SPRING 2004 POST-CHARACTERIZATION GROUNDWATER TECHNICAL MEMORANDUM
RP - PORTLAND SITE

November 1, 2004

Submitted to:

Oregon Department of Environmental Quality
Northwest Region
2020 S.W. 4th Avenue, Suite 400
Portland, Oregon 97201

Prepared for:

SLLI
One Copely Parkway, Suite 309
Morrisville, North Carolina 27560

Prepared by:

AMEC Earth & Environmental, Inc.
7376 S.W. Durham Road
Portland, Oregon 97224

0-61M-10703-0/Task 43

November 1, 2004

0-61M-10703-0/Task 43

Tom Roick
Oregon Department of Environmental Quality
Northwest Region
2020 SW Fourth Avenue, Suite 400
Portland, Oregon 97201-4987

Dear Mr. Tom Roick:

Re: Spring 2004 Post-Characterization Groundwater Technical Memorandum
RP - Portland Site

On behalf of SLLI, AMEC Earth & Environmental, Inc. is submitting to the Oregon Department of Environmental Quality (DEQ) the enclosed Spring 2004 Post-Characterization Groundwater Technical Memorandum (Spring 2004 TM) for the Spring 2004 groundwater monitoring and sampling activities conducted at the RP Site.

Field activities were completed in general accordance with the DEQ-approved Final Post-Characterization Groundwater Monitoring Plan (PCGMP) dated February 17, 2004. The final list of groundwater monitoring wells and laboratory analyses proposed were approved by DEQ in a letter dated March 17, 2004; additional scope was added in a letter to DEQ dated April 7, 2004. Although there were some minor variations from the Spring 2004 TM, none of these variations adversely affects the overall quality of the Spring 2004 groundwater monitoring and sampling data.

Included in the Spring 2004 TM are tables comprising a comparison of planned versus actual sampling activities, groundwater physical parameters (field measurements), groundwater and surface water elevation data, and analytical results. A copy of the completed Groundwater Sampling Field Forms, a complete table of validated final analytical results, and detailed data validation reports are included as appendices.

One hard copy of the entire report (including extensive data tables) is enclosed per DEQ's request. Three copies of this report, including both hard copy portions and electronic portions on compact disk (CD), are enclosed. Appendices A, B, C, D, and E are provided on CD in Portable Document Format (PDF). In addition, a Microsoft Excel version of the analytical data table (Appendix E, Table E-1) is provided on the enclosed CD. The PDF files can be accessed using Adobe® Acrobat® or Reader® software. Please contact us if you have any trouble accessing or navigating between the electronic files.

Please contact Roger Gresh at (503) 639-3400 if you have any questions regarding this report.

Sincerely,

AMEC Earth & Environmental, Inc.

Roger Gresh, P.G.
Project Manager

Teresa A.R. Wilson, R.G.
Task Manager

JF/lp

Encl.: Spring 2004 Post-Characterization Groundwater Technical Memorandum

c: R. Ferguson, SLLI
J. Benedict, CHBH&L

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Appendix C Data Validation Report for Spring 2004 Post-Characterization Groundwater Monitoring Event

Appendix D Spring 2004 Post-Characterization Groundwater Monitoring Event 90-Day Investigation-Derived Waste Log

Appendix E Final Validated Spring 2004 Groundwater Characterization Event Analytical Results

1.0 INTRODUCTION

The Spring 2004 Post-Characterization Groundwater Monitoring Event was completed between April 8, 2004 and April 22, 2004 at the Rhône-Poulenc (RP) Portland Site. The groundwater monitoring and sampling event was conducted in accordance with the Final Post-Characterization Groundwater Monitoring Plan (PCGMP) dated February 17, 2004. The PCGMP, which included as an appendix the Final Post-Characterization Groundwater Monitoring Field Sampling Plan (Post-Characterization FSP), was approved by the Oregon Department of Environmental Quality (DEQ) in a letter dated March 17, 2004. The RP property is located at 6200 NW St. Helens Road in Portland, Oregon.

The list of monitoring wells to be sampled during the Spring 2004 groundwater sampling event was provided to DEQ in the Post-Characterization FSP. Additional analyses for this sampling event were also proposed in a letter to DEQ dated April 7, 2004; DEQ approved the additional analyses on April 8, 2004. The scope of work included groundwater sample collection at 33 monitoring wells and water level measurements at 122 monitoring wells and 3 staff gauges.

The following groundwater monitoring activities were completed in April 2004:

- Water level measurements - April 8, 9, and 12, 2004
- Groundwater sampling - April 12 through April 22, 2004

The Post-Characterization FSP included proposed sampling of City of Portland storm sewer outfalls in the vicinity of the RP Site: City Outfalls 22B and 22C. These samples were specified for collection during the summer or fall (dry season); therefore, these samples have not been included in this Spring 2004 Post-Characterization Groundwater Technical Memorandum (Spring 2004 TM). The results of the outfall sampling, which was conducted in September 2004, will be provided in a separate letter report with a table summarizing the analytical results.

2.0 WATER LEVEL MONITORING PROGRAM

Groundwater and surface water level measurements were collected according to the Post-Characterization FSP. Water level, total depth, and NAPL thickness measurements were collected from 122 monitoring wells and 3 staff gauges, as specified in the Post-Characterization FSP. Depth to water measurements were collected in general accordance with the procedures described in Standard Operating Procedure 1 (SOP - 1), Methodology for Water Level Determination, included in Appendix A-1 of the Post-Characterization FSP. Variations from the

Post-Characterization FSP regarding water level measurements are discussed in Section 5.1 of this Spring 2004 TM.

3.0 GROUNDWATER SAMPLING PROGRAM

Groundwater sampling was conducted from April 12 through April 22, 2004. Groundwater sampling was performed in general accordance with the procedures specified in the Post-Characterization FSP. Groundwater samples were collected and submitted for analytical testing from 33 monitoring wells during the Spring 2004 groundwater sampling event, as specified in the Post-Characterization FSP. Information regarding sampling locations, procedures, handling, and Quality Assurance/Quality Control (QA/QC) requirements is provided in the following sections. Variations from the Post-Characterization FSP regarding groundwater sampling are discussed in Section 5.2 of this Spring 2004 TM. None of the variations adversely affect the overall quality of the Spring 2004 analytical data.

3.1 Sampling Locations and Procedures

Groundwater samples were collected from 33 monitoring wells located on or in the vicinity of the RP property. Table 1 summarizes the monitoring wells sampled and the analyses requested from the laboratory during the Spring 2004 monitoring event.

Groundwater sampling and sample handling activities were generally conducted in accordance with the procedures described within the Post-Characterization FSP, including SOP - 2 (Methodology for Groundwater Sampling), SOP - 3 (Decontamination Procedure), and SOP - 4 (Field Measurement of Groundwater Parameters).

All groundwater sampling procedures, field data, and observations were recorded on loose-leaf project-specific forms and/or a bound field logbook, in general accordance with the Post-Characterization FSP (see Appendix A).

The primary laboratories utilized include the following:

Primary Laboratories Utilized

Laboratory	Analysis Type
Eno River Labs, formerly known as Triangle Laboratories, Inc.	Dioxins/Furans
Food Quality Labs	Total Heterotrophic Plate Count, Diesel-Degrading Bacteria
North Creek Analytical (NCA)	VOCs, Phenols, Pesticides, Herbicides, Metals, Total Petroleum Hydrocarbons (TPH), Natural Attenuation Parameters

Severn Trent Laboratories in Sacramento, California (STL) was used for analysis of specific QC samples. Performance evaluation samples were provided by R.T. Corporation (RTC) of Laramie, Wyoming (see Section 3.2).

3.2 QA/QC Requirements

QC samples were collected in general accordance with the Post-Characterization FSP. QA review of these data is provided in the data validation reports that have been included as Appendix B and Appendix C.

- Rinsate samples were collected after groundwater sampling and equipment decontamination at monitoring wells RP-06-87 and W-09-116.
- Blind field duplicates were collected at four monitoring wells, including RP-01-51, RP-03-52R, AL2-46, and W-09-116.
- Interlaboratory split samples were collected at four monitoring wells, including RP-01-51, RP-03-52R, AL2-46, and W-09-116, and submitted to STL.
- One performance evaluation sample (comprised of sample bottles prepared by a third-party laboratory [RTC] with known concentrations of selected site constituents) was submitted to NCA and STL for analysis.
- One trip blank accompanied each cooler containing bottles/samples that were to be analyzed for VOCs (EPA Method 8260B). Throughout the sampling event a total of 6 trip blanks accompanied samples that were submitted to the laboratory.
- Additional sample quantity used by the laboratory for matrix spike/matrix spike duplicates (MS/MSDs) was from 12 monitoring wells, including AL6-96, BST2W-61, MW-03-I, MW-10-24, RP-01-31, RP-02-66, RP-06-87, RP-07-84, RP-07-119, W-09-116, W-11-S, and W-18-D.

4.0 TREATMENT AND DISPOSAL OF INVESTIGATION-DERIVED WASTE

IDW was handled in accordance with procedures described in the Post-Characterization FSP. Approximately 151 gallons of purge water and decontamination fluid were generated and pumped into the treatment system during the Spring 2004 groundwater characterization event. A total of five drums were used to contain the solid waste. The 90-Day IDW Log forms for this sampling event are included in Appendix D.

5.0 VARIATIONS FROM THE FIELD SAMPLING PLAN

Although groundwater sampling was generally conducted according to the Post-Characterization FSP, field conditions prompted some minor variations from the planned activities. Variations from the planned activities are discussed in the sections below and are summarized on Table 1 of this Spring 2004 TM. None of these variations from the Post-Characterization 2004 FSP adversely affected the overall quality of the Spring 2004 groundwater monitoring event.

5.1 Water Level Monitoring

Two variations from the Post-Characterization FSP are discussed below:

- The FSP indicated that it would take about 1.5 days to complete the water level measurements. However, due to site access issues at the ATOFINA Chemical (now ARKEMA, Inc.) property, the water levels for the RP-02 and W-19 series wells were not collected until April 12, 2004, 2 days after all the other monitoring wells. Repeat water level measurements were taken for the nearby RP-01 series wells on April 12, 2004, and there was a 0.19- to 0.35-foot drop in the water levels since April 8, 2004. These changes are within the recorded tidal influence at these wells (URS 2000). Based on previous groundwater elevation measurements, the difference in water levels did not have a significant impact on the evaluation of the overall groundwater flow direction and gradient.
- Due to an oversight, the recovery wells (A through H) were not turned off prior to measuring the water levels. Based on previous groundwater elevation data the overall Site groundwater gradient probably was not significantly affected by the operation of the on-property recovery wells; therefore, the deviation from the Post-Characterization FSP is not considered significant.

5.2 Groundwater Sampling

The minor variations from the Post-Characterization FSP are listed below:

- Field parameters were not measured prior to sampling RP-04-41 due to the presence of NAPL blebs in the groundwater. These NAPL blebs could have potentially damaged the multiprobe instrument. Although the NAPL blebs were noted, the sample was submitted for analysis. Based on discussions concerning laboratory procedures with NCA and Triangle, the results for SVOCs, pesticides, NWTPH-Dx, and dioxins/furans would not be representative of the dissolved phase constituents because, based on extraction techniques, it is likely that these analyses included the NAPL phase. The RP-04-41 analytical results for these samples have been removed from the groundwater tables and flagged in the database as NAPL-affected samples to reflect the fact that these results are not representative of dissolved-phase constituents.
- Due to a field oversight, the field test results for turbidity and ferrous iron were either not collected or not recorded for MW-05-70, and a ferrous iron test result also was not recorded for W-18-I.
- Due to laboratory error, the wrong bottles were analyzed for PAHs and pesticides in the PE sample. This error was not discovered until after the analyses were run and, therefore, the PE results for PAHs and pesticides are not valid. However, the absence of a PE result for PAHs and pesticides does not affect the overall usability of the groundwater analytical results.

5.3 Field QA/QC Requirements

Field QA/QC samples were collected as discussed in the Post-Characterization FSP.

6.0 DATA QUALITY EVALUATION

AMEC performed a data quality evaluation of the analytical results from the Spring 2004 post-characterization groundwater samples. The results of the evaluation are presented in the Data Validation Reports for the Spring 2004 Post-Characterization Groundwater Monitoring Event, included with this Spring 2004 TM as Appendices C and D.

The purpose of the data quality evaluation was to identify and explain data usability issues discovered during verification and validation of the analytical results, and to identify corrective actions necessary to improve data quality for future sampling events. The data evaluation was based on findings of the data verification and validation process, and any communications with the analytical laboratories about those findings. Verification and validation were performed on 100% of the laboratory data for Spring 2004. The purpose of the data verification was to make certain that the data quality indicators and analytical detection limits met project requirements and to verify the data were transferred accurately from the laboratory to the project database.

Full validation according to EPA National Functional Guidelines for Data Review, modified for SW-846 method requirements, performed on laboratory analytical results for Spring 2004 groundwater samples, exceeded requirements agreed upon in correspondence between AMEC and DEQ dated January 16, February 9, and March 23, 2001.

Although analytical results for the Spring 2004 post-characterization groundwater samples underwent the exhaustive validation procedures described above and in Appendices C and D, SLLI intends to streamline the validation procedures for future post-characterization groundwater sampling events. It is currently anticipated that 10% of data from future events will be validated, in addition to any results that appear anomalous based on sampling location history or other reasons deemed appropriate by SLLI. This proposed validation procedure is consistent with validation procedures for similar projects under DEQ oversight, and a less rigorous validation process should be sufficient to meet the Data Quality Objectives (DQOs) for these post-characterization events.

Based on the validation reports, the laboratory performance and overall data quality appear to be acceptable for the Spring 2004 groundwater analytical data. All the dioxin data generated during the Spring 2004 groundwater monitoring event were found to be usable (Appendix B). Approximately 0.3% of the analytical data, other than dioxin data, was qualified as unusable data as a result of the verification process (Appendix C).

7.0 RESULTS

The results of the water level monitoring and groundwater sample analysis are summarized in the tables and figures of this Spring 2004 TM, as follows:

- Water level measurements, including NAPL thickness and groundwater elevations, are provided on Table 2;
- Groundwater field measurements are summarized on Table 3;
- Groundwater analytical results (detections only) from the Spring 2004 groundwater sampling event are summarized in Table 4; and
- A complete tabulation of final validated groundwater analytical results for the Spring 2004 groundwater sampling event is provided as Appendix E.

The results of the Spring 2004 Post-Characterization Groundwater Monitoring Event will be incorporated, as appropriate, into the RI Report for the RP Site. These results will also be used, as appropriate, to address the DQOs specified in the Post-Characterization FSP.

LIMITATIONS

This report was prepared exclusively for SLLI by AMEC Earth & Environmental, Inc. (AMEC). The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in AMEC services and based on:
i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This Spring 2004 Post-Characterization Groundwater Technical Memorandum is intended to be used by SLLI for the RP - Portland Site, 6200 N.W. St. Helens Road, Portland, Oregon only, subject to the terms and conditions of its contract with AMEC. Any other use of, or reliance on, this report by any third party is at that party's sole risk.

TABLES

TABLE 1
Planned Versus Actual Sampling and Analysis
Spring 2004 Post-Characterization Groundwater Sampling Event
RP - Portland Site

Location		Measurement and Sampling Requirements											
Monitoring Well	Property Owner	Water Level Measurement	NAPL Measurement if Present	VOCs by EPA 8260B	Phenols by EPA 8270C	Herbicides by EPA 8151A	Dioxins/ Furans by EPA 8290 for Groundwater and EPA 1613B for Outfall	Metals by EPA 6010/6020 and 7470A for Groundwater and 200.7/200.8 and 1631 for Outfall	Pesticides by EPA 8081A	PAHs by 8270C-SIM	SVOCs by 8270C (including phenols and PAHs)	Natural Attenuation	Explanation for Variations From Plan
AL2-17	SLLI	X	X										As planned
AL2-32	SLLI	X	X	X	X	X	X	X				X	As planned
AL2-46	SLLI	X	X	X	X	X	X					X	As planned
AL4-47	SLLI	X	X										As planned
AL5-19	SLLI	X	X										As planned
AL5-35	SLLI	X	X										As planned
AL5-62	SLLI	X	X										As planned
AL6-96	SLLI	X	X	X		X	X					X	As planned
ASW-01A	Metro	X	X										As planned
ASW-04	Metro	X	X										As planned
ASW-05	Metro	X	X										As planned
ASW-06	Metro	X	X										As planned
ASW-08	Metro	X	X										As planned
BST2W-61	SLLI	X	X	X	X	X						X	As planned
BST5W-74	SLLI	X	X										As planned
BTB-4A-84	SLLI	X	X										As planned
BTB-4B-25	SLLI	X	X										As planned
BTB-4B-55	SLLI	X	X										As planned
KM-MW-2	Kinder Morgan	X	X										As planned
KM-MW-5	Kinder Morgan	X	X										As planned
MW-01-26	SLLI	X	X										As planned
MW-01-41	SLLI	X	X										As planned
MW-01-56	SLLI	X	X										As planned
MW-01-76	SLLI	X	X										As planned
MW-02-26	SLLI	X	X										As planned
MW-02-46	SLLI	X	X										As planned
MW-02-62	SLLI	X	X										As planned
MW-03-27	SLLI	X	X										As planned
MW-03-49	SLLI	X	X										As planned
MW-03-68	SLLI	X	X										As planned
MW-03-81	Wacker	X	X	X		X		X				X	As planned
MW-03-I	Wacker	X	X	X		X		X				X	As planned
MW-03-S	Wacker	X	X										As planned
MW-04-27	SLLI	X	X										As planned
MW-04-47	SLLI	X	X										As planned
MW-04-63	SLLI	X	X										As planned
MW-05-24	SLLI	X	X	X	X	X						X	As planned
MW-05-34	SLLI	X	X	X	X	X						X	As planned
MW-05-52	SLLI	X	X	X	X	X	X					X	As planned

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MW-05-70	SLLI	X	X	X		X	X					X	Turbidity and Ferrous Iron not measured.
MW-06-S	Wacker	X	X										As planned
MW-07-S	Wacker	X	X										As planned
MW-08-27	SLLI	X	X										As planned
MW-08-46	SLLI	X	X										As planned
MW-08-64	SLLI	X	X										As planned
MW-09-23	SLLI	X	X										As planned
MW-09-42	SLLI	X	X										As planned
MW-09-58	SLLI	X	X										As planned
MW-09-80	SLLI	X	X										As planned
MW-10-24	SLLI	X	X					X	X			X	As planned
MW-10-44	SLLI	X	X										As planned
MW-10-57	SLLI	X	X										As planned
MW-11-24	SLLI	X	X										As planned
MW-11-37	SLLI	X	X										As planned
MW-11-56	SLLI	X	X										As planned
MW-11-79	SLLI	X	X										As planned
MW-12-27	SLLI	X	X										As planned
MW-12-41	SLLI	X	X										As planned
MW-12-59	SLLI	X	X										As planned
MW-12-79	SLLI	X	X										As planned
P-07	SLLI	X	X										As planned
P-10	SLLI	X	X										As planned
P-11	SLLI	X	X										As planned
PP-08	SLLI	X	X										As planned
PZ-02-40	Portland	X	X										As planned
PZ-1-11	SLLI	X	X										As planned
RP-01-31	BN/SF	X	X	X		X						X	As planned
RP-01-51	BN/SF	X	X	X		X	X					X	As planned
RP-01-65	BN/SF	X	X	X		X	X					X	As planned
RP-02-31	Atofina	X	X										Water level measured two days after other wells due to access problems
RP-02-49	Atofina	X	X										Water level measured two days after other wells due to access problems
RP-02-66	Atofina	X	X	X		X	X	X				X	after other wells due to access
RP-03-30R	BN/SF	X	X	X			X			X			As planned
RP-03-52R	BN/SF	X	X	X		X	X			X			As planned

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Monitoring Well	Property Owner	Water Level Measurement	NAPL Measurement if Present	VOCs by EPA 8260B	Phenols by EPA 8270C	Herbicides by EPA 8151A	Dioxins/ Furans by EPA 8290 for Groundwater and EPA 1613B for Outfall	Metals by EPA 6010/6020 and 7470A for Groundwater and 200.7/200.8 and 1631 for Outfall	Pesticides by EPA 8081A	PAHs by 8270C-SIM	SVOCs by 8270C (including phenols and PAHs)	Natural Attenuation	Explanation for Variations From Plan
RP-04-16	SLLI	X	X	X		X	X	X	X		X	X	As planned
RP-04-41	SLLI	X	X	X		X	X	X	X		X	X	NAPL in sample/ no field parameters
RP-05-16	SLLI	X	X										As planned
RP-06-30	BN/SF	X	X										As planned
RP-06-87	BN/SF	X	X	X		X		X				X	As planned
RP-07-30	Wacker	X	X							X			As planned
RP-07-55	Wacker	X	X							X			As planned
RP-07-84	Wacker	X	X	X		X	X	X		X		X	As planned
RP-07-119	Wacker	X	X	X		X	X	X		X		X	As planned
RPW-02	SLLI	X	X										As planned
RPW-03	SLLI	X	X										As planned
RPW-05	SLLI	X	X										As planned
W-03-D	Gould	X	X										As planned
W-03-I	Gould	X	X										As planned
W-03-S	Gould	X	X										As planned
W-04-89	Gould	X	X										As planned
W-04-I	Gould	X	X										As planned
W-04-S	Gould	X	X										As planned
W-06-B	SLLI	X	X										As planned
W-06-D	SLLI	X	X										As planned
W-06-S	SLLI	X	X										As planned
W-08	SLLI	X	X										As planned
W-08-26	SLLI	X	X										As planned
W-08-74	SLLI	X	X										As planned
W-09	SLLI	X	X										As planned
W-09-116	SLLI	X	X	X		X	X	X	X		X	X	As planned
W-09-86	SLLI	X	X										As planned
W-10	Portland	X	X										As planned
W-11-B	ESCO	X	X	X		X	X					X	As planned
W-11-D	ESCO	X	X	X		X	X					X	As planned
W-11-I	ESCO	X	X	X		X						X	As planned
W-11-S	ESCO	X	X	X		X						X	As planned
W-12-D	ESCO	X	X										As planned
W-12-I	ESCO	X	X										As planned
W-12-S	ESCO	X	X										As planned
W-15-D	Metro	X	X										As planned
W-15-I	Metro	X	X										As planned
W-15-S	Metro	X	X										As planned
W-16-31	Schnitzer	X	X										As planned

TABLE 1
Planned Versus Actual Sampling and Analysis
Spring 2004 Post-Characterization Groundwater Sampling Event
RP - Portland Site

Location		Measurement and Sampling Requirements											
Monitoring Well	**Property Owner**	**Water Level Measurement**	**NAPL Measurement if Present**	**VOCs by EPA 8260B**	**Phenols by EPA 8270C**	**Herbicides by EPA 8151A**	**Dioxins/ Furans by EPA 8290 for Groundwater and EPA 1613B for Outfall**	**Metals by EPA 6010/6020 and 7470A for Groundwater and 200.7/200.8 and 1631 for Outfall**	**Pesticides by EPA 8081A**	**PAHs by 8270C-SIM**	**SVOCs by 8270C (including phenols and PAHs)**	**Natural Attenuation**	**Explanation for Variations From Plan**
W-16-D	Schnitzer	X	X										As planned
W-16-I	Schnitzer	X	X										As planned
W-16-S	Schnitzer	X	X										As planned
W-18-D	PGE	X	X					X				X	As planned
W-18-I	PGE	X	X					X				X	Ferrous Iron not measured.
W-18-S	PGE	X	X										As planned
W-19-D	Atofina	X	X	X		X						X	Water level measured two days after other wells due to access problems
W-19-I	Atofina	X	X	X		X						X	Water level measured two days after other wells due to access problems
W-19-S	Atofina	X	X										Water level measured two days after other wells due to access problems
SG-NDL	BN/SF	X											As planned
SG-NDP	Wacker	X											As planned
SG-WDL	BN/SF	X											As planned
City Outfalls 22B and 22C - Nonstormwater Dry Season Sampling Only													
CO-22B-01 *	N/A	N/A	N/A	X	X	X	X	X	X	X			Scheduled for Summer/Fall 2004
CO-22C-01 *	N/A	N/A	N/A	X	X	X	X	X	X	X			Scheduled for Summer/Fall 2004

DQO **Data Quality Objectives**
N Changes in groundwater chemistry, natural attenuation.
M Potential migration of constituents offsite or to receptors.
FS Possible data requirements for feasibility study.

Notes:
NAPL Non-aqueous-phase liquid VOCs Volatile organic compounds SVOCs Semivolatile organic compounds
PAHs Polynuclear aromatic hydrocarbons EPA United States Environmental Protection Agency
* Outfall samples will also be analyzed for total suspended solids (TSS), petroleum hydrocarbons by NWTPH-Dx, Alkalinity by USEPA Method 310.0, Anions by USEPA 300.0, pH by USEPA Method 150.1, and Hardness by Calculation Method No. SM2340B.

TABLE 2
Groundwater Elevation and NAPL Thickness Measurements
Spring 2004 Post-Characterization Groundwater Sampling Event
RP - Portland Site

Site ID	Type	Location/Property	Depth to Water (Feet BMP)	Date	Time	Measuring Point Elevation (Feet AMSL)	Groundwater Elevation (Feet AMSL)	LNAPL Thickness (Feet)	DNAPL Thickness (Feet)
AL2-17	Well	RP - LAKE AREA	11.62	04/08/2004	10:58	41.77	30.15	None	None
AL2-32	Well	RP - LAKE AREA	14.78	04/08/2004	11:08	41.41	26.63	None	None
AL2-46	Well	RP - LAKE AREA	14.99	04/08/2004	11:01	41.77	26.78	None	None
AL4-47	Well	RP - LAKE AREA	13.56	04/08/2004	11:25	40.24	26.68	None	None
AL5-19	Well	RP - LAKE AREA	12.74	04/09/2004	13:20	40.07	27.33	None	None
AL5-35	Well	RP - LAKE AREA	13.43	04/09/2004	13:23	39.54	26.11	None	None
AL5-62	Well	RP - LAKE AREA	13.51	04/09/2004	13:27	39.59	26.08	None	None
AL6-96	Well	RP - LAKE AREA	16.02	04/08/2004	16:44	38.72	22.70	None	None
ASW-01A	Well	METRO	9.27	04/08/2004	11:06	38.81	29.54	None	None
ASW-04	Well	METRO	7.53	04/08/2004	10:38	40.76	33.23	None	None
ASW-05	Well	METRO	7.50	04/08/2004	10:46	*	NA	None	None
ASW-06	Well	METRO	8.37	04/09/2004	09:30	40.10	31.73	None	None
ASW-08	Well	METRO	6.92	04/08/2004	11:15	36.72	29.80	None	None
BST2W-61	Well	RP - LAKE AREA	13.53	04/08/2004	11:05	41.13	27.60	None	None
BST5W-74	Well	RP - LAKE AREA	14.17	04/09/2004	13:14	39.84	25.67	None	None
BTB-4A-84	Well	RP - LAKE AREA	15.69	04/08/2004	16:28	39.50	23.81	None	None
BTB-4B-25	Well	RP - LAKE AREA	10.30	04/08/2004	16:20	39.54	29.24	None	None
BTB-4B-55	Well	RP - LAKE AREA	16.02	04/08/2004	16:24	39.81	23.79	None	None
KM-MW-2	Well	KINDER MORGAN	24.28	04/08/2004	09:48	50.68	26.40	None	None
KM-MW-5	Well	KINDER MORGAN	23.29	04/08/2004	09:53	50.78	27.49	None	None
MW-01-26	Well	RP - HERBICIDE AREA	11.06	04/08/2004	13:09	49.89	38.83	None	None
MW-01-41	Well	RP - HERBICIDE AREA	13.82	04/08/2004	13:04	49.53	35.71	None	None
MW-01-56	Well	RP - HERBICIDE AREA	14.09	04/08/2004	13:00	49.70	35.61	None	None
MW-01-76	Well	RP - HERBICIDE AREA	16.67	04/08/2004	13:11	47.70	31.03	None	None
MW-02-26	Well	RP - HERBICIDE AREA	12.67	04/08/2004	13:59	48.09	35.42	None	None
MW-02-46	Well	RP - HERBICIDE AREA	12.50	04/08/2004	14:01	47.91	35.41	None	None
MW-02-62	Well	RP - HERBICIDE AREA	12.10	04/08/2004	14:05	48.00	35.90	None	None
MW-03-27	Well	RP - HERBICIDE AREA	13.27	04/08/2004	14:48	48.29	35.02	None	None
MW-03-49	Well	RP - HERBICIDE AREA	13.22	04/08/2004	14:49	48.28	35.06	None	None
MW-03-68	Well	RP - HERBICIDE AREA	13.17	04/08/2004	14:52	48.25	35.08	None	None
MW-03-81	Well	WACKER	18.80	04/09/2004	10:25	35.54	16.74	None	None
MW-03-I	Well	WACKER	19.42	04/09/2004	10:45	36.43	17.01	None	None
MW-03-S	Well	WACKER	12.92	04/09/2004	10:40	36.35	23.43	None	None

TABLE 2
Groundwater Elevation and NAPL Thickness Measurements
Spring 2004 Post-Characterization Groundwater Sampling Event
RP - Portland Site

Site ID	Type	Location/Property	Depth to Water (Feet BMP)	Date	Time	Measuring Point Elevation (Feet AMSL)	Groundwater Elevation (Feet AMSL)	LNAPL Thickness (Feet)	DNAPL Thickness (Feet)
MW-04-27	Well	RP - HERBICIDE AREA	15.75	04/08/2004	15:06	47.53	31.78	None	None
MW-04-47	Well	RP - HERBICIDE AREA	15.52	04/08/2004	15:08	47.65	32.13	None	None
MW-04-63	Well	RP - HERBICIDE AREA	15.47	04/08/2004	15:15	48.00	32.53	None	None
MW-05-24	Well	RP - HERBICIDE AREA	8.87	04/08/2004	14:30	37.83	28.96	None	None
MW-05-34	Well	RP - HERBICIDE AREA	9.95	04/08/2004	14:36	37.83	27.88	None	None
MW-05-52	Well	RP - HERBICIDE AREA	10.78	04/08/2004	14:33	37.70	26.92	None	None
MW-05-70	Well	RP - HERBICIDE AREA	11.59	04/09/2004	14:32	38.33	26.74	None	None
MW-06-S	Well	WACKER	12.47	04/09/2004	10:59	36.37	23.90	None	None
MW-07-S	Well	WACKER	14.59	04/09/2004	11:09	37.32	22.73	None	None
MW-08-27	Well	RP - HERBICIDE AREA	23.26	04/09/2004	15:28	48.23	24.97	6.25	None
MW-08-46	Well	RP - HERBICIDE AREA	17.27	04/09/2004	15:12	48.11	30.84	None	None
MW-08-64	Well	RP - HERBICIDE AREA	17.07	04/09/2004	15:18	47.97	30.90	None	None
MW-09-23	Well	RP - HERBICIDE AREA	13.24	04/08/2004	14:23	47.03	33.79	None	None
MW-09-42	Well	RP - HERBICIDE AREA	14.02	04/08/2004	14:27	47.64	33.62	None	None
MW-09-58	Well	RP - HERBICIDE AREA	13.05	04/08/2004	14:31	46.21	33.16	None	None
MW-09-80	Well	RP - HERBICIDE AREA	13.31	04/08/2004	14:19	46.67	33.36	None	None
MW-10-24	Well	RP - INSECTICIDE AREA	12.42	04/08/2004	14:06	46.21	33.79	None	None
MW-10-44	Well	RP - INSECTICIDE AREA	12.78	04/08/2004	14:02	46.54	33.76	None	None
MW-10-57	Well	RP - INSECTICIDE AREA	12.69	04/08/2004	13:58	46.66	33.97	None	None
MW-11-24	Well	RP - INSECTICIDE AREA	10.16	04/08/2004	13:31	44.01	33.85	None	None
MW-11-37	Well	RP - INSECTICIDE AREA	9.85	04/08/2004	13:39	43.80	33.95	None	None
MW-11-56	Well	RP - INSECTICIDE AREA	9.33	04/08/2004	13:42	43.63	34.30	None	None
MW-11-79	Well	RP - INSECTICIDE AREA	9.37	04/08/2004	13:34	44.14	34.77	None	None
MW-12-27	Well	RP - INSECTICIDE AREA	13.81	04/08/2004	12:43	50.22	36.41	None	None
MW-12-41	Well	RP - INSECTICIDE AREA	13.68	04/08/2004	12:46	50.08	36.40	None	None
MW-12-59	Well	RP - INSECTICIDE AREA	13.13	04/08/2004	12:50	49.58	36.45	None	None
MW-12-79	Well	RP - INSECTICIDE AREA	13.84	04/08/2004	12:40	50.08	36.24	None	None
P-07	Piezometer	RP - HERBICIDE AREA	15.80	04/09/2004	14:42	46.27	30.47	None	None
P-10	Piezometer	RPAC	10.83	04/08/2004	15:39	40.19	29.36	None	None
P-11	Piezometer	RP - HERBICIDE AREA	10.33	04/08/2004	15:42	39.29	28.96	None	None
PP-08	Piezometer	RP - LAKE AREA	11.18	04/08/2004	11:38	37.76	26.58	None	None
PZ-02-40	Piezometer	RTE 30/ COP ROW	35.81	04/08/2004	10:06	64.53	28.72	None	None
PZ-1-11	Piezometer	BNSF	7.39	04/08/2004	12:30	45.28	37.89	None	None

TABLE 2
Groundwater Elevation and NAPL Thickness Measurements
Spring 2004 Post-Characterization Groundwater Sampling Event
RP - Portland Site

Site ID	Type	Location/Property	Depth to Water (Feet BMP)	Date	Time	Measuring Point Elevation (Feet AMSL)	Groundwater Elevation (Feet AMSL)	LNAPL Thickness (Feet)	DNAPL Thickness (Feet)
RP-01-31	Well	BNSF	25.70	04/08/2004	12:58	35.38	9.68	None	None
RP-01-51	Well	BNSF	25.65	04/08/2004	13:01	35.28	9.63	None	None
RP-01-65	Well	BNSF	25.46	04/08/2004	13:04	35.00	9.54	None	None
RP-02-31	Well	ATOFINA	31.31	04/12/2004	10:57	40.12	8.81	None	None
RP-02-49	Well	ATOFINA	31.04	04/12/2004	10:53	39.83	8.79	None	None
RP-02-66	Well	ATOFINA	31.15	04/12/2004	10:47	39.70	8.55	None	None
RP-03-30R	Well	BNSF	15.40	04/08/2004	13:40	36.61	21.21	None	None
RP-03-52R	Well	BNSF	17.34	04/08/2004	13:43	36.60	19.26	None	None
RP-04-16	Piezometer	BNSF	10.07	04/08/2004	13:39	33.66	23.59	None	None
RP-04-41	Well	BNSF	7.91	04/08/2004	13:34	34.10	26.19	None	0.14
RP-05-16	Piezometer	BNSF	12.84	04/08/2004	16:05	40.54	27.70	None	None
RP-06-30	Well	BNSF	17.69	04/08/2004	13:21	37.10	19.41	None	None
RP-06-87	Well	BNSF	25.74	04/08/2004	13:24	37.20	11.46	None	None
RP-07-30	Well	WACKER	24.33	04/09/2004	09:59	35.26	10.93	None	None
RP-07-55	Well	WACKER	26.34	04/09/2004	10:03	35.20	8.86	None	None
RP-07-84	Well	WACKER	26.33	04/09/2004	10:07	35.22	8.89	None	None
RP-07-119	Well	WACKER	26.09	04/09/2004	09.55	35.13	9.04	None	None
RPW-02	Well	RP - INSECTICIDE AREA	10.92	04/08/2004	13:22	47.07	36.15	None	None
RPW-03	Well	RP - INSECTICIDE AREA	9.97	04/08/2004	13:47	43.94	33.97	None	None
RPW-05	Well	RP - HERBICIDE AREA	11.15	04/08/2004	15:34	49.83	38.68	None	None
SG-NDL	Staff Gauge	NORTH DOANE LAKE	2.58	04/08/2004	14:37	27.46	24.88	None	None
SG-NDP	Staff Gauge	NW DRAINAGE POND	0.89	04/08/2004	13:53	24.81	23.92	None	None
SG-WDL	Staff Gauge	WEST DOANE LAKE	0.72	04/08/2004	16:10	26.74	26.02	None	None
W-03-D	Well	GOULD	12.40	04/08/2004	10:23	32.47	20.07	None	None
W-03-I	Well	GOULD	8.49	04/08/2004	10:20	32.93	24.44	None	None
W-03-S	Well	GOULD	6.94	04/08/2004	10:16	34.17	27.23	None	None
W-04-89	Well	GOULD	11.24	04/08/2004	10:55	35.94	24.70	None	None
W-04-I	Well	GOULD	9.88	04/08/2004	10:35	32.52	22.64	None	None
W-04-S	Well	GOULD	7.46	04/08/2004	10:41	32.57	25.11	None	None
W-06-B	Well	RP - LAKE AREA	13.18	04/08/2004	16:15	39.96	26.78	None	None
W-06-D	Well	RP - LAKE AREA	10.81	04/08/2004	16:22	41.10	30.29	None	None
W-06-S	Well	RP - LAKE AREA	11.17	04/08/2004	16:26	39.55	28.38	None	None
W-08	Well	RP - LAKE AREA	9.20	04/08/2004	15:51	35.87	26.67	None	None

TABLE 2
Groundwater Elevation and NAPL Thickness Measurements
Spring 2004 Post-Characterization Groundwater Sampling Event
RP - Portland Site

Site ID	Type	Location/Property	Depth to Water (Feet BMP)	Date	Time	Measuring Point Elevation (Feet AMSL)	Groundwater Elevation (Feet AMSL)	LNAPL Thickness (Feet)	DNAPL Thickness (Feet)
W-08-26	Well	RP - LAKE AREA	10.37	04/08/2004	15:55	38.66	28.29	None	None
W-08-74	Well	RP - LAKE AREA	13.35	04/08/2004	15:59	38.77	25.42	None	None
W-09	Well	RP - LAKE AREA	7.40	04/08/2004	15:30	34.88	27.48	None	None
W-09-116	Well	RP - LAKE AREA	17.71	04/08/2004	15:38	38.12	20.41	None	None
W-09-86	Well	RP - LAKE AREA	17.97	04/08/2004	15:34	38.54	20.57	None	None
W-10	Well	PUMP STATION	18.85	04/08/2004	12:40	31.99	13.14	None	None
W-11-B	Well	ESCO	26.89	04/08/2004	09:54	41.33	14.44	None	None
W-11-D	Well	ESCO	26.35	04/08/2004	09:50	40.09	13.74	None	None
W-11-I	Well	ESCO	26.38	04/08/2004	09:47	40.28	13.90	None	None
W-11-S	Well	ESCO	11.18	04/08/2004	09:45	40.90	29.72	None	None
W-12-D	Well	ESCO	21.35	04/08/2004	09:26	41.63	20.28	None	None
W-12-I	Well	ESCO	21.05	04/08/2004	09:23	41.66	20.61	None	None
W-12-S	Well	ESCO	12.93	04/08/2004	09:20	41.41	28.48	None	None
W-15-D	Well	METRO	12.01	04/09/2004	10:00	40.53	28.52	None	None
W-15-I	Well	METRO	11.58	04/09/2004	10:10	40.72	29.14	None	None
W-15-S	Well	METRO	11.73	04/09/2004	10:15	40.82	29.09	None	None
W-16-31	Well	SCHNITZER	7.14	04/08/2004	11:26	33.70	26.56	None	None
W-16-D	Well	SCHNITZER	10.67	04/08/2004	11:24	35.44	24.77	None	None
W-16-I	Well	SCHNITZER	10.51	04/08/2004	11:21	35.42	24.91	None	None
W-16-S	Well	SCHNITZER	7.53	04/08/2004	11:18	35.07	27.54	None	None
W-18-D	Well	UPGRADIENT	19.49	04/08/2004	09:28	55.70	36.21	None	None
W-18-I	Well	UPGRADIENT	17.88	04/08/2004	09:30	54.73	36.85	None	None
W-18-S	Well	UPGRADIENT	17.05	04/08/2004	09:19	55.23	38.18	None	None
W-19-D	Well	ATOFINA	25.31	04/12/2004	11:50	35.12	9.81	None	None
W-19-I	Well	ATOFINA	25.68	04/12/2004	11:48	35.34	9.66	None	None
W-19-S	Well	ATOFINA	25.41	04/12/2004	11:46	35.20	9.79	None	None

BMP Below Measuring Point
NA Not Applicable
AMSL Above Mean Sea Level, in City of Portland (COP) datum
LNAPL Light Non-Aqueous-Phase Liquid
DNAPL Dense Non-Aqueous-Phase Liquid
* Survey data not available
Note: Groundwater Elevations have not been adjusted for potential displacement by LNAPL/DNAPL. NAPL was measured using a electronic interface probe. The NAPL thickness measured within monitoring wells does not represent the actual thickness of NAPL in the formation.

TABLE 3
Groundwater Field Measurements
Spring 2004 Post-Characterization Groundwater Sampling Event
RP - Portland Site

Site ID	Date	Approx. Start Time	Approx. Finish Time	Purge Rate (L/min)	pH (SU)	Specific Conductivity (mS)	Temp (C)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)
AL2-32	04/20/2004	13:40	14:10	0.25	6.43	5.627	14.27	0.17	-81.1	6.92	0.9
AL2-46	04/21/2004	09:15	9:30	0.24	6.96	1.538	14.95	0.22	-112.1	3.61	3.4
AL-06-96	04/19/2004	13.35	14:00	0.35	6.64	2.119	13.77	0.23	-33.4	25.3	2.8
BST2W-61	04/21/2004	11:00	11:40	0.36	6.86	1.283	15.59	0.23	-108.4	3.69	3.7
MW-03-81	04/13/2004	14:15	14:45	0.35	6.51	0.628	12.90	0.65	-135.5	13.2	3.6
MW-03-I	04/13/2004	13:10	13:30	0.3	6.41	1.158	12.07	0.19	-16.5	12.2	3.4
MW-05-24	04/22/2004	9:25	9:45	0.5	6.51	0.691	13.31	0.37	-26.2	11.2	1.2
MW-05-34	04/22/2004	10:55	11:25	0.35	5.64	0.544	14.58	2.94	67.7	3.96	1.9
MW-05-52	04/22/2004	11:25	11:50	0.5	6.43	0.746	14.82	0.24	-80.1	14.3	2.6
MW-05-70	04/22/2004	10:15	10:45	0.5	7.57	0.590	14.65	0.28	-106.1	--	--
MW-10-24	04/19/2004	12:25	12:50	0.4	6.25	0.260	13.37	2.36	101.6	3.9	0.0
RP-01-31	04/15/2004	9:15	9:45	0.4	6.17	0.431	12.09	2.70	166.5	29.6	0.0
RP-01-51	04/15/2004	10:15	10:45	0.25	6.54	3.912	12.05	0.23	29.0	7.26	1.0
RP-01-65	04/15/2004	11:45	12:15	0.4	6.17	4.936	12.18	0.22	29.7	0.8	0.0
RP-02-66	04/12/2004	10.56	11:15	0.5	5.62	0.345	14.52	0.2	117.3	1.12	1.0
RP-03-30R	04/19/2004	9:55	10:25	0.5	6.67	0.468	12.16	0.33	-105.4	46.2	4.0
RP-03-52R	04/19/2004	10:40	11:00	0.5	6.25	0.825	12.33	0.18	44.1	3.71	0.6
RP-04-16	04/21/2004	13:15	13:40	0.35	6.54	0.518	10.43	0.57	-63.4	2.68	3.2
RP-04-41	04/21/2004	13:45	14:00	0.5	--[1]	--[1]	--[1]	--[1]	--[1]	--[1]	--[1]
RP-06-87	04/15/2004	13:55	14:25	0.5	6.55	3.628	12.48	0.54	-75.4	3.44	9.2
RP-07-30	04/13/2004	8:45	9:15	0.5	6.39	0.651	14.35	0.34	-91.6	12.6	3.4
RP-07-55	04/13/2004	9:20	9:55	0.2	6.46	1.012	14.38	0.16	-61.6	31.4	5.2
RP-07-84	04/13/2004	10:00	10:20	0.5	6.44	2.637	14.10	0.17	-24.4	32.2	3.6
RP-07-119	04/13/2004	11:00	11:35	0.5	6.56	1.437	14.32	0.27	-9.3	12.2	1.4
W-09-116	04/20/2004	9:40	10:15	0.5	6.29	1.981	13.26	0.23	21.7	6.15	1.4
W-11-B	04/14/2004	12:20	13:00	0.5	7.12	2.031	13.37	0.12	-110.6	1.74	2.6
W-11-D	04/14/2004	11:35	12:00	0.5	6.66	2.789	13.62	0.14	10.6	135	1.2
W-11-I	04/14/2004	10:40	11:00	0.5	6.6	0.858	13.42	0.18	-117.8	3.65	2.8
W-11-S	04/14/2004	9:45	10:10	0.5	11.71	0.762	11.72	0.09	-156.7	3.49	0.0
W-18-D	04/14/2004	14:50	15:15	0.5	7.03	0.193	10.84	4.90	28.9	2.81	0.0
W-18-I	04/14/2004	15:40	16:15	0.5	6.45	0.155	10.97	3.92	84.5	36.2	--
W-19-D	04/12/2004	13:15	13:30	0.5	6.38	0.361	13.31	0.19	80.5	1.27	0.0
W-19-I	04/12/2004	14:00	14:20	0.5	6.16	0.036	13.43	0.27	71.5	1.83	0.4

+	Well purged dry
--	Groundwater not tested for this parameter, or information is not applicable or was not recorded.
--[1]	NAPL blebs were encountered in groundwater and measurements were not taken to prevent equipment damage.
ORP	Oxidation-reduction potential
L/min	Liters per minute
SU	Standard pH units
uS	MicroSiemens
C	Degrees Celsius
mg/L	Milligrams per liter
mV	Millivolts

Notes: a) Field measurements are indicative of steady state conditions and were the final measurements before groundwater sample collection.
b) Field measurements for pH, specific conductivity, temperature, dissolved oxygen, and ORP were collected using a YSI 600XL sonde and controller. Field turbidity measurements were collected using a Hach model 2100P portable turbidimeter. Ferrous iron measurements were obtained using a Hach field test kit.

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

AL2-32

Analysis: 300.0 Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	1820	mg/l	2.07	50.0	
Sulfate	56.3	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	1380	mg/l	1.04	50.0	

Analysis: 350.1 Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.174	mg/l	0.00760	0.0500	

Analysis: 351.2 Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	5.43	mg/l	0.332	0.500	

Analysis: 365.2 Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.0153	mg/l	0.00141	0.0100	

Analysis: 376.2 Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	0.13	mg/l	0.0150	0.200	

Analysis: 405.1 Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	49	mg/l	1.13	4.00	

Analysis: 410.4 Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	382	mg/l	16.9	50.0	

Analysis: 415.1/5310 Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	112	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Calcium	137	mg/l	0.361	1.00	
Iron	28.9	mg/l	0.00640	0.100	
Magnesium	48.2	mg/l	0.0136	0.100	
Potassium	8.56	mg/l	0.111	1.00	
Sodium	1550	mg/l	1.67	100	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

AL2-32

Analysis: 6020

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	0.0234	mg/l	0.000964	0.00100	
Chromium	0.00257	mg/l	0.000791	0.00100	
Copper	0.0136	mg/l	0.000259	0.00200	
Lead	0.00044	mg/l	0.0000870	0.00100	
Manganese	25.1	mg/l	0.000680	0.100	
Nickel	0.0367	mg/l	0.000826	0.00200	
Vanadium	0.022	mg/l	0.000669	0.00500	
Zinc	0.00559	mg/l	0.00102	0.00500	

Analysis: 6020 (Dissolved)

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.029	mg/l	0.000964	0.00100	
Chromium (Dissolved)	0.00393	mg/l	0.000791	0.00100	
Copper (Dissolved)	0.00542	mg/l	0.000259	0.00200	
Nickel (Dissolved)	0.0503	mg/l	0.000242	0.00200	
Vanadium (Dissolved)	0.0268	mg/l	0.000669	0.00500	
Zinc (Dissolved)	0.00422	mg/l	0.00102	0.00500	

Analysis: 8151MOD

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	1.89	ug/l	1.26	3.00	J,N
2,4-D	1380	ug/l	131	300	
2,4-DB	104	ug/l	1.90	3.00	
Dicamba	9.24	ug/l	1.01	3.00	
Dichlorprop	46.6	ug/l	1.16	3.00	
2,4,5-T	25.2	ug/l	1.39	3.00	
2,4,5-TP(Silvex)	814	ug/l	12.4	30.0	

Analysis: 8260B

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Benzene	15.4	ug/l	1.47	10.0	
Chlorobenzene	787	ug/l	1.36	10.0	
1,2-Dichlorobenzene	1330	ug/l	0.859	10.0	
1,3-Dichlorobenzene	65.8	ug/l	1.32	10.0	
1,4-Dichlorobenzene	346	ug/l	1.87	10.0	
cis-1,2-Dichloroethene	6.9	ug/l	1.70	10.0	
Ethylbenzene	205	ug/l	1.10	10.0	
Isopropylbenzene	18	ug/l	1.07	10.0	
Methylene chloride	18.5	ug/l	4.54	50.0	
n-Propylbenzene	40.9	ug/l	1.38	10.0	
Toluene	6.9	ug/l	1.55	10.0	
1,2,4-Trimethylbenzene	84.1	ug/l	0.884	10.0	
1,3,5-Trimethylbenzene	11.7	ug/l	1.57	10.0	
m,p-Xylene	47.4	ug/l	2.95	20.0	
o-Xylene	144	ug/l	1.87	10.0	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

AL2-32

Analysis: 8270C

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
2-Chlorophenol	356	ug/l	50.0	50.0	
2,4-Dichlorophenol	686	ug/l	50.0	50.0	
2,6-Dichlorophenol	480	ug/l	100	250	
2-Methylphenol	468	ug/l	50.0	100	
2,4,6-Trichlorophenol	218	ug/l	50.0	50.0	

Analysis: 8290

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,7,8-HxCDD	4.6	pg/l	2.4	6.57	J
1,2,3,6,7,8-HxCDD	3.3	pg/l	2.1	8.19	N - EMPC data
1,2,3,7,8,9-HxCDD	4.8	pg/l	2.7	14.3	J
1,2,3,4,7,8-HxCDF	3.2	pg/l	1.4	17.3	N - EMPC data
1,2,3,6,7,8-HxCDF	3.7	pg/l	1.4	8.86	J
1,2,3,7,8,9-HxCDF	3.9	pg/l	1.8	30.4	J
2,3,4,6,7,8-HxCDF	2.8	pg/l	1.2	20.8	J
1,2,3,4,6,7,8,9-OCDD	19.7	pg/l	8.4	17.7	J
1,2,3,7,8-PeCDD	4.7	pg/l	2.0	7.43	J
1,2,3,7,8-PeCDF	6.5	pg/l	1.1	4.48	J
2,3,4,7,8-PeCDF	4.4	pg/l	1.6	5.52	J
2,3,7,8-TCDF	2.6	pg/l	0.8	6.00	J
Total HxCDD	9.4	pg/l	2.4	6.57	
Total HxCDF	10.3	pg/l	1.4	8.86	
Total PeCDD	4.7	pg/l	2.0	7.43	
Total PeCDF	22.6	pg/l	1.3	4.48	
Total TCDD	34.9	pg/l	1.5	3.14	
Total TCDF	424	pg/l	1.2	6.00	
EMPC-HXCDD	12.7	pg/l	2.4	6.57	N - EMPC data
EMPC-HXCDF	13.6	pg/l	1.4	8.86	N - EMPC data
EMPC-PECDF	29.9	pg/l	1.3	4.48	N - EMPC data
EMPC-TCDD	38.4	pg/l	1.5	3.14	N - EMPC data
EMPC-TCDF	450	pg/l	1.2	6.00	N - EMPC data

Analysis: NWTPH-DX

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	5.17	mg/l	0.153	0.250	

Analysis: RSK 175

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	13200	ug/l	16.0	51.9	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

AL2-46

Analysis: 300.0 Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	161	mg/l	2.07	50.0	
Sulfate	33.9	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	764	mg/l	1.04	50.0	

Analysis: 350.1 Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0393	mg/l	0.00760	0.0500	

Analysis: 351.2 Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	0.67	mg/l	0.332	0.500	

Analysis: 365.2 Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	2.15	mg/l	0.0141	0.100	

Analysis: 405.1 Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	50.4	mg/l	1.13	4.00	

Analysis: 410.4 Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	208	mg/l	8.45	25.0	

Analysis: 415.1/5310 Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	59.8	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Calcium	8.24	mg/l	0.0361	0.100	
Iron	6.15	mg/l	0.00640	0.100	
Magnesium	2.84	mg/l	0.0136	0.100	
Potassium	2.5	mg/l	0.111	1.00	
Sodium	474	mg/l	1.67	100	

Analysis: 6020 Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	2	mg/l	0.0000845	0.0124	

Analysis: 8151MOD Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	32.8	ug/l	1.26	3.00	J
2,4-DB	170	ug/l	19.0	30.0	J
2,4,5-T	64.2	ug/l	1.39	3.00	J

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

AL2-46

Analysis: 8260B

Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Benzene	97	ug/l	14.7	100	J
Chlorobenzene	741	ug/l	13.6	100	J
1,2-Dichlorobenzene	10400	ug/l	8.59	100	J
1,3-Dichlorobenzene	347	ug/l	13.2	100	J
1,4-Dichlorobenzene	2660	ug/l	18.7	100	J
cis-1,2-Dichloroethene	190	ug/l	17.0	100	J
Ethylbenzene	1340	ug/l	11.0	100	J
Isopropylbenzene	41	ug/l	10.7	100	J
Methylene chloride	73	ug/l	45.4	500	J
n-Propylbenzene	87	ug/l	13.8	100	J
Toluene	94	ug/l	15.5	100	J
1,2,4-Trichlorobenzene	36	ug/l	21.3	100	J
Trichloroethene	360	ug/l	24.1	100	J
1,2,4-Trimethylbenzene	653	ug/l	8.84	100	J
1,3,5-Trimethylbenzene	139	ug/l	15.7	100	J
Vinyl chloride	43	ug/l	15.2	100	J
m,p-Xylene	1960	ug/l	29.5	200	J
o-Xylene	990	ug/l	18.7	100	J

Analysis: 8270C

Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Chloro-3-methylphenol	49.3	ug/l	30.0	50.0	J
2-Chlorophenol	1050	ug/l	50.0	50.0	J
2,4-Dichlorophenol	1100	ug/l	50.0	50.0	J
2,6-Dichlorophenol	533	ug/l	100	250	J
2-Methylphenol	99.6	ug/l	50.0	100	J
Pentachlorophenol	130	ug/l	50.0	100	J
Phenol	36.4	ug/l	30.0	50.0	J
Tetrachlorophenols	112	ug/l	100	250	J
2,4,5-Trichlorophenol	72.4	ug/l	50.0	50.0	J
2,4,6-Trichlorophenol	1370	ug/l	50.0	50.0	J

Analysis: 8290

Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total PeCDF	61.6	pg/l	1.5	4.56	
Total TCDD	69.4	pg/l	1.9	3.20	
Total TCDF	1410	pg/l	1.4	6.12	
EMPC-HXCDF	5.9	pg/l	1.6	9.03	J,N - EMPC data

Analysis: NWTPH-DX

Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	15.8	mg/l	0.153	0.250	
Fuel oil no. 6	0.298	mg/l	0.286	0.500	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

AL2-46

Analysis: RSK 175 Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	2040	ug/l	16.0	51.9	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

AL2-46 (Dup)

Analysis: 8270C Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Chloro-3-methylphenol	44.9	ug/l	30.0	50.0	J
2-Chlorophenol	1050	ug/l	50.0	50.0	J
2,4-Dichlorophenol	979	ug/l	50.0	50.0	J
2,6-Dichlorophenol	510	ug/l	100	250	J
2-Methylphenol	100	ug/l	50.0	100	J
Pentachlorophenol	127	ug/l	50.0	100	J
Phenol	37.7	ug/l	30.0	50.0	J
Tetrachlorophenols	107	ug/l	100	250	J
2,4,5-Trichlorophenol	68.3	ug/l	50.0	50.0	J
2,4,6-Trichlorophenol	1280	ug/l	50.0	50.0	J

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

AL6-96

Analysis: 300.0 Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	506	mg/l	2.07	50.0	
Nitrate	0.2	mg/l	0.0173	0.100	
Sulfate	90.9	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	632	mg/l	2.08	100	

Analysis: 350.1 Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0649	mg/l	0.00760	0.0500	

Analysis: 365.2 Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.00568	mg/l	0.00141	0.0100	

Analysis: 405.1 Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	7.32	mg/l	1.13	4.00	

Analysis: 410.4 Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	24.9	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	5.54	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.775	mg/l	0.0434	0.100	
Calcium	128	mg/l	0.361	1.00	
Iron	3.98	mg/l	0.00640	0.100	
Magnesium	61.1	mg/l	0.136	1.00	
Potassium	10.3	mg/l	0.111	1.00	
Sodium	365	mg/l	1.67	100	

Analysis: 6020 Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	12.7	mg/l	0.00136	0.200	

Analysis: 8151MOD Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
2,4-DB	2.41	ug/l	1.90	3.00	N
Dichlorprop	7.02	ug/l	1.16	3.00	
2,4,5-T	1.51	ug/l	1.39	3.00	
2,4,5-TP(Silvex)	22.5	ug/l	1.24	3.00	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

AL6-96

Analysis: 8260B

Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Benzene	38.4	ug/l	2.94	20.0	
Chlorobenzene	2120	ug/l	2.72	20.0	
1,2-Dichlorobenzene	943	ug/l	1.72	20.0	
1,3-Dichlorobenzene	66.2	ug/l	2.64	20.0	
1,4-Dichlorobenzene	838	ug/l	3.74	20.0	
cis-1,2-Dichloroethene	5.4	ug/l	3.40	20.0	

Analysis: 8290

Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	2400	pg/l			J
1,2,3,4,6,7,8-HpCDF	1700	pg/l			J
1,2,3,4,7,8,9-HpCDF	2200	pg/l			J
1,2,3,4,7,8-HxCDD	2000	pg/l			J
1,2,3,6,7,8-HxCDD	1800	pg/l			J
1,2,3,7,8,9-HxCDD	2500	pg/l			J
1,2,3,4,7,8-HxCDF	2400	pg/l			J
1,2,3,6,7,8-HxCDF	2200	pg/l			J
1,2,3,7,8,9-HxCDF	2400	pg/l			J
2,3,4,6,7,8-HxCDF	1500	pg/l			J
1,2,3,4,6,7,8,9-OCDD	7500	pg/l			J
1,2,3,4,6,7,8,9-OCDF	4700	pg/l			J
1,2,3,7,8-PeCDD	2100	pg/l			J
1,2,3,7,8-PeCDF	2500	pg/l			J
2,3,4,7,8-PeCDF	2200	pg/l			J
Total HpCDD	3600	pg/l			
Total HpCDF	3900	pg/l			
Total HxCDD	6300	pg/l			
Total HxCDF	8600	pg/l			
Total PeCDD	2100	pg/l			
Total PeCDF	4700	pg/l			
Total TCDF	48000	pg/l			
EMPC-HXCDD	9000	pg/l			N - EMPC data

Analysis: NWTPH-DX

Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.894	mg/l	0.153	0.250	

Analysis: RSK 175

Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	3680	ug/l	16.0	51.9	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

ASW-06

Analysis: 200.8 Sample Date: 06/10/04 Time: 11:13

Compound	Concentration	Units	MDL	MRL	Qualifiers
Lead	0.0014	mg/l	0.000224	0.00100	

Analysis: 200.8 (Dissolved) Sample Date: 06/10/04 Time: 11:13

Compound	Concentration	Units	MDL	MRL	Qualifiers
Lead (Dissolved)	0.00025	mg/l	0.000224	0.00100	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

BST2W-61

Analysis: 300.0 Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	169	mg/l	0.207	5.00	
Sulfate	6.33	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	560	mg/l	1.04	50.0	

Analysis: 350.1 Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0364	mg/l	0.00760	0.0500	

Analysis: 351.2 Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	0.492	mg/l	0.332	0.500	

Analysis: 365.2 Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	5.74	mg/l	0.141	1.00	

Analysis: 376.2 Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	0.19	mg/l	0.0150	0.200	

Analysis: 405.1 Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	127	mg/l	1.13	4.00	

Analysis: 410.4 Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	312	mg/l	8.45	25.0	

Analysis: 415.1/5310 Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	97.4	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.0457	mg/l	0.0434	0.100	
Calcium	10.8	mg/l	0.0361	0.100	
Iron	3.46	mg/l	0.00640	0.100	
Magnesium	4.27	mg/l	0.0136	0.100	
Potassium	3.7	mg/l	0.111	1.00	
Sodium	353	mg/l	1.67	100	

Analysis: 6020 Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	3.29	mg/l	0.0000826	0.0121	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

BST2W-61

Analysis: 8151MOD

Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	47.8	ug/l	1.26	3.00	J
2,4-D	153	ug/l	13.1	30.0	J
2,4-DB	78	ug/l	1.90	3.00	J
Dichlorprop	11.6	ug/l	11.6	30.0	J,N
2,4,5-TP(Silvex)	23.8	ug/l	1.24	3.00	J

Analysis: 8260B

Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	299	ug/l	117	1250	J
Benzene	154	ug/l	7.35	50.0	J
Chlorobenzene	494	ug/l	6.80	50.0	J
1,2-Dichlorobenzene	3930	ug/l	4.30	50.0	J
1,3-Dichlorobenzene	126	ug/l	6.60	50.0	J
1,4-Dichlorobenzene	1040	ug/l	9.35	50.0	J
1,1-Dichloroethene	13	ug/l	9.85	50.0	J
cis-1,2-Dichloroethene	62	ug/l	8.50	50.0	J
Ethylbenzene	4820	ug/l	5.50	50.0	J
Isopropylbenzene	46	ug/l	5.35	50.0	J
n-Propylbenzene	112	ug/l	6.90	50.0	J
Toluene	295	ug/l	7.75	50.0	J
1,2,4-Trichlorobenzene	15	ug/l	10.6	50.0	J
Trichloroethene	772	ug/l	12.0	50.0	J
1,2,4-Trimethylbenzene	630	ug/l	4.42	50.0	J
1,3,5-Trimethylbenzene	188	ug/l	7.85	50.0	J
Vinyl chloride	14.5	ug/l	7.60	50.0	J
m,p-Xylene	7520	ug/l	14.8	100	J
o-Xylene	3580	ug/l	9.35	50.0	J

Analysis: 8270C

Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Chloro-3-methylphenol	98.1	ug/l	30.0	50.0	J
2-Chlorophenol	4750	ug/l	1000	1000	J
2,4-Dichlorophenol	135	ug/l	50.0	50.0	J
2-Methylphenol	791	ug/l	50.0	100	J
Phenol	745	ug/l	30.0	50.0	J

Analysis: NWTPH-DX

Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	18.7	mg/l	0.153	0.250	
Fuel oil no. 6	0.7	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	4640	ug/l	16.0	51.9	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

MW-03-81

Analysis: 300.0 Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	22.8	mg/l	0.0207	0.500	

Analysis: 310.1 Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	335	mg/l	0.208	10.0	

Analysis: 350.1 Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	19.2	mg/l	0.0760	0.500	

Analysis: 351.2 Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	21.8	mg/l	3.32	5.00	

Analysis: 376.2 Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	0.0496	mg/l	0.0150	0.200	

Analysis: 405.1 Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	19.7	mg/l	1.13	4.00	

Analysis: 410.4 Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	35.5	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	7.83	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.049	mg/l	0.0434	0.100	
Calcium	50	mg/l	0.0361	0.100	
Iron	46.3	mg/l	0.00640	0.100	
Magnesium	25.1	mg/l	0.0136	0.100	
Potassium	5.6	mg/l	0.111	1.00	
Sodium	38.5	mg/l	0.167	10.0	

Analysis: 6020 Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	0.00337	mg/l	0.000964	0.00100	
Copper	0.00156	mg/l	0.000259	0.00200	
Manganese	2.47	mg/l	0.000136	0.0200	
Nickel	0.00476	mg/l	0.000826	0.00200	
Vanadium	0.00188	mg/l	0.000669	0.00500	
Zinc	0.00633	mg/l	0.00102	0.00500	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

MW-03-81

Analysis: 6020 (Dissolved)

Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.00305	mg/l	0.000964	0.00100	
Nickel (Dissolved)	0.00413	mg/l	0.000242	0.00200	
Zinc (Dissolved)	0.0035	mg/l	0.00102	0.00500	

Analysis: 8260B

Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2-Dichlorobenzene	0.09	ug/l	0.0859	1.00	

Analysis: RSK 175

Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	34900	ug/l	16.0	51.9	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

MW-03-I

Analysis: 300.0 Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	324	mg/l	0.207	5.00	
Sulfate	2.34	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	330	mg/l	0.208	10.0	

Analysis: 350.1 Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	6.61	mg/l	0.0152	0.100	

Analysis: 351.2 Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	7.28	mg/l	0.332	0.500	

Analysis: 410.4 Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	43.2	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	6.45	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Calcium	98.3	mg/l	0.361	1.00	
Iron	10.5	mg/l	0.00640	0.100	
Magnesium	55	mg/l	0.0136	0.100	
Potassium	4.19	mg/l	0.111	1.00	
Sodium	93.2	mg/l	0.167	10.0	

Analysis: 6020 Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	0.00181	mg/l	0.000964	0.00100	
Copper	0.00221	mg/l	0.000259	0.00200	
Lead	0.00043	mg/l	0.0000870	0.00100	
Manganese	5.5	mg/l	0.000136	0.0200	
Nickel	0.00452	mg/l	0.000826	0.00200	
Zinc	0.00653	mg/l	0.00102	0.00500	

Analysis: 6020 (Dissolved) Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.00146	mg/l	0.000964	0.00100	
Nickel (Dissolved)	0.00456	mg/l	0.000242	0.00200	
Zinc (Dissolved)	0.00738	mg/l	0.00102	0.00500	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

MW-03-I

Analysis: 8260B Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chlorobenzene	3.28	ug/l	0.136	1.00	
1,2-Dichlorobenzene	0.8	ug/l	0.0859	1.00	
1,4-Dichlorobenzene	0.3	ug/l	0.187	1.00	N

Analysis: RSK 175 Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	511	ug/l	0.370	1.20	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

MW-05-24

Analysis: 300.0 Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	72.2	mg/l	0.207	5.00	
Sulfate	25.9	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	312	mg/l	1.04	50.0	

Analysis: 350.1 Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.276	mg/l	0.00760	0.0500	

Analysis: 351.2 Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	1.08	mg/l	0.332	0.500	

Analysis: 365.2 Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	3.34	mg/l	0.0141	0.100	

Analysis: 405.1 Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	71	mg/l	1.13	4.00	

Analysis: 410.4 Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	412	mg/l	8.45	25.0	

Analysis: 415.1/5310 Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	120	mg/l	4.19	10.0	

Analysis: 6010B Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.134	mg/l	0.0434	0.100	
Calcium	8.65	mg/l	0.0361	0.100	
Iron	1.23	mg/l	0.00640	0.100	
Magnesium	1.45	mg/l	0.0136	0.100	
Potassium	1.19	mg/l	0.111	1.00	
Sodium	195	mg/l	0.167	10.0	

Analysis: 6020 Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	0.302	mg/l	0.0000136	0.00200	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

MW-05-24

Analysis: 8151MOD

Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	182	ug/l	12.6	30.0	J
2,4-D	40400	ug/l	131	300	N
2,4-DB	689	ug/l	19.0	30.0	
2,4,5-T	2360	ug/l	139	300	
2,4,5-TP(Silvex)	45.5	ug/l	1.24	3.00	

Analysis: 8260B

Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Benzene	84	ug/l	29.4	200	
Chlorobenzene	1000	ug/l	27.2	200	
1,2-Dichlorobenzene	28200	ug/l	17.2	200	
1,3-Dichlorobenzene	1030	ug/l	26.4	200	
1,4-Dichlorobenzene	9070	ug/l	37.4	200	
Ethylbenzene	2150	ug/l	22.0	200	
Isopropylbenzene	52	ug/l	21.4	200	
Methylene chloride	5670	ug/l	90.8	1000	
n-Propylbenzene	152	ug/l	27.6	200	
Toluene	242	ug/l	31.0	200	
1,2,4-Trichlorobenzene	172	ug/l	42.6	200	
Trichloroethene	218	ug/l	48.2	200	
1,2,4-Trimethylbenzene	1670	ug/l	17.7	200	
1,3,5-Trimethylbenzene	478	ug/l	31.4	200	
m,p-Xylene	7260	ug/l	59.0	400	
o-Xylene	2330	ug/l	37.4	200	

Analysis: 8270C

Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
2-Chlorophenol	616	ug/l	125	125	
2,4-Dichlorophenol	19400	ug/l	1250	1250	
2,6-Dichlorophenol	2560	ug/l	250	625	
2-Methylphenol	193	ug/l	125	250	
Pentachlorophenol	264	ug/l	125	250	
Phenol	229	ug/l	75.0	125	J
2,4,5-Trichlorophenol	530	ug/l	125	125	
2,4,6-Trichlorophenol	3860	ug/l	125	125	

Analysis: NWTPH-DX

Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	21.9	mg/l	0.153	0.250	
Fuel oil no. 6	0.523	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	1640	ug/l	16.0	51.9	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

MW-05-34

Analysis: 300.0 Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	63.3	mg/l	0.207	5.00	
Nitrite(as N)	0.08	mg/l	0.0146	0.100	
Sulfate	44.4	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	110	mg/l	1.04	50.0	

Analysis: 350.1 Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0722	mg/l	0.00760	0.0500	

Analysis: 351.2 Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	1.07	mg/l	0.332	0.500	

Analysis: 365.2 Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.333	mg/l	0.00141	0.0100	

Analysis: 405.1 Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	237	mg/l	1.13	4.00	

Analysis: 410.4 Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	964	mg/l	16.9	50.0	

Analysis: 415.1/5310 Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	240	mg/l	4.19	10.0	

Analysis: 6010B Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.154	mg/l	0.0434	0.100	
Calcium	1.36	mg/l	0.0361	0.100	
Iron	2.71	mg/l	0.00640	0.100	
Magnesium	0.845	mg/l	0.0136	0.100	
Potassium	0.897	mg/l	0.111	1.00	
Sodium	141	mg/l	0.167	10.0	

Analysis: 6020 Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	0.176	mg/l	0.0000136	0.00200	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

MW-05-34

Analysis: 8151MOD

Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	5510	ug/l	126	300	J
2,4-D	55800	ug/l	1310	3000	
2,4-DB	336	ug/l	19.0	30.0	
2,4,5-T	775	ug/l	13.9	30.0	N

Analysis: 8260B

Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Benzene	291	ug/l	14.7	100	
Chlorobenzene	401	ug/l	13.6	100	
1,2-Dichlorobenzene	12600	ug/l	8.59	100	
1,3-Dichlorobenzene	463	ug/l	13.2	100	
1,4-Dichlorobenzene	3930	ug/l	18.7	100	
2-Ethyl-1-hexanol	12500	ug/l	10000	10000	
Ethylbenzene	8020	ug/l	11.0	100	
Isobutylalcohol	12800	ug/l	1590	10000	
Isopropylbenzene	60	ug/l	10.7	100	
Methylene chloride	412	ug/l	45.4	500	
n-Propylbenzene	154	ug/l	13.8	100	
Toluene	1450	ug/l	15.5	100	
1,2,4-Trichlorobenzene	103	ug/l	21.3	100	
Trichloroethene	3520	ug/l	24.1	100	
1,2,4-Trimethylbenzene	1450	ug/l	8.84	100	
1,3,5-Trimethylbenzene	405	ug/l	15.7	100	
m,p-Xylene	20800	ug/l	29.5	200	
o-Xylene	6300	ug/l	18.7	100	

Analysis: 8270C

Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
2-Chlorophenol	1670	ug/l	1000	1000	
2,4-Dichlorophenol	84400	ug/l	10000	10000	
2,6-Dichlorophenol	8190	ug/l	2000	5000	
Phenol	659	ug/l	600	1000	J
2,4,5-Trichlorophenol	1120	ug/l	1000	1000	
2,4,6-Trichlorophenol	12900	ug/l	1000	1000	

Analysis: NWTPH-DX

Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	89	mg/l	1.53	2.50	
Fuel oil no. 6	4.37	mg/l	2.86	4.50	

Analysis: RSK 175

Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	85.9	ug/l	0.370	1.20	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

MW-05-52

Analysis: 300.0 Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	210	mg/l	0.207	5.00	
Sulfate	46.2	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	419	mg/l	1.04	50.0	

Analysis: 350.1 Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0221	mg/l	0.00760	0.0500	

Analysis: 351.2 Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	0.63	mg/l	0.332	0.500	

Analysis: 365.2 Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	9.74	mg/l	0.141	1.00	

Analysis: 376.2 Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	0.0924	mg/l	0.0150	0.200	

Analysis: 410.4 Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	41.9	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	11.4	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Calcium	2.46	mg/l	0.0361	0.100	
Iron	5.82	mg/l	0.00640	0.100	
Magnesium	5.19	mg/l	0.0136	0.100	
Potassium	1.28	mg/l	0.111	1.00	
Sodium	330	mg/l	1.67	100	

Analysis: 6020 Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	0.565	mg/l	0.0000136	0.00200	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

MW-05-52

Analysis: 8151MOD

Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	24.2	ug/l	1.26	3.00	J
2,4-D	75.8	ug/l	1.31	3.00	
2,4-DB	4.05	ug/l	1.90	3.00	
Dichlorprop	13.5	ug/l	1.16	3.00	
2,4,5-T	2.06	ug/l	1.39	3.00	N
2,4,5-TP(Silvex)	10.4	ug/l	1.24	3.00	

Analysis: 8260B

Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Benzene	39.2	ug/l	2.94	20.0	
Chlorobenzene	199	ug/l	2.72	20.0	
1,2-Dichlorobenzene	2460	ug/l	1.72	20.0	
1,3-Dichlorobenzene	84	ug/l	2.64	20.0	
1,4-Dichlorobenzene	602	ug/l	3.74	20.0	
cis-1,2-Dichloroethene	7.4	ug/l	3.40	20.0	
trans-1,2-Dichloroethene	3.8	ug/l	3.50	20.0	
Ethylbenzene	911	ug/l	2.20	20.0	
Isopropylbenzene	15.4	ug/l	2.14	20.0	
n-Propylbenzene	21.4	ug/l	2.76	20.0	
Styrene	25.2	ug/l	1.45	20.0	
Tetrachloroethene	2.4	ug/l	2.18	20.0	
Toluene	23	ug/l	3.10	20.0	
1,2,4-Trichlorobenzene	9	ug/l	4.26	20.0	
Trichloroethene	95.2	ug/l	4.82	20.0	
1,2,4-Trimethylbenzene	130	ug/l	1.77	20.0	
1,3,5-Trimethylbenzene	37.8	ug/l	3.14	20.0	
m,p-Xylene	777	ug/l	5.90	40.0	
o-Xylene	759	ug/l	3.74	20.0	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

MW-05-52

Analysis: 8290

Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	4.6	pg/l	1.8	7.88	J
1,2,3,4,6,7,8-HpCDF	5.1	pg/l	0.9	17.9	J
1,2,3,4,7,8-HxCDF	2.5	pg/l	0.7	17.5	J
2,3,4,6,7,8-HxCDF	1.9	pg/l	0.7	21.0	J
1,2,3,4,6,7,8,9-OCDD	23.4	pg/l	2.7	17.9	J
1,2,3,4,6,7,8,9-OCDF	11.1	pg/l	2.2	17.4	N - EMPC data
1,2,3,7,8-PeCDF	2.2	pg/l	0.6	4.52	J
2,3,4,7,8-PeCDF	2.4	pg/l	0.8	5.58	N - EMPC data
2,3,7,8-TCDD	96.1	pg/l	1.4	3.17	
Total HpCDD	9.8	pg/l	1.8	7.88	
Total HpCDF	5.1	pg/l	1.0	12.7	
Total HxCDF	26.1	pg/l	0.7	8.94	
Total PeCDD	3.6	pg/l	1.0	7.50	
Total PeCDF	447	pg/l	0.7	4.52	
Total TCDD	1500	pg/l	1.4	3.17	
Total TCDF	2350	pg/l	1.1	6.06	
EMPC-HPCDF	8.6	pg/l	1.0	12.7	N - EMPC data
EMPC-HXCDD	2.3	pg/l	1.2	6.63	N - EMPC data
EMPC-PECDF	450	pg/l	0.7	4.52	N - EMPC data
EMPC-TCDF	2360	pg/l	1.1	6.06	N - EMPC data

Analysis: NWTPH-DX

Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	2.26	mg/l	0.153	0.250	

Analysis: RSK 175

Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	150	ug/l	0.370	1.20	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

MW-05-70

Analysis: 300.0 Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	43.9	mg/l	0.207	5.00	
Sulfate	30.8	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	280	mg/l	1.04	50.0	

Analysis: 350.1 Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.023	mg/l	0.00760	0.0500	

Analysis: 365.2 Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	1.26	mg/l	0.0141	0.100	

Analysis: 410.4 Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	7.93	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	1.74	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.141	mg/l	0.0434	0.100	
Calcium	1.41	mg/l	0.0361	0.100	
Iron	0.983	mg/l	0.00640	0.100	
Magnesium	0.727	mg/l	0.0136	0.100	
Potassium	2.34	mg/l	0.111	1.00	
Sodium	167	mg/l	0.167	10.0	

Analysis: 6020 Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	0.438	mg/l	0.0000136	0.00200	

Analysis: 8151MOD Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
2,4-D	6.7	ug/l	1.31	3.00	
Dichlorprop	1.77	ug/l	1.16	3.00	N
2,4,5-TP(Silvex)	3.71	ug/l	1.24	3.00	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

MW-05-70

Analysis: 8260B

Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Benzene	1.55	ug/l	0.735	5.00	
Chlorobenzene	38.3	ug/l	0.680	5.00	
1,2-Dichlorobenzene	658	ug/l	0.430	5.00	
1,3-Dichlorobenzene	18.8	ug/l	0.660	5.00	
1,4-Dichlorobenzene	172	ug/l	0.935	5.00	
cis-1,2-Dichloroethene	6.45	ug/l	0.850	5.00	
Ethylbenzene	0.9	ug/l	0.550	5.00	
Trichloroethene	13.7	ug/l	1.20	5.00	

Analysis: 8290

Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDF	0.74	pg/l	0.3	17.7	N - EMPC data
1,2,3,4,7,8-HxCDD	1.4	pg/l	0.4	6.57	J
1,2,3,4,7,8-HxCDF	1.1	pg/l	0.3	17.3	J
1,2,3,6,7,8-HxCDF	0.66	pg/l	0.2	8.86	J
1,2,3,4,6,7,8,9-OCDD	7.5	pg/l	0.9	17.7	J
Total HxCDD	1.4	pg/l	0.4	6.57	
Total HxCDF	1.7	pg/l	0.3	8.86	
Total PeCDF	5.2	pg/l	0.2	4.48	
Total TCDD	30.7	pg/l	0.5	3.14	
Total TCDF	103	pg/l	0.4	6.00	
EMPC-HPCDD	1.7	pg/l	0.6	7.81	N - EMPC data
EMPC-HPCDF	0.74	pg/l	0.3	12.6	N - EMPC data
EMPC-TCDD	35.1	pg/l	0.5	3.14	N - EMPC data
EMPC-TCDF	119	pg/l	0.4	6.00	N - EMPC data

Analysis: NWTPH-DX

Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.2	mg/l	0.153	0.250	

Analysis: RSK 175

Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	284	ug/l	0.370	1.20	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

MW-10-24

Analysis: 300.0 Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	6.51	mg/l	0.0207	0.500	
Nitrate	0.89	mg/l	0.0173	0.100	
Sulfate	20.4	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	135	mg/l	0.208	10.0	

Analysis: 365.2 Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.0512	mg/l	0.00141	0.0100	

Analysis: 410.4 Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	6.54	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	2.8	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.0841	mg/l	0.0434	0.100	
Calcium	30.1	mg/l	0.0361	0.100	
Iron	0.231	mg/l	0.00640	0.100	
Magnesium	13.8	mg/l	0.0136	0.100	
Potassium	1.67	mg/l	0.111	1.00	
Sodium	19.3	mg/l	0.0167	1.00	

Analysis: 6020 Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chromium	0.00333	mg/l	0.000791	0.00100	
Copper	0.00537	mg/l	0.000259	0.00200	
Manganese	0.531	mg/l	0.0000136	0.00200	
Nickel	0.00229	mg/l	0.000826	0.00200	
Vanadium	0.00529	mg/l	0.000669	0.00500	
Zinc	0.015	mg/l	0.00102	0.00500	

Analysis: 6020 (Dissolved) Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chromium (Dissolved)	0.00361	mg/l	0.000791	0.00100	
Copper (Dissolved)	0.00581	mg/l	0.000259	0.00200	
Lead (Dissolved)	0.00009	mg/l	0.0000870	0.00100	
Nickel (Dissolved)	0.00237	mg/l	0.000242	0.00200	
Vanadium (Dissolved)	0.00512	mg/l	0.00134	0.0100	
Zinc (Dissolved)	0.0176	mg/l	0.00102	0.00500	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

MW-10-24

Analysis: 8081A Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aldrin	1.9	ug/l	0.250	0.500	
gamma-BHC (Lindane)	0.526	ug/l	0.250	0.500	N
alpha-BHC	0.774	ug/l	0.250	0.500	J
beta-BHC	1.3	ug/l	0.250	0.500	N
delta-BHC	1.63	ug/l	0.250	0.500	J
alpha-Chlordane	0.342	ug/l	0.250	0.500	N
gamma-Chlordane	0.977	ug/l	0.250	0.500	
Dieldrin	4.15	ug/l	0.250	0.500	
Endrin Ketone	1.89	ug/l	0.250	0.500	N
Heptachlor epoxide	4.52	ug/l	0.250	0.500	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

RP-01-31

Analysis: 300.0 Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	5.66	mg/l	0.0207	0.500	
Nitrate	1.34	mg/l	0.0173	0.100	
Sulfate	23.6	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	152	mg/l	0.208	10.0	

Analysis: 365.2 Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.352	mg/l	0.00141	0.0100	

Analysis: 410.4 Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	3.2	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	1.65	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.253	mg/l	0.0434	0.100	
Calcium	6.12	mg/l	0.0361	0.100	
Iron	0.7	mg/l	0.00640	0.100	
Magnesium	2.32	mg/l	0.0136	0.100	
Potassium	1.87	mg/l	0.111	1.00	
Sodium	78.1	mg/l	0.167	10.0	

Analysis: 6020 Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	0.0228	mg/l	0.0000136	0.00200	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

RP-01-51

Analysis: 300.0 Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	803	mg/l	2.07	50.0	
Sulfate	230	mg/l	1.70	10.0	

Analysis: 310.1 Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	522	mg/l	0.208	10.0	

Analysis: 350.1 Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.286	mg/l	0.00760	0.0500	

Analysis: 351.2 Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	0.563	mg/l	0.332	0.500	

Analysis: 365.2 Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.127	mg/l	0.00141	0.0100	

Analysis: 410.4 Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	30.5	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	9.97	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Calcium	102	mg/l	0.0361	0.100	
Iron	0.359	mg/l	0.00640	0.100	
Magnesium	41.2	mg/l	0.0136	0.100	
Potassium	14.4	mg/l	0.111	1.00	
Sodium	702	mg/l	0.835	50.0	

Analysis: 6020 Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	3.38	mg/l	0.000136	0.0200	

Analysis: 8151MOD Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Dichlorprop	3.29	ug/l	1.16	3.00	
2,4,5-TP(Silvex)	15.1	ug/l	1.24	3.00	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

RP-01-51

Analysis: 8260B Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Benzene	0.64	ug/l	0.294	2.00	
Chlorobenzene	37.4	ug/l	0.272	2.00	
1,2-Dichlorobenzene	279	ug/l	0.172	2.00	
1,3-Dichlorobenzene	8.54	ug/l	0.264	2.00	
1,4-Dichlorobenzene	77.1	ug/l	0.374	2.00	
1,1-Dichloroethene	0.94	ug/l	0.394	2.00	
cis-1,2-Dichloroethene	4.64	ug/l	0.340	2.00	
trans-1,2-Dichloroethene	0.48	ug/l	0.350	2.00	
Trichloroethene	4.52	ug/l	0.482	2.00	
Vinyl chloride	10.1	ug/l	0.304	2.00	

Analysis: 8290 Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDF	1.2	pg/l	0.5	18.1	J

Analysis: NWTPH-DX Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.175	mg/l	0.153	0.250	

Analysis: RSK 175 Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	700	ug/l	0.370	1.20	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

RP-01-51 (Dup)

Analysis: 8151MOD Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Dichlorprop	3.55	ug/l	1.16	3.00	
2,4,5-TP(Silvex)	16.3	ug/l	1.24	3.00	

Analysis: 8260B Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Benzene	0.6	ug/l	0.294	2.00	
Chlorobenzene	34.5	ug/l	0.272	2.00	
1,2-Dichlorobenzene	270	ug/l	0.172	2.00	
1,3-Dichlorobenzene	8.1	ug/l	0.264	2.00	
1,4-Dichlorobenzene	76.8	ug/l	0.374	2.00	
1,1-Dichloroethene	1	ug/l	0.394	2.00	
cis-1,2-Dichloroethene	4.62	ug/l	0.340	2.00	
trans-1,2-Dichloroethene	0.52	ug/l	0.350	2.00	
Trichloroethene	4.56	ug/l	0.482	2.00	
Vinyl chloride	9.98	ug/l	0.304	2.00	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

RP-01-65

Analysis: 300.0 Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	1340	mg/l	2.07	50.0	
Nitrite(as N)	1.6	mg/l	0.146	1.00	
Sulfate	140	mg/l	1.70	10.0	

Analysis: 310.1 Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	412	mg/l	1.04	50.0	

Analysis: 350.1 Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0126	mg/l	0.00760	0.0500	

Analysis: 365.2 Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.0763	mg/l	0.00141	0.0100	

Analysis: 405.1 Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	3.9	mg/l	1.13	4.00	

Analysis: 410.4 Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	26.8	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	4.42	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Calcium	327	mg/l	1.80	5.00	
Iron	0.0607	mg/l	0.00640	0.100	
Magnesium	104	mg/l	0.0136	0.100	
Potassium	19.6	mg/l	0.111	1.00	
Sodium	558	mg/l	0.835	50.0	

Analysis: 6020 Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	3.32	mg/l	0.000136	0.0200	

Analysis: 8151MOD Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Dichlorprop	6.7	ug/l	1.16	3.00	
2,4,5-TP(Silvex)	31.6	ug/l	1.24	3.00	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

RP-01-65

Analysis: 8260B Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Benzene	7.7	ug/l	0.735	5.00	
Chlorobenzene	84	ug/l	0.680	5.00	
1,2-Dichlorobenzene	678	ug/l	0.430	5.00	
1,3-Dichlorobenzene	20.3	ug/l	0.660	5.00	
1,4-Dichlorobenzene	186	ug/l	0.935	5.00	
1,1-Dichloroethene	2.2	ug/l	0.985	5.00	
cis-1,2-Dichloroethene	9.95	ug/l	0.850	5.00	
trans-1,2-Dichloroethene	1.1	ug/l	0.875	5.00	
Trichloroethene	11.8	ug/l	1.20	5.00	
Vinyl chloride	19.7	ug/l	0.760	5.00	

Analysis: 8290 Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDF	1.4	pg/l	0.6	17.7	J

Analysis: NWTPH-DX Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.32	mg/l	0.153	0.250	

Analysis: RSK 175 Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	1290	ug/l	0.370	1.20	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

RP-02-66

Analysis: 300.0 Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	17300	mg/l	20.7	500	

Analysis: 310.1 Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	228	mg/l	0.208	10.0	

Analysis: 350.1 Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.128	mg/l	0.00760	0.0500	

Analysis: 365.2 Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.0624	mg/l	0.00141	0.0100	

Analysis: 410.4 Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	321	mg/l	16.9	50.0	

Analysis: 415.1/5310 Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	0.438	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Calcium	1740	mg/l	3.61	10.0	
Iron	0.27	mg/l	0.00640	0.100	
Magnesium	490	mg/l	0.136	1.00	
Potassium	84.1	mg/l	1.11	10.0	
Sodium	8210	mg/l	1.67	100	

Analysis: 6020 Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Cadmium	0.0078	mg/l	0.00178	0.0100	
Copper	0.0521	mg/l	0.00259	0.0200	
Lead	0.0011	mg/l	0.000870	0.0100	
Manganese	6.59	mg/l	0.000136	0.0200	
Nickel	0.0815	mg/l	0.00826	0.0200	
Zinc	0.015	mg/l	0.0102	0.0500	

Analysis: 6020 (Dissolved) Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.00205	mg/l	0.000964	0.00100	
Cadmium (Dissolved)	0.00704	mg/l	0.0000730	0.00100	
Lead (Dissolved)	0.0011	mg/l	0.0000870	0.00100	
Nickel (Dissolved)	0.0319	mg/l	0.000242	0.00200	
Vanadium (Dissolved)	0.00867	mg/l	0.000669	0.00500	
Zinc (Dissolved)	0.0105	mg/l	0.00102	0.00500	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

RP-02-66

Analysis: 8151MOD

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
2,4-D	7.01	ug/l	1.31	3.00	J
2,4,5-TP(Silvex)	6.35	ug/l	1.24	3.00	J

Analysis: 8260B

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chlorobenzene	18.4	ug/l	0.136	1.00	J
Chloroform	0.37	ug/l	0.143	1.00	J
1,2-Dichlorobenzene	105	ug/l	0.0859	1.00	J
1,3-Dichlorobenzene	3.05	ug/l	0.132	1.00	J
1,4-Dichlorobenzene	28.1	ug/l	0.187	1.00	J
1,1-Dichloroethene	0.37	ug/l	0.197	1.00	J
cis-1,2-Dichloroethene	1.73	ug/l	0.170	1.00	J
Tetrachloroethene	0.11	ug/l	0.109	1.00	J
Trichloroethene	1.26	ug/l	0.241	1.00	J
Trichlorofluoromethane	0.65	ug/l	0.160	1.00	J
Vinyl chloride	4.26	ug/l	0.152	1.00	J

