
Report

January 2006 Groundwater Sampling Results for Wyckoff/Eagle Harbor Superfund Site

Prepared for
U.S. Environmental Protection Agency

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Introduction

This report is intended to summarize the results of the January 2006 groundwater sampling event conducted at the Wyckoff/Eagle Harbor Superfund Site on Bainbridge Island, Washington. Groundwater sampling activities were performed by CH2M HILL on January 23 through 26, 2006.

The objectives of the January 2006 sampling event were to identify the presence of chemicals of concern, semi-volatile and TPH contaminants in the lower aquifer and compare to previous sampling event results. This sampling event was also designed to identify the presence of chemicals in piezometers located on the south hillside.

This January 2006 sampling event was also designed to monitor groundwater in the same sampling locations and for the same analytes as chosen for March and September 2004 sampling events. Sample locations included two upper aquifer wells (MW19, MW21), nine lower aquifer wells (CW-01, CW-02, CW-05, CW-09, CW-12, CW-15, 02CD-MW-01, 99CD-MW-02, 99CD-MW-04) and nine piezometers (PZ-03, PZ-05, PZ-06, PZ-07, PZ-08, PZ-09, PZ-10, PZ-11, PZ-12). Figure 1 shows the locations of monitoring wells and piezometers at the Wyckoff site.

The Groundwater Sampling Event Planning form "GSEP_Wyckoff_Dec05_final.doc" was utilized for laboratory coordination and sampling event planning. A copy of the GSEP form is included in Appendix A.

Groundwater Sampling Method

The January 2006 groundwater sampling event was performed by CH2M HILL in accordance with the procedures outlined in the 2005 Addendum to the Groundwater Sampling and Analysis Plan (December 29, 2005). A copy of the SAP addendum can be found in Appendix B.

Groundwater sampling procedures included well/piezometer purging, collection of field parameter data during purging, and sample collection for laboratory analysis. Groundwater sampling from monitoring wells and piezometers was performed consistent with the EPA Low Flow Groundwater Sampling Procedures.

Depth-to-groundwater measurements were performed prior to and after sampling each well and piezometer with a Herron water level indicator. The water level indicator was decontaminated prior to use at each well and piezometer by using a three step decontamination process: Liquinox water wash, tap water rinse and deionized water rinse. The depth to water (DTW) was measured from the top of the well casing to the static water level inside of the well to the nearest 0.01-foot.

A Mini Rae PID was used for personnel air monitoring during sampling activities.

Well / Piezometer Purgung

A peristaltic pump was used to purge wells and piezometers prior to sampling (except well CW-01). The peristaltic pump was equipped with polyethylene tubing. Purge tubing was set so that the bottom of the tubing was in the center of the well screen. The disposable peristaltic tubing was discarded between sampling points. Well CW-01 was purged with a dedicated submersible electric pump. The intake of the pump was set in the middle of the well screen. After sampling, the submersible pump was decontaminated, labeled and stored onsite for future sampling of well CW-01.

Purge water was discharged into a portable purge water tank. Purge water was then emptied from the tank into the decontamination pad drain for treatment through the groundwater treatment system.

Field Parameter Data

A Horiba U-22 water quality meter was utilized to collect groundwater parameters during well purging. Field parameters were recorded every 3 minutes. Results were recorded in the field notebook as they were collected. Purging was continued until the field parameter measurements stabilized between successive readings. Sampling field records are provided in Appendix C.

Sample Collection

All locations were sampled for Polynuclear Aromatic Hydrocarbons (PAHs), Pentachlorophenol (PCP), Semi-Volatile Organic Compounds (SVOCs) with Tentatively Identified Compounds (TICs)), and Total Petroleum Hydrocarbons for diesel and motor oil (TPH-Dx and TPH-motor oil). Required quality control samples included two field duplicate samples, which were collected at well CW-15 and piezometer PZ-07, and extra sample volumes for a matrix spike and a matrix spike duplicate (MS/MSD) were collected at well CW-15.

Groundwater samples were collected into pre-cleaned certified, pre-labeled sample bottles. After collection, all samples were placed in coolers with enough ice to maintain an internal temperature of 4°C and sealed with tape and custody seals. The secured coolers were stored overnight in the locked boiler building onsite. Coolers were re-packed with ice the following morning and sealed with tape and custody seals for sample transportation that day.

Sample numbers for the January 2006 sample event are provided in Table 1.

TABLE 1
January 2006 Groundwater Sample Numbers

Sample Location	Project Sample Number	EPA Sample Number	CLP Sample Number (SVOC Samples Only)
PZ03	PZ03-0106	06044000	J6B08
MW21	MW21-0106	06044001	J6B09
CW02	CW02-0106	06044002	J6B10
02CDMW01	02CDMW01-0106	06044003	J6B11
CW09	CW09-0106	06044004	J6B12
CW15	CW15-0106	06044005	J6B13
CW05	CW05-0106	06044006	J6B14
99CDMW02	99CDMW02-0106	06044007	J6B15
99CDMW04	99CDMW04-0106	06044008	J6B16
CW12	CW12-0106	06044009	J6B17
MW50 (CW15 Field Duplicate)	MW50-0106	06044010	J6B18
MW19	MW19-0106	06044011	J6B19
CW01	CW01-0106	06044012	J6B20
PZ05	PZ05-0106	06044013	J6B21
PZ06	PZ06-0106	06044014	J6B22
PZ07	PZ07-0106	06044015	J6B23
MW60 (PZ07 Field Duplicate)	MW60-0106	06044016	J6B24
PZ08	PZ08-0106	06044017	J6B25
PZ09	PZ09-0106	06044018	J6B26
PZ10	PZ10-0106	06044019	J6B27
PZ11	PZ11-0106	06044020	J6B28
PZ12	PZ12-0106	06044021	J6B29

Groundwater Sample Analysis

Groundwater samples were sent to two laboratories. Samples collected for PAH, PCP and TPH analyses were sent to the Manchester Environmental Laboratory (Port Orchard, Washington) and samples collected for SVOC analysis were sent to the A4 Scientific Laboratory (The Woodlands, Texas) under the United States Environmental Protection Agency (US EPA) Region 10 Contract Laboratory Program (CLP). Appendix D contains the Forms II Lite Tracking Records (chains of custody) for the sample shipments.

SVOC sample results were submitted electronically by the CLP lab on February 21, 2006. The CLP laboratory data package was then validated by Brandon Perkins/USEPA on February 24, 2006.

The TPH, PAH, and PCP results by Manchester were submitted electronically on February 28, 2006. CH2M HILL addressed an error in data package reporting with the EPA, where sample station description PZ09-0106 was listed in place of PZ10-0106 for EPA sample number 06044019. EPA decided to resubmit all laboratory data packages with the station name correction on March 6, 2006. Results provided by Manchester were subject only to a data review.

CH2M HILL performed a cursory review of the CLP and Manchester data packages. A summary of the cursory review was presented to the EPA in memorandum "Cursory Review of Wyckoff Groundwater Data - Samples 06044000 - 06044021" dated March 9, 2006.

Appendix E contains the data packages provided by the CLP laboratory and Manchester laboratory as well as the CLP validation package by EPA.

Groundwater Sample Results

Results of the January 2006 groundwater sampling event were added to the Wyckoff project database. A table summarizing the January 2006 groundwater sampling results can be seen in Table 2. Results in the table are shown compared to the groundwater cleanup levels as stated in Table 13 of the Soil and Groundwater Operable Units Record of Decision (February 2000). Chemical concentrations exceeding groundwater cleanup levels were found at sample locations 99CDMW02, CW05, CW09, CW15, PZ07 and PZ11.

Lower aquifer monitoring well CW15 contained the highest concentrations of contaminants and also had the highest occurrences of reported concentrations that exceeded groundwater cleanup levels (7 PAH analytes exceeded the corresponding CULs in both the regular sample and the field duplicate sample). Multiple concentrations were also reported as exceeding groundwater CULs for wells CW05 and CW09 and piezometer PZ07. One analyte was reported above the corresponding groundwater CUL in well 99CDMW02 and piezometer PZ11.

A lower aquifer evaluation of well CW15 (with relation to CW05 and CW09) is provided in Appendix F.

The January 2006 lower aquifer groundwater sample results are shown compared to historical lower aquifer groundwater results in Table 3. Groundwater sample results in this table include those events which occurred in April 1994, November 1995, November 2002, December 2002, January 2003, March 2004, June 2004 and September 2004. A historical comparison of upper aquifer groundwater sample results is similarly shown in Table 4.

Conclusions and Recommendations

Groundwater sampling results from the January 2006 event do not appear to be significantly different from the 2004 groundwater sample results. However, chemical concentrations exceeding groundwater CULs were observed in well CW09 and piezometer PZ11, which did not show CUL exceedances in the 2004 sampling events. Groundwater sampling results contained within this report and groundwater monitoring objectives should be reviewed by the EPA in preparation for any potential changes for the next groundwater sampling event.

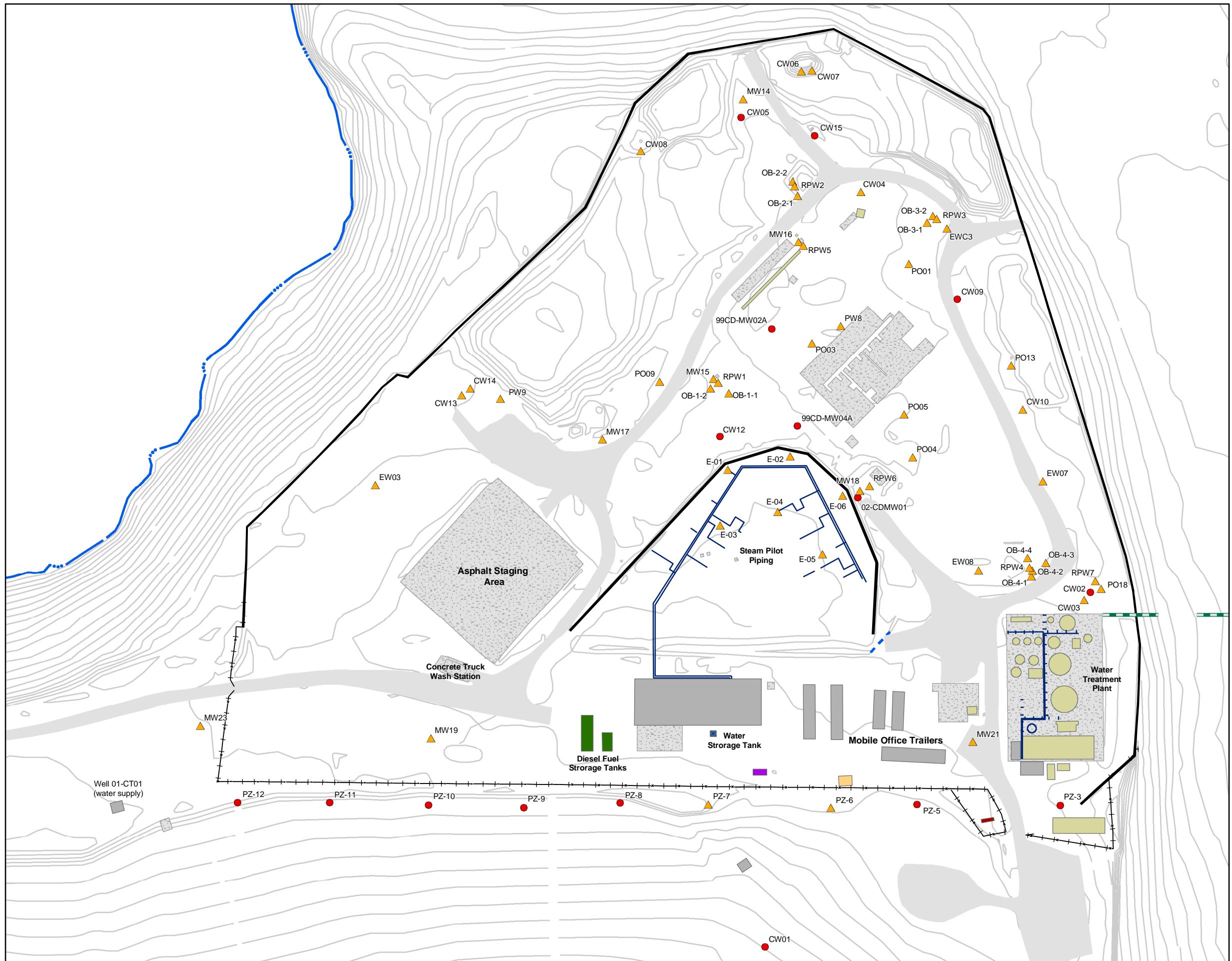


Table 2

Lower and Upper Aquifer Results - January 2006

Wyckoff

Location ID Aquifer Sample Date	Groundwater Cleanup Level (ug/L)*																	
	02CD-MW01 Lower 1/23/2006	99CD-MW02 Lower 1/24/2006	99CD-MW04 Lower 1/24/2006	CW01 Lower 1/26/2006	CW02 Lower 1/23/2006	CW05 Lower 1/24/2006	CW09 Lower 1/23/2006	CW12 Lower 1/25/2006	CW15 Lower 1/24/2006	CW15-FD Lower 1/24/2006	PZ-03 Lower 1/23/2006	PZ-08 Lower 1/26/2006	PZ-09 Lower 1/26/2006	PZ-10 Lower 1/26/2006	PZ-11 Lower 1/26/2006	PZ-12 Lower 1/26/2006		
	Chemical Group	Analyte	Units															
BNA	1,1'-Biphenyl	ug/L	--	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U
BNA	1,2,4,5-Tetrachlorobenzene	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	2,4,5-Trichlorophenol	ug/L	--	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U						
BNA	2,4,6-Trichlorophenol	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	2,4-Dichlorophenol	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	2,4-Dimethylphenol	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	2,4-Dinitrophenol	ug/L	--	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U						
BNA	2,4-Dinitrotoluene	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	2,6-Dinitrotoluene	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	2-Chloronaphthalene	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ						
BNA	2-Chlorophenol	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	2-Methylnaphthalene	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	1.1 J	5.0 UJ						
BNA	2-Methylphenol	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	2-Nitroaniline	ug/L	--	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U						
BNA	2-Nitrophenol	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	3,3'-Dichlorobenzidine	ug/L	--	5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
BNA	3-Nitroaniline	ug/L	--	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U						
BNA	4,6-Dinitro-2-methylphenol	ug/L	--	20 UJ	20 U	20 UJ	20 U	20 UJ	20 U	20 UJ	20 U	20 UJ	20 U	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
BNA	4-Bromophenyl-phenylether	ug/L	--	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ					
BNA	4-Chloro-3-methylphenol	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	4-Chloroaniline	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	4-Chlorophenyl-phenylether	ug/L	--	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ					
BNA	4-Methylphenol	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	4-Nitroaniline	ug/L	--	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U						
BNA	4-Nitrophenol	ug/L	--	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U						
BNA	Acenaphthene	ug/L	3.0	5.0 U	5.0 U	5.0 U	18	39	5.0 U	5.0 U	5.0 UJ	7.1 J						
BNA	Acenaphthylene	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ						
BNA	Acetophenone	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	Anthracene	ug/L	9.0	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	Atrazine	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	Benzaldehyde	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	Benzo(a)anthracene	ug/L	0.030	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	Benzo(a)pyrene	ug/L	0.030	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	Benzo(b)fluoranthene	ug/L	0.030	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	Benzo(g,h,i)perylene	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	Benzo(k)fluoranthene	ug/L	0.030	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	bis(2-Chloroethoxy)methane	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U						
BNA	bis(2-Chloroethyl)ether	ug/L																

Table 2

Lower and Upper Aquifer Results - January 2006

Lower and
Wyckoff

Notes:

BNA = base/neutral and acid extractables

General = general chemistry

HPAH = High molecular weight Polynuclear Aromatic Hydrocarbon compounds

PAH = polynuclear aromatic hydrocarbons

TPH = total petroleum hydrocarbons

J = The analyte was positively identified; the quantitation is an estimation.

U = The analyte was not detected at or above the reported value.

* From Wyckoff ROD 2/2000

Tentatively Identified Compounds (TICs) have not been included in the results table.

Bold The analyte was detected

Value exceeds cleanup level

Table 2

Lower and Upper Aquifer Results - January 2006

Wyckoff

Location ID		MW19	MW21	PZ-05	PZ-06	PZ-07	PZ-07-FD
Aquifer		Upper	Upper	Upper	Upper	Upper	Upper
Sample Date		1/25/2006	1/23/2006	1/25/2006	1/25/2006	1/25/2006	1/25/2006
Groundwater Cleanup Level (ug/L)*							
Chemical Group	Analyte	Units					
BNA	1,1'-Biphenyl	ug/L	--	5.0 U	5.0 U	5.0 UJ	5.0 UJ
BNA	1,2,4,5-Tetrachlorobenzene	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	2,4,5-Trichlorophenol	ug/L	--	20 U	20 U	20 U	20 U
BNA	2,4,6-Trichlorophenol	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	2,4-Dichlorophenol	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	2,4-Dimethylphenol	ug/L	--	5.0 U	5.0 U	5.0 U	2.1 J
BNA	2,4-Dinitrophenol	ug/L	--	20 U	20 U	20 UJ	20 U
BNA	2,4-Dinitrotoluene	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	2,6-Dinitrotoluene	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	2-Chloronaphthalene	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 UJ
BNA	2-Chlorophenol	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	2-Methylnaphthalene	ug/L	--	5.0 U	5.0 U	5.0 U	6.4
BNA	2-Methylphenol	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	2-Nitroaniline	ug/L	--	20 U	20 U	20 U	20 U
BNA	2-Nitrophenol	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	3,3'-Dichlorobenzidine	ug/L	--	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ
BNA	3-Nitroaniline	ug/L	--	20 U	20 U	20 U	20 U
BNA	4,6-Dinitro-2-methylphenol	ug/L	--	20 U	20 U	20 UJ	20 U
BNA	4-Bromophenyl-phenylether	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 UJ
BNA	4-Chloro-3-methylphenol	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	4-Chloroaniline	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	4-Chlorophenyl-phenylether	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 UJ
BNA	4-Methylphenol	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	4-Nitroaniline	ug/L	--	20 U	20 U	20 U	20 U
BNA	4-Nitrophenol	ug/L	--	20 U	20 U	20 U	20 U
BNA	Acenaphthene	ug/L	3.0	5.0 U	1.7 J	5.0 U	13
BNA	Acenaphthylene	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 UJ
BNA	Acetophenone	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	Anthracene	ug/L	9.0	5.0 U	5.0 U	5.0 U	1.3 J
BNA	Atrazine	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	Benzaldehyde	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	Benzo(a)anthracene	ug/L	0.030	5.0 U	5.0 U	5.0 U	5.0 U
BNA	Benzo(a)pyrene	ug/L	0.030	5.0 U	5.0 U	5.0 UJ	5.0 U
BNA	Benzo(b)fluoranthene	ug/L	0.030	5.0 U	5.0 U	5.0 UJ	5.0 U
BNA	Benzo(g,h,i)perylene	ug/L	--	5.0 U	5.0 U	5.0 UJ	5.0 U
BNA	Benzo(k)fluoranthene	ug/L	0.030	5.0 U	5.0 U	5.0 UJ	5.0 U
BNA	bis(2-Chloroethoxy)methane	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	bis(2-Chloroethyl)ether	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	bis(2-chloroisopropyl)ether	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	bis(2-ethylhexyl)phthalate	ug/L	--	5.0 U	5.0 U	5.0 UJ	5.0 U
BNA	Butylbenzylphthalate	ug/L	--	5.0 U	5.0 U	5.0 UJ	5.0 U
BNA	Caprolactam	ug/L	--	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
BNA	Chrysene	ug/L	0.030	5.0 U	5.0 U	5.0 U	5.0 U
BNA	Dibenzo(a,h)anthracene	ug/L	0.0070	5.0 U	5.0 U	5.0 UJ	5.0 U
BNA	Dibenzofuran	ug/L	--	5.0 U	5.0 U	5.0 U	8.6
BNA	Diethylphthalate	ug/L	--	5.0 U	5.0 U	5.0 UJ	11 J
BNA	Dimethylphthalate	ug/L	--	5.0 U	5.0 U	5.0 UJ	5.0 UJ
BNA	Di-n-butylphthalate	ug/L	--	5.0 U	5.0 U	5.0 UJ	5.0 UJ
BNA	Di-n-octylphthalate	ug/L	--	5.0 U	5.0 U	5.0 UJ	5.0 UJ
BNA	Fluoranthene	ug/L	3.0	5.0 U	5.0 U	5.0 U	2.9 J
BNA	Fluorene	ug/L	3.0	5.0 U	5.0 U	5.0 U	3.9 J
BNA	Hexachlorobenzene	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	Hexachlorobutadiene	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U

Table 2

Lower and Upper Aquifer Results - January 2006

Wyckoff

Location ID		MW19	MW21	PZ-05	PZ-06	PZ-07	PZ-07-FD
Aquifer		Upper	Upper	Upper	Upper	Upper	Upper
Sample Date		1/25/2006	1/23/2006	1/25/2006	1/25/2006	1/25/2006	1/25/2006
Groundwater Cleanup Level (ug/L)*							
Chemical Group	Analyte	Units					
BNA	Hexachlorocyclopentadiene	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	Hexachloroethane	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	Indeno(1,2,3-cd)pyrene	ug/L	0.030	5.0 U	5.0 U	5.0 UJ	5.0 U
BNA	Isophorone	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	Naphthalene	ug/L	83	5.0 U	5.0 U	5.0 U	38 44 J
BNA	Nitrobenzene	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	n-Nitrosodinpropylamine	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	n-Nitrosodiphenylamine	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	Pentachlorophenol	ug/L	4.9	5.0 U	5.0 U	5.0 UJ	5.0 U
BNA	Phenanthrene	ug/L	--	5.0 U	5.0 U	5.0 U	17 22
BNA	Phenol	ug/L	--	5.0 U	5.0 U	5.0 U	5.0 U
BNA	Pyrene	ug/L	15	5.0 U	5.0 U	5.0 U	1.6 J 2.3 J
General	Dissolved Oxygen	mg/L	--	4.1	1.5	8.0	2.6
General	Oxidation Reduction Potential	mV	--	148	-1.44E+02	30	-9.30E+01
General	pH	units	--	6.7	6.8	6.6	6.4
General	Salinity	%	--	--	0.020	--	--
General	Specific Conductivity	mS/cm	--	0.89	0.60	0.42	0.40
General	Temperature	deg C	--	9.6	12	8.7	7.5
General	Turbidity	NTU	--	17	14	6.0	14
PAH	2-Methylnaphthalene	ug/L	--	0.037 U	0.037 U	0.037 U	31 25
PAH	Acenaphthene	ug/L	3.0	0.037 U	2.3	0.037 U	67 55
PAH	Acenaphthylene	ug/L	--	0.037 U	0.037 J	0.037 U	0.50 0.40
PAH	Anthracene	ug/L	9.0	0.41	0.35	0.037 U	0.064 5.3
PAH	Benzo(a)anthracene	ug/L	0.030	0.037 U	0.037 U	0.037 U	0.13 0.11
PAH	Benzo(a)pyrene	ug/L	0.030	0.037 U	0.037 UJ	0.037 U	0.037 U
PAH	Benzo(b)fluoranthene	ug/L	0.030	0.037 U	0.037 UJ	0.037 U	0.027 J 0.024 J
PAH	Benzo(g,h,i)perylene	ug/L	--	0.037 U	0.037 UJ	0.037 U	0.037 U
PAH	Benzo(k)fluoranthene	ug/L	0.030	0.037 U	0.037 UJ	0.037 U	0.037 U
PAH	Chrysene	ug/L	0.030	0.037 U	0.037 U	0.037 U	0.12 0.11
PAH	Dibenz(a,h)anthracene	ug/L	0.0070	0.037 U	0.037 UJ	0.037 U	0.037 U
PAH	Fluoranthene	ug/L	3.0	0.037 U	0.037 U	0.037 U	8.0 7.3
PAH	Fluorene	ug/L	3.0	0.037 U	0.21	0.037 U	41 34
PAH	HPAH	ug/L	0.25	0.037 U	0.037 U	0.037 U	13 12
PAH	Indeno(1,2,3-cd)pyrene	ug/L	0.030	0.037 U	0.037 UJ	0.037 U	0.037 U
PAH	Naphthalene	ug/L	83	0.037 U	0.037 U	0.037 U	190 160
PAH	Phenanthrene	ug/L	--	0.037 U	0.037 U	0.037 U	66 59
PAH	Pyrene	ug/L	15	0.037 U	0.037 U	0.037 U	4.7 4.2
PCP	Pentachlorophenol	ug/L	4.9	0.074 U	0.074 U	0.074 U	0.074 U
TPH	TPH-GC/Diesel Range Organics	ug/L	--	190 U	190 U	190 U	1,000 870
TPH	TPH-GC/Motor Oil Range Organic	ug/L	--	460 U	460 U	460 U	460 U

Notes:

BNA = base/neutral and acid extractables

General = general chemistry

HPAH = High molecular weight Polynuclear Aromatic Hydrocarbon compounds

PAH = polynuclear aromatic hydrocarbons

TPH = total petroleum hydrocarbons

J = The analyte was positively identified; the quantitation is an estimation.

U = The analyte was not detected at or above the reported value.

* From Wyckoff ROD 2/2000

Tentatively Identified Compounds (TICs) have not been included in the results table.

Bold The analyte was detected

Value exceeds cleanup level

Table 3

All Lower Aquifer Results - 1994 through 2006

Wyckoff

Chemical Group	Analyte	Units	Groundwater Cleanup Level (ug/L)*	CW01		CW01		CW01		CW02		CW05		CW05		CW05	
				03/17/2004	01/26/2006	4/27/1994	11/14/1995	03/17/2004	01/23/2006	4/28/1994	11/15/1995	11/06/2002	12/05/2002	01/08/2003	03/18/2004	01/24/2006	11/14/1995
BNA	1,1'-Biphenyl	ug/L	--	0.036 J	5.0 U	--	--	0.033 J	5.0 UJ	--	--	--	--	--	0.74 U	5.0 U	--
BNA	1,2,4,5-Tetrachlorobenzene	ug/L	--	--	5.0 U	--	--	--	5.0 U	--	--	--	--	--	--	5.0 U	--
BNA	2,4,5-Trichlorophenol	ug/L	--	0.37 U	20 U	--	--	0.37 U	20 U	--	--	--	--	--	0.37 U	20 U	--
BNA	2,4,6-Trichlorophenol	ug/L	--	0.74 U	5.0 U	--	--	0.74 U	5.0 U	--	--	--	--	--	0.74 U	5.0 U	--
BNA	2,4-Dichlorophenol	ug/L	--	0.74 U	5.0 U	--	--	0.74 U	5.0 U	--	--	--	--	--	0.74 U	5.0 U	--
BNA	2,4-Dimethylphenol	ug/L	--	0.37 U	5.0 U	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	--
BNA	2,4-Dinitrophenol	ug/L	--	--	20 U	--	--	--	20 U	--	--	--	--	--	--	20 U	--
BNA	2,4-Dinitrotoluene	ug/L	--	1.9 U	5.0 U	--	--	1.9 U	5.0 U	--	--	--	--	--	1.9 U	5.0 U	--
BNA	2,6-Dinitrotoluene	ug/L	--	0.74 U	5.0 U	--	--	0.74 U	5.0 U	--	--	--	--	--	0.74 U	5.0 U	--
BNA	2-Chloronaphthalene	ug/L	--	0.37 U	5.0 U	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	--
BNA	2-Chlorophenol	ug/L	--	0.37 U	5.0 U	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	--
BNA	2-Methylnaphthalene	ug/L	--	0.025 J	5.0 U	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	--
BNA	2-Methylphenol	ug/L	--	0.37 U	5.0 U	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	--
BNA	2-Nitroaniline	ug/L	--	1.9 U	20 U	--	--	1.9 U	20 U	--	--	--	--	--	1.9 U	20 U	--
BNA	2-Nitrophenol	ug/L	--	1.9 U	5.0 U	--	--	1.9 U	5.0 U	--	--	--	--	--	1.9 U	5.0 U	--
BNA	3,3'-Dichlorobenzidine	ug/L	--	1.9 U	5.0 U	--	--	1.9 U	5.0 U	--	--	--	--	--	1.9 U	5.0 UJ	--
BNA	3-Nitroaniline	ug/L	--	1.9 U	20 U	--	--	1.9 U	20 U	--	--	--	--	--	1.9 U	20 U	--
BNA	4,6-Dinitro-2-methylphenol	ug/L	--	3.7 U	20 U	--	--	3.7 U	20 UJ	--	--	--	--	--	3.7 U	20 U	--
BNA	4-Bromophenyl-phenylether	ug/L	--	0.37 U	5.0 U	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	--
BNA	4-Chloro-3-methylphenol	ug/L	--	0.37 U	5.0 U	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	--
BNA	4-Chloroaniline	ug/L	--	0.37 U	5.0 U	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 UJ	5.0 U	--
BNA	4-Chlorophenyl-phenylether	ug/L	--	0.37 U	5.0 U	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	--
BNA	4-Methylphenol	ug/L	--	0.37 U	5.0 U	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	--
BNA	4-Nitroaniline	ug/L	--	--	20 U	--	--	--	20 U	--	--	--	--	--	--	20 U	--
BNA	4-Nitrophenol	ug/L	--	1.9 U	20 U	--	--	1.9 U	20 U	--	--	--	--	--	1.9 U	20 U	--
BNA	9H-Carbazole	ug/L	--	0.37 U	--	--	--	0.37 U	--	--	--	--	--	--	0.37 U	--	--
BNA	Acenaphthene	ug/L	3.0	0.37 U	5.0 U	--	--	0.37 U	5.0 U	--	--	--	--	--	0.033 J	5.0 U	--
BNA	Acenaphthylene	ug/L	--	0.37 U	5.0 U	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	--
BNA	Acetophenone	ug/L	--	0.74 U	5.0 U	--	--	0.74 U	5.0 U	--	--	--	--	--	0.74 U	5.0 U	--
BNA	Anthracene	ug/L	9.0	0.37 U	5.0 U	--	--	0.37 U	5.0 U	--	--	--	--	--	0.32 J	5.0 U	--
BNA	Atrazine	ug/L	--	0.74 U	5.0 U	--	--	0.74 U	5.0 U	--	--	--	--	--	0.74 U	5.0 U	--
BNA	Benzaldehyde	ug/L	--	0.74 U	5.0 U	--	--	0.74 U	5.0 U	--	--	--	--	--	0.74 U	5.0 U	--
BNA	Benzo(a)anthracene	ug/L	0.030	0.37 U	5.0 U	--	--	0.37 U	5.0 U	--	--	--	--	--	0.17 J	5.0 U	--
BNA	Benzo(a)pyrene	ug/L	0.030	0.74 U	5.0 U	--	--	0.74 U	5.0 U	--	--	--	--	--	0.74 U	5.0 U	--
BNA	Benzo(b)fluoranthene	ug/L	0.030	1.9 U	5.0 U	--	--	1.9 U	5.0 U	--	--	--	--	--	1.9 U	5.0 U	--
BNA	Benzo(g,h,i)perylene	ug/L	--	1.9 U	5.0 U	--	--	1.9 U	5.0 U	--	--	--	--	--	1.9 U	5.0 U	--
BNA	Benzo(k)fluoranthene	ug/L	0.030	0.37 U	5.0 U	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	--
BNA	Butylbenzylphthalate	ug/L	--	1.9 U	5.0 U	--	--	1.9 U	5.0 UJ	--	--	--	--	--	1.9 U	5.0 U	--
BNA	Caprolactam	ug/L	--	1.9 U	5.0 U	--	--	1.9 U	5.0 UJ	--	--	--	--	--	1.9 UJ	5.0 UJ	--
BNA	Chrysene	ug/L	0.030	0.37 U	5.0 U	--	--	0.37 U	5.0 U	--	--	--	--	--	0.14 J	5.0 U	--
BNA	Di-n-butylphthalate	ug/L	--	0.74 U	5.0 U	--	--	0.74 U	5.0 UJ	--	--	--	--	--	0.74 U	5.0 U	--
BNA	Di-n-octylphthalate	ug/L	--	1.9 U	5.0 U	--	--	1.9 U	5.0 UJ	--	--	--	--	--	1.9 U	5.0 U	--
BNA	Dibenzo(a,h)anthracene	ug/L	0.0070	1.9 U	5.0 U	--	--	1.9 U	5.0 U	--	--	--	--	--	1.9 U	5.0 U	--
BNA	Dibenzofuran	ug/L	--	0.37 U	5.0 U	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	--
BNA	Diethylphthalate	ug/L	--	0.37 U	5.0 U	--	--	0.37 U	5.0 UJ	--	--	--	--	--	0.37 U	5.0 U	--
BNA	Dimethylphthalate	ug/L	--	0.37 U	5.0 U	--	--	0.37 U	5.0 UJ	--	--	--	--	--	0.37 U	5.0 U	--
BNA	Fluoranthene	ug/L	3.0	0.37 U	5.0 U	--	--	0.37 U	5.0 U	--	--	--	--	--	2.0	5.0 U	--
BNA	Fluorene	ug/L	3.0	0.37 U	5.0 U	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	--
BNA	Hexachlorobenzene	ug/L	--	0.37 U	5.0 U	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	--
BNA	Hexachlorobutadiene	ug/L	--	0.37 U	5.0 U	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 UJ	5.0 U	--
BNA	Hexachlorocyclopentadiene	ug/L	--	1.9 U													

Table 3

All Lower Aquifer Results - 1994 through 2006

Wyckoff

Notes

BNA = base/neutral and acid extractables

General = general chemistry

HPAH = High molecular weight Polynuclear Aromatic Hydrocarbon compounds

PAH = polynuclear aromatic hydrocarbon

TPH = total petroleum hydrocarbons

† = The analyte was positively identified; the quantitation is an estimation.

II = The analyte was not detected at or above the reported value.

C = Calculated Result. Sum of the following "high molecular weight polynuclear aromatic hydrocarbon" compounds (detections and estimated)

polynuclear aromatic hydrocarbon compounds (detected and estimated quantities): fluoranthene, pyrene, benzo(a)anthracene, chrysene.

benzo[b]fluoranthene, benzo[k]fluoranthene, benzo(a)pyrene,

dibenzo(a,h)anthracene, benzo(g,h,i)perylene, and indeno(1,2,3-cd)pyrene

* From Wyckoff ROD 2/2000

Bold The analyte was detected

Value exceeds cleanup level

Table 3

All Lower Aquifer Results - 1994 through 2006

Wyckoff

Chemical Group	Analyte	Units	Groundwater Cleanup Level (ug/L)*	CW09		CW09		CW09		CW12		CW12		CW15		CW15			
				11/06/2002	12/05/2002	01/08/2003	03/18/2004	01/23/2006	11/14/1995	03/18/2004	01/25/2006	11/14/1995	11/06/2002	12/05/2002	01/08/2003	03/18/2004	01/24/2006		
BNA	1,1'-Biphenyl	ug/L	--	--	--	--	0.74 U	5.0 U	--	0.74 U	5.0 U	--	--	--	--	--	17	5.0 U	
BNA	1,2,4,5-Tetrachlorobenzene	ug/L	--	--	--	--	--	5.0 U	--	--	5.0 U	--	--	--	--	--	--	5.0 U	
BNA	2,4,5-Trichlorophenol	ug/L	--	--	--	--	0.37 U	20 U	--	0.37 U	20 U	--	--	--	--	--	0.37 U	20 U	
BNA	2,4,6-Trichlorophenol	ug/L	--	--	--	--	0.74 U	5.0 U	--	0.74 U	5.0 U	--	--	--	--	--	0.74 U	5.0 U	
BNA	2,4-Dichlorophenol	ug/L	--	--	--	--	0.74 U	5.0 U	--	0.74 U	5.0 U	--	--	--	--	--	0.74 U	5.0 U	
BNA	2,4-Dimethylphenol	ug/L	--	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	
BNA	2,4-Dinitrophenol	ug/L	--	--	--	--	--	20 U	--	--	20 U	--	--	--	--	--	--	20 U	
BNA	2,4-Dinitrotoluene	ug/L	--	--	--	--	1.9 U	5.0 U	--	1.9 U	5.0 U	--	--	--	--	--	1.9 U	5.0 U	
BNA	2,6-Dinitrotoluene	ug/L	--	--	--	--	0.74 U	5.0 U	--	0.74 U	5.0 U	--	--	--	--	--	0.74 U	5.0 U	
BNA	2-Chloronaphthalene	ug/L	--	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	
BNA	2-Chlorophenol	ug/L	--	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	
BNA	2-Methylnaphthalene	ug/L	--	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	57	5.0 U	
BNA	2-Methylphenol	ug/L	--	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	
BNA	2-Nitroaniline	ug/L	--	--	--	--	--	1.9 U	20 U	--	1.9 U	20 U	--	--	--	--	--	1.9 U	20 U
BNA	2-Nitrophenol	ug/L	--	--	--	--	--	1.9 U	5.0 U	--	1.9 U	5.0 U	--	--	--	--	--	1.9 U	5.0 U
BNA	3,3'-Dichlorobenzidine	ug/L	--	--	--	--	--	1.9 U	5.0 U	--	1.9 U	5.0 UJ	--	--	--	--	--	1.9 U	5.0 U
BNA	3-Nitroaniline	ug/L	--	--	--	--	--	1.9 U	20 U	--	1.9 U	20 U	--	--	--	--	--	1.9 U	20 U
BNA	4,6-Dinitro-2-methylphenol	ug/L	--	--	--	--	--	3.7 U	20 UJ	--	3.7 U	20 UJ	--	--	--	--	--	3.7 U	20 U
BNA	4-Bromophenyl-phenylether	ug/L	--	--	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U
BNA	4-Chloro-3-methylphenol	ug/L	--	--	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U
BNA	4-Chloroaniline	ug/L	--	--	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U
BNA	4-Chlorophenyl-phenylether	ug/L	--	--	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U
BNA	4-Methylphenol	ug/L	--	--	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	0.040 J	5.0 U
BNA	4-Nitroaniline	ug/L	--	--	--	--	--	--	20 U	--	--	20 U	--	--	--	--	--	--	20 U
BNA	4-Nitrophenol	ug/L	--	--	--	--	--	1.9 U	20 U	--	1.9 U	20 U	--	--	--	--	--	1.9 U	20 U
BNA	9H-Carbazole	ug/L	--	--	--	--	0.062 J	--	--	0.37 U	--	--	--	--	--	--	16	--	
BNA	Acenaphthene	ug/L	3.0	--	--	--	0.28 J	5.0 U	--	0.067 J	5.0 U	--	--	--	--	--	73	18	
BNA	Acenaphthylene	ug/L	--	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	0.35 J	5.0 U	
BNA	Acetophenone	ug/L	--	--	--	--	0.74 U	5.0 U	--	0.74 U	5.0 U	--	--	--	--	--	0.74 U	5.0 U	
BNA	Anthracene	ug/L	9.0	--	--	--	0.015 J	5.0 U	--	0.031 J	5.0 U	--	--	--	--	--	12	5.0 U	
BNA	Atrazine	ug/L	--	--	--	--	0.74 U	5.0 U	--	0.74 U	5.0 U	--	--	--	--	--	0.74 U	5.0 U	
BNA	Benzaldehyde	ug/L	--	--	--	--	0.74 U	5.0 U	--	0.74 U	5.0 U	--	--	--	--	--	0.74 U	5.0 U	
BNA	Benzo(a)anthracene	ug/L	0.030	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	5.5	5.0 U	
BNA	Benzo(a)pyrene	ug/L	0.030	--	--	--	0.74 U	5.0 U	--	0.74 U	5.0 U	--	--	--	--	--	1.0	5.0 U	
BNA	Benzo(b)fluoranthene	ug/L	0.030	--	--	--	1.9 U	5.0 U	--	1.9 U	5.0 U	--	--	--	--	--	1.3 J	5.0 U	
BNA	Benzo(g,h,i)perylene	ug/L	--	--	--	--	1.9 U	5.0 U	--	1.9 U	5.0 U	--	--	--	--	--	0.19 J	5.0 U	
BNA	Benzo(k)fluoranthene	ug/L	0.030	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	1.2	5.0 U	
BNA	Butylbenzylphthalate	ug/L	--	--	--	--	1.9 U	5.0 U	--	1.9 U	5.0 U	--	--	--	--	--	1.9 U	5.0 U	
BNA	Caprolactam	ug/L	--	--	--	--	1.9 U	5.0 UJ	--	1.9 U	5.0 UJ	--	--	--	--	--	1.9 U	5.0 U	
BNA	Chrysene	ug/L	0.030	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	4.7	5.0 U	
BNA	Di-n-butylphthalate	ug/L	--	--	--	--	0.74 U	5.0 U	--	0.74 U	5.0 U	--	--	--	--	--	0.74 U	5.0 U	
BNA	Di-n-octylphthalate	ug/L	--	--	--	--	1.9 U	5.0 U	--	1.9 U	5.0 U	--	--	--	--	--	1.9 U	5.0 U	
BNA	Dibenzo(a,h)anthracene	ug/L	0.0070	--	--	--	1.9 U	5.0 U	--	1.9 U	5.0 U	--	--	--	--	--	1.9 U	5.0 U	
BNA	Dibenzofuran	ug/L	--	--	--	--	0.12 J	5.0 U	--	0.067 J	5.0 U	--	--	--	--	--	59	7.0	
BNA	Diethylphthalate	ug/L	--	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	
BNA	Dimethylphthalate	ug/L	--	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	
BNA	Fluoranthene	ug/L	3.0	--	--	--	0.054 J	5.0 U	--	0.089 J	5.0 U	--	--	--	--	--	47	1.9 J	
BNA	Fluorene	ug/L	3.0	--	--	--	0.065 J	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	58	2.1 J	
BNA	Hexachlorobenzene	ug/L	--	--	--	--	0.37 U	5.0 U	--</										

