



April 29, 2013

Mr. Eugene Radcliff
Washington State Department of Ecology
PO Box 47775
Olympia, Washington 98504

**Subject: First Quarter 2013 Groundwater Monitoring and Sampling Report
76 Products Facility No. 351386**
1300 West 12th Street
Vancouver, Washington
Washington State Department of Ecology Facility No. 47231541

Dear Mr. Radcliff:

On behalf of Chevron Environmental Management Company, for itself and as Attorney-in-Fact for Union Oil Company of California (EMC), SAIC Energy, Environment & Infrastructure, LLC (SAIC) submits this Groundwater Monitoring and Sampling Report for the above-referenced site (Figure 1). Quarterly groundwater monitoring and sampling activities were conducted by Blaine Tech Services, Inc. (Blaine Tech) on March 5, 2013. The Blaine Tech groundwater monitoring and sampling package is provided as Attachment A.

FIELD ACTIVITIES

On March 5, 2013, depth to groundwater was measured in wells MW-1, MW-2, MW-4, MW-5A, and MW-6. The groundwater elevation ranged from 53.34 feet (MW-5A) to 53.20 feet (MW-1) based on an arbitrary benchmark elevation of 100.00 feet. Groundwater flow is to the west-southwest at a gradient of approximately 0.0008 foot per foot (ft/ft). A potentiometric map is provided on Figure 1.

Groundwater samples were collected from all monitoring wells and shipped under chain-of-custody protocol to Eurofins Lancaster Laboratories, Inc. in Lancaster, Pennsylvania.

Groundwater samples were submitted for the following analyses:

- Total petroleum hydrocarbons (TPH) as diesel-range organics (TPH-D) and TPH as heavy oil-range organics (TPH-O) by Northwest Method NWTPH-Dx; and
- Selected Volatile Organic Compounds by United States Environmental Protection Agency Method 8260B.

Laboratory analytical results are included as Attachment B and a site plan with groundwater analytical results is shown on Figure 2. In addition, hydrographs for wells MW-1, MW-2, MW-4, and MW-5A are included as Attachment C.

RESULTS

The results of the first quarter 2013 sampling event indicate that concentrations of contaminants of concern are generally consistent and following a downward trend with respect to historical data. Below is a summary of analytical results:

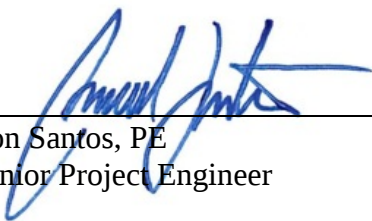
- Tetrachloroethene was detected in groundwater from wells MW-4 and MW-5A at concentrations greater than the Model Toxic Cleanup Act (MTCA) Method A cleanup level.
- TPH-D and TPH-O were detected in groundwater from well MW-4 at concentrations greater than their respective MTCA Method A cleanup levels.
- Remaining analytes were below their respective MTCA Method A cleanup levels or laboratory reporting limits.

Blaine Tech will continue to perform groundwater monitoring and sampling on a quarterly basis.

If you have any questions or comments, please contact me at (208) 429-3772 or via email at ronald.santos@saic.com.

Sincerely,

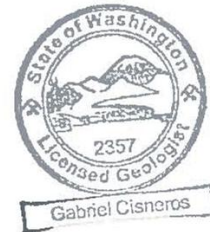
SAIC Energy, Environment & Infrastructure, LLC



Ron Santos, PE
Senior Project Engineer



Gabriel Cisneros LG #2357
Geologist



Enclosures:

Figure 1 – Potentiometric Map

Figure 2 – Site Plan with Groundwater Analytical Results

Table 1 – Groundwater Monitoring Data and Analytical Results

Attachment A – Groundwater Monitoring and Sampling Data Package

Attachment B – Laboratory Analysis Report

Attachment C – Hydrographs

cc: Mr. J. Mark Inglis – Union Oil of California
Ms. Sheila Smith, Emerald West, LLC – Property Owner
Project File

REPORT LIMITATIONS

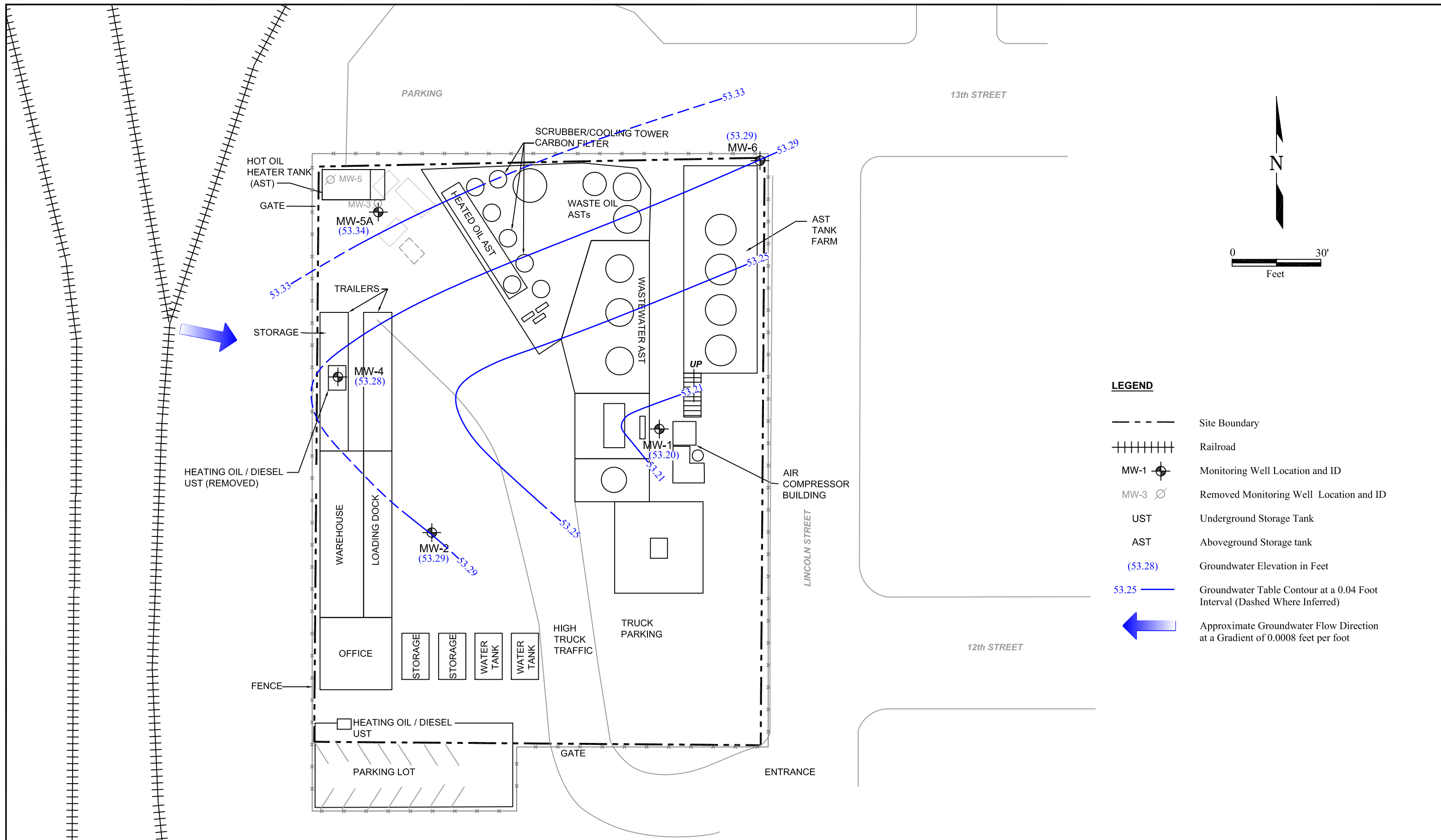
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Site history and background information provided in this technical document are based on sources that may include interviews with environmental regulatory agencies and property management personnel and a review of acquired environmental regulatory agency documents and property information obtained from CEMC and others. SAIC has not made, nor has it been asked to make, any independent investigation concerning the accuracy, reliability, or completeness of such information beyond that described in this technical document.

Recognizing reasonable limits of time and cost, this technical document cannot wholly eliminate uncertainty regarding the vertical and lateral extent of impacted environmental media.

Opinions and recommendations presented in this technical document apply only to site conditions and features as they existed at the time of SAIC's site visits or site work and cannot be applied to conditions and features of which SAIC is unaware and has not had the opportunity to evaluate.

All sources of information on which SAIC has relied in making its conclusions (including direct field observations) are identified by reference in this technical document or in appendices attached to this technical document. Any information not listed by reference or in appendices has not been evaluated or relied upon by SAIC in the context of this technical document. The conclusions, therefore, represent our professional opinion based on the identified sources of information.



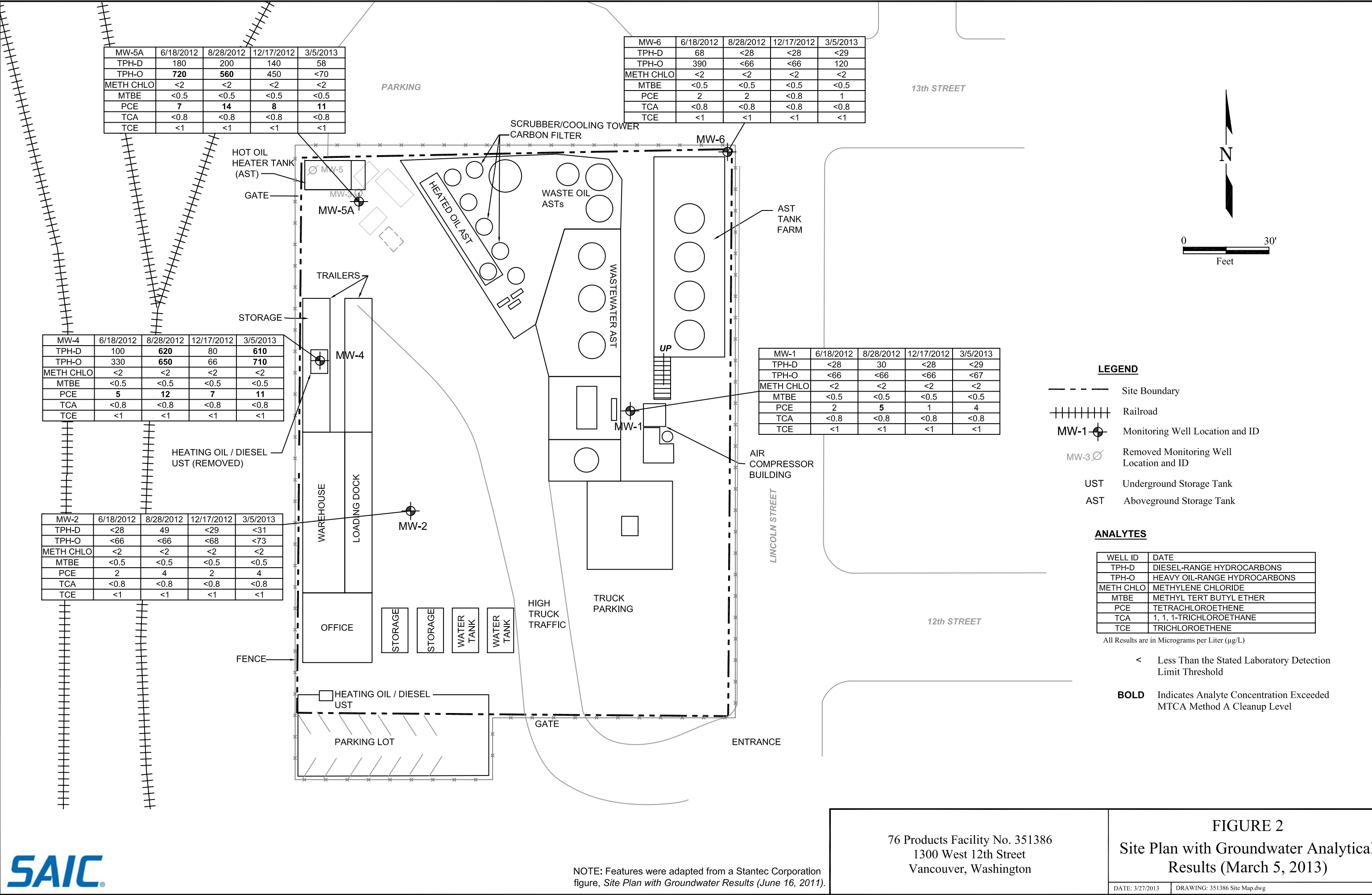


TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
76 PRODUCTS FACILITY No. 351386
1300 W 12th Street, Vancouver, Washington
Concentrations reported in µg/L unless otherwise noted

