

4660 Kitsap Way, Suite A
Bremerton, WA 98312-2357
T. 360.377.0014 F. 360.479.5961
www.parametrix.com

TECHNICAL MEMORANDUM

Date: March 12, 2014
To: Christopher Maurer
From: David Dinkuhn, P.E.
Subject: Former Chevron Property Long Term Monitoring Event 3 (January 2014)
cc: Thomas Knuckey, P.E.
Project Number: 233-1896-107
Project Name: Former Chevron Property Remediation

FORMER CHEVRON PROPERTY LONG TERM GROUNDWATER MONITORING EVENT 3

This technical memorandum presents a summary of the results of the second long-term groundwater monitoring event (Event 3) at the Former Chevron Property in Bremerton, Washington. Long-term monitoring is being performed under the site's Agreed Order Number DE-12TCPHQ-9509. Sampling was conducted in accordance with the site's Long Term Monitoring Plan (LTGMP; Parametrix 2013). Data from this long-term monitoring event is intended to be used to evaluate groundwater quality trends at the site and confirm the continued occurrence of natural attenuation.

EVENT 2 MONITORING RESULTS

Groundwater samples were collected on January 21 and 22, 2014 using a peristaltic pump and low flow sampling techniques. Samples were collected from eleven designated long-term monitoring wells including: MW-4R, -9R, -10R, -11, -13R, -20R, -21R, -22R, -25, -26R, and -27. A figure showing well locations (Figure 1) is attached.

Prior to sampling, all wells were purged until measured water quality parameters stabilized according to criteria specified in the LTGMP. Upon stabilization, groundwater samples were collected in appropriate containers. The final set of water quality parameter measurements is provided in Table 1. Well MW-13R produced very little water and general chemistry samples were not collected. Field sampling forms related to the sample collection are attached.

Groundwater samples were submitted to Onsite Environmental of Redmond, Washington, for chemical analysis of gasoline, diesel, and lube oil along with benzene, toluene, ethylbenzene, and xylenes, total and dissolved lead and general chemistry parameters. A summary of analytical results is presented in Table 1. An analytical data review memorandum and laboratory report are also attached.

The depth to groundwater was measured in each well on January 24, 2014. Inferred groundwater surface elevation contours were developed from the measurements as shown on Figure 1.

DISCUSSION

Concentration trends versus time for benzene and gasoline have been graphed as shown in Figures 2 and 3. The trend lines show generally decreasing concentrations as compared with the previous sampling event.

Evidence that ongoing anaerobic respiration is occurring in the impacted aquifer is demonstrated by elevated alkalinity and general absence of dissolved oxygen in the impacted wells. Additional evidence is provided by elevated dissolved methane concentrations with associated negative oxidation reduction potential values (Table 1).

Diesel concentrations are currently below the MTCA A cleanup levels in all wells except well MW-25.

Lube oil was not detected in any sample.

The sample from MW-09R was tested for both total and dissolved lead. Only total lead was detected (at a concentration well below the cleanup level). The City requests that lead sampling in MW-09R be discontinued.

REFERENCES

Parametrix. 2013. Former Chevron Property Long-Term Groundwater Monitoring Plan. Prepared for Ecology on behalf of City of Bremerton. July 8.

ATTACHMENTS:

Figure 1 – Long Term Groundwater Monitoring Event 3 Sampling Results – January 2014

Figure 2 – Benzene Results

Figure 3 – Gasoline Results

Table 1 – Groundwater Results Summary

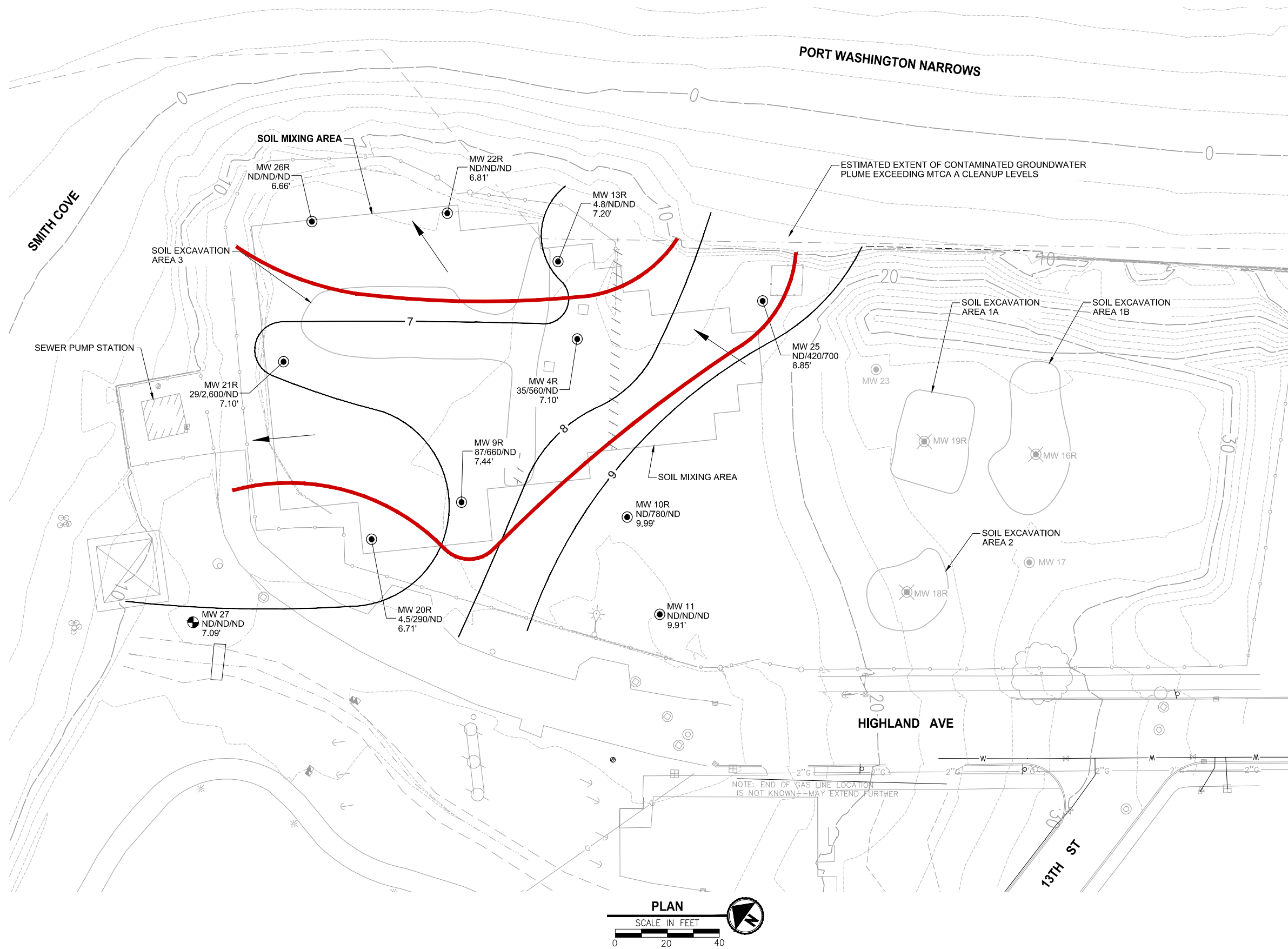
Monitoring Well Logs

Field Sampling Forms

Data Validation Technical Memorandum

Laboratory Report

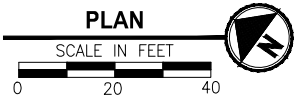
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PLOTTED BY: peter/jl



- LEGEND**
- EXISTING CHAIN LINK FENCE
 - EXISTING MONITORING WELL
 - SOIL EXCAVATION AREA
 - MW 14 WELL REMOVED DURING INTERIM ACTION
 - MW 19R LONG TERM MONITORING WELL
 - 5.08' GROUNDWATER SURFACE ELEVATION
 - R INDICATES REPLACEMENT WELL
 - ESTIMATED CONTAMINATED GROUNDWATER PLUME EXCEEDING MTCA A CLEANUP LEVELS
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER SURFACE ELEVATION CONTOUR
 - 19/1,500/ND GW RESULTS FOR BENZENE GASOLINE/DIESEL RESULTS IN ug/L
 - ND NOT DETECTED

- GENERAL NOTES:**
- CONTOUR DATUM NAVD 88
 - GROUNDWATER ELEVATION MEASUREMENTS COLLECTED 8/16/13

CLEANUP LEVELS	
MTCA A	ug/L
BENZENE	5
GASOLINE	800
DIESEL	500



REVISIONS			
NO.	DESCRIPTION	DATE	BY

0 1" 2"
TWO INCHES AT FULL SCALE IF NOT SCALE ACCORDINGLY
SCALE
HORIZ. 1"=20' VERT. N/A

FIELD BOOK	CITY OF BREMERTON DEPARTMENT OF PUBLIC WORKS & UTILITIES ENGINEERING DIVISION		
DRAWING NO.	DRAWN BY: JLP DATE 11/13	DESIGN BY: DLD WASH. P.E. # DATE 11/13	CHECKED BY: WASH. P.E. # DATE

FORMER CHEVRON PROPERTY LONG-TERM GROUNDWATER MONITORING EVENT 3 SAMPLING RESULTS - JANUARY 2014		FIG. NO. 1	SHEET 1 OF 1
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Figure 2. Benzene Results - Former Chevron Property