Table 3

All Lower Aquifer Results - 1994 through 2006

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Chemical Group	Analyte	Units	Groundwater Cleanup Level (ug/L)*	CW09		CW09		CW09		CW12		CW12		CW15		CW15		
				11/06/2002	12/05/2002	01/08/2003	03/18/2004	01/23/2006	11/14/1995	03/18/2004	01/25/2006	11/14/1995	11/06/2002	12/05/2002	01/08/2003	03/18/2004	01/23/2006	
BNA	Phenol	ug/L	--	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U
BNA	Pyrene	ug/L	15	--	--	--	0.036 J	5.0 U	--	0.079 J	5.0 U	--	--	--	--	--	27	5.0 U
BNA	bis(2-Chloroethoxy)methane	ug/L	--	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U
BNA	bis(2-Chloroethyl)ether	ug/L	--	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U
BNA	bis(2-chloroisopropyl)ether	ug/L	--	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U
BNA	bis(2-ethylhexyl)phthalate	ug/L	--	--	--	--	1.9 U	5.0 U	--	1.9 U	5.0 U	--	--	--	--	--	1.9 U	5.0 U
BNA	n-Nitrosodimethylamine	ug/L	--	--	--	--	1.9 U	--	--	1.9 U	--	--	--	--	--	--	1.9 U	--
BNA	n-Nitrosodipropylamine	ug/L	--	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U
BNA	n-Nitrosodiphenylamine	ug/L	--	--	--	--	0.37 U	5.0 U	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U
General	Dissolved Oxygen	mg/L	--	--	--	--	--	2.2	--	--	5.1	--	--	--	--	--	--	1.3
General	Eh	mV	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
General	Specific Conductivity	mS	--	--	--	--	--	14	--	--	0.32	--	--	--	--	--	--	5.7
General	Temperature	°C	--	--	--	--	--	12	--	--	13	--	--	--	--	--	--	12
General	Turbidity	ntu	--	--	--	--	--	2.8	--	--	1.2	--	--	--	--	--	--	27
General	pH	units	--	--	--	--	--	6.7	--	--	6.8	--	--	--	--	--	--	6.6
General	Oxidation Reduction Potential	mV	--	--	--	--	--	65	--	--	132	--	--	--	--	--	--	-2.81E+02
General	Salinity	%	--	--	--	--	0.82	--	--	0	--	--	--	--	--	--	--	0.30
PAH	1-Methylnaphthalene	ug/L	--	1.1	0.39 U	0.24 J	--	--	195	--	--	125	16	7.2	16	--	--	--
PAH	2-Chloronaphthalene	ug/L	--	0.37 U	0.39 U	0.38 U	--	--	0.43 U	--	--	0.45 U	0.37 U	0.38 U	0.38 U	--	--	--
PAH	2-Methylnaphthalene	ug/L	--	0.22 J	0.39 U	0.023 J	0.046 U	0.037 U	39	0.046 U	0.037 U	147	10	0.38 U	8.7	51	3.6	
PAH	Acenaphthene	ug/L	3.0	1.3	0.070 J	0.23 J	0.21	0.037 U	237	0.058	0.037 U	140	41	58	131	79	71	
PAH	Acenaphthylene	ug/L	--	0.37 U	0.39 U	0.38 U	0.046 U	0.037 U	5.3	0.046 U	0.037 U	1.7	0.36 J	0.52	0.99	0.23 J	0.46	
PAH	Anthracene	ug/L	9.0	0.21 J	0.39 U	0.023 J	0.046 U	0.18	18	0.031 J	0.037 U	11	2.7	2.1	4.5	12	1.2	
PAH	Benzo(a)anthracene	ug/L	0.030	0.37 U	0.39 U	0.38 U	0.046 U	0.089	1.8	0.010 J	0.037 U	0.85	1.2	0.95	1.7	5.8	0.15	
PAH	Benzo(a)pyrene	ug/L	0.030	0.045 J	0.39 U	0.38 U	0.093 U	0.035 J	0.36 J	0.093 U	0.037 U	0.27 J	0.20 J	0.19 J	0.34 J	0.93	0.022 J	
PAH	Benzo(b)fluoranthene	ug/L	0.030	0.084 J	0.39 U	0.38 U	0.093 U	0.060	0.73	0.093 U	0.037 U	0.45	0.41	0.36 J	0.64	1.3	0.048	
PAH	Benzo(g,h,i)perylene	ug/L	--	0.37 U	0.39 U	0.38 U	0.093 U	0.037 U	0.43 U	0.093 U	0.037 U	0.45 U	0.046 J	0.38 U	0.078 J	0.16	0.037 U	
PAH	Benzo(k)fluoranthene	ug/L	0.030	0.032 J	0.39 U	0.38 U	0.046 U	0.027 J	0.30 J	0.046 U	0.037 U	0.19 J	0.14 J	0.15 J	0.22 J	0.94	0.020 J	
PAH	Chrysene	ug/L	0.030	0.16 J	0.39 U	0.38 U	0.046 U	0.11	2.0	0.013 J	0.037 U	0.90	0.96	0.87	1.5	4.5	0.17	
PAH	Dibenzo(a,h)anthracene	ug/L	0.0070	0.74 U	0.78 U	1.9 U	0.093 U	0.037 U	0.43 U	0.093 U	0.037 U	0.45 U	0.74 U	0.75 U	1.9 U	0.14	0.037 U	
PAH	Fluoranthene	ug/L	3.0	0.98	0.057 J	0.058 J	0.045 J	0.49	30	0.085	0.037 U	22	9.6	6.3	14	52	2.1	
PAH	Fluorene	ug/L	3.0	0.58	0.39 U	0.060 J	0.027 J	0.037 U	153	0.017 J	0.037 U	71	27	34	52	66	6.6	
PAH	Indeno(1,2,3-cd)pyrene	ug/L	0.030	1.9 U	2.0 U	1.9 U	0.093 U	0.037 U	0.43 U	0.093 U	0.037 U	0.45 U	1.9 U	1.9 U	0.069 J	0.25	0.037 U	
PAH	Naphthalene	ug/L	83	8.6	0.22 J	3.0	0.097	0.029 J	1,404	0.046 U	0.037 U	1,154	99	4.2	49	390	220	
PAH	Phenanthrene	ug/L	--	2.0	0.10 J	0.18 J	0.032 J	0.037 J	110	0.12	0.037 U	124	39	39	78	170	30	
PAH	Pyrene	ug/L	15	0.61	0.39 U	0.055 J	0.028 J	0.32	14	0.046 J	0.037 U	11	5.2	3.5	7.8	26	1.1	
PAH	HPAH	ug/L	0.25	1.9 C	0.057 C	0.11 C	0.073 C	1.1	--	0.15 C	0.037 U	--	18 C	12 C	26 C	92 C	3.6	
PCP	Pentachlorophenol	ug/L	4.9	--	--	--	0.037 U	0.82	--	0.037 U	0.074 U	--	--	--	--	0.037 U	0.074 U	
TPH	Diesel (#2)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
TPH	Gasoline	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
TPH	Lube Oil	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
TPH	TPH-GC/Diesel Range Organics	ug/L	--	--	--													

Table 3

All Lower Aquifer Results - 1994 through 2006

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Chemical Group	Analyte	Units	Groundwater Cleanup Level (ug/L)*	CW15-FD	EWC1	02CD-MW01	02CD-MW01	99CD-MW02	99CD-MW02	99CD-MW02	99CD-MW02	99CD-MW02	99CD-MW04	99CD-MW04	99CD-MW04				
				01/24/2006	4/25/1994	11/13/1995	01/08/2003	03/18/2004	01/23/2006	11/07/2002	12/05/2002	01/08/2003	03/19/2004	06/14/2004	01/24/2006	11/07/2002	12/05/2002	01/08/2003	
BNA	1,1'-Biphenyl	ug/L	--	1.3 J	--	--	--	0.027 J	5.0 UJ	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	1,2,4,5-Tetrachlorobenzene	ug/L	--	5.0 U	--	--	--	--	5.0 U	--	--	--	--	5.0 U	--	--	--	--	
BNA	2,4,5-Trichlorophenol	ug/L	--	20 U	--	--	--	0.37 U	20 U	--	--	--	--	0.37 U	20 U	--	--	--	
BNA	2,4,6-Trichlorophenol	ug/L	--	5.0 U	--	--	--	0.74 U	5.0 U	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	2,4-Dichlorophenol	ug/L	--	5.0 U	--	--	--	0.74 U	5.0 U	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	2,4-Dimethylphenol	ug/L	--	5.0 U	--	--	--	0.37 U	5.0 U	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	2,4-Dinitrophenol	ug/L	--	20 U	--	--	--	--	20 U	--	--	--	--	--	20 U	--	--	--	
BNA	2,4-Dinitrotoluene	ug/L	--	5.0 U	--	--	--	1.9 U	5.0 U	--	--	--	--	3.7 U	5.0 U	--	--	--	
BNA	2,6-Dinitrotoluene	ug/L	--	5.0 U	--	--	--	0.74 U	5.0 U	--	--	--	--	1.9 U	5.0 U	--	--	--	
BNA	2-Chloronaphthalene	ug/L	--	5.0 U	--	--	--	0.37 U	5.0 U	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	2-Chlorophenol	ug/L	--	5.0 U	--	--	--	0.37 U	5.0 U	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	2-Methylnaphthalene	ug/L	--	2.1 J	--	--	--	0.37 U	5.0 U	--	--	--	--	0.16 J	5.0 U	--	--	--	
BNA	2-Methylphenol	ug/L	--	5.0 U	--	--	--	0.37 U	5.0 U	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	2-Nitroaniline	ug/L	--	20 U	--	--	--	1.9 U	20 U	--	--	--	--	1.9 U	20 U	--	--	--	
BNA	2-Nitrophenol	ug/L	--	5.0 U	--	--	--	1.9 U	5.0 U	--	--	--	--	1.9 U	5.0 U	--	--	--	
BNA	3,3'-Dichlorobenzidine	ug/L	--	5.0 UJ	--	--	--	1.9 U	5.0 U	--	--	--	--	3.7 U	5.0 UJ	--	--	--	
BNA	3-Nitroaniline	ug/L	--	20 U	--	--	--	1.9 U	20 U	--	--	--	--	1.9 U	20 U	--	--	--	
BNA	4,6-Dinitro-2-methylphenol	ug/L	--	20 U	--	--	--	3.7 U	20 UJ	--	--	--	--	3.7 U	20 U	--	--	--	
BNA	4-Bromophenyl-phenylether	ug/L	--	5.0 U	--	--	--	0.37 U	5.0 UJ	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	4-Chloro-3-methylphenol	ug/L	--	5.0 U	--	--	--	0.37 U	5.0 U	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	4-Chloroaniline	ug/L	--	5.0 U	--	--	--	0.37 U	5.0 U	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	4-Chlorophenyl-phenylether	ug/L	--	5.0 U	--	--	--	0.37 U	5.0 UJ	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	4-Methylphenol	ug/L	--	5.0 U	--	--	--	0.37 U	5.0 U	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	4-Nitroaniline	ug/L	--	20 U	--	--	--	--	20 U	--	--	--	--	--	--	20 U	--	--	
BNA	4-Nitrophenol	ug/L	--	20 U	--	--	--	1.9 U	20 U	--	--	--	--	1.9 U	20 U	--	--	--	
BNA	9H-Carbazole	ug/L	--	--	--	--	--	0.37 U	--	--	--	--	--	0.074 J	--	--	--	--	
BNA	Acenaphthene	ug/L	3.0	39	--	--	--	0.37 U	5.0 U	--	--	--	--	0.22 J	5.0 U	--	--	--	
BNA	Acenaphthylene	ug/L	--	5.0 U	--	--	--	0.37 U	5.0 U	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	Acetophenone	ug/L	--	5.0 U	--	--	--	0.74 U	5.0 U	--	--	--	--	0.14 J	5.0 U	--	--	--	
BNA	Anthracene	ug/L	9.0	5.0 U	--	--	--	0.37 U	5.0 U	--	--	--	--	0.046 J	5.0 U	--	--	--	
BNA	Atrazine	ug/L	--	5.0 U	--	--	--	0.74 U	5.0 U	--	--	--	--	0.74 U	5.0 U	--	--	--	
BNA	Benzaldehyde	ug/L	--	5.0 U	--	--	--	0.74 U	5.0 U	--	--	--	--	0.74 U	5.0 U	--	--	--	
BNA	Benzo(a)anthracene	ug/L	0.030	5.0 U	--	--	--	0.37 U	5.0 U	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	Benzo(a)pyrene	ug/L	0.030	5.0 U	--	--	--	0.74 U	5.0 U	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	Benzo(b)fluoranthene	ug/L	0.030	5.0 U	--	--	--	--	1.9 U	5.0 U	--	--	--	--	0.37 U	5.0 U	--	--	--
BNA	Benzo(g,h,i)perylene	ug/L	--	5.0 U	--	--	--	--	1.9 U	5.0 U	--	--	--	--	0.37 U	5.0 U	--	--	--
BNA	Benzo(k)fluoranthene	ug/L	0.030	5.0 U	--	--	--	0.37 U	5.0 U	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	Butylbenzylphthalate	ug/L	--	5.0 U	--	--	--	--	1.9 U	5.0 UJ	--	--	--	--	0.37 U	5.0 U	--	--	--
BNA	Caprolactam	ug/L	--	5.0 UJ	--	--	--	--	1.9 U	1.6 J	--	--	--	--	0.74 U	5.0 UJ	--	--	--
BNA	Chrysene	ug/L	0.030	5.0 U	--	--	--	0.37 U	5.0 U	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	Di-n-butylphthalate	ug/L	--	5.0 U	--	--	--	0.74 U	5.0 UJ	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	Di-n-octylphthalate	ug/L	--	5.0 U	--	--	--	1.9 U	5.0 UJ	--	--	--	--	1.9 U	5.0 U	--	--	--	
BNA	Dibenzo(a,h)anthracene	ug/L	0.0070	5.0 U	--	--	--	--	1.9 U	5.0 U	--	--	--	--	1.9 U	5.0 U	--	--	--
BNA	Dibenzofuran	ug/L	--	14	--	--	--	0.37 U	5.0 UJ	--	--	--	--	0.12 J	5.0 U	--	--	--	
BNA	Diethylphthalate	ug/L	--	5.0 U	--	--	--	0.37 U	5.0 UJ	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	Dimethylphthalate	ug/L	--	5.0 U	--	--	--	0.37 U	5.0 UJ	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	Fluoranthene	ug/L	3.0	1.8 J	--	--	--	0.37 U	5.0 U	--	--	--	--	0.28 J	5.0 U	--	--	--	
BNA	Fluorene	ug/L	3.0	4.1 J	--	--	--	0.37 U	5.0 UJ	--	--	--	--	0.14 J	5.0 U	--	--	--	
BNA	Hexachlorobenzene	ug/L	--	5.0 U	--	--	--	0.37 U	5.0 U	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	Hexachlorobutadiene	ug/L	--	5.0 U	--	--	--	0.37 U	5.0 U	--	--	--	--	0.37 U	5.0 U	--			

Table 3

All Lower Aquifer Results - 1994 through 2006

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Chemical Group	Analyte	Units	Groundwater Cleanup Level (ug/L)*	CW15-FD		EWC1		02CD-MW01		02CD-MW01		99CD-MW02		99CD-MW02		99CD-MW02		99CD-MW04		
				01/24/2006	4/25/1994	11/13/1995	01/08/2003	03/18/2004	01/23/2006	11/07/2002	12/05/2002	01/08/2003	03/19/2004	06/14/2004	01/24/2006	11/07/2002	12/05/2002	01/08/2003		
BNA	Phenol	ug/L	--	5.0 U	--	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	Pyrene	ug/L	15	5.0 U	--	--	--	0.37 U	5.0 U	--	--	--	--	--	0.16 J	5.0 U	--	--	--	
BNA	bis(2-Chloroethoxy)methane	ug/L	--	5.0 U	--	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	bis(2-Chloroethyl)ether	ug/L	--	5.0 U	--	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	bis(2-chloroisopropyl)ether	ug/L	--	5.0 U	--	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	bis(2-ethylhexyl)phthalate	ug/L	--	5.0 U	--	--	--	1.9 U	5.0 UJ	--	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	n-Nitrosodimethylamine	ug/L	--	--	--	--	--	1.9 U	--	--	--	--	--	--	0.37 U	--	--	--	--	
BNA	n-Nitrosodipropylamine	ug/L	--	5.0 U	--	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	--	--	--	
BNA	n-Nitrosodiphenylamine	ug/L	--	5.0 U	--	--	--	0.37 U	5.0 U	--	--	--	--	--	0.37 U	5.0 U	--	--	--	
General	Dissolved Oxygen	mg/L	--	1.3	--	--	--	--	2.0	--	--	--	--	--	--	2.5	--	--	--	
General	Eh	mV	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
General	Specific Conductivity	mS	--	5.7	--	--	--	--	0.22	--	--	--	--	--	--	0.23	--	--	--	
General	Temperature	°C	--	12	--	--	--	--	16	--	--	--	--	--	--	13	--	--	--	
General	Turbidity	ntu	--	27	--	--	--	--	42	--	--	--	--	--	--	18	--	--	--	
General	pH	units	--	6.6	--	--	--	--	8.3	--	--	--	--	--	--	8.1	--	--	--	
General	Oxidation Reduction Potential	mV	--	-2.81E+02	--	--	--	--	-1.52E+02	--	--	--	--	--	--	-2.59E+02	--	--	--	
General	Salinity	%	--	0.30	--	--	--	--	0.010	--	--	--	--	--	--	0.010	--	--	--	
PAH	1-Methylnaphthalene	ug/L	--	--	0.44 U	0.37 U	--	--	0.38 U	0.38 U	0.37 U	--	--	--	--	0.37 U	0.37 U	0.37 U	0.37 U	
PAH	2-Chloronaphthalene	ug/L	--	--	10 U	0.44 U	0.37 U	--	0.38 U	0.38 U	0.37 U	--	--	--	--	0.37 U	0.37 U	0.37 U	0.37 U	
PAH	2-Methylnaphthalene	ug/L	--	0.72	10 U	0.32 J	0.37 U	0.046 U	0.037 U	0.38 U	0.38 U	0.37 U	0.046 U	0.14	0.14	0.37 U	0.37 U	0.37 U	0.37 U	
PAH	Acenaphthene	ug/L	3.0	73	10 U	0.034 J	0.033 J	0.046 U	0.037 U	0.021 J	0.092 J	0.15 J	0.048	0.24	0.11	0.37 U	0.37 U	0.034 J	0.37 U	0.072 J
PAH	Acenaphthylene	ug/L	--	0.43	10 U	0.15 J	0.37 U	0.046 U	0.037 U	0.38 U	0.38 U	0.37 U	0.046 U	0.046 U	0.037 U	0.37 U	0.37 U	0.37 U	0.37 U	
PAH	Anthracene	ug/L	9.0	0.98	10 U	8.3	0.041 J	0.011 J	0.037 U	0.38 U	0.38 U	0.37 U	0.046 U	0.046 U	0.037 U	0.37 U	0.034 J	0.37 U	0.026 J	
PAH	Benzo(a)anthracene	ug/L	0.030	0.14	10 U	0.44 U	0.37 U	0.046 U	0.037 U	0.38 U	0.38 U	0.37 U	0.046 U	0.046 U	0.037 U	0.37 U	0.37 U	0.37 U	0.37 U	
PAH	Benzo(a)pyrene	ug/L	0.030	0.021 J	10 U	0.15 J	0.37 U	0.093 U	0.037 U	0.38 U	0.38 U	0.37 U	0.093 U	0.093 U	0.037 U	0.37 U	0.37 U	0.37 U	0.37 U	
PAH	Benzo(b)fluoranthene	ug/L	0.030	0.046	10 U	0.32 J	0.057 J	0.093 U	0.037 U	0.38 U	0.38 U	0.37 U	0.093 U	0.093 U	0.037 U	0.37 U	0.37 U	0.37 U	0.37 U	
PAH	Benzo(g,h,i)perylene	ug/L	--	0.037 U	10 U	0.44 U	0.37 U	0.093 U	0.037 U	0.38 U	0.38 U	0.37 U	0.093 U	0.093 U	0.037 U	0.37 U	0.37 U	0.37 U	0.37 U	
PAH	Benzo(k)fluoranthene	ug/L	0.030	0.019 J	10 U	0.11 J	0.37 U	0.046 U	0.037 U	0.38 U	0.38 U	0.37 U	0.046 U	0.046 U	0.037 U	0.37 U	0.37 U	0.37 U	0.37 U	
PAH	Chrysene	ug/L	0.030	0.16	10 U	0.85	0.050 J	0.046 U	0.037 U	0.38 U	0.38 U	0.37 U	0.046 U	0.046 U	0.037 U	0.37 U	0.37 U	0.37 U	0.37 U	
PAH	Dibenz(a,h)anthracene	ug/L	0.0070	0.037 U	10 U	0.44 U	1.9 U	0.093 U	0.037 U	0.75 U	0.77 U	1.9 U	0.093 U	0.093 U	0.037 U	0.74 U	0.74 U	1.9 U	1.9 U	
PAH	Fluoranthene	ug/L	3.0	1.7	10 U	0.34 J	0.16 J	0.0097 J	0.037 U	0.11 J	0.069 J	0.070 J	0.085	0.30	0.20	0.039 J	0.37 U	0.048 J	0.37 U	
PAH	Fluorene	ug/L	3.0	3.3	10 U	0.75	0.37 U	0.046 U	0.037 U	0.38 U	0.050 J	0.11 J	0.025 J	0.16	0.041	0.37 U	0.37 U	0.029 J	0.37 U	
PAH	Indeno(1,2,3-cd)pyrene	ug/L	0.030	0.037 U	10 U	0.44 U	1.9 U	0.093 U	0.037 U	1.9 U	1.9 U	1.9 U	0.093 U	0.093 U	0.037 U	1.9 U	1.9 U	1.9 U	1.9 U	
PAH	Naphthalene	ug/L	83	91	2.0 J	3.0	0.039 J	0.046 U	0.033 J	0.38 U	0.38 U	0.024 J	0.046 U	1.7	2.1	0.37 U	0.046 J	0.31 J	0.37 U	
PAH	Phenanthrene	ug/L	--	28	10 U	1.2	0.059 J	0.0073 J	0.037 U	0.38 U	0.039 J	0.079 J	0.020 J	0.28	0.11	0.020 J	0.37 U	0.077 J	0.37 U	
PAH	Pyrene	ug/L	15	0.95	10 U	0.27 J	0.15 J	0.046 U	0.037 U	0.12 J	0.38 U	0.061 J	0.034 J	0.14	0.13	0.37 U	0.37 U	0.054 J	0.37 U	
PAH	HPAH	ug/L	0.25	3.0	--	--	0.42 C	0.0097 C	0.037 U	0.23 C	0.069 C	0.13 C	0.12 C	0.4						

Table 3

All Lower Aquifer Results - 1994 through 2006

Wyckoff

Chemical Group	Analyte	Groundwater Cleanup Level (ug/L)*	99CD-MW04 03/19/2004	99CD-MW04 06/14/2004	99CD-MW04 01/24/2006	MWC2 4/25/1994	MWC2 11/13/1995	PZ-03 09/14/2004	PZ-03 01/23/2006	PZ-08 09/14/2004	PZ-08 01/26/2006	PZ-09 09/16/2004	PZ-09 01/26/2006	PZ-10 09/14/2004	PZ-10 01/26/2006	PZ-11 09/14/2004	
BNA	1,1'-Biphenyl	ug/L	--	--	0.37 U	5.0 UJ	--	--	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U
BNA	1,2,4,5-Tetrachlorobenzene	ug/L	--	--	--	5.0 U	--	--	5.0 U	5.0 U							
BNA	2,4,5-Trichlorophenol	ug/L	--	--	0.37 U	20 U	--	--	20 U	20 U	0.15 J	20 U	20 U				
BNA	2,4,6-Trichlorophenol	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U	0.22 J	5.0 U	5.0 U				
BNA	2,4-Dichlorophenol	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U							
BNA	2,4-Dimethylphenol	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U							
BNA	2,4-Dinitrophenol	ug/L	--	--	--	20 U	--	--	20 U	20 U							
BNA	2,4-Dinitrotoluene	ug/L	--	--	3.7 U	5.0 U	--	--	5.0 U	5.0 U							
BNA	2,6-Dinitrotoluene	ug/L	--	--	1.9 U	5.0 U	--	--	5.0 U	5.0 U							
BNA	2-Chloronaphthalene	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U	0.22 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U
BNA	2-Chlorophenol	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U							
BNA	2-Methylnaphthalene	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U	0.27 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U
BNA	2-Methylphenol	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U	0.26 J	5.0 U	5.0 U				
BNA	2-Nitroaniline	ug/L	--	--	1.9 U	20 U	--	--	20 U	20 U	0.12 J	20 U	20 U				
BNA	2-Nitrophenol	ug/L	--	--	1.9 U	5.0 U	--	--	5.0 U	5.0 U							
BNA	3,3'-Dichlorobenzidine	ug/L	--	--	3.7 U	5.0 UJ	--	--	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U
BNA	3-Nitroaniline	ug/L	--	--	1.9 U	20 U	--	--	20 U	20 U							
BNA	4,6-Dinitro-2-methylphenol	ug/L	--	--	3.7 U	20 UJ	--	--	20 U	20 UJ	20 U	20 U	20 U	20 UJ	20 U	20 UJ	20 U
BNA	4-Bromophenyl-phenylether	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U							
BNA	4-Chloro-3-methylphenol	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U	0.20 J	5.0 U	5.0 U				
BNA	4-Chloroaniline	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U							
BNA	4-Chlorophenyl-phenylether	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U	0.16 J	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
BNA	4-Methylphenol	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U	0.28 J	5.0 U	5.0 U				
BNA	4-Nitroaniline	ug/L	--	--	--	20 U	--	--	20 U	20 U							
BNA	4-Nitrophenol	ug/L	--	--	1.9 U	20 U	--	--	20 U	20 U							
BNA	9H-Carbazole	ug/L	--	--	0.37 U	--	--	--	--	--	--	--	--	--	--	--	--
BNA	Acenaphthene	ug/L	3.0	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U	0.15 J	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
BNA	Acenaphthylene	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U	0.19 J	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
BNA	Acetophenone	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U							
BNA	Anthracene	ug/L	9.0	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U	0.19 J	5.0 U	5.0 U				
BNA	Atrazine	ug/L	--	--	0.74 U	5.0 U	--	--	5.0 U	5.0 U	2.1 J	5.0 U	0.77 J	5.0 U	5.0 U	5.0 U	0.16 J
BNA	Benzaldehyde	ug/L	--	--	0.74 U	5.0 U	--	--	5.0 U	5.0 U							
BNA	Benzo(a)anthracene	ug/L	0.030	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U							
BNA	Benzo(a)pyrene	ug/L	0.030	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U							
BNA	Benzo(b)fluoranthene	ug/L	0.030	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U							
BNA	Benzo(g,h,i)perylene	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U							
BNA	Benzo(k)fluoranthene	ug/L	0.030	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U							
BNA	Butylbenzylphthalate	ug/L	--	--	0.37 U	5.0 UJ	--	--	0.62 J	5.0 UJ	0.53 J	5.0 U	5.0 UJ	5.0 UJ	0.92 J	5.0 UJ	0.60 J
BNA	Caprolactam	ug/L	--	--	0.74 U	5.0 UJ	--	--	0.34 J	5.0 UJ	0.26 J	5.0 UJ	0.23 J	5.0 UJ	5.0 UJ	0.32 J	5.0 UJ
BNA	Chrysene	ug/L	0.030	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U							
BNA	Di-n-butylphthalate	ug/L	--	--	0.37 U	5.0 UJ	--	--	5.0 UJ	5.0 UJ							
BNA	Di-n-octylphthalate	ug/L	--	--	1.9 U	5.0 UJ	--	--	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U
BNA	Dibenzo(a,h)anthracene	ug/L	0.0070	--	1.9 U	5.0 U	--	--	5.0 U	5.0 U							
BNA	Dibenzofuran	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U	0.19 J	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
BNA	Diethylphthalate	ug/L	--	--	0.37 U	5.0 UJ	--	--	5.0 U	5.0 UJ	0.17 J	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 UJ	0.19 J
BNA	Dimethylphthalate	ug/L	--	--	0.37 U	5.0 UJ	--	--	5.0 U	5.0 UJ	5.0 U	5.0 U</td					

Table 3

All Lower Aquifer Results - 1994 through 2006

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Chemical Group	Analyte	Units	Groundwater Cleanup Level (ug/L)*	99CD-MW04 03/19/2004	99CD-MW04 06/14/2004	99CD-MW04 01/24/2006	MWC2 4/25/1994	MWC2 11/13/1995	PZ-03 09/14/2004	PZ-03 01/23/2006	PZ-08 09/14/2004	PZ-08 01/26/2006	PZ-09 09/16/2004	PZ-09 01/26/2006	PZ-10 09/14/2004	PZ-10 01/26/2006	PZ-11 09/14/2004	
BNA	Phenol	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U	0.21 J								
BNA	Pyrene	ug/L	15	--	0.37 U	5.0 U	--	--	5.0 U									
BNA	bis(2-Chloroethoxy)methane	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U	0.16 J	5.0 U						
BNA	bis(2-Chloroethyl)ether	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U	5.0 U	0.20 J	5.0 U						
BNA	bis(2-chloroisopropyl)ether	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U									
BNA	bis(2-ethylhexyl)phthalate	ug/L	--	--	0.37 U	5.0 UJ	--	--	5.0 UJ									
BNA	n-Nitrosodimethylamine	ug/L	--	--	0.37 U	--	--	--	--	--	--	--	--	--	--	--	--	
BNA	n-Nitrosodipropylamine	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U									
BNA	n-Nitrosodiphenylamine	ug/L	--	--	0.37 U	5.0 U	--	--	5.0 U									
General	Dissolved Oxygen	mg/L	--	--	--	4.4	--	--	0.28	1.8	0.23	1.7	2.7	5.0	3.8	4.8	2.7	
General	Eh	mV	--	--	--	--	--	--	260	--	221	--	224	--	240	--	228	
General	Specific Conductivity	mS	--	--	--	--	0.21	--	--	0.43	5.2	0.19	0.17	0.20	0.16	0.16	0.14	0.17
General	Temperature	°C	--	--	--	14	--	--	12	12	11	9.9	11	10	11	9.9	10	
General	Turbidity	ntu	--	--	--	4.7	--	--	49	28	4.8	3.1	6.5	2.3	131	3.4	45	
General	pH	units	--	--	--	7.6	--	--	6.4	6.6	5.8	6.3	5.9	6.6	5.8	6.4	6.0	
General	Oxidation Reduction Potential	mV	--	--	--	-7.80E+01	--	--	--	-7.90E+01	--	--	117	--	135	--	154	
General	Salinity	%	--	--	--	0.010	--	--	--	--	0.27	--	--	--	0.010	--	--	
PAH	1-Methylnaphthalene	ug/L	--	--	--	--	--	0.41 U	--	--	--	--	--	--	--	--	--	
PAH	2-Chloronaphthalene	ug/L	--	--	--	--	--	10 U	0.41 U	--	--	--	--	--	--	--	--	
PAH	2-Methylnaphthalene	ug/L	--	0.023 J	0.011 J	0.037 U	10 U	0.41 U	--	0.037 U	--							
PAH	Acenaphthene	ug/L	3.0	0.046 J	0.011 J	0.037 U	10 UJ	0.41 U	--	0.037 U	--							
PAH	Acenaphthylene	ug/L	--	0.046 U	0.046 U	0.037 U	10 U	0.41 U	--	0.037 U	--							
PAH	Anthracene	ug/L	9.0	0.046 U	0.046 U	0.037 U	10 U	0.41 U	--	0.026 J	--	0.15	--	0.044	--	0.024 J	--	
PAH	Benzo(a)anthracene	ug/L	0.030	0.046 U	0.046 U	0.037 U	10 U	0.41 U	--	0.037 U	--							
PAH	Benzo(a)pyrene	ug/L	0.030	0.093 U	0.093 U	0.037 U	10 U	0.41 U	--	0.037 U	--							
PAH	Benzo(b)fluoranthene	ug/L	0.030	0.093 U	0.093 U	0.037 U	10 U	0.41 U	--	0.037 U	--							
PAH	Benzo(g,h,i)perylene	ug/L	--	0.093 U	0.093 U	0.037 U	10 U	0.41 U	--	0.037 U	--							
PAH	Benzo(k)fluoranthene	ug/L	0.030	0.046 U	0.046 U	0.037 U	10 U	0.41 U	--	0.037 U	--							
PAH	Chrysene	ug/L	0.030	0.046 U	0.046 U	0.037 U	10 U	0.41 U	--	0.037 U	--							
PAH	Dibenz(a,h)anthracene	ug/L	0.0070	0.093 U	0.093 U	0.037 U	10 U	0.41 U	--	0.037 U	--							
PAH	Fluoranthene	ug/L	3.0	0.080	0.046 U	0.037 U	10 U	0.41 U	--	0.037 U	--							
PAH	Fluorene	ug/L	3.0	0.029 J	0.046 U	0.037 U	10 U	0.41 U	--	0.037 U	--							
PAH	Indeno(1,2,3-cd)pyrene	ug/L	0.030	0.093 U	0.093 U	0.037 U	10 U	0.41 U	--	0.037 U	--							
PAH	Naphthalene	ug/L	83	0.11	0.052	0.024 J	10 U	0.41 U	--	0.037 U	--							
PAH	Phenanthrene	ug/L	--	0.074	0.046 U	0.037 U	10 U	0.068 J	--	0.037 U	--							
PAH	Pyrene	ug/L	15	0.039 J	0.046 U	0.037 U	10 UJ	0.41 U	--	0.037 U	--							
PAH	HPAH	ug/L	0.25	0.12 C	0 C	0.037 U	--	--	--	0.037 U	--							
PCP	Pentachlorophenol	ug/L	4.9	--	0.037 U	0.074 U	--	--	--	0.074 U	--							
TPH	Diesel (#2)	mg/L	--	--	--	--	--	--	0.46 UJ	--	0.46 UJ	--	0.46 UJ	--	0.46 UJ	--	0.46 UJ	
TPH	Gasoline	mg/L	--	--	--	--	--	--	0.19 UJ	--	0.19 UJ	--	0.19 UJ	--	0.19 UJ	--	0.19 UJ	

Table 3

All Lower Aquifer Results - 1994 through 2006

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Chemical Group	Analyte	Units	Groundwater Cleanup Level (ug/L)*	PZ-11		PZ-12	
				01/26/2006	09/14/2004	01/26/2006	01/26/2006
BNA	1,1'-Biphenyl	ug/L	--	5.0 UJ	5.0 U	5.0 UJ	
BNA	1,2,4,5-Tetrachlorobenzene	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	2,4,5-Trichlorophenol	ug/L	--	20 U	20 U	20 U	
BNA	2,4,6-Trichlorophenol	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	2,4-Dichlorophenol	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	2,4-Dimethylphenol	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	2,4-Dinitrophenol	ug/L	--	20 U	20 U	20 U	
BNA	2,4-Dinitrotoluene	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	2,6-Dinitrotoluene	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	2-Chloronaphthalene	ug/L	--	5.0 UJ	5.0 U	5.0 UJ	
BNA	2-Chlorophenol	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	2-Methylnaphthalene	ug/L	--	1.1 J	0.18 J	5.0 UJ	
BNA	2-Methylphenol	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	2-Nitroaniline	ug/L	--	20 U	20 U	20 U	
BNA	2-Nitrophenol	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	3,3'-Dichlorobenzidine	ug/L	--	5.0 UJ	5.0 U	5.0 UJ	
BNA	3-Nitroaniline	ug/L	--	20 U	20 U	20 U	
BNA	4,6-Dinitro-2-methylphenol	ug/L	--	20 UJ	20 U	20 UJ	
BNA	4-Bromophenyl-phenylether	ug/L	--	5.0 UJ	5.0 U	5.0 UJ	
BNA	4-Chloro-3-methylphenol	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	4-Chloroaniline	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	4-Chlorophenyl-phenylether	ug/L	--	5.0 UJ	5.0 U	5.0 UJ	
BNA	4-Methylphenol	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	4-Nitroaniline	ug/L	--	20 U	20 U	20 U	
BNA	4-Nitrophenol	ug/L	--	20 U	20 U	20 U	
BNA	9H-Carbazole	ug/L	--	--	--	--	
BNA	Acenaphthene	ug/L	3.0	7.1 J	0.26 J	5.0 UJ	
BNA	Acenaphthylene	ug/L	--	5.0 UJ	0.11 J	5.0 UJ	
BNA	Acetophenone	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	Anthracene	ug/L	9.0	5.0 U	5.0 U	5.0 U	
BNA	Atrazine	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	Benzaldehyde	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	Benzo(a)anthracene	ug/L	0.030	5.0 U	5.0 U	5.0 U	
BNA	Benzo(a)pyrene	ug/L	0.030	5.0 U	5.0 U	5.0 U	
BNA	Benzo(b)fluoranthene	ug/L	0.030	5.0 U	5.0 U	5.0 U	
BNA	Benzo(g,h,i)perylene	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	Benzo(k)fluoranthene	ug/L	0.030	5.0 U	5.0 U	5.0 U	
BNA	Butylbenzylphthalate	ug/L	--	5.0 UJ	1.1 J	5.0 UJ	
BNA	Caprolactam	ug/L	--	5.0 UJ	0.17 J	5.0 UJ	
BNA	Chrysene	ug/L	0.030	5.0 U	5.0 U	5.0 U	
BNA	Di-n-butylphthalate	ug/L	--	5.0 UJ	5.0 UJ	5.0 UJ	
BNA	Di-n-octylphthalate	ug/L	--	5.0 UJ	5.0 U	5.0 UJ	
BNA	Dibenzo(a,h)anthracene	ug/L	0.0070	5.0 U	5.0 U	5.0 U	
BNA	Dibenzofuran	ug/L	--	7.0 J	0.50 J	5.0 UJ	
BNA	Diethylphthalate	ug/L	--	5.0 UJ	0.22 J	5.0 UJ	
BNA	Dimethylphthalate	ug/L	--	5.0 UJ	5.0 U	5.0 UJ	
BNA	Fluoranthene	ug/L	3.0	5.0 U	5.0 U	5.0 U	
BNA	Fluorene	ug/L	3.0	5.0 UJ	5.0 U	5.0 UJ	
BNA	Hexachlorobenzene	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	Hexachlorobutadiene	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	Hexachlorocyclopentadiene	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	Hexachloroethane	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	Indeno(1,2,3-cd)pyrene	ug/L	0.030	5.0 U	5.0 U	5.0 U	
BNA	Isophorone	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	Naphthalene	ug/L	83	1.1 J	0.25 J	5.0 UJ	
BNA	Nitrobenzene	ug/L	--	5.0 U	5.0 U	5.0 U	
BNA	Pentachlorophenol	ug/L	4.9	5.0 U	5.0 U	5.0 U	
BNA	Phenanthrene	ug/L	--	5.0 U	5.0 U	5.0 U	

Table 3
All Lower Aquifer Results - 1994 through 2006
Wyckoff

Chemical Group	Analyte	Units	Groundwater Cleanup Level	PZ-11	PZ-12	PZ-12
			(ug/L)*	01/26/2006	09/14/2004	01/26/2006
BNA	Phenol	ug/L	--	5.0 U	5.0 U	5.0 U
BNA	Pyrene	ug/L	15	5.0 U	5.0 U	5.0 U
BNA	bis(2-Chloroethoxy)methane	ug/L	--	5.0 U	5.0 U	5.0 U
BNA	bis(2-Chloroethyl)ether	ug/L	--	5.0 U	5.0 U	5.0 U
BNA	bis(2-chloroisopropyl)ether	ug/L	--	5.0 U	5.0 U	5.0 U
BNA	bis(2-ethylhexyl)phthalate	ug/L	--	5.0 UJ	5.0 UJ	5.0 UJ
BNA	n-Nitrosodimethylamine	ug/L	--	--	--	--
BNA	n-Nitrosodipropylamine	ug/L	--	5.0 U	5.0 U	5.0 U
BNA	n-Nitrosodiphenylamine	ug/L	--	5.0 U	5.0 U	5.0 U
General	Dissolved Oxygen	mg/L	--	1.5	1.3	3.8
General	Eh	mV	--	--	231	--
General	Specific Conductivity	mS	--	0.18	0.23	0.12
General	Temperature	°C	--	9.8	11	10
General	Turbidity	ntu	--	8.4	5.6	10
General	pH	units	--	6.5	6.3	6.6
General	Oxidation Reduction Potential	mV	--	58	--	144
General	Salinity	%	--	--	--	--
PAH	1-Methylnaphthalene	ug/L	--	--	--	--
PAH	2-Chloronaphthalene	ug/L	--	--	--	--
PAH	2-Methylnaphthalene	ug/L	--	0.037 U	--	0.037 U
PAH	Acenaphthene	ug/L	3.0	18	--	0.037 U
PAH	Acenaphthylene	ug/L	--	0.64	--	0.037 U
PAH	Anthracene	ug/L	9.0	0.32	--	0.037 U
PAH	Benzo(a)anthracene	ug/L	0.030	0.037 U	--	0.037 U
PAH	Benzo(a)pyrene	ug/L	0.030	0.037 U	--	0.037 U
PAH	Benzo(b)fluoranthene	ug/L	0.030	0.037 U	--	0.037 U
PAH	Benzo(g,h,i)perylene	ug/L	--	0.037 U	--	0.037 U
PAH	Benzo(k)fluoranthene	ug/L	0.030	0.037 U	--	0.037 U
PAH	Chrysene	ug/L	0.030	0.037 U	--	0.037 U
PAH	Dibenzo(a,h)anthracene	ug/L	0.0070	0.037 U	--	0.037 U
PAH	Fluoranthene	ug/L	3.0	0.098	--	0.037 U
PAH	Fluorene	ug/L	3.0	2.3	--	0.037 U
PAH	Indeno(1,2,3-cd)pyrene	ug/L	0.030	0.037 U	--	0.037 U
PAH	Naphthalene	ug/L	83	2.1	--	0.037 U
PAH	Phenanthrene	ug/L	--	0.13	--	0.037 U
PAH	Pyrene	ug/L	15	0.030 J	--	0.037 U
PAH	HPAH	ug/L	0.25	0.13	--	0.037 U
PCP	Pentachlorophenol	ug/L	4.9	0.074 U	--	0.074 U
TPH	Diesel (#2)	mg/L	--	--	0.46 UJ	--
TPH	Gasoline	mg/L	--	--	0.19 UJ	--
TPH	Lube Oil	mg/L	--	--	0.23 UJ	--
TPH	TPH-GC/Diesel Range Organics	ug/L	--	550	--	190 U
TPH	TPH-GC/Motor Oil Range Organic	ug/L	--	460 U	--	460 U

Notes:

BNA = base/neutral and acid extractables

General = general chemistry

HPAH = High molecular weight Polynuclear Aromatic Hydrocarbon compounds

PAH = polynuclear aromatic hydrocarbons

TPH = total petroleum hydrocarbons

J = The analyte was positively identified; the quantitation is an estimation.