Analysis: 8290

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	4.5	pg/l	0.6	7.66	J
1,2,3,4,6,7,8-HpCDF	2.4	pg/l	0.3	17.4	J
1,2,3,4,7,8,9-HpCDF	3.8	pg/l	0.4	12.3	J
1,2,3,4,7,8-HxCDD	2.9	pg/l	0.4	6.45	J
1,2,3,6,7,8-HxCDD	3.1	pg/l	0.3	8.04	J
1,2,3,7,8,9-HxCDD	3.8	pg/l	0.4	14.0	J
1,2,3,4,7,8-HxCDF	3.2	pg/l	0.2	17.0	J
1,2,3,6,7,8-HxCDF	3.0	pg/l	0.2	8.69	J
1,2,3,7,8,9-HxCDF	4.1	pg/l	0.3	29.8	J
2,3,4,6,7,8-HxCDF	3.0	pg/l	0.2	20.4	J
1,2,3,4,6,7,8,9-OCDD	12.2	pg/l	1.2	17.4	J
1,2,3,4,6,7,8,9-OCDF	7.3	pg/l	1.0	16.9	J
1,2,3,7,8-PeCDD	3.1	pg/l	0.5	7.29	N - EMPC data
1,2,3,7,8-PeCDF	4.5	pg/l	0.3	4.39	
2,3,4,7,8-PeCDF	3.9	pg/l	0.4	5.42	
Total HpCDD	4.5	pg/l	0.6	7.66	J
Total HpCDF	6.2	pg/l	0.3	12.3	J
Total HxCDD	9.8	pg/l	0.4	6.45	J
Total HxCDF	13.3	pg/l	0.2	8.69	J
Total PeCDF	8.4	pg/l	0.3	4.39	
EMPC-PECDD	3.1	pg/l	0.5	7.29	N - EMPC data

Analysis: RSK 175

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	470	ug/l	0.370	1.20	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

RP-03-30R

Analysis: 8260B Sample Date: 04/19/04 Time: 10:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chlorobenzene	7.2	ug/l	1.36	10.0	
Ethylbenzene	5.1	ug/l	1.10	10.0	
Isopropylbenzene	2.5	ug/l	1.07	10.0	
Naphthalene	1720	ug/l	0.989	10.0	
1,2,4-Trimethylbenzene	18.9	ug/l	0.884	10.0	
1,3,5-Trimethylbenzene	7.8	ug/l	1.57	10.0	
m,p-Xylene	5.2	ug/l	2.95	20.0	
o-Xylene	3.7	ug/l	1.87	10.0	

Analysis: 8270M Sample Date: 04/19/04 Time: 10:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acenaphthene	483	ug/l	25.0	50.0	J
Anthracene	7.04	ug/l	0.500	1.00	
Benzo(a)anthracene	0.602	ug/l	0.500	1.00	
Fluoranthene	18.2	ug/l	0.500	1.00	
Fluorene	204	ug/l	25.0	50.0	J
Naphthalene	1440	ug/l	25.0	50.0	J
Phenanthrene	198	ug/l	25.0	50.0	J
Pyrene	14.1	ug/l	0.500	1.00	

Analysis: 8290 Sample Date: 04/19/04 Time: 10:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	11.6	pg/l	3.1	7.88	
Total HpCDD	29.7	pg/l	3.1	7.88	
Total TCDD	36.1	pg/l	1.8	3.17	
EMPC-TCDD	50.0	pg/l	1.8	3.17	N - EMPC data

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

RP-03-52R

Analysis: 8270M Sample Date: 04/19/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acenaphthene	0.0796	ug/l	0.0500	0.100	J
Fluorene	0.0891	ug/l	0.0500	0.100	J
Naphthalene	0.117	ug/l	0.0500	0.100	J
Phenanthrene	0.104	ug/l	0.0500	0.100	J

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

RP-03-52R (Dup)

Analysis: 8270M Sample Date: 04/19/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acenaphthene	0.079	ug/l	0.0500	0.100	J
Fluorene	0.0936	ug/l	0.0500	0.100	J
Naphthalene	0.118	ug/l	0.0500	0.100	J
Phenanthrene	0.107	ug/l	0.0500	0.100	J

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

RP-04-16

Analysis: 300.0 Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	28	mg/l	0.0207	0.500	
Sulfate	23	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	320	mg/l	1.04	50.0	

Analysis: 350.1 Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.578	mg/l	0.00760	0.0500	

Analysis: 351.2 Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	1.09	mg/l	0.332	0.500	

Analysis: 365.2 Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.00971	mg/l	0.00141	0.0100	

Analysis: 376.2 Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	0.154	mg/l	0.0150	0.200	

Analysis: 405.1 Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	27.5	mg/l	1.13	4.00	

Analysis: 410.4 Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	56.6	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	14.9	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Calcium	79	mg/l	0.361	1.00	
Iron	10.6	mg/l	0.00640	0.100	
Magnesium	8.47	mg/l	0.0136	0.100	
Potassium	3.27	mg/l	0.111	1.00	
Sodium	49.8	mg/l	0.167	10.0	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

RP-04-16

Analysis: 6020

Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	0.185	mg/l	0.000964	0.00100	
Copper	0.00104	mg/l	0.000259	0.00200	
Manganese	0.768	mg/l	0.0000136	0.00200	
Nickel	0.00349	mg/l	0.000826	0.00200	
Vanadium	0.00085	mg/l	0.000669	0.00500	
Zinc	0.0022	mg/l	0.00102	0.00500	

Analysis: 6020 (Dissolved)

Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.0661	mg/l	0.000964	0.00100	J
Chromium (Dissolved)	0.00086	mg/l	0.000791	0.00100	J
Copper (Dissolved)	0.00047	mg/l	0.000259	0.00200	J
Nickel (Dissolved)	0.00403	mg/l	0.000242	0.00200	J
Zinc (Dissolved)	0.00346	mg/l	0.00102	0.00500	J

Analysis: 8081A

Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Endosulfan II	0.777	ug/l	0.250	0.500	J,N
Endrin	0.294	ug/l	0.250	0.500	J

Analysis: 8151MOD

Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
2,4-D	2500	ug/l	131	300	J
2,4-DB	16.1	ug/l	1.90	3.00	J
Dicamba	1.17	ug/l	1.01	3.00	J,N

Analysis: 8260B

Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Benzene	95.2	ug/l	0.735	5.00	J
Chlorobenzene	249	ug/l	0.680	5.00	J
1,2-Dichlorobenzene	748	ug/l	0.430	5.00	J
1,3-Dichlorobenzene	27.3	ug/l	0.660	5.00	J
1,4-Dichlorobenzene	245	ug/l	0.935	5.00	J
Ethylbenzene	46.4	ug/l	0.550	5.00	J
Isobutylalcohol	387	ug/l	79.5	500	J
Isopropylbenzene	1.25	ug/l	0.535	5.00	J
n-Propylbenzene	3.8	ug/l	0.690	5.00	J
Toluene	1.5	ug/l	0.775	5.00	J
1,2,4-Trichlorobenzene	2.45	ug/l	1.06	5.00	J
1,2,4-Trimethylbenzene	36	ug/l	0.442	5.00	J
1,3,5-Trimethylbenzene	7.85	ug/l	0.785	5.00	J
m,p-Xylene	131	ug/l	1.48	10.0	J
o-Xylene	42.4	ug/l	0.935	5.00	J

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

RP-04-16

Analysis: 8270C

Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
2-Chlorophenol	32	ug/l	5.00	5.00	J
1,2-Dichlorobenzene	562	ug/l	30.0	50.0	J
1,3-Dichlorobenzene	23.1	ug/l	3.00	5.00	J
1,4-Dichlorobenzene	144	ug/l	3.00	5.00	J
2,4-Dichlorophenol	546	ug/l	50.0	50.0	J
2,6-Dichlorophenol	67.3	ug/l	10.0	25.0	J
2-Methylphenol	59.9	ug/l	5.00	10.0	J
Phenol	9.44	ug/l	3.00	5.00	J
2,4,5-Trichlorophenol	25.2	ug/l	5.00	5.00	J
2,4,6-Trichlorophenol	116	ug/l	5.00	5.00	J

Analysis: 8290

Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDF	6.4	pg/l	1.9	17.7	N - EMPC data
1,2,3,4,6,7,8,9-OCDD	10.9	pg/l	7.2	17.7	N - EMPC data
1,2,3,4,6,7,8,9-OCDF	13.4	pg/l	5.2	17.2	J
1,2,3,7,8-PeCDF	5.7	pg/l	1.2	4.48	J
2,3,4,7,8-PeCDF	4.2	pg/l	1.8	5.52	N - EMPC data
2,3,7,8-TCDD	378	pg/l	2.3	3.14	
2,3,7,8-TCDF	7.5	pg/l	0.9	6.00	J
Total HxCDF	25.0	pg/l	1.5	8.86	
Total PeCDD	8.5	pg/l	2.1	7.43	
Total PeCDF	1220	pg/l	1.5	4.48	
Total TCDD	1040	pg/l	2.3	3.14	
Total TCDF	6360	pg/l	1.6	6.00	
EMPC-HPCDF	11.9	pg/l	2.2	12.6	N - EMPC data
EMPC-HXCDF	28.3	pg/l	1.5	8.86	N - EMPC data
EMPC-PECDF	1230	pg/l	1.5	4.48	N - EMPC data
EMPC-TCDF	6380	pg/l	1.6	6.00	N - EMPC data

Analysis: NWTPH-DX

Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.981	mg/l	0.153	0.250	

Analysis: RSK 175

Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	16200	ug/l	16.0	51.9	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

RP-06-87

Analysis: 300.0 Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	1160	mg/l	2.07	50.0	
Nitrite(as N)	1.5	mg/l	0.146	1.00	
Sulfate	105	mg/l	1.70	10.0	

Analysis: 310.1 Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	419	mg/l	1.04	50.0	

Analysis: 350.1 Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0676	mg/l	0.00760	0.0500	

Analysis: 365.2 Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.0153	mg/l	0.00141	0.0100	

Analysis: 410.4 Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	24.6	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	3.39	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Calcium	506	mg/l	0.361	1.00	
Iron	6.5	mg/l	0.00640	0.100	
Magnesium	177	mg/l	0.136	1.00	
Potassium	14.6	mg/l	0.111	1.00	
Sodium	90.7	mg/l	0.167	10.0	

Analysis: 6020 Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	0.0143	mg/l	0.000964	0.00100	J
Chromium	0.00091	mg/l	0.000791	0.00100	J
Copper	0.00586	mg/l	0.000259	0.00200	J
Manganese	25.9	mg/l	0.00136	0.200	
Nickel	0.0241	mg/l	0.000826	0.00200	J
Vanadium	0.0038	mg/l	0.000669	0.00500	J
Zinc	0.0134	mg/l	0.00102	0.00500	J

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

RP-06-87

Analysis: 6020 (Dissolved)

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.0102	mg/l	0.000964	0.00100	
Cadmium (Dissolved)	0.00024	mg/l	0.0000730	0.00100	
Copper (Dissolved)	0.00143	mg/l	0.000259	0.00200	
Lead (Dissolved)	0.00011	mg/l	0.0000870	0.00100	
Nickel (Dissolved)	0.0144	mg/l	0.000242	0.00200	
Vanadium (Dissolved)	0.00306	mg/l	0.000669	0.00500	
Zinc (Dissolved)	0.00344	mg/l	0.00102	0.00500	

Analysis: 8151MOD

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Dichlorprop	5.72	ug/l	1.16	3.00	N
2,4,5-TP(Silvex)	29.5	ug/l	1.24	3.00	

Analysis: 8260B

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Benzene	1.5	ug/l	0.735	5.00	
Chlorobenzene	103	ug/l	0.680	5.00	
1,2-Dichlorobenzene	583	ug/l	0.430	5.00	
1,3-Dichlorobenzene	13.5	ug/l	0.660	5.00	
1,4-Dichlorobenzene	146	ug/l	0.935	5.00	
1,1-Dichloroethene	2.75	ug/l	0.985	5.00	
cis-1,2-Dichloroethene	10.9	ug/l	0.850	5.00	
trans-1,2-Dichloroethene	1.15	ug/l	0.875	5.00	N
Trichloroethene	18.6	ug/l	1.20	5.00	
Vinyl chloride	19.8	ug/l	0.760	5.00	

Analysis: NWTPH-DX

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.275	mg/l	0.153	0.250	

Analysis: RSK 175

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	750	ug/l	0.370	1.20	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

RP-07-119

Analysis: 300.0 Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	486	mg/l	2.07	50.0	
Nitrate	0.04	mg/l	0.0173	0.100	
Nitrite(as N)	0.9	mg/l	0.146	1.00	
Sulfate	31.7	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	140	mg/l	0.208	10.0	

Analysis: 350.1 Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0233	mg/l	0.00760	0.0500	

Analysis: 365.2 Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.015	mg/l	0.00141	0.0100	

Analysis: 410.4 Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	10.7	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	1.46	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Calcium	245	mg/l	1.80	5.00	
Iron	0.485	mg/l	0.00640	0.100	
Magnesium	57.5	mg/l	0.0136	0.100	
Potassium	10.7	mg/l	0.111	1.00	
Sodium	20.3	mg/l	0.0167	1.00	

Analysis: 6020 Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Copper	0.00181	mg/l	0.000259	0.00200	
Manganese	0.255	mg/l	0.0000136	0.00200	
Nickel	0.00781	mg/l	0.000826	0.00200	
Vanadium	0.00323	mg/l	0.000669	0.00500	
Zinc	0.0101	mg/l	0.00102	0.00500	

Analysis: 6020 (Dissolved) Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Nickel (Dissolved)	0.00792	mg/l	0.000242	0.00200	
Vanadium (Dissolved)	0.00277	mg/l	0.000669	0.00500	
Zinc (Dissolved)	0.00999	mg/l	0.00102	0.00500	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

RP-07-119

Analysis: 8151MOD Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
2,4-D	4.61	ug/l	1.31	3.00	
Dichlorprop	3.08	ug/l	1.16	3.00	N
2,4,5-TP(Silvex)	10.4	ug/l	1.24	3.00	

Analysis: 8260B Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chlorobenzene	4.14	ug/l	0.136	1.00	
Chloroform	0.44	ug/l	0.143	1.00	
1,2-Dichlorobenzene	54.9	ug/l	0.0859	1.00	
1,3-Dichlorobenzene	3.56	ug/l	0.132	1.00	
1,4-Dichlorobenzene	16.8	ug/l	0.187	1.00	
1,1-Dichloroethene	0.27	ug/l	0.197	1.00	
cis-1,2-Dichloroethene	6.02	ug/l	0.170	1.00	
Trichloroethene	5.88	ug/l	0.241	1.00	

Analysis: RSK 175 Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	7.74	ug/l	0.370	1.20	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

RP-07-30

Analysis: 8270M Sample Date: 04/13/04 Time: 09:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acenaphthene	7.78	ug/l	0.0500	0.100	
Acenaphthylene	0.0964	ug/l	0.0500	0.100	
Anthracene	0.144	ug/l	0.0500	0.100	
Fluoranthene	1.19	ug/l	0.0500	0.100	
Fluorene	2.32	ug/l	0.0500	0.100	
Phenanthrene	2.88	ug/l	0.0500	0.100	
Pyrene	0.933	ug/l	0.0500	0.100	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

RP-07-84

Analysis: 300.0 Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	1040	mg/l	2.07	50.0	
Sulfate	83.4	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	250	mg/l	0.208	10.0	

Analysis: 350.1 Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0172	mg/l	0.00760	0.0500	

Analysis: 410.4 Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	36	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	1.37	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.333	mg/l	0.0434	0.100	
Calcium	511	mg/l	0.361	1.00	
Iron	3.73	mg/l	0.00640	0.100	
Magnesium	127	mg/l	0.136	1.00	
Potassium	17.5	mg/l	0.111	1.00	
Sodium	57.7	mg/l	0.167	10.0	

Analysis: 6020 Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	0.00483	mg/l	0.000964	0.00100	
Chromium	0.00296	mg/l	0.000791	0.00100	J
Copper	0.00749	mg/l	0.000259	0.00200	
Lead	0.00066	mg/l	0.0000870	0.00100	
Manganese	0.556	mg/l	0.0000136	0.00200	
Nickel	0.0186	mg/l	0.000826	0.00200	
Vanadium	0.00854	mg/l	0.000669	0.00500	
Zinc	0.0144	mg/l	0.00102	0.00500	

Analysis: 6020 (Dissolved) Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.00408	mg/l	0.000964	0.00100	
Nickel (Dissolved)	0.0165	mg/l	0.000242	0.00200	
Zinc (Dissolved)	0.00803	mg/l	0.00102	0.00500	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

RP-07-84

Analysis: 8151MOD Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Dichlorprop	6.27	ug/l	1.16	3.00	
2,4,5-TP(Silvex)	29.8	ug/l	1.24	3.00	

Analysis: 8260B Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Benzene	1.9	ug/l	0.735	5.00	
Chlorobenzene	107	ug/l	0.680	5.00	
1,2-Dichlorobenzene	704	ug/l	0.430	5.00	
1,3-Dichlorobenzene	19.6	ug/l	0.660	5.00	
1,4-Dichlorobenzene	190	ug/l	0.935	5.00	
1,1-Dichloroethene	2.7	ug/l	0.985	5.00	
cis-1,2-Dichloroethene	26.6	ug/l	0.850	5.00	
trans-1,2-Dichloroethene	1.35	ug/l	0.875	5.00	
Trichloroethene	5.5	ug/l	1.20	5.00	
Vinyl chloride	16.3	ug/l	0.760	5.00	

Analysis: 8290 Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	2.6	pg/l	1.0	7.81	N - EMPC data
1,2,3,4,7,8-HxCDD	1.7	pg/l	0.6	6.57	J
1,2,3,6,7,8-HxCDD	1.7	pg/l	0.5	8.19	J
1,2,3,7,8,9-HxCDD	1.9	pg/l	0.6	14.3	J
1,2,3,4,7,8-HxCDF	2.4	pg/l	0.4	17.3	J
1,2,3,6,7,8-HxCDF	1.8	pg/l	0.3	8.86	J
1,2,3,7,8,9-HxCDF	1.5	pg/l	0.4	30.4	J
2,3,4,6,7,8-HxCDF	1.2	pg/l	0.4	20.8	J
1,2,3,4,6,7,8,9-OCDD	18.9	pg/l	1.6	17.7	J
1,2,3,4,6,7,8,9-OCDF	3.3	pg/l	1.3	17.2	N - EMPC data
1,2,3,7,8-PeCDF	3.0	pg/l	0.3	4.48	N - EMPC data
2,3,4,7,8-PeCDF	1.7	pg/l	0.4	5.52	N - EMPC data
Total HxCDD	5.4	pg/l	0.5	6.57	
Total HxCDF	6.9	pg/l	0.4	8.86	
EMPC-HPCDD	5.0	pg/l	1.0	7.81	N - EMPC data
EMPC-PECDF	4.7	pg/l	0.3	4.48	N - EMPC data

Analysis: NWTPH-DX Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.362	mg/l	0.153	0.250	

Analysis: RSK 175 Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	1250	ug/l	0.370	1.20	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-03-S

Analysis: 200.8 Sample Date: 06/10/04 Time: 13:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Lead	0.00088	mg/l	0.000224	0.00100	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-04-S

Analysis: 200.8 Sample Date: 06/10/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Lead	0.00101	mg/l	0.000224	0.00100	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-09-116

Analysis: 300.0 Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	735	mg/l	2.07	50.0	
Nitrite(as N)	1	mg/l	0.146	1.00	
Sulfate	67	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	501	mg/l	1.04	50.0	

Analysis: 350.1 Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.195	mg/l	0.00760	0.0500	

Analysis: 351.2 Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	0.498	mg/l	0.332	0.500	

Analysis: 365.2 Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.0128	mg/l	0.00141	0.0100	

Analysis: 405.1 Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	4.82	mg/l	1.13	4.00	

Analysis: 410.4 Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	16.8	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	3.8	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Calcium	211	mg/l	0.361	1.00	
Iron	0.867	mg/l	0.00640	0.100	
Magnesium	114	mg/l	0.136	1.00	
Potassium	13.6	mg/l	0.111	1.00	
Sodium	246	mg/l	0.167	10.0	

Analysis: 6020 Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	0.00446	mg/l	0.000964	0.00100	
Copper	0.00427	mg/l	0.000259	0.00200	
Manganese	10.5	mg/l	0.000272	0.0400	
Nickel	0.0204	mg/l	0.000826	0.00200	
Vanadium	0.00232	mg/l	0.000669	0.00500	
Zinc	0.00997	mg/l	0.00102	0.00500	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-09-116

Analysis: 6020 (Dissolved)

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.00741	mg/l	0.000964	0.00100	
Cadmium (Dissolved)	0.00014	mg/l	0.0000730	0.00100	
Chromium (Dissolved)	0.00135	mg/l	0.000791	0.00100	
Copper (Dissolved)	0.00623	mg/l	0.000259	0.00200	
Nickel (Dissolved)	0.0284	mg/l	0.000242	0.00200	
Vanadium (Dissolved)	0.0024	mg/l	0.000669	0.00500	
Zinc (Dissolved)	0.00804	mg/l	0.00102	0.00500	

Analysis: 8081A

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
alpha-Chlordane	0.0663	ug/l	0.0500	0.100	N
gamma-Chlordane	0.313	ug/l	0.0500	0.100	N
Heptachlor	0.0523	ug/l	0.0500	0.100	N

Analysis: 8151MOD

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
2,4-D	1.39	ug/l	1.31	3.00	
Dichlorprop	5.72	ug/l	1.16	3.00	
2,4,5-TP(Silvex)	17.7	ug/l	1.24	3.00	

Analysis: 8260B

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Benzene	145	ug/l	2.94	20.0	
Chlorobenzene	290	ug/l	2.72	20.0	
1,2-Dichlorobenzene	2160	ug/l	1.72	20.0	
1,3-Dichlorobenzene	66.2	ug/l	2.64	20.0	
1,4-Dichlorobenzene	660	ug/l	3.74	20.0	
cis-1,2-Dichloroethene	14	ug/l	3.40	20.0	
Isopropylbenzene	6.2	ug/l	2.14	20.0	
Trichloroethene	17.2	ug/l	4.82	20.0	
Vinyl chloride	16.4	ug/l	3.04	20.0	

Analysis: 8270C

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Chloro-3-methylphenol	3.84	ug/l	3.00	5.00	
1,2-Dichlorobenzene	1160	ug/l	30.0	50.0	J
1,3-Dichlorobenzene	58.7	ug/l	3.00	5.00	J
1,4-Dichlorobenzene	485	ug/l	30.0	50.0	J

Analysis: 8290

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total TCDF	283	pg/l	0.9	6.00	
EMPC-TCDF	285	pg/l	0.9	6.00	N - EMPC data

Analysis: NWTPH-DX

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	1.38	mg/l	0.153	0.250	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-09-116

Analysis: RSK 175 Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	3990	ug/l	16.0	51.9	

W-09-116 (Dup)

Analysis: 6020

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	0.00454	mg/l	0.000964	0.00100	
Copper	0.00456	mg/l	0.000259	0.00200	
Nickel	0.0222	mg/l	0.000826	0.00200	
Vanadium	0.00268	mg/l	0.000669	0.00500	
Zinc	0.0112	mg/l	0.00102	0.00500	

Analysis: 6020 (Dissolved)

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.00776	mg/l	0.000964	0.00100	
Chromium (Dissolved)	0.00203	mg/l	0.000791	0.00100	
Copper (Dissolved)	0.00426	mg/l	0.000259	0.00200	
Nickel (Dissolved)	0.0319	mg/l	0.000242	0.00200	
Vanadium (Dissolved)	0.00297	mg/l	0.000669	0.00500	
Zinc (Dissolved)	0.00906	mg/l	0.00102	0.00500	

Analysis: 8081A

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
4,4'-DDE	0.154	ug/l	0.0500	0.100	J,N
Endrin	0.234	ug/l	0.0500	0.100	N

Analysis: 8151MOD

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
2,4-D	1.94	ug/l	1.31	3.00	N
Dichlorprop	7.14	ug/l	1.16	3.00	
2,4,5-TP(Silvex)	21.3	ug/l	1.24	3.00	

Analysis: 8260B

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Benzene	151	ug/l	2.94	20.0	
Chlorobenzene	295	ug/l	2.72	20.0	
1,2-Dichlorobenzene	2200	ug/l	1.72	20.0	
1,3-Dichlorobenzene	67	ug/l	2.64	20.0	
1,4-Dichlorobenzene	673	ug/l	3.74	20.0	
1,1-Dichloroethene	5	ug/l	3.94	20.0	
cis-1,2-Dichloroethene	14.4	ug/l	3.40	20.0	
Isopropylbenzene	6.2	ug/l	2.14	20.0	
Trichloroethene	17.2	ug/l	4.82	20.0	
Vinyl chloride	17.2	ug/l	3.04	20.0	

Analysis: 8270C

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Chloro-3-methylphenol	3.65	ug/l	3.00	5.00	
1,2-Dichlorobenzene	1250	ug/l	30.0	50.0	J
1,3-Dichlorobenzene	56	ug/l	3.00	5.00	J
1,4-Dichlorobenzene	518	ug/l	30.0	50.0	J
2,4-Dichlorophenol	5.25	ug/l	5.00	5.00	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-09-116 (Dup)

Analysis: 8290 Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	2.0	pg/l	0.8	7.81	N - EMPC data
1,2,3,4,6,7,8-HpCDF	1.1	pg/l	0.4	17.7	N - EMPC data
1,2,3,4,7,8,9-HpCDF	0.60	pg/l	0.5	12.6	N - EMPC data
1,2,3,7,8,9-HxCDD	1.3	pg/l	0.6	14.3	J
1,2,3,6,7,8-HxCDF	0.53	pg/l	0.3	8.86	N - EMPC data
1,2,3,4,6,7,8,9-OCDF	2.1	pg/l	1.2	17.2	J,N - EMPC data
1,2,3,7,8-PeCDF	1.3	pg/l	0.3	4.48	N - EMPC data
Total HxCDD	1.3	pg/l	0.5	6.57	
Total PeCDF	18.2	pg/l	0.4	4.48	
Total TCDD	13.3	pg/l	0.8	3.14	
Total TCDF	127	pg/l	0.5	6.00	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-11-B

Analysis: 300.0 Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	709	mg/l	2.07	50.0	
Nitrite(as N)	0.9	mg/l	0.146	1.00	
Sulfate	126	mg/l	1.70	10.0	

Analysis: 310.1 Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	322	mg/l	1.04	50.0	

Analysis: 350.1 Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.106	mg/l	0.00760	0.0500	

Analysis: 365.2 Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.00506	mg/l	0.00141	0.0100	

Analysis: 410.4 Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	12.1	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	1.67	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Calcium	405	mg/l	0.361	1.00	
Iron	9.31	mg/l	0.00640	0.100	
Magnesium	79.8	mg/l	0.0136	0.100	
Potassium	12.3	mg/l	0.111	1.00	
Sodium	60.9	mg/l	0.167	10.0	

Analysis: 6020 Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	0.584	mg/l	0.0000136	0.00200	

Analysis: 8151MOD Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Dichlorprop	2.3	ug/l	1.16	3.00	
2,4,5-TP(Silvex)	14	ug/l	1.24	3.00	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-11-B

Analysis: 8260B

Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Benzene	15.6	ug/l	0.735	5.00	
Chlorobenzene	93.2	ug/l	0.680	5.00	
1,2-Dichlorobenzene	482	ug/l	0.430	5.00	
1,3-Dichlorobenzene	14.2	ug/l	0.660	5.00	
1,4-Dichlorobenzene	128	ug/l	0.935	5.00	
1,1-Dichloroethene	2.6	ug/l	0.985	5.00	
cis-1,2-Dichloroethene	24.1	ug/l	0.850	5.00	
trans-1,2-Dichloroethene	1.15	ug/l	0.875	5.00	
Trichloroethene	2.2	ug/l	1.20	5.00	
Vinyl chloride	12.6	ug/l	0.760	5.00	

Analysis: 8290

Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	3.0	pg/l	0.7	7.74	J
1,2,3,4,6,7,8-HpCDF	1.7	pg/l	0.4	17.5	J
1,2,3,4,7,8,9-HpCDF	1.7	pg/l	0.5	12.5	J
1,2,3,7,8,9-HxCDD	1.5	pg/l	0.5	14.2	J
1,2,3,4,7,8-HxCDF	1.4	pg/l	0.3	17.2	J
1,2,3,7,8,9-HxCDF	1.7	pg/l	0.4	30.1	N - EMPC data
2,3,4,6,7,8-HxCDF	1.7	pg/l	0.3	20.6	J
1,2,3,4,6,7,8,9-OCDD	9.3	pg/l	1.3	17.5	N - EMPC data
1,2,3,4,6,7,8,9-OCDF	3.4	pg/l	1.0	17.1	N - EMPC data
1,2,3,7,8-PeCDD	1.9	pg/l	0.3	7.36	N - EMPC data
1,2,3,7,8-PeCDF	2.2	pg/l	0.2	4.43	J
2,3,4,7,8-PeCDF	2.3	pg/l	0.3	5.47	N - EMPC data
Total HpCDD	4.8	pg/l	0.7	7.74	
Total HpCDF	3.4	pg/l	0.5	12.5	
Total HxCDD	1.5	pg/l	0.5	6.51	
Total HxCDF	3.1	pg/l	0.3	8.77	
Total PeCDF	2.2	pg/l	0.3	4.43	
EMPC-HXCDD	3.1	pg/l	0.5	6.51	N - EMPC data
EMPC-HXCDF	4.9	pg/l	0.3	8.77	N - EMPC data
EMPC-PECDD	1.9	pg/l	0.3	7.36	N - EMPC data
EMPC-PECDF	6.4	pg/l	0.3	4.43	N - EMPC data

Analysis: NWTPH-DX

Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.241	mg/l	0.153	0.250	

Analysis: RSK 175

Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	637	ug/l	0.370	1.20	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-11-D

Analysis: 300.0 Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	830	mg/l	2.07	50.0	
Sulfate	246	mg/l	1.70	10.0	

Analysis: 310.1 Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	417	mg/l	1.04	50.0	

Analysis: 350.1 Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0618	mg/l	0.00760	0.0500	

Analysis: 365.2 Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.00661	mg/l	0.00141	0.0100	

Analysis: 410.4 Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	31.3	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	3.32	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.49	mg/l	0.0434	0.100	
Calcium	202	mg/l	1.80	5.00	
Iron	3.2	mg/l	0.00640	0.100	
Magnesium	65.3	mg/l	0.0136	0.100	
Potassium	10.2	mg/l	0.111	1.00	
Sodium	504	mg/l	0.835	50.0	

Analysis: 6020 Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	13.5	mg/l	0.00136	0.200	

Analysis: 8151MOD Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
2,4-D	9.29	ug/l	1.31	3.00	
Dichlorprop	2.37	ug/l	1.16	3.00	N
2,4,5-TP(Silvex)	28.8	ug/l	1.24	3.00	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-11-D

Analysis: 8260B

Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Benzene	7.9	ug/l	0.735	5.00	
Chlorobenzene	480	ug/l	0.680	5.00	
1,2-Dichlorobenzene	569	ug/l	0.430	5.00	
1,3-Dichlorobenzene	20.6	ug/l	0.660	5.00	
1,4-Dichlorobenzene	228	ug/l	0.935	5.00	
cis-1,2-Dichloroethene	1.6	ug/l	0.850	5.00	
Vinyl chloride	9.75	ug/l	0.760	5.00	

Analysis: 8290

Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDF	1.1	pg/l	0.5	17.9	N - EMPC data
1,2,3,4,7,8-HxCDF	1.2	pg/l	0.4	17.5	J
1,2,3,4,6,7,8,9-OCDD	7.4	pg/l	1.7	17.9	N - EMPC data
1,2,3,7,8-PeCDF	0.84	pg/l	0.3	4.52	N - EMPC data
Total HpCDD	1.2	pg/l	1.0	7.88	
Total HxCDF	1.2	pg/l	0.4	8.94	
Total TCDD	5.1	pg/l	0.6	3.17	
Total TCDF	146	pg/l	0.4	6.06	
EMPC-HPCDF	1.1	pg/l	0.5	12.7	N - EMPC data
EMPC-PECDF	0.84	pg/l	0.3	4.52	N - EMPC data
EMPC-TCDF	152	pg/l	0.4	6.06	N - EMPC data

Analysis: NWTPH-DX

Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.331	mg/l	0.153	0.250	

Analysis: RSK 175

Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	426	ug/l	0.370	1.20	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-11-I

Analysis: 300.0 Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	36	mg/l	0.207	5.00	

Analysis: 310.1 Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	478	mg/l	0.208	10.0	

Analysis: 350.1 Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	4.41	mg/l	0.00760	0.0500	

Analysis: 351.2 Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	6.22	mg/l	0.332	0.500	

Analysis: 365.2 Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.00599	mg/l	0.00141	0.0100	

Analysis: 376.2 Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	0.0214	mg/l	0.0150	0.200	

Analysis: 405.1 Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	9.56	mg/l	1.13	4.00	

Analysis: 410.4 Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	24.6	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	7.42	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Calcium	128	mg/l	0.361	1.00	
Iron	40.7	mg/l	0.00640	0.100	
Magnesium	51.9	mg/l	0.0136	0.100	
Potassium	7.8	mg/l	0.111	1.00	
Sodium	24.6	mg/l	0.0167	1.00	

Analysis: 6020 Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	2.1	mg/l	0.000136	0.0200	

Analysis: 8151MOD Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
2,4-D	6.71	ug/l	1.31	3.00	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-11-I

Analysis: RSK 175 Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	37800	ug/l	16.0	51.9	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-11-S

Analysis: 300.0 Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	6	mg/l	0.0207	0.500	
Nitrate	0.02	mg/l	0.0173	0.100	
Sulfate	13	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	242	mg/l	0.208	10.0	

Analysis: 350.1 Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	2.89	mg/l	0.00760	0.0500	

Analysis: 351.2 Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	3.12	mg/l	0.332	0.500	

Analysis: 365.2 Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.00661	mg/l	0.00141	0.0100	

Analysis: 376.2 Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	0.312	mg/l	0.0150	0.200	

Analysis: 410.4 Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	15.2	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	5.29	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.918	mg/l	0.0434	0.100	
Calcium	39.2	mg/l	0.0361	0.100	
Iron	0.00678	mg/l	0.00640	0.100	
Magnesium	0.0373	mg/l	0.0136	0.100	
Potassium	11.9	mg/l	0.111	1.00	
Sodium	72.6	mg/l	0.167	10.0	

Analysis: 6020 Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	0.0005	mg/l	0.0000136	0.00200	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-11-S

Analysis: 8260B Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Benzene	0.86	ug/l	0.147	1.00	
Ethylbenzene	0.18	ug/l	0.110	1.00	
4-Isopropyltoluene	0.18	ug/l	0.149	1.00	
Toluene	1.02	ug/l	0.155	1.00	
1,2,4-Trimethylbenzene	0.32	ug/l	0.0884	1.00	
1,3,5-Trimethylbenzene	0.22	ug/l	0.157	1.00	
m,p-Xylene	0.63	ug/l	0.295	2.00	
o-Xylene	0.49	ug/l	0.187	1.00	

Analysis: RSK 175 Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	1260	ug/l	16.0	51.9	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-12-S

Analysis: 200.8 Sample Date: 06/10/04 Time: 12:05

Compound	Concentration	Units	MDL	MRL	Qualifiers
Lead	0.00075	mg/l	0.000224	0.00100	

Analysis: 200.8 (Dissolved) Sample Date: 06/10/04 Time: 12:05

Compound	Concentration	Units	MDL	MRL	Qualifiers
Lead (Dissolved)	0.00032	mg/l	0.000224	0.00100	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-12-S (Dup)

Analysis: 200.8 Sample Date: 06/10/04 Time: 12:05

Compound	Concentration	Units	MDL	MRL	Qualifiers
Lead	0.00075	mg/l	0.000224	0.00100	

Analysis: 200.8 (Dissolved) Sample Date: 06/10/04 Time: 12:05

Compound	Concentration	Units	MDL	MRL	Qualifiers
Lead (Dissolved)	0.00034	mg/l	0.000224	0.00100	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-18-D

Analysis: 300.0 Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	4.13	mg/l	0.0207	0.500	
Nitrate	1.88	mg/l	0.0173	0.100	
Sulfate	20.9	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	99.4	mg/l	0.208	10.0	

Analysis: 365.2 Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.331	mg/l	0.00141	0.0100	

Analysis: 415.1/5310 Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	0.945	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Calcium	24.8	mg/l	0.0361	0.100	
Iron	0.0549	mg/l	0.00640	0.100	
Magnesium	12.5	mg/l	0.0136	0.100	
Potassium	2.89	mg/l	0.111	1.00	
Sodium	15.8	mg/l	0.0167	1.00	

Analysis: 6020 Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	0.00224	mg/l	0.000964	0.00100	
Chromium	0.00211	mg/l	0.000791	0.00100	
Manganese	0.0016	mg/l	0.0000136	0.00200	
Vanadium	0.0192	mg/l	0.000669	0.00500	
Zinc	0.0025	mg/l	0.00102	0.00500	

Analysis: 6020 (Dissolved) Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.00306	mg/l	0.000964	0.00100	
Chromium (Dissolved)	0.00273	mg/l	0.000791	0.00100	J
Copper (Dissolved)	0.00089	mg/l	0.000259	0.00200	J
Nickel (Dissolved)	0.00255	mg/l	0.000242	0.00200	J
Vanadium (Dissolved)	0.0216	mg/l	0.000669	0.00500	J
Zinc (Dissolved)	0.00468	mg/l	0.00102	0.00500	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-18-I

Analysis: 300.0 Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	3.57	mg/l	0.0207	0.500	
Nitrate	1.66	mg/l	0.0173	0.100	
Sulfate	15.1	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	78.5	mg/l	0.208	10.0	

Analysis: 350.1 Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0101	mg/l	0.00760	0.0500	

Analysis: 365.2 Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.141	mg/l	0.00141	0.0100	

Analysis: 405.1 Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	3.86	mg/l	1.13	4.00	

Analysis: 410.4 Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	7.09	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	2.63	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.158	mg/l	0.0434	0.100	
Calcium	17.5	mg/l	0.0361	0.100	
Iron	0.506	mg/l	0.00640	0.100	
Magnesium	8.86	mg/l	0.0136	0.100	
Potassium	2.31	mg/l	0.111	1.00	
Sodium	14.7	mg/l	0.0167	1.00	

Analysis: 6020 Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	0.00239	mg/l	0.000964	0.00100	
Chromium	0.00219	mg/l	0.000791	0.00100	
Lead	0.00112	mg/l	0.0000870	0.00100	
Manganese	0.03	mg/l	0.0000136	0.00200	
Nickel	0.00157	mg/l	0.000826	0.00200	
Vanadium	0.0234	mg/l	0.000669	0.00500	
Zinc	0.0119	mg/l	0.00102	0.00500	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-18-I

Analysis: 6020 (Dissolved) Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.00251	mg/l	0.000964	0.00100	
Chromium (Dissolved)	0.00219	mg/l	0.000791	0.00100	J
Copper (Dissolved)	0.00054	mg/l	0.000259	0.00200	J
Nickel (Dissolved)	0.00223	mg/l	0.000242	0.00200	J
Vanadium (Dissolved)	0.0213	mg/l	0.000669	0.00500	J
Zinc (Dissolved)	0.0096	mg/l	0.00102	0.00500	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-19-D

Analysis: 300.0 Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	1330	mg/l	2.07	50.0	
Nitrite(as N)	2	mg/l	0.146	1.00	
Sulfate	93.2	mg/l	1.70	10.0	

Analysis: 310.1 Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	427	mg/l	0.208	10.0	

Analysis: 365.2 Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.113	mg/l	0.00141	0.0100	

Analysis: 410.4 Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	44.9	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	1.93	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Calcium	490	mg/l	3.61	10.0	
Iron	0.0506	mg/l	0.00640	0.100	
Magnesium	204	mg/l	0.136	1.00	
Potassium	18.3	mg/l	0.111	1.00	
Sodium	193	mg/l	0.167	10.0	

Analysis: 6020 Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	0.311	mg/l	0.0000136	0.00200	

Analysis: 8151MOD Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
2,4-D	1.49	ug/l	1.31	3.00	J
Dichlorprop	4.5	ug/l	1.16	3.00	J
MCPP	278	ug/l	111	300	J,N
2,4,5-TP(Silvex)	27.9	ug/l	1.24	3.00	J

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-19-D

Analysis: 8260B Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Benzene	1.6	ug/l	0.735	5.00	J
Chlorobenzene	178	ug/l	0.680	5.00	J
1,2-Dichlorobenzene	676	ug/l	0.430	5.00	J
1,3-Dichlorobenzene	20.6	ug/l	0.660	5.00	J
1,4-Dichlorobenzene	202	ug/l	0.935	5.00	J
1,1-Dichloroethene	2.6	ug/l	0.985	5.00	J
cis-1,2-Dichloroethene	9	ug/l	0.850	5.00	J
trans-1,2-Dichloroethene	1.1	ug/l	0.875	5.00	J
Trichloroethene	6.5	ug/l	1.20	5.00	J
Vinyl chloride	27.3	ug/l	0.760	5.00	J

Analysis: NWTPH-DX Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.279	mg/l	0.153	0.250	

Analysis: RSK 175 Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	1160	ug/l	0.370	1.20	

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-19-I

Analysis: 300.0 Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	1800	mg/l	2.07	50.0	
Nitrate	0.07	mg/l	0.0173	0.100	
Sulfate	48.1	mg/l	1.70	10.0	

Analysis: 310.1 Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	374	mg/l	1.04	50.0	

Analysis: 365.2 Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.0441	mg/l	0.00141	0.0100	

Analysis: 410.4 Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	29.9	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	4.63	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Calcium	352	mg/l	3.61	10.0	
Iron	0.0871	mg/l	0.00640	0.100	
Magnesium	137	mg/l	0.136	1.00	
Potassium	20.2	mg/l	0.111	1.00	
Sodium	649	mg/l	1.67	100	

Analysis: 6020 Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	11.4	mg/l	0.000272	0.0400	

Analysis: 8151MOD Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Dichlorprop	1.41	ug/l	1.16	3.00	J,N
MCPP	135	ug/l	111	300	J
2,4,5-TP(Silvex)	13	ug/l	1.24	3.00	J

Table 4
Final Validated Spring 2004 Groundwater Characterization Event Analytical Results, Detections Only
RP - Portland Site

W-19-I

Analysis: 8260B Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Benzene	0.54	ug/l	0.294	2.00	J
Chlorobenzene	45.9	ug/l	0.272	2.00	J
1,2-Dichlorobenzene	226	ug/l	0.172	2.00	J
1,3-Dichlorobenzene	6.82	ug/l	0.264	2.00	J
1,4-Dichlorobenzene	65.2	ug/l	0.374	2.00	J
1,1-Dichloroethene	0.9	ug/l	0.394	2.00	J
cis-1,2-Dichloroethene	3.34	ug/l	0.340	2.00	J
Trichloroethene	2.3	ug/l	0.482	2.00	J
Vinyl chloride	9.84	ug/l	0.304	2.00	J

Analysis: NWTPH-DX Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.159	mg/l	0.153	0.250	

Analysis: RSK 175 Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	701	ug/l	0.370	1.20	

Definitions

( )	Estimated concentration that is greater than the MDL but less than the MRL.
MDL	Method Detection Limit
MRL	Method Reporting Limit
mg/l	milligrams per liter (ppm)
ug/l	micrograms per liter (ppb)
pg/l	picograms per liter (ppq)
cfu/ml	colony forming units per milliliter

Analytical Qualifiers

U	The analyte was not detected above the method detection limit or quantitation limit. In the case of blank contamination, the analyte is considered to be less than the stated result.
J	The analyte was positively identified, but the associated concentration is an estimate.
N	Presumptive evidence of analyte presence was detected, but not all identification criteria were met. The presence of the analyte and the associated numerical concentration are both uncertain.
R	Results for the analyte are unusable due to serious deficiencies in the sample analysis. The presence or absence of the analyte cannot be verified.
EMPC	(Estimated Maximum Possible Concentration) A chromatographic peak was detected at the proper retention time for the congener, but the ion abundance ratios did not meet method requirements. Congener identification is uncertain.

APPENDIX A

Completed Groundwater Sampling Field Forms, Spring 2004
Post-Characterization Groundwater Monitoring Event

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP Spring 2004 GW Sampling
Project #: 06/M10703 DL T43
Monitoring/Sampling Date: 4-14-04

Monitoring Well ID: W-18-I
Field Personnel: JR BM LG
Start Time: 15:40
Weather Conditions: Raining Heavily
Approx. Air Temp (F): 55°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: 0.0
PID Calibration Standard: isobutylene
%LEL Background: – In well Casing: –
PID Calibration Date: –
Date/Time of Measurement: 4-14-04 /
Depth to Water Measuring Technique: –
Depth Well Bottom (TOC - ft.): 55.24
Detection Method of Free Product: –
Depth to Water Level (TOC - ft.): 19.70
Depth to Free Product (TOC - ft.): –
Calculated Column Height (ft.): –
Casing Diameter (in.): 2"
Quantity of Free Product Collected (gal.): 0
Method of Collecting Free Product: –

Conversions Factors (casing dia. = gallons/linear ft.) Circle One
0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Three Well Purge Volumes (gallons) = 3 x _____ = _____

Obsevation of sheen or LNAPL: NO
Observation of DNAPL: NO

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
	.5l	10.84	6.51	156	Clear	5.28	76.5	15:45
	1.5l	10.89	6.47	156	↓	4.77	79.5	15:50
	3.5l	10.96	6.45	156		3.91	83.4	15:55
	5.0l	10.97	6.45	155	36.2	3.92	84.5	16:00

Total Purged = Purge Pumping Rate (approx. L/m): .5 l/min Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristaltic Pump / Grunfos Pump / Other = Dual Valve
Ferrous Iron (ppm): Decontamination Method: Alnor DI Method, DI Rinse
Instrument Type & Number: YSI #3 Water Disposal: On-Site System
Instrument Calibration Date & Time: 4-14-04 800 Approx. Pump/Intake Depth: 52.5

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:
Casing Condition: OK / NA / Needs Repairs / Repaired Lock Condition: OK / NA / Needs Repairs / Replaced
Cap Condition: OK / NA / Needs Repairs / Repaired Inner Casing Condition: OK / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / Needs Repairs / Repaired Monument Condition: OK / NA / Needs Repairs / Repaired
Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 4-14-04 QA/QC Sample (circle one): YES / NO Water Chemistry Sample: YES / NO
Time Sampled: 16:15 Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump
Chain-of-Custody #s: Teflon Bailer Peristaltic Pump Other: Dual Valve

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
015-01	4	VOA	HCL	NCA		Methane
	2	1 l	HCl	NCA		NWTPH-Dx
	1	500ml	HNO3	NCA		Total ~~Dissolved~~ cations
	1	500ml	HNO3	NCA		Dissolved
	1	100ml	None	AZA FQL		Plate Count

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO
Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Jae Rock Sampler Signature: [signature] Date Signed: 4-14-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP-Spring 2004 Qtr Sampling Project #: 061M1220301 T43 Monitoring/Sampling Date: 4-14-04

Monitoring Well ID: W-18-I | Field Personnel: JR, BM, LG

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled:

Time Sampled:

Additional Chain-of-Custody #s:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
015-01	1	1	None	NCA		Alk Anions
	1	250 ml	Sulfuric			NH_3, TKN, TOC, COD
	1	1	None			TOD
	1	250	NaOH-ZnAce			Sulfide

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-14-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RPS spring 2004 GW Sampling Project #: 06(M)07030/T43 Monitoring/Sampling Date: 4-14-04

Monitoring Well ID: W-13-D	Field Personnel: J.R. BM. LG	
Start Time: 14:50	Weather Conditions: Rain, Cool	Approx. Air Temp (F): 55°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 8.5	In well Casing: 8.8	PID Calibration Standard: —
%LEL Background: —	In well Casing: —	PID Calibration Date: —

Date/Time of Measurement: 4-14-04 / 14:50	Depth to Water Measuring Technique: Solinist
Depth Well Bottom (TOC - ft.): 65.00	Detection Method of Free Product:
Depth to Water Level (TOC - ft.): 20.05	Conversions Factors (casing dia. = gallons/linear ft.) Circle One
Depth to Free Product (TOC - ft.): NA	0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
Calculated Column Height (ft.):	4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Casing Diameter (in.): 4"	Three Well Purge Volumes (gallons) = 3 x =
Quantity of Free Product Collected (gal.): Ø	Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: None	Observation of DNAPL: None

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (~~mS~~) µS	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
	.5 l	10.98	7.19	195	clear	5.76	30.4	14:50
	2.0 l	10.89	7.07	193	↓	5.12	27.3	14:54
	4.0 l	10.84	7.04	193	↓	4.93	28.8	14:59
	6.0 l	10.84	7.03	193	2.81	4.90	28.9	15:05

Total Purged = 6.0 l | Purge Pumping Rate (approx. L/m): .5 l/min | Well Yield: (High) Moderate / Low

Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve

Ferrous Iron (ppm): Ø.Ø ppm	Decontamination Method: Alconox, DI, Methanol, DI rinses
Instrument Type & Number: YSI #3	Water Disposal: on-site system
Instrument Calibration Date & Time: 4-14-04 800	Approx. Pump/Intake Depth: 62.0

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel (PVC) Other:

Casing Condition: (OK) / NA / Needs Repairs / Repaired	Lock Condition: (OK) / NA / Needs Repairs / Replaced
Cap Condition: (OK) / NA / Needs Repairs / Repaired	Inner Casing Condition: (OK) / NA / Needs Repairs / Repaired
Paint Condition: (OK) / NA / Needs Repairs / Repaired	Monument Condition: (OK) / NA / Needs Repairs / Repaired

Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 4-14-04	QA/QC Sample (circle one): YES / (NO)	Water Chemistry Sample: (YES) / NO
Time Sampled: 15:15	Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump	
Chain-of-Custody #s:	Teflon Bailer Peristaltic Pump Other: Dual Valve	

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
014-01	4	VOA	HCL	NCA		VOCs Methane
	2	1 L	~~HNO3~~ HCL	↑		Herbicides NWTPH-DX
	1	500 ml	HNO_3			Total Metals & Cations
	1	500 ml	HNO_3	↓		Dissolved Metals
	1	100 ml	None	RQL		Plate Count

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted (YES) / NO

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Steve Rocke Sampler Signature: [signature] Date Signed: 4-14-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP Spring 2004 GW Sampling Project #: 06141070301-T43 Monitoring/Sampling Date: 4-14-04

Monitoring Well ID: W-18-D | Field Personnel: JR BM LG

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-14-04 | Additional Chain-of-Custody #s:

Time Sampled: 15:15

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
014-01	1	2	None	NCA		Alk, Anions
	1	250	Sulfuric	NCA		NH_3, TKN, TOC, COD
	1	2	None	NCA		BOD
	1	250	NaOH+ZnAce	NCA		Sulfide

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-14-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP Project #: 06M1020 30 T43 Monitoring/Sampling Date: 4-12-04

Monitoring Well ID: w-19 I	Field Personnel: J.R. BM		
Start Time: 1400	Weather Conditions: Partly Cloudy	Approx. Air Temp (F): 70°	

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: 6.0	PID Calibration Standard: Isobutylene
%LEL Background: NA In well Casing: NA	PID Calibration Date: 4-12-04
Date/Time of Measurement: 4-12-04 / 1148	Depth to Water Measuring Technique: Solinist
Depth Well Bottom (TOC - ft.): 50.50	Detection Method of Free Product: NA
Depth to Water Level (TOC - ft.): 25.68	Conversions Factors (casing dia. = gallons/linear ft.) Circle One
Depth to Free Product (TOC - ft.): NA	0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
Calculated Column Height (ft.): 24.82	4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Casing Diameter (in.): 4"	Three Well Purge Volumes (gallons) = 3 x _____ = _____
Quantity of Free Product Collected (gal.): Ø	Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: None	Observation of DNAPL: ~~NA~~ NO

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)	
	.5l	13.69	6.28	33	Clear	5.24	126.6	1405	DI 25:
	2.0l	13.49	6.23	35	↓	.47	92.4	14:08	
	4.5l	13.43	6.20	35	↓	.36	80.5	14:13	
	5.5l	13.43	6.16	36	1.83	.27	71.5	14:15	25:

Total Purged = 6.0l	Purge Pumping Rate (approx. L/m): .5l/min	Well Yield: (High) / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve		
Ferrous Iron (ppm): Ø.4 ppm	Decontamination Method: Alcanox, DI, Methanol, DI	
Instrument Type & Number: YSI #3	Water Disposal: On-Site System	
Instrument Calibration Date & Time: 945 4-12-04	Approx. Pump/Intake Depth: 48'	

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel (PVC) Other:	
Casing Condition: (OK) / NA / Needs Repairs / Repaired	Lock Condition: (OK) / NA / Needs Repairs / Replaced
Cap Condition: (OK) / NA / Needs Repairs / Repaired	Inner Casing Condition: (OK) / NA / Needs Repairs / Repaired
Paint Condition: (OK) / NA / Needs Repairs / Repaired	Monument Condition: (OK) / NA / Needs Repairs / Repaired
Recommended Well Repairs:	

SAMPLING INFORMATION / DATA

Date Sampled: 4-12-04	QA/QC Sample (circle one): YES / (NO)	Water Chemistry Sample: (YES) / NO
Time Sampled: 14:20	Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump	
Chain-of-Custody #s:	Teflon Bailer Peristaltic Pump Other: Dual Valve	

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
003-01	4	VOA	HCL	NCA	Courier	VOC's by 8260
	2	1l	None	↓	↓	Herbicides by 8151A
	2	1l	HCL	↓	↓	NWTPH-DX
	1	500ml	HNO_3	↓	↓	Cations
	1	100ml	None	EQL	↓	Total Heterotrophic Plate Count

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: (YES) / NO

Field Observations/Notes of Sampling Event: _____

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock Sampler Signature: [signature] Date Signed: 4-12-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP Project #: 061M107030 T43 Monitoring/Sampling Date: 4-12-04

Monitoring Well ID: W-19-I | Field Personnel: See Front Page

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-12-04 | Additional Chain-of-Custody #s:

Time Sampled:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
003-01	1	1 l	None	NCA	Courier	Alk, Cl^-, NO_2, NO_3, SO_4, OPO4
	1	250ml	Sulfuric			NH_3, TKN, TOC, COD
	1	1 l	None			BOD
	1	250ml	NaOH			Sulfide
	4	VOA	HCL			Methane

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-12-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: R.P Project #: 0-6\M-107030 T43 Monitoring/Sampling Date: 4-12-04

Monitoring Well ID: W-19-D	Field Personnel: JR, JF, LG, JR, BM
Start Time: 13:15	Weather Conditions: Partly Cloudy Approx. Air Temp (F): 63.5°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: 0.0	PID Calibration Standard: Isobutylene
%LEL Background: NA In well Casing: NA	PID Calibration Date: 4/12/04
Date/Time of Measurement: 4-12-04 / 1150	Depth to Water Measuring Technique: Solinst
Depth Well Bottom (TOC - ft.): 68.52	Detection Method of Free Product: NA
Depth to Water Level (TOC - ft.): 25.31	Conversions Factors (casing dia. = gallons/linear ft.) Circle One
Depth to Free Product (TOC - ft.): NA	0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
Calculated Column Height (ft.): 43.21	4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Casing Diameter (in.): 4"	Three Well Purge Volumes (gallons) = 3 x =
Quantity of Free Product Collected (gal.): Ø gal	Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: None	Observation of DNAPL: NO

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
	1 l	13.56	6.50	367	Clear	1.96	114.8	13:15
	3 l	13.38	6.41	361	↓	.53	100.5	13:17
	5 l	13.31	6.38	361	↓	.23	87.1	13:19
	7 l	13.31	6.38	361	1.27	.19	80.5	13:21

Total Purged = 7 l	Purge Pumping Rate (approx L/m): .5 l/min	Well Yield: High / Moderate / Low

Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve

Ferrous Iron (ppm): Ø.Ø	Decontamination Method: Alconox, DI, methanol, DI
Instrument Type & Number: YSI #3	Water Disposal: On-Site system
Instrument Calibration Date & Time: 4-12-04 10:00	Approx. Pump/Intake Depth: 66'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:

Casing Condition: OK / NA / Needs Repairs / Repaired	Lock Condition: OK / NA / Needs Repairs / Replaced
Cap Condition: OK / NA / Needs Repairs / Repaired	Inner Casing Condition: OK / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / Needs Repairs / Repaired	Monument Condition: OK / NA / Needs Repairs / Repaired

Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 4-12-04	QA/QC Sample (circle one): YES NO	Water Chemistry Sample: YES / NO
Time Sampled: 13:30	Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump	
Chain-of-Custody #s:	Teflon Bailer Peristaltic Pump Other: Dual Valve	

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
002-01	4	VOA	HCL	NCA	Courier	VOC's by 8260
	2	1 l	None	↓	↓	Herbicides by 8151A
	2	1 l	HCL			NWTPH - DX
	~~2~~ 1	500	HNO_3			~~Total Diss~~ Cations Metals
	1	110 ml	None	FGL		Total Heterotrophic Plate Count

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock Sampler Signature: [signature] Date Signed: 4-12-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP Project #: 06IM107030 043 Monitoring/Sampling Date: 4-12-04

Monitoring Well ID: W-19-D | Field Personnel: See Smart page

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-12-04 | Additional Chain-of-Custody #s:

Time Sampled: 13:30

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
002-01	1	1	None	NCA	Courier	Alk, Cl⁻, Na, Mg, SO4, OPO4
	1	250ml	Sulfuric	↓	↓	NH3, TOC, COD
	1	1l	None			BOD
	1	250	NaOH			Sulfide
	4	VOA	HCL			Methane

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-12-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP Spring 2004 GW Sampling
Project #: 061M107030 T43
Monitoring/Sampling Date: 4-14-03

Monitoring Well ID: W-11-S
Field Personnel: J. Rock, B. McGillicuddy, J. Roth
Start Time: 9:45
Weather Conditions: Cloudy, Cool, SW Wind
Approx. Air Temp (F): 55°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: * In well Casing: *
PID Calibration Standard: —
%LEL Background: — In well Casing: —
PID Calibration Date: —

Date/Time of Measurement: 4-14-04 / 9:46
Depth to Water Measuring Technique: Solinst
Depth Well Bottom (TOC - ft.): 46.5
Detection Method of Free Product: NA
Depth to Water Level (TOC - ft.): 11.34
Depth to Free Product (TOC - ft.): None
Calculated Column Height (ft.):
Casing Diameter (in.): 2"
Quantity of Free Product Collected (gal.): Ø
Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: None
Observation of DNAPL: None

Conversions Factors (casing dia. = gallons/linear ft.) Circle One

0.75" = 0.02	1" = 0.04	2" = 0.17	3" = 0.37
4" = 0.66	6" = 1.47	8" = 2.61	12" = 5.88

Three Well Purge Volumes (gallons) = 3 x . =

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (~~mS~~) µS	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)	DTW
	.5 l	11.88	11.69	718	Clear	.44	-82.0	9:47	11.3
	2.0 l	11.97	11.71	713		.25	-130.9	9:52	11.3
	3.5 l	11.82	11.71	753		.11	-146.7	9:56	11.3
	4.5 l	11.73	11.72	761		.10	-153.8	10:00	11.3
	5.5 l	11.72	11.71	762	3.49	.09	-156.7	10:03	11.34

Total Purged = 5.5 l
Purge Pumping Rate (approx. L/m): .5 l/min
Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve
Ferrous Iron (ppm): Ø.
Decontamination Method: Alconox, DI, Methanol, DI Rinses
Instrument Type & Number: YSI #3
Water Disposal: On-Site System
Instrument Calibration Date & Time: 4-14-04 8:00
Approx. Pump/Intake Depth: 16'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:
Casing Condition: OK / NA / Needs Repairs / Repaired
Lock Condition: OK / NA / Needs Repairs / Replaced
Cap Condition: OK / NA / Needs Repairs / Repaired
Inner Casing Condition: OK / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / Needs Repairs / Repaired
Monument Condition: OK / NA / Needs Repairs / Repaired
Recommended Well Repairs:

SAMPLING INFORMATION / DATA GMA 5/21/04

Date Sampled: 4-14-04
QA/QC Sample (circle one): YES / NO
Water Chemistry Sample: YES / NO
Time Sampled: 10:10
Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump Teflon Bailer Peristaltic Pump Other: Dual Valve
Chain-of-Custody #s:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
010-01	4	VOAs	HCL	NCA		VOC's
	2	1 l	None	NCA		Herbicides
	1	110 ml	None	FQL		Plate Count
	1	1	None	NCA		Alk, Cl⁻, NO₂, NO₃, SO₄, OPO₄
	1	250	Sulfuric	NCA		NH₃, TKN, TOC, COD

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO

Field Observations/Notes of Sampling Event: * PID not functioning

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock
Sampler Signature:
Date Signed: 4-14-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP Spring 2004 GW Sampling Project #: 06/M10703 01 + 43 Monitoring/Sampling Date: 4-14-04

Monitoring Well ID: W-11-S | Field Personnel: J.R. J.R, B.M.

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-14-04 | Additional Chain-of-Custody #s:

Time Sampled: 10:10

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
010-01	1	2	None	NCA		BOD
	1	250ml	NaOH+Zn Acetate	NCA		Sulfide
	50cl	500	HNO_3	NCA		Cations
	2	1 L	HCL	NCA		NWTPH-DX
	4	VOA	HCL	NCA		Methane
010-03	1	VOA	HCL	NCA		VOC (Trip Blank)

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Steve Rock | Sampler Signature: [signature] | Date Signed: 4-14-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP Spring 2004 GW Sampling Project #: 06/M0170301 T43 Monitoring/Sampling Date: 4-14-04

Monitoring Well ID: W-11-I	Field Personnel: J. Roth, B. McGillicuddy, J. Rock		
Start Time: 10:40	Weather Conditions: Cloudy, windy	Approx. Air Temp (F): 55°	

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: *	In well Casing: *	PID Calibration Standard: –	
%LEL Background: –	In well Casing: –	PID Calibration Date: –	
Date/Time of Measurement: 4-14-04 / 10:42		Depth to Water Measuring Technique: Solinst	
Depth Well Bottom (TOC - ft.): 60		Detection Method of Free Product: NA	
Depth to Water Level (TOC - ft.): 27.30		Conversions Factors (casing dia. = gallons/linear ft.)	Circle One
Depth to Free Product (TOC - ft.): NA		0.75" = 0.02 / 1" = 0.04	2" = 0.17 / 3" = 0.37
Calculated Column Height (ft.): –		4" = 0.66 / 6" = 1.47	8" = 2.61 / 12" = 5.88
Casing Diameter (in.): 2"		Three Well Purge Volumes (gallons) = 3 x	=
Quantity of Free Product Collected (gal.): Ø		Method of Collecting Free Product: NA	
Obsevation of sheen or LNAPL: NO		Observation of DNAPL: None	

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (~~mS~~) uS	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)	DTW
	.5 l	13.57	6.61	829	clear	.56	-107.5	10:45	27.
	2.0 l	13.48	6.60	861		.24	-112.1	10:49	27.
	3.5 l	13.47	6.60	861		.23	-115.5	10:53	27.
	4.0 l	13.44	6.60	859		.19	-116.0	10:55	27.
	5.0 l	13.42	6.60	858	3.65	.18	-117.8	11:00	27.

Total Purged =	Purge Pumping Rate (approx. L/m): .500 l/min	Well Yield: High / Moderate / Low	
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve			
Ferrous Iron (ppm): 2.8 ppm	Decontamination Method: Alconox, DI, Methanol, DI rinses		
Instrument Type & Number: YSI H3	Water Disposal: On-Site System		
Instrument Calibration Date & Time: 4-14-04 800	Approx. Pump/Intake Depth: 55'		

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:			
Casing Condition: OK / NA / Needs Repairs / Repaired		Lock Condition: OK / NA / Needs Repairs / Replaced	
Cap Condition: OK / NA / Needs Repairs / Repaired		Inner Casing Condition: OK / NA / Needs Repairs / Repaired	
Paint Condition: OK / NA / Needs Repairs / Repaired		Monument Condition: OK / NA / Needs Repairs / Repaired	
Recommended Well Repairs:			

SAMPLING INFORMATION / DATA

Date Sampled: 4-14-04	QA/QC Sample (circle one): YES / NO	Water Chemistry Sample: YES / NO
Time Sampled: 11:10	Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump	
Chain-of-Custody #s:	Teflon Bailer Peristaltic Pump Other: Dual Valve	

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
011-01	4	vOAs	HCl	NCA		VOC's
	2	1 l	None	NCA		Herbicides
	1	110 ml	none	FQL		Plate Count
	1	1 l	None	NCA		Alk, Cl, NO_2, NO_3, SO_4, OPO4
	1	250	Sulfuric	NCA		NH_3, TKN, COD, TOC

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO

Field Observations/Notes of Sampling Event: * not measured - PID not functioning ~ QMC 5/21/04

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock Sampler Signature: [signature] Date Signed: 4-14-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP-Spring 2004 GW Sampling Project #: 061M07030(T43 Monitoring/Sampling Date: 4-14-04

Monitoring Well ID: W-11-I | Field Personnel: J Rock J Roth B McGillicuddy

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-14-00 | Additional Chain-of-Custody #s:

Time Sampled: 11:00

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
011-01	1	1	None	NCA		BOD
	1	250ml	NaOH+Zn Acetate	NCA		Sulfide
	1	500	HNO_3	NCA		Cations
	2	1 l	HCL	NCA		NWTPH-DX
	4	VOA	HCL	NCA		Methane

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-14-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP-Spring 2004 GW Sampling Project #: 06/M10703 01 T43 Monitoring/Sampling Date: 4-14-04

Monitoring Well ID: MW-11-D	Field Personnel: JR-JR-BN
Start Time: 11:35	Weather Conditions: Raining, Wind. Approx. Air Temp (F): 55°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: * In well Casing: *	PID Calibration Standard: —
%LEL Background: — In well Casing: —	PID Calibration Date: —
Date/Time of Measurement: 4-14-04 / 11:35	Depth to Water Measuring Technique: Solinst
Depth Well Bottom (TOC - ft.): 104'	Detection Method of Free Product: NA
Depth to Water Level (TOC - ft.): 27.09	Conversions Factors (casing dia. = gallons/linear ft.) Circle One
Depth to Free Product (TOC - ft.): NA	0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
Calculated Column Height (ft.):	4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Casing Diameter (in.): 3"	Three Well Purge Volumes (gallons) = 3 x _____ =
Quantity of Free Product Collected (gal.): Ø	Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: None	Observation of DNAPL: None

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (µS) mS	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)	DTW
	.5 l	13.79	6.99	2833	Clear	3.39	0.6	11:35	27.0
	2.0 l	13.61	6.94	2881	↓	1.36	22.8	11:40	27.1
	5.0 l	13.60	6.73	2808	Turbid	.20	18.6	11:46	27.1
	6.5 l	13.61	6.65	2792	Clearing	.18	16.2	11:50	27.1
	8.0 l	13.61	6.64	2791	↓	.16	14.8	11:54	27.1
	9.0 l	13.62	6.66	2789	135	.14	10.6	11:56	

Total Purged = 9.0 l	Purge Pumping Rate (approx. L/m): .5 l/min	Well Yield: (High) / Moderate / Low

Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve

Ferrous Iron (ppm): 1.2 ppm	Decontamination Method: Alconox, DI, Methanol, DI rinses
Instrument Type & Number: YSI #3	Water Disposal: On-Site system
Instrument Calibration Date & Time: 4-14-04 8:00	Approx. Pump/Intake Depth: 102'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel (PVC) Other:

Casing Condition: (OK) / NA / Needs Repairs / Repaired	Lock Condition: (OK) / NA / Needs Repairs / Replaced
Cap Condition: (OK) / NA / Needs Repairs / Repaired	Inner Casing Condition: (OK) / NA / Needs Repairs / Repaired
Paint Condition: (OK) / NA / Needs Repairs / Repaired	Monument Condition: (OK) / NA / Needs Repairs / Repaired

Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 4-14-04	QA/QC Sample (circle one): YES (NO)	Water Chemistry Sample: (YES) / NO
Time Sampled: 12:00	Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump	
Chain-of-Custody #s:	Teflon Bailer Peristaltic Pump Other: Dual Valve Pump	

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
012-01	4	VOA	HCL	NCA		VOC's
	2	1 l	None	NCA		Herbicides
	1	100 ml	None	Lab FGL		Plate Count
	1	1 l	None	NCA		Alk, Anions
	1	250	Sulfuric	NCA		NH3, TKN, TOC, COD

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: (YES) / NO

Field Observations/Notes of Sampling Event: * PID not Functioning JMP 5/21/04

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Jack Rock Sampler Signature: [signature] Date Signed: 4-14-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP - Spring 2004 GW Sampling Project #: 061m10710301 T43 Monitoring/Sampling Date: 4-14-04

Monitoring Well ID: W-11-0 | Field Personnel: JR JR BM

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-14-04 | Additional Chain-of-Custody #s:

Time Sampled: 12:00

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
012-01	1	1l	None	NCA		BOD
	1	250ml	NaOH+Zn Acetate	NCA		Sulfide
	1	500ml	HNO_3	NCA		Cations
	2	1l	HCL	NCA		NWTPH-DX
	4	VOA	HCL	NCA		Methane
	2	1l	None	Triangle		Dioxins, Furans

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-14-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP - Spring 2004 GW Sampling
Project #: 061M102030 - T43
Monitoring/Sampling Date: 4-14-04

Monitoring Well ID: W-11-B | Field Personnel: J.R. BM
Start Time: 12:20 | Weather Conditions: Rain windy | Approx. Air Temp (F): 55°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: * In well Casing: * | PID Calibration Standard: -
%LEL Background: - In well Casing: | PID Calibration Date: -
Date/Time of Measurement: 4-14-04 / 12:10 | Depth to Water Measuring Technique: Solinist
Depth Well Bottom (TOC - ft.): 121.9 | Detection Method of Free Product: NA
Depth to Water Level (TOC - ft.): 27.77 | Conversions Factors (casing dia. = gallons/linear ft.) Circle One
Depth to Free Product (TOC - ft.): NA | 0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
Calculated Column Height (ft.): | 4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Casing Diameter (in.): 2" | Three Well Purge Volumes (gallons) = 3 x =
Quantity of Free Product Collected (gal.): Ø | Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: None | Observation of DNAPL: None

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (mS)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)	DT
	.5 l	13.34	7.09	2018	cloudy	1.19	-100.0	12:25	27.
	2.5 l	13.38	7.10	2035	clear	0.22	-111.5	12:30	27.
	5.0 l	13.39	7.11	2030	↓	0.14	-109.4	12:40	28.
	6.5 l	13.37	7.12	2031	1.74	0.12	-110.6	12:50	29.

Total Purged = 6.5 l | Purge Pumping Rate (approx. L/m): .5 l/min | Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve
Ferrous Iron (ppm): 2.6 ppm | Decontamination Method: Alconox, DI, Methanol, DI rinses
Instrument Type & Number: YSI #3 | Water Disposal: On-Site System
Instrument Calibration Date & Time: 4-14-04 8:00 | Approx. Pump/Intake Depth: 119'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:
Casing Condition: OK / NA / Needs Repairs / Repaired | Lock Condition: OK / NA / Needs Repairs / Replaced
Cap Condition: OK / NA / Needs Repairs / Repaired | Inner Casing Condition: OK / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / Needs Repairs / Repaired | Monument Condition: OK / NA / Needs Repairs / Repaired
Recommended Well Repairs: None

SAMPLING INFORMATION / DATA

Date Sampled: 4-14-04 | QA/QC Sample (circle one): YES / NO | Water Chemistry Sample: YES / NO
Time Sampled: 13:00 | Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump
Chain-of-Custody #s: | Teflon Bailer Peristaltic Pump Other: Dual Valve

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
013-01	4	VOA	HCL	NCA		VOC's
	2	1 l	None	NCA		Herbicides
	1	110 ml	None	F&L		plate Count
	1	1 l	None	NCA		Alk, Anions
	1	250	Sulfuric	NCA		NH_3, TKN, TOC, COD

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO
Field Observations/Notes of Sampling Event: * PID not functioning 5/21/04

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-14-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP Spring 2004 GW Sampling Project #: 061M10703 01 T43 Monitoring/Sampling Date: 4-14-04

Monitoring Well ID: W-11-B | Field Personnel: J.R. BM.

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-14-04 | Additional Chain-of-Custody #s:

Time Sampled: 13:06

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
013-01	1	1 l	None	NCA		BOD
	1	250ml	NaOH+Z. Acc			Sulfide
	1	500ml	HNO_3			Cations
	2	1 l	HCL			NWTPH-DX
	4	VOA	HCL			Methane
	2	1 l	None	Triangle		Dioxins, Furans

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-14-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name:
Project #:
Monitoring/Sampling Date:

Monitoring Well ID: | Field Personnel:
Start Time: | Weather Conditions: | Approx. Air Temp (F):

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: In well Casing: | PID Calibration Standard:
%LEL Background: In well Casing: | PID Calibration Date:

Date/Time of Measurement: | Depth to Water Measuring Technique:
Depth Well Bottom (TOC - ft.): | Detection Method of Free Product:
Depth to Water Level (TOC - ft.):
Depth to Free Product (TOC - ft.):
Calculated Column Height (ft.):
Casing Diameter (in.):
Quantity of Free Product Collected (gal.):

Conversions Factors (casing dia. = gallons/linear ft.) Circle One

0.75" = 0.02	1" = 0.04	2" = 0.17	3" = 0.37
4" = 0.66	6" = 1.47	8" = 2.61	12" = 5.88

Three Well Purge Volumes (gallons) = 3 x _____ = _____

Method of Collecting Free Product:

Obsevation of sheen or LNAPL: | Observation of DNAPL:

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

Total Purged = | Purge Pumping Rate (approx. L/m): | Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other =
Ferrous Iron (ppm): | Decontamination Method:
Instrument Type & Number: | Water Disposal:
Instrument Calibration Date & Time: | Approx. Pump/Intake Depth:

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:
Casing Condition: OK / NA / Needs Repairs / Repaired | Lock Condition: OK / NA / Needs Repairs / Replaced
Cap Condition: OK / NA / Needs Repairs / Repaired | Inner Casing Condition: OK / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / Needs Repairs / Repaired | Monument Condition: OK / NA / Needs Repairs / Repaired
Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: | QA/QC Sample (circle one): YES / NO | Water Chemistry Sample: YES / NO
Time Sampled: | Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump
Chain-of-Custody #s: | Teflon Bailer Peristaltic Pump Other:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): | Sampler Signature: | Date Signed:

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP-Spring 2004 GW Sampling
Project #: 061M107030 T43
Monitoring/Sampling Date: 4/20/04

Monitoring Well ID: W-07-116
Field Personnel: J.R., B.M., J.R.

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4/20/04
Time Sampled: 10:15 / 11:15 Dup - 04 series
Additional Chain-of-Custody #s:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
024-06	4	VOAS	HCL	NCA		VOC's
	2	1 l	None	NCA		Herbicides
	2	1 l	None	Triangle		Dioxins/Furans
	24	250 ml	HNO_3	NCA		Total + Dissolved Metals
	2	1 l	None	NCA		Pesticides
	2	1 l	None	NCA		SVOC's
024-04	4	VOAS	HCL	NCA		VOC's
	2	1 l	None	NCA		Herbicides
	2	1 l	None	NCA		Phenols
	2	1 l	None	Triangle		Dioxins
	2	250 ml	HNO_3	NCA		Total Metals
	2	1 l	None	NCA		Pesticides
	2	1 l	None	NCA		SVOC's
	2	1 l	None	NCA		PAH's

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Jim Ruck
Sampler Signature:
Date Signed: 4-20-04

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amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP-Spring 2004 GW Sampling
Project #: 061M107038 T43
Monitoring/Sampling Date: 4/20/04

Monitoring Well ID: W-09-116
Field Personnel: J. Roth, B. McGillicuddy, J. Rock
Start Time: 9:40
Weather Conditions: Light Rain
Approx. Air Temp (F): 55°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: ~~0.2~~ 0.2
PID Calibration Standard: –
%LEL Background: – In well Casing: –
PID Calibration Date: –

Date/Time of Measurement: 4-20-04 / 9:40
Depth to Water Measuring Technique: Solinist
Depth Well Bottom (TOC - ft.): 116 –
Detection Method of Free Product: NA
Depth to Water Level (TOC - ft.): 18.60
Depth to Free Product (TOC - ft.): NA
Calculated Column Height (ft.):
Casing Diameter (in.): 2"
Quantity of Free Product Collected (gal.): Ø
Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: None
Observation of DNAPL: None

Conversions Factors (casing dia. = gallons/linear ft.) Circle One

0.75" = 0.02	1" = 0.04	2" = 0.17	3" = 0.37
4" = 0.66	6" = 1.47	8" = 2.61	12" = 5.88

Three Well Purge Volumes (gallons) = 3 x _____ =

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (~~mS~~) ms	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)	DTW
	.5 l	12.76	6.35	1774	Turbid	0.51	3.5	9:45	18.6
	2.5 l	12.91	6.31	1837	Clear	0.49	17.5	9:50	18.9
	4.5 l	13.28	6.29	1978		0.30	20.1	9:56	18.8
	6.0 l	13.26	6.29	1982		0.25	21.8	10:00	18.8
	7.5 l	13.27	6.27	1985		0.24	21.1	10:05	18.8
	8.5 l	13.26	6.29	1981	6.15	0.23	21.7	10:10	18.8

Total Purged = 8.5 l
Purge Pumping Rate (approx. L/m): .5 l/min
Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve
Ferrous Iron (ppm): 1.4 ppm
Decontamination Method: Alconox DI, Methanol, DI rinses
Instrument Type & Number: YSI #3
Water Disposal: On-Site Disposal
Instrument Calibration Date & Time: 4/20/04 845
Approx. Pump/Intake Depth: 113

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:
Casing Condition: OK / NA / Needs Repairs / Repaired
Lock Condition: OK / NA / Needs Repairs / Replaced
Cap Condition: OK / NA / Needs Repairs / Repaired
Inner Casing Condition: OK / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / Needs Repairs / Repaired
Monument Condition: OK / NA / Needs Repairs / Repaired
Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 4-20-04
QA/QC Sample (circle one): YES / NO
Water Chemistry Sample: YES / NO
Time Sampled: 10:15
Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump Teflon Bailer Peristaltic Pump Other: Dual Valve
Chain-of-Custody #s:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
024-01	8	VOAs	HCL	NCA		VOC's
	24	1 l	None	NCA		Herbicides
	4	1 l	None	Triangle		Dioxins/Furans
	2	500 ml	HNO_3	NCA		Total Metals + Cations
	2	500 ml	HNO_3	NCA		Dissolved Metals

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Jim Rock
Sampler Signature: [signature]
Date Signed: 4/24/04

vironmental, Inc.
WATER
ELD FORM

Project Name: RP - Spring 2004 GW Sampling
Project #: 06M 1070 0 043
Monitoring/Sampling Date: 4/20/04

rsonnel: J.R., B.M., J.R.

TA & WELL PURGING INFORMATION

ater H J.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

CONDITION

RMATION / DATA
dy #s:

Sample Transporter	Analytical Parameters
	Pesticides
	SVOC's
	Plate Count
	Alk, Anions
	NH_3, TKN, TOC, COD
	BOD
	Sulfide
	NwTPH-DX
	Methane
	VOC's
	Herbicides
	Dioxins/Furans
	Total & Dissolved metals
	Pesticides
	SVOC's

sheet for xtra sampling

NT
ided on this page is accurate.

Date Signed: 4-24-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP-Spring 2004 GW Sampling
Project #: 061M107030743
Monitoring/Sampling Date: 4-13-04

Monitoring Well ID: RP-07-119
Start Time: 11:00
Field Personnel: J. Fuosio, J. Roth, J. Rock, B. McGillicuddy
Weather Conditions: Sunny, Light SE wind Approx. Air Temp (F): 65°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.2 In well Casing: 0.2
%LEL Background: — In well Casing: —
PID Calibration Standard: ~
PID Calibration Date: ~
Date/Time of Measurement: 4-13-04 / 1100
Depth Well Bottom (TOC - ft.): 119
Depth to Water Level (TOC - ft.): 28.00
Depth to Free Product (TOC - ft.): NA
Calculated Column Height (ft.): 91'
Casing Diameter (in.): 2"
Quantity of Free Product Collected (gal.): Ø
Depth to Water Measuring Technique: Solinst
Detection Method of Free Product: NA
Conversions Factors (casing dia. = gallons/linear ft.) Circle One
0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Three Well Purge Volumes (gallons) = 3 x _____ = _____
Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: No
Observation of DNAPL: No

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity ~~(mS)~~ uS	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
	.5 l	14.75	6.69	1455	Turbid	1.41	-9.4	11:10
	1.5 l	14.42	6.59	1444	Clear	.53	-5.0	11:13
	4.0 l	14.29	6.57	1437		.33	-9.5	11:20
	6.5 l	14.33	6.57	1437		.29	-9.1	11:24
	7.5 l	14.32	6.56	1437	13.2	.27	-9.3	11:26

Total Purged = 7.5 l
Purge Pumping Rate (approx. L/m): .5 l/min
Well Yield: (High) / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve
Ferrous Iron (ppm): 1.37 ppm
Decontamination Method: Alcox, DI, Methanol, DI rinse
Instrument Type & Number: TSI #3
Water Disposal: On-site system
Instrument Calibration Date & Time: 4-13-04 800
Approx. Pump/Intake Depth: 117'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel (PVC) Other:
Casing Condition: (OK) / NA / Needs Repairs / Repaired
Lock Condition: (OK) / NA / Needs Repairs / Replaced
Cap Condition: (OK) / NA / Needs Repairs / Repaired
Inner Casing Condition: (OK) / NA / Needs Repairs / Repaired
Paint Condition: (OK) / NA / Needs Repairs / Repaired
Monument Condition: (OK) / NA / Needs Repairs / Repaired
Recommended Well Repairs: None

SAMPLING INFORMATION / DATA

Date Sampled: 4-13-04
QA/QC Sample (circle one): (YES) / NO
Water Chemistry Sample: (YES) / NO
Time Sampled: 11:35
Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump
Chain-of-Custody #s:
Teflon Bailer Peristaltic Pump Other: Dual Valve

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
007-01	4	voa	HCL	NCA		VOC's
	2	1 l	None	NCA		Herbicides
	2	1 l	None	Triangle		Dioxins
	4	VOAs	HCL	NCA		Methane
	2	1 l	HCL	NCA		NWTPH-Dx

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted (YES) NO

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock Sampler Signature: [signature] Date Signed: 4-13-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP 2004 Spring GW Sampling Project #: 06(M)07030 T43 Monitoring/Sampling Date: 4-13-04

Monitoring Well ID: RP-07-119 | Field Personnel: See Front Page

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-13-04 | Additional Chain-of-Custody #s:

Time Sampled:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
007-01	1	1 l	None	NCA		Alk, Anions
	1	250ml	Sulfuric	NCA		NH_3, TKN, TOC, COD
	1	1 l	None	NCA		BOD
	1	250ml	NaOH + Zn acetate			Sulfide
	1	500ml	HNO_3	NCA		Cations, Total Metals
	1	500ml	HNO_3	NCA		Dissolved Metals
	1	125ml	None	FQL		Plate Count
	2	1 l	None	NCA		PAH's
007-03	1	VOA	HCL	NCA		VOC's

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rocek | Sampler Signature: [signature] | Date Signed: 4-13-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP - Spring 2004 GW Sampling Project #: 06M107030 T43 Monitoring/Sampling Date: 4-13-04

Monitoring Well ID: RP-07-84	Field Personnel: J. Fazzio, J. Roth, J. Rock, B. McGillicuddy
Start Time: 1000	Weather Conditions: Partly Cloudy, Light wind Approx. Air Temp (F): 65°F

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: 0.8	PID Calibration Standard: –
%LEL Background: – In well Casing: –	PID Calibration Date: –
Date/Time of Measurement: 4/13/04 / 1002	Depth to Water Measuring Technique: Solinst
Depth Well Bottom (TOC - ft.): 83.41	Detection Method of Free Product: NA
Depth to Water Level (TOC - ft.): 28.52	Conversions Factors (casing dia. = gallons/linear ft.) Circle One
Depth to Free Product (TOC - ft.): –	0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
Calculated Column Height (ft.): –	4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Casing Diameter (in.): 2"	Three Well Purge Volumes (gallons) = 3 x =
Quantity of Free Product Collected (gal.): NA	Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: ND	Observation of DNAPL: ND

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity µS (~~mS~~)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)	DT.
	0.5	14.24	6.53	2632	–	1.75	-18.4	1005	28.
	2.0	14.23	6.48	2644	–	0.23	-24.4	1008	28.3
	3.5	14.11	6.46	2638	–	0.16	-26.9	1011	28.4
	5.5	14.10	6.44	2637	–	0.17	-24.4	1015	
					32.2				

Total Purged = 5.5	Purge Pumping Rate (approx. L/m): ~~0.34 L/m~~ 0.5 L/min Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve Pump	
Ferrous Iron (ppm): 3.6 ppm	Decontamination Method: Alconox, DI rinse, Methanol, DI rinse
Instrument Type & Number: YSI #3	Water Disposal: RP WTP
Instrument Calibration Date & Time: 4/13/04 800	Approx. Pump/Intake Depth: ~81.5'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel (PVC) Other:	
Casing Condition: (OK) / NA / Needs Repairs / Repaired	Lock Condition: (OK) / NA / Needs Repairs / Replaced
Cap Condition: (OK) / NA / Needs Repairs / Repaired	Inner Casing Condition: OK / (NA) / Needs Repairs / Repaired
Paint Condition: OK / (NA) / Needs Repairs / Repaired	Monument Condition: (OK) NA / Needs Repairs / Repaired
Recommended Well Repairs: None	

SAMPLING INFORMATION / DATA

Date Sampled: 4/13/04	QA/QC Sample (circle one): YES (NO)	Water Chemistry Sample: (YES) / NO
Time Sampled: 1020	Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump	
Chain-of-Custody #s:	Teflon Bailer Peristaltic Pump Other: Dual Valve Pump	

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
006-01	3	VOA	HCl	NCA		VOCs
	2	1l	None	NCA		Herbicides
	2	1l	None	Triangle		Dioxins
	4	VOAs	HCl	NCA		Methane
	2	1l	HCl	NCA		NW TPH-DX

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: (YES) / NO

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Fazzio Sampler Signature: Joe Fazzio Date Signed: 4/13/04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP - 2004 GW Sampling Project #: 06(M107030 T43 Monitoring/Sampling Date: 4/13/04

Monitoring Well ID: RP-07-84 | Field Personnel: JF, JR, JR, BM

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4/13/04 | Additional Chain-of-Custody #s:

Time Sampled: 1020

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
006-01	1	1l	None	NCA		Alk, Anions
	1	250ml	Sulfuric ~~None~~ MF	NCA		NH_3, TKN, TOC, COD
	1	1l	~~Sulfuric~~ None	NCA		BOD
	1	250ml	~~Sulfuric~~ Sulfide NaOH + Zn acetate			Sulfide
	1	500ml	Nitric acid	NCA		Cations Total Metals
	1	500ml	Nitric acid	NCA		Dissolved Metals
	1	125ml		FQL		Plate Count
	2	1l	None	NCA		PAHs

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Fazzio | Sampler Signature: Joe Fazzio | Date Signed: 4/13/04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP - Spring 2004 GW Sampling
Project #: 06IM107030 T 47
Monitoring/Sampling Date: 4/13/04

Monitoring Well ID: RP-07-55 | Field Personnel: J. Fassio, J. Rock, J. Roth, B. McGillicuddy
Start Time: 920 | Weather Conditions: Partly | Approx. Air Temp (F): 62°F

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.2 In well Casing: 0.8 | PID Calibration Standard: –
%LEL Background: – In well Casing: – | PID Calibration Date: –
Date/Time of Measurement: 4/13/04 / 930 | Depth to Water Measuring Technique: Solinst
Depth Well Bottom (TOC - ft.): 54.44 | Detection Method of Free Product: NA
Depth to Water Level (TOC - ft.): 28.21 | Conversions Factors (casing dia. = gallons/linear ft.) Circle One
Depth to Free Product (TOC - ft.): NA | 0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
Calculated Column Height (ft.): – | 4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Casing Diameter (in.): 2" | Three Well Purge Volumes (gallons) = 3 x _____ = _____
Quantity of Free Product Collected (gal.): – | Method of Collecting Free Product: –
Obsevation of sheen or LNAPL: None | Observation of DNAPL: None

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity µS (~~mS~~)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)	DTW
	0.5	14.36	6.62	842	–	3.77	-59.1	931	29.7
	1.1	14.38	6.50	967	–	0.54	-66.3	934	29.4
	1.9	14.41	6.48	984	–	0.54	-61.5	938	29.1
	2.9	14.38	6.46	999	–	0.26	-66.2	943	29.1
	3.5	14.40	6.46	1008	–	0.19	-62.7	946	29.5
	4.1	14.38	6.46	1012	–	0.16	-61.6	949	29.5
					31.4				

Total Purged = 4.1 | Purge Pumping Rate (approx. L/m): 0.2 L/m | Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve Pump
Ferrous Iron (ppm): 5.2 ppm | Decontamination Method: Alconox, DI, methanol, final DI rinse
Instrument Type & Number: YSI #3 | Water Disposal: RP WTP
Instrument Calibration Date & Time: 4/13/04 | Approx. Pump/Intake Depth: 52.5'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:
Casing Condition: OK / NA / Needs Repairs / Repaired | Lock Condition: OK / NA / Needs Repairs / Replaced
Cap Condition: OK / NA / Needs Repairs / Repaired | Inner Casing Condition: OK / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / Needs Repairs / Repaired | Monument Condition: OK / NA / Needs Repairs / Repaired
Recommended Well Repairs: None

SAMPLING INFORMATION / DATA

Date Sampled: 4/13/04 | QA/QC Sample (circle one): YES / NO | Water Chemistry Sample: YES / NO
Time Sampled: 955 | Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump
Chain-of-Custody #s: | Teflon Bailer Peristaltic Pump Other: Dual Valve Pump

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
005-01	2	1l	None			PAH

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO
Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Fassio | Sampler Signature: Joe Fassio | Date Signed: 4/13/04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: Project #: Monitoring/Sampling Date:

Monitoring Well ID: | Field Personnel:

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: | Additional Chain-of-Custody #s:

Time Sampled:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): | Sampler Signature: | Date Signed:

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP Spring 2004 GW Sampling
Project #: 061M107030 T43
Monitoring/Sampling Date: 4/13/04

Monitoring Well ID: RP-07-30
Start Time: 845
Field Personnel: J. Fassio, J. Rock, J. Roth, B. McGillicuddy
Weather Conditions: Partly Cloudy, Light, NW Approx. Air Temp (F): 62°F

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: 0.5
%LEL Background: – In well Casing: –
PID Calibration Standard: –
PID Calibration Date:

Date/Time of Measurement: 4/13/04 / 850
Depth Well Bottom (TOC - ft.):
Depth to Water Level (TOC - ft.): 24.72
Depth to Free Product (TOC - ft.): NA
Calculated Column Height (ft.): NA
Casing Diameter (in.): 2"
Quantity of Free Product Collected (gal.): –

Depth to Water Measuring Technique: Solinst
Detection Method of Free Product: NA
Conversions Factors (casing dia. = gallons/linear ft.) Circle One
0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Three Well Purge Volumes (gallons) = 3 x _____ = _____
Method of Collecting Free Product: –

Obsevation of sheen or LNAPL: None
Observation of DNAPL: None

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity µ(mS)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)	DTW
	0.5	14.63	6.43	604		1.58	-92.0	8:53	24.7
	2.5	14.57	6.41	689		0.66	-111.3	8:57	–
	3.3	14.39	6.40	694		0.61	-107.3	9:01	–
	3.9	14.35	6.39	663		0.42	-96.7	9:04	–
	4.5	14.35	6.39	656		0.39	-91.1	9:07	–
	5.1	14.35	6.39	651	12.6	0.34	-91.6	9:16	–

Total Purged = 5.1
Purge Pumping Rate (approx. L/m): 0.5 L/m
Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve Pump

Ferrous Iron (ppm): 3.4 ppm
Decontamination Method: Alconox, DI rinse, methanol, DI rinse
Instrument Type & Number: YSI #3
Water Disposal: RP water Treatment plant
Instrument Calibration Date & Time: 4/13/04
Approx. Pump/Intake Depth: ~25'

↑ Drawdown to top of Pump

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel (PVC) Other:
Casing Condition: (OK) / NA / Needs Repairs / Repaired
Lock Condition: (OK) / NA / Needs Repairs / Replaced
Cap Condition: (OK) / NA / Needs Repairs / Repaired
Inner Casing Condition: OK / (NA) / Needs Repairs / Repaired
Paint Condition: OK (NA) Needs Repairs / Repaired
Monument Condition: (OK) / NA / Needs Repairs / Repaired
Recommended Well Repairs: None

SAMPLING INFORMATION / DATA

Date Sampled: 4/13/04
QA/QC Sample (circle one): YES (NO)
Water Chemistry Sample: (YES) / NO
Time Sampled:
Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump Teflon Bailer Peristaltic Pump Other: Dual-Valve Pump
Chain-of-Custody #s:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
004-01	2	1l	None	NCA		PAHs

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: (YES) / NO

Field Observations/Notes of Sampling Event: Pump well dry at 0.5L/min – reduce pump rate to 0.2L/min

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Fassio Sampler Signature: [signature] Date Signed: 4/13/04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: Project #: Monitoring/Sampling Date:

Monitoring Well ID: | Field Personnel:

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: | Additional Chain-of-Custody #s:

Time Sampled:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): | Sampler Signature: | Date Signed:

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP-Spring GW Sampling 2004
Project #: 06/M107030 T43
Monitoring/Sampling Date: 4-15-04

Monitoring Well ID: RP-06-87 | Field Personnel: J.R. B.M.
Start Time: 13:55 | Weather Conditions: Cloudy | Approx. Air Temp (F): 55°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: 0.1 | PID Calibration Standard: –
%LEL Background: – In well Casing: – | PID Calibration Date: –
Date/Time of Measurement: 4-15-04 / 14:00 | Depth to Water Measuring Technique: Sallight
Depth Well Bottom (TOC - ft.): 87 | Detection Method of Free Product: NA
Depth to Water Level (TOC - ft.): 26.35
Depth to Free Product (TOC - ft.): NA
Calculated Column Height (ft.): –
Casing Diameter (in.): 2"
Quantity of Free Product Collected (gal.): Ø | Method of Collecting Free Product: NA

Conversions Factors (casing dia. = gallons/linear ft.) Circle One
0.75" = 0.02 | 1" = 0.04 | 2" = 0.17 | 3" = 0.37
4" = 0.66 | 6" = 1.47 | 8" = 2.61 | 12" = 5.88
Three Well Purge Volumes (gallons) = 3 x _____ = _____

Obsevation of sheen or LNAPL: NA | Observation of DNAPL: NA

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity µS (~~mS~~)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
	.5 l	12.48	6.55	3399	Clear	1.79	-81.8	14:00
	2.0 l	12.66	6.55	3628	↓	.54	-78.0	14:05
	4.5 l	12.47	6.55	3629	↓	.53	-76.2	14:10
	6.5 l	12.48	6.55	3628	3.44	.54	-75.4	14:17

DTW 26.