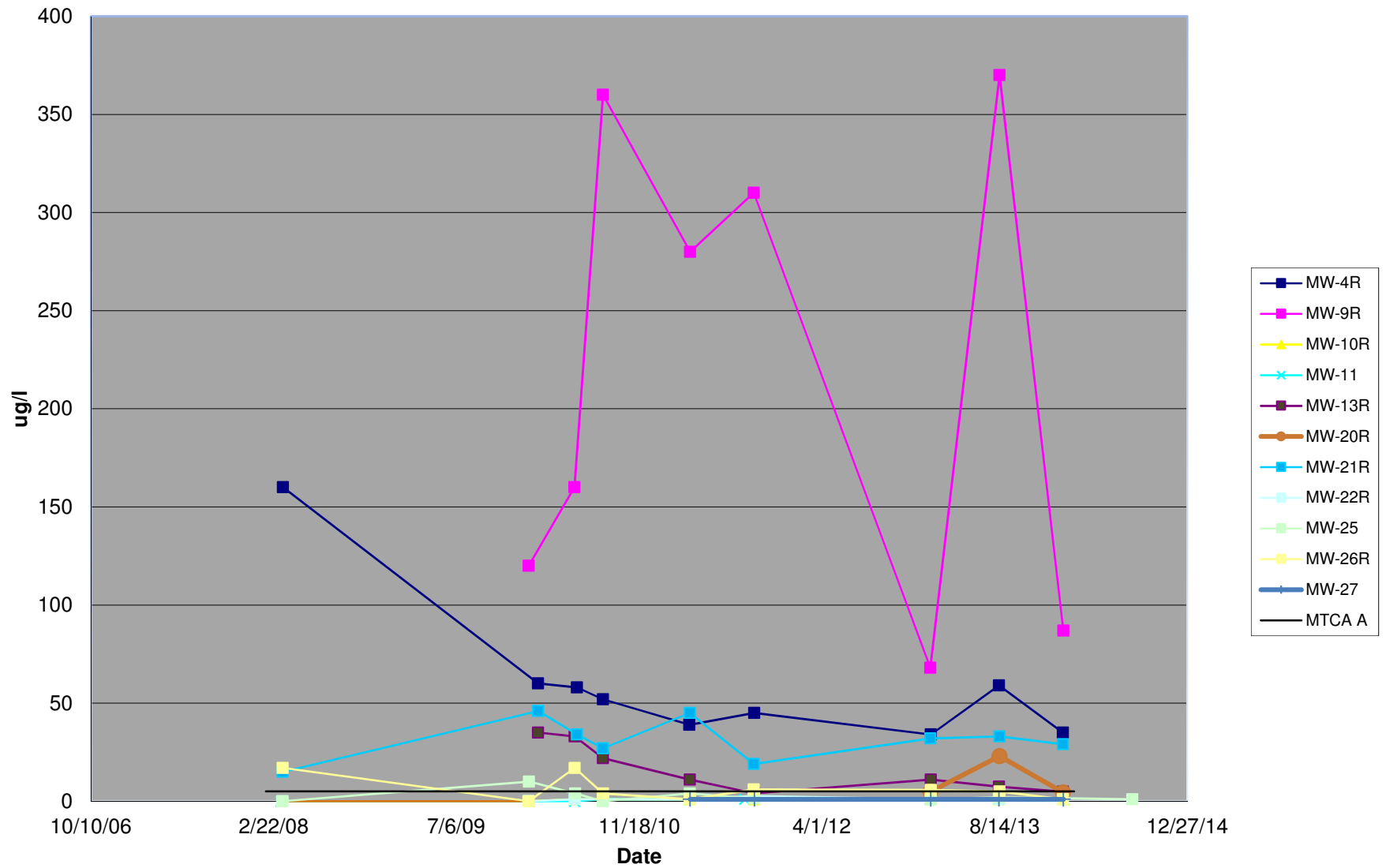


Figure 3. Gasoline Results - Former Chevron Property

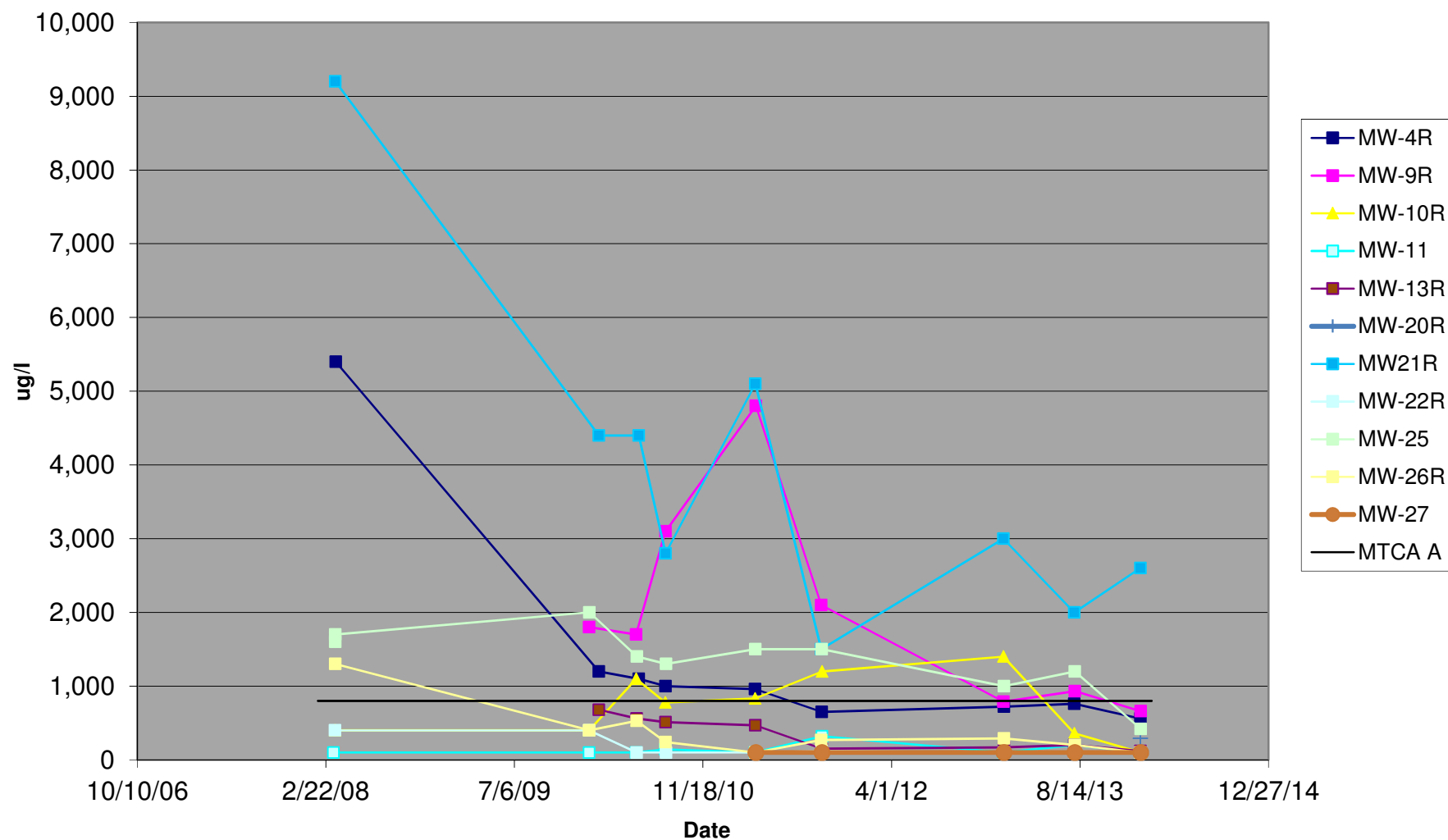


Table 1 Groundwater Results Summary, Long Term Monitoring Event 3 (January 2014)

Monitoring Well No.			MW-04R												MW-09R									
PARAMETERS	Units	Sample Date	3/19/08 ¹	1/21/10	6/1/10	6/1/10*	8/11/10	8/11/10*	4/5/11	4/5/11*	9/29/11	1/24/13	7/30/13	1/21/14	1/20/10	5/25/10	5/25/10*	8/11/10	4/7/11	9/28/11	1/23/13	7/31/13	1/22/14	
MTCA A																								
VOLATILE ORGANICS (BTEX)																								
Benzene	ug/L	5	160	60 J	58	--	52	--	39	--	45	34	59	35	120 J	160	170	360	280	310	68	370	87	
Toluene	ug/L	1,000	10 U	2.0 J	1.0 U	--	1.0 U	--	4.0 U	--	1.0 U	2.1 U	4.0 U	1.8 U	4 U	3.2	3.6	11	11	13	4	7.4	3.4	
Ethylbenzene	ug/L	700	45	31 J	45	--	40	--	17	--	20	7.9	5.9	3.1	89 J	89	97	230	220	150	20	25	13	
m,p-Xylene	ug/L	1,000	86	15 J	7.6	--	4.7	--	9.4	--	2.1	4.1	9.4	2.5	170 J	120	140	400	300	190	12	6.9	6.4	
o-Xylene	ug/L	1,000	12	1.8 J	1.0 U	--	1.0 U	--	4.0	--	1.0 U	1.5	4.0 U	1.3 U	4 U	3.5	3.9	8.1	11	10	4	2.5	2.4	
TOTAL PETROLEUM HYDROCARBONS																								
Gasoline	ug/L	800	5,400	1,200 J	1,100	--	1,000	--	960	--	650	720	760	560	1,800 J	1,500	1,700	3,100	4,800	2,100	790	930	660	
Diesel	mg/L	0.5	27	0.64 M	0.34 U	--	0.62 M	--	0.46	--	0.34 U	0.31 U	0.31 U	0.36 U	0.31 U	0.29 U	0.69	0.45 M	0.82	0.33 U	0.26 U	0.54 U	0.30 U	
Lube Oil	mg/L	0.5	2.3	0.45 U	0.42 U	--	0.41 U	--	0.42 U	--	0.42 U	0.41 U	0.41 U	0.41 U	0.49 U	0.47 U	0.66	0.42 U	0.43 U	0.42 U	0.41 U	0.54	0.54 U	
METALS																								
Total Lead	ug/L	15	--	8.2	--	--	--	--	--	--	--	--	--	--	80	36 J	74 J	21 J	170	--	1.00 U	3.90	2.80	
Dissolved Lead	ug/L	15	--	1.0 U	--	--	--	--	--	--	--	--	--	--	13	12	14	17	3.0	--	1.00 U	1.10 U	1.00 U	
Dissolved Iron	ug/L		--	4,200	--	--	--	--	--	--	--	--	--	--	34,000	--	--	--	--	--	--	--	--	
Total Ferrous Iron	mg/L		--	--	7.36	--	9.75	--	5.4	--	--	7.35	9.70	9.64	--	46.2	42.1	29.2	49.4	--	34.20	36.20	36.90	
Dissolved Manganese	ug/L		--	3,000	4,600	--	4,400	--	3,400	--	--	4,500	6,500	5,500	5,000	3,600	3,900	4,200	4,500	--	4,000	4,500	4,700	
PAHs																								
Naphthalene	ug/L		--	1.4	--	--	--	--	1.0 U	1.0 U	--	--	--	--	6.4	--	--	--	--	--	--	--	--	
2-Methylnaphthalene	ug/L		--	0.20	--	--	--	--	1.0 U	1.0 U	--	--	--	--	2.8	--	--	--	--	--	--	--	--	
1-Methylnapththalene	ug/L		--	3.2	--	--	--	--	4.7	4.9	--	--	--	--	2.2	--	--	--	--	--	--	--	--	
Acenaphthylene	ug/L		--	0.23	--	--	--	--	1.0 U	1.0 U	--	--	--	--	0.11 U	--	--	--	--	--	--	--	--	
Acenaphthene	ug/L		--	1.9	--	--	--	--	3.3	3.4	--	--	--	--	0.18	--	--	--	--	--	--	--	--	
Flourene	ug/L		--	1.8	--	--	--	--	2.3	2.3	--	--	--	--	0.14	--	--	--	--	--	--	--	--	
Phenanthrene	ug/L		--	0.15	--	--	--	--	1.0 U	1.0 U	--	--	--	--	0.17	--	--	--	--	--	--	--	--	
Anthracene	ug/L		--	0.44	--	--	--	--	1.0 U	1.0 U	--	--	--	--	0.11 U	--	--	--	--	--	--	--	--	
Fluoranthene	ug/L		--	0.39	--	--	--	--	1.0 U	1.0 U	--	--	--	--	0.11 U	--	--	--	--	--	--	--	--	
Pyrene	ug/L		--	0.26	--	--	--	--	1.0 U	1.0 U	--	--	--	--	0.11 U	--	--	--	--	--	--	--	--	
Benzo(a)anthracene	ug/L		--	0.047	0.032	0.03	0.050 U	0.042	0.10 U	0.10 U	--	--	--	--	0.011 U	--	--	--	--	--	--	--	--	
Chrysene	ug/L		--	0.033	0.010 U	0.010 U	0.050 U	0.023	0.10 U	0.10 U	--	--	--	--	0.011 U	--	--	--	--	--	--	--	--	
Benzo(b)fluoranthene	ug/L		--	0.013	0.010 U	0.010 U	0.010 U	0.010 U	0.10 U	0.10 U	--	--	--	--	0.011 U	--	--	--	--	--	--	--	--	
Benzo(k)fluoranthene	ug/L		--	0.028	0.010 U	0.010 U	0.010 U	0.010 U	0.10 U	0.10 U	--	--	--	--	0.011 U	--	--	--	--	--	--	--	--	
Benzo(a)pyrene	ug/L	0.1	--	0.020	0.010 U	0.010 U	0.010 U	0.010 U	0.10 U	0.10 U	--	--	--	--	0.011 U	--	--	--	--	--	--	--	--	
Indeno(1,2,3-cd)pyrene	ug/L		--	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.10 U	0.10 U	--	--	--	--	0.011 U	--	--	--	--	--	--	--	--	
Dibenz(a,h)anthracene	ug/L		--	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.10 U	0.10 U	--	--	--	--	0.011 U	--	--	--	--	--	--	--	--	
Benzo[g,h,i]perylene	ug/L		--	0.010 U	--	--	--	--	0.10 U	0.10 U	--	--	--	--	0.011 U	--	--	--	--	--	--	--	--	
GENERAL CHEMISTRY																								
Alkalinity	mg/L		--	190	1,900	--	2,100	--	2,300	--	--	7100	3300	3300	700	720	730	800	730	--	450	85	740	
Nitrate (as Nitrogen)	mg/L		--	0.050 U	0.050 U	--	0.050 U	--	0.050 U	--	--	0.05 U	0.05 U	0.04 U	0.050 U	0.050 U	0.050 U	0.14	0.050 U	--	0.076	0.05 U	0.05 U	
Sulfate	mg/L		--	250	150	--	120	--	110	--	--	5.00 U	5.00 U	10.00 U	30	7.5	7.4	5.0 U	5.0 U	--	25.00 U	5.00 U	5.00 U	
Chloride	mg/L		--	290	250	--	250	--	230	--	--	240	520	260	77	120	120	78	91	--	32	35	31	
Dissolved Methane	ug/L		--	710	590	--	670	--	740	--	--	690	540	600	2,100	8,600	7,800	6,600	9,900	--	11000	7100	11000	
BOD5	mg/L		--	8.97	8.1	--	8.6	--	--	--	--	--	--	--	5.46	3.0	4.3	12.3	--	--	--	--	--	
FIELD PARAMETERS																								
Turbidity	Neth. Turbidity Units		--	333	5.3	5.3	106	106	9.0	9.0	116.0	NM	0.6	1.1	146	57.9	57.9	>1000	>1000	106.0	NM	60.0	5.1	
pH	--		--	6.63	6.90	6.90	7.01	7.01	7.09	7.09	7.11	7.07	7.24	6.96	6.36	6.77	6.77	6.94	6.78	7.05	6.87	7.18	6.57	
Specific Conductance	Millisiemens/cm		--	3.50	3.42	3.42	32.6	32.6	35.1	35.1	5.48	5.41	5.43	5.73	1.52	1.42	1.42	2.65	1.81	1.91	1.47	1.77	1.41	
Dissolved Oxygen	mg/L		--	4.91	4.55	4.55	0.0	0.0	4.02	4.02	0.06	0.00	1.01	0.43	9.65	0.96	0.96	0.0	0.40	6.68	3.92	0.97	0.60	
Oxdat. Red. Potential	Millivolts		--	-136	-115	-115	-161	-161	-149	-149	-163	-247	-123	-140	-124	-136.8	-136.8	-169	-134	-152	-211	-139	-83	