U = The analyte was not detected at or above the reported value.

C = Calculated Result. Sum of the following "high molecular weight polynuclear aromatic hydrocarbon" compounds (detections and estimated quantities): fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo(a)pyrene, dibenzo(a,h)anthracene, benzo(g,h,i)perylene, and indeno(1,2,3-cd)pyrene.

* From Wyckoff ROD 2/2000

Bold The analyte was detected

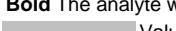
 Value exceeds cleanup level

Table 4

All Upper Aquifer Results - **2002 through 2006

Wyckoff

Chemical Group	Analyte	Units	Groundwater Cleanup Level		MW21	MW21	MW19	MW19	PZ-05	PZ-05	PZ-06	PZ-06	PZ-07	PZ-07	PZ-07-FD
			(ug/L)*	03/17/2004	03/17/2004	01/23/2006	03/17/2004	01/25/2006	09/16/2004	01/25/2006	09/16/2004	01/25/2006	09/16/2004	01/25/2006	09/16/2004
BNA	1,1'-Biphenyl	ug/L	--	0.032 J	5.0 U	0.033 J	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U	17	1.8 J	2.4 J
BNA	1,2,4,5-Tetrachlorobenzene	ug/L	--	--	5.0 U	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BNA	2,4,5-Trichlorophenol	ug/L	--	0.37 U	20 U	0.37 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
BNA	2,4,6-Trichlorophenol	ug/L	--	0.74 U	5.0 U	0.74 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BNA	2,4-Dichlorophenol	ug/L	--	0.74 U	5.0 U	0.74 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BNA	2,4-Dimethylphenol	ug/L	--	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	180 D	2.1 J	2.4 J
BNA	2,4-Dinitrophenol	ug/L	--	--	20 U	--	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
BNA	2,4-Dinitrotoluene	ug/L	--	1.9 U	5.0 U	1.9 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BNA	2,6-Dinitrotoluene	ug/L	--	0.74 U	5.0 U	0.74 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BNA	2-Chloronaphthalene	ug/L	--	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
BNA	2-Chlorophenol	ug/L	--	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BNA	2-Methylnaphthalene	ug/L	--	0.37 U	5.0 U	0.020 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	180 D	6.4	8.3 J
BNA	2-Methylphenol	ug/L	--	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	56	5.0 U	5.0 U
BNA	2-Nitroaniline	ug/L	--	1.9 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
BNA	2-Nitrophenol	ug/L	--	1.9 U	5.0 U	1.9 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BNA	3,3'-Dichlorobenzidine	ug/L	--	1.9 U	5.0 U	1.9 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 UJ
BNA	3-Nitroaniline	ug/L	--	1.9 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
BNA	4,6-Dinitro-2-methylphenol	ug/L	--	3.7 U	20 U	3.7 U	20 U	20 U	20 UU	20 U	20 UU	20 U	20 U	20 U	20 UU
BNA	4-Bromophenyl-phenylether	ug/L	--	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
BNA	4-Chloro-3-methylphenol	ug/L	--	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BNA	4-Chloroaniline	ug/L	--	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BNA	4-Chlorophenyl-phenylether	ug/L	--	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
BNA	4-Methylphenol	ug/L	--	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	670 D	5.0 U	5.0 U
BNA	4-Nitroaniline	ug/L	--	--	20 U	--	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
BNA	4-Nitrophenol	ug/L	--	1.9 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
BNA	9H-Carbazole	ug/L	--	0.37 U	--	0.029 J	--	--	--	--	--	--	--	--	--
BNA	Acenaphthene	ug/L	3.0	0.37 U	1.7 J	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	200 D	13	17 J
BNA	Acenaphthylene	ug/L	--	0.37 U	5.0 U	0.030 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.2	5.0 U	5.0 UJ
BNA	Acetophenone	ug/L	--	0.74 U	5.0 U	0.74 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.4	5.0 U	5.0 U
BNA	Anthracene	ug/L	9.0	0.056 J	5.0 U	0.61	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	13	1.3 J	1.8 J
BNA	Atrazine	ug/L	--	0.65 J	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BNA	Benzaldehyde	ug/L	--	0.74 U	5.0 U	0.74 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BNA	Benzo(a)anthracene	ug/L	0.030	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.39 J	5.0 U	5.0 U
BNA	Benzo(a)pyrene	ug/L	0.030	0.74 U	5.0 U	0.74 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
BNA	Benzo(b)fluoranthene	ug/L	0.030	1.9 U	5.0 U	1.9 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BNA	Benzo(g,h,i)perylene	ug/L	--	1.9 U	5.0 U	1.9 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BNA	Benzo(k)fluoranthene	ug/L	0.030	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BNA	Butylbenzylphthalate	ug/L	--	1.9 U	5.0 U	1.9 U	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
BNA	Caprolactam	ug/L	--	1.9 U	5.0 UJ	1.9 U	5.0 UJ	0.25 J	5.0 UJ	0.17 J	5.0 UJ	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ
BNA	Chrysene	ug/L	0.030	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.20 J	5.0 U	5.0 U
BNA	Di-n-butylphthalate	ug/L	--	0.74 U	5.0 U	0.74 U	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ
BNA	Di-n-octylphthalate	ug/L	--	1.9 U	5.0 U	1.9 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 UJ
BNA	Dibenzo(a,h)anthracene	ug/L	0.0070	1.9 U	5.0 U	1.9 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BNA	Dibenzofuran	ug/L	--	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	96 D	8.6	11 J
BNA	Diethylphthalate	ug/L	--	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 UJ
BNA	Dimethylphthalate	ug/L	--	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 UJ
BNA															

Table 4

All Upper Aquifer Results - **2002 through 2006
Wyckoff

Chemical Group	Analyte	Units	Groundwater Cleanup Level		MW21	MW21	MW19	MW19	PZ-05	PZ-05	PZ-06	PZ-06	PZ-07	PZ-07	PZ-07-FD
			(ug/L)*	03/17/2004	01/23/2006	03/17/2004	01/25/2006	09/16/2004	01/25/2006	09/16/2004	01/25/2006	09/16/2004	01/25/2006	01/25/2006	01/25/2006
BNA	Naphthalene	ug/L	83	0.37 U	5.0 U	0.030 J	5.0 U	5.0 U	1,400 D	38	44 J				
BNA	Nitrobenzene	ug/L	--	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BNA	Pentachlorophenol	ug/L	4.9	3.7 U	5.0 U	3.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BNA	Phenanthrene	ug/L	--	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	70	17	22
BNA	Phenol	ug/L	--	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	11	5.0 U	5.0 U
BNA	Pyrene	ug/L	15	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	6.1	1.6 J	2.3 J
BNA	bis(2-Chloroethoxy)methane	ug/L	--	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BNA	bis(2-Chloroethyl)ether	ug/L	--	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BNA	bis(2-chloroisopropyl)ether	ug/L	--	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BNA	bis(2-ethylhexyl)phthalate	ug/L	--	1.9 U	5.0 U	1.9 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U	5.0 UJ
BNA	n-Nitrosodimethylamine	ug/L	--	1.9 U	--	1.9 U	--	--	--	--	--	--	--	--	--
BNA	n-Nitrosodinpropylamine	ug/L	--	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
BNA	n-Nitrosodiphenylamine	ug/L	--	0.37 U	5.0 U	0.37 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
General	Dissolved Oxygen	mg/L	--	--	1.5	--	4.1	5.3	8.0	2.6	2.6	0.25	1.9	1.9	
General	Eh	mV	--	--	--	--	--	210	--	240	--	65 U	--	--	--
General	Specific Conductivity	mS	--	--	0.60	--	0.89	0.52	0.42	0.72	0.40	0.96	0.75	0.75	
General	Temperature	°C	--	--	12	--	9.6	15	8.7	15	7.5	15	7.9	7.9	
General	Turbidity	ntu	--	--	14	--	17	12	6.0	3.6	14	4.9	6.5	6.5	
General	pH	units	--	--	6.8	--	6.7	6.5	6.6	6.3	7.0	6.0	6.4	6.4	
General	Oxidation Reduction Potential	mV	--	--	-1.44E+02	--	148	--	30	--	-9.30E+01	--	-5.40E+01	-5.40E+01	
General	Salinity	%	--	--	0.020	--	--	--	--	--	--	--	--	--	--
PAH	2-Methylnaphthalene	ug/L	--	0.046 U	0.037 U	0.012 J	0.037 U	--	0.037 U	--	0.037 U	--	31	25	
PAH	Acenaphthene	ug/L	3.0	0.046 U	2.3	0.046 U	0.037 U	--	0.037 U	--	0.037 U	--	67	55	
PAH	Acenaphthylene	ug/L	--	0.046 U	0.037 J	0.014 J	0.037 U	--	0.037 U	--	0.037 U	--	0.50	0.40	
PAH	Anthracene	ug/L	9.0	0.048	0.35	0.29	0.41	--	0.037 U	--	0.064	--	5.3	4.8	
PAH	Benzo(a)anthracene	ug/L	0.030	0.046 U	0.037 U	0.015 J	0.037 U	--	0.037 U	--	0.037 U	--	0.13	0.11	
PAH	Benzo(a)pyrene	ug/L	0.030	0.093 U	0.037 UU	0.066 J	0.037 U	--	0.037 U	--	0.037 U	--	0.037 U	0.037 U	
PAH	Benzo(b)fluoranthene	ug/L	0.030	0.093 U	0.037 UU	0.065 J	0.037 U	--	0.037 U	--	0.037 U	--	0.027 J	0.024 J	
PAH	Benzo(g,h,i)perylene	ug/L	--	0.093 U	0.037 UU	0.043 J	0.037 U	--	0.037 U	--	0.037 U	--	0.037 U	0.037 U	
PAH	Benzo(k)fluoranthene	ug/L	0.030	0.046 U	0.037 UU	0.018 J	0.037 U	--	0.037 U	--	0.037 U	--	0.037 U	0.037 U	
PAH	Chrysene	ug/L	0.030	0.0097 J	0.037 U	0.018 J	0.037 U	--	0.037 U	--	0.037 U	--	0.12	0.11	
PAH	Dibenzo(a,h)anthracene	ug/L	0.0070	0.093 U	0.037 UU	0.093 U	0.037 U	--	0.037 U	--	0.037 U	--	0.037 U	0.037 U	
PAH	Fluoranthene	ug/L	3.0	0.012 J	0.037 U	0.025 J	0.037 U	--	0.037 U	--	0.037 U	--	8.0	7.3	
PAH	Fluorene	ug/L	3.0	0.046 U	0.21	0.046 U	0.037 U	--	0.037 U	--	0.037 U	--	41	34	
PAH	HPAH	ug/L	0.25	0.032 C	0.037 U	0.34 C	0.037 U	--	0.037 U	--	0.037 U	--	13	12	
PAH	Indeno(1,2,3-cd)pyrene	ug/L	0.030	0.093 U	0.037 UU	0.068 J	0.037 U	--	0.037 U	--	0.037 U	--	0.037 U	0.037 U	
PAH	Naphthalene	ug/L	83	0.046 U	0.037 U	0.046 U	0.037 U	--	0.037 U	--	0.037 U	--	190	160	
PAH	Phenanthrene	ug/L	--	0.046 U	0.037 U	0.046 U	0.037 U	--	0.037 U	--	0.037 U	--	66	59	
PAH	Pyrene	ug/L	15	0.0098 J	0.037 U	0.023 J	0.037 U	--	0.037 U	--	0.037 U	--	4.7	4.2	
PCP	Pentachlorophenol	ug/L	4.9	0.037 U	0.074 U	0.037 U	0.074 U	--	0.074 U	--	0.074 U	--	0.074 U	0.074 U	
TPH	Diesel (#2)	mg/L	--	--	-- v	--	--	0.46 UJ	--	0.46 UJ	--	--	--	--	--
TPH	Gasoline	mg/L	--	--	--	--	--	0.19 UJ	--	0.19 UJ	--	--	--	--	--
TPH	Lube Oil	mg/L	--	--	--	--	--	0.23 UJ	--	0.23 UJ	--	--	--	--	--
TPH	TPH-GC/Diesel Range Organics	ug/L	--	190 U	190 U	190 U	190 U	--	190 U	--	190 U	--	1,000	870	
TPH	TPH-GC/Motor Oil Range Organi	ug/L	--	--	460 U	--	460 U	--	460 U	--	460 U	--	460 U	460 U	

Notes:

BNA = base/neutral and acid extractables

General = general chemistry

HPAH = High molecular weight Polynuclear Aromatic Hydrocarbon compounds

PAH = polynuclear aromatic hydrocarbons

TPH = total petroleum hydrocarbons

J = The analyte was positively identified; the quantitation is an estimation.

U = The analyte was not detected at or above the reported value.

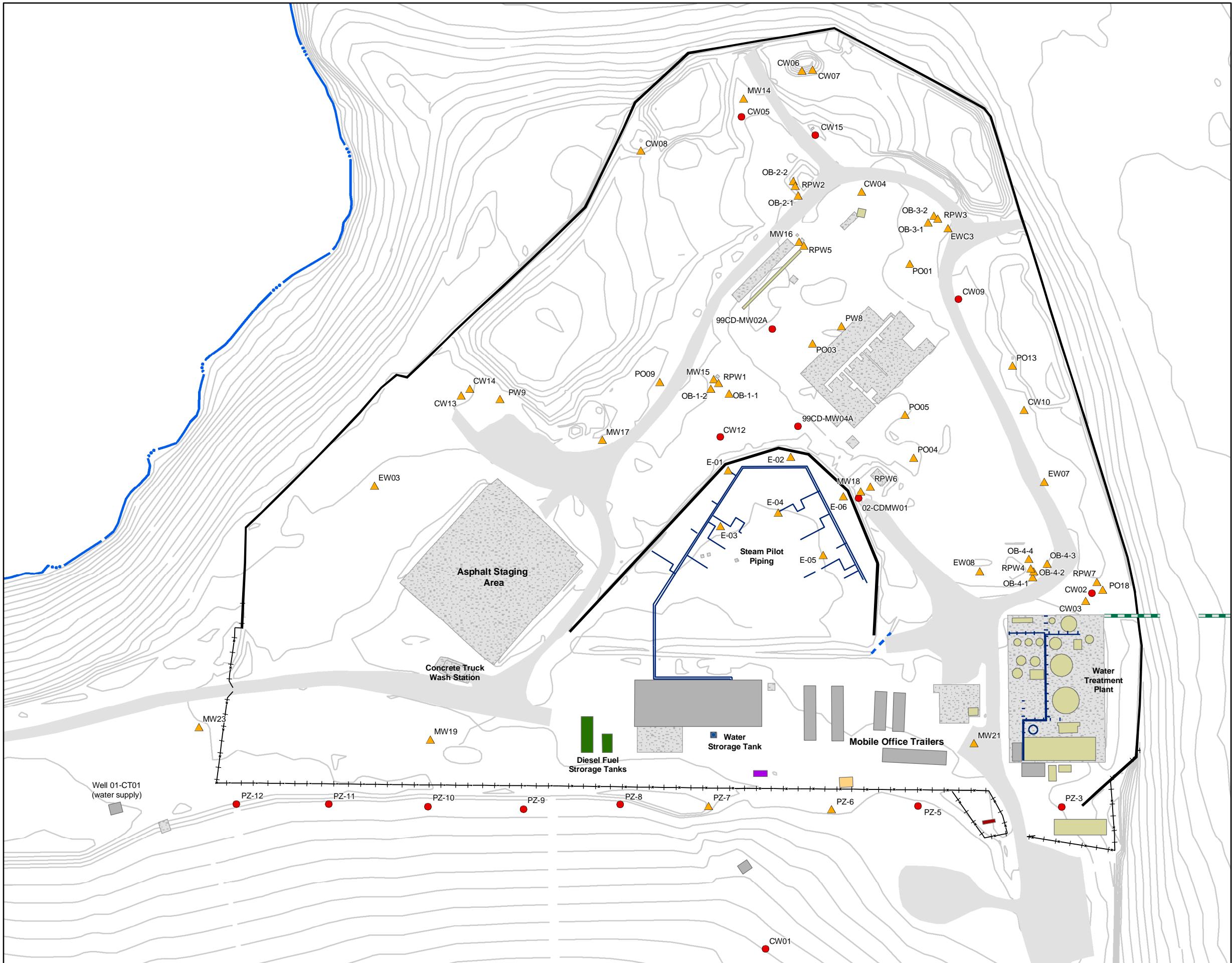


FIGURE 1

WYCKOFF/EAGLE HARBOR SUPERFUND SITE

Appendix A Groundwater Sampling Event Planning (GSEP) Form

**WYCKOFF/EAGLE HARBOR SUPERFUND SITE
GROUNDWATER SAMPLING EVENT PLANNING (GSEP) FORM**

APPROVAL

Approved	_____ USEPA Region 10 Remedial Project Manager	Date _____
Approved	_____ USEPA Region 10 Quality Assurance Manager	Date _____
Approved	_____ USACE Project Manager	Date _____

SAMPLING EVENT OBJECTIVES

1. Identify presence of chemicals of concern in the lower and upper aquifer and compare to previous sampling event results.
2. Identify presence of semi-volatile and TPH contaminants in lower aquifer.
3. Identify presence of chemicals that may be transported in groundwater down from the south hillside and onto the site.

GROUNDWATER MONITORING WELLS SCHEDULED FOR SAMPLING

Well Locations for This Sampling Event		
Shallow Aquifer Wells	Lower Aquifer Wells	Piezometers
MW-19	CW-01	PZ-03
MW-21	CW-02	PZ-05
	CW-05	PZ-06
	CW-09	PZ-07
	CW-12	PZ-08
	CW-15	PZ-09
	02-CD-MW-01	PZ-10
	99CD-MW-02	PZ-11
	99CD-MW-04	PZ-12
Well Selection Rationale	The wells and piezometers selected for this sampling event are the same as those sampled in the 2004 site groundwater sampling events. Results will be used to trend the presence of chemicals of concern across the site over time. Sampling of piezometers allows for monitoring of chemicals that may be transported through groundwater from the south hillside and onto the site.	

**WYCKOFF/EAGLE HARBOR SUPERFUND SITE
GROUNDWATER SAMPLING EVENT PLANNING (GSEP) FORM**

FIELD MEASUREMENT METHODS AND MEASUREMENT QUALITY OBJECTIVES

Parameter	Analytical Method or Instrument	Required Sensitivity
Groundwater Purge Rate	Graduated Cylinder	+/- 10 ml/min
Dissolved Oxygen	Horiba U22 Flow Cell or equivalent	+/- 0.2 mg/L
Temperature	Horiba U22 Flow Cell or equivalent	+/- 1 °C
Turbidity	Horiba U22 Flow Cell or equivalent	+/- 10 %
PH	Horiba U22 Flow Cell or equivalent	+/- 0.2 units
Specific Conductance	Horiba U22 Flow Cell or equivalent	+/- 5%
Water level Elevation	Solinst Electric Water Level Probe	+/- 0.01 ft
Interface Level Elevation	Onsite Interface Probe	+/- 0.01 m

LABORATORY ANALYSES AND MEASUREMENT QUALITY OBJECTIVES

Wells	Analyte	Laboratory	Method	Required Sensitivity	Method Reporting Limit	Accuracy Goal	Precision Goal
All	PCP	EPA Region 10	SW-846 8041	0.1 µg/L	0.1 µg/L	65-135	+/- 35
All	Semivolatile Organics (with TICs)	EPA Region 10	SW-846 8270C	* Per OLC03.2 (5 µg/L for most analytes)	* Per OLC03.2 (5 µg/L for most analytes)	65-135	+/- 35
All	PAHs: Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Dibenzo(a,h)anthracene Fluoranthene Fluorene Indeno(1,2,3-cd)pyrene Naphthalene Phenanthrene Pyrene HPAH	EPA Region 10	SW-846 8270C (with SIM on non-detects)	0.04 µg/L*	0.04 µg/L*	65-135	+/- 35

**WYCKOFF/EAGLE HARBOR SUPERFUND SITE
GROUNDWATER SAMPLING EVENT PLANNING (GSEP) FORM**

Wells	Analyte	Laboratory	Method	Required Sensitivity	Method Reporting Limit	Accuracy Goal	Precision Goal
All	Petroleum Hydrocarbons (NWTPH-Dx)	EPA Region 10	NWTPH-Dx NWTPH-Motor oil	0.25 mg/L	0.25 mg/L	65-135	+/-35

* The Manchester Laboratory may only be able to report down to 0.1 ug/L for some PAHs.

REQUIRED QUALITY CONTROL SAMPLES

Number of Samples	Sample Type
2	Field Duplicates (Frequency of 10 percent)
0	Equipment Rinse Blanks (Frequency of one per day)
1	Extra volume for MS/MSD/Laboratory Duplicates (Frequency of 5 percent)

LABORATORY REPORTING

Deliverable	<ul style="list-style-type: none"> • Electronic (sent as text file for database) • Hard Copy with QA memo (sent as pdf file)
Required Turn-Around-Time	Standard TATs Manchester: 8 weeks for final (Electronic and Hard Copy) CLP: 21 days for final (Electronic and Hard Copy)
Send Laboratory Results to:	<p>Kathryn Carpenter USACE Seattle District (EC-TB-ET) PO Box 3755 Seattle, WA 98124-3755 (206)766-6440 Kathryn.a.carpenter@usace.army.mil</p> <p>Krystal Dalton CH2M Hill 1100 112th Ave NE Suite 400 Bellevue, WA 98004 (425) 453-5000 Krystal.Dalton@ch2m.com</p>

**WYCKOFF/EAGLE HARBOR SUPERFUND SITE
GROUNDWATER SAMPLING EVENT PLANNING (GSEP) FORM**

TASK REPORTING REQUIREMENTS

Report Type and Contents	Technical memorandum to present these data and relate it to any previously collected. The memo will contain the following: <ul style="list-style-type: none"> • Project Objectives and Methods • Summary of Field Activities • Summary of Findings • Tables of Final Data • Laboratory Data Sheets (Form Is) • Data Quality Review Reports and Summary • Field Forms and Notes
Send Technical Memorandum To:	Mary Jane Nearman US EPA 1200 Sixth Avenue Seattle, WA 98101 (206) 553-6642 Nearman.Maryjane@epamail.epa.gov M. Kathy LeProwse USACE Seattle District (PM-EM) PO Box 3755 Seattle, WA 98124-3755 (206) 764-3505 Mary.K.Leprowse@usace.army.mil

PERSONNEL

Persons/Groups Requesting Sampling	Mary Jane Nearman US EPA 1200 Sixth Avenue Seattle, WA 98101 (206) 553-6642 Nearman.Maryjane@epamail.epa.gov Krystal Dalton / Ken Scheffler CH2M Hill 1100 112 th Ave NE Suite 400 Bellevue, WA 98004 (425) 453-5000 Krystal.Dalton@ch2m.com Ken.Scheffler@ch2m.com
Project Chemist/Quality Assurance Officer	Kathryn Carpenter USACE Seattle District (EC-TB-ET) PO Box 3755 Seattle, WA 98124-3755

**WYCKOFF/EAGLE HARBOR SUPERFUND SITE
GROUNDWATER SAMPLING EVENT PLANNING (GSEP) FORM**

	(206)766-6440 Kathryn.a.carpenter@usace.army.mil
Sampling Team	CH2M HILL Field Team (K. Dalton, J. Crawford) 1100 112 th Ave NE Suite 400 Bellevue, WA 98004 (425) 453-5000
Other Team Members	--
Date(s) of Approved Sampling Event	Week of December 12 – 16, 2005

Appendix B Groundwater Sampling and Analysis Plan Addendum

ADDENDUM

Groundwater Sampling and Analysis Plan

Wyckoff/Eagle Harbor Superfund Site Kitsap County, Washington

Prepared for:

U.S. Environmental Protection Agency
Region 10
1200 6th Avenue
Seattle, Washington 98101

Prepared by:

U.S. Army Corps of Engineers
Seattle District
4735 East Marginal Way South
Seattle, Washington 98134

December 29, 2005

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Approved _____ Date _____
USEPA Region 10 Remedial Project Manager

Approved _____ Date _____
USEPA Region 10 Quality Assurance Officer

Approved _____ Date _____
USACE Project Manager

SECTION B DATA GENERATION AND ACQUISITION

B.1 SAMPLING DESIGN AND PRE-EVENT PLANNING

The specific wells selected for each sampling event will be listed on the GSEP form. The rationale for selecting specific wells for sampling will vary depending on the objectives of each event. In general the well location and construction information, in conjunction with measurements and observations and previous laboratory results will be used to select monitoring wells to meet event objectives. The GSEP form provides for documentation of how selected wells will meet the objectives.

Construction information for groundwater monitoring wells at the Site is listed in Table 1. The locations of all wells are shown on Figure 1.

The following pre-event planning steps will be taken four to six weeks before the intended sampling:

- Pre-event planning begins with the completion of a Groundwater Sampling Event Planning (GSEP) form as presented in Appendix A. Subsequent sections of this document provide guidance for completing the GSEP form. The form must be completed by the person requesting the sampling event in conjunction with the sampling team and the Project Chemist. The GSEP form contains the following Information:
 - Persons Involved
 - Project Description and Sampling Event Objectives
 - Date of Proposed Sampling
 - Wells Selected for Sampling and How Selected Wells Relate to Objectives
 - Analytes, Laboratory Methods, and Selected Laboratory
 - Quality Control Samples Required
 - Measurement Quality Objectives
 - Laboratory Reporting Requirements
 - Event Reporting Requirements
- If the GSEP form specifies any analyses to be performed by a USEPA laboratory, send a memorandum to the USEPA Customer Service Office (CSO) (also known as the Quality Assurance Officer (QAO)) notifying them of the scheduled sampling event (known as a “project”). The CSO will assign the project a laboratory, project code, and sample numbers. Laboratory information is available in Section B.4 of this document.

The following pre-event planning steps will be taken two weeks before the intended sampling:

- Fill in the Monitoring Well Measurements and Observations Data Contained in Appendix B with the most current information available for the wells to be sampled (as identified on the GSEP form).
- Notify on-site operations personnel of the intended date of sampling and intended sampling locations and resolve any conflicts.
- For analyses called out on the GSEP form to be performed by private laboratories, contact the laboratory to verify laboratory capacity at the intended receipt date and request sample containers,

coolers, chain of custody forms, and sample labels. Laboratory information is available in Section B.4 of this document.

- Inventory field supplies. The specific equipment and supplies depends on the analytes selected, as outlined in the GSEP form. Quantities of disposable items will depend on the number of wells outlined on the GSEP form, the depth of the selected wells as shown in Table 1, and the monitoring well measurements and observations data contained in Appendix B. All calibration solutions and field reagents must be checked to ensure that the expiration date has not passed. When the inventory check determines supplies are low, additional supplies should be ordered for shipment or pick up in time for the field event. See checklist in Appendix C.
- Verify operation of field equipment. Equipment should be tested if it is seldom used, has malfunctioned in the past, or has been rented out. If tested equipment is in need of repair or replacement, the task should be taken care of in time for the field event.

The following pre-event planning steps will be taken one week before the intended sampling:

- Check sample containers to ensure that the proper number and type of containers, and preservatives are present. Refer to Table 2 for the proper sample containers.

The following pre-event planning steps will be taken two days before the intended sampling:

- Arrange for and ready transportation/field service vehicle.
- Review sampling procedures and site data in this document and from the last sampling event. Site data, including the monitoring well data, well sampling logs from the last event, and the site plan should also be reviewed
- Review health and safety plan and GSEP form.
- Ready remaining field equipment and supplies as outlined on the checklist in Appendix C.

B.2 GROUNDWATER MONITORING FIELD PROCEDURES

Groundwater monitoring field activities will consist of the following:

B.2.1 Equipment and Field Measurements

The following equipment may be used in the field to collect measurements, depending on the required measurements to meet objectives for a given groundwater sampling event:

- Flow through cell with probes. Used to measure groundwater temperature, pH, specific conductance, dissolved oxygen, turbidity, and oxidation-reduction potential “in-line” during purging without atmospheric contact. These measurements are used as an indicator of the adequacy of purging prior to sample collection as well as for geochemical characterization.
- Water Level Indicator. Used to measure depth to water to the nearest 0.01 ft.
- Interface probe. Used to identify and measure thickness of NAPL in monitoring wells.
- Photometer. Used in conjunction with Chemetrics or Hach self-filling colorimetric ampoules to provide in-field measurements of sensitive constituents such as Fe(II), Fe(III), dissolved oxygen (<1mg/L), and sulfide.

Field measurement methods and measurement quality objectives relevant to sampling event objectives will be listed on the GSEP form.

B.2.2 Equipment Calibration and Operation Verification

All field instruments must be calibrated at the start of each day's deployment per the instrument manufacturer's instructions. Record calibration data on the "Field Instruments Calibration Form" (Appendix D). All calibration solutions must be discarded after each use. Calibration checks against standards should be performed periodically throughout each day to verify equipment operation. Due to high expected contaminant concentrations, it is possible that the membrane on the dissolved oxygen probe will become fouled and inoperative. The membrane should be replaced as often as necessary per the manufacturer's guidelines.

B.2.3 Equipment Decontamination

All non-disposable and/or non-dedicated equipment that is exposed to well water (e.g. water level probe) should be decontaminated prior to collecting the first sample each day and between wells.

Decontamination of equipment must be completed before leaving each well head, therefore, eliminating cross contamination.

Decontamination will be performed according to ASTM D5088.

The wash for wells that historically show no presence of NAPL should consist of:

- Non-phosphate detergent (such as Alconox) and water wash
- Tap water rinse
- Deionized water rinse

Decontamination procedures for wells that have historically shown the presence of NAPL should also include an additional step following the tap water rinse:

- Organic desorbing agent (isopropanol, acetone, methanol, etc.) rinse.

All accessible surfaces should be cleaned with a brush to remove particles or surface film. Internal surfaces should be cleaned with a small "bottle" type brush if possible. If the internal mechanism or tubing cannot be adequately cleaned with a brush, the decontamination solutions should be circulated through the equipment. Specific details for disassembly and decontamination of specific equipment (e.g. flow-through cell) may be found in the manufacturer's User's Guides.

All disposable equipment (tubing, nitrile gloves) must be discarded between sampling points. Spent decontamination fluids must be contained. Water and soapy water may be disposed in the on-site decontamination pad sump (which is handled by the on-site treatment plant). Used solvents must be collected, stored, and disposed of according to approved site hazardous waste procedures. Specifically, solvent rinses will be captured in a labeled 5-gallon container, which will be sealed and over-packed in a labeled 55-gallon drum located at the on-site hazardous waste storage area. The waste will be stored here until disposal is contracted by USACE. Per the Site Waste Management Plan, the spent solvent will only be disposed of at an approved hazardous waste facility.

B.2.4 Monitoring Well Purging and Sampling Procedures

All groundwater sampling from monitoring wells at the Site will be performed consistent with EPA/540/5-95/504 (Low Flow Groundwater Sampling Procedures). Purging and sampling will be performed using a peristaltic pump or dedicated submersible pump (with flow controller). Purging will be completed at a low rate to minimize sample disturbance and analytical artifacts, and samples will be collected when indicator parameter measurements have stabilized (indicating purging is complete).

Step-by-Step Groundwater Purging and Sampling Procedure

1. Bring decontaminated equipment to the first well scheduled to be sampled (typically the least contaminated). Make notes on the Groundwater Sampling Data Sheet (Appendix E) describing the well condition, need for maintenance/repair, and activity in the vicinity of the well.
2. If the available monitoring well measurements and observations data from previous sampling events suggests the presence of NAPL (or if no data are available from the well), check for the presence of NAPL using the Interface Probe. The interface probe will not be used to check for NAPL in lower aquifer wells and piezometers to avoid cross-contamination from the probe. After recording the NAPL thickness and water level on the Groundwater Sampling Data Sheet (Appendix E), retract the interface probe while wiping it down with a disposable towel. If the presence of NAPL is not suggested, measure the depth to water from the surveyed reference mark on the wellhead using the standard water level meter. As with the interface probe, retract the water level meter while wiping it down with a disposable towel.
3. If using a peristaltic pump:
 - Deploy a sufficient length of disposable ¼" OD polyethylene tubing into the well. If the static water level is above the top of the well screen, the bottom of the tubing should be placed in the center of the well screen. If the static water level is below the top of the well screen, the bottom of the tubing should be placed in the center of the water column.
 - The upper end of the disposable tubing should be tightly connected to silicon disposable tubing placed inside the grip of the peristaltic pump.
 - Connect a sufficient length of ¼" OD polyethylene disposable tubing to the discharge side of the silicon tube in order to connect the water line from the pump to the In-line flow cell's "IN" fitting.
4. If instead using a dedicated submersible pump:
 - Deploy the pump into the well. If the static water level is above the top of the well screen, the intake of the pump should be placed in the center of the well screen. If the static water level is below the top of the well screen, the intake of the pump should be placed in the center of the water column.
 - Connect a sufficient length of the disposable 1/2" OD polyethylene water tubing to the In-Line flow cell's "IN" fitting.
5. Verify the pump and controller are OFF. Connect the pump cables to the battery. If using the submersible pump, connect the pump to the flow controller plug. Then connect the controller cables to the battery.
6. Connect the Flow Cell's "OUT" line and secure to drain the purge water into the purge water collection container.
7. Deploy the water level meter and lock it in place so that the level can be monitored during purging and sampling. When placing the probe in the well, take precautions to prevent disturbing or agitating the water.
8. Set the pump controller settings to the documented settings used previously for the specific well. Start the pump. Verify the flow rate using a graduated cylinder. If the well has not been sampled with this equipment before, set the flow controller just high enough to allow water to reach the surface. Confirm the flow rate is equal to the well's established optimum flow rate. Modify as necessary (documenting any required modifications).

-
9. After a single flow cell's volume has been adequately purged, read and record water quality field measurements until all parameters have stabilized within their allowable ranges for at least three consecutive measurements.

Ranges for stabilized values are as follows:

- Temperature: $\pm 0.5^\circ \text{ C}$
- pH: $\pm 0.2 \text{ units}$
- Conductance: $\pm 5.0 \% \text{ of reading}$
- Turbidity $\pm 10\% \text{ NTU}$

The frequency of readings will be based on the time required to purge one volume of the flow cell. For example, a 500-ml flow cell purged at a rate of 250 ml/minute will be purged in two minutes, so readings should be at least two minutes apart. If the flow rate is 100 ml/min, the readings should be at least 5 minutes apart, etc. When stabilization has been achieved, sample collection may begin.

10. Monitor the water level and confirm that the Static Water Level (SWL) drawdown has stabilized.
11. To collect the sample, disconnect the flow cell and its tubing from the pump discharge line before collecting samples. For volatile constituent samples, decrease the pump rate to 100 milliliters per minute or less by lowering the pump controller's speed setting prior to collecting samples for volatiles. Refer to the GSEP for each event's specific sample collection matrix. Samples, as applicable, should be collected in the following sequence for each well: VOCs, PAHs, PCP, SVOCs, and then TPH. This sample collection sequence will ensure that critical samples are collected first in case the wells were to be pumped dry.
12. Place the samples in a cooler with enough ice to keep them at 4 degrees Centigrade.
13. For dissolved gas analysis and field chemical analyses, see procedures below.
14. When all sample containers have been filled, make a final measurement of the well's Static Water Level and record the measurement on the gauging and sampling sheet.
15. Measure and record total purge volume collected. Consolidate generated purge water.
16. Turn off the pump. Disconnect the cables from the battery terminals and the pump from the controller (if applicable).
17. Remove the pump and all applicable tubing from the well. Disconnect the tubing from the pump.
18. Remove and decontaminate the submersible pump (if applicable) and water level probe with phosphate-free detergent, rinsing with potable water and rinsing with de-ionized water.
19. Dispose of the polyethylene and silicone tubing.
20. Secure the wellhead cover. Move equipment to next well to be sampled.
21. At the end of each day, post calibrate all field instruments and record the measurements on the "Groundwater Sampling Instrument Calibration Documentation Form".
22. If an In-Line Flow Cell was used, clean and decontaminate this equipment with phosphate-free detergent, rinsing with potable water and rinsing with de-ionized water.

