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Letter of Transmittal

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Date: June 19, 2009

From: Roy Kuroiwa – Port of Seattle

Project Reference: **Terminal 117 Early Action Area**

<u>Hard Copy:</u>	<u>Electronic</u>	<u>Description:</u>
<u>2</u>	<u>X</u>	1Q09 Interim Groundwater Monitoring Report, dated June 19, 2009

cc:

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*Electronic version will be available online at <http://www.windwardenv.com/t117docs/default.htm>

Roy Kuroiwa
Project Coordinator



Pier 69 ♦ 2711 Alaskan Way
Seattle, WA 98121

June 19, 2009

Ms. Piper Peterson Lee
USEPA Region 10
1200 Sixth Avenue
Suite 900, ECL-111
Seattle, WA 98101-3140

**Subject: First Quarter 2009 Interim Groundwater Monitoring Data Results
Terminal 117 Early Action Area**

Dear Ms. Peterson Lee:

The Port of Seattle together with the City of Seattle is pleased to provide to you the First Quarter 2008 Interim Groundwater Monitoring Data Results report for the Terminal 117 Early Action Area. This report is provided per the Statement of Work (SOW), T-117 Early Action Area, Amendment No. 1 of Administrative Settlement Agreement and Order on Consent No. CERCLA 10-2006-0103.

We look forward to hearing from you. Please feel free to contact me at 206-728-3814 (Kuroiwa.R@portseattle.org) if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads "Roy Kuroiwa".

Roy Kuroiwa
Project Coordinator

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Lower Duwamish Waterway Superfund Site
Terminal 117 Early Action Area

**FIRST QUARTER 2009 INTERIM GROUNDWATER
MONITORING DATA RESULTS –
NON-TIME CRITICAL REMOVAL ACTION**

PREPARED FOR:

**The Port of Seattle
and
The City of Seattle**

FOR SUBMITTAL TO:

**US Environmental Protection Agency, Region 10
1200 Sixth Avenue
Seattle, WA 98101**

JUNE 19, 2009

PREPARED BY: AECOM ENVIRONMENT

AECOM

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1 Introduction

This *First Quarter 2009 Interim Groundwater Monitoring Data Results Report* (Report) presents the objectives, methodologies, and results of the interim groundwater monitoring activities preceding the Non-Time Critical Removal Actions (NTCRA) at the Terminal 117 (T-117) Early Action Area (EAA) of the Lower Duwamish Waterway (LDW) Superfund Site in Seattle, Washington (Figure 1). This report was prepared on behalf of the Port of Seattle (Port) and the City of Seattle (City) for submittal to the U.S. Environmental Protection Agency (EPA) in accordance with the *Statement of Work* amendment (SOW, EPA 2007a) appended to the NTCRA Administrative Settlement Agreement and Order on Consent (Settlement Agreement) issued on December 22, 2005.

The investigation described herein was performed in accordance with the *Interim Groundwater Monitoring Plan* (Plan; ENSR 2008a) and the *Quality Assurance Project Plan-Non-Time Critical Removal Action – Preliminary Investigation and Interim Groundwater Monitoring Plan* (QAPP; ENSR 2008b) submitted on behalf of the Port and the City to EPA on March 4, 2008.

1.1 PURPOSE AND OBJECTIVES

The groundwater monitoring network at T-117 includes 11 wells, as shown on Figure 2. The monitoring wells are located to provide specific information on the T-117 Upland groundwater (Table 1 in the Plan (ENSR 2008a)). Monitoring wells (MW-02 through MW-08) are located along the shoreline to assess the groundwater entering the LDW. Additionally, MW-02 and MW-06 are located downgradient of the highest historical PCB concentrations in contact with groundwater. The shoreline wells are spread out along the entire T-117 Upland shoreline border. Monitoring well MW-03 is located in the center of T-117 Upland near a historical industrial well. New monitoring wells MW-09, MW-10, MW-11, as well as existing monitoring well MW-01, are upgradient and assess the groundwater quality entering the site from Basin Oil. Monitoring wells MW-09 and MW-10 were installed in February 2008 and MW-11 was installed on September 2, 2008 to further assess the groundwater quality entering the site from Basin Oil. Monitoring wells MW-04R, MW-05R, and MW-08R were re-installed in February 2008; these wells were removed during previous site activities along the riverbank.

The objectives of the Interim Groundwater Monitoring Plan as stated in the SOW are as follows:

- ◆ Determine if groundwater migrating onto the T-117 Upland contains contaminants at levels that have the potential to recontaminate the T-117 Upland area.
- ◆ Determine if groundwater at the T-117 Upland contains contaminants at levels that have the potential to cause unacceptable

human exposures or cause contaminants to migrate into the LDW sediments (including any bank or sediment areas created as part of the NTCRA) at levels exceeding the Washington State Sediment Management Standards or Washington State Water Quality Standards.

1.2 REPORT ORGANIZATION

This report is organized as follows:

- ◆ Section 1 describes the background and the purpose and objectives of the investigation
- ◆ Section 2 describes the methods and field procedures used to complete the investigation
- ◆ Section 3 provides details of the data quality assurance, management, and usability of the investigation
- ◆ Section 4 describes the results of the interim groundwater monitoring – fifth event investigation (first quarter 2009)
- ◆ Section 5 summarizes the groundwater analytical results
- ◆ Section 6 provides a summary of the next quarterly sampling event
- ◆ Section 7 provides references cited in the report
- ◆ The appendices provide the groundwater monitoring and other field forms, laboratory and data validation reports and corresponding lab and validation qualifier table.

2 Sampling Process, Field Procedures, and Methods

The First Quarter 2009 interim groundwater monitoring activities were performed from March 30 through April 8, 2009. Groundwater monitoring activities were conducted in accordance with the Plan (ENSR 2008a) and the QAPP (ENSR 2008b).

2.1 GROUNDWATER SAMPLING

Between March 30 and April 8, 2009 groundwater samples were collected from four existing, three replacement, and three newly-installed monitoring wells on the T117-Upland and streets portion of the EAA. MW-03 was not sampled due to the presence of a sheen on the groundwater. The thickness was not measurable, but a trace to heavy trace sheen was observed (see field forms in Appendix A). MW-06 was sampled over three days because the well went dry during sampling (see field forms in Appendix A).

All groundwater samples were collected in accordance with EPA-approved low-flow groundwater sampling techniques via peristaltic pump as described in the QAPP. All groundwater monitoring wells were purged until the aquifer stabilized according to the QAPP before groundwater samples were collected. See Section 4.2 for well stabilization details. Field notes detailing aquifer stabilization parameters can be found in Appendix A. All groundwater sample collection equipment was decontaminated between sample locations in accordance with the QAPP.

With the exceptions noted above regarding monitoring wells going dry, there were no deviations from the procedures outlined for collecting groundwater samples in the QAPP during this field activity.

2.2 ADDITIONAL FIELD PROCEDURES

Additional field procedures were conducted in accordance with all methods and procedures listed in the QAPP. These included:

- ◆ Instrument/equipment calibration and maintenance
- ◆ Decontamination
- ◆ Sample handling and custody
- ◆ Sample packing and labeling
- ◆ Sample log-in
- ◆ Inspection/acceptance of supplies and consumables.

2.3 GROUNDWATER ANALYTICAL METHODS

Groundwater samples were sent for analysis to Analytical Resources, Inc (ARI) in Tukwila, WA. A summary of requested groundwater analysis are listed below.

Table 1 Summary of Groundwater Analytical Methods

ANALYTE	METHOD	METHOD REPORTING LIMIT
PCBs	EPA 8082 Low Level	0.01 µg/L
Diesel Range Hydrocarbons	NWTPH-Dx	0.25 mg/L
Lube Oil Range Hydrocarbons	NWTPH-Dx	0.50 mg/L
Gasoline Range Hydrocarbons	NWTPH-Gx	0.25 mg/L
Total Suspended Solids	EPA 160.2	1 mg/L
SVOCs, including PAHs	EPA 8270D and EPA 8270D SIM	0.1 µg/L for PAHs, 0.1 to 10 µg/L for other SVOCs
BTEX	NWTPH-Gx/EPA 8021	1 µg/L
VOCs	EPA 8260B	0.2 to 5 µg/L (depending on analyte)
Metals	6010B – Ag, Be, Cd, Cr, Cu, Ni, Pd, Se, Sb, Ti, Zn; 7470 – Hg; 7060A – As	0.0001 to 0.05 mg/L (depending on metal)

Notes:

PCB – Polychlorinated biphenyls

EPA – Environmental Protection Agency

NWTPH-Dx – Northwest analytical method for diesel and heavy oil range hydrocarbons

NWTPH-Gx – Northwest analytical method for gasoline range hydrocarbons

SVOCs – Semi-volatile organic compounds

PAHs – Polycyclic aromatic hydrocarbons

BTEX – Benzene, Toluene, Ethylbenzene, and Xylenes

VOCs – Volatile organic compounds

µg/L – microgram per liter

mg/L – milligrams per liter

Ag-Silver; As – Arsenic; Be – Beryllium; Cd – Cadmium; Cr – Chromium; Cu-Copper; Ni – Nickel;

Pd – Palladium; Se – Selenium; Sb – Antimony; Ti – Thallium; Zn – Zinc; Hg – Mercury

3 Data Quality Assurance, Management, and Usability

All data validation followed the guidelines provided in US EPA's *Contract Laboratory Program (CLP) National Functional Guidelines for Organic/Inorganic Data Review*, document numbers EPA540/R-99/008 and EPA540/R-04/004 of October 1999 (Organic) and October 2004 (Inorganic), and the US EPA's *Contract Laboratory Program (CLP) National Functional Guidelines for Superfund Organic Methods Data Review*, document number USEPA-540-R-07-003, July 2007 (USEPA 2007b), as they applied to the reported methodology.

A Level 4 CLP-like fully validated data package (USEPA 1991) was generated and the data was validated and qualified using the control limits specified in Table 1-1 of the QAPP. Data validation reports for the investigation, including a summary table of the laboratory assigned qualifiers and the validation assigned qualifiers, are included in Appendix B. In these reports, conclusions regarding data validation criteria (accuracy, precision, completeness, and method compliance) are provided.

3.1 GROUNDWATER DATA VALIDATION RESULTS

Precision, accuracy, method compliance, and completeness of the data set have been determined to be acceptable, based on the data submitted. Generally, all analytical data was within acceptable QA/QC standards with the exception of three analytes: 2-chloroethylvinylether (Method 8260B), acetone (Method 8260B), and chloromethane (Method 8260B).

2-chloroethylvinylether was not recovered due to the degradation of this compound in the presence of the sample preservative. As all of the VOC water samples were acid preserved, the undetected results for 2-chloroethylvinylether in all of the VOC samples in this data set have been qualified as R to indicate the results are rejected.

Target analytes, acetone, and chloromethane, were detected in the trip blank sample at 1.4 µg/L and 2.7 µg/L, respectively. Chloromethane was also detected in associated samples MW-04R-0309 and MW-11-0309 with concentrations less than the concentration in the trip blank sample. Acetone was also detected in associated samples MW-01-0309, MW-02-0309, and MW-11-0309 with concentrations less than two times the reporting limit. These results have been qualified as U in these samples to indicate the analyte was undetected at the reported concentration and is considered to be a false positive due to evidence of contamination in transit.

The QA Officer reviewed field notebooks, laboratory report, and results of the data validation to determine if the Data Quality Objectives (DQO) had been met. The usability of the data depends on the magnitude of the DQO exceedance; data that has been rejected has been flagged as "R" and maintained in the database, but will not be used in any decision making. All of the data collected for the Investigation Report are considered usable except where noted above.

The *Organic and Inorganic Data Validation Report* can be found in Appendix B. A table summarizing the laboratory applied qualifiers and the validation applied qualifiers is included in Appendix B.

4 Field Results

This section discusses the groundwater sampling times and how they were determined and the results of the stabilized field parameters.

4.1 GROUNDWATER SAMPLING TIMES

A 48-hour tidal study was conducted March 4-6, 2008 (ENSR, 2008c). The primary purpose of this tidal study was to determine the effect of tidal variations from the LDW on groundwater and to determine the prevailing groundwater flow direction and gradient across the EAA. The results of the tidal study were used to determine the most accurate times to collect groundwater samples to: a) ensure samples are representative of the aquifer and not river water from the LDW; and b) provide consistency from sampling event to sampling event.

Table 2 (below) provides a summary of the recommended groundwater sample times for each well at the site based on the results of the tidal study conducted in March 2008. The sample times were chosen during the lowest tide, at the point of maximum drawdown in a given well, to allow for sampling when the groundwater gradient is toward the LDW. This approach is consistent with previous groundwater sampling events and designed to ensure the capture of water flowing from the surrounding aquifer to the LDW (Windward, DOF, Onsite 2003; Windward, DOF, Onsite 2005; RETEC 2006). The tidal study also indicated that the upgradient monitoring wells—MW-01, MW-09, MW-10, and MW-11— are not tidally influenced (ENSR, 2008c).

Table 2 Recommended Groundwater Sample Times for 1Q09

WELL ID	TIME OF LOWEST TIDE 3/30/2009	TIME OF LOWEST TIDE 3/31/2009	TIME OF LOWEST TIDE 4/1/2009	LAG TIME*	SAMPLE TIME FOR 3/30/2009	SAMPLE TIME FOR 3/31/2009	SAMPLE TIME FOR 4/1/2009
MW-01	Sample Any Time						
MW-02	2:20 PM	3:10 PM	4:07 PM	3:00	5:20 PM	6:10 PM	7:07 PM
MW-03	2:20 PM	3:10 PM	4:07 PM	1:45	4:05 PM	4:55 PM	5:52 PM
MW-04R	2:20 PM	3:10 PM	4:07 PM	-2:15	12:05 PM	12:55 PM	1:52 PM
MW-05R	2:20 PM	3:10 PM	4:07 PM	2:25	4:45 PM	5:35 PM	6:32 PM
MW-06	2:20 PM	3:10 PM	4:07 PM	1:35	3:55 PM	4:45 PM	5:42 PM
MW-07	2:20 PM	3:10 PM	4:07 PM	0:30	2:50 PM	3:40 PM	4:37 PM
MW-08R	2:20 PM	3:10 PM	4:07 PM	0:40	3:00 PM	3:50 PM	4:47 PM
MW-09	Sample Any Time						
MW-10	Sample Any Time						
MW-11	Sample Any Time						

*Difference calculated between suggested and actual samples time from December 2008 GW sampling event

4.2 GROUNDWATER MONITORING FIELD PARAMETERS

Stabilized field parameters measured during the first quarter 2009 groundwater sampling event are summarized below.

Table 3 Stabilized Field Parameters

WELL	SAMPLE DATE	FIELD PARAMETERS						
		TIME	TEMPERATURE (°C)	PH PH UNITS	CONDUCTIVITY (µS/CM)	DISSOLVED OXYGEN (MG/L)	ORP (MV)	TURBIDITY (NTU)
MW-1	3/30/09	14:19	11.67	6.21	0.513	0.20	47.3	0.00
MW-2	3/31/09	17:57	10.46	6.71	0.503	0.63	-83.4	0.23
MW-3	Not sampled due to the presence of sheen.							
MW-4R	3/30/09	12:03	8.37	7.12	10.456	8.40	178.5	0.00
MW-5R	3/31/09	17:25	9.88	7.16	2.719	9.98	187.3	0.65
MW-6*	4/8/09	12:59	14.17	6.91	0.941	4.51	204.9	7.80
MW-7	3/30/09	14:52	11.99	5.92	0.104	6.82	144.8	2.1
MW-8R	3/31/09	15:21	8.80	6.73	8.305	9.06	207.0	0.50
MW-9	3/30/09	12:23	12.34	5.95	0.245	4.75	180.1	0.65
MW-10	3/31/09	11:23	10.17	5.88	0.165	1.84	181.3	14.0
MW-11	3/31/09	12:13	12.20	5.98	0.328	0.74	187.7	0.00
Sitewide Minimum			8.37	5.88	0.104	0.20	-83.4	0.00
Sitewide Maximum			14.17	7.16	10.46	9.98	207.0	14.0
Sitewide Mean			11.01	6.46	2.43	4.70	143.55	2.59

Notes:

Stabilized field parameters are the last measured values before collecting groundwater samples.

°C – degrees Celsius

µS/cm – microSiemens per centimeter

mg/L – milligrams per Liter

mV – millivolts

NTU – Nephelometric Turbidity Units

*MW-06 was measured on three separate days. The third day's results were used in this table.

4.2.1 pH

The mean pH of groundwater across the groundwater monitoring well network during the reporting period was 6.46, with a minimum value of 5.88, and a maximum value of 7.16. The minimum value was detected in MW-10 and the maximum value was detected in MW-05R. These results are consistent with fourth quarter 2008 pH stabilized field parameters.

4.2.2 Conductivity

The mean conductivity of groundwater during the reporting period was 2.43 $\mu\text{S}/\text{cm}$, with a minimum value of 0.104 $\mu\text{S}/\text{cm}$, and a maximum value of 10.46 $\mu\text{S}/\text{cm}$. The maximum value was detected in MW-4R; the minimum value was detected in MW-07. These results are consistent with fourth quarter 2008 conductivity stabilized field parameters.

4.2.3 Temperature

The mean temperature ($^{\circ}\text{C}$) of groundwater during the reporting period was 10.78 $^{\circ}\text{C}$ with a minimum value of 8.37 $^{\circ}\text{C}$ and a maximum value of 12.34 $^{\circ}\text{C}$. The temperature fluctuation varies seasonally. The maximum value was detected in MW-09 and the minimum value was detected in MW-04R.

4.2.4 Dissolved Oxygen

The typical dissolved oxygen (DO) concentration in groundwater is between 0 mg/L and 10 mg/L, which are equal to the saturation index of dissolved oxygen in water. The mean DO concentration in groundwater during the reporting period was 5.04 mg/L, with a minimum value of 0.20 mg/L (MW-02), and a maximum value of 9.98 mg/L (MW-05R). These results are slightly higher than the fourth quarter 2008 stabilized field results for DO.