Well ID TOC Elevation (ft)	Sample Date	Depth to Water (ft)	GW Elevation (ft)	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Chloroform	Methylene Chloride	MTBE	1,1,1-TCA	TCE	PCE	Dissolved Lead (mg/L)	Total Lead (mg/L)	Ethanol	Dissolved Oxygen (mg/L)
MW-1 96.52	04/24/00	37.34	59.18	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	--	--
	08/30/00	44.19	52.33	--	--	--	--	--	--	--	--	ND	ND	ND	ND	1.96	--	--	--	--
	10/04/00	44.75	51.77	--	--	--	--	--	--	--	--	ND	ND	ND	ND	1.98	<0.00100	--	--	--
	01/15/01	43.41	53.11	--	--	--	--	--	--	--	--	ND	ND	ND	ND	1.88	--	--	--	--
	04/23/01	NA	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/25/01	46.17	50.35	--	--	--	--	--	--	--	--	ND	3.63	ND	ND	1.83	<0.00100	0.0478	--	--
	10/16/01	45.38	51.14	--	--	--	--	--	--	--	--	ND	1.67	ND	ND	1.29	<0.00859	0.0231	--	--
	01/09/02	40.90	55.62	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	<0.00100	0.00252	--	--
	04/04/02	42.96	53.56	--	--	--	--	--	--	--	--	ND	5,120	ND	ND	108	--	--	--	--
	07/08/02	40.24	56.28	--	--	--	--	--	--	--	--	ND	476	ND	ND	28.2	--	--	--	--
	10/30/02	45.25	51.27	--	--	--	--	--	--	--	--	ND	144	ND	1.46	11.4	--	--	--	--
	01/17/03	43.05	53.47	--	--	--	--	--	--	--	--	ND	346	ND	ND	15.1	--	--	--	--
	04/04/03	40.23	56.29	--	--	--	--	--	--	--	--	ND	85.3	ND	ND	2.93	--	--	--	--
	07/02/03	42.58	53.94	--	--	--	--	--	--	--	--	ND	574	ND	ND	17.3	--	--	--	--
	01/28/04	40.90	55.62	--	--	--	--	--	--	--	--	ND	326	ND	ND	ND	--	--	--	--
	04/26/04	42.75	53.77	--	--	--	--	--	--	--	--	ND	338	ND	0.757	6.31	--	--	--	2.03
	07/23/04	44.25	52.27	--	--	--	--	--	--	--	--	ND	127	ND	2.06	19.5	--	--	--	--
	11/05/04	44.13	52.39	--	--	--	--	--	--	--	--	1.01	447	ND	1.3	8.06	--	--	--	2.88
	02/04/05	43.68	52.84	--	--	--	--	--	--	--	--	<1.0	192	ND	12.6	1.08	--	--	--	--
	05/10/05	41.02	55.50	--	--	--	--	--	--	--	--	<5.0	197	ND	ND	ND	--	--	--	--
	08/08/05	43.72	52.80	--	--	--	--	--	--	--	--	<1.0	234	<200	1.33	12.9	--	--	--	4.88
	12/13/05	43.67	52.85	--	--	--	--	--	--	--	--	<2.0	<0.5	<0.8	<1.0	6.0	--	--	--	7.59
	03/03/06	40.78	55.74	--	--	--	--	--	--	--	--	<2.0	100	<0.8	<1.0	6.0	--	--	--	6.23
	06/29/06	40.30	56.22	--	--	--	--	--	--	--	--	<2.0	18	<0.8	<1.0	10	--	--	--	6.04
	09/08/06	44.40	52.12	--	--	--	--	--	--	--	--	<2.0	58	<0.8	1.0	10	--	--	--	6.89
	12/01/06	41.34	55.18	--	--	--	--	--	--	--	--	<2.0	19	<0.8	<1.0	4.0	--	--	--	5.20
	03/01/07	41.60	54.92	--	--	--	--	--	--	--	--	<2.0	14	<0.8	<1.0	7.0	--	--	--	7.35
	06/28/07	43.10	53.42	--	--	--	--	--	--	--	--	<2	<0.5	<0.8	1	12	--	--	--	7.0
97.10	02/01/08	42.25	54.27	--	--	--	<0.5	<0.7	<0.8	<0.8	--	<2	<0.5	<0.8	<1	7	--	--	--	--
	03/20/08	42.07	54.45	--	--	--	<0.5	<0.7	<0.8	<0.8	--	<2	<0.5	<0.8	<1	5	--	--	--	--
	06/19/08	36.39	60.13	--	--	--	<0.5	<0.7	<0.8	<0.8	2	<2	<0.5	<0.8	<1	3	--	--	--	--
	09/30/08	44.92	51.60	--	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	9.2	--	--	--	--
	11/07/08	44.65	51.87	--	--	--	<0.5	<0.7	<0.8	<0.8	<0.8	<2	<0.5	<0.8	<1	8	--	--	--	--
	02/19/09	44.19	52.33	--	--	--	<0.12	<0.21	<0.20	<0.27	0.78	<1.0	<0.16	<0.20	0.34	8.5	--	--	--	--
	04/21/09	42.02	55.08	--	--	--	<0.12	<0.21	<0.20	<0.27	1.7	<1.0	<0.16	<0.20	<0.22	4.3	--	--	--	--
	07/30/09	44.25	52.85	--	--	--	<0.12	<0.21	<0.20	<0.27	1.1	<1.0	<0.16	<0.20	0.32 J	6.1	--	--	--	--
	10/27/09	45.98	51.12	--	--	--	0.13 J	0.69 J	<0.20	<0.42	1.1	<1.0	<0.16	<0.20	<0.22	5.1	--	--	--	--
	03/12/10	44.38	52.72	--	--	--	<0.12	<0.21	<0.20	<0.42	1.6	<0.26	<0.16	<0.20	<0.22	3.3	--	--	--	--



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MW-1 (cont)	06/04/10	40.20	56.90	--	<77.7	<388	<1.0	<1.0	<1.0	<3.0	1.6	<4.0	<1.0	<1.0	<1.0	2.8	--	--	--	--
	09/02/10	46.00	51.10	--	<75.8	<379	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<1.0	<1.0	4.6	--	--	--	--
	12/01/10	43.36	53.74	--	<75.5	<377	<1.0	<1.0	<1.0	<3.0	2.0	<4.0	<1.0	<1.0	<1.0	2.4	--	--	--	--
	03/08/11	40.53	56.57	--	<75.5	<377	<1.0	<1.0	<1.0	<3.0	1.8	<4.0	<1.0	<1.0	<1.0	2.2	--	--	--	--
	06/16/11	31.98	65.12	--	<88.9	<444	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<1.0	<1.0	1.4	--	--	--	--
	09/26/11	45.00	52.10	<50	<30	<69	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	6	--	--	<50	--
	12/19/11	45.15	51.95	--	<29	<67	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	4	--	--	<50	--
	03/23/12	28.61	68.49	--	<29	<67	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	0.9	--	--	<50	--
	06/18/12	38.27	58.83	--	<28	<66	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	2	--	--	<50	--
	08/28/12	43.32	53.78	--	30	<66	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	5	--	--	<50	--
	12/17/12	39.52	57.58	--	<28	<66	<0.5	<0.5	<0.5	<0.5	1	<2	<0.5	<0.8	<1	1	--	--	<50	--
	03/05/13	43.90	53.20	--	<29	<67	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	4	--	--	<50	--
MW-2 96.95	04/24/00	37.76	59.19	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	--	--
	08/30/00	44.63	52.32	--	--	--	--	--	--	--	--	ND	ND	1.07	ND	4.00	--	--	--	--
	10/04/00	45.26	51.69	--	--	--	--	--	--	--	--	ND	ND	ND	ND	3.37	<0.00100	--	--	--
	01/15/01	43.87	53.08	--	--	--	--	--	--	--	--	ND	ND	ND	ND	1.24	--	--	--	--
	04/23/01	44.97	51.98	--	--	--	--	--	--	--	--	ND	ND	ND	ND	2.29	<0.00100	0.00600	--	--
	07/25/01	46.65	50.30	--	--	--	--	--	--	--	--	ND	ND	ND	ND	6.74	<0.00100	0.0733	--	--
	10/16/01	45.72	51.23	--	--	--	--	--	--	--	--	ND	ND	ND	ND	3.26	<0.00100	0.0157	--	--
	01/09/02	41.34	55.61	--	--	--	--	--	--	--	--	ND	ND	ND	ND	2.33	<0.00100	0.00757	--	--
	04/04/02	43.42	53.53	--	--	--	--	--	--	--	--	ND	1.54	ND	ND	3.78	--	--	--	--
	07/08/02	40.69	56.26	--	--	--	--	--	--	--	--	ND	ND	ND	1.48	6.88	--	--	--	--
	10/30/02	45.74	51.21	--	--	--	--	--	--	--	--	ND	ND	ND	7.1	<5	--	--	--	--
	01/17/03	43.49	53.46	--	--	--	--	--	--	--	--	ND	1.03	ND	1.22	8.83	--	--	--	--
	04/04/03	40.70	56.25	--	--	--	--	--	--	--	--	ND	11.8	ND	ND	5.34	--	--	--	--
	07/02/03	43.02	53.93	--	--	--	--	--	--	--	--	ND	3.33	ND	1.55	8.91	--	--	--	--
	01/28/04	41.35	55.60	--	--	--	--	--	--	--	--	ND	40.4	ND	2.1	9.4	--	--	--	--
	04/26/04	43.21	53.74	--	--	--	--	--	--	--	--	ND	16.1	0.563	2.53	12.5	--	--	--	1.91
	07/23/04	44.70	52.25	--	--	--	--	--	--	--	--	ND	7.24	0.899	3.58	18.5	--	--	--	--
	11/05/04	44.60	52.35	--	--	--	--	--	--	--	--	ND	2.67	ND	2.74	10.8	--	--	--	2.83
	02/04/05	44.13	52.82	--	--	--	--	--	--	--	--	<1.0	2.78	ND	3.20	17	--	--	--	--
	05/10/05	41.42	55.53	--	--	--	--	--	--	--	--	<5.0	ND	ND	ND	4.84	--	--	--	--
	08/08/05	44.16	52.79	--	--	--	--	--	--	--	--	<1.0	29.2	<200	3.26	15.6	--	--	--	3.84
	12/13/05	44.14	52.81	--	--	--	--	--	--	--	--	<2.0	<0.5	<0.8	1.0	9.0	--	--	--	7.36
	03/03/06	41.22	55.73	--	--	--	--	--	--	--	--	<2.0	7.0	<0.8	2.0	8.0	--	--	--	6.3
	06/29/06	40.78	56.17	--	--	--	--	--	--	--	--	<2.0	12	<0.8	2.0	13	--	--	--	6.2
	09/08/06	42.82	54.13	--	--	--	--	--	--	--	--	<2.0	120	<0.8	4.0	20	--	--	--	5.5
	12/01/06	41.81	55.14	--	--	--	--	--	--	--	--	<2.0	5.0	<0.8	<1.0	8.0	--	--	--	4.95
	03/01/07	42.08	54.87	--	--	--	--	--	--	--	--	<2.0	23.0	<0.8	2.0	11.0	--	--	--	5.7