Dissolved Gas Sampling Procedures (if Required)

Dissolved gas sampling will be conducted in accordance with Microseeps Inc. (Pittsburgh, PA) SOP SM9 for bubble-stripping:

-
1. Follow well purging steps 1-10 as outlined above.
 2. Connect the inlet tube of the decontaminated gas stripping cell to the pump discharge tubing.
 3. Insert the drain tube of the cell into a waste container, keeping the end of the tube at the bottom of the container. Any waste container of suitable size may be used. Place a graduated cylinder in the waste container to determine pumping flow rate.
 4. Secure the cell assembly so that the housing cover (stopper) is above the glass housing (i.e. upright). A ring stand and clamp are recommended for this purpose.
 5. Turn the pump on and check for leaks. If any leaks are found, seal them before proceeding.
 6. Measure, in mL per minute, the flow rate of the pump.
 7. Determine the equilibrium time needed to bubble strip at this flow rate based on the flow rate as follows:

Flow Rate (ml/min)	Sampling Time (min)
100-120	30
130-150	25
160-200	20
210-300	15
>300	10

8. Unclamp the cell assembly, invert it, and re-secure the assembly in the inverted position. Make sure the drain tube is still in the waste container and the end of the drain tube is near the bottom of the bottle.
9. Connect the stopcock to the syringe and the needle to the stopcock (zoom in on image). Place the stopcock in the open position (so that the stopcock handle is in-line with the syringe). Draw the plunger back on the syringe to the 20.0 mL mark pulling ambient air into the syringe.
10. Keeping the cell in the inverted position, insert the needle into the needle guide. Pierce the septum and inject the air into the cell creating the bubble. Withdraw the needle from the assembly and carefully place the needle into the cover. Do not discard the syringe apparatus.
11. Start timing and let the groundwater pump through the cell for the required equilibrium. Meanwhile, be sure that the sample vial is properly labeled and that the flow rate and any other relevant field data are recorded in the field log.

Note: Be sure to keep the end of the drain tube submerged at the bottom of the waste container. This will insure that outside air is not drawn into the cell. **Failure to do this will invalidate the sample.**

12. When equilibration time is up, **turn off the pump**, unclamp the cell, and re-clamp it in its upright position. Verify that the plunger of the syringe is pushed all the way in and that the stopcock is in the open position.
13. Insert the needle into the needle guide and pierce the septum. Withdraw 1 mL of gas by pulling back on the syringe plunger while holding the syringe body in place. Remove the syringe from the cell and expel the sample.
14. Immediately re-insert the needle into the needle guide and pierce the septum. Withdraw a 15 mL sample of gas (being careful not to pull any water into the syringe). With the needle still through the septum, close the stopcock and withdraw the needle from the septum.

-
15. Immediately insert the needle through the septum on the sample vial. Keeping the syringe and vial "in line", open the stopcock and completely depress the syringe plunger injecting the entire sample into the vial.
 16. Keeping the plunger depressed, quickly remove the vial from the needle. The sample is now ready to be packaged and shipped to the laboratory for analysis. Do not cool the samples.
 17. Return to step #14 of Ground Water Sampling Procedures.

Field Analysis Procedures (if Required)

Certain sensitive constituents, such as Fe (II) and Fe (III), dissolved carbon dioxide, and sulfide are often best determined in the field due to chemical changes that can occur following collection. Furthermore, if dissolved oxygen measurements below 1.0 mg/L are desired, field tests must be performed due to limitations of dissolved oxygen sensors. If required, field analyses will be performed at the wellhead using colorimetric methods. Chemetrics or Hach self-filling analyte-specific ampoules and a portable photometer from either manufacturer will be used.

Because these analyses are being performed for constituents that are sensitive to air exposure, a funnel-device must be used to allow the ampoule to be filled from an upward-flowing water stream while the pump is discharging water. The hard plastic funnel (supplied by the ampoule manufacturers) should be attached to the pump discharge tubing with a small piece of adaptable disposable tubing. Tygon 2356 is preferred for this application due to its chemical resistance. Standard vinyl Tygon tubing should not be used due to the leachable plasticizers.

After allowing the ampoule to fill in the upward discharge stream, all instructions and procedures printed by the manufacturer for each analyte should be followed. Results should be recorded on the groundwater sampling field log forms. Return to step #14 of Ground Water Purging and Sampling Procedure.

B.3 SAMPLE DOCUMENTATION, HANDLING AND CUSTODY

This section describes the documentation required for groundwater sampling events. This documentation will be supplemented with additional EPA documentation as required.

B.3.1 Sample Identification

All groundwater monitoring samples will be identified on chain-of-custody forms, analysis requests, and sample tags with USEPA-assigned sample numbers, RAS case numbers (if applicable), and sampling location IDs (e.g., CW-15). USEPA sample numbers will be used as assigned by the CSO (per Section B.1). Groundwater sample identification and chain-of-custody information will be coordinated with the Forms II Lite software.

B.3.2 Field Documentation and Sample Management

This section describes the procedures for documentation and sample management in the field, including field documentation (i.e., information to be included in field logbooks), sample documentation (i.e., USEPA-assigned project codes and sample numbers, the various chain-of-custody and analytical request forms, sample tags and labels, and chain-of-custody procedures), packaging, and shipping.

B.3.3 Field Documentation

All field sampling activities will be documented using the Groundwater Sampling Data Sheet to record the following information:

-
- Physical/environmental conditions during field activities;
 - Well conditions, need for maintenance;
 - Personnel involved with the activities;
 - Well/sample location identification;
 - Equipment calibration and decontamination notes (cross reference calibration form);
 - Depth to groundwater before sampling was initiated;
 - Identifiers for specific equipment used for sample collection (i.e. serial numbers);
 - Information regarding well purging (e.g., volumes and pumping rates);
 - Date and elapsed time from sample start to sample finish;
 - Purging data, including time-series measurements of indicator parameters and water level during pumping;
 - Final, stable field parameter measurements;
 - Results of any in-field analyses;
 - Type of sample and necessary treatment (e.g., filtering or preservative used);
 - Field observations (e.g., weather conditions);
 - Appearance of sample (i.e., color, turbidity, sediment, odor or sheens);
 - Sample duplicates, splits, and blanks, if applicable; and
 - Unusual activities, such as departures from planned procedures and equipment breakdowns.

All logs will be completed, signed, and dated by the recorder. All logs will be written with waterproof ink. Corrections will be made by crossing out the error with a single horizontal line, initialing the correction, and entering the correct information. Crossed-out information shall be readable.

B.3.4 Sample Documentation Forms

For all analyses, whether performed by USEPA regional labs, CLP labs, or commercial labs, samples must be labeled and documented with the FORMS II Lite software.

B.3.5 Sample Tags

The information recorded on the sample tag includes:

- Project Code—the number assigned by the USEPA to the sampling project
- Station Number—A station number will be assigned to each sampling location
- Month/Day/Year—A six-digit number indicating the date of collection
- Time—A four-digit number indicating the military time of collection
- Designate: Preservative—A box that should be checked appropriately to indicate ice or none
- Designate: Chemical—A box that should be checked appropriately if a chemical preservation is used
- Station Location—This is the location of the sampling event
- Samplers—Signatures of samplers on the project team
- Remarks—Type of chemical preservative, if any, as well as any pertinent comments
- Tag No.—A unique serial number preprinted or stamped on the tag
- Lab Sample No.—The EPA-assigned eight-digit sample number provided by the CSO

Additionally, the sample tag contains appropriate spaces for indicating the analytical parameter(s) for which the sample will be analyzed.

After the sample tag is completed, each tag will be securely attached to the sample container using clear packing tape.

B.3.6 Sample Preservation, Packaging and Shipment

Specific sample containers and sample handling requirements for expected analyses are described in Table 2. Refer to the GSEP form for the event specific sampling matrix.

The following packaging procedure should be followed:

1. Place samples in plastic bag and seal. An additional outer wrap of a bubble-wrap bag with an adhesive strip is preferred for packaging.
2. Put samples upright in a field cooler with blue ice and/or wet ice immediately after collection. Wet ice must be sealed in plastic bags to prevent melting ice from soaking the packing material and/or destroying sample labels. The cooler drain plug should be taped shut inside and out.
3. The samples should be firmly packed with cushioning materials, such as foam blocks or bubble-wrap, to minimize the potential for breakage during shipping.
4. Enclose sample documentation in sealed plastic bags and tape to the underside of the cooler lid. Keep copies with the field notes.
5. Secure shipping cooler(s) for shipment with strap tape and custody seals, and coordinate shipment.

Samples will be shipped by common carrier or hand delivered to the laboratory. Shipment and/or delivery of the samples will be coordinated with the USEPA CSO. Freight bills, postal receipts, and bills of lading will be retained as part of the permanent documentation.

B.3.7 Chain-of-Custody Procedures

In accordance with USEPA enforcement requirements, official custody of samples will be maintained and documented from the time of collection until the time of introduction as evidence during litigation, if required.

A sample will be considered to be in an individual's custody if any of the following criteria are met: (1) the sample is in your possession or it is in your view after being in your possession; (2) it was in your possession and then locked up or sealed to prevent tampering; or (3) it is in a secured area. The sampling team leader will be responsible for the care and custody of the collected samples until they are dispatched properly. In follow-up, the sampling team leader will review all field activities to confirm that proper custody procedures were followed during the fieldwork.

The Chain-of-Custody Record form is physical evidence of sample custody. A Chain-of-Custody Record form will be completed to accompany each cooler shipped from the field to the laboratory.

One member of the sampling team will be designated as the recorder, and that person will complete all of the paper work associated with one Chain-of-Custody Record form. However, each sampling team member must also initial the Chain-of-Custody Record form in the designated area. For each station number, the recorder is to indicate the date, time, whether the sample is a composite or grab, station location, number of containers, analytical parameters, sample label number(s), and preservatives used. When shipping the samples, the recorder signs the bottom of the form and enters the date and time the samples are relinquished. The shipper name and air bill number are to be entered under the remarks section in the bottom right corner of the form. Samples that are hand delivered to the laboratory will also be identified here.

The Chain-of-Custody Record form is to be completed using waterproof ink. Corrections are to be made by drawing a line through the error, initialing and dating the error, then entering the correct information.

The original signature copy of the Chain-of-Custody Record form will be enclosed in plastic and secured to the inside of the cooler lid. A copy of the custody record will be retained for the sampler's files.

Shipping coolers will be secured, and EPA custody seals will be placed across cooler openings. As long as the Chain-of-Custody Record forms are sealed inside the sample cooler and remain intact, commercial carriers will not be required to sign the record when they receive and relinquish the samples.

The laboratory representative who accepts the incoming sample shipment will sign and date the Chain-of-Custody Record form to acknowledge receipt of the samples. Once the sample transfer process is complete, the laboratory will be responsible for maintaining internal logbooks and records that provide a custody record throughout sample preparation and analysis.

B.4 LABORATORIES AND ANALYTICAL METHODS

USEPA Regional Laboratory analytical specifications and USEPA CLP specifications will apply as applicable.

B.4.1 Laboratory Contacts:

USEPA Customer Service Officer / Quality Assurance Officer:

Laura Castrilli

USEPA

1200 6th Avenue

Seattle, WA 98101

Tel: (206) 553-4323

B.4.2 Analytical Methods and Measurement Quality Objectives

Specific analytical methods and measurement quality objectives (MQOs), in terms of accuracy, precision, completeness, comparability, and representativeness, will be specified on each GSEP form.

B.5 QUALITY CONTROL SAMPLES

The type and number of QC samples will be specified on the GSEP form. The following explains the various types of samples and provides guidance for the frequency of collection.

B.5.1 Laboratory QC Samples.

The laboratory will perform method-specific QC activities, including surrogate recoveries, matrix spike, duplicates, and blanks. The data will be considered valid if percent recoveries fall between method-specific lower and upper control limits. Due to the complexity of the chemistry at the Wyckoff site, each sampling event must supply the laboratory enough sample volume so that site-specific matrix spike and matrix spike duplicates samples may be analyzed.

B.5.2 Field QC Samples

Field Equipment Rinse Blanks

No field equipment rinse blanks are required because only dedicated well pumps and tubing will be used.

Field Duplicate Samples

During each individual sampling event, one field duplicate or ten percent of the total samples (whichever is greater) will be collected and analyzed for all parameter groups in each sample matrix.

These samples will be submitted as blind duplicates (i.e. under a separate, unique sample number). Refer to section B.3.1 for labeling information. The location where the duplicate samples were collected will be recorded in the field logs and documented in the monitoring report. The duplicate samples will be submitted to the same laboratory as the primary samples. The duplicate samples should be collected from wells where constituents of concern have been detected in previous sampling events. The duplicate should rotate among eligible locations between sampling events whenever possible.

Field Temperature Blanks

The field temperature blank is designed to verify that the temperature within the transport container is maintained at 4 degrees Celsius. The temperature blank will be water. One temperature blank will be included in each cooler.

Field Trip Blanks

The trip blank is designed to determine if the VOC vials were decontaminated properly, if the source water was contaminant-free, or if cross contamination may have occurred during storage and transport of samples as a result of VOCs possibly diffusing through the septum lids. The trip blanks will be prepared by the contracted laboratory and sent with the empty VOC sample vials. One set of trip blanks will be included in each cooler containing samples for VOC analysis.

B.5.3 Analytical Data Quality Indicators

Accuracy: Amount of agreement between a measured and true value. The accuracy goal for each measurement or measurement groups for a given sampling even will be specified on the GSEP form.

Precision: The degree of agreement between or among independent, similar, or repeated measures. The precision goal for each measurement or measurement groups for a given sampling even will be specified on the GSEP form.

Representativeness: The degree to which sample results represent the system under study. This program will use the results of all analyses to evaluate the data in terms of its intended use.

Comparability: The degree to which data from one study can be compared with data from other similar studies. Achieved by using standard techniques to collect and analyze representative samples and by reporting analytical results in appropriate units.

Completeness: The percentage of useable data out of the total amount of planned data. The project goal is 98 percent of all data.

Table 1. Monitoring Well Construction Information

Monitoring Well Identification	Well Location (feet, NAD83)		Top of Casing Elev.	Total depth from Ground	Stickup	Depth to top of Screen	Screen Length	Screen type and Opening Size	Depth to Top of Sandpack	Size and Type of Sandpack	Hydraulic Conductivity	Well Diameter (inches)	Construction Date	Drilling Method
	Eastings	Northings	Elev. (ft MLLW)											
CW01 ^A	1229108.5	228884.3	60.97	65	0	52	10	316 ss, 10 slot	50	10x20 CSSI		4	3/17/1994	Speedstar 72 Cable Tool
CW02 ^A	1229448.8	229253.9	19.45	80	0	67	10	316 ss, 10 slot	65	10x20 CSSI		4	3/29/1994	Speedstar 72 Cable Tool
CW03	1229441.2	229245.9	19.28	52	0	39	10	316 ss, 10 slot	37	10x20 CSSI		4	3/31/1994	Speedstar 72 Cable Tool
CW04	1229209.0	229672.4	17.44	70	0	49	19	316 ss, 10 slot	55	10x20 CSSI		4	3/24/1994	Speedstar 72 Cable Tool
CW05 ^A	1229083.7	229749.7	18.30	102	0	58	41	316 ss, 10 slot	87	10x20 CSSI		4	4/1/1994	Speedstar 72 Cable Tool
CW06	1229146.7	229797.7	16.81	67.5	2.57	54.5	10	316 ss, 10 slot	51.5	10x20 CSSI		4	9/7/1995 ^E	Speedstar 72 Cable Tool
CW07	1229157.4	229798.8	16.69	23	2.72	5	15	316 ss, 10 slot	2	10x20 CSSI		4	9/6/1995 ^E	Speedstar 72 Cable Tool
CW08	1228978.4	229714.8	17.85	23	2.76	5	15	316 ss, 10 slot	2	10x20 CSSI		4	9/5/1995 ^E	Speedstar 72 Cable Tool
CW09 ^A	1229309.5	229580.6	17.79	108	2.93	95	10	316 ss, 10 slot	92	10x20 CSSI		4	9/19/1995 ^E	Speedstar 72 Cable Tool
CW10	1229377.3	229444.4	17.38	62	2.71	49	10	316 ss, 10 slot	46	10x20 CSSI		4	9/21/1995 ^E	Speedstar 72 Cable Tool
CW12 ^A	1229061.5	229416.6	18.64	68	2.86	55	10	316 ss, 10 slot	52	10x20 CSSI		4	9/27/1995 ^E	Speedstar 72 Cable Tool
CW13	1228791.5	229460.3	17.37	23	3.17	5	15	316 ss, 10 slot	2	10x20 CSSI		4	8/31/1995 ^E	Speedstar 72 Cable Tool
CW14	1228800.7	229466.6	17.23	39	2.94	26	10	316 ss, 10 slot	23	10x20 CSSI		4	9/12/1995 ^E	Speedstar 72 Cable Tool
CW15 ^A	1229160.2	229731.0	16.33	98	2.6	85	10	316 ss, 10 slot	82	10x20 CSSI		4	9/7/1995 ^E	Speedstar 72 Cable Tool
EW03	1228701.4	229365.8	17.23	23.5	0.13	17.5	5	ss, 30 slot	15.5	Monterey Sand #9		2	7/19/1985	10 inch HSA
EW07	1229398.4	229370.1	16.86	21	1.86	15	5	ss, 30 slot	11.8	Monterey Sand #9		2	7/18/1985	10 inch HSA
EW08	1229332.1	229276.7	17.37	10.8	2.27	4.8	5	ss, 30 slot	3.8	Monterey Sand #9		2	8/8/1985	10 inch HSA
EW11	1229458.8	229265.5	15.52	29	-0.38	23	5	ss, 30 slot	19	Monterey Sand #9		2	8/12/1985	10 inch HSA
EW12	1229292.0	229639.1	15.07	20	-0.23	14	5	ss, 30 slot	12	Monterey Sand #9		2	8/7/1985	10 inch HSA
EWC2 ^C	1229462.3	229254.2	15.72	59.7	-0.28	53.7	5	ss, 30 slot	50.7	Monterey Sand #9		2	8/14/1985	10 inch HSA
EWC3	1229298.6	229634.4	15.11	64.5	-0.29	58.5	5	ss, 30 slot	54.7	Monterey Sand #9		2	8/8/1985	10 inch HSA
MW14	1229086.2	229768.8	17.90	22	2.73	7	10	304 ss, 20 slot	6	Colorado Sand #8	62.5 gpd/ft ²	2	3/17/1987	8 inch OD HSA
MW15	1229055.0	229477.0	15.57	22	-0.23	5	10	304 ss, 20 slot	3.7	Colorado Sand #8	163 gpd/ft ²	2	3/31/1987	8 inch OD HSA
MW16	1229143.2	229620.3	13.88	22.5	-0.32	5	10	304 ss, 20 slot	4	Colorado Sand #8		2	3/17/1987	8 inch OD HSA
MW17	1228939.2	229413.8	19.06	30	2.88	5	10	304 ss, 20 slot	4	Colorado Sand #8		2	3/16/1987	8 inch OD HSA
MW18	1229207.7	229360.3	15.92	22	0.12	5	10	304 ss, 20 slot	3	Colorado Sand #8	26.7 gpd/ft ²	2	3/16/1987	8 inch OD HSA
MW19	1228759.7	229101.7	18.45	20	0.2	5	10	304 ss, 20 slot	4	Colorado Sand #8	8.7 gpd/ft ²	2	3/14/1987	8 inch OD HSA
MW21	1229326.1	229097.5	18.26	23.5	-0.34	8.5	10	304 ss, 20 slot	7	Colorado Sand #8	55.2 gpd/ft ²	2	3/12/1987	8 inch OD HSA
MW22	1228244.7	229110.7	17.5 ^D	20		5	10	304 ss, 20 slot	4	Colorado Sand #8	4.8 gpd/ft ²	2	03/23/87 ^F	8 inch OD HSA
MW23	1228518.9	229114.7	17.45	20	-0.75	5	10	304 ss, 20 slot	4	Colorado Sand #8	3.5 gpd/ft ²	2	03/24/87 ^F	12 inch OD HSA
OB-1-1	1229070.7	229462.3	17.72	39	1.72	5	30	ss, 20 slot	4	Monterey Sand #16		2	11/15/1988	Mobile B 61
OB-1-2	1229051.9	229467.1	17.65	39	1.75	5	30	ss, 20 slot	4	Monterey Sand #16		2	11/16/1988	Mobile B 61
OB-2-1	1229142.7	229668.0	16.08	39.5	1.18	5	31.5	ss, 20 slot	4	Monterey Sand #16		2	11/16/1988	Mobile B 61
OB-2-2	1229137.4	229682.8	16.43	39	1.83	5	31	ss, 20 slot	4.29	Monterey Sand #16		2	11/16/1988	Mobile B 61
OB-3-1	1229277.6	229639.7	17.24	39	1.94	5	31	ss, 20 slot	4	Monterey Sand #16		2	11/21/1988	Mobile B 61
OB-3-2	1229284.0	229647.2	17.45	39	2.07	6	30	ss, 20 slot	4	Monterey Sand #16		2	11/21/1988	Mobile B 61
OB-4-1	1229386.6	229271.4	16.31	39.5	0.31	6.5	30	ss, 20 slot	3.5	Monterey Sand #16		2	11/17/1988	Mobile B 61
OB-4-2	1229387.5	229277.3	16.56	39.8	0.56	6.4	30.3	ss, 20 slot	3.5	Monterey Sand #16		2	11/17/1988	Mobile B 61
OB-4-3	1229401.9	229285.1	16.22	39.25	0.42	6.25	30	ss, 20 slot	4	Monterey Sand #16		2	11/18/1988	Mobile B 61
OB-4-4	1229382.7	229290.2	16.34	39.75	0.14	6.8	29.95	ss, 20 slot	4	Monterey Sand #16		2	11/18/1988	Mobile B 61
PO01	1229259.0	229597.2	17.94	19	2.34	4	10	ss, 20 slot	2.5	Monterey Sand #16		2	4/10/1989	Acker Portable Mud Rotary
PO03	1229157.8	229514.3	16.36	17	2.64	4	10	ss, 20 slot	2.5	Monterey Sand #16		2	4/12/1989	Acker Portable Mud Rotary
PO04	1229262.1	229395.7	16.83	17.5	2.48	4.5	10	ss, 20 slot	2.5	Monterey Sand #16		2	4/14/1989	Acker Portable Mud Rotary
PO05	1229254.5	229439.6	16.72	17.5	2.68	4.5	10	ss, 20 slot	2.5	Monterey Sand #16		2	4/17/1989	Acker Portable Mud Rotary
PO09	1228998.9	229473.5	18.54	18	2.52	5	10	ss, 20 slot	2.5	Monterey Sand #16		2	4/18/1989	Mobile B 61
PO13	1229366.1	229490.7	16.78	18	1.88	5	10	ss, 20 slot	2.5	Monterey Sand #16		2	4/18/1989	Mobile B 61
PO18	1229459.8	229258.2	17.62	16	1.82	5	10	ss, 20 slot	5	Aqua 8		2	8/23/1989	Bucyrus Erie 22 W Cable Tool
99CD-MW02 ^A	1229118.2	229522.8	16.80	82.5	2.5	72.5	10.0	ss, 20 slot	70.0	10x20 CSSI		2	7/29/1999	Bucyrus Erie 22 W Cable Tool
99CD-MW04 ^A	1229145.1	229421.6	18.23	76.0	2.5	66.0	10.0	ss, 20 slot	64.0	10x20 CSSI		2	7/22/1999	Bucyrus Erie 22 W Cable Tool
02CD-MW01 ^A	Not surveyed	Not surveyed	Not surveyed	63.0	2.6	53.0	10.0	304 ss, 20 slot	50.1	10x20 CSSI		2	11/25/2002	Bucyrus Erie 22 W Cable Tool

Notes:

- A. Monitoring well screen is in lower aquifer.
- B. Riser cut shorter after soil removal.
- C. Inner casing damaged during sheet pile installation, well is unserviceable.
- D. Inner casing fused shut; measurement is outer casing.
- E. Completion date not known; date is start of drilling.
- F. Completion date not known; date is completion of well development.

Table 2. Sample Handling Requirements for Groundwater Monitoring

Analysis	Type of Container	Sample Volume	Sample Preservation	Sample Holding Time
Total Organic Carbon	125 ml HDPE bottle with Teflon-lined cap	125 ml; fill to shoulder of bottle	Cool, 4°C; H ₂ SO ₄ to pH < 2	As soon as possible, 28 days maximum
Nitrate	125 ml HDPE bottle with Teflon-lined cap	125 ml; fill to shoulder of bottle	Cool, 4°C	48 hours
Nitrite	125 ml HDPE bottle with Teflon-lined cap	125 ml; fill to shoulder of bottle	Cool, 4°C	48 hours
Sulfate	125 ml HDPE bottle with Teflon-lined cap	125 ml; fill to shoulder of bottle	Cool, 4°C	As soon as possible, 28 days maximum
Chloride	125 ml HDPE bottle with Teflon-lined cap	125 ml; fill to shoulder of bottle	Cool, 4°C	As soon as possible, 28 days maximum
Petroleum Hydrocarbons (NWTPh-Dx)	One 1-liter amber glass bottle with Teflon-lined phenolic or polypropylene cap	1 liter; fill to shoulder of bottle	Cool, 4°C	As soon as possible, 7 days maximum to extraction
PCP	One 1-liter amber glass bottle with Teflon-lined phenolic or polypropylene cap	1 liter; fill to shoulder of bottle	Cool, 4°C	7 days to extraction, 40 days after extraction
PAHs (w/SIM)	Two 1-liter amber glass bottle with Teflon-lined phenolic or polypropylene cap	1 liter; fill to shoulder of bottle	Cool, 4°C	7 days to extraction, 40 days after extraction
SVOCs	One 1-liter amber glass bottle with Teflon-lined phenolic or polypropylene cap	1 liter; fill to shoulder of bottle	Cool, 4°C	7 days to extraction, 40 days after extraction
VOCs	Three 40 ml VOA vials with Teflon-lined caps	40 ml, fill to top ensuring no bubbles	Cool, 4°C; HCl to pH < 2	As soon as possible, 14 days maximum to extraction
Metals (total) - calcium - magnesium - manganese - potassium - sodium	500 ml HDPE bottle with Teflon-lined cap	500 ml; fill to shoulder of bottle	Cool, 4°C; HNO ₃ to pH < 2	6 months

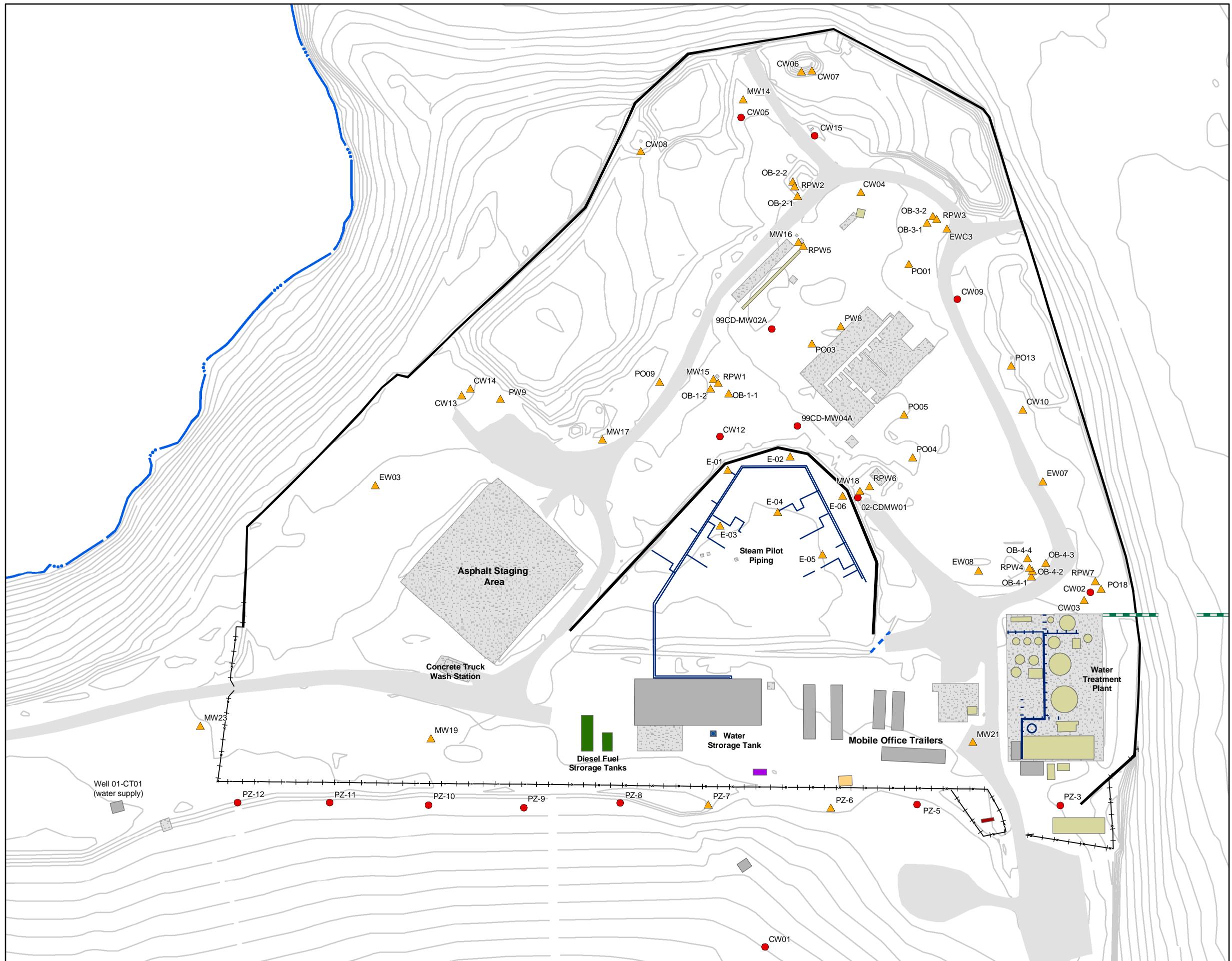


FIGURE 1
Existing Well Locations

WYCKOFF/EAGLE HARBOR SUPERFUND SITE

APPENDIX A

GROUNDWATER SAMPLING EVENT PLANNING (GSEP) FORM

**WYCKOFF/EAGLE HARBOR SUPERFUND SITE
GROUNDWATER SAMPLING EVENT PLANNING (GSEP) FORM**

APPROVAL

Approved	_____ USEPA Region 10 Remedial Project Manager	Date _____
Approved	_____ USEPA Region 10 Quality Assurance Manager	Date _____
Approved	_____ USACE Project Manager	Date _____

SAMPLING EVENT OBJECTIVES

1.

GROUNDWATER MONITORING WELLS SCHEDULED FOR SAMPLING

Well Locations for This Sampling Event	
Well Selection Rationale	

**WYCKOFF/EAGLE HARBOR SUPERFUND SITE
GROUNDWATER SAMPLING EVENT PLANNING (GSEP) FORM**

FIELD MEASUREMENT METHODS AND MEASUREMENT QUALITY OBJECTIVES

Parameter	Analytical Method or Instrument	Required Sensitivity

LABORATORY ANALYSES AND MEASUREMENT QUALITY OBJECTIVES

Wells	Analyte	Laboratory	Method	Required Sensitivity	Method Reporting Limit	Accuracy Goal	Precision Goal

**WYCKOFF/EAGLE HARBOR SUPERFUND SITE
GROUNDWATER SAMPLING EVENT PLANNING (GSEP) FORM**

REQUIRED QUALITY CONTROL SAMPLES

Number of Samples	Sample Type
	Field Duplicates (Frequency of 10 percent)
	Equipment Rinse Blanks (Frequency of one per day)
	Extra volume for MS/MSD/Laboratory Duplicates (Frequency of 5 percent)

LABORATORY REPORTING

Deliverable	
Required Turn-Around-Time	
Send Laboratory Results to:	

TASK REPORTING REQUIREMENTS

Report Type and Contents	
Send Technical Memorandum To:	

**WYCKOFF/EAGLE HARBOR SUPERFUND SITE
GROUNDWATER SAMPLING EVENT PLANNING (GSEP) FORM**

PERSONNEL

Persons/Groups Requesting Sampling	
Project Chemist/Quality Assurance Officer	
Sampling Team	
Other Team Members	
Date(s) of Approved Sampling Event	

APPENDIX B

**MONITORING WELL MEASUREMENTS AND OBSERVATIONS
FORM**

Monitoring Well Measurements and Observations Form

Wyckoff Superfund Site - Bainbridge Island, Washington

Field Team

Date

Water Level Indicators (WLI)

Monitoring Well Identification	Aquifer	Time	DTW	NAPL Observed?	WLI Used (WK or CH)	Comments / Observations / Well Condition
CW01	Lower					
CW02	Lower					
CW05	Lower					
CW09	Lower					
CW12	Lower					
CW15	Lower					
02CD-MW-01	Lower					
99CD-MW02A	Lower					
99CD-MW04A	Lower					
MW19	Upper					
MW21	Upper					
PZ03	Lower					
PZ05	Upper					
PZ06	Upper					
PZ07	Upper					
PZ08	Lower					
PZ09	Lower					
PZ10	Lower					
PZ11	Lower					
PZ12	Lower					

APPENDIX C

FIELD EQUIPMENT AND SUPPLIES CHECKLIST

Field Equipment and Supplies Checklist

Wyckoff Superfund Site - Bainbridge Island, Washington

Documentation

<input type="checkbox"/>	Site Location Map
<input type="checkbox"/>	Well Location Map / Site Plan
<input type="checkbox"/>	Field Sampling Plan
<input type="checkbox"/>	Groundwater Event Sample Planning form
<input type="checkbox"/>	Well Logs
<input type="checkbox"/>	Field Notebook
<input type="checkbox"/>	Data Collection Forms

Decon Supplies

<input type="checkbox"/>	Alconox Detergent
<input type="checkbox"/>	DI Water
<input type="checkbox"/>	Tap Water
<input type="checkbox"/>	Paper Towels
<input type="checkbox"/>	Wisk Broom

General

ONSITE	Keys (gate, wells)
<input type="checkbox"/>	Stop Watch
ONSITE	Tool Kit (bolt cutter, pry bar, hammer, set of wrenches)
<input type="checkbox"/>	Knife
<input type="checkbox"/>	Camera
<input type="checkbox"/>	Cell Phone
<input type="checkbox"/>	Umbrella
<input type="checkbox"/>	Spare Batteries

Sampling Supplies

ONSITE	Purge container(s) (with lids)
<input type="checkbox"/>	Sample Bottles
<input type="checkbox"/>	Coolers
<input type="checkbox"/>	Labels (Forms II Light)
<input type="checkbox"/>	Ice
ONSITE	Chain of Custody Forms (Forms II Light)
<input type="checkbox"/>	Fed Ex Forms
<input type="checkbox"/>	Return Airbill forms
<input type="checkbox"/>	Packing materials (bubble wrap, tape)
<input type="checkbox"/>	Ziplock bags
<input type="checkbox"/>	Garbage bags
<input type="checkbox"/>	Plastic cover for van
<input type="checkbox"/>	Permanent Markers / Pens

Safety Equipment

<input type="checkbox"/>	First Aid Kit
<input type="checkbox"/>	Health and Safety Plan
<input type="checkbox"/>	Safety Glasses
<input type="checkbox"/>	Raingear
<input type="checkbox"/>	Coveralls
<input type="checkbox"/>	Respirator
<input type="checkbox"/>	Rubber Boots
<input type="checkbox"/>	Nitrile Gloves
<input type="checkbox"/>	Warm Gloves
<input type="checkbox"/>	Hat

Water Level Supplies

<input type="checkbox"/>	Datalogger Reader
<input type="checkbox"/>	Laptop
<input type="checkbox"/>	Replacement Covers

Field Equipment

<input type="checkbox"/>	PID
<input type="checkbox"/>	Calibration Gas for PID
ONSITE	Electric Submersible Pump
ONSITE	Flow Controller
<input type="checkbox"/>	12-Volt Battery
<input type="checkbox"/>	Peristaltic Pump
<input type="checkbox"/>	Tubing (polyethylene and silicon)
<input type="checkbox"/>	"Clean" Water Level Indicator
<input type="checkbox"/>	"Dirty" Water Level Indicator
ONSITE	Interface Probe
<input type="checkbox"/>	Flow Cell
<input type="checkbox"/>	Flow Cell - Backup
<input type="checkbox"/>	Calibration Solution for Flow Cell
<input type="checkbox"/>	Graduated Cylinder

APPENDIX D

FIELD INSTRUMENTS CALIBRATION FORM

Field Instruments Calibration Form
 Wyckoff Superfund Site - Bainbridge Island, Washington

Meter Type	Manufacturer	Model Number	Mfg. Serial#	Rental Co. Serial #	Date	Time
Water Quality						
Calibrated to Autocal Solution			Manufacturer	Lot Number		
pH =	Turbidity =	Temperature =				
Conductivity =	Dissolved Oxygen =	Salinity =				
Comments:						
Meter Type	Manufacturer	Model Number	Mfg. Serial#	Rental Co. Serial #	Date	Time
Water Quality						
Calibrated to Autocal Solution			Manufacturer	Lot Number		
pH =	Turbidity =	Temperature =				
Conductivity =	Dissolved Oxygen =	Salinity =				
Comments:						
Meter Type	Manufacturer	Model Number	Mfg. Serial#	Rental Co. Serial #	Date	Time
Water Quality						
Calibrated to Autocal Solution			Manufacturer	Lot Number		
pH =	Turbidity =	Temperature =				
Conductivity =	Dissolved Oxygen =	Salinity =				
Comments:						
Meter Type	Manufacturer	Model Number	Mfg. Serial#	Rental Co. Serial #	Date	Time
Water Quality						
Calibrated to Autocal Solution			Manufacturer	Lot Number		
pH =	Turbidity =	Temperature =				
Conductivity =	Dissolved Oxygen =	Salinity =				
Comments:						

APPENDIX E

GROUNDWATER SAMPLING DATA SHEET

Groundwater Sampling Data Sheet
Wyckoff Superfund Site - Bainbridge Island, Washington

Well ID
Sample: ID
Field Conditions

	Date
	Field Team: (Initials)

Purge Information

Well Diameter (in.)

Well Depth (ft.)

Initial Depth to Water (ft.)

Depth of Water Column

3 Casing Volumes

1 Casing Volume

Purge Method (circle) : Bailer # _____

Submersible Pump

Bladder Pump

Peristaltic Pump

Other: _____

Start Time

End Time

Total Gallons Purged

Purge Rate

Controller Frequency

Time	DTW	Gallons Purged	pH	Conductivity	NTU	DO	Temp.	ORP	Appearance
------	-----	----------------	----	--------------	-----	----	-------	-----	------------

Sample Information

Sample Method(s) (circle): Bailer Bladder pump Peristaltic pump Submersible Pump other

Analysis	Time	Bottle Type	Preservative/Filtration	Comments
----------	------	-------------	-------------------------	----------

End Time

Comments / Exceptions:

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

Stabilization Parameters are shown in **BOLD**

Check for floaters and sinkers and enter observations under comments section.

Appendix C Field Records

Jan 23-2006
0910 - CNRM Hill on site workup
for GW sample Project - Kona, HI.

Jim Crawford FTL/SSC
Kris L. Dahl FTM/SSC
~~Kris L. Dahl~~ Nadike Gulne FTM/SSC

- Set up in P Boiler Blk
- Calibration

Minikaa 7000 P.D.

CNRM Hill 100939

Frost Air = 0.1

100 ppm VOC output = 100 ppm

CNA End. R. 1 #7 Elbow 100 ppm 150 Air

W.H. 81463

Value = 0.5 CPM w T tube.

CNA Norite U22 - see Field Log for

120 vol-%

- Standard Sampling GW wells -

0930

PZ03 - set up -

Samples in Resist/HR pump
CNRM 4.11 # closer - Gekick Pump

PID reading same as background = 0.1 CPM.

Time	
1050	Set up on CNRM P.D. = Ba = 0.2 ppm
1345	Set up on CNRM P.D. = Ba = 0.1 ppm
1600	Set up on CNRM P.D. = Ba = 0.2 ppm
1650	Pack up / Bulk Psys for Shipping -
1845	1 P.M. side to 7:10 PM).

4

Jan 24. 06 -
0810 - On site

On Capturing
Kris. Deltin

Pap L, Sungkyu in Down Stagn Bl.

PID C-1 - Min Max 2000
c/w m H11 100939

Fresh Air = 0.0 ppm

100 ppm isobut. = 99.5

c. gas = Cha 7E16 ppm

lot # 01463

0.5 ppm valve in T tube

Fresh Air C-1 = 0.0

100 ppm isobut. = 99.5

c. gas = 0.0 ppm

and 01463 0.5 ppm valve

in T tube.

Sungkyu protocol -

= Using poly "or poly tubing
with heat seal British 1/4" flange

1.141113 - 0.5 ppm + T tube
+ silicon. Only need (max) 1 tube!
All tubing is single use & discarded
After each use "shells" > 50' long

required twisting in single use
sections of stainless steel - cleaned/
Rinsed before use & discarded after!

