-7	
N-Nitrosodiphenylamine	Not detected	mg/L	0.01	8270	10/31/00	GCE	156-10-5	
N-Nitrosodi-n-propylamine	Not detected	mg/L	0.01	8270	10/31/00	GCE	621-64-7	
Pentachlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	87-86-5	
Phenanthrene	Not detected	mg/L	0.01	8270	10/31/00	GCE	85-01-8	
Phenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	108-95-2	
Pyrene	Not detected	mg/L	0.01	8270	10/31/00	GCE	129-00-0	
1,2,4-Trichlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	120-82-1	
2,4,5-Trichlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	95-95-4	
2,4,6-Trichlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	88-06-2	



Analytical Laboratory Report

Lab Sample ID: S03531.07
 Sample Tag: MW-10S
 Collected Date/Time: 10/18/2000 15:00
 Matrix: Groundwater
 COC Reference: 002328

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40 ml Glass	None	Yes	4	3184
2	1 L Amber	None	Yes	4	3184
1	125ml Plastic	HNO3	Yes	4	3184

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Metals								
Digestion	Completed			varies	10/24/00	EMIL		
Arsenic	0.007	mg/L	0.001	200.8	10/24/00	EMIL	7440-38-2	
Barium	0.02	mg/L	0.01	200.8	10/24/00	EMIL	7440-39-3	
Cadmium	Not detected	mg/L	0.0002	200.8	10/24/00	EMIL	7440-43-9	
Chromium	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-47-3	
Copper	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-50-8	
Lead	Not detected	mg/L	0.003	200.8	10/24/00	EMIL	7439-92-1	
Mercury	Not detected	mg/L	0.0002	245.1M	10/25/00	EMIL	7439-97-6	
Selenium	Not detected	mg/L	0.005	200.8	10/24/00	EMIL	7782-49-2	
Silver	Not detected	mg/L	0.0005	200.8	10/24/00	EMIL	7440-22-4	
Zinc	0.01	mg/L	0.01	200.8	10/24/00	EMIL	7440-66-6	
Organics								
BNA Extraction	Completed			3510	10/24/00	KJT		
Extraction, PCB	Completed			3510	10/23/00	JKB		
PCB								
PCB-1016	Not detected	mg/L	0.0001	8082	10/25/00	JANB	12674-11-2	
PCB-1221	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11104-28-2	
PCB-1232	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11141-16-5	
PCB-1248	Not detected	mg/L	0.0001	8082	10/25/00	JANB	12672-29-6	
PCB-1254	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11097-69-1	
PCB-1260	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11096-82-5	
PCB-1242	Not detected	mg/L	0.0001	8082	10/25/00	JANB	53469-21-9	
Total PCB	Not detected	mg/L	0.0001	8082	10/25/00	JANB		
Volatile Organics								
Benzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	71-43-2	
Bromodichloromethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	75-27-4	
Bromoform	Not detected	mg/L	0.001	8260	11/01/00	VFM	75-25-2	
Bromomethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	74-83-9	
n-Butylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	104-51-8	
sec-Butylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	135-98-8	
tert-Butylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	98-06-6	
Carbon tetrachloride	Not detected	mg/L	0.001	8260	11/01/00	VFM	56-23-5	
Chlorobenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	108-90-7	
Chloroethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	75-00-3	
Chloroform	Not detected	mg/L	0.001	8260	11/01/00	VFM	67-66-3	
Chloromethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	74-87-3	
Dibromochloromethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	124-48-1	
1,2-Dichlorobenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	95-50-1	



Analytical Laboratory Report

Lab Sample ID: S03531.07 (continued)

Sample Tag: MW-10S

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
Volatile Organics (continued)								
1,3-Dichlorobenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	541-73-1	
1,4-Dichlorobenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	106-46-7	
1,1-Dichloroethane	0.039	mg/L	0.001	8260	11/01/00	VFM	75-34-3	
1,2-Dichloroethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	107-06-2	
1,1-Dichloroethene	Not detected	mg/L	0.001	8260	11/01/00	VFM	75-35-4	
cis-1,2-Dichloroethene	0.002	mg/L	0.001	8260	11/01/00	VFM	156-59-2	
trans-1,2-Dichloroethene	Not detected	mg/L	0.001	8260	11/01/00	VFM	156-60-5	
1,2-Dichloropropane	Not detected	mg/L	0.001	8260	11/01/00	VFM	78-87-5	
cis-1,3-Dichloropropene	Not detected	mg/L	0.001	8260	11/01/00	VFM	10061-01-5	
trans-1,3-Dichloropropene	Not detected	mg/L	0.001	8260	11/01/00	VFM	10061-02-6	
Ethylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	100-41-4	
Isopropylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	98-82-8	
p-Isopropyltoluene	Not detected	mg/L	0.001	8260	11/01/00	VFM	99-87-6	
Methylene chloride	Not detected	mg/L	0.005	8260	11/01/00	VFM	75-09-2	
Naphthalene	Not detected	mg/L	0.001	8260	11/01/00	VFM	91-20-3	
n-Propylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	103-65-1	
Styrene	Not detected	mg/L	0.001	8260	11/01/00	VFM	100-42-5	
1,1,2,2-Tetrachloroethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	79-34-5	
Tetrachloroethene	Not detected	mg/L	0.001	8260	11/01/00	VFM	127-18-4	
Toluene	Not detected	mg/L	0.001	8260	11/01/00	VFM	108-88-3	
1,1,1-Trichloroethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	71-55-6	
1,1,2-Trichloroethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	79-00-5	
Trichloroethene	0.001	mg/L	0.001	8260	11/01/00	VFM	79-01-6	
1,2,4-Trimethylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	95-63-6	
1,3,5-Trimethylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	108-67-8	
Vinyl chloride	Not detected	mg/L	0.001	8260	11/01/00	VFM	75-01-4	
o-Xylene	Not detected	mg/L	0.001	8260	11/01/00	VFM	95-47-6	
p,m-Xylene	Not detected	mg/L	0.001	8260	11/01/00	VFM	106-42-3	
Acetone	Not detected	mg/L	0.05	8260	11/01/00	VFM	67-64-1	
2-Butanone (MEK)	Not detected	mg/L	0.05	8260	11/01/00	VFM	78-93-3	
Carbon disulfide	Not detected	mg/L	0.05	8260	11/01/00	VFM	75-15-0	
2-Hexanone	Not detected	mg/L	0.05	8260	11/01/00	VFM	591-78-6	
4-Methyl-2-pentanone (MIBK)	Not detected	mg/L	0.05	8260	11/01/00	VFM	108-10-1	
GC/MS Semi-Volatile Organics								
Acenaphthene	Not detected	mg/L	0.01	8270	10/31/00	GCE	83-32-9	
Acenaphthylene	Not detected	mg/L	0.01	8270	10/31/00	GCE	208-96-8	
Anthracene	Not detected	mg/L	0.01	8270	10/31/00	GCE	120-12-7	
Benzo(a)anthracene	Not detected	mg/L	0.01	8270	10/31/00	GCE	56-55-3	
Benzo(b)fluoranthene	Not detected	mg/L	0.01	8270	10/31/00	GCE	205-99-2	
Benzo(k)fluoranthene	Not detected	mg/L	0.01	8270	10/31/00	GCE	207-08-9	
Benzo(ghi)perylene	Not detected	mg/L	0.01	8270	10/31/00	GCE	191-24-2	
Benzo(a)pyrene	Not detected	mg/L	0.01	8270	10/31/00	GCE	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	mg/L	0.01	8270	10/31/00	GCE	111-91-1	
bis(2-Chloroethyl)ether	Not detected	mg/L	0.01	8270	10/31/00	GCE	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	mg/L	0.01	8270	10/31/00	GCE	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	117-81-7	
4-Bromophenyl phenyl ether	Not detected	mg/L	0.01	8270	10/31/00	GCE	101-55-3	
Butyl benzyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	85-68-7	



Analytical Laboratory Report

Lab Sample ID: S03531.07 (continued)

Sample Tag: MW-10S

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
GC/MS Semi-Volatile Organics (continued)								
4-Chloroaniline	Not detected	mg/L	0.01	8270	10/31/00	GCE	106-47-8	
2-Chloronaphthalene	Not detected	mg/L	0.01	8270	10/31/00	GCE	91-58-7	
4-Chloro-3-methylphenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	59-50-7	
2-Chlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	mg/L	0.01	8270	10/31/00	GCE	7005-72-3	
Chrysene	Not detected	mg/L	0.01	8270	10/31/00	GCE	218-01-9	
p,m-Cresol	Not detected	mg/L	0.01	8270	10/31/00	GCE	106-44-5	
o-Cresol	Not detected	mg/L	0.01	8270	10/31/00	GCE	95-48-7	
Dibenzo(ah)anthracene	Not detected	mg/L	0.01	8270	10/31/00	GCE	53-70-3	
Dibenzofuran	Not detected	mg/L	0.01	8270	10/31/00	GCE	132-64-9	
di-n-Butyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	84-74-2	
1,2-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	95-50-1	
1,3-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	541-73-1	
1,4-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	106-46-7	
3,3'-Dichlorobenzidine	Not detected	mg/L	0.01	8270	10/31/00	GCE	91-94-1	
2,4-Dichlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	120-83-2	
Diethyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	84-66-2	
2,4-Dimethylphenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	105-67-9	
Dimethyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	534-52-1	
2,4-Dinitrophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	51-28-5	
2,4-Dinitrotoluene	Not detected	mg/L	0.01	8270	10/31/00	GCE	121-14-2	
2,6-Dinitrotoluene	Not detected	mg/L	0.01	8270	10/31/00	GCE	606-20-2	
di-n-Octyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	117-84-0	
Fluoranthene	Not detected	mg/L	0.01	8270	10/31/00	GCE	206-44-0	
Fluorene	Not detected	mg/L	0.01	8270	10/31/00	GCE	86-73-7	
Hexachlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	118-74-1	
Hexachlorobutadiene	Not detected	mg/L	0.01	8270	10/31/00	GCE	87-68-3	
Hexachlorocyclopentadiene	Not detected	mg/L	0.01	8270	10/31/00	GCE	77-47-4	
Hexachloroethane	Not detected	mg/L	0.01	8270	10/31/00	GCE	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	mg/L	0.01	8270	10/31/00	GCE	193-39-5	
Isophorone	Not detected	mg/L	0.01	8270	10/31/00	GCE	78-59-1	
2-Methylnaphthalene	Not detected	mg/L	0.01	8270	10/31/00	GCE	91-57-6	
Naphthalene	Not detected	mg/L	0.01	8270	10/31/00	GCE	91-20-3	
2-Nitroaniline	Not detected	mg/L	0.01	8270	10/31/00	GCE	88-74-4	
3-Nitroaniline	Not detected	mg/L	0.01	8270	10/31/00	GCE	99-09-2	
4-Nitroaniline	Not detected	mg/L	0.01	8270	10/31/00	GCE	100-01-6	
Nitrobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	98-95-3	
2-Nitrophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	88-75-5	
4-Nitrophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	100-02-7	
N-Nitrosodiphenylamine	Not detected	mg/L	0.01	8270	10/31/00	GCE	156-10-5	
N-Nitrosodi-n-propylamine	Not detected	mg/L	0.01	8270	10/31/00	GCE	621-64-7	
Pentachlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	87-86-5	
Phenanthrene	Not detected	mg/L	0.01	8270	10/31/00	GCE	85-01-8	
Phenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	108-95-2	
Pyrene	Not detected	mg/L	0.01	8270	10/31/00	GCE	129-00-0	
1,2,4-Trichlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	120-82-1	
2,4,5-Trichlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	95-95-4	
2,4,6-Trichlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	88-06-2	



Analytical Laboratory Report

Lab Sample ID: S03531.08
 Sample Tag: MW-12S
 Collected Date/Time: 10/18/2000 16:10
 Matrix: Groundwater
 COC Reference: 002328

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40 ml Glass	None	Yes	4	3184
2	1 L Amber	None	Yes	4	3184
1	125ml Plastic	HNO3	Yes	4	3184

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Metals								
Digestion	Completed			varies	10/24/00	EMIL		
Arsenic	Not detected	mg/L	0.001	200.8	10/24/00	EMIL	7440-38-2	
Barium	0.15	mg/L	0.01	200.8	10/24/00	EMIL	7440-39-3	
Cadmium	Not detected	mg/L	0.0002	200.8	10/24/00	EMIL	7440-43-9	
Chromium	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-47-3	
Copper	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-50-8	
Lead	Not detected	mg/L	0.003	200.8	10/24/00	EMIL	7439-92-1	
Mercury	Not detected	mg/L	0.0002	245.1M	10/25/00	EMIL	7439-97-6	
Selenium	Not detected	mg/L	0.005	200.8	10/24/00	EMIL	7782-49-2	
Silver	Not detected	mg/L	0.0005	200.8	10/24/00	EMIL	7440-22-4	
Zinc	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-66-6	
Organics								
BNA Extraction	Completed			3510	10/24/00	KJT		
Extraction, PCB	Completed			3510	10/23/00	JKB		
PCB								
PCB-1016	Not detected	mg/L	0.0001	8082	10/25/00	JANB	12674-11-2	
PCB-1221	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11104-28-2	
PCB-1232	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11141-16-5	
PCB-1248	Not detected	mg/L	0.0001	8082	10/25/00	JANB	12672-29-6	
PCB-1254	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11097-69-1	
PCB-1260	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11096-82-5	
PCB-1242	Not detected	mg/L	0.0001	8082	10/25/00	JANB	53469-21-9	
Total PCB	Not detected	mg/L	0.0001	8082	10/25/00	JANB		
Volatile Organics								
Benzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	71-43-2	
Bromodichloromethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-27-4	
Bromoform	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-25-2	
Bromomethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	74-83-9	
n-Butylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	104-51-8	
sec-Butylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	135-98-8	
tert-Butylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	98-06-6	
Carbon tetrachloride	Not detected	mg/L	0.001	8260	10/29/00	VFM	56-23-5	
Chlorobenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	108-90-7	
Chloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-00-3	
Chloroform	Not detected	mg/L	0.001	8260	10/29/00	VFM	67-66-3	
Chloromethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	74-87-3	
Dibromochloromethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	124-48-1	
1,2-Dichlorobenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	95-50-1	



Analytical Laboratory Report

Lab Sample ID: S03531.08 (continued)

Sample Tag: MW-12S

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
Volatile Organics (continued)								
1,3-Dichlorobenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	541-73-1	
1,4-Dichlorobenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	106-46-7	
1,1-Dichloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-34-3	
1,2-Dichloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	107-06-2	
1,1-Dichloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-35-4	
cis-1,2-Dichloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	156-59-2	
trans-1,2-Dichloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	156-60-5	
1,2-Dichloropropane	Not detected	mg/L	0.001	8260	10/29/00	VFM	78-87-5	
cis-1,3-Dichloropropene	Not detected	mg/L	0.001	8260	10/29/00	VFM	10061-01-5	
trans-1,3-Dichloropropene	Not detected	mg/L	0.001	8260	10/29/00	VFM	10061-02-6	
Ethylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	100-41-4	
Isopropylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	98-82-8	
p-Isopropyltoluene	Not detected	mg/L	0.001	8260	10/29/00	VFM	99-87-6	
Methylene chloride	Not detected	mg/L	0.005	8260	10/29/00	VFM	75-09-2	
Naphthalene	Not detected	mg/L	0.001	8260	10/29/00	VFM	91-20-3	
n-Propylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	103-65-1	
Styrene	Not detected	mg/L	0.001	8260	10/29/00	VFM	100-42-5	
1,1,2,2-Tetrachloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	79-34-5	
Tetrachloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	127-18-4	
Toluene	Not detected	mg/L	0.001	8260	10/29/00	VFM	108-88-3	
1,1,1-Trichloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	71-55-6	
1,1,2-Trichloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	79-00-5	
Trichloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	79-01-6	
1,2,4-Trimethylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	95-63-6	
1,3,5-Trimethylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	108-67-8	
Vinyl chloride	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-01-4	
o-Xylene	Not detected	mg/L	0.001	8260	10/29/00	VFM	95-47-6	
p,m-Xylene	Not detected	mg/L	0.001	8260	10/29/00	VFM	106-42-3	
Acetone	Not detected	mg/L	0.05	8260	10/29/00	VFM	67-64-1	
2-Butanone (MEK)	Not detected	mg/L	0.05	8260	10/29/00	VFM	78-93-3	
Carbon disulfide	Not detected	mg/L	0.05	8260	10/29/00	VFM	75-15-0	
2-Hexanone	Not detected	mg/L	0.05	8260	10/29/00	VFM	591-78-6	
4-Methyl-2-pentanone (MIBK)	Not detected	mg/L	0.05	8260	10/29/00	VFM	108-10-1	
GC/MS Semi-Volatile Organics								
Acenaphthene	Not detected	mg/L	0.01	8270	10/31/00	GCE	83-32-9	
Acenaphthylene	Not detected	mg/L	0.01	8270	10/31/00	GCE	208-96-8	
Anthracene	Not detected	mg/L	0.01	8270	10/31/00	GCE	120-12-7	
Benzo(a)anthracene	Not detected	mg/L	0.01	8270	10/31/00	GCE	56-55-3	
Benzo(b)fluoranthene	Not detected	mg/L	0.01	8270	10/31/00	GCE	205-99-2	
Benzo(k)fluoranthene	Not detected	mg/L	0.01	8270	10/31/00	GCE	207-08-9	
Benzo(ghi)perylene	Not detected	mg/L	0.01	8270	10/31/00	GCE	191-24-2	
Benzo(a)pyrene	Not detected	mg/L	0.01	8270	10/31/00	GCE	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	mg/L	0.01	8270	10/31/00	GCE	111-91-1	
bis(2-Chloroethyl)ether	Not detected	mg/L	0.01	8270	10/31/00	GCE	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	mg/L	0.01	8270	10/31/00	GCE	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	117-81-7	
4-Bromophenyl phenyl ether	Not detected	mg/L	0.01	8270	10/31/00	GCE	101-55-3	
Butyl benzyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	85-68-7	



Analytical Laboratory Report

Lab Sample ID: S03531.08 (continued)