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MW-2 (cont)	06/28/07	43.64	53.31	--	--	--	--	--	--	--	--	<2	35	<0.8	2	13	--	--	--	6.40
	02/01/08	42.70	54.25	--	--	--	<0.5	<0.7	<0.8	<0.8	--	<2	<0.5	<0.8	<1	7	--	--	--	--
	03/20/08	42.50	54.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/19/08	36.82	60.13	--	--	--	<0.5	<0.7	<0.8	<0.8	3	<2	<0.5	<0.8	<1	7	--	--	--	--
	09/30/08	45.30	51.65	--	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	1.9	11	--	--	--	--
	11/07/08	45.10	51.85	--	--	--	<0.5	<0.7	<0.8	<0.8	2	<2	<0.5	<0.8	<1	8	--	--	--	--
	02/19/09	45.60	51.35	--	--	--	<0.12	<0.21	<0.20	<0.27	2.5	<1.0	<0.16	0.22	1.1	9.2	--	--	--	--
	04/21/09	41.82	55.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/30/09	44.00	52.95	--	--	--	<0.12	<0.21	<0.20	<0.27	2.1	<1.0	<0.16	<0.20	1.1	8.8	--	--	--	--
	10/27/09	45.77	51.18	--	--	--	<0.12	<0.21	<0.20	<0.42	2.1	<1.0	<0.16	<0.20	0.60 J	5.1	--	--	--	--
	03/12/10	44.15	52.80	--	--	--	<0.12	<0.21	<0.20	<0.42	2.7	<0.26	<0.16	<0.20	0.54 J	3.6	--	--	--	--
	06/04/10	40.06	56.89	--	<77.7	<388	<1.0	<1.0	<1.0	<3.0	3.5	<4.0	<1.0	<1.0	<1.0	2.1	--	--	--	--
	09/02/10	45.82	51.13	--	<75.8	<379	<1.0	<1.0	<1.0	<3.0	1.6	<4.0	<1.0	<1.0	1.0	6.0	--	--	--	--
	12/01/10	43.15	53.80	--	<75.5	<377	<1.0	<1.0	<1.0	<3.0	3.5	<4.0	<1.0	<1.0	<1.0	2.3	--	--	--	--
	03/08/11	40.33	56.62	--	<75.5	<377	<1.0	<1.0	<1.0	<3.0	3.6	<4.0	<1.0	<1.0	<1.0	2.9	--	--	--	--
	06/16/11	31.87	65.08	--	<81.6	<408	<1.0	<1.0	<1.0	<3.0	2.5	<4.0	<1.0	<1.0	<1.0	2.2	--	--	--	--
	09/26/11	44.79	52.16	<50	<28	<66	<0.5	<0.5	<0.5	<0.5	2	<2	<0.5	<0.8	<1	6	--	--	<50	--
	12/19/11	45.11	51.84	--	34	<67	<0.5	<0.5	<0.5	<0.5	2	<2	<0.5	<0.8	<1	4	--	--	<50	--
	03/23/12	28.49	68.46	--	<28	<66	<0.5	<0.5	<0.5	<0.5	3	<2	<0.5	<0.8	<1	1	--	--	<50	--
	06/18/12	38.09	58.86	--	<28	<66	<0.5	<0.5	<0.5	<0.5	4	<2	<0.5	<0.8	<1	2	--	--	<50	--
	08/28/12	43.13	53.82	--	49	<66	<0.5	<0.5	<0.5	<0.5	2	<2	<0.5	<0.8	<1	4	--	--	<50	--
	12/17/12	39.39	57.56	--	<29	<68	<0.5	<0.5	<0.5	<0.5	4	<2	<0.5	<0.8	<1	2	--	--	<50	--
	03/05/13	43.66	53.29	--	<31	<73	<0.5	<0.5	<0.5	<0.5	2	<2	<0.5	<0.8	<1	4	--	--	<50	--
MW-4 95.80	08/30/00	43.50	52.30	--	--	--	--	--	--	--	--	ND	ND	ND	ND	12.6	--	--	--	--
	10/04/00	44.07	51.73	--	--	--	--	--	--	--	--	ND	ND	ND	ND	12.8	0.00122	--	--	--
	01/15/01	42.69	53.11	--	--	--	--	--	--	--	--	ND	ND	ND	ND	5.19	--	--	--	--
	04/23/01	43.87	51.93	--	--	--	--	--	--	--	--	ND	ND	ND	ND	9.02	<0.00100	0.00238	--	--
	07/25/01	45.43	50.37	--	--	--	--	--	--	--	--	ND	ND	ND	ND	7.92	<0.00100	0.0620	--	--
	10/16/01	44.59	51.21	--	--	--	--	--	--	--	--	ND	ND	ND	ND	3.8	<0.00100	0.0108	--	--
	01/09/02	40.17	55.63	--	--	--	--	--	--	--	--	ND	ND	ND	ND	3.21	<0.00100	0.00139	--	--
	04/04/02	43.32	52.48	--	--	--	--	--	--	--	--	ND	8.58	2.87	15.4	45.5	--	--	--	--
	07/08/02	39.53	56.27	--	--	--	--	--	--	--	--	ND	22.7	1.83	9.59	22.2	--	--	--	--
	10/30/02	44.53	51.27	--	--	--	--	--	--	--	--	ND	1,090	ND	35	76.6	--	--	--	--
	01/17/03	42.32	53.48	--	--	--	--	--	--	--	--	ND	2,960	ND	27.2	84.8	--	--	--	--
	04/04/03	39.53	56.27	--	--	--	--	--	--	--	--	ND	779	ND	12.2	48.2	--	--	--	--
	07/02/03	41.90	53.90	--	--	--	--	--	--	--	--	ND	397	2.38	11.6	58.2	--	--	--	--
	01/28/04	40.20	55.60	--	--	--	--	--	--	--	--	ND	289	ND	11.2	63.9	--	--	--	--
	04/26/04	42.05	53.75	--	--	--	--	--	--	--	--	ND	362	1.62	6.86	49.6	--	--	--	2.11
	07/23/04	43.61	52.19	--	--	--	--	--	--	--	--	ND	86.1	1.7	4.97	48.4	--	--	--	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
76 PRODUCTS FACILITY No. 351386
1300 W 12th Street, Vancouver, Washington
Concentrations reported in µg/L unless otherwise noted

Well ID TOC Elevation (ft)	Sample Date	Depth to Water (ft)	GW Elevation (ft)	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Chloroform	Methylene Chloride	MTBE	1,1,1-TCA	TCE	PCE	Dissolved Lead (mg/L)	Total Lead (mg/L)	Ethanol	Dissolved Oxygen (mg/L)
MW-4 (cont)	11/05/04	43.49	52.31	--	--	--	--	--	--	--	--	ND	59.8	2.13	6.14	45.5	--	--	--	3.18
	02/04/05	42.96	52.84	--	--	--	--	--	--	--	--	<1.0	169	2.14	5.15	46.8	--	--	--	--
	05/10/05	40.29	55.51	--	--	--	--	--	--	--	--	<5.0	4.86	ND	ND	4.91	--	--	--	--
	08/08/05	43.00	52.80	--	--	--	--	--	--	--	--	<1.0	139	1.85	5.3	44.8	--	--	--	1.94
	12/13/05	42.97	52.83	--	--	--	--	--	--	--	--	<2.0	110	0.9	2.0	17	--	--	--	6.07
	03/03/06	40.02	55.78	--	--	--	--	--	--	--	--	<2.0	70	<0.8	2.0	11	--	--	--	4.89
	06/29/06	39.63	56.17	--	--	--	--	--	--	--	--	<2.0	110	<0.8	3.0	23	--	--	--	4.90
	09/08/06	43.66	52.14	--	--	--	--	--	--	--	--	<2.0	270	1	5.0	35	--	--	--	4.30
	12/01/06	40.65	55.15	--	--	--	--	--	--	--	--	<2.0	160	<0.8	2.0	18	--	--	--	3.80
	03/01/07	40.90	54.90	--	--	--	--	--	--	--	--	<2.0	180	<0.8	2.0	25	--	--	--	4.65
	06/28/07	42.48	53.32	--	--	--	--	--	--	--	--	<2	2	<0.8	2	33	--	--	--	3.5
	02/01/08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/20/08	41.34	54.46	--	--	--	<0.5	<0.7	<0.8	<0.8	--	<2	<0.5	<0.8	1	11	--	--	--	--
	06/19/08	35.66	60.14	--	--	--	<0.5	<0.7	<0.8	<0.8	0.9	<2	<0.5	<0.8	<1	9	--	--	--	--
	09/30/08	44.15	51.65	--	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	1.2	15	--	--	--	--
	11/07/08	43.94	51.86	--	--	--	<0.5	<0.7	<0.20	<0.8	<0.8	<2	<0.5	<0.8	1	16	--	--	--	--
	02/19/09	43.54	52.26	--	--	--	<0.12	<0.21	<0.20	<0.27	0.19	<1.0	0.89	0.33	0.98	26	--	--	--	--
	04/21/09	40.65	55.15	--	--	--	<0.12	<0.21	<0.20	<0.27	1.6	<1.0	0.32 J	<0.20	0.88 J	11.7	--	--	--	--
	07/30/09	42.85	52.95	--	--	--	<0.12	<0.21	<0.20	<0.27	1.0	<1.0	0.40 J	0.29 J	1.2	19.0	--	--	--	--
	10/27/09	44.61	51.19	--	--	--	<0.12	<0.21	<0.20	<0.42	0.99 J	<1.0	0.31 J	<0.15	1.0	16.6	--	--	--	--
	03/12/10	43.02	52.78	--	--	--	<0.12	<0.21	<0.20	<0.42	0.79 J	<0.26	0.33 J	0.26 J	1.0	13.9	--	--	--	--
	06/04/10	38.90	56.90	--	<75.8	<379	<1.0	<1.0	<1.0	<3.0	2.60	<4.0	<1.0	<1.0	<1.0	5.2	--	--	--	--
	09/02/10	44.65	51.15	--	<75.8	<379	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<1.0	<1.0	11.6	--	--	--	--
	12/01/10	42.00	53.80	--	<75.5	<377	<1.0	<1.0	<1.0	<3.0	2.3	<4.0	<1.0	<1.0	<1.0	7.1	--	--	--	--
	03/08/11	39.16	56.64	--	130	<377	<1.0	<1.0	<1.0	<3.0	1.8	<4.0	<1.0	<1.0	<1.0	8.6	--	--	--	--
	06/16/11	31.25	64.55	--	<83.3	<417	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<1.0	<1.0	3.9	--	--	--	--
	09/26/11	43.63	52.17	99	<28	<66	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	14	--	--	<50	--
	12/19/11	43.82	51.98	--	330	700	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	11	--	--	<50	--
	03/23/12	27.33	68.47	--	80	290	<0.5	<0.5	<0.5	<0.5	2	<2	<0.5	<0.8	<1	4	--	--	<50	--
	06/18/12	39.16	56.64	--	100	330	<0.5	<0.5	<0.5	<0.5	2	<2	<0.5	<0.8	<1	5	--	--	<50	--
	08/28/12	42.01	53.79	--	620	650	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	12	--	--	<50	--
	12/17/12	38.17	57.63	--	80	66	<0.5	<0.5	<0.5	<0.5	0.9	<2	<0.5	<0.8	<1	7	--	--	<50	--
	03/05/13	42.52	53.28	--	610	710	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	11	--	--	<50	--
MW-5 96.47	08/30/00	44.18	52.29	--	--	--	--	--	--	--	--	ND	ND	2.0	1.56	25.6	--	--	--	--
	10/04/00	44.72	51.75	--	--	--	--	--	--	--	--	ND	ND	ND	1.73	16.9	<0.00100	--	--	--
	01/15/01	43.35	53.12	--	--	--	--	--	--	--	--	ND	ND	ND	ND	7.37	--	--	--	--
	04/23/01	44.52	51.95	--	--	--	--	--	--	--	--	ND	ND	ND	ND	9.21	<0.00100	0.00174	--	--
	07/25/01	46.11	50.36	--	--	--	--	--	--	--	--	ND	ND	ND	1.42	22.9	<0.00100	0.0123	--	--
	10/16/01	45.28	51.19	--	--	--	--	--	--	--	--	ND	ND	ND	1.29	18	<0.00100	0.00602	--	--