Reused because + discarded after!
use. Tubing set to mid-point in
well screen. Tubing run through
Holes. Or else fall to. Reuse is
during sampling. Prior to sampling tubing
is removed from bottom and flushed

5

Jan 25th 2006

0815 - on site Trunkline
in Delta

Pap Per Sungkyu
PID C-1 Min Max 2000

c/w m H11 100936

Fresh Air = 0.0

100 ppm isobut. = 99.5

c. gas = 0.0 ppm

and 01463 0.5 ppm valve

91-2506

water filling holes - under house / mini well
through piping. Taped pipe ends
& run out opening - plus dimensions
measured at site, stepped.

1030 - stepped curb

1107 - stepped curb

1410 - stepped curb - noted

SL organic or crushed stone
- PWD readings same as background

1605 PWD stepped curb - no adobe, no stone

1700 stepped curb - finish sawing
after curb.

- note on Run - channel
out of it, end wall is poor surf
- limestone rise, top with stone
of stone. All down hole except discharge
str. use - epoxy off inside.
Marble cell in limestone & under
spray between wells.

Jan 26 2006

0810 - on site J. Carlford

K. D. P. Jr

PWD - Chalk Hill mini well 2000

Fresh Air Cyl = C. Open
Cylinder 150psi, max pressure
and C. / C. 2000 rpm

2.5 mm efficiency

or 5 rpm vibration + tubes

0955 - stepped curb in

"cyclone" subsurface cyl. pump

Rinsed off pump cyl. cyl in PWD
Pump 1. use - a High $\frac{3}{8}$ " 10 tubing
+. Pump is lower into well to Midpoint
of screen. Tubing requires use
of 3/8" hose bush on Herkitt Flange

Through cyl. Used cyclone
continually to set pump rods.

After sawing pulled pump, disassembled
Tubing, rinsed pump + rods, can be re-
assembled (without flanges, one
exception). Stand pump in contractor
spade tank bag + inflated to cover cylinder.

1-26-06

1115. Sighted PZ06 -
 - Note on PZ wells - me/
 to verify screened interval from
 Top of well case - intervals on 1.3 sec
 as BGS (below ground surface)
 - Added in sticks to screened interval
 on PZ wells only.

1220 Sighted PZ09 - no color noted.

1355 Sighted PZ10 -

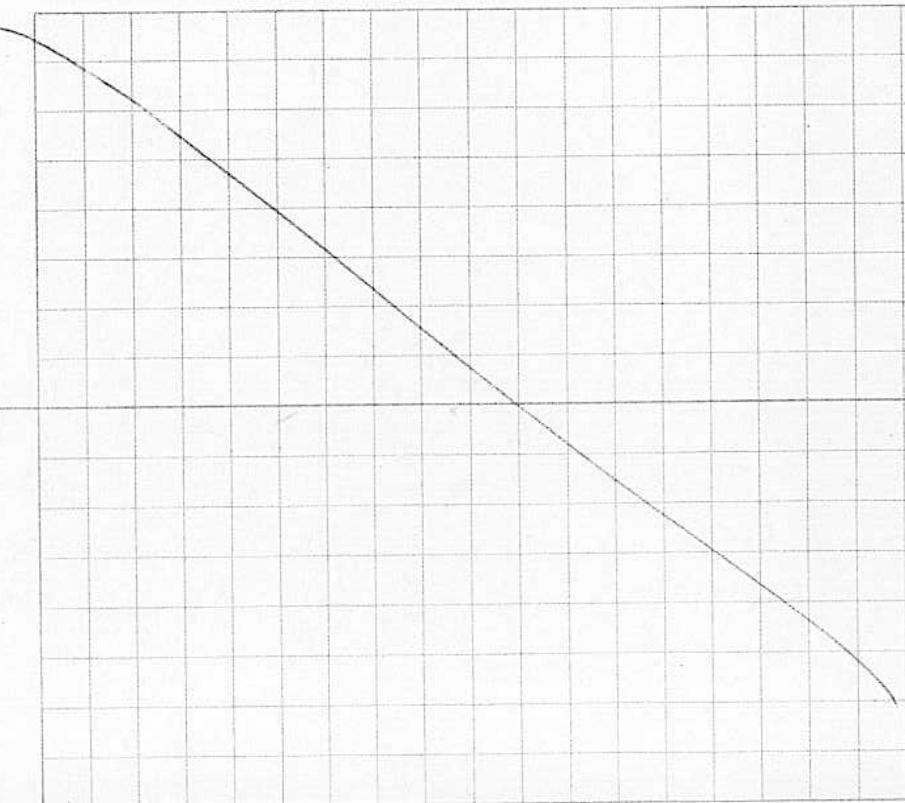
1500 - Sighted PZ11 - noted organic
 color & higher visible turbidity
 than other wells

1605 Sighted PZ12

- End of sampling -
 clean up -
 off site @ 1715 -

1-27-06

- Sighted some flagup debris
 clean up - sampled flagup debris
 Numbered them to keep track of them -
 St. Cambrian / k Dr / Nm -



Field Sampling Logbook

Wyckoff Superfund Site

Bainbridge Island, WA

Sampling Team Members

Jim Crawford

Nahide Gulensoy

Kristen Dalton

Sampling Dates

1/23/04 - 1/26/04

Field Instruments Calibration Form
Wyckoff Superfund Site - Bainbridge Island, Washington

Meter Type	Manufacturer	Model Number	Mfg. Serial#	Rental Co. Serial #	Date	Time
Water Quality	Hach	U22		CHEMTRAC C101050	1-23-05	0835
Calibrated to Autocal Solution		Manufacturer	Auricel Co.	Lot Number	5065	
pH = 7.00 = 4.00	Turbidity = 0.0 NTU's = 0.0		2-AL008	exp. 11-2007	Temperature = 19.7	
Conductivity = 4.49 mS/cm = 4.49		Dissolved Oxygen = 7.47 mg/l			Salinity = 0.23	
Comments: End of Day Cal check: pH 7.00 reads 3.99, 4.49 and reads 4.59, Turb reads 3.1 DO reads 11.18 & 14.7 mg/l						
Meter Type	Manufacturer	Model Number	Mfg. Serial#	Rental Co. Serial #	Date	Time
Water Quality	Hach	U22		CHEMTRAC C101050	1-24-05	0835
Calibrated to Autocal Solution		Manufacturer	Auricel Co. 2-AL008	Lot Number	5065	
pH = 7.0 = 3.99	Turbidity = 0.0			exp. 11-2007	Temperature = 17.6	
Conductivity = 4.49 = 4.49	Dissolved Oxygen = 10.02				Salinity = 0.23 ORP ± 260	
Comments:						
Meter Type	Manufacturer	Model Number	Mfg. Serial#	Rental Co. Serial #	Date	Time
Water Quality	Hach	U22		CHEMTRAC C101620	1-25-05	0840
Calibrated to Autocal Solution		Manufacturer	Auricel Co. 2-AL008	Lot Number	5065 exp. 11-2007	
pH = 7.0 = 4.00	Turbidity = 0.0 = 0.0				Temperature = 17.62	
Conductivity = 4.49 = 4.49	Dissolved Oxygen = 7.79				Salinity = 0.2 ORP ± 260	
Comments:						
Meter Type	Manufacturer	Model Number	Mfg. Serial#	Rental Co. Serial #	Date	Time
Water Quality	Hach	U22		CHEMTRAC C101620	1-26-05	0817
Calibrated to Autocal Solution		Manufacturer	Auricel Co.	Lot Number	5065 exp. 11-2007	
pH = 7.0 = 3.99	Turbidity = 4.49 = 0.0 = 0.0		2-AL008		Temperature = 9.2	
Conductivity = 4.49 = 4.50	Dissolved Oxygen = 14.40				Salinity = ORP ± 246	
Comments:						

Monitoring Well Measurements and Observations Form

Wyckoff Superfund Site - Bainbridge Island, Washington

Field Team K. Dalton & J. Crawford, N. Gulansky
 Date 1/23/04 - 1/26/04
 Water Level Indicators (WLI) 1/10/23/04

CH WLT oner (Heron)

Monitoring Well Identification	Aquifer	Time	DTW (ft)	NAPL Observed?	WLI Used (WK or CH)	Assumed Sampling Screen Depth (ft) <small>(CH vs. BG)</small>	Comments / Observations / Well Condition
CW01 1/24/04 Lower		9:34	43.14	NO	CH	12.30 ^{ft}	72 ft sampling depth
CW02 1/23/04 Lower		13:25	9.22	NO	CH	48.57 ^{ft}	
CW05 1/24/04 Lower		13:13	6.85	NO	CH	78 ft	
CW09 1/23/04 Lower		15:15	9.05	NO	CH	99 ft	
CW12 1/25/04 Lower		10:00	6.44	NO	CH	60 ft	
CW15 1/24/04 Lower		10:00	4.72	NO	CH	90 ft	
02CD-MW-01 Lower		14:48	4.01	NO	CH	72 ft	
99CD-MW-02A Lower		11:15	9.02	NO	CH	53 ft	
99CD-MW-02A Lower		11:30	8.73	NO	CH	70 ft	
MW19 1/25/04 Upper		11:37	4.48	NO	CH	10 ft	
MW21 1/23/04 Upper		10:50	7.43	NO	CH	15 ft	
PZ03 1/23/04 Lower		9:29	8.05	NO	CH	25 ft	
PZ05 1/25/04 Upper		10:48	5.37	NO	CH	7.2 ft	
PZ06 1/25/04 Upper		15:44	4.07	NO	CH	4 ft	
PZ07 1/25/04 Upper		13:50	3.57	NO	CH	8 ft	
PZ08 1/25/04 Lower		10:58	4.07 ^{ft}	NO	CH	21.54 ft	odor
PZ09 1/25/04 Lower		11:54	6.37	NO	CH	21.7 ft	
PZ10 1/26/04 Lower		13:43	6.57	NO	CH	21.4 ft	
PZ11 1/26/04 Lower		14:35	6.12	NO	CH	21.7 ft	
PZ12 1/26/04 Lower		15:48	5.42	NO	CH	21.7 ft	

Groundwater Sampling Data Sheet

Wyckoff Superfund Site - Bainbridge Island, Washington

Well ID
Sample: ID
Field Conditions

9703
PE03-0106
Overrun, sand infiltration Don'ty, very H. Breeze
CLP-J6B00

Date 1-23-06
Field Team: (Initials) SJC/KD/NG

Purge Information

Well Diameter (in.)

2"

PVC

Well Depth (ft.)

51.5

2.66

Initial Depth to Water (ft.)

3.65

2.0926

Depth of Water Column (ft.)

42.85

CW

3 Casing Volumes

21.4

C-101232

1 Casing Volume

7.1

gal

Scanned from 20-34' BGS

Purge Method (circle): Bailer #

Submersible Pump

Bladder Pump

Peristaltic Pump

Low Flow GeoTech

Other:

C-101823

Start Time 0948

End Time 1003

Total Gallons Pured 5.25 L (1 1/2 gal)

Purge Rate 350 ml/min

Controller Frequency ND

350 mL

15 min

1750

3500

5250

S-1

Gallons

Time	DTW	Purged	pH	Conductivity	NTU	DO	Temp.	ORP	Appearance	Notes
0950	..		6.42	5.11	28.3	3.42	12.1	-32	clear	0.26
0953	8.93		6.43	5.12	28.6	2.27	12.1	-51	-	0.27
0955	8.99									
0957	9.08		6.51	5.16	28.5	2.09	12.1	-64	very turb	0.28
10:00	9.11		6.55	5.16	28.2	1.88	12.1	-72		0.29
10:03	9.15		6.58	5.17	28.0	1.76	12.1	-79	very	0.29
10:30	8.98									

Sample Information

Sample Method(s) (circle): Bailer Bladder pump Peristaltic pump Submersible Pump other

Analysis	Time	Bottle Type	Preservative/Filtration	Comments
PAH-SIM	09:05	2X1L Amber	None	
PCP	10:05	"	"	
TPH-DX (extended to motor oil)	10:05	"	"	
SVOC with TCS	10:05	"	"	

End Time

10:30

Comments / Exceptions:

water on DTW - well is技fully influenced
-Turbidity from pump and 1. mid depth in wellscreen

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

Stabilization Parameters are shown in **BOLD**

Check for floaters and sinkers and enter observations under comments section.

Groundwater Sampling Data Sheet

Wyckoff Superfund Site - Bainbridge Island, Washington

Well ID
Sample: ID
Field Conditions

MW21
MW21-0106
On recd., 47°F

Date 1-23-06
Field Team: (Initials) SL/KD/NG

Purge Information

Well Diameter (in.)

2"

Submersible Pump

Well Depth (ft.)

23.5

Bladder Pump

Initial Depth to Water (ft.)

7.43

Peristaltic Pump

Depth of Water Column (ft.)

16.1

Other:

3 Casing Volumes

8.0 gal

C-101823

1 Casing Volume

2.7 gal

Purge Method (circle): Bailer #

Submersible Pump

Water Level Indicator # C-101232

Bladder Pump

Peristaltic Pump

Other:

11:00

Start Time

11:25

End Time

Total Gallons Purged

350 mL/min

Purge Rate

Controller Frequency

300 mL/min

11:06

275 mL/min

11:10

97

Time	DTW	Gallons Purged	pH	Sl/cm Conductivity	Turb NTU	DO	Temp. °C	ORP	Appearance
11:01	7.90		6.84	0.868	64.7	4.55	11.8	-103	Silty/slightly turbid
11:04	8.51		6.81	0.698	43.1	1.90	11.9	-122	
11:05									
11:07	8.80				x0				
11:09	8.74		6.78	0.648	4037.5	1.62	11.8	-133	
11:13	8.65		6.77	0.627	30.2	1.55	11.8	-137	
11:16	8.58		6.77	0.413	21.2	1.51	11.8	-140	
11:20	8.52		6.74	0.407	19.1	1.51	11.8	-142	
11:23	8.54		6.76	0.401	13.8	1.47	11.8	-144	
11:56	8.45								

Sample Information

Sample Method(s) (circle): Bailer Bladder pump Peristaltic pump Submersible Pump other

Analysis	Time	Bottle Type	Preservative/Filtration	Comments
PAH-SIM	11:25	2x 1-Liter Amber	None	
PCP	11:25	"	"	
SVOC with TACCS	11:25	"	"	
TPH-DX	11:25	"	"	

End Time

11:55

Comments / Exceptions:

Downloaded data logger . set tubing to mid-screen

POD-BE = 0.2 ppm , Background = 0.1 ppm

* Downloaded POD logger and DTW = 8.000

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

Stabilization Parameters are shown in **BOLD**

Check for floaters and sinkers and enter observations under comments section.

Groundwater Sampling Data Sheet

Wyckoff Superfund Site - Bainbridge Island, Washington

Well ID
Sample: ID
Field Conditions

JAC
MWT CW02
CW02-D106
D106, 40°F, light Brown

Date
Field Team: (Initials)

1-23-06
JAC

Purge Information

Well Diameter (in.)	4"
Well Depth (ft.)	80
Initial Depth to Water (ft.)	9.27
Depth of Water Column (ft.)	70.78
3 Casing Volumes	138.6
1 Casing Volume	46.2

Water Level Indicator # C-101232

Purge Method (circle): Bailer # Submersible Pump

Bladder Pump

Peristaltic Pump

Other:

C-101823

Start Time 13:52
End Time 14:20
Total Gallons Purged 8.4 L (2 1/2 gal)
Purge Rate 300 mL/min
Controller Frequency

300 mL/min
2.5 min2400
0.000
4.100

Sal

Time	DTW	Gallons Purged	pH	Conductivity	NTU	DO	Temp.	ORP	Appearance
13:55	9.86		7.09	2.26	95.1	5.00	12.1	+104	St. Turbidity, yellow
13:59	9.94		7.10	2.25	13.8	3.77	12.2	101	clear
14:01	10.01		7.11	2.25	15.6	3.52	12.3	+244 100	clear
14:04									
14:07	10.12		7.10	2.25	13.8/14.1	3.44	12.3	100	clear
14:13	10.24		7.11	2.24	13.9	3.35	12.3	100	clear
14:18	10.30		7.10	2.25	14.8/13.2	3.28	12.3	99	clear
14:50	10.63								

Sample Information

Sample Method(s) (circle): Bailer Bladder pump Peristaltic pump Submersible Pump other

Analysis	Time	Bottle Type	Preservative/Filtration	Comments
PAH-SIM	14:25	2X 1-L Amber	None	
PCP	14:25	"	"	
TPH-DX	14:25	"	"	
SOC with TICs	14:25	"	"	

End Time

14:50

Comments / Exceptions:

pH = 8.2 = 0.1 BF = 0.1

Readings for:

Turbidity jumping around.

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

Stabilization Parameters are shown in **BOLD**

Check for floaters and sinkers and enter observations under comments section.

Groundwater Sampling Data Sheet

Wyckoff Superfund Site - Bainbridge Island, Washington

Well ID: CW-09
 Sample: ID: CW09-0106
 Field Conditions: Overcast

Date: 1/23/06
 Field Team: (Initials) SC/NG/KD

Purge Information

Well Diameter (in.) 4"

Well Depth (ft.) 102'

Initial Depth to Water (ft.) 9.05

Depth of Water Column 98.95

3 Casing Volumes 193.9 gal

1 Casing Volume 64.6 gal

Water Level Indicator # C101232

Purge Method (circle): Bailer # Submersible Pump
 Bladder Pump
 Peristaltic Pump

Other:

Start Time 15:15
 End Time 15:42
 Total Gallons Purged

Purge Rate 375 mL/min

Controller Frequency

Time	DTW	Gallons Purged	pH	Conductivity	NTU	DO	Temp.	ORP	Appearance	Sal
15:18	9.33		6.33	13.0	4.2	2.74	11.9	105	clear	0.7
15:24	9.38		6.33	13.2	3.0	2.55	11.9	91	clear	0.7
15:28	9.45		6.38	13.4	2.9	2.37	11.8	82	clear	0.76
15:31	9.50		6.40	13.7 / 9.0	2.8	2.30	11.8	74	clear	0.78
15:38	9.59		6.55	14.1	2.7	2.24	11.9	67	clear	0.81
15:42	9.60		6.65	14.4	2.8	2.22	11.8	65	clear	0.8
16:09	9.81									

Sample Information

Sample Method(s) (circle): Bailer Bladder pump Peristaltic pump Submersible Pump other

Analysis	Time	Bottle Type	Preservative/Filtration	Comments
PAH-SIM	15:45	2x 1-L Amber	None	
PCP	15:45	"	"	
SVOC WHNTCS	15:45	"	"	
TPH-DX	15:45	"	"	

End Time

16:05

Comments / Exceptions:

conductivity reading jumping around; also DO. Horiba appears to need recalibration.

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

Stabilization Parameters are shown in **BOLD**

Check for floaters and sinkers and enter observations under comments section.

Groundwater Sampling Data Sheet

Wyckoff Superfund Site - Bainbridge Island, Washington

Well ID: 02CDMW01
 Sample: ID: 02CDMW01-0106
 Field Conditions: Overcast 45° L.B. Breeze

Date: 12/3/06
 Field Team: (Initials) SP/C/KD/NB

Purge Information

Well Diameter (in.)	2"	Purge Method (circle):	Bailer	#	Submersible Pump
Well Depth (ft.)	6'	Bladder Pump			
Initial Depth to Water (ft.)	9.02	Peristaltic Pump			C141923
Depth of Water Column	53.98	Other:			
3 Casing Volumes	27 gal	Start Time:	16:15		
1 Casing Volume	9 gal	End Time:	16:36		
	Since 53'	Total Gallons Purged:			
		Purge Rate:	4000L/min		
		Controller Frequency:			

Time	DTW	Gallons Purged	pH	Conductivity	NTU	DO	Temp.	ORP	Appearance
16:18	9.22		8.54	0.417	97.3	2.76	15.1	-179	Fogged, Brown
16:21	9.24		8.55	0.303	30.4	1.62	15.6	-204	clearing
16:24	9.34		8.52	0.254	26.7	1.52	15.7	-211	Foggy
16:27	9.36		8.50	0.241	24.2	1.51	15.8	-202	Clear
16:30	9.37		8.43	0.234	30.9	1.70	15.7	-185	
16:33	9.39		8.31	0.225	39.9	1.85	15.6	-160	Clear
16:36	9.43		8.29	0.223	41.6	2.01	15.6	-152	Clear

Sample Information

Sample Method(s) (circle): Bailer Bladder pump Peristaltic pump Submersible Pump other

Analysis	Time	Bottle Type	Preservative/Filtration	Comments
PAN-SIM	16:40	2x1L Poly, G	None / 4°C	
PCP				
SVOC & TICS	↓	↓	↓	
TPH-DX	↓	↓	↓	

End Time:

16:08

Comments / Exceptions:

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

Stabilization Parameters are shown in **BOLD**

Check for floaters and sinkers and enter observations under comments section.

Groundwater Sampling Data Sheet

Wyckoff Superfund Site - Bainbridge Island, Washington

Well ID: CW15
Sample: ID: CW150106
Field Conditions: Light overcast, 45°, H. Brown

Date: 1-29-06	Field Team: (Initials) SH
---------------	---------------------------

Purge Information

Well Diameter (in.)	4"	Purge Method (circle):	Bailer	#	Submersible Pump
Well Depth (ft.)	901		Bladder Pump		
Initial Depth to Water (ft.)	9.72		Peristaltic Pump		C101823
Depth of Water Column	93.28	Other:			
3 Casing Volumes	182.7 gal	Start Time	10:00/1000E - Red. 1st sm		
1 Casing Volume	60.9 gal	End Time	10:33		
	Scanning depth 85-95	Total Gallons Purged	8.42 ~ 7 gal.		
	3rd tubing @ 90'	Purge Rate	350 ml/min		
		Controller Frequency			

Time	DTW	Gallons Purged	pH	Conductivity	NTU	DO	Temp.	ORP	Appearance	Sc
10:00			6.10	4.82	16.6	4.30	11.9	-184	Clear	0.24
10:03			6.47	4.85	24.9	1.67	11.6	-215	Clear	0.25
10:06	9.70		6.51	5.06	27.3	1.50	11.7	-230	Clear (very)	0.26
10:09	9.70		6.57	5.21	24.9	1.40	11.8	-250		0.26
10:22			6.67	5.33	35.7	1.36	11.4	-251	Very clear	0.26
10:25			6.60	5.50	28.8	1.32	11.7	-259	" "	0.29
10:28	9.70		6.64	5.62	27.8	1.35	11.8	-265	" "	0.30
10:31			6.63	5.66	28.7	1.33	11.8	-280	" "	0.30
10:34			6.63	5.72	27.0	1.33	11.8	-281		0.30
10:35	9.70									

Sample Information

Sample Method(s) (circle): Bailer Bladder pump Peristaltic pump Submersible Pump other

Analysis	Time	Bottle Type	Preservative/Filtration	Comments
PAN-SIM	10:35	6x1L AGL	1/ce only	Collected 2x vol for ms/MSD
PCP		6x1L AGL		1
SVOCL-TIL		6x1L AGL		b
TPH-DV	b	4x1L AGL		Collected 2x vol for Lab QC

End Time: 10:35

Comments / Exceptions:

PID: 0.0 - BG = 0.0

Sample is very clear. No shear noted. But slight organic "coconut-like" odor in purge. Tubing set at 90' mid screen; did not touch bottom of well.

Collected MS/MSD

* Collected Duplicate Sample MWSO-0106 Sampled a few mins 10:35 Filled BOTTLE for lab analysis & sample sent to Dugay Singh.

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

Stabilization Parameters are shown in **BOLD**

Check for floaters and sinkers and enter observations under comments section.

Groundwater Sampling Data Sheet

Wyckoff Superfund Site - Bainbridge Island, Washington

Well ID: CW05
 Sample: ID: CW05-0106
 Field Conditions: Sunny, Lt. Breeze, 50°

Date: 12-1-06
 Field Team: (Initials) GCL/KD

Purge Information

Well Diameter (in.): 4"
 Well Depth (ft.): 102
 Initial Depth to Water (ft.): 6.85
 Depth of Water Column (ft.): 95.15
 3 Casing Volumes: 180.3 gal
 1 Casing Volume: 62.1 gal
 Sequenced intervals:
 5' - 9' 1" set tubing to 7'

Purge Method (circle): Bailer # Submersible Pump
 Bladder Pump
 Peristaltic Pump C101-023
 Other:
 Start Time: 13:31
 End Time: 14:00
 Total Gallons Purged: 8.42 ± 2 gal/sec
 Purge Rate: 400 ml/min - total down to 375 ml/min
 Controller Frequency: c 13.3 s

Time	DTW	Gallons Purged	pH	Conductivity	NTU	DO	Temp.	ORP	Appearance
7:00 13:31	7.02	- Note - note yet purging well	-	-	-	-	-	-	-
1335	7.30		5.87	14.2	16.6	6.25	12.1	+88	Clear
1338	7.41*		6.51	14.0	49.1	2.90	12.0	+56	very clear
1341			6.65	14.1	69.2	1.90	12.0	+19	very clear
1344			6.79	14.0	56.7	1.79	12.0	+32	" "
1347	7.59		6.79	13.9	41.0	1.70	12.1	+30	
1351*			6.86	14.8	12.2	8.10	12.1	35	
1354	7.64		6.86	14.6	8.1	1.97	12.2	+30	- clear
1358			6.87	14.4	11.1	1.68	12.1	+76	Clear
1400	7.66		6.87	14.4	12.9	1.61	12.1	+24	
1420-1	8.03	Ending water level							

Sample Information

Sample Method(s) (circle): Bailer Bladder pump Peristaltic pump Submersible Pump other

Analysis	Time	Bottle Type	Preservative/Filtration	Comments
PAN-Sim	1405	1L Amb. G	ice only	
PCP	1406			
SVCOC w TIC's	1405			
TPN-DX	1405	↓	↓	

End Time: 1428

Comments / Exceptions:

1320 Hatched Cal check prior to str. f
 pH 4.00 = 3.98 and 4.19 = 4.50 DO = 11.63 Temp = 11.1 Turb = 0.0 Si = 0.23
 or p = 0.07, cleaned out Herl. flw - through all
 * Purge water at 1344 - very clear, no odor, no shear.
 1358 - cleaned turb probe; - rinsed out all purge water from coll & gas line/Drain

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

Stabilization Parameters are shown in **BOLD**

Check for floaters and sinkers and enter observations under comments section.

Groundwater Sampling Data Sheet

Wyckoff Superfund Site - Bainbridge Island, Washington

Well ID
Sample: ID
Field Conditions

99CDMW02	99CDMW02-C101
Sunn Y; 50' C101	

Date	1-24-06
Field Team: (Initials)	SBC

Purge Information

Well Diameter (in.)

2"

Well Depth (ft.)

87.5

Initial Depth to Water (ft.)

14.6

6.61

Depth of Water Column (ft.)

74.5

3 Casing Volumes

38.3 gal

1 Casing Volume

12.8 gal

Screen: 77.5-87.5

Purge Method (circle): Bailer #

Submersible Pump

Bladder Pump

Peristaltic Pump

Geo Guard & C101/923

Other:

Start Time

15:06

End Time

1530

Total Gallons Purged

Purge Rate

35 gal/min (15 min flow 300 mL)

Controller Frequency

Time	DTW	Gallons Purged	pH	Conductivity	NTU	DO	Temp.	ORP	Appearance
1507	6.37		7.13	0.283	40.1	3.46	12.4	-759	Gray, S1 turb
1512	6.40		7.92	0.284	25.1	2.17	12.5	-270	"
1514	6.42		7.94	0.290	18.5	1.90	12.5	-275	clear
1517-1520	6.58		7.84	0.231	19.9	1.89	12.4	-261	"
1522	6.60		7.88	0.227	19.4	1.79	12.5	-264	
1525			7.94	0.230	18.5	2.11	12.6	-264	Fairly clear
1528			8.09	0.230	17.5	2.45	12.6	-265	
1530	6.65		8.11	0.231	18.0	2.53	12.6	-259	
1603	7.11								

Sample Information

Sample Method(s) (circle): Bailer Bladder pump Peristaltic pump Submersible Pump other

Analysis	Time	Bottle Type	Preservative/Filtration	Comments
PAH-SIM	1535	1L Ambros	ice only	
PCP	1535	/	/	
SO4-SVOC-TIC	1535	/	/	
TPH-DX	1535	/	/	

End Time

1603

Comments / Exceptions:

1507- Purge water is dark BERRY, S1 turb. and Turbid, no odor, no silt
 PID = R2 = 0.1 = 3.6.
 - Sediment at top of screen - could get below 78 ft.

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

Stabilization Parameters are shown in **BOLD**

Check for floaters and sinkers and enter observations under comments section.

Groundwater Sampling Data Sheet

Wyckoff Superfund Site - Bainbridge Island, Washington

Well ID
Sample: ID
Field Conditions

99CDMW04
Casing ~ 50'

Date 1-29-06
Field Team: (Initials) SJ/KB

Purge Information

Well Diameter (in.) 2"
Well Depth (ft.) 76'
Initial Depth to Water (ft.) 8.73
Depth of Water Column 67.3
3 Casing Volumes 33.4 gal
1 Casing Volume 11.2 gal
* Scanned - 66'-76'

Purge Method (circle): Bailer # Submersible Pump
 Bladder Pump Peristaltic Pump C42 N H.H. Grecian
 Other: C-101823
 Water Level Indicator # 14mm CH-E C101732
 Start Time 1630
 End Time 1649
 Total Gallons Purged 350
 Purge Rate 350 ml/min
 Controller Frequency

Time	DTW	Gallons Purged	pH	Conductivity	NTU	DO	Temp.	ORP	Appearance
16:32	8.86		8.70	0.197	22.3	6.50	11.9	-111	turbid, brownish
16:35	8.89		7.68	0.208	10.6	4.14	14.4	-107	
16:38	8.92		7.59	0.210	7.3	4.06	14.5	-98	fairly clear
16:41	8.93		7.57	0.212	6.6	4.13	14.5	-89	+ clear
16:44	8.93		7.56	0.213	7.3	4.23	14.3	-81	clear
16:47	8.93		7.55	0.213	4.0	4.32	14.4	-74	clear
16:50			7.57	0.213	4.7	4.33	14.4	-79	
17:23	9.38								

Sample Information

Sample Method(s) (circle): Bailer Bladder pump Peristaltic pump Submersible Pump other

Analysis	Time	Bottle Type	Preservative/Filtration	Comments
PAH	1650	10 Anler 6	ice only	
PCP		/	/	
SVOC + TIC's	/	/	/	
TPH DX	/	/	/	

End Time

17:23

Comments / Exceptions:

- 16:32 initial purge water is turbid, brownish, no odor, no shear.
 & Sat tubing to 70'

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

Stabilization Parameters are shown in **BOLD**

Check for floaters and sinkers and enter observations under comments section.

Groundwater Sampling Data Sheet

Wyckoff Superfund Site - Bainbridge Island, Washington

Well ID
Sample: ID
Field Conditions

CW 12
CW12-0106
Sunny - 48°

Date 1-25-06
Field Team: (Initials) SHC/ICD

Purge Information

Well Diameter (in.) 4"
Well Depth (ft.) 63"
Initial Depth to Water (ft.) 6.44
Depth of Water Column ft 60.10
3 Casing Volumes 120.40 gal
1 Casing Volume 40.2 gal
3 casing - 55.65'

Purge Method (circle): Bailer # Submersible Pump
 Bladder Pump Peristaltic Pump geo pump CW #
 Other: C-
 Start Time 10:06
 End Time 10:29
 Total Gallons Purged
 Purge Rate 80 gal/min 35 gal/min
 Controller Frequency 10.81 30 gal/min

Time	DTW	Gallons Purged	pH	Conductivity	NTU	DO	Temp.	ORP	Appearance
10:08			5.97	0.382	11.4	7.56	12.97	+175	Clear
10:11	6.74		6.12	0.377	16.7	5.62	13.37	+163	" brownish
10:14	6.82		6.27	0.377	16.2	5.26	13.53	+151	"
10:17	6.87		6.43	0.376	1.5	5.05	13.61	+143	"
10:19	6.85		6.57	0.374	1.9	5.05	13.49	+133	" turned brownish
10:22	6.83		6.63	0.374	1.1	5.14	13.14	+135	Clear
10:25	6.80		6.73	0.369	1.4	5.06	13.39	+133	"
10:28	6.81		6.78	0.379	1.2	5.12	13.41	+132	"
11:00	^{inc} 6.77	071-6.72							

Sample Information

Sample Method(s) (circle): Bailer Bladder pump Peristaltic pump Submersible Pump other

Analysis	Time	Bottle Type	Preservative/Filtration	Comments
PAH-SIM	10:30	xsl Ambig	ice only	
PCP				
SVOC+TIC				
TPH-DX				
Hg-SIM	11:12	SL		

End Time

11:00

Comments / Exceptions:

Procedure is clear no sheet or order.
Tubing set + mid-section 60ft.

PID = BG = 0.1 ppm

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

Stabilization Parameters are shown in **BOLD**

Check for floaters and sinkers and enter observations under comments section.

Groundwater Sampling Data Sheet
Wyckoff Superfund Site - Bainbridge Island, Washington

Well ID: MW19
Sample: ID: MW19-0106
Field Conditions: On-elev. standing in Rain ~ 45°

Date: 1-25-01	Field Team: (Initials) T.J.KD
---------------	-------------------------------

Well Diameter (in.) 7"

Well Depth (ft.) 70'

Initial Depth to Water (ft.) 4.48

Depth of Water Column ft 15.5

3 Casing Volumes 7.8 gal

1 Casing Volume 2.6 gal

Heron C11
Water Level Indicator # CIV1132
Screened - 5-15'

Purge Information

Purge Method (circle): Bailer #	Submersible Pump
Bladder Pump	Peristaltic Pump
Other: Geopump C152, C-101923	
Start Time: 1137	
End Time: 1204	
Total Gallons Purged	
Purge Rate: 750 ml/min → 240 ml/min	
Controller Frequency	

Time	4 DTW	Gallons Purged	pH	Conductivity	NTU	DO	Temp.	ORP	Appearance
1138	8.97		7.01	0.795	73.7	6.95	9.78	+141	St. Turbulent bottom
1141	5.18		6.89	0.834	51.7	4.26	9.60	+155	
1142	Stopped Pumping	to watch Recovery							
1145	5.048	+ to 8.73C screen							
1147	4.97								
1148	-Pumping on flow = 240 ml/min								
1150	5.33		6.68	0.875	49.6	3.79	9.59	+158	Fairly clear
1154	5.68		6.68	0.903	23.4	4.74	9.57	+155	
1158	5.75		6.68	0.904	23.5	4.88	9.65	+153	
1202	5.90		6.67	0.890	17.8	4.10	9.63	+150	
1206	5.98		6.67	0.889	16.9	4.10	9.61	+148	
1207	6.74								

Sample Information

Sample Method(s) (circle): Bailer Bladder pump Peristaltic pump Submersible Pump other

Analysis	Time	Bottle Type	Preservative/Filtration	Comments
PAN	1207	2410 Amber A	ice only	
SVOC-TIC's				
PCP				
TPH-DX	↓	↓	↓	

End Time: 12:43

Comments / Exceptions:

Set tubing to 10' - mid screen.
 1148 Note - water level is just up above screened interval of 5' BGS
 - will require pumping into screen & collect sample
 will use slower purge rate & wait PTH

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

Stabilization Parameters are shown in **BOLD**

Check for floaters and sinkers and enter observations under comments section.

Groundwater Sampling Data Sheet
Wyckoff Superfund Site - Bainbridge Island, Washington

Well ID
Sample: ID
Field Conditions

PZ07
PZ07-0106
L+ Run ~ 45°

Date 25/01
Field Team: (Initials) JH / KD

Purge Information

Well Diameter (in.)
Well Depth (ft.)
Initial Depth to Water (ft.)
Depth of Water Column ft
3 Casing Volumes
1 Casing Volume

2"
31.5
3.52
27.9
14 gal
4.7 gal
Scrub 2-12'
St. Line 2'

Purge Method (circle): Bailer # Submersible Pump
 Bladder Pump
 Peristaltic Pump C-101823
 Other:
Start Time 1350
End Time 1417
Total Gallons Purged
Purge Rate 250 ml/min
Controller Frequency

Time	DTW	Gallons Purged	pH	Conductivity	NTU	DO	Temp.	ORP	Appearance
1353	3.69		6.31	1.14	8.9	4.68	9.09	-95	Clear
1356	3.70		6.75	1.09	9.9	3.00	8.95	-103	n
1359	3.70		6.79	0.892	10.1	7.99	8.22	-97	
1402	3.71		6.58	0.665	8.2	2.25	9.08	-72	clear +
1405	3.71		6.49	0.628	6.9	2.07	7.97	-66	.
1408	3.72		6.45	0.671	6.5	2.05	8.00	-63	
1411	3.72		6.40	0.694	6.7	2.01	7.93	-58	
1415	3.72		6.35	0.735	6.3	1.63	7.94	-55	
1417	3.73		6.35	0.750	6.8	1.42	7.78	-54	clear
1510	3.80								

Sample Information

Sample Method(s) (circle): Bailer Bladder pump Peristaltic pump Submersible Pump other

Analysis	Time	Bottle Type	Preservative/Filtration	Comments
PAN-Sim	1415	EXTR. Amber	ice only	Coll. 15, 14.68 1418
PCP	1413			
SOC + TIC's	1419			
TPL-OX	1418	F		

End Time

1417

Comments / Exceptions:

sed. in tubing P.D. = 1.7 - BG = 0 & ppm - Downhole reading
Same as BG.
water level 3.57 - 27' - 1.6 ft std. up.
1.97 ft + well BG = Scrub 2 ft. well tubing to 8 ft BG -
BG
Every water is clear, no shear - possible slight organic (concrete) or

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

Stabilization Parameters are shown in **BOLD**

Check for floaters and sinkers and enter observations under comments section.

$$\frac{1.6}{1.7} = 0.6 \text{ ft. BG}$$

Groundwater Sampling Data Sheet

Wyckoff Superfund Site - Bainbridge Island, Washington

Well ID
Sample: ID
Field Conditions

PZ06
PZ06-0106
Recovery

Date 1-25-06
Field Team: (Initials) SMW/JSD

Purge Information

Well Diameter (in.)

20"
12

Purge Method (circle) : Bailer # Submersible Pump

Well Depth (ft.)

6.07
4.07

Bladder Pump

Initial Depth to Water (ft.)

7.9 ft
4.0 gal

Peristaltic Pump c101 823

Depth of Water Column

1.3 gal

Other:

3 Casing Volumes

Jan-1-6

Start Time 1544

1 Casing Volume

End Time 1601

Total Gallons Purged

Purge Rate 25gal/min \Rightarrow 200ml/min

Controller Frequency 0.1584

Time	DTW	Gallons Purged	pH	Conductivity	NTU	DO	Temp.	ORP	Appearance
1545	5.19		7.84	0.343	21.9	5.40	7.49	-3	clear
1548	4.31		7.44	0.405	14.9	3.94	7.42	-66	clear
1551	4.45		7.31	0.405	14.4	3.44	7.40	-96	
1554	7.64		7.17	0.404	16.4	2.71	7.40	-102	turned down
1557	4.74		7.04	0.393	13.6	2.60	7.44	-98	
1601			7.01	0.404	13.7	2.63	7.45	-93	
1632	6.00								

Sample Information

Sample Method(s) (circle): Bailer Bladder pump Peristaltic pump Submersible Pump other

Analysis	Time	Bottle Type	Preservative/Filtration	Comments
PAH-SIM	1605	221d.A-F	, 16 ml	
PCP				
SVOLATILES				
TFH-DX	1632	h	b	

End Time

1632

Comments / Exceptions:

PID = 0.1 = BG/BZ

St. elev. 7.42 screening 3.48 from top of case
water level 0.6 below top of screen
-SOV tubing to 4' BG

Purge with St. bromate until water clear, no odor noticed.

7/22

7/22

3.51 - screen missed

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

Stabilization Parameters are shown in **BOLD**

Check for floaters and sinkers and enter observations under comments section.