Notes:
1 Sample collected from replaced well.
* Duplicate sample.
J = Reported concentration is an estimate.
mg/L= Milligrams per liter.
NM = Not measured due to equipment malfunction.
µg/L = Micrograms per liter.
U = Analyte not detected above practical quantitation limit given.
U1 = The practical quantitation limit is elevated due to interferences present in the sample.
Exceeds MTCA A cleanup level.

Table 1 Groundwater Results Summary, Long Term Monitoring Event 3 (January 2014)

Monitoring Well No.			MW-10R									MW-11											
PARAMETERS	Units	Sample Date	3/17/08 ¹	1/20/10	5/25/10	8/10/10	4/5/11	9/30/11	1/23/13	7/30/13	1/22/14	3/13/08	1/20/10	5/25/10	8/10/10	8/10/10*	4/5/11	4/5/11*	9/30/11	1/23/13	1/23/2013*	7/30/13	1/22/14
MTCA A																							
VOLATILE ORGANICS (BTEX)																							
Benzene	ug/L	5	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4 U	1 U
Toluene	ug/L	1,000	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.2	1.7	1.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4 U	1 U
Ethylbenzene	ug/L	700	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4 U	1 U
m,p-Xylene	ug/L	1,000	6.8	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4 U	1 U
o-Xylene	ug/L	1,000	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4 U	1 U
TOTAL PETROLEUM HYDROCARBONS																							
Gasoline	ug/L	800	400 U	400 U	1,100	780	830	1200	1400	360	100 U	100 U	100 U	100 U	140	130	100 U	100 U	320	100 U	100 U	400 U	100 U
Diesel	mg/L	0.5	160	0.27 U	0.61 U	0.42 U	0.45 U	0.81 U	0.76 U	--	0.26 U	0.27	0.17 U	0.26 U	0.25 U	0.25 U	0.26 U	0.26 U	0.37	0.26 U	0.26 U	0.27 U	0.26 U
Lube Oil	mg/L	0.5	8.8 U	0.44 U	0.42 U	0.45 U	0.43 U	0.43 U	0.41 U	U	--	0.41 U	0.40 U	0.27 U	0.42 U	0.41 U	0.41 U	0.42 U	0.42 U	0.41 U	0.41 U	0.44 U	0.41 U
METALS																							
Total Lead	ug/L	15	--	3.8	--	--	--	--	--	--	--	--	4.7	--	--	--	--	--	--	--	--	--	--
Dissolved Lead	ug/L	15	--	2.2	--	--	--	--	--	--	--	--	1.4	--	--	--	--	--	--	--	--	--	--
Dissolved Iron	ug/L		--	6,400	--	--	--	--	--	--	--	--	270	--	--	--	--	--	--	--	--	--	--
Total Ferrous Iron	mg/L		--	--	25.2	34.4	12.4	--	40.80	--	2.14	--	--	19.0	30.4	30.0	2.66	2.74	--	0.67	0.88	35.90	6.88
Dissolved Manganese	ug/L		--	1,100	1,400	2,000	1,500	--	3,700	--	2000.00	--	300	1,400	2,600	2,600	400	400	--	370	350	3800	1100
PAHs																							
Naphthalene	ug/L		--	0.14	--	--	--	--	--	--	--	--	0.13 U	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	ug/L		--	0.12 U	--	--	--	--	--	--	--	--	0.13 U	--	--	--	--	--	--	--	--	--	--
1-Methylnapththalene	ug/L		--	21	--	--	--	--	--	--	--	--	0.13 U	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	ug/L		--	0.12 U	--	--	--	--	--	--	--	--	0.13 U	--	--	--	--	--	--	--	--	--	--
Acenaphthene	ug/L		--	0.23	--	--	--	--	--	--	--	--	0.13 U	--	--	--	--	--	--	--	--	--	--
Flourene	ug/L		--	0.32	--	--	--	--	--	--	--	--	0.13 U	--	--	--	--	--	--	--	--	--	--
Phenanthrene	ug/L		--	0.12 U	--	--	--	--	--	--	--	--	0.13 U	--	--	--	--	--	--	--	--	--	--
Anthracene	ug/L		--	0.12 U	--	--	--	--	--	--	--	--	0.13 U	--	--	--	--	--	--	--	--	--	--
Fluoranthene	ug/L		--	0.12 U	--	--	--	--	--	--	--	--	0.13 U	--	--	--	--	--	--	--	--	--	--
Pyrene	ug/L		--	0.12 U	--	--	--	--	--	--	--	--	0.13 U	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	ug/L		--	0.014	--	--	--	--	--	--	--	--	0.013 U	--	--	--	--	--	--	--	--	--	--
Chrysene	ug/L		--	0.012 U	--	--	--	--	--	--	--	--	0.013 U	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	ug/L		--	0.012 U	--	--	--	--	--	--	--	--	0.013 U	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	ug/L		--	0.012 U	--	--	--	--	--	--	--	--	0.013 U	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	ug/L	0.1	--	0.012 U	--	--	--	--	--	--	--	--	0.013 U	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	ug/L		--	0.012 U	--	--	--	--	--	--	--	--	0.013 U	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	ug/L		--	0.012 U	--	--	--	--	--	--	--	--	0.013 U	--	--	--	--	--	--	--	--	--	--
Benzo[g,h,i]perylene	ug/L		--	0.012 U	--	--	--	--	--	--	--	--	0.013 U	--	--	--	--	--	--	--	--	--	--
GENERAL CHEMISTRY																							
Alkalinity	mg/L		220	190	200	210	230	--	250	--	280.00	170	52	210	120	110	70	66	--	130	180	160	190
Nitrate (as Nitrogen)	mg/L		0.050 U	0.77	0.094	0.050 U	0.050 U	--	0.05 U	--	0.58	0.050 U	0.050 U	0.070	0.086	0.1	0.050 U	0.050 U	--	2.40	1.60	0.05 U	30.00
Sulfate	mg/L		5.0 U	10	10 U	5.0 U	5.0 U	--	25.00 U	--	43.00	5.0 U	8.8	10 U	25 U	25 U	5.0 U	5.0 U	--	56	47	5 U	45
Chloride	mg/L		2.5	10	10	14	6.8	--	14.00	--	16.00	5.2	3.1	7.9	8.8	9.4	6.0	5.5	--	2.70	3.60	9.70	25.00
Dissolved Methane	ug/L		--	170	510	260	590	--	2900	--	37.00	--	15	1,200	870	730	310	340	--	53	68	390	190
BOD5	mg/L		--	3.06	2.0	12 U	--	--	--	--	--	--	3.36	3.1	12 U	12 U	--	--	--	--	--	--	--
FIELD PARAMETERS																							
Turbidity	Neth. Turbidity Units		208	54.7	3.0	235	2.7	6.5	NM	NM	0.1	12.6	165	1.5	32.9	32.9	3.4	3.4	21.1	NM	--	5.80	13.20
pH	--		6.38	6.00	6.32	6.05	6.50	6.52	6.58	NM	6.4	6.20	5.27	6.20	6.27	6.27	6.17	6.17	6.41	6.19	--	6.72	6.15
Specific Conductance	Millisiemens/cm		53.4	35.9	51.2	90	90	81.2	0.8	NM	0.68	63.5	10.3	32.0	90	90	64.3	64.3	89.0	0.4	--	0.61	0.78
Dissolved Oxygen	mg/L		0.0	5.38	6.31	2.38	2.20	6.16	0.20	NM	0.72	0.0	5.87	0.90	0.0	0.0	2.67	2.67	0.00	0.91	--	0.59	0.71
Oxdat. Red. Potential	Millivolts		-35	-64	-19.0	-79	-110	-96	-194	NM	58.2	62	169	-49.3	-110	-110	-31	-31	-106	-221	--	-98	36.4

Notes:
1 Sample collected from replaced well.
* Duplicate sample.
J = Reported concentration is an estimate.
mg/L= Milligrams per liter.
NM = Not measured due to equipment malfunction.
µg/L = Micrograms per liter.
U = Analyte not detected above practical quantitation limit given.
U1 = The practical quantitation limit is elevated due to interferences present in the sample.
Exceeds MTCA A cleanup level.