Sample Tag: MW-12S

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
GC/MS Semi-Volatile Organics (continued)								
4-Chloroaniline	Not detected	mg/L	0.01	8270	10/31/00	GCE	106-47-8	
2-Chloronaphthalene	Not detected	mg/L	0.01	8270	10/31/00	GCE	91-58-7	
4-Chloro-3-methylphenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	59-50-7	
2-Chlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	mg/L	0.01	8270	10/31/00	GCE	7005-72-3	
Chrysene	Not detected	mg/L	0.01	8270	10/31/00	GCE	218-01-9	
p,m-Cresol	Not detected	mg/L	0.01	8270	10/31/00	GCE	106-44-5	
o-Cresol	Not detected	mg/L	0.01	8270	10/31/00	GCE	95-48-7	
Dibenzo(ah)anthracene	Not detected	mg/L	0.01	8270	10/31/00	GCE	53-70-3	
Dibenzofuran	Not detected	mg/L	0.01	8270	10/31/00	GCE	132-64-9	
di-n-Butyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	84-74-2	
1,2-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	95-50-1	
1,3-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	541-73-1	
1,4-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	106-46-7	
3,3'-Dichlorobenzidine	Not detected	mg/L	0.01	8270	10/31/00	GCE	91-94-1	
2,4-Dichlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	120-83-2	
Diethyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	84-66-2	
2,4-Dimethylphenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	105-67-9	
Dimethyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	534-52-1	
2,4-Dinitrophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	51-28-5	
2,4-Dinitrotoluene	Not detected	mg/L	0.01	8270	10/31/00	GCE	121-14-2	
2,6-Dinitrotoluene	Not detected	mg/L	0.01	8270	10/31/00	GCE	606-20-2	
di-n-Octyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	117-84-0	
Fluoranthene	Not detected	mg/L	0.01	8270	10/31/00	GCE	206-44-0	
Fluorene	Not detected	mg/L	0.01	8270	10/31/00	GCE	86-73-7	
Hexachlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	118-74-1	
Hexachlorobutadiene	Not detected	mg/L	0.01	8270	10/31/00	GCE	87-68-3	
Hexachlorocyclopentadiene	Not detected	mg/L	0.01	8270	10/31/00	GCE	77-47-4	
Hexachloroethane	Not detected	mg/L	0.01	8270	10/31/00	GCE	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	mg/L	0.01	8270	10/31/00	GCE	193-39-5	
Isophorone	Not detected	mg/L	0.01	8270	10/31/00	GCE	78-59-1	
2-Methylnaphthalene	Not detected	mg/L	0.01	8270	10/31/00	GCE	91-57-6	
Naphthalene	Not detected	mg/L	0.01	8270	10/31/00	GCE	91-20-3	
2-Nitroaniline	Not detected	mg/L	0.01	8270	10/31/00	GCE	88-74-4	
3-Nitroaniline	Not detected	mg/L	0.01	8270	10/31/00	GCE	99-09-2	
4-Nitroaniline	Not detected	mg/L	0.01	8270	10/31/00	GCE	100-01-6	
Nitrobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	98-95-3	
2-Nitrophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	88-75-5	
4-Nitrophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	100-02-7	
N-Nitrosodiphenylamine	Not detected	mg/L	0.01	8270	10/31/00	GCE	156-10-5	
N-Nitrosodi-n-propylamine	Not detected	mg/L	0.01	8270	10/31/00	GCE	621-64-7	
Pentachlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	87-86-5	
Phenanthrene	Not detected	mg/L	0.01	8270	10/31/00	GCE	85-01-8	
Phenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	108-95-2	
Pyrene	Not detected	mg/L	0.01	8270	10/31/00	GCE	129-00-0	
1,2,4-Trichlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	120-82-1	
2,4,5-Trichlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	95-95-4	
2,4,6-Trichlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	88-06-2	



Analytical Laboratory Report

Lab Sample ID: S03531.09
 Sample Tag: MW-13S
 Collected Date/Time: 10/18/2000 16:40
 Matrix: Groundwater
 COC Reference: 002328

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40 ml Glass	None	Yes	4	3184
2	1 L Amber	None	Yes	4	3184
1	125ml Plastic	HNO3	Yes	4	3184

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Metals								
Digestion	Completed			varies	10/24/00	EMIL		
Arsenic	Not detected	mg/L	0.001	200.8	10/24/00	EMIL	7440-38-2	
Barium	0.06	mg/L	0.01	200.8	10/24/00	EMIL	7440-39-3	
Cadmium	Not detected	mg/L	0.0002	200.8	10/24/00	EMIL	7440-43-9	
Chromium	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-47-3	
Copper	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-50-8	
Lead	Not detected	mg/L	0.003	200.8	10/24/00	EMIL	7439-92-1	
Mercury	Not detected	mg/L	0.0002	245.1M	10/25/00	EMIL	7439-97-6	
Selenium	Not detected	mg/L	0.005	200.8	10/24/00	EMIL	7782-49-2	
Silver	Not detected	mg/L	0.0005	200.8	10/24/00	EMIL	7440-22-4	
Zinc	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-66-6	
Organics								
BNA Extraction	Completed			3510	10/24/00	KJT		
Extraction, PCB	Completed			3510	10/23/00	JKB		
PCB								
PCB-1016	Not detected	mg/L	0.0001	8082	10/25/00	JANB	12674-11-2	
PCB-1221	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11104-28-2	
PCB-1232	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11141-16-5	
PCB-1248	Not detected	mg/L	0.0001	8082	10/25/00	JANB	12672-29-6	
PCB-1254	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11097-69-1	
PCB-1260	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11096-82-5	
PCB-1242	Not detected	mg/L	0.0001	8082	10/25/00	JANB	53469-21-9	
Total PCB	Not detected	mg/L	0.0001	8082	10/25/00	JANB		
Volatile Organics								
Benzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	71-43-2	
Bromodichloromethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	75-27-4	
Bromoform	Not detected	mg/L	0.001	8260	11/01/00	VFM	75-25-2	
Bromomethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	74-83-9	
n-Butylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	104-51-8	
sec-Butylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	135-98-8	
tert-Butylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	98-06-6	
Carbon tetrachloride	Not detected	mg/L	0.001	8260	11/01/00	VFM	56-23-5	
Chlorobenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	108-90-7	
Chloroethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	75-00-3	
Chloroform	Not detected	mg/L	0.001	8260	11/01/00	VFM	67-66-3	
Chloromethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	74-87-3	
Dibromochloromethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	124-48-1	
1,2-Dichlorobenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	95-50-1	



Analytical Laboratory Report

Lab Sample ID: S03531.09 (continued)

Sample Tag: MW-13S

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
Volatile Organics (continued)								
1,3-Dichlorobenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	541-73-1	
1,4-Dichlorobenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	106-46-7	
1,1-Dichloroethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	75-34-3	
1,2-Dichloroethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	107-06-2	
1,1-Dichloroethene	Not detected	mg/L	0.001	8260	11/01/00	VFM	75-35-4	
cis-1,2-Dichloroethene	Not detected	mg/L	0.001	8260	11/01/00	VFM	156-59-2	
trans-1,2-Dichloroethene	Not detected	mg/L	0.001	8260	11/01/00	VFM	156-60-5	
1,2-Dichloropropane	Not detected	mg/L	0.001	8260	11/01/00	VFM	78-87-5	
cis-1,3-Dichloropropene	Not detected	mg/L	0.001	8260	11/01/00	VFM	10061-01-5	
trans-1,3-Dichloropropene	Not detected	mg/L	0.001	8260	11/01/00	VFM	10061-02-6	
Ethylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	100-41-4	
Isopropylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	98-82-8	
p-Isopropyltoluene	Not detected	mg/L	0.001	8260	11/01/00	VFM	99-87-6	
Methylene chloride	Not detected	mg/L	0.005	8260	11/01/00	VFM	75-09-2	
Naphthalene	Not detected	mg/L	0.001	8260	11/01/00	VFM	91-20-3	
n-Propylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	103-65-1	
Styrene	Not detected	mg/L	0.001	8260	11/01/00	VFM	100-42-5	
1,1,2,2-Tetrachloroethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	79-34-5	
Tetrachloroethene	Not detected	mg/L	0.001	8260	11/01/00	VFM	127-18-4	
Toluene	Not detected	mg/L	0.001	8260	11/01/00	VFM	108-88-3	
1,1,1-Trichloroethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	71-55-6	
1,1,2-Trichloroethane	Not detected	mg/L	0.001	8260	11/01/00	VFM	79-00-5	
Trichloroethene	Not detected	mg/L	0.001	8260	11/01/00	VFM	79-01-6	
1,2,4-Trimethylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	95-63-6	
1,3,5-Trimethylbenzene	Not detected	mg/L	0.001	8260	11/01/00	VFM	108-67-8	
Vinyl chloride	Not detected	mg/L	0.001	8260	11/01/00	VFM	75-01-4	
o-Xylene	Not detected	mg/L	0.001	8260	11/01/00	VFM	95-47-6	
p,m-Xylene	Not detected	mg/L	0.001	8260	11/01/00	VFM	106-42-3	
Acetone	Not detected	mg/L	0.05	8260	11/01/00	VFM	67-64-1	
2-Butanone (MEK)	Not detected	mg/L	0.05	8260	11/01/00	VFM	78-93-3	
Carbon disulfide	Not detected	mg/L	0.05	8260	11/01/00	VFM	75-15-0	
2-Hexanone	Not detected	mg/L	0.05	8260	11/01/00	VFM	591-78-6	
4-Methyl-2-pentanone (MIBK)	Not detected	mg/L	0.05	8260	11/01/00	VFM	108-10-1	
GC/MS Semi-Volatile Organics								
Acenaphthene	Not detected	mg/L	0.01	8270	10/31/00	GCE	83-32-9	
Acenaphthylene	Not detected	mg/L	0.01	8270	10/31/00	GCE	208-96-8	
Anthracene	Not detected	mg/L	0.01	8270	10/31/00	GCE	120-12-7	
Benzo(a)anthracene	Not detected	mg/L	0.01	8270	10/31/00	GCE	56-55-3	
Benzo(b)fluoranthene	Not detected	mg/L	0.01	8270	10/31/00	GCE	205-99-2	
Benzo(k)fluoranthene	Not detected	mg/L	0.01	8270	10/31/00	GCE	207-08-9	
Benzo(ghi)perylene	Not detected	mg/L	0.01	8270	10/31/00	GCE	191-24-2	
Benzo(a)pyrene	Not detected	mg/L	0.01	8270	10/31/00	GCE	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	mg/L	0.01	8270	10/31/00	GCE	111-91-1	
bis(2-Chloroethyl)ether	Not detected	mg/L	0.01	8270	10/31/00	GCE	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	mg/L	0.01	8270	10/31/00	GCE	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	117-81-7	
4-Bromophenyl phenyl ether	Not detected	mg/L	0.01	8270	10/31/00	GCE	101-55-3	
Butyl benzyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	85-68-7	



Analytical Laboratory Report

Lab Sample ID: S03531.09 (continued)

Sample Tag: MW-13S

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
GC/MS Semi-Volatile Organics (continued)								
4-Chloroaniline	Not detected	mg/L	0.01	8270	10/31/00	GCE	106-47-8	
2-Chloronaphthalene	Not detected	mg/L	0.01	8270	10/31/00	GCE	91-58-7	
4-Chloro-3-methylphenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	59-50-7	
2-Chlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	mg/L	0.01	8270	10/31/00	GCE	7005-72-3	
Chrysene	Not detected	mg/L	0.01	8270	10/31/00	GCE	218-01-9	
p,m-Cresol	Not detected	mg/L	0.01	8270	10/31/00	GCE	106-44-5	
o-Cresol	Not detected	mg/L	0.01	8270	10/31/00	GCE	95-48-7	
Dibenzo(ah)anthracene	Not detected	mg/L	0.01	8270	10/31/00	GCE	53-70-3	
Dibenzofuran	Not detected	mg/L	0.01	8270	10/31/00	GCE	132-64-9	
di-n-Butyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	84-74-2	
1,2-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	95-50-1	
1,3-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	541-73-1	
1,4-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	106-46-7	
3,3'-Dichlorobenzidine	Not detected	mg/L	0.01	8270	10/31/00	GCE	91-94-1	
2,4-Dichlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	120-83-2	
Diethyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	84-66-2	
2,4-Dimethylphenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	105-67-9	
Dimethyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	534-52-1	
2,4-Dinitrophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	51-28-5	
2,4-Dinitrotoluene	Not detected	mg/L	0.01	8270	10/31/00	GCE	121-14-2	
2,6-Dinitrotoluene	Not detected	mg/L	0.01	8270	10/31/00	GCE	606-20-2	
di-n-Octyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	117-84-0	
Fluoranthene	Not detected	mg/L	0.01	8270	10/31/00	GCE	206-44-0	
Fluorene	Not detected	mg/L	0.01	8270	10/31/00	GCE	86-73-7	
Hexachlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	118-74-1	
Hexachlorobutadiene	Not detected	mg/L	0.01	8270	10/31/00	GCE	87-68-3	
Hexachlorocyclopentadiene	Not detected	mg/L	0.01	8270	10/31/00	GCE	77-47-4	
Hexachloroethane	Not detected	mg/L	0.01	8270	10/31/00	GCE	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	mg/L	0.01	8270	10/31/00	GCE	193-39-5	
Isophorone	Not detected	mg/L	0.01	8270	10/31/00	GCE	78-59-1	
2-Methylnaphthalene	Not detected	mg/L	0.01	8270	10/31/00	GCE	91-57-6	
Naphthalene	Not detected	mg/L	0.01	8270	10/31/00	GCE	91-20-3	
2-Nitroaniline	Not detected	mg/L	0.01	8270	10/31/00	GCE	88-74-4	
3-Nitroaniline	Not detected	mg/L	0.01	8270	10/31/00	GCE	99-09-2	
4-Nitroaniline	Not detected	mg/L	0.01	8270	10/31/00	GCE	100-01-6	
Nitrobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	98-95-3	
2-Nitrophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	88-75-5	
4-Nitrophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	100-02-7	
N-Nitrosodiphenylamine	Not detected	mg/L	0.01	8270	10/31/00	GCE	156-10-5	
N-Nitrosodi-n-propylamine	Not detected	mg/L	0.01	8270	10/31/00	GCE	621-64-7	
Pentachlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	87-86-5	
Phenanthrene	Not detected	mg/L	0.01	8270	10/31/00	GCE	85-01-8	
Phenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	108-95-2	
Pyrene	Not detected	mg/L	0.01	8270	10/31/00	GCE	129-00-0	
1,2,4-Trichlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	120-82-1	
2,4,5-Trichlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	95-95-4	
2,4,6-Trichlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	88-06-2	



Analytical Laboratory Report

Lab Sample ID: S03531.10
 Sample Tag: MW-03S
 Collected Date/Time: 10/18/2000 17:30
 Matrix: Groundwater
 COC Reference: 002328

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40 ml Glass	None	Yes	4	3184
2	1 L Amber	None	Yes	4	3184
1	125ml Plastic	HNO3	Yes	4	3184

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Metals								
Digestion	Completed			varies	10/24/00	EMIL		
Arsenic	0.007	mg/L	0.001	200.8	10/24/00	EMIL	7440-38-2	
Barium	0.15	mg/L	0.01	200.8	10/24/00	EMIL	7440-39-3	
Cadmium	Not detected	mg/L	0.0002	200.8	10/24/00	EMIL	7440-43-9	
Chromium	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-47-3	
Copper	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-50-8	
Lead	Not detected	mg/L	0.003	200.8	10/24/00	EMIL	7439-92-1	
Mercury	Not detected	mg/L	0.0002	245.1M	10/25/00	EMIL	7439-97-6	
Selenium	Not detected	mg/L	0.005	200.8	10/24/00	EMIL	7782-49-2	
Silver	Not detected	mg/L	0.0005	200.8	10/24/00	EMIL	7440-22-4	
Zinc	Not detected	mg/L	0.01	200.8	10/24/00	EMIL	7440-66-6	
Organics								
BNA Extraction	Completed			3510	10/24/00	KJT		
Extraction, PCB	Completed			3510	10/23/00	JKB		
PCB								
PCB-1016	Not detected	mg/L	0.0001	8082	10/25/00	JANB	12674-11-2	
PCB-1221	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11104-28-2	
PCB-1232	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11141-16-5	
PCB-1248	Not detected	mg/L	0.0001	8082	10/25/00	JANB	12672-29-6	
PCB-1254	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11097-69-1	
PCB-1260	Not detected	mg/L	0.0001	8082	10/25/00	JANB	11096-82-5	
PCB-1242	Not detected	mg/L	0.0001	8082	10/25/00	JANB	53469-21-9	
Total PCB	Not detected	mg/L	0.0001	8082	10/25/00	JANB		
Volatile Organics								
Benzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	71-43-2	
Bromodichloromethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-27-4	
Bromoform	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-25-2	
Bromomethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	74-83-9	
n-Butylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	104-51-8	
sec-Butylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	135-98-8	
tert-Butylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	98-06-6	
Carbon tetrachloride	Not detected	mg/L	0.001	8260	10/29/00	VFM	56-23-5	
Chlorobenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	108-90-7	
Chloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-00-3	
Chloroform	Not detected	mg/L	0.001	8260	10/29/00	VFM	67-66-3	
Chloromethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	74-87-3	
Dibromochloromethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	124-48-1	
1,2-Dichlorobenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	95-50-1	



Analytical Laboratory Report

Lab Sample ID: S03531.10 (continued)

Sample Tag: MW-03S

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
Volatile Organics (continued)								
1,3-Dichlorobenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	541-73-1	
1,4-Dichlorobenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	106-46-7	
1,1-Dichloroethane	0.017	mg/L	0.001	8260	10/29/00	VFM	75-34-3	
1,2-Dichloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	107-06-2	
1,1-Dichloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-35-4	
cis-1,2-Dichloroethene	0.035	mg/L	0.001	8260	10/29/00	VFM	156-59-2	
trans-1,2-Dichloroethene	0.002	mg/L	0.001	8260	10/29/00	VFM	156-60-5	
1,2-Dichloropropane	0.001	mg/L	0.001	8260	10/29/00	VFM	78-87-5	
cis-1,3-Dichloropropene	Not detected	mg/L	0.001	8260	10/29/00	VFM	10061-01-5	
trans-1,3-Dichloropropene	Not detected	mg/L	0.001	8260	10/29/00	VFM	10061-02-6	
Ethylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	100-41-4	
Isopropylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	98-82-8	
p-Isopropyltoluene	Not detected	mg/L	0.001	8260	10/29/00	VFM	99-87-6	
Methylene chloride	Not detected	mg/L	0.005	8260	10/29/00	VFM	75-09-2	
Naphthalene	Not detected	mg/L	0.001	8260	10/29/00	VFM	91-20-3	
n-Propylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	103-65-1	
Styrene	Not detected	mg/L	0.001	8260	10/29/00	VFM	100-42-5	
1,1,2,2-Tetrachloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	79-34-5	
Tetrachloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	127-18-4	
Toluene	Not detected	mg/L	0.001	8260	10/29/00	VFM	108-88-3	
1,1,1-Trichloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	71-55-6	
1,1,2-Trichloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	79-00-5	
Trichloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	79-01-6	
1,2,4-Trimethylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	95-63-6	
1,3,5-Trimethylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	108-67-8	
Vinyl chloride	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-01-4	
o-Xylene	Not detected	mg/L	0.001	8260	10/29/00	VFM	95-47-6	
p,m-Xylene	Not detected	mg/L	0.001	8260	10/29/00	VFM	106-42-3	
Acetone	Not detected	mg/L	0.05	8260	10/29/00	VFM	67-64-1	
2-Butanone (MEK)	Not detected	mg/L	0.05	8260	10/29/00	VFM	78-93-3	
Carbon disulfide	Not detected	mg/L	0.05	8260	10/29/00	VFM	75-15-0	
2-Hexanone	Not detected	mg/L	0.05	8260	10/29/00	VFM	591-78-6	
4-Methyl-2-pentanone (MIBK)	Not detected	mg/L	0.05	8260	10/29/00	VFM	108-10-1	
GC/MS Semi-Volatile Organics								
Acenaphthene	Not detected	mg/L	0.01	8270	10/31/00	GCE	83-32-9	
Acenaphthylene	Not detected	mg/L	0.01	8270	10/31/00	GCE	208-96-8	
Anthracene	Not detected	mg/L	0.01	8270	10/31/00	GCE	120-12-7	
Benzo(a)anthracene	Not detected	mg/L	0.01	8270	10/31/00	GCE	56-55-3	
Benzo(b)fluoranthene	Not detected	mg/L	0.01	8270	10/31/00	GCE	205-99-2	
Benzo(k)fluoranthene	Not detected	mg/L	0.01	8270	10/31/00	GCE	207-08-9	
Benzo(ghi)perylene	Not detected	mg/L	0.01	8270	10/31/00	GCE	191-24-2	
Benzo(a)pyrene	Not detected	mg/L	0.01	8270	10/31/00	GCE	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	mg/L	0.01	8270	10/31/00	GCE	111-91-1	
bis(2-Chloroethyl)ether	Not detected	mg/L	0.01	8270	10/31/00	GCE	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	mg/L	0.01	8270	10/31/00	GCE	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	117-81-7	
4-Bromophenyl phenyl ether	Not detected	mg/L	0.01	8270	10/31/00	GCE	101-55-3	
Butyl benzyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	85-68-7	