Groundwater Sampling Data Sheet

Wyckoff Superfund Site - Bainbridge Island, Washington

Well ID
Sample: ID
Field Conditions

PZS
PZS-C106
Running - feeling dark

Date 1-25-06
Field Team: (Initials) CD/KD

Purge Information

Well Diameter (in.)
Well Depth (ft.)
Initial Depth to Water (ft.)
Depth of Water Column
3 Casing Volumes
1 Casing Volume

21
13.5
5.57
8.1 ft
4.1 gal
1.35 gal
top screen 3-8

Purge Method (circle): Bailer # Submersible Pump
Bladder Pump
Peristaltic Pump
Other:
Water Level Indicator # C101232
Start Time 16410
End Time 16541 170030
Total Gallons Purged
Purge Rate 240 ml/min
Controller Frequency

Time	DTW	Gallons Purged	pH	Conductivity	NTU	DO	Temp.	ORP	Appearance
1450	5.59	6.65	5.83	0.4410	14.7	9.02	2.65	-2	cur
1453		6	6.53	0.4440	7.2	9.21	9.74	+20	11
1456	5.75		6.51	0.4424	6.2	9.03	9.71	+27	
1459			6.55	0.4420	6.0	9.01	9.67	+30	
↑									
Samples									
6-1648 to 1654 SP									
1656									
1700									
1705 ✓	7.38								

Sample Information

Sample Method(s) (circle): Bailer Bladder pump Peristaltic pump Submersible Pump other

Analysis	Time	Bottle Type	Preservative/Filtration	Comments
PAN-STM	1600	M0032	2X10ml/LC	ice only
PCP	1700	/	/	
SVAC-TIC	1700	/	/	
TPH-OX	1700	/	/	

End Time

1730

Comments / Exceptions:

Stabilizer 1.7
Screen from 4.7-9.7 and pump = 7.5 ft 5.37-9.7
Soil tubing is 7.2 ft

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

Stabilization Parameters are shown in **BOLD**

Check for floaters and sinkers and enter observations under comments section.

Groundwater Sampling Data Sheet
Wyckoff Superfund Site - Bainbridge Island, Washington

Well ID
Sample: ID
Field Conditions

CDW01
CDW01 0108
L4 P1

Date	1-26-01
Field Team: (Initials)	SP-JRJ

Purge Information

Well Diameter (in.)

4"

Purge Method (circle) : Bailer #

Submersible Pump

Well Depth (ft.)

43.65

Bladder Pump

Initial Depth to Water (ft.)

43.16

Peristaltic Pump

Depth of Water Column

21.8 ft

Other: *Calibration the line plus pump*

3 Casing Volumes

13.7 gal

1 Casing Volume

13.7 gal

Start Time

0736

End Time

0755

Total Gallons Purged

50 and 52-62

Purge Rate

3.33 g/min 1040 C-450 ml/min

Controller Frequency

63.19 Revs/Sec 53.5 450 = Revs/Sec

55.82 - Revs/Sec 55.75 450 = Revs/Sec

Time	DTW	Gallons Purged	pH	Conductivity	NTU	DO	Temp.	ORP	Appearance
0740	43.31		6.36	0.284	6.3	6.78	11.1	+43	bogus
0743	43.31		6.31	0.283	5.9	5.57	10.5	-39	
0746	43.31		6.33	0.283	6.5	5.54	10.51	-32	
0749	43.42		6.07	0.283	6.5	5.77	11.0	-24	
0752	43.42		6.01	0.283	6.3	6.44	10.3	-23	
0755	43.38		6.54	0.280	6.7	8.61	10.9	-29	
10/17/93	43.46								

Sample Information

Sample Method(s) (circle): Bailer Bladder pump Peristaltic pump Submersible Pump other

Analysis	Time	Bottle Type	Preservative/Filtration	Comments
PAH	0755	OGEST	W/Fil + 10% Oxalic	
PCP				
SVOC				
TF-L-A21	\$			

End Time

10/17

Comments / Exceptions:

Sample 10/17/93

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

Stabilization Parameters are shown in **BOLD**

Check for floaters and sinkers and enter observations under comments section.

Groundwater Sampling Data Sheet

Wyckoff Superfund Site - Bainbridge Island, Washington

Well ID
Sample: ID
Field Conditions

PZ08
PZ08-0101
Ct. Run, ~450

Date 1-26-05
Field Team: (Initials) SNL/KD

Purge Information

Well Diameter (in.)

2"

Well Depth (ft.)

31.5

Initial Depth to Water (ft.)

6.59

Depth of Water Column

24.9 ft

3 Casing Volumes

12.4 gal

1 Casing Volume

4.2 gal

Screened - 15-25

Purge Method (circle): Bailer # Submersible Pump

Bladder Pump

Peristaltic Pump

Other:

Start Time 1058

End Time 1112

Total Gallons Purged

Purge Rate 300ml/min

Controller Frequency

1101923

1101923

Time	DTW	Gallons Purged	pH	Conductivity	NTU	DO	Temp.	ORP	Appearance
1100	6.65	30.41	6.47	0.166	2.6	5.71	9.3	+123	Clear
1103	6.65		6.42	0.166	2.3	7.61	9.7	+121	"
1106	6.65		6.39	0.167	3.1	1.78	9.8	+119	"
1109	6.70	30.41	6.37	0.167	3.1	1.72	9.8	+117	
1112	6.71		6.34	0.167	3.1	1.68	9.9	+117	
1135	6.72								

Sample Information

Sample Method(s) (circle): Bailer Bladder pump Peristaltic pump Submersible Pump other

Analysis	Time	Bottle Type	Preservative/Filtration	Comments
PAH-SIM	1115	2x1L PnL &	ice only	
FEP				
SVOC/TIC's	1	1	1	
TPN-DX	1	1	1	

End Time

1135

Comments / Exceptions:

stratigraphic layers 15-25' screen = 16.45-26.45

set tubing to ~21.5

Purge water is clear, no odor, no shear,

DID = 121 ± 3%

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

Stabilization Parameters are shown in **BOLD**

Check for floaters and sinkers and enter observations under comments section.

Groundwater Sampling Data Sheet

Wyckoff Superfund Site - Bainbridge Island, Washington

Well ID
Sample: ID
Field Conditions

PZ10
PZ10-0106
Lg. Rnch 45

Date 1-26-06
Field Team: (Initials) SAC/KD

Purge Information

Well Diameter (in.)

24

Submersible Pump

Well Depth (ft.)

31.5

Bladder Pump

Initial Depth to Water (ft.)

6.51

Peristaltic Pump

Depth of Water Column

15.25 ft

Other:

3 Casing Volumes

12.5 gal

1 Casing Volume

4.2 gal

Screen 15-25' BG5

Start Time 13:43

End Time 13:51

Total Gallons Purged

Purge Rate 400 ml/min

Controller Frequency

Time	DTW	Gallons Purged	pH	Conductivity	NTU	DO	Temp.	ORP	Appearance
13:43	6.53		6.53	0.146	0.2	10.00	9.6	153	clear
13:48	6.53		6.39	0.130	4.0	5.42	9.3	153	
13:51	6.54		6.39	0.130	4.1	5.03	9.4	154	
13:54			6.38	0.137	3.4	4.83	9.4	154	
14:15	6.55								

Sample Information

Sample Method(s) (circle): Bailer Bladder pump Peristaltic pump Submersible Pump other

Analysis	Time	Bottle Type	Preservative/Filtration	Comments
PAH-SIM	13:55	24 oz. Drkwr	1 ml mlp	
PLP	13:55			
SVOC-TTB	13:55	/	/	
TPN-DX	13:55	/	/	

End Time

14:15

Comments / Exceptions:

stickups - 1.6 ft + screen 15.0 - 20.0 sticking to 21.0

Purge was ~13 min, no water, no shear.

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

Stabilization Parameters are shown in **BOLD**

Check for floaters and sinkers and enter observations under comments section.

Groundwater Sampling Data Sheet

Wyckoff Superfund Site - Bainbridge Island, Washington

Well ID: PZ12
Sample: ID: 0106
Field Conditions: Rain ~ 40°

PZ12	0106
Rain ~ 40°	

Date: 1-26-07
Field Team: (Initials) SB/C/KL

Purge Information

Well Diameter (in.) 4'
Well Depth (ft.) 46.5
Initial Depth to Water (ft.) 5.62
Depth of Water Column 40.9
3 Casing Volumes 20.4 gal
1 Casing Volume 6.8 gal

2'
46.5
5.62
40.9
20.4 gal
6.8 gal
SL - well - 15-25

Purge Method (circle): Bailer # Submersible Pump
Bladder Pump
Peristaltic Pump Other: 4401823
Water Level Indicator # L-101232
Start Time 1548
End Time 1603
Total Gallons Purged
Purge Rate 400 ml/min
Controller Frequency

Time	DTW	Gallons Purged	pH	Conductivity	NTU	DO	Temp.	ORP	Appearance
1351	5.83		6.57	0.123	7.2	5.52	7.4	+160	Cloudy
1354	5.80		6.57	0.121	9.1	7.12	9.9	+165	14
1357	5.81		6.57	0.118	13.2	3.92	10.0	+167	Cloudy
1600	5.82		6.57	0.117	11.2	3.77	11.9	+167	
1603	5.83		6.57	0.116	10.1	3.77	11.1	+167	14
<hr/>									
1607 5.86									

Sample Information

Sample Method(s) (circle): Bailer Bladder pump Peristaltic pump Submersible Pump other

Analysis	Time	Bottle Type	Preservative/Filtration	Comments
PAH-SIM	1605	XLAD	Ice on top	
PCP	1605	/		
SVAC+TIC	1605	/	/	
TP12-DX	1605	/	/	
<hr/>				
End Time: 1608				

Comments / Exceptions:

Stirrupa 17 - scanned +6.0 10 - 06.7
pH = 6.1 ± 0.6

1607 - Clear - no odor, no gasses.

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

Stabilization Parameters are shown in **BOLD**

Check for floaters and sinkers and enter observations under comments section.

Appendix D Groundwater Sample Tracking Records

EPA USEPA Contract Laboratory Program

Reference Case: 34934
R

Region:	10	Date Shipped:	1/24/2006	Chain of Custody Record	Sampler Signature:
Project Code:	WVEH-016G	Carrier Name:	FedEx	By Courier	
Account Code:	06T10P302DD2C10W2LA00	Airbill:	123456789004	Relinquished By	(Date / Time)
CERCLIS ID:	WAD009248295	Shipped to:	Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800	Received By	(Date / Time)
Spill ID:	W2	Site Name/State:	Wyckoff_Eagle Harbor/WA	2	
Project Leader:	MaryJane Nearman	Action:	Remedial Action	3	
Sampling Co.:	CH2M HILL			4	

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	CONTAINER Code	QC Type
MW21-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM(21), PCP (21)	0604 (Ice Only), 06044001 (Ice Only) (4)	MW21-0106	S: 1/23/2006	N1, N2, N3, N4	--
PZ03-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM(21), PCP (21), TPH-DX (21)	0604 (Ice Only), 06044000 (Ice Only) (6)	PZ03-0106	S: 1/23/2006	N1, N2, N3, N4, N5, N6	--

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s): <i>J. M. Dalton</i>	Chain of Custody Seal Number:
Analysis Key: PAH-SIM = PAH-SIM, PCP = PCP, TPH-DX = TPH-DX (extended to motor oil)	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced?

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EPA USEPA Contract Laboratory Program

Reference Case 34934
Client No:
SDG No: L

Date Shipped:	1/24/2006	Carrier Name:	BY COURIER	Relinquished By	(Date / Time)	Received By	(Date / Time)	For Lab Use Only
Shipped to:	Manchester Environmental Lab	12/14/05	12/14/05	Kristal Dalton	1/24/06/10:00			
Lab	7411 Beach Drive East							Unit Price:
Port Orchard WA 98366	(360) 871-8800							Transfer To:
								Lab Contract No:
								Unit Price:
								FOR LAB USE ONLY Sample Condition On Receipt

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	PRESERVATIVE/BOTTLES	TAG No/ 12-104	STATION LOCATION	SAMPLE COLLECT DATE/TIME	CONTAINER CODE
MW21-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21), PCP (21)	06044(ice Only), 06044001 (ice Only) (4)	MW21-106	S: 1/23/2006	N ¹ , N ² , N ³ , N ⁴	
PZ03-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21), PCP (21), TPH-Dx (21)	06044(ice Only), 06044000 (ice Only) (6)	PZ03-0106	S: 1/23/2006	N ¹ , N ² , N ³ , N ⁴ , N ⁵ , N ⁶	

Shipment for Case Completed?	Sample(s) to be used for laboratory QC: <i>J. A. C.</i>	Additional Sampler Signature(s): <i>J. A. C.</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal intact? _____	Shipment iced? _____
PAH-SIM = PAH-SIM, PCP = PCP, TPH-Dx = TPH-Dx (extended to motor oil)				

TR Number: 10-330794875-012306-0001

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EPA USEPA Contract Laboratory Program

Reference Case: 34934
R

Client No:		Chain of Custody Record		Sampler Signature: <i>Kristen Dalton</i>	
Date Shipped: 1/24/2006		Carrier Name: FedEx By Courier		Received By (Date / Time)	
Airbill: 124002		Relinquished By (Date / Time)			
Shipped to: Manchester Environmental Lab		2 7411 Beach Drive East			
Wyckoff, Eagle Harbor/WA		Port Orchard WA 98366		3 (360) 871-8800	
Project Leader: MaryJane Nearman		4			
Action: Remedial Action					
Sampling Co: CH2M HILL					
SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No/ PRESERVATIVE Bottles	STATION LOCATION
02CDMW01-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21)	0604 (Ice Only), 06044003 (Ice Only) (2) <i>(N2)</i>	02CDMW01-0106 S: 1/23/2006
CW02-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21), PCP (21), TPH-Dx (21)	0604 (Ice Only), 06044002 (Ice Only) (6) <i>(N4)</i>	CW02-0106 S: 1/23/2006
MW21-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	TPH-Dx (21)	0604 (Ice Only), 06044001 (Ice Only) (2) <i>(N2)</i>	MW21-0106 S: 1/23/2006
SAMPLE COLLECT DATE/TIME		Container ID 12400 Type		Containment Code	
				<i>N1, N2</i>	
				<i>N1, N2, N3, N4, N5, N6</i>	
				<i>N1, N2</i>	
				<i>--</i>	

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>J. Dalton</i>	Additional Sampler Signature(s): <i>J. Dalton</i>	Chain of Custody Seal Number:
Analysis Key: PAH-SIM = PAH-SIM, PCP = PCP, TPH-DX = TPH-DX (extended to motor oil)	Concentration: L = Low, M = Low/Medium, H = High <i>J. Dalton</i>	Type/Designate: Composite = C, Grab = G <i>J. Dalton</i>	Shipment Iced? <i>___</i>

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EPA USEPA Contract Laboratory Program

Generic Chain of Custody

Reference Case 34934
Client No:
SDG No:

L

Chain of Custody Record		For Lab Use Only	
Relinquished By	(Date / Time)	Sampler Signature:	SDG No.
Carrier Name: FedEx Ground	1/24/06 0922	Kris Dutton	
Shipped to: Manchester Environmental Lab	1/24/06 10:15		
7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800	2		
	3		
	4		
		Unit Price:	
		Lab Contract No:	
		Transfer To:	

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	PRESERVATIVE/ Bottles	TAG No/ 1/24/06	STATION LOCATION	SAMPLE COLLECT DATE/TIME	CONTAINER Code	FOR LAB USE ONLY Sample Condition On Receipt
02CDMW01-01 06	Ground Water/ Jim Crawford	L/G	PAH-SIM (21), (Ice Only) (2)		02CDMW01-0106	S: 1/23/2006		N1, N2	
CW02-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21), PCP (21), TPH-Dx (21) (Ice Only) (6)		CW02-0106	S: 1/23/2006		N1, N2, N3, N4, N5, N6	
MW21-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	TPH-Dx (21) (Ice Only) (2)		MW21-0106	S: 1/23/2006		N5, N6	

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s): <i>J. R. D.</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key: PAH-SIM = PAH-SIM, PCP = PCP, TPH-Dx = TPH-Dx (extended to motor oil)	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? —	Shipment Iced? —

TR Number: 10-330794875-012306-0002

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EPA USEPA Contract Laboratory Program

Reference Case: 34934
R

Client No:

Region:	10	Date Shipped:	1/24/2006	Sampler Signature:	Krystal Dalton
Project Code:	WEH-016G	Carrier Name:	-FedEx- By Courier	Received By	(Date / Time)
Account Code:	06T10P302DD2C10W2LA00	Airbill:	003-	Relinquished By	(Date / Time)
CERCLIS ID:	WAD009248295	Shipped to:	Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800	3	2
Spill ID:	W2				
Site Name/State:	Wyckoff_Eagle Harbor/WA				
Project Leader:	MaryJane Nearman				
Action:	Remedial Action				
Sampling Co.:	CH2M HILL				

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
02CDMW01-0	Ground Water/ Krystal Dalton &	L/G	PCP (21), TPH-Dx (21)	0604-(Ice-Or-Hg), 06044003 (Ice Only) (4)	02CDMW01-0106	S: 1/23/2006	--
106	Jim Crawford						
CW09-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM(21), PCP (21), TPH-Dx (21)	0604-(Ice-Or-Hg); 06044004 (Ice Only) (6)	CW09-0106	S: 1/23/2006	--

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>Krystal Dalton</i>	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Chain of Custody Seal Number:
Analysis Key: PAH-SIM = PAH-SIM, PCP = PCP, TPH-DX = TPH-DX (extended to motor oil)	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced?

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EPA USEPA Contract Laboratory Program

Generic Chain of Custody

Reference Case 34934	SDG No:
L	
For Lab Use Only	
Carrier Name: FedEx by Carrier	Sampler Signature: <i>Kathy Dalton</i>
Airbill: 12464-003	Received By (Date / Time)
Shipped to: Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800	Relinquished By (Date / Time) <i>Kathy Dalton 12/16/06</i>

SAMPLE NO.	MATRIX / SAMPLER	CONC / TYPE	ANALYSIS / TURNAROUND	TAG NO./ PRESERVATIVE/BOTTLES	STATION LOCATION	SAMPLE COLLECT DATETIME	CONTAINER CODE	FOR LAB USE ONLY Sample Condition On Receipt
02CDMW01-01 06	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PCP (21), TPH-Dx (21)	.0604446e-0047; 06044003 (Ice Only) (4)	02CDMW01-0106	S: 1/23/2006	N3,N4,N5,N6	
CW09-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21), PCP (21), TPH-Dx (21)	0604446e-0047; 06044004 (Ice Only) (6)	CW09-0106	S: 1/23/2006	N1,N2,N3,N4,N5,N6	

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>G. G. G.</i>	Additional Sampler Signature(s): <i>G. G. G.</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key: PAH-SIM = PAH-SIM, PCP = PCP, TPH-Dx = TPH-Dx (extended to motor oil)	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>

TR Number: 10-330794875-012306-0003

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Organic Traffic Report & Chain of Custody Record

Case No.: 34934

R

DAS No:

Region:	10	Date Shipped:	1/24/2006	Carrier Name:	FedEx	Sampler Signature:	Krystal Dalton
Project Code:	WEH-016G	Airbill:	06T10P302DD2C10W2LA00	Relinquished By	(Date / Time)	Received By	(Date / Time)
Account Code:	WAD009248295	Shipped to:	Wyckoff_Eagle Harbor/WA	KRISTAL DALTON	1/24/06		
CERCLIS ID:	W2	Site Name/State:	MaryJane Nearman	1544 Sawdust Road			
Spill ID:		Project Leader:	Remedial Action	Suite 505			
Action:		Sampling Co:	CH2M HILL	The Woodlands TX 77380			
				(281) 292-5277			
				3			
				4			

ORGANIC SAMPLE No.	MATRIX SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	QC Type
J6B08	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	0604 (Ice Only), 06044000 (Ice Only) (2)	PZ03-0106	S: 1/23/2006	--	--
J6B09	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	0604 (Ice Only), 06044001 (Ice Only) (2)	MW21-0106	S: 1/23/2006	--	--
J6B10	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	0604 (Ice Only), 06044002 (Ice Only) (2)	CW02-0106	S: 1/23/2006	--	--

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key: SVOC with = SVOC with TICs	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 10-330794875-012306-0012

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Organic Traffic Report & Chain of Custody Record

Date Shipped:	1/24/2006	Carrier Name:	FedEx	Case No:	34934
SDG No:	L	Chain of Custody Record	Sampler Signature	DAS No:	
Relinquished By	(Date / Time)	Received By	(Date / Time)	For Lab Use Only	
Airbill: 12345678900734	1/21/06/10:30			Lab Contract No:	
Shipped to:				Unit Price:	
A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 (281) 292-5277				Transfer To:	
3				Lab Contract No:	
4				Unit Price:	
ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	SAMPLE COLLECT DATE/TIME
J6B08	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	-0604(Ice-Only) (2) 0604(Ice-Only) (2)	PZ03-0106
J6B09	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	0604(Ice-Only); 06044001 (Ice Only) (2)	MW21-0106
J6B10	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	0604(Ice-Only); 06044002 (Ice Only) (2)	S: 1/23/2006

Shipment for Case Complete/N	Sample(s) to be used for laboratory QC: <i>J. J. Dalton</i>	Additional Sampler Signature(s): <i>J. J. Dalton</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key: SVOC with = SVOC with TICS	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? _____	Shipment Iced? _____

TR Number: 10-330794875-012306-0012

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EPA USEPA Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record

Case No:	34934
DAS No:	R

Region:		Date Shipped:	1/24/2006	Chain of Custody Record		Sampler Signature:	Krystle Dalton
Project Code:	WEH-016G	Carrier Name:	FedEx	Relinquished By:	(Date / Time)	Received By:	(Date / Time)
Account Code:	06710P302DD2C10W2LA00	Airbill:	FDLCO-015-8535 4740 0745	Krystle Dalton	1/24/2006/10:00		
CERCLIS ID:	WAD009248295	Shipped to:					
Spill ID:	W2	A4 Scientific	1544 Sawdust Road				
Site Name/State:	Wyckoff_Eagle Harbor/WA	Suite 505	The Woodlands TX 77380				
Project Leader:	MaryJane Nearman	(281) 292-5277					
Action:	Remedial Action						
Sampling Co:	CH2M HILL						
ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No. QC Type
J6B11	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	0604 (Ice Only), 06044003 (Ice Only) (2)	02CDMW01-0106	S: 1/23/2006	--
J6B12	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	0604 (Ice Only), 06044004 (Ice Only) (2)	CW09-0106	S: 1/23/2006	--

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key: SVOC with = SVOC with TTCS	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 10-330794875-012306-0013

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EPA USEPA Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record

Date Shipped:	1/24/2006	Case No.:	34934					
Carrier Name:	FedEx	DAS No.:	L					
Airbill:	124104 015 8525 4740 0745	SDG No.:						
Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 (281) 292-5277	Signature:	Kristen Dalton					
	(Date / Time)	Received By:	(Date / Time)					
	Kristen Dalton 1/24/06 10:00							
		Unit Price:						
		Transfer To:						
		Lab Contract No.:						
ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
J6B11	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	-9604(Ice Only), 06044003 (Ice Only) (2) -9604(Ice Only), 06044004 (Ice Only) (2)	02CDMW01-0106	S: 1/23/2006		
J6B12	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	-9604(Ice Only), 06044004 (Ice Only) (2)	CW09-0106	S: 1/23/2006		

also corrected on original

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC: <i>G.G., K.D.</i>	Additional Sampler Signature(s): <i>G.G., K.D.</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		
SVOC with = SVOC with TICCS				

TR Number: 10-330794875-012306-0013

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LABORATORY COPY

EPA USEPA Contract Laboratory Program

Reference Case: 34934

R

Client No:

Region: 10	Date Shipped: 1/25/2006	Carrier Name: FedEx	Sampler Signature: 
Project Code: WEH-016G	(Date / Time)	Received By	(Date / Time)
Account Code: 06110P302DD2C10W2LA00			
CERCLIS ID: WAD009248295			
Spill ID: W2			
Site Name/State: Wyckoff_Eagle Harbor/WA			
Project Leader: Marylaine Nearman			
Action: Remedial Action			
Sampling Co: CH2M HILL			

Chain of Custody Record			
Date Shipped: 1/25/2006	Carrier Name: FedEx	Sampler Signature: 	(Date / Time)
Airbill: 004352547400686	Relinquished By	(Date / Time)	Received By
Shipped to: Manchester Environmental Lab			
7411 Beach Drive East			
Port Orchard WA 98366			
(360) 871-8800			
4			

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	Container Code	QC Type
99CDMW02-0	Ground Water/ Krystal Dalton & Jim Crawford	L/G (21)	PAH-SIM (21), PCP (Ice Only) (4)	1/25/2006 (N4) 99CDMW02-0106	S: 1/24/2006 / 15:35	N1,N2,N3,N4	-	
106	Ground Water/ Krystal Dalton & Jim Crawford	L/G (21)	PAH-SIM (21), PCP (Ice Only), 06044006 (Ice Only) (6)	1/25/2006 (N4) CW05-0106	S: 1/24/2006 / 14:05	N1,N2,N3,N4,N5,N6		
CW05-0106								

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: 	Additional Sampler Signature(s): 	Chain of Custody Seal Number:
Analysis Key: PAH-SIM = PAH-SIM, PCP = PCP, TPH-DX = TPH-DX (extended to motor oil)	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment lead? _____

REGION COPY

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Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA 20191-3400 Phone 703/264-9348 Fax 703/264-9222

EPA USEPA Contract Laboratory Program

Generic Chain of Custody

Reference Case 34934
Client No:
SDG No:

For Lab Use Only

Date Shipped: 1/25/2006

Carrier Name: FedEx

Airbill: 42514C-004-3535-4740 US6

Shipped to:

Manchester Environmental

Lab

7411 Beach Drive East

Port Orchard WA 98366

(360) 871-8800

4

Chain of Custody Record		Sampler Signature:	SDG No:
Relinquished By	(Date / Time)	Received By	(Date / Time)
Kristal Dalton	1/25/06/10:30		
2			
3			
4			

SAMPLE NO.	MATRIX / SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No/ PRESERVATIVE Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	CARRIER CODE	FOR LAB USE ONLY Sample Condition On Receipt
99CDMW02-01 06	Ground Water/ Jim Crawford	L/G	PAH-SIM (21), PCP (21)	(Ice Only), 06044007 (Ice Only) (4)	99CDMW02-0106 (N4)	S: 1/24/2006 / 15:35	N1,N2,N3,N4	
CW05-0106	Ground Water/ Jim Crawford	L/G	PAH-SIM (21), PCP (21), TPH-Dx (21)	(Ice Only), 06044006 (Ice Only) (6)	CW05-0106 (N6)	S: 1/24/2006 / 14:05	N1,N2,N3,N4,N5,N6	

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>Kristal Dalton</i>	Additional Sampler Signature(s): <i>Kristal Dalton</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key: PAH-SIM = PAH-SIM, PCP = PCP, TPH-Dx = TPH-Dx (extended to motor oil)	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal intact? _____	Shipment Iced? _____

TR Number: 10-330794875-012306-0004

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

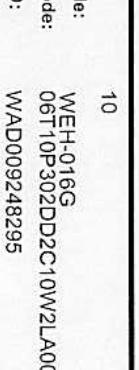
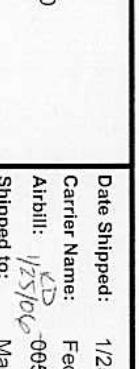
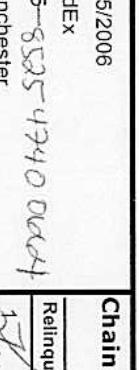
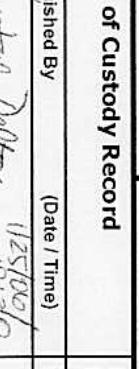
Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 703/264-9348 Fax 703/264-9222

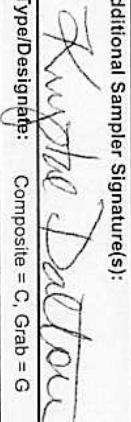
LABORATORY COPY

EPA USEPA Contract Laboratory Program

Reference Case: 34934

R

Region:		10	Date Shipped:	1/25/2006	Carrier Name:	FedEx	Sampler Signature:	
Project Code:		WEH-016G	Airbill:	06T10P302DD2C10W2LA00	Site Name:	Wyckoff_Eagle Harbor/WA	Received By (Date / Time)	
Account Code:		WAD009248295	Spill ID:	W2	Shipped to:	Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800	Received By (Date / Time)	
CERCLIS ID:			Project Leader:	MaryJane Nearman	Action:	Remedial Action	Received By (Date / Time)	
Sampling Co:		CH2M HILL						
SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	Container Code	QC Type
99CDMW02-0 106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	TPH-Dx (21) (Ice Only) (2)	(Ice Only), 06044007 (Ice Only) (2)	99CDMW02-0106	S: 1/24/2006/15:35	NJ, NJ, NJ,	--
99CDMW04-0 106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21), PCP (21), TPH-Dx (21) (Ice Only) (6)	(Ice Only), 06044008 (Ice Only) (6)	99CDMW04-0106	S: 1/24/2006/16:50	NJ, NJ, NJ, NJ, NJ, NJ	

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: 	Additional Sampler Signature(s): 	Chain of Custody Seal Number:
Analysis Key: PAH-SIM = PAH-SIM, PCP = PCP, TPH-DX = TPH-DX (extended to motor oil)	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced?

TR Number: 10-330794875-012306-0005

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EPA USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case 34934					Client No:	L
					SDG No:	
Date Shipped:	1/25/2006	Carrier Name:	FedEx	For Lab Use Only		
Airbill:	KD 8005-83254740004	Shipped to:	Manchester Environmental Lab	Sampler Signature:	<i>G. M.</i>	
Chain of Custody Record			Received By	(Date / Time)		
				1/25/06 / 10:30		
SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME
99CDMW02-01	Ground Water/ Krystal Dalton & Jim Crawford	L/G	TPH-Dx (21)	(Ice Only), 06044007 (Ice Only) (2)	99CDMW02-0106 (N2)	S: 1/24/2006 / 15:35 NS, N4
99CDMW04-01	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAHSIM (21), PCP (21), TPH-Dx (21)	(Ice Only), 06044008 (Ice Only) (6)	99CDMW04-0106 (N2)	S: 1/24/2006 / 16:50 N1, N2, N3, N4, N5, N6
CONTAINER CODE #P506						
FOR LAB USE ONLY Sample Condition On Receipt						
Lab Contract No:						
Unit Price:						
Transfer To:						
Lab Contract No:						
Unit Price:						

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>Krystal Dalton</i>	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key: PAH-SIM = PAH-SIM, PCP = PCP, TPH-Dx = TPH-Dx (extended to motor oil)	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? _____	Shipment Leaded? _____

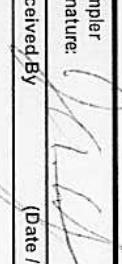
TR Number: 10-330794875-012306-0005
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EPA USEPA Contract Laboratory Program

Reference Case: 34934
R

R

Region:	10	Client No.:	
Project Code:	WEH-016G	Sampler Signature:	
Account Code:	06T10P302DD2C10W2LA00	Date / Time:	1/25/06
CERC LIS ID:	WAD009248295	Carrier Name:	FedEx
Spill ID:	W2	Airbill:	125104 066-3525 4740 0645
Site Name/State:	Wyckoff_Eagle Harbor/WA	Shipped to:	Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800
Project Leader:	MaryJane Nearman	1	
Action:	Remedial Action	2	
Sampling Co.:	CH2M HILL	3	
		4	

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	PRESERVATIVE/ BOTTLES	TAG No./ 1/25/06	STATION LOCATION	SAMPLE COLLECT DATE/TIME	Container Code	QC Type
MW50-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21), PCP (21), TPH-Dx (21)	(Ice Only), 06044010 (Ice Only) (6)	(N/A)	MW50-0106	S: 1/24/2006 /10:35	N1,N2,N3,N4,N5,N6	Field Duplicate

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>Krystal Dalton</i>	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Chain of Custody Seal Number:
Analysis Key: PAH-SIM = PAH-SIM, PCP = PCP, TPH-Dx = TPH-Dx (extended to motor oil)	Concentration: L = Low, M = Low/Medium, H = High Type/Designate: Composite = C, Grab = G		Shipment Iced? _____

TR Number: **10-330794875-012306-0006**

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

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Generic Chain of Custody

Reference Case 34934		L						
Date Shipped:	1/25/2006	Carrier Name:	FedEx					
Airbill:	125100-000-3525 474000-75	Shipped to:	Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800					
Chain of Custody Record		Sampler Signature:	<i>J. J.</i>					
Relinquished By	(Date / Time)	Received By	(Date / Time)					
<i>Kathy Dalton 1/25/06/10:30</i>		<i>J. J.</i>						
2		Unit Price:						
3		Transfer To:						
4		Lab Contract No:						
		Unit Price:						
SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	CONTAINER Code	FOR LAB USE ONLY Sample Condition On Receipt
MW50-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21), PCP (21), TPH-Dx (21)	125/06 (Ice Only) (6) (NLO)	MW50-0106	S: 1/24/2006 / IC: 35	N1, N2, N3, N4, N5, N6	

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>Kathy Dalton</i>	Additional Sampler Signature(s): <i>Kathy Dalton</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type Designate: Composite = C, Grab = G	Custody Seal Intact? _____	Shipment Iced? _____
PAH-SIM = PAH-SIM, PCP = PCP, TPH-Dx = TPH-Dx (extended to motor oil)				

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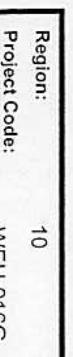
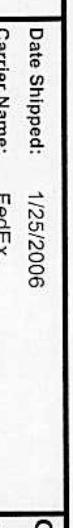
PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA 20191-3400 Phone 703/264-9348 Fax 703/264-9222

TR Number: 10-330794875-012306-0006

EPA USEPA Contract Laboratory Program

Reference Case: 34934

R

Region:		10		Chain of Custody Record		Client No:	
Project Code:	WEH-016G	Date Shipped:	1/25/2006	Carrier Name:	FedEx	Sampler Signature:	
Account Code:	06T10P302DD2C10W2LA00	Airbill:	1234567890-007-5535-4740 0442	Shipped to:	Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800	Relinquished By (Date / Time)	
CERC LIS ID:	WAD009248295					Received By (Date / Time)	
Spill ID:	W2						
Site Name/State:	Wyckoff_Eagle Harbor/WA						
Project Leader:	MaryJane Nearman						
Action:	Remedial Action						
Sampling Co:	CH2M HILL						

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
CW15-0106	Ground Water/ Krystal Dalton & Jin Crawford	L/G	PAH-SIM (21), TPH-Dx (21)	(Ice Only) 06044005 (Ice Only) (40) (8) L/G 125/64 (N8)	CW15-0106	S: 1/24/2006/10:35	N1,N2,N3,N5,N7,N9,N10 Lab QC N5,N6

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: 	Additional Sampler Signature(s): 	Chain of Custody Seal Number:
Analysis Key: PAH-SIM = PAH-SIM, TPH-Dx = TPH-Dx (extended to motor oil)	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced?

TR Number: 10-330794875-012306-0016

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

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EPA USEPA Contract Laboratory Program

Generic Chain of Custody

Date Shipped:	1/25/2006	Carrier Name:	FedEx	Reference Case	34934
Airbill:	425/007 \$525 4740 C642	Shipped To:	Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800	Client No:	L
SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	For Lab Use Only
CW15-0106	Ground Water/ Krystal Dalton & Jim Crawford	LG	PAH-SIM (21), TPH-Dx (21)	KD 1/25/06 (Ice Only), 06044005 (Ice Only) (40) (S) Kb 1/25/06 (N8)	Sampler Signature: <i>J. H. U.</i>
				STATION LOCATION	Received By (Date / Time)
				SAMPLE COLLECT DATETIME	Lab Contract No:
				COOLING, CODE	Unit Price:
				FOR LAB USE ONLY	Transfer To:
				426/06 Sample Condition On Receipt	Lab Contract No:
					Unit Price:

1/25/06

1/25/06

1/25/06

1/24/2006

N₁, N₂, N₇, N₈, N₉, N₁₀,
N₅, N₆

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal intact? _____	Shipment冰冻? _____
PAH-SIM = PAH-SIM, TPH-Dx = TPH-Dx (extended to motor oil)				

TR Number: 10-330794875-012306-0016

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 703/264-9348 Fax 703/264-9222

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EPA USEPA Contract Laboratory Program

Reference Case: 34934
R

Client No:

Region: 10	Date Shipped: 1/25/2006	Chain of Custody Record	Sampler Signature: <i>K. Dalton</i>
Project Code: WEH-016G	Carrier Name: FedEx	Relinquished By (Date / Time)	Received By (Date / Time)
Account Code: 06T10P302DD2C10W2LA00	Airbill: KDP-008-8525-4740 0653	<i>K. Dalton 1/25/06 10:30</i>	
CERCIS ID: WAD009246295	Shipped to: Manchester		
Spill ID: W2	Environmental Lab		
Site Name/State: Wyckoff_Eagle Harbor/WA	7411 Beach Drive East		
Project Leader: MaryJane Nearman	Port Orchard WA 98366		
Action: Remedial Action	(360) 871-8800		
Sampling Co: CH2M HILL			

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	CONTAINER Code	QC Type
CW15-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PCP (21), TPH-Dx (21)	(ice Only), 06044005 (ice Only) (S) LD 1/25/06	CW15-0106	S: 1/24/2006 /10:35	N3,N4,M1,Ni2,Ni3,Ni4, N5,N16	Lab QC

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: CW15-0106	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Chain of Custody Seal Number:
Analysis Key: PCP = PCP, TPH-Dx = TPH-Dx (extremely low to moderate oil)	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: **10-330794875-012306-0017**

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EPA USEPA Contract Laboratory Program
Generic Chain of Custody

Date Shipped:	1/25/2006	Carrier Name:	FedEx				
Airbill:	825-4740 C153	Shipped to:	Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800				
Chain of Custody Record		Sampler Signature:	L				
Relinquished By (Date / Time)		Received By (Date / Time)					
1 Krystal Dalton 1/25/06 10:30		2	Unit Price:				
3		3	Transfer To:				
4		4	Lab Contract No:				
SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	KD STATION LOCATION	SAMPLE COLLECT DATETIME	COTTER FOR LAB USE ONLY COTTER Sample Condition On Receipt
CW15-0106	Ground Water/ Krystal Dalton & Jim Crawford	LG	PCP (21), TRH-Dx(21) LD 1/25/06	(ice Only), 06044005 (ice Only) (8) LD 1/25/06	CW15-0106	S: 1/24/2006 /ic:35	N3N4,N11,N12,N13,N14, N15,N16

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
CW15-0106	Krystal Dalton			
Analysis Key: PCP = PCP , TRH- Dx = TRH- Dx (extremely toxic oil)	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input type="checkbox"/>	Shipment Iced? <input type="checkbox"/>

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TR Number: 10-330794875-012306-0017

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EPA USEPA Organic Traffic Report & Chain of Custody Record

Case No.: 34934
R

Region:	10	Date Shipped:	1/25/2006	Chain of Custody Record	Sampler Signature:
Project Code:	WEH-016G	Carrier Name:	FedEx	Relinquished By	(Date / Time)
Account Code:	06T10P302DD2C10W2LA00	Airbill:	KD 046-8525 4740 0701	Received By	(Date / Time)
CERCLIS ID:	WAD009248295	Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 (281) 292-5277		
Spill ID:	W2				
Site Name/State:	Wyckoff_Eagle Harbor/WA				
Project Leader:	MaryJane Nearman				
Action:	Remedial Action				
Sampling Co.:	CH2M HILL				
ORGANIC SAMPLE No.	MATRIX / SAMPLER	CONC / TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION
J6B13	Ground Water/ Kystal Dalton & Jim Crawford	L/G	SVOC with (21)	(Ice Only), 06044005 (Ice Only) (6)	CW15-0106
J6B14	Ground Water/ Kystal Dalton & Jim Crawford	L/G	SVOC with (21)	(Ice Only), 06044006 (Ice Only) (2)	CW05-0106
J6B15	Ground Water/ Kystal Dalton & Jim Crawford	L/G	SVOC with (21)	(Ice Only), 06044007 (Ice Only) (2)	S: 1/24/2006 / 10:35
J6B16	Ground Water/ Kystal Dalton & Jim Crawford	L/G	SVOC with (21)	(Ice Only), 06044008 (Ice Only) (2)	S: 1/24/2006 / 14:05
					--
					--
				SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No. QC Type
					Lab QC

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: J6B13	Additional Sampler Signature(s): <i>Kystal Dalton</i>	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced?
SVOC with = SVOC with TICCS			

TR Number: 10-330794875-012306-0018

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

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EPA USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No.: 34934
DAS No.:
SDG No.: L

Chain of Custody Record		For Lab Use Only						
Relinquished By (Date / Time)	Received By (Date / Time)	Lab Contract No:						
Kristen Dalton 1/25/06 / 10:30		Unit Price:						
2		Transfer To:						
3		Lab Contract No:						
4		Unit Price:						
ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
J6B13	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	(Ice Only), 06044005 (Ice Only) (6)	CW15-0106	S: 1/24/2006 / 10:35		
J6B14	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	(Ice Only), 06044006 (Ice Only) (2)	CW05-0106	S: 1/24/2006 / 14:05		
D- J6B45 25/06	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	(Ice Only), 06044007 (Ice Only) (2)	99CDMM02-0106	S: 1/24/2006-		

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: J6B13	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key: SVOC with = SVOC with TICS	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal intact? —	Shipment Iced? —

TR Number: 10-330794875-012306-0018

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EPA USEPA Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record

Case No: 34934 R

Region:	10	Case No:	34934 R
Project Code:	WEH-016G	Date Shipped:	1/25/2006
Account Code:	06110P302DD2C10W2LA00	Carrier Name:	FEDEX
CERCLIS ID:	WAD009248295	Airbill:	10177-8325 4740 0712
Spill ID:	W2	Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 (281) 292-5277
Site Name/State:	Wyckoff_Eagle Harbor/WA	1	Hugh Dalton 1/25/06/10:30
Project Leader:	Marylaine Nearman	2	
Action:	Remedial Action	3	
Sampling Co:	CH2M HILL	4	

ORGANIC SAMPLE No.	MATRIX SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	QC Type
J6B16	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	(Ice Only), 06044008 (Ice Only) (2)	99CDMW04-0106	S: 1/24/2006 / 10:50	--	
J6B18	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	(Ice Only), 06044010 (Ice Only) (2)	MW50-0106	S: 1/24/2006 / 10:35		Field Duplicate
J6B15	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	06044007 (Ice Only) (2)	99CDMW02-0106	S: 1/24/2006 / 10:35		

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>Krystal Dalton</i>	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Chain of Custody Seal Number:
Analysis Key: SVOC with = SVOC with TCSS	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 10-330794875-012306-0019

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

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EPA USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No.: 34934	DAS No:
L	SDG No:

Date Shipped: 1/25/2006	Carrier Name: FedEx	Relinquished By: 1/25/06-047-3335 47400312	Received By: Krys Dalton 1/25/06/10:30	For Lab Use Only
Shipped to: A4 Scientific	1544 Sawdust Road	Suite 505	The Woodlands TX 77380	Lab Contract No: _____
(281) 292-5277	3			Unit Price: _____
	4			Transfer To: _____
				Lab Contract No: _____
				Unit Price: _____

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	PRESERVATIVE	TAG No/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
J6B16	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	(Ice Only), 06044008 (Ice Only) (2)	99CDMW04-0106	S: 1/24/2006 / 10:50			
J6B18	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	(Ice Only), 06044010 (Ice Only) (2)	MW50-0106	S: 1/24/2006 / 10:35			
J6B15	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	(Ice Only) (2)	99CDMW02-0106	S: 1/24/2006 / 15:35			

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>Krys Dalton</i>	Additional Sampler Signature(s): <i>Krys Dalton</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key: SVOC with = SVOC with TICCS	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? —	Shipment Iced? —

TR Number: 10-330794875-012306-0019

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EPA USEPA Contract Laboratory Program

Reference Case: 34934
R

Region: 10	Date Shipped: 1/26/2006	Carrier Name: FedEx	Sampler Signature: <i>J. M. H.</i>
Project Code: WEH-016G	Airbill: 1720600-069-8525 4740 0410	Relinquished By (Date / Time)	Received By (Date / Time)
Account Code: 06110P302DD2C10W2LA00	Shipped to: Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800	<i>Krystal Dalton 1/20/06</i>	
CERCLIS ID: WAD009248295	Site Name/State: Wyckoff_Eagle Harbor/WA	Action: Remedial Action	
Spill ID: W2	Project Leader: MaryJane Nearman	Sampling Co: CH2M HILL	

SAMPLE NO.	MATRIX / SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	PRESERVATIVE/ BOTTLES	TAG No./ LOC	STATION LOCATION	SAMPLE COLLECT DATE/TIME	Container Code	QC Type
GW041-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21)	0604(Ice Only); 06044012 (Ice Only) (2)	1/26/06	CW01-0106	S: 1/25/2006 / 12:07		-
MW19-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21), PCP (21), TPH-Dx (21)	0604(Ice Only); 06044011(N4) (Ice Only) (6)	1/25/06	MW19-0106	S: 1/25/2006 / 12:07	N1,N2,N3,N4,N5,N6	

Site: Wyckoff-Oilole Ground water/
Krystal Dalton, Jim Crawford
PCP (21), TPH-Dx (21) 06044014 (Ice only)(4) (N4) Muxco-Oilole S: 1/25/2006/14:18 N3,N4,N5,N6

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>Krystal Dalton</i>	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Chain of Custody Seal Number:
Analysis Key: PAH-SIM = PAH-SIM, PCP = PCP, TPH-DX = TPH-DX (extended to motor oil)	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced?