4.2.5 Oxidation-Reduction Potential

The mean oxidation-reduction potential (ORP) in groundwater during the reporting period was 141.3 mV, with a minimum value of -83.4 mV, and a maximum value of 207.0 mV. Negative ORP values indicate reducing conditions. One well, MW-02, had a negative ORP value during aquifer stabilization prior to groundwater sampling. This well will continue to be monitored for negative ORP trends.

4.2.6 Turbidity

The mean turbidity in groundwater during the reporting period was 2.33 NTU with a minimum value of 0.0 (MW-01, MW-04R, MW-11) and a maximum value of 14.0 (MW-10). These results are consistent with historical turbidity results during aquifer stabilization.

5 Groundwater Analytical Results

This section presents the results from the first quarter 2009 groundwater sampling event conducted between March 30 and April 8, 2009. Groundwater samples were collected from ten of eleven groundwater monitoring wells and were analyzed for PCBs, TPH, PAHs and SVOCs, VOCs, BTEX, and total and dissolved metals.

Groundwater results were compared to the following screening levels:

- ◆ TPH/NWTPH and chromium screening levels obtained from the Model Toxics Control Act (MTCA) Method A Cleanup Level
- ◆ PCBs screening levels are obtained from the Surface Water ARAR – Aquatic Life – Marine/Chronic – National Toxics Rule, 40 CFR 131
- ◆ Cadmium, copper, lead, and silver screening levels are obtained from the WAC Chapter 173-201A-Aquatic Life – Marine/ Acute Water Quality Standards for Surface Waters of the State of Washington
- ◆ All other groundwater screening levels were obtained from the Surface Water ARAR – Human Health – Marine – Clean Water Act §304.

Table 4 presents the analytical results from the first quarter 2009 groundwater sampling event; Table 5 summarizes the detected constituents in groundwater samples collected since 2003. Appendix B contains the laboratory and data validation reports and corresponding qualifier summary table.

5.1 POLYCHLORINATED BIPHENYLS (PCBs)

This quarter Aroclor® 1260 was the only PCB detected. Aroclor® 1260 was detected in MW-6 at a concentration of 0.068 µg/L and is above the PCB screening level of 0.03 µg/L (WAC Chapter 173-201 Water Quality Standards for Surface Waters of the State of Washington). This result has increased from the third quarter 2008 event (0.026 µg/L), but still lower than the first (0.082 µg/L) and second (0.76 µg/L) quarter 2008 results.

Historically, Aroclor® 1260 has been detected above the screening level of 0.03 µg/L in monitoring wells MW-1, MW-03, MW-05R, MW-7, and MW-08R. During the first quarter 2009 sampling event, Aroclor® 1260 was not detected, above the detection limit, in any of these wells. A summary of historical detections is included in Table 5.

5.2 TOTAL PETROLEUM HYDROCARBONS (TPH)

During the first quarter 2009 groundwater sampling event only one monitoring well, MW-02, reported detections of diesel range hydrocarbons. Diesel range hydrocarbons were detected at a concentration of 0.69 mg/L, which exceeds the screening level of 0.5 mg/L. The result has decreased since the last sampling event and is consistent with other previous results.

Gasoline and motor oil range hydrocarbons were not detected in the groundwater in any of the ten monitoring wells sampled.

5.3 POLYCYCLIC AROMATIC HYDROCARBONS (PAHS) AND SEMIVOLATILE ORGANIC COMPOUNDS (SVOCS)

1-Methylnaphthalene and acenaphthene were detected in the groundwater from MW-02 at a concentration of 0.3 µg/L and 0.18 µg/L, respectively. Both detections were below the screening levels (MTCA Method A Cleanup Level for groundwater and the Surface Water ARAR – Human Health – Marine – Clean Water Act §304).

SVOCs were detected in the groundwater from MW-02, MW-04R, MW-09, MW-10, and MW-11. The following SVOCs were detected:

- ◆ MW-02: Phenol was detected at a concentration of 11 µg/L
- ◆ MW-04R: bis(2-Ethylhexyl)phthalate was detected at a concentration of 1 µg/L
- ◆ MW-09: bis(2-Ethylhexyl)phthalate was detected in the duplicate sample at a concentration of 4.7 µg/L
- ◆ MW-10: bis(2-Ethylhexyl)phthalate was detected at a concentration of 3 µg/L
- ◆ MW-11: bis(2-Ethylhexyl)phthalate was detected at a concentration of 1.2 µg/L.

Only bis(2-Ethylhexyl)phthalate was detected above the screening level of 2.2 µg/L (Surface Water ARAR – Human Health – Marine – Clean Water Act §304) in two wells, at a concentration of 4.7 µg/L (MW-09) and 3 µg/L (MW-10). All other detected SVOCs were below their respective screening levels.

5.4 VOLATILE ORGANIC COMPOUNDS (VOCs)

Of the 70 VOCs analyzed, four compounds were detected during the first quarter 2009 sampling event. All detected VOCs are below their respective screening level (Surface Water ARAR – Human Health – Marine – Clean Water Act §304). VOC detections are summarized below:

- ◆ Chlorobenzene – MW-02 (0.3 µg/L)
- ◆ Cis-1,2-Dichloroethene – MW-11 (1.3 µg/L)
- ◆ Tetrachloroethene – MW-09 (1.3 µg/L), MW-10 (1 µg/L), and MW-11 (1.4 µg/L)
- ◆ Trichloroethene – MW-11 (0.6 µg/L).

5.5 PRIORITY POLLUTANT METALS

Dissolved arsenic was detected above the Surface Water ARAR (Human Health - Marine - Clean Water Act §304) screening level of 0.00014 mg/L in the groundwater collected from MW-01 (0.003 mg/L), MW-02 (0.055 mg/L), MW-05R (0.002 mg/L), and MW-06 (0.002 mg/L).

Total arsenic was detected above the Surface Water ARAR (Human Health - Marine - Clean Water Act §304) screening level of 0.00014 mg/L in the groundwater collected from MW-01 (0.002 mg/L), MW-02 (0.047 mg/L), MW-05R (0.002 mg/L), and MW-06 (0.002 mg/L).

Dissolved copper was detected in the groundwater from MW-06 (0.009 mg/L), MW-09 (0.003 mg/L), and MW-10 (0.003 mg/L). These detections were below the screening level of 0.48 mg/L (WAC Chapter 173-201A-Aquatic Life - Marine/ Acute Water Quality Standards).

Total copper was detected in the groundwater from: MW-06 (0.01 mg/L), MW-09 (0.003 mg/L), and MW-10 (0.007 mg/L). All detections of total copper were below the screening level of 0.48 mg/L (WAC Chapter 173-201A-Aquatic Life - Marine/ Acute Water Quality Standards).

Total nickel was detected in the groundwater from MW-11 at a concentration of 0.01 mg/L. This detection was below the screening level of 4.6 mg/L (Surface Water ARAR - Human Health - Marine - Clean Water Act §304).

Table 4 T-117 First Quarter 2009 GW Results

Chemical Name	Total/ Dissolved	Unit	Action Level	Location ID	MW-01	MW-02	MW-04R	MW-05R	MW-06	MW-06	MW-06	MW-07	MW-08R	MW-09	MW-09	MW-10	MW-11	
				Sample ID	Sample Date	Sample Matrix	Sample Type	MW-01-0309	MW-02-0309	MW-04R-0309	MW-05R-0309	MW-06-0309	MW-06-040109	MW-06-040809	MW-07-0309	MW-08R-0309	MW-09-0309	DUP-1-0309
					WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	
					N	N	N	N	N	N	N	N	N	N	FD	N	N	
Metals																		
Antimony	D	mg/L	.64	<	0.05	<	0.05	<	0.1	<	0.05	<	0.05	<	0.05	<	0.05	
Antimony	T	mg/L	.64	<	0.05	<	0.05	<	0.1	<	0.05	<	0.05	<	0.05	<	0.05	
Arsenic	D	mg/L	.00014	<	0.003	<	0.055	<	0.005	<	0.002	<	0.001	<	0.002	<	0.001	
Arsenic	T	mg/L	.00014	<	0.002	<	0.047	<	0.005	<	0.002	<	0.001	<	0.002	<	0.001	
Beryllium	D	mg/L	NV	<	0.001	<	0.001	<	0.002	<	0.001	<	0.001	<	0.001	<	0.001	
Beryllium	T	mg/L	NV	<	0.001	<	0.001	<	0.002	<	0.001	<	0.001	<	0.001	<	0.001	
Cadmium	D	mg/L	0.42	<	0.002	<	0.002	<	0.004	<	0.002	<	0.002	<	0.002	<	0.002	
Cadmium	T	mg/L	0.42	<	0.002	<	0.002	<	0.004	<	0.002	<	0.002	<	0.002	<	0.002	
Chromium	D	mg/L	1.1	<	0.005	<	0.005	<	0.01	<	0.005	J	<	0.005	J	<	0.005	
Chromium	T	mg/L	1.1	<	0.005	<	0.005	J	<	0.01	<	0.005	<	0.005	<	0.005	J	
Copper	D	mg/L	0.48	<	0.002	<	0.002	<	0.004	<	0.002	<	0.002	<	0.002	<	0.002	
Copper	T	mg/L	0.48	<	0.002	<	0.002	<	0.004	<	0.002	<	0.002	<	0.002	<	0.002	
Lead	D	mg/L	0.21	<	0.02	<	0.02	<	0.04	<	0.02	<	0.02	<	0.02	<	0.02	
Lead	T	mg/L	0.21	<	0.02	<	0.02	<	0.04	<	0.02	<	0.02	<	0.02	<	0.02	
Mercury	D	mg/L	.0003	<	0.0001	<	0.0001	<	0.0001	<	0.0001	<	0.0001	<	0.0001	<	0.0001	
Mercury	T	mg/L	.0003	<	0.0001	<	0.0001	<	0.0001	<	0.0001	<	0.0001	<	0.0001	<	0.0001	
Nickel	D	mg/L	4.6	<	0.01	<	0.01	<	0.02	<	0.01	J	<	0.01	<	0.01	<	0.01
Nickel	T	mg/L	4.6	<	0.01	J	<	0.01	<	0.02	<	0.01	J	<	0.01	J	<	0.01
Selenium	D	mg/L	4.2	<	0.05	<	0.05	<	0.1	<	0.05	<	0.05	<	0.05	<	0.05	
Selenium	T	mg/L	4.2	<	0.05	<	0.05	<	0.1	<	0.05	<	0.05	<	0.05	<	0.05	
Silver	D	mg/L	.0019	<	0.003	<	0.003	<	0.006	<	0.003	<	0.003	<	0.003	<	0.003	
Silver	T	mg/L	.0019	<	0.003	<	0.003	<	0.006	<	0.003	<	0.003	<	0.003	<	0.003	
Thallium	D	mg/L	.00047	<	0.05	<	0.05	<	0.1	<	0.05	<	0.05	<	0.05	<	0.05	
Thallium	T	mg/L	.00047	<	0.05	<	0.05	<	0.1	<	0.05	<	0.05	<	0.05	<	0.05	
Zinc	D	mg/L	26	<	0.01	<	0.01	<	0.02	<	0.01	<	0.01	<	0.01	<	0.01	
Zinc	T	mg/L	26	<	0.01	<	0.01	<	0.02	<	0.01	<	0.01	<	0.01	<	0.01	
TPH																		
Diesel Range Hydrocarbons	T	mg/L	0.5	<	0.25	<	0.69	<	0.25	<	0.25	<	0.25	<	0.25	<	0.25	
Gasoline Range Hydrocarbons	T	mg/L	0.5	<	0.25	<	0.25	<	0.25	<	0.25	<	0.25	<	0.25	<	0.25	
Motor Oil Range Hydrocarbons	T	mg/L	0.5	<	0.5	<	0.5	<	0.5	<	0.5	<	0.5	<	0.5	<	0.5	
BTEX																		
Benzene	T	µg/L	51	<	1	<	1	<	1	<	1	<	1	<	1	<	1	
Ethylbenzene	T	µg/L	2100	<	1	<	1	<	1	<	1	<	1	<	1	<	1	
o-Xylene	T	µg/L	1000	<	1	<	1	<	1	<	1	<	1	<	1	<	1	
Toluene	T	µg/L	15000	<	1	<	1	<	1	<	1	<	1	<	1	<	1	
Xylene (meta & para)	T	µg/L	1000	<	1	<	1	<	1	<	1	<	1	<	1	<	1	
PCBs																		
Aroclor 1016	T	µg/L	.03	<	0.01	<	0.01	J	<	0.01	<	0.01	<	0.01	<	0.01	<	0.01
Aroclor 1221	T	µg/L	NV	<	0.01	<	0.01	J	<	0.01	<	0.025	Y	<	0.01	<	0.01	
Aroclor 1232	T	µg/L	NV	<	0.01	<	0.015	Y	<	0.01	J	<	0.01	<	0.01	<	0.01	
Aroclor 1254	T	µg/L	.03	<	0.01	<	0.01	J	<	0.01	<	0.025	Y	<	0.01	<	0.01	
Aroclor 1260	T	µg/L	.03	<	0.01	<	0.01	J	<	0.01	<	0.068	<	0.01	<	0.01	<	0.01
Aroclor-1242	T	µg/L	NV	<	0.01	<	0.01	J	<	0.01	<	0.01	<	0.01	<	0.01	<	0.01
Aroclor-1248	T	µg/L	NV	<	0.01	<	0.01	J	<	0.01	<	0.01	<	0.01	<	0.01	<	0.01
VOCs																		
1,1,1,2-Tetrachloroethane	T	µg/L	NV	<	0.2	<	0.2	<	0.2	<	0.2	<	0.2	<	0.2	<	0.2	
1,1,1-Trichloroethane	T	µg/L	200	<	0.2	<	0.2	<	0.2	<	0.2	<	0.2	<	0.2	<	0.2	
1,1,2,2-Tetrachloroethane	T	µg/L	4	<	0.2	<	0.2	<	0.2	<	0.2	<	0.2	<	0.2	<	0.2	
1,1,2-Trichloroethane	T	µg/L	16	<	0.2	<	0.2	<	0.2	<	0.2	<	0.2	<	0.2	<	0.2	

Table 4 T-117 First Quarter 2009 GW Results

Chemical Name	Location ID			MW-01	MW-02	MW-04R	MW-05R	MW-06	MW-06	MW-06	MW-07	MW-08R	MW-09	MW-09	MW-10	MW-11
	Total/ Dissolved	Unit	Action Level	MW-01-0309 3/30/2009 WG N	MW-02-0309 3/31/2009 WG N	MW-04R-0309 3/30/2009 WG N	MW-05R-0309 3/31/2009 WG N	MW-06-0309 3/31/2009 WG N	MW-06-040109 4/1/2009 WG N	MW-06-040809 4/8/2009 WG N	MW-07-0309 3/30/2009 WG N	MW-08R-0309 3/31/2009 WG N	MW-09-0309 3/30/2009 WG N	DUP-1-0309 3/30/2009 WG FD	MW-10-0309 3/31/2009 WG N	MW-11-0309 3/31/2009 WG N
	Sample Date	Sample Matrix	Sample Type													
1,1,2-Trichlorotrifluoroethane	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,1-Dichloroethane	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,1-Dichloroethene	T	µg/L	7100	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,1-Dichloropropene	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,2,3-Trichlorobenzene	T	µg/L	NV	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	—	—	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,3-Trichloropropane	T	µg/L	NV	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	—	—	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,4-Trichlorobenzene	T	µg/L	70	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	—	—	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,4-Trimethylbenzene	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dibromo-3-chloropropane	T	µg/L	NV	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	—	—	< 0.5 J	< 0.5	< 0.5 J	< 0.5 J	< 0.5	< 0.5
1,2-Dibromoethane (EDB)	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	T	µg/L	1300	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichloroethane	T	µg/L	37	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichloropropane	T	µg/L	15	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,3,5-Trimethylbenzene	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	T	µg/L	960	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichloropropane	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,4-Dichlorobenzene	T	µg/L	190	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2,2-Dichloropropane	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorotoluene	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Hexanone	T	µg/L	NV	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	—	—	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
4-Chlorotoluene	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
4-Isopropyltoluene	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Acetone	T	µg/L	NV	< 4	< 3.6	< 2.5	< 2.5	< 2.5	—	—	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.9
Acrolein	T	µg/L	290	< 5 J	< 5 J	< 5 J	< 5 J	< 5 J	—	—	< 5 J	< 5 J	< 5 J	< 5 J	< 5 J	< 5 J
Acrylonitrile	T	µg/L	0.25	< 1	< 1	< 1	< 1	< 1	—	—	< 1	< 1	< 1	< 1	< 1	< 1
Benzene	T	µg/L	51	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Bromobenzene	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Bromochloromethane	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Bromodichloromethane	T	µg/L	17	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Bromoethane	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Bromoform	T	µg/L	140	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Bromomethane	T	µg/L	1500	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	—	—	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Disulfide	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Carbon Tetrachloride	T	µg/L	1.6	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chlorobenzene	T	µg/L	1600	< 0.2	0.3	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chloroethane	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chloroform	T	µg/L	470	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chloromethane	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.3
cis-1,2-Dichloroethene	T	µg/L	5	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	1.3
cis-1,3-Dichloropropene	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Dibromochloromethane	T	µg/L	13	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Dibromomethane	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Dichloromethane	T	µg/L	590	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	—	—	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	T	µg/L	2100	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobutadiene	T	µg/L	18	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	—	—	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Iodomethane	T	µg/L	NV	< 1	< 1	< 1	< 1	< 1	—	—	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Methyl ethyl ketone	T	µg/L	NV	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	—	—	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Methyl isobutyl ketone	T	µg/L	NV	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	—	—	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Naphthalene	T	µg/L	160	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	—	—	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