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GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
76 PRODUCTS FACILITY No. 351386
1300 W 12th Street, Vancouver, Washington
Concentrations reported in µg/L unless otherwise noted

Well ID TOC Elevation (ft)	Sample Date	Depth to Water (ft)	GW Elevation (ft)	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Chloroform	Methylene Chloride	MTBE	1,1,1-TCA	TCE	PCE	Dissolved Lead (mg/L)	Total Lead (mg/L)	Ethanol	Dissolved Oxygen (mg/L)
MW-5 (cont)	01/09/02	NA	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/04/02	42.95	53.52	--	--	--	--	--	--	--	--	ND	ND	2.78	15.1	105	--	--	--	--
	07/08/02	40.22	56.25	--	--	--	--	--	--	--	--	ND	ND	1.48	5.6	57.6	--	--	--	--
	10/30/02	45.15	51.32	--	--	--	--	--	--	--	--	ND	1.37	2.75	14.8	101	--	--	--	--
MW-5A 96.46	01/17/03	42.93	53.53	--	--	--	--	--	--	--	--	ND	15.1	2.29	10.3	79	--	--	--	--
	04/04/03	40.18	56.28	--	--	--	--	--	--	--	--	ND	67	ND	1.91	17.1	--	--	--	--
	07/02/03	42.55	53.91	--	--	--	--	--	--	--	--	ND	35.7	2.2	9.8	78.1	--	--	--	--
	01/28/04	40.83	55.63	--	--	--	--	--	--	--	--	ND	449	ND	ND	31.4	--	--	--	--
	04/26/04	42.68	53.78	--	--	--	--	--	--	--	--	ND	164	3.9	7.43	68	--	--	--	2.89
	07/23/04	44.21	52.25	--	--	--	--	--	--	--	--	ND	45	5.07	9.93	79.3	--	--	--	--
	11/05/04	44.06	52.40	--	--	--	--	--	--	--	--	ND	ND	ND	ND	2.98	--	--	--	4.89
	02/04/05	43.60	52.86	--	--	--	--	--	--	--	--	<1.0	26	2.71	5.47	58.8	--	--	--	--
	05/10/05	40.94	55.52	--	--	--	--	--	--	--	--	<5.0	214	ND	ND	21.2	--	--	--	--
	08/08/05	43.64	52.82	--	--	--	--	--	--	--	--	<1.0	89	2.3	5.8	59.4	--	--	--	4.62
	12/13/05	43.60	52.86	--	--	--	--	--	--	--	--	<2.0	95	1.0	3.0	26	--	--	--	5.82
	03/03/06	40.71	55.75	--	--	--	--	--	--	--	--	<2.0	110	0.8	2.0	25	--	--	--	3.09
	06/29/06	40.25	56.21	--	--	--	--	--	--	--	--	<2.0	130	1.0	3.0	37	--	--	--	4.15
	09/08/06	44.30	52.16	--	--	--	--	--	--	--	--	<2.0	16	2.0	6.0	66	--	--	--	3.30
	12/01/06	41.29	55.17	--	--	--	--	--	--	--	--	<2.0	12	<0.8	2.0	25	--	--	--	4.10
	03/01/07	41.54	54.92	--	--	--	--	--	--	--	--	<2.0	26	0.9	2.0	38	--	--	--	5.50
	06/28/07	43.12	53.34	--	--	--	--	--	--	--	--	<2	1	<0.8	3	40	--	--	--	3.5
	02/01/08	42.19	54.27	--	--	--	<0.5	<0.7	<0.8	<0.8	--	<2	<0.5	<0.8	1	32	--	--	--	--
	03/20/08	42.00	54.46	--	--	--	<0.5	<0.7	<0.8	<0.8	--	<2	<0.5	<0.8	2	28	--	--	--	--
	06/19/08	36.25	60.21	--	--	--	<0.5	<0.7	<0.8	<0.8	1	<2	<0.5	<0.8	<1	9	--	--	--	--
	09/30/08	44.80	51.66	--	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	1.5	26	--	--	--	--
	11/07/08	44.62	51.84	--	--	--	<0.5	<0.7	<0.8	<0.8	<0.8	<2	<0.5	<0.8	1.0	26	--	--	--	--
	02/19/09	44.15	52.31	--	--	--	<0.12	<0.21	<0.20	<0.27	3.1	<1.0	0.23	0.26	0.97	26	--	--	--	--
	04/21/09	41.31	55.15	--	--	--	0.26 J	0.90 J	0.54 J	0.99 J	1.8	<1.0	0.22 J	<0.20	0.65 J	14.1	--	--	--	--
	07/30/09	43.50	52.96	--	--	--	<0.12	<0.21	<0.20	<0.27	1.8	<1.0	0.28 J	0.28 J	1.0	23.5	--	--	--	--
	10/27/09	45.22	51.24	--	--	--	<0.12	<0.21	<0.20	<0.42	0.73 J	<1.0	<0.16	<0.20	0.46 J	10.4	--	--	--	--
	03/12/10	43.65	52.81	--	--	--	<0.12	<0.21	<0.20	<0.42	3.1	<0.26	0.16 J	<0.20	0.66 J	11.6	--	--	--	--
	06/04/10	39.59	56.87	--	<77.7	<388	<1.0	<1.0	<1.0	<3.0	1.6	<4.0	<1.0	<1.0	<1.0	7.3	--	--	--	--
	09/02/10	45.29	51.17	--	<75.8	<379	<1.0	<1.0	<1.0	<3.0	1.9	<4.0	<1.0	<1.0	<1.0	13.0	--	--	--	--
	12/01/10	42.59	53.87	--	<75.5	<377	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<1.0	<1.0	7.4	--	--	--	--
	03/08/11	39.81	56.65	--	118	<377	<1.0	<1.0	<1.0	<3.0	1.6	<4.0	<1.0	<1.0	<1.0	9.2	--	--	--	--
	06/16/11	30.62	65.84	--	<81.6	<408	<1.0	<1.0	<1.0	<3.0	2.3	<4.0	<1.0	<1.0	<1.0	3.0	--	--	--	--
	09/26/11	44.30	52.16	58	<28	<66	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	20	--	--	<50	--
	12/19/11	44.37	52.09	--	58	<67	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	10	--	--	<50	--

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76 PRODUCTS FACILITY No. 351386
1300 W 12th Street, Vancouver, Washington
Concentrations reported in µg/L unless otherwise noted

Well ID TOC Elevation (ft)	Sample Date	Depth to Water (ft)	GW Elevation (ft)	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Chloroform	Methylene Chloride	MTBE	1,1,1-TCA	TCE	PCE	Dissolved Lead (mg/L)	Total Lead (mg/L)	Ethanol	Dissolved Oxygen (mg/L)
MW-5A (cont)	03/23/12	27.98	68.48	--	160	380	<0.5	<0.5	<0.5	<0.5	1	<2	<0.5	<0.8	<1	3	--	--	<50	--
	06/18/12	37.57	58.89	--	180	720	<0.5	<0.5	<0.5	<0.5	2	<2	<0.5	<0.8	<1	7	--	--	<50	--
	08/28/12	42.61	53.85	--	200	560	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	14	--	--	<50	--
	12/17/12	38.82	57.64	--	140	450	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	8	--	--	<50	--
	03/05/13	43.12	53.34	--	58	<70	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	11	--	--	<50	--
MW-6 110.19	08/30/00	57.87	52.32	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	--	--
	10/04/00	58.42	51.77	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	<0.00100	--	--	--
	01/15/01	57.04	53.15	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	--	--
	04/23/01	58.18	52.01	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	<0.00100	0.00347	--	--
	07/25/01	59.80	50.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/16/01	59.02	51.17	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	--	--
	01/09/02	54.58	55.61	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	<0.00830	0.00714	--	--
	04/04/02	56.64	53.55	--	--	--	--	--	--	--	--	ND	ND	ND	ND	5.84	<0.00100	0.00461	--	--
	07/08/02	53.90	56.29	--	--	--	--	--	--	--	--	ND	ND	ND	ND	3.8	--	--	--	--
	10/30/02	58.90	51.29	--	--	--	--	--	--	--	--	ND	ND	ND	ND	2.26	--	--	--	--
	01/17/03	56.69	53.50	--	--	--	--	--	--	--	--	ND	ND	ND	ND	4.56	--	--	--	--
	04/04/03	53.90	56.29	--	--	--	--	--	--	--	--	ND	1.17	ND	ND	2.64	--	--	--	--
	07/02/03	56.24	53.95	--	--	--	--	--	--	--	--	ND	ND	ND	ND	4.26	--	--	--	--
	01/28/04	54.56	55.63	--	--	--	--	--	--	--	--	ND	ND	ND	ND	2.39	--	--	--	--
	04/26/04	56.38	53.81	--	--	--	--	--	--	--	--	ND	ND	ND	ND	14.9	--	--	--	1.83
	07/23/04	58.01	52.18	--	--	--	--	--	--	--	--	ND	ND	ND	ND	7.26	--	--	--	--
	11/05/04	57.76	52.43	--	--	--	--	--	--	--	--	ND	332	ND	3.05	17.7	--	--	--	3.08
	02/04/05	57.34	52.85	--	--	--	--	--	--	--	--	<1.0	ND	ND	ND	8.55	--	--	--	--
	05/10/05	54.70	55.49	--	--	--	--	--	--	--	--	<5.0	ND	ND	ND	1.53	--	--	--	--
	08/08/05	57.40	52.79	--	--	--	--	--	--	--	--	<1.0	<1	<200	<5.0	5.48	--	--	--	3.71
	12/13/05	57.30	52.89	--	--	--	--	--	--	--	--	<2.0	<0.5	<0.8	<1.0	2.0	--	--	--	7.4
	03/03/06	54.45	55.74	--	--	--	--	--	--	--	--	<2.0	<0.5	<0.8	<1.0	6.0	--	--	--	6.48
	06/29/06	53.94	56.25	--	--	--	--	--	--	--	--	<2.0	<0.5	<0.8	<1.0	11	--	--	--	6.95
	09/08/06	58.09	52.10	--	--	--	--	--	--	--	--	<2.0	<0.5	<0.8	<1.0	3.0	--	--	--	7.10
	12/01/06	55.00	55.19	--	--	--	--	--	--	--	--	<2.0	<0.5	<0.8	<1.0	2.0	--	--	--	6.90
	03/01/07	55.25	54.94	--	--	--	--	--	--	--	--	<2.0	<0.5	<0.8	<1.0	6.0	--	--	--	7.75
	06/28/07	56.77	53.42	--	--	--	--	--	--	--	--	<2	<0.5	<0.8	<1	2	--	--	--	6.70
	02/01/08	55.90	54.29	--	--	--	<0.5	<0.7	<0.8	<0.8	--	<2	<0.5	<0.8	<1	4	--	--	--	--
	03/20/08	55.75	54.44	--	--	--	<0.5	<0.7	<0.8	<0.8	--	<2	<0.5	<0.8	<1	3	--	--	--	--
	06/19/08	50.07	60.12	--	--	--	<0.5	<0.7	<0.8	<0.8	<0.8	<2	<0.5	<0.8	<1	1	--	--	--	--
	09/30/08	58.60	51.59	--	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--
	11/07/08	58.30	51.89	--	--	--	<0.5	<0.7	<0.8	<0.8	<0.8	<2	<0.5	<0.8	<1	0.9	--	--	--	--
	02/19/09	57.87	52.32	--	--	--	<0.12	<0.21	<0.20	<0.27	0.34	<1.0	<0.16	<0.20	<0.22	1.5	--	--	--	--
	04/21/09	55.04	55.15	--	--	--	0.17 J	0.82 J	0.32 J	0.61 J	<0.15	<1.0	<0.16	<0.20	<0.22	3.4	--	--	--	--