TR Number: 10-330794875-012306-0007

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EPA USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case 34934
L

Date Shipped:	1/26/2006	Carrier Name:	FedEx	SDG No.:
Airbill:	426106-009-8254740 0010	Relinquished By	(Date / Time)	For Lab Use Only
Shipped to:	Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800	Received By	(Date / Time)	Client No.:
				SDG No.:

SAMPLE NO.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/BOTTLES	STATION/ LOCATION	SAMPLE COLLECT DATE/TIME	CONTAINER CODE	FOR LAB USE ONLY Sample Condition On Receipt
CW01-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM(21), PCP (21), TPH-Dx(21)	0604(Ice Only); 06044012 0604(Ice Only); 06044011 (Ice Only) (6)	CW01-0106	S: 1/25/2006 / 12:07 S: 1/25/2006 / 14:18	N1,N2,N3,N4,N5,N6	
MW19-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM(21), PCP (21), TPH-Dx(21)	0604(Ice Only); 06044011 (Ice Only) (6)	MW19-0106	S: 1/25/2006 / 12:07 S: 1/25/2006 / 14:18	N3,N4,N5,N6	

Shipment for Case Complete?	Sample(s) to be used for laboratory QC: <i>Krystal Dalton</i>	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number: 10-330794875-012306-0007
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? _____	Shipment Iced? _____
PAH-SIM = PAH-SIM, PCP = PCP, TPH-Dx = TPH-Dx (extended to motor oil)				

TR Number: **10-330794875-012306-0007**

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
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EPA USEPA Contract Laboratory Program

Reference Case: 34934
R

Region:	10	Date Shipped:	1/26/2006	Chain of Custody Record	Sampler Signature:
Project Code:	WEH-016G	Carrier Name:	FedEx	Relinquished By	(Date / Time)
Account Code:	0610P302DD2C10W2LA00	Airbill:	1241010 - 040-8525 4740 0020	Received By	(Date / Time)
CERCLIS ID:	WAD009248295	Shipped to:	Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800		
Spill ID:	W2				
Site Name/State:	Wyckoff_Eagle Harbor/WA				
Project Leader:	MaryJane Nearman				
Action:	Remedial Action				
Sampling Co:	CH2M HILL				

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	PRESERVATIVE/ BOTTLES	TAG No./ LOCATION	SAMPLE COLLECT DATE/TIME	QC Type
-CW01-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PCP (21), TPH-Dx (21)	0604 (Ice Only), 06044012 (Ice Only) (4)	CW01-0106	S: 1/25/2006	--
PZ05-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21), PCP (21)	KD VZL/ice -0604 (Ice Only), 06044013 (Ice Only) (4)	PZ05-0106	S: 1/25/2006 / 17:00 KD VZL/ice	N1,N2,N3,N4
CW12-0106	Ground Water/ Krystal Dalton & Jim Crawford	µg	PAH-SIM (21), PCP (21) TPH-Dx (21)	06044009 (Ice only) (2)	(No)	CW12-0106 S: 1/25/2006 / 10:30 N1,N2,N3,N4,W5,W6	--

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>Krystal Dalton</i>	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Chain of Custody Seal Number: F2V51045
Analysis Key: PAH-SIM = PAH-SIM, PCP = PCP, TPH-DX = TPH-Dx (extended to motor oil)	Concentration: L = Low, M = Low/Medium, H = High Type/Designate: Composite = C, Grab = G	Shipment Iced?	—

TR Number: 10-330794875-012306-0008

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EPA USEPA Contract Laboratory Program

Reference Case 34934
Client No.: L

Chain of Custody Record		Sampler Signature: <i>J.D.</i>	SDG No.: L						
SAMPLE No.	MATRIX/ SAMPLER	ANALYSIS/ CONC/ TYPE	TURNDOWN	PRESERVATIVE/ Bottles	TAG No./ LOCATION	STATION	SAMPLE COLLECT DATE/TIME	CONTAINER	FOR LAB USE ONLY
CW01-0106	Ground Water/ Krystal Dalton & Jim Crawford	UG PAH-SIM(21), PCP (21)	PCP(21); TPH-Dx (ice Only) (4)	0604 (ice Only); 06044012 (ice Only) (4)	KD 1/26/04 CW01-0106	S: 1/25/2006	S: 1/25/2006	Sample Condition On Receipt	Sample Condition On Receipt
PZ05-0106	Ground Water/ Krystal Dalton & Jim Crawford	UG PAH-SIM(21), PCP (21)	PCP(21); TPH-Dx (ice Only) (4)	0604 (ice Only); 06044013 (ice Only) (4)	KD 1/26/04 PZ05-0106	S: 1/25/2006	17:00	N1,N2,N3,N4	N1,N2,N3,N4
CW12-0106	Ground Water/ Krystal Dalton & Jim Crawford	PAH-SIM(21), PCP(21), TPH-Dx (21)	06044009 (w) (ice Only) (4)	0604 (ice Only); 06044014 (ice Only) (4)	KD 1/26/04 CW12-0106	S: 1/25/2006	10:30	N1,N2,N3,N4,N5,N6	N1,N2,N3,N4,N5,N6

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? _____	Shipment Iced? _____

PAH-SIM = PAH-SIM, PCP = PCP, TPH-DX = TPH-DX (extended to motor oil)

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EPA USEPA Contract Laboratory Program

Reference Case: 34934
R

Region:	10	Date Shipped:	1/26/2006	Chain of Custody Record	Sampler Signature:
Project Code:	WEH-016G	Carrier Name:	FedEx	Relinquished By	(Date / Time)
Account Code:	06T10P302DD2C10W2LA00	Airbill:	KD-014-8525 4740 0540	Received By	(Date / Time)
CERCLIS ID:	WAD009248295	Shipped to:	Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800		
Spill ID:	W2				
Site Name/State:	Wyckoff_Eagle Harbor/WA				
Project Leader:	MaryJane Nearman				
Action:	Remedial Action				
Sampling Co:	CH2M HILL				

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	Container Code	QC Type
PZ05-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	TPH-Dx (21)	0604(Ice Only) (2) (Ice Only) (2)	PZ05-0106	S: 1/25/2006 / 17:00	N5, N4	-
PZ06-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21), PCP (21), TPH-Dx (21)	0604(Ice Only), 06044014 (Ice Only) (6)	PZ06-0106	S: 1/25/2006 / 16:05	N1, N2, N3, N4, N5, N6	

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>Krystal Dalton</i>	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Chain of Custody Seal Number:
Analysis Key: PAH-SIM = PAH-SIM, PCP = PCP, TPH-DX = TPH-Dx (extended to motor oil)	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 10-330794875-012306-0009

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EPA USEPA Contract Laboratory Program

Reference Case 34934
L
Client No:
SDG No:

Date Shipped:	1/26/2006	Carrier Name:	FedEx					
Airbill#:	126104-014-8525 4740 056	Relinquished By	(Date / Time)					
Shipped to:	Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800	Received By	(Date / Time)					
Chain of Custody Record		Sampler Signature:	J. M. G.					
		SDG No.:						
SAMPLE NO.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	Container Code	FOR LAB USE ONLY Sample Condition On Receipt
PZ05-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	TPH-Dx(21)	-0604 (Ice-Only), 06044013 (Ice Only) (2) <i>ICD 1/26/06</i>	PZ05-0106	S: 1/25/2006 / 17:00	N5,N6	
PZ06-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21), PCP (21), TPH-Dx(21)	0604 (Ice-Only), 06044014 (Ice Only) (6) <i>NO</i>	PZ06-0106	S: 1/25/2006 / 16:05	N1,N2,N3,N4,N5,N6	
Unit Price:								

SAMPLE NO.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	Container Code	FOR LAB USE ONLY Sample Condition On Receipt
PZ05-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	TPH-Dx(21)	-0604 (Ice-Only), 06044013 (Ice Only) (2) <i>ICD 1/26/06</i>	PZ05-0106	S: 1/25/2006 / 17:00	N5,N6	
PZ06-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21), PCP (21), TPH-Dx(21)	0604 (Ice-Only), 06044014 (Ice Only) (6) <i>NO</i>	PZ06-0106	S: 1/25/2006 / 16:05	N1,N2,N3,N4,N5,N6	

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s): <i>Kyoto Dalton</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? _____	Shipment Iced? _____
PAH-SIM = PAH-SIM, PCP = PCP, TPH-Dx = TPH-Dx (extended to motor oil)				

TR Number: 10-330794875-012306-0009

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
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Reference Case: 34934
R

Region:		10	Date Shipped:	1/26/2006	Chain of Custody Record	Sampler Signature:
Project Code:	WEH-016G		Carrier Name:	FedEx		
Account Code:	06T10P302DD2C10W2LA00		Airbill:	1/26/06-042-852547400550	Relinquished By	(Date / Time)
CERCLIS ID:	WAD009248295		Shipped to:	Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800	Received By	(Date / Time)
Spill ID:	W2		Site Name/State:	Wyckoff_Eagle Harbor/WA		
Project Leader:	MaryJane Nearman		Action:	Remedial Action		
Sampling Co:	CH2M HILL					

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	Container Code	QC Type
MW60-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21)	0604-(fee Only)-06044016 (NZ) (Ice Only) (2)	MW60-0106	S: 1/25/2006 / 14:18	N1,N2	Field Duplicate
PZ07-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21), PCP -0604-(fee Only); 06044015 (Ice Only) (6)	PZ07-0106	S: 1/25/2006 / 14:16	N1,N2,N3,N4,N5,N6		

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>Krystal Dalton</i>	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Chain of Custody Seal Number:
Analysis Key: PAH-SIM = PAH-SIM, PCP = PCP, TPH-DX = TPH-DX (extended to motor oil)	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: **10-330794875-012306-0010**

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Reference Case 34934
L
Client No:
SDG No:

Date Shipped:	1/26/2006	Carrier Name:	FedEx	For Lab Use Only
Airbill:	1W106-012-8525 4740 0550	Shipped to:	Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800	Sampler Signature: <i>J.W. Dalton</i>
Relinquished By	(Date / Time)	Received By	(Date / Time)	SDG No:
PZ07-0106	KD 1/26/06	KD 1/26/06	KD 1/26/06	Unit Price:
MW60-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21) (Ice Only) (2)	Transfer To:
PZ07-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21), PCP 0604(Ice Only); 06044015 (21), TPH-Dx (21) (Ice Only) (6)	Lab Contract No:
				Unit Price:

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	CONTAINER Code	FOR LAB USE ONLY Sample Condition On Receipt
MW60-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21) (Ice Only) (2)	KD 1/26/06 (N2)	MW60-0106	S: 1/25/2006 /14:18	N1, N2	
PZ07-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21), PCP 0604(Ice Only); 06044015 (21), TPH-Dx (21) (Ice Only) (6)	KD 1/26/06 (N2)	PZ07-0106	S: 1/25/2006 /14:18	N1, N2, N3, N4, N5, N6	

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? —	Shipment Iced? —

PR Number: 10-330794875-012306-0010

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EPA USEPA Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record

Case No.: 34934
DAS No:

R

Region: 10	Date Shipped: 1/26/2006
Project Code: WEH-016G	Carrier Name: FedEx
Account Code: 06T10P302DD2C10W2LA00	Airbill: 124100-018-8525 4740 0837
CERCCLIS ID: WAD009248295	Shipped to: A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 (281) 292-5277
Spill ID: W2	
Site Name/State: Wyckoff_Eagle Harbor/WA	
Project Leader: MaryJane Nearman	
Action: Remedial Action	
Sampling Co: CH2M HILL	

ORGANIC SAMPLE No.	MATRIX / SAMPLER	CONC / TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE / TIME	INORGANIC SAMPLE No.	QC Type
J6B19	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	6004(Ice Only), 06044011 (Ice Only) (2)	MW19-0106	S: 1/25/2006 / 13:07	--	--
J6B20	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	0604(Ice Only), 06044012 (Ice Only) (2) 6004(Ice Only), 06044013 (Ice Only) (2)	CW01-0106	S: 1/25/2006	--	--
J6B21	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	PZ05-0106	S: 1/25/2006 / 17:00	--	--	--

Ground Water/ L/G SVOC with (21) Krystal Dalton & Jim Crawford

06044009 (Ice Only) (2)

CW12-0106 S: 1/25/2006 / 10:30

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>Krystal Dalton</i>	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Chain of Custody Seal Number:
Analysis Key: SVOC with = SVOC with TICCS	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 10-330794875-012306-0014

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EPA USEPA Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record

Case No: 34934
DAS No:
SDG No: L

Date Shipped:	1/26/2006	Carrier Name:	FedEx	Sampler Signature:	J. A. (J.A.)
Airbill:	KD 048-8525 4740 0837	Relinquished By:	(Date / Time)	Received By:	(Date / Time)
Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 (281) 292-5277	Kristal Dalton 1/26/06 / 11:00			
	4			Unit Price:	
ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION
J6B19	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	KD 1/26/06 06044011 (Ice Only) (2)	MW19-0106 S: 1/25/2006 S: 1/25/2006— S: 1/25/2006—
J6B20	Ground Water/ Krystal Dalton & Jim Crawford	H/G	SVOC with (21)	06044012 (Ice Only) (2) KD 1/26/06 06044013 (Ice Only) (2)	CW01-0106
J6B21	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	PZ05-0106 S: 1/25/2006 / 1/26/06 1/26/06 S: 1/25/2006 / 10:30	S: 1/25/2006 / 10:30

For Lab Use Only	
Lab Contract No:	
Unit Price:	
Transfer To:	
Lab Contract No:	
Unit Price:	
INORGANIC SAMPLE No.	FOR LAB USE ONLY
SAMPLE COLLECT DATE/TIME	
STATION LOCATION	
PRESERVATIVE/ Bottles	

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: Kristal Dalton	Additional Sampler Signature(s): Kristal Dalton	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? —	Shipment Iced?
SVOC with = SVOC with TICS				

TR Number: 10-330794875-012306-0014

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LABORATORY

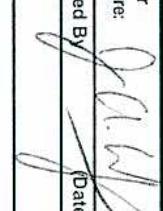
EPA USEPA Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record

Case No.: 34934

R

DAS No:

Region:	10	Date Shipped:	1/26/2006	Carrier Name:	FedEx	Sampler Signature:	
Project Code:	WEH-016G	(Date / Time)		Relinquished By		(Date / Time)	
Account Code:	06T10P302DDC10W2LA00			Shipped to:			
CERCLIS ID:	WAD009248295			A4 Scientific			
Spill ID:	W2			1544 Sawdust Road			
Site Name/State:	Wyckoff_Eagle Harbor/WA			Suite 505			
Project Leader:	MaryJane Nearman			The Woodlands TX 77380			
Action:	Remedial Action			(281) 292-5277			
Sampling Co:	CH2M HILL			4			

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	QC Type
J6B22	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	KD 1/26/06 (Ice Only) (2)	PZ06-0106	S: 1/25/2006 / 14:05	--	--
J6B23	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	KD 1/26/06 0604-(Ice Only); 06044015 (Ice Only) (2)	PZ07-0106	S: 1/25/2006 / 14:18	--	--
J6B24	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	KD 1/26/06 0604-(Ice Only); 06044016 (Ice Only) (2)	MW60-0106	S: 1/25/2006 / 14:18	Field Duplicate	

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: 	Additional Sampler Signature(s): 	Chain of Custody Seal Number:
Analysts Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 10-330794875-012306-0015

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EPA USEPA Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record

Case No: 34934
DAS No: L
SDG No:

Chain of Custody Record		Sampler Signature: <i>J. M. Dalton</i>	For Lab Use Only
Carrier Name: <i>KCD</i>	FedEx	Received By (Date / Time)	Lab Contract No:
Shipped to: A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 (281) 292-5277	2 3 4		Unit Price: Transfer To: Lab Contract No:
			Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY
J6B22	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	0604-(Ice-Only), 06044014 (Ice Only) (2) <i>KCD 1/26/04</i>	PZ06-0106	S: 1/25/2006 / <i>14:05</i>		
J6B23	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	-0604-(Ice-Only), 06044015 (Ice Only) (2) <i>KCD 1/26/04</i>	PZ07-0106	S: 1/25/2006 / <i>14:18</i>		
J6B24	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	0604-(Ice Only)-06044016 (Ice Only) (2) <i>KCD 1/26/04</i>	MW60-0106	S: 1/25/2006 / <i>14:18</i>		

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>Kristen Dalton</i>	Additional Sampler Signature(s): <i>Kristen Dalton</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? —	Shipment Iced? —

SVOC with = SVOC with TICS

TR Number: 10-330794875-012306-0015

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EPA USEPA Contract Laboratory Program

Reference Case: 34934

R

Region:	10	Date Shipped:	1/27/2006	Chain of Custody Record	Sampler Signature: <i>M. G.</i>
Project Code:	WEH-016G	Carrier Name:	Courier	Received By (Date / Time)	
Account Code:	06T10P302DD2C10W2LA00	Airbill:	001	(Date / Time)	
CERCLIS ID:	WAD009248295	Shipped to:	Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800		
Spill ID:	W2	Site Name/State:	Wyckoff_Eagle Harbor/WA		
Project Leader:	MaryJane Nearman	Action:	Remedial Action		
Sampling Co:	CH2M HILL				

SAMPLE No.	MATRIX / SAMPLER	CONC / TYPE	ANALYSIS/ TURNAROUND	PRESERVATIVE/ Bottles	TAG No./ TAG DATE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	Container Type	QC Type
PZ08-0106	Ground Water/ Kystal Dalton & Jim Crawford	L/G (21)	PAH-SIM(21), PCP (21)	(Ice Only) (4)	1/24/06 (N4)	PZ08-0106	S: 1/26/2006 / 11:15	N1,N2,N3,N4	-

CW01-0106 Ground Water/ 46 PAH-SIM(21),
Kystal Dalton, PCP(21)
Jim Crawford TPH-Dx(21) 06044012 (w) CW01-0106 S: 1/26/2006 / 9:55- N1,N2,N3,N4,N5,N6
(ice only) (6) (N4)

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>Kystal Dalton</i>	Additional Sampler Signature(s): <i>Kystal Dalton</i>	Chain of Custody Seal Number:
Analysis Key: PAH-SIM = PAH-SIM, PCP = PCP, TPH = TPH-Dx = TPH-Dx (extended to motor oil)	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced?

TR Number: 10-330794875-012506-0001

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USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case 34934
 Client No.: **L**
 SDG No:

Chain of Custody Record		Sampler Signature:	For Lab Use Only
Carrier Name:	Courier	Received By	(Date / Time)
Airbill:	001		
Shipped to:	Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800		
2			Unit Price:
3			Transfer To:
4			Lab Contract No:
			Unit Price:

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No/ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	FOR LAB USE ONLY
PZ08-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G (21)	PAH-SIM(21), PCP (Ice Only) (4)	PAH-SIM(21), PCP (21), TPH-Dx (21)	06044017 (Ice (N4)) TPH-Dx (21) Jim Crawford	PZ08-0106 S: 1/26/2006 / 11:15	06044017 (Ice (N4)) TPH-Dx (21) Jim Crawford

CUCQ-CQCE Ground Water/
Krystal Dalton
Jim Crawford
PAH-SIM(21),
PCP (21),
TPH-Dx (21)
S: 1/26/2006 / 9:55
N1,N2,N3,N4,
N5,N6

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key: PAH-SIM = PAH-SIM, PCP = PCP, TPH-Dx = TPH-Dx (extended to Motor Oil)	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? —	Shipment Iced? —

TR Number: **10-330794875-012506-0001**

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EPA USEPA Contract Laboratory Program

Reference Case: 34934
Client No.: R

Region:	10	Date Shipped:	1/27/2006	Carrier Name:	Courier	Sampler Signature:	
Project Code:	WEH-016G	Relinquished By	(Date / Time)	Received By	(Date / Time)		
Account Code:	06T10P302DD2C10W2LA00						
CERCLIS ID:	WAD009248295						
Spill ID:	W2						
Site Name/State:	Wyckoff_Eagle Harbor/WA						
Project Leader:	MaryJane Nearman						
Action:	Remedial Action						
Sampling Co.:	CH2M HILL						

Chain of Custody Record							
SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	PRESERVATIVE/ BOTTLES	TAG No./ LOCATION	STATION DATE/TIME	SAMPLE COLLECT TIME / DATE/TIME
PZ08-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	TPH-Dx (21)	(Ice Only), 06044017 (Ice Only) (2)	(NQ)	PZ08-0106 S: 1/26/2006 / 11:15	Captainer 1/26/2006 NQ, NQ
PZ09-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21), PCP (21), TPH-Dx (21)	(Ice Only), 06044018 (Ice Only) (6)	(NQ)	PZ09-0106 S: 1/26/2006 / 12:20	NQ, NQ, NQ, NQ, NQ, NQ
PZ10-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21)	(Ice Only), 06044019 (Ice Only) (2)	(NQ)	PZ10-0106 S: 1/26/2006 / 13:55	NQ, NQ --

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: 	Additional Sampler Signature(s): 	Chain of Custody Seal Number:
Analysis Key: PAH-SIM = PAH-SIM, PCP = PCP, TPH-DX = TPH-DX (extended to motor oil)	Concentration: L = Low, M = Low/Medium, H = High Type/Designate: Composite = C, Grab = G		Shipment Iced? _____

TR Number: 10-330794875-012506-0002

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Generic Chain of Custody

Reference Case 34934	SDG No:	L						
		For Lab Use Only						
Date Shipped:	1/27/2006							
Carrier Name:	Courier							
Airbill:	002							
Shipped to:	Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800							
	1 Krystal Dalton 1/27/06/06/06							
	2							
	3							
	4							
SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	FOR LAB USE ONLY COOL & DRY/ICE	Sample Condition On Receipt
PZ08-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	TPH-Dx (21)	(Ice Only), 06044017 (Ice Only) (2)	(Nz) PZ08-0106	S: 1/26/2006 / 11:15		N51N6
PZ09-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21), PCP (21), TPH-Dx (21)	(Ice Only), 06044018 (Ice Only) (6)	(Nz) PZ09-0106	S: 1/26/2006 / 12:20		N51N3N4,N51N6
PZ10-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21)	(Ice Only), 06044019 (Ice Only) (2)	(Nz) PZ10-0106	S: 1/26/2006 / 13:55		N11N2
							Unit Price:	
							Lab Contract No:	

Shipment for Case Completeness	Sample(s) to be used for laboratory QC: <i>Krystal Dalton</i>	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key: PAH-SIM = PAH-SIM, PCP = PCP, TPH-Dx = TPH-Dx (extended to motor oil)	Concentration: L = Low, M = Low/Medium, H = High	Type Designate: Composite = C, Grab = G		Custody Seal Intact? — Shipment Iced? —

TR Number: 10-330794875-012506-0002

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EPA USEPA Contract Laboratory Program

Reference Case: 34934
R

Region:	10	Date Shipped:	1/27/2006	Chain of Custody Record	Sampler Signature:
Project Code:	WEH-016G	Carrier Name:	Courier	Relinquished By	(Date / Time)
Account Code:	W6T10P302DD2C10W2LA00	Airbill:	003	Received By	
CERCLIS ID:	WAD009248295	Shipped to:	Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800	Krystal Dalton	1/27/2006 11:00
Spill ID:	W2			2	
Site Name/State:	Wyckoff_Eagle Harbor/WA			3	
Project Leader:	MaryJane Nearman			4	
Action:	Remedial Action				
Sampling Co.:	CH2M HILL				

SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	PRESERVATIVE/ BOTTLES	TAG No./ LOCATION	SAMPLE COLLECT DATE/TIME	CONTAINER CODE	QC Type
PZ10-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PCP (21), TPH-Dx (21)	(ice Only), 06044019 (ice Only) (4)	(ML)	PZ10-0106	S: 1/26/2006 /13:55	N3,N4,N5,N4
PZ11-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAHSIM (21), PCP (21)	(ice Only), 06044020 (ice Only) (4)	(N4)	PZ11-0106	S: 1/26/2006 /15:00	N1,N2,N3,N4

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>Krystal Dalton</i>	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High PAH-SIM = PAH-SIM, PCP=PCP, TPH-DX = TPH-DX (extended to motor oil)	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 10-330794875-012506-0003

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EPA USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case 34934
Client No:
SDG No:

L

Chain of Custody Record		Sampler Signature: <i>J. M. W.</i>	For Lab Use Only
Relinquished By (Date / Time)	Received By (Date / Time)	Lab Contract No:	
<i>Krystal Dalton 1/26/06 11:00</i>	<i>J. M. W. 1/26/06 11:00</i>	Unit Price:	
2		Transfer To:	
3		Lab Contract No:	
4		Unit Price:	

SAMPLE NO.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	PRESERVATIVE/BOTTLES	TAG No./ LOCATION	STATION DATE/TIME	SAMPLE COLLECT CONTAINER	FOR LAB USE ONLY Sample Condition On Receipt
PZ10-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PCP (21), TPH-Dx (21) (Ice Only) (4)	(Ice Only), 06044019 (Ice Only) (4)	PZ10-0106	S: 1/26/2006 / 13:55	N ₃ ,N ₄ ,N ₅ ,N ₆	
PZ11-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM(21), PCP (21) (Ice Only) (4)	PAH-SIM(21), PCP (Ice Only), 06044020 (Ice Only) (4)	PZ11-0106	S: 1/26/2006 / 15:00	N ₁ ,N ₂ ,N ₃ ,N ₄	

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>Krystal Dalton</i>	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type Designate: Composite = C, Grab = G	Custody Seal Intact? _____	Shipment Iced? _____
PAH-SIM = PAH-SIM, PCP = PCP, TPH-Dx = TPH-Dx (extended to motor oil)				

TR Number: 10-330794875-012506-0003

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Reference Case: 34934
R

Client No:

Region:	10	Date Shipped:	1/27/2006	Chain of Custody Record	Sampler Signature:
Project Code:	WEH-016G	Carrier Name:	Courier	Relinquished By	(Date / Time)
Account Code:	06T10P302DD2C10W2LA00	Airbill:	004	Received By	(Date / Time)
CERCLIS ID:	WAD009248295	Shipped to:	Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800	Krystal Dalton 1/27/2006	
Spill ID:	W2			2	
Site Name/State:	Wyckoff_Eagle Harbor/WA			3	
Project Leader:	MaryJane Nearman			4	
Action:	Remedial Action				
Sampling Co:	CH2M HILL				

SAMPLE No.	MATRIX / SAMPLER	CONC / TYPE	ANALYSIS / TURNAROUND	PRESERVATIVE / Bottles	TAG No./ LOCATION	SAMPLE COLLECT DATE / TIME	Container Type	QC Type
PZ11-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	TPH-Dx (21)	(Ice Only), 06044020 (Ice Only) (2)	(N2)	PZ11-0106	S: 1/26/2006 / 15:00	N1,N2,N3,N4,N5,N6
PZ12-0106	Ground Water/ Krystal Dalton & Jim Crawford	L/G	PAH-SIM (21), PCP (21), TPH-Dx (21)	(Ice Only), 06044021 (Ice Only) (6)	(N2)	PZ12-0106	S: 1/26/2006 / 16:05	N1,N2,N3,N4,N5,N6

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>Krystal Dalton</i>	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Chain of Custody Seal Number:
Analysts Key: PAH-SIM = PAH-SIM, PCP = PCP, TPH-DX = TPH-DX (extended to motor oil)	Concentration: L = Low, M = Low/Medium, H = High Type/Designate: Composite = C, Grab = G	Shipment Iced? _____	

TR Number: 10-330794875-012506-0004

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EPA USEPA Contract Laboratory Program
Generic Chain of Custody

Reference Case 34934
Client No:
SDG No:

L

Date Shipped:	1/27/2006	For Lab Use Only
Carrier Name:	Courier	Sampler Signature: <i>G. Clegg</i>
Airbill:	004	Received By (Date / Time)
Shipped to:	Manchester Environmental Lab 7411 Beach Drive East Port Orchard WA 98366 (360) 871-8800	Lab Contract No:
		Unit Price:
		Transfer To:
		Lab Contract No:
		Unit Price:

SAMPLE NO.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	PRESERVATIVE/ BOTTLES	TAG No/ LOCATION	STATION DATE/TIME	SAMPLE COLLECT TIME	FOR LAB USE ONLY Sample Condition On Receipt
PZ11-0106	Ground Water/ Krystal Dalton & Jim Crawford	LG	TPH-Dx (21)	(Ice Only), 06044020 (Ice Only) (2)	PZ11-0106	S: 1/26/2006 / 15:00	44,612	N5, N6 N1,N2,N3,N4,N5,N6
PZ12-0106	Ground Water/ Krystal Dalton & Jim Crawford	LG	PAH-SIM (21), PCP (Ice Only) 06044021 (Ice Only) (6)	PZ12-0106	S: 1/26/2006 // 16:05			

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:	
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? —	Shipment Iced? —
PAH-SIM = PAH-SIM, PCP = PCP, TPH-DX = TPH-Dx (extended to motor oil)					

TR Number: 10-330794875-012506-0004

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EPA USEPA Contract Laboratory Program

Case No.: 34934
DAS No.: R

Organic Traffic Report & Chain of Custody Record

Region:	10	Date Shipped:	1/27/2006	Sampler Signature:	
Project Code:	WEH-016G	Carrier Name:	Courier - FedEx	Received By:	
Account Code:	06710P302DD2C10W2LA00	Airbill:	FDL04-006-850547400956	(Date / Time)	
CERCLIS ID:	WAD009248295	Shipped to:	Kristal Dalton /		
Spill ID:	W2		A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 (281) 292-5277		
Site Name/State:	Wyckoff_Eagle Harbor/WA				
Project Leader:	Marylane Nearman				
Action:	Remedial Action				
Sampling Co.:	CH2M HILL				
ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION
J6B27	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	(Ice Only), 06044019 (Ice Only) (2)	PZ10-0106
J6B28	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	(Ice Only), 06044020 (Ice Only) (2)	PZ11-0106
J6B29	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)	(Ice Only), 06044021 (Ice Only) (2)	PZ12-0106
					S: 1/26/2006 / 13:55
					S: 1/26/2006 / 15:00
					--
					--
				SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No. QC Type

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: 	Additional Sampler Signature(s): 	Chain of Custody Seal Number:
Analysis Key: SVOC with = SVOC with TCSS	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 10-330794875-012506-0006

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EPA USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Date Shipped:	1/27/2006	Case No.:	34934					
Carrier Name:	Counter- Airbill: ✓ Shipped to:	DAS No.:	L					
Relinquished By	(Date / Time)	Received By	(Date / Time)					
A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 (281) 292-5277								
ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME ice/26/06	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
J6B27	Ground Water/ Krystal Dalton & Jim Crawford	U/G	SVOC with (21) (Ice Only) (2)		PZ10-0106	S: 1/26/2006 / 13:55		
J6B28	Ground Water/ Krystal Dalton & Jim Crawford	U/G	SVOC with (21) (Ice Only) (2)		PZ11-0106	S: 1/26/2006 / 15:00		
J6B29	Ground Water/ Krystal Dalton & Jim Crawford	U/G	SVOC with (21) (Ice Only), 06044021 (Ice Only) (2)		PZ12-0106	S: 1/26/2006 / 16:05		
								Unit Price:
								Lab Contract No.:

Chain of Custody Record	For Lab Use Only
Relinquished By	Sampler Signature: <i>J. A. Dalton</i>
(Date / Time)	Received By (Date / Time)
<i>J. A. Dalton</i> 1/26/06	<i>J. A. Dalton</i> 1/26/06
2	Unit Price:
3	Transfer To:
4	Lab Contract No.:

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>J. A. Dalton</i>	Additional Sampler Signature(s): <i>J. A. Dalton</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key: SVOC with = SVOC with TICS	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? —	Shipment Iced? —

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA 20191-3400 Phone 703/264-9348 Fax 703/264-9222

TR Number: 10-330794875-012506-0006

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to:

Sample Management Office, 2000 Edmund Halley Dr., Reston, VA 20191-3400 Phone 703/264-9348 Fax 703/264-9222

EPA USEPA Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record

Case No.: 34934
DAS No: R

Region:	10	Date Shipped:	1/27/2006	Chain of Custody Record	Sampler Signature: 
Project Code:	WEH-116G	Carrier Name:	-Courier Fed EX	Relinquished By (Date / Time)	Received By (Date / Time)
Account Code:	06T10P302DD2C10W2LA00	Airbill:	1724104 -005 85254740 0848	<i>Kristal Dalton 1/27/06/10:15</i>	
CERCLIS ID:	WAD009248295	Shipped to:	A4 Scientific		
Spill ID:	W2		1544 Sawdust Road		
Site Name/State:	Wyckoff_Eagle Harbor/WA		Suite 505		
Project Leader:	MaryJane Nearman		The Woodlands TX 77380		
Action:	Remedial Action		(281) 292-5277		
Sampling Co.:	CH2M HILL				

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	PRESERVATIVE	TAG No./ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	QC Type
J6B25	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)		(Ice Only), 06044017 (Ice Only) (2)	PZ08-0106	S: 1/26/2006 / 11:15		--
J6B26	Ground Water/ Krystal Dalton & Jim Crawford	L/G	SVOC with (21)		(Ice Only), 06044018 (Ice Only) (2)	PZ09-0106	S: 1/26/2006 / 12:10		--

NoB20 Ground Water/ 46 SVOC with(21) 06044012 (ice
Krystal Dalton
Jim Crawford
On 14) (2)
Cw01-0100 S: 1/26/2006/9:55

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>Krystal Dalton</i>	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Chain of Custody Seal Number:
Analysis Key: SVOC with = SVOC with TCSS	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 10-330794875-012506-0005

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA 20191-3400 Phone 703/264-9348 Fax 703/264-9222

REGION COPY

EPA USEPA Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record

Date Shipped:	1/27/2006	Case No.:	34934
Carrier Name:	Confortier Red EX 17404606-553547406348	DAS No.:	L
Airbill:	KJL	SDG No.:	
Shipped to:	A4 Scientific 1544 Sawdust Road Suite 505 The Woodlands TX 77380 (281) 292-5277	For Lab Use Only	
		Sampler Signature:	
		Relinquished By (Date / Time)	
		Received By (Date / Time)	
		Lab Contract No.:	
		Unit Price:	
		Transfer To:	
		Lab Contract No.:	
		Unit Price:	

ORGANIC SAMPLE No.	MATRIX SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No/ PRESERVATIVE Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY
J6B25	Ground Water/ Krystal Dalton & Jim Crawford	LG	SVOC with (21)	(Ice Only), 06044017 (Ice Only) (2)	PZ08-0106	S: 1/26/2006 / 11:15		
J6B26	Ground Water/ Krystal Dalton & Jim Crawford	LG	SVOC with (21)	(Ice Only), 06044018 (Ice Only) (2)	PZ09-0106	S: 1/26/2006 / 12:20		
J6B20	Ground water/ Krystal Dalton & Jim Crawford	LG	SVOC with (21)	(Ice Only), 06044012 (Ice Only) (2)	CW01-0106 S: 1/26/2006 / 09:55			

J6B20
Ground water/
Krystal Dalton &
Jim Crawford

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: <i>Krystal Dalton</i>	Additional Sampler Signature(s): <i>Krystal Dalton</i>	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? —	Shipment Iced? —
SVOC with = SVOC with TICS				

TR Number: 10-330794875-012506-0005

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA 20191-3400 Phone 703/264-9348 Fax 703/264-9222

LABORATORY COPY

Appendix E Laboratory Data Packages



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, WA 98101**

February 24, 2006

MEMORANDUM

SUBJECT: Data validation report for the semi-volatile organic compounds (SVOCs) analysis of samples from the Wyckoff Eagle Harbor Site Case: 34934 SDG: J6B08

FROM: Brandon Perkins, QA Chemist *BP*
Office of Environmental Assessment

TO: Maryjane Nearman, Remedial Project Manager
Office of Environmental Cleanup

CC: Kathryn Carpenter
US Army Corps of Engineers

Krystal Dalton
CH2M Hill

The quality assurance (QA) review of 22 water samples collected from the above referenced site has been completed. All samples were analyzed for SVOCs in accordance with the USEPA Contract Laboratory Program (CLP) Statement of Work (SOW) for Low Concentration Organic Analyses (OLC03.2) by A4 Scientific, Inc. of The Woodlands, TX. The following samples were evaluated in this validation report:

SDG J6B08:

J6B08	J6B09	J6B10	J6B11	J6B12	J6B13	J6B14
J6B15	J6B16	J6B17	J6B18	J6B19	J6B20	J6B21
J6B22	J6B23	J6B24	J6B25	J6B26	J6B27	J6B28
J6B29						

DATA QUALIFICATIONS

The following comments refer to the laboratory performance in meeting the Quality Control (QC) Specifications outlined in the USEPA CLP SOW for Low Concentration Organic Analysis (OLC03.2) and the USEPA CLP National Functional Guidelines for Organic Data Review (10/99).