Analytical Laboratory Report

Lab Sample ID: S03531.10 (continued)

Sample Tag: MW-03S

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
GC/MS Semi-Volatile Organics (continued)								
4-Chloroaniline	Not detected	mg/L	0.01	8270	10/31/00	GCE	106-47-8	
2-Chloronaphthalene	Not detected	mg/L	0.01	8270	10/31/00	GCE	91-58-7	
4-Chloro-3-methylphenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	59-50-7	
2-Chlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	mg/L	0.01	8270	10/31/00	GCE	7005-72-3	
Chrysene	Not detected	mg/L	0.01	8270	10/31/00	GCE	218-01-9	
p,m-Cresol	Not detected	mg/L	0.01	8270	10/31/00	GCE	106-44-5	
o-Cresol	Not detected	mg/L	0.01	8270	10/31/00	GCE	95-48-7	
Dibenzo(ah)anthracene	Not detected	mg/L	0.01	8270	10/31/00	GCE	53-70-3	
Dibenzofuran	Not detected	mg/L	0.01	8270	10/31/00	GCE	132-64-9	
di-n-Butyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	84-74-2	
1,2-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	95-50-1	
1,3-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	541-73-1	
1,4-Dichlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	106-46-7	
3,3'-Dichlorobenzidine	Not detected	mg/L	0.01	8270	10/31/00	GCE	91-94-1	
2,4-Dichlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	120-83-2	
Diethyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	84-66-2	
2,4-Dimethylphenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	105-67-9	
Dimethyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	534-52-1	
2,4-Dinitrophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	51-28-5	
2,4-Dinitrotoluene	Not detected	mg/L	0.01	8270	10/31/00	GCE	121-14-2	
2,6-Dinitrotoluene	Not detected	mg/L	0.01	8270	10/31/00	GCE	606-20-2	
di-n-Octyl phthalate	Not detected	mg/L	0.01	8270	10/31/00	GCE	117-84-0	
Fluoranthene	Not detected	mg/L	0.01	8270	10/31/00	GCE	206-44-0	
Fluorene	Not detected	mg/L	0.01	8270	10/31/00	GCE	86-73-7	
Hexachlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	118-74-1	
Hexachlorobutadiene	Not detected	mg/L	0.01	8270	10/31/00	GCE	87-68-3	
Hexachlorocyclopentadiene	Not detected	mg/L	0.01	8270	10/31/00	GCE	77-47-4	
Hexachloroethane	Not detected	mg/L	0.01	8270	10/31/00	GCE	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	mg/L	0.01	8270	10/31/00	GCE	193-39-5	
Isophorone	Not detected	mg/L	0.01	8270	10/31/00	GCE	78-59-1	
2-Methylnaphthalene	Not detected	mg/L	0.01	8270	10/31/00	GCE	91-57-6	
Naphthalene	Not detected	mg/L	0.01	8270	10/31/00	GCE	91-20-3	
2-Nitroaniline	Not detected	mg/L	0.01	8270	10/31/00	GCE	88-74-4	
3-Nitroaniline	Not detected	mg/L	0.01	8270	10/31/00	GCE	99-09-2	
4-Nitroaniline	Not detected	mg/L	0.01	8270	10/31/00	GCE	100-01-6	
Nitrobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	98-95-3	
2-Nitrophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	88-75-5	
4-Nitrophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	100-02-7	
N-Nitrosodiphenylamine	Not detected	mg/L	0.01	8270	10/31/00	GCE	156-10-5	
N-Nitrosodi-n-propylamine	Not detected	mg/L	0.01	8270	10/31/00	GCE	621-64-7	
Pentachlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	87-86-5	
Phenanthrene	Not detected	mg/L	0.01	8270	10/31/00	GCE	85-01-8	
Phenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	108-95-2	
Pyrene	Not detected	mg/L	0.01	8270	10/31/00	GCE	129-00-0	
1,2,4-Trichlorobenzene	Not detected	mg/L	0.01	8270	10/31/00	GCE	120-82-1	
2,4,5-Trichlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	95-95-4	
2,4,6-Trichlorophenol	Not detected	mg/L	0.01	8270	10/31/00	GCE	88-06-2	



Analytical Laboratory Report

Lab Sample ID: S03531.11
 Sample Tag: Trip Blank
 Collected Date/Time: 10/18/2000 :
 Matrix: Liquid
 COC Reference: 002328

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40 ml Glass	None	Yes	4	3184

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
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Organics

Volatile Organics

Benzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	71-43-2	
Bromodichloromethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-27-4	
Bromoform	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-25-2	
Bromomethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	74-83-9	
n-Butylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	104-51-8	
sec-Butylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	135-98-8	
tert-Butylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	98-06-6	
Carbon tetrachloride	Not detected	mg/L	0.001	8260	10/29/00	VFM	56-23-5	
Chlorobenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	108-90-7	
Chloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-00-3	
Chloroform	Not detected	mg/L	0.001	8260	10/29/00	VFM	67-66-3	
Chloromethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	74-87-3	
Dibromochloromethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	124-48-1	
1,2-Dichlorobenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	95-50-1	
1,3-Dichlorobenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	541-73-1	
1,4-Dichlorobenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	106-46-7	
1,1-Dichloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-34-3	
1,2-Dichloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	107-06-2	
1,1-Dichloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-35-4	
cis-1,2-Dichloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	156-59-2	
trans-1,2-Dichloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	156-60-5	
1,2-Dichloropropane	Not detected	mg/L	0.001	8260	10/29/00	VFM	78-87-5	
cis-1,3-Dichloropropene	Not detected	mg/L	0.001	8260	10/29/00	VFM	10061-01-5	
trans-1,3-Dichloropropene	Not detected	mg/L	0.001	8260	10/29/00	VFM	10061-02-6	
Ethylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	100-41-4	
Isopropylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	98-82-8	
p-Isopropyltoluene	Not detected	mg/L	0.001	8260	10/29/00	VFM	99-87-6	
Methylene chloride	Not detected	mg/L	0.005	8260	10/29/00	VFM	75-09-2	
Naphthalene	Not detected	mg/L	0.001	8260	10/29/00	VFM	91-20-3	
n-Propylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	103-65-1	
Styrene	Not detected	mg/L	0.001	8260	10/29/00	VFM	100-42-5	
1,1,2,2-Tetrachloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	79-34-5	
Tetrachloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	127-18-4	
Toluene	Not detected	mg/L	0.001	8260	10/29/00	VFM	108-88-3	
1,1,1-Trichloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	71-55-6	
1,1,2-Trichloroethane	Not detected	mg/L	0.001	8260	10/29/00	VFM	79-00-5	
Trichloroethene	Not detected	mg/L	0.001	8260	10/29/00	VFM	79-01-6	
1,2,4-Trimethylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	95-63-6	
1,3,5-Trimethylbenzene	Not detected	mg/L	0.001	8260	10/29/00	VFM	108-67-8	
Vinyl chloride	Not detected	mg/L	0.001	8260	10/29/00	VFM	75-01-4	
o-Xylene	Not detected	mg/L	0.001	8260	10/29/00	VFM	95-47-6	
p,m-Xylene	Not detected	mg/L	0.001	8260	10/29/00	VFM	106-42-3	



Analytical Laboratory Report

Lab Sample ID: S03531.11 (continued)

Sample Tag: Trip Blank

Analysis	Results	Units	MDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
Volatile Organics (continued)								
Acetone	Not detected	mg/L	0.05	8260	10/29/00	VFM	67-64-1	
2-Butanone (MEK)	Not detected	mg/L	0.05	8260	10/29/00	VFM	78-93-3	
Carbon disulfide	Not detected	mg/L	0.05	8260	10/29/00	VFM	75-15-0	
2-Hexanone	Not detected	mg/L	0.05	8260	10/29/00	VFM	591-78-6	
4-Methyl-2-pentanone (MIBK)	Not detected	mg/L	0.05	8260	10/29/00	VFM	108-10-1	



Quality Control Cover Page

Report ID: S03531.01(01)
Report Date: 11/02/2000
Project: 01138 079 003
Lab Sample ID(s): S03531.01-S03531.11

Report to:

Attention: Mr. Babusukumar
Roy F. Weston, Inc.
750 E. Bunker Ct. Ste. 500
Vernon Hills, IL 60061

Sample ID	Sample Tag	Collected	Matrix	Analysis Departments
S03531.01	MW-07S	10/18/2000 09:30	Groundwater	Metals, Organics
S03531.02	MW-06S	10/18/2000 10:50	Groundwater	Metals, Organics
S03531.03	MW-01S	10/18/2000 11:30	Groundwater	Metals, Organics
S03531.04	MW-01S Dup	10/18/2000 11:30	Groundwater	Metals, Organics
S03531.05	MW-05S	10/18/2000 12:15	Groundwater	Metals, Organics
S03531.06	MW-11S	10/18/2000 14:00	Groundwater	Metals, Organics
S03531.07	MW-10S	10/18/2000 15:00	Groundwater	Metals, Organics
S03531.08	MW-12S	10/18/2000 16:10	Groundwater	Metals, Organics
S03531.09	MW-13S	10/18/2000 16:40	Groundwater	Metals, Organics
S03531.10	MW-03S	10/18/2000 17:30	Groundwater	Metals, Organics
S03531.11	Trip Blank	10/18/2000 :	Liquid	Organics

This QC package, to the best of my knowledge, is in compliance with all technical and administrative requirements.
If you have any questions, please do not hesitate to contact me at 517-332-0167 (ext. 14) or email me at mmurshak@fec-labs.com.

Sincerely,

Maya Murshak
Chemical Engineer / QA Officer

Form 1: GC/MS injection Log - Semi-Volatile Organics

GC Column....: DB-5/L:30m/D:0.25mm
 Instrument ID: svol.01.Urza

Analytical Batch: b001027a.1
 Heated Purge....: N/A

Filename	Run Time	Sample Comments	Mat.	QC Sample Type
d3.d	10/30 11:49 AM	DFTPP	WW	Tune
spcc3.d	10/30 01:03 PM	SPCC	WW	SPCC
0348501r.d	10/30 01:47 PM	SAG01 625TTO 950ml/ml 2:1	WW	
0348901r.d	10/30 02:30 PM	GMKW03 TCLPSEM 760ml/ml 4:1	WW	
0348902r.d	10/30 03:14 PM	GMKW03 TCLPSEM TOTAL 100:1	WW	
0350501r.d	10/30 03:58 PM	GMKW03 TCLPSEM 1000/ml 4:1	WW	
0351901r.d	10/30 06:53 PM	AC_02 625TTO 980ml/ml 1:1	WW	
0353001r.d	10/30 07:37 PM	BOC BOCSASV/PH/CM 940/ml 1:1	WW	
0353101r.d	10/30 08:21 PM	WES04 8270W 930ml/ml 1:1	WW	
0353102r.d	10/30 09:05 PM	WES04 8270W 940ml/ml 1:1	WW	
0353103r.d	10/30 09:49 PM	WES04 8270W 930ml/ml 1:1	WW	
0353104r.d	10/30 10:33 PM	WES04 8270W 960ml/ml 1:1	WW	
0353105r.d	10/30 11:16 PM	WES04 8270W 1000ml/ml 1:1	WW	
d4.d	10/31 12:18 AM	DFTPP	WW	Tune
spcc4.d	10/31 01:02 AM	SPCC	WW	SPCC
0353106.d	10/31 01:45 AM	WES 8270W 850ml/ml 1:1	WW	
0353107.d	10/31 02:30 AM	WES 8270W 930ml/ml 1:1	WW	
0353108.d	10/31 03:13 AM	WES 8270W 980ml/ml 1:1	WW	
0353109.d	10/31 03:57 AM	WES 8270W 950ml/ml 1:1	WW	
0353110.d	10/31 04:41 AM	WES 8270W 980ml/ml 1:1	WW	
d6.d	11/01 01:35 PM	DFTPP	WW	Tune
spcc6.d	11/01 02:19 PM	SPCC	WW	SPCC
blk-w1.d	11/01 03:47 PM	BLK_001030	WW	Blk
ms-w1.d	11/01 04:31 PM	MS_001030	WW	MS/D
msd-w1.d	11/01 05:14 PM	MSD_001030	WW	Dup
0354601.d	11/01 05:58 PM	ENV01 TCLPSEM 700ml/ml 40:1	WW	
0356201.d	11/01 08:44 PM	MPC01 TCLPSEM 530ml/ml 10:1	WW	
d7.d	11/03 02:51 PM	DFTPP	WW	Tune
spcc7.d	11/03 03:35 PM	SPCC	WW	SPCC
lcs.w.d	11/03 04:18 PM	LCS	WW	MS/D
0358601.d	11/03 06:35 PM	GMPG01 FSCANSV TTL 400:1	WW	

Outlier Summary

Surrogate Standard Outliers (Form 2): 0
 Duplicate/MSD Outliers (Form 3a): 0
 Matrix Spike Outliers (Form 3b): 0
 BFB/DFTPP Outliers (Form 5): 0
 SPCC Outliers (Form 7a): 0
 CCC Outliers (Form 7b): 0
 ISD Outliers (Form 8): 0

Matrix Summary

Water Samples...: 19 Soil Samples...: 0
 Water Duplicates: 1 Soil Duplicates.: 0
 Water Spikes....: 2 Soil Spikes.....: 0
 Water Blanks....: 1 Soil Blanks.....: 0

Batch Comments

[no comments]

Form 2: Surrogate Standard Recoveries/System Monitoring Compounds

GC Column....: DB-5/L:30m/D:0.25mm
 Instrument ID: sv01.01.Urza

Analytical Batch: b001027a.1
 Heated Purge....: N/A

Filename	SSD Compound	Concentration		LCL/UCL	Matrix
		Found/Spiked	%Rec.		
spcc3.d	2-Fluorophenol	51.8/100.0	n/a	14.1/111.7	WW
	2-Fluorobiphenyl	52.9/100.0	n/a	35.0/116.0	
	Nitrobenzene-D5	54.1/100.0	n/a	32.0/114.0	
	Phenol-d5	55.9/100.0	n/a	3.8/134.8	
	2,4,6-Tribromophenol	50.2/100.0	n/a	10.0/131.5	
	Terphenyl-D14	49.8/100.0	n/a	26.2/141.0	
0348501r.d	2-Fluorophenol	53.3/100.0	53.3	14.1/111.7	WW
	2-Fluorobiphenyl	59.9/100.0	59.9	35.0/116.0	
	Nitrobenzene-D5	47.6/100.0	47.6	32.0/114.0	
	Phenol-d5	63.0/100.0	63.0	3.8/134.8	
	2,4,6-Tribromophenol	60.8/100.0	60.8	10.0/131.5	
	Terphenyl-D14	62.7/100.0	62.7	26.2/141.0	
0348901r.d	2-Fluorophenol	66.5/100.0	66.5	14.1/111.7	WW
	2-Fluorobiphenyl	68.7/100.0	68.7	35.0/116.0	
	Nitrobenzene-D5	70.2/100.0	70.2	32.0/114.0	
	Phenol-d5	74.8/100.0	74.8	3.8/134.8	
	2,4,6-Tribromophenol	68.8/100.0	68.8	10.0/131.5	
	Terphenyl-D14	79.0/100.0	79.0	26.2/141.0	
0348902r.d	2-Fluorobiphenyl	0.0/100.0	n/a	35.0/116.0	WW
	Nitrobenzene-D5	0.1/100.0	n/a	32.0/114.0	
	Terphenyl-D14	0.0/100.0	n/a	26.2/141.0	
0350501r.d	2-Fluorophenol	56.3/100.0	56.3	14.1/111.7	WW
	2-Fluorobiphenyl	57.6/100.0	57.6	35.0/116.0	
	Nitrobenzene-D5	58.5/100.0	58.5	32.0/114.0	
	Phenol-d5	59.3/100.0	59.3	3.8/134.8	
	2,4,6-Tribromophenol	53.7/100.0	53.7	10.0/131.5	
	Terphenyl-D14	60.1/100.0	60.1	26.2/141.0	
0351901r.d	2-Fluorophenol	58.9/100.0	58.9	14.1/111.7	WW
	2-Fluorobiphenyl	76.3/100.0	76.3	35.0/116.0	
	Nitrobenzene-D5	59.7/100.0	59.7	32.0/114.0	
	Phenol-d5	40.9/100.0	40.9	3.8/134.8	
	2,4,6-Tribromophenol	77.4/100.0	77.4	10.0/131.5	
	Terphenyl-D14	89.5/100.0	89.5	26.2/141.0	
0353001r.d	2-Fluorophenol	67.0/100.0	67.0	14.1/111.7	WW
	2-Fluorobiphenyl	82.2/100.0	82.2	35.0/116.0	
	Nitrobenzene-D5	67.2/100.0	67.2	32.0/114.0	
	Phenol-d5	75.5/100.0	75.5	3.8/134.8	
	2,4,6-Tribromophenol	75.0/100.0	75.0	10.0/131.5	
	Terphenyl-D14	86.0/100.0	86.0	26.2/141.0	
0353101r.d	2-Fluorophenol	55.4/100.0	55.4	14.1/111.7	WW
	2-Fluorobiphenyl	69.5/100.0	69.5	35.0/116.0	
	Nitrobenzene-D5	59.5/100.0	59.5	32.0/114.0	
	Phenol-d5	63.1/100.0	63.1	3.8/134.8	
	2,4,6-Tribromophenol	67.8/100.0	67.8	10.0/131.5	
	Terphenyl-D14	84.7/100.0	84.7	26.2/141.0	
0353102r.d	2-Fluorophenol	61.7/100.0	61.7	14.1/111.7	WW
	2-Fluorobiphenyl	79.0/100.0	79.0	35.0/116.0	
	Nitrobenzene-D5	63.3/100.0	63.3	32.0/114.0	
	Phenol-d5	70.3/100.0	70.3	3.8/134.8	
	2,4,6-Tribromophenol	75.3/100.0	75.3	10.0/131.5	
	Terphenyl-D14	87.3/100.0	87.3	26.2/141.0	