Table 4 T-117 First Quarter 2009 GW Results

Chemical Name	Total/ Dissolved	Unit	Action Level	Location ID	MW-01	MW-02	MW-04R	MW-05R	MW-06	MW-06	MW-06	MW-07	MW-08R	MW-09	MW-09	MW-10	MW-11
				Sample ID	Sample Date	Sample Matrix	Sample Type	MW-01-0309	MW-02-0309	MW-04R-0309	MW-05R-0309	MW-06-0309	MW-06-040109	MW-06-040809	MW-07-0309	MW-08R-0309	MW-09-0309
					WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
					N	N	N	N	N	N	N	N	N	N	FD	N	N
n-Butylbenzene	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
n-Propylbenzene	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	T	µg/L	1000	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
sec-Butylbenzene	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Styrene	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
tert-Butylbenzene	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachloroethene	T	µg/L	3.3	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	1.3	1.3	1	1.4
Toluene	T	µg/L	15000	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
trans-1,2-Dichloroethene	T	µg/L	10000	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
trans-1,3-Dichloropropene	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
trans-1,4-Dichloro-2-butene	T	µg/L	NV	< 1	< 1	< 1	< 1	< 1	< 1	—	—	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	T	µg/L	30	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.6
Trichlorofluoromethane	T	µg/L	NV	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Vinyl Acetate	T	µg/L	NV	< 1 J	< 1 J	< 1 J	< 1 J	< 1 J	< 1 J	—	—	< 1 J	< 1 J	< 1 J	< 1 J	< 1 J	< 1 J
Vinyl Chloride	T	µg/L	2.4	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	—	—	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Xylene (meta & para)	T	µg/L	1000	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	—	—	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
SVOCs																	
1,2,4-Trichlorobenzene	T	µg/L	70	< 1	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	T	µg/L	1300	< 1	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	T	µg/L	960	< 1	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	T	µg/L	190	< 1	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1
1-Methylnaphthalene	T	µg/L	160	< 1	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1
2,2'-Oxybis(1-Chloropropane)	T	µg/L	NV	< 1	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1
2,4,5-Trichlorophenol	T	µg/L	3600	< 5	< 5	< 5	< 5	< 5	—	< 5	—	< 5	< 5	< 5	< 5	< 5	< 5
2,4,6-Trichlorophenol	T	µg/L	2.4	< 5	< 5	< 5	< 5	< 5	—	< 5	—	< 5	< 5	< 5	< 5	< 5	< 5
2,4-Dichlorophenol	T	µg/L	290	< 5	< 5	< 5	< 5	< 5	—	< 5	—	< 5	< 5	< 5	< 5	< 5	< 5
2,4-Dimethylphenol	T	µg/L	850	< 1	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1
2,4-Dinitrophenol	T	µg/L	5300	< 10 J	< 10 J	< 10 J	< 10 J	< 10 J	—	< 10 J	—	< 10 J	< 10 J	< 10 J	< 10 J	< 10 J	< 10 J
2,4-Dinitrotoluene	T	µg/L	3.4	< 5	< 5	< 5	< 5	< 5	—	< 5	—	< 5	< 5	< 5	< 5	< 5	< 5
2,6-Dinitrotoluene	T	µg/L	NV	< 5	< 5	< 5	< 5	< 5	—	< 5	—	< 5	< 5	< 5	< 5	< 5	< 5
2-Chloronaphthalene	T	µg/L	1600	< 1	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorophenol	T	µg/L	NV	< 1	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1
2-Methylnaphthalene	T	µg/L	NV	< 1	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1
2-Methylphenol	T	µg/L	NV	< 1	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1
2-Nitroaniline	T	µg/L	NV	< 5	< 5	< 5	< 5	< 5	—	< 5	—	< 5	< 5	< 5	< 5	< 5	< 5
2-Nitrophenol	T	µg/L	NV	< 5	< 5	< 5	< 5	< 5	—	< 5	—	< 5	< 5	< 5	< 5	< 5	< 5
3,3'-Dichlorobenzidine	T	µg/L	0.03	< 5 J	< 5 J	< 5 J	< 5 J	< 5 J	—	< 5 J	—	< 5 J	< 5 J	< 5 J	< 5 J	< 5 J	< 5 J
3-Nitroaniline	T	µg/L	NV	< 5	< 5	< 5	< 5	< 5	—	< 5	—	< 5	< 5	< 5	< 5	< 5	< 5
4,6-Dinitro-o-cresol	T	µg/L	NV	< 10	< 10	< 10	< 10	< 10	—	< 10	—	< 10	< 10	< 10	< 10	< 10	< 10
4-Bromophenyl phenyl ether	T	µg/L	NV	< 1	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1
4-Chloro-3-methylphenol	T	µg/L	NV	< 5	< 5	< 5	< 5	< 5	—	< 5	—	< 5	< 5	< 5	< 5	< 5	< 5
4-Chloroaniline	T	µg/L	NV	< 5	< 5	< 5	< 5	< 5	—	< 5	—	< 5	< 5	< 5	< 5	< 5	< 5
4-Chlorophenyl phenyl ether	T	µg/L	NV	< 1	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1
4-Methylphenol	T	µg/L	NV	< 1	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1
4-Nitroaniline	T	µg/L	NV	< 5	< 5	< 5	< 5	< 5	—	< 5	—	< 5	< 5	< 5	< 5	< 5	< 5
4-NITROPHENOL	T	µg/L	NV	< 5	< 5	< 5	< 5	< 5	—	< 5	—	< 5	< 5	< 5	< 5	< 5	< 5
Acenaphthene	T	µg/L	990	< 1	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1
Acenaphthylene	T	µg/L	NV	< 1	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1
Anthracene	T	µg/L	40000	< 1	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1
Benzo(a)anthracene	T	µg/L	0.018	< 1	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1

Table 4 T-117 First Quarter 2009 GW Results

Chemical Name	Total/ Dissolved	Unit	Action Level	Location ID	MW-01	MW-02	MW-04R	MW-05R	MW-06	MW-06	MW-06	MW-07	MW-08R	MW-09	MW-09	MW-10	MW-11
				Sample ID	Sample Date	Sample Matrix	Sample Type	MW-01-0309	MW-02-0309	MW-04R-0309	MW-05R-0309	MW-06-0309	MW-06-040109	MW-06-040809	MW-07-0309	MW-08R-0309	MW-09-0309
					WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
					N	N	N	N	N	N	N	N	N	N	FD	N	N
Benzo(a)pyrene	T	µg/L	0.018	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Benzo(b)fluoranthene	T	µg/L	0.018	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Benzo(g,h,i)perylene	T	µg/L	NV	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Benzo(k)fluoranthene	T	µg/L	0.018	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Benzoic Acid	T	µg/L	NV	< 10	< 10	< 10	< 10	—	< 10	—	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzyl Alcohol	T	µg/L	NV	< 5	< 5	< 5	< 5	—	< 5	—	< 5	< 5	< 5	< 5	< 5	< 5	< 5
bis(2-chloroethoxy)methane	T	µg/L	NV	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
bis(2-chloroethyl)ether	T	µg/L	0.53	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
bis(2-Ethylhexyl)phthalate	T	µg/L	2.2	< 1	< 1	1	< 1	—	< 1	—	< 1	< 1	< 1	1 J	4.7 J	3	1.2
Butyl benzyl phthalate	T	µg/L	1900	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbazole	T	µg/L	NV	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chrysene	T	µg/L	0.018	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibenzo(a,h)anthracene	T	µg/L	0.018	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibenzofuran	T	µg/L	NV	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Diethyl phthalate	T	µg/L	44000	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dimethyl phthalate	T	µg/L	1100000	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Di-n-butyl phthalate	T	µg/L	4500	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Di-n-Octyl phthalate	T	µg/L	NV	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Fluoranthene	T	µg/L	140	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Fluorene	T	µg/L	5300	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobenzene	T	µg/L	0.00029	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	T	µg/L	18	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorocyclopentadiene	T	µg/L	1100	< 5 J	< 5 J	< 5 J	< 5 J	—	< 5 J	—	< 5 J	< 5 J	< 5 J	< 5 J	< 5 J	< 5 J	< 5 J
Hexachloroethane	T	µg/L	3.3	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Indeno(1,2,3-cd)pyrene	T	µg/L	0.018	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isophorone	T	µg/L	960	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	T	µg/L	160	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Nitrobenzene	T	µg/L	690	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
N-Nitroso-Di-N-Propylamine	T	µg/L	0.51	< 5	< 5	< 5	< 5	—	< 5	—	< 5	< 5	< 5	< 5	< 5	< 5	< 5
N-Nitrosodiphenylamine	T	µg/L	6	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Pentachlorophenol	T	µg/L	3	< 5	< 5	< 5	< 5	—	< 5	—	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Phenanthrene	T	µg/L	0.1	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Phenol	T	µg/L	10000	< 1	11	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Pyrene	T	µg/L	4000	< 1	< 1	< 1	< 1	—	< 1	—	< 1	< 1	< 1	< 1	< 1	< 1	< 1
PAHs by SIM																	
1-Methylnaphthalene	T	µg/L	160	< 0.1	0.3	< 0.1	< 0.1	—	< 0.1	—	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	T	µg/L	NV	< 0.1	< 0.1	< 0.1	< 0.1	—	< 0.1	—	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	T	µg/L	990	< 0.1	0.18	< 0.1	< 0.1	—	< 0.1	—	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	T	µg/L	NV	< 0.1	< 0.1	< 0.1	< 0.1	—	< 0.1	—	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Anthracene	T	µg/L	40000	< 0.1	< 0.1	< 0.1	< 0.1	—	< 0.1	—	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	T	µg/L	0.018	< 0.1	< 0.1	< 0.1	< 0.1	—	< 0.1	—	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	T	µg/L	0.018	< 0.1	< 0.1	< 0.1	< 0.1	—	< 0.1	—	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	T	µg/L	0.018	< 0.1	< 0.1	< 0.1	< 0.1	—	< 0.1	—	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(g,h,i)perylene	T	µg/L	NV	< 0.1	< 0.1	< 0.1	< 0.1	—	< 0.1	—	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene	T	µg/L	0.018	< 0.1	< 0.1	< 0.1	< 0.1	—	< 0.1	—	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	T	µg/L	0.018	< 0.1	< 0.1	< 0.1	< 0.1	—	< 0.1	—	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzo(a,h)anthracene	T	µg/L	0.018	< 0.1	< 0.1	< 0.1	< 0.1	—	< 0.1	—	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	T	µg/L	NV	< 0.1	< 0.1	< 0.1	< 0.1	—	< 0.1	—	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	T	µg/L	140	< 0.1	< 0.1	< 0.1	< 0.1	—	< 0.1	—	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	T	µg/L	5300	< 0.1	< 0.1	< 0.1	< 0.1	—	< 0.1	—	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

Table 4 T-117 First Quarter 2009 GW Results

Location ID Sample ID Sample Date Sample Matrix Sample Type				MW-01 MW-01-0309 3/30/2009 WG N	MW-02 MW-02-0309 3/31/2009 WG N	MW-04R MW-04R-0309 3/30/2009 WG N	MW-05R MW-05R-0309 3/31/2009 WG N	MW-06 MW-06-0309 3/31/2009 WG N	MW-06 MW-06-040109 4/1/2009 WG N	MW-06 MW-06-040809 4/8/2009 WG N	MW-07 MW-07-0309 3/30/2009 WG N	MW-08R MW-08R-0309 3/31/2009 WG N	MW-09 MW-09-0309 3/30/2009 WG N	MW-09 DUP-1-0309 3/30/2009 WG FD	MW-10 MW-10-0309 3/31/2009 WG N	MW-11 MW-11-0309 3/31/2009 WG N
Chemical Name	Total/ Dissolved	Unit	Action Level													
Indeno(1,2,3-cd)pyrene	T	µg/L	0.018	< 0.1	< 0.1	< 0.1	< 0.1	—	< 0.1	—	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Naphthalene	T	µg/L	160	< 0.1	< 0.1	< 0.1	< 0.1	—	< 0.1	—	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	T	µg/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1	—	< 0.1	—	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pyrene	T	µg/L	4000	< 0.1	< 0.1	< 0.1	< 0.1	—	< 0.1	—	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Conventionals																
Total Suspended Solids	T	mg/L	NV	< 1	28	1.3	< 1	—	NA	—	< 1	< 1	< 1	< 1	2.8	< 1

Notes

- Red** - Detected value that exceeds screening level
 - Bold** - Detected result
 - Blue** - Non-detected value that exceeds the screening level
 - < Non Detect at the reporting limit shown
 - FD Field duplicate
 - J Estimated concentration
 - J- Estimated concentration, biased low
 - Y Reporting limit was raised due to the presence of interference (AECOM qualifier)
 - Samples were analyzed on different sampling dates because the well went dry during sampling.
 - NA Not analyzed
 - NV No established value
- Screening Levels are proposed levels only, for delineation of the groundwater monitoring well network
 TPH/NWTPH screening levels obtained from the MTCA Method A Cleanup Level for groundwater
 PCB screening levels are obtained from the Surface Water ARAR - Aquatic Life - Marine/Chronic - National Toxics Rule, 40 CFR 131
 Cadmium, Copper, Lead, and Silver screening levels obtained from the WAC Chapter 173-201A-Aquatic Life - Marine/Acute Water Quality Standards for Surface Waters of the State of Washington
 Phenanthrene, Naphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, 1,1,1-Trichloroethane, cis-1,2-Dichloroethane, and all Xylene screening levels were obtained from the MTCA Method A Cleanup Level for groundwater
 All other groundwater screening levels were obtained from the Surface Water ARAR - Human Health – Marine – Clean Water Act §304

Table 5 T-117 Groundwater Detections 2003 – Present

Chemical Name	Total/ Dissolved	Unit	Action Level	Location ID	MW-01	MW-01	MW-01	MW-01	MW-01	MW-01
				Sample ID	SP-MW1	SP-MW5	MW-1-0308	MW-01-0608	MW-01-0908	MW-01-1208
				Sample Date	5/8/2003	5/8/2003	3/11/2008	6/3/2008	9/11/2008	12/10/2008
				Sample Matrix	WG	WG	WG	WG	WG	WG
				Sample Type	N	FD	N	N	N	N
Metals										
Arsenic	D	mg/L	.00014		NA	NA	< 0.05	0.002	< 0.05	< 0.05
Arsenic	T	mg/L	.00014		NA	NA	< 0.05	0.002	< 0.05	< 0.05
Cadmium	D	mg/L	.42		NA	NA	< 0.002	< 0.002	< 0.002	< 0.002
Cadmium	T	mg/L	.42		NA	NA	< 0.002	< 0.002	< 0.002	< 0.002
Chromium	D	mg/L	1.1		NA	NA	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	T	mg/L	1.1		NA	NA	< 0.005	< 0.005	< 0.005	0.01
Copper	D	mg/L	.48		NA	NA	< 0.002	< 0.002	0.002	< 0.002
Copper	T	mg/L	.48		NA	NA	0.002	< 0.002	0.002	0.011 J
Lead	T	mg/L	.21		NA	NA	< 0.02	< 0.02	< 0.02	< 0.02
Nickel	D	mg/L	4.6		NA	NA	< 0.01	< 0.01 J	< 0.01	< 0.01
Nickel	T	mg/L	4.6		NA	NA	< 0.01	< 0.01 J	< 0.01	0.01
Silver	D	mg/L	.0019		NA	NA	< 0.003	< 0.003	< 0.003	< 0.003
Silver	T	mg/L	.0019		NA	NA	< 0.003	< 0.003	< 0.003	< 0.003
Zinc	T	mg/L	26		NA	NA	< 0.01	< 0.01	< 0.01	0.02
TPH										
Diesel Range Hydrocarbons	T	mg/L	.5		NA	NA	< 0.25	< 0.25	< 0.25	< 0.25
Motor Oil Range Hydrocarbons	T	mg/L	.5		NA	NA	< 0.5	< 0.5	< 0.5	< 0.5
Total Petroleum Hydrocarbons (calc'd)	T	mg/L	.5		< 0.42	< 0.41	NA	NA	NA	NA
TPH - Diesel Range	T	mg/L	.5		< 0.26	< 0.26	NA	NA	NA	NA
TPH - Lube Oil Range	T	mg/L	.5		< 0.42	< 0.41	NA	NA	NA	NA
PCB										
Aroclor 1254	T	µg/L	.03		< 0.051	< 0.049	< 0.01	< 0.01	< 0.01	< 0.01
Aroclor 1260	T	µg/L	.03		< 0.051	< 0.049	< 0.01	< 0.01 J	0.088 AJ	< 0.01
PCBs (total calc'd)	T	µg/L	0.03		< 0.051	< 0.049	NA	NA	NA	NA
BTEX										
Total Xylenes (calc'd)	T	µg/L	1000		< 1	< 1	NA	NA	NA	NA
Xylene (meta & para)	T	µg/L	1000		< 1	< 1	< 1	< 0.4	< 1	< 0.4
SVOC										
bis(2-Ethylhexyl)phthalate	T	µg/L	2.2		NA	NA	1.4	< 1	< 1	< 1
Phenol	T	µg/L	1700000		NA	NA	< 1	< 1	< 1	< 1
VOC										
1,1,1-Trichloroethane	T	µg/L	200		NA	NA	< 0.2 J	< 0.2	< 0.2	< 0.2
Acetone	T	µg/L	NV		NA	NA	< 3	3.6	< 3	< 3
Chlorobenzene	T	µg/L	1600		NA	NA	< 0.2	< 0.2	< 0.2	< 0.2
cis-1,2-Dichloroethene	T	µg/L	5		NA	NA	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	T	µg/L	1000		NA	NA	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachloroethene	T	µg/L	3.3		NA	NA	< 0.2	< 0.2	< 0.2	< 0.2
Trichloroethene	T	µg/L	30		NA	NA	< 0.2	< 0.2	< 0.2	< 0.2
Xylene (meta & para)	T	µg/L	1000		NA	NA	< 0.4	< 1	< 0.4	< 1
PAH										
1-Methylnaphthalene	T	µg/L	160		< 0.099	< 0.097	< 0.1	< 1	< 1	< 1
Acenaphthene	T	µg/L	990		NA	NA	NA	NA	NA	< 1
Benzo(a)anthracene	T	µg/L	0.018		< 0.0099	< 0.0097	< 1	< 1	< 1	< 1
Benzo(b)fluoranthene	T	µg/L	0.018		< 0.0099	< 0.0097	< 0.1	< 1	< 1	< 1
Benzo(k)fluoranthene	T	µg/L	0.018		< 0.0099	< 0.0097	NA	NA	NA	NA
Chrysene	T	µg/L	0.018		< 0.0099	< 0.0097	< 1	< 1	< 1	< 1
Fluorene	T	µg/L	5300		< 0.099	< 0.097	< 1	< 1	< 1	< 1
Total HPAH (calc'd)	T	µg/L	NV		< 0.099	< 0.097	NA	NA	NA	NA
Total LPAH (calc'd)	T	µg/L	NV		< 0.099	< 0.097	NA	NA	NA	NA
Total PAH (calc'd)	T	µg/L	NV		< 0.099	< 0.097	NA	NA	NA	NA
PAH by SW8270D SIM										
1-Methylnaphthalene	T	µg/L	160		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	T	µg/L	990		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1
Anthracene	T	µg/L	40000		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	T	µg/L	0.018		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	T	µg/L	0.018		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	T	µg/L	0.018		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene	T	µg/L	0.018		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	T	µg/L	0.018		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	T	µg/L	140		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	T	µg/L	5300		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1
Naphthalene	T	µg/L	160		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	T	µg/L	0.1		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1
Pyrene	T	µg/L	4000		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1
Dioxins²										
OCDD	T	pg/l	NV ³		NA	NA	NA	NA	NA	NA
Conventionals										
Dissolved Organic Carbon	D	mg/L	NV		NA	NA	NA	NA	NA	NA
Total Dissolved Solids	D	mg/L	NV		NA	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)	T	mg/L	NV		NA	NA	NA	NA	NA	NA
Total Suspended Solids	T	mg/L	NV		NA	NA	1.2	1.1	< 1	235 J