Total Purged = 6.5 l | Purge Pumping Rate (approx. L/m): .5 l/m | Well Yield: (High) / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve
Ferrous Iron (ppm): 9.2 mg/l | Decontamination Method: Alconox, DI, Methanol, DI rinses
Instrument Type & Number: YSI #3 | Water Disposal: On-Site System
Instrument Calibration Date & Time: 4-15-04 830 | Approx. Pump/Intake Depth: 84'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel (PVC) Other:
Casing Condition: (OK) / NA / Needs Repairs / Repaired | Lock Condition: (OK) / NA / Needs Repairs / Replaced
Cap Condition: (OK) / NA / Needs Repairs / Repaired | Inner Casing Condition: (OK) / NA / Needs Repairs / Repaired
Paint Condition: (OK) / NA / Needs Repairs / Repaired | Monument Condition: (OK) / NA / Needs Repairs / Repaired
Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 4-15-04 | QA/QC Sample (circle one): (YES) / NO | Water Chemistry Sample: (YES) / NO
Time Sampled: 14:25 | Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump
Chain-of-Custody #s: | Teflon Bailer Peristaltic Pump Other: Dual Valve

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
019-01	4	voa	HCL	NCA		VOC's
	2	1 l	None	NCA		Herbicides
	1	500 ml	HNO_3	NCA		Total Metals & Cations
	1	500 ml	HNO_3	NCA		Dissolved Metals
	1	100 ml	None	NCA		Plate Count

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: (YES) NO
Field Observations/Notes of Sampling Event: Rinsate and PE sample submit with primary

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-15-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP-Spring 2004 GW Sampling
Project #: 06/M/07030 T43
Monitoring/Sampling Date: 4-15-04

Monitoring Well ID: RP-06-87
Field Personnel: J.R. B.M.

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-15-04
Time Sampled: 14:25
Additional Chain-of-Custody #s:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
019-01	1	1	None	NCA		Alk, Anions
	1	250ml	Sulfuric	NCA		NH_3, TKN, COD, TOC
	1	1	None	NCA		BOD
	1	250ml	NaOH+ZnAce	NCA		Sulfide
	2	1 l	HCL	NCA		Nutr+H-DX
	4	VOA	HCL	NCA		Methane
019-04	4	VOAS	HCL	NCA		VOC's
	2	1 l	None	NCA		PAH
	2	1 l	None	NCA		Herbicides
	1	500ml	HNO_3	NCA		Total Metals
	2	1 l	None	Triangle		Dioxins
019-05	2	VOA				VOCs
	2	1 l				Herb
	2	1 l				Dioxin
	2	1 l				Phenols
	1	500ml				metals

PE sample

Field Observations/Notes of Sampling Event: 019-5 - 2-1l PAHs and 2-1l-Pesticides

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock
Sampler Signature:
Date Signed: 4-15-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP Spring GW Sampling 2004
Project #: 06/M/07030 T43
Monitoring/Sampling Date: 4/21/04

Monitoring Well ID: RP-04-41 | Field Personnel: JR BM
Start Time: 13:45 | Weather Conditions: Sunny, Warm | Approx. Air Temp (F): 65°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.4 In well Casing: 274 | PID Calibration Standard: –
%LEL Background: – In well Casing: – | PID Calibration Date: –
Date/Time of Measurement: 4-21-04 13:45 | Depth to Water Measuring Technique: Solinist
Depth Well Bottom (TOC - ft.): 41' | Detection Method of Free Product: –
Depth to Water Level (TOC - ft.): 8.10
Depth to Free Product (TOC - ft.): 8.10
Calculated Column Height (ft.):
Casing Diameter (in.): 2"
Quantity of Free Product Collected (gal.): 300mls

Conversions Factors (casing dia. = gallons/linear ft.) Circle One
0.75" = 0.02 | 1" = 0.04 | 2" = 0.17 | 3" = 0.37
4" = 0.66 | 6" = 1.47 | 8" = 2.61 | 12" = 5.88
Three Well Purge Volumes (gallons) = 3 x _____ = _____
Method of Collecting Free Product: –

Obsevation of sheen or LNAPL: Yes | Observation of DNAPL: Yes

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
	–	Parameters not collected due to presence of DNAPL.						
	–	Did not want to compromise YSI						

Total Purged = 5 l | Purge Pumping Rate (approx. L/m): .500 l/min | Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve
Ferrous Iron (ppm): Not Taken, DNAPL present | Decontamination Method: Alcnox, DI, Methac, DI, Hexane Rinses
Instrument Type & Number: YSI #3 | Water Disposal: Bucket stored in Haz waste building
Instrument Calibration Date & Time: 4/21/04 830 | Approx. Pump/Intake Depth: 38'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:
Casing Condition: OK / NA / Needs Repairs / Repaired | Lock Condition: OK / NA / Needs Repairs / Replaced
Cap Condition: OK / NA / Needs Repairs / Repaired | Inner Casing Condition: OK / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / Needs Repairs / Repaired | Monument Condition: OK / NA / Needs Repairs / Repaired
Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 4-21-04 | QA/QC Sample (circle one): YES NO | Water Chemistry Sample: YES / NO
Time Sampled: 1400 | Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump
Chain-of-Custody #s: | Teflon Bailer Peristaltic Pump Other Dual Valve

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
029-01	4	40A	HCL	NCA		VOC's
	2	1l	None	NCA		Herbicides
	2	1l	None	Triangle		Dioxins/Furans
	2	250	HNO3	NCA		Total Metals + Cations
	2	250	HNO3	NCA		Dissolved Metals

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO

Field Observations/Notes of Sampling Event: B. McGillicuddy noted DNAPL blebs in each of the sample container - not a measurable thickness noted. J. Fussi 5/24/04

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Jim Rock | Sampler Signature: [signature] | Date Signed: 4/21/04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP Spring 2004 GW Sampling Project #: 06/M107030 T43 Monitoring/Sampling Date: 4/21/04

Monitoring Well ID: RP-04-41 | Field Personnel: JR, BM

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-21-04 | Additional Chain-of-Custody #s:

Time Sampled: 1400

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
029-01	2	l	None	NCA		Pesticides
	2	l	None	NCA		SVOC's
	1	110ml	None	FQL		Plate Count
	1	l	None	NCA		Alk, Anions
	1	250	Sulfuric	↓		NH_3, TKN, TOC, COD
	1	l	None			BOD
	1	250	NaOH+ZnAce			Sulfide
	2	l	HCl			NWTPH-Dx
	4	VOA	HCl			Methane

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rocle | Sampler Signature: [signature] | Date Signed: 4-21-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP-Spring 2004 GW Sampling
Project #: 061M107030 J43
Monitoring/Sampling Date: 4-21-04

Monitoring Well ID: RP-04-16 | Field Personnel: JR, BM
Start Time: 13:15 | Weather Conditions: Partly Cloudy | Approx. Air Temp (F): 60°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: 1.6 | PID Calibration Standard: –
%LEL Background: – In well Casing: – | PID Calibration Date: –

Date/Time of Measurement: 4-21-04 / | Depth to Water Measuring Technique: Solinist
Depth Well Bottom (TOC - ft.): 16' | Detection Method of Free Product:
Depth to Water Level (TOC - ft.): 10.19 | Conversions Factors (casing dia. = gallons/linear ft.) Circle One
Depth to Free Product (TOC - ft.): NA | 0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
Calculated Column Height (ft.): – | 4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Casing Diameter (in.): 2" | Three Well Purge Volumes (gallons) = 3 x _____ = _____
Quantity of Free Product Collected (gal.): 0 | Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: No | Observation of DNAPL: No

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (~~mS~~ µS)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
	.5l	10.65	6.45	527	Clear	1.60	61.6	13:20
	2.0l	10.43	6.55	515	↓	.65	-63.3	13:25
	3.5l	10.42	6.55	514		.63	-63.2	13:30
	5.0l	10.43	6.54	518	2.68	.57	-63.4	13:35

DTW 10.1'

Total Purged = 5.0l | Purge Pumping Rate (approx. L/m): .35 l/min | Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other =
Ferrous Iron (ppm): 3.2 | Decontamination Method: ~~Alconox~~, Dirrine, methanol, DI rinse ~~None~~, disposable tubing
Instrument Type & Number: TSC # 3 | Water Disposal: On-Site Treatment system
Instrument Calibration Date & Time: 4-21-04 | Approx. Pump/Intake Depth: 14'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:
Casing Condition: OK / NA / Needs Repairs / Repaired | Lock Condition: OK / NA / Needs Repairs / Replaced
Cap Condition: OK / NA / Needs Repairs / Repaired | Inner Casing Condition: OK / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / Needs Repairs / Repaired | Monument Condition: OK / NA / Needs Repairs / Repaired
Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 4-21-04 | QA/QC Sample (circle one): YES NO | Water Chemistry Sample: YES / NO
Time Sampled: 13:40 | Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump
Chain-of-Custody #s: | Teflon Bailer Peristaltic Pump Other:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
028-01	4	VOA	HCL	NCA		VOC's
	2	1l	None	NCA		Herbicides
	2	1l	None	Triangle		Dioxins/Furans
	2	250	HNO_3	NCA		Total Metals + Cations
	2	250	~~HNO_3~~	NCA		Dissolved Metals

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-21-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP Spring 2004 GW Sampling Project #: 06IM107030 T43 Monitoring/Sampling Date: 4/21/04

Monitoring Well ID: RP-04-16 | Field Personnel: JR BM

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-21-04 | Additional Chain-of-Custody #s:

Time Sampled: 13:40

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
025-01	2	l	None	NCA		Pesticides
	2	l	None	NCA		SVOC's
	1	110ml	None	FOL		Plate Count
	1	l	None	NCA		Alk, Anions
	1	250	Sulfuric	NCA		NH_3, TKN, TOC, COD
	1	l	None	NCA		BOD
	1	250	NaOH+ZnAc	NCA		Sulfide
	2	l	HCL	NCA		NWTPH-DX
	4	VOA	HCL	NCA		Methane

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rook | Sampler Signature: [signature] | Date Signed: 4-21-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP Spring 2004 GW Sampling
Project #: 061M107030 T43
Monitoring/Sampling Date: 4/19/04

Monitoring Well ID: RP-03-B2R | Field Personnel: J. Roth, B McCaillicaddy, J. Rock
Start Time: 10:40 | Weather Conditions: Light Rain | Approx. Air Temp (F): 55°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: 0.2 | PID Calibration Standard: —
%LEL Background: — In well Casing: — | PID Calibration Date: —

Date/Time of Measurement: 4/19/04 10:40 | Depth to Water Measuring Technique: Solinst
Depth Well Bottom (TOC - ft.): 52'
Depth to Water Level (TOC - ft.): 17.47
Depth to Free Product (TOC - ft.): NA
Calculated Column Height (ft.):
Casing Diameter (in.): 2"
Quantity of Free Product Collected (gal.): Ø

Detection Method of Free Product: —
Conversions Factors (casing dia. = gallons/linear ft.) Circle One
0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Three Well Purge Volumes (gallons) = 3 x _____ = _____
Method of Collecting Free Product: NA

Obsevation of sheen or LNAPL: ~~None~~ Sheen 3/21/04 | Observation of DNAPL: None

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (~~mS~~ uS)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)	DTW
	.5 l	12.36	6.24	824	Clear	.90	24.8	10:45	17.5
	2.5 l	12.34	6.24	832	↓	.27	37.9	10:50	17.5
	4.5 l	12.32	6.25	824	↓	.35	43.2	10:55	17.5
	6.5 l	12.33	6.25	825	3.71	.18	44.1	11:00	17.5
	~~7.5 l~~								

Total Purged = 6.5 l | Purge Pumping Rate (approx. L/m): .5 l/min | Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve
Ferrous Iron (ppm): .6 mg/l | Decontamination Method: Alconox DI Methanol DI Rinses
Instrument Type & Number: YSI #3 | Water Disposal: On-Site System Treatment
Instrument Calibration Date & Time: 4/19/04 930 | Approx. Pump/Intake Depth: 50'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:
Casing Condition: OK / NA / Needs Repairs / Repaired | Lock Condition: OK / NA / Needs Repairs / Replaced
Cap Condition: OK / NA / Needs Repairs / Repaired | Inner Casing Condition: OK / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / Needs Repairs / Repaired | Monument Condition: OK / NA / Needs Repairs / Repaired
Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 4/19/04 | QA/QC Sample (circle one): YES / NO | Water Chemistry Sample: YES / NO
Time Sampled: 11:00 | Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump
Chain-of-Custody #s: | Teflon Bailer Peristaltic Pump Other: Dual Valve

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
021-01	4	VOAs	HCL	NCA		VOC's
	2	1 l	None	NCA		Herbicides
	2	1 l	None	NCA		Dioxins/Furans
	~~2~~ 4	1 l	None	NCA		PAH's
021-02	2	1 l	None	NCA		PAH's

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO
Field Observations/Notes of Sampling Event: Sheen / Odor on purge water

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4/19/04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP-Spring 2004 GW Sampling
Project #: 0G1M10703 0 J43
Monitoring/Sampling Date: 4/19/04

Monitoring Well ID: RP-03-52R
Field Personnel: S.R., B.M., JR

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4/19/04
Time Sampled: 11:00
Additional Chain-of-Custody #s:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
021-06	2	1 L	None	NCA		PAH's

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock
Sampler Signature:
Date Signed: 4/19/04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RI Spring 2004 GW Sampling
Project #: 0 6 M 10 4 0 3 0 T43 0
Monitoring/Sampling Date: 4/19/04

Monitoring Well ID: RP-03-30R | Field Personnel: J. Rock, J. Ruth, R. McGillicuddy
Start Time: 9:55 | Weather Conditions: Light Rain | Approx. Air Temp (F): 55°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: 0.0 | PID Calibration Standard: -
%LEL Background: - In well Casing: - | PID Calibration Date:

Date/Time of Measurement: 4-19-04 19:55 | Depth to Water Measuring Technique: Solinst
Depth Well Bottom (TOC - ft.): 30' | Detection Method of Free Product: NA
Depth to Water Level (TOC - ft.): 18.21 | Conversions Factors (casing dia. = gallons/linear ft.) Circle One
Depth to Free Product (TOC - ft.): NA | 0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
Calculated Column Height (ft.): — | 4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Casing Diameter (in.): 2" | Three Well Purge Volumes (gallons) = 3 x =
Quantity of Free Product Collected (gal.): Ø | Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: None | Observation of DNAPL: None

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (mS)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
	.5 l	12.09	6.64	479	Clear	.80	-114.2	10:00
	2.5 l	12.11	6.68	466	↓	.55	-113.5	10:04
	4.5 l	12.14	6.67	467		.43	-100.5	10:08
	6.5 l	12.16	6.67	468	46.2	.33	-105.4	10:12

Total Purged = 6.5 l | Purge Pumping Rate (approx. L/m): .5 l/min | Well Yield: (High) / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve
Ferrous Iron (ppm): 4.0 mg/l | Decontamination Method: Alconox, DI, Methanol, DI Rinse
Instrument Type & Number: YSI #3 | Water Disposal: On Site System Treatment
Instrument Calibration Date & Time: 4-19-04 930 | Approx. Pump/Intake Depth: 20'

WELL CONDITION

Casing (circle one): (Stainless Steel) Carbon Steel PVC Other:
Casing Condition: (OK) / NA / Needs Repairs / Repaired | Lock Condition: (OK) / NA / Needs Repairs / Replaced
Cap Condition: (OK) / NA / Needs Repairs / Repaired | Inner Casing Condition: (OK) / NA / Needs Repairs / Repaired
Paint Condition: (OK) / NA / Needs Repairs / Repaired | Monument Condition: (OK) / NA / Needs Repairs / Repaired
Recommended Well Repairs: None

SAMPLING INFORMATION / DATA

Date Sampled: 4/19/04 | QA/QC Sample (circle one): YES (NO) | Water Chemistry Sample: (YES) / NO
Time Sampled: 10:25 | Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump
Chain-of-Custody #s: | Teflon Bailer Peristaltic Pump Other: Dual Valve

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
RP-01	4	VOA	HCL	NCA		VOCs
						~~Herbicides~~
	2	1 l	None	Triangle		Dioxins / Furans
	2	1 l	None	~~DANCA~~		PAH's

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: (YES) / NO
Field Observations/Notes of Sampling Event: Sheen / Odor in purge water

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-19-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: Project #: Monitoring/Sampling Date:

Monitoring Well ID: | Field Personnel:

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: | Additional Chain-of-Custody #s:

Time Sampled:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): | Sampler Signature: | Date Signed:

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP
Project #: 061M107030T43
Monitoring/Sampling Date: 4/12/2004

Monitoring Well ID: RP-02-66
Field Personnel: J. Fassio, J. Rock, B.M., J.R., L.G.
Start Time: 1056
Weather Conditions: Partly Sunny
Approx. Air Temp (F): ~61°F

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: 0.0
PID Calibration Standard: Isobutylene
%LEL Background: NA In well Casing: NA
PID Calibration Date: 4/12/2004
Date/Time of Measurement: 4/12/2004 1047
Depth to Water Measuring Technique: Solinst
Depth Well Bottom (TOC - ft.): 68.35
Detection Method of Free Product: NA
Depth to Water Level (TOC - ft.): 31.15
Depth to Free Product (TOC - ft.): NA
Calculated Column Height (ft.): 37.20
Casing Diameter (in.): 2
Quantity of Free Product Collected (gal.): NONE
Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: NO
Observation of DNAPL: NO

Conversions Factors (casing dia. = gallons/linear ft.) Circle One

0.75" = 0.02	1" = 0.04	2" = 0.17	3" = 0.37
4" = 0.66	6" = 1.47	8" = 2.61	12" = 5.88

Three Well Purge Volumes (gallons) = 3 x _____ = _____

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity µS (~~mS~~)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
	1 l	14.80	5.63	347	clear	.65	134.6	11:00
	3 l	14.52	5.62	346	↓	.31	125.6	11:04
	4.5 l	14.51	5.62	347		.24	120.5	11:07
	6.0 l	14.52	5.62	345	1.12	.20	117.3	11:10

320

Total Purged = 6 l
Purge Pumping Rate (approx. L/m): .5
Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve
Ferrous Iron (ppm): 1.0 ppm
Decontamination Method: Alconox, DI, Methanol, DI rinses
Instrument Type & Number: YSI #3
Water Disposal: On site system
Instrument Calibration Date & Time: 4/12/04 10:00
Approx. Pump/Intake Depth: 66'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:
Casing Condition: OK / NA / Needs Repairs / Repaired
Lock Condition: OK / NA / Needs Repairs / Replaced
Cap Condition: OK / NA / Needs Repairs / Repaired
Inner Casing Condition: OK / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / Needs Repairs / Repaired
Monument Condition: OK / NA / Needs Repairs / Repaired
Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 4/12/04
QA/QC Sample (circle one): YES / NO
Water Chemistry Sample: YES / NO
Time Sampled: 11:15
Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump Teflon Bailer Peristaltic Pump Other: Dual Valve
Chain-of-Custody #s: 1299, 1428, Food Lab

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
001-01	4	voa	HCL	NCA	Courier	VOCs by 8260B
	2	1 l	None	↓	↓	Herbicides by 8151A
	2	1 l	None	Triangle		Dioxins/Furans 8290
	~~2~~	~~500 ml~~	~~HNO3~~ HNO3	↓		~~Total & Dissolved Metals~~ Total Bio Metals
	~~2~~ 1	110 ml	None	Food Lab	↓	Total Heterotrophic Plate Count

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO

Field Observations/Notes of Sampling Event: See back side of form for additional sample bottle info

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock
Sampler Signature: [signature]
Date Signed: 4-12-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RPAC Project #: 061M10703043 Monitoring/Sampling Date: 4/12/04

Monitoring Well ID: RP-02-66 | Field Personnel: See front page

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-12-04 | Additional Chain-of-Custody #s:

Time Sampled: 11:15

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
001-01	1	1 l	None	NCA	Courier	Alkalinity, Cl⁻, NO_3, NO_2, SO_4, PO_4
	~~2~~ 1	~~250ml~~ 1	Sulfuric	NCA		NH_3, TOC, COD
	1	1 l	None	NCA		BOD
	1	250	NaOH	NCA		Sulfide
	~~4~~	~~500ml~~	~~HNO_3~~	~~NCA~~		~~Cations~~ Included w/Total Metals
	2	1 l	HCL	NCA		NWTPH-DX
	4	VOA	HCL	NCA		Methane
004-03	1	VOA	HCl	NCA		VOCs - Trip Blank

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed 4-12-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP-Spring 2004 GW Sampling
Project #: 06IM07030-T43
Monitoring/Sampling Date: 4-15-04

Monitoring Well ID: RP-01-65 | Field Personnel: J. Rock, B. McGilliguddy, J. Roth
Start Time: 11:45 | Weather Conditions: Cloudy, Cool | Approx. Air Temp (F): 50°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: 0.0 | PID Calibration Standard: –
%LEL Background: – In well Casing: | PID Calibration Date: –
Date/Time of Measurement: 4-15-04 / 11:50 | Depth to Water Measuring Technique: Solinst
Depth Well Bottom (TOC - ft.): 63' | Detection Method of Free Product: NA
Depth to Water Level (TOC - ft.): 26.00 | Conversions Factors (casing dia. = gallons/linear ft.) Circle One
Depth to Free Product (TOC - ft.): NA | 0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
Calculated Column Height (ft.): | 4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Casing Diameter (in.): 2" | Three Well Purge Volumes (gallons) = 3 x ____ =
Quantity of Free Product Collected (gal.): Ø | Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: None | Observation of DNAPL: None

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity µS (mS)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)	DTW
	.5 l	12.18	6.14	4880	Clear	1.32	10.6	11:55	26.1
	2.0 l	12.15	6.14	4837		.34	10.9	12:00	26.1
	3.0 l	12.16	6.16	4934		.22	28.5	12:05	26.1
	4.0 l	12.17	6.15	4937		.22	29.4	12:08	
	7.0 l	12.18	6.17	4936	.80	.22	29.7	12:14	

Total Purged = 7.0 l | Purge Pumping Rate (approx. L/m): .400 l/min | Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve
Ferrous Iron (ppm): Ø | Decontamination Method: Alconox, DI, Methanol, DI Rinses
Instrument Type & Number: TS-H3 | Water Disposal: On-Site System
Instrument Calibration Date & Time: 4-15-04 830 | Approx. Pump/Intake Depth: 63'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:
Casing Condition: OK / NA / Needs Repairs / Repaired | Lock Condition: OK / NA / Needs Repairs / Replaced
Cap Condition: OK / NA / Needs Repairs / Repaired | Inner Casing Condition: OK / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / Needs Repairs / Repaired | Monument Condition: OK / NA / Needs Repairs / Repaired
Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 4-15-04 | QA/QC Sample (circle one): YES NO | Water Chemistry Sample: YES / NO
Time Sampled: 12:15 | Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump
Chain-of-Custody #s: | Teflon Bailer Peristaltic Pump Other Dual Valve

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
GW8-01	4	VOA	HCL	NCA		VOC's
	2	1 l	None	NCA		Herbicides
	2	1 l	None	Inlangle		Dioxins / Furans
	1	100 ml	None	FQL		Plate Count
	1	1 l	None	NCA		BOD

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO
Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-15-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP-Spring 2004 GW Sampling Project #: 061M10030 T43 Monitoring/Sampling Date: 4-15-04

Monitoring Well ID: RP-01-65 | Field Personnel: JR, JR, BM

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-15-04 | Additional Chain-of-Custody #s:

Time Sampled: 12:15

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
01B-01	1	250	Sulfuric	NCA		NH_3, TKN, TOC, COD
	1	1 l	None	NCA		BOD
	1	250	NaOH+ZnAce	NCA		Sulfide
	1	500	HNO_3	NCA		Cations
	2	1 l	HCL	NCA		NWTPH-Dx
	4	VOAS	HCL	NCA		Methane

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-15-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP-Spring 2004 GW Sampling
Project #: 061M107030 T43
Monitoring/Sampling Date: 4-15-04

Monitoring Well ID: RP-01-51
Field Personnel: J. Rock, B. McGillicuddy
Start Time: 10:15
Weather Conditions: Cloudy, Light Rain
Approx. Air Temp (F): 55°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: 0.0
PID Calibration Standard: –
%LEL Background: In well Casing: –
PID Calibration Date: –
Date/Time of Measurement: 4-15-04 / ~~26.10~~ 10:15
Depth to Water Measuring Technique: Solinst
Depth Well Bottom (TOC - ft.): 51
Detection Method of Free Product: NA
Depth to Water Level (TOC - ft.): 26.10
Depth to Free Product (TOC - ft.): NA
Calculated Column Height (ft.): –
Casing Diameter (in.): 2"
Conversions Factors (casing dia. = gallons/linear ft.) Circle One
0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Three Well Purge Volumes (gallons) = 3 x =
Quantity of Free Product Collected (gal.): 0
Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: None
Observation of DNAPL: None

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity ~~(mS)~~ µS	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)	DTW
	.5 l	11.90	6.69	2961	Cloudy	41.51	-7.51	10:18	26.1
	3.0 l	11.96	6.59	3739	Clear	.45	11.5	10:25	26.1
	4.5 l	11.98	6.58	3790		.35	20.0	10:30	26.1
	5.5 l	12.05	6.55	3910		.25	28.5	10:34	26.1
	7.0 l	12.02	6.55	3911		.24	28.9	10:37	
	9.5 l	12.05	6.54	3912	7.26	.23	29.0	10:43	

Total Purged = 9.5 l
Purge Pumping Rate (approx. L/m): 0.25
Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve
Ferrous Iron (ppm): 1.0 ppm
Decontamination Method: Alconox, DI, Methanol, DI Rinses
Instrument Type & Number: TS-D3
Water Disposal: On-Site System
Instrument Calibration Date & Time: 4-15-04 8:30
Approx. Pump/Intake Depth: 48'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:
Casing Condition: OK / NA / Needs Repairs / Repaired
Lock Condition: OK / NA / Needs Repairs / Replaced
Cap Condition: OK / NA / Needs Repairs / Repaired
Inner Casing Condition: OK / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / Needs Repairs / Repaired
Monument Condition: OK / NA / Needs Repairs / Repaired
Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 4-15-04
QA/QC Sample (circle one): YES / NO
Water Chemistry Sample: YES / NO
Time Sampled: 10:45
Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump Teflon Bailer Peristaltic Pump Other: Dual Valve
Chain-of-Custody #s:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
017-01	8	VOA	HCL	NCA		VOC's
"	4	1 l	None	NCA		Herbicides
"	2	1 l	None	Triangle		Dioxins/Furans
"	1	110 ml	None	RAL		Plate Count
"	1	1 l	None	NCA		Alk, Anions

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Jim Rock
Sampler Signature:
Date Signed: 4-15-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP-Spring 2004 Gw Sampling Project #: 061M107030 T43 Monitoring/Sampling Date: 4-15-04

Monitoring Well ID: RP-01-51 | Field Personnel: J.R. B.M.

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-15-04 | Additional Chain-of-Custody #s:

Time Sampled: 10:45

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
017-01	1	250	Sulfuric	NCA		NH_3, TKN, TOC, COD
"	1	1 l	None	NCA		BOD
"	1	250	NaOH+ZnAce	NCA		Sulfide
"	1	500ml	HNO_3	NCA		Cations
"	2	1 l	HCL	NCA		NWTPH-DX
"	4	VOA	HCL	NCA		Methane
017-02	4	VOAS	HCL	NCA		VOC'S
"	2	1 l	None	NCA		Herbicides
017-06	4	VOAS	HCL	NCA		VOC's
	2	1 l	None	NCA		Herbicides
017-03	1	VOA	HCL	NCA		VOC's

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-15-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP - Spring 2004 GW Sampling
Project #: 061M107030 743
Monitoring/Sampling Date: 4-15-04

Monitoring Well ID: RP-01-31
Start Time: 9:15
Field Personnel: J Rock, B. McGillicuddy
Weather Conditions: Cloudy, Rain
Approx. Air Temp (F): 55°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: 0.0
%LEL Background: — In well Casing: —
PID Calibration Standard: —
PID Calibration Date: —
Date/Time of Measurement: 4-15-04 / 9:05
Depth Well Bottom (TOC - ft.): 31
Depth to Water Level (TOC - ft.): 25.94
Depth to Free Product (TOC - ft.): NA
Calculated Column Height (ft.):
Casing Diameter (in.): 2"
Quantity of Free Product Collected (gal.): 0
Depth to Water Measuring Technique: Solinist
Detection Method of Free Product: NA
Conversions Factors (casing dia. = gallons/linear ft.) Circle One
0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Three Well Purge Volumes (gallons) = 3 x _____ =
Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: None
Observation of DNAPL: None

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (~~mS~~) µS	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)	DT
	.5 l	12.00	6.18	438	cloudy	2.81	177.9	9:27	26.1
	2.5 l	12.10	6.17	430	clear	2.66	170.4	9:33	26.6
	4.5 l	12.10	6.17	431	6	2.65	166.4	9:37	26.7
	5.5 l	12.09	6.17	431	29.6	2.70	166.5	9:40	26.6

Total Purged =
Purge Pumping Rate (approx. L/m): .5 l/min
Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve
Ferrous Iron (ppm): Ø
Decontamination Method: Alconox, DI, Methanol, DI rinses
Instrument Type & Number: YSI #3
Water Disposal: On-Site system
Instrument Calibration Date & Time: 4-15-04 830
Approx. Pump/Intake Depth: 28'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:
Casing Condition: OK / NA / Needs Repairs / Repaired
Lock Condition: OK / NA / Needs Repairs / Replaced
Cap Condition: OK / NA / Needs Repairs / Repaired
Inner Casing Condition: OK / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / Needs Repairs / Repaired
Monument Condition: OK / NA / Needs Repairs / Repaired
Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 4-15-04
Time Sampled: 9:45
Chain-of-Custody #s:
QA/QC Sample (circle one): YES / NO
Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump Teflon Bailer Peristaltic Pump Other: Dual Valve
Water Chemistry Sample: YES / NO

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
016-01	4	VOA	HCL	NCA		VOC's
	2	1 l	None	NCA		Herbicides
	1	1/2 gal	None	FQL		Plate Count
	1	l	None	NCA		Alk, Anions
	1	250	Sul/Sulfic	NCA		NH3, TKN, TOC, COD

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted YES / NO
Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock
Sampler Signature: [signature]
Date Signed: 4-15-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP-Spring 2004 Geo Sampling Project #: 06LM102030 #43 Monitoring/Sampling Date: 4-15-04

Monitoring Well ID: RP-01-31 | Field Personnel: JR BM

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-15-04
Time Sampled: 9:45
Additional Chain-of-Custody #s:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
016-01	1	2	None	NCA		BOD
	1	250	NaOH+ZnAce	NCA		Sulfide
	1	500	HNO_3	NCA		Cations
	2	1 l	HCL	NCA		NWTPH-DX
	4	VOA	HCL	NCA		Methane

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-15-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP Spring 2004 GW Sampling
Project #: 061M1070SO-743
Monitoring/Sampling Date: 4-19-04

Monitoring Well ID: MW-10-24
Field Personnel: J. Roth, D. McGillicuddy, J. Rock
Start Time: 12:25
Weather Conditions: Light Rain
Approx. Air Temp (F): 60°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.8 In well Casing: 0.9
PID Calibration Standard: –
%LEL Background: – In well Casing: –
PID Calibration Date: –
Date/Time of Measurement: 4-19-04 / 12:26
Depth to Water Measuring Technique: Solinist
Depth Well Bottom (TOC - ft.): 24.
Detection Method of Free Product: NA
Depth to Water Level (TOC - ft.): 12.59
Depth to Free Product (TOC - ft.): NA
Calculated Column Height (ft.):
Casing Diameter (in.): 2"

Conversions Factors (casing dia. = gallons/linear ft.) Circle One

0.75" = 0.02	1" = 0.04	2" = 0.17	3" = 0.37
4" = 0.66	6" = 1.47	8" = 2.61	12" = 5.88

Three Well Purge Volumes (gallons) = 3 x _____ = _____

Quantity of Free Product Collected (gal.): NO
Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: None
Observation of DNAPL: None

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity uS (~~mS~~)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)	DTW
	.5l	13.62	6.26	244	Clear	3.17	90.6	1230	12.5
	2.5l	13.49	6.24	242		3.08	94.6	12:35	12.7
	4.5l	13.37	6.25	257		2.56	99.7	12:40	12.7
	6.0l	13.36	6.25	259		2.32	100.4	12:45	12.7
	7.0l	13.37	6.25	260	3.90	2.36	101.6	12:48	12.81

Total Purged = 7.0l
Purge Pumping Rate (approx. L/m): .4 l/min
Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve
Ferrous Iron (ppm): 0.0
Decontamination Method: Alconox DI Method
Instrument Type & Number: YSI #3
Water Disposal: On-Site System Treatment
Instrument Calibration Date & Time: 4-19-04 930
Approx. Pump/Intake Depth: 22'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:
Casing Condition: OK / NA / Needs Repairs / Repaired
Lock Condition: OK / NA / Needs Repairs / Replaced
Cap Condition: OK / NA / Needs Repairs / Repaired
Inner Casing Condition: OK / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / Needs Repairs / Repaired
Monument Condition: OK / NA / Needs Repairs / Repaired
Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 4-19-04
QA/QC Sample (circle one): YES / NO
Water Chemistry Sample: YES / NO
Time Sampled: 12:50
Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump Teflon Bailer Peristaltic Pump Other: Dual Valve
Chain-of-Custody #s:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
022-01	1	500ml	HNO_3	NCA		Total Metals + Cations
	1	500ml	HNO_3	NCA		Dissolved Metals
	2	1 l	None	NCA		Pesticides
	1	100ml	None	FQL		Plate Count
	1	l	None	NCA		Alk, Anions

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Roth
Sampler Signature: [signature]
Date Signed: 4-19-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP Spring 2004 GW Sampling Project #: 06IM107030-T43 Monitoring/Sampling Date: 4-19-04

Monitoring Well ID: MW-10-24 | Field Personnel: J.R. JR BM

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-19-04 | Additional Chain-of-Custody #s:

Time Sampled: 12:50

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
022.01	1	250ml	Sulfuric	NCA		NH_3, TKN, TOC, COD
	1	~~250~~ 500ml	None	NCA		BOD
	1	250	NaOH+2 drop	NCA		Sulfide
	4	VOA	HCL	NCA		Methane
	2	1	HCL	NCA		NWTPH-Dx

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-19-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP-Spring 2004 GW Sampling
Project #: 06IM107030 T43
Monitoring/Sampling Date: 4-22-04

Monitoring Well ID: MW-5-70 | Field Personnel: J. Rock B. McCilliendy
Start Time: 10:15 | Weather Conditions: Cloudy, No wind | Approx. Air Temp (F): 55°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: 0.0 | PID Calibration Standard: –
%LEL Background: – In well Casing: – | PID Calibration Date: –
Date/Time of Measurement: 4-22-04 / 10:18 | Depth to Water Measuring Technique: Solinist
Depth Well Bottom (TOC - ft.): 70' | Detection Method of Free Product: NA
Depth to Water Level (TOC - ft.): 11.95
Depth to Free Product (TOC - ft.): NA
Calculated Column Height (ft.):
Casing Diameter (in.): 2"
Quantity of Free Product Collected (gal.): Ø

Conversions Factors (casing dia. = gallons/linear ft.) Circle One
0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Three Well Purge Volumes (gallons) = 3 x _____ =
Method of Collecting Free Product: NA

Obsevation of sheen or LNAPL: None | Observation of DNAPL: None

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (~~mS~~) uS	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)	DTW
	.5 l	14.37	7.57	577	clear	.61	-61.3	10:20	11.9
	2.5 l	14.60	7.57	585		.39	-89.9	10:25	11.9
	4.5 l	14.61	7.57	588		.32	-101.6	10:30	11.9
	6.5 l	14.63	7.57	589		.29	-105.6	10:35	11.9
	8.5 l	14.65	7.57	590	*	.28	-106.1	10:40	11.9

Total Purged = 8.5 l | Purge Pumping Rate (approx. L/m): .5 l/min | Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve
Ferrous Iron (ppm): * | Decontamination Method: Alconox, DI, Methanol, DI rinses
Instrument Type & Number: YSI #3 | Water Disposal: On-Site Treatment System
Instrument Calibration Date & Time: 4-22-04 900 | Approx. Pump/Intake Depth: 67'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel Other:
Casing Condition: OK / NA / Needs Repairs / Repaired | Lock Condition: OK / NA / Needs Repairs / Replaced
Cap Condition: OK / NA / Needs Repairs / Repaired | Inner Casing Condition: OK / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / Needs Repairs / Repaired | Monument Condition: OK / NA / Needs Repairs / Repaired
Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 4-22-04 | QA/QC Sample (circle one): YES / NO | Water Chemistry Sample: YES / NO
Time Sampled: 10:45 | Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump Teflon Bailer Peristaltic Pump Other: Dual Valve
Chain-of-Custody #s:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
031-01	4	VIAS	HCL	NCA		VOC's
	2	l	None	NCA		Herbicides
	2	l	None	~~NCA~~ Triangle		Dioxins/Furans
	1	1Lond	None	RCQL		Plate Count
	1	l	None	NCA		Alk, Anions

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO
Field Observations/Notes of Sampling Event: * no measurement recorded JMF 5/21/04

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-22-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP-Spring 2004 GW Sampling Project #: 06IM107032 T413 Monitoring/Sampling Date: 4-22-04

Monitoring Well ID: MW-5-70 | Field Personnel: J.R. B.M.

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-22-04 | Additional Chain-of-Custody #s:

Time Sampled: 10:45

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
031-01	1	250	Sulfuric	NCA		NH3, TKN, TOC, COD
	1	1	None	NCA		BOD
	1	250	NaOH, ZnAcc	NCA		Sulfide
	1	500	HNO3	NCA		Cations
	2	1	HCL	NCA		NWTPH-Dx
	4	VOA	HCL	NCA		Methane

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-22-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP-Spring 2004 GW Sampling
Project #: 06IM107030 T43
Monitoring/Sampling Date: 4-22-04

Monitoring Well ID: MW-5-52
Field Personnel: J. Rock, B. McGillicuddy, J. Roth
Start Time: 11:25
Weather Conditions: Sunny
Approx. Air Temp (F): 65°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: N/A
%LEL Background: — In well Casing: —
PID Calibration Standard: —
PID Calibration Date: —

Date/Time of Measurement: 4-22-04 / 11:28
Depth Well Bottom (TOC - ft.): 52'
Depth to Water Level (TOC - ft.): 11.60
Depth to Free Product (TOC - ft.): NA
Calculated Column Height (ft.):
Casing Diameter (in.): 2"
Quantity of Free Product Collected (gal.): Ø
Obsevation of sheen or LNAPL: None

Depth to Water Measuring Technique: Solinist
Detection Method of Free Product: NA
Conversions Factors (casing dia. = gallons/linear ft.) Circle One
0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Three Well Purge Volumes (gallons) = 3 x =
Method of Collecting Free Product: NA
Observation of DNAPL: None

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (mS)uS	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
	.5 l	14.80	6.40	516	Clear	.33	-33.6	11:28
	2.5 l	14.85	6.43	540		.26	-48.7	11:32
	5.0 l	14.83	6.44	744		.25	-78.9	11:36
	8.0 l	14.83	6.44	745		.24	-79.8	11:40
	9.0 l	14.82	6.43	746	14.3	.24	-80.1	11:45

Total Purged =
Purge Pumping Rate (approx. L/m): .5 l/min
Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve
Ferrous Iron (ppm): 2.6
Decontamination Method: Alconox, DI, Methanol, DI rinses
Instrument Type & Number: YSI #3
Water Disposal: On-Site System treatment
Instrument Calibration Date & Time: 4-22-04 900
Approx. Pump/Intake Depth: 50'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:
Casing Condition: OK / NA / Needs Repairs / Repaired
Lock Condition: OK / NA / Needs Repairs / Replaced
Cap Condition: OK / NA / Needs Repairs / Repaired
Inner Casing Condition: OK / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / Needs Repairs / Repaired
Monument Condition: OK / NA / Needs Repairs / Repaired
Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 4-22-04
QA/QC Sample (circle one): YES / NO
Water Chemistry Sample: YES / NO
Time Sampled: 11:50
Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump Teflon Bailer Peristaltic Pump Other: Dual Valve
Chain-of-Custody #s:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
033-01	4	40A	1+CL	MCA		VOC's
	2	l	None	MCA		Phenols
	2	l	None	MCA		Herbicides
	2	l	None	Triangle		Dioxins / Furans
	1	110	None	EQL		Plate Count

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock
Sampler Signature:
Date Signed: 4-22-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP-Spring 2004 GW Sampling
Project #: 061M107030 T43
Monitoring/Sampling Date: 4-22-04

Monitoring Well ID: MW-5-52 | Field Personnel: J.R. B.M. J.R.

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-22-04 | Additional Chain-of-Custody #s:
Time Sampled: 11:50

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
033-01	1	1	None	NCA		Alk, Anions
	1	250	Sulfuric	NCA		NH_3, TKN, TOC, COD
	1	1	None	NCA		BOD
	1	250	NaOH ZnAce	NCA		Sulfide
	1	500	HNO_3	NCA		Cations
	2	1	HCL	NCA		NWTPH-Dx
	4	VOA	HCL	NCA		Methane

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-22-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP-Spring 2004 GW Sampling
Project #: 061M107030 T43
Monitoring/Sampling Date: 4-22-04

Monitoring Well ID: MW-5-34 | Field Personnel: J. Rock, J. Roth, B. McGill, Luddy
Start Time: 10:55 | Weather Conditions: Clearing, Sunny | Approx. Air Temp (F): 60°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: 43.1 | PID Calibration Standard: -
%LEL Background: - In well Casing: - | PID Calibration Date: -
Date/Time of Measurement: 4-22-04 10:55 | Depth to Water Measuring Technique: Solinist
Depth Well Bottom (TOC - ft.): 34 | Detection Method of Free Product: NA
Depth to Water Level (TOC - ft.): 9.75 | Conversions Factors (casing dia. = gallons/linear ft.) Circle One
Depth to Free Product (TOC - ft.): NA | 0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
Calculated Column Height (ft.): - | 4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Casing Diameter (in.): 2" | Three Well Purge Volumes (gallons) = 3 x _____ = _____
Quantity of Free Product Collected (gal.): Ø | Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: None | Observation of DNAPL: None

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)	DTW
	.5 l	14.37	5.67	568	Clear	4.41	75.1	10:58	9.7
	2.0 l	14.56	5.66	560		3.11	74.5	11:03	9.7
	4.0 l	14.58	5.64	545		3.09	69.5	11:08	
	5.0	14.58	5.66	546		2.93	68.0	11:13	
	7.0 l	14.58	5.64	544	3.96	2.94	67.7	11:18	

Total Purged = 7.0 l | Purge Pumping Rate (approx. L/m): .35 l/min | Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristaltic Pump / Grunfos Pump / Other =
Ferrous Iron (ppm): 1.9 | Decontamination Method: None, Disposable Tubing
Instrument Type & Number: YSI #3 | Water Disposal: On-Site, Treatment System
Instrument Calibration Date & Time: 4-22-04 0800 | Approx. Pump/Intake Depth: 31'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:
Casing Condition: OK / NA / Needs Repairs / Repaired | Lock Condition: OK / NA / Needs Repairs / Replaced
Cap Condition: OK / NA / Needs Repairs / Repaired | Inner Casing Condition: OK / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / Needs Repairs / Repaired | Monument Condition: OK / NA / Needs Repairs / Repaired
Recommended Well Repairs: None

SAMPLING INFORMATION / DATA

Date Sampled: 4-22-04 | QA/QC Sample (circle one): YES / NO | Water Chemistry Sample: YES / NO
Time Sampled: 11:25 | Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump
Chain-of-Custody #s: | Teflon Bailer Peristaltic Pump Other:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
032-01	4	VOAs	HCL	NCA		VOC's
	2	l	None			Phenols
	2	l	None			Herbicides
	1	1100ml	None	FQL		Plate Count
	1	l	None	NCA		Alk, Anions

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-22-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP-Spring 2004 GW Sampling Project #: 06IM107030 T43 Monitoring/Sampling Date: 4-22-04

Monitoring Well ID: MW-5-34 | Field Personnel: J.R., BM, JR

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-22-04 | Additional Chain-of-Custody #s:

Time Sampled: 11:25

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
032-01	1	250	Sulfuric	NCA		NH_3, TKN, TOC, COD
	1	1	None	NCA		BOD
	1	250	NaOH+ZnAce	NCA		Sulfide
	1	500	HNO_3	NCA		Cations
	2	1	HCL	NCA		Nutrit-Dx
	4	VOA	HCL	NCA		Methane

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-22-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP Spring 2004 GW Sampling
Project #: 06IM107030 T43
Monitoring/Sampling Date: 4/22/04

Monitoring Well ID: MW-5-24
Start Time: 9:25
Field Personnel: J. Rock, B. McGilliguddy
Weather Conditions: cloudy, no wind
Approx. Air Temp (F): 55°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: 32.5
%LEL Background: – In well Casing: –
PID Calibration Standard: –
PID Calibration Date: –
Date/Time of Measurement: 4-22-04 / 9:25
Depth Well Bottom (TOC - ft.): 24'
Depth to Water Level (TOC - ft.): 9.55
Depth to Free Product (TOC - ft.): NA
Calculated Column Height (ft.):
Casing Diameter (in.): 2"
Quantity of Free Product Collected (gal.): Ø
Depth to Water Measuring Technique: Solinist
Detection Method of Free Product: NA
Conversions Factors (casing dia. = gallons/linear ft.) Circle One
0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Three Well Purge Volumes (gallons) = 3 x _____ = _____
Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: None
Observation of DNAPL: None

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (~~mS~~) µS	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
	.5 l	13.29	6.51	688	Clear	.61	-16.9	9:28
	2.5 l	13.29	6.50	688		.41	-23.5	9:32
	4.5 l	13.30	6.51	690		.38	-25.6	9:36
	6.5 l	13.31	6.51	691	11.2	.37	-26.2	9:40

DT: 9.5

Total Purged = 6.5 l
Purge Pumping Rate (approx. L/m): .5 l/min
Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristaltic Pump / Grunfos Pump / Other =
Ferrous Iron (ppm): 1.2 ppm
Decontamination Method: None, Dedicated Tubing
Instrument Type & Number: YSI #3
Water Disposal: On-Site Treatment System
Instrument Calibration Date & Time: 4-22-04 9:00
Approx. Pump/Intake Depth: 22'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:
Casing Condition: OK / NA / Needs Repairs / Repaired
Lock Condition: OK / NA / Needs Repairs / Replaced
Cap Condition: OK / NA / Needs Repairs / Repaired
Inner Casing Condition: OK / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / Needs Repairs / Repaired
Monument Condition: OK / NA / Needs Repairs / Repaired
Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 4-22-04
QA/QC Sample (circle one): YES / NO
Water Chemistry Sample: YES / NO
Time Sampled: 9:45
Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump Teflon Bailer Peristaltic Pump Other:
Chain-of-Custody #s:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
030-1	4	VOA	HCL	NCA		VOC's
	2	l	None	NCA		Phenols
	2	l	None	NCA		Herbicides
	1	110ml	None	FQL		Plate Count
	1	l	None	NCA		Alk, Anions

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock
Sampler Signature:
Date Signed: 4-22-04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP Spring 2004 GW Sampling Project #: 06IM107030 T-13 Monitoring/Sampling Date: 4-22-04

Monitoring Well ID: MW-5-24 | Field Personnel: J.R. B.M.

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-22-04 | Additional Chain-of-Custody #s:

Time Sampled: 9:45

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
030-01	1	250	Sulfuric	NCA		NH_3, TKN, TOC, COD
	1	1	None	NCA		BOD
	1	250	NaOH+ZnAce	NCA		Sulfide
	1	500	1% NO_3	NCA		Cations
	2	1	1%CL	NCA		NWTPH-DX
	4	VOA	1%CL	NCA		Methane

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-22-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP Spring 2004 GW Sampling
Project #: 06IM10030543
Monitoring/Sampling Date: 4-13-04

Monitoring Well ID: MW-03-81
Field Personnel: J. Rossio, J. Rock, J. Roth, B McGillicuddy
Start Time: 14:15
Weather Conditions: Sunny
Approx. Air Temp (F): 70°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: 0.4
PID Calibration Standard: -
%LEL Background: — In well Casing: —
PID Calibration Date: -
Date/Time of Measurement: 4-13-04 / 14:16
Depth to Water Measuring Technique: Solinst
Depth Well Bottom (TOC - ft.): 81'
Detection Method of Free Product: NA
Depth to Water Level (TOC - ft.): 20.54
Depth to Free Product (TOC - ft.): 60.46 None
Calculated Column Height (ft.): 60.46
Conversions Factors (casing dia. = gallons/linear ft.) Circle One
0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Casing Diameter (in.): 2"
Three Well Purge Volumes (gallons) = 3 x _____ =
Quantity of Free Product Collected (gal.): Ø
Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: No
Observation of DNAPL: NO

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (µS)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)	DO
	.5 l	12.64	6.46	629	Clear	1.45	-134.1	14:20	20.2
	1.5 l	12.67	6.49	629	↓	1.18	-135.9	14:23	23.1
	3.0 l	12.97	6.51	631	↓	.86	-136.3	14:28	24.
	4.0 l	12.90	6.51	628	13.2	.65	-134.5	14:32	

Total Purged = Purge Pumping Rate (approx. L/m): 350 Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve
Ferrous Iron (ppm): 3.6 ppm
Decontamination Method: Alconox, DI, methanol, DI rinses
Instrument Type & Number: YSI #3
Water Disposal: On-Site system
Instrument Calibration Date & Time: 4-13-04 8:00
Approx. Pump/Intake Depth: 79'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel (PVC) Other:
Casing Condition: (OK) / NA / Needs Repairs / Repaired
Lock Condition: (OK) / NA / Needs Repairs / Replaced
Cap Condition: (OK) / NA / Needs Repairs / Repaired
Inner Casing Condition: (OK) / NA / Needs Repairs / Repaired
Paint Condition: (OK) / NA / Needs Repairs / Repaired
Monument Condition: (OK) / NA / Needs Repairs / Repaired
Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 4-13-04
QA/QC Sample (circle one): YES (NO)
Water Chemistry Sample: (YES) NO
Time Sampled: 14:45
Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump
Chain-of-Custody #s:
Teflon Bailer Peristaltic Pump Other: Dual Valve

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
009-01	4	VOAS	HCL	NCA		VOC's
	2	1 l	None	↓		Herbicides
	1	500ml	HNO_3			Total metals, cations
	1	500ml	HNO_3			Dissolved metals
	4	VOS	HCL	↓		methane

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: (YES) NO
Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock Sampler Signature: [signature] Date Signed: 4-13-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP Spring 2004 GW Sampling
Project #: 0-61M-107030 T43
Monitoring/Sampling Date: 4/13/04

Monitoring Well ID: MW-03-81 | Field Personnel: JF, JR, JR, BM

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-13-04
Time Sampled: 14:45
Additional Chain-of-Custody #s:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
009-01	2	1 l	HCL	NCA		MIOTPH-DX
	1	1 l	None	↓		Alk, Anions
	1	1 l	None	↓		BOD
	1	125 l	None	EQL		Plate Count
	1	250 ml	Sulfuric	NCA		TOC, COD, NH_3
	1	250 ml	NaOH+Zn Ace	↓		Sulfide

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Sampler Signature: Date Signed:

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP Spring 2004 GW Sampling Project #: 061M107030T43 Monitoring/Sampling Date: 4/13/04

Monitoring Well ID: MW-03-I	Field Personnel: J. Fussio, J. Rock, J. Roth, B. McGillicuddy
Start Time: 1310	Weather Conditions: Cloudy — Approx. Air Temp (F): 60°F

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: 0.0	PID Calibration Standard: –
%LEL Background: – In well Casing: –	PID Calibration Date: –
Date/Time of Measurement: 4/13/04 / 1314	Depth to Water Measuring Technique: Solinst
Depth Well Bottom (TOC - ft.):	Detection Method of Free Product: NA
Depth to Water Level (TOC - ft.): 20.10	Conversions Factors (casing dia. = gallons/linear ft.) Circle One
Depth to Free Product (TOC - ft.): None	0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
Calculated Column Height (ft.): NA	4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Casing Diameter (in.): 2 in	Three Well Purge Volumes (gallons) = 3 x _____ = _____
Quantity of Free Product Collected (gal.): NA	Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: None	Observation of DNAPL: None

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity µS (~~mS~~)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)	DTW
	0.5	12.37	6.56	1174	–	3.50	-14.0	13:13	20.1
	2.5	11.95	6.45	1148	–	0.41	-10.6	13:17	20.4
	4.9	12.14	6.42	1156	–	0.21	-8.7	13:25	21.4
	6.1	12.07	6.41	1158	–	0.19	-16.5	13:29	21.8
					12.2				

Total Purged = 6.1	Purge Pumping Rate (approx. L/m): 0.5 L/min	Well Yield: High / Moderate / Low

Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve Pump

Ferrous Iron (ppm): 3.4 mg/L	Decontamination Method: Alkonox, DI, Methanol, DI
Instrument Type & Number: YSI #3	Water Disposal: RP WTP
Instrument Calibration Date & Time: 4/13/04 800	Approx. Pump/Intake Depth: ~57.5'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:

Casing Condition: (OK) / NA / Needs Repairs / Repaired	Lock Condition: (OK) / NA / Needs Repairs / Replaced
Cap Condition: (OK) / NA / Needs Repairs / Repaired	Inner Casing Condition: OK / (NA) / Needs Repairs / Repaired
Paint Condition: OK / (NA) / Needs Repairs / Repaired	Monument Condition: (OK) / NA / Needs Repairs / Repaired

Recommended Well Repairs: None

SAMPLING INFORMATION / DATA

Date Sampled: 4/13/04	QA/QC Sample (circle one): YES (NO)	Water Chemistry Sample: (YES) / NO
Time Sampled: 1330	Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump	
Chain-of-Custody #s:	Teflon Bailer Peristaltic Pump Other: Dual Valve Pump	

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
008-01	34	VOA	HCl	NCA		VOCs
↓	2	1l	None	↓		Herbicides
	1	500ml	Nitric Acid			Total metals, Cations
	1	500ml	Nitric acid			Dissolved metals
↓	34	VOAs	HCl	↓		Methane

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: (YES) / NO

Field Observations/Notes of Sampling Event: Re: Pump rate reduced to 0.3 L/min

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Fussio Sampler Signature: Joe Fussio Date Signed: 4/13/04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP 2004 GW Sampling
Project #: 061M 107030 T43
Monitoring/Sampling Date: 4/13/04

Monitoring Well ID: MW-03-1 | Field Personnel: JF, JR, JR, BM

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4/13/04
Time Sampled: 1330
Additional Chain-of-Custody #s:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
008-01	2	1l	HCl	NCA		NWTPH-Dx
	1	1l	None	↓		Alk, Anions
	1	1l	None	↓		BOD
	1	125ml		FQL		Plate Count
	1	250ml	Sulfuric	NCA		TOC, COD, Ammonia
	1	250ml	NaOH + Zn Acc.	NCA		Sulfide

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Fassio Sampler Signature: Joe Fassio Date Signed: 4/13/04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP Spring 2004 GW Sampling
Project #: 06LM 107030-T43
Monitoring/Sampling Date: 4/21/04

Monitoring Well ID: BST2W-6 | Field Personnel: J. Rock, B. McGillicuddy
Start Time: 11:00 | Weather Conditions: Partly Cloudy | Approx. Air Temp (F): 55°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: 43.7 | PID Calibration Standard: -
%LEL Background: - In well Casing: - | PID Calibration Date: -

Date/Time of Measurement: 4/21/04 / 11:05 | Depth to Water Measuring Technique: Solinist
Depth Well Bottom (TOC - ft.): 61' | Detection Method of Free Product: NA
Depth to Water Level (TOC - ft.): 14.85
Depth to Free Product (TOC - ft.): NA
Calculated Column Height (ft.):
Casing Diameter (in.): 2"
Quantity of Free Product Collected (gal.): Ø

Conversions Factors (casing dia. = gallons/linear ft.) Circle One
0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Three Well Purge Volumes (gallons) = 3 x _____ = _____
Method of Collecting Free Product: NA

Obsevation of sheen or LNAPL: None | Observation of DNAPL: None

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity µS (~~mS~~)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)	DTW
	.5 l	15.21	6.91	1051	Clear	2.74	-77.7	11:05	14.9
	1.5 l	15.00	6.87	1179		.47	-91.9	11:08	14.1
	3.0 l	15.53	6.85	1265		.30	-104.4	11:13	14.9
	4.0 l	15.54	6.85	1277		.27	-105.6	11:17	14.1
	5.0 l	15.57	6.86	1279		.25	-106.7	11:20	14.9
	6.0 l	15.59	6.86	1283	3.69	.23	-108.4	11:23	14.9

Total Purged = 6.0 l | Purge Pumping Rate (approx. L/m): .36 l/min | Well Yield: (High) / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve
Ferrous Iron (ppm): 3.7 ppm | Decontamination Method: Alconox, DI, Methanol, DI rinses
Instrument Type & Number: YSI #3 | Water Disposal: On-Site Treatment
Instrument Calibration Date & Time: 4/21/04 830 | Approx. Pump/Intake Depth: 58'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel (PVC) Other:
Casing Condition: (OK) / NA / Needs Repairs / Repaired | Lock Condition: (OK) / NA / Needs Repairs / Replaced
Cap Condition: (OK) / NA / Needs Repairs / Repaired | Inner Casing Condition: (OK) / NA / Needs Repairs / Repaired
Paint Condition: (OK) / NA / Needs Repairs / Repaired | Monument Condition: (OK) / NA / Needs Repairs / Repaired
Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 4/21/04 | QA/QC Sample (circle one): YES / (NO) | Water Chemistry Sample: (YES) / NO
Time Sampled: 11:40 | Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump
Chain-of-Custody #s: | Teflon Bailer Peristaltic Pump Other: Dual Valve

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
027-01	4	VOA	HCL	NCA		VOC's
	2	1 l	None	NCA		Phenols
	2	1 l	None	NCA		Herbicides
	1	1 l	None	FOL		Plate Count
	1	1 l	None	NCA		Alk, Anions

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: (YES) / NO

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4/21/04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP- Spring 2004 GW Sampling Project #: 061M107030 T43 Monitoring/Sampling Date: 4/21/04

Monitoring Well ID: BSJ2W-61 | Field Personnel: JR, JR, BM

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4/21/04 | Additional Chain-of-Custody #s:

Time Sampled:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
027-01	1	250	Sulfuric	NCA		NH_3, TKN, TOC, COD
	1	1	None	NCA		BOD
	1	250	NaOH Zn Acc	NCA		Sulfide
	2	250	HNO_3	NCA		Cations
	2	1	HCL	NCA		NWTPH-DX
	4	VOA	HCL	NCA		Methane

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4/21/04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP-Spring 2004 GW Sampling
Project #: 06IM107038743
Monitoring/Sampling Date: ~~6-9~~ 4-19-04

Monitoring Well ID: AL-06-96
Field Personnel: J. Rock, J. Roth, B. McGillicuddy
Start Time: 13:35
Weather Conditions: Rain
Approx. Air Temp (F): 60°

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.2 In well Casing: 3.7
PID Calibration Standard: –
%LEL Background: – In well Casing: –
PID Calibration Date: –
Date/Time of Measurement: 4-19-04 / 13:35
Depth to Water Measuring Technique: Solinist
Depth Well Bottom (TOC - ft.): 96.
Detection Method of Free Product: NA
Depth to Water Level (TOC - ft.): 16.26
Depth to Free Product (TOC - ft.):
Calculated Column Height (ft.):
Casing Diameter (in.): 2"
Quantity of Free Product Collected (gal.): Ø
Conversions Factors (casing dia. = gallons/linear ft.) Circle One

0.75" = 0.02	1" = 0.04	2" = 0.17	3" = 0.37
4" = 0.66	6" = 1.47	8" = 2.61	12" = 5.88

Three Well Purge Volumes (gallons) = 3 x _____ = _____
Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: None
Observation of DNAPL: None

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
	.5l	13.51	6.64	2049	~~Clear~~ Turbid	.57	-2.3	13:40
	2.5l	13.72	6.64	2100	Clearing	.30	-27.1	13:45
	4.0l	13.77	6.64	2110	Clear	.30	-31.4	13:50
	6.5l	13.77	6.64	2119	25.3	.23	-33.4	13:55

Total Purged = 6.5l
Purge Pumping Rate (approx. L/m): .350 l/min
Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve
Ferrous Iron (ppm): 2.0
Decontamination Method: Alconox, DI, Methanol, DI rinses
Instrument Type & Number: YSI #3
Water Disposal: On-Site Treatment
Instrument Calibration Date & Time: 4-19-04
Approx. Pump/Intake Depth: 93'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:
Casing Condition: OK / NA / Needs Repairs / Repaired
Lock Condition: OK / NA / Needs Repairs / Replaced
Cap Condition: OK / NA / Needs Repairs / Repaired
Inner Casing Condition: OK / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / Needs Repairs / Repaired
Monument Condition: OK / NA / Needs Repairs / Repaired
Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 4-19-04
QA/QC Sample (circle one): YES / NO
Water Chemistry Sample: YES / NO
Time Sampled: 14:00
Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump Teflon Bailer Peristaltic Pump Other: Dual Valve
Chain-of-Custody #s:

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
023-01	4	VOA	HCL	NCA		VOC's
	2	1l	None	NCA		Herbicides
	2	1l	None	Triangle		Dioxins/Furans
	1	1l Dal	None	RQL		Plate Count
	1	l	None	NCA		Alk. Anions

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO
Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock
Sampler Signature: [signature]
Date Signed: 4-19-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP-Spring 2004 GW Sampling
Project #: 061M107030-T43
Monitoring/Sampling Date: 4-19-04

Monitoring Well ID: AL-06-96 | Field Personnel: BM, OR, JR

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-19-04 | Additional Chain-of-Custody #s:
Time Sampled: 14:00

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
023-01	1	250	Sulfuric	NCA		NH_3, TKN, TOC, COD
	1	2	None	NCA		BOD
	1	250ml	NaOH-ZnAc	NCA		Sulfide
	1	500ml	HNO_3	NCA		Cations
	2	1L	HCL	NCA		NWTPH-DX
	4	VOA	HCL	NCA		Methane

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-19-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP-Source 2004 GW Sampling
Project #: 06IM107030 T43
Monitoring/Sampling Date: ~~4/20/04~~ 4/21/04

Monitoring Well ID: AL-2-46 | Field Personnel: J. Roth, G. McGillicuddy, J. Rock
Start Time: 9:15 | Weather Conditions: Rain | Approx. Air Temp (F): 60°

4/21/04 AM

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: 3.0 | PID Calibration Standard: -
%LEL Background: - In well Casing: - | PID Calibration Date:
Date/Time of Measurement: 4/21/04 ~~8:15~~ | Depth to Water Measuring Technique: Solinst
Depth Well Bottom (TOC - ft.): 46 | Detection Method of Free Product: NA
Depth to Water Level (TOC - ft.): 15.60 | Conversions Factors (casing dia. = gallons/linear ft.) Circle One
Depth to Free Product (TOC - ft.): NA | 0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
Calculated Column Height (ft.): | 4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Casing Diameter (in.): 2" | Three Well Purge Volumes (gallons) = 3 x =
Quantity of Free Product Collected (gal.): 0 | Method of Collecting Free Product: NA
Obsevation of sheen or LNAPL: None | Observation of DNAPL: None

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)	DTW
	.5 l	13.86	7.09	1536	Clear	2.59	149.8	9:15	15.6
	2.0 l	14.62	6.92	1580		6.26	-102.2	9:20	15.7
	3.0 l	14.75	6.96	1544		.37	-105.5	9:23	15.8
	4.0 l	14.99	6.96	1544		.27	-110.0	9:25	15.9
	4.5 l	14.97	6.96	1541		.24	-112.1	9:27	15.9
	5.0 l	14.95	6.96	1533	3.61	.22	-112.1	9:29	15.9

Total Purged = | Purge Pumping Rate (approx. L/m): .24 l/min | Well Yield: High / (Moderate) / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve
Ferrous Iron (ppm): 3.4 ppm | Decontamination Method: Alconox, DI, Methanol, DI rinses
Instrument Type & Number: YSI #3 | Water Disposal: On-Site Treatment System
Instrument Calibration Date & Time: 4/20/04 8:30 | Approx. Pump/Intake Depth: 43'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel (PVC) Other:
Casing Condition: (OK) / NA / Needs Repairs / Repaired | Lock Condition: (OK) / NA / Needs Repairs / Replaced
Cap Condition: (OK) / NA / Needs Repairs / Repaired | Inner Casing Condition: (OK) / NA / Needs Repairs / Repaired
Paint Condition: (OK) / NA / Needs Repairs / Repaired | Monument Condition: (OK) / NA / Needs Repairs / Repaired
Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: ~~4/20/04~~ 4/21/04 | QA/QC Sample (circle one): (YES) / NO | Water Chemistry Sample: (YES) / NO
Time Sampled: 9:30 | Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump
Chain-of-Custody #s: | Teflon Bailer Peristaltic Pump Other: Dual Valve

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
026-01	4	VOA	HCL	NCA		VOC's
	~~24~~ 2	1 l	None	NCA		Phenols
	2	1 l	None	NCA		Herbicides
	2	1 l	None	~~AOC~~ A Triangle		Dioxins/Furans
	1	1 l	None	FQL		Plate Count

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: (YES) / NO

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4/20/04

amec	AMEC Earth & Environmental, Inc. GROUNDWATER SAMPLING FIELD FORM	Project Name: RP - Springton GW Sampling Project #: 061M107030 743 Monitoring/Sampling Date: ~~4/20/04~~ 4/21/04

Monitoring Well ID: Mi-2-46 | Field Personnel: J. Rock B. McGillicuddy J. Roth

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: ~~4-20-04~~ 4/21/04 | Additional Chain-of-Custody #s:

Time Sampled: 9:30

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
026-01	1	1	None	NCA		Alk, Anions
	1	250	NaOH/ZnAc	NCA		Sulfide
	1	250	Sulfuric	NCA		NH3, TKN, TOC, COD
	1	1	None	NCA		BOD
	2	1	HCL	NCA		NWTPH-Dx
	4	VOA	HCL	NCA		Methane
026-02	2	1	None	NCA		Phenols
026-06	2	1	None	STL		Phenols
026-01	2	250	HNO3	NCA		Major Cations

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-21-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RP-Spring 2004 GW Sampling
Project #: 06-M107030-T43
Monitoring/Sampling Date: 4-20-04

Monitoring Well ID: AL-2-32 | Field Personnel: Brandon McGillicuddy, Joe Rock, John Roth
Start Time: 13:40 | Weather Conditions: Rain | Approx. Air Temp (F): 60's

INITIAL WELL DATA & WELL PURGING INFORMATION

PID (ppm) Background: 0.0 In well Casing: 9.3 | PID Calibration Standard: --
%LEL Background: - In well Casing: - | PID Calibration Date: -

Date/Time of Measurement: 4-20-04 13:40 | Depth to Water Measuring Technique: Solinst
Depth Well Bottom (TOC - ft.): 33'
Depth to Water Level (TOC - ft.): 16.35
Depth to Free Product (TOC - ft.): NA
Calculated Column Height (ft.): -
Casing Diameter (in.): 2"
Quantity of Free Product Collected (gal.): Ø

Detection Method of Free Product: -
Conversions Factors (casing dia. = gallons/linear ft.) Circle One
0.75" = 0.02 1" = 0.04 2" = 0.17 3" = 0.37
4" = 0.66 6" = 1.47 8" = 2.61 12" = 5.88
Three Well Purge Volumes (gallons) = 3 x =
Method of Collecting Free Product: NA

Obsevation of sheen or LNAPL: None | Observation of DNAPL: None

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (~~mS~~ µS)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)
	.5 l	14.19	6.59	5001	Turbid	.78	-66.0	13:45
	2.5 l	14.27	6.48	5377	Clear	.22	-77.4	13:50
	4.0 l	14.24	6.44	5520		.19	-79.5	13:55
	5.5 l	14.25	6.44	5596	↓	.18	-80.1	14:00
	6.5 l	14.27	6.43	5627	6.92	.17	-81.1	14:05

Total Purged = 6.5 l | Purge Pumping Rate (approx. L/m): .25 l/min | Well Yield: High / Moderate / Low
Purge Method (circle one): PVC Bailer / Poly Bailer / SS Bailer / Peristalic Pump / Grunfos Pump / Other = Dual Valve
Ferrous Iron (ppm): .9 mg/l | Decontamination Method: Alconox, DI, Methanol, DI rinses
Instrument Type & Number: YSI #3 | Water Disposal: On-Site Treatment System
Instrument Calibration Date & Time: 4-20-04 830 | Approx. Pump/Intake Depth: 30'

WELL CONDITION

Casing (circle one): Stainless Steel Carbon Steel PVC Other:
Casing Condition: OK / NA / Needs Repairs / Repaired | Lock Condition: OK / NA / Needs Repairs / Replaced
Cap Condition: OK / NA / Needs Repairs / Repaired | Inner Casing Condition: OK / NA / Needs Repairs / Repaired
Paint Condition: OK / NA / Needs Repairs / Repaired | Monument Condition: OK / NA / Needs Repairs / Repaired
Recommended Well Repairs:

SAMPLING INFORMATION / DATA

Date Sampled: 4-20-04 | QA/QC Sample (circle one): YES / NO | Water Chemistry Sample: YES / NO
Time Sampled: 14:10 | Sampling Method (circle one): SS Bailer Poly Bailer Grunfos Pump
Chain-of-Custody #s: | Teflon Bailer Peristaltic Pump Other: Dual Valve

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
025-01	4	VOA	HCL	NCA		VOC's
	2	1 l	None	NCA		Phenols
	2	1 l	None	NCA		Herbicides
	2	1 l	None	Triangle		Dioxins/Furans
	2	250ml	HNO_3	NCA		Total Metals + Cations

All samples were immediately placed into a cooler and packed with ice or "Blue Ice", unless otherwise noted: YES / NO

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-20-04

amec

AMEC Earth & Environmental, Inc.
GROUNDWATER
SAMPLING FIELD FORM

Project Name: RF Spring 2001 GW Sampling
Project #: 06IM107030 543
Monitoring/Sampling Date: 4-20-04

Monitoring Well ID: AL-2-32 | Field Personnel: J.R. JR BM

INITIAL WELL DATA & WELL PURGING INFORMATION

Casing Volumes (#)	Volume Purged (liters)	Water Temperature (degree C)	Water pH (S.U.)	Specific Conductivity (ms)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Time (0:00 - 23:59)

WELL CONDITION

Recommended Well Repairs/Additional Notes:

SAMPLING INFORMATION / DATA

Date Sampled: 4-20-04 | Additional Chain-of-Custody #s:

Time Sampled: 1410

Sample ID	Bottles (total)	Bottles (size)	Preservative	Destination Laboratory	Sample Transporter	Analytical Parameters
0-25-01	2	250	HNO_3	NCA		Dissolved Metals
	1	110ml	None	EQL		Plate Count
	1	1L	None	NCA		~~BOD~~ Alk, Anions
	1	250ml	Sulfuric	NCA		Nitr, TKN, TOC, COD
	1	1L	None	NCA		BOD
	1	250	NaOH+ZnAc	NCA		Sulfide
	2	1L	HCL	NCA		DWTPH-Dx
	4	VOA	HCL	NCA		Methane

Field Observations/Notes of Sampling Event:

CERTIFICATION STATEMENT

By signing below, the listed AMEC sampler states that the information provided on this page is accurate.

Sampler (Print): Joe Rock | Sampler Signature: [signature] | Date Signed: 4-20-04

APPENDIX B

Data Validation Report for Spring 2004
Post-Characterization Groundwater Monitoring Event
PCDD/PCDF Results

DATA VALIDATION REPORT FOR
SPRING 2004 GROUNDWATER SAMPLING EVENT
PCDD/PCDF RESULTS
RP - Portland Site

November 1, 2004

Submitted to:

Oregon Department of Environmental Quality
Northwest Region
2020 S.W. 4th Avenue, Suite 400
Portland, Oregon 97201

Prepared for:

SLLI
One Copely Parkway, Suite 309
Morrisville, North Carolina 27560

Prepared by:

AMEC Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224

0-61M-10703-0/Task 56

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1.0 INTRODUCTION

A total of 21 groundwater samples from the Rhône-Poulenc (RP) Portland Site Spring 2004 Groundwater Sampling Event were submitted to Eno River Labs, LLC (ERL) for analysis of polychlorinated dioxins (PCDD) and dibenzofurans (PCDF) using United States Environmental Protection Agency (USEPA) Method 8290. The samples included 18 primary samples, 1 field duplicate, 1 performance evaluation (PE) sample, and 1 rinsate blank. A single interlaboratory split sample was submitted to Severn Trent Laboratories, Inc. (STL). A list of these samples by site identification (ID), field ID, ERL lab ID, ERL project number, and STL sample ID is presented in Table 1.

2.0 DATA VALIDATION METHODOLOGY

Validation of these data followed the USEPA Region 10 SOP for the Validation of Polychlorinated Dioxin and Polychlorinated Dibenzofuran Data, with reference to USEPA Method 8290, Revision 0 (September 1994), and exceeded the level of validation specified in the DEQ-approved Revised Quality Assurance Project Plan (QAPP) dated June 13, 2001.

In general, it is important to recognize that no analytical data are guaranteed to be correct, even if all Quality Control (QC) audits are passed. Strict QC serves to increase confidence in data, but any reported value may potentially contain error.

Qualifiers added to the data as a result of the validation effort follow industry standard usage as defined by the USEPA. Data qualifiers added by AMEC during validation with associated definitions may be found in Table 2.

3.0 HOLDING TIME AND PRESERVATION

All samples were received at ERL in good condition, and were extracted and analyzed within USEPA recommended maximum holding time.

4.0 GC/MS PERFORMANCE CHECKS AND INITIAL CALIBRATION

The format of the ERL documentation does not allow full review of mass spectrometer tune frequency and quality. ERL monitors perfluorokerosene (PFK) molecular leak and mass lock performance with each standard, blank, and spike sample analyzed.

Analysis of PCDD/PCDF in these samples on the primary DB-5 column was conducted under ICAL TF5D183 and ICAL SF51294. Analysis for 2,3,7,8-TCDF on the DB-225 column was conducted under ICAL PF2D163. Ion abundance ratios and percent

relation standard deviation (%RSD) for all target compounds met requirements of USEPA Method 8290.

5.0 CONTINUING CALIBRATION

All compounds in the opening and closing continuing calibration evaluation standards (CCAL) met method requirements for percent drift in relative response (%D) and ion abundance ratios. In some cases, several compounds in closing CCALs met only the less stringent requirements that Method 8290 allows for closing CCAL, rather than the more stringent requirements for opening CCAL.

USEPA Region 10 validation guidelines leave the decision of whether to qualify data associated with closing CCAL that meet the less stringent requirement to the professional judgment of the validation chemist. When those compounds that failed to meet the more stringent requirements of 20 %D for unlabeled compounds and 30 %D for labeled compounds were within 5 %D of meeting the requirements, no data were qualified.

- %D for $^{13}C_{12}$-1,2,3,7,8,-PeCDF and $^{13}C_{12}$-OCDD was -33.4% and -46.8% respectively in closing CCAL T042008 analyzed on May 11, 2004 (for May 10, 2004). Because %D was acceptable for the associated unlabeled compounds and based on professional judgment, data usability is not adversely affected.
- %D for 1,2,3,4,7,8-HxCDF, $^{13}C_{12}$-1,2,3,6,7,8,-HxCDF, and $^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF was -20.1%, 30.5%, and 34.3% respectively in closing CCAL S041693 analyzed on May 19, 2004. Because %D for these compounds was within 5% of meeting the requirements, data usability is not adversely affected.
- %D for the internal standards$^{13}C_{12}$-1,2,3,7,8-PeCDF and $^{13}C_{12}$-1,2,3,7,8-PeCDD was -32.7% and -44.2% respectively in closing CCAL T042179 analyzed on May 26, 2004. Because %D was acceptable for the associated unlabeled compounds and based on professional judgment, data usability is not adversely affected.

6.0 LABORATORY BLANKS

A list of target analytes detected in the laboratory blanks associated with the analysis of these samples along with affected samples may be found in Table 3.

- 2,3,7,8-TCDD (3.4 pg/L), 2,3,7,8-TCDF (5.0 pg/L), total TCDD (3.4 pg/L), and total TCDF (5.0 picograms per liter [pg/L]) were detected in the laboratory blank

associated with the initial analyses of all samples from this project. Specific limitations include the following:

- 2,3,7,8-TCDD results from samples RP-02-66 (001-01), AL-06-96 (023-01), AL2-32 (025-01), and MW-5-70 (031-01) have been U qualified by AMEC.
- 2,3,7,8-TCDF results from samples RP-02-66 (001-01), W-11-D (012-01), RP-01-65 (018-01), and AL-06-96 (023-01) have been U qualified by AMEC.
- Total TCDD results from samples RP-02-66 (001-01) and AL-06-96 (023-01) have been U qualified by AMEC.
- Total TCDF results from samples RP-02-66 (001-01) and RP-01-65 (018-01) have been U qualified by AMEC.

- OCDD and estimated maximum possible concentration (EMPC) total TCDD were detected in the laboratory blank associated with ERL Project number 62839r1 at concentrations of 5.9 pg/L and 2.6 pg/L, respectively. The OCDD result from sample RP-07-119 (007-01) was U qualified by AMEC.
- 1,2,3,7,8,9-HxCDD (5.1 pg/L), EMPC OCDD (10.6 pg/L), 1,2,3,7,8-PeCDF (5.8 pg/L), EMPC 1,2,3,4,7,8-HxCDF (2.0 pg/L), 1,2,3,6,7,8-HxCDF (2.4 pg/L), 2,3,4,6,7,8-HxCDF (2.3 pg/L), 1,2,3,7,8,9-HxCDF (7.0 pg/L), total HxCDD (5.1 pg/L), total PeCDF (5.8 pg/L), total HxCDF (11.7 pg/L), and EMPC total HxCDF (13.7 pg/L) were detected in the laboratory blank associated with ERL Project number 62840r1. The OCDD, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, and total HxCDF results from sample RP-03-30R (020-01) were U qualified by AMEC.
- OCDD (5.9 pg/L), 1,2,3,4,7,8-HxCDF, and total HxCDF were detected in the laboratory blank associated with ERL project number 62874r1 at concentrations of 5.9 pg/L, 1.1 pg/L, and 1.1 pg/L, respectively. The OCDD, 1,2,3,4,7,8-HxCDF, and total HxCDF results from sample W-09-116 (024-02) were U qualified by AMEC.

7.0 RINSATE BLANKS

All detected results, except for the 1,2,3,4,6,7,8-HpCDF results from samples RP-01-51 (017-01) and RP-01-65 (018-01), have been U qualified by AMEC because of analyte detections in rinsate blank 019-04. Specific details concerning these analyte detections may be found in Table 4 at the end of this document.

8.0 RECOVERY OF C-13 LABELED ISOTOPE DILUTION STANDARDS USED AS INTERNAL STANDARDS

USEPA Method 8290 uses an isotope dilution procedure for calculation of analyte concentrations. A total of 18 carbon or chlorine labeled PCDD and PCDF isomers are

added to the sample or extract to monitor different aspects of the procedure. Of the18 labeled isomers added, 9 are used as internal standards for calculation of analytical results. Problems with recovery of internal standards affect all analytical results that are calculated using the affected internal standard, and not just the corresponding nonlabeled isomer.

Qualification of data based on internal standard results can seem counterintuitive in that low IS recovery implies a possible high bias in the calculated result, and high IS recovery can imply a possible low bias. The reason for this lies in the fact that low recovery implies lower than expected area counts for the IS, and high recovery implies higher than expected area counts. Because the area of the internal standard appears in the denominator of the equation for calculation of results using the internal standard technique, low IS area counts lead to high results for any calculation based on that IS, and high IS area counts lead to low results for any calculation based on that IS.

Recovery and performance of carbon labeled isotope dilution standards used as internal standards in all field and QC samples were within the method-specified limits of 40% to 135%, except as described below.

- Recovery of the internal standard $^{13}C_{12}$-2,3,7,8-TCDF was slightly low at 38.6% in sample RP-02-66 (001-01). The 2,3,7,8-TCDF result from this sample was U qualified by AMEC because of laboratory blank contamination and further qualification is not necessary.
- Recoveries of the internal standards $^{13}C_{12}$-2,3,7,8-TCDF and $^{13}C_{12}$-2,3,7,8-TCDD were low at 39.8% and 37.4%, respectively in sample RP-07-84 (006-01). Because the recoveries were low and 2,3,7,8-TCDF and 2,3,7,8-TCDD were not detected in the sample, data usability is not adversely affected.
- Recoveries of the internal standards $^{13}C_{12}$-2,3,7,8-TCDF, $^{13}C_{12}$-2,3,7,8-TCDD, and $^{13}C_{12}$-1,2,3,7,8-PeCDF were low at 38.6%, 38.3%, and 34.4%, respectively in rinsate blank 024-04. Because the recoveries were low and target analytes were not detected in the rinsate blank, data usability is not adversely affected.
- Recovery of the internal standard $^{13}C_{12}$-1,2,3,7,8-PeCDF was low at 39.3% in sample AL2-46 (026-01). Because the recovery was low and 1,2,3,7,8-PeCDF was not detected in the sample, data usability is not adversely affected.
- Recoveries of the internal standards $^{13}C_{12}$-2,3,7,8-TCDF and $^{13}C_{12}$-2,3,7,8-TCDD were low at 38.4% and 36.4%, respectively in sample RP-01-65 (018-01). Because the recoveries were low and 2,3,7,8-TCDD and 2,3,7,8-TCDF were not detected in the sample, data usability is not adversely affected.

- Recoveries of the internal standards $^{13}C_{12}$-2,3,7,8-TCDD and $^{13}C_{12}$-1,2,3,7,8-PeCDF were low at 38.4% and 36.7%, respectively in sample RP-03-30R (020-01). Because the recoveries were low and 2,3,7,8-TCDD and 1,2,3,7,8-PeCDF were not detected in the sample, data usability is not adversely affected.
- Recoveries of the internal standards $^{13}C_{12}$-2,3,7,8-TCDF and $^{13}C_{12}$-2,3,7,8-TCDD were low at 36.7% and 33%, respectively in the laboratory blank associated with ERL Project number 62874r1. Because the recoveries were low and 2,3,7,8-TCDD and 2,3,7,8-TCDF were not detected in the blank, data usability is not adversely affected.
- Recovery of the internal standard $^{13}C_{12}$-2,3,7,8-TCDD was low at 38.4% in sample W-09-116 (024-02). Because the recovery was low and 2,3,7,8-TCDD was not detected in the sample, data usability is not adversely affected.

9.0 INSTRUMENT RECOVERY INTERNAL STANDARDS

The instrument Recovery Standards $^{13}C_{12}$-1,2,3,4-TCDD (DB-5 and DB-225 analyses) and $^{13}C_{12}$-1,2,3,7,8,9-HxCDD (DB-5 analysis only) are added to sample extracts and standards before injection into the gas chromatography mass spectrometer (GC/MS). The instrument recovery standards are used to determine the recovery efficiency of the extraction and cleanup procedures, to determine if the GC/MS sensitivity and response are stable during the analytical run, and to determine if the same amount of extract was injected into the GC/MS[1]. The $^{13}C_{12}$-1,2,3,4-TCDD recovery standard is used to calculate recoveries of the TCDD, TCDF, PeCDD, and PeCDF internal standards. The $^{13}C_{12}$-1,2,3,7,8,9-HxCDD recovery standard is used to calculate recoveries of the HxCDD, HxCDF, HpCDD, HpCDF, OCDD, and OCDF internal standards.

Recovery of the sums of the instrument recovery standards in all field and QC samples were within method requirements of 25% to 400% of initial area counts, except as described below.

- Recovery of the instrument recovery standard $^{13}C_{12}$-1,2,3,7,8,9-HxCDD was slightly low at 24.6% in closing CCAL T042008, analyzed on May 11, 2004 (for a sequence started on May 10, 2004). The low recovery would indicate a low bias in the reported internal standard recoveries. This may mask high internal standard response, which would negatively bias any associated results. Because %D for all

[1] EPA Region 10 SOP for the Validation of PCDD and PCDF Data, Revision 2.0, January 31, 1996

unlabeled compounds in the CCAL was within EPA acceptance limits, data usability is not adversely affected.

- Recoveries of the instrument recovery standards $^{13}C_{12}$-1,2,3,4-TCDD and $^{13}C_{12}$-1,2,3,7,8,9-HxCDD were high at 408% and 557%, respectively in closing CCAL S041641, analyzed on May 13, 2004. The high recoveries would indicate a high bias the reported internal standard recoveries. This may mask low internal standard response and result in a potential positive bias any associated results. Because %D for all compounds in the CCAL was within EPA acceptance limits, data usability is not considered to be adversely affected.
- Recovery of the instrument recovery standard $^{13}C_{12}$-1,2,3,7,8,9-HxCDD was high at 472% in sample RP-02-66 (001-01). AMEC has J qualified the detected HxCDD, HpCDD, OCDD, HxCDF, HpCDF, and OCDF results from this sample.
- Recovery of the instrument recovery standard $^{13}C_{12}$-1,2,3,7,8,9-HxCDD was slightly low at 24.7% in rinsate blank 024-04. Because the recovery is within 1% of the lower acceptance limit and based on professional judgment, usability of the data set, as a whole, is not adversely affected.
- Recovery of the instrument recovery standard $^{13}C_{12}$-1,2,3,7,8,9-HxCDD was low at 22.7% in sample AL2-46 (026-01). AMEC has UJ qualified the nondetected HxCDD, HpCDD, OCDD, HxCDF, HpCDF, and OCDF results and J qualified the detected total HxCDF result from this sample.

10.0 LABORATORY CONTROL SAMPLE AND MATRIX SPIKE RECOVERIES

ERL extracted and analyzed a laboratory control sample (LCS) and a duplicate laboratory control sample (LCSD) with each extraction batch. This equates to a total of 8 LCS/LCSD results for 18 primary samples, or approximately 44%, which exceeds the rate of 5% specified in the Oregon Department of Environmental Quality (DEQ)-approved QAPP. Recovery and precision in laboratory control samples associated with this project were acceptable.

Matrix spikes (MS) and matrix spike duplicates (MSD) were performed on 1 (W-09-116 [024-01]) of the 18 primary samples submitted to ERL from this project, or 5.6%, which exceeds the 5% rate specified in the DEQ-approved QAPP. Recoveries were acceptable for all analytes.