Form 2: Surrogate Standard Recoveries/System Monitoring Compounds

GC Column....: DB-5/L:30m/D:0.25mm
 Instrument ID: svol.01.Urza

Analytical Batch: b001027a.1
 Heated Purge....: N/A

Filename	SSD Compound	Concentration		LCL/UCL	Matrix
		Found/Spiked	%Rec.		
0353103r.d	2-Fluorophenol	55.4/100.0	55.4	14.1/111.7	WW
	2-Fluorobiphenyl	71.6/100.0	71.6	35.0/116.0	
	Nitrobenzene-D5	56.3/100.0	56.3	32.0/114.0	
	Phenol-d5	63.7/100.0	63.7	3.8/134.8	
	2,4,6-Tribromophenol	74.4/100.0	74.4	10.0/131.5	
	Terphenyl-D14	84.2/100.0	84.2	26.2/141.0	
0353104r.d	2-Fluorophenol	76.7/100.0	76.7	14.1/111.7	WW
	2-Fluorobiphenyl	96.9/100.0	96.9	35.0/116.0	
	Nitrobenzene-D5	78.7/100.0	78.7	32.0/114.0	
	Phenol-d5	86.7/100.0	86.7	3.8/134.8	
	2,4,6-Tribromophenol	91.3/100.0	91.3	10.0/131.5	
	Terphenyl-D14	104.0/100.0	104.0	26.2/141.0	
0353105r.d	2-Fluorophenol	60.6/100.0	60.6	14.1/111.7	WW
	2-Fluorobiphenyl	75.2/100.0	75.2	35.0/116.0	
	Nitrobenzene-D5	61.8/100.0	61.8	32.0/114.0	
	Phenol-d5	67.3/100.0	67.3	3.8/134.8	
	2,4,6-Tribromophenol	73.7/100.0	73.7	10.0/131.5	
	Terphenyl-D14	86.4/100.0	86.4	26.2/141.0	
spcc4.d	2-Fluorophenol	51.0/100.0	n/a	14.1/111.7	WW
	2-Fluorobiphenyl	53.0/100.0	n/a	35.0/116.0	
	Nitrobenzene-D5	52.4/100.0	n/a	32.0/114.0	
	Phenol-d5	49.9/100.0	n/a	3.8/134.8	
	2,4,6-Tribromophenol	49.7/100.0	n/a	10.0/131.5	
	Terphenyl-D14	48.7/100.0	n/a	26.2/141.0	
0353106.d	2-Fluorophenol	74.1/100.0	74.1	14.1/111.7	WW
	2-Fluorobiphenyl	92.3/100.0	92.3	35.0/116.0	
	Nitrobenzene-D5	71.4/100.0	71.4	32.0/114.0	
	Phenol-d5	79.7/100.0	79.7	3.8/134.8	
	2,4,6-Tribromophenol	83.3/100.0	83.3	10.0/131.5	
	Terphenyl-D14	93.5/100.0	93.5	26.2/141.0	
0353107.d	2-Fluorophenol	51.7/100.0	51.7	14.1/111.7	WW
	2-Fluorobiphenyl	67.7/100.0	67.7	35.0/116.0	
	Nitrobenzene-D5	53.8/100.0	53.8	32.0/114.0	
	Phenol-d5	59.5/100.0	59.5	3.8/134.8	
	2,4,6-Tribromophenol	76.2/100.0	76.2	10.0/131.5	
	Terphenyl-D14	95.4/100.0	95.4	26.2/141.0	
0353108.d	2-Fluorophenol	59.4/100.0	59.4	14.1/111.7	WW
	2-Fluorobiphenyl	75.3/100.0	75.3	35.0/116.0	
	Nitrobenzene-D5	59.0/100.0	59.0	32.0/114.0	
	Phenol-d5	66.0/100.0	66.0	3.8/134.8	
	2,4,6-Tribromophenol	67.3/100.0	67.3	10.0/131.5	
	Terphenyl-D14	78.3/100.0	78.3	26.2/141.0	
0353109.d	2-Fluorophenol	61.3/100.0	61.3	14.1/111.7	WW
	2-Fluorobiphenyl	74.3/100.0	74.3	35.0/116.0	
	Nitrobenzene-D5	61.8/100.0	61.8	32.0/114.0	
	Phenol-d5	68.1/100.0	68.1	3.8/134.8	
	2,4,6-Tribromophenol	76.8/100.0	76.8	10.0/131.5	
	Terphenyl-D14	94.4/100.0	94.4	26.2/141.0	

Form 2: Surrogate Standard Recoveries/System Monitoring Compounds

GC Column....: DB-5/L:30m/D:0.25mm
Instrument ID: svol.01.Urza

Analytical Batch: b001027a.1
Heated Purge....: N/A

Filename	SSD Compound	Concentration		LCL/UCL	Matrix
		Found/Spiked	%Rec.		
0353110.d	2-Fluorophenol	61.4/100.0	61.4	14.1/111.7	WW
	2-Fluorobiphenyl	84.1/100.0	84.1	35.0/116.0	
	Nitrobenzene-D5	65.4/100.0	65.4	32.0/114.0	
	Phenol-d5	72.9/100.0	72.9	3.8/134.8	
	2,4,6-Tribromophenol	80.2/100.0	80.2	10.0/131.5	
	Terphenyl-D14	91.8/100.0	91.8	26.2/141.0	
spcc6.d	2-Fluorophenol	51.9/100.0	n/a	14.1/111.7	WW
	2-Fluorobiphenyl	58.3/100.0	n/a	35.0/116.0	
	Nitrobenzene-D5	58.5/100.0	n/a	32.0/114.0	
	Phenol-d5	58.2/100.0	n/a	3.8/134.8	
	2,4,6-Tribromophenol	48.1/100.0	n/a	10.0/131.5	
	Terphenyl-D14	48.4/100.0	n/a	26.2/141.0	
blk-w1.d	2-Fluorophenol	74.7/100.0	74.7	14.1/111.7	WW
	2-Fluorobiphenyl	91.0/100.0	91.0	35.0/116.0	
	Nitrobenzene-D5	85.0/100.0	85.0	32.0/114.0	
	Phenol-d5	86.7/100.0	86.7	3.8/134.8	
	2,4,6-Tribromophenol	82.2/100.0	82.2	10.0/131.5	
	Terphenyl-D14	108.4/100.0	108.4	26.2/141.0	
ms-w1.d	2-Fluorophenol	79.8/100.0	79.8	14.1/111.7	WW
	2-Fluorobiphenyl	95.5/100.0	95.5	35.0/116.0	
	Nitrobenzene-D5	89.8/100.0	89.8	32.0/114.0	
	Phenol-d5	92.2/100.0	92.2	3.8/134.8	
	2,4,6-Tribromophenol	84.4/100.0	84.4	10.0/131.5	
	Terphenyl-D14	101.8/100.0	101.8	26.2/141.0	
msd-w1.d	2-Fluorophenol	82.1/100.0	82.1	14.1/111.7	WW
	2-Fluorobiphenyl	101.2/100.0	101.2	35.0/116.0	
	Nitrobenzene-D5	93.3/100.0	93.3	32.0/114.0	
	Phenol-d5	94.7/100.0	94.7	3.8/134.8	
	2,4,6-Tribromophenol	86.7/100.0	86.7	10.0/131.5	
	Terphenyl-D14	101.1/100.0	101.1	26.2/141.0	
0354601.d	2-Fluorophenol	74.0/100.0	74.0	14.1/111.7	WW
	2-Fluorobiphenyl	67.0/100.0	67.0	35.0/116.0	
	Nitrobenzene-D5	92.8/100.0	92.8	32.0/114.0	
	Phenol-d5	88.3/100.0	88.3	3.8/134.8	
	2,4,6-Tribromophenol	59.5/100.0	59.5	10.0/131.5	
	Terphenyl-D14	75.8/100.0	75.8	26.2/141.0	
0356201.d	2-Fluorophenol	62.2/100.0	62.2	14.1/111.7	WW
	2-Fluorobiphenyl	64.7/100.0	64.7	35.0/116.0	
	Nitrobenzene-D5	83.2/100.0	83.2	32.0/114.0	
	Phenol-d5	75.2/100.0	75.2	3.8/134.8	
	2,4,6-Tribromophenol	70.0/100.0	70.0	10.0/131.5	
	Terphenyl-D14	79.5/100.0	79.5	26.2/141.0	
spcc7.d	2-Fluorophenol	51.4/100.0	n/a	14.1/111.7	WW
	2-Fluorobiphenyl	57.0/100.0	n/a	35.0/116.0	
	Nitrobenzene-D5	59.8/100.0	n/a	32.0/114.0	
	Phenol-d5	59.7/100.0	n/a	3.8/134.8	
	2,4,6-Tribromophenol	49.6/100.0	n/a	10.0/131.5	
	Terphenyl-D14	48.5/100.0	n/a	26.2/141.0	

Form 2: Surrogate Standard Recoveries/System Monitoring Compounds

GC Column.....: DB-5/L:30m/D:0.25mm
Instrument ID: svol.01.Urza

Analytical Batch: b001027a.1
Heated Purge.....: N/A

Filename	SSD Compound	Concentration		LCL/UCL	Matrix
		Found/Spiked	%Rec.		
lcs.w.d	2-Fluorophenol	80.1/100.0	80.1	14.1/111.7	WW
	2-Fluorobiphenyl	101.2/100.0	101.2	35.0/116.0	
	Nitrobenzene-D5	90.9/100.0	90.9	32.0/114.0	
	Phenol-d5	93.1/100.0	93.1	3.8/134.8	
	2,4,6-Tribromophenol	87.4/100.0	87.4	10.0/131.5	
	Terphenyl-D14	106.9/100.0	106.9	26.2/141.0	
0358601.d	2-Fluorobiphenyl	0.0/100.0	n/a	35.0/116.0	WW
	Terphenyl-D14	0.0/100.0	n/a	26.2/141.0	

Form 3a: Duplicate/Matrix Spike Duplicate Summary

GC Column....: DB-5/L:30m/D:0.25mm
Instrument ID: svol.01.Urza

Analytical Batch: b001027a.1
Heated Purge....: N/A

<i>File Name</i>	<i>Sample Name</i>	<i>Target Compound</i>	<i>Dup/Samp Conc.</i>	<i>%RPD</i>	<i>Matrix</i>
msd-w1.d	ms-w1.d	phenol **	7.45/ 7.16	4.0	WW
		2-chlorophenol **	20.71/ 20.52	0.9	
		1,4-dichlorobenzene **	22.25/ 21.79	2.1	
		n-nitrosodi-n-propylamine**	40.59/ 38.76	4.6	
		1,2,4-trichlorobenzene **	20.07/ 19.03	5.3	
		4-chloro-3-methylphenol **	20.03/ 19.05	5.0	
		acenaphthene **	30.69/ 29.35	4.5	
		2,4-dinitrotoluene **	25.98/ 25.09	3.5	
		pentachlorophenol **	14.58/ 13.74	5.9	
		pyrene **	36.00/ 35.09	2.6	
		[end of compound list]			

Form 3b: Matrix Spike Summary

GC Column....: DB-5/L:30m/D:0.25mm
 Instrument ID: svol.01.Urza

Analytical Batch: b001027a.1
 Heated Purge....: N/A

File Name	Sample Name	Target Compound	MS/	Samp/	Spike	%Rec	LCL/UCL	Mat.
ms-w1.d	blk-w1.d	1,2,4-Trichlorobenzene	19.03/	0.00/	50.00	38.1	30.0/142.0	WW
		1,4-Dichlorobenzene	21.79/	0.00/	50.00	43.6	20.0/124.0	
		2,4-Dinitrotoluene	25.09/	0.00/	50.00	50.2	39.0/139.0	
		2-Chlorophenol	20.52/	0.00/	50.00	41.0	23.0/134.0	
		4-Chloro-3-methylphenol	19.05/	0.00/	50.00	38.1	22.0/147.0	
		Acenaphthene	29.35/	0.00/	50.00	58.7	30.0/145.0	
		N-Nitrosodi-n-propylamine	38.76/	0.00/	50.00	77.5	1.0/230.0	
		Pentachlorophenol	13.74/	0.00/	50.00	27.5	14.0/176.0	
		Phenol	7.16/	0.00/	50.00	14.3	5.0/112.0	
		Pyrene	35.09/	0.00/	50.00	70.2	30.0/159.0	
lcs.w.d	blk-w1.d	1,2,4-Trichlorobenzene	19.13/	0.00/	50.00	38.3	30.0/142.0	WW
		1,4-Dichlorobenzene	22.03/	0.00/	50.00	44.1	20.0/124.0	
		2,4-Dinitrotoluene	26.46/	0.00/	50.00	52.9	39.0/139.0	
		2-Chlorophenol	20.58/	0.00/	50.00	41.2	23.0/134.0	
		4-Chloro-3-methylphenol	19.50/	0.00/	50.00	39.0	22.0/147.0	
		Acenaphthene	30.63/	0.00/	50.00	61.3	30.0/145.0	
		N-Nitrosodi-n-propylamine	40.21/	0.00/	50.00	80.4	1.0/230.0	
		Pentachlorophenol	14.65/	0.00/	50.00	29.3	14.0/176.0	
		Phenol	7.19/	0.00/	50.00	14.4	5.0/112.0	
		Pyrene	34.59/	0.00/	50.00	69.2	30.0/159.0	

Form 4: Method Blank Summary

GC Column....: DB-5/L:30m/D:0.25mm
Instrument ID: svol.01.Urza

Analytical Batch: b001027a.1
Heated Purge....: N/A

<i>Filename</i>	<i>Run Time</i>	<i>Target Compound</i>	<i>Conc.</i>	<i>Matrix</i>
blk-w1.d	11/01 03:47 PM	[end of compound list]	0.00	WW

Form 5: Instrument Performance Check (BFB/DFTPP)

GC Column....: DB-5/L:30m/D:0.25mm
 Instrument ID: svol.01.Urza

Analytical Batch: b001027a.1
 Heated Purge....: N/A

Filename	Run Time	Tgt. Mass	Rel. Mass	LCL(%)	UCL(%)	Rel.Abn.	Raw Abn.	Result
d3.d	10/30 11:49 AM	51	198	30.0	60.0	38.3	154240	PASS
		68	69	0.0	2.0	0.0	0	PASS
		69	198	0.0	100.0	47.2	190208	PASS
		70	69	0.0	2.0	0.7	1257	PASS
		127	198	40.0	60.0	46.8	188736	PASS
		197	198	0.0	1.0	0.0	0	PASS
		198	198	100.0	100.0	100.0	403136	PASS
		199	198	5.0	9.0	7.0	28256	PASS
		275	198	10.0	30.0	22.3	89976	PASS
		365	198	1.0	100.0	3.9	15580	PASS
		441	443	0.0	100.0	0.0	0	PASS
		442	198	40.0	100.0	63.9	257536	PASS
		443	442	17.0	23.0	19.0	48856	PASS
d4.d	10/31 12:18 AM	51	198	30.0	60.0	44.2	179436	PASS
		68	69	0.0	2.0	0.0	0	PASS
		69	198	0.0	100.0	54.2	220046	PASS
		70	69	0.0	2.0	0.3	578	PASS
		127	198	40.0	60.0	53.0	214976	PASS
		197	198	0.0	1.0	0.0	0	PASS
		198	198	100.0	100.0	100.0	405760	PASS
		199	198	5.0	9.0	6.9	27984	PASS
		275	198	10.0	30.0	21.3	86336	PASS
		365	198	1.0	100.0	3.7	14824	PASS
		441	443	0.0	100.0	0.0	0	PASS
		442	198	40.0	100.0	54.0	219264	PASS
		443	442	17.0	23.0	19.5	42864	PASS
d6.d	11/01 01:35 PM	51	198	30.0	60.0	46.9	108200	PASS
		68	69	0.0	2.0	0.0	0	PASS
		69	198	0.0	100.0	56.1	129637	PASS
		70	69	0.0	2.0	0.5	642	PASS
		127	198	40.0	60.0	54.3	125400	PASS
		197	198	0.0	1.0	0.0	0	PASS
		198	198	100.0	100.0	100.0	230912	PASS
		199	198	5.0	9.0	6.9	15941	PASS
		275	198	10.0	30.0	22.0	50904	PASS
		365	198	1.0	100.0	3.9	9071	PASS
		441	443	0.0	100.0	0.0	0	PASS
		442	198	40.0	100.0	52.8	121992	PASS
		443	442	17.0	23.0	18.3	22368	PASS
d7.d	11/03 02:51 PM	51	198	30.0	60.0	41.9	102480	PASS
		68	69	0.0	2.0	0.0	0	PASS
		69	198	0.0	100.0	51.2	125296	PASS
		70	69	0.0	2.0	0.6	813	PASS
		127	198	40.0	60.0	48.3	118088	PASS
		197	198	0.0	1.0	0.0	0	PASS
		198	198	100.0	100.0	100.0	244736	PASS
		199	198	5.0	9.0	6.9	16968	PASS
		275	198	10.0	30.0	23.2	56888	PASS
		365	198	1.0	100.0	4.1	9955	PASS
		441	443	0.0	100.0	0.0	0	PASS
		442	198	40.0	100.0	60.4	147712	PASS
		443	442	17.0	23.0	19.5	28744	PASS

Note: See Form 1 (Injection Log) for 12-hour time increments and associated samples