Table 5 T-117 Groundwater Detections 2003 – Present

Chemical Name	Total/ Dissolved	Unit	Action Level	Location ID	MW-01	MW-01	MW-02	MW-02	MW-02	MW-02
				Sample ID	DUP 1	MW-01-0309	SP-MW2	T117-MW2	T117-MW-2	MW-2-0806
				Sample Date	12/10/2008	3/30/2009	5/8/2003	1/13/2004	6/22/2005	8/10/2006
				Sample Matrix	WG	WG	WG	WG	WG	WG
				Sample Type	FD	N	N	N	N	N
Metals										
Arsenic	D	mg/L	.00014	< 0.05	0.003	NA	NA	NA	NA	0.082
Arsenic	T	mg/L	.00014	< 0.05	0.002	NA	NA	NA	NA	0.0903
Cadmium	D	mg/L	.42	< 0.002	< 0.002	NA	NA	NA	NA	< 0.000011
Cadmium	T	mg/L	.42	< 0.002	< 0.002	NA	NA	NA	NA	0.000123
Chromium	D	mg/L	1.1	< 0.005	< 0.005	NA	NA	NA	NA	0.00304
Chromium	T	mg/L	1.1	0.005	< 0.005	NA	NA	NA	NA	0.00393
Copper	D	mg/L	.48	< 0.002	< 0.002	NA	NA	NA	NA	NA
Copper	T	mg/L	.48	0.004 J	< 0.002	NA	NA	NA	NA	NA
Lead	T	mg/L	.21	< 0.02	< 0.02	NA	NA	NA	NA	0.000027
Nickel	D	mg/L	4.6	< 0.01	< 0.01	NA	NA	NA	NA	NA
Nickel	T	mg/L	4.6	< 0.01	< 0.01 J	NA	NA	NA	NA	NA
Silver	D	mg/L	.0019	< 0.003	< 0.003	NA	NA	NA	NA	NA
Silver	T	mg/L	.0019	< 0.003	< 0.003	NA	NA	NA	NA	NA
Zinc	T	mg/L	26	< 0.01	< 0.01	NA	NA	NA	NA	NA
TPH										
Diesel Range Hydrocarbons	T	mg/L	.5	< 0.25	< 0.25	NA	NA	NA	NA	NA
Motor Oil Range Hydrocarbons	T	mg/L	.5	< 0.5	< 0.5	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (calc'd)	T	mg/L	.5	NA	NA	< 0.42	NA	0.5	0.5	0.94
TPH - Diesel Range	T	mg/L	.5	NA	NA	< 0.26	NA	0.5	0.5	0.94
TPH - Lube Oil Range	T	mg/L	.5	NA	NA	< 0.42	NA	NA	NA	NA
PCB										
Aroclor 1254	T	µg/L	.03	< 0.01	< 0.01	< 0.05	< 1	< 0.04	< 0.04	< 0.01
Aroclor 1260	T	µg/L	.03	0.017 AJ	< 0.01	< 0.05	< 1	< 0.04	< 0.04	0.01 J
PCBs (total calc'd)	T	µg/L	0.03	NA	NA	< 0.05	< 1	< 0.16	< 0.16	0.01 J
BTEX										
Total Xylenes (calc'd)	T	µg/L	1000	NA	NA	< 1	< 1	NA	NA	NA
Xylene (meta & para)	T	µg/L	1000	< 0.4	< 1	< 1	< 1	NA	NA	NA
SVOC										
bis(2-Ethylhexyl)phthalate	T	µg/L	2.2	< 1	< 1	NA	NA	NA	NA	< 1
Phenol	T	µg/L	1700000	< 1	< 1	NA	NA	NA	NA	5.8
VOC										
1,1,1-Trichloroethane	T	µg/L	200	< 0.2	< 0.2	NA	< 1 J	NA	NA	NA
Acetone	T	µg/L	NV	4.5	< 4	NA	< 5	NA	NA	NA
Chlorobenzene	T	µg/L	1600	< 0.2	< 0.2	NA	< 1	NA	NA	NA
cis-1,2-Dichloroethene	T	µg/L	5	< 0.2	< 0.2	NA	< 1	NA	NA	NA
o-Xylene	T	µg/L	1000	< 0.2	< 0.2	NA	NA	NA	NA	NA
Tetrachloroethene	T	µg/L	3.3	< 0.2	< 0.2	NA	< 1	NA	NA	NA
Trichloroethene	T	µg/L	30	< 0.2	< 0.2	NA	< 1	NA	NA	NA
Xylene (meta & para)	T	µg/L	1000	< 1	< 0.4	NA	NA	NA	NA	NA
PAH										
1-Methylnaphthalene	T	µg/L	160	< 0.1	< 1	< 0.096	NA	NA	NA	NA
Acenaphthene	T	µg/L	990	< 1	< 1	< 0.096	< 1.1	< 0.2	< 0.2	< 1
Benzo(a)anthracene	T	µg/L	0.018	< 1	< 1	< 0.0096	< 1.1	< 0.2	< 0.2	< 1
Benzo(b)fluoranthene	T	µg/L	0.018	< 1	< 1	< 0.0096	< 1.1	< 0.2	< 0.2	< 1
Benzo(k)fluoranthene (total calc'd)	T	µg/L	0.018	NA	NA	< 0.0096	< 1.1	< 0.2	< 0.2	< 1
Chrysene	T	µg/L	0.018	< 1	< 1	< 0.0096	< 1.1	< 0.2	< 0.2	< 1
Fluorene	T	µg/L	5300	< 1	< 1	< 0.096	< 1.1	< 0.2	< 0.2	< 1
Total HPAH (calc'd)	T	µg/L	NV	NA	NA	< 0.096	< 1.1	< 0.2 J	< 0.2	< 1
Total LPAH (calc'd)	T	µg/L	NV	NA	NA	< 0.096	< 1.1	< 0.2	< 0.2	< 1
Total PAH (calc'd)	T	µg/L	NV	NA	NA	< 0.096	< 1.1	< 0.2 J	< 0.2	< 1
PAH by SW8270D SIM										
1-Methylnaphthalene	T	µg/L	160	< 0.1	< 0.1	NA	NA	NA	NA	NA
Acenaphthene	T	µg/L	990	< 0.1	< 0.1	NA	NA	NA	NA	NA
Anthracene	T	µg/L	40000	< 0.1	< 0.1	NA	NA	NA	NA	NA
Benzo(a)anthracene	T	µg/L	0.018	< 0.1	< 0.1	NA	NA	NA	NA	NA
Benzo(a)pyrene	T	µg/L	0.018	< 0.1	< 0.1	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	T	µg/L	0.018	< 0.1	< 0.1	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	T	µg/L	0.018	< 0.1	< 0.1	NA	NA	NA	NA	NA
Chrysene	T	µg/L	0.018	< 0.1	< 0.1	NA	NA	NA	NA	NA
Fluoranthene	T	µg/L	140	< 0.1	< 0.1	NA	NA	NA	NA	NA
Fluorene	T	µg/L	5300	< 0.1	< 0.1	NA	NA	NA	NA	NA
Naphthalene	T	µg/L	160	< 0.1	< 0.1	NA	NA	NA	NA	NA
Phenanthrene	T	µg/L	0.1	< 0.1	< 0.1	NA	NA	NA	NA	NA
Pyrene	T	µg/L	4000	< 0.1	< 0.1	NA	NA	NA	NA	NA
Dioxins²										
OCDD	T	pg/l	NV ³	NA	NA	NA	NA	NA	NA	NA
Conventionals										
Dissolved Organic Carbon	D	mg/L	NV	NA	NA	NA	NA	NA	NA	28.5
Total Dissolved Solids	D	mg/L	NV	NA	NA	NA	NA	NA	NA	15,500
Total Organic Carbon (TOC)	T	mg/L	NV	NA	NA	NA	18	22.3	22.3	NA
Total Suspended Solids	T	mg/L	NV	537 J	< 1	NA	52	124	124	21

Table 5 T-117 Groundwater Detections 2003 – Present

Chemical Name	Total/ Dissolved	Unit	Action Level	Location ID	MW-02	MW-02	MW-02	MW-02	MW-02	MW-02
				Sample ID	MW-2-0308	MW-02-0608	MW-02-0908	MW-102-0908	MW-02-1208	MW-02-0309
				Sample Date	3/11/2008	6/3/2008	9/10/2008	9/10/2008	12/9/2008	3/31/2009
				Sample Matrix	WG	WG	WG	WG	WG	WG
				Sample Type	N	N	N	FD	N	N
Metals										
Arsenic	D	mg/L	.00014		< 0.05	0.008	0.09	0.11	0.06	0.055
Arsenic	T	mg/L	.00014		< 0.05	0.07	0.1	0.1	0.06	0.047
Cadmium	D	mg/L	.42		< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Cadmium	T	mg/L	.42		< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Chromium	D	mg/L	1.1		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	T	mg/L	1.1		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005 J
Copper	D	mg/L	.48		0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Copper	T	mg/L	.48		0.004	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Lead	T	mg/L	.21		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Nickel	D	mg/L	4.6		< 0.01	< 0.01 J	< 0.01	< 0.01	< 0.01	< 0.01
Nickel	T	mg/L	4.6		< 0.01	< 0.01 J	< 0.01	< 0.01	< 0.01	< 0.01
Silver	D	mg/L	.0019		< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Silver	T	mg/L	.0019		< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Zinc	T	mg/L	26		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
TPH										
Diesel Range Hydrocarbons	T	mg/L	.5		0.7	0.74	0.79	0.67 J	0.84	0.69
Motor Oil Range Hydrocarbons	T	mg/L	.5		< 0.5	< 0.5	< 0.5	< 0.5 J	< 0.5	< 0.5
Total Petroleum Hydrocarbons (calc'd)	T	mg/L	.5		NA	NA	NA	NA	NA	NA
TPH - Diesel Range	T	mg/L	.5		NA	NA	NA	NA	NA	NA
TPH - Lube Oil Range	T	mg/L	.5		NA	NA	NA	NA	NA	NA
PCB										
Aroclor 1254	T	µg/L	.03		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aroclor 1260	T	µg/L	.03		< 0.01	0.012 AJ	< 0.01	< 0.01	< 0.01	< 0.01
PCBs (total calc'd)	T	µg/L	0.03		NA	NA	NA	NA	NA	NA
BTEX										
Total Xylenes (calc'd)	T	µg/L	1000		NA	NA	NA	NA	NA	NA
Xylene (meta & para)	T	µg/L	1000		< 1	< 0.4	< 1	< 1	< 1	< 0.4
SVOC										
bis(2-Ethylhexyl)phthalate	T	µg/L	2.2		< 1	< 1	2.1 J	< 1 J	< 1	< 1
Phenol	T	µg/L	1700000		< 1	12	20 J	9.6 J	12	11
VOC										
1,1,1-Trichloroethane	T	µg/L	200		< 0.2 J	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Acetone	T	µg/L	NV		< 3	4.3	< 3	4 J	4.6	< 3.6
Chlorobenzene	T	µg/L	1600		0.4	0.5	0.5	0.6 J	0.4	0.3
cis-1,2-Dichloroethene	T	µg/L	5		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	T	µg/L	1000		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachloroethene	T	µg/L	3.3		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Trichloroethene	T	µg/L	30		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Xylene (meta & para)	T	µg/L	1000		< 0.4	< 1	< 0.4	< 0.4	< 0.4	< 1
PAH										
1-Methylnaphthalene	T	µg/L	160		< 1	< 1	< 1	< 1	< 1	< 1
Acenaphthene	T	µg/L	990		NA	NA	NA	NA	< 1	< 1
Benzo(a)anthracene	T	µg/L	0.018		< 1	< 1	< 1	< 1	< 1	< 1
Benzo(b)fluoranthene	T	µg/L	0.018		< 1	< 1	< 1	< 1	< 1	< 1
Benzo(k)fluoranthene	T	µg/L	0.018		< 1	< 1	< 1	< 1	< 1	< 1
Benzo(a)pyrene	T	µg/L	0.018		< 1	< 1	< 1	< 1	< 1	< 1
Chrysene	T	µg/L	0.018		< 1	< 1	< 1	< 1	< 1	< 1
Fluorene	T	µg/L	5300		< 1	< 1	< 1	< 1	< 1	< 1
Total HPAH (calc'd)	T	µg/L	NV		NA	NA	NA	NA	NA	NA
Total LPAH (calc'd)	T	µg/L	NV		NA	NA	NA	NA	NA	NA
Total PAH (calc'd)	T	µg/L	NV		NA	NA	NA	NA	NA	NA
PAH by SW8270D SIM										
1-Methylnaphthalene	T	µg/L	160		0.19	0.14	0.1	0.1	0.2	0.3
Acenaphthene	T	µg/L	990		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.18
Anthracene	T	µg/L	40000		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	T	µg/L	0.018		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	T	µg/L	0.018		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	T	µg/L	0.018		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene	T	µg/L	0.018		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	T	µg/L	0.018		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	T	µg/L	140		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	T	µg/L	5300		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Naphthalene	T	µg/L	160		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	T	µg/L	0.1		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pyrene	T	µg/L	4000		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dioxins²										
OCDD	T	pg/l	NV ³		NA	NA	NA	NA	NA	NA
Conventionals										
Dissolved Organic Carbon	D	mg/L	NV		NA	NA	NA	NA	NA	NA
Total Dissolved Solids	D	mg/L	NV		NA	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)	T	mg/L	NV		NA	NA	NA	NA	NA	NA
Total Suspended Solids	T	mg/L	NV		9	150	122	113	95.6	28