Table 1 Groundwater Results Summary, Long Term Monitoring Event 3 (January 2014)

Monitoring Well No.			MW-13R									MW-20R				MW-21R								
PARAMETERS	Units	Sample Date	2/15/10	5/26/10	8/11/10	4/6/11	9/29/11	1/24/13	7/30/13	7/30/13	1/21/14	1/23/13	7/31/13	1/21/14*	1/21/14	3/18/08 ¹	2/15/10	6/1/10	8/11/10	8/11/10*	4/6/11	4/6/11*	9/28/11	
MTCA A																								
VOLATILE ORGANICS (BTEX)																								
Benzene	ug/L	5	35 J	33	22	11	4	11	11	7.4	4.8	4.8	23	4.3	4.5	15	46 J	34	27	--	45	--	19	
Toluene	ug/L	1,000	4.0 U	1.3	1.0 U	1.0 U	1.0 U	1 U	1 U	4 U	1 U	1 U	4 U	1 U	1 U	91	5.0 J	2.9	1.7	--	6.7	--	1.0 U	
Ethylbenzene	ug/L	700	13 J	15	10	2.6	1.0 U	2	2	8.8	1	3	40	4.9	5	620	230 J	240	120	--	340	--	34	
m,p-Xylene	ug/L	1,000	4.0 U	1.4	1.7	1.0 U	1.0 U	1 U	1 U	4 U	1 U	1 U	4 U	1 U	1 U	910	190 J	210	100	--	290	--	21	
o-Xylene	ug/L	1,000	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	4 U	1 U	1 U	4 U	1 U	1 U	110	8.9 J	2.3	1.9	--	4.0 U	--	1.0 U	
TOTAL PETROLEUM HYDROCARBONS																								
Gasoline	ug/L	800	680 J	560	510	420	150	170	170	400 U	120 U	260	790	280	290	9,200	4,400 J	4,400	2,800	--	5,100	--	1500	
Diesel	mg/L	0.5	0.49 U1	0.43	0.39 U	0.41	0.26 U	0.26 U	0.26 U	0.35	0.27 U	0.26 U	0.27 U	0.26 U	0.26 U	1.7	0.89 U1	0.79 U	0.87	--	0.68 U	--	0.42 U	
Lube Oil	mg/L	0.5	0.70 J	0.45 U	0.43 U	0.42 U	0.42 U	0.42 U	0.42 U	0.64	0.43 U	0.42 U	0.43 U	0.41 U	0.41 U	0.40 U	0.46 U	0.42 U	0.41 U	--	0.42 U	--	0.42 U	
METALS																								
Total Lead	ug/L	15	5.2	--	--	--	--	--	--	--	--	--	--	--	--	10	15	2.8 J	10 J	5.5 J	1.1	1.1 U	--	
Dissolved Lead	ug/L	15	1.1	--	--	--	--	--	--	--	--	--	--	--	--	8.9	2.3	1.4	1.4	1.0	1.0 U	1.0 U	--	
Dissolved Iron	ug/L		3,600	--	--	--	--	--	--	--	--	--	--	--	--	--	18,000	--	--	--	--	--	--	
Total Ferrous Iron	mg/L		--	15.2	9.31	7.94	--	4.51	4.51	--	0.286	26.20	29.20	0.088	0.078	--	--	16.2	17.9	--	10.1	--	--	
Dissolved Manganese	ug/L		1,500	1,300	2,000	1,800	--	1,700	1,700	--	--	1,900	2,600	390	390	--	4,100	4,500	3,500	--	4,200	--	--	
PAHs																								
Naphthalene	ug/L		15	--	--	0.35	--	--	--	--	--	--	--	--	--	18	18	--	--	--	--	--	--	
2-Methylnaphthalene	ug/L		1.1	--	--	0.10 U	--	--	--	--	--	--	--	--	--	32	7.3	--	--	--	--	--	--	
1-Methylnapthalene	ug/L		4.7	--	--	0.38	--	--	--	--	--	--	--	--	--	20	18	--	--	--	--	--	--	
Acenaphthylene	ug/L		1.1	--	--	0.40	--	--	--	--	--	--	--	--	--	0.099	1.1 U	--	--	--	--	--	--	
Acenaphthene	ug/L		48	--	--	22	--	--	--	--	--	--	--	--	--	1.1	1.3	--	--	--	--	--	--	
Flourene	ug/L		21	--	--	7.6	--	--	--	--	--	--	--	--	--	0.96	0.61	--	--	--	--	--	--	
Phenanthrene	ug/L		3.2	--	--	0.70	--	--	--	--	--	--	--	--	--	0.65	0.44	--	--	--	--	--	--	
Anthracene	ug/L		1.9	--	--	1.2	--	--	--	--	--	--	--	--	--	0.095 U	0.26	--	--	--	--	--	--	
Fluoranthene	ug/L		1.5	--	--	1.2	--	--	--	--	--	--	--	--	--	0.11	0.12	--	--	--	--	--	--	
Pyrene	ug/L		0.91	--	--	0.58	--	--	--	--	--	--	--	--	--	0.095 U	0.11 U	--	--	--	--	--	--	
Benzo(a)anthracene	ug/L		0.15	0.057	0.061	0.058	--	--	--	--	--	--	--	--	--	0.012	0.011 U	--	--	--	--	--	--	
Chrysene	ug/L		0.15	0.040	0.050 U	0.044	--	--	--	--	--	--	--	--	--	0.011	0.011 U	--	--	--	--	--	--	
Benzo(b)fluoranthene	ug/L		0.093	0.010 U	0.010 U	0.018	--	--	--	--	--	--	--	--	--	0.010	0.011 U	--	--	--	--	--	--	
Benzo(k)fluoranthene	ug/L		0.083	0.010 U	0.010 U	0.014	--	--	--	--	--	--	--	--	--	0.011	0.011 U	--	--	--	--	--	--	
Benzo(a)pyrene	ug/L	0.1	0.092	0.010 U	0.010 U	0.017	--	--	--	--	--	--	--	--	--	0.012	0.011 U	--	--	--	--	--	--	
Indeno(1,2,3-cd)pyrene	ug/L		0.041	0.010 U	0.010 U	0.010 U	--	--	--	--	--	--	--	--	--	0.0099	0.011 U	--	--	--	--	--	--	
Dibenz(a,h)anthracene	ug/L		0.013	0.010 U	0.010 U	0.010 U	--	--	--	--	--	--	--	--	--	0.0095 U	0.011 U	--	--	--	--	--	--	
Benzo[g,h,i]perylene	ug/L		0.053	--	--	0.010 U	--	--	--	--	--	--	--	--	--	0.013	0.011 U	--	--	--	--	--	--	
GENERAL CHEMISTRY																								
Alkalinity	mg/L		1,300	1,400	1,600	1,500	--	1900	1900	--	--	220	270	250	270	150	140	1,400	1,500	--	2,000	2000	--	
Nitrate (as Nitrogen)	mg/L		0.050 U	0.050 U	0.050 U	0.050 U	--	0.05 U	0.05 U	--	--	0.05 U	0.05 U	6.40	6.30	0.050 U	0.050 U	0.050 U	0.057	--	0.27	--	--	
Sulfate	mg/L		460	460	560	280	--	160.00	160.00	--	--	25 U	10 U	43	38	5.0 U	230	170	120	--	110	--	--	
Chloride	mg/L		710	670	750	420	--	400.00	400.00	--	--	24	28	43	42	28	140	120	110	--	100	--	--	
Dissolved Methane	ug/L		280	580	680	290	--	10.00	10.00	--	220.00	540	2000	930	840	--	5,700	4,200	4,800	--	3,200	--	--	
BOD5	mg/L		4.47	2.2	5.1	--	--	--	--	--	--	--	--	--	--	--	17	8.4	16.2	--	--	--	--	
FIELD PARAMETERS																								
Turbidity	Neth. Turbidity Units		366	275.3	106	>1000	170.0	NM	NM	11.2	10.4	NM	0	--	0.1	168	303	8.9	384	384	52.2	52.2	646.0	
pH	--		6.96	6.81	6.89	6.99	7.42	7.20	7.20	7.31	7.01	6.67	6.62	--	5.98	6.39	6.56	6.83	7.00	7.00	7.06	7.06	7.06	
Specific Conductance	Millisiemens/cm		57.3	4.53	55.2	438	5.99	4.85	4.85	5.82	5.24	0.64	0.70	--	0.724	44.4	33.3	2.50	4.47	4.47	430	430	3.33	
Dissolved Oxygen	mg/L		7.56	3.07	0.0	4.82	7.70	7.68	7.68	5.34	3.29	0.00	3.79	--	0.56	0.0	0.00	4.92	0.0	0.0	1.80	1.80	0.00	
Oxdat. Red. Potential	Millivolts		-13	-96.3	-146	-103	-133	151	151	151	80	-243	-79	--	166	15	-107	-140.0	-162	-162	-160	-160	-195	

Notes:
1 Sample collected from replaced well.
* Duplicate sample.
J = Reported concentration is an estimate.
mg/L= Milligrams per liter.
NM = Not measured due to equipment malfunction.
µg/L = Micrograms per liter.
U = Analyte not detected above practical quantitation limit given.
U1 = The practical quantitation limit is elevated due to interferences present in the sample.
Exceeds MTCA A cleanup level.