TABLE 1

GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS

76 PRODUCTS FACILITY No. 351386

1300 W 12th Street, Vancouver, Washington

Concentrations reported in µg/L unless otherwise noted

Well ID TOC Elevation (ft)	Sample Date	Depth to Water (ft)	GW Elevation (ft)	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Chloroform	Methylene Chloride	MTBE	1,1,1-TCA	TCE	PCE	Dissolved Lead (mg/L)	Total Lead (mg/L)	Ethanol	Dissolved Oxygen (mg/L)
MW-6 (cont)	07/30/09	57.25	52.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/09	58.95	51.24	--	--	--	<0.12	<0.21	<0.20	<0.42	0.20 J	<1.0	<0.16	<0.20	<0.22	0.70 J	--	--	--	--
	03/12/10	57.40	52.79	--	--	--	<0.12	<0.21	<0.20	<0.42	<0.15	<0.26	<0.16	<0.20	<0.22	2.0	--	--	--	--
	06/04/10	53.33	56.86	--	<80.0	<400	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<1.0	<1.0	1.6	--	--	--	--
	09/02/10	59.01	51.18	--	129	460	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<1.0	<1.0	1.1	--	--	--	--
	12/01/10	56.39	53.80	--	<75.5	<377	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--
	03/08/11	53.53	56.66	--	<75.5	<377	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<1.0	<1.0	1.1	--	--	--	--
	06/16/11	45.00	65.19	--	<83.3	<417	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--
	09/26/11	58.01	52.18	110	<29	<67	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	0.9	--	--	<50	--
	12/19/11	58.09	52.10	--	<29	<67	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	<0.8	--	--	<50	--
	03/23/12	51.73	58.46	--	190	750	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	<0.8	--	--	<50	--
	06/18/12	51.33	58.86	--	68	390	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	2	--	--	<50	--
	08/28/12	56.33	53.86	--	<28	<66	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	2	--	--	<50	--
	12/17/12	52.55	57.64	--	<28	<66	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	<0.8	--	--	<50	--
	03/05/13	56.90	53.29	--	<29	120	<0.5	<0.5	<0.5	<0.5	<0.8	<2	<0.5	<0.8	<1	1	--	--	<50	--
MTCA Method A Cleanup Levels:				1,000/800 ^a	500	500	5	1,000	700	1,000	NE	5	20	200	5	5	15	15	NE	NA

NOTES:

Analytical results in bold font indicate concentrations exceed MTCA Method A cleanup levels.

Groundwater monitoring data, top of casing elevations, and laboratory analytical results prior to September 26, 2011 provided by STANTEC Consulting Corporation.

TOC referenced to a site datum with an assumed elevation of 100.00 feet (National Geodetic Vertical Datum).

^a = MTCA Method A cleanup levels for TPH-G are 1,000 µg/L when no benzene is present and 800 µg/L when benzene is present.

ABBREVIATIONS:

BTEX = Benzene, Toluene, Ethylbenzene, and Total Xylenes

ft = Feet

GW = Groundwater

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit

mg/L = Milligrams per liter

MTBE = Methyl Tertiary Butyl Ether

MTCA = Model Toxics Control Act

NE = Not Established

1,1,1-TCA = 1,1,1-Trichloroethane

PCE = Tetrachloroethene

TCE = Trichloroethene

TPH = Total Petroleum Hydrocarbons

TPH-D = TPH as Diesel-range organics

TPH-G = TPH as Gasoline-range organics

TPH-O = TPH as Heavy Oil-range organics

USEPA = United States Environmental Protection Agency

µg/L = Micrograms per liter

-- = Not measured/Not analyzed

< = Less than the stated laboratory reporting limit

ANALYTICAL METHOD:

TPH-G analyzed by Northwest Method NWTPH-Gx.

TPH-D and TPH-O analyzed by Northwest Method NWTPH-Dx.

BTEX analyzed by USEPA Method 8260B.

Methylene Chloride analyzed by USEPA Method 8260B.

MTBE analyzed by USEPA Method 8260B.

1,1,1-TCA analyzed by USEPA Method 8260B.

TCE analyzed by USEPA Method 8260B.

PCE analyzed by USEPA Method 8260B.

Total and dissolved lead analyzed by USEPA Method 200 or 6000/7000 Series.

Ethanol analyzed by USEPA Method 8260B.

Attachment A:
Groundwater Monitoring and Sampling Data Package

WELL GAUGING DATA

Project # 130305-J31 Date 03/05/13 Client CHUBB

Site 1300 W 12TH ST. VANCOUVER

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-1	1322	2					43.90	48.60	↓	
MW-2	1327	2					43.66	49.00		
MW-4	1336	2					42.52	49.13		
MW-5A	1332	2					43.12	49.20		
MW-6	1318	2					56.90	64.67		

LOW FLOW WELL MONITORING DATA SHEET

Project #: <u>130305-531</u>	Client: <u>CH2M</u>
Sampler: <u>SB</u>	Gauging Date: <u>03/05/13</u>
Well I.D.: <u>116.1</u>	Well Diameter (in.): <u>(2)</u> 3 4 6 8
Total Well Depth (ft.): <u>48.60</u>	Depth to Water (ft.): <u>43.90</u>
Depth to Free Product: <u> </u>	Thickness of Free Product (feet): <u> </u>
Referenced to: <u>(PVC)</u> Grade	Flow Cell Type: <u>251 556</u>

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other

Start Purge Time: 1416 Flow Rate: 200 mL/min Pump Depth: 47'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or <u>µS/cm</u>)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or <u>mL</u>)	Depth to Water (ft.)
1419	12.29	6.59	192	6	1.37	93.4	600	44.08
1422	12.56	6.57	192	6	1.29	90.1	1200	44.11
1425	12.70	6.56	194	5	1.22	88.7	1800	44.14
1428	12.81	6.55	195	5	1.16	87.0	2400	44.16
1431	12.95	6.55	195	6	1.11	85.8	3000	44.20

Did well dewater? Yes <u>(No)</u>	Amount actually evacuated: <u>3 L</u>
Sampling Time: <u>1432</u>	Sampling Date: <u>03/05/13</u>
Sample I.D.: <u>116.1</u>	Laboratory: <u>LA2CASTER</u>
Analyzed for: TPH-G BTEX MTBE <u>(TPH-D)</u> Other: <u>SEE LOG</u>	
Equipment Blank I.D.: <u>@</u> Time	Duplicate I.D.: <u> </u>

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

LOW FLOW WELL MONITORING DATA SHEET

Project #:	130305-321	Client:	CH2M
Sampler:	53	Gauging Date:	03/05/13
Well I.D.:	11.2	Well Diameter (in.):	2 3 4 6 8
Total Well Depth (ft.):	49.00	Depth to Water (ft.):	43.66
Depth to Free Product:	—	Thickness of Free Product (feet):	—
Referenced to:	PVC Grade	Flow Cell Type:	351556

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other
 Start Purge Time: 1540 Flow Rate: 200 mL/min Pump Depth: 47'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1543	11.88	6.45	251	9	1.59	112.7	600	43.84
1546	12.23	6.45	253	9	1.56	109.5	1200	43.88
1549	12.56	6.44	255	7	1.49	108.6	1800	43.91
1552	12.74	6.44	256	7	1.47	106.2	2400	43.94
1555	12.89	6.44	257	6	1.44	105.1	3000	43.96

Did well dewater? Yes	No	Amount actually evacuated:	3 L
Sampling Time:	1556	Sampling Date:	03/05/13
Sample I.D.:	11.2	Laboratory:	low/05/13
Analyzed for:	TPH-G BTEX MTBE TPH-D	Other:	546 L/L
Equipment Blank I.D.:	@	Duplicate I.D.:	Time

LOW FLOW WELL MONITORING DATA SHEET

Project #: <u>130305-331</u>	Client: <u>CHEVRON</u>
Sampler: <u>33</u>	Gauging Date: <u>03/05/13</u>
Well I.D.: <u>MW-4</u>	Well Diameter (in.): <u>2</u> 3 4 6 8
Total Well Depth (ft.): <u>49.13</u>	Depth to Water (ft.): <u>42.52</u>
Depth to Free Product: <u> </u>	Thickness of Free Product (feet): <u> </u>
Referenced to: <u>PVC</u> Grade	Flow Cell Type: <u>31556</u>

Purge Method: 2 Grundfos Pump
 Sampling Method: Dedicated Tubing

Peristaltic Pump
 New Tubing

Bladder Pump
 Other

Start Purge Time: 1513

Flow Rate: 200 mL/min

Pump Depth: 47'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1516	12.18	6.36	331	10	1.09	56.4	600	42.80
1519	12.30	6.34	335	10	98.6	52.7	1200	42.82
1522	12.48	6.34	336	11	95.1	50.1	1800	42.84
1525	12.67	6.33	338	10	93.7	48.8	2400	42.87
1528	12.79	6.31	338	10	90.2	47.6	3000	42.90

Did well dewater? Yes No

Amount actually evacuated: 3 L

Sampling Time: 1529

Sampling Date: 03/05/13

Sample I.D.: MW-4

Laboratory: 1200562

Analyzed for: TPH-G BTEX MTBE TPH-D

Other 54610L

Equipment Blank I.D.: @ Time

Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: <u>130305-531</u>	Client: <u>CH2M</u>
Sampler: <u>SB</u>	Gauging Date: <u>03/05/13</u>
Well I.D.: <u>no. 5A</u>	Well Diameter (in.): <u>(2)</u> 3 4 6 8
Total Well Depth (ft.): <u>49.20</u>	Depth to Water (ft.): <u>43.12</u>
Depth to Free Product: <u> </u>	Thickness of Free Product (feet): <u> </u>
Referenced to: <u>(PVC)</u> Grade	Flow Cell Type: <u>351 556</u>