11.0 SURROGATE, OTHER, AND ALTERNATE STANDARD RECOVERIES

Because ERL includes additional labeled isomers beyond those used as internal standards in the spiking solution added to samples, the additional isomers can be used in a manner analogous to surrogate compounds in order to monitor extraction and cleanup efficiency. Qualification of data based on recovery of these isomers is more straightforward than qualification based on internal standards. When recovery of one of these isomers falls outside acceptance limits, only the result from the corresponding nonlabeled isomer is qualified. No data are qualified based on recovery of the $^{37}Cl_4$-2,3,7,8-TCDD cleanup standard unless recoveries of other labeled compounds are also outside acceptance limits.

Recoveries of all $^{13}C_{12}$ and $^{37}Cl_4$ labeled standards were within the 40 to 135% acceptance limits in field and QC samples associated with the Spring 2004 Groundwater Sampling Event.

12.0 FIELD DUPLICATES

One set of field duplicates was collected at sampling location W-09-116 along with the 18 primary samples. This corresponds to a rate of 5.6%, which exceeds the 5% (or 1 in 20) rate specified in the DEQ-approved QAPP. Field duplicate results are presented in Table 5.

PCDD/PCDF congeners were not detected in the primary analysis (024-01) but certain congeners were detected in the duplicate (024-02). Most of the detections in 024-02 were EMPC values and were generally lower than the detection limits for 024-01. Relative percent differences between the primary and duplicate results cannot be calculated for any congeners except for Total TCDF but in AMEC's professional opinion the data may still be considered comparable.

13.0 INTERLABORATORY SPLIT SAMPLES

One sample (W-09-116) out of the 18 primary samples submitted for PCDD/PCDF analysis from the Spring 2004 Groundwater Sampling Event was collected in duplicate in the field and submitted to STL in Sacramento, California as well as to ERL. No PCDD/PCDF congeners were detected by either lab. The interlaboratory split results are presented in Table 6 at the end of this document.

14.0 PERFORMANCE EVALUATION SAMPLE ACCURACY

ERL analyzed a PE sample, purchased from Resource Technology Corporation (RTC) located in Laramie, Wyoming. Certified reference values and acceptance ranges were

supplied for 2,3,7,8-TCDD, 1,2,3,4,7,8-HxCDD, OCDDS, 2,3,7,8-TCDF, and OCDF. Results from the PE analyses may be found in Table 7.

ERL reported concentrations that were within RTC's acceptance ranges. It should be noted that the reported 2,3,7,8-TCDD, 1,2,3,4,7,8-HxCDD, OCDD, and OCDF concentrations were greater than ERL's linear calibration range and, although acceptable, must be considered estimated values.

15.0 COMPOUND IDENTIFICATION AND QUANTIFICATION

ERL applied a number of qualifiers to data from analysis of these samples in order to describe matrix interference and other analytical issues. Definitions of these laboratory qualifiers, resulting validation qualifiers, and a discussion of effect on data usability may be found below.

- The B qualifier is applied by ERL to indicate that a congener was detected in the laboratory blank associated with a sample, as well as in the sample itself. Depending on the relative concentrations in the blank and sample, the results may be U qualified by AMEC. Results that met all identification criteria in a sample were not qualified if the detected analyte in the associated blank was an EMPC.
- The E qualifier is applied by ERL to indicate that a result is based on a ratio of analyte to internal standard that exceeds the calibration range. Any E qualified results have been J qualified by AMEC during validation to reflect the associated quantitative uncertainty.
- The EMPC qualifier is applied by ERL to data when all required ions for a congener are present and signal to noise requirements are met, but the ratios of ions are outside acceptance limits. This indicates uncertainty in analyte identification, so EMPC data have been N qualified by AMEC. In cases where both EMPC and non-EMPC data are reported for total homolog results, the EMPC data are only N qualified if there is a significant (i.e., greater than 20%) difference between the EMPC and non-EMPC results.
- The J qualifier is applied by ERL to indicate a result based on a response that is below the calibrated range of the instrument. Results that were J qualified by the laboratory were also J qualified by AMEC during validation.
- The Q qualifier is applied by ERL to document the presence of QC ion instabilities related to quantitative interferences. Any Q qualified results have been J qualified by AMEC during validation to reflect this quantitative uncertainty.

- The RO qualifier is applied by ERL to indicate that a labeled standard has an abundance ratio that is outside of QC acceptance limits. Results associated with RO qualified standards were J qualified by AMEC during validation.
- The S qualifier is applied by ERL to indicate that the response from a specific PCDD/PCDF isomer has exceeded the normal dynamic range of the mass spectrometer detection system and the corresponding signal is saturated. The reported analyte concentration is a minimum estimate. Results that were S qualified by the laboratory were J qualified by AMEC during validation.
- The V qualifier is applied by ERL to indicate that the percent recovery of a labeled standard is below QC limits but the signal-to-noise ratio is greater than 10:1. Results associated with V quantified standards were J qualified by AMEC during validation.
- The X qualifier is applied by ERL to data when a PCDF peak elutes at the same time as the associated diphenyl ether (DPE), and the DPE contribution to the PCDF result is greater than 10%. Any X qualified results have been J qualified by AMEC during validation to reflect this quantitative uncertainty.

The DB-5 column is used as the primary column for PCDD/PCDF analysis for all congeners except 2,3,7,8-TCDF, which is not adequately resolved from other TCDF congeners on the DB-5. ERL does not confirm 2,3,7,8-TCDF hits that are below the calibrated range of the DB-5 analysis (i.e., J qualified data), and AMEC has N qualified any low level 2,3,7,8-TCDF hits that were not confirmed.

Review of compound identification by AMEC did not reveal any problems with proper application of required compound identification criteria by ERL. In general, selection of data qualifiers by ERL was complete and accurate, and reported values without qualifiers meet all required criteria for identification and quantification.

16.0 TEQ CALCULATIONS

Please note that ERL includes EMPC and estimated detection limit values in the toxicity equivalence (TEQ) calculations. This is contrary to specific language in USEPA Method 8290 related to TEQ calculations.

7.9.7.1.3 For a gas chromatographic peak to be identified as a 2,3,7,8-substituted PCDD/PCDF congener, it must meet the ion abundance and signal-to-noise ratio criteria listed in Secs. 7.8.4.2 and 7.8.4.3 respectively.

TEQ values reported by the laboratory must be recalculated prior to use, excluding the EMPC and EDL results.

17.0 SUMMARY

PCDD/PCDF data generated for the Spring 2004 Groundwater Sampling Event are of acceptable quality. A list of data qualifiers applicable to the PCDD/PCDF data for these samples may be found in Table 2.

LIMITATIONS

This report was prepared exclusively for SLLI by AMEC Earth & Environmental, Inc. (AMEC). The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in AMEC services and based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This Spring 2004 Groundwater Sampling Event Data Validation Report, PCDD/PCDF Results is intended to be used by SLLI for the RP - Portland Site, 6200 N.W. St. Helens Road, Portland, Oregon only, subject to the terms and conditions of its contract with AMEC. Any other use of, or reliance on, this report by any third party is at that party's sole risk.

TABLES

TABLE 1
Field Samples Submitted to ERL and STL with Corresponding Laboratory IDs Spring 2004 Groundwater Sampling Event RP - Portland Site

Site ID	Field Sample ID	ERL Project Number	ERL Sample Number	STL Sample ID
RP-02-66	001-01	62835	380-35-1A	-
RP-07-84	006-01	62839	380-39-1A	-
RP-07-119	007-01	62839r1	380-39-2A	-
W-11-D	012-01	62836	380-36-1A	-
W-11-B	013-01	62836	380-36-2A	-
RP-01-51	017-01	62837	380-37-1A	-
RP-01-65	018-01	62837	380-37-2A	-
Rinsate Blank	019-04	62837	380-37-3A	-
PE Samples	019-05	62838	380-38-1A	-
RP-03-30R	020-01	62840r1	380-40-1A	-
RP-03-52R	021-01	62840r1	380-40-2A	-
AL-06-96	023-01	62840	380-40-3	-
W-09-116	024-01	62874	380-74-1A	-
W-09-116 (Dup)	024-02	62874r1	380-74-2A	-
W-09-116 (Split)	024-06	-	-	120711-1
Rinsate Blank	024-04	62874	680-74-3A	-
AL2-32	025-01	62874	680-74-4A	-
AL2-46	026-01	62874	680-74-5A	-
RP-04-16	028-01	62872	380-72-1A	-
RP-04-41	029-01	62872	380-72-2A	-
MW-5-70	031-01	62873	380-73-1A	-
MW-5-52	033-01	62873	380-73-2A	-

ERL = Eno River Labs, LLC
STL = Severn Trent Laboratories, Inc.
ID = sample identification

TABLE 2
Summary of Data Qualifiers for PCDD/PCDF Results
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Congener or Homolog	RP-02-66 (001-01)	RP-07-84 (006-01)	RP-07-119 (007-01)	W-11-D (012-01)	W-11-B (013-01)	RP-01-51 (017-01)	RP-01-65 (018-01)	RP-03-30R (020-01)	RP-03-52R (021-01)
2,3,7,8-TCDD	U-MB	none	none	none	none	none	none	none	none
1,2,3,7,8-PeCDD	N-EM	none	none	none	N-EM	none	none	none	none
1,2,3,4,7,8-HxCDD	J-HI	J	none	none	none	none	U-FB	none	none
1,2,3,6,7,8-HxCDD	J-HI	J	none	none	none	none	U-FB	none	none
1,2,3,7,8,9-HxCDD	J-HI	J	none	none	J	none	U-FB	none	none
1,2,3,4,6,7,8-HpCDD	J-HI	N-EM	none	none	J	none	none	none	none
OCDD	J-HI	J	U-MB	N-EM	N-EM	U-FB	U-FB	U-MB	none
2,3,7,8-TCDF	U-MB	none	none	U-MB	none	none	U-MB	none	none
1,2,3,7,8-PeCDF	none	N-EM	none	N-EM	J	none	U-FB	none	none
2,3,4,7,8-PeCDF	none	N-EM	none	none	N-EM	none	U-FB	none	none
1,2,3,4,7,8-HxCDF	J-HI	J	none	J	J	U-FB	U-FB	U-MB	none
1,2,3,6,7,8-HxCDF	J-HI	J	none	none	none	none	U-FB	U-MB	none
2,3,4,6,7,8-HxCDF	J-HI	J	none	none	J	none	U-FB	none	none
1,2,3,7,8,9-HxCDF	J-HI	J	none	none	N-EM	none	U-FB	none	none
1,2,3,4,6,7,8-HpCDF	J-HI	none	none	N-EM	J	J	J	none	none
1,2,3,4,7,8,9-HpCDF	J-HI	none	none	none	J	none	U-FB	none	none
OCDF	J-HI	N-EM	none	none	N-EM	U-FB	U-FB	none	none
Total TCDD	U-MB	none	none	none	none	none	none	none	none
EMPC TCDD	-	-	-	-	-	-	-	N-EM	-
Total PeCDD	none	none	none	none	none	none	none	none	none
EMPC PeCDD	N-EM	-	-	-	N-EM	-	-	-	-
Total HxCDD	J-HI	none	none	none	none	none	U-FB	none	none
EMPC HxCDD	-	-	-	-	N-EM	-	-	-	-
Total HpCDD	J-HI	none	none	none	none	none	none	none	none
EMPC HpCDD	-	N-EM	-	-	-	-	-	-	-
Total TCDF	U-MB	none	none	none	none	none	U-MB	none	none
EMPC TCDF	U-MB	U-MB	-	none	-	-	-	-	-
Total PeCDF	none	none	none	none	none	none	none	none	none
EMPC PeCDF	-	N-EM	-	N-EM	N-EM	-	U-FB	-	-
Total HxCDF	J-HI	none	none	none	none	none	U-FB	U-MB	none
EMPC HxCDF	-	-	-	-	N-EM	U-FB	U-FB	-	-
Total HpCDF	J-HI	none	none	none	none	U-FB	U-FB	none	none
EMPC HpCDF	-	-	-	N-EM	-	-	-	-	-

TABLE 2
Summary of Data Qualifiers for PCDD/PCDF Results
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Congener or Homolog	AL-06-96 (023-01)	W-09-116 (024-01)	W-09-116 (024-02)	AL2-32 (025-01)	AL2-46 (026-01)	RP-04-16 (028-01)	RP-04-41 (029-01)	MW-5-70 (031-01)	MW-5-52 (033-01)
2,3,7,8-TCDD	U-MB	none	none	U-MB	none	none	(1:500)	U-MB	none
1,2,3,7,8-PeCDD	J	none	none	J	none	none	none	none	none
1,2,3,4,7,8-HxCDD	J	none	none	J	UJ-LI	none	none	J	none
1,2,3,6,7,8-HxCDD	J	none	none	N-EM	UJ-LI	none	none	none	none
1,2,3,7,8,9-HxCDD	J	none	J	J	UJ-LI	none	none	none	none
1,2,3,4,6,7,8-HpCDD	J	none	N-EM	none	UJ-LI	none	none	none	J
OCDD	J	none	U-MB	J	UJ-LI	N-EM	none	J	J
2,3,7,8-TCDF	U-MB	none	none	J (DB-225)	(DB-225)	(DB-225) J	(DB-225, 1:20)	(DB-225)	(DB-225)
1,2,3,7,8-PeCDF	J	none	N-EM	J	none	J	none	none	J
2,3,4,7,8-PeCDF	J	none	none	J	none	N-EM	none	none	N-EM
1,2,3,4,7,8-HxCDF	J	none	U-MB	N-EM	UJ-LI	none	none	J	J
1,2,3,6,7,8-HxCDF	J	none	N-EM	J	UJ-LI	none	none	J	none
2,3,4,6,7,8-HxCDF	J	none	none	J	UJ-LI	none	none	none	J
1,2,3,7,8,9-HxCDF	J	none	none	J	UJ-LI	none	none	none	none
1,2,3,4,6,7,8-HpCDF	J	none	N-EM	none	UJ-LI	N-EM	none	N-EM	J
1,2,3,4,7,8,9-HpCDF	J	none	N-EM	none	UJ-LI	none	none	none	none
OCDF	J	none	N-EM	none	UJ-LI	J	(1:20)	none	N-EM
Total TCDD	U-MB	none	none	none	none	none	(1:500)	none	none
EMPC TCDD	U-MB	-	N-EM	none	-	-	-	none	-
Total PeCDD	none	none	none	none	none	none	none	none	none
Total HxCDD	none	none	none	none	UJ-LI	none	none	none	none
EMPC HxCDD	N-EM	-	-	N-EM	-	-	none	-	N-EM
Total HpCDD	none	none	none	none	UJ-LI	none	none	none	none
EPMC HpCDD	-	-	N-EM	-	-	-	-	N-EM	-
Total TCDF	none	none	none	none	none	none	(1:500)	none	none
EMPC TCDF	-	none	-	none	-	none	-	none	none
Total PeCDF	none	none	none	none	none	none	(1:20)	none	none
EMPC PeCDF	-	-	none	N-EM	-	none	(1:20)	-	none
Total HxCDF	none	none	none	none	UJ-LI	none	(1:20)	none	none
EMPC HxCDF	-	-	U-MB	N-EM	NJ-EM/LI	none	(1:20)	-	-
Total HpCDF	none	none	none	none	UJ-LI	none	none	none	none
EMPC HpCDF	-	-	N-EM	-	-	N-EM	none	N-EM	N-EM

TABLE 2
Summary of Data Qualifiers for PCDD/PCDF Results
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Data Qualifiers

U The U qualifier indicates that the analyte must be considered to be nondetected at the concentration listed. U qualifiers added during validation are typically a result of detections of target analytes in rinsate or laboratory blanks.

J The J qualifier indicates that the associated result is quantitatively uncertain. J qualifiers added during validation may indicate concentrations between the method detection limit (MDL) and the method reporting limit (MRL) or sample reporting limit (SRL), or a data limitation related to a QC element that exceeds required acceptance limits.

UJ The analyte was not detected above the adjusted MRL. However, the reported adjusted MRL is approximate and may be inaccurate or imprecise.

N The N qualifier indicates that an analyte has been presumptively identified. Presumptive detection means that a chromatographic peak was detected at the correct retention time for an analyte but that not all required identification criteria were met. The associated result is both qualitatively and quantitatively uncertain.

Qualification Rationale Abbreviations

EM The result is based on a response with ion abundance ratios outside method acceptance limits and should be considered an estimated maximum possible concentration.

FB Analyte was detected in a rinsate blank at a concentration more than 20% of the concentration detected in the sample.

HI Recovery standard recovery was greater than 400%. Analytical results may be biased high.

LI Recovery standard recovery was less than 25%. Analytical results may be biased low.

MB Analyte was detected in the method blank at a concentration more than 20% of the concentration detected in the sample.

UC Analyte to internal standard ratio exceeded linear calibration range.

Notes

(DB-225) The 2,3,7,8-TCDF result should be taken from the analysis performed on the DB-225 column.

TABLE 3
PCDD/PCDF Detections in Laboratory Blanks
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Analyte	Detected Concentration (pg/L)	U Qualify Results Below the Following Concentrations in Samples Associated with this Blank (5x or 10x Rule)	Associated Samples	
ERL Project Numbers: 62835, 62836, 62837, 62838, 62839, 62840, 62872, 62873, 62874				
2,3,7,8-TCDD	3.4	17	RP-02-66	001-01
2,3,7,8-TCDF	5.0	25	RP-07-84	006-01
Total TCDD	3.4	17	W-11-D	012-01
Total TCDF	5.0	25	W-11-B	013-01
			RP-01-51	017-01
			RP-01-65	018-01
			AL-06-96	023-01
			W-09-116	024-01
			AL2-32	025-01
			AL2-46	026-01
			RP-04-16	028-01
			RP-04-41	029-01
			MW-5-70	031-01
			MW-5-52	033-01
ERL Project Number 62839r1				
OCDD	5.9	59	RP-07-119	007-01
Total TCDD (EMPC)	2.6	13		
ERL Project Number 62840r1				
1,2,3,7,8,9-HxCDD	5.1	25.5	RP-03-30R	020-01
OCDD (EMPC)	10.6	106	RP-03-52R	021-01
1,2,3,7,8-PeCDF	5.8	29		
1,2,3,4,7,8-HxCDF (EMPC)	2.0	10		
1,2,3,6,7,8-HxCDF	2.4	12		
2,3,4,6,7,8-HxCDF	2.3	11.5		
1,2,3,7,8,9-HxCDF	7.0	35		
Total HxCDD	5.1	25.5		
Total PeCDF	5.8	29		
Total HxCDF	11.7	58.5		
Total HxCDF (EMPC)	13.7	68.5		
ERL Project Number 62874r1				
OCDD	5.9	59	W-09-116	024-02
1,2,3,4,7,8-HxCDF	1.1	5.5		
Total HxCDF	1.1	5.5		

pg/L = picograms per liter
ERL = Eno River Labs, LLC

TABLE 4
PCDD/PCDF Detections in Rinsate Blanks
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Analyte	Concentration (pg/L)	U Qualify Results Below the Following Concentrations in Samples Associated with this Blank (5x or 10x Rule)	Associated Samples
Rinsate Blank 019-04			
2,3,7,8-TCDD	1.8	9.0	RP-01-51 017-01
1,2,3,7,8-PeCDD	<0.7	-	RP-01-65 018-01
1,2,3,4,7,8-HxCDD	1.3	6.5	
1,2,3,6,7,8-HxCDD	1.4	7.0	
1,2,3,7,8,9-HxCDD	1.7	8.5	
1,2,3,4,6,7,8-HpCDD	1.8	9.0	
OCDD	7.8	78	
2,3,7,8-TCDF	3.3	16.5	
1,2,3,7,8-PeCDF (EMPC)	1.7	8.5	
2,3,4,7,8-PeCDF	2.0	10	
1,2,3,4,7,8-HxCDF	1.8	9.0	
1,2,3,6,7,8-HxCDF	1.4	7.0	
2,3,4,6,7,8-HxCDF	1.3	6.5	
1,2,3,7,8,9-HxCDF	1.8	9.0	
1,2,3,4,6,7,8-HpCDF (EMPC)	1.2	6.0	
1,2,3,4,7,8,9-HpCDF	1.8	9.0	
OCDF	3.2	16	
Total TCDD	1.8	9.0	
Total PeCDD	<0.7	-	
Total HxCDD	4.3	21.5	
Total HpCDD	1.8	9.0	
Total TCDF	5.5	27.5	
Total PeCDF (EMPC)	3.7	18.5	
Total HxCDF	6.2	31	
Total HpCDF (EMPC)	3.0	15	

pg/L = picograms per liter

TABLE 5
Field Duplicate Results for Sample W-09-116 (024-01 and 024-02)
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Congener or Homolog	Concentration Reported in the Primary Sample (pg/L)	Concentration Reported in the Duplicate Sample (pg/L)	Relative Percent Difference
2,3,7,8-TCDD	<1.2	<0.8	NC
1,2,3,7,8-PeCDD	<1.4	<0.6	NC
1,2,3,4,7,8-HxCDD	<1.6	<0.6	NC
1,2,3,6,7,8-HxCDD	<1.4	<0.5	NC
1,2,3,7,8,9-HxCDD	<1.8	1.3	NC
1,2,3,4,6,7,8-HpCDD	<2.8	2.0 (EMPC)	NC
OCDD	<5.6	9.5	NC
2,3,7,8-TCDF	<0.9	<0.5	NC
1,2,3,7,8-PeCDF	<0.8	1.3 (EMPC)	NC
2,3,4,7,8-PeCDF	<1.1	<0.5	NC
1,2,3,4,7,8-HxCDF	<1.0	0.83 (EMPC)	NC
1,2,3,6,7,8-HxCDF	<1.0	0.53 (EMPC)	NC
2,3,4,6,7,8-HxCDF	<0.9	<0.3	NC
1,2,3,7,8,9-HxCDF	<1.2	<0.4	NC
1,2,3,4,6,7,8-HpCDF	<1.5	1.1 (EMPC)	NC
1,2,3,4,7,8,9-HpCDF	<2.1	0.60 (EMPC)	NC
OCDF	<4.1	2.1 (EMPC)	NC
Total TCDD	<1.2	17.0 (EMPC)	NC
Total PeCDD	<1.4	<0.6	NC
Total HxCDD	<1.6	1.3	NC
Total HpCDD	<2.8	2.0 (EMPC)	NC
Total TCDF	283	127	76%
Total PeCDF	<0.9	19.6 (EMPC)	NC
Total HxCDF	<1.0	1.4 (EMPC)	NC
Total HpCDF	<1.8	1.7 (EMPC)	NC

EMPC = Estimated Maximum Possible Concentration
NC = Not Calculable

TABLE 6
Interlaboratory Split Results for Sample W-09-116 (024-01 and 024-06)
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Congener or Homolog	Concentration Reported by ERL (Primary Sample) (pg/L)	Concentration Reported by STL (Split Sample) (pg/L)	Relative Percent Difference
2,3,7,8-TCDD	<1.2	<1.8	NC
1,2,3,7,8-PeCDD	<1.4	<3.5	NC
1,2,3,4,7,8-HxCDD	<1.6	<2.7	NC
1,2,3,6,7,8-HxCDD	<1.4	<2.2	NC
1,2,3,7,8,9-HxCDD	<1.8	<2.3	NC
1,2,3,4,6,7,8-HpCDD	<2.8	<3.6	NC
OCDD	<5.6	<3.6	NC
2,3,7,8-TCDF	<0.9	<4.9	NC
1,2,3,7,8-PeCDF	<0.8	<1.7	NC
2,3,4,7,8-PeCDF	<1.1	<1.7	NC
1,2,3,4,7,8-HxCDF	<1.0	<2.0	NC
1,2,3,6,7,8-HxCDF	<1.0	<1.8	NC
2,3,4,6,7,8-HxCDF	<0.9	<2.0	NC
1,2,3,7,8,9-HxCDF	<1.2	<2.3	NC
1,2,3,4,6,7,8-HpCDF	<1.5	<0.92	NC
1,2,3,4,7,8,9-HpCDF	<2.1	<1.3	NC
OCDF	<4.1	<5.1	NC
Total TCDD	<1.2	<1.8	NC
Total PeCDD	<1.4	<3.5	NC
Total HxCDD	<1.6	<2.7	NC
Total HpCDD	<2.8	<3.6	NC
Total TCDF	283	<4.9	NC
Total PeCDF	<0.9	<2.4	NC
Total HxCDF	<1.0	<2.3	NC
Total HpCDF	<1.8	<1.3	NC

ERL = Eno River Labs, LLC
STL = Severn Trent Laboratories, Inc.
NC = Not Calculable

TABLE 7
Performance Evaluation Sample Results
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Analyte	Reference Value (pg/L)	Reported Concentration (pg/L)	Prediction Interval	%Recovery
2,3,7,8-TCDD	80,000	43,310	32,000 - 112,000	54%
1,2,3,7,8-PeCDD	-	621		
1,2,3,4,7,8-HxCDD	88,000	51,490	35,200 - 123,000	59%
1,2,3,6,7,8-HxCDD	-	<0.5		
1,2,3,7,8,9-HxCDD	-	<0.6		
1,2,3,4,6,7,8-HpCDD	-	77.0		
OCDD	65,000	63,980	26,000 - 91,000	98%
2,3,7,8-TCDF	56,000	44,550	22,400 - 78,400	80%
1,2,3,7,8-PeCDF	-	4.5		
2,3,4,7,8-PeCDF	-	4.1		
1,2,3,4,7,8-HxCDF	-	10.4		
1,2,3,6,7,8-HxCDF	-	2.0		
2,3,4,6,7,8-HxCDF	-	2.0		
1,2,3,7,8,9-HxCDF	-	2.6		
1,2,3,4,6,7,8-HpCDF	-	122		
1,2,3,4,7,8,9-HpCDF	-	107		
OCDF	144,000	82,970	57,600 - 202,000	58%

pg/L = picograms per liter

APPENDIX C

Data Validation Report for Spring 2004
Post-Characterization Groundwater Monitoring Event

DATA VALIDATION REPORT FOR SPRING 2004 GROUNDWATER SAMPLING EVENT EXCLUDING PCDD/PCDF RESULTS RP - PORTLAND SITE

November 1, 2004

Submitted to:

Oregon Department of Environmental Quality
811 S.W. 6th Ave.
Portland, Oregon 97204

Prepared for:

SLLI
One Copely Parkway, Suite 309
Morrisville, North Carolina 27709

Prepared by:

AMEC Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224

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ACRONYMS

%D	percent deviation or percent drift in relative response
BS	blank spike
BSD	blank spike duplicate
CAR	certified analytical report
CCAL	continuing calibration
CCB	continuing calibration blank
CCV	continuing calibration verification
CLP	USEPA Contract Laboratory Program
COC	chain of custody
DNAPL	dense non-aqueous phase liquid
GC	gas chromatography
ICAL	initial calibration
ICP	inductively coupled plasma
ICS	interference check sample
ICV	initial calibration verification
ID	site identification
IDL	instrument detection limit
IS	internal standard
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
LNAPL	light non-aqueous phase liquid
MRL	method reporting limit
MS	matrix spike
MSD	matrix spike duplicate
NAPL	non-aqueous phase liquid
OCP	organochlorine pesticide
OSWER	USEPA Office of Solid Waste and Emergency Response

PAH	polynuclear aromatic compounds
PCDD	polychlorinated dioxin
PCDF	polychlorinated dibenzofuran
PE	performance evaluation
PQL	practical quantitation limit
QC	quality control
RF	response factor
RPD	relative percent difference
SOP	standard operating procedure
SVOC	semivolatile organic compound
VOC	volatile organic compound

1.0 INTRODUCTION

Fifty groundwater samples from the Rhône-Poulenc (RP) Portland Site were collected between April 12, 2004 and April 22, 2004. The samples were submitted to North Creek Analytical, Inc. in Beaverton, Oregon (NCA) where they were received between April 13, 2004 and April 22, 2004. Samples analyzed for methane were shipped by NCA to North Creek Analytical, Inc. in Bend, Oregon. Interlaboratory split samples were submitted, by AMEC Earth & Environmental, Inc. (AMEC), to Severn Trent Laboratories, Inc. (STL) in Seattle, Washington. The samples included 33 primary samples, 4 field duplicates, 4 interlaboratory split samples, 6 trip blanks, 2 rinsate blanks, and 1 performance evaluation (PE) sample. Analyses performed on these samples included metals by United States Environmental Protection Agency (USEPA) Methods 6010A and 6020; mercury by USEPA Method 7470A; organochlorine pesticides by USEPA Method 8081A; chlorinated herbicides by USEPA Method 8151A; volatile organic compounds (VOCs) by USEPA Method 8260B; semivolatile organic compounds (SVOCs) by USEPA Method 8270C; and polynuclear aromatic compounds (PAHs) by USEPA Method 8270M-SIM. A list of these samples by sample location, field sample identification (ID), NCA sample ID, and STL sample ID is presented in Table 1.

2.0 DATA VALIDATION METHODOLOGY

This data validation has been performed with reference to USEPA guidelines as given in the April 1992 final version of Guidance for Data Usability in Risk Assessment, the current USEPA functional guidelines for organic and inorganic data review, and the USEPA Office of Solid Waste and Emergency Response (OSWER) standard operating procedures (SOPs) for inorganic and organic data review. The USEPA guidelines listed above were written specifically for the Contract Laboratory Program (CLP), and have been modified for the purposes of this data validation where they differ from USEPA Method SW-846 quality control requirements.

AMEC's methodology exceeded the validation procedures specified in the Department of Environmental Quality (DEQ) -approved Revised Quality Assurance Project Plan (QAPP), dated June 13, 2001 (AMEC, 2001) and the QAPP Addendum No. 1 dated August 1, 2002 (AMEC, 2002). The laboratory's certified analytical report (CAR) and supporting documentation were reviewed to assess the following: chain of custody (COC) compliance; holding time compliance; presence or absence of laboratory contamination as demonstrated by method and field blanks; accuracy and bias as demonstrated by recovery of surrogate spikes, blank spikes (BS), matrix spikes (MS), and PE samples; analytical precision as relative percent difference (RPD) of analyte

concentration between replicate samples (i.e., laboratory duplicates) or MS and matrix spike duplicates (MSD); sampling precision as RPD of analyte concentration between field duplicates; calibration performance; and insofar as possible, the degree of conformance to method requirements and good laboratory practices.

In general, it is important to recognize that no analytical data are guaranteed to be correct, even if all quality control (QC) audits are passed. Strict QC serves to increase confidence in data, but any reported value may potentially contain error.

3.0 EXPLANATION OF DATA QUALITY INDICATORS

LCS Recoveries

Laboratory control samples (LCS) and laboratory control sample duplicates (LCSD), also known as BS and blank spike duplicates (BSD), are aliquots of analyte-free water or Ottawa sand that are spiked with the analytes of interest for an analytical method or a representative subset of those analytes. The spiked water or sand is then processed through the same extraction, concentration, cleanup, and analytical procedures as the samples they accompany. LCS recovery and precision are an indication of the ability of a laboratory to successfully perform an analytical method in an interference-free matrix.

MS Recoveries

Matrix spikes MS and matrix spike duplicates (MSD) are prepared by adding known amounts of the analytes of interest for an analytical method, or a representative subset of those analytes, to an aliquot of sample. The spiked sample is then processed through the same extraction, concentration, cleanup, and analytical procedures as the unspiked samples in an analytical batch.

MS recovery and precision are an indication of the ability of a laboratory to successfully recover an analyte in the matrix of a specific sample or closely related sample matrices. It is important not to apply MS results for any specific sample to other samples without understanding how the sample matrices are related.

Internal Standard Recoveries

Internal standards (IS) are compounds that are added to a sample extract after all preparatory steps are completed and before instrumental analysis. These compounds serve as standards for qualitative analysis using relative retention time and quantitative

analysis using relative response factors (RFs). Methods that use IS calibration include requirements for changes in response to the IS relative to the initial calibration.

For USEPA Method 6020, IS response must fall between 30% and 120% of the response in the initial calibration.

For USEPA Method 8260B and USEPA Method 8270C, IS response must fall between 50% and 200% of the response in the initial calibration. Because the area of the IS is used in the denominator of the equation for calculation of results using internal standardization, a response below 50% may indicate a possible positive bias, and a response above 200% may indicate a possible negative bias.

Surrogate Spike Recoveries

Surrogate spikes are used to evaluate accuracy, method performance, and extraction efficiency in each individual sample. Surrogate compounds are compounds not normally found in environmental samples, but which are similar to target analytes in chemical composition and behavior in the analytical process.

Field Duplicate Results

Field duplicates are replicate samples collected at the same location and submitted in blind form to the laboratory. Field duplicates provide an indication of the reproducibility of the sampling and analysis procedures for a given sample matrix, including heterogeneity of the sample itself. A summary of field duplicate detections may be found in Table 2.

Blank Concentrations

Blank samples are aliquots of analyte free water that are used as negative controls to verify that the sample collection, storage, preparation, and analysis system does not produce false positive results. The three types of blanks employed for this project are:

- Laboratory blanks are aliquots of analyte free water that are processed by the laboratory using exactly the same procedures as the field samples. Laboratory blanks are used to monitor for contamination introduced by the laboratory during sample preparation and analysis. A summary of compounds detected in the laboratory blanks may be found in Table 3A at the end of this document.
- Trip blanks are aliquots of analyte free water that are placed in sample containers at the analytical laboratory and are then sent into the field with the sample containers that are used to collect field samples. Trip blanks are not opened in the

field, but accompany the field samples back to the laboratory where they are analyzed as samples. Trip blanks are used to monitor for contamination that results from sample shipping and storage. For the purpose of this project, trip blanks are prepared and analyzed for VOCs only.

- Rinsate blanks are prepared by passing analyte-free water through or over sample collection equipment and collecting the water in sample containers. Rinsate blanks are analyzed for the analytical suite required for the project. Rinsate blanks are used to monitor for possible sample contamination during the sample collection process and serve as a check on the effectiveness of field documentation procedures.

A summary of compounds detected in the rinsate blanks (field blanks) may be found in Table 3B.

4.0 CHAIN OF CUSTODY AND SAMPLE RECEIPT CONDITION DOCUMENTATION

4.1 Sample Receipt at NCA

All samples were received at NCA in good condition. Specific details of sample receipt condition and COC anomalies are described below.

- Samples RP-02-66 (001-01), W-19-D (002-01), and W-19-I (003-01) were collected on April 12, 2004 between 11:15 and 14:20. The samples were received by NCA on April 13, 2004 at 10:23 at the documented cooler temperatures of 11.3 degrees Celsius (°C) and 7.3°C. Because the samples were received at temperatures exceeding the USEPA-recommended limits of 4°C ± 2°C, AMEC has J qualified all detected VOC and herbicide results and UJ qualified all nondetected results. Because the stability of metals in environmental matrices is not temperature sensitive, the metals data usability is not adversely affected.
- VOC analysis was mistakenly marked on the COC for sample RP-07-55 (005-01). VOC analysis was not planned at this sampling location and volatile organic analyte (VOA) vials were not collected. NCA contacted AMEC for clarification and was instructed to disregard the requested VOC analysis on this sample.
- The interlaboratory splits of samples RP-01-51 (017-06) and RP-03-52R (021-06) were inadvertently submitted to NCA for analysis. AMEC realized the mistake before NCA performed any analyses on these samples and had STL's courier pick up the samples from NCA and submit them to STL for analysis.

- NCA received a 1-liter amber bottle labeled 024-02 (field duplicate of W-09-116) but with the same sampling time as 024-04 (rinsate blank). Because the bottle was received in a plastic bag with a second 024-04 sample, NCA assumed that the sample should have been labeled 024-04.
- Samples AL2-46 (026-01 and 026-02), BST2W-6 (027-01), RP-04-16 (028-01), and RP-04-41 (029-01) were collected on April 21, 2004 between 09:30 and 14:00. The samples were received by NCA on April 22, 2004 at 09:22 at the documented cooler temperatures of 9.4°C, 8.6°C, 7.9°C, and 4.4°C. Because the samples were received at temperatures exceeding the USEPA-recommended limits of 4°C ± 2°C, AMEC has J qualified all detected organic (VOC, SVOC, herbicide, and pesticide) results and UJ qualified all nondetected results. Because the stability of metals in environmental matrices is not temperature sensitive, the metals data usability is not adversely affected.
- There were visual observations of both light non-aqueous phase liquid (LNAPL) and dense non-aqueous phase liquid (DNAPL) when sample RP-04-41 (029-01) was collected. Some NAPL may have been inadvertently collected with the sample and the analytical results may not be representative of dissolved-phase concentrations. The analytical results from RP-04-41 have therefore been labeled as NAPL-affected in the project database and excluded from dissolved-phase discussions.
- Samples MW-5-24 (030-01), MW-5-70 (031-01), MW-5-34 (032-01), and MW-5-52 (033-01) were collected on April 22, 2004 between 09:45 and 11:50. The samples were received by NCA on April 22, 2004 at 14:40 at the documented cooler temperatures of 4.7°C, 12.9°C, and 13.9°C. Because the samples were received at the laboratory between 3 and 5 hours after sampling, in AMEC's professional opinion data usability is not adversely affected.

5.0 SPECIFIC DATA VALIDATION FINDINGS FOR EACH ANALYTICAL METHOD

Sections 5.1 to 5.8 of this Data Validation Report contain narrative descriptions of data validation findings and data quality limitations. Definitions of data qualifiers added during validation may be found in Table 4. Summaries of specific QC sample results are presented in Table 2, Table 3A, Table 3B, Table 11, and Table 12. Summaries of specific qualifiers added to each affected sample as a result of the data validation findings are presented in Tables 5 through 10.

5.1 Metals by USEPA 6020 and USEPA 7470

Samples from the Spring 2004 Groundwater Sampling Event underwent metals analysis by USEPA Method 6020 and USEPA Method 7470A at the NCA laboratory. Summaries of specific QC sample results are presented in Table 5. The results may be considered usable with the limitations and exceptions described below.

5.1.1 Holding Times

All samples were analyzed for metals within the recommended technical holding time of 180 days and for mercury within the recommended technical holding time of 28 days.

5.1.2 Sample Preservation and Preparation

Sample RP-04-16 (028-01) was not field filtered. The sample was submitted to NCA unfiltered and unpreserved. NCA filtered the sample prior to analysis. AMEC has J qualified the detected dissolved: arsenic, chromium, copper, nickel, and zinc results and R qualified and rejected the nondetected dissolved: cadmium, mercury, lead, and vanadium results from this sample because of the lack of proper preservation and uncertainties related to filtering in the laboratory rather than in the field.

5.1.3 Initial Calibration

All initial calibrations (ICAL) associated with analysis of these samples using USEPA Method 6020 and USEPA Method 7470A were acceptable.

5.1.4 Initial Calibration Verification

USEPA acceptance limits for metals initial calibration verification (ICVs) are 90% to 110%. All initial calibration verifications associated with the analysis of these samples using USEPA Method 6020 and USEPA Method 7470A were acceptable.

5.1.5 Continuing Calibration Verification

USEPA acceptance limits for metals continuing calibration verification (CCVs) are 90% to 110%. All CCVs associated with reported data from analysis of these samples using USEPA Method 6020 and USEPA Method 7470A were acceptable.

5.1.6 Inductively Coupled Plasma Interference Check Sample

All interference check samples (ICS) exhibited recoveries, within the 80% to 120% acceptance limits, except for ICS 0131CSB.D analyzed on April 17, 2004 at 23:07. Vanadium (192%), chromium (175%), nickel (160%), copper (151%), zinc (191%), arsenic (187%), and cadmium (179%) recoveries were high in this ICS. As a result, all detected vanadium, chromium, nickel, copper, zinc, arsenic, and cadmium results associated with this failing ICS have been J qualified by AMEC because of a possible high bias in the analytical results. It should be noted that the BS and MS for extraction batch 4040640 are associated with this failing ICS and the spike recoveries may be biased high. Because data were qualified based on the high ICS recoveries, AMEC did not additionally qualify data based on the possible high bias in the BS and MS recoveries.

5.1.7 Blanks

Target analytes should not be found in blank samples. When the concentration detected in the blank is less than the method reporting limit (MRL), concentrations in associated samples greater than the MRL but less than 5 times the concentration detected in the blank have been U qualified by AMEC. When the absolute concentration detected in the blank is greater than the MRL, concentrations in associated samples greater than the MRL but less than 10 times the concentration detected in the blank have been U qualified by AMEC. In both cases, sample concentrations between the instrument detection limit (IDL) and MRL, and less than 5 or 10 times the concentration detected in the blank have been U qualified at the MRL concentration.

Laboratory Blanks

No detected target analyte concentrations above the applicable screening level values (SLVs) were U qualified because of analyte detections in the laboratory blanks.

Target analyte concentrations in laboratory blanks associated with analysis of these samples for metals are described below and a summary can be found in Table 3A:

- Dissolved copper was detected in laboratory blank 4040608-BLK1 at a concentration of 0.000870 milligrams per liter (mg/L). AMEC has U qualified the dissolved copper results from samples RP-02-66 (001-01), RP-07-84 (006-01), RP-07-119 (007-01), MW-03-I (008-01), and MW-03-81 (009-01).

- Lead was detected in laboratory blank 4041077-BLK1 at a concentration of 0.0000900 mg/L. AMEC has U qualified the lead results from samples RP-04-16 (028-01) and RP-04-41 (029-01).

Continuing Calibration Blanks

Target analyte concentrations greater than the MDL in continuing calibration blanks associated with analysis of these samples for metals are described below.

- Cadmium and lead were detected at concentrations of 0.00021 mg/L and 0.00016 mg/L, respectively in 056_CCB analyzed on April 18, 2004 at 02:48. Because the cadmium and lead concentrations detected in the associated samples were more than 5 times the concentrations detected in the continuing calibration blank (CCB), data usability is not adversely affected.
- Nickel, cadmium, and lead were detected at concentrations of 0.00044 mg/L, 0.00015 mg/L, and 0.00015 mg/L, respectively in 068_CCB and 0.00060 mg/L, 0.00021 mg/L, and 0.00022 mg/L, respectively in 083_CCB1 analyzed on April 18, 2004. Because nickel, cadmium, and lead either were not detected in the associated samples or were detected at concentrations greater than 5 times the concentrations detected in the CCB, data usability is not adversely affected.
- Cadmium was detected at a concentration of 0.00012 mg/L in 055_CCB analyzed on April 19, 2004. Because cadmium was either not detected in the associated samples or detected at concentrations greater than 5 times the concentration detected in the CCB, data usability is not adversely affected.
- Copper was detected in 067_CCB and 080_CCB analyzed on April 19, 2004 at concentrations of 0.00073 mg/L and 0.00077 mg/L, respectively. AMEC has U qualified the dissolved copper result from sample RP-02-66 (001-01) and the total copper results from samples W-18-D (014-01) and W-18-I (015-01).
- Lead was detected in 102_CCB, 116_CCB, and 128_CCB, analyzed on April 23, 2004, at concentrations of 0.00019 mg/L, 0.00017 mg/L, and 0.00011 mg/L, respectively. AMEC has U qualified the lead result from sample MW-10-24 (022-01).
- Cadmium was detected at a concentration of 0.00008 mg/L in 059_CCB analyzed on April 26, 2004. Because cadmium was either not detected in the associated samples or detected at concentrations greater than 5 times the concentration detected in the CCB, data usability is not adversely affected.

- Lead was detected in 063_CCB, 075_CCB, and 088_CCB, analyzed on April 27, 2004 at concentrations of 0.00013 mg/L, 0.00012 mg/L, and 0.00015mg/L, respectively. AMEC has U qualified the total lead result from samples RP-04-16 (028-01) and RP-04-41 (029-01).

5.1.8 LCS/LCSD Recovery and Precision

Precision and recovery were acceptable in all LCS/LCSDs associated with analysis of these water samples for metals.

5.1.9 MS/MSD Recovery and Precision

The method-specified acceptance limits for metals MS recoveries are 75% to 125%. However, spike recovery limits are not applicable when the sample concentration exceeds the spike concentration by a factor of four or more.

Because recovery and precision were acceptable for all analytes in the LCS, AMEC's qualifications of metals results in the aqueous samples based on MS recoveries are indicative of sample matrix effects.

Precision and recovery was acceptable in all MS associated with analysis of these samples for metals, except as described below.

- Matrix spikes were performed on sample RP-07-84 (006-01). Manganese recovery was slightly high at 133%. The manganese concentration in the unspiked sample was 0.556 mg/L and the spike concentration was 0.100 mg/L. Because the background manganese concentration in the unspiked sample was approximately 5.6 times the spike concentration, data usability is not adversely affected.

5.1.10 IS Recoveries

Recoveries of all IS associated with analysis of samples from this event for metals were acceptable, except as described below.

- Recoveries of the IS ^{6}Li, ^{7}Li, and ^{45}Sc were high at 132%, 660%, and 129%, respectively in sample RP-06-87 (019-01). AMEC has J qualified the detected arsenic, chromium, copper, nickel, vanadium, and zinc results as estimated values. The usability of the nondetected cadmium and lead values is not adversely affected because the cadmium and lead masses are bracketed by passing IS.

- Recoveries of the IS ^{6}Li, ^{7}Li, and ^{45}Sc were high at 135.8%, 129.2%, and 120.1%, respectively in rinsate blank 024-04. Because the sample is a rinsate blank, AMEC has not qualified any of the data based on the high IS recoveries.

5.1.11 Laboratory Duplicates

USEPA CLP acceptance limits for duplicate sample analyses are ±20% RPD for sample concentrations greater than or equal to 5 times the MRL. A control limit of ± MRL is used if either the sample or duplicate result is less than 5 times the MRL. MRLs are 0.000200 mg/L for mercury; 0.00100 mg/L for arsenic, cadmium, chromium, and lead; 0.00200 mg/L for copper, manganese, and nickel; 0.00500 mg/L for vanadium and zinc; 0.100 mg/L for aluminum, calcium, iron, and magnesium; and 1.00 mg/L for potassium and sodium.

The laboratory duplicates exhibited acceptable precision, except as described below.

- Sample RP-07-84 (006-01) was analyzed in duplicate. RPDs for chromium and lead were high at 45.1% and 46.7%, respectively. Specific limitations include the following:
  - Chromium was detected in the primary analysis at a concentration of 0.00296 mg/L and in the duplicate at a concentration of 0.00187 mg/L. Because the difference between the concentrations was greater than the MRL of 0.00100 mg/L, AMEC has J qualified the detected chromium result from sample RP-07-84 (006-01) and UJ qualified the nondetected chromium results from samples RP-07-119 (007-01), MW-03-I (008-01), and MW-03-81 (009-01).
  - The lead concentration detected in the primary analysis was 0.000660 mg/L and the concentration detected in the duplicate was 0.000410 mg/L. Because both concentrations were less than the MRL of 0.00100 mg/L, data usability is not adversely affected.
- Sample W-09-116 (024-02) was analyzed in duplicate. The RPD for dissolved vanadium was high at 25.9%. The dissolved vanadium concentration detected in the primary analysis was 0.00297 mg/L and the concentration detected in the duplicate analysis was 0.00229 mg/L. Because both concentrations were less than the MRL of 0.00500 mg/L, data usability is not adversely affected.
- Sample BST2W-6 (027-01) was analyzed in duplicate. The RPD for chromium was high at 21%. The chromium concentration detected in the primary analysis was 0.00158 mg/L and the concentration detected in the duplicate analysis was

0.00128 mg/L. Because the difference between the concentrations was less than the MRL of 0.00100 mg/L, data usability is not adversely affected.

5.2 Organochlorine Pesticides by USEPA Method 8081A

Samples from this event were analyzed for organochlorine pesticides (OCPs) at NCA. Summaries of specific QC sample results are presented in Table 6. The results may be considered usable with the limitations and exceptions described below.

5.2.1 Holding Times

All samples were extracted and analyzed within the USEPA recommended maximum holding times of 7 days for extraction and 45 days for analysis.

5.2.2 DDT/Endrin Breakdown

Breakdown is a measure of the amount of decomposition that 4,4'-DDT and endrin undergo when analyzed on the gas chromatography (GC) column. Excessive breakdown is an indication that the chromatographic system is contaminated, chemically active, or too hot. Breakdown is measured by injecting a mixture of DDT and endrin into the GC and dividing the sum of the areas of the breakdown products (DDE and DDD for DDT, and endrin aldehyde and endrin ketone for endrin) by the sums of the areas of the breakdown products and the parent compounds. Breakdown must be less than 15% for analysis to proceed and data to be fully useable. 4,4'-DDT and endrin breakdown was less than 15% each day that samples from this project were analyzed for OCPs.

5.2.3 Initial Calibration

All ICAL associated with analysis of these samples for OCPs were acceptable, except as described below.

- Quadratic models with five data points was used for 4,4'-DDD and 4,4'-DDE in ICAL FOCP0506 analyzed on May 6, 2004. Method 8000B states, "The statistical considerations in developing a non-linear calibration model require more data than the more traditional linear approaches described above. Whereas SW-846 methods employ five standards for a linear (first order) calibration model, a quadratic (second order) model requires six standards, and a third order polynomial requires seven standards." AMEC has J qualified all detected and UJ qualified all nondetected results for these analytes from samples analyzed under this ICAL.

- Quadratic models with five data points was used for delta-BHC, 4,4'-DDE, dieldrin, endrin, 4,4'-DDD, endosulfan II, 4,4'-DDT, endrin aldehyde, endosulfan sulfate, methoxychlor, and endrin ketone in ICAL ROCP0510 analyzed on May 10, 2004. AMEC has J qualified all detected results and UJ qualified all nondetected results for these analytes from samples analyzed under this ICAL.

5.2.4 Continuing Calibration

CCAL performance is evaluated in terms of %D, which corresponds to percent difference (average RF models) or percent drift (regression fit models) from the average ICAL response. To facilitate understanding of CCAL effects on data quality to the end user, %D has been expressed as % recovery in this narrative.

CCAL recoveries should fall within 85% to 115% acceptance limits. AMEC has J qualified all positive results associated with CCAL recoveries greater than 115% due to a possible high bias in the analytical results. AMEC has J qualified all positive results and UJ qualified all negative results associated with CCAL recoveries less than 85% due to a possible low bias in the analytical results.

All CCALs associated with analysis of these samples for OCPs were acceptable, except as described below.

- Recoveries of all analytes, except for aldrin, heptachlor epoxide, gamma-chlordane, and endosulfan I were greater than 115% in CCAL 04290434 (front) analyzed on April 29, 2004. Because the associated results were used for confirmational purposes only, data usability is not adversely affected.
- 4,4'-DDE and 4,4'-DDD recoveries were low at 82.9% and 81.4%, respectively in CCAL 04290435 (rear), analyzed on April 29, 2004. Because the 4,4'-DDE and 4,4'-DDD results from the associated samples were not reported, data usability is not adversely affected.
- 4,4-DDD recovery was low at 81% in CCAL 04290450 (front), analyzed on April 29, 2004. Because the associated results were used for confirmational purposes only and 4,4'-DDD results were not confirmed using the associated analyses, data usability is not adversely affected.
- Delta-BHC (77.7%), endosulfan I (84.5%), 4,4'-DDE (70.8%), dieldrin (83.2%), endrin (83.4%), 4,4'-DDD (67.3%), 4,4'-DDT (76.8%), endosulfan sulfate (83.6%), and methoxychlor (73.9%) recoveries were low in CCAL 04290451 (rear), analyzed on April 29, 2004. Because the delta-BHC, endosulfan I, 4,4'-DDE, dieldrin, endrin, 4,4'-DDD, 4,4'-DDT, endosulfan sulfate, and methoxychlor results

from the associated samples were not reported, data usability is not adversely affected.

- Delta-BHC (75.4%), 4,4'-DDE (70.3%), endrin (56.5%), 4,4'-DDD (54.5%), endosulfan II (53.5%), 4,4'-DDT (63.9%), endrin aldehyde (84.6%), methoxychlor (27.4%), and endosulfan sulfate (28.6%) recoveries were low in CCAL 04290472 (front), analyzed on April 30, 2004. Because the associated results were used for confirmational purposes only and delta-BHC, 4,4'-DDE, endrin, 4,4'-DDD, endosulfan II, 4,4'-DDT, endrin aldehyde, methoxychlor, and endosulfan sulfate results were not confirmed using the associated analyses, data usability is not adversely affected.
- Recoveries of all analytes, except for endrin and 4,4'-DDT were less than 85% in CCAL 04300442.D (front), analyzed on May 1, 2004. Because endrin and 4,4'-DDT were the only analytes reported from the associated samples, data usability is not adversely affected.
- Recoveries of all analytes were greater than 115% in CCAL 05040438 (front), analyzed on May 4, 2004. Because the associated analyses were used for confirmational purposes only, data usability is not adversely affected.
- Recoveries of all analytes were greater than 115% in CCAL05040454 (front), analyzed on May 4, 2004. Because the associated analyses were used for confirmational purposes only, data usability is not adversely affected.
- Recovery of the surrogate compound 2,4,5,6-tetrachloro-m-xylene (TCMX) was high at 118% and hexachlorobenzene (120%), beta-BHC (116%), delta-BHC (118%), 4,4'-DDE (122%), endrin (116%), 4,4'-DDD (121%), 4,4'-DDT (118%), and methoxychlor (128%) recoveries were high in CCAL 05040455 (rear), analyzed on May 4, 2004. Because the recoveries were high and these analytes were not detected in the associated samples, data usability is not adversely affected.
- Alpha-BHC (116%), gamma-BHC (121%), beta-BHC (120%), delta-BHC (124%), endrin (116%), 4,4'-DDD (120%), 4,4'-DDT (124%), endrin aldehyde (116%), methoxychlor (147%), endosulfan sulfate (117%), and endrin ketone (116%) recoveries were high in CCAL 05050436 (front), analyzed on May 5, 2004. Because the associated analyses were used for confirmational purposes only, data usability is not adversely affected.
- Recoveries of all analytes, except for heptachlor, aldrin, and heptachlor epoxide were greater than 115% in CCAL 05050437 (rear), analyzed on May 5, 2004. Because the recoveries were high and no target analytes were detected in the associated samples, data usability is not adversely affected.

- TCMX (116%), alpha-BHC (119%), gamma-BHC (124%), beta-BHC (122%), delta-BHC (123%), dieldrin (119%), endrin (119%), 4,4'-DDD (116%), endosulfan II (119%), 4,4'-DDT (125%), endrin aldehyde (118%), methoxychlor (138%), endosulfan sulfate (120%), and endrin ketone (118%) recoveries were high in CCAL 05050454 (front), analyzed on May 5, 2004. The only detected analytes reported from the associated analyses were: heptachlor, heptachlor epoxide, alpha-chlordane, and endosulfan I.
- 4,4'-DDE (118%), 4,4'-DDD (121%), and methoxychlor (120%) recoveries were high in CCAL 05050455 (rear), analyzed on May 5, 2004. Because the recoveries were high and 4,4'-DDE, 4,4'-DDD, and methoxychlor were not detected in the associated samples, data usability is not adversely affected.
- Endrin (116%), 4,4'-DDD (116%), endosulfan sulfate (116%), and endrin ketone (117%) recoveries were high in CCAL 05050474 (front), analyzed on May 6, 2004. Because no detected endrin, 4,4'-DDD, endosulfan sulfate, and endrin ketone results were reported from the associated analyses, data usability is not adversely affected.
- Recoveries of all analytes, except for aldrin and heptachlor epoxide, were greater than 115% in CCAL 05060405 (rear), analyzed on May 6, 2004. Because the associated analyses were used for confirmational purposes only, data usability is not adversely affected.
- 4,4'-DDD, 4,4'-DDT, and methoxychlor recoveries were low at 84.3%, 83.1%, and 76.5%, respectively in CCAL 05060422 (front), analyzed on May 6, 2004. Because no 4,4'-DDD, 4,4'-DDT, and methoxychlor results were reported from the associated analyses, data usability is not adversely affected.
- Recoveries of all analytes were greater than 115% in CCAL 05060423 (rear), analyzed on May 6, 2004. The associated analyses were used for confirmational purposes only and data usability is not adversely affected.
- Delta-BHC and heptachlor were not recovered and 4,4'-DDD and methoxychlor recoveries were low at 74.7% and 83.4%, respectively in CCAL 05060441 (rear), analyzed on May 6, 2004. The associated analyses were used for confirmational purposes only and in AMEC's professional opinion, data usability is not adversely affected.
- Dieldrin (118%), endrin (117%), endosulfan II (125%), 4,4'-DDT (118%), endrin aldehyde (125%), endosulfan sulfate (124%), methoxychlor (116%), and endrin ketone (127%) recoveries were high in CCAL 05070425 (rear), analyzed on May 7, 2004. Because dieldrin, endrin, endosulfan II, 4,4'-DDT, endrin aldehyde,

endosulfan sulfate, methoxychlor, and endrin ketone results from the associated samples were not reported, data usability is not adversely affected.

- Endosulfan II and endrin ketone recoveries were high at 117% and 117%, respectively in CCAL 05070445 (rear), analyzed on May 8, 2004. The endosulfan II and endrin ketone results from LCS/LCSD 4041131-BS1/BSD1 were reported from analyses associated with this CCAL. In AMEC's professional opinion, usability of the data set, as a whole, is not adversely affected.

5.2.5 Laboratory and Rinsate Blanks

No target compounds were detected in any laboratory or rinsate blanks associated with analysis of samples from this event for OCPs.

5.2.6 LCS/LCSD Recovery and Precision

Target analyte recoveries were within the QAPP-specified 70% to 130% acceptance limits and precision values were less than 20% in the LCS/LCSDs associated with the analysis of these samples for OCPs, except as described below.

- Alpha-BHC, 4,4'-DDD, 4,4'-DDE, endrin, and methoxychlor recoveries were outside of acceptance limits in LCS/LCSD 4040904-BS1/BSD1. Specific limitations include the following:
  - Alpha-BHC recoveries were acceptable at 70% in the LCS but low at 65.2% in the LCSD. Because the average recovery was low at 67.6%, AMEC has J qualified the detected alpha-BHC result from sample MW-10-24 and UJ qualified the nondetected alpha-BHC results from samples W-09-116 (024-01 and 024-02).
  - 4,4'-DDD recoveries were acceptable at 122% in the LCS but high at 149% in the LCSD. Because the average recovery was high at 136% and 4,4'-DDD was not detected in the associated samples, data usability is not adversely affected.
  - 4,4'-DDE recoveries were acceptable at 122% in the LCS but high at 149% in the LCSD. Because the average recovery was high at 136%, AMEC has J qualified the detected 4,4'-DDE result from sample W-09-116 (024-02).
  - Endrin recoveries were acceptable at 111% in the LCS but high at 133% in the LCSD. Because the average recovery was acceptable at 122%, data usability is not adversely affected.

- Methoxychlor recoveries were high at 131% in the LCS and 137% in the LCSD. Because the recoveries were high and methoxychlor was not detected in the associated samples, data usability is not adversely affected.

- Aldrin, alpha-BHC, and heptachlor recoveries were slightly low at 67.2%, 69.4%, and 69.4% in LCS 4041131-BS1. Because the LCSD recoveries were acceptable at 83%, 81.2%, and 82.2%, respectively and the average recoveries were acceptable at 75.1%, 75.3%, and 75.8%, respectively, data usability is not adversely affected.

5.2.7 MS/MSD Recovery

No matrix spikes associated with the analysis of these samples for OCPs were reported.

5.2.8 Surrogate Recoveries

Surrogate recoveries associated with analysis of these samples for OCPs were within the QAPP-specified 60% to 140% acceptance limits, except as described below.

- The surrogate compound TCMX could not be recovered in sample RP-04-41 (029-01). The sample was analyzed at a 1:100 dilution because of high concentrations of target and non-target analytes, which reduced the surrogate concentration below the analytical detection limit. Data usability is not adversely affected.

5.2.9 Data Reporting and Analytical Procedures

The following anomalies were noted during review of the OCP data.

- There was greater than 40% RPD between the results from the primary and confirmational analytical columns for beta-BHC, gamma-BHC, alpha-chlordane, and endrin ketone in sample MW-10-24 (022-01). AMEC has N qualified these results as presumptive.
- There was greater than 40% RPD between the results from the primary and confirmational analytical columns for alpha-chlordane, gamma-chlordane, and heptachlor in sample W-09-116 (024-01). AMEC has N qualified these results as presumptive.
- There was greater than 40% RPD between the results from the primary and confirmational analytical columns for 4,4'-DDE and endrin in sample W-09-116 (024-02). AMEC has N qualified these results as presumptive.

- There was greater than 40% RPD between the results from the primary and confirmational analytical columns for alpha-chlordane, gamma-chlordane, and heptachlor in sample W-09-116 (024-01). AMEC has N qualified these results as presumptive.
- There was greater than 40% RPD between the results from the primary and confirmational analytical columns for endosulfan II in samples RP-04-16 (028-01) and RP-04-41 (029-01). AMEC has N qualified the endosulfan II results as presumptive.
- The 4,4'-DDT result from LCSD 4040904-BSD1 and delta-BHC, 4,4'-DDE, 4,4'-DDD, 4,4'-DDT, endosulfan sulfate, methoxychlor, and endrin ketone results from LCS/LCSD 4041131-BS1/BSD1 were reported from analyses performed under unacceptable ICALs. Five, not six, points were used for a quadratic calibration curve. In AMEC's professional opinion, considering that all LCS recoveries were acceptable, the usability of the data set, as a whole, is not adversely affected.

5.3 Chlorophenoxy Acid Herbicides by USEPA Method 8151A

Samples from this event were analyzed for herbicides at NCA. Summaries of data qualifiers added to herbicide results are presented in Table 7. The results may be considered usable with the limitations and exceptions described below.

5.3.1 Holding Times

All samples from this event were extracted for herbicides within the recommended maximum holding time of 7 days and analyzed within the maximum holding time of 40 days, except as described below.

- Sample RP-01-51 (017-02) was collected on April 15, 2004. The sample was initially extracted on April 19, 2004 but recovery of the surrogate compound 2,4-dichlorophenylacetic acid (2,4-DCAA) was high at 177%. The sample was re-extracted on April 23, 2004, 1 day past the maximum recommended holding time. Because the surrogate recovery was acceptable in the re-extracted sample and the analytical results from both analyses were comparable, the data from the original extraction should be considered definitive and the data from the re-extraction should be used for confirmational purposes.

5.3.2 Initial Calibration

All ICALs associated with analysis of samples from this event for herbicides were acceptable and met all method criteria, except as described below.

- NCA used average response factor calibration models for dicamba and MCPP on column 1 in ICAL81514D15 even though the average response factors for those analytes were greater than the method-specified limit of 20%. Because dicamba and MCPP coelute on the first analytical column and are not reported from that column, in AMEC's professional opinion, data usability is not adversely affected.
- A quadratic model with five data points was used for 2,4-D on column 2 in ICAL 8151E04A analyzed on May 5, 2004. Because column 2 was used for confirmational purposes only, data usability is not adversely affected.

5.3.3 Continuing Calibration

CCAL performance is evaluated in terms of %D, which corresponds to percent difference (average RF models) or percent drift (regression fit models) from the average ICAL response. To facilitate understanding of CCAL effects on data quality to the end user, %D has been expressed as % recovery in this narrative.

CCAL recoveries should fall within 85% to 115% acceptance limits. AMEC has J qualified all positive results associated with CCAL recoveries greater than 115% due to a possible high bias in the analytical results. AMEC has J qualified all positive results and UJ qualified all negative results associated with CCAL recoveries less than 85% due to a possible low bias in the analytical results.

All CCALs associated with analysis of these samples for herbicides were within acceptance limits, except as described below.

- 2,4-DB recovery was high at 136% on column 1 in CCAL 04150416.D analyzed on April 15, 2004. Because 2,4-DB was not detected in the associated samples, the high recovery does not adversely affect data usability.
- MCPP recovery was slightly low at 83.9% on column 1 in CCAL 04150427.D analyzed on April 16, 2004. Because column 1 was used for confirmational purposes, the low recovery does not adversely affect data usability.
- 2,4-D (125%/127%), bromoxynil (122%/122%), 2,4,5-T (121%/128%), 2,4-DB (140%/133%), and dinoseb (129%/135%) recoveries were high on both analytical columns in CCAL 04230440 analyzed on April 24, 2004. All detected 2,4-D,

bromoxynil, 2,4,5-T, 2,4-DB, and dinoseb results from the associated samples were reanalyzed and data usability is not adversely affected.

- Dalapon and 2,4,5-TP recoveries were high at 120% and 120%, respectively, on column 2 in CCAL 04230440 analyzed on April 24, 2004. Because column 2 was used for confirmational purposes, the high recoveries do not adversely affect data usability.
- 2,4-D (119%/125%), bromoxynil (120%/121%), 2,4,5-T (119%/124%), 2,4-DB (131%/133%), and dinoseb (130%/139%) recoveries were high in CCAL 04230442, analyzed on April 24, 2004. All detected 2,4-D, bromoxynil, 2,4,5-T, 2,4-DB, and dinoseb results from the associated samples were reanalyzed and data usability is not adversely affected.
- MCPA and 2,4,5-TP recoveries were high at 116% and 119%, respectively on column 2 in CCAL 04230442, analyzed on April 24, 2004. Because column 2 was used for confirmational purposes, the high recoveries do not adversely affect data usability.
- Dicamba recovery was low at 83.9% on column 1 in CCAL 04290466, analyzed on April 30, 2004. Because no dicamba results associated with this CCAL were reported, data usability is not adversely affected.
- Dalapon and 2,4,5-T recoveries were high at 133% and 121%, respectively, on column 2 in CCAL 05040429, analyzed on May 5, 2004. Because the recoveries were high and dalapon and 2,4,5-T were not detected in the associated samples, data usability is not adversely affected.

5.3.4 Laboratory and Rinsate Blanks

No target analytes were detected in the laboratory or rinsate blanks associated with analysis of samples from this event for herbicides.

5.3.5 LCS/LCSD Recovery and Precision

Precision and recovery were within the QAPP-specified 70% to 130% acceptance limits in all LCS associated with analysis of these samples for herbicides except as described below.

- Dicamba recovery was slightly low at 68.7% in LCSD 4040497-BSD1. The LCS recovery was acceptable at 72% and the average recovery was acceptable at 70%. In AMEC's professional opinion, data usability is not adversely affected.

- 2,4,5-T (68%), 2,4,5-TP (68.7%), and dichlorprop (69.7%) recoveries were outside of acceptance limits in LCS 4040738-BS1. Because the average LCS/LCSD recoveries were acceptable at 71.8%, 73.4%, and 73.7%, respectively, data usability is not adversely affected.
- 2,4-D and dinoseb recoveries were outside of acceptance limits in LCS 4040963-BS1. Specific limitations include the following:
  - 2,4-D recoveries were high at 147% in the LCS but acceptable at 114% in the LCSD. Because the average recovery is acceptable at 130%, data usability is not adversely affected.
  - Dinoseb recoveries were high at 136% in the LCS and in the LCSD. Because the recoveries were high and dinoseb was not detected in the associated samples, data usability is not adversely affected.

5.3.6 Surrogate Recoveries

All surrogate recoveries associated with analysis of these samples for herbicides were within the QAPP-specified 70% to 130% acceptance limits for analyte-free matrices and 60% to 140% acceptance limits for field sample matrices, except as described below.

- Recovery of the surrogate compound 2,4-dichlorophenylacetic acid (2,4-DCAA) was slightly low at 69% in LCSD 4040497-BSD1. Because the recovery was within 1% of the lower acceptance limit and sample surrogate recoveries were acceptable, data usability is not adversely affected.
- 2,4-DCAA recovery was high at 144% in sample AL2-46 (026-01). AMEC has J qualified the detected 2,4-DB, 2,4,5-T, and bromoxynil results from this sample because of a possible high bias in the analytical results.
- 2,4-DCAA recovery was high at 178% in sample MW-5-24 (030-01) because of matrix interference from high concentrations of target analytes. In AMEC's professional opinion, data usability is not adversely affected.
- 2,4-DCAA recovery was high at 150% in sample MW-5-34 (032-01) because of matrix interference from high concentrations of target analytes. In AMEC's professional opinion, data usability is not adversely affected.

5.3.7 MS/MSD Recovery and Precision

Precision and recovery were within the QAPP-specified 60% to 140% acceptance limits in all MS associated with analysis of these samples for herbicides, except as described below.

- Matrix spikes were performed on sample RP-07-84 (006-01). 2,4,5-TP recovery was acceptable at 71.3% in the MS but low at 50% in the MSD. Because the average recovery is acceptable at 60.6%, data usability is not adversely affected.
- Matrix spikes were performed on sample W-09-116 (024-01). Dinoseb, MCPP, and bromoxynil recoveries were outside of acceptance limits. Specific limitations include the following:
  - Dinoseb recoveries were acceptable at 72.3% in the MS but low at 53.3% in the MSD. Because the average recovery is acceptable at 62.8%, data usability is not adversely affected.
  - MCPP recoveries were low at 57.7% in the MS and 44% in the MSD. Because MCPP was not detected in the associated samples, AMEC has UJ qualified the MCPP results from samples RP-03-52R (021-01), AL-06-96 (023-01), W-09-116 (024-01 and 024-02), AL2-32 (025-01), AL2-46 (026-01), BST2W-6 (027-01), RP-04-16 (028-01), RP-04-41 (029-01), MW-5-24 (030-01), MW-5-70 (031-01), MW-5-34 (032-01), and MW-5-52 (033-01).
  - Bromoxynil recoveries were low at 9.27% in the MS and 8.17% in the MSD. Because the recoveries were less than 15%, AMEC has R qualified and rejected the nondetected bromoxynil results from samples RP-03-52R (021-01), AL-06-96 (023-01), W-09-116 (024-01 and 024-02), RP-04-16 (028-01), RP-04-41 (029-01), and MW-5-70 (031-01) and J qualified the detected bromoxynil results from samples AL2-32 (025-01), AL2-46 (026-01), BST2W-6 (027-01), MW-5-24 (030-01), MW-5-34 (032-01), and MW-5-52 (033-01).

5.3.8 Data Reporting and Analytical Procedures

The following anomalies were noted during review of the herbicide data:

- There was greater than 40% RPD between the results from the primary and secondary analytical columns for MCPP in sample W-19-D (002-01). AMEC has N qualified the MCPP result as presumptive.

- There was greater than 40% RPD between the results from the primary and secondary analytical columns for dichlorprop in samples W-19-I (003-01), RP-07-119 (007-01), W-11-D (012-01), RP-06-87 (019-01), BST2W-6 (027-01), and MW-5-70 (031-01). AMEC has N qualified the dichlorprop results from these samples as presumptive.
- There was greater than 40% RPD between the results from the primary and secondary analytical columns for 2,4-DB and 2,4,5-T in sample AL-06-96 (023-01). AMEC has N qualified these results as presumptive.
- There was greater than 40% RPD between the results from the primary and secondary analytical columns for 2,4-D in sample W-09-116 (024-02). AMEC has N qualified the 2,4-D result as presumptive.
- There was greater than 40% RPD between the results from the primary and secondary analytical columns for bromoxynil in sample AL2-32 (025-01). AMEC has N qualified the bromoxynil result as presumptive.
- There was greater than 40% RPD between the results from the primary and secondary analytical columns for dicamba in sample RP-04-16 (028-01). AMEC has N qualified the dicamba result as presumptive.
- The 2,4-D result from sample MW-5-24 (030-01) could not be confirmed off of the second column because a quadratic calibration model was used and the peak area made quantification impossible. AMEC has N qualified the 2,4-D result as presumptive.
- There was greater than 40% RPD between the results from the primary and secondary analytical columns for 2,4,5-T in samples MW-5-34 (032-01) and MW-5-52 (033-01). AMEC has N qualified the 2,4,5-T results as presumptive.

5.4 Volatile Organic Compounds by USEPA Method 8260B

VOC results generated by NCA for samples from this sampling event may be considered usable with the limitations and exceptions described below. Summaries of specific QC sample results are presented in Table 8.

5.4.1 Holding Times

All samples from this event were analyzed for VOCs within the recommended maximum holding time of 14 days.

5.4.2 Initial Calibration

All criteria were met for the initial calibrations associated with analysis of samples from this sampling event for VOCs.

5.4.3 Continuing Calibration

CCAL performance is evaluated in terms of %D, which corresponds to percent difference (average RF models) or percent drift (regression fit models) from the average ICAL response. To facilitate understanding of CCAL effects on data quality to the end user, %D has been expressed as percent recovery in this narrative.

Compounds with CCAL recoveries greater than 120% and positive results have been J qualified by AMEC in all associated samples to indicate a possible high bias in the results. AMEC has J qualified positive results or UJ qualified negative results associated with compounds with CCAL recoveries less than 80% to indicate possible low bias in the sample results.

All criteria were met for the continuing calibration (CCAL) associated with analysis of samples from this sampling event for VOCs except as described below:

- 4-Methyl-2-pentanone (MIBK), 2-hexanone, and 1,2-dibromo-3-chloropropane recoveries were high at 121% in CCAL C0416002, analyzed on April 16, 2004. Because the recoveries were high and MIBK, 2-hexanone, and 1,2-dibromo-3-chloropropane were not detected in the associated samples, data usability is not adversely affected.
- Bromomethane (71.6%), acetone (69%), isobutyl alcohol (66.5%), and 2-ethyl-1-hexanol (55.9%) recoveries were low in CCAL C0425003, analyzed on April 25, 2004. Because these analytes were not detected in the associated samples, AMEC has UJ qualified the bromomethane, acetone, isobutyl alcohol, and 2-ethyl-1-hexanol results from samples RP-01-31 (016-01), RP-01-51 (017-01 and 017-02), RP-01-65 (018-01), RP-06-87 (019-01), RP-03-30R (020-01), AL-06-96 (023-01), W-09-116 (024-02), and AL2-32 (025-01).
- Bromomethane (75.9%), 4-methyl-2-pentanone (MIBK) (121%), and 2-hexanone (128%) recoveries were outside of acceptance limits in CCAL C0428003, analyzed on April 28, 2004. Specific limitations include the following:
    - Because bromomethane was not detected in the associated samples, AMEC UJ qualified the bromomethane results from samples RP-03-52R (021-01), W-09-116 (024-01), AL2-46 (026-01), BST2W-6 (027-01), RP-04-16 (028-01),

RP-04-41 (029-01), MW-5-24 (030-01), MW-5-70 (031-01), MW-5-34 (032-01), and MW-5-52 (033-01).

- Because the MIBK and 2-hexanone recoveries were high and MIBK and 2-hexanone were not detected in the associated samples, data usability is not adversely affected.

5.4.4 Blanks

Target analytes should not be found in blank samples. Results greater than the MRL but less than 5 times the concentration found in the blank, or 10 times the amount found in the blank for methylene chloride, acetone, and 2-butanone (MEK), have been U qualified. Results between the IDL and MRL, and less than 5 or 10 times the amount found in the blank have been U qualified at the MRL concentration.

Laboratory Blanks

No target analytes were detected in the laboratory blanks associated with the analysis of these samples for VOCs, except as described below.

- 1,2,3-Trichlorobenzene was detected in laboratory blank 4040600-BLK1 at a concentration of 0.290 micrograms per liter (µg/L). Because 1,2,3-trichlorobenzene was not detected in the associated samples, data usability is not adversely affected.
- Acetone was detected in laboratory blank 4040654-BLK1 at a concentration of 3.53 µg/L. Because acetone was not detected in the associated samples, data usability is not adversely affected.
- 1,2-Dichlorobenzene was detected in laboratory blank 4040995-BLK1 at a concentration of 0.12 µg/L. Because 1,2-dichlorobenzene either was not detected in the associated samples or was detected at concentrations greater than 5 times the concentration detected in the blank, data usability is not adversely affected.

Trip Blanks

No target analytes were detected in the trip blanks associated with the analysis of these samples for VOCs.

Rinsate Blanks

No target analytes were detected in the rinsate blanks associated with the analysis of these samples for VOCs, except as described below.

- Chloroform and 1,2-dichlorobenzene were detected in rinsate blank 019-04 at concentrations of 0.18 µg/L and 0.26 µg/L, respectively. Because chloroform was not detected in the associated samples and 1,2-dichlorobenzene either was not detected or was detected at concentrations more than 5 times the concentration detected in the blank, data usability is not adversely affected.
- Acetone, 2-butanone (MEK), 1,2-dichlorobenzene, and naphthalene were detected in rinsate blank 024-04 at concentrations of 4.2 µg/L, 5.89 µg/L, 0.1 µg/L, and 2.56 µg/L, respectively. Specific limitations include the following:
  - Acetone and MEK were not detected in the associated samples and data usability is not adversely affected.
  - 1,2-Dichlorobenzene either was not detected in the associated samples or was detected at concentrations greater than 5 times the concentration detected in the blank. Data usability is not adversely affected.
  - The naphthalene result from sample AL2-32 has been U qualified by AMEC.

5.4.5 LCS/LCSD Recovery and Precision

All LCS/LCSD recoveries associated with analysis of samples from this project for VOCs were within the QAPP-specified 70% to 130% acceptance limits, except as described below.

- Acetone and 2-ethyl-1-hexanol recoveries were low at 66.2% and 61.5%, respectively in LCS 4040995-BS1, and 63.2% and 66%, respectively in LCSD 4040995-BSD1. Because these analytes were not detected in the associated samples, AMEC has UJ qualified the acetone and 2-ethyl-1-hexanol results from samples RP-01-31 (016-01), RP-01-51 (017-01 and 017-02), RP-01-65 (018-01), RP-06-87 (019-01), RP-03-30R (020-01), AL-06-96 (023-01), W-09-116 (024-02), and AL2-32 (025-01).

5.4.6 Surrogate and Internal Standard Recoveries

Recovery of all surrogates and IS associated with analysis of samples from this event for VOCs were acceptable.

5.4.7 MS/MSD Recovery and Precision

All MS/MSD recoveries associated with analysis of samples from this project for VOCs were within the QAPP-specified 60% to 140% acceptance limits, except as described below.

- Matrix spikes were performed on sample RP-01-51 (017-01). Carbon disulfide recovery was low at 56.4% in the MSD but acceptable at 81.2% in the MS. Because the average recovery is acceptable at 68.8%, in AMEC's professional opinion data usability is not adversely affected.
- Matrix spikes were performed on sample W-09-116 (024-01). Carbon disulfide recovery was low at 54.1% in the MSD but acceptable at 88% in the MS. Because the average recovery is acceptable at 71%, in AMEC's professional opinion data usability is not adversely affected.

5.4.8 Data Reporting and Analytical Procedure

AMEC has N qualified the detected 1,4-dichlorobenzene result from sample MW-03-I (008-01) because the ion abundance ratios do not meet method-specified criteria.

AMEC has N qualified the detected trans-1,2-dichloroethene result from sample RP-06-87 (019-01) because the ion abundance ratios do not meet method-specified criteria.

5.5 Semivolatile Organic Compounds by USEPA Method 8270C

Because of the well known difficulty in extracting phenols from aqueous matrices, AMEC chose to use the United States Army Corps of Engineers (USACE) measurement quality objectives for Method 8270 semivolatiles (USACE, 2001) for evaluating data usability of the acid extractable analytes (phenols) instead of using the QAPP-specified acceptance limits.

SVOC results generated by NCA for samples from this event may be considered usable with the limitations described below. Summaries of specific QC sample results are presented in Table 9.

5.5.1 Holding Times

All samples were extracted and analyzed within the USEPA recommended maximum holding time of 7 days for aqueous extraction and 45 days for analysis.

5.5.2 Initial Calibration

All criteria were met for the initial calibrations associated with analysis of samples from this sampling event for SVOCs.

5.5.3 Continuing Calibration

CCAL performance is evaluated in terms of %D, which corresponds to percent difference (average RF models) or percent drift (regression fit models) from the average ICAL response. To facilitate understanding of CCAL effects on data quality to the end user, %D has been expressed as % recovery in this narrative. CCAL performance is evaluated in terms of percent recovery for linear and quadratic calibration models.

CCAL recoveries should fall within 80% to 120% acceptance limits. AMEC has J qualified all positive results associated with CCAL recoveries greater than 120% due to a possible high bias in the analytical results. AMEC has J qualified all positive results and UJ qualified all negative results associated with CCAL recoveries less than 80% due to a possible low bias in the analytical results.

- Isophorone (67.7%), hexachlorocyclopentadiene (50.6%), 2,4-dinitrotoluene (77.4%), and 3,3'-dichlorobenzidine (155%) recoveries were outside of acceptance limits in CCAL 04270401, analyzed on April 27, 2004 at 10:10. Because these analytes were not detected in the associated sample, AMEC has UJ qualified the isophorone, hexachlorocyclopentadiene, and 2,4-dinitrotoluene results from sample W-09-116 (024-01), but the high 3,3'-dichlorobenzidine recovery does not adversely affect data usability.
- Isophorone (67.9%), hexachlorocyclopentadiene (56.5%), and 3,3'-dichlorobenzidine (177%) recoveries were outside of acceptance limits in CCAL 04290403, analyzed on April 29, 2004 at 11:00. Because these analytes were not detected in the associated samples, AMEC has UJ qualified the isophorone and hexachlorocyclopentadiene results from samples W-09-116 (024-02) and RP-04-41 (029-01), but the high 3,3'-dichlorobenzidine recovery does not adversely affect data usability.
- Bis(2-chlorethyl)ether (77.4%); benzyl alcohol (72.9%); isophorone (68.8%); hexachlorocyclopentadiene (68.9%); 2,4-dinitrotoluene (68.8%); and 3,3'-dichlorobenzidine (144%) recoveries were outside of acceptance limits in CCAL 05030405, analyzed on May 3, 2004 at 13:18. Because these analytes were not detected in the associated sample, AMEC has UJ qualified the bis(2-chlorethyl)ether, benzyl alcohol, isophorone, hexachlorocyclopentadiene, and 2,4-dinitrotoluene results from sample RP-04-16 (028-01) and the bis(2-chlorethyl)ether and benzyl alcohol results from sample RP-04-41 (029-01), but the high 3,3'-dichlorobenzidine recovery does not adversely affect data usability.

- Bis(2-chlorethyl)ether (75.4%), benzyl alcohol (74.4%), isophorone (65.6%), hexachlorocyclopentadiene (78.6%), 2,4-dinitrotoluene (74.8%), and 3,3'-dichlorobenzidine (162%) recoveries were outside of acceptance limits in CCAL 05040407, analyzed on May 4, 2004 at 14:36. Because these analytes were not reported from the associated analyses, data usability is not adversely affected.

5.5.4 Laboratory Blanks

No SVOCs were detected in the laboratory blanks associated with these samples.

5.5.5 Rinsate Blanks

No SVOCs were detected in the rinsate blanks associated with these samples.

5.5.6 LCS/LCSD Recovery and Precision

For the purpose of this data validation report, AMEC has defaulted to the USACE-specified LCS recovery limits of 45 to 135% (USACE, 2001) for the acid extractable analytes, but applied the QAPP-specified 70% to 130% acceptance limits for the base/neutral extractable analytes. Non-detected analytes with LCS recoveries less than 15% were R qualified and rejected by AMEC.

Recovery and precision for LCS/LCSDs associated with analysis of samples from this project for SVOCs were acceptable, except as described below.

- Benzoic acid, benzyl alcohol; bis(2-chloroethyl)ether; 2-chloronaphthalene; 1,2-dichlorobenzene; 1,3-dichlorobenzene; 1,4-dichlorobenzene; 3,3'-dichlorobenzidine; hexachlorobutadiene; hexachlorocyclopentadiene; hexachloroethane; isophorone; 2-methylnaphthalene; naphthalene; nitrobenzene; 4-nitrophenol; phenol; and 1,2,4-trichlorobenzene recoveries were outside of acceptance limits in LCS/LCSD 4040907-BS1/BSD1 associated with the analysis of samples AL2-32 (025-01) (phenols only) and W-09-116 (024-01 and 024-02) (full 8270 list). Specific limitations include the following:
    - Benzoic acid was not recovered in the LCS or in the LCSD. The benzoic acid results from sample W-09-116 (024-01 and 024-02) have been R qualified and rejected by AMEC.
    - Benzyl alcohol (65%/59.5%), hexachlorobutadiene (57%/45%), hexachlorocyclopentadiene (33.7%/25.7%), hexachloroethane (42.7%/32.9%), 2-methylnaphthalene (65.2%/61.8%), and 1,2,4-trichlorobenzene (58.3%/48%)

recoveries were outside of the QAPP-specified limits. Because these analytes were not detected in the associated sample, AMEC has UJ qualified these analytes in sample W-09-116 (024-01 and 024-02).

- 3,3'-Dichlorobenzidine recoveries were high at 138% in the LCS and 136% in the LCSD. Because 3,3'-dichlorobenzidine was not detected in the associated samples, the high recoveries do not adversely affect data usability.
- 1,2-Dichlorobenzene (48.3%/37.7%); 1,3-dichlorobenzene (43.7%/33.1%); and 1,4-dichlorobenzene (46%/35.3%) recoveries were outside of the QAPP-specified limits. AMEC has J qualified the detected 1,2-dichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene results from sample W-09-116 (024-01 and 024-02).
- 4-Nitrophenol (36.5%/34.8%) and phenol (34.2%/29.8%) recoveries were outside the USACE-specified limits. Because 4-nitrophenol and phenol were not detected in the associated samples, AMEC has UJ qualified the 4-nitrophenol and phenol results from samples W-09-116 (024-01 and 024-02) and AL2-32 (025-01).

- Benzoic acid, benzyl alcohol; 1,2-dichlorobenzene; 1,3-dichlorobenzene; 1,4-dichlorobenzene; 3,3'-dichlorobenzidine; 2,4-dimethylphenol; hexachlorobutadiene; hexachlorocyclopentadiene; hexachloroethane; 2-methylnaphthalene; 4-nitrophenol; phenol; and 1,2,4-trichlorobenzene recoveries were outside of acceptance limits in LCS/LCSD 4041010-BS1/BSD1. This LCS/LCSD was associated with the analysis of samples AL2-46 (026-01 and 026-02), BST2W-6 (027-01), MW-5-24 (030-01), MW-5-34 (032-01), and MW-5-52 (033-01) for phenols and RP-04-16 (028-01) and RP-04-41 (029-01) for the full list of SVOCs. Specific limitations include the following:
  - Benzoic acid was not recovered in the LCS and recovery was low at 33.8% in the LCSD. Because the average recovery was greater than 15%, AMEC has UJ qualified the nondetected benzoic acid results from samples RP-04-16 (028-01) and RP-04-41 (029-01).
  - Benzyl alcohol (66.5%/68%), hexachlorobutadiene (32.2%/26.1%), hexachloroethane (23.7%/20.2%), 2-methylnaphthalene (64%/63.8%), and 1,2,4-trichlorobenzene (41%/36.3%) recoveries were low in the LCS and in the LCSD. AMEC has UJ qualified the nondetected benzyl alcohol, hexachlorobutadiene, hexachloroethane, 2-methylnaphthalene, and 1,2,4-trichlorobenzene results from samples RP-04-16 (028-01) and RP-04-41 (029-01).

- 1,2-Dichlorobenzene (32.5%/29.1%); 1,3-dichlorobenzene (27.7%/24.6%); and 1,4-dichlorobenzene (26.5%/30.1%) recoveries were low in the LCS and in the LCSD. AMEC has J qualified the detected 1,2-dichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene results from samples RP-04-16 (028-01) and RP-04-41 (029-01).
- 3,3'-Dichlorobenzidine recoveries were high at 133% in the LCS but acceptable at 119% in the LCSD. Because the average recovery is acceptable at 126%, data usability is not adversely affected.
- 2,4-Dimethylphenol recoveries were acceptable at 53.8% in the LCS but low at 42% in the LCSD. Because the average recovery was acceptable at 47.9%, data usability is not adversely affected.
- Hexachlorocyclopentadiene was not recovered in the LCS or in the LCSD. AMEC has R qualified and rejected the nondetected hexachlorocyclopentadiene results from samples RP-04-16 (028-01) and RP-04-41 (029-01).
- 4-Nitrophenol recoveries were low at 33% in the LCS and 37.5% in the LCSD. AMEC has UJ qualified the nondetected 4-nitrophenol results from all of the associated samples.
- Phenol recoveries were low at 32.5% in the LCS and 34.5% in the LCSD. AMEC has J qualified the detected phenol results from samples AL2-46 (026-01 and 026-02), BST2W-6 (027-01), RP-04-16 (028-01), MW-5-24 (030-01), and MW-5-34 (032-01) and UJ qualified the nondetected phenol results from samples RP-04-41 (029-01) and MW-5-52 (033-01).

5.5.7 MS/MSD Recovery and Precision

For the purpose of this Data Validation Report, AMEC has defaulted to the USACE-specified MS recovery limits of 45% to 135% (USACE, 2001) for the acid extractable analytes, but applied the QAPP-specified 60% to 140% acceptance limits for the base/neutral extractable analytes. Non-detected analytes with MS recoveries less than 15% were R qualified and rejected by AMEC.

Precision and recoveries were acceptable in the MS/MSDs associated with the analysis of samples from this project for SVOCs, except as described below:

- Matrix spikes were performed on sample W-09-116 (024-01). Benzoic acid, 1,3-dichlorobenzene; 1,4-dichlorobenzene; hexachlorocyclopentadiene;

hexachloroethane; 4-nitrophenol; and phenol recoveries were outside of acceptance limits. Specific limitations include the following:

- Benzoic acid recoveries were low at 46.9% in the MS and 48% in the MSD. AMEC has revised the benzoic acid qualifiers for sample W-09-116 (024-01 and 024-02) from R qualified and rejected to UJ qualified because benzoic acid was recoverable in the MS/MSD.
- 1,3-Dichlorobenzene recoveries were low at 37.1% in the MS and 29.7% in the MSD. The 1,3-dichlorobenzene concentration in the unspiked sample was 58.7 µg/L and the spike concentration was 28.3 µg/L. Because the background 1,3-dichlorobenzene concentration in the unspiked sample was approximately 2 times the spike concentration, in AMEC's professional opinion, data usability is not adversely affected.
- 1,4-Dichlorobenzene recoveries were acceptable at 67.1% in the MS but low at 35% in the MSD. The 1,4-dichlorobenzene concentration in the unspiked sample was 485 µg/L and the spike concentration was 28.3 µg/L. Because the background 1,4-dichlorobenzene concentration in the unspiked sample was approximately 17 times the spike concentration, data usability is not adversely affected.
- Hexachlorocyclopentadiene (39.9%/38.5%) and hexachloroethane (51.9%/47.2%) recoveries were low in the MS and MSD. Because these analytes were not detected in the associated samples, AMEC has UJ qualified the hexachlorocyclopentadiene and hexachloroethane results from sample W-09-116 (024-01 and 024-02).
- 4-Nitrophenol (39.3%/38.1%) and phenol (38.7%/38.3%) recoveries were low in the MS and MSD. Because these analytes were not detected in the associated samples, AMEC has UJ qualified the 4-nitrophenol and phenol results from samples W-09-116 (024-01 and 024-02) and AL2-32 (025-01).