Table 5 T-117 Groundwater Detections 2003 – Present

Chemical Name	Total/ Dissolved	Unit	Action Level	Location ID	MW-03	MW-03	MW-03	MW-03	MW-03	MW-03
				Sample ID	SP-MW3	MW-3-0308	MW-03-0608	MW-103-0608	MW-03-0908	MW-03-1208
				Sample Date	5/8/2003	3/11/2008	6/4/2008	6/4/2008	9/10/2008	12/9/2008
				Sample Matrix	WG	WG	WG	WG	WG	WG
				Sample Type	N	N	N	FD	N	N
Metals										
Arsenic	D	mg/L	.00014	NA	< 0.05	0.024	0.022	< 0.05	< 0.05	< 0.05
Arsenic	T	mg/L	.00014	NA	< 0.05	0.023	0.021	< 0.05	< 0.05	NA
Cadmium	D	mg/L	.42	NA	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Cadmium	T	mg/L	.42	NA	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	NA
Chromium	D	mg/L	1.1	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	T	mg/L	1.1	NA	0.006	< 0.005	< 0.005	0.012	< 0.005	NA
Copper	D	mg/L	.48	NA	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Copper	T	mg/L	.48	NA	0.01	< 0.002	< 0.002	0.024	< 0.002	NA
Lead	T	mg/L	.21	NA	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	NA
Nickel	D	mg/L	4.6	NA	< 0.01	< 0.01 J	< 0.01 J	< 0.01	< 0.01	< 0.01
Nickel	T	mg/L	4.6	NA	< 0.01	< 0.01	< 0.01 J	< 0.01	< 0.01	NA
Silver	D	mg/L	.0019	NA	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Silver	T	mg/L	.0019	NA	< 0.003	< 0.003 J	< 0.003	< 0.003	< 0.003	NA
Zinc	T	mg/L	26	NA	0.01	< 0.01	< 0.01	0.02	< 0.01	NA
TPH										
Diesel Range Hydrocarbons	T	mg/L	.5	NA	4.2	3	3.2	4	< 0.01	NA
Motor Oil Range Hydrocarbons	T	mg/L	.5	NA	3.3	0.85	1.2	3.8	< 0.01	NA
Total Petroleum Hydrocarbons (calc'd)	T	mg/L	.5	2.1	NA	NA	NA	NA	< 0.01	NA
TPH - Diesel Range	T	mg/L	.5	0.7	NA	NA	NA	NA	< 0.01	NA
TPH - Lube Oil Range	T	mg/L	.5	1.4	NA	NA	NA	NA	< 0.01	NA
PCB										
Aroclor 1254	T	µg/L	.03	< 0.053	< 0.011	< 0.01	< 0.01	< 0.01	< 0.01	NA
Aroclor 1260	T	µg/L	.03	< 0.053	2	< 0.01 J	0.016 AJ	0.52 AJ	< 0.01	NA
PCBs (total calc'd)	T	µg/L	0.03	< 0.053	NA	NA	NA	NA	< 0.01	NA
BTEX										
Total Xylenes (calc'd)	T	µg/L	1000	1.3	NA	NA	NA	NA	< 0.01	NA
Xylene (meta & para)	T	µg/L	1000	1.3	< 1	< 1	< 0.4	< 0.4	< 0.01	< 0.4
SVOC										
bis(2-Ethylhexyl)phthalate	T	µg/L	2.2	NA	2	< 1	< 1	< 1	< 1	NA
Phenol	T	µg/L	1700000	NA	< 1	< 1	< 1	< 1	< 1	NA
VOC										
1,1,1-Trichloroethane	T	µg/L	200	NA	< 0.2 J	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Acetone	T	µg/L	NV	NA	7.7	7	7.6	3.4	< 0.2	6.9
Chlorobenzene	T	µg/L	1600	NA	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
cis-1,2-Dichloroethene	T	µg/L	5	NA	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	T	µg/L	1000	NA	0.3	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachloroethene	T	µg/L	3.3	NA	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Trichloroethene	T	µg/L	30	NA	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Xylene (meta & para)	T	µg/L	1000	NA	0.7	< 0.4	< 1	< 1	< 0.2	< 1
PAH										
1-Methylnaphthalene	T	µg/L	160	0.15	< 1	< 1	< 1	< 1	< 1	NA
Acenaphthene	T	µg/L	990	0.39	NA	NA	NA	NA	< 1	NA
Benzo(a)anthracene	T	µg/L	0.018	0.016	< 1	< 1	< 1	< 1	< 1	NA
Benzo(b)fluoranthene	T	µg/L	0.018	0.013	< 1	< 1	< 1	< 1	< 1	NA
Benzofluoranthenes (total-calc'd)	T	µg/L	0.018	0.013	NA	NA	NA	NA	< 1	NA
Chrysene	T	µg/L	0.018	0.1	< 1	< 1	< 1	< 1	< 1	NA
Fluorene	T	µg/L	5300	NA	< 1	< 1	< 1	< 1	< 1	NA
Total HPAH (calc'd)	T	µg/L	NV	0.1	NA	NA	NA	NA	< 1	NA
Total LPAH (calc'd)	T	µg/L	NV	2	NA	NA	NA	NA	< 1	NA
Total PAH (calc'd)	T	µg/L	NV	2.1	NA	NA	NA	NA	< 1	NA
PAH by SW8270D SIM										
1-Methylnaphthalene	T	µg/L	160	NA	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA
Acenaphthene	T	µg/L	990	NA	< 0.1	< 0.1	0.14	< 0.1	< 0.1	NA
Anthracene	T	µg/L	40000	NA	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA
Benzo(a)anthracene	T	µg/L	0.018	NA	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA
Benzo(a)pyrene	T	µg/L	0.018	NA	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA
Benzo(b)fluoranthene	T	µg/L	0.018	NA	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA
Benzo(k)fluoranthene	T	µg/L	0.018	NA	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA
Chrysene	T	µg/L	0.018	NA	0.5	< 0.1	< 0.1	0.25	< 0.1	NA
Fluoranthene	T	µg/L	140	NA	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA
Fluorene	T	µg/L	5300	NA	< 0.1	< 0.1	< 0.1	0.13	< 0.1	NA
Naphthalene	T	µg/L	160	NA	0.19	0.47 J	0.1 J	< 0.1	< 0.1	NA
Phenanthrene	T	µg/L	0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA
Pyrene	T	µg/L	4000	NA	0.33	< 0.1	< 0.1	0.17	< 0.1	NA
Dioxins²										
OCDD	T	pg/l	NV ³	NA	NA	NA	NA	NA	NA	NA
Conventionals										
Dissolved Organic Carbon	D	mg/L	NV	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	D	mg/L	NV	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)	T	mg/L	NV	NA	NA	NA	NA	NA	NA	NA
Total Suspended Solids	T	mg/L	NV	NA	82.5	1,460 J	725 J	3,140	< 0.1	NA

Table 5 T-117 Groundwater Detections 2003 – Present

Chemical Name	Total/ Dissolved	Unit	Action Level	Location ID	MW-03	MW-04	MW-04	MW-04	MW-04	MW-04
				Sample ID	MW-03-121108	SP-MW4	T117-MW4	T117-MW-4	MW-4-0806	MW-4-0806
				Sample Date	12/11/2008	5/8/2003	1/14/2004	6/22/2005	8/11/2006	8/11/2006
				Sample Matrix	WG	WG	WG	WG	WG	WG
				Sample Type	N	N	N	N	N	FD
Metals										
Arsenic	D	mg/L	.00014		NA	NA	NA	NA	0.00066	0.00066
Arsenic	T	mg/L	.00014	<	0.05	NA	NA	NA	0.00065	0.00065
Cadmium	D	mg/L	.42		NA	NA	NA	NA	0.000518	0.00055
Cadmium	T	mg/L	.42	<	0.002	NA	NA	NA	0.000482	0.000453
Chromium	D	mg/L	1.1		NA	NA	NA	NA	0.00123	0.00107
Chromium	T	mg/L	1.1		0.013	NA	NA	NA	0.00128	0.00129
Copper	D	mg/L	.48		NA	NA	NA	NA	NA	NA
Copper	T	mg/L	.48		0.014	NA	NA	NA	NA	NA
Lead	T	mg/L	.21	<	0.02	NA	NA	NA	<	0.000036
Nickel	D	mg/L	4.6		NA	NA	NA	NA	NA	NA
Nickel	T	mg/L	4.6	<	0.01	NA	NA	NA	NA	NA
Silver	D	mg/L	.0019		NA	NA	NA	NA	NA	NA
Silver	T	mg/L	.0019	<	0.003	J	NA	NA	NA	NA
Zinc	T	mg/L	26		0.03	NA	NA	NA	NA	NA
TPH										
Diesel Range Hydrocarbons	T	mg/L	.5		11	NA	NA	NA	NA	NA
Motor Oil Range Hydrocarbons	T	mg/L	.5		11	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (calc'd)	T	mg/L	.5		NA	<	0.48	NA	<	0.5
TPH - Diesel Range	T	mg/L	.5		NA	<	0.3	NA	<	0.25
TPH - Lube Oil Range	T	mg/L	.5		NA	<	0.48	NA	NA	NA
PCB										
Aroclor 1254	T	µg/L	.03	<	0.59	Y	<	0.051	<	1
Aroclor 1260	T	µg/L	.03		1.2	AJ	<	0.051	<	1
PCBs (total calc'd)	T	µg/L	0.03		NA		<	0.051	<	1
BTEX										
Total Xylenes (calc'd)	T	µg/L	1000		NA	<	1	<	1	NA
Xylene (meta & para)	T	µg/L	1000		NA	<	1	<	1	NA
SVOC										
bis(2-Ethylhexyl)phthalate	T	µg/L	2.2	<	1	NA	NA	NA	<	1
Phenol	T	µg/L	1700000	<	1	NA	NA	NA	<	1
VOC										
1,1,1-Trichloroethane	T	µg/L	200		NA	NA	<	1	J	NA
Acetone	T	µg/L	NV		NA	NA	<	5	NA	NA
Chlorobenzene	T	µg/L	1600		NA	NA	<	1	NA	NA
cis-1,2-Dichloroethene	T	µg/L	5		NA	NA	<	1	NA	NA
o-Xylene	T	µg/L	1000		NA	NA	<	1	NA	NA
Tetrachloroethene	T	µg/L	3.3		NA	NA	<	1	NA	NA
Trichloroethene	T	µg/L	30		NA	NA	<	1	NA	NA
Xylene (meta & para)	T	µg/L	1000		NA	NA	<	1	NA	NA
PAH										
1-Methylnaphthalene	T	µg/L	160	<	1	<	0.11	NA	NA	NA
Acenaphthene	T	µg/L	990	<	1	<	0.11	<	1.1	NA
Benzo(a)anthracene	T	µg/L	0.018	<	1	<	0.011	<	1.1	NA
Benzo(b)fluoranthene	T	µg/L	0.018	<	1	<	0.011	<	1.1	NA
Benzo(k)fluoranthene	T	µg/L	0.018	<	1	<	0.011	<	1.1	NA
Benzo(a)pyrene	T	µg/L	0.018	<	1	<	0.011	<	1.1	NA
Chrysene	T	µg/L	0.018	<	1	<	0.011	<	1.1	NA
Fluorene	T	µg/L	5300	<	1	<	0.11	<	1.1	NA
Total HPAH (calc'd)	T	µg/L	NV		NA	<	0.11	<	1.1	NA
Total LPAH (calc'd)	T	µg/L	NV		NA	<	0.11	<	1.1	NA
Total PAH (calc'd)	T	µg/L	NV		NA	<	0.11	<	1.1	NA
PAH by SW8270D SIM										
1-Methylnaphthalene	T	µg/L	160	<	0.1	NA	NA	NA	NA	NA
Acenaphthene	T	µg/L	990	<	0.1	NA	NA	NA	NA	NA
Anthracene	T	µg/L	40000	<	0.1	NA	NA	NA	NA	NA
Benzo(a)anthracene	T	µg/L	0.018	<	0.1	NA	NA	NA	NA	NA
Benzo(a)pyrene	T	µg/L	0.018	<	0.1	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	T	µg/L	0.018	<	0.1	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	T	µg/L	0.018	<	0.1	NA	NA	NA	NA	NA
Chrysene	T	µg/L	0.018		0.12	NA	NA	NA	NA	NA
Fluoranthene	T	µg/L	140	<	0.1	NA	NA	NA	NA	NA
Fluorene	T	µg/L	5300		0.35	NA	NA	NA	NA	NA
Naphthalene	T	µg/L	160	<	0.1	NA	NA	NA	NA	NA
Phenanthrene	T	µg/L	0.1	<	0.1	NA	NA	NA	NA	NA
Pyrene	T	µg/L	4000		0.1	NA	NA	NA	NA	NA
Dioxins²										
OCDD	T	pg/l	NV ³		NA	NA	NA	NA	NA	NA
Conventionals										
Dissolved Organic Carbon	D	mg/L	NV		NA	NA	NA	NA	<	1.5
Total Dissolved Solids	D	mg/L	NV		NA	NA	NA	NA	500	J
Total Organic Carbon (TOC)	T	mg/L	NV		NA	NA	2	1.82	NA	NA
Total Suspended Solids	T	mg/L	NV		NA	NA	2.3	4.6	5.3	5.8

Table 5 T-117 Groundwater Detections 2003 – Present

Chemical Name	Total/ Dissolved	Unit	Action Level	Location ID	MW-04R	MW-04R	MW-04R	MW-04R	MW-04R	MW-05
				Sample ID	MW-4R-0308	MW-04R-0608	MW-04R-0908	MW-04R-1208	MW-04R-0309	T117-MW5-2004
				Sample Date	3/11/2008	6/4/2008	9/11/2008	12/9/2008	3/30/2009	1/14/2004
				Sample Matrix	WG	WG	WG	WG	WG	WG
				Sample Type	N	N	N	N	N	N
Metals										
Arsenic	D	mg/L	.00014		< 0.05	0.002	< 0.2	< 0.1	< 0.005	NA
Arsenic	T	mg/L	.00014		< 0.05	< 0.001	< 0.2	< 0.1	< 0.005	NA
Cadmium	D	mg/L	.42		< 0.002	< 0.002	< 0.01	< 0.004	< 0.004	NA
Cadmium	T	mg/L	.42		< 0.002	< 0.002	< 0.01	< 0.004	< 0.004	NA
Chromium	D	mg/L	1.1		< 0.005	< 0.005	< 0.02	< 0.01	< 0.01	NA
Chromium	T	mg/L	1.1		0.006	< 0.005	< 0.02	< 0.01	< 0.01	NA
Copper	D	mg/L	.48		0.003	< 0.002	< 0.01	0.005	< 0.004	NA
Copper	T	mg/L	.48		0.004	< 0.002	< 0.01	0.004	< 0.004	NA
Lead	T	mg/L	.21		< 0.02	< 0.02	< 0.1	< 0.04	< 0.04	NA
Nickel	D	mg/L	4.6		< 0.01	< 0.01	J < 0.05	< 0.02	< 0.02	NA
Nickel	T	mg/L	4.6		< 0.01	< 0.01	J < 0.05	< 0.02	< 0.02	NA
Silver	D	mg/L	.0019		0.004	< 0.003	0.02	0.007	< 0.006	NA
Silver	T	mg/L	.0019		0.003	< 0.003	0.03	< 0.006	< 0.006	NA
Zinc	T	mg/L	26		< 0.01	< 0.01	< 0.05	< 0.02	< 0.02	NA
TPH										
Diesel Range Hydrocarbons	T	mg/L	.5		< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	NA
Motor Oil Range Hydrocarbons	T	mg/L	.5		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA
Total Petroleum Hydrocarbons (calc'd)	T	mg/L	.5		NA	NA	NA	NA	NA	NA
TPH - Diesel Range	T	mg/L	.5		NA	NA	NA	NA	NA	NA
TPH - Lube Oil Range	T	mg/L	.5		NA	NA	NA	NA	NA	NA
PCB										
Aroclor 1254	T	µg/L	.03		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	J < 1
Aroclor 1260	T	µg/L	.03		< 0.01	< 0.01	J < 0.01	< 0.01	< 0.01	J < 1
PCBs (total calc'd)	T	µg/L	0.03		NA	NA	NA	NA	NA	< 1
BTEX										
Total Xylenes (calc'd)	T	µg/L	1000		NA	NA	NA	NA	NA	< 1
Xylene (meta & para)	T	µg/L	1000		< 0.4	< 0.4	< 0.4	< 0.4	< 1	< 1
SVOC										
bis(2-Ethylhexyl)phthalate	T	µg/L	2.2		< 1	< 1	16 J	< 1	1	NA
Phenol	T	µg/L	1700000		< 1	< 1	< 1	< 1	< 1	NA
VOC										
1,1,1-Trichloroethane	T	µg/L	200		< 0.2	J < 0.2	< 0.2	< 0.2	< 0.2	< 1
Acetone	T	µg/L	NV		< 3	< 3	< 3	< 3	< 2.5	< 5
Chlorobenzene	T	µg/L	1600		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1
cis-1,2-Dichloroethene	T	µg/L	5		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1
o-Xylene	T	µg/L	1000		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	NA
Tetrachloroethene	T	µg/L	3.3		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1
Trichloroethene	T	µg/L	30		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 1
Xylene (meta & para)	T	µg/L	1000		< 1	< 1	< 1	< 1	< 0.4	NA
PAH										
1-Methylnaphthalene	T	µg/L	160		< 1	< 1	< 1	< 1	< 1	NA
Acenaphthene	T	µg/L	990		NA	NA	NA	< 1	< 1	< 1
Benzo(a)anthracene	T	µg/L	0.018		< 1	< 1	< 1	< 1	< 1	< 1
Benzo(b)fluoranthene	T	µg/L	0.018		< 1	< 1	< 1	< 1	< 1	< 1
Benzo(k)fluoranthene	T	µg/L	0.018		< 1	< 1	< 1	< 1	< 1	< 1
Benzo(a)pyrene	T	µg/L	0.018		< 1	< 1	< 1	< 1	< 1	< 1
Chrysene	T	µg/L	0.018		< 1	< 1	< 1	< 1	< 1	< 1
Fluorene	T	µg/L	5300		< 1	< 1	< 1	< 1	< 1	< 1
Total HPAH (calc'd)	T	µg/L	NV		NA	NA	NA	NA	NA	< 1
Total LPAH (calc'd)	T	µg/L	NV		NA	NA	NA	NA	NA	< 1
Total PAH (calc'd)	T	µg/L	NV		NA	NA	NA	NA	NA	< 1
PAH by SW8270D SIM										
1-Methylnaphthalene	T	µg/L	160		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA
Acenaphthene	T	µg/L	990		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA
Anthracene	T	µg/L	40000		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	T	µg/L	0.018		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA
Benzo(a)pyrene	T	µg/L	0.018		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA
Benzo(b)fluoranthene	T	µg/L	0.018		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA
Benzo(k)fluoranthene	T	µg/L	0.018		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA
Chrysene	T	µg/L	0.018		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA
Fluoranthene	T	µg/L	140		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA
Fluorene	T	µg/L	5300		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA
Naphthalene	T	µg/L	160		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA
Phenanthrene	T	µg/L	0.1		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA
Pyrene	T	µg/L	4000		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	NA
Dioxins²										
OCDD	T	pg/l	NV ³		NA	NA	NA	NA	NA	NA
Conventionals										
Dissolved Organic Carbon	D	mg/L	NV		NA	NA	NA	NA	NA	NA
Total Dissolved Solids	D	mg/L	NV		NA	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)	T	mg/L	NV		NA	NA	NA	NA	NA	2.3
Total Suspended Solids	T	mg/L	NV		2.1	< 1.1	2.9	1.8	1.3	5.1