Form 6: Initial Calibration Data

GC Column....: DB-5/L:30m/D:0.25mm
 Instrument ID: svol.01.Urza

Analytical Batch: b001027a.1
 Heated Purge....: N/A

Filename	Compound	Fit	<RF>	%RSD	RF(1)	RF(2)	RF(3)	RF(4)	RF(5)	RF(6)	COD	k(0)	k(1)	k(2)	
bn001023.m	1,4-DICHLOROENZENE-D4	I			10.00	20.00	35.00	50.00	65.00	100.0					
	Pyridine	A	4.131	7.11	4.402	4.576	4.030	4.009	3.965	3.803					
	N-Nitrosodimethylamine	A	1.711	7.77	1.814	1.927	1.668	1.615	1.661	1.579					
	2-Picoline	A	4.514	4.49	4.578	4.863	4.515	4.426	4.444	4.255					
	Methyl methanesulfonate	A	2.293	8.42	2.460	2.590	2.259	2.151	2.206	2.090					
	2-Fluorophenol	A	2.317	3.28	2.262	2.430	2.263	2.391	2.305	2.250					
	Ethyl methanesulfonate	A	2.904	7.32	3.041	3.252	2.895	2.765	2.803	2.667					
	Phenol-d5	A	4.287	3.67	4.287	4.598	4.181	4.227	4.185	4.244					
	Phenol **	A	5.098	7.22	5.246	5.665	5.114	5.069	4.957	4.538					
	Aniline	A	6.200	5.50	6.299	6.790	6.157	6.093	6.108	5.751					
	2-Chlorophenol **	A	1.047	6.46	0.940	1.047	1.002	1.117	1.063	1.112					
	Bis(2-chloroethyl)ether	A	4.445	8.32	4.766	4.951	4.417	4.336	4.294	3.907					
	1,3-Dichlorobenzene	A	1.115	4.86	1.037	1.132	1.060	1.174	1.130	1.155					
	1,4-Dichlorobenzene **	A	1.226	6.50	1.111	1.217	1.160	1.287	1.254	1.324					
	1,2-Dichlorobenzene	A	1.157	7.47	1.030	1.139	1.093	1.214	1.201	1.265					
	Bis(2-chloroisopropyl)ether	QO	3.181	9.82	3.482	3.606	3.192	3.003	3.024	2.781	1.00	0.00	3.433	-0.26	
	Benzyl Alcohol	A	1.998	4.48	1.849	2.111	1.960	2.056	2.012	2.000					
	Acetophenone	A	5.298	4.25	5.356	5.713	5.222	5.229	5.217	5.052					
	o-Cresol	A	2.731	3.09	2.659	2.873	2.659	2.778	2.740	2.679					
	p,m-Cresol	A	3.616	2.85	3.495	3.776	3.524	3.679	3.624	3.599					
	Hexachloroethane	A	1.248	3.60	1.241	1.332	1.212	1.259	1.229	1.213					
	N-Nitrosodi-n-propylamine**	A	1.587	12.5	1.853	1.816	1.545	1.451	1.459	1.398					
	NAPHTHALENE-D8	I				10.00	20.00	35.00	50.00	65.00	100.0				
	Nitrobenzene-d5	A	1.195	8.65	1.305	1.337	1.169	1.135	1.153	1.072					
	Nitrobenzene	A	0.252	6.35	0.228	0.251	0.240	0.268	0.256	0.269					
	N-Nitrosopiperidine	A	0.383	3.29	0.368	0.400	0.370	0.393	0.386	0.381					
	Isophorone	A	2.224	7.26	2.381	2.446	2.165	2.157	2.191	2.006					
	2-Nitrophenol	A	0.181	9.25	0.155	0.181	0.169	0.192	0.185	0.202					
	2,4-Dimethylphenol	A	1.157	3.48	1.166	1.231	1.121	1.149	1.150	1.123					
	Bis(2-chloroethoxy)methane	A	1.659	6.84	1.748	1.828	1.646	1.611	1.617	1.505					
	2,4-Dichlorophenol	A	0.348	12.2	0.286	0.331	0.324	0.368	0.369	0.407					
	1,2,4-Trichlorobenzene **	A	0.430	6.03	0.391	0.431	0.408	0.451	0.444	0.457					
	Benzoic Acid	A	0.625	11.8		0.525	0.571	0.679	0.654	0.697					
	Naphthalene	A	1.055	13.8	0.861	0.981	0.966	1.121	1.134	1.264					
	4-Chloroaniline	LO	0.464	16.0	0.357	0.432	0.430	0.489	0.506	0.571	0.98	0.00	0.532	0.00	
	2,6-Dichlorophenol	A	0.356	11.1	0.296	0.340	0.339	0.373	0.381	0.409					
	Hexachlorobutadiene	A	0.381	3.56	0.368	0.397	0.361	0.387	0.386	0.387					
	N-Nitroso-di-n-butylamine	A	0.827	6.58	0.884	0.905	0.814	0.792	0.798	0.770					
	4-Chloro-3-methylphenol **	A	0.990	2.93	0.957	1.039	0.966	0.998	0.995	0.983					
	2-Methylnaphthalene	A	0.538	12.8	0.437	0.510	0.503	0.564	0.579	0.633					
ACENAPHTHALENE-D10	I				10.00	20.00	35.00	50.00	65.00	100.0					
1,2,4,5-Tetrachlorobenzene	A	0.748	7.94	0.674	0.731	0.691	0.790	0.776	0.826						
Hexachlorocyclopentadiene	A	0.086	4.86		0.085	0.084	0.080	0.088	0.091						
2,4,6-Trichlorophenol	A	0.422	9.77	0.365	0.412	0.390	0.448	0.440	0.478						
2,4,5-Trichlorophenol	A	0.461	12.9	0.383	0.432	0.425	0.490	0.486	0.550						
2-Fluorobiphenyl	A	1.263	12.6	1.061	1.179	1.156	1.345	1.338	1.498						
1-Chloronaphthalene	LO	0.990	13.3	0.838	0.934	0.886	1.044	1.035	1.202	0.98	0.00	1.114	0.00		
2-Chloronaphthalene	A	0.945	11.3	0.802	0.897	0.864	1.013	1.015	1.079						
2-Nitroaniline	A	0.283	10.9	0.237	0.274	0.261	0.307	0.298	0.319						
Acenaphthylene	LO	1.073	16.3	0.849	0.955	0.970	1.172	1.182	1.309	0.98	0.00	1.229	0.00		
Dimethyl Phthalate	A	1.512	9.49	1.323	1.447	1.399	1.604	1.603	1.695						
2,6-Dinitrotoluene	A	0.303	6.74	0.278	0.295	0.284	0.324	0.311	0.326						
3-Nitroaniline	A	0.260	14.3	0.198	0.254	0.255	0.275	0.264	0.312						
Acenaphthene **	QO	0.928	16.6	0.742	0.843	0.835	0.980	0.993	1.176	1.00	0.00	0.711	0.19		
2,4-Dinitrophenol	LO	0.167	31.7	0.080	0.139	0.159	0.201	0.199	0.226	0.97	0.00	0.209	0.00		
Dibenzofuran	A	1.502	11.2	1.298	1.406	1.374	1.600	1.594	1.739						
4-Nitrophenol **	A	0.480	10.0	0.392	0.480	0.465	0.514	0.522	0.507						
2,4-Dinitrotoluene **	A	0.430	12.5	0.374	0.400	0.382	0.451	0.460	0.512						
1-Naphthylamine	LO	0.512	21.2	0.360	0.440	0.462	0.571	0.587	0.649	0.97	0.00	0.606	0.00		
2-Naphthylamine	QO	0.310	44.9	0.123	0.229	0.314	0.422	0.464		0.99	0.00	0.143	0.20		
2,3,4,6-Tetrachlorophenol	A	0.421	11.5	0.354	0.401	0.386	0.452	0.448	0.483						
Fluorene	A	1.223	13.4	1.020	1.133	1.113	1.294	1.303	1.472						
Diethyl phthalate	A	1.682	13.8	1.444	1.561	1.480	1.728	1.828	2.050						

Form 6: Initial Calibration Data

GC Column....: DB-5/L:30m/D:0.25mm
Instrument ID: svol.01.Urza

Analytical Batch: b001027a.1
Heated Purge....: N/A

Filename	Compound	Fit	<RF>	%RSD	RF(1)	RF(2)	RF(3)	RF(4)	RF(5)	RF(6)	COD	k(0)	k(1)	k(2)	
bn001023.m	4-Chlorophenyl phenyl ether	A	0.779	10.6	0.690	0.746	0.726	0.847	0.884						
	4-Nitroaniline	LO	0.189	15.4	0.148	0.173	0.173	0.208	0.201	0.228	0.98	0.00	0.214	0.00	
	2,4,6-Tribromophenol	A	0.252	9.88	0.225	0.239	0.229	0.265	0.269	0.287					
		PHENANTHRENE-D10	I			10.00	20.00	35.00	50.00	65.00	100.0				
		4,6-Dinitro-2-methylphenol	LO	0.142	13.6	0.112	0.140	0.139	0.158	0.160		0.99	0.00	0.155	0.00
		N-Nitrosodiphenylamine	A	0.936	12.5	0.765	0.874	0.875	1.022	1.005	1.076				
		1,2-Diphenylhydrazine	A	0.174	12.7	0.148	0.163	0.158	0.181	0.187	0.208				
		Azobenzene	A	0.174	12.7	0.148	0.163	0.158	0.181	0.187	0.208				
		4-Bromophenyl phenyl ether	A	0.235	3.25	0.224	0.241	0.228	0.244	0.234	0.237				
		1,3,5-Trinitrobenzene	A	0.099	7.31	0.085	0.102	0.099	0.106	0.101	0.101				
		Phenacetin	A	0.812	5.70	0.843	0.883	0.800	0.814	0.776	0.755				
		Hexachlorobenzene	A	0.088	3.58	0.088	0.093	0.084	0.089	0.086	0.086				
		4-Aminobiphenyl	LO	0.420	30.3	0.180	0.389	0.432	0.499	0.500	0.517	0.99	0.00	0.500	0.00
		Pentachlorophenol **	A	0.139	14.7	0.102	0.136	0.136	0.156	0.150	0.156				
		Pronamide	A	0.338	5.09	0.310	0.342	0.325	0.355	0.350	0.347				
		Pentachloronitrobenzene	A	0.155	3.42	0.152	0.165	0.151	0.158	0.153	0.153				
		Phenanthrene	A	0.917	5.50	0.840	0.929	0.875	0.969	0.929	0.962				
		Anthracene	A	0.885	6.50	0.805	0.876	0.844	0.969	0.895	0.920				
		di-N-butyl phthalate	A	1.204	3.85	1.137	1.235	1.160	1.260	1.214	1.215				
		Fluoranthene	A	1.072	4.12	1.011	1.114	1.043	1.130	1.068	1.065				
		Terphenyl-d14	A	0.820	3.48	0.781	0.850	0.807	0.856	0.817	0.807				
		CHRYSENE-D12	I			10.00	20.00	35.00	50.00	65.00	100.0				
		Benzidine	QO	0.226	30.1	0.132	0.179	0.198	0.261	0.269	0.317	1.00	0.00	0.167	0.06
		Pyrene **	A	1.249	5.27	1.174	1.255	1.176	1.306	1.249	1.335				
		p-Dimethylaminoazobenzene	A	0.271	4.08	0.265	0.269	0.255	0.285	0.272	0.282				
		Butyl benzyl phthalate	A	0.616	5.57	0.571	0.620	0.583	0.641	0.618	0.662				
		TCDD	A												
		Benzo(a)anthracene	A	1.194	3.50	1.145	1.222	1.143	1.240	1.191	1.223				
		3,3'-Dichlorobenzidine	A	0.427	6.83	0.378	0.429	0.409	0.442	0.441	0.460				
		Chrysene	A	1.152	4.68	1.073	1.173	1.097	1.189	1.169	1.208				
		Bis(2-ethylhexyl)phthalate	A	0.948	5.46	0.963	0.938	0.871	0.942	0.940	1.032				
		Di-n-octyl phthalate	A	1.198	8.86	1.032	1.143	1.143	1.277	1.249	1.323				
		PERYLENE-D12	I			10.00	20.00	35.00	50.00	65.00	100.0				
	Benzo(b)fluoranthene	A	1.229	10.6	1.017	1.194	1.337	1.283	1.314						
	7,12-Dimethylbenz(a)anthracene	A	0.567	9.35	0.477	0.565	0.540	0.595	0.598	0.626					
	Benzo(k)fluoranthene	A	1.228	10.5	1.109	1.259	1.033	1.287	1.313	1.368					
	Benzo(a)pyrene	A	1.036	7.45	0.898	1.046	0.998	1.089	1.081	1.102					
	3-Methylcholanthrene	A	0.492	5.23	0.448	0.500	0.475	0.504	0.504	0.519					
	Dibenz(a,j)acridine	A	0.696	9.03	0.592	0.700	0.662	0.721	0.729	0.774					
	Indeno(1,2,3-cd)pyrene	A	0.971	7.06	0.855	0.983	0.936	0.991	1.003	1.056					
	Dibenzo(a,h)anthracene	A	0.848	8.92	0.723	0.839	0.809	0.877	0.902	0.935					
	Benzo(ghi)perylene	A	0.791	6.02	0.706	0.814	0.771	0.802	0.810	0.843					

NOTES:

Average RF Fit : $A^* = \langle RF \rangle C^*$

Other Curve Fit : $A^* = k(0) + k(1)C^* + k(2)(C^*)^2$

Notation: $A^* = A_s/A_i$ (normalized peak area/height)

$C^* = C_s/C_i$ (normalized concentration)

A: Average RF Fit

L/LO: Linear/Linear Origin Curve Fit

Q/QO: Quad/Quad Origin Curve Fit

Calibration (1): bn001023.m (Mean %RSD: 9.30)

Form 7a: System Performance Compounds Check

GC Column.....: DB-5/L:30m/D:0.25mm
 Instrument ID: svol.01.Urza

Analytical Batch: b001027a.1
 Heated Purge.....: N/A

<i>Filename</i>	<i>Run Time</i>	<i>SPCC Compound</i>	<i>SPCC RF</i>	<i>RF LCL</i>
spcc3.d	10/30 01:03 PM	2,4-Dinitrophenol	0.209	0.05
		4-Nitrophenol	0.480	0.05
		Hexachlorocyclopentadiene	0.086	0.05
		N-Nitrosodi-n-propylamine	1.587	0.05
spcc4.d	10/31 01:02 AM	2,4-Dinitrophenol	0.209	0.05
		4-Nitrophenol	0.480	0.05
		Hexachlorocyclopentadiene	0.086	0.05
		N-Nitrosodi-n-propylamine	1.587	0.05
spcc6.d	11/01 02:19 PM	2,4-Dinitrophenol	0.209	0.05
		4-Nitrophenol	0.480	0.05
		Hexachlorocyclopentadiene	0.086	0.05
		N-Nitrosodi-n-propylamine	1.587	0.05
spcc7.d	11/03 03:35 PM	2,4-Dinitrophenol	0.209	0.05
		4-Nitrophenol	0.480	0.05
		Hexachlorocyclopentadiene	0.086	0.05
		N-Nitrosodi-n-propylamine	1.587	0.05

Form 7b: Calibration Check Compounds

GC Column.....: DB-5/L:30m/D:0.25mm
 Instrument ID: svol.01.Urza

Analytical Batch: b001027a.1
 Heated Purge.....: N/A

Filename	Run Time	CCC Compound	CCC Conc.	CCC %D/UCL
spcc3.d	10/30 01:03 PM	Phenol	53.0/ 50.0	6.0/ 20.0
		1,4-Dichlorobenzene	51.8/ 50.0	3.6/ 20.0
		2-Nitrophenol	52.7/ 50.0	5.4/ 20.0
		2,4-Dichlorophenol	50.5/ 50.0	1.0/ 20.0
		Hexachlorobutadiene	49.0/ 50.0	2.0/ 20.0
		4-Chloro-3-methylphenol	50.1/ 50.0	0.1/ 20.0
		2,4,6-Trichlorophenol	52.8/ 50.0	5.6/ 20.0
		Acenaphthene	52.5/ 50.0	5.0/ 20.0
		N-Nitrosodiphenylamine	55.9/ 50.0	11.8/ 20.0
		Pentachlorophenol	53.7/ 50.0	7.4/ 20.0
		Fluoranthene	50.5/ 50.0	1.1/ 20.0
		Di-n-octyl phthalate	58.6/ 50.0	17.3/ 20.0
		Benzo(a)pyrene	51.6/ 50.0	3.2/ 20.0
		spcc4.d	10/31 01:02 AM	Phenol
1,4-Dichlorobenzene	52.3/ 50.0			4.6/ 20.0
2-Nitrophenol	52.3/ 50.0			4.7/ 20.0
2,4-Dichlorophenol	50.7/ 50.0			1.5/ 20.0
Hexachlorobutadiene	47.2/ 50.0			5.6/ 20.0
4-Chloro-3-methylphenol	48.6/ 50.0			2.8/ 20.0
2,4,6-Trichlorophenol	51.4/ 50.0			2.7/ 20.0
Acenaphthene	52.7/ 50.0			5.5/ 20.0
N-Nitrosodiphenylamine	52.7/ 50.0			5.4/ 20.0
Pentachlorophenol	51.3/ 50.0			2.5/ 20.0
Fluoranthene	49.8/ 50.0			0.4/ 20.0
Di-n-octyl phthalate	56.2/ 50.0			12.4/ 20.0
Benzo(a)pyrene	51.3/ 50.0			2.6/ 20.0
spcc6.d	11/01 02:19 PM			Phenol
		1,4-Dichlorobenzene	52.4/ 50.0	4.8/ 20.0
		2-Nitrophenol	52.3/ 50.0	4.6/ 20.0
		2,4-Dichlorophenol	50.0/ 50.0	0.0/ 20.0
		Hexachlorobutadiene	50.5/ 50.0	1.1/ 20.0
		4-Chloro-3-methylphenol	52.2/ 50.0	4.4/ 20.0
		2,4,6-Trichlorophenol	50.9/ 50.0	1.9/ 20.0
		Acenaphthene	54.2/ 50.0	8.4/ 20.0
		N-Nitrosodiphenylamine	54.8/ 50.0	9.6/ 20.0
		Pentachlorophenol	45.1/ 50.0	9.9/ 20.0
		Fluoranthene	49.9/ 50.0	0.1/ 20.0
		Di-n-octyl phthalate	57.9/ 50.0	15.9/ 20.0
		Benzo(a)pyrene	51.5/ 50.0	3.1/ 20.0
		spcc7.d	11/03 03:35 PM	Phenol
1,4-Dichlorobenzene	52.8/ 50.0			5.7/ 20.0
2-Nitrophenol	52.2/ 50.0			4.5/ 20.0
2,4-Dichlorophenol	49.9/ 50.0			0.3/ 20.0
Hexachlorobutadiene	51.0/ 50.0			1.9/ 20.0
4-Chloro-3-methylphenol	54.7/ 50.0			9.3/ 20.0
2,4,6-Trichlorophenol	58.7/ 50.0			17.3/ 20.0
Acenaphthene	54.7/ 50.0			9.5/ 20.0
N-Nitrosodiphenylamine	55.6/ 50.0			11.1/ 20.0
Pentachlorophenol	45.9/ 50.0			8.2/ 20.0
Fluoranthene	48.6/ 50.0			2.7/ 20.0
Di-n-octyl phthalate	58.9/ 50.0			17.8/ 20.0
Benzo(a)pyrene	52.4/ 50.0			4.9/ 20.0

Form 8: Internal Standard Area and Retention Time Summary

GC Column....: DB-5/L:30m/D:0.25mm
 Instrument ID: svol.01.Urza

Analytical Batch: b001027a.1
 Heated Purge....: N/A

Filename	Run Time	ISD Compound	Area/RT	Ratio/Diff.
spcc3.d	10/30 01:03 PM	1,4-Dichlorobenzene-D4	912206/ 9.76	1.000/ 0.00
		Naphthalene-D8	3080010/12.76	1.000/ 0.00
		Acenaphthalene-D10	2148740/16.95	1.000/ 0.00
		Phenanthrene-D10	4675485/20.44	1.000/ 0.00
		Chrysene-D12	3863834/26.76	1.000/ 0.00
		Perylene-D12	2648108/29.90	1.000/ 0.00
0348501r.d	10/30 01:47 PM	1,4-Dichlorobenzene-D4	1250757/ 9.74	1.371/-0.02
		Naphthalene-D8	4577242/12.74	1.486/-0.02
		Acenaphthalene-D10	3135846/16.95	1.459/ 0.00
		Phenanthrene-D10	5952557/20.43	1.273/-0.01
		Chrysene-D12	4581868/26.74	1.186/-0.02
		Perylene-D12	4705931/29.90	1.777/ 0.00
0348901r.d	10/30 02:30 PM	1,4-Dichlorobenzene-D4	880272/ 9.73	0.965/-0.03
		Naphthalene-D8	2946867/12.72	0.957/-0.04
		Acenaphthalene-D10	1973082/16.93	0.918/-0.02
		Phenanthrene-D10	3843440/20.40	0.822/-0.04
		Chrysene-D12	2908973/26.72	0.753/-0.04
		Perylene-D12	2354807/29.87	0.889/-0.03
0348902r.d	10/30 03:14 PM	1,4-Dichlorobenzene-D4	1024096/ 9.73	1.123/-0.03
		Naphthalene-D8	3493223/12.72	1.134/-0.04
		Acenaphthalene-D10	2361052/16.93	1.099/-0.02
		Phenanthrene-D10	4775179/20.41	1.021/-0.03
		Chrysene-D12	3679711/26.73	0.952/-0.03
		Perylene-D12	2796018/29.88	1.056/-0.02
0350501r.d	10/30 03:58 PM	1,4-Dichlorobenzene-D4	1238598/ 9.74	1.358/-0.02
		Naphthalene-D8	4265394/12.73	1.385/-0.03
		Acenaphthalene-D10	2875676/16.93	1.338/-0.02
		Phenanthrene-D10	5594210/20.41	1.196/-0.03
		Chrysene-D12	4165643/26.74	1.078/-0.02
		Perylene-D12	3077342/29.88	1.162/-0.02
0351901r.d	10/30 06:53 PM	1,4-Dichlorobenzene-D4	1220947/ 9.74	1.338/-0.02
		Naphthalene-D8	4255006/12.73	1.381/-0.03
		Acenaphthalene-D10	2844283/16.94	1.324/-0.01
		Phenanthrene-D10	5368172/20.41	1.148/-0.03
		Chrysene-D12	4021943/26.74	1.041/-0.02
		Perylene-D12	3049420/29.88	1.152/-0.02
0353001r.d	10/30 07:37 PM	1,4-Dichlorobenzene-D4	1071112/ 9.74	1.174/-0.02
		Naphthalene-D8	3700505/12.73	1.201/-0.03
		Acenaphthalene-D10	2556406/16.94	1.190/-0.01
		Phenanthrene-D10	5078104/20.41	1.086/-0.03
		Chrysene-D12	3646554/26.72	0.944/-0.04
		Perylene-D12	2743190/29.87	1.036/-0.03
0353101r.d	10/30 08:21 PM	1,4-Dichlorobenzene-D4	1180342/ 9.74	1.294/-0.02
		Naphthalene-D8	4030422/12.73	1.309/-0.03
		Acenaphthalene-D10	2810599/16.93	1.308/-0.02
		Phenanthrene-D10	5277399/20.41	1.129/-0.03
		Chrysene-D12	3924406/26.73	1.016/-0.03
		Perylene-D12	2953772/29.87	1.115/-0.03
0353102r.d	10/30 09:05 PM	1,4-Dichlorobenzene-D4	1115277/ 9.74	1.223/-0.02
		Naphthalene-D8	3855664/12.73	1.252/-0.03
		Acenaphthalene-D10	2617908/16.94	1.218/-0.01
		Phenanthrene-D10	4999621/20.41	1.069/-0.03
		Chrysene-D12	3756473/26.73	0.972/-0.03
		Perylene-D12	2826509/29.88	1.067/-0.02
0353103r.d	10/30 09:49 PM	1,4-Dichlorobenzene-D4	1263202/ 9.74	1.385/-0.02
		Naphthalene-D8	4404454/12.73	1.430/-0.03
		Acenaphthalene-D10	3004473/16.94	1.398/-0.01
		Phenanthrene-D10	5959048/20.41	1.275/-0.03
		Chrysene-D12	4321982/26.74	1.119/-0.02
		Perylene-D12	3275082/29.88	1.237/-0.02