- Matrix spikes were performed on sample AL2-46 (026-01). Because of high concentrations of target and nontarget analytes in this sample, the sample extracts were diluted enough to lower the spike concentrations to less than MRLs, and in some cases, less than MDLs. AMEC has not qualified any data based on these matrix spikes.

5.5.8 Internal Standard Recoveries

IS recoveries were within the method-specified 50% to 200% acceptance limits.

5.5.9 Surrogate Recoveries

For the purpose of this Data Validation Report, AMEC has defaulted to the USACE-specified surrogate recovery limits of 35% to 140% for acid surrogate compounds, but applied the QAPP-specified 60% to 140% for base/neutral surrogate compounds in sample matrices. Up to one surrogate from each extraction fraction may be outside of acceptance limits without affecting data usability.

Surrogate recoveries associated with analysis of these samples for SVOCs were acceptable, except as described below.

- Recoveries of the surrogate compound phenol-d6 were low in samples W-09-116 (024-02), AL2-32 (025-01), AL2-46 (026-01), RP-04-16 (028-01), and MW-5-52 (033-01) at 34.9%, 32.6%, 33.8%, 24.8%, and 30.4%, respectively. Because phenol-d6 was the only acid extractable surrogate outside of acceptance limits and USEPA Method 8270C allows up to one surrogate from each extraction fraction to be outside of acceptance limits, data usability is not adversely affected.
- Recoveries of the acid surrogate compounds 2-fluorophenol (34%) and phenol-d6 (24.8%) and the base/neutral surrogate compound 2-fluorobiphenyl (54.8%) were low in rinsate blank 024-04. Because the sample was a rinsate blank and the surrogate recoveries were acceptable in the field samples, in AMEC's professional opinion, data usability is not adversely affected. Low surrogate recoveries in deionized water is a common problem and is not an indicator of extraction inefficiency in field samples.
- The surrogate compounds 2-fluorophenol and phenol-d6 could not be recovered from sample RP-04-41 (029-01). Because these surrogates were reported from a 1:200 dilution, which reduced the surrogate concentrations below the analytical detection limits, data usability is not adversely affected.
- The surrogate compound phenol-d6 could not be recovered from sample MW-5-24 (030-01). Because the sample was analyzed at a 1:25 dilution, which reduced the surrogate concentration below the analytical detection limit, data usability is not adversely affected.
- No surrogates could be recovered from sample MW-5-34 (032-01). Because the sample was analyzed at a 1:200 dilution, which reduced the surrogate concentrations below the analytical detection limits, data usability is not adversely affected.

5.6 Polynuclear Aromatic Hydrocarbons by USEPA Method 8270M-SIM

PAH results generated by NCA for these samples may be considered usable with the limitations described below. Summaries of specific QC sample results are presented in Table 10.

5.6.1 Holding Times

All samples were extracted and analyzed within the USEPA recommended maximum holding time of 7 days for extraction and 45 days for analysis.

5.6.2 Initial Calibration

All criteria were met for the initial calibrations associated with the analysis of samples from this sampling event for PAHs.

5.6.3 Continuing Calibration

CCAL performance is evaluated in terms of %D, which corresponds to percent difference (average RF models) or percent drift (regression fit models) from the average ICAL response. To facilitate understanding of CCAL effects on data quality to the end user, %D has been expressed as % recovery in this narrative.

All CCAL recoveries were within the 80% to 120% acceptance limits, except as described below:

- Benzo(b)fluoranthene and benzo(ghi)perylene recoveries were low at 73.1% and 76.6%, respectively, in CCAL 04270411, analyzed on April 27, 2004. AMEC has UJ qualified the nondetected benzo(b)fluoranthene and benzo(ghi)perylene results from samples RP-03-30R (020-01) and RP-03-52R (021-01 and 021-02).

5.6.4 Laboratory Blanks

No PAHs were detected in the laboratory blanks associated with these samples.

5.6.5 Rinsate Blanks

No PAHs were detected in the rinsate blanks associated with these samples, except as described below:

- Acenaphthene (0.154 µg/L), fluorene (0.0673 µg/L), naphthalene (0.353 µg/L), and phenanthrene (0.0688 µg/L) were detected in rinsate blank 024-04. Because no

other PAH samples were collected on the same day as the rinsate blank, AMEC has not qualified any data based on the detections in the rinsate blank.

5.6.6 LCS/LCSD Recovery and Precision

Recovery and precision for LCS/LCSDs associated with analysis of samples from this project for PAHs were within the QAPP-specified 70% to 130% recovery limits and 20% precision limit, except as described below.

- Benzo(a)pyrene, benzo(ghi)perylene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene recoveries were outside of acceptance limits in LCS/LCSD 4040583-BS1/4040583-BSD1, associated with the analysis of samples RP-07-30 (004-01), RP-07-55 (005-01), RP-07-84 (006-01), and RP-07-119 (007-01). Specific limitations include the following:
  - Benzo(a)pyrene recovery was acceptable at 74.8% in the LCS but low at 67.6% in the LCSD. Because the average recovery is acceptable at 71.2%, data usability is not adversely affected.
  - Benzo(ghi)perylene recoveries were low at 50.8% in the LCS and 46% in the LCSD. AMEC has UJ qualified the nondetected benzo(ghi)perylene results from the associated samples.
  - Dibenzo(a,h)anthracene recoveries were low at 44% in the LCS and 39.8% in the LCSD. AMEC has UJ qualified the nondetected dibenzo(a,h)anthracene results from the associated samples.
  - Indeno(1,2,3-cd)pyrene recoveries were low at 64.8% in the LCS and 58.4% in the LCSD. AMEC has UJ qualified the nondetected indeno(1,2,3-cd)pyrene results from the associated samples.

- Acenaphthene, acenaphthylene, anthracene, benzo(ghi)perylene, dibenzo(a,h)anthracene, fluorine, naphthalene, and phenanthrene recoveries were outside of the QAPP-specified acceptance limits in LCS/LCSD 4040909-BS1/BSD1. Specific limitations include the following:
  - Acenaphthene (56.8%/68.8%), naphthalene (54%/69.6%), and phenanthrene (55.6%/ 69.2%) recoveries were low in the LCD and in the LCSD. AMEC has J qualified the detected acenaphthene, naphthalene, and phenanthrene results from samples RP-03-30R (020-01) and RP-03-52R (021-01 and 021-02).
  - Acenaphthylene (58%/69.6%), benzo(ghi)perylene (69.6%/67.6%), and dibenzo(a,h)anthracene (63.6%/57.6%) recoveries were low in the LCS and LCSD. AMEC has UJ qualified the nondetected acenaphthylene,

benzo(ghi)perylene, and dibenzo(a,h)anthracene results from samples RP-03-30R (020-01) and RP-03-52R (021-01 and 021-02).

- Anthracene recoveries were low at 66.8% in the LCS but acceptable at 80.8% in the LCSD. Because the average recovery is acceptable at 73.8%, data usability is not adversely affected.
- Fluorene recoveries were low at 58.8% in the LCS but acceptable at 71.6% in the LCSD. Because the average recovery is low at 65.2%, AMEC has J qualified the detected fluorene results from samples RP-03-30R (020-01) and RP-03-52R (021-01 and 021-02).

5.6.7 MS/MSD Recovery and Precision

Recoveries were within the QAPP-specified 60% to 140% acceptance limits and precision values were acceptable with less than 30% RPD in the MS/MSDs associated with the analysis of samples from this project for PAHs, except as described below.

- Matrix spikes were performed on sample RP-07-84 (006-01). Benzo(ghi)perylene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene recoveries were outside of acceptance limits. Specific limitations include the following:
  - Benzo(ghi)perylene recoveries were low at 45.8% in the MS and 53.8% in the MSD. AMEC has UJ qualified the nondetected benzo(ghi)perylene results from the associated samples.
  - Dibenzo(a,h)anthracene recoveries were low at 39.7% in the MS and 46.6 the MSD. AMEC has UJ qualified the nondetected dibenzo(a,h)anthracene results from the associated samples.
  - Indeno(1,2,3-cd)pyrene recoveries were low at 51.7% in the MS and 59.3% in the MSD. AMEC has UJ qualified the nondetected indeno(1,2,3-cd)pyrene results from the associated samples.

5.6.8 IS Recoveries

Recovery of all IS associated with analysis of samples from this event for PAHs were acceptable.

5.6.9 Surrogate Recoveries

Surrogate recoveries associated with analysis of these samples for PAHs were within the QAPP-specified 60% to 140% acceptance limits, except as described below.

- Recoveries of the surrogate compound benzo(a)pyrene-d12 were low at 58.5% in samples RP-07-30 (004-01) and RP-03-30R (020-01) at 58.5% and 50%, respectively. USEPA Method 8270C allows up to one surrogate to be outside of acceptance limits without affecting data quality and data usability is not adversely affected.

6.0 FIELD DUPLICATE RESULTS

Four field duplicate pairs out of 50 field samples were submitted to NCA. The samples were labeled blindly, so that the laboratory was not aware which samples were submitted in duplicate. Primary samples were named with -01 appended to the sample name, and duplicate samples were coded with -02 appended to the sample name. Positive results for each set of field duplicates are summarized in Table 2 at the end of this document.

Precision values met the QAPP-specified acceptance limits, with RPDs for aqueous samples less than 30% for analytes with concentrations more than 5 times their PQLs, and concentrations within one MRL for analytes with concentrations less than 5 times their PQLs.

7.0 INTERLABORATORY SPLIT SAMPLE RESULTS

Four field samples were submitted to both NCA and STL. The samples were labeled blindly, so that the primary laboratory (i.e., NCA) was not aware which samples were also submitted to the QC laboratory (i.e., STL). Primary samples were named with -01 appended to the sample name, and split samples were coded with -06 appended to the sample name. A summary of split sample results may be found in Table 13.

STL MRLs and MDLs are generally lower than NCA's. Analyte concentrations reported by both laboratories were generally comparable, except for the SVOC analyses performed on sample W-09-116 (024-01 and 024-06) and the phenols analyses of sample AL2-46 (026-01 and 026-06). In both cases, the laboratories reported widely different concentrations for the semivolatile analytes. STL reported much higher concentrations and detected more analytes in sample W-09-116 than NCA did and NCA reported more analytes and higher analyte concentrations in sample AL2-46 than STL did. Based on the inconsistency between which laboratory reported the higher analytical results, NCA's good analytical precision in the field duplicates collected with these samples, and NCA's acceptable performance on the phenols PE sample, AMEC believes that the high RPDs between the SVOC and

phenols results reported by NCA and STL may be indicative of sampling irregularities and are not indicative of analytical problems with this data set.

It should be noted that STL does not report alpha or gamma chlordane in their OCP analyses or bromoxynil in their herbicide analyses. STL also reports a much shorter phenols list than NCA.

8.0 DOUBLE BLIND PERFORMANCE EVALUATION SAMPLE RESULTS

PE samples were purchased in whole volume form from Resource Technology Corporation, Inc. (RTC) in Laramie, Wyoming (NVLAP Code 200393-0). AMEC labeled all PE sample bottles with the appropriate analyses and submitted them to NCA as a single sample with the blind ID 019-05. When the samples were extracted at the lab, it appears that the extractionists did not extract the correct sample bottles and as a result, the pesticide and PAH PE samples were unusable. In future sampling events, AMEC will separate the PE samples and submit the bottles for each analysis individually in an attempt to eliminate the possibility of extraction errors. The exceptions to this rule would be the VOC and metals PE samples, which may be submitted with any other single PE sample owing to dissimilar sampling containers.

NCA performed well on the herbicides, VOCs, and phenols PE samples. When the preliminary metals results were submitted to AMEC, mercury, nickel, lead, and vanadium concentrations were approximately half of the certified PE concentrations. Upon further review, NCA realized that a dilution factor of 2 had not been reported for the nickel, lead, and vanadium analyses. NCA reanalyzed the metals PE sample for mercury, after the holding time had expired, and got an even lower concentration than in the initial analysis. Both times that NCA analyzed the PE for mercury the blank spike recoveries were acceptable, as were the laboratory duplicate analyses performed on the PE. Additionally, NCA's reported mercury result was comparable to STL's result in the interlaboratory split. It is possible that the certified mercury concentration was incorrect in the PE sample.

The results of the PE analyses may be found in Table 12 at the end of this document.

9.0 SUMMARY AND CONCLUSIONS

The data are generally usable and of good quality, with the exceptions listed below.

The most common reason for qualifying the data from this sampling event was elevated sample receipt temperature. In future sampling events, AMEC should take precautions such as, but not limited to, not over packing sample coolers and using

water ice in addition to gel ice to ensure that samples arrive at the analytical laboratory at proper temperatures. No data were rejected based on the elevated sample receipt temperatures.

NCA has historically had problems with laboratory blank contamination in the metals analyses. The number of analytes detected in the blanks and the detected concentrations seem to have lessened and few metals results from this sampling event were U qualified due to blank contamination.

NCA reported metals results even when the IS did not bracket analyte masses or ICS failed high. In both cases, AMEC J qualified the affected results as estimated. Rejected metals results are detailed below.

- Dissolved cadmium, mercury, lead, and vanadium results from sample RP-04-16 (028-01) were R qualified and rejected by AMEC because the sample could not be field filtered and the sample was submitted to the laboratory unfiltered and unpreserved.

Approximately 10% of the OCP results were N qualified by AMEC because there was more than 40% difference between the analyte concentrations on the primary and secondary analytical columns.

NCA reported OCP results from quadratic calibration models, which did not meet USEPA Method 8000B acceptance criteria. AMEC J qualified these results as estimated. No OCP results were rejected by AMEC due to data quality issues.

Approximately 4% of the herbicide results were N qualified by AMEC because there was more than 40% difference between the analyte concentrations on the primary and secondary analytical columns. Rejected herbicide results are detailed below.

- Bromoxynil results from samples RP-03-52R (021-01), AL-06-96 (023-01), W-09-116 (024-01 and 024-02), RP-04-16 (028-01), RP-04-41 (029-01), and MW-5-70 (031-01) were R qualified and rejected by AMEC because of extremely low MS/MSD recoveries. Because the LCS/LCSD recoveries were acceptable, the low MS/MSD recoveries are likely due to matrix interference and are not indicative of analytical error.

VOC results were generally qualified because of low CCAL or LCS recoveries. No VOC results were rejected by AMEC due to data quality issues.

SVOC and PAH results were generally qualified because of low CCAL, LCS, and/or MS recoveries. No PAH results were rejected by AMEC due to data quality issues. Rejected SVOC results are detailed below.

- Hexachlorocyclopentadiene results from samples RP-04-16 (028-01) and RP-04-41 (029-01) were R qualified and rejected by AMEC because hexachlorocyclopentadiene could not be recovered in the LCS or in the LCSD. Because hexachlorocyclopentadiene is not a constituent of concern at the RP site, the overall usability of the data set is not adversely affected.

REFERENCES

AMEC, 2001. *Revised Quality Assurance Project Plan, RPAC - Portland Site*, prepared for Aventis CropScience, prepared by AMEC Earth & Environmental, submitted to Oregon Department of Environmental Quality, June 13, 2001.

AMEC, 2002. *Draft Quality Assurance Project Plan Addendum No. 1, RPAC - Portland Site*, prepared for RPAC, prepared by AMEC Earth & Environmental, Inc. submitted to Oregon Department of Environmental Quality, August 1, 2002.

U. S. Army Corps of Engineers, 2001. *Requirements for the Preparation of Sampling and Analysis Plans*, E200-1-3.

U. S. Environmental Protection Agency, 1999. *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review*, EPA540/R-99/008.

U. S. Environmental Protection Agency, 2002. *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, EPA 540-R-01-008.

LIMITATIONS

This report was prepared exclusively for SLLI by AMEC Earth & Environmental, Inc. (AMEC). The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in AMEC services and based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This Data Validation Report is intended to be used by SLLI for the RP - Portland Site, 6200 N.W. St. Helens Road, Portland, Oregon only, subject to the terms and conditions of its contract with AMEC. Any other use of, or reliance on, this report by any third party is at that party's sole risk.

TABLES

TABLE 1
Field Samples Submitted to NCA
and STL with Corresponding Laboratory IDs
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Sample Location	Field Sample ID	NCA Sample ID	STL Sample ID	Notes
RP-02-66	001-01	P4D0420-01		
Trip Blank	001-03	P4D0420-02		
W-19-D	002-01	P4D0420-03		
W-19-I	003-01	P4D0420-04		
RP-07-30	004-01	P4D0461-01		
RP-07-55	005-01	P4D0461-02		
RP-07-84	006-01	P4D0461-03		
RP-07-119	007-01	P4D0461-04		
Trip Blank	007-03	P4D0461-05		
MW-03-I	008-01	P4D0461-06		
MW-03-81	009-01	P4D0461-07		
W-11-S	010-01	P4D0506-01		
Trip Blank	010-03	P4D0506-02		
W-11-I	011-01	P4D0506-03		
W-11-D	012-01	P4D0506-04		
W-11-B	013-01	P4D0506-05		
W-18-D	014-01	P4D0506-06		
W-18-I	015-01	P4D0506-07		
RP-01-31	016-01	P4D0559-01		
RP-01-51	017-01	P4D0559-02		
RP-01-51	017-02	P4D0559-03		Field Duplicate
RP-01-51	017-06		120696-1	Interlaboratory Split
Trip Blank	017-03	P4D0559-04		
RP-01-65	018-01	P4D0559-06		
RP-06-87	019-01	P4D0559-07		
Rinsate Blank	019-04	P4D0559-08		
PE Samples	019-05	P4D0586-01		
RP-03-30R	020-01	P4D0671-01		
RP-03-52R	021-01	P4D0671-02		
RP-03-52R	021-02	P4D0671-03		Field Duplicate
RP-03-52R	021-06		120695-1	Interlaboratory Split
MW-10-24	022-01	P4D0671-05		
AL-06-96	023-01	P4D0671-06		
Trip Blank	020-03	P4D0671-07		
W-09-116	024-01	P4D0744-01		
W-09-116	024-02	P4D0744-02		Field Duplicate
W-09-116	024-06		120711-1	Interlaboratory Split
Rinsate Blank	024-04	P4D0744-03		
AL2-32	025-01	P4D0744-04		
Trip Blank	024-03	P4D0744-05		
AL2-46	026-01	P4D0792-01		
AL2-46	026-02	P4D0792-02		Field Duplicate
AL2-46	026-06		120711-2	Interlaboratory Split
BST2W-6	027-01	P4D0792-03		
RP-04-16	028-01	P4D0792-04		
RP-04-41	029-01	P4D0792-05		
MW-5-24	030-01	P4D0795-01		
MW-5-70	031-01	P4D0795-02		
MW-5-34	032-01	P4D0795-03		
MW-5-52	033-01	P4D0795-04		

NCA = North Creek Analytical
STL = Severn-Trent Laboratories
ID = identification

TABLE 2
Summary of Field Duplicate Detections
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Analytical Method	Analyte	MRL	Primary Result	Duplicate Result	RPD
Sample RP-01-51 (017-01 and 017-02)					
Herbicides	2,4,5-TP (Silvex)	3.00	15.1	16.3	8%
	Dichlorprop	3.00	3.29	3.55	8%
VOCs	Benzene	2.00	0.640	0.600	6%
	Chlorobenzene	2.00	37.4	34.5	8%
	1,2-Dichlorobenzene	2.00	279	270	3%
	1,3-Dichlorobenzene	2.00	8.54	8.10	5%
	1,4-Dichlorobenzene	2.00	77.1	76.8	0%
	1,1-Dichloroethene	2.00	0.940	1.00	6%
	cis-1,2-Dichloroethene	2.00	4.64	4.62	0%
	trans-1,2-Dichloroethene	2.00	0.480	0.520	8%
	Trichloroethene	2.00	4.52	4.56	1%
	Vinyl Chloride	2.00	10.1	9.98	1%
Sample RP-03-52R (021-01 and 021-02)					
PAHs	Acenaphthene	0.100	0.0796	0.0790	1%
	Fluorene	0.100	0.0891	0.0936	5%
	Naphthalene	0.100	0.117	0.118	1%
	Phenanthrene	0.100	0.104	0.107	3%

TABLE 2
Summary of Field Duplicate Detections
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Analytical Method	Analyte	MRL	Primary Result	Duplicate Result	RPD
Sample W-09-116 (024-01 and 024-02)					
Total Metals	Arsenic	0.00100	0.00446	0.00454	2%
	Copper	0.00200	0.00427	0.00456	7%
	Nickel	0.00200	0.0204	0.0222	8%
	Vanadium	0.00500	0.00232	0.00268	14%
	Zinc	0.00500	0.00997	0.011200	12%
Dissolved Metals	Arsenic	0.00100	0.00741	0.00776	5%
	Cadmium	0.00100	0.000140	<0.0000730	NC
	Chromium	0.00100	0.00135	0.00203	40%
	Copper	0.00200	0.00623	0.00426	38%
	Nickel	0.00200	0.0284	0.0319	12%
	Vanadium	0.00500	0.00240	0.00297	21%
	Zinc	0.00500	0.00804	0.00906	12%
Pesticides	alpha-Chlordane	0.100	0.0663	<0.0500	NC
	gamma-Chlordane	0.100	0.313	<0.0500	NC
	4,4'-DDE	0.100	<0.0500	0.154	NC
	Endrin	0.100	<0.0500	0.234	NC
	Heptachlor	0.100	0.0523	<0.0500	NC
Herbicides	2,4-D	3.00	1.39	1.94	33%
	2,4,5-TP (Silvex)	3.00	17.7	21.3	18%
	Dichlorprop	3.00	5.72	7.14	22%
VOCs	Benzene	20.0	145	151	4%
	Chlorobenzene	20.0	290	295	2%
	1,2-Dichlorobenzene	20.0	2160	2200	2%
	1,3-Dichlorobenzene	20.0	66.2	67.0	1%
	1,4-Dichlorobenzene	20.0	660	673	2%
	1,1-Dichloroethene	20.0	<3.94	5.00	NC
	cis-1,2-Dichloroethene	20.0	14.0	14.4	3%
	Isopropylbenzene	20.0	6.20	6.20	0%
	Trichloroethene	20.0	17.2	17.2	0%
	Vinyl Chloride	20.0	16.4	17.2	5%
SVOCs	4-Chloro-3-methylphenol	5.00	3.84	3.65	5%
	1,2-Dichlorobenzene	50.0	1160	1250	7%
	1,3-Dichlorobenzene	5.00	58.7	56.0	5%
	1,4-Dichlorobenzene	50.0	485	518	7%
	2,4-Dichlorophenol	5.00	<5.00	5.25	NC
Sample AL2-46 (026-01 and 026-02)					
Phenols	4-Chloro-3-methylphenol	50.0	49.3	44.9	9%
	2-Chlorophenol	50.0	1050	1050	0%
	2,4-Dichlorophenol	50.0	1100	979	12%
	2,6-Dichlorophenol	250	533	510	4%
	2-Methylphenol	100	99.6	100	0%
	Pentachlorophenol	100	130	127	2%
	Phenol	50.0	36.4	37.7	4%
	Tetrachlorophenols	250	112	107	5%
	2,4,5-Trichlorophenol	50.0	72.4	68.3	6%
	2,4,6-Trichlorophenol	50.0	1370	1280	7%

VOCs = volatile organic compounds
SVOCs = semivolatile organic compounds
PAH = polynuclear aromatic hydrocarbons

TABLE 3A
Analyte Detections in Laboratory Blanks
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Analyte	Detected Concentration	U Qualify Results Below the Following Concentrations in Samples Associated with this Blank (5x or 10x Rule)	Associated Samples	
Laboratory Blank 4040600-BLK1				
1,2,3-Trichlorobenzene	0.290	1.45	Trip Blank	001-03
			Trip Blank	007-03
			MW-03-I	008-01
			MW-03-81	009-01
			W-11-S	010-01
			Trip Blank	010-03
Laboratory Blank 4040608-BLK1				
Copper	0.000870	0.00435	RP-02-66	001-01
			RP-07-84	006-01
			RP-07-119	007-01
			MW-03-I	008-01
			MW-03-81	009-01
Laboratory Blank 4040654-BLK1				
Acetone	3.53	35.3	RP-02-66	001-01
			W-19-D	002-01
			W-19-I	003-01
			RP-07-84	006-01
			RP-07-119	007-01
			W-11-I	011-01
			W-11-D	012-01
			W-11-B	013-01
Laboratory Blank 4040995-BLK1				
1,2-Dichlorobenzene	0.120	0.600	RP-01-31	016-01
			RP-01-51	017-01
			RP-01-51	017-02
			Trip Blank	017-03
			RP-01-65	018-01
			RP-06-87	019-01
			RP-03-30R	020-01
			AL-06-96	023-01
			Trip Blank	020-03
			W-09-116	024-02
			AL2-32	025-01
			Trip Blank	024-03
Laboratory Blank 4041077-BLK1				
Lead	0.0000900	0.000450	RP-04-16	028-01
			RP-04-41	029-01
Laboratory Blank 4041139-BLK1				
1,2-Dichlorobenzene	0.130	0.650	Rinsate Blank	019-04
			RP-03-52R	021-01
			W-09-116	024-01
			Rinsate Blank	024-04

TABLE 3B
Analyte Detections in Field Blanks
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Analyte	Detected Concentration	U Qualify Results Below the Following Concentrations in Samples Associated with this Blank (5x or 10x Rule)	Associated Samples	
Rinsate Blank 019-04				
Chloroform	0.180	0.900	RP-01-31	016-01
1,2-Dichlorobenzene	0.260	1.30	RP-01-51	017-01
Copper	0.000460	0.00230	RP-01-51	017-02
Zinc	0.0181	0.0905	RP-01-65	018-01
			RP-06-87	019-01
Rinsate Blank 024-04				
Acenaphthene	0.154	0.770	W-09-116	024-01
Acetone	4.20	420	W-09-116	024-02
2-Butanone	5.89	29.5	AL2-32	025-01
Copper	0.000700	0.00350		
1,2-Dichlorobenzene	0.100	0.500		
Fluorene	0.0673	0.337		
Naphthalene (PAH)	0.353	1.77		
Naphthalene (VOC)	2.56	12.8		
Phenanthrene	0.0688	0.344		
Zinc	0.00113	0.00565		

TABLE 4
Definitions of Data Qualifiers Added as a Result of Data Validation Findings
Remaining Remedial Investigation Characterization Event
RP - Portland Site

U The U qualifier indicates that the analyte must be considered to be nondetected at the concentration listed. U qualifiers added during validation are typically a result of detection of target analytes in field, trip, or laboratory blanks.

J The J qualifier indicates that the associated result is quantitatively uncertain. J qualifiers added during validation may indicate a concentration between the method detection limit (MDL) and the method reporting limit (MRL) or sample reporting limit (SRL), or a data limitation related to a QC element that exceeds required acceptance limits.

N The N qualifier indicates an analyte has been presumptively identified. Presumptive detection means that a chromatographic peak was detected at the correct retention time for an analyte, but that not all required identification criteria were met. The associated result is both qualitatively and quantitatively uncertain.

R The R qualifier indicates that a result has been rejected due to serious QC problems. It is not possible to definitively determine whether the analyte is present or absent in the sample.

TABLE 5
Data Qualifiers for Metals by USEPA 6000/7000 Series Methods
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Analyte	RP-02-66 (001-01)	RP-07-84 (006-01)	RP-07-119 (007-01)	MW-03-I (008-01)	MW-03-81 (009-01)	W-18-D (014-01)	W-18-I (015-01)
Chromium	none	J-HD	UJ-HD	UJ-HD	UJ-HD	none	none
Copper	none	none	none	none	none	U-MB	U-MB
Dissolved Chromium	none	none	none	none	none	J-IH	J-IH
Dissolved Copper	U-MB	U-MB	U-MB	U-MB	U-MB	J-IH	J-IH
Dissolved Nickel	none	none	none	none	none	J-IH	J-IH
Dissolved Vanadium	none	none	none	none	none	J-IH	J-IH

Analyte	RP-06-87 (019-01)	MW-10-24 (022-01)	W-09-116 (024-01)	W-09-116 (024-02)	AL2-32 (025-01)	RP-04-16 (028-01)	RP-04-41 (029-01)
Arsenic	J-HI	none	none	none	none	none	none
Chromium	J-HI	none	none	none	none	none	none
Copper	J-HI	none	none	none	none	none	none
Lead	none	U-MB	none	none	none	U-MB	U-MB
Nickel	J-HI	none	none	none	none	none	none
Vanadium	J-HI	none	none	none	none	none	none
Zinc	J-HI	none	none	none	none	none	none
Dissolved Arsenic	none	none	none	none	none	J-NP	none
Dissolved Cadmium	none	none	none	none	none	R-NP	none
Dissolved Chromium	none	none	none	none	none	J-NP	none
Dissolved Copper	none	none	none	none	none	J-NP	none
Dissolved Mercury	none	none	none	none	none	R-NP	none
Dissolved Nickel	none	none	none	none	none	J-NP	none
Dissolved Lead	none	none	none	none	none	R-NP	none
Dissolved Vanadium	none	none	none	none	none	R-NP	none
Dissolved Zinc	none	none	none	none	none	J-NP	none

FB = Analyte was detected in the field blank at a concentration more than 20% of the concentration detected in the san
HD = There was greater than 20% RPD between laboratory duplicate results.
HI = High internal standard recovery. Analytical result should be considered an estimate.
HM = Matrix spike recovery was greater than 120%. Analytical results may be biased high.
IH = Interference check standard failed high. Analytical results may be biased high.
LM = Matrix spike recovery was less than 80%. Analytical results may be biased low.
MB = Analyte was detected in the CCB or method blank at a concentration more than 20% of the concentration detected in the sample.
NA = Not Applicable.
NP = Sample arrived at the laboratory unpreserved.
USEPA = United States Environmental Protection Agency

TABLE 6
Data Qualifiers for OCPs by USEPA Method 8081A
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Analyte	MW-10-24 (022-01)	W-09-116 (024-01)	W-09-116 (024-02)	RP-04-16 (028-01)	RP-04-41 (029-01)
Aldrin	none	none	none	UJ-NP	J-NP
alpha-BHC	J-LL	UJ-LL	UJ-LL	UJ-NP	UJ-NP
beta-BHC	N-SC	none	none	UJ-NP	UJ-NP
delta-BHC	J-BC	none	none	UJ-NP/BC	UJ-NP
gamma-BHC (Lindane)	N-SC	none	none	UJ-NP	UJ-NP
alpha-Chlordane	N-SC	N-SC	none	UJ-NP	UJ-NP
gamma-Chlordane	none	N-SC	none	UJ-NP	UJ-NP
4,4'-DDD	none	none	none	UJ-NP/BC	UJ-NP/BC
4,4'-DDE	none	none	NJ-SC/HL	UJ-NP/BC	UJ-NP/BC
4,4'-DDT	none	none	none	UJ-NP/BC	UJ-NP
Dieldrin	none	none	none	UJ-NP	UJ-NP
Endosulfan I	none	none	none	UJ-NP	UJ-NP
Endosulfan II	none	none	none	NJ-SC/NP	NJ-SC/NP
Endosulfan Sulfate	none	none	none	UJ-NP	UJ-NP
Endrin	none	none	N-SC	J-NP	UJ-NP
Endrin Aldehyde	none	none	none	UJ-NP	UJ-NP
Endrin Ketone	N-SC	none	none	UJ-NP	UJ-NP
Heptachlor	none	N-SC	none	UJ-NP	UJ-NP
Heptachlor Epoxide	none	none	none	UJ-NP	UJ-NP
Hexachlorobenzene	none	none	none	UJ-NP	UJ-NP
Methoxychlor	none	none	none	UJ-NP/BC	UJ-NP

BC = Calibration curve does not meet USEPA Method 8000B-specified acceptance limits.
HL = LCS recovery is greater than 130%. Analyte recovery may be biased high.
LL = LCS recovery is less than 70% but greater than 15%. Analyte recovery may be biased low.
NP = Sample not properly preserved.
SC = Greater than 40% RPD between analytical results from primary and secondary analytical columns.
OCPs = organochlorine pesticides
USEPA = United States Environmental Protection Agency

TABLE 7
Data Qualifiers for Chlorinated Herbicides by USEPA Method 8151A
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Analyte	RP-02-66 (001-01)	W-19-D (002-01)	W-19-I (003-01)	RP-07-84 (006-01)	RP-07-119 (007-01)	MW-03-I (008-01)	MW-03-81 (009-01)	W-11-S (010-01)
Bromoxynil	UJ-NP	UJ-NP	UJ-NP	none	none	none	none	none
2,4-D	J-NP	J-NP	UJ-NP	none	none	none	none	none
2,4-DB	UJ-NP	UJ-NP	UJ-NP	none	none	none	none	none
Dichlorprop	UJ-NP	J-NP	NJ-SC/NP	none	N-SC	none	none	none
Dalapon	UJ-NP	UJ-NP	UJ-NP	none	none	none	none	none
Dicamba	UJ-NP	UJ-NP	UJ-NP	none	none	none	none	none
Dinoseb	UJ-NP	UJ-NP	UJ-NP	none	none	none	none	none
MCPA	UJ-NP	UJ-NP	UJ-NP	none	none	none	none	none
MCPP	UJ-NP	NJ-SC/NP	J-NP	none	none	none	none	none
2,4,5-T	UJ-NP	UJ-NP	UJ-NP	none	none	none	none	none
2,4,5-TP (Silvex)	J-NP	J-NP	J-NP	none	none	none	none	none

Analyte	W-11-I (011-01)	W-11-D (012-01)	W-11-B (013-01)	RP-01-31 (016-01)	RP-01-51 (017-01)	RP-01-51 (017-02)	RP-01-65 (018-01)	RP-06-87 (019-01)
Dichlorprop	none	N-SC	none	none	none	none	none	N-SC

Analyte	RP-03-52R (021-01)	AL-06-96 (023-01)	W-09-116 (024-01)	W-09-116 (024-02)	AL2-32 (025-01)	AL2-46 (026-01)	BST2W-6 (027-01)	RP-04-16 (028-01)
Bromoxynil	R-MS	R-MS	R-MS	R-MS	NJ-SC/MS	J-MS/HS/NP	J-MS/NP	R-MS/NP
2,4-D	none	none	none	N-SC	none	UJ-NP	J-NP	J-NP
Dalapon	none	none	none	none	none	UJ-NP	UJ-NP	UJ-NP
2,4-DB	none	N-SC	none	none	none	J-HS/NP	J-NP	J-NP
Dicamba	none	none	none	none	none	UJ-NP	UJ-NP	NJ-SC/NP
Dichlorprop	none	none	none	none	none	UJ-NP	NJ-SC/NP	UJ-NP
Dinoseb	none	none	none	none	none	UJ-NP	UJ-NP	UJ-NP
MCPA	none	none	none	none	none	UJ-NP	UJ-NP	UJ-NP
MCPP	UJ-LM	UJ-LM	UJ-LM	UJ-LM	UJ-LM	UJ-LM/NP	UJ-LM/NP	UJ-LM/NP
2,4,5-T	none	none	none	none	none	J-HS/NP	UJ-NP	UJ-NP
2,4,5-TP (Silvex)	none	none	none	none	none	UJ-NP	J-NP	J-NP

Analyte	RP-04-41 (029-01)	MW-5-24 (030-01)	MW-5-70 (031-01)	MW-5-34 (032-01)	MW-5-52 (033-01)
Bromoxynil	R-MS/NP	J-MS	R-MS	J-MS	J-MS
2,4-D	J-NP	N-SC	none	none	none
Dalapon	UJ-NP	none	none	none	none
2,4-DB	J-NP	none	none	none	none
Dicamba	J-NP	none	none	none	none
Dichlorprop	UJ-NP	none	N-SC	none	none
Dinoseb	UJ-NP	none	none	none	none
MCPA	UJ-LM/NP	UJ-LM	UJ-LM	UJ-LM	UJ-LM
MCPP	UJ-NP	none	none	none	none
2,4,5-T	J-NP	none	none	N-SC	N-SC
2,4,5-TP (Silvex)	UJ-NP	none	none	none	none

HS = Surrogate recovery is greater than 140%. Analytical results may be biased high.
LM = Matrix spike (MS) recovery is less than 60% but greater than 15%. Analyte recovery may be biased low.
MS = MS recovery is less than 15%. Detected analytical results have been J qualified and nondetected analytical results have been R qualified and rejected by AMEC.
NP = Sample not properly preserved.
SC = Greater than 40% RPD between analytical results from primary and secondary analytical columns.
USEPA = United States Environmental Protection Agency

TABLE 8
Data Qualifiers for VOCs by USEPA Method 8260B
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Analyte	RP-02-66 (001-01)	W-19-D (002-01)	W-19-I (003-01)	RP-07-84 (006-01)	RP-07-119 (007-01)	MW-03-I (008-01)	MW-03-81 (009-01)
1,4-Dichlorobenzene	J-NP	J-NP	J-NP	none	none	N-IR	none
All detected VOCs	J-NP	J-NP	J-NP	none	none	none	none
All nondetected VOCs	UJ-NP	UJ-NP	UJ-NP	none	none	none	none

Analyte	W-11-S (010-01)	W-11-I (011-01)	W-11-D (012-01)	W-11-B (013-01)	RP-01-31 (016-01)	RP-01-51 (017-01)	RP-01-51 (017-02)
Acetone	none	none	none	none	UJ-LC/LL	UJ-LC/LL	UJ-LC/LL
Bromomethane	none	none	none	none	UJ-LC	UJ-LC	UJ-LC
2-Ethyl-1-hexanol	none	none	none	none	UJ-LC/LL	UJ-LC/LL	UJ-LC/LL
Isobutyl Alcohol	none	none	none	none	UJ-LC	UJ-LC	UJ-LC

Analyte	RP-01-65 (018-01)	RP-06-87 (019-01)	RP-03-30R (020-01)	RP-03-52R (021-01)	AL-06-96 (023-01)	W-09-116 (024-01)	W-09-116 (024-02)
Acetone	UJ-LC/LL	UJ-LC/LL	UJ-LC/LL	none	UJ-LC/LL	none	UJ-LC/LL
Bromomethane	UJ-LC	UJ-LC	UJ-LC	UJ-LC	UJ-LC	UJ-LC	UJ-LC
trans-1,2-Dichloroethene	none	N-IR	none	none	none	none	none
2-Ethyl-1-hexanol	UJ-LC/LL	UJ-LC/LL	UJ-LC/LL	none	UJ-LC/LL	none	UJ-LC/LL
Isobutyl Alcohol	UJ-LC	UJ-LC	UJ-LC	none	UJ-LC	none	UJ-LC

Analyte	AL2-32 (025-01)	AL2-46 (026-01)	BST2W-6 (027-01)	RP-04-16 (028-01)	RP-04-41 (029-01)
Acetone	UJ-LC	UJ-NP	J-NP	UJ-NP	UJ-NP
Benzene	none	J-NP	J-NP	J-NP	UJ-NP
Bromomethane	UJ-LC	UJ-NP/LC	UJ-NP/LC	UJ-NP/LC	UJ-NP/LC
Chlorobenzene	none	J-NP	J-NP	J-NP	J-NP
1,2-Dichlorobenzene	none	J-NP	J-NP	J-NP	J-NP
1,3-Dichlorobenzene	none	J-NP	J-NP	J-NP	J-NP
1,4-Dichlorobenzene	none	J-NP	J-NP	J-NP	J-NP
1,1-Dichloroethene	none	UJ-NP	J-NP	UJ-NP	UJ-NP
cis-1,2-Dichloroethene	none	J-NP	J-NP	UJ-NP	UJ-NP
2-Ethyl-1-hexanol	UJ-LC	UJ-NP	UJ-NP	UJ-NP	UJ-NP
Ethylbenzene	none	J-NP	J-NP	J-NP	J-NP
Isobutyl Alcohol	UJ-LC	UJ-NP	UJ-NP	J-NP	UJ-NP
Isopropylbenzene	none	J-NP	J-NP	J-NP	UJ-NP
Methylene Chloride	none	J-NP	UJ-NP	UJ-NP	UJ-NP
Naphthalene	U-RB	UJ-NP	UJ-NP	UJ-NP	UJ-NP
n-Propylbenzene	none	J-NP	J-NP	J-NP	UJ-NP
Toluene	none	J-NP	J-NP	J-NP	UJ-NP
1,2,4-Trichlorobenzene	none	J-NP	J-NP	J-NP	J-NP
Trichloroethene	none	J-NP	J-NP	UJ-NP	UJ-NP
1,2,4-Trimethylbenzene	none	J-NP	J-NP	J-NP	J-NP
1,3,5-Trimethylbenzene	none	J-NP	J-NP	J-NP	J-NP
Vinyl Chloride	none	J-NP	J-NP	UJ-NP	UJ-NP
m,p-Xylene	none	J-NP	J-NP	J-NP	J-NP
o-Xylene	none	J-NP	J-NP	J-NP	J-NP
All other VOCs	none	UJ-NP	UJ-NP	UJ-NP	UJ-NP

TABLE 8
Data Qualifiers for VOCs by USEPA Method 8260B
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Analyte	MW-5-24 (030-01)	MW-5-70 (031-01)	MW-5-34 (032-01)	MW-5-52 (033-01)
Bromomethane	UJ-LC	UJ-LC	UJ-LC	UJ-LC

IR = Ion ratios do not meet method-specified criteria.
LC = Continuing calibration recovery is less than 80%. Analytical results may be biased low.
LL = Laboratory control sample recovery for this analyte is lower than the QAPP-specified minimum recovery of 70%.
NP = Sample not properly preserved.
RB = Analyte was detected in the rinsate blank at a concentration more than 20% (or 10%) of the concentration detected in the sample.
VOCs = volatile organic compounds
USEPA = United States Environmental Protection Agency

TABLE 9
Data Qualifiers for SVOCs, Including Phenols, by USEPA Method 8270C
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Analyte	W-09-116 (024-01)	W-09-116 (024-02)	AL2-32 (025-01)	AL2-46 (026-01)	AL2-46 (026-02)	BST2W-6 (027-01)
Benzoic acid	UJ-LM	UJ-LM	-	-	-	-
Benzyl Alcohol	UJ-LL	UJ-LL	-	-	-	-
4-Chloro-3-methylphenol	none	none	none	J-NP	J-NP	J-NP
2-Chlorophenol	none	none	none	J-NP	J-NP	J-NP
1,2-Dichlorobenzene	J-LL	J-LL	-	-	-	-
1,3-Dichlorobenzene	J-LL	J-LL	-	-	-	-
1,4-Dichlorobenzene	J-LL	J-LL	-	-	-	-
2,4-Dichlorophenol	none	none	none	J-NP	J-NP	J-NP
2,6-Dichlorophenol	none	none	none	J-NP	J-NP	UJ-NP
2,4-Dimethylphenol	none	none	none	UJ-NP	UJ-NP	UJ-NP
4,6-Dinitro-2-methylphenol	none	none	none	UJ-NP	UJ-NP	UJ-NP
2,4-Dinitrophenol	none	none	none	UJ-NP	UJ-NP	UJ-NP
2,4-Dinitrotoluene	UJ-LC	none	-	-	-	-
Dinoseb	none	none	none	UJ-NP	UJ-NP	UJ-NP
Hexachlorobutadiene	UJ-LL/LM	UJ-LL/LM	-	-	-	-
Hexachlorocyclopentadiene	UJ-LL/LM/LC	UJ-LL/LM/LC	-	-	-	-
Hexachloroethane	UJ-LL	UJ-LL	-	-	-	-
Isophorone	UJ-LC	UJ-LC	-	-	-	-
2-Methylnaphthalene	UJ-LL	UJ-LL	-	-	-	-
2-Methylphenol	none	none	none	J-NP	J-NP	J-NP
3-,4-methylphenol	none	none	none	UJ-NP	UJ-NP	UJ-NP
2-Nitrophenol	none	none	none	UJ-NP	UJ-NP	UJ-NP
4-Nitrophenol	UJ-LL/LM	UJ-LL/LM	UJ-LL/LM	UJ-NP/LL	UJ-NP/LL	UJ-NP/LL
Pentachlorophenol	none	none	none	J-NP	J-NP	UJ-NP
Phenol	UJ-LL/LM	UJ-LL/LM	UJ-LL/LM	J-NP/LL	J-NP/LL	J-NP/LL
Tetrachlorophenols	none	none	none	J-NP	J-NP	UJ-NP
1,2,4-Trichlorobenzene	UJ-LL	UJ-LL	-	-	-	-
2,4,5-Trichlorophenol	none	none	none	J-NP	J-NP	UJ-NP
2,4,6-Trichlorophenol	none	none	none	J-NP	J-NP	UJ-NP

TABLE 9
Data Qualifiers for SVOCs, Including Phenols, by USEPA Method 8270C
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Analyte	RP-04-16 (028-01)	RP-04-41 (029-01)	MW-5-24 (030-01)	MW-5-34 (032-01)	MW-5-52 (033-01)
Benzoic Acid	UJ-NP/LL	UJ-NP/LL	-	-	-
Benzyl Alcohol	UJ-NP/LC/LL	UJ-NP/LC/LL	-	-	-
Bis(2-chloroethyl)ether	UJ-NP/LC	UJ-NP/LC	-	-	-
2-Chlorophenol	J-NP	UJ-NP	none	none	none
1,2-Dichlorobenzene	J-NP/LL	J-NP/LL	-	-	-
1,3-Dichlorobenzene	J-NP/LL	J-NP/LL	-	-	-
1,4-Dichlorobenzene	J-NP/LL	J-NP/LL	-	-	-
2,4-Dichlorophenol	J-NP	J-NP	none	none	none
2,6-Dichlorophenol	J-NP	J-NP	none	none	none
2,4-Dinitrotoluene	UJ-NP/LC	UJ-NP	-	-	-
Hexachlorobutadiene	UJ-NP/LL	UJ-NP/LL	-	-	-
Hexachlorocyclopentadiene	R-BS	R-BS	-	-	-
Hexachloroethane	UJ-NP/LL	UJ-NP/LL	-	-	-
Isophorone	UJ-NP/LC	UJ-NP/LC	-	-	-
2-Methylnaphthalene	UJ-NP/LL	UJ-NP/LL	-	-	-
2-Methylphenol	J-NP	UJ-NP	none	none	none
4-Nitrophenol	UJ-NP/LL	UJ-NP/LL	UJ-LL	UJ-LL	UJ-LL
Phenol	J-NP/LL	UJ-NP/LL	J-LL	J-LL	UJ-LL
1,2,4-Trichlorobenzene	UJ-NP/LL	UJ-NP/LL	-	-	-
2,4,5-Trichlorophenol	J-NP	J-NP	none	none	none
2,4,6-Trichlorophenol	J-NP	J-NP	none	none	none
All other SVOCs	UJ-NP	UJ-NP	-	-	-

BS = Laboratory control sample (LCS) recovery is less than 15%. Analyte has been R qualified and rejected.
LC = Continuing calibration recovery is less than 80%. Analytical results may be biased low.
LL = LCS recovery is less than 45% (acid) or 70% (base/neutral) but greater than 15%. Analyte recovery may be biased low.
LM = MS recovery is less than 45% (acid) or 60% (base/neutral) but greater than 15%. Analyte recovery may be biased low.
NP = Sample not properly preserved.
SVOCs = semivolatile organic compounds
USEPA = United States Environmental Protection Agency

TABLE 10
Data Qualifiers for PAHs by USEPA Method 8270-SIM
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Analyte	RP-07-30 (004-01)	RP-07-55 (005-01)	RP-07-84 (006-01)	RP-07-119 (007-01)	RP-03-30R (020-01)	RP-03-52R (021-01)	RP-03-52R (021-02)
Acenaphthene	none	none	none	none	J-LL	J-LL	J-LL
Acenaphthylene	none	none	none	none	UJ-LL	UJ-LL	UJ-LL
Benzo(b)fluoranthene	none	none	none	none	UJ-LC	UJ-LC	UJ-LC
Benzo(ghi)perylene	UJ-LL/LM	UJ-LL/LM	UJ-LL/LM	UJ-LL/LM	UJ-LL/LC	UJ-LL/LC	UJ-LL/LC
Dibenzo(a,h)anthracene	UJ-LL/LM	UJ-LL/LM	UJ-LL/LM	UJ-LL/LM	UJ-LL	UJ-LL	UJ-LL
Fluorene	none	none	none	none	J-LL	J-LL	J-LL
Indeno(1,2,3-cd)pyrene	UJ-LL/LM	UJ-LL/LM	UJ-LL/LM	UJ-LL/LM	none	none	none
Naphthalene	none	none	none	none	J-LL	J-LL	J-LL
Phenanthrene	none	none	none	none	J-LL	J-LL	J-LL

LC = Continuing calibration recovery is less than 80%. Analytical results may be biased low.
LL = Laboratory contol sample recovery is less than 70% but greater than 15%. Analyte recovery may be biased low.
LM = Matrix spike recovery is less than 60% but greater than 15%. Analyte recovery may be biased low.
PAH = polynuclear aromatic hydrocarbons
USEPA = United States Environmental Protection Agency

TABLE 11
Interlaboratory Split Samples Submitted to NCA and STL
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Analyte Class	Analyte	Primary Result (NCA)	Split Result (STL)	RPD
Sample RP-01-51 (017-01 and 017-06)				
VOCs	Benzene	0.640	0.646	1%
	Chlorobenzene	37.4	38.6	3%
	1,2-Dichlorobenzene	279	279	0%
	1,3-Dichlorobenzene	8.54	9.35	9%
	1,4-Dichlorobenzene	77.1	90.1	16%
	1,1-Dichloroethene	0.940	0.811	15%
	cis-1,2-Dichloroethene	4.64	4.36	6%
	trans-1,2-Dichloroethene	0.480	<1	NC
	Trichloroethene	4.52	4.86	7%
	Vinyl Chloride	10.1	8.99	12%
Herbicides	2,4-D	<3.00	0.231	NC
	2,4,5-TP (Silvex)	15.1	16	6%
	Dichlorprop	3.29	2.34	34%
Sample RP-03-52R (021-01 and 021-06)				
PAHs	Acenaphthene	0.0796	0.104	27%
	Anthracene	<0.100	0.0369	NC
	Fluorene	0.0891	0.109	20%
	Naphthalene	0.117	0.122	4%
	Phenanthrene	0.104	0.124	18%
Sample W-09-116 (024-01 and 024-06)				
VOCs	Benzene	141	148	5%
	Chlorobenzene	290	248	16%
	Chloroform	<20.0	1.89	NC
	1,2-Dichlorobenzene	2160	2260	5%
	1,3-Dichlorobenzene	66.2	57.7	14%
	1,4-Dichlorobenzene	660	749	13%
	1,1-Dichloroethene	<20.0	4.32	NC
	cis-1,2-Dichloroethene	14.0	13.8	1%
	trans-1,2-Dichloroethene	<20.0	0.639	NC
	Isopropylbenzene	6.20	7.24	15%
	n-Propylbenzene	<20.0	1.11	NC
	1,2,4-Trichlorobenzene	<20.0	0.794	NC
	Trichloroethene	17.2	18.3	6%
	Vinyl Chloride	16.4	15.4	6%
SVOCs	2-Chlorophenol	<5.00	1800	NC
	4-Chloro-3-methylphenol	3.84	<0.943	NC
	1,2-Dichlorobenzene	1160	10700	161%
	1,3-Dichlorobenzene	58.7	336	141%
	1,4-Dichlorobenzene	485	2770	140%
	2,4-Dichlorophenol	<5.00	224	NC
	2-Methylnaphthalene	<5.00	0.412	NC
	2-Methylphenol	<10.0	22	NC
	Naphthalene	<5.00	210	NC
	3-Nitroaniline	<10.0	1.4	NC
	Pentachlorophenol	<10.0	57.4	NC
	Phenol	<5.00	5.06	NC
	2,4,5-Trichlorophenol	<5.00	1620	NC

TABLE 11
Interlaboratory Split Samples Submitted to NCA and STL
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Analyte Class	Analyte	Primary Result (NCA)	Split Result (STL)	RPD
Sample W-09-116 (024-01 and 024-06)				
Herbicides	2,4-D	1.39	1.74	22%
	2,4-DB	<3.00	0.696	NC
	Dichlorprop	5.72	5.26	8%
	2,4,5-TP (Silvex)	17.7	18.6	5%
Pesticides	alpha-BHC	<0.100	0.051	NC
	alpha-Chlordane	0.0663	NR	NC
	beta-BHC	<0.100	0.126	NC
	delta-BHC	<0.100	0.145	NC
	4,4'-DDD	<0.100	0.512	NC
	4,4'-DDE	<0.100	0.187	NC
	gamma-Chlordane	0.313	NR	NC
	Heptachlor	0.0523	<0.00952	NC
	Hexachlorobenzene	<0.100	0.0161	NC
Total Metals	Arsenic	0.00446	0.00446	0%
	Copper	0.00427	0.00356	18%
	Lead	<0.00100	0.000125	NC
	Nickel	0.0204	0.0257	23%
	Vanadium	0.00232	<0.0005	NC
	Zinc	0.00997	0.00613	48%
Dissolved Metals	Arsenic	0.00741	0.00626	17%
	Cadmium	0.000140	<0.0005	NC
	Chromium	0.00135	0.00386	96%
	Copper	0.00623	0.00274	78%
	Lead	<0.00100	0.000145	NC
	Mercury	<0.000200	0.000074	NC
	Nickel	0.0284	0.024	17%
	Vanadium	0.00240	0.00326	30%
	Zinc	0.00804	0.0183	78%
Sample AL2-46 (026-01 and 026-06)				
Phenols	4-Chloro-3-methylphenol	49.3	NR	NC
	2-Chlorophenol	1050	165	146%
	2,4-Dichlorophenol	1100	23.4	192%
	2,6-Dichlorophenol	533	NR	NC
	2-Methylphenol	99.6	NR	NC
	Pentachlorophenol	130	5.75	183%
	Phenol	36.4	NR	NC
	Tetrachlorophenols	112	NR	NC
	2,4,5-Trichlorophenol	72.4	NR	NC
	2,4,6-Trichlorophenol	1370	<1.01	NC

RPD = Relative Percent Difference
NC = Not Calculable
NR = Not Reported
NCA = North Creek Analytical, Inc.
PAH = polynuclear aromatic hydrocarbons
STL = Severn Trent Laboratories, Inc.
SVOCs = semivolatile organic compounds
VOCs = volatile organic compounds
USEPA = United States Environmental Protection Agency

TABLE 12
Performance Evaluation Sample Results
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Analyte	Reference Value	Reported Concentration	Prediction Interval	%Recovery
Metals				
Arsenic	286	280	236 - 336	98%
Cadmium	437	429	375 - 499	98%
Chromium	756	739	658 - 854	98%
Copper	288	291	236 - 340	101%
Lead	1900	1870	1680 - 2120	98%
Mercury	15.1	7.23	11.3 - 18.9	48%
Nickel	2850	2700	2560 - 3140	95%
Vanadium	5890	5690	5320 - 6460	97%
Zinc	985	983	869 - 1110	100%
Chlorinated Herbicides				
2,4-D	4.69	4.29	0.00 - 9.71	91%
2,4,5-T	6.36	5.76	0.875 - 11.8	91%
2,4,5-TP (Silvex)	6.32	7.22	0.528 - 12.1	114%
Dicamba	5.71	4.98	0.647 - 10.8	87%
Phenols				
4-Chloro-3-methylphenol	120	102	56.2 - 184	85%
2-Chlorophenol	88.2	72.8	33.0 - 143	83%
2,4-Dichlorophenol	86.2	86.7	39.7 - 133	101%
2,4-Dimethylphenol	100	93.1	28.5 - 171	93%
4,6-Dinitro-2-methylphenol	126	147	16.8 - 235	117%
2,4-Dinitrophenol	28.9	29.0	0.577 - 57.2	100%
2-Nitrophenol	121	114	44.4 - 198	94%
4-Nitrophenol	102	83.3	0.00 - 247	82%
Pentachlorophenol	70.1	67.7	21.0 - 119	97%
Phenol	20.1	12.9	0.00 - 49.8	64%
2,4,5-Trichlorophenol	77.5	70.3	36.8 - 118	91%
2,4,6-Trichlorophenol	41.0	39.3	17.4 - 64.6	96%

TABLE 12
Performance Evaluation Sample Results
Spring 2004 Groundwater Sampling Event
RP - Portland Site

Analyte	Reference Value	Reported Concentration	Prediction Interval	%Recovery
Volatile Organic Compounds				
Acetone	NR	17.2		
Benzene	37.9	32.4	27.1 - 48.7	85%
Bromochloromethane	NR	0.630		
Bromodichloromethane	55.6	59.9	39.2 - 72.0	108%
Bromoform	40.7	41.1	26.0 - 55.4	101%
Bromomethane	NR	4.61		
Carbon Disulfide	60.5	45.4	36.3 - 84.7	75%
Carbon Tetrachloride	24.1	20.8	14.8 - 33.4	86%
Chlorobenzene	37.7	35.3	27.0 - 48.4	94%
Chloroform	15.7	14.1	11.1 - 20.3	90%
Chloromethane	63.2	75.1	19.4 - 107	119%
Dibromochloromethane	33.7	36.5	22.4 - 45.0	108%
1,2-Dibromo-3-chloropropane	67.8	65.6	40.7 - 94.9	97%
1,2-Dibromoethane (EDB)	55.1	55.6	33.1 - 77.1	101%
Dibromomethane	75.0	75.4	45.0 - 105.0	101%
1,2-Dichlorobenzene	27.2	27.3	19.2 - 35.2	100%
1,3-Dichlorobenzene	56.0	53.2	40.6 - 71.4	95%
1,4-Dichlorobenzene	51.6	45.4	35.9 - 67.3	88%
1,1-Dichloroethane	66.7	62.2	40.0 - 93.4	93%
1,2-Dichloroethane (EDC)	70.2	65.7	48.0 - 92.4	94%
1,1-Dichloroethene	92.8	76.0	49.8 - 136	82%
trans-1,2-Dichloroethene	92.9	81.4	58.7 - 127	88%
1,2-Dichloropropane	64.0	61.8	44.7 - 83.3	97%
cis-1,3-Dichloropropene	98.3	84.2	59.0 - 138	86%
trans-1,3-Dichloropropene	NR	0.540		
Ethylbenzene	67.8	57.8	45.7 - 89.9	85%
Methylene chloride	47.3	41.9	29.7 - 64.9	89%
Naphthalene	19.5	20.3	9.23 - 29.8	104%
Styrene	77.2	69.3	46.3 - 108	90%
1,1,1,2-Tetrachloroethane	55.7	64.3	33.4 - 78.0	115%
1,1,2,2-Tetrachloroethane	96.1	98.2	56.9 - 135	102%
Tetrachloroethene (PCE)	34.3	29.9	23.3 - 45.3	87%
Toluene	13.2	12.5	9.24 - 17.2	95%
1,1,1-Trichloroethane	16.6	15.0	11.1 - 22.1	90%
1,1,2-Trichloroethane	54.1	56.1	37.4 - 70.8	104%
Trichloroethene (TCE)	45.2	44.9	30.2 - 60.2	99%
1,2,3-Trichloropropane	44.6	45.9	26.8 - 62.4	103%
1,2,4-Trimethylbenzene	42.8	41.2	34.2 - 51.4	96%
1,3,5-Trimethylbenzene	35.4	33.1	28.3 - 42.5	94%
Vinyl Chloride	60.6	48.2	22.7 - 98.5	80%
m,p-Xylene	49.7	43.6	28.6 - 70.8	88%
o-Xylene	43.1	39.5	24.6 - 61.6	92%
Total Xylene	91.7	83.1	54.3 - 129	91%

NR = Analyte not reported on the certificate of analysis.

APPENDIX D

Spring 2004 Post-Characterization Groundwater Monitoring
Event 90-Day Investigation-Derived Waste Log

DAILY WATER DISPOSAL LOG
RI/FS
RPAC - Portland Site

Date	Area/Location(s)		Type of Waste	Activity Description	Volume Generated/Transferred (Give Units of Measure)
Example: 4/22/2002	*LA*	*RP-04-16*	*Purge Water*	*Fall 2001 GW*	*15 gallons*
4/8/02	NRA, LA, HA,	IA	Decon H_2O	Spring 2004 GW Sampling - Water Level Measurements	4 gallons
4/12/04	NRA	W-19-D, W-19-I, RP-02-66	Purge water Decon H_2O	↓	12 gallons
4/12/04	HA	MW-08-26	Purge water	NAPL Monitoring	2 gallons
4/13/04	NRA	RP-07 series MW-3-I, MW-3-81	Purge water	Spring 2004 GW Sampling	25 gallons
4/14/04	NRA	W-11-Series W-18-I, W-18-D	Purge water Decon water	Spring 2004 GW Sampling	25 gallons
4/15/04	NRA	RP-01 Series RP-06-87	Purge water Decon water	Spring 2004 GW Sampling	18 gallons
4/19/04	NRA	RP-03 Series AL-6-96 MW-10-24	Purge water Decon water	Spring 2004 GW Sampling	20 gallons
4/20/04	LA	W-09-116 AL-2-32	Purge water Decon water	Spring 2004 GW Sampling	12 gallons
4/21/04	LA	AL-2-46 RP-04-16 BSTZW-61 RP-04-41 } water kept in bucket near haz waste container	Purge water Decon water	Spring 2004 GW Sampling	15 gallons
4/22/04		MW-5 series	Purge water Decon water	Spring 2004 GW Sampling	18 gallons

Notes:
LA = Lake Area
IA = Insecticide Area
HA = Herbicide Area
NRA = Non-RPAC Area

SOIL AND PPE/DEBRIS
90-DAY INVESTIGATION DERIVED WASTE LOG
RI/FS
RP - Portland Site

Container Number	Date	Area/location(s)		Type of Waste	Activity Description	Samples collected for lab analysis (for soil)? (Y or N)	Amount/Volume Transferred	Remaining Capacity of Drum (in %)
Example: 048	*4/22/2002*	*NRA*	*RP-07-S*	*drill cuttings*	*Spr 2000 GW*	*N*	*1/2 drum*	*50%*
152	4/8/04	LA, HA, IA, NRA		PPE	Spring 2004 GW Sampling	N	10%	90%
152	4/12/04	NRA	W-14-D, W-19-I, RP-02-66	Tubing, Plastic, gloves, rope	water level measurements	N	70%	~~80%~~ 20%
153	4/12/04	HA	MW-08-26	PPE, Bailer, Gloves, Plastic	NAPL Monitoring	N	20%	80%
150	4/12/04	HA	MW-08-26	NAPL	NAPL Monitoring	Y	8 liters	45 gallons
152	4/13/04	NRA	MW-03-I, MW-03-81 RP-07 series	Tubing, Plastic, Rope, PPE	Spring 2004 GW Sampling	N	30%	0%
154	↓	↓	↓	↓	↓	N	20%	80%
154	4/14/04	NRA	W-11-Series W-18-I, W-18-D	Tubing, Plastic Rope, PPE	Spring GW Sampling 2004	N	80%	0%
155	4/15/04	NRA	RP-01 Series RP-06-97	Tubing, Plastic, Rope, PPE	Spring 2004 GW Sampling	N	30%	70%
155	4/19/04	NRA	RP-03 Series MW-10-24 AL6-96	Tubing, Plastic, Rope, PPE	Spring 2004 GW Sampling	N	70% drum	0%

Notes:

LA = Lake Area
IA = Insecticide Area
HA = Herbicide Area
NRA = Non-RP Area

SOIL PPE/DEBRIS
90-DAY INVESTIGATION DERIVED WASTE LOG
RI/FS
RP - Portland Site

Container Number	Date	Area/location(s)		Type of Waste	Activity Description	Samples collected for lab analysis (for soil)? (Y or N)	Amount/Volume Transferred	Remaining Capacity of Drum (in %)
Example: 048	*4/22/2002*	*NRA*	*RP-07-S*	*drill cuttings*	*Spr 2000 GW*	*N*	*1/2 drum*	*50%*
156	4/20/04	LA	W-09-116 AL-2-32	PPE, Plastic Tubing, rope	Spring 2004 GW Sampling	N	25%	75%
156	4/21/04	LA	AL-2-46 BST2W-61 RP-04-41 RP-04-16	PPE, Plastic Tubing, rope	Spring 2004 GW Sampling	N	50%	25%
156	4/22/04		MW-5 series	PPE, Plastic, Tubing, Rope	Spring 2004 GW Sampling	N	25%	0%

Notes:

LA = Lake Area
IA = Insecticide Area
HA = Herbicide Area
NRA = Non-RP Area

APPENDIX E

Final Validated Spring 2004
Groundwater Characterization Event Analytical Results

AL2-32

Analysis: 300.0

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	1820	mg/l	2.07	50.0	
Nitrate	<0.0173	mg/l	0.0173	0.100	
Nitrite(as N)	<0.146	mg/l	0.146	1.00	
Sulfate	56.3	mg/l	0.170	1.00	

Analysis: 310.1

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	1380	mg/l	1.04	50.0	

Analysis: 350.1

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.174	mg/l	0.00760	0.0500	

Analysis: 351.2

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	5.43	mg/l	0.332	0.500	

Analysis: 365.2

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.0153	mg/l	0.00141	0.0100	

Analysis: 376.2

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	0.13	mg/l	0.0150	0.200	

Analysis: 405.1

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	49	mg/l	1.13	4.00	

Analysis: 410.4

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	382	mg/l	16.9	50.0	

Analysis: 415.1/5310

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	112	mg/l	0.419	1.00	

Analysis: 6010B

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	<0.0434	mg/l	0.0434	0.100	
Calcium	137	mg/l	0.361	1.00	
Iron	28.9	mg/l	0.00640	0.100	
Magnesium	48.2	mg/l	0.0136	0.100	
Potassium	8.56	mg/l	0.111	1.00	
Sodium	1550	mg/l	1.67	100	

AL2-32

Analysis: 6020

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	0.0234	mg/l	0.000964	0.00100	
Cadmium	<0.000178	mg/l	0.000178	0.00100	
Chromium	0.00257	mg/l	0.000791	0.00100	
Copper	0.0136	mg/l	0.000259	0.00200	
Lead	0.00044	mg/l	0.0000870	0.00100	
Manganese	25.1	mg/l	0.000680	0.100	
Nickel	0.0367	mg/l	0.000826	0.00200	
Vanadium	0.022	mg/l	0.000669	0.00500	
Zinc	0.00559	mg/l	0.00102	0.00500	

Analysis: 6020 (Dissolved)

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.029	mg/l	0.000964	0.00100	
Cadmium (Dissolved)	<0.000730	mg/l	0.000730	0.0100	
Chromium (Dissolved)	0.00393	mg/l	0.000791	0.00100	
Copper (Dissolved)	0.00542	mg/l	0.000259	0.00200	
Lead (Dissolved)	<0.0000870	mg/l	0.0000870	0.00100	
Nickel (Dissolved)	0.0503	mg/l	0.000242	0.00200	
Vanadium (Dissolved)	0.0268	mg/l	0.000669	0.00500	
Zinc (Dissolved)	0.00422	mg/l	0.00102	0.00500	

Analysis: 7470A

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury	<0.000103	mg/l	0.000103	0.000200	

Analysis: 7470A (Dissolved)

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury (Dissolved)	<0.000103	mg/l	0.000103	0.000200	

Analysis: 8151MOD

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	1.89	ug/l	1.26	3.00	J,N
2,4-D	1380	ug/l	131	300	
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	104	ug/l	1.90	3.00	
Dicamba	9.24	ug/l	1.01	3.00	
Dichlorprop	46.6	ug/l	1.16	3.00	
Dinoseb	<1.54	ug/l	1.54	3.00	
MCPA	<1270	ug/l	1270	3000	
MCPP	<111	ug/l	111	300	J,U
2,4,5-T	25.2	ug/l	1.39	3.00	
2,4,5-TP(Silvex)	814	ug/l	12.4	30.0	

AL2-32

Analysis: 8260B Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<23.4	ug/l	23.4	250	J,U
Benzene	15.4	ug/l	1.47	10.0	
Bromobenzene	<3.33	ug/l	3.33	10.0	
Bromochloromethane	<2.66	ug/l	2.66	10.0	
Bromodichloromethane	<1.83	ug/l	1.83	10.0	
Bromoform	<1.74	ug/l	1.74	10.0	
Bromomethane	<2.82	ug/l	2.82	100	J,U
2-Butanone (MEK)	<16.0	ug/l	16.0	250	
n-Butylbenzene	<1.83	ug/l	1.83	10.0	
sec-Butylbenzene	<1.93	ug/l	1.93	10.0	
Carbon disulfide	<2.33	ug/l	2.33	100	
CarbonTetrachloride	<1.40	ug/l	1.40	20.0	
Chlorobenzene	787	ug/l	1.36	10.0	
Chloroethane	<3.27	ug/l	3.27	20.0	
Chloroform	<1.43	ug/l	1.43	10.0	
Chloromethane	<1.59	ug/l	1.59	50.0	
2-Chlorotoluene	<1.10	ug/l	1.10	10.0	
4-Chlorotoluene	<1.20	ug/l	1.20	10.0	
1,2-Dibromo-3-chloropropane	<4.05	ug/l	4.05	10.0	
Dibromochloromethane	<1.33	ug/l	1.33	10.0	
1,2-Dibromoethane	<1.87	ug/l	1.87	10.0	
Dibromomethane	<1.17	ug/l	1.17	10.0	
1,2-Dichlorobenzene	1330	ug/l	0.859	10.0	
1,3-Dichlorobenzene	65.8	ug/l	1.32	10.0	
1,4-Dichlorobenzene	346	ug/l	1.87	10.0	
Dichlorodifluoromethane	<3.12	ug/l	3.12	50.0	
1,1-Dichloroethane	<1.57	ug/l	1.57	10.0	
1,2-Dichloroethane	<1.42	ug/l	1.42	10.0	
1,1-Dichloroethene	<1.97	ug/l	1.97	10.0	
cis-1,2-Dichloroethene	6.9	ug/l	1.70	10.0	
trans-1,2-Dichloroethene	<1.75	ug/l	1.75	10.0	
1,2-Dichloropropane	<2.66	ug/l	2.66	10.0	
1,3-Dichloropropane	<1.51	ug/l	1.51	10.0	
2,2-Dichloropropane	<1.04	ug/l	1.04	10.0	
1,1-Dichloropropene	<1.49	ug/l	1.49	10.0	
cis-1,3-Dichloropropene	<1.28	ug/l	1.28	10.0	
trans-1,3-Dichloropropene	<1.52	ug/l	1.52	10.0	
2-Ethyl-1-hexanol	<1000	ug/l	1000	1000	J,U
Ethylbenzene	205	ug/l	1.10	10.0	
Hexachlorobutadiene	<8.78	ug/l	8.78	20.0	
2-Hexanone	<11.0	ug/l	11.0	100	
Iodomethane	<23.8	ug/l	23.8	200	
Isobutylalcohol	<159	ug/l	159	1000	J,U
Isopropylbenzene	18	ug/l	1.07	10.0	

AL2-32

Analysis: 8260B

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<1.49	ug/l	1.49	10.0	
4-methyl-2-pentanone (MIBK)	<14.9	ug/l	14.9	50.0	
Methylene chloride	18.5	ug/l	4.54	50.0	
Naphthalene	6.1	ug/l	0.989	10.0	U
n-Propylbenzene	40.9	ug/l	1.38	10.0	
Styrene	<0.723	ug/l	0.723	10.0	
tert-Butylbenzene	<2.06	ug/l	2.06	10.0	
1,1,1,2-Tetrachloroethane	<1.48	ug/l	1.48	10.0	
1,1,2,2-Tetrachloroethane	<2.94	ug/l	2.94	10.0	
Tetrachloroethene	<1.09	ug/l	1.09	10.0	
Toluene	6.9	ug/l	1.55	10.0	
1,2,3-Trichlorobenzene	<2.19	ug/l	2.19	10.0	
1,2,4-Trichlorobenzene	<2.13	ug/l	2.13	10.0	
1,1,1-Trichloroethane	<0.859	ug/l	0.859	10.0	
1,1,2-Trichloroethane	<3.01	ug/l	3.01	10.0	
Trichloroethene	<2.41	ug/l	2.41	10.0	
Trichlorofluoromethane	<1.60	ug/l	1.60	10.0	
1,2,3-Trichloropropane	<3.65	ug/l	3.65	10.0	
1,2,4-Trimethylbenzene	84.1	ug/l	0.884	10.0	
1,3,5-Trimethylbenzene	11.7	ug/l	1.57	10.0	
Vinyl chloride	<1.52	ug/l	1.52	10.0	
m,p-Xylene	47.4	ug/l	2.95	20.0	
o-Xylene	144	ug/l	1.87	10.0	

Analysis: 8270C

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Chloro-3-methylphenol	<30.0	ug/l	30.0	50.0	
2-Chlorophenol	356	ug/l	50.0	50.0	
2,4-Dichlorophenol	686	ug/l	50.0	50.0	
2,6-Dichlorophenol	480	ug/l	100	250	
2,4-Dimethylphenol	<100	ug/l	100	100	
2,4-Dinitrophenol	<150	ug/l	150	250	
Dinoseb	<100	ug/l	100	250	
2-Methyl-4,6-dinitrophenol	<50.0	ug/l	50.0	100	
2-Methylphenol	468	ug/l	50.0	100	
3 & 4-Methylphenol	<50.0	ug/l	50.0	50.0	
2-Nitrophenol	<50.0	ug/l	50.0	50.0	
4-Nitrophenol	<100	ug/l	100	250	J,U
Pentachlorophenol	<100	ug/l	100	100	
Phenol	<30.0	ug/l	30.0	50.0	J,U
Tetrachlorophenols	<100	ug/l	100	250	
2,4,5-Trichlorophenol	<50.0	ug/l	50.0	50.0	
2,4,6-Trichlorophenol	218	ug/l	50.0	50.0	

AL2-32

Analysis: 8290

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	<4.3	pg/l	4.3	7.81	
1,2,3,4,6,7,8-HpCDF	<2.2	pg/l	2.2	17.7	
1,2,3,4,7,8,9-HpCDF	<3.1	pg/l	3.1	12.6	
1,2,3,4,7,8-HxCDD	4.6	pg/l	2.4	6.57	J
1,2,3,6,7,8-HxCDD	3.3	pg/l	2.1	8.19	N - EMPC data
1,2,3,7,8,9-HxCDD	4.8	pg/l	2.7	14.3	J
1,2,3,4,7,8-HxCDF	3.2	pg/l	1.4	17.3	N - EMPC data
1,2,3,6,7,8-HxCDF	3.7	pg/l	1.4	8.86	J
1,2,3,7,8,9-HxCDF	3.9	pg/l	1.8	30.4	J
2,3,4,6,7,8-HxCDF	2.8	pg/l	1.2	20.8	J
1,2,3,4,6,7,8,9-OCDD	19.7	pg/l	8.4	17.7	J
1,2,3,4,6,7,8,9-OCDF	<6.1	pg/l	6.1	17.2	
1,2,3,7,8-PeCDD	4.7	pg/l	2.0	7.43	J
1,2,3,7,8-PeCDF	6.5	pg/l	1.1	4.48	J
2,3,4,7,8-PeCDF	4.4	pg/l	1.6	5.52	J
2,3,7,8-TCDD	3.4	pg/l	1.5	3.14	U,N - EMPC data
2,3,7,8-TCDF	2.6	pg/l	0.8	6.00	J
Total HpCDD	<4.3	pg/l	4.3	7.81	
Total HpCDF	<2.5	pg/l	2.5	12.6	
Total HxCDD	9.4	pg/l	2.4	6.57	
Total HxCDF	10.3	pg/l	1.4	8.86	
Total PeCDD	4.7	pg/l	2.0	7.43	
Total PeCDF	22.6	pg/l	1.3	4.48	
Total TCDD	34.9	pg/l	1.5	3.14	
Total TCDF	424	pg/l	1.2	6.00	
EMPC-HXCDD	12.7	pg/l	2.4	6.57	N - EMPC data
EMPC-HXCDF	13.6	pg/l	1.4	8.86	N - EMPC data
EMPC-PECDF	29.9	pg/l	1.3	4.48	N - EMPC data
EMPC-TCDD	38.4	pg/l	1.5	3.14	N - EMPC data
EMPC-TCDF	450	pg/l	1.2	6.00	N - EMPC data

Analysis: NWTPH-DX

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	5.17	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/20/04 Time: 14:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	13200	ug/l	16.0	51.9	

AL2-46

Analysis: 300.0 Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	161	mg/l	2.07	50.0	
Nitrate	<0.0173	mg/l	0.0173	0.100	
Nitrite(as N)	<0.0146	mg/l	0.0146	0.100	
Sulfate	33.9	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	764	mg/l	1.04	50.0	

Analysis: 350.1 Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0393	mg/l	0.00760	0.0500	

Analysis: 351.2 Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	0.67	mg/l	0.332	0.500	

Analysis: 365.2 Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	2.15	mg/l	0.0141	0.100	

Analysis: 376.2 Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	<0.0150	mg/l	0.0150	0.200	

Analysis: 405.1 Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	50.4	mg/l	1.13	4.00	

Analysis: 410.4 Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	208	mg/l	8.45	25.0	

Analysis: 415.1/5310 Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	59.8	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	<0.0434	mg/l	0.0434	0.100	
Calcium	8.24	mg/l	0.0361	0.100	
Iron	6.15	mg/l	0.00640	0.100	
Magnesium	2.84	mg/l	0.0136	0.100	
Potassium	2.5	mg/l	0.111	1.00	
Sodium	474	mg/l	1.67	100	

AL2-46

Analysis: 6020 Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	2	mg/l	0.0000845	0.0124	

Analysis: 8151MOD Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	32.8	ug/l	1.26	3.00	J
2,4-D	<1.31	ug/l	1.31	3.00	J,U
Dalapon	<1.10	ug/l	1.10	10.0	J,U
2,4-DB	170	ug/l	19.0	30.0	J
Dicamba	<1.01	ug/l	1.01	3.00	J,U
Dichlorprop	<1.16	ug/l	1.16	3.00	J,U
Dinoseb	<1.54	ug/l	1.54	3.00	J,U
MCPA	<127	ug/l	127	300	J,U
MCPP	<111	ug/l	111	300	J,U
2,4,5-T	64.2	ug/l	1.39	3.00	J
2,4,5-TP(Silvex)	<1.24	ug/l	1.24	3.00	J,U

AL2-46

Analysis: 8260B Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<234	ug/l	234	2500	J,U
Benzene	97	ug/l	14.7	100	J
Bromobenzene	<33.3	ug/l	33.3	100	J,U
Bromochloromethane	<26.6	ug/l	26.6	100	J,U
Bromodichloromethane	<18.3	ug/l	18.3	100	J,U
Bromoform	<17.4	ug/l	17.4	100	J,U
Bromomethane	<28.2	ug/l	28.2	1000	J,U
2-Butanone (MEK)	<160	ug/l	160	2500	J,U
n-Butylbenzene	<18.3	ug/l	18.3	100	J,U
sec-Butylbenzene	<19.3	ug/l	19.3	100	J,U
Carbon disulfide	<23.3	ug/l	23.3	1000	J,U
CarbonTetrachloride	<14.0	ug/l	14.0	200	J,U
Chlorobenzene	741	ug/l	13.6	100	J
Chloroethane	<32.7	ug/l	32.7	200	J,U
Chloroform	<14.3	ug/l	14.3	100	J,U
Chloromethane	<15.9	ug/l	15.9	500	J,U
2-Chlorotoluene	<11.0	ug/l	11.0	100	J,U
4-Chlorotoluene	<12.0	ug/l	12.0	100	J,U
1,2-Dibromo-3-chloropropane	<40.5	ug/l	40.5	100	J,U
Dibromochloromethane	<13.3	ug/l	13.3	100	J,U
1,2-Dibromoethane	<18.7	ug/l	18.7	100	J,U
Dibromomethane	<11.7	ug/l	11.7	100	J,U
1,2-Dichlorobenzene	10400	ug/l	8.59	100	J
1,3-Dichlorobenzene	347	ug/l	13.2	100	J
1,4-Dichlorobenzene	2660	ug/l	18.7	100	J
Dichlorodifluoromethane	<31.2	ug/l	31.2	500	J,U
1,1-Dichloroethane	<15.7	ug/l	15.7	100	J,U
1,2-Dichloroethane	<14.2	ug/l	14.2	100	J,U
1,1-Dichloroethene	<19.7	ug/l	19.7	100	J,U
cis-1,2-Dichloroethene	190	ug/l	17.0	100	J
trans-1,2-Dichloroethene	<17.5	ug/l	17.5	100	J,U
1,2-Dichloropropane	<26.6	ug/l	26.6	100	J,U
1,3-Dichloropropane	<15.1	ug/l	15.1	100	J,U
2,2-Dichloropropane	<10.4	ug/l	10.4	100	J,U
1,1-Dichloropropene	<14.9	ug/l	14.9	100	J,U
cis-1,3-Dichloropropene	<12.8	ug/l	12.8	100	J,U
trans-1,3-Dichloropropene	<15.2	ug/l	15.2	100	J,U
2-Ethyl-1-hexanol	<10000	ug/l	10000	10000	J,U
Ethylbenzene	1340	ug/l	11.0	100	J
Hexachlorobutadiene	<87.8	ug/l	87.8	200	J,U
2-Hexanone	<110	ug/l	110	1000	J,U
Iodomethane	<238	ug/l	238	2000	J,U
Isobutylalcohol	<1590	ug/l	1590	10000	J,U
Isopropylbenzene	41	ug/l	10.7	100	J

AL2-46

Analysis: 8260B

Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<14.9	ug/l	14.9	100	J,U
4-methyl-2-pentanone (MIBK)	<149	ug/l	149	500	J,U
Methylene chloride	73	ug/l	45.4	500	J
Naphthalene	<9.89	ug/l	9.89	100	J,U
n-Propylbenzene	87	ug/l	13.8	100	J
Styrene	<7.23	ug/l	7.23	100	J,U
tert-Butylbenzene	<20.6	ug/l	20.6	100	J,U
1,1,1,2-Tetrachloroethane	<14.8	ug/l	14.8	100	J,U
1,1,2,2-Tetrachloroethane	<29.4	ug/l	29.4	100	J,U
Tetrachloroethene	<10.9	ug/l	10.9	100	J,U
Toluene	94	ug/l	15.5	100	J
1,2,3-Trichlorobenzene	<21.9	ug/l	21.9	100	J,U
1,2,4-Trichlorobenzene	36	ug/l	21.3	100	J
1,1,1-Trichloroethane	<8.59	ug/l	8.59	100	J,U
1,1,2-Trichloroethane	<30.1	ug/l	30.1	100	J,U
Trichloroethene	360	ug/l	24.1	100	J
Trichlorofluoromethane	<16.0	ug/l	16.0	100	J,U
1,2,3-Trichloropropane	<36.5	ug/l	36.5	100	J,U
1,2,4-Trimethylbenzene	653	ug/l	8.84	100	J
1,3,5-Trimethylbenzene	139	ug/l	15.7	100	J
Vinyl chloride	43	ug/l	15.2	100	J
m,p-Xylene	1960	ug/l	29.5	200	J
o-Xylene	990	ug/l	18.7	100	J

Analysis: 8270C

Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Chloro-3-methylphenol	49.3	ug/l	30.0	50.0	J
2-Chlorophenol	1050	ug/l	50.0	50.0	J
2,4-Dichlorophenol	1100	ug/l	50.0	50.0	J
2,6-Dichlorophenol	533	ug/l	100	250	J
2,4-Dimethylphenol	<100	ug/l	100	100	J,U
2,4-Dinitrophenol	<150	ug/l	150	250	J,U
Dinoseb	<100	ug/l	100	250	J,U
2-Methyl-4,6-dinitrophenol	<50.0	ug/l	50.0	100	J,U
2-Methylphenol	99.6	ug/l	50.0	100	J
3 & 4-Methylphenol	<50.0	ug/l	50.0	50.0	J,U
2-Nitrophenol	<50.0	ug/l	50.0	50.0	J,U
4-Nitrophenol	<100	ug/l	100	250	J,U
Pentachlorophenol	130	ug/l	50.0	100	J
Phenol	36.4	ug/l	30.0	50.0	J
Tetrachlorophenols	112	ug/l	100	250	J
2,4,5-Trichlorophenol	72.4	ug/l	50.0	50.0	J
2,4,6-Trichlorophenol	1370	ug/l	50.0	50.0	J

AL2-46

Analysis: 8290

Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	<5.8	pg/l	5.8	7.96	J,U
1,2,3,4,6,7,8-HpCDF	<2.9	pg/l	2.9	18.1	J,U
1,2,3,4,7,8,9-HpCDF	<4.1	pg/l	4.1	12.8	J,U
1,2,3,4,7,8-HxCDD	<2.9	pg/l	2.9	6.70	J,U
1,2,3,6,7,8-HxCDD	<2.6	pg/l	2.6	8.35	J,U
1,2,3,7,8,9-HxCDD	<3.2	pg/l	3.2	14.6	J,U
1,2,3,4,7,8-HxCDF	<1.6	pg/l	1.6	17.7	J,U
1,2,3,6,7,8-HxCDF	<1.6	pg/l	1.6	9.03	J,U
1,2,3,7,8,9-HxCDF	<2.1	pg/l	2.1	31.0	J,U
2,3,4,6,7,8-HxCDF	<1.4	pg/l	1.4	21.2	J,U
1,2,3,4,6,7,8,9-OCDD	<14.5	pg/l	14.5	18.1	J,U
1,2,3,4,6,7,8,9-OCDF	<10.6	pg/l	10.6	17.6	J,U
1,2,3,7,8-PeCDD	<2.2	pg/l	2.2	7.57	
1,2,3,7,8-PeCDF	<1.3	pg/l	1.3	4.56	
2,3,4,7,8-PeCDF	<1.8	pg/l	1.8	5.63	
2,3,7,8-TCDD	<1.9	pg/l	1.9	3.20	
2,3,7,8-TCDF	<0.9	pg/l	0.9	6.12	
Total HpCDD	<5.8	pg/l	5.8	7.96	J,U
Total HpCDF	<3.4	pg/l	3.4	12.8	J,U
Total HxCDD	<2.9	pg/l	2.9	6.70	J,U
Total HxCDF	<1.6	pg/l	1.6	9.03	J,U
Total PeCDD	<2.2	pg/l	2.2	7.57	
Total PeCDF	61.6	pg/l	1.5	4.56	
Total TCDD	69.4	pg/l	1.9	3.20	
Total TCDF	1410	pg/l	1.4	6.12	
EMPC-HXCDF	5.9	pg/l	1.6	9.03	J,N - EMPC data

Analysis: NWTPH-DX

Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	15.8	mg/l	0.153	0.250	
Fuel oil no. 6	0.298	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	2040	ug/l	16.0	51.9	

AL2-46 (Dup)

Analysis: 8270C Sample Date: 04/21/04 Time: 09:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Chloro-3-methylphenol	44.9	ug/l	30.0	50.0	J
2-Chlorophenol	1050	ug/l	50.0	50.0	J
2,4-Dichlorophenol	979	ug/l	50.0	50.0	J
2,6-Dichlorophenol	510	ug/l	100	250	J
2,4-Dimethylphenol	<100	ug/l	100	100	J,U
2,4-Dinitrophenol	<150	ug/l	150	250	J,U
Dinoseb	<100	ug/l	100	250	J,U
2-Methyl-4,6-dinitrophenol	<50.0	ug/l	50.0	100	J,U
2-Methylphenol	100	ug/l	50.0	100	J
3 & 4-Methylphenol	<50.0	ug/l	50.0	50.0	J,U
2-Nitrophenol	<50.0	ug/l	50.0	50.0	J,U
4-Nitrophenol	<100	ug/l	100	250	J,U
Pentachlorophenol	127	ug/l	50.0	100	J
Phenol	37.7	ug/l	30.0	50.0	J
Tetrachlorophenols	107	ug/l	100	250	J
2,4,5-Trichlorophenol	68.3	ug/l	50.0	50.0	J
2,4,6-Trichlorophenol	1280	ug/l	50.0	50.0	J

AL6-96

Analysis: 300.0 Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	506	mg/l	2.07	50.0	
Nitrate	0.2	mg/l	0.0173	0.100	
Nitrite(as N)	<0.146	mg/l	0.146	1.00	
Sulfate	90.9	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	632	mg/l	2.08	100	

Analysis: 350.1 Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0649	mg/l	0.00760	0.0500	

Analysis: 351.2 Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	<0.332	mg/l	0.332	0.500	

Analysis: 365.2 Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.00568	mg/l	0.00141	0.0100	

Analysis: 376.2 Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	<0.0150	mg/l	0.0150	0.200	

Analysis: 405.1 Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	7.32	mg/l	1.13	4.00	

Analysis: 410.4 Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	24.9	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	5.54	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.775	mg/l	0.0434	0.100	
Calcium	128	mg/l	0.361	1.00	
Iron	3.98	mg/l	0.00640	0.100	
Magnesium	61.1	mg/l	0.136	1.00	
Potassium	10.3	mg/l	0.111	1.00	
Sodium	365	mg/l	1.67	100	

AL6-96

Analysis: 6020 Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	12.7	mg/l	0.00136	0.200	

Analysis: 8151MOD Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<1.26	ug/l	1.26	3.00	R
2,4-D	<1.31	ug/l	1.31	3.00	
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	2.41	ug/l	1.90	3.00	N
Dicamba	<1.01	ug/l	1.01	3.00	
Dichlorprop	7.02	ug/l	1.16	3.00	
Dinoseb	<1.54	ug/l	1.54	3.00	
MCPA	<127	ug/l	127	300	
MCPP	<111	ug/l	111	300	J,U
2,4,5-T	1.51	ug/l	1.39	3.00	
2,4,5-TP(Silvex)	22.5	ug/l	1.24	3.00	