Table 1 Groundwater Results Summary, Long Term Monitoring Event 3 (January 2014)

Monitoring Well No.			MW-21R				MW-22R								MW-25						
PARAMETERS	Units	Sample Date	1/23/13	7/31/13	7/31/13*	1/21/14	3/17/08 ¹	1/20/10	5/26/10	8/12/10	4/6/11	9/29/11	1/24/13	7/31/13	1/21/14	3/18/08	3/18/08	1/21/10	5/27/10	8/12/10	4/6/11
MTCA A																					
VOLATILE ORGANICS (BTEX)																					
Benzene	ug/L	5	32	39	33	29	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	2.7	1.0 U	1.0 U	1.0 U	4.0 U	4.0	10 J	4.0 U	1.3	4.0
Toluene	ug/L	1,000	4.5	7.3	6.7	9.1	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0	7.2 J	4.0 U	2.1	4.0
Ethylbenzene	ug/L	700	160	98	82	95	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	56	56	74 J	4.0 U	6.1	5.3
m,p-Xylene	ug/L	1,000	85	59	48	80	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.2	4.1	140 J	4.0 U	5.0 U	8.4
o-Xylene	ug/L	1,000	2.3	4.0 U	4.0 U	4.1	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0	200 U1	4.0 U	1.0 U	4.0
TOTAL PETROLEUM HYDROCARBONS																					
Gasoline	ug/L	800	3000	2300	2000	2600	400 U	400 U	100 U	100 U	100 U	120	100 U	100 U	100 U	1,600	1,700	2,000 U	1,400	1,300	1,500
Diesel	mg/L	0.5	0.47 U	0.59 U	0.65 U	0.77 U	0.26 U	0.26 U	0.27 U	0.25 U	0.27 U	0.26 U	0.26 U	0.27 U	0.26 U	1.2	1	0.49	0.92	2	7.0
Lube Oil	mg/L	0.5	0.41 U	0.43 U	0.42 U	0.41 U	0.41 U	0.41 U	0.43 U	0.41 U	0.43 U	0.41 U	0.41 U	0.44 U	0.41 U	0.48 U	0.46 U	0.42 U	0.42 U	0.41 U	0.42
METALS																					
Total Lead	ug/L	15	--	--	--	--	1.1 U	1.3	--	--	--	--	--	--	--	1.2	1.3	1.1 U	--	--	--
Dissolved Lead	ug/L	15	--	--	--	--	1.0 U	1.0 U	--	--	--	--	--	--	--	1.0 U	1.0 U	1.0 U	--	--	--
Dissolved Iron	ug/L		--	--	--	--	--	220	--	--	--	--	--	--	--	--	--	2,000	--	--	--
Total Ferrous Iron	mg/L		6.45	7.10	--	7.42	--	--	0.295	1.29	0.043	--	0.06	0.04 U	0.04 U	--	--	--	0.352	3.78	1.39
Dissolved Manganese	ug/L		2,800	3,400	--	3300	--	1,400	890	3,200	840	--	700	770	400	--	--	120	220	130	170
PAHs																					
Naphthalene	ug/L		--	--	--	--	0.098 U	0.10 U	--	--	--	--	--	--	--	1.2	1.4	0.27	--	--	--
2-Methylnaphthalene	ug/L		--	--	--	--	0.098 U	0.10 U	--	--	--	--	--	--	--	0.11 U	0.11 U	0.10 U	--	--	--
1-Methylnapthalene	ug/L		--	--	--	--	0.098 U	0.10 U	--	--	--	--	--	--	--	22	25	0.67	--	--	--
Acenaphthylene	ug/L		--	--	--	--	0.098 U	0.10 U	--	--	--	--	--	--	--	0.17	0.17	0.10 U	--	--	--
Acenaphthene	ug/L		--	--	--	--	0.52	0.10 U	--	--	--	--	--	--	--	0.98	0.96	0.15	--	--	--
Flourene	ug/L		--	--	--	--	0.098 U	0.10 U	--	--	--	--	--	--	--	1.6	1.7	0.18	--	--	--
Phenanthrene	ug/L		--	--	--	--	0.098 U	0.10 U	--	--	--	--	--	--	--	0.11 U	0.11 U	0.10 U	--	--	--
Anthracene	ug/L		--	--	--	--	0.098 U	0.10 U	--	--	--	--	--	--	--	0.11 U	0.11 U	0.10 U	--	--	--
Fluoranthene	ug/L		--	--	--	--	0.098 U	0.10 U	--	--	--	--	--	--	--	0.11 U	0.11 U	0.10 U	--	--	--
Pyrene	ug/L		--	--	--	--	0.098 U	0.10 U	--	--	--	--	--	--	--	0.11 U	0.11 U	0.10 U	--	--	--
Benzo(a)anthracene	ug/L		--	--	--	--	0.0098 U	0.010 U	--	--	--	--	--	--	--	0.011 U	0.011 U	0.010 U	--	--	--
Chrysene	ug/L		--	--	--	--	0.0098 U	0.010 U	--	--	--	--	--	--	--	0.011 U	0.011 U	0.010 U	--	--	--
Benzo(b)fluoranthene	ug/L		--	--	--	--	0.0098 U	0.010 U	--	--	--	--	--	--	--	0.011 U	0.011 U	0.010 U	--	--	--
Benzo(k)fluoranthene	ug/L		--	--	--	--	0.0098 U	0.010 U	--	--	--	--	--	--	--	0.011 U	0.011 U	0.010 U	--	--	--
Benzo(a)pyrene	ug/L	0.1	--	--	--	--	0.0098 U	0.010 U	--	--	--	--	--	--	--	0.011 U	0.011 U	0.010 U	--	--	--
Indeno(1,2,3-cd)pyrene	ug/L		--	--	--	--	0.0098 U	0.010 U	--	--	--	--	--	--	--	0.011 U	0.011 U	0.010 U	--	--	--
Dibenz(a,h)anthracene	ug/L		--	--	--	--	0.0098 U	0.010 U	--	--	--	--	--	--	--	0.011 U	0.011 U	0.010 U	--	--	--
Benzo[g,h,i]perylene	ug/L		--	--	--	--	0.0098 U	0.010 U	--	--	--	--	--	--	--	0.011 U	0.11 U	0.010 U	--	--	--
GENERAL CHEMISTRY																					
Alkalinity	mg/L		1700	1800	--	2000.00	340	160	320	240	310	--	250	200	280	420	410	140	190	260	200
Nitrate (as Nitrogen)	mg/L		0.05 U	0.05 U	--	0.062	0.050 U	0.50	0.050 U	0.17	0.41	--	0.31 U	0.22	0.50	0.052	0.050 U	3.4	0.73	0.050 U	1.4
Sulfate	mg/L		5.00 U	5.00 U	--	5.00 U	22	1,200	75	200	39	--	34	510	240	36	36	13	8.0	26	5.0
Chloride	mg/L		74	120	--	100.00	370	9,100	390	1,600	97	--	90	4100	1300	980	910	38	31	610	24
Dissolved Methane	ug/L		1300	2200	--	4200.00	--	6.3	21	10	6.8	--	1.90	3.30	5.40	--	--	220	190	330	190
BOD5	mg/L		--	--	--	--	--	2.00 U	1.0 U	1.2 U	--	--	--	--	--	--	--	2.00 U	1.9	4.3	--
FIELD PARAMETERS																					
Turbidity	Neth. Turbidity Units		NM	NM	5.6	5.7	212	56.3	4.1	132	0.8	112.0	NM	0.0	0.2	120	120	164	4.8	32.6	65.5
pH	--		7.08	7.08	7.20	6.84	6.62	6.32	6.82	6.69	7.03	7.65	7.08	6.97	6.98	6.31	6.31	5.81	6.28	6.96	6.20
Specific Conductance	Millisiemens/cm		3.22	3.22	3.09	3.60	19.6	17.9	1.37	NM	128	6.04	0.85	11.00	5.13	19.8	19.8	31.8	28.9	5.13	90
Dissolved Oxygen	mg/L		0.70	0.70	0.71	0.36	0.0	7.55	4.90	0.01	1.75	8.48	8.69	7.10	0.97	0.0	0.0	4.96	1.10	0.0	0.57
Oxdat. Red. Potential	Millivolts		-244	-244	-117	-32	148	54	62.0	-36	32	-139	-161	35	41.3	-56	-56	-14	85.6	-120	-30

Notes:

1 Sample collected from replaced well.

* Duplicate sample.

J = Reported concentration is an estimate.

mg/L= Milligrams per liter.

NM = Not measured due to equipment malfunction.

µg/L = Micrograms per liter.

U = Analyte not detected above practical quantitation limit given.

U1 = The practical quantitation limit is elevated due to interferences present in the sample.

Exceeds MTCA A cleanup level.

Table 1 Groundwater Results Summary, Long Term Monitoring Event 3 (January 2014)