Table 5 T-117 Groundwater Detections 2003 – Present

Chemical Name	Total/ Dissolved	Unit	Action Level	Location ID	MW-05	MW-05	MW-05R	MW-05R	MW-05R
				Sample ID	T117-MW-5	T117-MW5-2006	MW-5-0308	MW-05R-0608	MW-05R-0908
				Sample Date	6/20/2005	1/26/2006	3/11/2008	6/3/2008	9/10/2008
				Sample Matrix	WG	WG	WG	WG	WG
				Sample Type	N	N	N	N	N
Metals									
Arsenic	D	mg/L	.00014		NA	NA	< 0.05	0.004	< 0.05
Arsenic	T	mg/L	.00014		NA	NA	< 0.05	0.005	< 0.05
Cadmium	D	mg/L	.42		NA	NA	< 0.002	< 0.002	< 0.002
Cadmium	T	mg/L	.42		NA	NA	< 0.002	< 0.002	< 0.002
Chromium	D	mg/L	1.1		NA	NA	< 0.005	< 0.005	< 0.005
Chromium	T	mg/L	1.1		NA	NA	< 0.005	< 0.005	< 0.005
Copper	D	mg/L	.48		NA	NA	< 0.002	< 0.002	0.004
Copper	T	mg/L	.48		NA	NA	< 0.002	< 0.002	0.004
Lead	T	mg/L	.21		NA	NA	< 0.02	< 0.02	< 0.02
Nickel	D	mg/L	4.6		NA	NA	< 0.01	< 0.01 J	< 0.01
Nickel	T	mg/L	4.6		NA	NA	< 0.01	< 0.01 J	< 0.01
Silver	D	mg/L	.0019		NA	NA	< 0.003	< 0.003	0.004
Silver	T	mg/L	.0019		NA	NA	< 0.003	< 0.003	0.005
Zinc	T	mg/L	26		NA	NA	< 0.01	< 0.01	< 0.01
TPH									
Diesel Range Hydrocarbons	T	mg/L	.5		NA	NA	< 0.25	< 0.25	< 0.25
Motor Oil Range Hydrocarbons	T	mg/L	.5		NA	NA	< 0.5	< 0.5	< 0.5
Total Petroleum Hydrocarbons (calc'd)	T	mg/L	.5		NA	NA	NA	NA	NA
TPH - Diesel Range	T	mg/L	.5		NA	NA	NA	NA	NA
TPH - Lube Oil Range	T	mg/L	.5		NA	NA	NA	NA	NA
PCB									
Aroclor 1254	T	µg/L	.03		< 0.04	< 0.04	< 0.01	0.017 J	< 0.01
Aroclor 1260	T	µg/L	.03		0.04 J	0.32	0.057	0.039 J	0.014 AJ
PCBs (total calc'd)	T	µg/L	0.03		0.04 J	0.32	NA	NA	NA
BTEX									
Total Xylenes (calc'd)	T	µg/L	1000		NA	NA	NA	NA	NA
Xylene (meta & para)	T	µg/L	1000		NA	NA	< 1	< 1	< 0.4
SVOC									
bis(2-Ethylhexyl)phthalate	T	µg/L	2.2		NA	NA	< 1	< 1	4.8 J
Phenol	T	µg/L	1700000		NA	NA	< 1	< 1	< 1
VOC									
1,1,1-Trichloroethane	T	µg/L	200		NA	NA	< 0.2 J	< 0.2	< 0.2
Acetone	T	µg/L	NV		NA	NA	3.5	< 3	< 3
Chlorobenzene	T	µg/L	1600		NA	NA	< 0.2	< 0.2	< 0.2
cis-1,2-Dichloroethene	T	µg/L	5		NA	NA	< 0.2	< 0.2	< 0.2
o-Xylene	T	µg/L	1000		NA	NA	< 0.2	< 0.2	< 0.2
Tetrachloroethene	T	µg/L	3.3		NA	NA	< 0.2	< 0.2	< 0.2
Trichloroethene	T	µg/L	30		NA	NA	< 0.2	< 0.2	< 0.2
Xylene (meta & para)	T	µg/L	1000		NA	NA	< 0.4	< 0.4	< 1
PAH									
1-Methylnaphthalene	T	µg/L	160		NA	NA	< 1	< 1	< 1
Acenaphthene	T	µg/L	990		NA	NA	NA	NA	NA
Benzo(a)anthracene	T	µg/L	0.018		NA	NA	< 1	< 1	< 1
Benzo(b)fluoranthene	T	µg/L	0.018		NA	NA	< 1	< 1	< 1
Benzofluoranthenes (total-calc'd)	T	µg/L	0.018		NA	NA	NA	NA	NA
Chrysene	T	µg/L	0.018		NA	NA	< 1	< 1	< 1
Fluorene	T	µg/L	5300		NA	NA	< 1	< 1	< 1
Total HPAH (calc'd)	T	µg/L	NV		NA	NA	NA	NA	NA
Total LPAH (calc'd)	T	µg/L	NV		NA	NA	NA	NA	NA
Total PAH (calc'd)	T	µg/L	NV		NA	NA	NA	NA	NA
PAH by SW8270D SIM									
1-Methylnaphthalene	T	µg/L	160		NA	NA	< 0.1	< 0.1	< 0.1
Acenaphthene	T	µg/L	990		NA	NA	0.31	< 0.1	< 0.1
Anthracene	T	µg/L	40000		NA	NA	< 0.1	0.13	< 0.1
Benzo(a)anthracene	T	µg/L	0.018		NA	NA	< 0.1	0.19	< 0.1
Benzo(a)pyrene	T	µg/L	0.018		NA	NA	< 0.1	0.14	< 0.1
Benzo(b)fluoranthene	T	µg/L	0.018		NA	NA	< 0.1	0.13	< 0.1
Benzo(k)fluoranthene	T	µg/L	0.018		NA	NA	< 0.1	0.13	< 0.1
Chrysene	T	µg/L	0.018		NA	NA	< 0.1	0.19	< 0.1
Fluoranthene	T	µg/L	140		NA	NA	< 0.1	0.44	< 0.1
Fluorene	T	µg/L	5300		NA	NA	0.1	< 0.1	< 0.1
Naphthalene	T	µg/L	160		NA	NA	< 0.1	< 0.1	< 0.1
Phenanthrene	T	µg/L	0.1		NA	NA	< 0.1	0.5	< 0.1
Pyrene	T	µg/L	4000		NA	NA	< 0.1	0.44	< 0.1
Dioxins²									
OCDD	T	pg/l	NV ³		NA	NA	NA	NA	NA
Conventionals									
Dissolved Organic Carbon	D	mg/L	NV		NA	NA	NA	NA	NA
Total Dissolved Solids	D	mg/L	NV		NA	NA	NA	NA	NA
Total Organic Carbon (TOC)	T	mg/L	NV		1.55	NA	NA	NA	NA
Total Suspended Solids	T	mg/L	NV		11.6	NA	72.6	7.1	3.3

Table 5 T-117 Groundwater Detections 2003 – Present

Chemical Name	Total/ Dissolved	Unit	Action Level	Location ID	MW-05R	MW-05R	MW-06	MW-06	MW-06	MW-06		
				Sample ID	MW-05R-1208	MW-05R-0309	T117-MW6	T117-MW6-DUP	T117-MW-6	MW-06-0308		
				Sample Date	12/9/2008	3/31/2009	1/14/2004	1/14/2004	6/20/2005	3/13/2008		
				Sample Matrix	WG	WG	WG	WG	WG	WG		
				Sample Type	N	N	N	FD	N	N		
Metals												
Arsenic	D	mg/L	.00014	<	0.05	0.002	NA	NA	NA	<	0.05	
Arsenic	T	mg/L	.00014	<	0.05	0.002	NA	NA	NA	<	0.05	
Cadmium	D	mg/L	.42	<	0.002	<	0.002	NA	NA	<	0.002	
Cadmium	T	mg/L	.42	<	0.002	<	0.002	NA	NA	<	0.002	
Chromium	D	mg/L	1.1	<	0.005	<	0.005	NA	NA	<	0.005	
Chromium	T	mg/L	1.1	<	0.005	<	0.005	NA	NA	<	0.005	
Copper	D	mg/L	.48	<	0.002	<	0.002	NA	NA	<	0.006	
Copper	T	mg/L	.48	<	0.002	<	0.002	NA	NA	<	0.007	
Lead	T	mg/L	.21	<	0.02	<	0.02	NA	NA	<	0.02	
Nickel	D	mg/L	4.6	<	0.01	<	0.01	NA	NA	<	0.01	
Nickel	T	mg/L	4.6	<	0.01	<	0.01	NA	NA	<	0.01	
Silver	D	mg/L	.0019	<	0.003	<	0.003	NA	NA	<	0.003	
Silver	T	mg/L	.0019	<	0.003	<	0.003	NA	NA	<	0.003	
Zinc	T	mg/L	26	<	0.01	<	0.01	NA	NA	<	0.01	
TPH												
Diesel Range Hydrocarbons	T	mg/L	.5	<	0.25	<	0.25	NA	NA	<	0.25	
Motor Oil Range Hydrocarbons	T	mg/L	.5	<	0.5	<	0.5	NA	NA	<	0.5	
Total Petroleum Hydrocarbons (calc'd)	T	mg/L	.5	NA	NA	NA	NA	NA	NA	NA	NA	
TPH - Diesel Range	T	mg/L	.5	NA	NA	NA	NA	NA	NA	NA	NA	
TPH - Lube Oil Range	T	mg/L	.5	NA	NA	NA	NA	NA	NA	NA	NA	
PCB												
Aroclor 1254	T	µg/L	.03	<	0.01	<	0.01	<	1	<	0.06	
Aroclor 1260	T	µg/L	.03	<	0.01	<	0.01	<	1	<	0.06	
PCBs (total calc'd)	T	µg/L	0.03	NA	NA	<	1	<	1	<	0.18	
BTEX												
Total Xylenes (calc'd)	T	µg/L	1000	NA	NA	<	1	<	1	NA	NA	
Xylene (meta & para)	T	µg/L	1000	<	1	<	0.4	<	1	NA	<	1
SVOC												
bis(2-Ethylhexyl)phthalate	T	µg/L	2.2	<	1	<	1	NA	NA	NA	1.5	
Phenol	T	µg/L	1700000	<	1	<	1	NA	NA	NA	<	1
VOC												
1,1,1-Trichloroethane	T	µg/L	200	<	0.2	<	0.2	<	1	<	0.2	
Acetone	T	µg/L	NV	<	3.5	<	2.5	<	5	<	1	
Chlorobenzene	T	µg/L	1600	<	0.2	<	0.2	<	1	<	0.2	
cis-1,2-Dichloroethene	T	µg/L	5	<	0.2	<	0.2	<	1	<	0.2	
o-Xylene	T	µg/L	1000	<	0.2	<	0.2	NA	NA	<	0.2	
Tetrachloroethene	T	µg/L	3.3	<	0.2	<	0.2	<	1	<	0.2	
Trichloroethene	T	µg/L	30	<	0.2	<	0.2	<	1	<	0.2	
Xylene (meta & para)	T	µg/L	1000	<	0.4	<	1	NA	NA	<	0.4	
PAH												
1-Methylnaphthalene	T	µg/L	160	<	1	<	1	NA	NA	NA	<	1
Acenaphthene	T	µg/L	990	<	1	<	1	<	1	NA	NA	
Benzo(a)anthracene	T	µg/L	0.018	<	1	<	1	<	1	NA	<	1
Benzo(b)fluoranthene	T	µg/L	0.018	<	1	<	1	<	1	NA	<	1
Benzo(k)fluoranthene (total calc'd)	T	µg/L	0.018	NA	NA	<	1	NA	NA	NA	NA	
Chrysene	T	µg/L	0.018	<	1	<	1	<	1	NA	<	1
Fluorene	T	µg/L	5300	<	1	<	1	<	1	NA	<	1
Total HPAH (calc'd)	T	µg/L	NV	NA	NA	<	1	<	1	NA	NA	
Total LPAH (calc'd)	T	µg/L	NV	NA	NA	<	1	<	1	NA	NA	
Total PAH (calc'd)	T	µg/L	NV	NA	NA	<	1	<	1	NA	NA	
PAH by SW8270D SIM												
1-Methylnaphthalene	T	µg/L	160	<	0.1	<	0.1	NA	NA	NA	<	0.1
Acenaphthene	T	µg/L	990	NA	<	0.1	<	0.1	NA	NA	<	0.1
Anthracene	T	µg/L	40000	<	0.1	<	0.1	NA	NA	NA	<	0.1
Benzo(a)anthracene	T	µg/L	0.018	<	0.1	<	0.1	NA	NA	NA	<	0.1
Benzo(a)pyrene	T	µg/L	0.018	<	0.1	<	0.1	NA	NA	NA	<	0.1
Benzo(b)fluoranthene	T	µg/L	0.018	<	0.1	<	0.1	NA	NA	NA	<	0.1
Benzo(k)fluoranthene	T	µg/L	0.018	<	0.1	<	0.1	NA	NA	NA	<	0.1
Chrysene	T	µg/L	0.018	<	0.1	<	0.1	NA	NA	NA	<	0.1
Fluoranthene	T	µg/L	140	<	0.1	<	0.1	NA	NA	NA	<	0.1
Fluorene	T	µg/L	5300	<	0.1	<	0.1	NA	NA	NA	<	0.1
Naphthalene	T	µg/L	160	<	0.1	<	0.1	NA	NA	NA	<	0.1
Phenanthrene	T	µg/L	0.1	<	0.1	<	0.1	NA	NA	NA	<	0.1
Pyrene	T	µg/L	4000	<	0.1	<	0.1	NA	NA	NA	<	0.1
Dioxins²												
OCDD	T	pg/l	NV ³	<	6.85	NA	NA	NA	NA	NA	NA	
Conventionals												
Dissolved Organic Carbon	D	mg/L	NV	NA	NA	NA	NA	NA	NA	NA	NA	
Total Dissolved Solids	D	mg/L	NV	NA	NA	NA	NA	NA	NA	NA	NA	
Total Organic Carbon (TOC)	T	mg/L	NV	NA	NA	5.1	4.3	6.88	NA	NA	NA	
Total Suspended Solids	T	mg/L	NV	3.3	<	1	20	20	1.4	7.7	7.7	

Table 5 T-117 Groundwater Detections 2003 – Present

Chemical Name	Total/ Dissolved	Unit	Action Level	Location ID	MW-06	MW-06	MW-06	MW-07	MW-07
				Sample ID	MW-06-0608	MW-06-0908	MW-06-040809	T117-MW-7	MW-7-0806
				Sample Date	6/5/2008	9/11/2008	4/8/2009 ¹	6/20/2005	8/11/2006
				Sample Matrix	WG	WG	WG	WG	WG
				Sample Type	N	N	N	N	N
Metals									
Arsenic	D	mg/L	.00014	< 0.001	J+	< 0.05	0.002	NA	0.00072
Arsenic	T	mg/L	.00014	< 0.001	J+	< 0.05	0.002	NA	< 0.00068
Cadmium	D	mg/L	.42	< 0.002		< 0.002	< 0.002	NA	< 0.000019
Cadmium	T	mg/L	.42	< 0.002		< 0.002	< 0.002	NA	0.000086
Chromium	D	mg/L	1.1	< 0.005		< 0.005	< 0.005	J	< 0.00026
Chromium	T	mg/L	1.1	< 0.005		< 0.005	< 0.005	J	< 0.00034
Copper	D	mg/L	.48	0.005		0.005	0.009	NA	NA
Copper	T	mg/L	.48	0.008		0.01	0.01	NA	NA
Lead	T	mg/L	.21	< 0.02		< 0.02	< 0.02	NA	0.000043 J
Nickel	D	mg/L	4.6	< 0.01	J	< 0.01	< 0.01	J	NA
Nickel	T	mg/L	4.6	< 0.01	J	< 0.01	< 0.01	J	NA
Silver	D	mg/L	.0019	< 0.003		0.003	< 0.003	NA	NA
Silver	T	mg/L	.0019	< 0.003		0.005	< 0.003	NA	NA
Zinc	T	mg/L	26	< 0.01		< 0.01	< 0.01	NA	NA
TPH									
Diesel Range Hydrocarbons	T	mg/L	.5	< 0.25		< 0.25	< 0.25	NA	NA
Motor Oil Range Hydrocarbons	T	mg/L	.5	< 0.5		< 0.5	< 0.5	NA	NA
Total Petroleum Hydrocarbons (calc'd)	T	mg/L	.5	NA		NA	NA	NA	< 0.5
TPH - Diesel Range	T	mg/L	.5	NA		NA	NA	NA	< 0.25
TPH - Lube Oil Range	T	mg/L	.5	NA		NA	NA	NA	NA
PCB									
Aroclor 1254	T	µg/L	.03	< 0.01		< 0.01	< 0.025	Y	< 0.01
Aroclor 1260	T	µg/L	.03	0.76	AJ	0.026	0.068	< 0.06	< 0.01 J
PCBs (total calc'd)	T	µg/L	0.03	NA		NA	NA	< 0.08	< 0.01 J
BTEX									
Total Xylenes (calc'd)	T	µg/L	1000	NA		NA	NA	NA	NA
Xylene (meta & para)	T	µg/L	1000	< 0.4		< 1	< 1	NA	NA
SVOC									
bis(2-Ethylhexyl)phthalate	T	µg/L	2.2	3.7		1.5	J	< 1	< 1
Phenol	T	µg/L	1700000	< 1		< 1	< 1	NA	< 1
VOC									
1,1,1-Trichloroethane	T	µg/L	200	< 0.2		< 0.2	< 0.2	NA	NA
Acetone	T	µg/L	NV	< 3		< 3	< 2.5	NA	NA
Chlorobenzene	T	µg/L	1600	< 0.2		< 0.2	< 0.2	NA	NA
cis-1,2-Dichloroethene	T	µg/L	5	< 0.2		< 0.2	< 0.2	NA	NA
o-Xylene	T	µg/L	1000	< 0.2		< 0.2	< 0.2	NA	NA
Tetrachloroethene	T	µg/L	3.3	< 0.2		< 0.2	< 0.2	NA	NA
Trichloroethene	T	µg/L	30	< 0.2		< 0.2	< 0.2	NA	NA
Xylene (meta & para)	T	µg/L	1000	< 1		< 0.4	< 0.4	NA	NA
PAH									
1-Methylnaphthalene	T	µg/L	160	< 1		< 1	< 1	NA	NA
Acenaphthene	T	µg/L	990	NA		NA	NA	NA	< 1
Benzo(a)anthracene	T	µg/L	0.018	< 1		< 1	< 1	NA	< 1
Benzo(b)fluoranthene	T	µg/L	0.018	< 1		< 1	< 1	NA	< 1
Benzo(k)fluoranthene	T	µg/L	0.018	< 1		< 1	< 1	NA	< 1
Benzo(a)pyrene	T	µg/L	0.018	< 1		< 1	< 1	NA	< 1
Chrysene	T	µg/L	0.018	< 1		< 1	< 1	NA	< 1
Fluorene	T	µg/L	5300	< 1		< 1	< 1	NA	< 1
Total HPAH (calc'd)	T	µg/L	NV	NA		NA	NA	NA	< 1
Total LPAH (calc'd)	T	µg/L	NV	NA		NA	NA	NA	< 1
Total PAH (calc'd)	T	µg/L	NV	NA		NA	NA	NA	< 1
PAH by SW8270D SIM									
1-Methylnaphthalene	T	µg/L	160	< 0.1		< 0.1	< 0.1	NA	NA
Acenaphthene	T	µg/L	990	< 0.1		< 0.1	< 0.1	NA	NA
Anthracene	T	µg/L	40000	< 0.1		< 0.1	< 0.1	NA	NA
Benzo(a)anthracene	T	µg/L	0.018	< 0.1		< 0.1	< 0.1	NA	NA
Benzo(a)pyrene	T	µg/L	0.018	< 0.1		< 0.1	< 0.1	NA	NA
Benzo(b)fluoranthene	T	µg/L	0.018	< 0.1		< 0.1	< 0.1	NA	NA
Benzo(k)fluoranthene	T	µg/L	0.018	< 0.1		< 0.1	< 0.1	NA	NA
Chrysene	T	µg/L	0.018	< 0.1		< 0.1	< 0.1	NA	NA
Fluoranthene	T	µg/L	140	< 0.1		< 0.1	< 0.1	NA	NA
Fluorene	T	µg/L	5300	< 0.1		< 0.1	< 0.1	NA	NA
Naphthalene	T	µg/L	160	< 0.1		< 0.1	< 0.1	NA	NA
Phenanthrene	T	µg/L	0.1	< 0.1		< 0.1	< 0.1	NA	NA
Pyrene	T	µg/L	4000	< 0.1		< 0.1	< 0.1	NA	NA
Dioxins²									
OCDD	T	pg/l	NV ³	NA		NA	NA	NA	NA
Conventionals									
Dissolved Organic Carbon	D	mg/L	NV	NA		NA	NA	NA	3.19
Total Dissolved Solids	D	mg/L	NV	NA		NA	NA	NA	216
Total Organic Carbon (TOC)	T	mg/L	NV	NA		NA	NA	3.28	NA
Total Suspended Solids	T	mg/L	NV	4.1		9.5	NA	< 2.2	< 1