AL6-96

Analysis: 8260B Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<46.8	ug/l	46.8	500	J,U
Benzene	38.4	ug/l	2.94	20.0	
Bromobenzene	<6.66	ug/l	6.66	20.0	
Bromochloromethane	<5.32	ug/l	5.32	20.0	
Bromodichloromethane	<3.66	ug/l	3.66	20.0	
Bromoform	<3.48	ug/l	3.48	20.0	
Bromomethane	<5.64	ug/l	5.64	200	J,U
2-Butanone (MEK)	<32.0	ug/l	32.0	500	
n-Butylbenzene	<3.66	ug/l	3.66	20.0	
sec-Butylbenzene	<3.86	ug/l	3.86	20.0	
Carbon disulfide	<4.66	ug/l	4.66	200	
CarbonTetrachloride	<2.80	ug/l	2.80	40.0	
Chlorobenzene	2120	ug/l	2.72	20.0	
Chloroethane	<6.54	ug/l	6.54	40.0	
Chloroform	<2.86	ug/l	2.86	20.0	
Chloromethane	<3.18	ug/l	3.18	100	
2-Chlorotoluene	<2.20	ug/l	2.20	20.0	
4-Chlorotoluene	<2.40	ug/l	2.40	20.0	
1,2-Dibromo-3-chloropropane	<8.10	ug/l	8.10	20.0	
Dibromochloromethane	<2.66	ug/l	2.66	20.0	
1,2-Dibromoethane	<3.74	ug/l	3.74	20.0	
Dibromomethane	<2.34	ug/l	2.34	20.0	
1,2-Dichlorobenzene	943	ug/l	1.72	20.0	
1,3-Dichlorobenzene	66.2	ug/l	2.64	20.0	
1,4-Dichlorobenzene	838	ug/l	3.74	20.0	
Dichlorodifluoromethane	<6.24	ug/l	6.24	100	
1,1-Dichloroethane	<3.14	ug/l	3.14	20.0	
1,2-Dichloroethane	<2.84	ug/l	2.84	20.0	
1,1-Dichloroethene	<3.94	ug/l	3.94	20.0	
cis-1,2-Dichloroethene	5.4	ug/l	3.40	20.0	
trans-1,2-Dichloroethene	<3.50	ug/l	3.50	20.0	
1,2-Dichloropropane	<5.32	ug/l	5.32	20.0	
1,3-Dichloropropane	<3.02	ug/l	3.02	20.0	
2,2-Dichloropropane	<2.08	ug/l	2.08	20.0	
1,1-Dichloropropene	<2.98	ug/l	2.98	20.0	
cis-1,3-Dichloropropene	<2.56	ug/l	2.56	20.0	
trans-1,3-Dichloropropene	<3.04	ug/l	3.04	20.0	
2-Ethyl-1-hexanol	<2000	ug/l	2000	2000	J,U
Ethylbenzene	<2.20	ug/l	2.20	20.0	
Hexachlorobutadiene	<17.6	ug/l	17.6	40.0	
2-Hexanone	<22.0	ug/l	22.0	200	
Iodomethane	<47.6	ug/l	47.6	400	
Isobutylalcohol	<318	ug/l	318	2000	J,U
Isopropylbenzene	<2.14	ug/l	2.14	20.0	

AL6-96

Analysis: 8260B Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<2.98	ug/l	2.98	20.0	
4-methyl-2-pentanone (MIBK)	<29.8	ug/l	29.8	100	
Methylene chloride	<9.08	ug/l	9.08	100	
Naphthalene	<1.98	ug/l	1.98	20.0	
n-Propylbenzene	<2.76	ug/l	2.76	20.0	
Styrene	<1.45	ug/l	1.45	20.0	
tert-Butylbenzene	<4.12	ug/l	4.12	20.0	
1,1,1,2-Tetrachloroethane	<2.96	ug/l	2.96	20.0	
1,1,2,2-Tetrachloroethane	<5.88	ug/l	5.88	20.0	
Tetrachloroethene	<2.18	ug/l	2.18	20.0	
Toluene	<3.10	ug/l	3.10	20.0	
1,2,3-Trichlorobenzene	<4.38	ug/l	4.38	20.0	
1,2,4-Trichlorobenzene	<4.26	ug/l	4.26	20.0	
1,1,1-Trichloroethane	<1.72	ug/l	1.72	20.0	
1,1,2-Trichloroethane	<6.02	ug/l	6.02	20.0	
Trichloroethene	<4.82	ug/l	4.82	20.0	
Trichlorofluoromethane	<3.20	ug/l	3.20	20.0	
1,2,3-Trichloropropane	<7.30	ug/l	7.30	20.0	
1,2,4-Trimethylbenzene	<1.77	ug/l	1.77	20.0	
1,3,5-Trimethylbenzene	<3.14	ug/l	3.14	20.0	
Vinyl chloride	<3.04	ug/l	3.04	20.0	
m,p-Xylene	<5.90	ug/l	5.90	40.0	
o-Xylene	<3.74	ug/l	3.74	20.0	

AL6-96

Analysis: 8290

Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	2400	pg/l			J
1,2,3,4,6,7,8-HpCDF	1700	pg/l			J
1,2,3,4,7,8,9-HpCDF	2200	pg/l			J
1,2,3,4,7,8-HxCDD	2000	pg/l			J
1,2,3,6,7,8-HxCDD	1800	pg/l			J
1,2,3,7,8,9-HxCDD	2500	pg/l			J
1,2,3,4,7,8-HxCDF	2400	pg/l			J
1,2,3,6,7,8-HxCDF	2200	pg/l			J
1,2,3,7,8,9-HxCDF	2400	pg/l			J
2,3,4,6,7,8-HxCDF	1500	pg/l			J
1,2,3,4,6,7,8,9-OCDD	7500	pg/l			J
1,2,3,4,6,7,8,9-OCDF	4700	pg/l			J
1,2,3,7,8-PeCDD	2100	pg/l			J
1,2,3,7,8-PeCDF	2500	pg/l			J
2,3,4,7,8-PeCDF	2200	pg/l			J
2,3,7,8-TCDD	2300	pg/l			U
2,3,7,8-TCDF	3600	pg/l			U
Total HpCDD	3600	pg/l			
Total HpCDF	3900	pg/l			
Total HxCDD	6300	pg/l			
Total HxCDF	8600	pg/l			
Total PeCDD	2100	pg/l			
Total PeCDF	4700	pg/l			
Total TCDD	3800	pg/l			U
Total TCDF	48000	pg/l			
EMPC-HXCDD	9000	pg/l			N - EMPC data
EMPC-TCDD	4600	pg/l			U,N - EMPC data

Analysis: NWTPH-DX

Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.894	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/19/04 Time: 14:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	3680	ug/l	16.0	51.9	

ASW-06

Analysis: 200.8 Sample Date: 06/10/04 Time: 11:13

Compound	Concentration	Units	MDL	MRL	Qualifiers
Lead	0.0014	mg/l	0.000224	0.00100	

Analysis: 200.8 (Dissolved) Sample Date: 06/10/04 Time: 11:13

Compound	Concentration	Units	MDL	MRL	Qualifiers
Lead (Dissolved)	0.00025	mg/l	0.000224	0.00100	

BST2W-61

Analysis: 300.0

Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	169	mg/l	0.207	5.00	
Nitrate	<0.0173	mg/l	0.0173	0.100	
Nitrite(as N)	<0.0146	mg/l	0.0146	0.100	
Sulfate	6.33	mg/l	0.170	1.00	

Analysis: 310.1

Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	560	mg/l	1.04	50.0	

Analysis: 350.1

Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0364	mg/l	0.00760	0.0500	

Analysis: 351.2

Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	0.492	mg/l	0.332	0.500	

Analysis: 365.2

Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	5.74	mg/l	0.141	1.00	

Analysis: 376.2

Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	0.19	mg/l	0.0150	0.200	

Analysis: 405.1

Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	127	mg/l	1.13	4.00	

Analysis: 410.4

Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	312	mg/l	8.45	25.0	

Analysis: 415.1/5310

Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	97.4	mg/l	0.419	1.00	

Analysis: 6010B

Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.0457	mg/l	0.0434	0.100	
Calcium	10.8	mg/l	0.0361	0.100	
Iron	3.46	mg/l	0.00640	0.100	
Magnesium	4.27	mg/l	0.0136	0.100	
Potassium	3.7	mg/l	0.111	1.00	
Sodium	353	mg/l	1.67	100	

BST2W-61

Analysis: 6020 Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	3.29	mg/l	0.0000826	0.0121	

Analysis: 8151MOD Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	47.8	ug/l	1.26	3.00	J
2,4-D	153	ug/l	13.1	30.0	J
Dalapon	<1.10	ug/l	1.10	10.0	J,U
2,4-DB	78	ug/l	1.90	3.00	J
Dicamba	<10.1	ug/l	10.1	30.0	J,U
Dichlorprop	11.6	ug/l	11.6	30.0	J,N
Dinoseb	<1.54	ug/l	1.54	3.00	J,U
MCPA	<127	ug/l	127	300	J,U
MCPP	<1110	ug/l	1110	3000	J,U
2,4,5-T	<1.39	ug/l	1.39	3.00	J,U
2,4,5-TP(Silvex)	23.8	ug/l	1.24	3.00	J

BST2W-61

Analysis: 8260B Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	299	ug/l	117	1250	J
Benzene	154	ug/l	7.35	50.0	J
Bromobenzene	<16.6	ug/l	16.6	50.0	J,U
Bromochloromethane	<13.3	ug/l	13.3	50.0	J,U
Bromodichloromethane	<9.15	ug/l	9.15	50.0	J,U
Bromoform	<8.70	ug/l	8.70	50.0	J,U
Bromomethane	<14.1	ug/l	14.1	500	J,U
2-Butanone (MEK)	<80.0	ug/l	80.0	1250	J,U
n-Butylbenzene	<9.15	ug/l	9.15	50.0	J,U
sec-Butylbenzene	<9.65	ug/l	9.65	50.0	J,U
Carbon disulfide	<11.6	ug/l	11.6	500	J,U
CarbonTetrachloride	<7.00	ug/l	7.00	100	J,U
Chlorobenzene	494	ug/l	6.80	50.0	J
Chloroethane	<16.4	ug/l	16.4	100	J,U
Chloroform	<7.15	ug/l	7.15	50.0	J,U
Chloromethane	<7.95	ug/l	7.95	250	J,U
2-Chlorotoluene	<5.50	ug/l	5.50	50.0	J,U
4-Chlorotoluene	<6.00	ug/l	6.00	50.0	J,U
1,2-Dibromo-3-chloropropane	<20.2	ug/l	20.2	50.0	J,U
Dibromochloromethane	<6.65	ug/l	6.65	50.0	J,U
1,2-Dibromoethane	<9.35	ug/l	9.35	50.0	J,U
Dibromomethane	<5.85	ug/l	5.85	50.0	J,U
1,2-Dichlorobenzene	3930	ug/l	4.30	50.0	J
1,3-Dichlorobenzene	126	ug/l	6.60	50.0	J
1,4-Dichlorobenzene	1040	ug/l	9.35	50.0	J
Dichlorodifluoromethane	<15.6	ug/l	15.6	250	J,U
1,1-Dichloroethane	<7.85	ug/l	7.85	50.0	J,U
1,2-Dichloroethane	<7.10	ug/l	7.10	50.0	J,U
1,1-Dichloroethene	13	ug/l	9.85	50.0	J
cis-1,2-Dichloroethene	62	ug/l	8.50	50.0	J
trans-1,2-Dichloroethene	<8.75	ug/l	8.75	50.0	J,U
1,2-Dichloropropane	<13.3	ug/l	13.3	50.0	J,U
1,3-Dichloropropane	<7.55	ug/l	7.55	50.0	J,U
2,2-Dichloropropane	<5.20	ug/l	5.20	50.0	J,U
1,1-Dichloropropene	<7.45	ug/l	7.45	50.0	J,U
cis-1,3-Dichloropropene	<6.40	ug/l	6.40	50.0	J,U
trans-1,3-Dichloropropene	<7.60	ug/l	7.60	50.0	J,U
2-Ethyl-1-hexanol	<5000	ug/l	5000	5000	J,U
Ethylbenzene	4820	ug/l	5.50	50.0	J
Hexachlorobutadiene	<43.9	ug/l	43.9	100	J,U
2-Hexanone	<55.0	ug/l	55.0	500	J,U
Iodomethane	<119	ug/l	119	1000	J,U
Isobutylalcohol	<795	ug/l	795	5000	J,U
Isopropylbenzene	46	ug/l	5.35	50.0	J

BST2W-61

Analysis: 8260B

Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<7.45	ug/l	7.45	50.0	J,U
4-methyl-2-pentanone (MIBK)	<74.5	ug/l	74.5	250	J,U
Methylene chloride	<22.7	ug/l	22.7	250	J,U
Naphthalene	<4.94	ug/l	4.94	50.0	J,U
n-Propylbenzene	112	ug/l	6.90	50.0	J
Styrene	<3.62	ug/l	3.62	50.0	J,U
tert-Butylbenzene	<10.3	ug/l	10.3	50.0	J,U
1,1,1,2-Tetrachloroethane	<7.40	ug/l	7.40	50.0	J,U
1,1,2,2-Tetrachloroethane	<14.7	ug/l	14.7	50.0	J,U
Tetrachloroethene	<5.45	ug/l	5.45	50.0	J,U
Toluene	295	ug/l	7.75	50.0	J
1,2,3-Trichlorobenzene	<11.0	ug/l	11.0	50.0	J,U
1,2,4-Trichlorobenzene	15	ug/l	10.6	50.0	J
1,1,1-Trichloroethane	<4.30	ug/l	4.30	50.0	J,U
1,1,2-Trichloroethane	<15.0	ug/l	15.0	50.0	J,U
Trichloroethene	772	ug/l	12.0	50.0	J
Trichlorofluoromethane	<8.00	ug/l	8.00	50.0	J,U
1,2,3-Trichloropropane	<18.2	ug/l	18.2	50.0	J,U
1,2,4-Trimethylbenzene	630	ug/l	4.42	50.0	J
1,3,5-Trimethylbenzene	188	ug/l	7.85	50.0	J
Vinyl chloride	14.5	ug/l	7.60	50.0	J
m,p-Xylene	7520	ug/l	14.8	100	J
o-Xylene	3580	ug/l	9.35	50.0	J

Analysis: 8270C

Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Chloro-3-methylphenol	98.1	ug/l	30.0	50.0	J
2-Chlorophenol	4750	ug/l	1000	1000	J
2,4-Dichlorophenol	135	ug/l	50.0	50.0	J
2,6-Dichlorophenol	<100	ug/l	100	250	J,U
2,4-Dimethylphenol	<100	ug/l	100	100	J,U
2,4-Dinitrophenol	<150	ug/l	150	250	J,U
Dinoseb	<100	ug/l	100	250	J,U
2-Methyl-4,6-dinitrophenol	<50.0	ug/l	50.0	100	J,U
2-Methylphenol	791	ug/l	50.0	100	J
3 & 4-Methylphenol	<50.0	ug/l	50.0	50.0	J,U
2-Nitrophenol	<50.0	ug/l	50.0	50.0	J,U
4-Nitrophenol	<100	ug/l	100	250	J,U
Pentachlorophenol	<50.0	ug/l	50.0	100	J,U
Phenol	745	ug/l	30.0	50.0	J
Tetrachlorophenols	<100	ug/l	100	250	J,U
2,4,5-Trichlorophenol	<50.0	ug/l	50.0	50.0	J,U
2,4,6-Trichlorophenol	<50.0	ug/l	50.0	50.0	J,U

BST2W-61

Analysis: NWTPH-DX Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	18.7	mg/l	0.153	0.250	
Fuel oil no. 6	0.7	mg/l	0.286	0.500	

Analysis: RSK 175 Sample Date: 04/21/04 Time: 11:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	4640	ug/l	16.0	51.9	

MW-03-81

Analysis: 300.0

Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	22.8	mg/l	0.0207	0.500	
Nitrate	<0.0173	mg/l	0.0173	0.100	
Nitrite(as N)	<0.0146	mg/l	0.0146	0.100	
Sulfate	<0.170	mg/l	0.170	1.00	

Analysis: 310.1

Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	335	mg/l	0.208	10.0	

Analysis: 350.1

Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	19.2	mg/l	0.0760	0.500	

Analysis: 351.2

Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	21.8	mg/l	3.32	5.00	

Analysis: 365.2

Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	<0.00141	mg/l	0.00141	0.0100	

Analysis: 376.2

Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	0.0496	mg/l	0.0150	0.200	

Analysis: 405.1

Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	19.7	mg/l	1.13	4.00	

Analysis: 410.4

Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	35.5	mg/l	1.69	5.00	

Analysis: 415.1/5310

Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	7.83	mg/l	0.419	1.00	

Analysis: 6010B

Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.049	mg/l	0.0434	0.100	
Calcium	50	mg/l	0.0361	0.100	
Iron	46.3	mg/l	0.00640	0.100	
Magnesium	25.1	mg/l	0.0136	0.100	
Potassium	5.6	mg/l	0.111	1.00	
Sodium	38.5	mg/l	0.167	10.0	

MW-03-81

Analysis: 6020

Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	0.00337	mg/l	0.000964	0.00100	
Cadmium	<0.000178	mg/l	0.000178	0.00100	
Chromium	0.00124	mg/l	0.000791	0.00100	J,U
Copper	0.00156	mg/l	0.000259	0.00200	
Lead	<0.0000870	mg/l	0.0000870	0.00100	
Manganese	2.47	mg/l	0.000136	0.0200	
Nickel	0.00476	mg/l	0.000826	0.00200	
Vanadium	0.00188	mg/l	0.000669	0.00500	
Zinc	0.00633	mg/l	0.00102	0.00500	

Analysis: 6020 (Dissolved)

Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.00305	mg/l	0.000964	0.00100	
Cadmium (Dissolved)	<0.0000730	mg/l	0.0000730	0.00100	
Chromium (Dissolved)	<0.000791	mg/l	0.000791	0.00100	
Copper (Dissolved)	0.00074	mg/l	0.000259	0.00200	U
Lead (Dissolved)	<0.0000870	mg/l	0.0000870	0.00100	
Nickel (Dissolved)	0.00413	mg/l	0.000242	0.00200	
Vanadium (Dissolved)	<0.000669	mg/l	0.000669	0.00500	
Zinc (Dissolved)	0.0035	mg/l	0.00102	0.00500	

Analysis: 7470A

Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury	<0.000103	mg/l	0.000103	0.000200	

Analysis: 7470A (Dissolved)

Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury (Dissolved)	<0.0000630	mg/l	0.0000630	0.000200	

Analysis: 8151MOD

Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<1.26	ug/l	1.26	3.00	
2,4-D	<1.31	ug/l	1.31	3.00	
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	<1.90	ug/l	1.90	3.00	
Dicamba	<1.01	ug/l	1.01	3.00	
Dichlorprop	<1.16	ug/l	1.16	3.00	
Dinoseb	<1.54	ug/l	1.54	3.00	
MCPA	<127	ug/l	127	300	
MCPP	<111	ug/l	111	300	
2,4,5-T	<1.39	ug/l	1.39	3.00	
2,4,5-TP(Silvex)	<1.24	ug/l	1.24	3.00	

MW-03-81

Analysis: 8260B Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<2.34	ug/l	2.34	25.0	
Benzene	<0.147	ug/l	0.147	1.00	
Bromobenzene	<0.333	ug/l	0.333	1.00	
Bromochloromethane	<0.266	ug/l	0.266	1.00	
Bromodichloromethane	<0.183	ug/l	0.183	1.00	
Bromoform	<0.174	ug/l	0.174	1.00	
Bromomethane	<0.282	ug/l	0.282	10.0	
2-Butanone (MEK)	<1.60	ug/l	1.60	25.0	
n-Butylbenzene	<0.183	ug/l	0.183	1.00	
sec-Butylbenzene	<0.193	ug/l	0.193	1.00	
Carbon disulfide	<0.233	ug/l	0.233	10.0	
CarbonTetrachloride	<0.140	ug/l	0.140	2.00	
Chlorobenzene	<0.136	ug/l	0.136	1.00	
Chloroethane	<0.327	ug/l	0.327	2.00	
Chloroform	<0.143	ug/l	0.143	1.00	
Chloromethane	<0.159	ug/l	0.159	5.00	
2-Chlorotoluene	<0.110	ug/l	0.110	1.00	
4-Chlorotoluene	<0.120	ug/l	0.120	1.00	
1,2-Dibromo-3-chloropropane	<0.405	ug/l	0.405	1.00	
Dibromochloromethane	<0.133	ug/l	0.133	1.00	
1,2-Dibromoethane	<0.187	ug/l	0.187	1.00	
Dibromomethane	<0.117	ug/l	0.117	1.00	
1,2-Dichlorobenzene	0.09	ug/l	0.0859	1.00	
1,3-Dichlorobenzene	<0.132	ug/l	0.132	1.00	
1,4-Dichlorobenzene	<0.187	ug/l	0.187	1.00	
Dichlorodifluoromethane	<0.312	ug/l	0.312	5.00	
1,1-Dichloroethane	<0.157	ug/l	0.157	1.00	
1,2-Dichloroethane	<0.142	ug/l	0.142	1.00	
1,1-Dichloroethene	<0.197	ug/l	0.197	1.00	
cis-1,2-Dichloroethene	<0.170	ug/l	0.170	1.00	
trans-1,2-Dichloroethene	<0.175	ug/l	0.175	1.00	
1,2-Dichloropropane	<0.266	ug/l	0.266	1.00	
1,3-Dichloropropane	<0.151	ug/l	0.151	1.00	
2,2-Dichloropropane	<0.104	ug/l	0.104	1.00	
1,1-Dichloropropene	<0.149	ug/l	0.149	1.00	
cis-1,3-Dichloropropene	<0.128	ug/l	0.128	1.00	
trans-1,3-Dichloropropene	<0.152	ug/l	0.152	1.00	
2-Ethyl-1-hexanol	<100	ug/l	100	100	
Ethylbenzene	<0.110	ug/l	0.110	1.00	
Hexachlorobutadiene	<0.878	ug/l	0.878	2.00	
2-Hexanone	<1.10	ug/l	1.10	10.0	
Iodomethane	<2.38	ug/l	2.38	20.0	
Isobutylalcohol	<15.9	ug/l	15.9	100	
Isopropylbenzene	<0.107	ug/l	0.107	1.00	

MW-03-81

Analysis: 8260B

Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<0.149	ug/l	0.149	1.00	
4-methyl-2-pentanone (MIBK)	<1.49	ug/l	1.49	5.00	
Methylene chloride	<0.454	ug/l	0.454	5.00	
Naphthalene	<0.0989	ug/l	0.0989	1.00	
n-Propylbenzene	<0.138	ug/l	0.138	1.00	
Styrene	<0.0723	ug/l	0.0723	1.00	
tert-Butylbenzene	<0.206	ug/l	0.206	1.00	
1,1,1,2-Tetrachloroethane	<0.148	ug/l	0.148	1.00	
1,1,2,2-Tetrachloroethane	<0.294	ug/l	0.294	1.00	
Tetrachloroethene	<0.109	ug/l	0.109	1.00	
Toluene	<0.155	ug/l	0.155	1.00	
1,2,3-Trichlorobenzene	<0.219	ug/l	0.219	1.00	
1,2,4-Trichlorobenzene	<0.213	ug/l	0.213	1.00	
1,1,1-Trichloroethane	<0.0859	ug/l	0.0859	1.00	
1,1,2-Trichloroethane	<0.301	ug/l	0.301	1.00	
Trichloroethene	<0.241	ug/l	0.241	1.00	
Trichlorofluoromethane	<0.160	ug/l	0.160	1.00	
1,2,3-Trichloropropane	<0.365	ug/l	0.365	1.00	
1,2,4-Trimethylbenzene	<0.0884	ug/l	0.0884	1.00	
1,3,5-Trimethylbenzene	<0.157	ug/l	0.157	1.00	
Vinyl chloride	<0.152	ug/l	0.152	1.00	
m,p-Xylene	<0.295	ug/l	0.295	2.00	
o-Xylene	<0.187	ug/l	0.187	1.00	

Analysis: NWTPH-DX

Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	<0.153	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/13/04 Time: 14:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	34900	ug/l	16.0	51.9	

MW-03-I

Analysis: 300.0

Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	324	mg/l	0.207	5.00	
Nitrate	<0.0173	mg/l	0.0173	0.100	
Nitrite(as N)	<0.146	mg/l	0.146	1.00	
Sulfate	2.34	mg/l	0.170	1.00	

Analysis: 310.1

Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	330	mg/l	0.208	10.0	

Analysis: 350.1

Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	6.61	mg/l	0.0152	0.100	

Analysis: 351.2

Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	7.28	mg/l	0.332	0.500	

Analysis: 365.2

Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	<0.00141	mg/l	0.00141	0.0100	

Analysis: 376.2

Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	<0.0150	mg/l	0.0150	0.200	

Analysis: 405.1

Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	<1.13	mg/l	1.13	4.00	

Analysis: 410.4

Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	43.2	mg/l	1.69	5.00	

Analysis: 415.1/5310

Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	6.45	mg/l	0.419	1.00	

Analysis: 6010B

Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	<0.0434	mg/l	0.0434	0.100	
Calcium	98.3	mg/l	0.361	1.00	
Iron	10.5	mg/l	0.00640	0.100	
Magnesium	55	mg/l	0.0136	0.100	
Potassium	4.19	mg/l	0.111	1.00	
Sodium	93.2	mg/l	0.167	10.0	

MW-03-I

Analysis: 6020

Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	0.00181	mg/l	0.000964	0.00100	
Cadmium	<0.000178	mg/l	0.000178	0.00100	
Chromium	<0.000791	mg/l	0.000791	0.00100	J,U
Copper	0.00221	mg/l	0.000259	0.00200	
Lead	0.00043	mg/l	0.0000870	0.00100	
Manganese	5.5	mg/l	0.000136	0.0200	
Nickel	0.00452	mg/l	0.000826	0.00200	
Vanadium	<0.000669	mg/l	0.000669	0.00500	
Zinc	0.00653	mg/l	0.00102	0.00500	

Analysis: 6020 (Dissolved)

Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.00146	mg/l	0.000964	0.00100	
Cadmium (Dissolved)	<0.0000730	mg/l	0.0000730	0.00100	
Chromium (Dissolved)	<0.000791	mg/l	0.000791	0.00100	
Copper (Dissolved)	0.00196	mg/l	0.000259	0.00200	U
Lead (Dissolved)	<0.0000870	mg/l	0.0000870	0.00100	
Nickel (Dissolved)	0.00456	mg/l	0.000242	0.00200	
Vanadium (Dissolved)	<0.000669	mg/l	0.000669	0.00500	
Zinc (Dissolved)	0.00738	mg/l	0.00102	0.00500	

Analysis: 7470A

Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury	<0.000103	mg/l	0.000103	0.000200	

Analysis: 7470A (Dissolved)

Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury (Dissolved)	<0.0000630	mg/l	0.0000630	0.000200	

Analysis: 8151MOD

Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<1.26	ug/l	1.26	3.00	
2,4-D	<1.31	ug/l	1.31	3.00	
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	<1.90	ug/l	1.90	3.00	
Dicamba	<1.01	ug/l	1.01	3.00	
Dichlorprop	<1.16	ug/l	1.16	3.00	
Dinoseb	<1.54	ug/l	1.54	3.00	
MCPA	<127	ug/l	127	300	
MCPP	<111	ug/l	111	300	
2,4,5-T	<1.39	ug/l	1.39	3.00	
2,4,5-TP(Silvex)	<1.24	ug/l	1.24	3.00	

MW-03-I

Analysis: 8260B Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<2.34	ug/l	2.34	25.0	
Benzene	<0.147	ug/l	0.147	1.00	
Bromobenzene	<0.333	ug/l	0.333	1.00	
Bromochloromethane	<0.266	ug/l	0.266	1.00	
Bromodichloromethane	<0.183	ug/l	0.183	1.00	
Bromoform	<0.174	ug/l	0.174	1.00	
Bromomethane	<0.282	ug/l	0.282	10.0	
2-Butanone (MEK)	<1.60	ug/l	1.60	25.0	
n-Butylbenzene	<0.183	ug/l	0.183	1.00	
sec-Butylbenzene	<0.193	ug/l	0.193	1.00	
Carbon disulfide	<0.233	ug/l	0.233	10.0	
CarbonTetrachloride	<0.140	ug/l	0.140	2.00	
Chlorobenzene	3.28	ug/l	0.136	1.00	
Chloroethane	<0.327	ug/l	0.327	2.00	
Chloroform	<0.143	ug/l	0.143	1.00	
Chloromethane	<0.159	ug/l	0.159	5.00	
2-Chlorotoluene	<0.110	ug/l	0.110	1.00	
4-Chlorotoluene	<0.120	ug/l	0.120	1.00	
1,2-Dibromo-3-chloropropane	<0.405	ug/l	0.405	1.00	
Dibromochloromethane	<0.133	ug/l	0.133	1.00	
1,2-Dibromoethane	<0.187	ug/l	0.187	1.00	
Dibromomethane	<0.117	ug/l	0.117	1.00	
1,2-Dichlorobenzene	0.8	ug/l	0.0859	1.00	
1,3-Dichlorobenzene	<0.132	ug/l	0.132	1.00	
1,4-Dichlorobenzene	0.3	ug/l	0.187	1.00	N
Dichlorodifluoromethane	<0.312	ug/l	0.312	5.00	
1,1-Dichloroethane	<0.157	ug/l	0.157	1.00	
1,2-Dichloroethane	<0.142	ug/l	0.142	1.00	
1,1-Dichloroethene	<0.197	ug/l	0.197	1.00	
cis-1,2-Dichloroethene	<0.170	ug/l	0.170	1.00	
trans-1,2-Dichloroethene	<0.175	ug/l	0.175	1.00	
1,2-Dichloropropane	<0.266	ug/l	0.266	1.00	
1,3-Dichloropropane	<0.151	ug/l	0.151	1.00	
2,2-Dichloropropane	<0.104	ug/l	0.104	1.00	
1,1-Dichloropropene	<0.149	ug/l	0.149	1.00	
cis-1,3-Dichloropropene	<0.128	ug/l	0.128	1.00	
trans-1,3-Dichloropropene	<0.152	ug/l	0.152	1.00	
2-Ethyl-1-hexanol	<100	ug/l	100	100	
Ethylbenzene	<0.110	ug/l	0.110	1.00	
Hexachlorobutadiene	<0.878	ug/l	0.878	2.00	
2-Hexanone	<1.10	ug/l	1.10	10.0	
Iodomethane	<2.38	ug/l	2.38	20.0	
Isobutylalcohol	<15.9	ug/l	15.9	100	
Isopropylbenzene	<0.107	ug/l	0.107	1.00	

MW-03-I

Analysis: 8260B

Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<0.149	ug/l	0.149	1.00	
4-methyl-2-pentanone (MIBK)	<1.49	ug/l	1.49	5.00	
Methylene chloride	<0.454	ug/l	0.454	5.00	
Naphthalene	<0.0989	ug/l	0.0989	1.00	
n-Propylbenzene	<0.138	ug/l	0.138	1.00	
Styrene	<0.0723	ug/l	0.0723	1.00	
tert-Butylbenzene	<0.206	ug/l	0.206	1.00	
1,1,1,2-Tetrachloroethane	<0.148	ug/l	0.148	1.00	
1,1,2,2-Tetrachloroethane	<0.294	ug/l	0.294	1.00	
Tetrachloroethene	<0.109	ug/l	0.109	1.00	
Toluene	<0.155	ug/l	0.155	1.00	
1,2,3-Trichlorobenzene	<0.219	ug/l	0.219	1.00	
1,2,4-Trichlorobenzene	<0.213	ug/l	0.213	1.00	
1,1,1-Trichloroethane	<0.0859	ug/l	0.0859	1.00	
1,1,2-Trichloroethane	<0.301	ug/l	0.301	1.00	
Trichloroethene	<0.241	ug/l	0.241	1.00	
Trichlorofluoromethane	<0.160	ug/l	0.160	1.00	
1,2,3-Trichloropropane	<0.365	ug/l	0.365	1.00	
1,2,4-Trimethylbenzene	<0.0884	ug/l	0.0884	1.00	
1,3,5-Trimethylbenzene	<0.157	ug/l	0.157	1.00	
Vinyl chloride	<0.152	ug/l	0.152	1.00	
m,p-Xylene	<0.295	ug/l	0.295	2.00	
o-Xylene	<0.187	ug/l	0.187	1.00	

Analysis: NWTPH-DX

Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	<0.153	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/13/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	511	ug/l	0.370	1.20	

MW-05-24

Analysis: 300.0

Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	72.2	mg/l	0.207	5.00	
Nitrate	<0.0173	mg/l	0.0173	0.100	
Nitrite(as N)	<0.0146	mg/l	0.0146	0.100	
Sulfate	25.9	mg/l	0.170	1.00	

Analysis: 310.1

Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	312	mg/l	1.04	50.0	

Analysis: 350.1

Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.276	mg/l	0.00760	0.0500	

Analysis: 351.2

Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	1.08	mg/l	0.332	0.500	

Analysis: 365.2

Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	3.34	mg/l	0.0141	0.100	

Analysis: 376.2

Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	<0.0150	mg/l	0.0150	0.200	

Analysis: 405.1

Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	71	mg/l	1.13	4.00	

Analysis: 410.4

Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	412	mg/l	8.45	25.0	

Analysis: 415.1/5310

Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	120	mg/l	4.19	10.0	

Analysis: 6010B

Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.134	mg/l	0.0434	0.100	
Calcium	8.65	mg/l	0.0361	0.100	
Iron	1.23	mg/l	0.00640	0.100	
Magnesium	1.45	mg/l	0.0136	0.100	
Potassium	1.19	mg/l	0.111	1.00	
Sodium	195	mg/l	0.167	10.0	

MW-05-24

Analysis: 6020 Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	0.302	mg/l	0.0000136	0.00200	

Analysis: 8151MOD Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	182	ug/l	12.6	30.0	J
2,4-D	40400	ug/l	131	300	N
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	689	ug/l	19.0	30.0	
Dicamba	<10.1	ug/l	10.1	30.0	
Dichlorprop	<11.6	ug/l	11.6	30.0	
Dinoseb	<15.4	ug/l	15.4	30.0	
MCPA	<12700	ug/l	12700	30000	J,U
MCPP	<11100	ug/l	11100	30000	
2,4,5-T	2360	ug/l	139	300	
2,4,5-TP(Silvex)	45.5	ug/l	1.24	3.00	

MW-05-24

Analysis: 8260B Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<468	ug/l	468	5000	
Benzene	84	ug/l	29.4	200	
Bromobenzene	<66.6	ug/l	66.6	200	
Bromochloromethane	<53.2	ug/l	53.2	200	
Bromodichloromethane	<36.6	ug/l	36.6	200	
Bromoform	<34.8	ug/l	34.8	200	
Bromomethane	<56.4	ug/l	56.4	2000	J,U
2-Butanone (MEK)	<320	ug/l	320	5000	
n-Butylbenzene	<36.6	ug/l	36.6	200	
sec-Butylbenzene	<38.6	ug/l	38.6	200	
Carbon disulfide	<46.6	ug/l	46.6	2000	
CarbonTetrachloride	<28.0	ug/l	28.0	400	
Chlorobenzene	1000	ug/l	27.2	200	
Chloroethane	<65.4	ug/l	65.4	400	
Chloroform	<28.6	ug/l	28.6	200	
Chloromethane	<31.8	ug/l	31.8	1000	
2-Chlorotoluene	<22.0	ug/l	22.0	200	
4-Chlorotoluene	<24.0	ug/l	24.0	200	
1,2-Dibromo-3-chloropropane	<81.0	ug/l	81.0	200	
Dibromochloromethane	<26.6	ug/l	26.6	200	
1,2-Dibromoethane	<37.4	ug/l	37.4	200	
Dibromomethane	<23.4	ug/l	23.4	200	
1,2-Dichlorobenzene	28200	ug/l	17.2	200	
1,3-Dichlorobenzene	1030	ug/l	26.4	200	
1,4-Dichlorobenzene	9070	ug/l	37.4	200	
Dichlorodifluoromethane	<62.4	ug/l	62.4	1000	
1,1-Dichloroethane	<31.4	ug/l	31.4	200	
1,2-Dichloroethane	<28.4	ug/l	28.4	200	
1,1-Dichloroethene	<39.4	ug/l	39.4	200	
cis-1,2-Dichloroethene	<34.0	ug/l	34.0	200	
trans-1,2-Dichloroethene	<35.0	ug/l	35.0	200	
1,2-Dichloropropane	<53.2	ug/l	53.2	200	
1,3-Dichloropropane	<30.2	ug/l	30.2	200	
2,2-Dichloropropane	<20.8	ug/l	20.8	200	
1,1-Dichloropropene	<29.8	ug/l	29.8	200	
cis-1,3-Dichloropropene	<25.6	ug/l	25.6	200	
trans-1,3-Dichloropropene	<30.4	ug/l	30.4	200	
2-Ethyl-1-hexanol	<20000	ug/l	20000	20000	
Ethylbenzene	2150	ug/l	22.0	200	
Hexachlorobutadiene	<176	ug/l	176	400	
2-Hexanone	<220	ug/l	220	2000	
Iodomethane	<476	ug/l	476	4000	
Isobutylalcohol	<3180	ug/l	3180	20000	
Isopropylbenzene	52	ug/l	21.4	200	

MW-05-24

Analysis: 8260B

Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<29.8	ug/l	29.8	200	
4-methyl-2-pentanone (MIBK)	<298	ug/l	298	1000	
Methylene chloride	5670	ug/l	90.8	1000	
Naphthalene	<19.8	ug/l	19.8	200	
n-Propylbenzene	152	ug/l	27.6	200	
Styrene	<14.5	ug/l	14.5	200	
tert-Butylbenzene	<41.2	ug/l	41.2	200	
1,1,1,2-Tetrachloroethane	<29.6	ug/l	29.6	200	
1,1,2,2-Tetrachloroethane	<58.8	ug/l	58.8	200	
Tetrachloroethene	<21.8	ug/l	21.8	200	
Toluene	242	ug/l	31.0	200	
1,2,3-Trichlorobenzene	<43.8	ug/l	43.8	200	
1,2,4-Trichlorobenzene	172	ug/l	42.6	200	
1,1,1-Trichloroethane	<17.2	ug/l	17.2	200	
1,1,2-Trichloroethane	<60.2	ug/l	60.2	200	
Trichloroethene	218	ug/l	48.2	200	
Trichlorofluoromethane	<32.0	ug/l	32.0	200	
1,2,3-Trichloropropane	<73.0	ug/l	73.0	200	
1,2,4-Trimethylbenzene	1670	ug/l	17.7	200	
1,3,5-Trimethylbenzene	478	ug/l	31.4	200	
Vinyl chloride	<30.4	ug/l	30.4	200	
m,p-Xylene	7260	ug/l	59.0	400	
o-Xylene	2330	ug/l	37.4	200	

Analysis: 8270C

Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Chloro-3-methylphenol	<75.0	ug/l	75.0	125	
2-Chlorophenol	616	ug/l	125	125	
2,4-Dichlorophenol	19400	ug/l	1250	1250	
2,6-Dichlorophenol	2560	ug/l	250	625	
2,4-Dimethylphenol	<250	ug/l	250	250	
2,4-Dinitrophenol	<375	ug/l	375	625	
Dinoseb	<250	ug/l	250	625	
2-Methyl-4,6-dinitrophenol	<125	ug/l	125	250	
2-Methylphenol	193	ug/l	125	250	
3 & 4-Methylphenol	<125	ug/l	125	125	
2-Nitrophenol	<125	ug/l	125	125	
4-Nitrophenol	<250	ug/l	250	625	J,U
Pentachlorophenol	264	ug/l	125	250	
Phenol	229	ug/l	75.0	125	J
Tetrachlorophenols	<250	ug/l	250	625	
2,4,5-Trichlorophenol	530	ug/l	125	125	
2,4,6-Trichlorophenol	3860	ug/l	125	125	

MW-05-24

Analysis: NWTPH-DX Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	21.9	mg/l	0.153	0.250	
Fuel oil no. 6	0.523	mg/l	0.286	0.500	

Analysis: RSK 175 Sample Date: 04/22/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	1640	ug/l	16.0	51.9	

MW-05-34

Analysis: 300.0

Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	63.3	mg/l	0.207	5.00	
Nitrate	<0.0173	mg/l	0.0173	0.100	
Nitrite(as N)	0.08	mg/l	0.0146	0.100	
Sulfate	44.4	mg/l	0.170	1.00	

Analysis: 310.1

Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	110	mg/l	1.04	50.0	

Analysis: 350.1

Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0722	mg/l	0.00760	0.0500	

Analysis: 351.2

Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	1.07	mg/l	0.332	0.500	

Analysis: 365.2

Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.333	mg/l	0.00141	0.0100	

Analysis: 376.2

Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	<0.0150	mg/l	0.0150	0.200	

Analysis: 405.1

Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	237	mg/l	1.13	4.00	

Analysis: 410.4

Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	964	mg/l	16.9	50.0	

Analysis: 415.1/5310

Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	240	mg/l	4.19	10.0	

Analysis: 6010B

Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.154	mg/l	0.0434	0.100	
Calcium	1.36	mg/l	0.0361	0.100	
Iron	2.71	mg/l	0.00640	0.100	
Magnesium	0.845	mg/l	0.0136	0.100	
Potassium	0.897	mg/l	0.111	1.00	
Sodium	141	mg/l	0.167	10.0	

MW-05-34

Analysis: 6020

Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	0.176	mg/l	0.0000136	0.00200	

Analysis: 8151MOD

Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	5510	ug/l	126	300	J
2,4-D	55800	ug/l	1310	3000	
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	336	ug/l	19.0	30.0	
Dicamba	<10.1	ug/l	10.1	30.0	
Dichlorprop	<11.6	ug/l	11.6	30.0	
Dinoseb	<15.4	ug/l	15.4	30.0	
MCPA	<12700	ug/l	12700	30000	J,U
MCPP	<111000	ug/l	111000	300000	
2,4,5-T	775	ug/l	13.9	30.0	N
2,4,5-TP(Silvex)	<12.4	ug/l	12.4	30.0	

MW-05-34

Analysis: 8260B Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<234	ug/l	234	2500	
Benzene	291	ug/l	14.7	100	
Bromobenzene	<33.3	ug/l	33.3	100	
Bromochloromethane	<26.6	ug/l	26.6	100	
Bromodichloromethane	<18.3	ug/l	18.3	100	
Bromoform	<17.4	ug/l	17.4	100	
Bromomethane	<28.2	ug/l	28.2	1000	J,U
2-Butanone (MEK)	<160	ug/l	160	2500	
n-Butylbenzene	<18.3	ug/l	18.3	100	
sec-Butylbenzene	<19.3	ug/l	19.3	100	
Carbon disulfide	<23.3	ug/l	23.3	1000	
CarbonTetrachloride	<14.0	ug/l	14.0	200	
Chlorobenzene	401	ug/l	13.6	100	
Chloroethane	<32.7	ug/l	32.7	200	
Chloroform	<14.3	ug/l	14.3	100	
Chloromethane	<15.9	ug/l	15.9	500	
2-Chlorotoluene	<11.0	ug/l	11.0	100	
4-Chlorotoluene	<12.0	ug/l	12.0	100	
1,2-Dibromo-3-chloropropane	<40.5	ug/l	40.5	100	
Dibromochloromethane	<13.3	ug/l	13.3	100	
1,2-Dibromoethane	<18.7	ug/l	18.7	100	
Dibromomethane	<11.7	ug/l	11.7	100	
1,2-Dichlorobenzene	12600	ug/l	8.59	100	
1,3-Dichlorobenzene	463	ug/l	13.2	100	
1,4-Dichlorobenzene	3930	ug/l	18.7	100	
Dichlorodifluoromethane	<31.2	ug/l	31.2	500	
1,1-Dichloroethane	<15.7	ug/l	15.7	100	
1,2-Dichloroethane	<14.2	ug/l	14.2	100	
1,1-Dichloroethene	<19.7	ug/l	19.7	100	
cis-1,2-Dichloroethene	<17.0	ug/l	17.0	100	
trans-1,2-Dichloroethene	<17.5	ug/l	17.5	100	
1,2-Dichloropropane	<26.6	ug/l	26.6	100	
1,3-Dichloropropane	<15.1	ug/l	15.1	100	
2,2-Dichloropropane	<10.4	ug/l	10.4	100	
1,1-Dichloropropene	<14.9	ug/l	14.9	100	
cis-1,3-Dichloropropene	<12.8	ug/l	12.8	100	
trans-1,3-Dichloropropene	<15.2	ug/l	15.2	100	
2-Ethyl-1-hexanol	12500	ug/l	10000	10000	
Ethylbenzene	8020	ug/l	11.0	100	
Hexachlorobutadiene	<87.8	ug/l	87.8	200	
2-Hexanone	<110	ug/l	110	1000	
Iodomethane	<238	ug/l	238	2000	
Isobutylalcohol	12800	ug/l	1590	10000	
Isopropylbenzene	60	ug/l	10.7	100	

MW-05-34

Analysis: 8260B

Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<14.9	ug/l	14.9	100	
4-methyl-2-pentanone (MIBK)	<149	ug/l	149	500	
Methylene chloride	412	ug/l	45.4	500	
Naphthalene	<9.89	ug/l	9.89	100	
n-Propylbenzene	154	ug/l	13.8	100	
Styrene	<7.23	ug/l	7.23	100	
tert-Butylbenzene	<20.6	ug/l	20.6	100	
1,1,1,2-Tetrachloroethane	<14.8	ug/l	14.8	100	
1,1,2,2-Tetrachloroethane	<29.4	ug/l	29.4	100	
Tetrachloroethene	<10.9	ug/l	10.9	100	
Toluene	1450	ug/l	15.5	100	
1,2,3-Trichlorobenzene	<21.9	ug/l	21.9	100	
1,2,4-Trichlorobenzene	103	ug/l	21.3	100	
1,1,1-Trichloroethane	<8.59	ug/l	8.59	100	
1,1,2-Trichloroethane	<30.1	ug/l	30.1	100	
Trichloroethene	3520	ug/l	24.1	100	
Trichlorofluoromethane	<16.0	ug/l	16.0	100	
1,2,3-Trichloropropane	<36.5	ug/l	36.5	100	
1,2,4-Trimethylbenzene	1450	ug/l	8.84	100	
1,3,5-Trimethylbenzene	405	ug/l	15.7	100	
Vinyl chloride	<15.2	ug/l	15.2	100	
m,p-Xylene	20800	ug/l	29.5	200	
o-Xylene	6300	ug/l	18.7	100	

Analysis: 8270C

Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Chloro-3-methylphenol	<600	ug/l	600	1000	
2-Chlorophenol	1670	ug/l	1000	1000	
2,4-Dichlorophenol	84400	ug/l	10000	10000	
2,6-Dichlorophenol	8190	ug/l	2000	5000	
2,4-Dimethylphenol	<2000	ug/l	2000	2000	
2,4-Dinitrophenol	<3000	ug/l	3000	5000	
Dinoseb	<2000	ug/l	2000	5000	
2-Methyl-4,6-dinitrophenol	<1000	ug/l	1000	2000	
2-Methylphenol	<1000	ug/l	1000	2000	
3 & 4-Methylphenol	<1000	ug/l	1000	1000	
2-Nitrophenol	<1000	ug/l	1000	1000	
4-Nitrophenol	<2000	ug/l	2000	5000	J,U
Pentachlorophenol	<1000	ug/l	1000	2000	
Phenol	659	ug/l	600	1000	J
Tetrachlorophenols	<2000	ug/l	2000	5000	
2,4,5-Trichlorophenol	1120	ug/l	1000	1000	
2,4,6-Trichlorophenol	12900	ug/l	1000	1000	

MW-05-34

Analysis: NWTPH-DX Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	89	mg/l	1.53	2.50	
Fuel oil no. 6	4.37	mg/l	2.86	4.50	

Analysis: RSK 175 Sample Date: 04/22/04 Time: 11:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	85.9	ug/l	0.370	1.20	

MW-05-52

Analysis: 300.0

Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	210	mg/l	0.207	5.00	
Nitrate	<0.0173	mg/l	0.0173	0.100	
Nitrite(as N)	<0.0146	mg/l	0.0146	0.100	
Sulfate	46.2	mg/l	0.170	1.00	

Analysis: 310.1

Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	419	mg/l	1.04	50.0	

Analysis: 350.1

Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0221	mg/l	0.00760	0.0500	

Analysis: 351.2

Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	0.63	mg/l	0.332	0.500	

Analysis: 365.2

Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	9.74	mg/l	0.141	1.00	

Analysis: 376.2

Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	0.0924	mg/l	0.0150	0.200	

Analysis: 405.1

Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	<3.50	mg/l	3.50	12.0	

Analysis: 410.4

Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	41.9	mg/l	1.69	5.00	

Analysis: 415.1/5310

Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	11.4	mg/l	0.419	1.00	

Analysis: 6010B

Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	<0.0434	mg/l	0.0434	0.100	
Calcium	2.46	mg/l	0.0361	0.100	
Iron	5.82	mg/l	0.00640	0.100	
Magnesium	5.19	mg/l	0.0136	0.100	
Potassium	1.28	mg/l	0.111	1.00	
Sodium	330	mg/l	1.67	100	

MW-05-52

Analysis: 6020 Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	0.565	mg/l	0.0000136	0.00200	

Analysis: 8151MOD Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	24.2	ug/l	1.26	3.00	J
2,4-D	75.8	ug/l	1.31	3.00	
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	4.05	ug/l	1.90	3.00	
Dicamba	<1.01	ug/l	1.01	3.00	
Dichlorprop	13.5	ug/l	1.16	3.00	
Dinoseb	<1.54	ug/l	1.54	3.00	
MCPA	<127	ug/l	127	300	J,U
MCPP	<1110	ug/l	1110	3000	
2,4,5-T	2.06	ug/l	1.39	3.00	N
2,4,5-TP(Silvex)	10.4	ug/l	1.24	3.00	

MW-05-52

Analysis: 8260B Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<46.8	ug/l	46.8	500	
Benzene	39.2	ug/l	2.94	20.0	
Bromobenzene	<6.66	ug/l	6.66	20.0	
Bromochloromethane	<5.32	ug/l	5.32	20.0	
Bromodichloromethane	<3.66	ug/l	3.66	20.0	
Bromoform	<3.48	ug/l	3.48	20.0	
Bromomethane	<5.64	ug/l	5.64	200	J,U
2-Butanone (MEK)	<32.0	ug/l	32.0	500	
n-Butylbenzene	<3.66	ug/l	3.66	20.0	
sec-Butylbenzene	<3.86	ug/l	3.86	20.0	
Carbon disulfide	<4.66	ug/l	4.66	200	
CarbonTetrachloride	<2.80	ug/l	2.80	40.0	
Chlorobenzene	199	ug/l	2.72	20.0	
Chloroethane	<6.54	ug/l	6.54	40.0	
Chloroform	<2.86	ug/l	2.86	20.0	
Chloromethane	<3.18	ug/l	3.18	100	
2-Chlorotoluene	<2.20	ug/l	2.20	20.0	
4-Chlorotoluene	<2.40	ug/l	2.40	20.0	
1,2-Dibromo-3-chloropropane	<8.10	ug/l	8.10	20.0	
Dibromochloromethane	<2.66	ug/l	2.66	20.0	
1,2-Dibromoethane	<3.74	ug/l	3.74	20.0	
Dibromomethane	<2.34	ug/l	2.34	20.0	
1,2-Dichlorobenzene	2460	ug/l	1.72	20.0	
1,3-Dichlorobenzene	84	ug/l	2.64	20.0	
1,4-Dichlorobenzene	602	ug/l	3.74	20.0	
Dichlorodifluoromethane	<6.24	ug/l	6.24	100	
1,1-Dichloroethane	<3.14	ug/l	3.14	20.0	
1,2-Dichloroethane	<2.84	ug/l	2.84	20.0	
1,1-Dichloroethene	<3.94	ug/l	3.94	20.0	
cis-1,2-Dichloroethene	7.4	ug/l	3.40	20.0	
trans-1,2-Dichloroethene	3.8	ug/l	3.50	20.0	
1,2-Dichloropropane	<5.32	ug/l	5.32	20.0	
1,3-Dichloropropane	<3.02	ug/l	3.02	20.0	
2,2-Dichloropropane	<2.08	ug/l	2.08	20.0	
1,1-Dichloropropene	<2.98	ug/l	2.98	20.0	
cis-1,3-Dichloropropene	<2.56	ug/l	2.56	20.0	
trans-1,3-Dichloropropene	<3.04	ug/l	3.04	20.0	
2-Ethyl-1-hexanol	<2000	ug/l	2000	2000	
Ethylbenzene	911	ug/l	2.20	20.0	
Hexachlorobutadiene	<17.6	ug/l	17.6	40.0	
2-Hexanone	<22.0	ug/l	22.0	200	
Iodomethane	<47.6	ug/l	47.6	400	
Isobutylalcohol	<318	ug/l	318	2000	
Isopropylbenzene	15.4	ug/l	2.14	20.0	

MW-05-52

Analysis: 8260B

Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<2.98	ug/l	2.98	20.0	
4-methyl-2-pentanone (MIBK)	<29.8	ug/l	29.8	100	
Methylene chloride	<9.08	ug/l	9.08	100	
Naphthalene	<1.98	ug/l	1.98	20.0	
n-Propylbenzene	21.4	ug/l	2.76	20.0	
Styrene	25.2	ug/l	1.45	20.0	
tert-Butylbenzene	<4.12	ug/l	4.12	20.0	
1,1,1,2-Tetrachloroethane	<2.96	ug/l	2.96	20.0	
1,1,2,2-Tetrachloroethane	<5.88	ug/l	5.88	20.0	
Tetrachloroethene	2.4	ug/l	2.18	20.0	
Toluene	23	ug/l	3.10	20.0	
1,2,3-Trichlorobenzene	<4.38	ug/l	4.38	20.0	
1,2,4-Trichlorobenzene	9	ug/l	4.26	20.0	
1,1,1-Trichloroethane	<1.72	ug/l	1.72	20.0	
1,1,2-Trichloroethane	<6.02	ug/l	6.02	20.0	
Trichloroethene	95.2	ug/l	4.82	20.0	
Trichlorofluoromethane	<3.20	ug/l	3.20	20.0	
1,2,3-Trichloropropane	<7.30	ug/l	7.30	20.0	
1,2,4-Trimethylbenzene	130	ug/l	1.77	20.0	
1,3,5-Trimethylbenzene	37.8	ug/l	3.14	20.0	
Vinyl chloride	<3.04	ug/l	3.04	20.0	
m,p-Xylene	777	ug/l	5.90	40.0	
o-Xylene	759	ug/l	3.74	20.0	

Analysis: 8270C

Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Chloro-3-methylphenol	<75.0	ug/l	75.0	125	
2-Chlorophenol	<125	ug/l	125	125	
2,4-Dichlorophenol	<125	ug/l	125	125	
2,6-Dichlorophenol	<250	ug/l	250	625	
2,4-Dimethylphenol	<250	ug/l	250	250	
2,4-Dinitrophenol	<375	ug/l	375	625	
Dinoseb	<250	ug/l	250	625	
2-Methyl-4,6-dinitrophenol	<125	ug/l	125	250	
2-Methylphenol	<125	ug/l	125	250	
3 & 4-Methylphenol	<125	ug/l	125	125	
2-Nitrophenol	<125	ug/l	125	125	
4-Nitrophenol	<250	ug/l	250	625	J,U
Pentachlorophenol	<125	ug/l	125	250	
Phenol	<75.0	ug/l	75.0	125	J,U
Tetrachlorophenols	<250	ug/l	250	625	
2,4,5-Trichlorophenol	<125	ug/l	125	125	
2,4,6-Trichlorophenol	<125	ug/l	125	125	

MW-05-52

Analysis: 8290

Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	4.6	pg/l	1.8	7.88	J
1,2,3,4,6,7,8-HpCDF	5.1	pg/l	0.9	17.9	J
1,2,3,4,7,8,9-HpCDF	<1.2	pg/l	1.2	12.7	
1,2,3,4,7,8-HxCDD	<1.3	pg/l	1.3	6.63	
1,2,3,6,7,8-HxCDD	<1.1	pg/l	1.1	8.27	
1,2,3,7,8,9-HxCDD	<1.2	pg/l	1.2	14.4	
1,2,3,4,7,8-HxCDF	2.5	pg/l	0.7	17.5	J
1,2,3,6,7,8-HxCDF	<0.7	pg/l	0.7	8.94	
1,2,3,7,8,9-HxCDF	<0.8	pg/l	0.8	30.7	
2,3,4,6,7,8-HxCDF	1.9	pg/l	0.7	21.0	J
1,2,3,4,6,7,8,9-OCDD	23.4	pg/l	2.7	17.9	J
1,2,3,4,6,7,8,9-OCDF	11.1	pg/l	2.2	17.4	N - EMPC data
1,2,3,7,8-PeCDD	<1.0	pg/l	1.0	7.50	
1,2,3,7,8-PeCDF	2.2	pg/l	0.6	4.52	J
2,3,4,7,8-PeCDF	2.4	pg/l	0.8	5.58	N - EMPC data
2,3,7,8-TCDD	96.1	pg/l	1.4	3.17	
2,3,7,8-TCDF	<2.7	pg/l	2.7	6.06	
Total HpCDD	9.8	pg/l	1.8	7.88	
Total HpCDF	5.1	pg/l	1.0	12.7	
Total HxCDD	<1.2	pg/l	1.2	6.63	
Total HxCDF	26.1	pg/l	0.7	8.94	
Total PeCDD	3.6	pg/l	1.0	7.50	
Total PeCDF	447	pg/l	0.7	4.52	
Total TCDD	1500	pg/l	1.4	3.17	
Total TCDF	2350	pg/l	1.1	6.06	
EMPC-HPCDF	8.6	pg/l	1.0	12.7	N - EMPC data
EMPC-HXCDD	2.3	pg/l	1.2	6.63	N - EMPC data
EMPC-PECDF	450	pg/l	0.7	4.52	N - EMPC data
EMPC-TCDF	2360	pg/l	1.1	6.06	N - EMPC data

Analysis: NWTPH-DX

Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	2.26	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/22/04 Time: 11:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	150	ug/l	0.370	1.20	

MW-05-70

Analysis: 300.0

Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	43.9	mg/l	0.207	5.00	
Nitrate	<0.0173	mg/l	0.0173	0.100	
Nitrite(as N)	<0.0146	mg/l	0.0146	0.100	
Sulfate	30.8	mg/l	0.170	1.00	

Analysis: 310.1

Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	280	mg/l	1.04	50.0	

Analysis: 350.1

Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.023	mg/l	0.00760	0.0500	

Analysis: 351.2

Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	<0.332	mg/l	0.332	0.500	

Analysis: 365.2

Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	1.26	mg/l	0.0141	0.100	

Analysis: 376.2

Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	<0.0150	mg/l	0.0150	0.200	

Analysis: 405.1

Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	<1.13	mg/l	1.13	4.00	

Analysis: 410.4

Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	7.93	mg/l	1.69	5.00	

Analysis: 415.1/5310

Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	1.74	mg/l	0.419	1.00	

Analysis: 6010B

Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.141	mg/l	0.0434	0.100	
Calcium	1.41	mg/l	0.0361	0.100	
Iron	0.983	mg/l	0.00640	0.100	
Magnesium	0.727	mg/l	0.0136	0.100	
Potassium	2.34	mg/l	0.111	1.00	
Sodium	167	mg/l	0.167	10.0	

MW-05-70

Analysis: 6020 Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	0.438	mg/l	0.0000136	0.00200	

Analysis: 8151MOD Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<1.26	ug/l	1.26	3.00	R
2,4-D	6.7	ug/l	1.31	3.00	
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	<1.90	ug/l	1.90	3.00	
Dicamba	<1.01	ug/l	1.01	3.00	
Dichlorprop	1.77	ug/l	1.16	3.00	N
Dinoseb	<1.54	ug/l	1.54	3.00	
MCPA	<127	ug/l	127	300	J,U
MCPP	<111	ug/l	111	300	
2,4,5-T	<1.39	ug/l	1.39	3.00	
2,4,5-TP(Silvex)	3.71	ug/l	1.24	3.00	

MW-05-70

Analysis: 8260B Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<11.7	ug/l	11.7	125	
Benzene	1.55	ug/l	0.735	5.00	
Bromobenzene	<1.66	ug/l	1.66	5.00	J,U
Bromochloromethane	<1.33	ug/l	1.33	5.00	
Bromodichloromethane	<0.915	ug/l	0.915	5.00	
Bromoform	<0.870	ug/l	0.870	5.00	
Bromomethane	<1.41	ug/l	1.41	50.0	
2-Butanone (MEK)	<8.00	ug/l	8.00	125	
n-Butylbenzene	<0.915	ug/l	0.915	5.00	
sec-Butylbenzene	<0.965	ug/l	0.965	5.00	
Carbon disulfide	<1.16	ug/l	1.16	50.0	
CarbonTetrachloride	<0.700	ug/l	0.700	10.0	
Chlorobenzene	38.3	ug/l	0.680	5.00	
Chloroethane	<1.64	ug/l	1.64	10.0	
Chloroform	<0.715	ug/l	0.715	5.00	
Chloromethane	<0.795	ug/l	0.795	25.0	
2-Chlorotoluene	<0.550	ug/l	0.550	5.00	
4-Chlorotoluene	<0.600	ug/l	0.600	5.00	
1,2-Dibromo-3-chloropropane	<2.02	ug/l	2.02	5.00	
Dibromochloromethane	<0.665	ug/l	0.665	5.00	
1,2-Dibromoethane	<0.935	ug/l	0.935	5.00	
Dibromomethane	<0.585	ug/l	0.585	5.00	
1,2-Dichlorobenzene	658	ug/l	0.430	5.00	
1,3-Dichlorobenzene	18.8	ug/l	0.660	5.00	
1,4-Dichlorobenzene	172	ug/l	0.935	5.00	
Dichlorodifluoromethane	<1.56	ug/l	1.56	25.0	
1,1-Dichloroethane	<0.785	ug/l	0.785	5.00	
1,2-Dichloroethane	<0.710	ug/l	0.710	5.00	
1,1-Dichloroethene	<0.985	ug/l	0.985	5.00	
cis-1,2-Dichloroethene	6.45	ug/l	0.850	5.00	
trans-1,2-Dichloroethene	<0.875	ug/l	0.875	5.00	
1,2-Dichloropropane	<1.33	ug/l	1.33	5.00	
1,3-Dichloropropane	<0.755	ug/l	0.755	5.00	
2,2-Dichloropropane	<0.520	ug/l	0.520	5.00	
1,1-Dichloropropene	<0.745	ug/l	0.745	5.00	
cis-1,3-Dichloropropene	<0.640	ug/l	0.640	5.00	
trans-1,3-Dichloropropene	<0.760	ug/l	0.760	5.00	
2-Ethyl-1-hexanol	<500	ug/l	500	500	
Ethylbenzene	0.9	ug/l	0.550	5.00	
Hexachlorobutadiene	<4.39	ug/l	4.39	10.0	
2-Hexanone	<5.50	ug/l	5.50	50.0	
Iodomethane	<11.9	ug/l	11.9	100	
Isobutylalcohol	<79.5	ug/l	79.5	500	
Isopropylbenzene	<0.535	ug/l	0.535	5.00	

MW-05-70

Analysis: 8260B Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<0.745	ug/l	0.745	5.00	
4-methyl-2-pentanone (MIBK)	<7.45	ug/l	7.45	25.0	
Methylene chloride	<2.27	ug/l	2.27	25.0	
Naphthalene	<0.494	ug/l	0.494	5.00	
n-Propylbenzene	<0.690	ug/l	0.690	5.00	
Styrene	<0.362	ug/l	0.362	5.00	
tert-Butylbenzene	<1.03	ug/l	1.03	5.00	
1,1,1,2-Tetrachloroethane	<0.740	ug/l	0.740	5.00	
1,1,2,2-Tetrachloroethane	<1.47	ug/l	1.47	5.00	
Tetrachloroethene	<0.545	ug/l	0.545	5.00	
Toluene	<0.775	ug/l	0.775	5.00	
1,2,3-Trichlorobenzene	<1.10	ug/l	1.10	5.00	
1,2,4-Trichlorobenzene	<1.06	ug/l	1.06	5.00	
1,1,1-Trichloroethane	<0.430	ug/l	0.430	5.00	
1,1,2-Trichloroethane	<1.50	ug/l	1.50	5.00	
Trichloroethene	13.7	ug/l	1.20	5.00	
Trichlorofluoromethane	<0.800	ug/l	0.800	5.00	
1,2,3-Trichloropropane	<1.82	ug/l	1.82	5.00	
1,2,4-Trimethylbenzene	<0.442	ug/l	0.442	5.00	
1,3,5-Trimethylbenzene	<0.785	ug/l	0.785	5.00	
Vinyl chloride	<0.760	ug/l	0.760	5.00	
m,p-Xylene	<1.48	ug/l	1.48	10.0	
o-Xylene	<0.935	ug/l	0.935	5.00	

MW-05-70

Analysis: 8290

Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	<0.6	pg/l	0.6	7.81	
1,2,3,4,6,7,8-HpCDF	0.74	pg/l	0.3	17.7	N - EMPC data
1,2,3,4,7,8,9-HpCDF	<0.4	pg/l	0.4	12.6	
1,2,3,4,7,8-HxCDD	1.4	pg/l	0.4	6.57	J
1,2,3,6,7,8-HxCDD	<0.3	pg/l	0.3	8.19	
1,2,3,7,8,9-HxCDD	<0.4	pg/l	0.4	14.3	
1,2,3,4,7,8-HxCDF	1.1	pg/l	0.3	17.3	J
1,2,3,6,7,8-HxCDF	0.66	pg/l	0.2	8.86	J
1,2,3,7,8,9-HxCDF	<0.3	pg/l	0.3	30.4	
2,3,4,6,7,8-HxCDF	<0.3	pg/l	0.3	20.8	
1,2,3,4,6,7,8,9-OCDD	7.5	pg/l	0.9	17.7	J
1,2,3,4,6,7,8,9-OCDF	<0.7	pg/l	0.7	17.2	
1,2,3,7,8-PeCDD	<0.3	pg/l	0.3	7.43	
1,2,3,7,8-PeCDF	<0.2	pg/l	0.2	4.48	
2,3,4,7,8-PeCDF	<0.3	pg/l	0.3	5.52	
2,3,7,8-TCDD	6.0	pg/l	0.5	3.14	U
2,3,7,8-TCDF	<2.0	pg/l	2.0	6.00	
Total HpCDD	<0.6	pg/l	0.6	7.81	
Total HpCDF	<0.3	pg/l	0.3	12.6	
Total HxCDD	1.4	pg/l	0.4	6.57	
Total HxCDF	1.7	pg/l	0.3	8.86	
Total PeCDD	<0.3	pg/l	0.3	7.43	
Total PeCDF	5.2	pg/l	0.2	4.48	
Total TCDD	30.7	pg/l	0.5	3.14	
Total TCDF	103	pg/l	0.4	6.00	
EMPC-HPCDD	1.7	pg/l	0.6	7.81	N - EMPC data
EMPC-HPCDF	0.74	pg/l	0.3	12.6	N - EMPC data
EMPC-TCDD	35.1	pg/l	0.5	3.14	N - EMPC data
EMPC-TCDF	119	pg/l	0.4	6.00	N - EMPC data

Analysis: NWTPH-DX

Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.2	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/22/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	284	ug/l	0.370	1.20	

MW-10-24

Analysis: 300.0

Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	6.51	mg/l	0.0207	0.500	
Nitrate	0.89	mg/l	0.0173	0.100	
Nitrite(as N)	<0.0146	mg/l	0.0146	0.100	
Sulfate	20.4	mg/l	0.170	1.00	

Analysis: 310.1

Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	135	mg/l	0.208	10.0	

Analysis: 350.1

Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	<0.00760	mg/l	0.00760	0.0500	

Analysis: 351.2

Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	<0.332	mg/l	0.332	0.500	

Analysis: 365.2

Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.0512	mg/l	0.00141	0.0100	

Analysis: 376.2

Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	<0.0150	mg/l	0.0150	0.200	

Analysis: 405.1

Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	<1.13	mg/l	1.13	4.00	

Analysis: 410.4

Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	6.54	mg/l	1.69	5.00	

Analysis: 415.1/5310

Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	2.8	mg/l	0.419	1.00	

Analysis: 6010B

Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.0841	mg/l	0.0434	0.100	
Calcium	30.1	mg/l	0.0361	0.100	
Iron	0.231	mg/l	0.00640	0.100	
Magnesium	13.8	mg/l	0.0136	0.100	
Potassium	1.67	mg/l	0.111	1.00	
Sodium	19.3	mg/l	0.0167	1.00	

MW-10-24

Analysis: 6020

Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	<0.000964	mg/l	0.000964	0.00100	
Cadmium	<0.000178	mg/l	0.000178	0.00100	
Chromium	0.00333	mg/l	0.000791	0.00100	
Copper	0.00537	mg/l	0.000259	0.00200	
Lead	0.00034	mg/l	0.0000870	0.00100	U
Manganese	0.531	mg/l	0.0000136	0.00200	
Nickel	0.00229	mg/l	0.000826	0.00200	
Vanadium	0.00529	mg/l	0.000669	0.00500	
Zinc	0.015	mg/l	0.00102	0.00500	

Analysis: 6020 (Dissolved)

Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	<0.000964	mg/l	0.000964	0.00100	
Cadmium (Dissolved)	<0.0000730	mg/l	0.0000730	0.00100	
Chromium (Dissolved)	0.00361	mg/l	0.000791	0.00100	
Copper (Dissolved)	0.00581	mg/l	0.000259	0.00200	
Lead (Dissolved)	0.00009	mg/l	0.0000870	0.00100	
Nickel (Dissolved)	0.00237	mg/l	0.000242	0.00200	
Vanadium (Dissolved)	0.00512	mg/l	0.00134	0.0100	
Zinc (Dissolved)	0.0176	mg/l	0.00102	0.00500	

Analysis: 7470A

Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury	<0.000103	mg/l	0.000103	0.000200	

Analysis: 7470A (Dissolved)

Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury (Dissolved)	<0.0000630	mg/l	0.0000630	0.000200	

MW-10-24

Analysis: 8081A

Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aldrin	1.9	ug/l	0.250	0.500	
gamma-BHC (Lindane)	0.526	ug/l	0.250	0.500	N
alpha-BHC	0.774	ug/l	0.250	0.500	J
beta-BHC	1.3	ug/l	0.250	0.500	N
delta-BHC	1.63	ug/l	0.250	0.500	J
alpha-Chlordane	0.342	ug/l	0.250	0.500	N
gamma-Chlordane	0.977	ug/l	0.250	0.500	
4,4'-DDD	<0.250	ug/l	0.250	0.500	
4,4'-DDE	<0.250	ug/l	0.250	0.500	
4,4'-DDT	<0.250	ug/l	0.250	0.500	
Dieldrin	4.15	ug/l	0.250	0.500	
Endosulfan I	<0.250	ug/l	0.250	0.500	
Endosulfan II	<0.250	ug/l	0.250	0.500	
Endosulfan sulfate	<0.250	ug/l	0.250	0.500	
Endrin	<0.375	ug/l	0.375	0.500	
Endrin aldehyde	<0.250	ug/l	0.250	0.500	
Endrin Ketone	1.89	ug/l	0.250	0.500	N
Heptachlor	<0.250	ug/l	0.250	0.500	
Heptachlor epoxide	4.52	ug/l	0.250	0.500	
Hexachlorobenzene	<0.250	ug/l	0.250	0.500	
Methoxychlor	<0.250	ug/l	0.250	0.500	

Analysis: NWTPH-DX

Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	<0.153	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/19/04 Time: 12:50

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	<0.370	ug/l	0.370	1.20	

RP-01-31

Analysis: 300.0

Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	5.66	mg/l	0.0207	0.500	
Nitrate	1.34	mg/l	0.0173	0.100	
Nitrite(as N)	<0.0146	mg/l	0.0146	0.100	
Sulfate	23.6	mg/l	0.170	1.00	

Analysis: 310.1

Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	152	mg/l	0.208	10.0	

Analysis: 350.1

Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	<0.00760	mg/l	0.00760	0.0500	

Analysis: 351.2

Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	<0.332	mg/l	0.332	0.500	

Analysis: 365.2

Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.352	mg/l	0.00141	0.0100	

Analysis: 376.2

Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	<0.0150	mg/l	0.0150	0.200	

Analysis: 405.1

Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	<1.13	mg/l	1.13	4.00	

Analysis: 410.4

Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	3.2	mg/l	1.69	5.00	

Analysis: 415.1/5310

Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	1.65	mg/l	0.419	1.00	

Analysis: 6010B

Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.253	mg/l	0.0434	0.100	
Calcium	6.12	mg/l	0.0361	0.100	
Iron	0.7	mg/l	0.00640	0.100	
Magnesium	2.32	mg/l	0.0136	0.100	
Potassium	1.87	mg/l	0.111	1.00	
Sodium	78.1	mg/l	0.167	10.0	

RP-01-31

Analysis: 6020 Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	0.0228	mg/l	0.0000136	0.00200	

Analysis: 8151MOD Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<1.26	ug/l	1.26	3.00	
2,4-D	<1.31	ug/l	1.31	3.00	
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	<1.90	ug/l	1.90	3.00	
Dicamba	<1.01	ug/l	1.01	3.00	
Dichlorprop	<1.16	ug/l	1.16	3.00	
Dinoseb	<1.54	ug/l	1.54	3.00	
MCPA	<127	ug/l	127	300	
MCPP	<111	ug/l	111	300	
2,4,5-T	<1.39	ug/l	1.39	3.00	
2,4,5-TP(Silvex)	<1.24	ug/l	1.24	3.00	

RP-01-31

Analysis: 8260B Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<2.34	ug/l	2.34	25.0	J,U
Benzene	<0.147	ug/l	0.147	1.00	
Bromobenzene	<0.333	ug/l	0.333	1.00	
Bromochloromethane	<0.266	ug/l	0.266	1.00	
Bromodichloromethane	<0.183	ug/l	0.183	1.00	
Bromoform	<0.174	ug/l	0.174	1.00	
Bromomethane	<0.282	ug/l	0.282	10.0	J,U
2-Butanone (MEK)	<1.60	ug/l	1.60	25.0	
n-Butylbenzene	<0.183	ug/l	0.183	1.00	
sec-Butylbenzene	<0.193	ug/l	0.193	1.00	
Carbon disulfide	<0.233	ug/l	0.233	10.0	
CarbonTetrachloride	<0.140	ug/l	0.140	2.00	
Chlorobenzene	<0.136	ug/l	0.136	1.00	
Chloroethane	<0.327	ug/l	0.327	2.00	
Chloroform	<0.143	ug/l	0.143	1.00	
Chloromethane	<0.159	ug/l	0.159	5.00	
2-Chlorotoluene	<0.110	ug/l	0.110	1.00	
4-Chlorotoluene	<0.120	ug/l	0.120	1.00	
1,2-Dibromo-3-chloropropane	<0.405	ug/l	0.405	1.00	
Dibromochloromethane	<0.133	ug/l	0.133	1.00	
1,2-Dibromoethane	<0.187	ug/l	0.187	1.00	
Dibromomethane	<0.117	ug/l	0.117	1.00	
1,2-Dichlorobenzene	<0.0859	ug/l	0.0859	1.00	
1,3-Dichlorobenzene	<0.132	ug/l	0.132	1.00	
1,4-Dichlorobenzene	<0.187	ug/l	0.187	1.00	
Dichlorodifluoromethane	<0.312	ug/l	0.312	5.00	
1,1-Dichloroethane	<0.157	ug/l	0.157	1.00	
1,2-Dichloroethane	<0.142	ug/l	0.142	1.00	
1,1-Dichloroethene	<0.197	ug/l	0.197	1.00	
cis-1,2-Dichloroethene	<0.170	ug/l	0.170	1.00	
trans-1,2-Dichloroethene	<0.175	ug/l	0.175	1.00	
1,2-Dichloropropane	<0.266	ug/l	0.266	1.00	
1,3-Dichloropropane	<0.151	ug/l	0.151	1.00	
2,2-Dichloropropane	<0.104	ug/l	0.104	1.00	
1,1-Dichloropropene	<0.149	ug/l	0.149	1.00	
cis-1,3-Dichloropropene	<0.128	ug/l	0.128	1.00	
trans-1,3-Dichloropropene	<0.152	ug/l	0.152	1.00	
2-Ethyl-1-hexanol	<100	ug/l	100	100	J,U
Ethylbenzene	<0.110	ug/l	0.110	1.00	
Hexachlorobutadiene	<0.878	ug/l	0.878	2.00	
2-Hexanone	<1.10	ug/l	1.10	10.0	
Iodomethane	<2.38	ug/l	2.38	20.0	
Isobutylalcohol	<15.9	ug/l	15.9	100	J,U
Isopropylbenzene	<0.107	ug/l	0.107	1.00	

RP-01-31

Analysis: 8260B

Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<0.149	ug/l	0.149	1.00	
4-methyl-2-pentanone (MIBK)	<1.49	ug/l	1.49	5.00	
Methylene chloride	<0.454	ug/l	0.454	5.00	
Naphthalene	<0.0989	ug/l	0.0989	1.00	
n-Propylbenzene	<0.138	ug/l	0.138	1.00	
Styrene	<0.0723	ug/l	0.0723	1.00	
tert-Butylbenzene	<0.206	ug/l	0.206	1.00	
1,1,1,2-Tetrachloroethane	<0.148	ug/l	0.148	1.00	
1,1,2,2-Tetrachloroethane	<0.294	ug/l	0.294	1.00	
Tetrachloroethene	<0.109	ug/l	0.109	1.00	
Toluene	<0.155	ug/l	0.155	1.00	
1,2,3-Trichlorobenzene	<0.219	ug/l	0.219	1.00	
1,2,4-Trichlorobenzene	<0.213	ug/l	0.213	1.00	
1,1,1-Trichloroethane	<0.0859	ug/l	0.0859	1.00	
1,1,2-Trichloroethane	<0.301	ug/l	0.301	1.00	
Trichloroethene	<0.241	ug/l	0.241	1.00	
Trichlorofluoromethane	<0.160	ug/l	0.160	1.00	
1,2,3-Trichloropropane	<0.365	ug/l	0.365	1.00	
1,2,4-Trimethylbenzene	<0.0884	ug/l	0.0884	1.00	
1,3,5-Trimethylbenzene	<0.157	ug/l	0.157	1.00	
Vinyl chloride	<0.152	ug/l	0.152	1.00	
m,p-Xylene	<0.295	ug/l	0.295	2.00	
o-Xylene	<0.187	ug/l	0.187	1.00	

Analysis: NWTPH-DX

Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	<0.153	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/15/04 Time: 09:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	<0.370	ug/l	0.370	1.20	

RP-01-51

Analysis: 300.0
Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	803	mg/l	2.07	50.0	
Nitrate	<0.0173	mg/l	0.0173	0.100	
Nitrite(as N)	<0.146	mg/l	0.146	1.00	
Sulfate	230	mg/l	1.70	10.0	

Analysis: 310.1
Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	522	mg/l	0.208	10.0	

Analysis: 350.1
Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.286	mg/l	0.00760	0.0500	

Analysis: 351.2
Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	0.563	mg/l	0.332	0.500	

Analysis: 365.2
Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.127	mg/l	0.00141	0.0100	

Analysis: 376.2
Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	<0.0150	mg/l	0.0150	0.200	

Analysis: 405.1
Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	<1.13	mg/l	1.13	4.00	

Analysis: 410.4
Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	30.5	mg/l	1.69	5.00	

Analysis: 415.1/5310
Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	9.97	mg/l	0.419	1.00	

Analysis: 6010B
Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	<0.0434	mg/l	0.0434	0.100	
Calcium	102	mg/l	0.0361	0.100	
Iron	0.359	mg/l	0.00640	0.100	
Magnesium	41.2	mg/l	0.0136	0.100	
Potassium	14.4	mg/l	0.111	1.00	
Sodium	702	mg/l	0.835	50.0	

RP-01-51

Analysis: 6020 Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	3.38	mg/l	0.000136	0.0200	

Analysis: 8151MOD Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<1.26	ug/l	1.26	3.00	
2,4-D	<1.31	ug/l	1.31	3.00	
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	<1.90	ug/l	1.90	3.00	
Dicamba	<1.01	ug/l	1.01	3.00	
Dichlorprop	3.29	ug/l	1.16	3.00	
Dinoseb	<1.54	ug/l	1.54	3.00	
MCPA	<127	ug/l	127	300	
MCPP	<111	ug/l	111	300	
2,4,5-T	<1.39	ug/l	1.39	3.00	
2,4,5-TP(Silvex)	15.1	ug/l	1.24	3.00	

RP-01-51

Analysis: 8260B Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<4.68	ug/l	4.68	50.0	J,U
Benzene	0.64	ug/l	0.294	2.00	
Bromobenzene	<0.666	ug/l	0.666	2.00	
Bromochloromethane	<0.532	ug/l	0.532	2.00	
Bromodichloromethane	<0.366	ug/l	0.366	2.00	
Bromoform	<0.348	ug/l	0.348	2.00	
Bromomethane	<0.564	ug/l	0.564	20.0	J,U
2-Butanone (MEK)	<3.20	ug/l	3.20	50.0	
n-Butylbenzene	<0.366	ug/l	0.366	2.00	
sec-Butylbenzene	<0.386	ug/l	0.386	2.00	
Carbon disulfide	<0.466	ug/l	0.466	20.0	
CarbonTetrachloride	<0.280	ug/l	0.280	4.00	
Chlorobenzene	37.4	ug/l	0.272	2.00	
Chloroethane	<0.654	ug/l	0.654	4.00	
Chloroform	<0.286	ug/l	0.286	2.00	
Chloromethane	<0.318	ug/l	0.318	10.0	
2-Chlorotoluene	<0.220	ug/l	0.220	2.00	
4-Chlorotoluene	<0.240	ug/l	0.240	2.00	
1,2-Dibromo-3-chloropropane	<0.810	ug/l	0.810	2.00	
Dibromochloromethane	<0.266	ug/l	0.266	2.00	
1,2-Dibromoethane	<0.374	ug/l	0.374	2.00	
Dibromomethane	<0.234	ug/l	0.234	2.00	
1,2-Dichlorobenzene	279	ug/l	0.172	2.00	
1,3-Dichlorobenzene	8.54	ug/l	0.264	2.00	
1,4-Dichlorobenzene	77.1	ug/l	0.374	2.00	
Dichlorodifluoromethane	<0.624	ug/l	0.624	10.0	
1,1-Dichloroethane	<0.314	ug/l	0.314	2.00	
1,2-Dichloroethane	<0.284	ug/l	0.284	2.00	
1,1-Dichloroethene	0.94	ug/l	0.394	2.00	
cis-1,2-Dichloroethene	4.64	ug/l	0.340	2.00	
trans-1,2-Dichloroethene	0.48	ug/l	0.350	2.00	
1,2-Dichloropropane	<0.532	ug/l	0.532	2.00	
1,3-Dichloropropane	<0.302	ug/l	0.302	2.00	
2,2-Dichloropropane	<0.208	ug/l	0.208	2.00	
1,1-Dichloropropene	<0.298	ug/l	0.298	2.00	
cis-1,3-Dichloropropene	<0.256	ug/l	0.256	2.00	
trans-1,3-Dichloropropene	<0.304	ug/l	0.304	2.00	
2-Ethyl-1-hexanol	<200	ug/l	200	200	J,U
Ethylbenzene	<0.220	ug/l	0.220	2.00	
Hexachlorobutadiene	<1.76	ug/l	1.76	4.00	
2-Hexanone	<2.20	ug/l	2.20	20.0	
Iodomethane	<4.76	ug/l	4.76	40.0	
Isobutylalcohol	<31.8	ug/l	31.8	200	J,U
Isopropylbenzene	<0.214	ug/l	0.214	2.00	

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Analysis: 8260B Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<0.298	ug/l	0.298	2.00	
4-methyl-2-pentanone (MIBK)	<2.98	ug/l	2.98	10.0	
Methylene chloride	<0.908	ug/l	0.908	10.0	
Naphthalene	<0.198	ug/l	0.198	2.00	
n-Propylbenzene	<0.276	ug/l	0.276	2.00	
Styrene	<0.145	ug/l	0.145	2.00	
tert-Butylbenzene	<0.412	ug/l	0.412	2.00	
1,1,1,2-Tetrachloroethane	<0.296	ug/l	0.296	2.00	
1,1,2,2-Tetrachloroethane	<0.588	ug/l	0.588	2.00	
Tetrachloroethene	<0.218	ug/l	0.218	2.00	
Toluene	<0.310	ug/l	0.310	2.00	
1,2,3-Trichlorobenzene	<0.438	ug/l	0.438	2.00	
1,2,4-Trichlorobenzene	<0.426	ug/l	0.426	2.00	
1,1,1-Trichloroethane	<0.172	ug/l	0.172	2.00	
1,1,2-Trichloroethane	<0.602	ug/l	0.602	2.00	
Trichloroethene	4.52	ug/l	0.482	2.00	
Trichlorofluoromethane	<0.320	ug/l	0.320	2.00	
1,2,3-Trichloropropane	<0.730	ug/l	0.730	2.00	
1,2,4-Trimethylbenzene	<0.177	ug/l	0.177	2.00	
1,3,5-Trimethylbenzene	<0.314	ug/l	0.314	2.00	
Vinyl chloride	10.1	ug/l	0.304	2.00	
m,p-Xylene	<0.590	ug/l	0.590	4.00	
o-Xylene	<0.374	ug/l	0.374	2.00	

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Analysis: 8290

Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	<1.0	pg/l	1.0	7.96	
1,2,3,4,6,7,8-HpCDF	1.2	pg/l	0.5	18.1	J
1,2,3,4,7,8,9-HpCDF	<0.7	pg/l	0.7	12.8	
1,2,3,4,7,8-HxCDD	<0.8	pg/l	0.8	6.70	
1,2,3,6,7,8-HxCDD	<0.6	pg/l	0.6	8.35	
1,2,3,7,8,9-HxCDD	<0.7	pg/l	0.7	14.6	
1,2,3,4,7,8-HxCDF	1.2	pg/l	0.5	17.7	U
1,2,3,6,7,8-HxCDF	<0.5	pg/l	0.5	9.03	
1,2,3,7,8,9-HxCDF	<0.6	pg/l	0.6	31.0	
2,3,4,6,7,8-HxCDF	<0.5	pg/l	0.5	21.2	
1,2,3,4,6,7,8,9-OCDD	8.1	pg/l	1.5	18.1	U
1,2,3,4,6,7,8,9-OCDF	3.1	pg/l	1.2	17.6	U
1,2,3,7,8-PeCDD	<0.7	pg/l	0.7	7.57	
1,2,3,7,8-PeCDF	<0.4	pg/l	0.4	4.56	
2,3,4,7,8-PeCDF	<0.6	pg/l	0.6	5.63	
2,3,7,8-TCDD	<1.0	pg/l	1.0	3.20	
2,3,7,8-TCDF	<0.7	pg/l	0.7	6.12	
Total HpCDD	<1.0	pg/l	1.0	7.96	
Total HpCDF	1.2	pg/l	0.6	12.8	U
Total HxCDD	<0.7	pg/l	0.7	6.70	
Total HxCDF	<0.5	pg/l	0.5	9.03	
Total PeCDD	<0.7	pg/l	0.7	7.57	
Total PeCDF	<0.5	pg/l	0.5	4.56	
Total TCDD	<1.0	pg/l	1.0	3.20	
Total TCDF	<0.7	pg/l	0.7	6.12	
EMPC-HXCDF	1.2	pg/l	0.5	9.03	U

Analysis: NWTPH-DX

Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.175	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	700	ug/l	0.370	1.20	

RP-01-51 (Dup)

Analysis: 8151MOD Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<1.26	ug/l	1.26	3.00	
2,4-D	<1.31	ug/l	1.31	3.00	
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	<1.90	ug/l	1.90	3.00	
Dicamba	<1.01	ug/l	1.01	3.00	
Dichlorprop	3.55	ug/l	1.16	3.00	
Dinoseb	<1.54	ug/l	1.54	3.00	
MCPA	<127	ug/l	127	300	
MCPP	<111	ug/l	111	300	
2,4,5-T	<1.39	ug/l	1.39	3.00	
2,4,5-TP(Silvex)	16.3	ug/l	1.24	3.00	

RP-01-51 (Dup)

Analysis: 8260B Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<4.68	ug/l	4.68	50.0	J,U
Benzene	0.6	ug/l	0.294	2.00	
Bromobenzene	<0.666	ug/l	0.666	2.00	
Bromochloromethane	<0.532	ug/l	0.532	2.00	
Bromodichloromethane	<0.366	ug/l	0.366	2.00	
Bromoform	<0.348	ug/l	0.348	2.00	
Bromomethane	<0.564	ug/l	0.564	20.0	J,U
2-Butanone (MEK)	<3.20	ug/l	3.20	50.0	
n-Butylbenzene	<0.366	ug/l	0.366	2.00	
sec-Butylbenzene	<0.386	ug/l	0.386	2.00	
Carbon disulfide	<0.466	ug/l	0.466	20.0	
CarbonTetrachloride	<0.280	ug/l	0.280	4.00	
Chlorobenzene	34.5	ug/l	0.272	2.00	
Chloroethane	<0.654	ug/l	0.654	4.00	
Chloroform	<0.286	ug/l	0.286	2.00	
Chloromethane	<0.318	ug/l	0.318	10.0	
2-Chlorotoluene	<0.220	ug/l	0.220	2.00	
4-Chlorotoluene	<0.240	ug/l	0.240	2.00	
1,2-Dibromo-3-chloropropane	<0.810	ug/l	0.810	2.00	
Dibromochloromethane	<0.266	ug/l	0.266	2.00	
1,2-Dibromoethane	<0.374	ug/l	0.374	2.00	
Dibromomethane	<0.234	ug/l	0.234	2.00	
1,2-Dichlorobenzene	270	ug/l	0.172	2.00	
1,3-Dichlorobenzene	8.1	ug/l	0.264	2.00	
1,4-Dichlorobenzene	76.8	ug/l	0.374	2.00	
Dichlorodifluoromethane	<0.624	ug/l	0.624	10.0	
1,1-Dichloroethane	<0.314	ug/l	0.314	2.00	
1,2-Dichloroethane	<0.284	ug/l	0.284	2.00	
1,1-Dichloroethene	1	ug/l	0.394	2.00	
cis-1,2-Dichloroethene	4.62	ug/l	0.340	2.00	
trans-1,2-Dichloroethene	0.52	ug/l	0.350	2.00	
1,2-Dichloropropane	<0.532	ug/l	0.532	2.00	
1,3-Dichloropropane	<0.302	ug/l	0.302	2.00	
2,2-Dichloropropane	<0.208	ug/l	0.208	2.00	
1,1-Dichloropropene	<0.298	ug/l	0.298	2.00	
cis-1,3-Dichloropropene	<0.256	ug/l	0.256	2.00	
trans-1,3-Dichloropropene	<0.304	ug/l	0.304	2.00	
2-Ethyl-1-hexanol	<200	ug/l	200	200	J,U
Ethylbenzene	<0.220	ug/l	0.220	2.00	
Hexachlorobutadiene	<1.76	ug/l	1.76	4.00	
2-Hexanone	<2.20	ug/l	2.20	20.0	
Iodomethane	<4.76	ug/l	4.76	40.0	
Isobutylalcohol	<31.8	ug/l	31.8	200	J,U
Isopropylbenzene	<0.214	ug/l	0.214	2.00	

RP-01-51 (Dup)