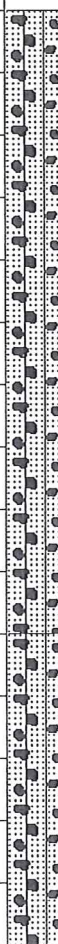
Monitoring Well No.			MW-25				MW-26R									MW-27				
PARAMETERS	Units	Sample Date	9/29/11	1/24/13	7/30/13	1/22/14	3/18/08 ¹	1/20/10	5/26/10	8/11/10	4/6/11	9/28/11	1/24/13	7/31/13	1/21/14	4/7/11	9/30/11	1/24/13	7/30/13	1/22/14
MTCA A																				
VOLATILE ORGANICS (BTEX)																				
Benzene	ug/L	5	U	1.4	1.0	4.0 U	1.0 U	17	4.0 U	17	3.9	1.0 U	6.0	5.7	5.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	ug/L	1,000	U	2.5	1.2	4.0 U	1.0 U	4.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	700		11	2	5	1.0 U	4.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m,p-Xylene	ug/L	1,000		1.2	3.4	9.0	1.0	4.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.1	4.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Xylene	ug/L	1,000	U	1.0 U	1.0 U	4.0 U	1.0 U	4.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TOTAL PETROLEUM HYDROCARBONS																				
Gasoline	ug/L	800		1500	1000	1200	420	1,300	400 U	530	240	100 U	270	290	400 U	100 U	100 U	100 U	100 U	100 U
Diesel	mg/L	0.5		1.3	0.7 U	2.0	0.7	1.3	0.27 U	0.26 U	0.31 U	0.27 U	0.26 U	0.26 U	0.25 U	0.26 U	0.26 U	0.26 U	0.27 U	0.26 U
Lube Oil	mg/L	0.5	U	0.41 U	0.44 U	0.48	0.41	0.40 U	0.43 U	0.41 U	0.40 U	0.43 U	0.41 U	0.41 U	0.40 U	0.41 U	0.42 U	0.42 U	0.43 U	0.41 U
METALS																				
Total Lead	ug/L	15		--	--	--	--	3.3	1.1 U	--	--	--	--	--	--	--	--	--	--	--
Dissolved Lead	ug/L	15		--	--	--	--	1.0 U	1.0 U	--	--	--	--	--	--	--	--	--	--	--
Dissolved Iron	ug/L			--	--	--	--	--	56 U	--	--	--	--	--	--	--	--	--	--	--
Total Ferrous Iron	mg/L			--	5.71	108.00	0.088	--	--	0.758	0.8	0.059	--	0.395	0.706	0.196	27.6	--	34.9	42.6
Dissolved Manganese	ug/L			--	670	2700	250	--	11 U	66	560	10 U	--	4,000	260	77	3,900	--	4,300	6,500
PAHs																				
Naphthalene	ug/L			--	--	--	--	0.80	0.10 U	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	ug/L			--	--	--	--	0.10 U	0.10 U	--	--	--	--	--	--	--	--	--	--	--
1-Methylnappthalene	ug/L			--	--	--	--	69	0.10 U	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	ug/L			--	--	--	--	0.45	0.15 U	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	ug/L			--	--	--	--	23	0.17 U	--	--	--	--	--	--	--	--	--	--	--
Flourene	ug/L			--	--	--	--	4.8	0.10 U	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	ug/L			--	--	--	--	10	0.10 U	--	--	--	--	--	--	--	--	--	--	--
Anthracene	ug/L			--	--	--	--	2.4	0.17 U	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	ug/L			--	--	--	--	0.88	0.10 U	--	--	--	--	--	--	--	--	--	--	--
Pyrene	ug/L			--	--	--	--	1.2	0.10 U	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	ug/L			--	--	--	--	0.10	0.016 U	--	--	--	--	--	--	--	--	--	--	--
Chrysene	ug/L			--	--	--	--	0.098	0.010 U	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	ug/L			--	--	--	--	0.022	0.010 U	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	ug/L			--	--	--	--	0.027	0.010 U	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	ug/L	0.1		--	--	--	--	0.051	0.010 U	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	ug/L			--	--	--	--	0.017	0.010 U	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	ug/L			--	--	--	--	0.010 U	0.010 U	--	--	--	--	--	--	--	--	--	--	--
Benzo[g,h,i]perylene	ug/L			--	--	--	--	0.020	0.010 U	--	--	--	--	--	--	--	--	--	--	--
GENERAL CHEMISTRY																				
Alkalinity	mg/L			--	400	130	150	190	180	270	210	300	--	330	200	160	310	--	270	310
Nitrate (as Nitrogen)	mg/L			--	0.05 U	0.05 U	7.60	0.050 U	1.0	0.16	0.050 U	0.050 U	--	0.05 U	0.05 U	0.41	0.050 U	--	0.05 U	0.05 U
Sulfate	mg/L		U	--	18	1100	140	1,400	1,200	1,400	2,200	1,300	--	1100	1100	2400	25 U	--	25 U	10 U
Chloride	mg/L			--	120	8000	1300	9,400	9,100	10,000	20,000	8,400	--	7200	14000	11000	9.8	--	10	20
Dissolved Methane	ug/L			--	110	57	3.2	--	3.0	68	5.0	29	--	270	16	1.0	8,600	--	6900	5200
BOD5	mg/L			--	--	--	--	--	2.00 U	1.7	1.5	--	--	--	--	--	--	--	--	--
FIELD PARAMETERS																				
Turbidity	Neth. Turbidity Units			60.0	NM	49.0	8.1	85.7	70.2	3.8	38.0	0.1	82.3	NM	0.0	4.9	49.2	>1000	NM	NM
pH	--			6.21	6.54	6.30	5.80	6.24	6.19	6.31	6.53	6.88	6.52	6.72	6.68	6.51	6.58	6.53	6.61	6.60
Specific Conductance	Millisiemens/cm			51.6	1.1	23.4	4.8	3.25	16.6	22.42	--	--	--	5.70	38.00	38.30	92	1.18	5.76	0.82
Dissolved Oxygen	mg/L			0.00	0.07	0.50	0.80	0.0	6.75	5.52	0.01	0.36	0.00	0.21	2.11	2.60	0.27	0.00	0.10	5.20
Oxdat. Red. Potential	Millivolts			-99	-287	-32	179	48	58	-64.5	-98	-84	-275	-321	-88	-156.5	-88	-111	-210	-99

Notes:

- 1 Sample collected from replaced well.
- * Duplicate sample.
- J = Reported concentration is an estimate.
- mg/L= Milligrams per liter.
- NM = Not measured due to equipment malfunction.
- µg/L = Micrograms per liter.
- U = Analyte not detected above practical quantitation limit given.
- U1 = The practical quantitation limit is elevated due to interferences present in the sample.
- Exceeds MTCA A cleanup level.

Parametrix

Boring Log

Boring ID: MW-4R			Drilling Company:		Sheet 1 of 1	
Project Name: Chevron Interim Action			Drilling Method: Direct Push		Starting Date: 12/14/09	
Project #: 255-1896-063 / 04-1304			Logged by: Lily Vagelatos		Ending Date: 12/14/09	
Location: Bremerton, WA			Checked by: Ingmar Saul, L.G.		Boring Depth: 15 ft	
					Depth to Water: 5 ft	
Depth (ft)	Lithologic Symbol	Description/Classification of Materials	Sample		Boring Diagram	Depth (ft)
			Sample ID	Recovery		
0		Ground Surface				0
		MIXED TREATMENT ZONE Sandy silt with gravel, tan brown, very moist.		50"		5
5						55"
10		Silty sand and gravel, tan brown, saturated, starting at approximately 10 ft bgs.		40"		15
15		Bottom of boring at 15 feet bgs.				20



Parametrix

Boring Log

Boring ID: MW-9R

Drilling Company:

Project Name: Chevron Interim Action

Drilling Method: Direct Push

Project #: 255-1896-063 / 04-1304

Logged by: Lily Vagelatos

Location: Bremerton, WA

Checked by: Ingmar Saul, L.G.

Sheet 1 of 1

Starting Date: 12/15/09

Ending Date: 12/15/09

Boring Depth: 15 ft

Depth to Water: 9 ft

Depth (ft)	Lithologic Symbol	Description/Classification of Materials	Sample		Boring Diagram	Depth (ft)
			Sample ID	Recovery		
0		Ground Surface				0
		TOP SOIL with VEGETATION Silty sand				
		MIXED TREATMENT ZONE Sandy silt with gravel, tan brown, very moist.		30"		
5				45"		5
10		Silty sand and gravel, tan brown, saturated, starting at approximately 10 ft bgs.	CHEV-SO-MW9R-0090	24"		10
15		Bottom of boring at 15 feet bgs.				15
20						20

Ground Water at 9' bgs



Bentonite Seal from 0 to 5'
0.75" Diameter Casing; 0 to 5'

Well Screen Sand Pack from 5' to 15'
0.75" Diameter Prepacked Well Screen; 5' to 15'

Parametrix

Boring Log

Boring ID: MW-10R

Drilling Company:

Project Name: Chevron Interim Action

Drilling Method: Direct Push

Project #: 255-1896-063 / 04-1304

Logged by: Lily Vagelatos

Location: Bremerton, WA

Checked by: Ingmar Saul, L.G.

Sheet 1 of 1

Starting Date: 12/29/09

Ending Date: 12/29/09

Boring Depth: 15 ft

Depth to Water: 7 ft

Depth (ft)	Lithologic Symbol	Description/Classification of Materials	Sample		Boring Diagram	Depth (ft)
			Sample ID	Recovery		
0		Ground Surface				0
		TILL and FILL MATERIAL Silty sand and gravel, brown tan.		12"		
5		Damp, starting at approximately 5 ft bgs.				5
		Saturated starting at approximately 7 ft bgs.	CHEV-SO-MW10R-0070	20"		
10				20"		10
15		Bottom of boring at 15 feet bgs.				15
20						20

Ground Water at 7' bgs

Bentonite Seal from 0 to 5'
0.75" Diameter Casing; 0 to 5'

Well Screen Sand Pack from 5' to 15'
0.75" Diameter Prepacked Well Screen; 5' to 15'

MONITOR WELL NO. M 11

WELL SCHEMATIC

Casing Elevation: 100.03
Casing Stickup: -0.3

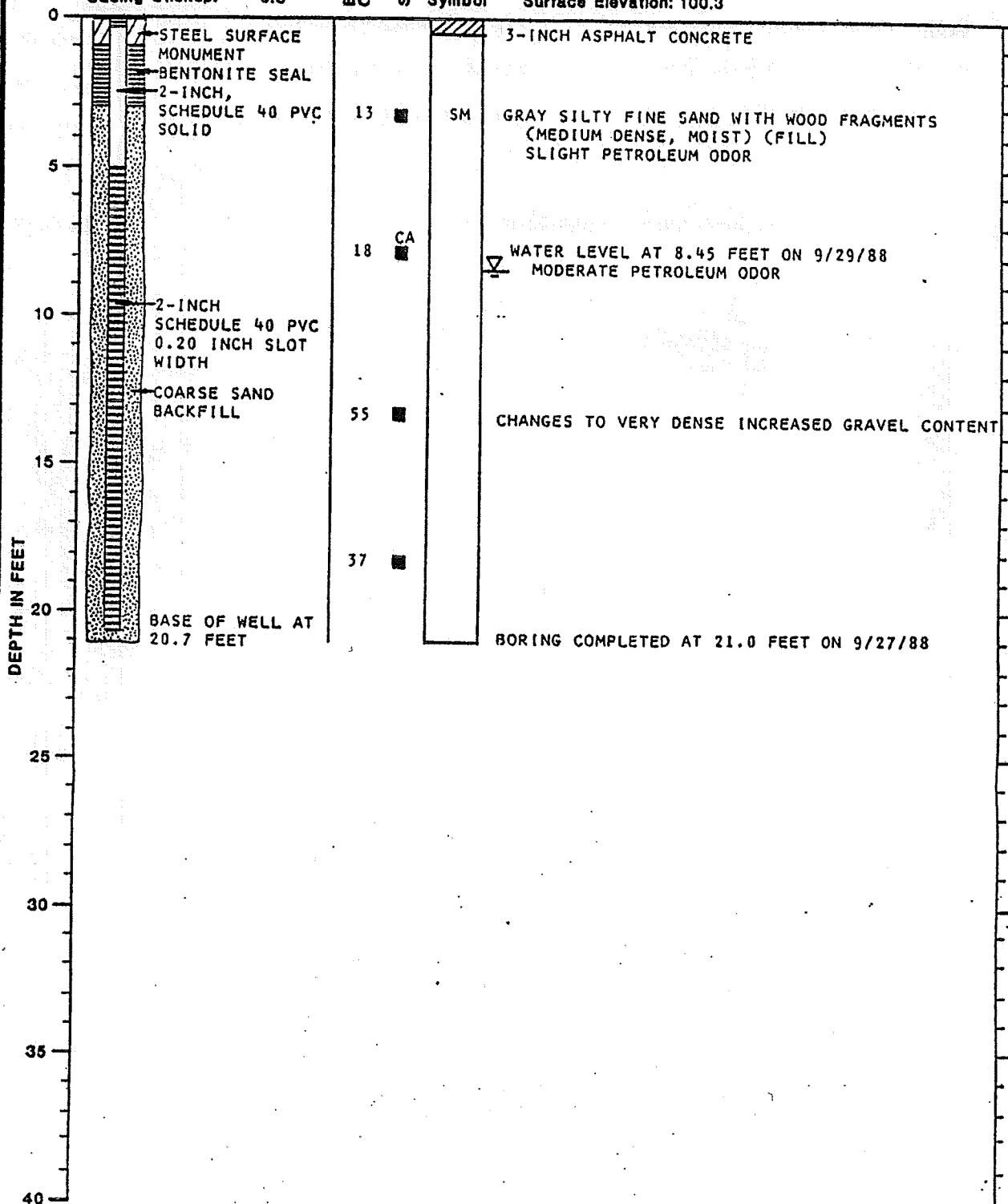
Blow-
Count

Samples

Group
Symbol

DESCRIPTION

Surface Elevation: 100.3



Note: See Figure A-2 for Explanation of Symbols

Geo  Engineers

LOG OF MONITOR WELL

FIGURE A-13

0372-34-4 KRF:DWA:GD 10/12/88

Parametrix

Boring Log

Boring ID: MW-13R

Drilling Company:

Project Name: Chevron Interim Action

Drilling Method: Direct Push

Project #: 255-1896-063 / 04-1304

Logged by: Lily Vagelatos

Location: Bremerton, WA

Checked by: Ingmar Saul, L.G.