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other

Start Purge Time: 1444 Flow Rate: 200 mL/min Pump Depth: 47'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1447	12.50	6.56	241	7	1.42	91.8	600	43.35
1450	12.59	6.56	245	5	1.21	87.4	1200	43.40
1453	12.71	6.56	249	5	1.14	84.6	1600	43.43
1456	12.82	6.55	251	4	1.10	82.7	2400	43.47
1459	12.97	6.56	253	4	1.06	80.9	3000	43.51

Did well dewater? Yes <u>(No)</u>	Amount actually evacuated: <u>3 L</u>
Sampling Time: <u>1500</u>	Sampling Date: <u>03/05/13</u>
Sample I.D.: <u>no. 5A</u>	Laboratory: <u>WALSTER</u>
Analyzed for: TPH-G BTEX MTBE <u>(TPH-D)</u> Other: <u>CEC/LC</u>	
Equipment Blank I.D.: <u>@</u> Time	Duplicate I.D.: <u> </u>

LOW FLOW WELL MONITORING DATA SHEET

Project #: <u>130305-331</u>	Client: <u>CH2M</u>
Sampler: <u>SB</u>	Gauging Date: <u>03/05/13</u>
Well I.D.: <u>6" - 6</u>	Well Diameter (in.): <u>(2)</u> 3 4 6 8
Total Well Depth (ft.): <u>64.67</u>	Depth to Water (ft.): <u>56.90</u>
Depth to Free Product: <u> </u>	Thickness of Free Product (feet): <u> </u>
Referenced to: <u>(PVC)</u> Grade	Flow Cell Type: <u>251 556</u>

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
 Sampling Method: Dedicated Tubing New Tubing Other
 Start Purge Time: 1346 Flow Rate: 200 mL/min Pump Depth: 62'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1349	12.53	6.89	241	23	1.47	78.4	600	57.21
1352	12.60	6.91	241	20	1.44	77.8	1200	57.23
1355	12.67	6.92	241	18	1.39	75.2	1800	57.26
1358	12.80	6.93	242	19	1.32	73.7	2400	57.28
1401	12.92	6.93	241	18	1.30	71.2	3000	57.30

Did well dewater? Yes <u>(No)</u>	Amount actually evacuated: <u>3 L</u>
Sampling Time: <u>1402</u>	Sampling Date: <u>03/05/13</u>
Sample I.D.: <u>6" - 6</u>	Laboratory: <u>WATKINS</u>
Analyzed for: TPH-G BTEX MTBE <u>(TPH-D)</u> <u>(Other: 500 CCL)</u>	
Equipment Blank I.D.: <u>@</u> Time	Duplicate I.D.: <u> </u>

[illegible]

WELLHEAD INSPECTION FORM

Client: CHARRA Site: 1300 W 12TH ST VANANUS Date: 03/05/13
 Job #: 130305-JB1 Technician: JB Page 1 of 1

Well ID	Well Inspected - No Corrective Action Required	Check indicates deficiency										Well Not Inspected (explain in notes)	Notes (list if cap or lick replaced, if there are access issues associated with repairs, if traffic control is required, if stand pipe damaged, or any specific details not covered by checklist)	
		Cap non-functional	Lock non-functional	Lock missing	Bolts missing (list qty)	Tabs stripped (list qty)	Tabs broken (list qty)	Annular seal incomplete	Apron damaged	Rim / Lid broken	Trip Hazard			Below Grade
MW. 1	X													
MW. 2					3/3									
MW. 4	X													
MW. 5A	X													
MW. 6	X													

NOTES: _____

SOURCE RECORD **BILL OF LADING**
FOR PURGEWATER RECOVERED FROM
GROUNDWATER WELLS AT CHEVRON FACILITIES IN
THE STATE OF WASHINGTON AND OREGON. THE
PURGE- WATER WHICH HAS BEEN RECOVERED FROM
GROUND- WATER WELLS IS COLLECTED BY THE
CONTRACTOR AND HAULED TO THEIR FACILITY IN
KENT, WASHINGTON FOR TEMPORARILY HOLDING
PENDING TRANSPORT BY OTHERS TO FINAL
DESTINATION.

The contractor performing this work is BLAINE TECH SERVICES, INC. (BLAINE TECH), 22727 72ND Ave South, Suite D – 102, Kent, WA 98032. BLAINE TECH. is authorized by Chevron Environmental Management Company (CHEVRON EMC) to recover, collect, apportion into loads, and haul the purgewater that is drawn from wells at the CHEVRON EMC facility indicated below and to deliver that purgewater to BLAINE TECH for temporarily holding. Transport routing of the purgewater may be direct from one CHEVRON EMC facility to BLAINE TECH; from one CHEVRON EMC facility to BLAINE TECH via another CHEVRON EMC facility; or any combination thereof. The well purgewater is and remains the property of CHEVRON EMC.

This Source Record **BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the Chevron facility described below:

CHEVRON # 35-1386 Mark W. GHS
Chevron Project Manager

1300 W 15th St Vancouver WA state

[illegible]

Permit To Work

for Chevron EMC Sites

Client: CH2MSite Address: 1300 W 12th St, Vancouver, BCDate: 03/05/13Job Number: 130305-531 Technician(s): SA

Pre-Job Safety Review

1. JMP reviewed, site restrictions and parking/access issues addressed.

Reviewed: ☒

2. Special Permit Required Task Review

Are there any conditions or tasks that would require:

	Yes	No
Confined space entry	☐	☒
Working at height	☐	☒
Lock-out/Tag-out	☐	☒
Excavations greater than 4 feet deep	☐	☒
Excavations within 3 feet of a buried active electrical line or product piping or within 10 feet of a high pressure gas line.	☐	☒
Use of overhead equipment within 15 feet of an overhead electrical power line or pole supporting one	☐	☒
Hot work	☐	☒

If "Yes" was the answer to any of the Special Permit Required Tasks above, the Project Manager will contact the client and arrange to modify the Scope of Work so that the Special Permit Required Tasks are not required to be performed by Blaine Tech Services employees.

3. Is a Traffic Control Permit required for today's work?

Yes ☐ No ☒If so is it in the folder? ☐Is it current? ☐Do you understand the Traffic Control Plan and what equipment you will need? ☐

On site Pre-Job Safety Review

1. Reviewed and signed the site specific HASP. ☒
2. Route to hospital understood. ☒
3. Reviewed "Groundwater Monitoring Well Sampling General Job Safety Analysis included in the HASP. ☒
4. Exceptional circumstances today that are not covered by the HASP, JSA or JMP have been addressed and mitigated. ☒
5. Understands procedure to follow, if site circumstances change, to address new site hazards. ☒
6. There are no unexpected conditions which would make your task a Special Permit Required Task. If there is, contact your Project Manager. ☒
7. All site hazards have been communicated to all necessary onsite personnel during tailgate safety meeting. ☒
8. After lunch tailgate safety meeting refresher conducted. ☒

If Checklist Task cannot be completed, explain:

Permit To Work Authority:

Name: ALGTitle: PMDate: 3/14/13Time: 842

[illegible]

Attachment B:
Laboratory Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

Chevron
L4310
6001 Bollinger Canyon Road
San Ramon CA 94583

March 20, 2013

Project: 351386

Submittal Date: 03/09/2013

Group Number: 1374376

PO Number: 0015093283

Release Number: INGLIS

State of Sample Origin: WA

Client Sample DescriptionMW-1 NA Water
MW-2 NA Water
MW-4 NA Water
MW-5A NA Water
MW-6 NA Water
QA NA WaterLancaster Labs (LLI) #6978436
6978437
6978438
6978439
6978440
6978441

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Blaine Tech Services
ELECTRONIC COPY TO SAIC
ELECTRONIC COPY TO SAIC
ELECTRONIC COPY TO SAIC

Attn: Alex Stack

Attn: Ron Santos

Attn: Kinga Kozlowska

Attn: Gabe Cisneros

Respectfully Submitted,



Jill M. Parker
Senior Specialist

(717) 556-7262

Sample Description: MW-1 NA Water
Facility# 351386
1300 W 12th St - Vancouver, WA

LLI Sample # WW 6978436
LLI Group # 1374376
Account # 11255

Project Name: 351386

Collected: 03/05/2013 14:32 by JB

Chevron

L4310

Submitted: 03/09/2013 09:45

6001 Bollinger Canyon Road

Reported: 03/20/2013 12:57

San Ramon CA 94583

12V01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles					
	SW-846 8260B		ug/l	ug/l	
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Ethanol	64-17-5	N.D.	50	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Tetrachloroethene	127-18-4	4	0.8	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
GC Petroleum					
	ECY 97-602 NWTPH-Dx		ug/l	ug/l	
Hydrocarbons modified					
08271	Diesel Range Organics C12-C24	n.a.	N.D.	29	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	67	1

General Sample Comments

State of Washington Lab Certification No. C259

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Ext. Water Master w/GRO	SW-846 8260B	1	W130711AA	03/12/2013 06:41	Christopher G Torres	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W130711AA	03/12/2013 06:41	Christopher G Torres	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	130770004A	03/19/2013 19:48	Christine E Dolman	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	130770004A	03/18/2013 17:15	JoElla L Rice	1

Sample Description: MW-2 NA Water
Facility# 351386
1300 W 12th St - Vancouver, WA

LLI Sample # WW 6978437
LLI Group # 1374376
Account # 11255

Project Name: 351386

Collected: 03/05/2013 15:56 by JB

Chevron

L4310

Submitted: 03/09/2013 09:45

6001 Bollinger Canyon Road

Reported: 03/20/2013 12:57

San Ramon CA 94583

12V02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles					
		SW-846 8260B	ug/l	ug/l	
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Chloroform	67-66-3	2	0.8	1
10335	Ethanol	64-17-5	N.D.	50	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Tetrachloroethene	127-18-4	4	0.8	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
GC Petroleum					
		ECY 97-602 NWTPH-Dx	ug/l	ug/l	
Hydrocarbons					
		modified			
08271	Diesel Range Organics C12-C24	n.a.	N.D.	31	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	73	1

General Sample Comments

State of Washington Lab Certification No. C259

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Ext. Water Master w/GRO	SW-846 8260B	1	W130711AA	03/12/2013 07:05	Christopher G Torres	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W130711AA	03/12/2013 07:05	Christopher G Torres	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	130770004A	03/19/2013 20:10	Christine E Dolman	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	130770004A	03/18/2013 17:15	JoElla L Rice	1

Sample Description: MW-4 NA Water
Facility# 351386
1300 W 12th St - Vancouver, WA

LLI Sample # WW 6978438
LLI Group # 1374376
Account # 11255

Project Name: 351386

Collected: 03/05/2013 15:29 by JB

Chevron

L4310

Submitted: 03/09/2013 09:45

6001 Bollinger Canyon Road

Reported: 03/20/2013 12:57

San Ramon CA 94583

12V04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10335	Benzene	71-43-2	N.D.	ug/l 0.5	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Ethanol	64-17-5	N.D.	50	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Tetrachloroethene	127-18-4	11	0.8	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08271	Diesel Range Organics C12-C24	n.a.	610	30	1
08271	Heavy Range Organics C24-C40	n.a.	710	71	1