Table 5 T-117 Groundwater Detections 2003 – Present

Chemical Name	Total/ Dissolved	Unit	Action Level	Location ID	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07
				Sample ID	MW-7-0308	MW-7-041808	MW-7-0608	MW-7-0908	MW-7-1208	MW-7-0309
				Sample Date	3/12/2008	4/18/2008	6/4/2008	9/10/2008	12/11/2008	3/30/2009
				Sample Matrix	WG	WG	WG	WG	WG	WG
				Sample Type	N	N	N	N	N	N
Metals										
Arsenic	D	mg/L	.00014	< 0.05	NA	< 0.001	< 0.05	< 0.05	< 0.05	< 0.001
Arsenic	T	mg/L	.00014	< 0.05	NA	< 0.001	< 0.05	< 0.05	< 0.05	< 0.001
Cadmium	D	mg/L	.42	< 0.002	NA	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Cadmium	T	mg/L	.42	< 0.002	NA	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Chromium	D	mg/L	1.1	< 0.005	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005 J
Chromium	T	mg/L	1.1	< 0.005	NA	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Copper	D	mg/L	.48	< 0.002	NA	< 0.002	0.002	< 0.002	< 0.002	< 0.002
Copper	T	mg/L	.48	< 0.002	NA	< 0.002	0.002	< 0.002	< 0.002	< 0.002
Lead	T	mg/L	.21	< 0.02	NA	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Nickel	D	mg/L	4.6	< 0.01	NA	< 0.01 J	< 0.01	< 0.01	< 0.01	< 0.01
Nickel	T	mg/L	4.6	< 0.01	NA	< 0.01 J	< 0.01	< 0.01	< 0.01	< 0.01 J
Silver	D	mg/L	.0019	< 0.003	NA	< 0.003	< 0.003	< 0.003	< 0.003 J	< 0.003
Silver	T	mg/L	.0019	< 0.003	NA	< 0.003	< 0.003	< 0.003	< 0.003 J	< 0.003
Zinc	T	mg/L	26	< 0.01	NA	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
TPH										
Diesel Range Hydrocarbons	T	mg/L	.5	< 0.25	NA	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Motor Oil Range Hydrocarbons	T	mg/L	.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Total Petroleum Hydrocarbons (calc'd)	T	mg/L	.5	NA	NA	NA	NA	NA	NA	NA
TPH - Diesel Range	T	mg/L	.5	NA	NA	NA	NA	NA	NA	NA
TPH - Lube Oil Range	T	mg/L	.5	NA	NA	NA	NA	NA	NA	NA
PCB										
Aroclor 1254	T	µg/L	.03	< 0.01	< 0.010	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aroclor 1260	T	µg/L	.03	0.036	< 0.010	< 0.01 J	< 0.01	< 0.01	< 0.01	< 0.01
PCBs (total calc'd)	T	µg/L	0.03	NA	NA	NA	NA	NA	NA	NA
BTEX										
Total Xylenes (calc'd)	T	µg/L	1000	NA	NA	NA	NA	NA	NA	NA
Xylene (meta & para)	T	µg/L	1000	< 1	NA	< 0.4	< 0.4	< 1	< 1	< 0.4
SVOC										
bis(2-Ethylhexyl)phthalate	T	µg/L	2.2	< 1	NA	< 1	< 1	< 1	< 1	< 1
Phenol	T	µg/L	1700000	< 1	NA	< 1	< 1	< 1	< 1	< 1
VOC										
1,1,1-Trichloroethane	T	µg/L	200	< 0.2 J	NA	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Acetone	T	µg/L	NV	3.8	NA	4.4	< 3	< 3	< 3	< 2.5
Chlorobenzene	T	µg/L	1600	< 0.2	NA	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
cis-1,2-Dichloroethene	T	µg/L	5	< 0.2	NA	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	T	µg/L	1000	< 0.2	NA	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachloroethene	T	µg/L	3.3	< 0.2	NA	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Trichloroethene	T	µg/L	30	< 0.2	NA	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Xylene (meta & para)	T	µg/L	1000	< 0.4	NA	< 1	< 1	< 0.4	< 0.4	< 1
PAH										
1-Methylnaphthalene	T	µg/L	160	< 1	NA	< 1	< 1	< 1	< 1	< 1
Acenaphthene	T	µg/L	990	NA	NA	NA	N	< 1	< 1	< 1
Benzo(a)anthracene	T	µg/L	0.018	< 1	NA	< 1	< 1	< 1	< 1	< 1
Benzo(b)fluoranthene	T	µg/L	0.018	< 1	NA	< 1	< 1	< 1	< 1	< 1
Benzo(k)fluoranthene	T	µg/L	0.018	< 1	NA	< 1	< 1	< 1	< 1	< 1
Benzo(a)pyrene	T	µg/L	0.018	< 1	NA	< 1	< 1	< 1	< 1	< 1
Chrysene	T	µg/L	0.018	< 1	NA	< 1	< 1	< 1	< 1	< 1
Fluorene	T	µg/L	5300	< 1	NA	< 1	< 1	< 1	< 1	< 1
Total HPAH (calc'd)	T	µg/L	NV	NA	NA	NA	NA	NA	NA	NA
Total LPAH (calc'd)	T	µg/L	NV	NA	NA	NA	NA	NA	NA	NA
Total PAH (calc'd)	T	µg/L	NV	NA	NA	NA	NA	NA	NA	NA
PAH by SW8270D SIM										
1-Methylnaphthalene	T	µg/L	160	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	T	µg/L	990	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Anthracene	T	µg/L	40000	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	T	µg/L	0.018	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	T	µg/L	0.018	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	T	µg/L	0.018	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene	T	µg/L	0.018	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	T	µg/L	0.018	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	T	µg/L	140	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	T	µg/L	5300	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Naphthalene	T	µg/L	160	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	T	µg/L	0.1	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pyrene	T	µg/L	4000	< 0.1	NA	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dioxins²										
OCDD	T	pg/l	NV ³	NA	NA	NA	NA	NA	NA	NA
Conventional										
Dissolved Organic Carbon	D	mg/L	NV	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	D	mg/L	NV	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)	T	mg/L	NV	NA	NA	NA	NA	NA	NA	NA
Total Suspended Solids	T	mg/L	NV	< 1.1	< 2.2	< 1.1	< 1.1	< 1	< 1	< 1

Table 5 T-117 Groundwater Detections 2003 – Present

Chemical Name	Total/ Dissolved	Unit	Action Level	Location ID	MW-08	MW-08	MW-08R	MW-08R	MW-08R	MW-08R	MW-08R
				Sample ID	T117-MW-8	MW-8-0806	MW-8-0308	MW-08R-0608	MW-08R-0908	MW-08R-1208	
				Sample Date	6/20/2005	8/10/2006	3/12/2008	6/4/2008	9/10/2008	12/9/2008	
				Sample Matrix	WG	WG	WG	WG	WG	WG	
				Sample Type	N	N	N	N	N	N	
Metals											
Arsenic	D	mg/L	.00014		NA	0.00086	< 0.05	0.002	< 0.2	< 0.1	<
Arsenic	T	mg/L	.00014		NA	0.00089	< 0.05	0.002	< 0.2	< 0.05	<
Cadmium	D	mg/L	.42		NA	0.000174	< 0.002	< 0.002	< 0.01	< 0.004	<
Cadmium	T	mg/L	.42		NA	0.000189	< 0.002	< 0.002	< 0.01	< 0.002	<
Chromium	D	mg/L	1.1		NA	0.00172	< 0.005	< 0.005	< 0.02	< 0.01	<
Chromium	T	mg/L	1.1		NA	0.00246	< 0.005	< 0.005	< 0.02	< 0.005	<
Copper	D	mg/L	.48		NA	NA	0.002	< 0.002	< 0.01	< 0.004	<
Copper	T	mg/L	.48		NA	NA	0.004	< 0.002	< 0.01	0.003	<
Lead	T	mg/L	.21		NA	0.00009	< 0.02	< 0.02	< 0.1	< 0.02	<
Nickel	D	mg/L	4.6		NA	NA	< 0.01	< 0.01	J < 0.05	< 0.02	<
Nickel	T	mg/L	4.6		NA	NA	< 0.01	< 0.01	J < 0.05	< 0.01	<
Silver	D	mg/L	.0019		NA	NA	0.003	< 0.003	0.03	< 0.006	<
Silver	T	mg/L	.0019		NA	NA	0.005	< 0.003	0.02	0.004	<
Zinc	T	mg/L	26		NA	NA	< 0.01	< 0.01	< 0.05	< 0.01	<
TPH											
Diesel Range Hydrocarbons	T	mg/L	.5		NA	NA	< 0.25	< 0.25	< 0.25	< 0.25	<
Motor Oil Range Hydrocarbons	T	mg/L	.5		NA	NA	< 0.5	< 0.5	< 0.5	< 0.5	<
Total Petroleum Hydrocarbons (calc'd)	T	mg/L	.5		NA	< 0.5	NA	NA	NA	NA	
TPH - Diesel Range	T	mg/L	.5		NA	< 0.25	NA	NA	NA	NA	
TPH - Lube Oil Range	T	mg/L	.5		NA	NA	NA	NA	NA	NA	
PCB											
Aroclor 1254	T	µg/L	.03		< 0.04	< 0.01	< 0.01	0.029	< 0.01	< 0.01	<
Aroclor 1260	T	µg/L	.03		< 0.04	0.021 J	< 0.01	0.049 J	< 0.01	< 0.01	<
PCBs (total calc'd)	T	µg/L	0.03		< 0.08	0.021 J	NA	NA	NA	NA	
BTEX											
Total Xylenes (calc'd)	T	µg/L	1000		NA	NA	NA	NA	NA	NA	
Xylene (meta & para)	T	µg/L	1000		NA	NA	< 1	< 0.4	< 1	< 1	<
SVOC											
bis(2-Ethylhexyl)phthalate	T	µg/L	2.2		NA	< 1	1.1	1.2	1.8 J	< 1	<
Phenol	T	µg/L	1700000		NA	< 1	< 1	< 1	< 1	< 1	<
VOC											
1,1,1-Trichloroethane	T	µg/L	200		NA	NA	< 0.2 J	< 0.2	< 0.2	< 0.2	<
Acetone	T	µg/L	NV		NA	NA	< 3	< 3	< 3	3.1	<
Chlorobenzene	T	µg/L	1600		NA	NA	< 0.2	< 0.2	< 0.2	< 0.2	<
cis-1,2-Dichloroethene	T	µg/L	5		NA	NA	< 0.2	< 0.2	< 0.2	< 0.2	<
o-Xylene	T	µg/L	1000		NA	NA	< 0.2	< 0.2	< 0.2	< 0.2	<
Tetrachloroethene	T	µg/L	3.3		NA	NA	< 0.2	< 0.2	< 0.2	< 0.2	<
Trichloroethene	T	µg/L	30		NA	NA	< 0.2	< 0.2	< 0.2	< 0.2	<
Xylene (meta & para)	T	µg/L	1000		NA	NA	< 0.4	< 1	< 0.4	< 0.4	<
PAH											
1-Methylnaphthalene	T	µg/L	160		NA	NA	< 1	< 1	< 1	< 1	<
Acenaphthene	T	µg/L	990		NA	< 1	NA	NA	NA	< 1	<
Benzo(a)anthracene	T	µg/L	0.018		NA	< 1	< 1	< 1	< 1	< 1	<
Benzo(b)fluoranthene	T	µg/L	0.018		NA	< 1	< 1	< 1	< 1	< 1	<
Benzo(k)fluoranthene (total calc'd)	T	µg/L	0.018		NA	< 1	NA	NA	NA	NA	
Chrysene	T	µg/L	0.018		NA	< 1	< 1	< 1	< 1	< 1	<
Fluorene	T	µg/L	5300		NA	< 1	< 1	< 1	< 1	< 1	<
Total HPAH (calc'd)	T	µg/L	NV		NA	< 1	NA	NA	NA	NA	
Total LPAH (calc'd)	T	µg/L	NV		NA	< 1	NA	NA	NA	NA	
Total PAH (calc'd)	T	µg/L	NV		NA	< 1	NA	NA	NA	NA	
PAH by SW8270D SIM											
1-Methylnaphthalene	T	µg/L	160		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1	<
Acenaphthene	T	µg/L	990		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1	<
Anthracene	T	µg/L	40000		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1	<
Benzo(a)anthracene	T	µg/L	0.018		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1	<
Benzo(a)pyrene	T	µg/L	0.018		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1	<
Benzo(b)fluoranthene	T	µg/L	0.018		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1	<
Benzo(k)fluoranthene	T	µg/L	0.018		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1	<
Chrysene	T	µg/L	0.018		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1	<
Fluoranthene	T	µg/L	140		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1	<
Fluorene	T	µg/L	5300		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1	<
Naphthalene	T	µg/L	160		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1	<
Phenanthrene	T	µg/L	0.1		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1	<
Pyrene	T	µg/L	4000		NA	NA	< 0.1	< 0.1	< 0.1	< 0.1	<
Dioxins²											
OCDD	T	pg/l	NV ³		NA	NA	NA	NA	NA	11.1	
Conventionals											
Dissolved Organic Carbon	D	mg/L	NV		NA	< 1.5	NA	NA	NA	NA	
Total Dissolved Solids	D	mg/L	NV		NA	1,140	NA	NA	NA	NA	
Total Organic Carbon (TOC)	T	mg/L	NV		2.46	NA	NA	NA	NA	NA	
Total Suspended Solids	T	mg/L	NV		2.8	9.5	5.5	100	2.2	< 1.1	<