Form 8: Internal Standard Area and Retention Time Summary

GC Column.....: DB-5/L:30m/D:0.25mm
 Instrument ID: svol.01.Urza

Analytical Batch: b001027a.1
 Heated Purge.....: N/A

Filename	Run Time	ISD Compound	Area/RT	Ratio/Diff.
0353104r.d	10/30 10:33 PM	1,4-Dichlorobenzene-D4	928857/ 9.73	1.018/-0.03
		Naphthalene-D8	3203123/12.73	1.040/-0.03
		Acenaphthalene-D10	2273344/16.93	1.058/-0.02
		Phenanthrene-D10	4398052/20.41	0.941/-0.03
		Chrysene-D12	3128365/26.73	0.810/-0.03
		Perylene-D12	2358394/29.87	0.891/-0.03
0353105r.d	10/30 11:16 PM	1,4-Dichlorobenzene-D4	1079746/ 9.74	1.184/-0.02
		Naphthalene-D8	3730922/12.73	1.211/-0.03
		Acenaphthalene-D10	2611627/16.94	1.215/-0.01
		Phenanthrene-D10	5079403/20.41	1.086/-0.03
		Chrysene-D12	3655422/26.73	0.946/-0.03
		Perylene-D12	2709579/29.87	1.023/-0.03
spcc4.d	10/31 01:02 AM	1,4-Dichlorobenzene-D4	933894/ 9.75	1.000/ 0.00
		Naphthalene-D8	3137846/12.76	1.000/ 0.00
		Acenaphthalene-D10	2206607/16.95	1.000/ 0.00
		Phenanthrene-D10	4954378/20.43	1.000/ 0.00
		Chrysene-D12	4039551/26.76	1.000/ 0.00
		Perylene-D12	2742870/29.90	1.000/ 0.00
0353106.d	10/31 01:45 AM	1,4-Dichlorobenzene-D4	1057644/ 9.75	1.133/ 0.00
		Naphthalene-D8	3609456/12.73	1.150/-0.03
		Acenaphthalene-D10	2420314/16.94	1.097/-0.01
		Phenanthrene-D10	4710930/20.41	0.951/-0.02
		Chrysene-D12	3790558/26.75	0.938/-0.01
		Perylene-D12	2826315/29.88	1.030/-0.02
0353107.d	10/31 02:30 AM	1,4-Dichlorobenzene-D4	1004911/ 9.74	1.076/-0.01
		Naphthalene-D8	3390638/12.73	1.081/-0.03
		Acenaphthalene-D10	2312681/16.94	1.048/-0.01
		Phenanthrene-D10	4406319/20.42	0.889/-0.01
		Chrysene-D12	3369979/26.73	0.834/-0.03
		Perylene-D12	2549946/29.87	0.930/-0.03
0353108.d	10/31 03:13 AM	1,4-Dichlorobenzene-D4	1185161/ 9.74	1.269/-0.01
		Naphthalene-D8	4184487/12.74	1.334/-0.02
		Acenaphthalene-D10	2817417/16.94	1.277/-0.01
		Phenanthrene-D10	5472085/20.41	1.104/-0.02
		Chrysene-D12	4065301/26.74	1.006/-0.02
		Perylene-D12	3145093/29.88	1.147/-0.02
0353109.d	10/31 03:57 AM	1,4-Dichlorobenzene-D4	1100416/ 9.74	1.178/-0.01
		Naphthalene-D8	3817490/12.74	1.217/-0.02
		Acenaphthalene-D10	2674943/16.94	1.212/-0.01
		Phenanthrene-D10	5235863/20.42	1.057/-0.01
		Chrysene-D12	3991939/26.73	0.988/-0.03
		Perylene-D12	2966418/29.88	1.082/-0.02
0353110.d	10/31 04:41 AM	1,4-Dichlorobenzene-D4	1155693/ 9.74	1.237/-0.01
		Naphthalene-D8	3999012/12.73	1.274/-0.03
		Acenaphthalene-D10	2745525/16.94	1.244/-0.01
		Phenanthrene-D10	5343530/20.41	1.079/-0.02
		Chrysene-D12	3954896/26.74	0.979/-0.02
		Perylene-D12	3001727/29.88	1.094/-0.02
spcc6.d	11/01 02:19 PM	1,4-Dichlorobenzene-D4	468364/ 9.76	1.000/ 0.00
		Naphthalene-D8	1562713/12.76	1.000/ 0.00
		Acenaphthalene-D10	1093441/16.96	1.000/ 0.00
		Phenanthrene-D10	2507834/20.44	1.000/ 0.00
		Chrysene-D12	2081330/26.76	1.000/ 0.00
		Perylene-D12	1390878/29.89	1.000/ 0.00
blk-w1.d	11/01 03:47 PM	1,4-Dichlorobenzene-D4	436747/ 9.74	0.932/-0.02
		Naphthalene-D8	1490818/12.73	0.954/-0.03
		Acenaphthalene-D10	1055235/16.94	0.965/-0.02
		Phenanthrene-D10	2102253/20.41	0.838/-0.03
		Chrysene-D12	1610057/26.72	0.774/-0.04
		Perylene-D12	1269474/29.88	0.913/-0.01

Form 8: Internal Standard Area and Retention Time Summary

GC Column....: DB-5/L:30m/D:0.25mm
 Instrument ID: svol.01.Urza

Analytical Batch: b001027a.1
 Heated Purge....: N/A

Filename	Run Time	ISD Compound	Area/RT	Ratio/Diff.
ms-w1.d	11/01 04:31 PM	1,4-Dichlorobenzene-D4	439489/ 9.74	0.938/-0.02
		Naphthalene-D8	1511140/12.73	0.967/-0.03
		Acenaphthalene-D10	1076233/16.94	0.984/-0.02
		Phenanthrene-D10	2167495/20.42	0.864/-0.02
		Chrysene-D12	1636300/26.73	0.786/-0.03
		Perylene-D12	1304728/29.87	0.938/-0.02
msd-w1.d	11/01 05:14 PM	1,4-Dichlorobenzene-D4	439929/ 9.75	0.939/-0.01
		Naphthalene-D8	1495760/12.74	0.957/-0.02
		Acenaphthalene-D10	1049676/16.94	0.960/-0.02
		Phenanthrene-D10	2096297/20.42	0.836/-0.02
		Chrysene-D12	1547277/26.73	0.743/-0.03
		Perylene-D12	1244089/29.87	0.894/-0.02
0354601.d	11/01 05:58 PM	1,4-Dichlorobenzene-D4	428307/ 9.74	0.914/-0.02
		Naphthalene-D8	1469758/12.73	0.941/-0.03
		Acenaphthalene-D10	1047878/16.93	0.958/-0.03
		Phenanthrene-D10	2132190/20.41	0.850/-0.03
		Chrysene-D12	1500326/26.72	0.721/-0.04
		Perylene-D12	849832/29.86	0.611/-0.03
0356201.d	11/01 08:44 PM	1,4-Dichlorobenzene-D4	460672/ 9.75	0.984/-0.01
		Naphthalene-D8	1584668/12.74	1.014/-0.02
		Acenaphthalene-D10	1096223/16.95	1.003/-0.01
		Phenanthrene-D10	2082793/20.43	0.831/-0.01
		Chrysene-D12	1511255/26.74	0.726/-0.02
		Perylene-D12	883339/29.88	0.635/-0.01
spcc7.d	11/03 03:35 PM	1,4-Dichlorobenzene-D4	483172/ 9.76	1.000/ 0.00
		Naphthalene-D8	1656036/12.77	1.000/ 0.00
		Acenaphthalene-D10	1221013/16.96	1.000/ 0.00
		Phenanthrene-D10	2862532/20.45	1.000/ 0.00
		Chrysene-D12	2286584/26.77	1.000/ 0.00
		Perylene-D12	1386294/29.90	1.000/ 0.00
lcs.w.d	11/03 04:18 PM	1,4-Dichlorobenzene-D4	518562/ 9.75	1.073/-0.01
		Naphthalene-D8	1787840/12.75	1.080/-0.02
		Acenaphthalene-D10	1246569/16.95	1.021/-0.01
		Phenanthrene-D10	2508365/20.42	0.876/-0.03
		Chrysene-D12	1999148/26.73	0.874/-0.04
		Perylene-D12	1491567/29.88	1.076/-0.02
0358601.d	11/03 06:35 PM	1,4-Dichlorobenzene-D4	446152/ 9.74	0.923/-0.02
		Naphthalene-D8	1585335/12.74	0.957/-0.03
		Acenaphthalene-D10	1112549/16.94	0.911/-0.02
		Phenanthrene-D10	2164086/20.42	0.756/-0.03
		Chrysene-D12	1747848/26.74	0.764/-0.03
		Perylene-D12	1214058/29.90	0.876/ 0.00

KEY:

[Area/RT]: Absolute area (counts) and absolute retention time (minutes) of internal standard
 [Ratio/Diff]: Ratio of internal standard areas and difference between internal standard retention times (minutes)

CONTROL LIMITS:

Area UCL/LCL = 50% to 200% of internal standard area
 RT UCL/LCL = +/- 0.5 minutes of internal standard RT

Form 0: GC/ECD Injection Log - PCB Aroclor Analysis

Instrument ID: Varian/3400(B)/DB-5
 GC Column: DB-5/L:30m/D:0.25mm/F:0.25um

Analytical Batch: b001025.1

Index of Applicable Reporting Forms

- | | |
|---|---|
| Form 0: GC/ECD Injection Log - PCB Aroclor Analysis | Form 4: Method Blank Summary |
| Form 1: GC/ECD Data Sheet | Form 6: Initial Calibration Data |
| Form 2: Surrogate Standard Recoveries | Form 7b: Calibration Verification Mixture Summary |
| Form 3a: Duplicate/Matrix Spike Duplicate Summary | Supplemental Forms: Chromatographic Data |
| Form 3b: Matrix Spike Summary | |

Filename	LIMS ID	Run Time	Sample Comments	Mtx	QC Type	Notes	CA
b001025.06r	sblk-r.01	10/25 01:34 PM	SBLK-R.01	WW	B1		
b001025.07r	sc1660.01	10/25 01:53 PM	SC1660.01 0.5ppm	WW	CV		
b001025.08r	slcs-w.01	10/25 02:13 PM	SLCS-W.01 w/df:1	WW	MS		
b001025.09r	slcs-w.02	10/25 02:32 PM	SLCS-W.02 w/df:1	WW	MS		
b001025.10r	sblk-w.01	10/25 02:52 PM	SBLK-W.01 w/df:1	WW	B1		
b001025.11r	s03521.01	10/25 03:12 PM	S03521.01 w/df:1 1L	WW			
b001025.12r	s03530.01	10/25 03:31 PM	S03530.01 w/df:1 970ml	WW			
b001025.13r	s03541.01	10/25 03:51 PM	S03541.01 w/df:1 990ml	WW			
b001025.14r	s03542.01	10/25 04:11 PM	S03542.01 w/df:1 980ml	WW			
b001025.15r	s03531.01	10/25 04:30 PM	S03531.01 w/df:1 950ml	WW			
b001025.16r	s03531.02	10/25 04:50 PM	S03531.02 w/df:1 980ml	WW			
b001025.17r	s03531.03	10/25 05:10 PM	S03531.03 w/df:1 940ml	WW			
b001025.18r	s03531.04	10/25 05:29 PM	S03531.04 w/df:1 970ml	WW			
b001025.19r	s03531.05	10/25 05:49 PM	S03531.05 w/df:1 970ml	WW			
b001025.20r	s03531.06	10/25 06:08 PM	S03531.06 w/df:1 810ml	WW			
b001025.21r	s03531.07	10/25 06:28 PM	S03531.07 w/df:1 980ml	WW			
b001025.22r	s03531.08	10/25 06:48 PM	S03531.08 w/df:1 940ml	WW			
b001025.23r	s03531.09	10/25 07:07 PM	S03531.09 w/df:1 980ml	WW			
b001025.24r	s03531.10	10/25 07:27 PM	S03531.10 w/df:1 980ml	WW			
b001025.25r	s03549.01	10/25 07:46 PM	S03549.01 w/df:1 980ml	WW			
b001025.26r	s03557.03	10/25 08:06 PM	S03557.03 w/df:1 950ml	WW			
b001025.27r	s03541.01	10/25 08:26 PM	S03541.01D w/df:1 990ml dup	WW		Dp	
b001025.28r	sc1660.02	10/25 08:45 PM	SC1660.02 0.5ppm	WW	CV		

Matrix (Mtx) Summary

Water Samples: 16 Soil Samples: 0
 Water Duplicates: 1 Soil Duplicates: 0
 Water Spikes: 2 Soil Spikes: 0
 Water Blanks: 2 Soil Blanks: 0

QC Sample Type Summary

CV: Calibration Verification
 MS: Matrix Spike/MS Duplicate
 B1: Blank
 Dp: Duplicate

Corrective Action (CA) Summary

E: Estimated Result
 R: Reanalyze Sample
 S: Surrogate Standard Outlier
 C: Concentration Beyond Calibration
 T: Exceeds Time Limit
 X: Other

Notes Summary

- 1: Surrogate Standard Outliers (Form 2): 0
- 2: Matrix Spike Outliers (Form 3b): 0
- 3: CVM Outliers (Form 7b): 0
- 4: Raw Data Included (Form 1+Chromatogram)

Batch Comments

[no comments]

Form 2: Surrogate Standard Recoveries/System Monitoring Compounds

Instrument ID: Varian/3400(B)/DB-5
GC Column: DB-5/L:30m/D:0.25mm/F:0.25um

Analytical Batch: b001025.1

Filename	LIMS ID	SSD Compound	Found/Spiked	%Rec.	LCL/UCL	Matrix
b001025.06r	sblk-r.01	TCX	10.73/10.00	107.3	49.0/134.0	WW
		DCBP	9.78/10.00	97.8	27.0/100.0	
b001025.07r	sc1660.01	TCX	9.51/10.00	n/a	49.0/134.0	WW
		DCBP	9.89/10.00	n/a	27.0/100.0	
b001025.08r	slcs-w.01	TCX	7.55/10.00	75.5	49.0/134.0	WW
		DCBP	8.09/10.00	80.9	27.0/100.0	
b001025.09r	slcs-w.02	TCX	9.33/10.00	93.3	49.0/134.0	WW
		DCBP	8.29/10.00	82.9	27.0/100.0	
b001025.10r	sblk-w.01	TCX	9.08/10.00	90.8	49.0/134.0	WW
		DCBP	9.18/10.00	91.8	27.0/100.0	
b001025.11r	s03521.01	TCX	9.19/10.00	91.9	49.0/134.0	WW
		DCBP	5.41/10.00	54.1	27.0/100.0	
b001025.12r	s03530.01	TCX	9.19/10.00	91.9	49.0/134.0	WW
		DCBP	11.36/10.00	113.6	27.0/100.0	
b001025.13r	s03541.01	TCX	9.36/10.00	93.6	49.0/134.0	WW
		DCBP	8.02/10.00	80.2	27.0/100.0	
b001025.14r	s03542.01	TCX	9.94/10.00	99.4	49.0/134.0	WW
		DCBP	7.61/10.00	76.1	27.0/100.0	
b001025.15r	s03531.01	TCX	10.66/10.00	106.6	49.0/134.0	WW
		DCBP	9.24/10.00	92.4	27.0/100.0	
b001025.16r	s03531.02	TCX	10.55/10.00	105.5	49.0/134.0	WW
		DCBP	11.06/10.00	110.6	27.0/100.0	
b001025.17r	s03531.03	TCX	9.49/10.00	94.9	49.0/134.0	WW
		DCBP	8.92/10.00	89.2	27.0/100.0	
b001025.18r	s03531.04	TCX	9.44/10.00	94.4	49.0/134.0	WW
		DCBP	8.42/10.00	84.2	27.0/100.0	
b001025.19r	s03531.05	TCX	10.72/10.00	107.2	49.0/134.0	WW
		DCBP	10.92/10.00	109.2	27.0/100.0	
b001025.20r	s03531.06	TCX	7.56/10.00	75.6	49.0/134.0	WW
		DCBP	9.99/10.00	99.9	27.0/100.0	
b001025.21r	s03531.07	TCX	9.58/10.00	95.8	49.0/134.0	WW
		DCBP	8.61/10.00	86.1	27.0/100.0	
b001025.22r	s03531.08	TCX	10.99/10.00	109.9	49.0/134.0	WW
		DCBP	9.41/10.00	94.1	27.0/100.0	
b001025.23r	s03531.09	TCX	10.05/10.00	100.5	49.0/134.0	WW
		DCBP	9.33/10.00	93.3	27.0/100.0	
b001025.24r	s03531.10	TCX	10.75/10.00	107.5	49.0/134.0	WW
		DCBP	9.82/10.00	98.2	27.0/100.0	
b001025.25r	s03549.01	TCX	10.17/10.00	101.7	49.0/134.0	WW
		DCBP	10.07/10.00	100.7	27.0/100.0	
b001025.26r	s03557.03	TCX	6.11/10.00	61.1	49.0/134.0	WW
		DCBP	8.26/10.00	82.6	27.0/100.0	
b001025.27r	s03541.01	TCX	6.84/10.00	68.4	49.0/134.0	WW
		DCBP	9.34/10.00	93.4	27.0/100.0	
b001025.28r	sc1660.02	TCX	9.04/10.00	n/a	49.0/134.0	WW
		DCBP	9.64/10.00	n/a	27.0/100.0	

NOTES

*: Surrogate recovery outside of laboratory-established control limits
n/a: Surrogate recovery not applicable (diluted run or standard run)