Analysis: 8260B Sample Date: 04/15/04 Time: 10:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<0.298	ug/l	0.298	2.00	
4-methyl-2-pentanone (MIBK)	<2.98	ug/l	2.98	10.0	
Methylene chloride	<0.908	ug/l	0.908	10.0	
Naphthalene	<0.198	ug/l	0.198	2.00	
n-Propylbenzene	<0.276	ug/l	0.276	2.00	
Styrene	<0.145	ug/l	0.145	2.00	
tert-Butylbenzene	<0.412	ug/l	0.412	2.00	
1,1,1,2-Tetrachloroethane	<0.296	ug/l	0.296	2.00	
1,1,2,2-Tetrachloroethane	<0.588	ug/l	0.588	2.00	
Tetrachloroethene	<0.218	ug/l	0.218	2.00	
Toluene	<0.310	ug/l	0.310	2.00	
1,2,3-Trichlorobenzene	<0.438	ug/l	0.438	2.00	
1,2,4-Trichlorobenzene	<0.426	ug/l	0.426	2.00	
1,1,1-Trichloroethane	<0.172	ug/l	0.172	2.00	
1,1,2-Trichloroethane	<0.602	ug/l	0.602	2.00	
Trichloroethene	4.56	ug/l	0.482	2.00	
Trichlorofluoromethane	<0.320	ug/l	0.320	2.00	
1,2,3-Trichloropropane	<0.730	ug/l	0.730	2.00	
1,2,4-Trimethylbenzene	<0.177	ug/l	0.177	2.00	
1,3,5-Trimethylbenzene	<0.314	ug/l	0.314	2.00	
Vinyl chloride	9.98	ug/l	0.304	2.00	
m,p-Xylene	<0.590	ug/l	0.590	4.00	
o-Xylene	<0.374	ug/l	0.374	2.00	

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Analysis: 300.0

Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	1340	mg/l	2.07	50.0	
Nitrate	<0.0173	mg/l	0.0173	0.100	
Nitrite(as N)	1.6	mg/l	0.146	1.00	
Sulfate	140	mg/l	1.70	10.0	

Analysis: 310.1

Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	412	mg/l	1.04	50.0	

Analysis: 350.1

Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0126	mg/l	0.00760	0.0500	

Analysis: 351.2

Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	<0.332	mg/l	0.332	0.500	

Analysis: 365.2

Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.0763	mg/l	0.00141	0.0100	

Analysis: 376.2

Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	<0.0150	mg/l	0.0150	0.200	

Analysis: 405.1

Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	3.9	mg/l	1.13	4.00	

Analysis: 410.4

Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	26.8	mg/l	1.69	5.00	

Analysis: 415.1/5310

Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	4.42	mg/l	0.419	1.00	

Analysis: 6010B

Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	<0.0434	mg/l	0.0434	0.100	
Calcium	327	mg/l	1.80	5.00	
Iron	0.0607	mg/l	0.00640	0.100	
Magnesium	104	mg/l	0.0136	0.100	
Potassium	19.6	mg/l	0.111	1.00	
Sodium	558	mg/l	0.835	50.0	

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Analysis: 6020 Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	3.32	mg/l	0.000136	0.0200	

Analysis: 8151MOD Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<1.26	ug/l	1.26	3.00	
2,4-D	<1.31	ug/l	1.31	3.00	
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	<1.90	ug/l	1.90	3.00	
Dicamba	<1.01	ug/l	1.01	3.00	
Dichlorprop	6.7	ug/l	1.16	3.00	
Dinoseb	<1.54	ug/l	1.54	3.00	
MCPA	<127	ug/l	127	300	
MCPP	<111	ug/l	111	300	
2,4,5-T	<1.39	ug/l	1.39	3.00	
2,4,5-TP(Silvex)	31.6	ug/l	1.24	3.00	

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Analysis: 8260B Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<11.7	ug/l	11.7	125	J,U
Benzene	7.7	ug/l	0.735	5.00	
Bromobenzene	<1.66	ug/l	1.66	5.00	
Bromochloromethane	<1.33	ug/l	1.33	5.00	
Bromodichloromethane	<0.915	ug/l	0.915	5.00	
Bromoform	<0.870	ug/l	0.870	5.00	
Bromomethane	<1.41	ug/l	1.41	50.0	J,U
2-Butanone (MEK)	<8.00	ug/l	8.00	125	
n-Butylbenzene	<0.915	ug/l	0.915	5.00	
sec-Butylbenzene	<0.965	ug/l	0.965	5.00	
Carbon disulfide	<1.16	ug/l	1.16	50.0	
CarbonTetrachloride	<0.700	ug/l	0.700	10.0	
Chlorobenzene	84	ug/l	0.680	5.00	
Chloroethane	<1.64	ug/l	1.64	10.0	
Chloroform	<0.715	ug/l	0.715	5.00	
Chloromethane	<0.795	ug/l	0.795	25.0	
2-Chlorotoluene	<0.550	ug/l	0.550	5.00	
4-Chlorotoluene	<0.600	ug/l	0.600	5.00	
1,2-Dibromo-3-chloropropane	<2.02	ug/l	2.02	5.00	
Dibromochloromethane	<0.665	ug/l	0.665	5.00	
1,2-Dibromoethane	<0.935	ug/l	0.935	5.00	
Dibromomethane	<0.585	ug/l	0.585	5.00	
1,2-Dichlorobenzene	678	ug/l	0.430	5.00	
1,3-Dichlorobenzene	20.3	ug/l	0.660	5.00	
1,4-Dichlorobenzene	186	ug/l	0.935	5.00	
Dichlorodifluoromethane	<1.56	ug/l	1.56	25.0	
1,1-Dichloroethane	<0.785	ug/l	0.785	5.00	
1,2-Dichloroethane	<0.710	ug/l	0.710	5.00	
1,1-Dichloroethene	2.2	ug/l	0.985	5.00	
cis-1,2-Dichloroethene	9.95	ug/l	0.850	5.00	
trans-1,2-Dichloroethene	1.1	ug/l	0.875	5.00	
1,2-Dichloropropane	<1.33	ug/l	1.33	5.00	
1,3-Dichloropropane	<0.755	ug/l	0.755	5.00	
2,2-Dichloropropane	<0.520	ug/l	0.520	5.00	
1,1-Dichloropropene	<0.745	ug/l	0.745	5.00	
cis-1,3-Dichloropropene	<0.640	ug/l	0.640	5.00	
trans-1,3-Dichloropropene	<0.760	ug/l	0.760	5.00	
2-Ethyl-1-hexanol	<500	ug/l	500	500	J,U
Ethylbenzene	<0.550	ug/l	0.550	5.00	
Hexachlorobutadiene	<4.39	ug/l	4.39	10.0	
2-Hexanone	<5.50	ug/l	5.50	50.0	
Iodomethane	<11.9	ug/l	11.9	100	
Isobutylalcohol	<79.5	ug/l	79.5	500	J,U
Isopropylbenzene	<0.535	ug/l	0.535	5.00	

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Analysis: 8260B Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<0.745	ug/l	0.745	5.00	
4-methyl-2-pentanone (MIBK)	<7.45	ug/l	7.45	25.0	
Methylene chloride	<2.27	ug/l	2.27	25.0	
Naphthalene	<0.494	ug/l	0.494	5.00	
n-Propylbenzene	<0.690	ug/l	0.690	5.00	
Styrene	<0.362	ug/l	0.362	5.00	
tert-Butylbenzene	<1.03	ug/l	1.03	5.00	
1,1,1,2-Tetrachloroethane	<0.740	ug/l	0.740	5.00	
1,1,2,2-Tetrachloroethane	<1.47	ug/l	1.47	5.00	
Tetrachloroethene	<0.545	ug/l	0.545	5.00	
Toluene	<0.775	ug/l	0.775	5.00	
1,2,3-Trichlorobenzene	<1.10	ug/l	1.10	5.00	
1,2,4-Trichlorobenzene	<1.06	ug/l	1.06	5.00	
1,1,1-Trichloroethane	<0.430	ug/l	0.430	5.00	
1,1,2-Trichloroethane	<1.50	ug/l	1.50	5.00	
Trichloroethene	11.8	ug/l	1.20	5.00	
Trichlorofluoromethane	<0.800	ug/l	0.800	5.00	
1,2,3-Trichloropropane	<1.82	ug/l	1.82	5.00	
1,2,4-Trimethylbenzene	<0.442	ug/l	0.442	5.00	
1,3,5-Trimethylbenzene	<0.785	ug/l	0.785	5.00	
Vinyl chloride	19.7	ug/l	0.760	5.00	
m,p-Xylene	<1.48	ug/l	1.48	10.0	
o-Xylene	<0.935	ug/l	0.935	5.00	

RP-01-65

Analysis: 8290

Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	<1.2	pg/l	1.2	7.81	U
1,2,3,4,6,7,8-HpCDF	1.4	pg/l	0.6	17.7	J
1,2,3,4,7,8,9-HpCDF	1.9	pg/l	0.9	12.6	U
1,2,3,4,7,8-HxCDD	2.3	pg/l	0.9	6.57	U
1,2,3,6,7,8-HxCDD	1.6	pg/l	0.8	8.19	U
1,2,3,7,8,9-HxCDD	1.7	pg/l	0.9	14.3	U
1,2,3,4,7,8-HxCDF	1.7	pg/l	0.6	17.3	U
1,2,3,6,7,8-HxCDF	1.6	pg/l	0.6	8.86	U
1,2,3,7,8,9-HxCDF	1.7	pg/l	0.7	30.4	U
2,3,4,6,7,8-HxCDF	1.7	pg/l	0.6	20.8	U
1,2,3,4,6,7,8,9-OCDD	9.4	pg/l	1.9	17.7	U
1,2,3,4,6,7,8,9-OCDF	3.6	pg/l	1.6	17.2	U
1,2,3,7,8-PeCDD	<0.9	pg/l	0.9	7.43	
1,2,3,7,8-PeCDF	1.6	pg/l	0.6	4.48	U
2,3,4,7,8-PeCDF	1.9	pg/l	0.8	5.52	U
2,3,7,8-TCDD	<1.4	pg/l	1.4	3.14	
2,3,7,8-TCDF	2.2	pg/l	1.0	6.00	U
Total HpCDD	<1.2	pg/l	1.2	7.81	
Total HpCDF	3.2	pg/l	0.7	12.6	U
Total HxCDD	5.6	pg/l	0.8	6.57	U
Total HxCDF	5.0	pg/l	0.6	8.86	U
Total PeCDD	<0.9	pg/l	0.9	7.43	
Total PeCDF	<0.7	pg/l	0.7	4.48	
Total TCDD	<1.4	pg/l	1.4	3.14	
Total TCDF	2.2	pg/l	1.0	6.00	U
EMPC-HXCDF	6.7	pg/l	0.6	8.86	U
EMPC-PECDF	3.5	pg/l	0.7	4.48	U

Analysis: NWTPH-DX

Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.32	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/15/04 Time: 12:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	1290	ug/l	0.370	1.20	

RP-02-66

Analysis: 300.0

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	17300	mg/l	20.7	500	
Nitrate	<17.3	mg/l	17.3	100	
Nitrite(as N)	<14.6	mg/l	14.6	100	
Sulfate	<170	mg/l	170	1000	

Analysis: 310.1

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	228	mg/l	0.208	10.0	

Analysis: 350.1

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.128	mg/l	0.00760	0.0500	

Analysis: 351.2

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	<0.332	mg/l	0.332	0.500	

Analysis: 365.2

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.0624	mg/l	0.00141	0.0100	

Analysis: 376.2

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	<0.0300	mg/l	0.0300	0.400	

Analysis: 405.1

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	<1.13	mg/l	1.13	4.00	

Analysis: 410.4

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	321	mg/l	16.9	50.0	

Analysis: 415.1/5310

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	0.438	mg/l	0.419	1.00	

Analysis: 6010B

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	<0.0434	mg/l	0.0434	0.100	
Calcium	1740	mg/l	3.61	10.0	
Iron	0.27	mg/l	0.00640	0.100	
Magnesium	490	mg/l	0.136	1.00	
Potassium	84.1	mg/l	1.11	10.0	
Sodium	8210	mg/l	1.67	100	

RP-02-66

Analysis: 6020

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	<0.00964	mg/l	0.00964	0.0100	
Cadmium	0.0078	mg/l	0.00178	0.0100	
Chromium	<0.00791	mg/l	0.00791	0.0100	
Copper	0.0521	mg/l	0.00259	0.0200	
Lead	0.0011	mg/l	0.000870	0.0100	
Manganese	6.59	mg/l	0.000136	0.0200	
Nickel	0.0815	mg/l	0.00826	0.0200	
Vanadium	<0.00669	mg/l	0.00669	0.0500	
Zinc	0.015	mg/l	0.0102	0.0500	

Analysis: 6020 (Dissolved)

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.00205	mg/l	0.000964	0.00100	
Cadmium (Dissolved)	0.00704	mg/l	0.0000730	0.00100	
Chromium (Dissolved)	<0.000791	mg/l	0.000791	0.00100	
Copper (Dissolved)	0.00223	mg/l	0.000259	0.00200	U
Lead (Dissolved)	0.0011	mg/l	0.0000870	0.00100	
Nickel (Dissolved)	0.0319	mg/l	0.000242	0.00200	
Vanadium (Dissolved)	0.00867	mg/l	0.000669	0.00500	
Zinc (Dissolved)	0.0105	mg/l	0.00102	0.00500	

Analysis: 7470A

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury	<0.000103	mg/l	0.000103	0.000200	

Analysis: 7470A (Dissolved)

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury (Dissolved)	<0.0000630	mg/l	0.0000630	0.000200	

Analysis: 8151MOD

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<1.26	ug/l	1.26	3.00	J,U
2,4-D	7.01	ug/l	1.31	3.00	J
Dalapon	<1.10	ug/l	1.10	10.0	J,U
2,4-DB	<1.90	ug/l	1.90	3.00	J,U
Dicamba	<1.01	ug/l	1.01	3.00	J,U
Dichlorprop	<1.16	ug/l	1.16	3.00	J,U
Dinoseb	<1.54	ug/l	1.54	3.00	J,U
MCPA	<127	ug/l	127	300	J,U
MCPP	<111	ug/l	111	300	J,U
2,4,5-T	<1.39	ug/l	1.39	3.00	J,U
2,4,5-TP(Silvex)	6.35	ug/l	1.24	3.00	J

RP-02-66

Analysis: 8260B Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<2.34	ug/l	2.34	25.0	J,U
Benzene	<0.147	ug/l	0.147	1.00	J,U
Bromobenzene	<0.333	ug/l	0.333	1.00	J,U
Bromochloromethane	<0.266	ug/l	0.266	1.00	J,U
Bromodichloromethane	<0.183	ug/l	0.183	1.00	J,U
Bromoform	<0.174	ug/l	0.174	1.00	J,U
Bromomethane	<0.282	ug/l	0.282	10.0	J,U
2-Butanone (MEK)	<1.60	ug/l	1.60	25.0	J,U
n-Butylbenzene	<0.183	ug/l	0.183	1.00	J,U
sec-Butylbenzene	<0.193	ug/l	0.193	1.00	J,U
Carbon disulfide	<0.233	ug/l	0.233	10.0	J,U
CarbonTetrachloride	<0.140	ug/l	0.140	2.00	J,U
Chlorobenzene	18.4	ug/l	0.136	1.00	J
Chloroethane	<0.327	ug/l	0.327	2.00	J,U
Chloroform	0.37	ug/l	0.143	1.00	J
Chloromethane	<0.159	ug/l	0.159	5.00	J,U
2-Chlorotoluene	<0.110	ug/l	0.110	1.00	J,U
4-Chlorotoluene	<0.120	ug/l	0.120	1.00	J,U
1,2-Dibromo-3-chloropropane	<0.405	ug/l	0.405	1.00	J,U
Dibromochloromethane	<0.133	ug/l	0.133	1.00	J,U
1,2-Dibromoethane	<0.187	ug/l	0.187	1.00	J,U
Dibromomethane	<0.117	ug/l	0.117	1.00	J,U
1,2-Dichlorobenzene	105	ug/l	0.0859	1.00	J
1,3-Dichlorobenzene	3.05	ug/l	0.132	1.00	J
1,4-Dichlorobenzene	28.1	ug/l	0.187	1.00	J
Dichlorodifluoromethane	<0.312	ug/l	0.312	5.00	J,U
1,1-Dichloroethane	<0.157	ug/l	0.157	1.00	J,U
1,2-Dichloroethane	<0.142	ug/l	0.142	1.00	J,U
1,1-Dichloroethene	0.37	ug/l	0.197	1.00	J
cis-1,2-Dichloroethene	1.73	ug/l	0.170	1.00	J
trans-1,2-Dichloroethene	<0.175	ug/l	0.175	1.00	J,U
1,2-Dichloropropane	<0.266	ug/l	0.266	1.00	J,U
1,3-Dichloropropane	<0.151	ug/l	0.151	1.00	J,U
2,2-Dichloropropane	<0.104	ug/l	0.104	1.00	J,U
1,1-Dichloropropene	<0.149	ug/l	0.149	1.00	J,U
cis-1,3-Dichloropropene	<0.128	ug/l	0.128	1.00	J,U
trans-1,3-Dichloropropene	<0.152	ug/l	0.152	1.00	J,U
2-Ethyl-1-hexanol	<100	ug/l	100	100	J,U
Ethylbenzene	<0.110	ug/l	0.110	1.00	J,U
Hexachlorobutadiene	<0.878	ug/l	0.878	2.00	J,U
2-Hexanone	<1.10	ug/l	1.10	10.0	J,U
Iodomethane	<2.38	ug/l	2.38	20.0	J,U
Isobutylalcohol	<15.9	ug/l	15.9	100	J,U
Isopropylbenzene	<0.107	ug/l	0.107	1.00	J,U

RP-02-66

Analysis: 8260B Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<0.149	ug/l	0.149	1.00	J,U
4-methyl-2-pentanone (MIBK)	<1.49	ug/l	1.49	5.00	J,U
Methylene chloride	<0.454	ug/l	0.454	5.00	J,U
Naphthalene	<0.0989	ug/l	0.0989	1.00	J,U
n-Propylbenzene	<0.138	ug/l	0.138	1.00	J,U
Styrene	<0.0723	ug/l	0.0723	1.00	J,U
tert-Butylbenzene	<0.206	ug/l	0.206	1.00	J,U
1,1,1,2-Tetrachloroethane	<0.148	ug/l	0.148	1.00	J,U
1,1,2,2-Tetrachloroethane	<0.294	ug/l	0.294	1.00	J,U
Tetrachloroethene	0.11	ug/l	0.109	1.00	J
Toluene	<0.155	ug/l	0.155	1.00	J,U
1,2,3-Trichlorobenzene	<0.219	ug/l	0.219	1.00	J,U
1,2,4-Trichlorobenzene	<0.213	ug/l	0.213	1.00	J,U
1,1,1-Trichloroethane	<0.0859	ug/l	0.0859	1.00	J,U
1,1,2-Trichloroethane	<0.301	ug/l	0.301	1.00	J,U
Trichloroethene	1.26	ug/l	0.241	1.00	J
Trichlorofluoromethane	0.65	ug/l	0.160	1.00	J
1,2,3-Trichloropropane	<0.365	ug/l	0.365	1.00	J,U
1,2,4-Trimethylbenzene	<0.0884	ug/l	0.0884	1.00	J,U
1,3,5-Trimethylbenzene	<0.157	ug/l	0.157	1.00	J,U
Vinyl chloride	4.26	ug/l	0.152	1.00	J
m,p-Xylene	<0.295	ug/l	0.295	2.00	J,U
o-Xylene	<0.187	ug/l	0.187	1.00	J,U

RP-02-66

Analysis: 8290

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	4.5	pg/l	0.6	7.66	J
1,2,3,4,6,7,8-HpCDF	2.4	pg/l	0.3	17.4	J
1,2,3,4,7,8,9-HpCDF	3.8	pg/l	0.4	12.3	J
1,2,3,4,7,8-HxCDD	2.9	pg/l	0.4	6.45	J
1,2,3,6,7,8-HxCDD	3.1	pg/l	0.3	8.04	J
1,2,3,7,8,9-HxCDD	3.8	pg/l	0.4	14.0	J
1,2,3,4,7,8-HxCDF	3.2	pg/l	0.2	17.0	J
1,2,3,6,7,8-HxCDF	3.0	pg/l	0.2	8.69	J
1,2,3,7,8,9-HxCDF	4.1	pg/l	0.3	29.8	J
2,3,4,6,7,8-HxCDF	3.0	pg/l	0.2	20.4	J
1,2,3,4,6,7,8,9-OCDD	12.2	pg/l	1.2	17.4	J
1,2,3,4,6,7,8,9-OCDF	7.3	pg/l	1.0	16.9	J
1,2,3,7,8-PeCDD	3.1	pg/l	0.5	7.29	N - EMPC data
1,2,3,7,8-PeCDF	4.5	pg/l	0.3	4.39	
2,3,4,7,8-PeCDF	3.9	pg/l	0.4	5.42	
2,3,7,8-TCDD	2.3	pg/l	0.5	3.08	U
2,3,7,8-TCDF	2.6	pg/l	0.3	5.89	U
Total HpCDD	4.5	pg/l	0.6	7.66	J
Total HpCDF	6.2	pg/l	0.3	12.3	J
Total HxCDD	9.8	pg/l	0.4	6.45	J
Total HxCDF	13.3	pg/l	0.2	8.69	J
Total PeCDD	<0.5	pg/l	0.5	7.29	
Total PeCDF	8.4	pg/l	0.3	4.39	
Total TCDD	2.3	pg/l	0.5	3.08	U
Total TCDF	2.6	pg/l	0.3	5.89	U
EMPC-PECDD	3.1	pg/l	0.5	7.29	N - EMPC data
EMPC-TCDF	3.5	pg/l	0.3	5.89	U,N - EMPC data

Analysis: NWTPH-DX

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	<0.153	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/12/04 Time: 11:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	470	ug/l	0.370	1.20	

RP-03-30R

RP-03-30R

Analysis: 8260B Sample Date: 04/19/04 Time: 10:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<23.4	ug/l	23.4	250	J,U
Benzene	<1.47	ug/l	1.47	10.0	
Bromobenzene	<3.33	ug/l	3.33	10.0	
Bromochloromethane	<2.66	ug/l	2.66	10.0	
Bromodichloromethane	<1.83	ug/l	1.83	10.0	
Bromoform	<1.74	ug/l	1.74	10.0	
Bromomethane	<2.82	ug/l	2.82	100	J,U
2-Butanone (MEK)	<16.0	ug/l	16.0	250	
n-Butylbenzene	<1.83	ug/l	1.83	10.0	
sec-Butylbenzene	<1.93	ug/l	1.93	10.0	
Carbon disulfide	<2.33	ug/l	2.33	100	
CarbonTetrachloride	<1.40	ug/l	1.40	20.0	
Chlorobenzene	7.2	ug/l	1.36	10.0	
Chloroethane	<3.27	ug/l	3.27	20.0	
Chloroform	<1.43	ug/l	1.43	10.0	
Chloromethane	<1.59	ug/l	1.59	50.0	
2-Chlorotoluene	<1.10	ug/l	1.10	10.0	
4-Chlorotoluene	<1.20	ug/l	1.20	10.0	
1,2-Dibromo-3-chloropropane	<4.05	ug/l	4.05	10.0	
Dibromochloromethane	<1.33	ug/l	1.33	10.0	
1,2-Dibromoethane	<1.87	ug/l	1.87	10.0	
Dibromomethane	<1.17	ug/l	1.17	10.0	
1,2-Dichlorobenzene	<0.859	ug/l	0.859	10.0	
1,3-Dichlorobenzene	<1.32	ug/l	1.32	10.0	
1,4-Dichlorobenzene	<1.87	ug/l	1.87	10.0	
Dichlorodifluoromethane	<3.12	ug/l	3.12	50.0	
1,1-Dichloroethane	<1.57	ug/l	1.57	10.0	
1,2-Dichloroethane	<1.42	ug/l	1.42	10.0	
1,1-Dichloroethene	<1.97	ug/l	1.97	10.0	
cis-1,2-Dichloroethene	<1.70	ug/l	1.70	10.0	
trans-1,2-Dichloroethene	<1.75	ug/l	1.75	10.0	
1,2-Dichloropropane	<2.66	ug/l	2.66	10.0	
1,3-Dichloropropane	<1.51	ug/l	1.51	10.0	
2,2-Dichloropropane	<1.04	ug/l	1.04	10.0	
1,1-Dichloropropene	<1.49	ug/l	1.49	10.0	
cis-1,3-Dichloropropene	<1.28	ug/l	1.28	10.0	
trans-1,3-Dichloropropene	<1.52	ug/l	1.52	10.0	
2-Ethyl-1-hexanol	<1000	ug/l	1000	1000	J,U
Ethylbenzene	5.1	ug/l	1.10	10.0	
Hexachlorobutadiene	<8.78	ug/l	8.78	20.0	
2-Hexanone	<11.0	ug/l	11.0	100	
Iodomethane	<23.8	ug/l	23.8	200	
Isobutylalcohol	<159	ug/l	159	1000	J,U
Isopropylbenzene	2.5	ug/l	1.07	10.0	

RP-03-30R

Analysis: 8260B

Sample Date: 04/19/04 Time: 10:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<1.49	ug/l	1.49	10.0	
4-methyl-2-pentanone (MIBK)	<14.9	ug/l	14.9	50.0	
Methylene chloride	<4.54	ug/l	4.54	50.0	
Naphthalene	1720	ug/l	0.989	10.0	
n-Propylbenzene	<1.38	ug/l	1.38	10.0	
Styrene	<0.723	ug/l	0.723	10.0	
tert-Butylbenzene	<2.06	ug/l	2.06	10.0	
1,1,1,2-Tetrachloroethane	<1.48	ug/l	1.48	10.0	
1,1,2,2-Tetrachloroethane	<2.94	ug/l	2.94	10.0	
Tetrachloroethene	<1.09	ug/l	1.09	10.0	
Toluene	<1.55	ug/l	1.55	10.0	
1,2,3-Trichlorobenzene	<2.19	ug/l	2.19	10.0	
1,2,4-Trichlorobenzene	<2.13	ug/l	2.13	10.0	
1,1,1-Trichloroethane	<0.859	ug/l	0.859	10.0	
1,1,2-Trichloroethane	<3.01	ug/l	3.01	10.0	
Trichloroethene	<2.41	ug/l	2.41	10.0	
Trichlorofluoromethane	<1.60	ug/l	1.60	10.0	
1,2,3-Trichloropropane	<3.65	ug/l	3.65	10.0	
1,2,4-Trimethylbenzene	18.9	ug/l	0.884	10.0	
1,3,5-Trimethylbenzene	7.8	ug/l	1.57	10.0	
Vinyl chloride	<1.52	ug/l	1.52	10.0	
m,p-Xylene	5.2	ug/l	2.95	20.0	
o-Xylene	3.7	ug/l	1.87	10.0	

Analysis: 8270M

Sample Date: 04/19/04 Time: 10:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acenaphthene	483	ug/l	25.0	50.0	J
Acenaphthylene	<3.50	ug/l	3.50	3.50	J,U
Anthracene	7.04	ug/l	0.500	1.00	
Benzo(a)anthracene	0.602	ug/l	0.500	1.00	
Benzo(a)pyrene	<0.500	ug/l	0.500	1.00	
Benzo(b)fluoranthene	<0.500	ug/l	0.500	1.00	J,U
Benzo(ghi)perylene	<0.500	ug/l	0.500	1.00	J,U
Benzo(k)fluoranthene	<0.500	ug/l	0.500	1.00	
Chrysene	<0.500	ug/l	0.500	1.00	
Dibenzo(a,h)anthracene	<1.00	ug/l	1.00	2.00	J,U
Fluoranthene	18.2	ug/l	0.500	1.00	
Fluorene	204	ug/l	25.0	50.0	J
Indeno(1,2,3-cd)pyrene	<0.500	ug/l	0.500	1.00	
Naphthalene	1440	ug/l	25.0	50.0	J
Phenanthrene	198	ug/l	25.0	50.0	J
Pyrene	14.1	ug/l	0.500	1.00	

RP-03-30R

Analysis: 8290 Sample Date: 04/19/04 Time: 10:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	11.6	pg/l	3.1	7.88	
1,2,3,4,6,7,8-HpCDF	<1.6	pg/l	1.6	17.9	
1,2,3,4,7,8,9-HpCDF	<2.2	pg/l	2.2	12.7	
1,2,3,4,7,8-HxCDD	<2.0	pg/l	2.0	6.63	
1,2,3,6,7,8-HxCDD	<1.7	pg/l	1.7	8.27	
1,2,3,7,8,9-HxCDD	<1.9	pg/l	1.9	14.4	
1,2,3,4,7,8-HxCDF	3.1	pg/l	1.1	17.5	U
1,2,3,6,7,8-HxCDF	2.8	pg/l	1.1	8.94	U
1,2,3,7,8,9-HxCDF	<1.3	pg/l	1.3	30.7	
2,3,4,6,7,8-HxCDF	<1.1	pg/l	1.1	21.0	
1,2,3,4,6,7,8,9-OCDD	38.9	pg/l	5.5	17.9	U
1,2,3,4,6,7,8,9-OCDF	<4.4	pg/l	4.4	17.4	
1,2,3,7,8-PeCDD	<1.5	pg/l	1.5	7.50	
1,2,3,7,8-PeCDF	<0.9	pg/l	0.9	4.52	
2,3,4,7,8-PeCDF	<1.3	pg/l	1.3	5.58	
2,3,7,8-TCDD	<1.8	pg/l	1.8	3.17	
2,3,7,8-TCDF	<1.2	pg/l	1.2	6.06	
Total HpCDD	29.7	pg/l	3.1	7.88	
Total HpCDF	<1.9	pg/l	1.9	12.7	
Total HxCDD	<1.9	pg/l	1.9	6.63	
Total HxCDF	5.9	pg/l	1.1	8.94	U
Total PeCDD	<1.5	pg/l	1.5	7.50	
Total PeCDF	<1.1	pg/l	1.1	4.52	
Total TCDD	36.1	pg/l	1.8	3.17	
Total TCDF	<1.2	pg/l	1.2	6.06	
EMPC-TCDD	50.0	pg/l	1.8	3.17	N - EMPC data

RP-03-52R

Analysis: 8151MOD Sample Date: 04/19/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<1.26	ug/l	1.26	3.00	R
2,4-D	<1.31	ug/l	1.31	3.00	
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	<1.90	ug/l	1.90	3.00	
Dicamba	<1.01	ug/l	1.01	3.00	
Dichlorprop	<1.16	ug/l	1.16	3.00	
Dinoseb	<1.54	ug/l	1.54	3.00	
MCPA	<127	ug/l	127	300	
MCPP	<111	ug/l	111	300	J,U
2,4,5-T	<1.39	ug/l	1.39	3.00	
2,4,5-TP(Silvex)	<1.24	ug/l	1.24	3.00	

RP-03-52R

Analysis: 8260B Sample Date: 04/19/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<2.34	ug/l	2.34	25.0	
Benzene	<0.147	ug/l	0.147	1.00	
Bromobenzene	<0.333	ug/l	0.333	1.00	
Bromochloromethane	<0.266	ug/l	0.266	1.00	
Bromodichloromethane	<0.183	ug/l	0.183	1.00	
Bromoform	<0.174	ug/l	0.174	1.00	
Bromomethane	<0.282	ug/l	0.282	10.0	J,U
2-Butanone (MEK)	<1.60	ug/l	1.60	25.0	
n-Butylbenzene	<0.183	ug/l	0.183	1.00	
sec-Butylbenzene	<0.193	ug/l	0.193	1.00	
Carbon disulfide	<0.233	ug/l	0.233	10.0	
CarbonTetrachloride	<0.140	ug/l	0.140	2.00	
Chlorobenzene	<0.136	ug/l	0.136	1.00	
Chloroethane	<0.327	ug/l	0.327	2.00	
Chloroform	<0.143	ug/l	0.143	1.00	
Chloromethane	<0.159	ug/l	0.159	5.00	
2-Chlorotoluene	<0.110	ug/l	0.110	1.00	
4-Chlorotoluene	<0.120	ug/l	0.120	1.00	
1,2-Dibromo-3-chloropropane	<0.405	ug/l	0.405	1.00	
Dibromochloromethane	<0.133	ug/l	0.133	1.00	
1,2-Dibromoethane	<0.187	ug/l	0.187	1.00	
Dibromomethane	<0.117	ug/l	0.117	1.00	
1,2-Dichlorobenzene	<0.0859	ug/l	0.0859	1.00	
1,3-Dichlorobenzene	<0.132	ug/l	0.132	1.00	
1,4-Dichlorobenzene	<0.187	ug/l	0.187	1.00	
Dichlorodifluoromethane	<0.312	ug/l	0.312	5.00	
1,1-Dichloroethane	<0.157	ug/l	0.157	1.00	
1,2-Dichloroethane	<0.142	ug/l	0.142	1.00	
1,1-Dichloroethene	<0.197	ug/l	0.197	1.00	
cis-1,2-Dichloroethene	<0.170	ug/l	0.170	1.00	
trans-1,2-Dichloroethene	<0.175	ug/l	0.175	1.00	
1,2-Dichloropropane	<0.266	ug/l	0.266	1.00	
1,3-Dichloropropane	<0.151	ug/l	0.151	1.00	
2,2-Dichloropropane	<0.104	ug/l	0.104	1.00	
1,1-Dichloropropene	<0.149	ug/l	0.149	1.00	
cis-1,3-Dichloropropene	<0.128	ug/l	0.128	1.00	
trans-1,3-Dichloropropene	<0.152	ug/l	0.152	1.00	
2-Ethyl-1-hexanol	<100	ug/l	100	100	
Ethylbenzene	<0.110	ug/l	0.110	1.00	
Hexachlorobutadiene	<0.878	ug/l	0.878	2.00	
2-Hexanone	<1.10	ug/l	1.10	10.0	
Iodomethane	<2.38	ug/l	2.38	20.0	
Isobutylalcohol	<15.9	ug/l	15.9	100	
Isopropylbenzene	<0.107	ug/l	0.107	1.00	

RP-03-52R

Analysis: 8260B

Sample Date: 04/19/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<0.149	ug/l	0.149	1.00	
4-methyl-2-pentanone (MIBK)	<1.49	ug/l	1.49	5.00	
Methylene chloride	<0.454	ug/l	0.454	5.00	
Naphthalene	<0.0989	ug/l	0.0989	1.00	
n-Propylbenzene	<0.138	ug/l	0.138	1.00	
Styrene	<0.0723	ug/l	0.0723	1.00	
tert-Butylbenzene	<0.206	ug/l	0.206	1.00	
1,1,1,2-Tetrachloroethane	<0.148	ug/l	0.148	1.00	
1,1,2,2-Tetrachloroethane	<0.294	ug/l	0.294	1.00	
Tetrachloroethene	<0.109	ug/l	0.109	1.00	
Toluene	<0.155	ug/l	0.155	1.00	
1,2,3-Trichlorobenzene	<0.219	ug/l	0.219	1.00	
1,2,4-Trichlorobenzene	<0.213	ug/l	0.213	1.00	
1,1,1-Trichloroethane	<0.0859	ug/l	0.0859	1.00	
1,1,2-Trichloroethane	<0.301	ug/l	0.301	1.00	
Trichloroethene	<0.241	ug/l	0.241	1.00	
Trichlorofluoromethane	<0.160	ug/l	0.160	1.00	
1,2,3-Trichloropropane	<0.365	ug/l	0.365	1.00	
1,2,4-Trimethylbenzene	<0.0884	ug/l	0.0884	1.00	
1,3,5-Trimethylbenzene	<0.157	ug/l	0.157	1.00	
Vinyl chloride	<0.152	ug/l	0.152	1.00	
m,p-Xylene	<0.295	ug/l	0.295	2.00	
o-Xylene	<0.187	ug/l	0.187	1.00	

Analysis: 8270M

Sample Date: 04/19/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acenaphthene	0.0796	ug/l	0.0500	0.100	J
Acenaphthylene	<0.0500	ug/l	0.0500	0.100	J,U
Anthracene	<0.0500	ug/l	0.0500	0.100	
Benzo(a)anthracene	<0.0500	ug/l	0.0500	0.100	
Benzo(a)pyrene	<0.0500	ug/l	0.0500	0.100	
Benzo(b)fluoranthene	<0.0500	ug/l	0.0500	0.100	J,U
Benzo(ghi)perylene	<0.0500	ug/l	0.0500	0.100	J,U
Benzo(k)fluoranthene	<0.0500	ug/l	0.0500	0.100	
Chrysene	<0.0500	ug/l	0.0500	0.100	
Dibenzo(a,h)anthracene	<0.100	ug/l	0.100	0.200	J,U
Fluoranthene	<0.0500	ug/l	0.0500	0.100	
Fluorene	0.0891	ug/l	0.0500	0.100	J
Indeno(1,2,3-cd)pyrene	<0.0500	ug/l	0.0500	0.100	
Naphthalene	0.117	ug/l	0.0500	0.100	J
Phenanthrene	0.104	ug/l	0.0500	0.100	J
Pyrene	<0.0500	ug/l	0.0500	0.100	

RP-03-52R

Analysis: 8290 Sample Date: 04/19/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	<2.4	pg/l	2.4	7.88	
1,2,3,4,6,7,8-HpCDF	<1.3	pg/l	1.3	17.9	
1,2,3,4,7,8,9-HpCDF	<1.8	pg/l	1.8	12.7	
1,2,3,4,7,8-HxCDD	<1.6	pg/l	1.6	6.63	
1,2,3,6,7,8-HxCDD	<1.3	pg/l	1.3	8.27	
1,2,3,7,8,9-HxCDD	<1.5	pg/l	1.5	14.4	
1,2,3,4,7,8-HxCDF	<1.0	pg/l	1.0	17.5	
1,2,3,6,7,8-HxCDF	<1.0	pg/l	1.0	8.94	
1,2,3,7,8,9-HxCDF	<1.2	pg/l	1.2	30.7	
2,3,4,6,7,8-HxCDF	<1.0	pg/l	1.0	21.0	
1,2,3,4,6,7,8,9-OCDD	<4.0	pg/l	4.0	17.9	
1,2,3,4,6,7,8,9-OCDF	<3.2	pg/l	3.2	17.4	
1,2,3,7,8-PeCDD	<1.5	pg/l	1.5	7.50	
1,2,3,7,8-PeCDF	<0.9	pg/l	0.9	4.52	
2,3,4,7,8-PeCDF	<1.2	pg/l	1.2	5.58	
2,3,7,8-TCDD	<2.0	pg/l	2.0	3.17	
2,3,7,8-TCDF	<1.5	pg/l	1.5	6.06	
Total HpCDD	<2.4	pg/l	2.4	7.88	
Total HpCDF	<1.5	pg/l	1.5	12.7	
Total HxCDD	<1.5	pg/l	1.5	6.63	
Total HxCDF	<1.1	pg/l	1.1	8.94	
Total PeCDD	<1.5	pg/l	1.5	7.50	
Total PeCDF	<1.0	pg/l	1.0	4.52	
Total TCDD	<2.0	pg/l	2.0	3.17	
Total TCDF	<1.5	pg/l	1.5	6.06	

RP-03-52R (Dup)

Analysis: 8270M Sample Date: 04/19/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acenaphthene	0.079	ug/l	0.0500	0.100	J
Acenaphthylene	<0.0500	ug/l	0.0500	0.100	J,U
Anthracene	<0.0500	ug/l	0.0500	0.100	
Benzo(a)anthracene	<0.0500	ug/l	0.0500	0.100	
Benzo(a)pyrene	<0.0500	ug/l	0.0500	0.100	
Benzo(b)fluoranthene	<0.0500	ug/l	0.0500	0.100	J,U
Benzo(ghi)perylene	<0.0500	ug/l	0.0500	0.100	J,U
Benzo(k)fluoranthene	<0.0500	ug/l	0.0500	0.100	
Chrysene	<0.0500	ug/l	0.0500	0.100	
Dibenzo(a,h)anthracene	<0.100	ug/l	0.100	0.200	J,U
Fluoranthene	<0.0500	ug/l	0.0500	0.100	
Fluorene	0.0936	ug/l	0.0500	0.100	J
Indeno(1,2,3-cd)pyrene	<0.0500	ug/l	0.0500	0.100	
Naphthalene	0.118	ug/l	0.0500	0.100	J
Phenanthrene	0.107	ug/l	0.0500	0.100	J
Pyrene	<0.0500	ug/l	0.0500	0.100	

RP-04-16

Analysis: 300.0 Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	28	mg/l	0.0207	0.500	
Nitrate	<0.0173	mg/l	0.0173	0.100	
Nitrite(as N)	<0.0146	mg/l	0.0146	0.100	
Sulfate	23	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	320	mg/l	1.04	50.0	

Analysis: 350.1 Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.578	mg/l	0.00760	0.0500	

Analysis: 351.2 Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	1.09	mg/l	0.332	0.500	

Analysis: 365.2 Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.00971	mg/l	0.00141	0.0100	

Analysis: 376.2 Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	0.154	mg/l	0.0150	0.200	

Analysis: 405.1 Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	27.5	mg/l	1.13	4.00	

Analysis: 410.4 Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	56.6	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	14.9	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	<0.0434	mg/l	0.0434	0.100	
Calcium	79	mg/l	0.361	1.00	
Iron	10.6	mg/l	0.00640	0.100	
Magnesium	8.47	mg/l	0.0136	0.100	
Potassium	3.27	mg/l	0.111	1.00	
Sodium	49.8	mg/l	0.167	10.0	

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Analysis: 6020

Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	0.185	mg/l	0.000964	0.00100	
Cadmium	<0.000178	mg/l	0.000178	0.00100	
Chromium	<0.000791	mg/l	0.000791	0.00100	
Copper	0.00104	mg/l	0.000259	0.00200	
Lead	0.00041	mg/l	0.0000870	0.00100	U
Manganese	0.768	mg/l	0.0000136	0.00200	
Nickel	0.00349	mg/l	0.000826	0.00200	
Vanadium	0.00085	mg/l	0.000669	0.00500	
Zinc	0.0022	mg/l	0.00102	0.00500	

Analysis: 6020 (Dissolved)

Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.0661	mg/l	0.000964	0.00100	J
Cadmium (Dissolved)	<0.0000730	mg/l	0.0000730	0.00100	R
Chromium (Dissolved)	0.00086	mg/l	0.000791	0.00100	J
Copper (Dissolved)	0.00047	mg/l	0.000259	0.00200	J
Lead (Dissolved)	<0.0000870	mg/l	0.0000870	0.00100	R
Nickel (Dissolved)	0.00403	mg/l	0.000242	0.00200	J
Vanadium (Dissolved)	<0.000669	mg/l	0.000669	0.00500	R
Zinc (Dissolved)	0.00346	mg/l	0.00102	0.00500	J

Analysis: 7470A

Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury	<0.000103	mg/l	0.000103	0.000200	

Analysis: 7470A (Dissolved)

Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury (Dissolved)	<0.000103	mg/l	0.000103	0.000200	R

RP-04-16

Analysis: 8081A

Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aldrin	<0.250	ug/l	0.250	0.500	J,U
gamma-BHC (Lindane)	<0.250	ug/l	0.250	0.500	J,U
alpha-BHC	<0.250	ug/l	0.250	0.500	J,U
beta-BHC	<0.250	ug/l	0.250	0.500	J,U
delta-BHC	<0.250	ug/l	0.250	0.500	J,U
alpha-Chlordane	<0.250	ug/l	0.250	0.500	J,U
gamma-Chlordane	<0.250	ug/l	0.250	0.500	J,U
4,4'-DDD	<0.250	ug/l	0.250	0.500	J,U
4,4'-DDE	<0.250	ug/l	0.250	0.500	J,U
4,4'-DDT	<0.250	ug/l	0.250	0.500	J,U
Dieldrin	<0.250	ug/l	0.250	0.500	J,U
Endosulfan I	<0.250	ug/l	0.250	0.500	J,U
Endosulfan II	0.777	ug/l	0.250	0.500	J,N
Endosulfan sulfate	<0.250	ug/l	0.250	0.500	J,U
Endrin	0.294	ug/l	0.250	0.500	J
Endrin aldehyde	<0.250	ug/l	0.250	0.500	J,U
Endrin Ketone	<0.250	ug/l	0.250	0.500	J,U
Heptachlor	<0.250	ug/l	0.250	0.500	J,U
Heptachlor epoxide	<0.250	ug/l	0.250	0.500	J,U
Hexachlorobenzene	<0.250	ug/l	0.250	0.500	J,U
Methoxychlor	<0.250	ug/l	0.250	0.500	J,U

Analysis: 8151MOD

Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<12.6	ug/l	12.6	30.0	R
2,4-D	2500	ug/l	131	300	J
Dalapon	<1.10	ug/l	1.10	10.0	J,U
2,4-DB	16.1	ug/l	1.90	3.00	J
Dicamba	1.17	ug/l	1.01	3.00	J,N
Dichlorprop	<1.16	ug/l	1.16	3.00	J,U
Dinoseb	<1.54	ug/l	1.54	3.00	J,U
MCPA	<127	ug/l	127	300	J,U
MCPP	<111	ug/l	111	300	J,U
2,4,5-T	149	ug/l	13.9	30.0	J,U
2,4,5-TP(Silvex)	<1.24	ug/l	1.24	3.00	J

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Analysis: 8260B Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<11.7	ug/l	11.7	125	J,U
Benzene	95.2	ug/l	0.735	5.00	J
Bromobenzene	<1.66	ug/l	1.66	5.00	J,U
Bromochloromethane	<1.33	ug/l	1.33	5.00	J,U
Bromodichloromethane	<0.915	ug/l	0.915	5.00	J,U
Bromoform	<0.870	ug/l	0.870	5.00	J,U
Bromomethane	<1.41	ug/l	1.41	50.0	J,U
2-Butanone (MEK)	<8.00	ug/l	8.00	125	J,U
n-Butylbenzene	<0.915	ug/l	0.915	5.00	J,U
sec-Butylbenzene	<0.965	ug/l	0.965	5.00	J,U
Carbon disulfide	<1.16	ug/l	1.16	50.0	J,U
CarbonTetrachloride	<0.700	ug/l	0.700	10.0	J,U
Chlorobenzene	249	ug/l	0.680	5.00	J
Chloroethane	<1.64	ug/l	1.64	10.0	J,U
Chloroform	<0.715	ug/l	0.715	5.00	J,U
Chloromethane	<0.795	ug/l	0.795	25.0	J,U
2-Chlorotoluene	<0.550	ug/l	0.550	5.00	J,U
4-Chlorotoluene	<0.600	ug/l	0.600	5.00	J,U
1,2-Dibromo-3-chloropropane	<2.02	ug/l	2.02	5.00	J,U
Dibromochloromethane	<0.665	ug/l	0.665	5.00	J,U
1,2-Dibromoethane	<0.935	ug/l	0.935	5.00	J,U
Dibromomethane	<0.585	ug/l	0.585	5.00	J,U
1,2-Dichlorobenzene	748	ug/l	0.430	5.00	J
1,3-Dichlorobenzene	27.3	ug/l	0.660	5.00	J
1,4-Dichlorobenzene	245	ug/l	0.935	5.00	J
Dichlorodifluoromethane	<1.56	ug/l	1.56	25.0	J,U
1,1-Dichloroethane	<0.785	ug/l	0.785	5.00	J,U
1,2-Dichloroethane	<0.710	ug/l	0.710	5.00	J,U
1,1-Dichloroethene	<0.985	ug/l	0.985	5.00	J,U
cis-1,2-Dichloroethene	<0.850	ug/l	0.850	5.00	J,U
trans-1,2-Dichloroethene	<0.875	ug/l	0.875	5.00	J,U
1,2-Dichloropropane	<1.33	ug/l	1.33	5.00	J,U
1,3-Dichloropropane	<0.755	ug/l	0.755	5.00	J,U
2,2-Dichloropropane	<0.520	ug/l	0.520	5.00	J,U
1,1-Dichloropropene	<0.745	ug/l	0.745	5.00	J,U
cis-1,3-Dichloropropene	<0.640	ug/l	0.640	5.00	J,U
trans-1,3-Dichloropropene	<0.760	ug/l	0.760	5.00	J,U
2-Ethyl-1-hexanol	<500	ug/l	500	500	J,U
Ethylbenzene	46.4	ug/l	0.550	5.00	J
Hexachlorobutadiene	<4.39	ug/l	4.39	10.0	J,U
2-Hexanone	<5.50	ug/l	5.50	50.0	J,U
Iodomethane	<11.9	ug/l	11.9	100	J,U
Isobutylalcohol	387	ug/l	79.5	500	J
Isopropylbenzene	1.25	ug/l	0.535	5.00	J

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Analysis: 8260B Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<0.745	ug/l	0.745	5.00	J,U
4-methyl-2-pentanone (MIBK)	<7.45	ug/l	7.45	25.0	J,U
Methylene chloride	<2.27	ug/l	2.27	25.0	J,U
Naphthalene	<0.494	ug/l	0.494	5.00	J,U
n-Propylbenzene	3.8	ug/l	0.690	5.00	J
Styrene	<0.362	ug/l	0.362	5.00	J,U
tert-Butylbenzene	<1.03	ug/l	1.03	5.00	J,U
1,1,1,2-Tetrachloroethane	<0.740	ug/l	0.740	5.00	J,U
1,1,2,2-Tetrachloroethane	<1.47	ug/l	1.47	5.00	J,U
Tetrachloroethene	<0.545	ug/l	0.545	5.00	J,U
Toluene	1.5	ug/l	0.775	5.00	J
1,2,3-Trichlorobenzene	<1.10	ug/l	1.10	5.00	J,U
1,2,4-Trichlorobenzene	2.45	ug/l	1.06	5.00	J
1,1,1-Trichloroethane	<0.430	ug/l	0.430	5.00	J,U
1,1,2-Trichloroethane	<1.50	ug/l	1.50	5.00	J,U
Trichloroethene	<1.20	ug/l	1.20	5.00	J,U
Trichlorofluoromethane	<0.800	ug/l	0.800	5.00	J,U
1,2,3-Trichloropropane	<1.82	ug/l	1.82	5.00	J,U
1,2,4-Trimethylbenzene	36	ug/l	0.442	5.00	J
1,3,5-Trimethylbenzene	7.85	ug/l	0.785	5.00	J
Vinyl chloride	<0.760	ug/l	0.760	5.00	J,U
m,p-Xylene	131	ug/l	1.48	10.0	J
o-Xylene	42.4	ug/l	0.935	5.00	J

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Analysis: 8270C Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acenaphthene	<3.00	ug/l	3.00	5.00	J,U
Acenaphthylene	<3.00	ug/l	3.00	5.00	J,U
Anthracene	<3.00	ug/l	3.00	5.00	J,U
Benzo(a)anthracene	<3.00	ug/l	3.00	5.00	J,U
Benzo(a)pyrene	<3.00	ug/l	3.00	5.00	J,U
Benzo(b)fluoranthene	<3.00	ug/l	3.00	5.00	J,U
Benzo(ghi)perylene	<3.00	ug/l	3.00	5.00	J,U
Benzo(k)fluoranthene	<3.00	ug/l	3.00	5.00	J,U
Benzoic acid	<5.00	ug/l	5.00	50.0	J,U
Benzyl alcohol	<5.00	ug/l	5.00	10.0	J,U
Bis(2-Chloroisopropyl) ether	<5.00	ug/l	5.00	10.0	J,U
4-Bromophenylphenyl ether	<3.00	ug/l	3.00	5.00	J,U
Butylbenzylphthalate	<3.00	ug/l	3.00	5.00	J,U
4-Chloro-3-methylphenol	<3.00	ug/l	3.00	5.00	J,U
4-Chloroaniline	<5.00	ug/l	5.00	20.0	J,U
Bis(2-Chloroethoxy) methane	<5.00	ug/l	5.00	10.0	J,U
Bis(2-Chloroethyl) ether	<3.00	ug/l	3.00	5.00	J,U
2-Chloronapthalene	<3.00	ug/l	3.00	5.00	J,U
2-Chlorophenol	32	ug/l	5.00	5.00	J
4-Chlorophenylphenyl ether	<3.00	ug/l	3.00	5.00	J,U
Chrysene	<3.00	ug/l	3.00	5.00	J,U
Dibenzo(a,h)anthracene	<3.00	ug/l	3.00	5.00	J,U
Dibenzofuran	<3.00	ug/l	3.00	5.00	J,U
1,2-Dichlorobenzene	562	ug/l	30.0	50.0	J
1,3-Dichlorobenzene	23.1	ug/l	3.00	5.00	J
1,4-Dichlorobenzene	144	ug/l	3.00	5.00	J
3,3'-Dichlorobenzidine	<5.00	ug/l	5.00	5.00	J,U
2,4-Dichlorophenol	546	ug/l	50.0	50.0	J
2,6-Dichlorophenol	67.3	ug/l	10.0	25.0	J
Diethylphthalate	<3.00	ug/l	3.00	5.00	J,U
2,4-Dimethylphenol	<10.0	ug/l	10.0	10.0	J,U
Dimethylphthalate	<3.00	ug/l	3.00	5.00	J,U
2,4-Dinitrophenol	<15.0	ug/l	15.0	25.0	J,U
2,4-Dinitrotoluene	<3.00	ug/l	3.00	5.00	J,U
2,6-Dinitrotoluene	<3.00	ug/l	3.00	5.00	J,U
Dinoseb	<10.0	ug/l	10.0	25.0	J,U
Bis(2-Ethylhexyl) pthalate	<10.0	ug/l	10.0	10.0	J,U
Fluoranthene	<3.00	ug/l	3.00	5.00	J,U
Fluorene	<3.00	ug/l	3.00	5.00	J,U
Hexachlorobenzene	<3.00	ug/l	3.00	5.00	J,U
Hexachlorobutadiene	<5.00	ug/l	5.00	10.0	J,U
Hexachlorocyclopentadiene	<5.00	ug/l	5.00	10.0	R
Hexachloroethane	<5.00	ug/l	5.00	10.0	J,U
Indeno(1,2,3-cd)pyrene	<3.00	ug/l	3.00	5.00	J,U

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Analysis: 8270C Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Isophorone	<3.00	ug/l	3.00	5.00	J,U
2-Methyl-4,6-dinitrophenol	<5.00	ug/l	5.00	10.0	J,U
1-Methylnaphthalene	<3.00	ug/l	3.00	5.00	J,U
2-Methylnaphthalene	<3.00	ug/l	3.00	5.00	J,U
2-Methylphenol	59.9	ug/l	5.00	10.0	J
3 & 4-Methylphenol	<5.00	ug/l	5.00	5.00	J,U
Naphthalene	<3.00	ug/l	3.00	5.00	J,U
Di-n-butylphthalate	<3.00	ug/l	3.00	5.00	J,U
2-Nitroaniline	<3.00	ug/l	3.00	5.00	J,U
3-Nitroaniline	<5.00	ug/l	5.00	10.0	J,U
4-Nitroaniline	<5.00	ug/l	5.00	10.0	J,U
Nitrobenzene	<3.00	ug/l	3.00	5.00	J,U
2-Nitrophenol	<5.00	ug/l	5.00	5.00	J,U
4-Nitrophenol	<10.0	ug/l	10.0	25.0	J,U
N-Nitrosodiphenylamine	<3.00	ug/l	3.00	5.00	J,U
N-Nitrosodi-n-propyl amine	<3.00	ug/l	3.00	10.0	J,U
Di-n-octyl phthalate	<5.00	ug/l	5.00	5.00	J,U
Pentachlorophenol	<5.00	ug/l	5.00	10.0	J,U
Phenanthrene	<3.00	ug/l	3.00	5.00	J,U
Phenol	9.44	ug/l	3.00	5.00	J
Pyrene	<3.00	ug/l	3.00	5.00	J,U
Tetrachlorophenols	<10.0	ug/l	10.0	25.0	J,U
1,2,4-Trichlorobenzene	<3.00	ug/l	3.00	5.00	J,U
2,4,5-Trichlorophenol	25.2	ug/l	5.00	5.00	J
2,4,6-Trichlorophenol	116	ug/l	5.00	5.00	J

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Analysis: 8290

Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	<3.9	pg/l	3.9	7.81	
1,2,3,4,6,7,8-HpCDF	6.4	pg/l	1.9	17.7	N - EMPC data
1,2,3,4,7,8,9-HpCDF	<2.7	pg/l	2.7	12.6	
1,2,3,4,7,8-HxCDD	<2.4	pg/l	2.4	6.57	
1,2,3,6,7,8-HxCDD	<2.1	pg/l	2.1	8.19	
1,2,3,7,8,9-HxCDD	<2.6	pg/l	2.6	14.3	
1,2,3,4,7,8-HxCDF	<1.5	pg/l	1.5	17.3	
1,2,3,6,7,8-HxCDF	<1.4	pg/l	1.4	8.86	
1,2,3,7,8,9-HxCDF	<1.8	pg/l	1.8	30.4	
2,3,4,6,7,8-HxCDF	<1.3	pg/l	1.3	20.8	
1,2,3,4,6,7,8,9-OCDD	10.9	pg/l	7.2	17.7	N - EMPC data
1,2,3,4,6,7,8,9-OCDF	13.4	pg/l	5.2	17.2	J
1,2,3,7,8-PeCDD	<2.1	pg/l	2.1	7.43	
1,2,3,7,8-PeCDF	5.7	pg/l	1.2	4.48	J
2,3,4,7,8-PeCDF	4.2	pg/l	1.8	5.52	N - EMPC data
2,3,7,8-TCDD	378	pg/l	2.3	3.14	
2,3,7,8-TCDF	7.5	pg/l	0.9	6.00	J
Total HpCDD	<3.9	pg/l	3.9	7.81	
Total HpCDF	<2.2	pg/l	2.2	12.6	
Total HxCDD	<2.4	pg/l	2.4	6.57	
Total HxCDF	25.0	pg/l	1.5	8.86	
Total PeCDD	8.5	pg/l	2.1	7.43	
Total PeCDF	1220	pg/l	1.5	4.48	
Total TCDD	1040	pg/l	2.3	3.14	
Total TCDF	6360	pg/l	1.6	6.00	
EMPC-HPCDF	11.9	pg/l	2.2	12.6	N - EMPC data
EMPC-HXCDF	28.3	pg/l	1.5	8.86	N - EMPC data
EMPC-PECDF	1230	pg/l	1.5	4.48	N - EMPC data
EMPC-TCDF	6380	pg/l	1.6	6.00	N - EMPC data

Analysis: NWTPH-DX

Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.981	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/21/04 Time: 13:40

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	16200	ug/l	16.0	51.9	

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Analysis: 300.0

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	1160	mg/l	2.07	50.0	
Nitrate	<0.0173	mg/l	0.0173	0.100	
Nitrite(as N)	1.5	mg/l	0.146	1.00	
Sulfate	105	mg/l	1.70	10.0	

Analysis: 310.1

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	419	mg/l	1.04	50.0	

Analysis: 350.1

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0676	mg/l	0.00760	0.0500	

Analysis: 351.2

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	<0.332	mg/l	0.332	0.500	

Analysis: 365.2

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.0153	mg/l	0.00141	0.0100	

Analysis: 376.2

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	<0.0150	mg/l	0.0150	0.200	

Analysis: 405.1

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	<1.13	mg/l	1.13	4.00	

Analysis: 410.4

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	24.6	mg/l	1.69	5.00	

Analysis: 415.1/5310

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	3.39	mg/l	0.419	1.00	

Analysis: 6010B

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	<0.0434	mg/l	0.0434	0.100	
Calcium	506	mg/l	0.361	1.00	
Iron	6.5	mg/l	0.00640	0.100	
Magnesium	177	mg/l	0.136	1.00	
Potassium	14.6	mg/l	0.111	1.00	
Sodium	90.7	mg/l	0.167	10.0	

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Analysis: 6020

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	0.0143	mg/l	0.000964	0.00100	J
Cadmium	<0.000178	mg/l	0.000178	0.00100	
Chromium	0.00091	mg/l	0.000791	0.00100	J
Copper	0.00586	mg/l	0.000259	0.00200	J
Lead	<0.0000870	mg/l	0.0000870	0.00100	
Manganese	25.9	mg/l	0.00136	0.200	
Nickel	0.0241	mg/l	0.000826	0.00200	J
Vanadium	0.0038	mg/l	0.000669	0.00500	J
Zinc	0.0134	mg/l	0.00102	0.00500	J

Analysis: 6020 (Dissolved)

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.0102	mg/l	0.000964	0.00100	
Cadmium (Dissolved)	0.00024	mg/l	0.0000730	0.00100	
Chromium (Dissolved)	<0.000791	mg/l	0.000791	0.00100	
Copper (Dissolved)	0.00143	mg/l	0.000259	0.00200	
Lead (Dissolved)	0.00011	mg/l	0.0000870	0.00100	
Nickel (Dissolved)	0.0144	mg/l	0.000242	0.00200	
Vanadium (Dissolved)	0.00306	mg/l	0.000669	0.00500	
Zinc (Dissolved)	0.00344	mg/l	0.00102	0.00500	

Analysis: 7470A

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury	<0.000103	mg/l	0.000103	0.000200	

Analysis: 7470A (Dissolved)

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury (Dissolved)	<0.0000630	mg/l	0.0000630	0.000200	

Analysis: 8151MOD

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<1.26	ug/l	1.26	3.00	
2,4-D	<1.31	ug/l	1.31	3.00	
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	<1.90	ug/l	1.90	3.00	
Dicamba	<1.01	ug/l	1.01	3.00	
Dichlorprop	5.72	ug/l	1.16	3.00	N
Dinoseb	<1.54	ug/l	1.54	3.00	
MCPA	<127	ug/l	127	300	
MCPP	<111	ug/l	111	300	
2,4,5-T	<1.39	ug/l	1.39	3.00	
2,4,5-TP(Silvex)	29.5	ug/l	1.24	3.00	

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Analysis: 8260B Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<11.7	ug/l	11.7	125	J,U
Benzene	1.5	ug/l	0.735	5.00	
Bromobenzene	<1.66	ug/l	1.66	5.00	
Bromochloromethane	<1.33	ug/l	1.33	5.00	
Bromodichloromethane	<0.915	ug/l	0.915	5.00	
Bromoform	<0.870	ug/l	0.870	5.00	
Bromomethane	<1.41	ug/l	1.41	50.0	J,U
2-Butanone (MEK)	<8.00	ug/l	8.00	125	
n-Butylbenzene	<0.915	ug/l	0.915	5.00	
sec-Butylbenzene	<0.965	ug/l	0.965	5.00	
Carbon disulfide	<1.16	ug/l	1.16	50.0	
CarbonTetrachloride	<0.700	ug/l	0.700	10.0	
Chlorobenzene	103	ug/l	0.680	5.00	
Chloroethane	<1.64	ug/l	1.64	10.0	
Chloroform	<0.715	ug/l	0.715	5.00	
Chloromethane	<0.795	ug/l	0.795	25.0	
2-Chlorotoluene	<0.550	ug/l	0.550	5.00	
4-Chlorotoluene	<0.600	ug/l	0.600	5.00	
1,2-Dibromo-3-chloropropane	<2.02	ug/l	2.02	5.00	
Dibromochloromethane	<0.665	ug/l	0.665	5.00	
1,2-Dibromoethane	<0.935	ug/l	0.935	5.00	
Dibromomethane	<0.585	ug/l	0.585	5.00	
1,2-Dichlorobenzene	583	ug/l	0.430	5.00	
1,3-Dichlorobenzene	13.5	ug/l	0.660	5.00	
1,4-Dichlorobenzene	146	ug/l	0.935	5.00	
Dichlorodifluoromethane	<1.56	ug/l	1.56	25.0	
1,1-Dichloroethane	<0.785	ug/l	0.785	5.00	
1,2-Dichloroethane	<0.710	ug/l	0.710	5.00	
1,1-Dichloroethene	2.75	ug/l	0.985	5.00	
cis-1,2-Dichloroethene	10.9	ug/l	0.850	5.00	
trans-1,2-Dichloroethene	1.15	ug/l	0.875	5.00	N
1,2-Dichloropropane	<1.33	ug/l	1.33	5.00	
1,3-Dichloropropane	<0.755	ug/l	0.755	5.00	
2,2-Dichloropropane	<0.520	ug/l	0.520	5.00	
1,1-Dichloropropene	<0.745	ug/l	0.745	5.00	
cis-1,3-Dichloropropene	<0.640	ug/l	0.640	5.00	
trans-1,3-Dichloropropene	<0.760	ug/l	0.760	5.00	
2-Ethyl-1-hexanol	<500	ug/l	500	500	J,U
Ethylbenzene	<0.550	ug/l	0.550	5.00	
Hexachlorobutadiene	<4.39	ug/l	4.39	10.0	
2-Hexanone	<5.50	ug/l	5.50	50.0	
Iodomethane	<11.9	ug/l	11.9	100	
Isobutylalcohol	<79.5	ug/l	79.5	500	J,U
Isopropylbenzene	<0.535	ug/l	0.535	5.00	

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Analysis: 8260B

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<0.745	ug/l	0.745	5.00	
4-methyl-2-pentanone (MIBK)	<7.45	ug/l	7.45	25.0	
Methylene chloride	<2.27	ug/l	2.27	25.0	
Naphthalene	<0.494	ug/l	0.494	5.00	
n-Propylbenzene	<0.690	ug/l	0.690	5.00	
Styrene	<0.362	ug/l	0.362	5.00	
tert-Butylbenzene	<1.03	ug/l	1.03	5.00	
1,1,1,2-Tetrachloroethane	<0.740	ug/l	0.740	5.00	
1,1,2,2-Tetrachloroethane	<1.47	ug/l	1.47	5.00	
Tetrachloroethene	<0.545	ug/l	0.545	5.00	
Toluene	<0.775	ug/l	0.775	5.00	
1,2,3-Trichlorobenzene	<1.10	ug/l	1.10	5.00	
1,2,4-Trichlorobenzene	<1.06	ug/l	1.06	5.00	
1,1,1-Trichloroethane	<0.430	ug/l	0.430	5.00	
1,1,2-Trichloroethane	<1.50	ug/l	1.50	5.00	
Trichloroethene	18.6	ug/l	1.20	5.00	
Trichlorofluoromethane	<0.800	ug/l	0.800	5.00	
1,2,3-Trichloropropane	<1.82	ug/l	1.82	5.00	
1,2,4-Trimethylbenzene	<0.442	ug/l	0.442	5.00	
1,3,5-Trimethylbenzene	<0.785	ug/l	0.785	5.00	
Vinyl chloride	19.8	ug/l	0.760	5.00	
m,p-Xylene	<1.48	ug/l	1.48	10.0	
o-Xylene	<0.935	ug/l	0.935	5.00	

Analysis: NWTPH-DX

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.275	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/15/04 Time: 14:25

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	750	ug/l	0.370	1.20	

RP-07-119

Analysis: 300.0

Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	486	mg/l	2.07	50.0	
Nitrate	0.04	mg/l	0.0173	0.100	
Nitrite(as N)	0.9	mg/l	0.146	1.00	
Sulfate	31.7	mg/l	0.170	1.00	

Analysis: 310.1

Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	140	mg/l	0.208	10.0	

Analysis: 350.1

Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0233	mg/l	0.00760	0.0500	

Analysis: 351.2

Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	<0.332	mg/l	0.332	0.500	

Analysis: 365.2

Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.015	mg/l	0.00141	0.0100	

Analysis: 376.2

Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	<0.0150	mg/l	0.0150	0.200	

Analysis: 405.1

Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	<1.13	mg/l	1.13	4.00	

Analysis: 410.4

Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	10.7	mg/l	1.69	5.00	

Analysis: 415.1/5310

Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	1.46	mg/l	0.419	1.00	

Analysis: 6010B

Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	<0.0434	mg/l	0.0434	0.100	
Calcium	245	mg/l	1.80	5.00	
Iron	0.485	mg/l	0.00640	0.100	
Magnesium	57.5	mg/l	0.0136	0.100	
Potassium	10.7	mg/l	0.111	1.00	
Sodium	20.3	mg/l	0.0167	1.00	

RP-07-119

Analysis: 6020

Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	<0.000964	mg/l	0.000964	0.00100	
Cadmium	<0.000178	mg/l	0.000178	0.00100	
Chromium	<0.000791	mg/l	0.000791	0.00100	J,U
Copper	0.00181	mg/l	0.000259	0.00200	
Lead	<0.0000870	mg/l	0.0000870	0.00100	
Manganese	0.255	mg/l	0.0000136	0.00200	
Nickel	0.00781	mg/l	0.000826	0.00200	
Vanadium	0.00323	mg/l	0.000669	0.00500	
Zinc	0.0101	mg/l	0.00102	0.00500	

Analysis: 6020 (Dissolved)

Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	<0.000964	mg/l	0.000964	0.00100	
Cadmium (Dissolved)	<0.0000730	mg/l	0.0000730	0.00100	
Chromium (Dissolved)	<0.000791	mg/l	0.000791	0.00100	
Copper (Dissolved)	0.00199	mg/l	0.000259	0.00200	U
Lead (Dissolved)	<0.0000870	mg/l	0.0000870	0.00100	
Nickel (Dissolved)	0.00792	mg/l	0.000242	0.00200	
Vanadium (Dissolved)	0.00277	mg/l	0.000669	0.00500	
Zinc (Dissolved)	0.00999	mg/l	0.00102	0.00500	

Analysis: 7470A

Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury	<0.000103	mg/l	0.000103	0.000200	

Analysis: 7470A (Dissolved)

Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury (Dissolved)	<0.0000630	mg/l	0.0000630	0.000200	

Analysis: 8151MOD

Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<1.26	ug/l	1.26	3.00	
2,4-D	4.61	ug/l	1.31	3.00	
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	<1.90	ug/l	1.90	3.00	
Dicamba	<1.01	ug/l	1.01	3.00	
Dichlorprop	3.08	ug/l	1.16	3.00	N
Dinoseb	<1.54	ug/l	1.54	3.00	
MCPA	<127	ug/l	127	300	
MCPP	<111	ug/l	111	300	
2,4,5-T	<1.39	ug/l	1.39	3.00	
2,4,5-TP(Silvex)	10.4	ug/l	1.24	3.00	

RP-07-119

Analysis: 8260B Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<2.34	ug/l	2.34	25.0	
Benzene	<0.147	ug/l	0.147	1.00	
Bromobenzene	<0.333	ug/l	0.333	1.00	
Bromochloromethane	<0.266	ug/l	0.266	1.00	
Bromodichloromethane	<0.183	ug/l	0.183	1.00	
Bromoform	<0.174	ug/l	0.174	1.00	
Bromomethane	<0.282	ug/l	0.282	10.0	
2-Butanone (MEK)	<1.60	ug/l	1.60	25.0	
n-Butylbenzene	<0.183	ug/l	0.183	1.00	
sec-Butylbenzene	<0.193	ug/l	0.193	1.00	
Carbon disulfide	<0.233	ug/l	0.233	10.0	
CarbonTetrachloride	<0.140	ug/l	0.140	2.00	
Chlorobenzene	4.14	ug/l	0.136	1.00	
Chloroethane	<0.327	ug/l	0.327	2.00	
Chloroform	0.44	ug/l	0.143	1.00	
Chloromethane	<0.159	ug/l	0.159	5.00	
2-Chlorotoluene	<0.110	ug/l	0.110	1.00	
4-Chlorotoluene	<0.120	ug/l	0.120	1.00	
1,2-Dibromo-3-chloropropane	<0.405	ug/l	0.405	1.00	
Dibromochloromethane	<0.133	ug/l	0.133	1.00	
1,2-Dibromoethane	<0.187	ug/l	0.187	1.00	
Dibromomethane	<0.117	ug/l	0.117	1.00	
1,2-Dichlorobenzene	54.9	ug/l	0.0859	1.00	
1,3-Dichlorobenzene	3.56	ug/l	0.132	1.00	
1,4-Dichlorobenzene	16.8	ug/l	0.187	1.00	
Dichlorodifluoromethane	<0.312	ug/l	0.312	5.00	
1,1-Dichloroethane	<0.157	ug/l	0.157	1.00	
1,2-Dichloroethane	<0.142	ug/l	0.142	1.00	
1,1-Dichloroethene	0.27	ug/l	0.197	1.00	
cis-1,2-Dichloroethene	6.02	ug/l	0.170	1.00	
trans-1,2-Dichloroethene	<0.175	ug/l	0.175	1.00	
1,2-Dichloropropane	<0.266	ug/l	0.266	1.00	
1,3-Dichloropropane	<0.151	ug/l	0.151	1.00	
2,2-Dichloropropane	<0.104	ug/l	0.104	1.00	
1,1-Dichloropropene	<0.149	ug/l	0.149	1.00	
cis-1,3-Dichloropropene	<0.128	ug/l	0.128	1.00	
trans-1,3-Dichloropropene	<0.152	ug/l	0.152	1.00	
2-Ethyl-1-hexanol	<100	ug/l	100	100	
Ethylbenzene	<0.110	ug/l	0.110	1.00	
Hexachlorobutadiene	<0.878	ug/l	0.878	2.00	
2-Hexanone	<1.10	ug/l	1.10	10.0	
Iodomethane	<2.38	ug/l	2.38	20.0	
Isobutylalcohol	<15.9	ug/l	15.9	100	
Isopropylbenzene	<0.107	ug/l	0.107	1.00	

RP-07-119

Analysis: 8260B

Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<0.149	ug/l	0.149	1.00	
4-methyl-2-pentanone (MIBK)	<1.49	ug/l	1.49	5.00	
Methylene chloride	<0.454	ug/l	0.454	5.00	
Naphthalene	<0.0989	ug/l	0.0989	1.00	
n-Propylbenzene	<0.138	ug/l	0.138	1.00	
Styrene	<0.0723	ug/l	0.0723	1.00	
tert-Butylbenzene	<0.206	ug/l	0.206	1.00	
1,1,1,2-Tetrachloroethane	<0.148	ug/l	0.148	1.00	
1,1,2,2-Tetrachloroethane	<0.294	ug/l	0.294	1.00	
Tetrachloroethene	<0.109	ug/l	0.109	1.00	
Toluene	<0.155	ug/l	0.155	1.00	
1,2,3-Trichlorobenzene	<0.219	ug/l	0.219	1.00	
1,2,4-Trichlorobenzene	<0.213	ug/l	0.213	1.00	
1,1,1-Trichloroethane	<0.0859	ug/l	0.0859	1.00	
1,1,2-Trichloroethane	<0.301	ug/l	0.301	1.00	
Trichloroethene	5.88	ug/l	0.241	1.00	
Trichlorofluoromethane	<0.160	ug/l	0.160	1.00	
1,2,3-Trichloropropane	<0.365	ug/l	0.365	1.00	
1,2,4-Trimethylbenzene	<0.0884	ug/l	0.0884	1.00	
1,3,5-Trimethylbenzene	<0.157	ug/l	0.157	1.00	
Vinyl chloride	<0.152	ug/l	0.152	1.00	
m,p-Xylene	<0.295	ug/l	0.295	2.00	
o-Xylene	<0.187	ug/l	0.187	1.00	

Analysis: 8270M

Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acenaphthene	<0.0500	ug/l	0.0500	0.100	
Acenaphthylene	<0.0500	ug/l	0.0500	0.100	
Anthracene	<0.0500	ug/l	0.0500	0.100	
Benzo(a)anthracene	<0.0500	ug/l	0.0500	0.100	
Benzo(a)pyrene	<0.0500	ug/l	0.0500	0.100	
Benzo(b)fluoranthene	<0.0500	ug/l	0.0500	0.100	
Benzo(ghi)perylene	<0.0500	ug/l	0.0500	0.100	J,U
Benzo(k)fluoranthene	<0.0500	ug/l	0.0500	0.100	
Chrysene	<0.0500	ug/l	0.0500	0.100	
Dibenzo(a,h)anthracene	<0.100	ug/l	0.100	0.200	J,U
Fluoranthene	<0.0500	ug/l	0.0500	0.100	
Fluorene	<0.0500	ug/l	0.0500	0.100	
Indeno(1,2,3-cd)pyrene	<0.0500	ug/l	0.0500	0.100	J,U
Naphthalene	<0.0500	ug/l	0.0500	0.100	
Phenanthrene	<0.0500	ug/l	0.0500	0.100	
Pyrene	<0.0500	ug/l	0.0500	0.100	

RP-07-119

Analysis: 8290

Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	<4.2	pg/l	4.2	7.77	
1,2,3,4,6,7,8-HpCDF	<2.2	pg/l	2.2	17.6	
1,2,3,4,7,8,9-HpCDF	<3.1	pg/l	3.1	12.5	
1,2,3,4,7,8-HxCDD	<2.5	pg/l	2.5	6.54	
1,2,3,6,7,8-HxCDD	<2.1	pg/l	2.1	8.15	
1,2,3,7,8,9-HxCDD	<2.4	pg/l	2.4	14.2	
1,2,3,4,7,8-HxCDF	<1.6	pg/l	1.6	17.3	
1,2,3,6,7,8-HxCDF	<1.6	pg/l	1.6	8.82	
1,2,3,7,8,9-HxCDF	<1.9	pg/l	1.9	30.2	
2,3,4,6,7,8-HxCDF	<1.6	pg/l	1.6	20.7	
1,2,3,4,6,7,8,9-OCDD	13.1	pg/l	7.3	17.6	U
1,2,3,4,6,7,8,9-OCDF	<5.2	pg/l	5.2	17.2	
1,2,3,7,8-PeCDD	<2.6	pg/l	2.6	7.39	
1,2,3,7,8-PeCDF	<1.4	pg/l	1.4	4.45	
2,3,4,7,8-PeCDF	<2.1	pg/l	2.1	5.50	
2,3,7,8-TCDD	<3.13	pg/l	3.13	3.7	
2,3,7,8-TCDF	<2.5	pg/l	2.5	5.97	
Total HpCDD	<4.2	pg/l	4.2	7.77	
Total HpCDF	<2.6	pg/l	2.6	12.5	
Total HxCDD	<2.3	pg/l	2.3	6.54	
Total HxCDF	<1.7	pg/l	1.7	8.82	
Total PeCDD	<2.6	pg/l	2.6	7.39	
Total PeCDF	<1.7	pg/l	1.7	4.45	
Total TCDD	<3.13	pg/l	3.13	3.7	
Total TCDF	<2.5	pg/l	2.5	5.97	

Analysis: NWTPH-DX

Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	<0.153	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/13/04 Time: 11:35

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	7.74	ug/l	0.370	1.20	

RP-07-30

Analysis: 8270M Sample Date: 04/13/04 Time: 09:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acenaphthene	7.78	ug/l	0.0500	0.100	
Acenaphthylene	0.0964	ug/l	0.0500	0.100	
Anthracene	0.144	ug/l	0.0500	0.100	
Benzo(a)anthracene	<0.0500	ug/l	0.0500	0.100	
Benzo(a)pyrene	<0.0500	ug/l	0.0500	0.100	
Benzo(b)fluoranthene	<0.0500	ug/l	0.0500	0.100	
Benzo(ghi)perylene	<0.0500	ug/l	0.0500	0.100	J,U
Benzo(k)fluoranthene	<0.0500	ug/l	0.0500	0.100	
Chrysene	<0.0500	ug/l	0.0500	0.100	
Dibenzo(a,h)anthracene	<0.100	ug/l	0.100	0.200	J,U
Fluoranthene	1.19	ug/l	0.0500	0.100	
Fluorene	2.32	ug/l	0.0500	0.100	
Indeno(1,2,3-cd)pyrene	<0.0500	ug/l	0.0500	0.100	J,U
Naphthalene	<0.150	ug/l	0.150	0.150	
Phenanthrene	2.88	ug/l	0.0500	0.100	
Pyrene	0.933	ug/l	0.0500	0.100	

RP-07-55

Analysis: 8270M Sample Date: 04/13/04 Time: 09:55

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acenaphthene	<0.0500	ug/l	0.0500	0.100	
Acenaphthylene	<0.0500	ug/l	0.0500	0.100	
Anthracene	<0.0500	ug/l	0.0500	0.100	
Benzo(a)anthracene	<0.0500	ug/l	0.0500	0.100	
Benzo(a)pyrene	<0.0500	ug/l	0.0500	0.100	
Benzo(b)fluoranthene	<0.0500	ug/l	0.0500	0.100	
Benzo(ghi)perylene	<0.0500	ug/l	0.0500	0.100	J,U
Benzo(k)fluoranthene	<0.0500	ug/l	0.0500	0.100	
Chrysene	<0.0500	ug/l	0.0500	0.100	
Dibenzo(a,h)anthracene	<0.100	ug/l	0.100	0.200	J,U
Fluoranthene	<0.0500	ug/l	0.0500	0.100	
Fluorene	<0.0500	ug/l	0.0500	0.100	
Indeno(1,2,3-cd)pyrene	<0.0500	ug/l	0.0500	0.100	J,U
Naphthalene	<0.0500	ug/l	0.0500	0.100	
Phenanthrene	<0.0500	ug/l	0.0500	0.100	
Pyrene	<0.0500	ug/l	0.0500	0.100	

RP-07-84

Analysis: 300.0

Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	1040	mg/l	2.07	50.0	
Nitrate	<0.0173	mg/l	0.0173	0.100	
Nitrite(as N)	<0.146	mg/l	0.146	1.00	
Sulfate	83.4	mg/l	0.170	1.00	

Analysis: 310.1

Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	250	mg/l	0.208	10.0	

Analysis: 350.1

Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0172	mg/l	0.00760	0.0500	

Analysis: 351.2

Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	<0.332	mg/l	0.332	0.500	

Analysis: 365.2

Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	<0.00141	mg/l	0.00141	0.0100	

Analysis: 376.2

Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	<0.0150	mg/l	0.0150	0.200	

Analysis: 405.1

Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	<1.13	mg/l	1.13	4.00	

Analysis: 410.4

Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	36	mg/l	1.69	5.00	

Analysis: 415.1/5310

Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	1.37	mg/l	0.419	1.00	

Analysis: 6010B

Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.333	mg/l	0.0434	0.100	
Calcium	511	mg/l	0.361	1.00	
Iron	3.73	mg/l	0.00640	0.100	
Magnesium	127	mg/l	0.136	1.00	
Potassium	17.5	mg/l	0.111	1.00	
Sodium	57.7	mg/l	0.167	10.0	

RP-07-84

Analysis: 6020

Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	0.00483	mg/l	0.000964	0.00100	
Cadmium	<0.000178	mg/l	0.000178	0.00100	
Chromium	0.00296	mg/l	0.000791	0.00100	J
Copper	0.00749	mg/l	0.000259	0.00200	
Lead	0.00066	mg/l	0.0000870	0.00100	
Manganese	0.556	mg/l	0.0000136	0.00200	
Nickel	0.0186	mg/l	0.000826	0.00200	
Vanadium	0.00854	mg/l	0.000669	0.00500	
Zinc	0.0144	mg/l	0.00102	0.00500	

Analysis: 6020 (Dissolved)

Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.00408	mg/l	0.000964	0.00100	
Cadmium (Dissolved)	<0.0000730	mg/l	0.0000730	0.00100	
Chromium (Dissolved)	<0.000791	mg/l	0.000791	0.00100	
Copper (Dissolved)	0.00342	mg/l	0.000259	0.00200	U
Lead (Dissolved)	<0.0000870	mg/l	0.0000870	0.00100	
Nickel (Dissolved)	0.0165	mg/l	0.000242	0.00200	
Vanadium (Dissolved)	<0.000669	mg/l	0.000669	0.00500	
Zinc (Dissolved)	0.00803	mg/l	0.00102	0.00500	

Analysis: 7470A

Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury	<0.000103	mg/l	0.000103	0.000200	

Analysis: 7470A (Dissolved)

Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury (Dissolved)	<0.0000630	mg/l	0.0000630	0.000200	

Analysis: 8151MOD

Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<1.26	ug/l	1.26	3.00	
2,4-D	<1.31	ug/l	1.31	3.00	
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	<1.90	ug/l	1.90	3.00	
Dicamba	<1.01	ug/l	1.01	3.00	
Dichlorprop	6.27	ug/l	1.16	3.00	
Dinoseb	<1.54	ug/l	1.54	3.00	
MCPA	<127	ug/l	127	300	
MCPP	<111	ug/l	111	300	
2,4,5-T	<1.39	ug/l	1.39	3.00	
2,4,5-TP(Silvex)	29.8	ug/l	1.24	3.00	

RP-07-84

Analysis: 8260B Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<11.7	ug/l	11.7	125	
Benzene	1.9	ug/l	0.735	5.00	
Bromobenzene	<1.66	ug/l	1.66	5.00	
Bromochloromethane	<1.33	ug/l	1.33	5.00	
Bromodichloromethane	<0.915	ug/l	0.915	5.00	
Bromoform	<0.870	ug/l	0.870	5.00	
Bromomethane	<1.41	ug/l	1.41	50.0	
2-Butanone (MEK)	<8.00	ug/l	8.00	125	
n-Butylbenzene	<0.915	ug/l	0.915	5.00	
sec-Butylbenzene	<0.965	ug/l	0.965	5.00	
Carbon disulfide	<1.16	ug/l	1.16	50.0	
CarbonTetrachloride	<0.700	ug/l	0.700	10.0	
Chlorobenzene	107	ug/l	0.680	5.00	
Chloroethane	<1.64	ug/l	1.64	10.0	
Chloroform	<0.715	ug/l	0.715	5.00	
Chloromethane	<0.795	ug/l	0.795	25.0	
2-Chlorotoluene	<0.550	ug/l	0.550	5.00	
4-Chlorotoluene	<0.600	ug/l	0.600	5.00	
1,2-Dibromo-3-chloropropane	<2.02	ug/l	2.02	5.00	
Dibromochloromethane	<0.665	ug/l	0.665	5.00	
1,2-Dibromoethane	<0.935	ug/l	0.935	5.00	
Dibromomethane	<0.585	ug/l	0.585	5.00	
1,2-Dichlorobenzene	704	ug/l	0.430	5.00	
1,3-Dichlorobenzene	19.6	ug/l	0.660	5.00	
1,4-Dichlorobenzene	190	ug/l	0.935	5.00	
Dichlorodifluoromethane	<1.56	ug/l	1.56	25.0	
1,1-Dichloroethane	<0.785	ug/l	0.785	5.00	
1,2-Dichloroethane	<0.710	ug/l	0.710	5.00	
1,1-Dichloroethene	2.7	ug/l	0.985	5.00	
cis-1,2-Dichloroethene	26.6	ug/l	0.850	5.00	
trans-1,2-Dichloroethene	1.35	ug/l	0.875	5.00	
1,2-Dichloropropane	<1.33	ug/l	1.33	5.00	
1,3-Dichloropropane	<0.755	ug/l	0.755	5.00	
2,2-Dichloropropane	<0.520	ug/l	0.520	5.00	
1,1-Dichloropropene	<0.745	ug/l	0.745	5.00	
cis-1,3-Dichloropropene	<0.640	ug/l	0.640	5.00	
trans-1,3-Dichloropropene	<0.760	ug/l	0.760	5.00	
2-Ethyl-1-hexanol	<500	ug/l	500	500	
Ethylbenzene	<0.550	ug/l	0.550	5.00	
Hexachlorobutadiene	<4.39	ug/l	4.39	10.0	
2-Hexanone	<5.50	ug/l	5.50	50.0	
Iodomethane	<11.9	ug/l	11.9	100	
Isobutylalcohol	<79.5	ug/l	79.5	500	
Isopropylbenzene	<0.535	ug/l	0.535	5.00	

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Analysis: 8260B

Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<0.745	ug/l	0.745	5.00	
4-methyl-2-pentanone (MIBK)	<7.45	ug/l	7.45	25.0	
Methylene chloride	<2.27	ug/l	2.27	25.0	
Naphthalene	<0.494	ug/l	0.494	5.00	
n-Propylbenzene	<0.690	ug/l	0.690	5.00	
Styrene	<0.362	ug/l	0.362	5.00	
tert-Butylbenzene	<1.03	ug/l	1.03	5.00	
1,1,1,2-Tetrachloroethane	<0.740	ug/l	0.740	5.00	
1,1,2,2-Tetrachloroethane	<1.47	ug/l	1.47	5.00	
Tetrachloroethene	<0.545	ug/l	0.545	5.00	
Toluene	<0.775	ug/l	0.775	5.00	
1,2,3-Trichlorobenzene	<1.10	ug/l	1.10	5.00	
1,2,4-Trichlorobenzene	<1.06	ug/l	1.06	5.00	
1,1,1-Trichloroethane	<0.430	ug/l	0.430	5.00	
1,1,2-Trichloroethane	<1.50	ug/l	1.50	5.00	
Trichloroethene	5.5	ug/l	1.20	5.00	
Trichlorofluoromethane	<0.800	ug/l	0.800	5.00	
1,2,3-Trichloropropane	<1.82	ug/l	1.82	5.00	
1,2,4-Trimethylbenzene	<0.442	ug/l	0.442	5.00	
1,3,5-Trimethylbenzene	<0.785	ug/l	0.785	5.00	
Vinyl chloride	16.3	ug/l	0.760	5.00	
m,p-Xylene	<1.48	ug/l	1.48	10.0	
o-Xylene	<0.935	ug/l	0.935	5.00	

Analysis: 8270M

Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acenaphthene	<0.0500	ug/l	0.0500	0.100	
Acenaphthylene	<0.0500	ug/l	0.0500	0.100	
Anthracene	<0.0500	ug/l	0.0500	0.100	
Benzo(a)anthracene	<0.0500	ug/l	0.0500	0.100	
Benzo(a)pyrene	<0.0500	ug/l	0.0500	0.100	
Benzo(b)fluoranthene	<0.0500	ug/l	0.0500	0.100	
Benzo(ghi)perylene	<0.0500	ug/l	0.0500	0.100	J,U
Benzo(k)fluoranthene	<0.0500	ug/l	0.0500	0.100	
Chrysene	<0.0500	ug/l	0.0500	0.100	
Dibenzo(a,h)anthracene	<0.100	ug/l	0.100	0.200	J,U
Fluoranthene	<0.0500	ug/l	0.0500	0.100	
Fluorene	<0.0500	ug/l	0.0500	0.100	
Indeno(1,2,3-cd)pyrene	<0.0500	ug/l	0.0500	0.100	J,U
Naphthalene	<0.0500	ug/l	0.0500	0.100	
Phenanthrene	<0.0500	ug/l	0.0500	0.100	
Pyrene	<0.0500	ug/l	0.0500	0.100	