General Sample Comments

State of Washington Lab Certification No. C259

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Ext. Water Master w/GRO	SW-846 8260B	1	W130711AA	03/12/2013 07:29	Christopher G Torres	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W130711AA	03/12/2013 07:29	Christopher G Torres	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	130770004A	03/19/2013 22:27	Christine E Dolman	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	130770004A	03/18/2013 17:15	JoElla L Rice	1

Sample Description: MW-5A NA Water
Facility# 351386
1300 W 12th St - Vancouver, WA

LLI Sample # WW 6978439
LLI Group # 1374376
Account # 11255

Project Name: 351386

Collected: 03/05/2013 15:00 by JB

Chevron

L4310

Submitted: 03/09/2013 09:45

6001 Bollinger Canyon Road

Reported: 03/20/2013 12:57

San Ramon CA 94583

12V05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10335	Benzene	71-43-2	N.D.	0.5 ug/l	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Ethanol	64-17-5	N.D.	50	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Tetrachloroethene	127-18-4	11	0.8	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
GC Petroleum ECY 97-602 NWTPH-Dx					
Hydrocarbons modified					
08271	Diesel Range Organics C12-C24	n.a.	58	30	1
08271	Heavy Range Organics C24-C40	n.a.	N.D.	70	1

General Sample Comments

State of Washington Lab Certification No. C259

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Ext. Water Master w/GRO	SW-846 8260B	1	W130711AA	03/12/2013 07:52	Christopher G Torres	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W130711AA	03/12/2013 07:52	Christopher G Torres	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	130770004A	03/19/2013 22:50	Christine E Dolman	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	130770004A	03/18/2013 17:15	JoElla L Rice	1

Sample Description: MW-6 NA Water
Facility# 351386
1300 W 12th St - Vancouver, WA

LLI Sample # WW 6978440
LLI Group # 1374376
Account # 11255

Project Name: 351386

Collected: 03/05/2013 14:02 by JB

Chevron

L4310

Submitted: 03/09/2013 09:45

6001 Bollinger Canyon Road

Reported: 03/20/2013 12:57

San Ramon CA 94583

12V06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles					
		SW-846 8260B	ug/l	ug/l	
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Ethanol	64-17-5	N.D.	50	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Tetrachloroethene	127-18-4	1	0.8	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
GC Petroleum					
		ECY 97-602 NWTPH-Dx	ug/l	ug/l	
Hydrocarbons					
		modified			
08271	Diesel Range Organics C12-C24	n.a.	N.D.	29	1
08271	Heavy Range Organics C24-C40	n.a.	120	68	1

General Sample Comments

State of Washington Lab Certification No. C259

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Ext. Water Master w/GRO	SW-846 8260B	1	W130711AA	03/12/2013 08:16	Christopher G Torres	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W130711AA	03/12/2013 08:16	Christopher G Torres	1
08271	NWTPH-Dx water	ECY 97-602 NWTPH-Dx modified	1	130770004A	03/19/2013 20:33	Christine E Dolman	1
11197	WA DRO NW DX Ext (Non SG)	ECY 97-602 NWTPH-Dx 06/97	1	130770004A	03/18/2013 17:15	JoElla L Rice	1

Sample Description: QA NA Water
Facility# 351386
1300 W 12th St - Vancouver, WA

LLI Sample # WW 6978441
LLI Group # 1374376
Account # 11255

Project Name: 351386

Collected: 03/05/2013 13:15

Chevron

Submitted: 03/09/2013 09:45

L4310

Reported: 03/20/2013 12:57

6001 Bollinger Canyon Road
San Ramon CA 94583

12VQA

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846 8260B	ug/l	ug/l	
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Ethanol	64-17-5	N.D.	50	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Tetrachloroethene	127-18-4	N.D.	0.8	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1

General Sample Comments

State of Washington Lab Certification No. C259

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Ext. Water Master w/GRO	SW-846 8260B	1	W130711AA	03/12/2013 04:41	Christopher G Torres	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W130711AA	03/12/2013 04:41	Christopher G Torres	1

Quality Control Summary

Client Name: Chevron
Reported: 03/20/13 at 12:57 PM

Group Number: 1374376

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: W130711AA	Sample number(s): 6978436-6978441							
Benzene	N.D.	0.5	ug/l	103	102	77-121	1	30
Chloroform	N.D.	0.8	ug/l	99	97	77-122	2	30
Ethanol	N.D.	50.	ug/l	127	116	54-149	9	30
Ethylbenzene	N.D.	0.5	ug/l	99	98	79-120	2	30
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	101	99	68-121	3	30
Methylene Chloride	N.D.	2.	ug/l	100	100	84-118	0	30
Tetrachloroethene	N.D.	0.8	ug/l	104	104	79-120	0	30
Toluene	N.D.	0.5	ug/l	101	100	79-120	1	30
1,1,1-Trichloroethane	N.D.	0.8	ug/l	101	98	66-126	2	30
Trichloroethene	N.D.	1.	ug/l	107	105	80-120	1	30
m+p-Xylene	N.D.	0.5	ug/l	103	101	77-120	2	30
o-Xylene	N.D.	0.5	ug/l	100	98	77-120	2	30
Batch number: 130770004A	Sample number(s): 6978436-6978440							
Diesel Range Organics C12-C24	N.D.	30.	ug/l	81	81	50-113	0	20
Heavy Range Organics C24-C40	N.D.	70.	ug/l					

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 8260 Ext. Water Master w/GRO
Batch number: W130711AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6978436	105	106	97	94
6978437	102	103	98	93
6978438	105	106	97	93
6978439	105	104	97	93
6978440	104	105	97	93
6978441	103	103	97	94
Blank	104	106	97	94
LCS	103	105	99	97
LCSD	104	104	100	98
Limits:	80-116	77-113	80-113	78-113

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
Reported: 03/20/13 at 12:57 PM

Group Number: 1374376

Surrogate Quality Control

Analysis Name: NWTPH-Dx water
Batch number: 130770004A
Orthoterphenyl

6978436	86
6978437	87
6978438	90
6978439	93
6978440	99
Blank	90
LCS	83
LCSD	83

Limits: 50-150

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

acct# 11255 Ap# 1374376 Sample# 6978436-41

CHAIN OF CUSTODY FORM

Chevron Environmental Management Company ■ 6001 Bollinger Canyon Road ■ San Ramon, CA 94583-2324

COC 1 of 1

Chevron Site Number: <u>35-1386</u>				Chevron Consultant: <u>SAIC</u>				ANALYSES REQUIRED																																																																																																								
Program Designation: <u>CMP</u>				Address: <u>20415 72nd Ave South, Suite 250, Kent WA 98032</u>				Preservation Codes H = HCL T = Thiosulfate N = HNO₃ B = NaOH S = H₂SO₄ O = Other																																																																																																								
Site Address (street, city, state / county): <u>1300 W. 12th St.</u>				Consultant Contact: <u>Ron Santos</u>				Special Instructions "VOC's include only BTEX, Chloroform, Methylene Chloride, MTBE, 1,1,1-TC TCE and PCE"																																																																																																								
<u>Vancouver, WA</u>				Consultant Phone No. <u>(208) 429-3772</u>																																																																																																												
Chevron PM:				Consultant Project No. <u>130305-351</u>																																																																																																												
Chevron PM Phone No.:				Sampling Company: <u>Blaine Tech Services</u>																																																																																																												
☐ Retail and Terminal Business Unit (RTBU) Job ☐ Construction/Retail Job				Sampled By (Print): <u>Sam Bustamante</u>				TPH-D and TPH-0 by (NWTTPH-DX) <u>No Site-941</u>																																																																																																								
Charge Code: <u>NWRTB 00SITE NUMBER-0- OML</u> WBS ELEMENTS: SITE ASSESSMENT: A1L REMEDIATION IMPLEMENTATION: R5L SITE MONITORING: OML OPERATION MAINTENANCE & MONITORING: M1L				Lancaster Laboratories ☒ Lancaster, PA Lab Contact: Megan Moeller 2425 New Holland Pike, Lancaster, PA 17601 Phone No: (717)656-2300				Other Lab _____ _____ _____ _____ _____				Temp. Blank Check Time Temp. <u>1400 3.5</u> <u>1556 2.5</u> _____ _____ _____																																																																																																				
SAMPLE ID <table border="1"> <thead> <tr> <th>Field Point Name</th> <th>Matrix</th> <th>Top Depth</th> <th>Date (yyymmdd)</th> <th>Sample Time</th> <th># of Containers</th> <th>Container Type</th> </tr> </thead> <tbody> <tr> <td><u>M10.1</u></td> <td><u>W</u></td> <td><u>1</u></td> <td><u>130305</u></td> <td><u>1432</u></td> <td><u>5</u></td> <td><u>600, 900, 200</u></td> </tr> <tr> <td><u>M10.2</u></td> <td><u>1</u></td> <td><u>1</u></td> <td><u>1</u></td> <td><u>1556</u></td> <td><u>5</u></td> <td><u>1</u></td> </tr> <tr> <td><u>M10.4</u></td> <td><u>1</u></td> <td><u>1</u></td> <td><u>1</u></td> <td><u>1529</u></td> <td><u>5</u></td> <td><u>1</u></td> </tr> <tr> <td><u>M10.5A</u></td> <td><u>1</u></td> <td><u>1</u></td> <td><u>1</u></td> <td><u>1500</u></td> <td><u>5</u></td> <td><u>1</u></td> </tr> <tr> <td><u>M10.6</u></td> <td><u>1</u></td> <td><u>1</u></td> <td><u>1</u></td> <td><u>1402</u></td> <td><u>5</u></td> <td><u>1</u></td> </tr> <tr> <td><u>QA</u></td> <td><u>T</u></td> <td><u>1</u></td> <td><u>1</u></td> <td><u>1315</u></td> <td><u>3</u></td> <td><u>600</u></td> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>				Field Point Name	Matrix	Top Depth	Date (yyymmdd)	Sample Time	# of Containers	Container Type	<u>M10.1</u>	<u>W</u>	<u>1</u>	<u>130305</u>	<u>1432</u>	<u>5</u>	<u>600, 900, 200</u>	<u>M10.2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1556</u>	<u>5</u>	<u>1</u>	<u>M10.4</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1529</u>	<u>5</u>	<u>1</u>	<u>M10.5A</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1500</u>	<u>5</u>	<u>1</u>	<u>M10.6</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1402</u>	<u>5</u>	<u>1</u>	<u>QA</u>	<u>T</u>	<u>1</u>	<u>1</u>	<u>1315</u>	<u>3</u>	<u>600</u>																																																									TPH-DRO w/ SILICA GEL CLEANUP (97-602M) (NWTTPH-DX w/ sec) TPH-ORO w/ SILICA GEL CLEANUP (97-602M) (NWTTPH-DX w/ sec) TPH-HRO w/ SILICA GEL CLEANUP (97-602M) (NWTTPH-DX w/ sec) 8260B FULL LISTED EDCC TBAO TAMED ED80 ETHANOL BTEX MTBE PAH's CPH's 8270 SIM TPH-G (NWTTPH-GX) TOTAL LEAD (6020) DISSOLVED LEAD (6020)			
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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
µg	microgram(s)	mg	milligram(s)
mL	milliliter(s)	L	liter(s)
m3	cubic meter(s)	µL	microliter(s)
		pg/L	picogram/liter
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