Form 3a: Duplicate/Matrix Spike Duplicate Summary

Instrument ID: Varian/3400(B)/DB-5

Analytical Batch: b001025.1

GC Column: DB-5/L:30m/D:0.25mm/F:0.25um

<i>File Name</i>	<i>LIMS ID</i>	<i>Sample Name</i>	<i>Target Compound</i>	<i>Dup/Samp Conc.</i>	<i>%RPD</i>	<i>Matrix</i>
b001025.27r	s03541.01	b001025.13r	1016-1	0.129/ 0.130	0.8	WW
			1016-2	0.956/ 0.850	11.7	
			1016-3	0.003/ 0.003	0.0	
			1016-4	0.006/ 0.007	15.4	
			1260-3	0.095/ 0.103	8.1	
			[end of list]			

Form 3b: Matrix Spike Summary

Instrument ID: Varian/3400(B)/DB-5
 GC Column: DB-5/L:30m/D:0.25mm/F:0.25um

Analytical Batch: b001025.1

File Name	LIMS ID	Sample Name	Target Compound	MS/Samp Conc.	#Rec	LCL/UCL	Mat.
b001025.08r	slcs-w.01	b001025.10r	1016-1	0.558/ 0.000	111.6		WW
			1016-2	0.543/ 0.000	108.6		
			1016-3	0.591/ 0.000	118.2		
			1016-4	0.622/ 0.007	123.0		
			1260-1	0.595/ 0.000	119.0		
			1260-2	0.528/ 0.000	105.6		
			1260-3	0.552/ 0.000	110.4		
			1260-4	0.519/ 0.009	102.0		
Average Recovery					112.3	59.0/116.0	
b001025.09r	slcs-w.02	b001025.10r	1016-1	0.609/ 0.000	121.8		WW
			1016-2	0.551/ 0.000	110.2		
			1016-3	0.540/ 0.000	108.0		
			1016-4	0.611/ 0.007	120.8		
			1260-1	0.607/ 0.000	121.4		
			1260-2	0.531/ 0.000	106.2		
			1260-3	0.531/ 0.000	106.2		
			1260-4	0.536/ 0.009	105.4		
Average Recovery					112.5	59.0/116.0	

NOTES

*: LCS/Matrix Spike recovery outside of laboratory-established control limits

Form 4: Method Blank Summary

Instrument ID: Varian/3400(B)/DB-5
GC Column: DB-5/L:30m/D:0.25mm/F:0.25um

Analytical Batch: b001025.1

<i>Filename</i>	<i>LIMS ID</i>	<i>Run Time</i>	<i>Target Compound</i>	<i>Conc.</i>	<i>Matrix</i>
b001025.06r	sblk-r.01	10/25 01:34 PM	1016-2	0.007	WW
			[end of list]	0.000	
b001025.10r	sblk-w.01	10/25 02:52 PM	1016-1	0.017	WW
			1016-2	0.023	
			1016-3	0.017	
			1016-4	0.007	
			1260-1	0.009	
			1260-3	0.009	
			[end of list]	0.000	

Form 6: Initial Calibration Data

Instrument ID: Varian/3400(B)/DB-5
 GC Column: DB-5/L:30m/D:0.25mm/F:0.25um

Analytical Batch: b001025.1

Filename	Compound	Fit	RT- <CF>	RT %RSD	RT+ COD	C(1) CF(1)	C(2) CF(2)	C(3) CF(3)	C(4) CF(4)	C(5) CF(5)	C(6) CF(6)	k(0) k(2)	k(1) k(3)
b66001016a.ca	TCX	A	1.25	1.32	1.39	2.00	4.00	6.00	8.00	10.00			0.083
			0.083	10.6		0.07	0.09	0.09	0.08	0.08			
	1016-1	A	1.93	2.00	2.07	0.10	0.30	0.50	0.60	0.80			2.339
			2.339	14.4		2.93	2.23	2.23	2.19	2.11			
	1016-2	A	2.13	2.20	2.27	0.10	0.30	0.50	0.60	0.80			1.903
			1.903	25.0		2.75	1.74	1.71	1.69	1.63			
	1016-3	A	2.47	2.54	2.61	0.10	0.30	0.50	0.60	0.80			5.410
			5.410	10.5		6.41	5.00	5.24	5.22	5.17			
	1016-4	A	3.45	3.52	3.59	0.10	0.30	0.50	0.60	0.80			1.932
			1.932	15.8		2.47	1.86	1.83	1.80	1.71			
	1260-1	A	6.34	6.41	6.48	0.10	0.30	0.50	0.60	0.80			5.522
			5.522	4.44		5.80	5.18	5.52	5.41	5.70			
	1260-2	A	6.97	7.04	7.11	0.10	0.30	0.50	0.60	0.80			6.056
			6.056	9.68		7.04	5.56	5.87	5.72	6.09			
	1260-3	A	8.73	8.80	8.87	0.10	0.30	0.50	0.60	0.80			11.284
			11.28	14.2		9.78	9.71	11.68	11.68	13.57			
	1260-4	A	9.46	9.53	9.60	0.10	0.30	0.50	0.60	0.80			4.524
			4.524	4.07		4.67	4.25	4.55	4.45	4.71			
	DCBP	A	13.0	13.0	13.1	2.00	4.00	6.00	8.00	10.00			0.071
			0.071	0.06		0.07	0.07	0.07	0.07	0.07			

CALIBRATION EQUATIONS

Average Fit : A = <CF>C
 Power Law Fit : A = k(1)C^k(0)
 Polynomial Fit: A = k(0)+k(1)C+k(2)C^2+k(3)C^3

NOTATION

A : peak area or height
 C : analyte concentration
 CF : calibration factor x 1e-6 (A/C)
 k(i): calibration constant x 1e-6

CALIBRATION ABBREVIATIONS

A : Average Fit
 PW: Power Law Fit
 L : Linear (Polynomial) Fit
 Q : Quadratic (Polynomial) Fit
 C : Cubic (Polynomial) Fit

Calibration (1): b66001016a.cal (Mean %RSD: 10.88)

Form 7b: Calibration Verification Mixture

Instrument ID: Varian/3400(B)/DB-5
 GC Column: DB-5/L:30m/D:0.25mm/F:0.25um

Analytical Batch: b001025.1

Filename	LIMS ID	Run Time	CVM Component	Δ RT/Win.	CVM Conc.	CVM %D/ UCL
b001025.07r	sc1660.01	10/25 01:53 PM	1016-1	0.02/0.07	0.581/0.500	16.2
			1016-2	0.02/0.07	0.522/0.500	4.4
			1016-3	0.02/0.07	0.506/0.500	1.2
			1016-4	0.04/0.07	0.580/0.500	16.0
			1260-1	0.04/0.07	0.578/0.500	15.6
			1260-2	0.06/0.07	0.523/0.500	4.6
			1260-3	0.04/0.07	0.539/0.500	7.8
			1260-4	0.05/0.07	0.503/0.500	0.6
b001025.28r	sc1660.02	10/25 08:45 PM	1016-1	0.02/0.07	0.568/0.500	13.6
			1016-2	0.02/0.07	0.521/0.500	4.2
			1016-3	0.02/0.07	0.521/0.500	4.2
			1016-4	0.03/0.07	0.599/0.500	19.8
			1260-1	0.03/0.07	0.649/0.500	29.8
			1260-2	0.04/0.07	0.571/0.500	14.2
			1260-3	0.02/0.07	0.525/0.500	5.0
			1260-4	0.03/0.07	0.527/0.500	5.4

NOTES

*: Calibration check drift outside of method-established control limits

Metals Quality Control
Sample Summary

Data Set ID: 00-1024A

Analysis Date: Oct 24 2000

FECL Sample #s	Comments
03452.01	
03453.01	
03471.02	
03484.01-03484.02	
03489.01-03489.02	
03505.01	
03508.01	
03508.03	
03511.01	
03519.01	
03528.01	
03531.01-03531.10	*QC
03537.01	
03540.02	

Metals Quality Control Sequence Log

Data Set ID: 00-1024A

Analysis Date: Oct 24 2000

Sequence ID	Sample Name	QC Type
001.D#	Blank	
002.D#	std-0.00	
003.D#	std-0.02	
004.D#	std-0.05	
005.D#	std-0.20	
006.D#	ICV-0.10	ICV
007.D#	ICB	ICB
008.D#	BS-0.010	BS
009.D#	ERA-99103-CV	ERA
010.D#	CCV1-0.10 ppm	CCV
011.D#	CCB1	CCB
012.D#	10/24 LCS1-0.05 ppm	LCS
013.D#	10/24 LRB1	LRB
014.D#	03452.01s	
015.D#	03453.01s	
016.D#	03484.01s	
017.D#	03484.02s	
018.D#	03519.01s	
019.D#	03528.01s	
020.D#	03537.01s	
021.D#	03471.02s	
022.D#	03540.02s	
023.D#	03540.02 dp	DP
024.D#	03540.02 MS-0.05	MS
025.D#	CCV2-0.10 ppm	CCV
026.D#	CCB2	CCB
027.D#	03531.01s	
028.D#	03531.02s	
029.D#	03531.03s	
030.D#	03531.04s	
031.D#	03531.05s	
032.D#	03531.06s	
033.D#	03531.07s	
034.D#	03531.08s	
035.D#	03531.09s	
036.D#	03531.10s	
037.D#	03531.10 dp	DP
038.D#	03531.10 MS-0.05	MS
039.D#	CCV3-0.10 ppm	CCV
040.D#	CCB3	CCB
041.D#	10/24 LCS2-0.05 ppm	LCS
042.D#	10/24 LRB2	LRB
043.D#	03489.01s	
044.D#	03489.01 MS-0.05	MS

Metals Quality Control Sequence Log

Data Set ID: 00-1024A

Analysis Date: Oct 24 2000

<u>Sequence ID</u>	<u>Sample Name</u>	<u>QC Type</u>
045.D#	Rinse	
046.D#	03489.02s	
047.D#	Rinse	
048.D#	03505.01s	
049.D#	03505.01 MS-0.05	MS
050.D#	Rinse	
051.D#	03508.01s	
052.D#	Rinse	
053.D#	03508.03s	
054.D#	03508.03 dp	DP
055.D#	03508.03 MS-0.05	MS
056.D#	Rinse	
057.D#	03511.01s	
058.D#	03511.01 MS-0.05	MS
059.D#	Rinse	
060.D#	CCV4-0.10 ppm	CCV
061.D#	CCB4	CCB

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

QC Type: ICV Seq ID: 006.D# Sample ID: ICV-0.10

Units: ppm Matrix: Liquid Dilution: 1.00

Element	Sample Conc.	Actual Conc.	% Rec	LCL	UCL	Flag
Cr	0.103	0.10	103	90	110	
Ni	0.103	0.10	103	90	110	
Cu	0.102	0.10	102	90	110	
Zn	0.0999	0.10	100	90	110	
As	0.0998	0.10	100	90	110	
Se	0.0997	0.10	100	90	110	
Mo	0.103	0.10	103	90	110	
Ag	0.101	0.10	101	90	110	
Cd	0.101	0.10	101	90	110	
Ba	0.101	0.10	101	90	110	
Pb	0.0997	0.10	100	90	110	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

QC Type: ICB Seq ID: 007.D# Sample ID: ICB

Units: ppm Matrix: Liquid Dilution: 1.00

Element	Sample Conc.	Flag
Cr	<0.001	
Ni	<0.001	
Cu	<0.001	
Zn	<0.001	
As	<0.001	
Se	<0.001	
Mo	<0.005	
Ag	<0.0001	
Cd	<0.0001	
Ba	<0.001	
Pb	<0.001	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

QC Type: BS Seq ID: 008.D# Sample ID: BS-0.010

Units: ppm Matrix: Liquid Dilution: 1.00

Element	Sample Conc.	Actual Conc.	% Rec	LCL	UCL	Flag
Cr	0.00937	0.010	94	70	130	
Ni	0.00942	0.010	94	70	130	
Cu	0.00942	0.010	94	70	130	
Zn	0.00973	0.010	97	70	130	
As	0.00944	0.010	94	70	130	
Se	0.00914	0.010	91	70	130	
Mo	0.00870	0.010	87	70	130	
Ag	0.00918	0.010	92	70	130	
Cd	0.00940	0.010	94	70	130	
Ba	0.00911	0.010	91	70	130	
Pb	0.00919	0.010	92	70	130	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

QC Type: ERA Seq ID: 009.D# Sample ID: ERA-99103-CV

Units: ppm Matrix: Liquid Dilution: 5.00 ERA Lot No. 9103

Element	Actual Conc.	Lower Accept	Upper Accept	Sample Conc.	% Rec	Flag
Cr	0.787	0.645	0.929	0.827	105	
Ni	0.828	0.679	0.977	0.877	106	
Cu	0.639	0.524	0.754	0.681	107	
Zn	1.200	0.984	1.420	1.21	101	
As	0.484	0.363	0.571	0.491	101	
Se	0.853	0.640	1.010	0.841	99	
Mo	0.515	0.422	0.608	0.516	100	
Ag	0.219	0.180	0.258	0.215	98	
Cd	0.403	0.330	0.476	0.399	99	
Ba	0.542	0.444	0.640	0.541	100	
Pb	0.141	0.116	0.166	0.139	99	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

QC Type: CCV Seq ID: 010.D# Sample ID: CCV1-0.10 ppm

Units: ppm Matrix: Liquid Dilution: 1.00

Element	Sample Conc.	Actual Conc.	% Rec	LCL	UCL	Flag
Cr	0.0992	0.10	99	90	110	
Ni	0.0995	0.10	100	90	110	
Cu	0.101	0.10	101	90	110	
Zn	0.0996	0.10	100	90	110	
As	0.0983	0.10	98	90	110	
Se	0.0992	0.10	99	90	110	
Mo	0.100	0.10	100	90	110	
Ag	0.0990	0.10	99	90	110	
Cd	0.0997	0.10	100	90	110	
Ba	0.0995	0.10	100	90	110	
Pb	0.0980	0.10	98	90	110	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

QC Type: CCB Seq ID: 011.D# Sample ID: CCB1

Units: ppm Matrix: Liquid Dilution: 1.00

Element	Sample Conc.	Flag
Cr	<0.001	
Ni	<0.001	
Cu	<0.001	
Zn	<0.001	
As	<0.001	
Se	<0.001	
Mo	<0.005	
Ag	<0.0001	
Cd	<0.0001	
Ba	<0.001	
Pb	<0.001	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

QC Type: LCS Seq ID: 012.D# Sample ID: 10/24 LCS1-0.05 ppm

Units: ppm Matrix: Liquid Dilution: 1.00

Element	Sample Conc.	Actual Conc.	% Rec	LCL	UCL	Flag
Cr	0.0488	0.05	98	85	115	
Ni	0.0501	0.05	100	85	115	
Cu	0.0511	0.05	102	85	115	
Zn	0.0484	0.05	97	85	115	
As	0.0480	0.05	96	85	115	
Se	0.0473	0.05	95	85	115	
Mo	0.0483	0.05	97	85	115	
Ag	0.0473	0.05	95	85	115	
Cd	0.0478	0.05	96	85	115	
Ba	0.0478	0.05	96	85	115	
Pb	0.0477	0.05	95	85	115	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

QC Type: LRB Seq ID: 013.D# Sample ID: 10/24 LRB1

Units: ppm Matrix: Liquid Dilution: 1.00

Element	Sample Conc.	Flag
Cr	<0.001	
Ni	<0.001	
Cu	<0.001	
Zn	<0.001	
As	<0.001	
Se	<0.001	
Mo	<0.005	
Ag	<0.0001	
Cd	<0.0001	
Ba	<0.001	
Pb	<0.001	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

Original

QC Type: DP Seq ID: 023.D# Sample ID: 03540.02 dp

Sample: 022.D# 03540.02s

Units: ppm Matrix: Liquid Dilution: 5.00

Element	Sample Conc.	Dup Conc.	RPD	LCL	UCL	Flag
Cr	0.0107	0.0106	1	0	20	
Ni	0.0118	0.0110	7	0	20	
Cu	0.0183	0.0198	8	0	20	
Zn	0.227	0.224	1	0	20	
As	<0.001	<0.001	NC	0	20	
Se	<0.005	<0.005	NC	0	20	
Mo	0.769	0.774	1	0	20	
Ag	<0.0005	<0.0005	NC	0	20	
Cd	<0.0002	<0.0002	NC	0	20	
Ba	0.0410	0.0393	4	0	20	
Pb	0.0373	0.0369	1	0	20	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

Original

QC Type: MS Seq ID: 024.D# Sample ID: 03540.02 MS-0.05 Sample: 022.D# 03540.02s

Units: ppm Matrix: Liquid Dilution: 5.00 Conc of Spike: 0.05

Element	Sample Conc.	Spike Amount	MS Conc.	% Rec	LCL	UCL	Flag
Cr	0.0107	0.25	0.262	101	75	125	
Ni	0.0118	0.25	0.249	95	75	125	
Cu	0.0183	0.25	0.264	98	75	125	
Zn	0.227	0.25	0.473	98	75	125	
As	<0.001	0.25	0.243	97	75	125	
Se	<0.005	0.25	0.245	98	75	125	
Mo	0.769	0.25	1.06	116	75	125	
Ag	<0.0005	0.25	0.230	92	75	125	
Cd	<0.0002	0.25	0.252	101	75	125	
Ba	0.0410	0.25	0.310	108	75	125	
Pb	0.0373	0.25	0.290	101	75	125	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

QC Type: CCV Seq ID: 025.D# Sample ID: CCV2-0.10 ppm

Units: ppm Matrix: Liquid Dilution: 1.00

Element	Sample Conc.	Actual Conc.	% Rec	LCL	UCL	Flag
Cr	0.0955	0.10	96	90	110	
Ni	0.0929	0.10	93	90	110	
Cu	0.0942	0.10	94	90	110	
Zn	0.0974	0.10	97	90	110	
As	0.0994	0.10	99	90	110	
Se	0.0946	0.10	95	90	110	
Mo	0.106	0.10	106	90	110	
Ag	0.0949	0.10	95	90	110	
Cd	0.0996	0.10	100	90	110	
Ba	0.104	0.10	104	90	110	
Pb	0.102	0.10	102	90	110	

1

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

QC Type: CCB Seq ID: 026.D# Sample ID: CCB2

Units: ppm Matrix: Liquid Dilution: 1.00

Element	Sample Conc.	Flag
Cr	<0.001	
Ni	<0.001	
Cu	<0.001	
Zn	<0.001	
As	<0.001	
Se	<0.001	
Mo	<0.005	
Ag	<0.0001	
Cd	<0.0001	
Ba	<0.001	
Pb	<0.001	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

Original

QC Type: DP Seq ID: 037.D# Sample ID: 03531.10 dp

Sample: 036.D# 03531.10s

Units: ppm Matrix: Liquid Dilution: 5.00

Element	Sample Conc.	Dup Conc.	RPD	LCL	UCL	Flag
Cr	<0.005	<0.005	NC	0	20	
Ni	0.00577	0.00623	8	0	20	
Cu	<0.005	<0.005	NC	0	20	
Zn	<0.005	<0.005	NC	0	20	
As	0.00674	0.00715	6	0	20	
Se	<0.005	<0.005	NC	0	20	
Mo	<0.005	<0.005	NC	0	20	
Ag	<0.0005	<0.0005	NC	0	20	
Cd	<0.0002	<0.0002	NC	0	20	
Ba	0.150	0.154	3	0	20	
Pb	<0.003	<0.003	NC	0	20	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