RP-07-84

Analysis: 8290

Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	2.6	pg/l	1.0	7.81	N - EMPC data
1,2,3,4,6,7,8-HpCDF	<0.5	pg/l	0.5	17.7	
1,2,3,4,7,8,9-HpCDF	<0.6	pg/l	0.6	12.6	
1,2,3,4,7,8-HxCDD	1.7	pg/l	0.6	6.57	J
1,2,3,6,7,8-HxCDD	1.7	pg/l	0.5	8.19	J
1,2,3,7,8,9-HxCDD	1.9	pg/l	0.6	14.3	J
1,2,3,4,7,8-HxCDF	2.4	pg/l	0.4	17.3	J
1,2,3,6,7,8-HxCDF	1.8	pg/l	0.3	8.86	J
1,2,3,7,8,9-HxCDF	1.5	pg/l	0.4	30.4	J
2,3,4,6,7,8-HxCDF	1.2	pg/l	0.4	20.8	J
1,2,3,4,6,7,8,9-OCDD	18.9	pg/l	1.6	17.7	J
1,2,3,4,6,7,8,9-OCDF	3.3	pg/l	1.3	17.2	N - EMPC data
1,2,3,7,8-PeCDD	<0.4	pg/l	0.4	7.43	
1,2,3,7,8-PeCDF	3.0	pg/l	0.3	4.48	N - EMPC data
2,3,4,7,8-PeCDF	1.7	pg/l	0.4	5.52	N - EMPC data
2,3,7,8-TCDD	<0.6	pg/l	0.6	3.14	
2,3,7,8-TCDF	<0.4	pg/l	0.4	6.00	
Total HpCDD	<1.0	pg/l	1.0	7.81	
Total HpCDF	<0.5	pg/l	0.5	12.6	
Total HxCDD	5.4	pg/l	0.5	6.57	
Total HxCDF	6.9	pg/l	0.4	8.86	
Total PeCDD	<0.4	pg/l	0.4	7.43	
Total PeCDF	<0.3	pg/l	0.3	4.48	
Total TCDD	<0.6	pg/l	0.6	3.14	
Total TCDF	<0.4	pg/l	0.4	6.00	
EMPC-HPCDD	5.0	pg/l	1.0	7.81	N - EMPC data
EMPC-PECDF	4.7	pg/l	0.3	4.48	N - EMPC data
EMPC-TCDF	1.4	pg/l	0.4	6.00	U,N - EMPC data

Analysis: NWTPH-DX

Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.362	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/13/04 Time: 10:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	1250	ug/l	0.370	1.20	

W-03-S

Analysis: 200.8 Sample Date: 06/10/04 Time: 13:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Lead	0.00088	mg/l	0.000224	0.00100	

Analysis: 200.8 (Dissolved) Sample Date: 06/10/04 Time: 13:45

Compound	Concentration	Units	MDL	MRL	Qualifiers
Lead (Dissolved)	<0.000224	mg/l	0.000224	0.00100	

W-04-S

Analysis: 200.8 Sample Date: 06/10/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Lead	0.00101	mg/l	0.000224	0.00100	

Analysis: 200.8 (Dissolved) Sample Date: 06/10/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Lead (Dissolved)	<0.000224	mg/l	0.000224	0.00100	

W-09-116

Analysis: 300.0
Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	735	mg/l	2.07	50.0	
Nitrate	<0.0173	mg/l	0.0173	0.100	
Nitrite(as N)	1	mg/l	0.146	1.00	
Sulfate	67	mg/l	0.170	1.00	

Analysis: 310.1
Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	501	mg/l	1.04	50.0	

Analysis: 350.1
Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.195	mg/l	0.00760	0.0500	

Analysis: 351.2
Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	0.498	mg/l	0.332	0.500	

Analysis: 365.2
Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.0128	mg/l	0.00141	0.0100	

Analysis: 376.2
Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	<0.0150	mg/l	0.0150	0.200	

Analysis: 405.1
Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	4.82	mg/l	1.13	4.00	

Analysis: 410.4
Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	16.8	mg/l	1.69	5.00	

Analysis: 415.1/5310
Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	3.8	mg/l	0.419	1.00	

Analysis: 6010B
Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	<0.0434	mg/l	0.0434	0.100	
Calcium	211	mg/l	0.361	1.00	
Iron	0.867	mg/l	0.00640	0.100	
Magnesium	114	mg/l	0.136	1.00	
Potassium	13.6	mg/l	0.111	1.00	
Sodium	246	mg/l	0.167	10.0	

W-09-116

Analysis: 6020

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	0.00446	mg/l	0.000964	0.00100	
Cadmium	<0.000178	mg/l	0.000178	0.00100	
Chromium	<0.000791	mg/l	0.000791	0.00100	
Copper	0.00427	mg/l	0.000259	0.00200	
Lead	<0.0000870	mg/l	0.0000870	0.00100	
Manganese	10.5	mg/l	0.000272	0.0400	
Nickel	0.0204	mg/l	0.000826	0.00200	
Vanadium	0.00232	mg/l	0.000669	0.00500	
Zinc	0.00997	mg/l	0.00102	0.00500	

Analysis: 6020 (Dissolved)

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.00741	mg/l	0.000964	0.00100	
Cadmium (Dissolved)	0.00014	mg/l	0.0000730	0.00100	
Chromium (Dissolved)	0.00135	mg/l	0.000791	0.00100	
Copper (Dissolved)	0.00623	mg/l	0.000259	0.00200	
Lead (Dissolved)	<0.0000870	mg/l	0.0000870	0.00100	
Nickel (Dissolved)	0.0284	mg/l	0.000242	0.00200	
Vanadium (Dissolved)	0.0024	mg/l	0.000669	0.00500	
Zinc (Dissolved)	0.00804	mg/l	0.00102	0.00500	

Analysis: 7470A

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury	<0.000103	mg/l	0.000103	0.000200	

Analysis: 7470A (Dissolved)

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury (Dissolved)	<0.000103	mg/l	0.000103	0.000200	

W-09-116

Analysis: 8081A

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aldrin	<0.0500	ug/l	0.0500	0.100	
gamma-BHC (Lindane)	<0.0500	ug/l	0.0500	0.100	
alpha-BHC	<0.0500	ug/l	0.0500	0.100	J,U
beta-BHC	<0.0500	ug/l	0.0500	0.100	
delta-BHC	<0.0500	ug/l	0.0500	0.100	
alpha-Chlordane	0.0663	ug/l	0.0500	0.100	N
gamma-Chlordane	0.313	ug/l	0.0500	0.100	N
4,4'-DDD	<0.0500	ug/l	0.0500	0.100	
4,4'-DDE	<0.0500	ug/l	0.0500	0.100	
4,4'-DDT	<0.0500	ug/l	0.0500	0.100	
Dieldrin	<0.0500	ug/l	0.0500	0.100	
Endosulfan I	<0.0500	ug/l	0.0500	0.100	
Endosulfan II	<0.0500	ug/l	0.0500	0.100	
Endosulfan sulfate	<0.0500	ug/l	0.0500	0.100	
Endrin	<0.0500	ug/l	0.0500	0.100	
Endrin aldehyde	<0.0500	ug/l	0.0500	0.100	
Endrin Ketone	<0.0500	ug/l	0.0500	0.100	
Heptachlor	0.0523	ug/l	0.0500	0.100	N
Heptachlor epoxide	<0.450	ug/l	0.450	0.450	
Hexachlorobenzene	<0.0500	ug/l	0.0500	0.100	
Methoxychlor	<0.0500	ug/l	0.0500	0.100	

Analysis: 8151MOD

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<1.26	ug/l	1.26	3.00	R
2,4-D	1.39	ug/l	1.31	3.00	
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	<1.90	ug/l	1.90	3.00	
Dicamba	<1.01	ug/l	1.01	3.00	
Dichlorprop	5.72	ug/l	1.16	3.00	
Dinoseb	<1.54	ug/l	1.54	3.00	
MCPA	<127	ug/l	127	300	
MCPP	<111	ug/l	111	300	J,U
2,4,5-T	<1.39	ug/l	1.39	3.00	
2,4,5-TP(Silvex)	17.7	ug/l	1.24	3.00	

W-09-116

Analysis: 8260B Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<46.8	ug/l	46.8	500	
Benzene	145	ug/l	2.94	20.0	
Bromobenzene	<6.66	ug/l	6.66	20.0	
Bromochloromethane	<5.32	ug/l	5.32	20.0	
Bromodichloromethane	<3.66	ug/l	3.66	20.0	
Bromoform	<3.48	ug/l	3.48	20.0	
Bromomethane	<5.64	ug/l	5.64	200	J,U
2-Butanone (MEK)	<32.0	ug/l	32.0	500	
n-Butylbenzene	<3.66	ug/l	3.66	20.0	
sec-Butylbenzene	<3.86	ug/l	3.86	20.0	
Carbon disulfide	<4.66	ug/l	4.66	200	
CarbonTetrachloride	<2.80	ug/l	2.80	40.0	
Chlorobenzene	290	ug/l	2.72	20.0	
Chloroethane	<6.54	ug/l	6.54	40.0	
Chloroform	<2.86	ug/l	2.86	20.0	
Chloromethane	<3.18	ug/l	3.18	100	
2-Chlorotoluene	<2.20	ug/l	2.20	20.0	
4-Chlorotoluene	<2.40	ug/l	2.40	20.0	
1,2-Dibromo-3-chloropropane	<8.10	ug/l	8.10	20.0	
Dibromochloromethane	<2.66	ug/l	2.66	20.0	
1,2-Dibromoethane	<3.74	ug/l	3.74	20.0	
Dibromomethane	<2.34	ug/l	2.34	20.0	
1,2-Dichlorobenzene	2160	ug/l	1.72	20.0	
1,3-Dichlorobenzene	66.2	ug/l	2.64	20.0	
1,4-Dichlorobenzene	660	ug/l	3.74	20.0	
Dichlorodifluoromethane	<6.24	ug/l	6.24	100	
1,1-Dichloroethane	<3.14	ug/l	3.14	20.0	
1,2-Dichloroethane	<2.84	ug/l	2.84	20.0	
1,1-Dichloroethene	<3.94	ug/l	3.94	20.0	
cis-1,2-Dichloroethene	14	ug/l	3.40	20.0	
trans-1,2-Dichloroethene	<3.50	ug/l	3.50	20.0	
1,2-Dichloropropane	<5.32	ug/l	5.32	20.0	
1,3-Dichloropropane	<3.02	ug/l	3.02	20.0	
2,2-Dichloropropane	<2.08	ug/l	2.08	20.0	
1,1-Dichloropropene	<2.98	ug/l	2.98	20.0	
cis-1,3-Dichloropropene	<2.56	ug/l	2.56	20.0	
trans-1,3-Dichloropropene	<3.04	ug/l	3.04	20.0	
2-Ethyl-1-hexanol	<2000	ug/l	2000	2000	
Ethylbenzene	<2.20	ug/l	2.20	20.0	
Hexachlorobutadiene	<17.6	ug/l	17.6	40.0	
2-Hexanone	<22.0	ug/l	22.0	200	
Iodomethane	<47.6	ug/l	47.6	400	
Isobutylalcohol	<318	ug/l	318	2000	
Isopropylbenzene	6.2	ug/l	2.14	20.0	

W-09-116

Analysis: 8260B Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<2.98	ug/l	2.98	20.0	
4-methyl-2-pentanone (MIBK)	<29.8	ug/l	29.8	100	
Methylene chloride	<9.08	ug/l	9.08	100	
Naphthalene	<1.98	ug/l	1.98	20.0	
n-Propylbenzene	<2.76	ug/l	2.76	20.0	
Styrene	<1.45	ug/l	1.45	20.0	
tert-Butylbenzene	<4.12	ug/l	4.12	20.0	
1,1,1,2-Tetrachloroethane	<2.96	ug/l	2.96	20.0	
1,1,2,2-Tetrachloroethane	<5.88	ug/l	5.88	20.0	
Tetrachloroethene	<2.18	ug/l	2.18	20.0	
Toluene	<3.10	ug/l	3.10	20.0	
1,2,3-Trichlorobenzene	<4.38	ug/l	4.38	20.0	
1,2,4-Trichlorobenzene	<4.26	ug/l	4.26	20.0	
1,1,1-Trichloroethane	<1.72	ug/l	1.72	20.0	
1,1,2-Trichloroethane	<6.02	ug/l	6.02	20.0	
Trichloroethene	17.2	ug/l	4.82	20.0	
Trichlorofluoromethane	<3.20	ug/l	3.20	20.0	
1,2,3-Trichloropropane	<7.30	ug/l	7.30	20.0	
1,2,4-Trimethylbenzene	<1.77	ug/l	1.77	20.0	
1,3,5-Trimethylbenzene	<3.14	ug/l	3.14	20.0	
Vinyl chloride	16.4	ug/l	3.04	20.0	
m,p-Xylene	<5.90	ug/l	5.90	40.0	
o-Xylene	<3.74	ug/l	3.74	20.0	

W-09-116

Analysis: 8270C Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acenaphthene	<3.00	ug/l	3.00	5.00	
Acenaphthylene	<3.00	ug/l	3.00	5.00	
Anthracene	<3.00	ug/l	3.00	5.00	
Benzo(a)anthracene	<3.00	ug/l	3.00	5.00	
Benzo(a)pyrene	<3.00	ug/l	3.00	5.00	
Benzo(b)fluoranthene	<3.00	ug/l	3.00	5.00	
Benzo(ghi)perylene	<3.00	ug/l	3.00	5.00	
Benzo(k)fluoranthene	<3.00	ug/l	3.00	5.00	
Benzoic acid	<5.00	ug/l	5.00	50.0	J,U
Benzyl alcohol	<5.00	ug/l	5.00	10.0	J,U
Bis(2-Chloroisopropyl) ether	<5.00	ug/l	5.00	10.0	
4-Bromophenylphenyl ether	<3.00	ug/l	3.00	5.00	
Butylbenzylphthalate	<3.00	ug/l	3.00	5.00	
4-Chloro-3-methylphenol	3.84	ug/l	3.00	5.00	
4-Chloroaniline	<5.00	ug/l	5.00	20.0	
Bis(2-Chloroethoxy) methane	<5.00	ug/l	5.00	10.0	
Bis(2-Chloroethyl) ether	<3.00	ug/l	3.00	5.00	
2-Chloronapthalene	<3.00	ug/l	3.00	5.00	
2-Chlorophenol	<5.00	ug/l	5.00	5.00	
4-Chlorophenylphenyl ether	<3.00	ug/l	3.00	5.00	
Chrysene	<3.00	ug/l	3.00	5.00	
Dibenzo(a,h)anthracene	<3.00	ug/l	3.00	5.00	
Dibenzofuran	<3.00	ug/l	3.00	5.00	
1,2-Dichlorobenzene	1160	ug/l	30.0	50.0	J
1,3-Dichlorobenzene	58.7	ug/l	3.00	5.00	J
1,4-Dichlorobenzene	485	ug/l	30.0	50.0	J
3,3'-Dichlorobenzidine	<5.00	ug/l	5.00	5.00	
2,4-Dichlorophenol	<5.00	ug/l	5.00	5.00	
2,6-Dichlorophenol	<10.0	ug/l	10.0	25.0	
Diethylphthalate	<3.00	ug/l	3.00	5.00	
2,4-Dimethylphenol	<10.0	ug/l	10.0	10.0	
Dimethylphthalate	<3.00	ug/l	3.00	5.00	
2,4-Dinitrophenol	<15.0	ug/l	15.0	25.0	
2,4-Dinitrotoluene	<3.00	ug/l	3.00	5.00	J,U
2,6-Dinitrotoluene	<3.00	ug/l	3.00	5.00	
Dinoseb	<10.0	ug/l	10.0	25.0	
Bis(2-Ethylhexyl) pthalate	<10.0	ug/l	10.0	10.0	
Fluoranthene	<3.00	ug/l	3.00	5.00	
Fluorene	<3.00	ug/l	3.00	5.00	
Hexachlorobenzene	<3.00	ug/l	3.00	5.00	
Hexachlorobutadiene	<5.00	ug/l	5.00	10.0	J,U
Hexachlorocyclopentadiene	<5.00	ug/l	5.00	10.0	J,U
Hexachloroethane	<5.00	ug/l	5.00	10.0	J,U
Indeno(1,2,3-cd)pyrene	<3.00	ug/l	3.00	5.00	

W-09-116

Analysis: 8270C Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Isophorone	<3.00	ug/l	3.00	5.00	J,U
2-Methyl-4,6-dinitrophenol	<5.00	ug/l	5.00	10.0	
1-Methylnaphthalene	<3.00	ug/l	3.00	5.00	
2-Methylnaphthalene	<3.00	ug/l	3.00	5.00	J,U
2-Methylphenol	<5.00	ug/l	5.00	10.0	
3 & 4-Methylphenol	<5.00	ug/l	5.00	5.00	
Naphthalene	<3.00	ug/l	3.00	5.00	
Di-n-butylphthalate	<3.00	ug/l	3.00	5.00	
2-Nitroaniline	<3.00	ug/l	3.00	5.00	
3-Nitroaniline	<5.00	ug/l	5.00	10.0	
4-Nitroaniline	<5.00	ug/l	5.00	10.0	
Nitrobenzene	<3.00	ug/l	3.00	5.00	
2-Nitrophenol	<5.00	ug/l	5.00	5.00	
4-Nitrophenol	<10.0	ug/l	10.0	25.0	J,U
N-Nitrosodiphenylamine	<3.00	ug/l	3.00	5.00	
N-Nitrosodi-n-propyl amine	<3.00	ug/l	3.00	10.0	
Di-n-octyl phthalate	<5.00	ug/l	5.00	5.00	
Pentachlorophenol	<5.00	ug/l	5.00	10.0	
Phenanthrene	<3.00	ug/l	3.00	5.00	
Phenol	<3.00	ug/l	3.00	5.00	J,U
Pyrene	<3.00	ug/l	3.00	5.00	
Tetrachlorophenols	<10.0	ug/l	10.0	25.0	
1,2,4-Trichlorobenzene	<3.00	ug/l	3.00	5.00	J,U
2,4,5-Trichlorophenol	<5.00	ug/l	5.00	5.00	
2,4,6-Trichlorophenol	<5.00	ug/l	5.00	5.00	

W-09-116

Analysis: 8290

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	<2.8	pg/l	2.8	7.81	
1,2,3,4,6,7,8-HpCDF	<1.5	pg/l	1.5	17.7	
1,2,3,4,7,8,9-HpCDF	<2.1	pg/l	2.1	12.6	
1,2,3,4,7,8-HxCDD	<1.6	pg/l	1.6	6.57	
1,2,3,6,7,8-HxCDD	<1.4	pg/l	1.4	8.19	
1,2,3,7,8,9-HxCDD	<1.8	pg/l	1.8	14.3	
1,2,3,4,7,8-HxCDF	<1.0	pg/l	1.0	17.3	
1,2,3,6,7,8-HxCDF	<1.0	pg/l	1.0	8.86	
1,2,3,7,8,9-HxCDF	<1.2	pg/l	1.2	30.4	
2,3,4,6,7,8-HxCDF	<0.9	pg/l	0.9	20.8	
1,2,3,4,6,7,8,9-OCDD	<5.6	pg/l	5.6	17.7	
1,2,3,4,6,7,8,9-OCDF	<4.1	pg/l	4.1	17.2	
1,2,3,7,8-PeCDD	<1.4	pg/l	1.4	7.43	
1,2,3,7,8-PeCDF	<0.8	pg/l	0.8	4.48	
2,3,4,7,8-PeCDF	<1.1	pg/l	1.1	5.52	
2,3,7,8-TCDD	<1.2	pg/l	1.2	3.14	
2,3,7,8-TCDF	<0.9	pg/l	0.9	6.00	
Total HpCDD	<2.8	pg/l	2.8	7.81	
Total HpCDF	<1.8	pg/l	1.8	12.6	
Total HxCDD	<1.6	pg/l	1.6	6.57	
Total HxCDF	<1.0	pg/l	1.0	8.86	
Total PeCDD	<1.4	pg/l	1.4	7.43	
Total PeCDF	<0.9	pg/l	0.9	4.48	
Total TCDD	<1.2	pg/l	1.2	3.14	
Total TCDF	283	pg/l	0.9	6.00	
EMPC-TCDF	285	pg/l	0.9	6.00	N - EMPC data

Analysis: NWTPH-DX

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	1.38	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	3990	ug/l	16.0	51.9	

W-09-116 (Dup)

Analysis: 6020

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	0.00454	mg/l	0.000964	0.00100	
Cadmium	<0.000178	mg/l	0.000178	0.00100	
Chromium	<0.000791	mg/l	0.000791	0.00100	
Copper	0.00456	mg/l	0.000259	0.00200	
Lead	<0.0000870	mg/l	0.0000870	0.00100	
Nickel	0.0222	mg/l	0.000826	0.00200	
Vanadium	0.00268	mg/l	0.000669	0.00500	
Zinc	0.0112	mg/l	0.00102	0.00500	

Analysis: 6020 (Dissolved)

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.00776	mg/l	0.000964	0.00100	
Cadmium (Dissolved)	<0.0000730	mg/l	0.0000730	0.00100	
Chromium (Dissolved)	0.00203	mg/l	0.000791	0.00100	
Copper (Dissolved)	0.00426	mg/l	0.000259	0.00200	
Lead (Dissolved)	<0.0000870	mg/l	0.0000870	0.00100	
Nickel (Dissolved)	0.0319	mg/l	0.000242	0.00200	
Vanadium (Dissolved)	0.00297	mg/l	0.000669	0.00500	
Zinc (Dissolved)	0.00906	mg/l	0.00102	0.00500	

Analysis: 7470A

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury	<0.000103	mg/l	0.000103	0.000200	

Analysis: 7470A (Dissolved)

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury (Dissolved)	<0.000103	mg/l	0.000103	0.000200	

W-09-116 (Dup)

Analysis: 8081A

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aldrin	<0.0500	ug/l	0.0500	0.100	
gamma-BHC (Lindane)	<0.0500	ug/l	0.0500	0.100	
alpha-BHC	<0.0500	ug/l	0.0500	0.100	J,U
beta-BHC	<0.0500	ug/l	0.0500	0.100	
delta-BHC	<0.0500	ug/l	0.0500	0.100	
alpha-Chlordane	<0.0500	ug/l	0.0500	0.100	
gamma-Chlordane	<0.0500	ug/l	0.0500	0.100	
4,4'-DDD	<0.0500	ug/l	0.0500	0.100	
4,4'-DDE	0.154	ug/l	0.0500	0.100	J,N
4,4'-DDT	<0.0500	ug/l	0.0500	0.100	
Dieldrin	<0.0500	ug/l	0.0500	0.100	
Endosulfan I	<0.0500	ug/l	0.0500	0.100	
Endosulfan II	<0.0500	ug/l	0.0500	0.100	
Endosulfan sulfate	<0.0500	ug/l	0.0500	0.100	
Endrin	0.234	ug/l	0.0500	0.100	N
Endrin aldehyde	<0.0500	ug/l	0.0500	0.100	
Endrin Ketone	<0.0500	ug/l	0.0500	0.100	
Heptachlor	<0.0500	ug/l	0.0500	0.100	
Heptachlor epoxide	<0.0500	ug/l	0.0500	0.100	
Hexachlorobenzene	<0.0500	ug/l	0.0500	0.100	
Methoxychlor	<0.0500	ug/l	0.0500	0.100	

Analysis: 8151MOD

Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<1.26	ug/l	1.26	3.00	R
2,4-D	1.94	ug/l	1.31	3.00	N
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	<1.90	ug/l	1.90	3.00	
Dicamba	<1.01	ug/l	1.01	3.00	
Dichlorprop	7.14	ug/l	1.16	3.00	
Dinoseb	<1.54	ug/l	1.54	3.00	
MCPA	<127	ug/l	127	300	
MCPP	<111	ug/l	111	300	J,U
2,4,5-T	<1.39	ug/l	1.39	3.00	
2,4,5-TP(Silvex)	21.3	ug/l	1.24	3.00	

W-09-116 (Dup)

Analysis: 8260B Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<46.8	ug/l	46.8	500	J,U
Benzene	151	ug/l	2.94	20.0	
Bromobenzene	<6.66	ug/l	6.66	20.0	
Bromochloromethane	<5.32	ug/l	5.32	20.0	
Bromodichloromethane	<3.66	ug/l	3.66	20.0	
Bromoform	<3.48	ug/l	3.48	20.0	
Bromomethane	<5.64	ug/l	5.64	200	J,U
2-Butanone (MEK)	<32.0	ug/l	32.0	500	
n-Butylbenzene	<3.66	ug/l	3.66	20.0	
sec-Butylbenzene	<3.86	ug/l	3.86	20.0	
Carbon disulfide	<4.66	ug/l	4.66	200	
CarbonTetrachloride	<2.80	ug/l	2.80	40.0	
Chlorobenzene	295	ug/l	2.72	20.0	
Chloroethane	<6.54	ug/l	6.54	40.0	
Chloroform	<2.86	ug/l	2.86	20.0	
Chloromethane	<3.18	ug/l	3.18	100	
2-Chlorotoluene	<2.20	ug/l	2.20	20.0	
4-Chlorotoluene	<2.40	ug/l	2.40	20.0	
1,2-Dibromo-3-chloropropane	<8.10	ug/l	8.10	20.0	
Dibromochloromethane	<2.66	ug/l	2.66	20.0	
1,2-Dibromoethane	<3.74	ug/l	3.74	20.0	
Dibromomethane	<2.34	ug/l	2.34	20.0	
1,2-Dichlorobenzene	2200	ug/l	1.72	20.0	
1,3-Dichlorobenzene	67	ug/l	2.64	20.0	
1,4-Dichlorobenzene	673	ug/l	3.74	20.0	
Dichlorodifluoromethane	<6.24	ug/l	6.24	100	
1,1-Dichloroethane	<3.14	ug/l	3.14	20.0	
1,2-Dichloroethane	<2.84	ug/l	2.84	20.0	
1,1-Dichloroethene	5	ug/l	3.94	20.0	
cis-1,2-Dichloroethene	14.4	ug/l	3.40	20.0	
trans-1,2-Dichloroethene	<3.50	ug/l	3.50	20.0	
1,2-Dichloropropane	<5.32	ug/l	5.32	20.0	
1,3-Dichloropropane	<3.02	ug/l	3.02	20.0	
2,2-Dichloropropane	<2.08	ug/l	2.08	20.0	
1,1-Dichloropropene	<2.98	ug/l	2.98	20.0	
cis-1,3-Dichloropropene	<2.56	ug/l	2.56	20.0	
trans-1,3-Dichloropropene	<3.04	ug/l	3.04	20.0	
2-Ethyl-1-hexanol	<2000	ug/l	2000	2000	J,U
Ethylbenzene	<2.20	ug/l	2.20	20.0	
Hexachlorobutadiene	<17.6	ug/l	17.6	40.0	
2-Hexanone	<22.0	ug/l	22.0	200	
Iodomethane	<47.6	ug/l	47.6	400	
Isobutylalcohol	<318	ug/l	318	2000	J,U
Isopropylbenzene	6.2	ug/l	2.14	20.0	

W-09-116 (Dup)

Analysis: 8260B Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<2.98	ug/l	2.98	20.0	
4-methyl-2-pentanone (MIBK)	<29.8	ug/l	29.8	100	
Methylene chloride	<9.08	ug/l	9.08	100	
Naphthalene	<1.98	ug/l	1.98	20.0	
n-Propylbenzene	<2.76	ug/l	2.76	20.0	
Styrene	<1.45	ug/l	1.45	20.0	
tert-Butylbenzene	<4.12	ug/l	4.12	20.0	
1,1,1,2-Tetrachloroethane	<2.96	ug/l	2.96	20.0	
1,1,2,2-Tetrachloroethane	<5.88	ug/l	5.88	20.0	
Tetrachloroethene	<2.18	ug/l	2.18	20.0	
Toluene	<3.10	ug/l	3.10	20.0	
1,2,3-Trichlorobenzene	<4.38	ug/l	4.38	20.0	
1,2,4-Trichlorobenzene	<4.26	ug/l	4.26	20.0	
1,1,1-Trichloroethane	<1.72	ug/l	1.72	20.0	
1,1,2-Trichloroethane	<6.02	ug/l	6.02	20.0	
Trichloroethene	17.2	ug/l	4.82	20.0	
Trichlorofluoromethane	<3.20	ug/l	3.20	20.0	
1,2,3-Trichloropropane	<7.30	ug/l	7.30	20.0	
1,2,4-Trimethylbenzene	<1.77	ug/l	1.77	20.0	
1,3,5-Trimethylbenzene	<3.14	ug/l	3.14	20.0	
Vinyl chloride	17.2	ug/l	3.04	20.0	
m,p-Xylene	<5.90	ug/l	5.90	40.0	
o-Xylene	<3.74	ug/l	3.74	20.0	

W-09-116 (Dup)

Analysis: 8270C Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acenaphthene	<3.00	ug/l	3.00	5.00	
Acenaphthylene	<3.00	ug/l	3.00	5.00	
Anthracene	<3.00	ug/l	3.00	5.00	
Benzo(a)anthracene	<3.00	ug/l	3.00	5.00	
Benzo(a)pyrene	<3.00	ug/l	3.00	5.00	
Benzo(b)fluoranthene	<3.00	ug/l	3.00	5.00	
Benzo(ghi)perylene	<3.00	ug/l	3.00	5.00	
Benzo(k)fluoranthene	<3.00	ug/l	3.00	5.00	
Benzoic acid	<5.00	ug/l	5.00	50.0	J,U
Benzyl alcohol	<5.00	ug/l	5.00	10.0	J,U
Bis(2-Chloroisopropyl) ether	<5.00	ug/l	5.00	10.0	
4-Bromophenylphenyl ether	<3.00	ug/l	3.00	5.00	
Butylbenzylphthalate	<3.00	ug/l	3.00	5.00	
4-Chloro-3-methylphenol	3.65	ug/l	3.00	5.00	
4-Chloroaniline	<5.00	ug/l	5.00	20.0	
Bis(2-Chloroethoxy) methane	<5.00	ug/l	5.00	10.0	
Bis(2-Chloroethyl) ether	<3.00	ug/l	3.00	5.00	
2-Chloronapthalene	<3.00	ug/l	3.00	5.00	
2-Chlorophenol	<5.00	ug/l	5.00	5.00	
4-Chlorophenylphenyl ether	<3.00	ug/l	3.00	5.00	
Chrysene	<3.00	ug/l	3.00	5.00	
Dibenzo(a,h)anthracene	<3.00	ug/l	3.00	5.00	
Dibenzofuran	<3.00	ug/l	3.00	5.00	
1,2-Dichlorobenzene	1250	ug/l	30.0	50.0	J
1,3-Dichlorobenzene	56	ug/l	3.00	5.00	J
1,4-Dichlorobenzene	518	ug/l	30.0	50.0	J
3,3'-Dichlorobenzidine	<5.00	ug/l	5.00	5.00	
2,4-Dichlorophenol	5.25	ug/l	5.00	5.00	
2,6-Dichlorophenol	<10.0	ug/l	10.0	25.0	
Diethylphthalate	<3.00	ug/l	3.00	5.00	
2,4-Dimethylphenol	<10.0	ug/l	10.0	10.0	
Dimethylphthalate	<3.00	ug/l	3.00	5.00	
2,4-Dinitrophenol	<15.0	ug/l	15.0	25.0	
2,4-Dinitrotoluene	<3.00	ug/l	3.00	5.00	
2,6-Dinitrotoluene	<3.00	ug/l	3.00	5.00	
Dinoseb	<10.0	ug/l	10.0	25.0	
Bis(2-Ethylhexyl) pthalate	<10.0	ug/l	10.0	10.0	
Fluoranthene	<3.00	ug/l	3.00	5.00	
Fluorene	<3.00	ug/l	3.00	5.00	
Hexachlorobenzene	<3.00	ug/l	3.00	5.00	
Hexachlorobutadiene	<5.00	ug/l	5.00	10.0	J,U
Hexachlorocyclopentadiene	<5.00	ug/l	5.00	10.0	J,U
Hexachloroethane	<5.00	ug/l	5.00	10.0	J,U
Indeno(1,2,3-cd)pyrene	<3.00	ug/l	3.00	5.00	

W-09-116 (Dup)

Analysis: 8270C Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Isophorone	<3.00	ug/l	3.00	5.00	J,U
2-Methyl-4,6-dinitrophenol	<5.00	ug/l	5.00	10.0	
1-Methylnaphthalene	<3.00	ug/l	3.00	5.00	
2-Methylnaphthalene	<3.00	ug/l	3.00	5.00	J,U
2-Methylphenol	<5.00	ug/l	5.00	10.0	
3 & 4-Methylphenol	<5.00	ug/l	5.00	5.00	
Naphthalene	<3.00	ug/l	3.00	5.00	
Di-n-butylphthalate	<3.00	ug/l	3.00	5.00	
2-Nitroaniline	<3.00	ug/l	3.00	5.00	
3-Nitroaniline	<5.00	ug/l	5.00	10.0	
4-Nitroaniline	<5.00	ug/l	5.00	10.0	
Nitrobenzene	<3.00	ug/l	3.00	5.00	
2-Nitrophenol	<5.00	ug/l	5.00	5.00	
4-Nitrophenol	<10.0	ug/l	10.0	25.0	J,U
N-Nitrosodiphenylamine	<3.00	ug/l	3.00	5.00	
N-Nitrosodi-n-propyl amine	<3.00	ug/l	3.00	10.0	
Di-n-octyl phthalate	<5.00	ug/l	5.00	5.00	
Pentachlorophenol	<5.00	ug/l	5.00	10.0	
Phenanthrene	<3.00	ug/l	3.00	5.00	
Phenol	<3.00	ug/l	3.00	5.00	J,U
Pyrene	<3.00	ug/l	3.00	5.00	
Tetrachlorophenols	<10.0	ug/l	10.0	25.0	
1,2,4-Trichlorobenzene	<3.00	ug/l	3.00	5.00	J,U
2,4,5-Trichlorophenol	<5.00	ug/l	5.00	5.00	
2,4,6-Trichlorophenol	<5.00	ug/l	5.00	5.00	

W-09-116 (Dup)

Analysis: 8290 Sample Date: 04/20/04 Time: 10:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	2.0	pg/l	0.8	7.81	N - EMPC data
1,2,3,4,6,7,8-HpCDF	1.1	pg/l	0.4	17.7	N - EMPC data
1,2,3,4,7,8,9-HpCDF	0.60	pg/l	0.5	12.6	N - EMPC data
1,2,3,4,7,8-HxCDD	<0.6	pg/l	0.6	6.57	
1,2,3,6,7,8-HxCDD	<0.5	pg/l	0.5	8.19	
1,2,3,7,8,9-HxCDD	1.3	pg/l	0.6	14.3	J
1,2,3,4,7,8-HxCDF	0.83	pg/l	0.3	17.3	U,N - EMPC data
1,2,3,6,7,8-HxCDF	0.53	pg/l	0.3	8.86	N - EMPC data
1,2,3,7,8,9-HxCDF	<0.4	pg/l	0.4	30.4	
2,3,4,6,7,8-HxCDF	<0.3	pg/l	0.3	20.8	
1,2,3,4,6,7,8,9-OCDD	9.5	pg/l	1.4	17.7	U
1,2,3,4,6,7,8,9-OCDF	2.1	pg/l	1.2	17.2	J,N - EMPC data
1,2,3,7,8-PeCDD	<0.6	pg/l	0.6	7.43	
1,2,3,7,8-PeCDF	1.3	pg/l	0.3	4.48	N - EMPC data
2,3,4,7,8-PeCDF	<0.5	pg/l	0.5	5.52	
2,3,7,8-TCDD	<0.8	pg/l	0.8	3.14	
2,3,7,8-TCDF	<0.5	pg/l	0.5	6.00	
Total HpCDD	<0.8	pg/l	0.8	7.81	
Total HpCDF	<0.5	pg/l	0.5	12.6	
Total HxCDD	1.3	pg/l	0.5	6.57	
Total HxCDF	<0.3	pg/l	0.3	8.86	
Total PeCDD	<0.6	pg/l	0.6	7.43	
Total PeCDF	18.2	pg/l	0.4	4.48	
Total TCDD	13.3	pg/l	0.8	3.14	
Total TCDF	127	pg/l	0.5	6.00	

W-11-B

Analysis: 300.0

Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	709	mg/l	2.07	50.0	
Nitrate	<0.0173	mg/l	0.0173	0.100	
Nitrite(as N)	0.9	mg/l	0.146	1.00	
Sulfate	126	mg/l	1.70	10.0	

Analysis: 310.1

Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	322	mg/l	1.04	50.0	

Analysis: 350.1

Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.106	mg/l	0.00760	0.0500	

Analysis: 351.2

Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	<0.332	mg/l	0.332	0.500	

Analysis: 365.2

Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.00506	mg/l	0.00141	0.0100	

Analysis: 376.2

Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	<0.0150	mg/l	0.0150	0.200	

Analysis: 405.1

Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	<1.13	mg/l	1.13	4.00	

Analysis: 410.4

Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	12.1	mg/l	1.69	5.00	

Analysis: 415.1/5310

Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	1.67	mg/l	0.419	1.00	

Analysis: 6010B

Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	<0.0434	mg/l	0.0434	0.100	
Calcium	405	mg/l	0.361	1.00	
Iron	9.31	mg/l	0.00640	0.100	
Magnesium	79.8	mg/l	0.0136	0.100	
Potassium	12.3	mg/l	0.111	1.00	
Sodium	60.9	mg/l	0.167	10.0	

W-11-B

Analysis: 6020 Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	0.584	mg/l	0.0000136	0.00200	

Analysis: 8151MOD Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<1.26	ug/l	1.26	3.00	
2,4-D	<1.31	ug/l	1.31	3.00	
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	<1.90	ug/l	1.90	3.00	
Dicamba	<1.01	ug/l	1.01	3.00	
Dichlorprop	2.3	ug/l	1.16	3.00	
Dinoseb	<1.54	ug/l	1.54	3.00	
MCPA	<127	ug/l	127	300	
MCPP	<111	ug/l	111	300	
2,4,5-T	<1.39	ug/l	1.39	3.00	
2,4,5-TP(Silvex)	14	ug/l	1.24	3.00	

W-11-B

Analysis: 8260B Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<11.7	ug/l	11.7	125	
Benzene	15.6	ug/l	0.735	5.00	
Bromobenzene	<1.66	ug/l	1.66	5.00	
Bromochloromethane	<1.33	ug/l	1.33	5.00	
Bromodichloromethane	<0.915	ug/l	0.915	5.00	
Bromoform	<0.870	ug/l	0.870	5.00	
Bromomethane	<1.41	ug/l	1.41	50.0	
2-Butanone (MEK)	<8.00	ug/l	8.00	125	
n-Butylbenzene	<0.915	ug/l	0.915	5.00	
sec-Butylbenzene	<0.965	ug/l	0.965	5.00	
Carbon disulfide	<1.16	ug/l	1.16	50.0	
CarbonTetrachloride	<0.700	ug/l	0.700	10.0	
Chlorobenzene	93.2	ug/l	0.680	5.00	
Chloroethane	<1.64	ug/l	1.64	10.0	
Chloroform	<0.715	ug/l	0.715	5.00	
Chloromethane	<0.795	ug/l	0.795	25.0	
2-Chlorotoluene	<0.550	ug/l	0.550	5.00	
4-Chlorotoluene	<0.600	ug/l	0.600	5.00	
1,2-Dibromo-3-chloropropane	<2.02	ug/l	2.02	5.00	
Dibromochloromethane	<0.665	ug/l	0.665	5.00	
1,2-Dibromoethane	<0.935	ug/l	0.935	5.00	
Dibromomethane	<0.585	ug/l	0.585	5.00	
1,2-Dichlorobenzene	482	ug/l	0.430	5.00	
1,3-Dichlorobenzene	14.2	ug/l	0.660	5.00	
1,4-Dichlorobenzene	128	ug/l	0.935	5.00	
Dichlorodifluoromethane	<1.56	ug/l	1.56	25.0	
1,1-Dichloroethane	<0.785	ug/l	0.785	5.00	
1,2-Dichloroethane	<0.710	ug/l	0.710	5.00	
1,1-Dichloroethene	2.6	ug/l	0.985	5.00	
cis-1,2-Dichloroethene	24.1	ug/l	0.850	5.00	
trans-1,2-Dichloroethene	1.15	ug/l	0.875	5.00	
1,2-Dichloropropane	<1.33	ug/l	1.33	5.00	
1,3-Dichloropropane	<0.755	ug/l	0.755	5.00	
2,2-Dichloropropane	<0.520	ug/l	0.520	5.00	
1,1-Dichloropropene	<0.745	ug/l	0.745	5.00	
cis-1,3-Dichloropropene	<0.640	ug/l	0.640	5.00	
trans-1,3-Dichloropropene	<0.760	ug/l	0.760	5.00	
2-Ethyl-1-hexanol	<500	ug/l	500	500	
Ethylbenzene	<0.550	ug/l	0.550	5.00	
Hexachlorobutadiene	<4.39	ug/l	4.39	10.0	
2-Hexanone	<5.50	ug/l	5.50	50.0	
Iodomethane	<11.9	ug/l	11.9	100	
Isobutylalcohol	<79.5	ug/l	79.5	500	
Isopropylbenzene	<0.535	ug/l	0.535	5.00	

W-11-B

Analysis: 8260B Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<0.745	ug/l	0.745	5.00	
4-methyl-2-pentanone (MIBK)	<7.45	ug/l	7.45	25.0	
Methylene chloride	<2.27	ug/l	2.27	25.0	
Naphthalene	<0.494	ug/l	0.494	5.00	
n-Propylbenzene	<0.690	ug/l	0.690	5.00	
Styrene	<0.362	ug/l	0.362	5.00	
tert-Butylbenzene	<1.03	ug/l	1.03	5.00	
1,1,1,2-Tetrachloroethane	<0.740	ug/l	0.740	5.00	
1,1,2,2-Tetrachloroethane	<1.47	ug/l	1.47	5.00	
Tetrachloroethene	<0.545	ug/l	0.545	5.00	
Toluene	<0.775	ug/l	0.775	5.00	
1,2,3-Trichlorobenzene	<1.10	ug/l	1.10	5.00	
1,2,4-Trichlorobenzene	<1.06	ug/l	1.06	5.00	
1,1,1-Trichloroethane	<0.430	ug/l	0.430	5.00	
1,1,2-Trichloroethane	<1.50	ug/l	1.50	5.00	
Trichloroethene	2.2	ug/l	1.20	5.00	
Trichlorofluoromethane	<0.800	ug/l	0.800	5.00	
1,2,3-Trichloropropane	<1.82	ug/l	1.82	5.00	
1,2,4-Trimethylbenzene	<0.442	ug/l	0.442	5.00	
1,3,5-Trimethylbenzene	<0.785	ug/l	0.785	5.00	
Vinyl chloride	12.6	ug/l	0.760	5.00	
m,p-Xylene	<1.48	ug/l	1.48	10.0	
o-Xylene	<0.935	ug/l	0.935	5.00	

W-11-B

Analysis: 8290

Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	3.0	pg/l	0.7	7.74	J
1,2,3,4,6,7,8-HpCDF	1.7	pg/l	0.4	17.5	J
1,2,3,4,7,8,9-HpCDF	1.7	pg/l	0.5	12.5	J
1,2,3,4,7,8-HxCDD	<0.5	pg/l	0.5	6.51	
1,2,3,6,7,8-HxCDD	<0.4	pg/l	0.4	8.11	J
1,2,3,7,8,9-HxCDD	1.5	pg/l	0.5	14.2	J
1,2,3,4,7,8-HxCDF	1.4	pg/l	0.3	17.2	J
1,2,3,6,7,8-HxCDF	<0.3	pg/l	0.3	8.77	
1,2,3,7,8,9-HxCDF	1.7	pg/l	0.4	30.1	N - EMPC data
2,3,4,6,7,8-HxCDF	1.7	pg/l	0.3	20.6	J
1,2,3,4,6,7,8,9-OCDD	9.3	pg/l	1.3	17.5	N - EMPC data
1,2,3,4,6,7,8,9-OCDF	3.4	pg/l	1.0	17.1	N - EMPC data
1,2,3,7,8-PeCDD	1.9	pg/l	0.3	7.36	N - EMPC data
1,2,3,7,8-PeCDF	2.2	pg/l	0.2	4.43	J
2,3,4,7,8-PeCDF	2.3	pg/l	0.3	5.47	N - EMPC data
2,3,7,8-TCDD	<0.5	pg/l	0.5	3.11	
2,3,7,8-TCDF	<0.4	pg/l	0.4	5.94	
Total HpCDD	4.8	pg/l	0.7	7.74	
Total HpCDF	3.4	pg/l	0.5	12.5	
Total HxCDD	1.5	pg/l	0.5	6.51	
Total HxCDF	3.1	pg/l	0.3	8.77	
Total PeCDD	<0.3	pg/l	0.3	7.36	
Total PeCDF	2.2	pg/l	0.3	4.43	
Total TCDD	<0.5	pg/l	0.5	3.11	
Total TCDF	<0.4	pg/l	0.4	5.94	
EMPC-HXCDD	3.1	pg/l	0.5	6.51	N - EMPC data
EMPC-HXCDF	4.9	pg/l	0.3	8.77	N - EMPC data
EMPC-PECDD	1.9	pg/l	0.3	7.36	N - EMPC data
EMPC-PECDF	6.4	pg/l	0.3	4.43	N - EMPC data

Analysis: NWTPH-DX

Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.241	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/14/04 Time: 13:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	637	ug/l	0.370	1.20	

W-11-D

Analysis: 300.0

Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	830	mg/l	2.07	50.0	
Nitrate	<0.0173	mg/l	0.0173	0.100	
Nitrite(as N)	<0.146	mg/l	0.146	1.00	
Sulfate	246	mg/l	1.70	10.0	

Analysis: 310.1

Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	417	mg/l	1.04	50.0	

Analysis: 350.1

Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0618	mg/l	0.00760	0.0500	

Analysis: 351.2

Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	<0.332	mg/l	0.332	0.500	

Analysis: 365.2

Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.00661	mg/l	0.00141	0.0100	

Analysis: 376.2

Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	<0.0150	mg/l	0.0150	0.200	

Analysis: 405.1

Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	<1.13	mg/l	1.13	4.00	

Analysis: 410.4

Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	31.3	mg/l	1.69	5.00	

Analysis: 415.1/5310

Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	3.32	mg/l	0.419	1.00	

Analysis: 6010B

Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.49	mg/l	0.0434	0.100	
Calcium	202	mg/l	1.80	5.00	
Iron	3.2	mg/l	0.00640	0.100	
Magnesium	65.3	mg/l	0.0136	0.100	
Potassium	10.2	mg/l	0.111	1.00	
Sodium	504	mg/l	0.835	50.0	

W-11-D

Analysis: 6020 Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	13.5	mg/l	0.00136	0.200	

Analysis: 8151MOD Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<1.26	ug/l	1.26	3.00	
2,4-D	9.29	ug/l	1.31	3.00	
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	<1.90	ug/l	1.90	3.00	
Dicamba	<1.01	ug/l	1.01	3.00	
Dichlorprop	2.37	ug/l	1.16	3.00	N
Dinoseb	<1.54	ug/l	1.54	3.00	
MCPA	<127	ug/l	127	300	
MCPP	<111	ug/l	111	300	
2,4,5-T	<1.39	ug/l	1.39	3.00	
2,4,5-TP(Silvex)	28.8	ug/l	1.24	3.00	

W-11-D

Analysis: 8260B Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<11.7	ug/l	11.7	125	
Benzene	7.9	ug/l	0.735	5.00	
Bromobenzene	<1.66	ug/l	1.66	5.00	
Bromochloromethane	<1.33	ug/l	1.33	5.00	
Bromodichloromethane	<0.915	ug/l	0.915	5.00	
Bromoform	<0.870	ug/l	0.870	5.00	
Bromomethane	<1.41	ug/l	1.41	50.0	
2-Butanone (MEK)	<8.00	ug/l	8.00	125	
n-Butylbenzene	<0.915	ug/l	0.915	5.00	
sec-Butylbenzene	<0.965	ug/l	0.965	5.00	
Carbon disulfide	<1.16	ug/l	1.16	50.0	
CarbonTetrachloride	<0.700	ug/l	0.700	10.0	
Chlorobenzene	480	ug/l	0.680	5.00	
Chloroethane	<1.64	ug/l	1.64	10.0	
Chloroform	<0.715	ug/l	0.715	5.00	
Chloromethane	<0.795	ug/l	0.795	25.0	
2-Chlorotoluene	<0.550	ug/l	0.550	5.00	
4-Chlorotoluene	<0.600	ug/l	0.600	5.00	
1,2-Dibromo-3-chloropropane	<2.02	ug/l	2.02	5.00	
Dibromochloromethane	<0.665	ug/l	0.665	5.00	
1,2-Dibromoethane	<0.935	ug/l	0.935	5.00	
Dibromomethane	<0.585	ug/l	0.585	5.00	
1,2-Dichlorobenzene	569	ug/l	0.430	5.00	
1,3-Dichlorobenzene	20.6	ug/l	0.660	5.00	
1,4-Dichlorobenzene	228	ug/l	0.935	5.00	
Dichlorodifluoromethane	<1.56	ug/l	1.56	25.0	
1,1-Dichloroethane	<0.785	ug/l	0.785	5.00	
1,2-Dichloroethane	<0.710	ug/l	0.710	5.00	
1,1-Dichloroethene	<0.985	ug/l	0.985	5.00	
cis-1,2-Dichloroethene	1.6	ug/l	0.850	5.00	
trans-1,2-Dichloroethene	<0.875	ug/l	0.875	5.00	
1,2-Dichloropropane	<1.33	ug/l	1.33	5.00	
1,3-Dichloropropane	<0.755	ug/l	0.755	5.00	
2,2-Dichloropropane	<0.520	ug/l	0.520	5.00	
1,1-Dichloropropene	<0.745	ug/l	0.745	5.00	
cis-1,3-Dichloropropene	<0.640	ug/l	0.640	5.00	
trans-1,3-Dichloropropene	<0.760	ug/l	0.760	5.00	
2-Ethyl-1-hexanol	<500	ug/l	500	500	
Ethylbenzene	<0.550	ug/l	0.550	5.00	
Hexachlorobutadiene	<4.39	ug/l	4.39	10.0	
2-Hexanone	<5.50	ug/l	5.50	50.0	
Iodomethane	<11.9	ug/l	11.9	100	
Isobutylalcohol	<79.5	ug/l	79.5	500	
Isopropylbenzene	<0.535	ug/l	0.535	5.00	

W-11-D

Analysis: 8260B Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<0.745	ug/l	0.745	5.00	
4-methyl-2-pentanone (MIBK)	<7.45	ug/l	7.45	25.0	
Methylene chloride	<2.27	ug/l	2.27	25.0	
Naphthalene	<0.494	ug/l	0.494	5.00	
n-Propylbenzene	<0.690	ug/l	0.690	5.00	
Styrene	<0.362	ug/l	0.362	5.00	
tert-Butylbenzene	<1.03	ug/l	1.03	5.00	
1,1,1,2-Tetrachloroethane	<0.740	ug/l	0.740	5.00	
1,1,2,2-Tetrachloroethane	<1.47	ug/l	1.47	5.00	
Tetrachloroethene	<0.545	ug/l	0.545	5.00	
Toluene	<0.775	ug/l	0.775	5.00	
1,2,3-Trichlorobenzene	<1.10	ug/l	1.10	5.00	
1,2,4-Trichlorobenzene	<1.06	ug/l	1.06	5.00	
1,1,1-Trichloroethane	<0.430	ug/l	0.430	5.00	
1,1,2-Trichloroethane	<1.50	ug/l	1.50	5.00	
Trichloroethene	<1.20	ug/l	1.20	5.00	
Trichlorofluoromethane	<0.800	ug/l	0.800	5.00	
1,2,3-Trichloropropane	<1.82	ug/l	1.82	5.00	
1,2,4-Trimethylbenzene	<0.442	ug/l	0.442	5.00	
1,3,5-Trimethylbenzene	<0.785	ug/l	0.785	5.00	
Vinyl chloride	9.75	ug/l	0.760	5.00	
m,p-Xylene	<1.48	ug/l	1.48	10.0	
o-Xylene	<0.935	ug/l	0.935	5.00	

W-11-D

Analysis: 8290

Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
1,2,3,4,6,7,8-HpCDD	<1.0	pg/l	1.0	7.88	
1,2,3,4,6,7,8-HpCDF	1.1	pg/l	0.5	17.9	N - EMPC data
1,2,3,4,7,8,9-HpCDF	<0.6	pg/l	0.6	12.7	
1,2,3,4,7,8-HxCDD	<0.6	pg/l	0.6	6.63	
1,2,3,6,7,8-HxCDD	<0.5	pg/l	0.5	8.27	
1,2,3,7,8,9-HxCDD	<0.6	pg/l	0.6	14.4	
1,2,3,4,7,8-HxCDF	1.2	pg/l	0.4	17.5	J
1,2,3,6,7,8-HxCDF	<0.3	pg/l	0.3	8.94	
1,2,3,7,8,9-HxCDF	<0.4	pg/l	0.4	30.7	
2,3,4,6,7,8-HxCDF	<0.4	pg/l	0.4	21.0	
1,2,3,4,6,7,8,9-OCDD	7.4	pg/l	1.7	17.9	N - EMPC data
1,2,3,4,6,7,8,9-OCDF	<1.4	pg/l	1.4	17.4	
1,2,3,7,8-PeCDD	<0.4	pg/l	0.4	7.50	
1,2,3,7,8-PeCDF	0.84	pg/l	0.3	4.52	N - EMPC data
2,3,4,7,8-PeCDF	<0.4	pg/l	0.4	5.58	
2,3,7,8-TCDD	<0.6	pg/l	0.6	3.17	
2,3,7,8-TCDF	1.1	pg/l	0.4	6.06	U
Total HpCDD	1.2	pg/l	1.0	7.88	
Total HpCDF	<0.5	pg/l	0.5	12.7	
Total HxCDD	<0.6	pg/l	0.6	6.63	
Total HxCDF	1.2	pg/l	0.4	8.94	
Total PeCDD	<0.4	pg/l	0.4	7.50	
Total PeCDF	<0.3	pg/l	0.3	4.52	
Total TCDD	5.1	pg/l	0.6	3.17	
Total TCDF	146	pg/l	0.4	6.06	
EMPC-HPCDF	1.1	pg/l	0.5	12.7	N - EMPC data
EMPC-PECDF	0.84	pg/l	0.3	4.52	N - EMPC data
EMPC-TCDF	152	pg/l	0.4	6.06	N - EMPC data

Analysis: NWTPH-DX

Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.331	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/14/04 Time: 12:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	426	ug/l	0.370	1.20	

W-11-I

Analysis: 300.0

Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	36	mg/l	0.207	5.00	
Nitrate	<0.0173	mg/l	0.0173	0.100	
Nitrite(as N)	<0.0146	mg/l	0.0146	0.100	
Sulfate	<0.170	mg/l	0.170	1.00	

Analysis: 310.1

Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	478	mg/l	0.208	10.0	

Analysis: 350.1

Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	4.41	mg/l	0.00760	0.0500	

Analysis: 351.2

Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	6.22	mg/l	0.332	0.500	

Analysis: 365.2

Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.00599	mg/l	0.00141	0.0100	

Analysis: 376.2

Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	0.0214	mg/l	0.0150	0.200	

Analysis: 405.1

Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	9.56	mg/l	1.13	4.00	

Analysis: 410.4

Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	24.6	mg/l	1.69	5.00	

Analysis: 415.1/5310

Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	7.42	mg/l	0.419	1.00	

Analysis: 6010B

Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	<0.0434	mg/l	0.0434	0.100	
Calcium	128	mg/l	0.361	1.00	
Iron	40.7	mg/l	0.00640	0.100	
Magnesium	51.9	mg/l	0.0136	0.100	
Potassium	7.8	mg/l	0.111	1.00	
Sodium	24.6	mg/l	0.0167	1.00	

W-11-I

Analysis: 6020 Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	2.1	mg/l	0.000136	0.0200	

Analysis: 8151MOD Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<1.26	ug/l	1.26	3.00	
2,4-D	6.71	ug/l	1.31	3.00	
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	<1.90	ug/l	1.90	3.00	
Dicamba	<1.01	ug/l	1.01	3.00	
Dichlorprop	<1.16	ug/l	1.16	3.00	
Dinoseb	<1.54	ug/l	1.54	3.00	
MCPA	<127	ug/l	127	300	
MCPP	<111	ug/l	111	300	
2,4,5-T	<1.39	ug/l	1.39	3.00	
2,4,5-TP(Silvex)	<1.24	ug/l	1.24	3.00	

W-11-I

Analysis: 8260B Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<2.34	ug/l	2.34	25.0	
Benzene	<0.147	ug/l	0.147	1.00	
Bromobenzene	<0.333	ug/l	0.333	1.00	
Bromochloromethane	<0.266	ug/l	0.266	1.00	
Bromodichloromethane	<0.183	ug/l	0.183	1.00	
Bromoform	<0.174	ug/l	0.174	1.00	
Bromomethane	<0.282	ug/l	0.282	10.0	
2-Butanone (MEK)	<1.60	ug/l	1.60	25.0	
n-Butylbenzene	<0.183	ug/l	0.183	1.00	
sec-Butylbenzene	<0.193	ug/l	0.193	1.00	
Carbon disulfide	<0.233	ug/l	0.233	10.0	
CarbonTetrachloride	<0.140	ug/l	0.140	2.00	
Chlorobenzene	<0.136	ug/l	0.136	1.00	
Chloroethane	<0.327	ug/l	0.327	2.00	
Chloroform	<0.143	ug/l	0.143	1.00	
Chloromethane	<0.159	ug/l	0.159	5.00	
2-Chlorotoluene	<0.110	ug/l	0.110	1.00	
4-Chlorotoluene	<0.120	ug/l	0.120	1.00	
1,2-Dibromo-3-chloropropane	<0.405	ug/l	0.405	1.00	
Dibromochloromethane	<0.133	ug/l	0.133	1.00	
1,2-Dibromoethane	<0.187	ug/l	0.187	1.00	
Dibromomethane	<0.117	ug/l	0.117	1.00	
1,2-Dichlorobenzene	<0.0859	ug/l	0.0859	1.00	
1,3-Dichlorobenzene	<0.132	ug/l	0.132	1.00	
1,4-Dichlorobenzene	<0.187	ug/l	0.187	1.00	
Dichlorodifluoromethane	<0.312	ug/l	0.312	5.00	
1,1-Dichloroethane	<0.157	ug/l	0.157	1.00	
1,2-Dichloroethane	<0.142	ug/l	0.142	1.00	
1,1-Dichloroethene	<0.197	ug/l	0.197	1.00	
cis-1,2-Dichloroethene	<0.170	ug/l	0.170	1.00	
trans-1,2-Dichloroethene	<0.175	ug/l	0.175	1.00	
1,2-Dichloropropane	<0.266	ug/l	0.266	1.00	
1,3-Dichloropropane	<0.151	ug/l	0.151	1.00	
2,2-Dichloropropane	<0.104	ug/l	0.104	1.00	
1,1-Dichloropropene	<0.149	ug/l	0.149	1.00	
cis-1,3-Dichloropropene	<0.128	ug/l	0.128	1.00	
trans-1,3-Dichloropropene	<0.152	ug/l	0.152	1.00	
2-Ethyl-1-hexanol	<100	ug/l	100	100	
Ethylbenzene	<0.110	ug/l	0.110	1.00	
Hexachlorobutadiene	<0.878	ug/l	0.878	2.00	
2-Hexanone	<1.10	ug/l	1.10	10.0	
Iodomethane	<2.38	ug/l	2.38	20.0	
Isobutylalcohol	<15.9	ug/l	15.9	100	
Isopropylbenzene	<0.107	ug/l	0.107	1.00	

W-11-I

Analysis: 8260B

Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<0.149	ug/l	0.149	1.00	
4-methyl-2-pentanone (MIBK)	<1.49	ug/l	1.49	5.00	
Methylene chloride	<0.454	ug/l	0.454	5.00	
Naphthalene	<0.0989	ug/l	0.0989	1.00	
n-Propylbenzene	<0.138	ug/l	0.138	1.00	
Styrene	<0.0723	ug/l	0.0723	1.00	
tert-Butylbenzene	<0.206	ug/l	0.206	1.00	
1,1,1,2-Tetrachloroethane	<0.148	ug/l	0.148	1.00	
1,1,2,2-Tetrachloroethane	<0.294	ug/l	0.294	1.00	
Tetrachloroethene	<0.109	ug/l	0.109	1.00	
Toluene	<0.155	ug/l	0.155	1.00	
1,2,3-Trichlorobenzene	<0.219	ug/l	0.219	1.00	
1,2,4-Trichlorobenzene	<0.213	ug/l	0.213	1.00	
1,1,1-Trichloroethane	<0.0859	ug/l	0.0859	1.00	
1,1,2-Trichloroethane	<0.301	ug/l	0.301	1.00	
Trichloroethene	<0.241	ug/l	0.241	1.00	
Trichlorofluoromethane	<0.160	ug/l	0.160	1.00	
1,2,3-Trichloropropane	<0.365	ug/l	0.365	1.00	
1,2,4-Trimethylbenzene	<0.0884	ug/l	0.0884	1.00	
1,3,5-Trimethylbenzene	<0.157	ug/l	0.157	1.00	
Vinyl chloride	<0.152	ug/l	0.152	1.00	
m,p-Xylene	<0.295	ug/l	0.295	2.00	
o-Xylene	<0.187	ug/l	0.187	1.00	

Analysis: NWTPH-DX

Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	<0.153	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/14/04 Time: 11:00

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	37800	ug/l	16.0	51.9	

W-11-S

Analysis: 300.0 Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	6	mg/l	0.0207	0.500	
Nitrate	0.02	mg/l	0.0173	0.100	
Nitrite(as N)	<0.0146	mg/l	0.0146	0.100	
Sulfate	13	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	242	mg/l	0.208	10.0	

Analysis: 350.1 Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	2.89	mg/l	0.00760	0.0500	

Analysis: 351.2 Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	3.12	mg/l	0.332	0.500	

Analysis: 365.2 Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.00661	mg/l	0.00141	0.0100	

Analysis: 376.2 Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	0.312	mg/l	0.0150	0.200	

Analysis: 405.1 Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	<1.13	mg/l	1.13	4.00	

Analysis: 410.4 Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	15.2	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	5.29	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.918	mg/l	0.0434	0.100	
Calcium	39.2	mg/l	0.0361	0.100	
Iron	0.00678	mg/l	0.00640	0.100	
Magnesium	0.0373	mg/l	0.0136	0.100	
Potassium	11.9	mg/l	0.111	1.00	
Sodium	72.6	mg/l	0.167	10.0	

W-11-S

Analysis: 6020 Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	0.0005	mg/l	0.0000136	0.00200	

Analysis: 8151MOD Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<1.26	ug/l	1.26	3.00	
2,4-D	<1.31	ug/l	1.31	3.00	
Dalapon	<1.10	ug/l	1.10	10.0	
2,4-DB	<1.90	ug/l	1.90	3.00	
Dicamba	<1.01	ug/l	1.01	3.00	
Dichlorprop	<1.16	ug/l	1.16	3.00	
Dinoseb	<1.54	ug/l	1.54	3.00	
MCPA	<127	ug/l	127	300	
MCPP	<111	ug/l	111	300	
2,4,5-T	<1.39	ug/l	1.39	3.00	
2,4,5-TP(Silvex)	<1.24	ug/l	1.24	3.00	

W-11-S

Analysis: 8260B Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<2.34	ug/l	2.34	25.0	
Benzene	0.86	ug/l	0.147	1.00	
Bromobenzene	<0.333	ug/l	0.333	1.00	
Bromochloromethane	<0.266	ug/l	0.266	1.00	
Bromodichloromethane	<0.183	ug/l	0.183	1.00	
Bromoform	<0.174	ug/l	0.174	1.00	
Bromomethane	<0.282	ug/l	0.282	10.0	
2-Butanone (MEK)	<1.60	ug/l	1.60	25.0	
n-Butylbenzene	<0.183	ug/l	0.183	1.00	
sec-Butylbenzene	<0.193	ug/l	0.193	1.00	
Carbon disulfide	<0.233	ug/l	0.233	10.0	
CarbonTetrachloride	<0.140	ug/l	0.140	2.00	
Chlorobenzene	<0.136	ug/l	0.136	1.00	
Chloroethane	<0.327	ug/l	0.327	2.00	
Chloroform	<0.143	ug/l	0.143	1.00	
Chloromethane	<0.159	ug/l	0.159	5.00	
2-Chlorotoluene	<0.110	ug/l	0.110	1.00	
4-Chlorotoluene	<0.120	ug/l	0.120	1.00	
1,2-Dibromo-3-chloropropane	<0.405	ug/l	0.405	1.00	
Dibromochloromethane	<0.133	ug/l	0.133	1.00	
1,2-Dibromoethane	<0.187	ug/l	0.187	1.00	
Dibromomethane	<0.117	ug/l	0.117	1.00	
1,2-Dichlorobenzene	<0.0859	ug/l	0.0859	1.00	
1,3-Dichlorobenzene	<0.132	ug/l	0.132	1.00	
1,4-Dichlorobenzene	<0.187	ug/l	0.187	1.00	
Dichlorodifluoromethane	<0.312	ug/l	0.312	5.00	
1,1-Dichloroethane	<0.157	ug/l	0.157	1.00	
1,2-Dichloroethane	<0.142	ug/l	0.142	1.00	
1,1-Dichloroethene	<0.197	ug/l	0.197	1.00	
cis-1,2-Dichloroethene	<0.170	ug/l	0.170	1.00	
trans-1,2-Dichloroethene	<0.175	ug/l	0.175	1.00	
1,2-Dichloropropane	<0.266	ug/l	0.266	1.00	
1,3-Dichloropropane	<0.151	ug/l	0.151	1.00	
2,2-Dichloropropane	<0.104	ug/l	0.104	1.00	
1,1-Dichloropropene	<0.149	ug/l	0.149	1.00	
cis-1,3-Dichloropropene	<0.128	ug/l	0.128	1.00	
trans-1,3-Dichloropropene	<0.152	ug/l	0.152	1.00	
2-Ethyl-1-hexanol	<100	ug/l	100	100	
Ethylbenzene	0.18	ug/l	0.110	1.00	
Hexachlorobutadiene	<0.878	ug/l	0.878	2.00	
2-Hexanone	<1.10	ug/l	1.10	10.0	
Iodomethane	<2.38	ug/l	2.38	20.0	
Isobutylalcohol	<15.9	ug/l	15.9	100	
Isopropylbenzene	<0.107	ug/l	0.107	1.00	

W-11-S

Analysis: 8260B

Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	0.18	ug/l	0.149	1.00	
4-methyl-2-pentanone (MIBK)	<1.49	ug/l	1.49	5.00	
Methylene chloride	<0.454	ug/l	0.454	5.00	
Naphthalene	<0.0989	ug/l	0.0989	1.00	
n-Propylbenzene	<0.138	ug/l	0.138	1.00	
Styrene	<0.0723	ug/l	0.0723	1.00	
tert-Butylbenzene	<0.206	ug/l	0.206	1.00	
1,1,1,2-Tetrachloroethane	<0.148	ug/l	0.148	1.00	
1,1,2,2-Tetrachloroethane	<0.294	ug/l	0.294	1.00	
Tetrachloroethene	<0.109	ug/l	0.109	1.00	
Toluene	1.02	ug/l	0.155	1.00	
1,2,3-Trichlorobenzene	<0.219	ug/l	0.219	1.00	
1,2,4-Trichlorobenzene	<0.213	ug/l	0.213	1.00	
1,1,1-Trichloroethane	<0.0859	ug/l	0.0859	1.00	
1,1,2-Trichloroethane	<0.301	ug/l	0.301	1.00	
Trichloroethene	<0.241	ug/l	0.241	1.00	
Trichlorofluoromethane	<0.160	ug/l	0.160	1.00	
1,2,3-Trichloropropane	<0.365	ug/l	0.365	1.00	
1,2,4-Trimethylbenzene	0.32	ug/l	0.0884	1.00	
1,3,5-Trimethylbenzene	0.22	ug/l	0.157	1.00	
Vinyl chloride	<0.152	ug/l	0.152	1.00	
m,p-Xylene	0.63	ug/l	0.295	2.00	
o-Xylene	0.49	ug/l	0.187	1.00	

Analysis: NWTPH-DX

Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	<0.153	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/14/04 Time: 10:10

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	1260	ug/l	16.0	51.9	

W-12-S

Analysis: 200.8 Sample Date: 06/10/04 Time: 12:05

Compound	Concentration	Units	MDL	MRL	Qualifiers
Lead	0.00075	mg/l	0.000224	0.00100	

Analysis: 200.8 (Dissolved) Sample Date: 06/10/04 Time: 12:05

Compound	Concentration	Units	MDL	MRL	Qualifiers
Lead (Dissolved)	0.00032	mg/l	0.000224	0.00100	

W-12-S (Dup)

Analysis: 200.8 Sample Date: 06/10/04 Time: 12:05

Compound	Concentration	Units	MDL	MRL	Qualifiers
Lead	0.00075	mg/l	0.000224	0.00100	

Analysis: 200.8 (Dissolved) Sample Date: 06/10/04 Time: 12:05

Compound	Concentration	Units	MDL	MRL	Qualifiers
Lead (Dissolved)	0.00034	mg/l	0.000224	0.00100	

W-18-D

Analysis: 300.0 Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	4.13	mg/l	0.0207	0.500	
Nitrate	1.88	mg/l	0.0173	0.100	
Nitrite(as N)	<0.0146	mg/l	0.0146	0.100	
Sulfate	20.9	mg/l	0.170	1.00	

Analysis: 310.1 Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	99.4	mg/l	0.208	10.0	

Analysis: 350.1 Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	<0.00760	mg/l	0.00760	0.0500	

Analysis: 351.2 Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	<0.332	mg/l	0.332	0.500	

Analysis: 365.2 Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.331	mg/l	0.00141	0.0100	

Analysis: 376.2 Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	<0.0150	mg/l	0.0150	0.200	

Analysis: 405.1 Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	<1.13	mg/l	1.13	4.00	

Analysis: 410.4 Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	<1.69	mg/l	1.69	5.00	

Analysis: 415.1/5310 Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	0.945	mg/l	0.419	1.00	

Analysis: 6010B Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	<0.0434	mg/l	0.0434	0.100	
Calcium	24.8	mg/l	0.0361	0.100	
Iron	0.0549	mg/l	0.00640	0.100	
Magnesium	12.5	mg/l	0.0136	0.100	
Potassium	2.89	mg/l	0.111	1.00	
Sodium	15.8	mg/l	0.0167	1.00	

W-18-D

Analysis: 6020

Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	0.00224	mg/l	0.000964	0.00100	
Cadmium	<0.000178	mg/l	0.000178	0.00100	
Chromium	0.00211	mg/l	0.000791	0.00100	
Copper	0.00156	mg/l	0.000259	0.00200	U
Lead	<0.0000870	mg/l	0.0000870	0.00100	
Manganese	0.0016	mg/l	0.0000136	0.00200	
Nickel	<0.000826	mg/l	0.000826	0.00200	
Vanadium	0.0192	mg/l	0.000669	0.00500	
Zinc	0.0025	mg/l	0.00102	0.00500	

Analysis: 6020 (Dissolved)

Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.00306	mg/l	0.000964	0.00100	
Cadmium (Dissolved)	<0.0000730	mg/l	0.0000730	0.00100	
Chromium (Dissolved)	0.00273	mg/l	0.000791	0.00100	J
Copper (Dissolved)	0.00089	mg/l	0.000259	0.00200	J
Lead (Dissolved)	<0.0000870	mg/l	0.0000870	0.00100	
Nickel (Dissolved)	0.00255	mg/l	0.000242	0.00200	J
Vanadium (Dissolved)	0.0216	mg/l	0.000669	0.00500	J
Zinc (Dissolved)	0.00468	mg/l	0.00102	0.00500	

Analysis: 7470A

Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury	<0.000103	mg/l	0.000103	0.000200	

Analysis: 7470A (Dissolved)

Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury (Dissolved)	<0.0000630	mg/l	0.0000630	0.000200	

Analysis: NWTPH-DX

Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	<0.153	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/14/04 Time: 15:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	<0.370	ug/l	0.370	1.20	

W-18-I

Analysis: 300.0

Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	3.57	mg/l	0.0207	0.500	
Nitrate	1.66	mg/l	0.0173	0.100	
Nitrite(as N)	<0.0146	mg/l	0.0146	0.100	
Sulfate	15.1	mg/l	0.170	1.00	

Analysis: 310.1

Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	78.5	mg/l	0.208	10.0	

Analysis: 350.1

Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	0.0101	mg/l	0.00760	0.0500	

Analysis: 351.2

Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	<0.332	mg/l	0.332	0.500	

Analysis: 365.2

Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.141	mg/l	0.00141	0.0100	

Analysis: 376.2

Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	<0.0150	mg/l	0.0150	0.200	

Analysis: 405.1

Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	3.86	mg/l	1.13	4.00	

Analysis: 410.4

Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	7.09	mg/l	1.69	5.00	

Analysis: 415.1/5310

Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	2.63	mg/l	0.419	1.00	

Analysis: 6010B

Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	0.158	mg/l	0.0434	0.100	
Calcium	17.5	mg/l	0.0361	0.100	
Iron	0.506	mg/l	0.00640	0.100	
Magnesium	8.86	mg/l	0.0136	0.100	
Potassium	2.31	mg/l	0.111	1.00	
Sodium	14.7	mg/l	0.0167	1.00	

W-18-I

Analysis: 6020

Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic	0.00239	mg/l	0.000964	0.00100	
Cadmium	<0.000178	mg/l	0.000178	0.00100	
Chromium	0.00219	mg/l	0.000791	0.00100	
Copper	0.00272	mg/l	0.000259	0.00200	U
Lead	0.00112	mg/l	0.0000870	0.00100	
Manganese	0.03	mg/l	0.0000136	0.00200	
Nickel	0.00157	mg/l	0.000826	0.00200	
Vanadium	0.0234	mg/l	0.000669	0.00500	
Zinc	0.0119	mg/l	0.00102	0.00500	

Analysis: 6020 (Dissolved)

Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Arsenic (Dissolved)	0.00251	mg/l	0.000964	0.00100	
Cadmium (Dissolved)	<0.0000730	mg/l	0.0000730	0.00100	
Chromium (Dissolved)	0.00219	mg/l	0.000791	0.00100	J
Copper (Dissolved)	0.00054	mg/l	0.000259	0.00200	J
Lead (Dissolved)	<0.0000870	mg/l	0.0000870	0.00100	
Nickel (Dissolved)	0.00223	mg/l	0.000242	0.00200	J
Vanadium (Dissolved)	0.0213	mg/l	0.000669	0.00500	J
Zinc (Dissolved)	0.0096	mg/l	0.00102	0.00500	

Analysis: 7470A

Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury	<0.000103	mg/l	0.000103	0.000200	

Analysis: 7470A (Dissolved)

Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Mercury (Dissolved)	<0.0000630	mg/l	0.0000630	0.000200	

Analysis: NWTPH-DX

Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	<0.153	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/14/04 Time: 16:15

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	<0.370	ug/l	0.370	1.20	

W-19-D

Analysis: 300.0

Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	1330	mg/l	2.07	50.0	
Nitrate	<0.0173	mg/l	0.0173	0.100	
Nitrite(as N)	2	mg/l	0.146	1.00	
Sulfate	93.2	mg/l	1.70	10.0	

Analysis: 310.1

Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	427	mg/l	0.208	10.0	

Analysis: 350.1

Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	<0.00760	mg/l	0.00760	0.0500	

Analysis: 351.2

Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	<0.332	mg/l	0.332	0.500	

Analysis: 365.2

Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.113	mg/l	0.00141	0.0100	

Analysis: 376.2

Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	<0.0150	mg/l	0.0150	0.200	

Analysis: 405.1

Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	<1.13	mg/l	1.13	4.00	

Analysis: 410.4

Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	44.9	mg/l	1.69	5.00	

Analysis: 415.1/5310

Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	1.93	mg/l	0.419	1.00	

Analysis: 6010B

Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	<0.0434	mg/l	0.0434	0.100	
Calcium	490	mg/l	3.61	10.0	
Iron	0.0506	mg/l	0.00640	0.100	
Magnesium	204	mg/l	0.136	1.00	
Potassium	18.3	mg/l	0.111	1.00	
Sodium	193	mg/l	0.167	10.0	

W-19-D

Analysis: 6020 Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	0.311	mg/l	0.0000136	0.00200	

Analysis: 8151MOD Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<1.26	ug/l	1.26	3.00	J,U
2,4-D	1.49	ug/l	1.31	3.00	J
Dalapon	<1.10	ug/l	1.10	10.0	J,U
2,4-DB	<1.90	ug/l	1.90	3.00	J,U
Dicamba	<1.01	ug/l	1.01	3.00	J,U
Dichlorprop	4.5	ug/l	1.16	3.00	J
Dinoseb	<1.54	ug/l	1.54	3.00	J,U
MCPA	<127	ug/l	127	300	J,U
MCPP	278	ug/l	111	300	J,N
2,4,5-T	<1.39	ug/l	1.39	3.00	J,U
2,4,5-TP(Silvex)	27.9	ug/l	1.24	3.00	J

W-19-D

Analysis: 8260B Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<11.7	ug/l	11.7	125	J,U
Benzene	1.6	ug/l	0.735	5.00	J
Bromobenzene	<1.66	ug/l	1.66	5.00	J,U
Bromochloromethane	<1.33	ug/l	1.33	5.00	J,U
Bromodichloromethane	<0.915	ug/l	0.915	5.00	J,U
Bromoform	<0.870	ug/l	0.870	5.00	J,U
Bromomethane	<1.41	ug/l	1.41	50.0	J,U
2-Butanone (MEK)	<8.00	ug/l	8.00	125	J,U
n-Butylbenzene	<0.915	ug/l	0.915	5.00	J,U
sec-Butylbenzene	<0.965	ug/l	0.965	5.00	J,U
Carbon disulfide	<1.16	ug/l	1.16	50.0	J,U
CarbonTetrachloride	<0.700	ug/l	0.700	10.0	J,U
Chlorobenzene	178	ug/l	0.680	5.00	J
Chloroethane	<1.64	ug/l	1.64	10.0	J,U
Chloroform	<0.715	ug/l	0.715	5.00	J,U
Chloromethane	<0.795	ug/l	0.795	25.0	J,U
2-Chlorotoluene	<0.550	ug/l	0.550	5.00	J,U
4-Chlorotoluene	<0.600	ug/l	0.600	5.00	J,U
1,2-Dibromo-3-chloropropane	<2.02	ug/l	2.02	5.00	J,U
Dibromochloromethane	<0.665	ug/l	0.665	5.00	J,U
1,2-Dibromoethane	<0.935	ug/l	0.935	5.00	J,U
Dibromomethane	<0.585	ug/l	0.585	5.00	J,U
1,2-Dichlorobenzene	676	ug/l	0.430	5.00	J
1,3-Dichlorobenzene	20.6	ug/l	0.660	5.00	J
1,4-Dichlorobenzene	202	ug/l	0.935	5.00	J
Dichlorodifluoromethane	<1.56	ug/l	1.56	25.0	J,U
1,1-Dichloroethane	<0.785	ug/l	0.785	5.00	J,U
1,2-Dichloroethane	<0.710	ug/l	0.710	5.00	J,U
1,1-Dichloroethene	2.6	ug/l	0.985	5.00	J
cis-1,2-Dichloroethene	9	ug/l	0.850	5.00	J
trans-1,2-Dichloroethene	1.1	ug/l	0.875	5.00	J
1,2-Dichloropropane	<1.33	ug/l	1.33	5.00	J,U
1,3-Dichloropropane	<0.755	ug/l	0.755	5.00	J,U
2,2-Dichloropropane	<0.520	ug/l	0.520	5.00	J,U
1,1-Dichloropropene	<0.745	ug/l	0.745	5.00	J,U
cis-1,3-Dichloropropene	<0.640	ug/l	0.640	5.00	J,U
trans-1,3-Dichloropropene	<0.760	ug/l	0.760	5.00	J,U
2-Ethyl-1-hexanol	<500	ug/l	500	500	J,U
Ethylbenzene	<0.550	ug/l	0.550	5.00	J,U
Hexachlorobutadiene	<4.39	ug/l	4.39	10.0	J,U
2-Hexanone	<5.50	ug/l	5.50	50.0	J,U
Iodomethane	<11.9	ug/l	11.9	100	J,U
Isobutylalcohol	<79.5	ug/l	79.5	500	J,U
Isopropylbenzene	<0.535	ug/l	0.535	5.00	J,U

W-19-D

Analysis: 8260B

Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<0.745	ug/l	0.745	5.00	J,U
4-methyl-2-pentanone (MIBK)	<7.45	ug/l	7.45	25.0	J,U
Methylene chloride	<2.27	ug/l	2.27	25.0	J,U
Naphthalene	<0.494	ug/l	0.494	5.00	J,U
n-Propylbenzene	<0.690	ug/l	0.690	5.00	J,U
Styrene	<0.362	ug/l	0.362	5.00	J,U
tert-Butylbenzene	<1.03	ug/l	1.03	5.00	J,U
1,1,1,2-Tetrachloroethane	<0.740	ug/l	0.740	5.00	J,U
1,1,2,2-Tetrachloroethane	<1.47	ug/l	1.47	5.00	J,U
Tetrachloroethene	<0.545	ug/l	0.545	5.00	J,U
Toluene	<0.775	ug/l	0.775	5.00	J,U
1,2,3-Trichlorobenzene	<1.10	ug/l	1.10	5.00	J,U
1,2,4-Trichlorobenzene	<1.06	ug/l	1.06	5.00	J,U
1,1,1-Trichloroethane	<0.430	ug/l	0.430	5.00	J,U
1,1,2-Trichloroethane	<1.50	ug/l	1.50	5.00	J,U
Trichloroethene	6.5	ug/l	1.20	5.00	J
Trichlorofluoromethane	<0.800	ug/l	0.800	5.00	J,U
1,2,3-Trichloropropane	<1.82	ug/l	1.82	5.00	J,U
1,2,4-Trimethylbenzene	<0.442	ug/l	0.442	5.00	J,U
1,3,5-Trimethylbenzene	<0.785	ug/l	0.785	5.00	J,U
Vinyl chloride	27.3	ug/l	0.760	5.00	J
m,p-Xylene	<1.48	ug/l	1.48	10.0	J,U
o-Xylene	<0.935	ug/l	0.935	5.00	J,U

Analysis: NWTPH-DX

Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.279	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/12/04 Time: 13:30

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	1160	ug/l	0.370	1.20	

W-19-I

Analysis: 300.0

Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Chloride	1800	mg/l	2.07	50.0	
Nitrate	0.07	mg/l	0.0173	0.100	
Nitrite(as N)	<0.146	mg/l	0.146	1.00	
Sulfate	48.1	mg/l	1.70	10.0	

Analysis: 310.1

Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Alkalinity	374	mg/l	1.04	50.0	

Analysis: 350.1

Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Ammonia (as N)	<0.00760	mg/l	0.00760	0.0500	

Analysis: 351.2

Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Total Kjeldahl Nitrogen	<0.332	mg/l	0.332	0.500	

Analysis: 365.2

Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Orthophosphorus	0.0441	mg/l	0.00141	0.0100	

Analysis: 376.2

Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Sulfide	<0.0150	mg/l	0.0150	0.200	

Analysis: 405.1

Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
BOD	<1.13	mg/l	1.13	4.00	

Analysis: 410.4

Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
COD	29.9	mg/l	1.69	5.00	

Analysis: 415.1/5310

Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
TOC	4.63	mg/l	0.419	1.00	

Analysis: 6010B

Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Aluminum	<0.0434	mg/l	0.0434	0.100	
Calcium	352	mg/l	3.61	10.0	
Iron	0.0871	mg/l	0.00640	0.100	
Magnesium	137	mg/l	0.136	1.00	
Potassium	20.2	mg/l	0.111	1.00	
Sodium	649	mg/l	1.67	100	

W-19-I

Analysis: 6020 Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Manganese	11.4	mg/l	0.000272	0.0400	

Analysis: 8151MOD Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Bromoxynil	<1.26	ug/l	1.26	3.00	J,U
2,4-D	<1.31	ug/l	1.31	3.00	J,U
Dalapon	<1.10	ug/l	1.10	10.0	J,U
2,4-DB	<1.90	ug/l	1.90	3.00	J,U
Dicamba	<1.01	ug/l	1.01	3.00	J,U
Dichlorprop	1.41	ug/l	1.16	3.00	J,N
Dinoseb	<1.54	ug/l	1.54	3.00	J,U
MCPA	<127	ug/l	127	300	J,U
MCPP	135	ug/l	111	300	J
2,4,5-T	<1.39	ug/l	1.39	3.00	J,U
2,4,5-TP(Silvex)	13	ug/l	1.24	3.00	J

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Analysis: 8260B Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Acetone	<4.68	ug/l	4.68	50.0	J,U
Benzene	0.54	ug/l	0.294	2.00	J
Bromobenzene	<0.666	ug/l	0.666	2.00	J,U
Bromochloromethane	<0.532	ug/l	0.532	2.00	J,U
Bromodichloromethane	<0.366	ug/l	0.366	2.00	J,U
Bromoform	<0.348	ug/l	0.348	2.00	J,U
Bromomethane	<0.564	ug/l	0.564	20.0	J,U
2-Butanone (MEK)	<3.20	ug/l	3.20	50.0	J,U
n-Butylbenzene	<0.366	ug/l	0.366	2.00	J,U
sec-Butylbenzene	<0.386	ug/l	0.386	2.00	J,U
Carbon disulfide	<0.466	ug/l	0.466	20.0	J,U
CarbonTetrachloride	<0.280	ug/l	0.280	4.00	J,U
Chlorobenzene	45.9	ug/l	0.272	2.00	J
Chloroethane	<0.654	ug/l	0.654	4.00	J,U
Chloroform	<0.286	ug/l	0.286	2.00	J,U
Chloromethane	<0.318	ug/l	0.318	10.0	J,U
2-Chlorotoluene	<0.220	ug/l	0.220	2.00	J,U
4-Chlorotoluene	<0.240	ug/l	0.240	2.00	J,U
1,2-Dibromo-3-chloropropane	<0.810	ug/l	0.810	2.00	J,U
Dibromochloromethane	<0.266	ug/l	0.266	2.00	J,U
1,2-Dibromoethane	<0.374	ug/l	0.374	2.00	J,U
Dibromomethane	<0.234	ug/l	0.234	2.00	J,U
1,2-Dichlorobenzene	226	ug/l	0.172	2.00	J
1,3-Dichlorobenzene	6.82	ug/l	0.264	2.00	J
1,4-Dichlorobenzene	65.2	ug/l	0.374	2.00	J
Dichlorodifluoromethane	<0.624	ug/l	0.624	10.0	J,U
1,1-Dichloroethane	<0.314	ug/l	0.314	2.00	J,U
1,2-Dichloroethane	<0.284	ug/l	0.284	2.00	J,U
1,1-Dichloroethene	0.9	ug/l	0.394	2.00	J
cis-1,2-Dichloroethene	3.34	ug/l	0.340	2.00	J
trans-1,2-Dichloroethene	<0.350	ug/l	0.350	2.00	J,U
1,2-Dichloropropane	<0.532	ug/l	0.532	2.00	J,U
1,3-Dichloropropane	<0.302	ug/l	0.302	2.00	J,U
2,2-Dichloropropane	<0.208	ug/l	0.208	2.00	J,U
1,1-Dichloropropene	<0.298	ug/l	0.298	2.00	J,U
cis-1,3-Dichloropropene	<0.256	ug/l	0.256	2.00	J,U
trans-1,3-Dichloropropene	<0.304	ug/l	0.304	2.00	J,U
2-Ethyl-1-hexanol	<200	ug/l	200	200	J,U
Ethylbenzene	<0.220	ug/l	0.220	2.00	J,U
Hexachlorobutadiene	<1.76	ug/l	1.76	4.00	J,U
2-Hexanone	<2.20	ug/l	2.20	20.0	J,U
Iodomethane	<4.76	ug/l	4.76	40.0	J,U
Isobutylalcohol	<31.8	ug/l	31.8	200	J,U
Isopropylbenzene	<0.214	ug/l	0.214	2.00	J,U

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Analysis: 8260B

Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
4-Isopropyltoluene	<0.298	ug/l	0.298	2.00	J,U
4-methyl-2-pentanone (MIBK)	<2.98	ug/l	2.98	10.0	J,U
Methylene chloride	<0.908	ug/l	0.908	10.0	J,U
Naphthalene	<0.198	ug/l	0.198	2.00	J,U
n-Propylbenzene	<0.276	ug/l	0.276	2.00	J,U
Styrene	<0.145	ug/l	0.145	2.00	J,U
tert-Butylbenzene	<0.412	ug/l	0.412	2.00	J,U
1,1,1,2-Tetrachloroethane	<0.296	ug/l	0.296	2.00	J,U
1,1,2,2-Tetrachloroethane	<0.588	ug/l	0.588	2.00	J,U
Tetrachloroethene	<0.218	ug/l	0.218	2.00	J,U
Toluene	<0.310	ug/l	0.310	2.00	J,U
1,2,3-Trichlorobenzene	<0.438	ug/l	0.438	2.00	J,U
1,2,4-Trichlorobenzene	<0.426	ug/l	0.426	2.00	J,U
1,1,1-Trichloroethane	<0.172	ug/l	0.172	2.00	J,U
1,1,2-Trichloroethane	<0.602	ug/l	0.602	2.00	J,U
Trichloroethene	2.3	ug/l	0.482	2.00	J
Trichlorofluoromethane	<0.320	ug/l	0.320	2.00	J,U
1,2,3-Trichloropropane	<0.730	ug/l	0.730	2.00	J,U
1,2,4-Trimethylbenzene	<0.177	ug/l	0.177	2.00	J,U
1,3,5-Trimethylbenzene	<0.314	ug/l	0.314	2.00	J,U
Vinyl chloride	9.84	ug/l	0.304	2.00	J
m,p-Xylene	<0.590	ug/l	0.590	4.00	J,U
o-Xylene	<0.374	ug/l	0.374	2.00	J,U

Analysis: NWTPH-DX

Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Diesel	0.159	mg/l	0.153	0.250	
Fuel oil no. 6	<0.286	mg/l	0.286	0.500	

Analysis: RSK 175

Sample Date: 04/12/04 Time: 14:20

Compound	Concentration	Units	MDL	MRL	Qualifiers
Methane	701	ug/l	0.370	1.20	

Definitions

( )	Estimated concentration that is greater than the MDL but less than the MRL.
MDL	Method Detection Limit
MRL	Method Reporting Limit
mg/l	milligrams per liter (ppm)
ug/l	micrograms per liter (ppb)
pg/l	picograms per liter (ppq)
cfu/ml	colony forming units per milliliter

Analytical Qualifiers

U	The analyte was not detected above the method detection limit or quantitation limit. In the case of blank contamination, the analyte is considered to be less than the stated result.
J	The analyte was positively identified, but the associated concentration is an estimate.
N	Presumptive evidence of analyte presence was detected, but not all identification criteria were met. The presence of the analyte and the associated numerical concentration are both uncertain.
R	Results for the analyte are unusable due to serious deficiencies in the sample analysis. The presence or absence of the analyte cannot be verified.
EMPC	(Estimated Maximum Possible Concentration) A chromatographic peak was detected at the proper retention time for the congener, but the ion abundance ratios did not meet method requirements. Congener identification is uncertain.