The conclusions presented herein are based on the information provided for the review.

Holding Time/Preservation - Acceptable

All of the samples met the 7 day holding time criteria. The samples were collected 1/23/06 – 1/26/06. All of the samples were received by the lab at temperatures between 4-6°C. None of the data was qualified on this basis.

Instrument Performance Check - Acceptable

One GC/MS systems were used in the analysis. The instrument's performance checks met the ion abundance criteria. All of the samples were analyzed within an acceptable 12-hour QC period. The instrument used remained stable throughout the course of analyses. None of the data was qualified on this basis.

Initial Calibrations (ICAL) - Acceptable

The ICAL evaluated in this report met the technical acceptance criteria for the percent relative standard deviations (%RSDs) and the minimum relative response factors (RRFs) for all target compounds and surrogates. None of the data was qualified on this basis.

Continuing Calibration Verification (CCV) -

All of the CCV checks met the criteria for frequency of analysis, the SOW specified minimum RRFs and %Ds (25%) as compared to the initial calibration with the following exceptions:

Date/Time of Analysis	Compound	%D	Qualifier Detect/Non-detect	Associated Samples
2/3/06 9:38 instr. G-5973	Caprolactam	-33.0	J/UJ	J6B08, J6B09, J6B10, J6B11, J6B12, J6B13
2/4/06 10:38 instr. G-5973	Caprolactam 4-Nitrophenol 3,3'-Dichlorobenzidine	-46.0 35.2 -57.8	J/UJ J/None J/UJ	J6B14, J6B15, J6B16, J6B17, J6B18, J6B19, J6B20, J6B21, J6B23, J6B24, J6B25, J6B26, J6B27, J6B28, J6B29
2/6/06 9:45 instr. G-5973	Hexachloroethane Caprolactam 2,4-Dinitrophenol 4-Nitrophenol Pentachlorophenol Butylbenzylphthalate 3,3'-Dichlorobenzidine bis(2-Ethylhexyl)phthalate Di-n-octylphthalate	26.3 -67.0 -40.3 28.2 -31.3 -50.8 -70.7 -49.3 -47.2	J/None J/UJ J/UJ J/None J/UJ J/UJ J/UJ J/UJ	J6B22

Quantitation Limits - Acceptable

The samples were analyzed at the contract required quantitation limits (CRQL). The CRQLs were based on the lowest standard concentration analyzed in the initial calibrations. Target compounds that were detected at concentrations less than the QLs were qualified as estimated, "J". Detected compounds at concentrations over the

calibration range were analyzed by the laboratory at a dilution. In cases like this, the reviewer crossed-out the initial concentration and reported the values reported from the dilution runs. Trace levels of common laboratory contaminants detected in the samples at concentrations <CRQLs were qualified by the reviewer as non-detect, "U" and reported at the CRQL. All of the reported results were adjusted for sample amounts analyzed. When applicable, all of the "E" and "D" qualifiers applied by the laboratory were crossed-out by the reviewer.

It is recommended that data users should utilize the results/analytical run selected by the reviewer where more than one analysis was performed on a single extract (i.e., dilution, re-analysis).

Blanks - Acceptable

All method and/or instrument blanks analyzed for SVOCs were acceptable. None of the data was qualified on this basis.

Analytical Sequence - Acceptable

All of the standards, blanks, samples, and QC samples were analyzed within an acceptable 12-hour window and in accordance with the SOW specified analytical sequence.

Deuterated Monitoring Compounds (DMCs) -

Sixteen deuterated SVOCs were spiked in all the samples and QC samples to evaluate laboratory performance. The 16 DMCs and their corresponding recovery acceptance limits are:

DMCs	Recovery Limits (%)	DMCs	Recovery Limits (%)
Phenol-d5 (PHL)	10-110	Dimethylphthalate-d6 (DMP)	62-102
2-Chlorophenol-d4 (2CP)	33-110	Fluorene-d10 (FLR)	50-97
2-Nitrophenol-d4 (2NP)	40-106	Anthracene-d10 (ANC)	55-116
bis-(2-Chloroethyl)ether-d8 (BCE)	41-94	Pyrene-d10 (PYR)	47-114
4-Methylphenol-d8 (4MP)	38-95	Acenaphthylene-d8 (ACY)	49-98
4-Chloroaniline-d4 (4CA)	8-70	4-Nitrophenol-d4 (4NP)	9-181
Nitrobenzene-d5 (NBZ)	35-114	Benzo(a)pyrene-d12 (BAP)	54-120
2,4-Dichlorophenol-d3 (DCP)	42-98	4,6-Dinitro-2-methylphenol-d2 (NMP)	53-153

All of the DMC recoveries met the applicable recovery criteria with the following exceptions:

Sample	DMC	Recovery (%)	Qualification Detects/Non-detects	Associated VOCs
J6B08	DMP	55	J/UJ	Caprolactam, 1,1'-Biphenyl, Dimethylphthalate, Diethylphthalate, Di-n-butylphthalate, Butylbenzylphthalate, bis(2-Ethylhexyl)phthalate, Di-n-octylphthalate
	NMP	41	J/UJ	4,6-Dinitro-2-methylphenol
J6B10	DMP	57	J/UJ	Caprolactam, 1,1'-Biphenyl, Dimethylphthalate, Diethylphthalate, Di-n-butylphthalate, Butylbenzylphthalate, bis(2-Ethylhexyl)phthalate, Di-n-octylphthalate
	NMP	42	J/UJ	4,6-Dinitro-2-methylphenol
J6B11	DMP	53	J/UJ	Caprolactam, 1,1'-Biphenyl, Dimethylphthalate, Diethylphthalate, Di-n-butylphthalate, Butylbenzylphthalate, bis(2-Ethylhexyl)phthalate, Di-n-octylphthalate
	FLR	48	J/UJ	Dibenzofuran, Fluorene, 4-Chlorophenyl-phenylether, 4-Bromophenyl-phenylether
	NMP	40	J/UJ	4,6-Dinitro-2-methylphenol
J6B12	NMP	45	J/UJ	4,6-Dinitro-2-methylphenol
J6B14	4CA	75	J/None	4-Chloroaniline, Hexachlorocyclopentadiene, 3,3'-Dichlorobenzidine
J6B16	DMP	57	J/UJ	Caprolactam, 1,1'-Biphenyl, Dimethylphthalate, Diethylphthalate, Di-n-butylphthalate, Butylbenzylphthalate, bis(2-Ethylhexyl)phthalate, Di-n-octylphthalate
J6B17	NMP	43	J/UJ	4,6-Dinitro-2-methylphenol
J6B21	DMP	58	J/UJ	Caprolactam, 1,1'-Biphenyl, Dimethylphthalate, Diethylphthalate, Di-n-butylphthalate, Butylbenzylphthalate, bis(2-Ethylhexyl)phthalate, Di-n-octylphthalate
	NMP	37	J/UJ	4,6-Dinitro-2-methylphenol

J6B22	DMP	54	J/UJ	Caprolactam, 1,1`-Biphenyl, Dimethylphthalate, Diethylphthalate, Di-n-butylphthalate, Butylbenzylphthalate, bis(2-Ethylhexyl)phthalate, Di-n-octylphthalate
	NMP	24	J/UJ	4,6-Dinitro-2-methylphenol
	BAP	44	J/UJ	Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene
J6B24	DMP	54	J/UJ	Caprolactam, 1,1`-Biphenyl, Dimethylphthalate, Diethylphthalate, Di-n-butylphthalate, Butylbenzylphthalate, bis(2-Ethylhexyl)phthalate, Di-n-octylphthalate
	ACY	44	J/UJ	Naphthalene, 2-Methylnaphthalene, 2-Chloronaphthalene, Acenaphthylene, Acenaphthene
	FLR	47	J/UJ	Dibenzofuran, Fluorene, 4-Chlorophenyl-phenylether, 4-Bromophenyl-phenylether
	NMP	45	J/UJ	4,6-Dinitro-2-methylphenol
J6B26	DMP	54	J/UJ	Caprolactam, 1,1`-Biphenyl, Dimethylphthalate, Diethylphthalate, Di-n-butylphthalate, Butylbenzylphthalate, bis(2-Ethylhexyl)phthalate, Di-n-octylphthalate
	FLR	48	J/UJ	Dibenzofuran, Fluorene, 4-Chlorophenyl-phenylether, 4-Bromophenyl-phenylether
	NMP	41	J/UJ	4,6-Dinitro-2-methylphenol
J6B27	DMP	57	J/UJ	Caprolactam, 1,1`-Biphenyl, Dimethylphthalate, Diethylphthalate, Di-n-butylphthalate, Butylbenzylphthalate, bis(2-Ethylhexyl)phthalate, Di-n-octylphthalate
	ACY	48	J/UJ	Naphthalene, 2-Methylnaphthalene, 2-Chloronaphthalene, Acenaphthylene, Acenaphthene
	NMP	46	J/UJ	4,6-Dinitro-2-methylphenol
J6B28	DMP	56	J/UJ	Caprolactam, 1,1`-Biphenyl, Dimethylphthalate, Diethylphthalate, Di-n-butylphthalate, Butylbenzylphthalate, bis(2-Ethylhexyl)phthalate, Di-n-octylphthalate
	ACY	44	J/UJ	Naphthalene, 2-Methylnaphthalene, 2-Chloronaphthalene, Acenaphthylene, Acenaphthene

	FLR	47	J/UJ	Dibenzofuran, Fluorene, 4-Chlorophenyl-phenylether, 4-Bromophenyl-phenylether
	NMP	41	J/UJ	4,6-Dinitro-2-methylphenol
J6B29	DMP	54	J/UJ	Caprolactam, 1,1'-Biphenyl, Dimethylphthalate, Diethylphthalate, Di-n-butylphthalate, Butylbenzylphthalate, bis(2-Ethylhexyl)phthalate, Di-n-octylphthalate
	ACY	46	J/UJ	Naphthalene, 2-Methylnaphthalene, 2-Choronaphthalene, Acenaphthylene, Acenaphthene
	FLR	46	J/UJ	Dibenzofuran, Fluorene, 4-Chlorophenyl-phenylether, 4-Bromophenyl-phenylether
	NMP	33	J/UJ	4,6-Dinitro-2-methylphenol

Matrix Spike/Matrix Spike Duplicate (MS/MSD) -

Sample J6B13 was designated for MS/MSD analyses. Both MS/MSD analysis met the technical acceptance criteria for percent recovery (%R) and relative percent difference (RPD) with the following exceptions:

Compound (J6B13)	MS %R	MSD %R	Control Limits	RPD	Control Limits
N-Nitroso-di-n-prop.	37*	20*	41-116	60*	38
2-Chlorophenol	28	20*	27-123	55*	40
4-Chloro-3-methylphenol	33	25	23-97	48*	42
Acenaphthlene	37	15*	46-118	145*	31

*outside of control limits

N-Nitroso-di-n-prop. was qualified estimated "J" in sample J6B13.

Internal Standards (IS) - Acceptable

The acceptance criteria for internal standards (IS) are ± 20 seconds for retention time (RT) shifts and the area counts are within $\pm 50\%$ of the daily continuing calibration verification standard. All of the GC/MS analyses met the IS area count and RT shift criteria. None of the data was qualified on this basis.

Compound Identification

All of the compounds detected in the GC/MS analyses were within the retention time windows, met the USEPA spectral matching criteria and were judged to be acceptable with the following exception:

Trace levels of some target compounds were reported in some samples. Most of these trace compounds had weak spectra and did not meet the USEPA spectral matching criteria and were qualified by the reviewer as non-detects, "U" and reported at the CRQL or at the level of detection whichever is higher.

Tentatively Identified Compounds

Peaks that were detected in the samples at areas >10% of the internal standards and were not part of the target compound lists were identified as tentatively identified compounds (TICs). TICs that were both found in the sample and in the associated method blank(s) were crossed-out by the reviewer. Peaks that were identified as common laboratory contaminants, solvent preservatives, column bleed or aldol condensation products were also crossed-out by the reviewer and qualified as unusable, "R". The rest of the peaks identified as TICs were qualified "JN", tentatively identified at the estimated concentration.

Laboratory Contact

The laboratory was not contacted for this review.

Overall Assessment

The total number of data points evaluated was 1386. 3.0% of the total data points were qualified as estimated due to exceedances in SVOCs calibration criteria. 10.2% of the total data points were qualified as estimated due to exceedances in SVOCs DMC recovery criteria. Less than 1% of the total data points were qualified as estimated due to exceedances in MS/MSD criteria. All of the samples were analyzed in accordance with technical specifications outlined in the SOW. The data as qualified are acceptable and can be used for all purposes.

Data Qualifiers	
U	The analyte was not detected at or above the reported result.
J	The analyte was positively identified. The associated numerical result is an estimate.
UJ	The analyte was not detected at or above the reported estimated result. The associated numerical value is an estimate of the quantitation limit of the analyte in this sample.
R	The data are unusable for all purposes.
N	There is evidence the analyte is present in this sample.
JN	There is evidence that the analyte is present. The associated numerical result is an estimate.

1LCC
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B08

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7398.001 Date Received: 01/25/2006

Lab File ID: G7532 Date Extracted: 01/26/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/03/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	UJ
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	UJ
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	UJ
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5.0	U

BL
2/21/00

1LCD
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

J6B08

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038
 Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08
 Lab Sample ID: 7398.001 Date Received: 01/25/2006
 Lab File ID: G7532 Date Extracted: 01/26/2006
 Sample Volume: 1000 (ML) Date Analyzed: 02/03/2006
 Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0
 Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	UJ
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	UJ
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	5.0	UJ
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	UJ
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	UJ
117-84-0	Di-n-octylphthalate	5.0	UJ
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U

(1) Cannot be separated from Diphenylamine

BL
2/2/08

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B08

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7398.001 Date Received: 01/25/2006

Lab File ID: G7532 Date Extracted: 01/26/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/03/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

Number TICs found: 1

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01	000111-06-8	Hexadecanoic acid, butyl est	11.29	2.9	JN
02					
03					
04					
05					
06					
07					
08					
09					
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1LCC
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B09

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038
 Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08
 Lab Sample ID: 7398.002 Date Received: 01/25/2006
 Lab File ID: G7533 Date Extracted: 01/26/2006
 Sample Volume: 1000 (ML) Date Analyzed: 02/03/2006
 Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0
 Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	1.7	J

BL 2/2/00

1LCD

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET

EPA SAMPLE NO.

J6B09

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7398.002 Date Received: 01/25/2006

Lab File ID: G7533 Date Extracted: 01/26/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/03/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U

(1) Cannot be separated from Diphenylamine

BL
2/21/08

1LCG
 LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS
 DATA SHEET TENTATIVELY IDENTIFIED COMPOUND EPA SAMPLE NO.

J6B09

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038
 Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08
 Lab Sample ID: 7398.002 Date Received: 01/25/2006
 Lab File ID: G7533 Date Extracted: 01/26/2006
 Sample Volume: 1000 (ML) Date Analyzed: 02/03/2006
 Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0
 Injection Volume: 1.0 (UL)
 Number TICs found: 2

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01		UNKNOWN	5.26	2.6	J
02		UNKNOWN	8.92	2.2	J
03					
04					
05					
06					
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2/2/06*

1LCC
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B10

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038
 Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08
 Lab Sample ID: 7398.003 Date Received: 01/25/2006
 Lab File ID: G7534 Date Extracted: 01/26/2006
 Sample Volume: 1000 (ML) Date Analyzed: 02/03/2006
 Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0
 Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	UJ
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	UJ
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	UJ
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5.0	U

BL
2/21/06

1LCD
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

J6B10

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038
 Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08
 Lab Sample ID: 7398.003 Date Received: 01/25/2006
 Lab File ID: G7534 Date Extracted: 01/26/2006
 Sample Volume: 1000 (ML) Date Analyzed: 02/03/2006
 Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0
 Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	UJ
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	UJ
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	5.0	UJ
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	UJ
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	UJ
117-84-0	Di-n-octylphthalate	5.0	UJ
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U

(1) Cannot be separated from Diphenylamine

Bl 2/21/06
OLC03.2

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B10

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7398.003 Date Received: 01/25/2006

Lab File ID: G7534 Date Extracted: 01/26/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/03/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
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11					
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29					
30					

BL 2/2/09

1LCC
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B11

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7398.004 Date Received: 01/25/2006

Lab File ID: G7535 Date Extracted: 01/26/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/03/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	1.6	J
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	U J
91-58-7	2-Choronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	U J
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5.0	U

J6B11

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7398.004 Date Received: 01/25/2006

Lab File ID: G7535 Date Extracted: 01/26/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/03/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2, 4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U J
121-14-2	2, 4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U J
86-73-7	Fluorene	5.0	U J
7005-72-3	4-Chlorophenyl-phenylether	5.0	U J
100-01-6	4-Nitroaniline	20	U
534-52-1	4, 6-Dinitro-2-methylphenol	20	U J
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1, 2, 4, 5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U J
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U J
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U J
91-94-1	3, 3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	U J
117-84-0	Di-n-octylphthalate	5.0	U J
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1, 2, 3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a, h)anthracene	5.0	U
191-24-2	Benzo(g, h, i)perylene	5.0	U

(1) Cannot be separated from Diphenylamine

1LCG
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS
DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B11

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7398.004 Date Received: 01/25/2006

Lab File ID: G7535 Date Extracted: 01/26/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/03/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
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11					
12					
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2/2/08

1LCC
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B12

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038
 Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08
 Lab Sample ID: 7398.005 Date Received: 01/25/2006
 Lab File ID: G7536 Date Extracted: 01/26/2006
 Sample Volume: 1000 (ML) Date Analyzed: 02/03/2006
 Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0
 Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5.0	U

BL
2/21/06

1LCD

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET

EPA SAMPLE NO.

J6B12

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7398.005 Date Received: 01/25/2006

Lab File ID: G7536 Date Extracted: 01/26/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/03/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U ^J
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U

(1) Cannot be separated from Diphenylamine

18
2/21/04

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B12

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7398.005 Date Received: 01/25/2006

Lab File ID: G7536 Date Extracted: 01/26/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/03/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01					
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1LCC
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B13

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038
 Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08
 Lab Sample ID: 7407.001 Date Received: 01/26/2006
 Lab File ID: G7537 Date Extracted: 01/26/2006
 Sample Volume: 1000 (ML) Date Analyzed: 02/03/2006
 Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0
 Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	UJ
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	52	
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	UJ
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	18	

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2/2/06

J6B13

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7407.001 Date Received: 01/26/2006

Lab File ID: G7537 Date Extracted: 01/26/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/03/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	7.0	
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	2.1	J
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	17	
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	1.9	J
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U

(1) Cannot be separated from Diphenylamine

BL
2/2/06

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B13

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038
 Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08
 Lab Sample ID: 7407.001 Date Received: 01/26/2006
 Lab File ID: G7537 Date Extracted: 01/26/2006
 Sample Volume: 1000 (ML) Date Analyzed: 02/03/2006
 Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0
 Injection Volume: 1.0 (UL)
 Number TICs found: 9

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01	000496-11-7	Indane	4.45	3.9	JN
02	000095-13-6	Indene	4.52	3.1	JN
03	001504-58-1	3-Phenyl-2-propyn-1-ol	4.99	2.4	JN
04	004565-32-6	Benzo[b]thiophene, 2,3-dihyd	6.17	2.2	JN
05	000090-12-0	Naphthalene, 1-methyl-	6.57	9.4	JN
06	000132-65-0	Dibenzothiophene	9.35	2.2	JN
07		UNKNOWN	9.59	2.7	J
08		UNKNOWN	10.17	3.2	J
09	007132-70-9	3-Acridinol	11.60	8.6	JN
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FORM I LCSV-TIC

OLC03.2

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LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B14

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7407.002 Date Received: 01/26/2006

Lab File ID: G7544 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5.0	U

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2/21/06

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET

EPA SAMPLE NO.

J6B14

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7407.002 Date Received: 01/26/2006

Lab File ID: G7544 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U ¹
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U

(1) Cannot be separated from Diphenylamine

*Bl
2/2/06*

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B14

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7407.002 Date Received: 01/26/2006

Lab File ID: G7544 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01					
02					
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FORM I LCSV-TIC

OLC03.2

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LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B15

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7407.003 Date Received: 01/26/2006

Lab File ID: G7545 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5.0	U

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2/21/06

J6B15

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7407.003 Date Received: 01/26/2006

Lab File ID: G7545 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U ⁽¹⁾
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U

(1) Cannot be separated from Diphenylamine

13
2/21/00

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B15

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7407.003 Date Received: 01/26/2006

Lab File ID: G7545 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

Number TICs found: 1

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01	010544-50-0	Cyclic octaatomic sulfur	10.90	4.8	JN
02					
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LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B16

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7407.004 Date Received: 01/26/2006

Lab File ID: G7546 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	UJ
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	UJ
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	UJ
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5.0	U

BP
2/21/06

1LCD

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET

EPA SAMPLE NO.

J6B16

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7407.004 Date Received: 01/26/2006

Lab File ID: G7546 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U

(1) Cannot be separated from Diphenylamine

B6
2/21/06

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B16

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7407.004 Date Received: 01/26/2006

Lab File ID: G7546 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01					
02					
03					
04					
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06					
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FORM I LCSV-TIC

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BL
2/2/06

1LCC
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B17

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038
 Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08
 Lab Sample ID: 7419.001 Date Received: 01/27/2006
 Lab File ID: G7548 Date Extracted: 01/31/2006
 Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006
 Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0
 Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	UJ
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5.0	U

J6B17

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7419.001 Date Received: 01/27/2006

Lab File ID: G7548 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U

(1) Cannot be separated from Diphenylamine

BL
2/2/06

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B17

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7419.001 Date Received: 01/27/2006

Lab File ID: G7548 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01					
02					
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FORM I LCSV-TIC

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2/2/06

1LCC
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B18

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7407.005 Date Received: 01/26/2006

Lab File ID: G7547 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	110	ZJ
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	UJ
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	2.1	J
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	1.3	J
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	39	

Use dilution run for Naphthalene

1b
2/2/06

1LCD
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

J6B18

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7407.005 Date Received: 01/26/2006

Lab File ID: G7547 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	14	
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	4.1	J
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	19	
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	1.8	J
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U

(1) Cannot be separated from Diphenylamine

BB
2/2/06

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B18

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7407.005 Date Received: 01/26/2006

Lab File ID: G7547 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

Number TICs found: 13

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01	000496-11-7	Indane	4.45	7.3	JN
02	000095-13-6	Indene	4.52	6.2	JN
03	004265-25-2	Benzofuran, 2-methyl-	4.95	2.9	JN
04	017059-52-8	Benzofuran, 7-methyl-	4.99	4.8	JN
05	004565-32-6	Benzo (b) thiophene, 2, 3-di	6.17	4.7	JN
06	000091-57-6	Naphthalene, 2-methyl-	6.57	21	JN
07	000582-16-1	Naphthalene, 2, 7-dimethyl-	7.19	2.1	JN
08	000575-41-7	Naphthalene, 1, 3-dimethyl-	7.30	2.2	JN
09	007320-53-8	Dibenzofuran, 4-methyl-	8.65	2.1	JN
10	000132-65-0	Dibenzothiophene	9.35	2.5	JN
11		UNKNOWN	9.59	2.1	J
12	027323-29-1	Methylcarbazole	10.16	2.6	JN
13	001015-89-0	6(5h)- Phenanthridinone	11.60	5.1	JN
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FORM I LCSV-TIC

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1LCC
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B18DL

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038
 Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08
 Lab Sample ID: 7407.005DL Date Received: 01/27/2006
 Lab File ID: G7563 Date Extracted: 01/31/2006
 Sample Volume: 1000 (ML) Date Analyzed: 02/06/2006
 Concentrated Extract Volume: 1000 (UL) Dilution Factor: 2.0
 Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	10	U
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
98-86-2	Acetophenone	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
91-20-3	Naphthalene	100	D
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
105-60-2	Caprolactam	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	40	U
92-52-4	1,1'-Biphenyl	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	40	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	40	U
83-32-9	Acenaphthene	37	D

Use this run for Naphthalene

131
2/21/06

J6B18DL

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7407.005DL Date Received: 01/27/2006

Lab File ID: G7563 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/06/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 2.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	40	U
100-02-7	4-Nitrophenol	40	U
132-64-9	Dibenzofuran	13	D
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	3.6	JD
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	40	U
534-52-1	4,6-Dinitro-2-methylphenol	40	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
95-94-3	1,2,4,5 Tetrachlorobenzene	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
1912-24-9	Atrazine	10	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	18	D
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

16
2/21/06

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B18DL

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7407.005DL Date Received: 01/27/2006

Lab File ID: G7563 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/06/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 2.0

Injection Volume: 1.0 (UL)

Number TICs found: 5

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01	000496-11-7	Indane	4.44	6.5	JN
02	000095-13-6	Indene	4.51	5.0	JN
03	017059-52-8	Benzofuran, 7-methyl-	4.98	4.1	JN
04	000091-57-6	Naphthalene, 2-methyl-	6.56	19	JN
05	010544-50-0	Cyclic octaatomic sulfur	10.90	39	JN
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*SL
2/1/06*

1LCC
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B19

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038
 Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08
 Lab Sample ID: 7419.002 Date Received: 01/27/2006
 Lab File ID: G7549 Date Extracted: 01/31/2006
 Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006
 Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0
 Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5.0	U

BD
2/2/06

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET

EPA SAMPLE NO.

J6B19

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7419.002 Date Received: 01/27/2006

Lab File ID: G7549 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U ¹
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U

(1) Cannot be separated from Diphenylamine

1/27/06

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B19

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7419.002 Date Received: 01/27/2006

Lab File ID: G7549 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01					
02					
03					
04					
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1LCC
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B20

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7421.001 Date Received: 01/28/2006

Lab File ID: G7554 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5.0	U

1/2/06

J6B20

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7421.001 Date Received: 01/28/2006

Lab File ID: G7554 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2, 4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2, 4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4, 6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1, 2, 4, 5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3, 3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1, 2, 3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a, h)anthracene	5.0	U
191-24-2	Benzo(g, h, i)perylene	5.0	U

(1) Cannot be separated from Diphenylamine

18
2/21/06

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B20

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7421.001 Date Received: 01/28/2006

Lab File ID: G7554 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01					
02					
03					
04					
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FORM I LCSV-TIC

OLC03.2

BD
2/2/06

1LCC
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B21

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038
 Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08
 Lab Sample ID: 7419.003 Date Received: 01/27/2006
 Lab File ID: G7550 Date Extracted: 01/31/2006
 Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006
 Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0
 Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5.0	U

2/21/06

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET

EPA SAMPLE NO.

J6B21

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7419.003 Date Received: 01/27/2006

Lab File ID: G7550 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	UJ
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	UJ
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	5.0	UJ
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	UJ
91-94-1	3,3'-Dichlorobenzidine	5.0	UJ
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	UJ
117-84-0	Di-n-octylphthalate	5.0	UJ
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U

(1) Cannot be separated from Diphenylamine

BL
2/2/06

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B21

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7419.003 Date Received: 01/27/2006

Lab File ID: G7550 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01					
02					
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FORM I LCSV-TIC

OLC03.2

1LCC
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B22

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038
 Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08
 Lab Sample ID: 7419.004 Date Received: 01/27/2006
 Lab File ID: G7562 Date Extracted: 01/31/2006
 Sample Volume: 1000 (ML) Date Analyzed: 02/06/2006
 Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0
 Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	UJ
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	UJ
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	UJ
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5.0	U

BD
2/21/06

J6B22

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7419.004 Date Received: 01/27/2006

Lab File ID: G7562 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/06/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	
51-28-5	2,4-Dinitrophenol	20	UJ
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	UJ
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	UJ
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	UJ
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	5.0	UJ
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	UJ
91-94-1	3,3'-Dichlorobenzidine	5.0	UJ
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	UJ
117-84-0	Di-n-octylphthalate	5.0	UJ
205-99-2	Benzo(b)fluoranthene	5.0	UJ
207-08-9	Benzo(k)fluoranthene	5.0	UJ
50-32-8	Benzo(a)pyrene	5.0	UJ
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	UJ
53-70-3	Dibenzo(a,h)anthracene	5.0	UJ
191-24-2	Benzo(g,h,i)perylene	5.0	UJ

(1) Cannot be separated from Diphenylamine

Bl
2/2/06

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B22

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7419.004 Date Received: 01/27/2006

Lab File ID: G7562 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/06/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01					
02					
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FORM I LCSV-TIC

OLC03.2

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1LCC
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B23

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7419.005 Date Received: 01/27/2006

Lab File ID: G7552 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	2.1	J
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	38	
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	6.4	
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	1.8	J
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	13	

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2/21/06

1LCD
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

J6B23

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038
 Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08
 Lab Sample ID: 7419.005 Date Received: 01/27/2006
 Lab File ID: G7552 Date Extracted: 01/31/2006
 Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006
 Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0
 Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	8.6	
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	9.7	
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	17	
120-12-7	Anthracene	1.3	J
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	2.9	J
129-00-0	Pyrene	1.6	J
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	UJ
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U

(1) Cannot be separated from Diphenylamine

Bf
2/2/06

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B23

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7419.005 Date Received: 01/27/2006

Lab File ID: G7552 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

Number TICs found: 4

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01	000496-11-7	Indane	4.45	2.1	JN
02	000091-57-6	Naphthalene, 2-methyl-	6.57	9.2	JN
03	000575-41-7	Naphthalene, 1,3 dimethyl-	7.19	2.4	JN
04	000581-40-8	Naphthalene, 2,3-dimethyl-	7.30	3.3	JN
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LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B24

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7419.006 Date Received: 01/27/2006

Lab File ID: G7553 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	2.4	J
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	44	J
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	UJ
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	8.3	J
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	2.4	J
91-58-7	2-Chloronaphthalene	5.0	UJ
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	UJ
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	UJ
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	17	J

OLC03.2

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET

EPA SAMPLE NO.

J6B24

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7419.006 Date Received: 01/27/2006

Lab File ID: G7553 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	11	J
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	UJ
86-73-7	Fluorene	13	J
7005-72-3	4-Chlorophenyl-phenylether	5.0	UJ
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	UJ
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	UJ
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	22	
120-12-7	Anthracene	1.8	J
84-74-2	Di-n-butylphthalate	5.0	UJ
206-44-0	Fluoranthene	3.9	J
129-00-0	Pyrene	2.3	J
85-68-7	Butylbenzylphthalate	5.0	UJ
91-94-1	3,3'-Dichlorobenzidine	5.0	UJ
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	UJ
117-84-0	Di-n-octylphthalate	5.0	UJ
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U

(1) Cannot be separated from Diphenylamine

BL
2/21/00

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B24

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7419.006 Date Received: 01/27/2006

Lab File ID: G7553 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

Number TICs found: 9

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01	000496-11-7	Indane	4.45	2.6	JN
02	000091-57-6	Naphthalene, 2-methyl-	6.57	12	JN
03	000575-43-9	Naphthalene, 1, 6-dimethyl-	7.19	3.1	JN
04	000575-41-7	Naphthalene, 1, 3-dimethyl-	7.30	4.4	JN
05	007320-53-8	Dibenzofuran, 4-methyl-	8.64	2.6	JN
06	002235-15-6	1 (2H) - Acenaphthylenone	8.80	2.3	JN
07	000132-65-0	Dibenzothiophene	9.35	2.1	JN
08	000203-64-5	4H-Cyclopenta (def) phenanth	10.23	2.8	JN
09	000081-84-5	1, 8- Naphthalic anhydride	10.81	2.1	JN
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FORM I LCSV-TIC

OLC03.2

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LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B25

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7421.002 Date Received: 01/28/2006

Lab File ID: G7555 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5.0	U

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LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

J6B25

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7421.002 Date Received: 01/28/2006

Lab File ID: G7555 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	UJ
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U

(1) Cannot be separated from Diphenylamine

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2/2/06

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B25

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038
 Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08
 Lab Sample ID: 7421.002 Date Received: 01/28/2006
 Lab File ID: G7555 Date Extracted: 01/31/2006
 Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006
 Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0
 Injection Volume: 1.0 (UL)
 Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
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LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B26

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7421.003 Date Received: 01/28/2006

Lab File ID: G7556 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	UJ
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	UJ
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	UJ
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5.0	U

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2/2/06

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET

EPA SAMPLE NO.

J6B26

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7421.003 Date Received: 01/28/2006

Lab File ID: G7556 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U <u>J</u>
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U <u>J</u>
86-73-7	Fluorene	5.0	U <u>J</u>
7005-72-3	4-Chlorophenyl-phenylether	5.0	U <u>J</u>
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U <u>J</u>
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U <u>J</u>
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U <u>J</u>
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U <u>J</u>
91-94-1	3,3'-Dichlorobenzidine	5.0	U <u>J</u>
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	U <u>J</u>
117-84-0	Di-n-octylphthalate	5.0	U <u>J</u>
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U

(1) Cannot be separated from Diphenylamine

B
2/2/08

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B26

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7421.003 Date Received: 01/28/2006

Lab File ID: G7556 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01					
02					
03					
04					
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2/2/04

1LCC
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B27

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038.

Lab Code: A4 Case No.: 34934 Client No.: REDACTED SDG No.: J6B08

Lab Sample ID: 7421.004 Date Received: 01/28/2006

Lab File ID: G7557 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	UJ
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	UJ
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	UJ
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	UJ
91-58-7	2-Chloronaphthalene	5.0	UJ
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	UJ
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	UJ
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5.0	UJ

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2/2/06

1LCD
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

J6B27

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038
 Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08
 Lab Sample ID: 7421.004 Date Received: 01/28/2006
 Lab File ID: G7557 Date Extracted: 01/31/2006
 Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006
 Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0
 Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	UJ
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	UJ
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	5.0	UJ
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	UJ
91-94-1	3,3'-Dichlorobenzidine	5.0	UJ
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	UJ
117-84-0	Di-n-octylphthalate	5.0	UJ
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U

(1) Cannot be separated from Diphenylamine

10
2/21/06

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B27

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038
 Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08
 Lab Sample ID: 7421.004 Date Received: 01/28/2006
 Lab File ID: G7557 Date Extracted: 01/31/2006
 Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006
 Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0
 Injection Volume: 1.0 (UL)
 Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01					
02					
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LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B28

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038
 Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08
 Lab Sample ID: 7421.005 Date Received: 01/28/2006
 Lab File ID: G7558 Date Extracted: 01/31/2006
 Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006
 Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0
 Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	. 5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	1.1	J
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	UJ
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	1.1	J
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	UJ
91-58-7	2-Chloronaphthalene	5.0	UJ
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	UJ
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	UJ
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	7.1	J

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2/21/04

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET

EPA SAMPLE NO.

J6B28

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7421.005 Date Received: 01/28/2006

Lab File ID: G7558 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	7.0	J
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	UJ
86-73-7	Fluorene	5.0	UJ
7005-72-3	4-Chlorophenyl-phenylether	5.0	UJ
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	UJ
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	UJ
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	5.0	UJ
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	UJ
91-94-1	3,3'-Dichlorobenzidine	5.0	UJ
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	UJ
117-84-0	Di-n-octylphthalate	5.0	UJ
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U

(1) Cannot be separated from Diphenylamine

1/27/06

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B28

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7421.005 Date Received: 01/28/2006

Lab File ID: G7558 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

Number TICs found: 4

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01	000496-11-7	Indane	4.45	14	JN
02	000095-13-6	Indene	4.52	9.2	JN
03	017059-52-8	Benzofuran, 7-methyl-	4.98	2.5	JN
04	002235-15-6	1 (2H) -Acenaphthyleneone	8.80	6.7	JN
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LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS
ANALYSIS DATA SHEET

EPA SAMPLE NO.

J6B29

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7421.006 Date Received: 01/28/2006

Lab File ID: G7559 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-oxybis(1-Chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	20	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	5.0	U

1LCD
LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

J6B29

Lab Name: A4 SCIENTIFIC, INC.	Contract: 68W01038
Lab Code: A4 Case No.: 34934	Client No.: SDG No.: J6B08
Lab Sample ID: 7421.006	Date Received: 01/28/2006
Lab File ID: G7559	Date Extracted: 01/31/2006
Sample Volume: 1000 (ML)	Date Analyzed: 02/04/2006
Concentrated Extract Volume: 1000 (UL)	Dilution Factor: 1.0
Injection Volume: 1.0 (UL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	5.0	U J
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U J
86-73-7	Fluorene	5.0	U J
7005-72-3	4-Chlorophenyl-phenylether	5.0	U J
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U J
86-30-6	N-Nitrosodiphenylamine (1)	5.0	U
95-94-3	1,2,4,5 Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U J
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	5.0	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U J
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U J
91-94-1	3,3'-Dichlorobenzidine	5.0	U J
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	5.0	U J
117-84-0	Di-n-octylphthalate	5.0	U J
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U

(1) Cannot be separated from Diphenylamine

10
7/21/00

1LCG

LOW CONCENTRATION WATER SEMIVOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUND

EPA SAMPLE NO.

J6B29

Lab Name: A4 SCIENTIFIC, INC. Contract: 68W01038

Lab Code: A4 Case No.: 34934 Client No.: SDG No.: J6B08

Lab Sample ID: 7421.006 Date Received: 01/28/2006

Lab File ID: G7559 Date Extracted: 01/31/2006

Sample Volume: 1000 (ML) Date Analyzed: 02/04/2006

Concentrated Extract Volume: 1000 (UL) Dilution Factor: 1.0

Injection Volume: 1.0 (UL)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01					
02					
03					
04					
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06					
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Appendix F Lower Aquifer Evaluation of Well CW15

Lower Aquifer Evaluation of CW15

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The purpose of this memo is to discuss the available information regarding the position of the screen interval of the CW15 monitoring well. Historically there has been some uncertainty as to whether CW15 is screened in the lower aquifer or in the aquitard. The following sections support that CW15 is representative of the lower aquifer.

Hydrostratigraphy:

Inspection of the well logs from CW15 and lower aquifer wells CW5 located about 80 feet northwest and CW9 located about 225 feet southeast show very similar overall hydrostratigraphy throughout their entire depths (see attached logs). This similarity implies that the three wells are screened in the same hydrostratigraphic unit. Specifically, the aquitard starts about 62 feet below ground surface (bgs) in CW15 and at about 62 feet and 54 feet bgs in CW5 and CW9, respectively. The bottom of the aquitard is at about 80 feet bgs in CW15 and at about 87 and 90 feet bgs in CW5 and CW9, respectively. At both CW5 and CW9 the bottom is marked by a clay layer and at CW15 a silt layer and the water content was reported to change from moist to wet in CW9 and CW15. Each well is screened and sandpacked over similar depth intervals. CW15 is screened and sandpacked 81 to 100 bgs. CW5 and CW9 are screened and sandpacked 86 to 102 and 92 to 107 bgs, respectively.

Hydraulic Tidal Response:

Figure 1 shows the hydrographs from CW15, CW5, and CW9 for about 10 days in September 2004. The tidally induced groundwater level changes (potentiometric head) of the lower aquifer CW5 and CW9 are very similar to the hydrograph of CW15. If the approximate 1 foot offset between CW5 and CW9/CW15 were removed, the hydrographs would be virtually identical. The approximate maximum fluctuation of about 5 feet for the lower aquifer is in contrast to generally 1 foot or less in the upper aquifer for the same time period. In addition, the 12 to 5 feet MLLW range of groundwater elevation change in all three wells falls within the normal tidal fluctuations of all lower aquifer wells for this time period. During this same time period, groundwater elevations in upper aquifer wells vary from 2 to 5 feet MLLW.

Conclusion:

CW15 is a lower aquifer well by virtue of its similar hydrostratigraphy and hydraulic response with other lower aquifer monitoring wells. If additional information is required to further define the hydrostratigraphy or vertical contaminant distribution near CW15,

additional wells should be installed in the vicinity of the well and downgradient from this well at the OU compliance point to determine the extent of impact, if any, to the lower aquifer.