Sheet 1 of 1

Starting Date: 12/14/09

Ending Date: 12/14/09

Boring Depth: 15 ft

Depth to Water: 7 ft

Depth (ft)	Lithologic Symbol	Description/Classification of Materials	Sample		Boring Diagram	Depth (ft)
			Sample ID	Recovery		
0		Ground Surface				0
		MIXED TREATMENT ZONE Sandy silt with gravel, tan brown, very moist.		45"		
5				50"		5
10		Silty sand and gravel, tan brown, saturated, at approximately 10 ft bgs.		30"		10
15		Bottom of boring at 15 feet bgs.				15
20						20

Ground Water at 7' bgs

Bentonite Seal from 0 to 5'
0.75" Diameter Casing; 0 to 5'

Well Screen Sand Pack from 5' to 15'
0.75" Diameter Prepacked Well Screen; 5' to 15'

Parametrix

Boring Log

Boring ID: MW-16R

Drilling Company:

Project Name: Chevron Interim Action

Drilling Method: Direct Push

Project #: 255-1896-063 / 04-1304

Logged by: Lily Vagelatos

Location: Bremerton, WA

Checked by: Ingmar Saul, L.G.

Sheet 1 of 1

Starting Date: 12/29/09

Ending Date: 12/29/09

Boring Depth: 15 ft

Depth to Water: 7 ft

Depth (ft)	Lithologic Symbol	Description/Classification of Materials	Sample		Boring Diagram	Depth (ft)
			Sample ID	Recovery		
0		Ground Surface				0
		SILTY GRAVELLY SAND Gray brown, damp, fill.				
5						5
10						10
15		Bottom of boring at 15 feet bgs.				15
20						20

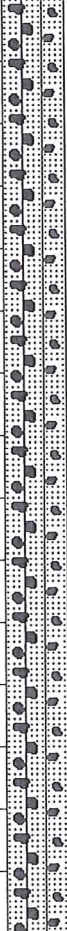
Ground Water at 7' bgs

Bentonite Seal from 0 to 5'
0.75" Diameter Casing; 0 to 5'

Well Screen Sand Pack from 5' to 15'
0.75" Diameter Prepacked Well Screen; 5' to 15'

Parametrix

Boring Log

Boring ID: MW-18R Project Name: Chevron Interim Action Project #: 255-1896-063 / 04-1304 Location: Bremerton, WA				Drilling Company: Drilling Method: Direct Push Logged by: Lily Vagelatos Checked by: Ingmar Saul, L.G.		Sheet 1 of 1 Starting Date: 12/29/09 Ending Date: 12/29/09 Boring Depth: 15 ft Depth to Water: 5 ft	
Depth (ft)	Lithologic Symbol	Description/Classification of Materials	Sample		Boring Diagram	Depth (ft)	
			Sample ID	Recovery			
0		Ground Surface				0	
		SILTY GRAVELLY SAND Gray brown, damp, fill.				5	
15		Bottom of boring at 15 feet bgs.				15	
20						20	

Parametrix

Boring Log

Boring ID: MW-19R		Drilling Company:		Sheet 1 of 1	
Project Name: Chevron Interim Action		Drilling Method: Direct Push		Starting Date: 12/29/09	
Project #: 255-1896-063 / 04-1304		Logged by: Lily Vagelatos		Ending Date: 12/29/09	
Location: Bremerton, WA		Checked by: Ingmar Saul, L.G.		Boring Depth: 15 ft	
				Depth to Water: 4 ft	

Depth (ft)	Lithologic Symbol	Description/Classification of Materials	Sample		Boring Diagram	Depth (ft)
			Sample ID	Recovery		
0		Ground Surface				0
0 to 20		SILTY GRAVELLY SAND Gray brown, damp, fill.				0 to 20
20		Bottom of boring at 20 feet bgs.				20
25						25

Boring ID: MW-20R

Drilling Method: HSA

Sheet 1 of 1

Project Name: Chevron LTM

Sample Method: Sprit Spoon

Drilling Date: 1/10/13

Project #: 233-1896-107

Logged by: Lara Linde, L.G.

Boring Depth: 15 ft

Location: Bremerton, WA

Checked by: Ingmar Saul, L.G.

Depth to Water: 4.99 ft

Ecology Tag #: BHK 398

Elevation (ft)	Lithologic Symbol	U.S.C.S.	Description/Classification of Materials; Soil: Group name, group symbol, color, plasticity, grain size, moisture, density, misc.	PID (PPM)	Recovery (in)	Well Diagram	Depth (ft)
0.0			Ground Surface				0
	SM		SAND (SM) Brown-gray, nonplastic, medium to fine, moist, loose, trace of fine rounded gravel, no petroleum odor.		36"/60"		
-8.0			Increasing silt content starting at approx. 8 ft bgs.		30"/60"		
-9.0			Strong petroleum odor starting at approx. 9 ft bgs.				
-9.5							
	SP		SAND (SP) Gray, low plasticity, fine to medium grained, wet, loose, some fine rounded gravel, strong petroleum odor.		36"/60"		10
-14.0							
-15.0	ML		SILT (ML) Brown-gray, high plasticity, moist, soft, some fine rounded gravel, slight petroleum odor.				15
			Bottom of boring at 15 feet bgs.				

Parametrix

Boring Log

Boring ID: MW-21R Project Name: Chevron Interim Action Project #: 255-1896-063 / 04-1304 Location: Bremerton, WA		Drilling Company: Drilling Method: Direct Push Logged by: Lily Vagelatos Checked by: Ingmar Saul, L.G.		Sheet 1 of 1 Starting Date: 12/15/09 Ending Date: 12/15/09 Boring Depth: 15 ft Depth to Water: 7 ft		
Depth (ft)	Lithologic Symbol	Description/Classification of Materials	Sample		Boring Diagram	Depth (ft)
			Sample ID	Recovery		
0		Ground Surface				0
		MIXED TREATMENT ZONE Sandy silt with gravel, tan brown, very moist.		50"		5
10		Silty sand and gravel, tan brown, saturated, starting at approximately 10 ft bgs.	CHEV-SO-MW21R-0100	50"		10
15				40"		15
20		Bottom of boring at 15 feet bgs.				20

Parametrix

Boring Log

Boring ID: MW-22R		Drilling Company:		Sheet 1 of 1	
Project Name: Chevron Interim Action		Drilling Method: Direct Push		Starting Date: 12/14/09	
Project #: 255-1896-063 / 04-1304		Logged by: Lily Vagelatos		Ending Date: 12/14/09	
Location: Bremerton, WA		Checked by: Ingmar Saul, L.G.		Boring Depth: 15 ft	
				Depth to Water: 10 ft	

Depth (ft)	Lithologic Symbol	Description/Classification of Materials	Sample		Boring Diagram	Depth (ft)
			Sample ID	Recovery		
0		Ground Surface				0
		MIXED TREATMENT ZONE Sandy silt with gravel, tan brown, very moist.		50"		
5				55"		5
10		Silty sand and gravel, tan brown, saturated, starting at approximately 10 ft bgs.	CHEV-SO-MW22R-0100	45"		10
15		Bottom of boring at 15 feet bgs.				15
20						20

The Boring Diagram illustrates the physical components of the well. It shows a vertical casing starting at the ground surface (0 ft) and extending to 15 feet. A Bentonite Seal is indicated between the 0 to 5-foot and 5 to 15-foot sections. A Well Screen Sand Pack is shown from 5' to 15', with a 0.75" Diameter Prepacked Well Screen. A blue arrow points to the water level at 10 feet bgs.

Boring ID: MW-25

Drilling Company: ESN

Sheet 1 of 1

Project Name: Chevron Prop RI/FS

Drilling Method: Auger

Drilling Date: 3/7/08

Project #: 255-1896-063

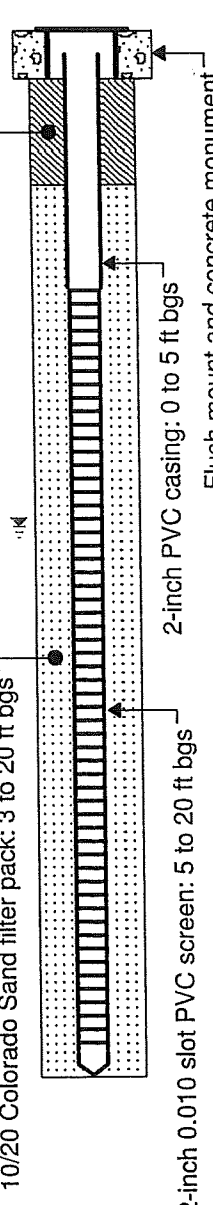
Logged by: David Dinkuhn, P.E.

Boring Depth: 20 ft

Location: SEE MAP

Checked by: David Dinkuhn, P.E.

Depth to Water: 9.5 ft

Depth (ft)	Sample Type	Lithologic Symbol	Description/Classification of Materials	Sample			Well Point Diagram	Depth (ft)
				PID Reading	Sample ID	Recovery (ft)		
0			Ground Surface				 Bentonite Anular Seal: 1 to 3 ft bgs 10/20 Colorado Sand filter pack: 3 to 20 ft bgs 2-inch 0.010 slot PVC screen: 5 to 20 ft bgs 2-inch PVC casing: 0 to 5 ft bgs Flush mount and concrete monument	0
			Silty Sandy Gravel Gray brown, damp, No petroleum hydrocarbon odor (FILL)	0		4		
5				0		3		5
				0		3		
10			Silty Gravelly Sand Gray, wet, moderate petroleum hydrocarbon odor (FILL)	1400	CHEV-SO-MW25-0100	3		10
			Silty Gravelly Sand Wet, No petroleum hydrocarbon odor (OUTWASH)			3		
15				4		3		15
						3		
20						1		20
			Bottom of boring at 20 feet bgs.					