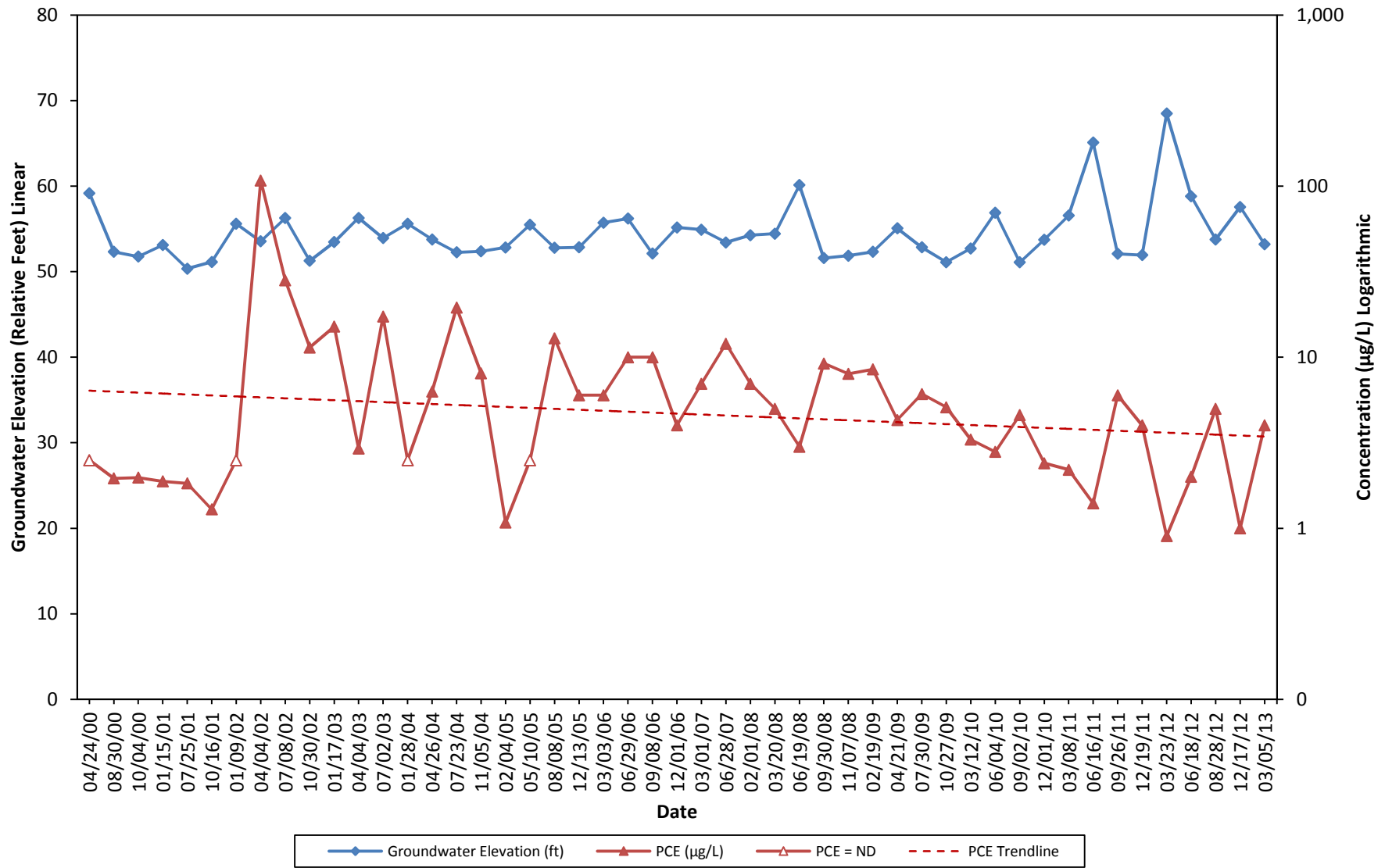
Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as "analyze immediately" are not performed within 15 minutes.

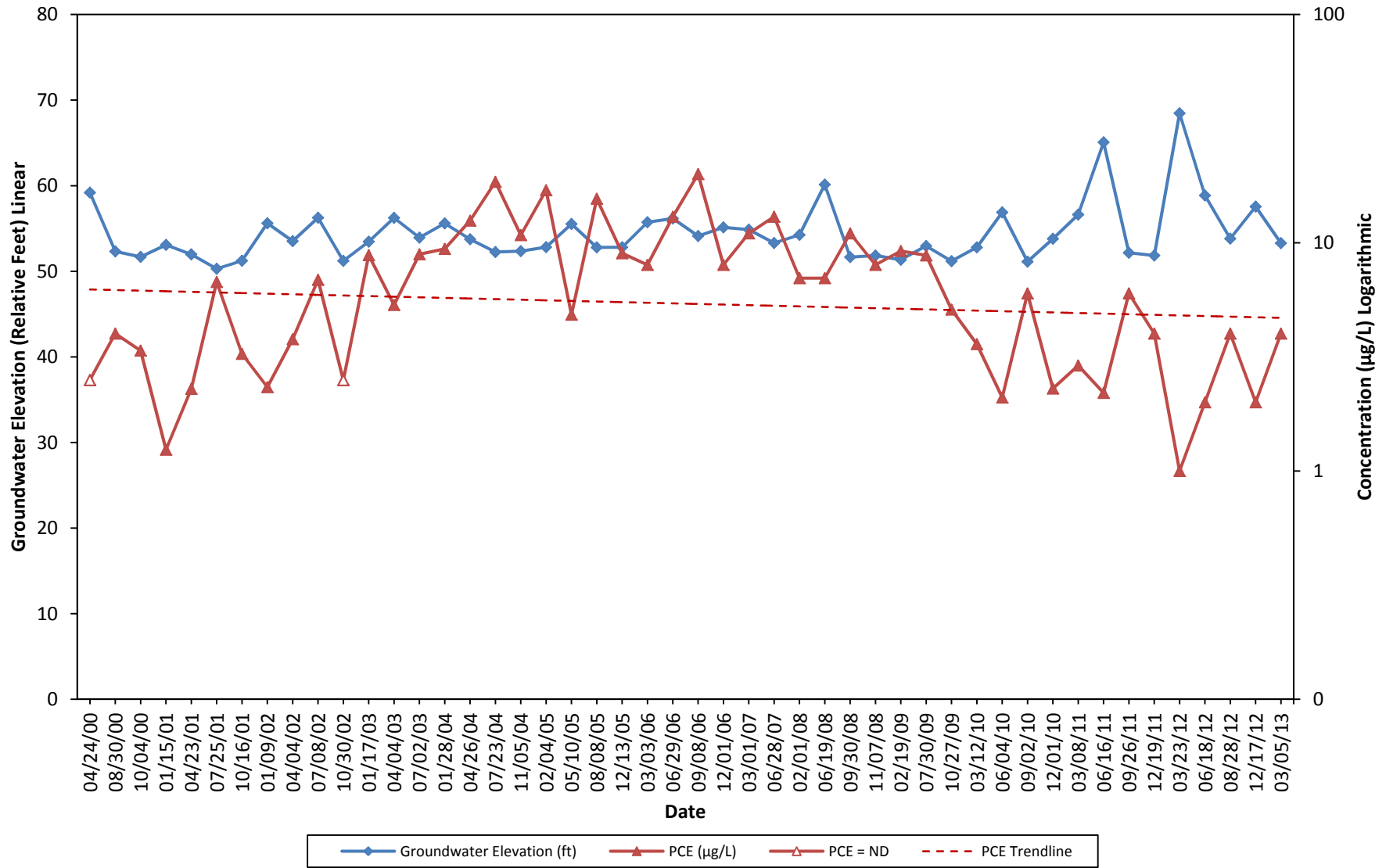
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Attachment C:
Hydrographs

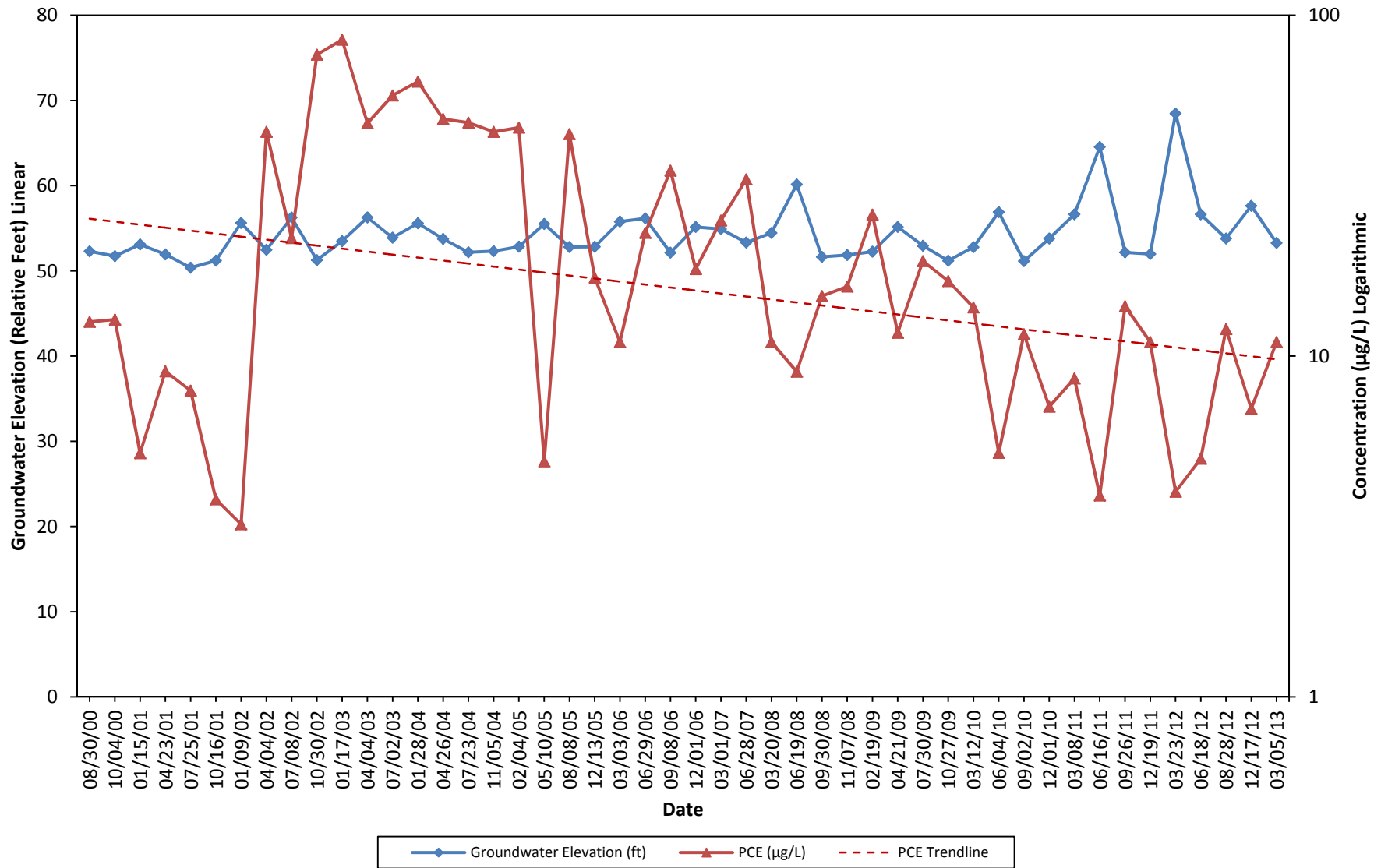
MW-1
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