Original

QC Type: MS Seq ID: 038.D# Sample ID: 03531.10 MS-0.05

Sample: 036.D# 03531.10s

Units: ppm Matrix: Liquid Dilution: 5.00 Conc of Spike: 0.05

Element	Sample Conc.	Spike Amount	MS Conc.	% Rec	LCL	UCL	Flag
Cr	<0.005	0.25	0.242	97	75	125	
Ni	0.00577	0.25	0.232	91	75	125	
Cu	<0.005	0.25	0.224	90	75	125	
Zn	<0.005	0.25	0.245	98	75	125	
As	0.00674	0.25	0.286	112	75	125	
Se	<0.005	0.25	0.266	106	75	125	
Mo	<0.005	0.25	0.279	112	75	125	
Ag	<0.0005	0.25	0.240	96	75	125	
Cd	<0.0002	0.25	0.253	101	75	125	
Ba	0.150	0.25	0.434	114	75	125	
Pb	<0.003	0.25	0.244	98	75	125	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

QC Type: CCV Seq ID: 039.D# Sample ID: CCV3-0.10 ppm

Units: ppm Matrix: Liquid Dilution: 1.00

Element	Sample Conc.	Actual Conc.	% Rec	LCL	UCL	Flag
Cr	0.0978	0.10	98	90	110	
Ni	0.0941	0.10	94	90	110	
Cu	0.0959	0.10	96	90	110	
Zn	0.0966	0.10	97	90	110	
As	0.0968	0.10	97	90	110	
Se	0.0938	0.10	94	90	110	
Mo	0.103	0.10	103	90	110	
Ag	0.0953	0.10	95	90	110	
Cd	0.1000	0.10	100	90	110	
Ba	0.105	0.10	105	90	110	
Pb	0.0998	0.10	100	90	110	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

QC Type: CCB Seq ID: 040.D# Sample ID: CCB3

Units: ppm Matrix: Liquid Dilution: 1.00

Element	Sample Conc.	Flag
Cr	<0.001	
Ni	<0.001	
Cu	<0.001	
Zn	<0.001	
As	<0.001	
Se	<0.001	
Mo	<0.005	
Ag	<0.0001	
Cd	<0.0001	
Ba	<0.001	
Pb	<0.001	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

QC Type: LCS Seq ID: 041.D# Sample ID: 10/24 LCS2-0.05 ppm

Units: ppm Matrix: Liquid Dilution: 1.00

Element	Sample Conc.	Actual Conc.	% Rec	LCL	UCL	Flag
Cr	0.0499	0.05	100	85	115	
Ni	0.0477	0.05	95	85	115	
Cu	0.0484	0.05	97	85	115	
Zn	0.0498	0.05	100	85	115	
As	0.0498	0.05	100	85	115	
Se	0.0470	0.05	94	85	115	
Mo	0.0522	0.05	104	85	115	
Ag	0.0483	0.05	97	85	115	
Cd	0.0504	0.05	101	85	115	
Ba	0.0530	0.05	106	85	115	
Pb	0.0514	0.05	103	85	115	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

QC Type: LRB Seq ID: 042.D# Sample ID: 10/24 LRB2

Units: ppm Matrix: Liquid Dilution: 1.00

Element	Sample Conc.	Flag
Cr	<0.001	
Ni	<0.001	
Cu	<0.001	
Zn	<0.001	
As	<0.001	
Se	<0.001	
Mo	<0.005	
Ag	<0.0001	
Cd	<0.0001	
Ba	<0.001	
Pb	<0.001	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

Original

QC Type: MS Seq ID: 044.D# Sample ID: 03489.01 MS-0.05

Sample: 043.D# 03489.01s

Units: ppm Matrix: Liquid Dilution: 50.00 Conc of Spike: 0.05

Element	Sample Conc.	Spike Amount	MS Conc.	% Rec	LCL	UCL	Flag
Cr	<0.005	2.50	2.50	100	75	125	
Ni	<0.005	2.50	2.42	97	75	125	
Cu	0.237	2.50	2.75	101	75	125	
Zn	0.0647	2.50	2.60	101	75	125	
As	<0.001	2.50	2.50	100	75	125	
Se	<0.005	2.50	2.16	86	75	125	
Mo	3.49	2.50	6.21	109	75	125	
Ag	<0.0005	2.50	2.10	84	75	125	
Cd	<0.0002	2.50	2.55	102	75	125	
Ba	0.0161	2.50	2.73	109	75	125	
Pb	<0.003	2.50	2.53	101	75	125	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

Original

QC Type: MS Seq ID: 049.D# Sample ID: 03505.01 MS-0.05

Sample: 048.D# 03505.01s

Units: ppm Matrix: Liquid Dilution: 25.00 Conc of Spike:

Element	Sample Conc.	Spike Amount	MS Conc.	% Rec	LCL	UCL	Flag
Cr	<0.005	1.25	1.22	98	75	125	
Ni	<0.005	1.25	1.16	93	75	125	
Cu	0.0146	1.25	1.20	95	75	125	
Zn	2.27	1.25	3.53	101	75	125	
As	<0.001	1.25	1.33	106	75	125	
Se	<0.005	1.25	1.21	97	75	125	
Mo	<0.005	1.25	1.37	110	75	125	
Ag	<0.0005	1.25	1.26	101	75	125	
Cd	<0.0002	1.25	1.25	100	75	125	
Ba	0.440	1.25	1.82	110	75	125	
Pb	<0.003	1.25	1.23	98	75	125	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

Original

QC Type: DP Seq ID: 054.D# Sample ID: 03508.03 dp

Sample: 053.D# 03508.03s

Units: ppm Matrix: Liquid Dilution: 25.00

Element	Sample Conc.	Dup Conc.	RPD	LCL	UCL	Flag
Cr	<0.005	<0.005	NC	0	20	
Ni	0.153	0.150	2	0	20	
Cu	<0.005	<0.005	NC	0	20	
Zn	0.354	0.355	0	0	20	
As	<0.001	<0.001	NC	0	20	
Se	<0.005	<0.005	NC	0	20	
Mo	<0.005	<0.005	NC	0	20	
Ag	<0.0005	<0.0005	NC	0	20	
Cd	<0.0002	<0.0002	NC	0	20	
Ba	0.360	0.322	11	0	20	
Pb	<0.003	<0.003	NC	0	20	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

Original

QC Type: MS Seq ID: 055.D# Sample ID: 03508.03 MS-0.05

Sample: 053.D# 03508.03s

Units: ppm Matrix: Liquid Dilution: 25.00 Conc of Spike: 0.05

Element	Sample Conc.	Spike Amount	MS Conc.	% Rec	LCL	UCL	Flag
Cr	<0.005	1.25	1.23	98	75	125	
Ni	0.153	1.25	1.34	95	75	125	
Cu	<0.005	1.25	1.22	98	75	125	
Zn	0.354	1.25	1.62	101	75	125	
As	<0.001	1.25	1.30	104	75	125	
Se	<0.005	1.25	1.19	95	75	125	
Mo	<0.005	1.25	1.34	107	75	125	
Ag	<0.0005	1.25	1.26	101	75	125	
Cd	<0.0002	1.25	1.24	99	75	125	
Ba	0.360	1.25	1.73	110	75	125	
Pb	<0.003	1.25	1.26	101	75	125	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

Original

QC Type: MS Seq ID: 058.D# Sample ID: 03511.01 MS-0.05

Sample: 057.D# 03511.01s

Units: ppm Matrix: Liquid Dilution: 25.00 Conc of Spike:

Element	Sample Conc.	Spike Amount	MS Conc.	% Rec	LCL	UCL	Flag
Cr	<0.005	1.25	1.24	99	75	125	
Ni	<0.005	1.25	1.21	97	75	125	
Cu	<0.005	1.25	1.23	98	75	125	
Zn	1.88	1.25	3.16	102	75	125	
As	<0.001	1.25	1.32	106	75	125	
Se	<0.005	1.25	1.19	95	75	125	
Mo	<0.005	1.25	1.34	107	75	125	
Ag	<0.0005	1.25	1.19	95	75	125	
Cd	<0.0002	1.25	1.24	99	75	125	
Ba	2.95	1.25	4.40	116	75	125	
Pb	<0.003	1.25	1.27	102	75	125	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

QC Type: CCV Seq ID: 060.D# Sample ID: CCV4-0.10 ppm

Units: ppm Matrix: Liquid Dilution: 1.00

Element	Sample Conc.	Actual Conc.	% Rec	LCL	UCL	Flag
Cr	0.0986	0.10	99	90	110	
Ni	0.0967	0.10	97	90	110	
Cu	0.0983	0.10	98	90	110	
Zn	0.0980	0.10	98	90	110	
As	0.0984	0.10	98	90	110	
Se	0.0918	0.10	92	90	110	
Mo	0.102	0.10	102	90	110	
Ag	0.0948	0.10	95	90	110	
Cd	0.0976	0.10	98	90	110	
Ba	0.107	0.10	107	90	110	
Pb	0.101	0.10	101	90	110	

Metals Quality Control

Data Set ID: 00-1024A Analysis Date: Oct 24 2000

QC Type: CCB Seq ID: 061.D# Sample ID: CCB4

Units: ppm Matrix: Liquid Dilution: 1.00

Element	Sample Conc.	Flag
Cr	<0.001	
Ni	<0.001	
Cu	<0.001	
Zn	<0.001	
As	<0.001	
Se	<0.001	
Mo	<0.005	
Ag	<0.0001	
Cd	<0.0001	
Ba	<0.001	
Pb	<0.001	

Mercury Quality Control Summary

FECL Sample Numbers

- 1) 03477.69
- 2) 03501.01
- 3) 03505.01
- 4) 03508.01
- 5) 03508.03
- 6) 03511.01
- 7) 03519.01
- 8) 03531.01-03531.10
- 9) 03540.02
- 10) 03543.01
- 11) 03546.01
- 12) 03548.01-03548.02
- 13) 03565.01
- 14) 03509.01-03509.03
- 15) 03514.01
- 16) 03545.01
- 17) 03557.01
- 18) _____
- 19) _____
- 20) _____

Date of Analysis Wed Oct 25 13:50:26 2000
Sequence ID C:\HGTALK\SEQUENCE\00-1025a.hsq
Method ID C:\HGTALK\METHOD\00-1025A.HMH
Analyst Emil Blaj

Notes

5 Pt. Calib. Curve (ppb) 0.00, 0.50, 1.00, 2.00, 10.0
Correlation Coefficient 0.999998

Mercury Method 245.1/7471 Detection Limit Study

	ug/L	ug/kg
Method Detection Limits	0.012	0.31
Practical Quantitation Limits	0.05	1
Reporting Limits	0.2	100

	Source	Stock Solution Concentration	Lot #	Expiration Date	Catalog #
Calibration Curve	HPS (High Purity Standards)	10 ppm	019429	Jul 2001	1033-1
Initial Calibration Verification	SPEX Chemicals	10 ppm	7-80HG	Jul 2001	PLHG2-1AY
Continuing Calibration Verification	HPS (High Purity Standards)	10 ppm	019429	Jul 2001	1033-1

WasteWatR Trace Metals

ERA Lot No. 9991	Certified Value (ug/L)	Performance Acceptance Limits (ug/L)	Found (ug/L)	% Recovery
Mercury	4.76	3.57-5.95	4.8516	102

Mercury Quality Control Summary

Initial and Continuing Calibration Verification

	Control Limits (% Recovery)	True Value (ug/L)	Found Value (ug/L)	% Recovery
ICV	75-125	5.00	4.6039	92
ICB	NA	<0.10	<0.05	NA
CCV 1	75-125	2.00	1.8764	94
CCB 1	NA	<0.10	<0.05	NA
CCV 2	75-125	2.00	1.6934	85
CCB 2	NA	<0.10	<0.05	NA
CCV 3	75-125	2.00	1.5975	80
CCB 3	NA	<0.10	<0.05	NA
CCV 4	75-125	2.00	1.5146	76
CCB 4	NA	<0.10	<0.05	NA
CCV 5	75-125	2.00	1.5469	77
CCB 5	NA	<0.10	<0.05	NA
CCV 6				
CCB 6				
CCV 7				
CCB 7				
CCV 8				
CCB 8				
CCV 9				
CCB 9				
CCV 10				
CCB 10				

Laboratory Control Sample and Laboratory Reagent Blank Verification

	Control Limits (% Recovery)	True Value (ug/L)	Found Value (ug/L)	% Recovery
LCS 1	75-125	0.20	0.1745	87
LRB 1	NA	<0.10	<0.05	NA
LCS 2	75-125	0.20	0.1551	78
LRB 2	NA	<0.10	<0.05	NA
LCS 3	75-125	0.20	0.1502	75
LRB 3	NA	<0.10	<0.05	NA
LCS 4				
LRB 4				
LCS 5				
LRB 5				

ICV = Initial Calibration Verification
 ICB = Initial Calibration Blank
 CCV = Continuing Calibration Verification
 CCB = Continuing Calibration Blank

LCS = Laboratory Control Sample
 LRB = Laboratory Reagent Blank

Mercury Quality Control Summary

Matrix Duplicate Verification

FECL #	Matrix	Control Limits (% Recovery)	Sample Result (S)	Duplicate Result (D)	RPD
03531.03	ug/L	0-25	<0.05	<0.05	NC
03546.01	ug/L	0-25	<0.05	<0.05	NC
03509.01	mg/Kg	0-25	<0.02	<0.02	NC

Matrix Spike Verification

FECL #	Matrix	Control Limits (% Recovery)	Spike Sample Result (SSR)	Sample Result (SR)	Dilution Factor	Spike Amount (SA)	% Recovery
03531.03	ug/L	75-125	1.5978	<0.05	1.00	2.0	80
03546.01	ug/L	75-125	1.5573	<0.05	1.00	2.0	78
03509.01	mg/Kg	75-125	0.1011	<0.02	67.00	0.002	75

Notes

- 1) * = out of control
- 2) NC = non calculable due to value(s) less than Control
- 3) Matrix Duplicate RPD = $[(S-D)/(S+D)/2] \times 100$
- 4) Matrix Spike % Recovery = $[(SSR-SR)/Dilution\ Factor/SA] \times 100$



Fire & Environmental Consulting Laboratories, Inc

1451 East Lansing Drive Suite 222 East Lansing MI 48823 Phone: (517) 332-0167 Ext. 14 Fax: (517) 332-633

January 5, 2001

Attn.: Tanya Ballat
R. F. Weston
3 Hathorn Parkway Suite 400
Vernon Hills, IL 60061

RE: Analysis information for 3531.01-.11

Dear Ms. Ballat:

Summary of the results are listed below:

FECL #	Data Analyzed	Re-Analysis
3531.01	10/29/00	No
3531.02	10/29/00	No
3531.03	11/01/00	Yes (<i>due to high target hits</i>)
3531.04	11/01/00	Yes (<i>due to high target hits</i>)
3531.05	11/01/00	Yes (<i>due to high target hits</i>)
3531.06	11/01/00	Yes (<i>due to suspect TCE carryover contamination from run 3531.05 on the initial day 10/29/00</i>)
3531.07	11/01/00	Yes (<i>same reason as 3531.06</i>)
3531.08	10/29/00	No (<i>TCE was not present above he detection limit</i>)
3531.09	11/01/00	Yes (<i>same reason as 3531.06</i>)
3531.10	10/29/00	No
3531.11	10/29/00	No

All 11 samples initially analyzed on 10/29/00 as part of Batch 001028a.1 (initially supplied as hardcopy). 2 blanks were evaluated (blk-w1.d & blk-w2.d) and no MeCl₂ was found.

Six samples were re-analyzed on 11/01/00 as part of batch 001101a.1 The blank runs applicable to the re-analysis Batch were the ones supplied via fax.

Note: Since 3531.06 was analyzed twice, it is clear that the MeCl₂ contamination was from the laboratory since on the first day the MeCl₂ was not present in the sample and only was present above detection limit on the second day when laboratory levels of MeCl₂ were higher.

If you have any further questions, or need any more information, please so not hesitate to contact me at (517) 332-0167 ext. 14, or e-mail me at: mmurshak@fec-labs.com

Very truly yours,

Maya V. Murshak
Chemical Engineer/QA Officer



Fire & Environmental Consulting Laboratories, Inc.

One East Complex 1451 East Lansing Dr., Suite 222 East Lansing, MI 48823 (517) 332-0167 FAX (517) 332-6333
Indianapolis (317) 577-8087

002328

INVOICE TO		CHAIN OF CUSTODY RECORD				REPORT TO	
NAME <i>S Babu Sukumar</i>		NAME		ADDRESS <i>SAME</i>		ADDRESS	
ADDRESS <i>750 F. Bunker Court Suite 500</i>		CITY <i>Vernon Hills</i>		STATE <i>IL</i>		ZIP CODE <i>60061</i>	
CITY		PHONE NO. <i>847 918 4000</i>		PHONE NO.		FAX NO.	
P.O. NO.		FAX NO. <i>847 918 4055</i>		STATE		ZIP CODE	

PROJECT NO. <i>01138 079 903</i>	CLIENT
SAMPLER (SIGNATURE) <i>Todd Carmichael</i>	SAMPLER - PLEASE PRINT NAME <i>TODD CARMICHAEL</i>
AFFILIATION <i>Roy F WESTON INC.</i>	

PRESERVATIVE CODE <i>EAB</i>	SAMPLE TYPE <input checked="" type="checkbox"/> GW <input type="checkbox"/> WW <input type="checkbox"/> SW <input type="checkbox"/> SOIL <input type="checkbox"/>
REFRIGERATE (Y/N)	SLUDGE <input type="checkbox"/> OTHER _____
BOTTLE TYPE	CODE: A = NONE B = HNO ₃ C = H ₂ SO ₄ D = NaOH E = HCL F =

FEC LAB. NO.	SAMPLE COLLECTION YEAR:		SAMPLE TAG IDENTIFICATION-DESCRIPTION	TOTAL NO. CONTAINERS
	DATE	TIME		
01	10/18/00	9:30	MW-07S MW-07S	5
02		10:50	MW-06S	5
03		11:30	MW-01S	5
04		11:30	MW-01S DUP	5
05		12:15	MW-05S	5
06		14:00	MW-11S	5
07		15:00	MW-10S	5
08		16:10	MW-12S	5
09		16:40	MW-13S	5
10		17:30	MW-03S	5
11			Trip Blank	1

ANALYSES	
<i>2 2 1</i>	<i>VOC's, SVOC's, PCB's, MI 10 Metals</i>
<i>1</i>	<i>VOC's</i>
	<i>Must Meet MDEQ Detection Limits! Groundwater</i>

RELINQUISHED BY: SIGNATURE <i>[Signature]</i>	DATE <i>10/19/00</i>	TIME <i>1145</i>
RECEIVED BY: SIGNATURE <i>[Signature]</i>	DATE <i>10/19/00</i>	TIME <i>1145</i>
RELINQUISHED BY: SIGNATURE	DATE	TIME
RECEIVED BY: SIGNATURE	DATE	TIME

RELINQUISHED BY: SIGNATURE <i>[Signature]</i>	DATE	TIME
RECEIVED AT FECL BY: SIGNATURE <i>[Signature]</i>	DATE <i>10/19/00</i>	TIME <i>1145</i>
SEAL NO.	SEAL INTACT YES <input type="checkbox"/> NO <input type="checkbox"/>	INITIALS
SEAL NO.	SEAL INTACT YES <input type="checkbox"/> NO <input type="checkbox"/>	INITIALS
NOTES: TEMP. ON ARRIVAL _____		