Table 5 T-117 Groundwater Detections 2003 – Present

Chemical Name	Total/ Dissolved	Unit	Action Level	Location ID	MW-09	MW-09	MW-09	MW-09	MW-10
				MW-08R Sample ID 3/31/2009 WG N	MW-9-0308 3/12/2008 WG N	DUP-1-0308 3/11/2008 WG FD	MW-09-0309 3/30/2009 WG N	DUP-1-0309 3/30/2009 WG FD	MW-10-0308 3/11/2008 WG N
Metals									
Arsenic	D	mg/L	.00014	0.002	< 0.05	< 0.05	< 0.001	< 0.001	< 0.05
Arsenic	T	mg/L	.00014	0.002	< 0.05	< 0.05	< 0.001	< 0.001	< 0.05
Cadmium	D	mg/L	.42	0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Cadmium	T	mg/L	.42	0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Chromium	D	mg/L	1.1	0.005	< 0.005	< 0.005	< 0.005 J	< 0.005 J	< 0.005
Chromium	T	mg/L	1.1	0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Copper	D	mg/L	.48	0.002	0.003	< 0.002	0.003	0.003	0.004
Copper	T	mg/L	.48	0.002	0.003	0.003	0.003	0.003	0.005
Lead	T	mg/L	.21	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Nickel	D	mg/L	4.6	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Nickel	T	mg/L	4.6	0.01 J	< 0.01	< 0.01	< 0.01 J	< 0.01 J	< 0.01
Silver	D	mg/L	.0019	0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Silver	T	mg/L	.0019	0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Zinc	T	mg/L	26	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
TPH									
Diesel Range Hydrocarbons	T	mg/L	.5	0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Motor Oil Range Hydrocarbons	T	mg/L	.5	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Total Petroleum Hydrocarbons (calc'd)	T	mg/L	.5	NA	NA	NA	NA	NA	NA
TPH - Diesel Range	T	mg/L	.5	NA	NA	NA	NA	NA	NA
TPH - Lube Oil Range	T	mg/L	.5	NA	NA	NA	NA	NA	NA
PCB									
Aroclor 1254	T	µg/L	.03	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aroclor 1260	T	µg/L	.03	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCBs (total calc'd)	T	µg/L	0.03	NA	NA	NA	NA	NA	NA
BTEX									
Total Xylenes (calc'd)	T	µg/L	1000	NA	NA	NA	NA	NA	NA
Xylene (meta & para)	T	µg/L	1000	1	< 0.4	< 0.4	< 0.4	< 1	< 1
SVOC									
bis(2-Ethylhexyl)phthalate	T	µg/L	2.2	1	< 1	1.1	< 1 J	4.7 J	1.2
Phenol	T	µg/L	1700000	1	< 1	< 1	< 1	< 1	< 1
VOC									
1,1,1-Trichloroethane	T	µg/L	200	0.2	< 0.2 J	< 0.2 J	< 0.2	< 0.2	< 0.2 J
Acetone	T	µg/L	NV	2.5	< 3	< 3	< 2.5	< 2.5	< 3
Chlorobenzene	T	µg/L	1600	0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
cis-1,2-Dichloroethene	T	µg/L	5	0.2	< 0.2	< 0.2	< 0.2	< 0.2	1.2
o-Xylene	T	µg/L	1000	0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachloroethene	T	µg/L	3.3	0.2	1	0.9	1.3	1.3	2
Trichloroethene	T	µg/L	30	0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.5
Xylene (meta & para)	T	µg/L	1000	0.4	< 1	< 1	< 1	< 0.4	< 0.4
PAH									
1-Methylnaphthalene	T	µg/L	160	1	< 1	< 1	< 1	< 1	< 1
Acenaphthene	T	µg/L	990	1	NA	NA	NA	NA	NA
Benzo(a)anthracene	T	µg/L	0.018	1	< 1	< 1	< 1	< 1	< 1
Benzo(b)fluoranthene	T	µg/L	0.018	1	< 1	< 1	< 1	< 1	< 1
Benzo(k)fluoranthene (total calc'd)	T	µg/L	0.018	NA	NA	NA	NA	NA	NA
Chrysene	T	µg/L	0.018	1	< 1	< 1	< 1	< 1	< 1
Fluorene	T	µg/L	5300	1	< 1	< 1	< 1	< 1	< 1
Total HPAH (calc'd)	T	µg/L	NV	NA	NA	NA	NA	NA	NA
Total LPAH (calc'd)	T	µg/L	NV	NA	NA	NA	NA	NA	NA
Total PAH (calc'd)	T	µg/L	NV	NA	NA	NA	NA	NA	NA
PAH by SW8270D SIM									
1-Methylnaphthalene	T	µg/L	160	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	T	µg/L	990	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Anthracene	T	µg/L	40000	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	T	µg/L	0.018	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	T	µg/L	0.018	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	T	µg/L	0.018	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene	T	µg/L	0.018	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	T	µg/L	0.018	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	T	µg/L	140	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	T	µg/L	5300	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Naphthalene	T	µg/L	160	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	T	µg/L	0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pyrene	T	µg/L	4000	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dioxins²									
OCDD	T	pg/l	NV ³	NA	NA	NA	NA	NA	NA
Conventional									
Dissolved Organic Carbon	D	mg/L	NV	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	D	mg/L	NV	NA	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)	T	mg/L	NV	NA	NA	NA	NA	NA	NA
Total Suspended Solids	T	mg/L	NV	1	< 1.1	< 2.1	< 1	< 1	< 1

Table 5 T-117 Groundwater Detections 2003 – Present

Chemical Name	Total/ Dissolved	Unit	Action Level	Location ID	MW-10	MW-10	MW-10	MW-11	MW-11	MW-11
				Sample ID	MW-10-0608	MW-10-1208	MW-10-0309	MW-11-0908	MW-11-1208	MW-11-0309
				Sample Date	6/3/2008	12/10/2008	3/31/2009	9/11/2008	12/11/2008	3/31/2009
				Sample Matrix	WG	WG	WG	WG	WG	WG
				Sample Type	N	N	N	N	N	N
Metals										
Arsenic	D	mg/L	.00014		< 0.001	< 0.05	< 0.001	< 0.05	< 0.05	< 0.001
Arsenic	T	mg/L	.00014		0.002	< 0.05	< 0.001	< 0.05	< 0.05	< 0.001
Cadmium	D	mg/L	.42		< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Cadmium	T	mg/L	.42		< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Chromium	D	mg/L	1.1		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	T	mg/L	1.1		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Copper	D	mg/L	.48		0.009	0.003	0.003	0.002	< 0.002	< 0.002
Copper	T	mg/L	.48		0.01	0.005	0.007	0.004	< 0.002	< 0.002
Lead	T	mg/L	.21		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Nickel	D	mg/L	4.6	J	< 0.01	< 0.01	< 0.01	0.01	< 0.01	< 0.01
Nickel	T	mg/L	4.6		< 0.01	< 0.01	< 0.01	0.01	0.01	0.01
Silver	D	mg/L	.0019		< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Silver	T	mg/L	.0019	J	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Zinc	T	mg/L	26		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
TPH										
Diesel Range Hydrocarbons	T	mg/L	.5		0.53	< 0.25	< 0.25	< 0.25	0.27	< 0.25
Motor Oil Range Hydrocarbons	T	mg/L	.5		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Total Petroleum Hydrocarbons (calc'd)	T	mg/L	.5		NA	NA	NA	NA	NA	NA
TPH - Diesel Range	T	mg/L	.5		NA	NA	NA	NA	NA	NA
TPH - Lube Oil Range	T	mg/L	.5		NA	NA	NA	NA	NA	NA
PCB										
Aroclor 1254	T	µg/L	.03		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aroclor 1260	T	µg/L	.03	J	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCBs (total calc'd)	T	µg/L	0.03		NA	NA	NA	NA	NA	NA
BTEX										
Total Xylenes (calc'd)	T	µg/L	1000		NA	NA	NA	NA	NA	NA
Xylene (meta & para)	T	µg/L	1000		< 0.4	< 0.4	< 1	< 1	< 0.4	< 0.4
SVOC										
bis(2-Ethylhexyl)phthalate	T	µg/L	2.2		< 1	< 1	3	19	J	< 1
Phenol	T	µg/L	1700000		< 1	< 1	< 1	< 1	< 1	< 1
VOC										
1,1,1-Trichloroethane	T	µg/L	200		0.4	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Acetone	T	µg/L	NV		3.3	3.4	< 2.5	3.4	< 3	< 2.9
Chlorobenzene	T	µg/L	1600		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
cis-1,2-Dichloroethene	T	µg/L	5		0.7	< 0.2	< 0.2	2.9	3.5	1.3
o-Xylene	T	µg/L	1000		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachloroethene	T	µg/L	3.3		1.4	1.3	1	< 0.2	< 0.2	1.4
Trichloroethene	T	µg/L	30		0.2	< 0.2	< 0.2	< 0.2	0.2	0.6
Xylene (meta & para)	T	µg/L	1000		< 1	< 1	< 0.4	< 0.4	< 1	< 1
PAH										
1-Methylnaphthalene	T	µg/L	160		< 1	< 1	< 1	< 1	< 1	< 1
Acenaphthene	T	µg/L	990		NA	< 1	NA	NA	< 1	NA
Benzo(a)anthracene	T	µg/L	0.018		< 1	< 1	< 1	< 1	< 1	< 1
Benzo(b)fluoranthene	T	µg/L	0.018		< 1	< 1	< 1	< 1	< 1	< 1
Benzo(k)fluoranthene	T	µg/L	0.018		< 1	< 1	< 1	< 1	< 1	< 1
Benzo(a)pyrene	T	µg/L	0.018		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	T	µg/L	0.018		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	T	µg/L	5300		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total HPAH (calc'd)	T	µg/L	NV		NA	NA	NA	NA	NA	NA
Total LPAH (calc'd)	T	µg/L	NV		NA	NA	NA	NA	NA	NA
Total PAH (calc'd)	T	µg/L	NV		NA	NA	NA	NA	NA	NA
PAH by SW8270D SIM										
1-Methylnaphthalene	T	µg/L	160		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	T	µg/L	990		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Anthracene	T	µg/L	40000		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	T	µg/L	0.018		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	T	µg/L	0.018		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	T	µg/L	0.018		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene	T	µg/L	0.018		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	T	µg/L	0.018		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	T	µg/L	140		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	T	µg/L	5300		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Naphthalene	T	µg/L	160		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	T	µg/L	0.1		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pyrene	T	µg/L	4000		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dioxins²										
OCDD	T	pg/l	NV ³		NA	< 4.42	NA	NA	NA	NA
Conventionals										
Dissolved Organic Carbon	D	mg/L	NV		NA	NA	NA	NA	NA	NA
Total Dissolved Solids	D	mg/L	NV		NA	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)	T	mg/L	NV		NA	NA	NA	NA	NA	NA
Total Suspended Solids	T	mg/L	NV		3.2	< 1.1	2.8	2.1	< 1	< 1

Table 5 T-117 Groundwater Detections 2003 – Present

Notes:

Screening Levels are proposed levels only, for delineation of the groundwater monitoring well network

Red - Detected value that exceeds screening level

Bold - Detected Result

Blue - Non-detected value that exceeds the screening level

< - Non Detect at the reporting limit shown.

FD - Field Duplicate

J - Estimated concentration with possible high (indicated with +) and low (indicated with -) bias based on lab QC results

A - reported result is likely a combination of Aroclor 1254/1260; accurate identification of Aroclor 1254 cannot be achieved (ENSR qualifier)

¹MW-06 was sampled on March 31, April 1, and April 8, 2009 because the well went dry during sampling.

²Dioxin and furans were sampled one time, from select wells, during the fourth quarter 2008 groundwater sampling event

³See the 4th Quarter 2008 Groundwater Report, Table 6, for applicable screening levels.

NV - No established value

NA - Not Analyzed

TPH/NWTPH screening levels obtained from the MTCA Method A Cleanup Level for groundwater

PCB screening levels are obtained from the Surface Water ARAR - Aquatic Life - Marine/Chronic - National Toxics Rule, 40 CFR 131

Cadium, copper, lead, and silver screening levels are obtained from the WAC Chapter 173-201A-Aquatic Life - Marine/Acute Water Quality Standards for Surface Waters of the State of Washington

Phenanthrene, Naphthalene, 1-Methylnaphthalene, 1,1,1-Trichloroethane, cis-1,2-Dichloroethane, and all Xylene screening levels were obtained from the MTCA Method A Cleanup Level for groundwater

All other groundwater screening levels were obtained from the Surface Water ARAR - Human Health – Marine – Clean Water Act §304

* MW-07 re-sampled on April 18, 2008 to verify results from the March 12, 2008 sampling event.

5.6 UPCOMING SAMPLING EVENT – SECOND QUARTER AND THIRD 2009

EPA has approved the reduction of the groundwater sampling program based on the proposal presented in the May 28, 2009 memorandum (AECOM, 2009). The revised sampling program includes the sampling and analysis of groundwater from the following six monitoring wells:

- ◆ MW-01
- ◆ MW-02
- ◆ MW-05R
- ◆ MW-08R
- ◆ MW-07
- ◆ MW-11.

Groundwater samples will be submitted for the following analysis:

- ◆ PCBs by Method 8082
- ◆ TPH (gasoline and diesel) by NWTPH-DX and NWTPH-Gx
- ◆ TSS by Method 160.2
- ◆ PAHs and SVOCs by 8270D SIM
- ◆ Total and dissolved priority pollutant metals by 6010 and 7470 from MW-08R and MW-05R.

The second quarter 2009 sampling event was conducted on May 26-27, 2009. This event was conducted under the revised sampling program, outlined above. The sampling times coincided with a minimum negative tide of -3.5 feet (on May 27) to a maximum negative tide of -3.9 feet ¹ (May 26). Sampling during a negative tide, at the point of maximum drawdown, ensures sampling is performed when the groundwater gradient is toward the LDW (ENSR 2008c).

The second quarter 2009 groundwater report will be submitted to EPA by July 26, which is within 60 days of the sampling event.

The third quarter 2009 sampling event is scheduled for August 17 through August 18. The sampling times coincide with a minimum negative tide of -1.8 feet (on August 17) to a maximum negative tide of -2.3 feet (on August 18). The third quarter 2009 groundwater report will be submitted to EPA within 60 days of the sampling event.

¹ Tide Chart: http://tidesandcurrents.noaa.gov/get_predictions.shtml?year=2009&stn=1814+Seattle

6 References

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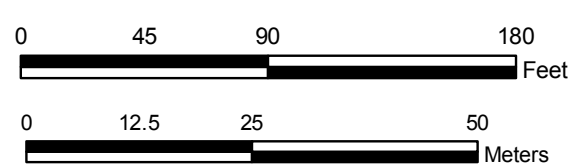
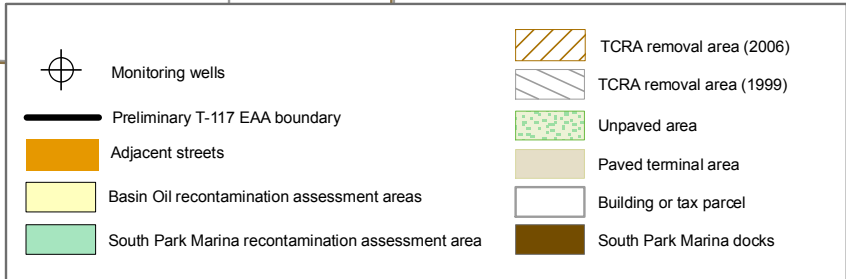


Figure 2. Site map

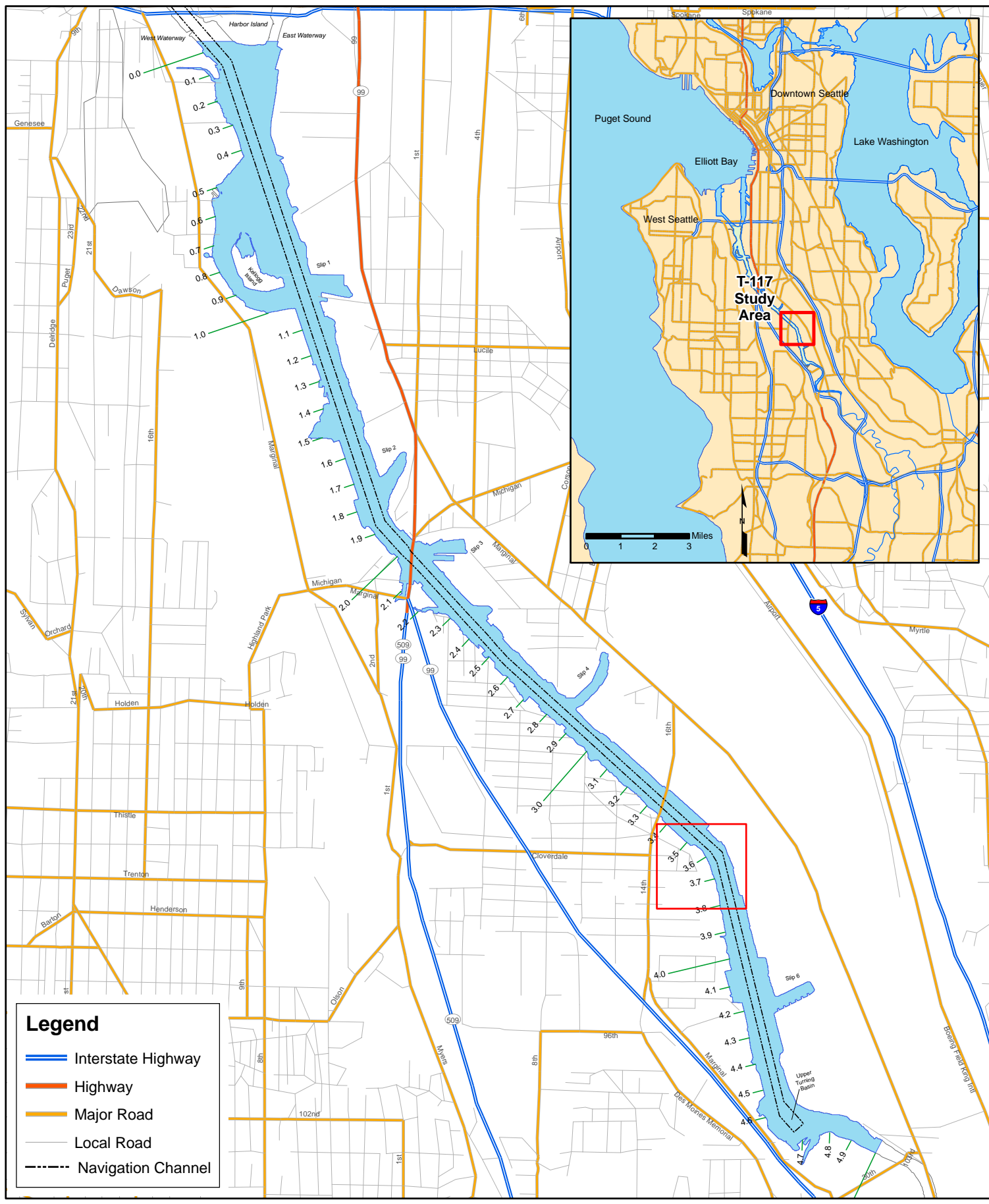


Figure 1. T-117 study area