Parametrix

Boring Log

Boring ID: MW-26R

Drilling Company:

Project Name: Chevron Interim Action

Drilling Method: Direct Push

Project #: 255-1896-063 / 04-1304

Logged by: Lily Vagelatos

Location: Bremerton, WA

Checked by: Ingmar Saul, L.G.

Sheet 1 of 1

Starting Date: 12/14/09

Ending Date: 12/14/09

Boring Depth: 15 ft

Depth to Water: 9.5 ft

Depth (ft)	Lithologic Symbol	Description/Classification of Materials	Sample		Boring Diagram	Depth (ft)
			Sample ID	Recovery		
0		Ground Surface				0
		MIXED TREATMENT ZONE Sandy silt with gravel, tan brown, very moist.		50"		
5				45"		5
10		Silty sand and gravel, tan brown, saturated, untreated fill in saturation zone, starting at approximately 10 ft bgs.	CHEV-SO-MW26R-0095	40"		10
15		Bottom of boring at 15 feet bgs.				15
20						20

Ground Water at 9.5' bgs

Bentonite Seal from 0 to 5'
0.75" Diameter Casing; 0 to 5'

Well Screen Sand Pack from 5' to 15'
0.75" Diameter Prepacked Well Screen; 5' to 15'

Boring ID: MW-27

Drilling Method: Probe/HSA Combo

Project Name: Former Chevron Prop. Remediation

Sample Method: Split Spoon

Project #: 233-1896-098 / 01-03

Logged by: Lara Linde

Location: 1310 Highland Drive, Bremerton

Checked by: Ingmar Saul, R.G.

Sheet 1 of 1

Drilling Date: 3/11/11

Boring Depth: 16 ft

Depth to Water: 6 ft

Ecology Tag #: BCN 891

Elevation (ft)	Lithologic Symbol	U.S.C.S.	Description/Classification of Materials; Soil: Group name, group symbol, color, plasticity, grain size, moisture, density, misc.	PID (PPM)	Recovery (in)	Well Diagram	Depth (ft)
12.0			Ground Surface				0
11.5	GW		RIP RAP Coarse gravel to cobbles (beach reinforcement)				
9.0	SP		SAND Brown, fine to medium grained, dry, loose, occassional fine gravel, no odor.	0	36/48		
6.0			Red, moist, iron staining starting at approximately 3 ft bgs.				
3.5			Moist to wet, few fine gravels, no odor, starting at approximately 6 ft bgs.	0	18/48		
	SM		SAND Brown to gray, fine to medium grained, wet, loose, organic odor, no sheen.	0	40/48		
-4.0			Gray, fine grained, wet to saturated, 5% shell fragments, moderate petroleum odor at approximately 16 ft bgs.	0	42/48		15
			Bottom of boring at 16 feet bgs.				

1-21-14

Activation G W Sampling

Weather 37° Overcast

Onsite Weather Pumping

Activation Weather Pumping

0930 Arrive on site

0945 CO Breathing maintenance over on site and ask who is doing it.

explosion

1000 setting up to purge MW20R

1025 purging MW20R

1040 Battery is dead using battery

former rented comp.

1215 setting up at MW21R

1235 purging MW21R

1340 setting up at MW26R

1351 purging MW26R

1403 stopped pump well is empty

1405 started pump, pumping water

1443 setting up at MW23R

1506 purging MW23R

1550 setting up at MW13R

1558 start purging

1600 well is dry stop pump

1604 start pump

1605 Well is dry

1-21-14

1607 start pump

1608 well is dry stop pump

1612 start pump

1615 well is dry stop pump

1618 pump is going as slow

as possible but the well

still runs dry in less than a minute

1623 start pump

1625 well is dry

1630 start pump taking samples

1640 5 VOAS are killed G B T E Y DISMETH

1710 1-500 Amber killed G S L L O

1734 1250 Amber killed Turquoise pump

1749 1-500 Amber killed total head

1805 Departure site

1-22-14

Activities - Groundwater sampling
 Weather - Overcast 38°F

Onsite - Walter Harvey

Author - Walter Harvey

0810 Arrive onsite

0823 Move equipment to MW25

0833 Preparing to purge MW25

0839 purging MW25

0940 setting up to purge MW4R

0955 purging MW4R

1050 setting up at MW10R

1118 purging MW10R

1200 setting up at MW11

1218 purging MW11

1320 setting up at MW9R

1330 purging MW9R

1332 lost flow stopped pump

1335 testing pump

1338 loss of flow stop pump

1340 start pump

1342 loss flow stopped pump

1347 start pump

1400 stopped pump

1402 started pump

1510 setting up at MW27

1-22-14

1518 purging MW27

1615 completed sampling

1630 departed site

1640 purchasing more ice

1700 samples transferred to carrier

1706-1730 depart office

1-22-17

Activity - depth to water and
bottom of wells

Weather 47° clear

On-site water sampling

Another water sampling

#1320 Arrived onsite

1332 MW-27 DTW 6.88

1333 MW-27 DTB 14.02

1338 MW-20R DTW 7.97

1338 MW-20R DTB 13.77

1343 MW-21R DTW 7.61

1344 MW-21R DTB 11.94

1348 MW-26R DTW 8.32

1349 MW-26R DTB 15.64

1351 MW-22R DTW 7.87

1352 MW-22R DTB 14.84

1355 MW-13R DTW 8.14

1356 MW-3R DTB 14.86

1358 MW-4R DTW 10.17

1400 MW-4R DTB 16.80

1402 MW-25R DTW 7.79

1404 MW-25R DTB 19.20

1406 MW-10R DTW 8.22

1407 MW-10R DTB 16.34

1410 MW-11 DTW 6.22

1411 MW-11 DTB 19.05

1-24-17

1413 MW-9R DTW 9.59

1415 MW-9R DTB 15.82

1425 departed site

Groundwater Sampling Field Data Sheet

Project Number	2331896107 03/02	Date	1-22-14
Project Name	Former Chevron Property	Location	Chevron Lower yard
Project Address	1310 Highland Ave, Bremerto	Sampled By	Walter Harvey
Client Name	City of Bremerton	Purged By	Walter Harvey

Depth to Water (feet)	<u>7.98</u>	Purge Vol. Meas. Method	<u>-Meas. cup/stopwatch</u>
Depth of Well (feet)	<u>16.80</u>	Date Purged	<u>1-22-14</u>
Reference Point (surveyors notch/etc)	<u>TOC</u>	Purge Time (from/to)	<u>0955 - 1011</u>
Date/Time Sampled	<u>12-2-14 1015</u>		<u>160 mL/min</u>

[illegible]

Purge Equipment	<u>Peristaltic pump YSI 6920 FC</u>	Sampling Equipment	<u>Same</u>
Laboratory	<u>Onsite Environmental/ARI</u>	Date Sent to Lab	<u>1-22-14</u>
Chain-of-Custody (yes/no)	<u>Yes</u>	Field QC Sample Number	<u>NA</u>
Shipment Method	<u>Courier</u>	Split with (name(s)/organization)	<u>NA</u>

Well Integrity GOOD
Remarks Water has a yellow tint and has a petroleum odor
Signature GAH Page 1 of 1

Groundwater Sampling Field Data Sheet

Well #: MW-9R
Sample #: CHEV-GW-MW-09R-0150

Well Integrity Good
Remarks water has petroleum odor and a yellowish tint
Signature [Signature] Page 1 of 1

Parametrix, Inc.

Well #: MW-10R
Sample #: CHEV-GW-MW10R-0130

Groundwater Sampling Field Data Sheet

Project Number	2331896107 03/02	Date	1-22-14
Project Name	Former Chevron Property	Location	Chevron Lower yard
Project Address	1310 Highland Ave, Bremerto	Sampled By	Walter Harvey
Client Name	City of Bremerton	Purged By	Walter Harvey

Casing Diameter: 2" _____ 4" _____ 6" _____ Other X ¾"

Depth to Water (feet)	8.08	Purge Vol. Meas. Method	-Meas. cup/stopwatch
Depth of Well (feet)	16.35	Date Purged	1-22-14
Reference Point (surveyors notch/etc)	TOC	Purge Time (from/to)	1118-1134
Date/Time Sampled	1-22-14 1140		200 mL/min

Purge Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)(\# \text{ Casing volumes})$
Purge Volume (gallons) for 2" = $(0.16)(h)(\#Cv)$; 4" = $(0.653)(h)(\#Cv)$; 6" = $(1.48)(h)(\#Cv)$
Calculated Purge Volume (gallons) _____ Actual Purge Volume (gallons) 1.25

TIME (2400 hr)	WATER LEVEL (ft) ± 0.3	pH (units) ± 0.1	COND (mS/cm) ± 3%	DO (mg/L) ± 10%	TEMP °C	TURB. ± 10% if >10 NTU	ORP (mV) ± 10mV	CUM. VOL. (gal)
1118	8.08	6.56	0.778	1.20	11.25	4.4	97.1	
1122	8.78	6.57	0.733	0.83	11.17	0.7	77.0	
1126	8.78	6.46	0.714	0.74	11.15	0.2	68.6	
1130	8.78	6.41	0.694	0.83	11.13	0.3	61.8	
1134	8.78	6.38	0.684	0.72	11.14	0.1	58.2	

Purge Equipment	Peristaltic pump YSI 6920 FC	Sampling Equipment	Same
Laboratory	Onsite Environmental/ARI	Date Sent to Lab	1-22-14
Chain-of-Custody (yes/no)	Yes	Field QC Sample Number	NA
Shipment Method	Courier	Split with (name(s)/organization)	NA

Well Integrity	Good
Remarks	Water clear no odor
Signature	<i>[Signature]</i>
Page	1 of 1

Parametrix, Inc.

Well #: MW-11
Sample #: CHEV-GW-MW11-0100

Groundwater Sampling Field Data Sheet

Project Number	2331896107 03/02	Date	1-22-14
Project Name	Former Chevron Property	Location	Chevron Lower yard
Project Address	1310 Highland Ave, Bremerto	Sampled By	Walter Harvey
Client Name	City of Bremerton	Purged By	Walter Harvey

Casing Diameter: 2" X 4" 6" Other X 7/8"

Depth to Water (feet)	5.99	Purge Vol. Meas. Method	-Meas. cup/stopwatch
Depth of Well (feet)	19.10	Date Purged	1-22-14
Reference Point (surveyors notch/etc)	TOC	Purge Time (from/to)	1224-1244
Date/Time Sampled	1-22-14 1250		

Purge Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)(\# \text{ Casing volumes})$
Purge Volume (gallons) for 2" = $(0.16)(h)(\#Cv)$; 4" = $(0.653)(h)(\#Cv)$; 6" = $(1.48)(h)(\#Cv)$
Calculated Purge Volume (gallons) Actual Purge Volume (gallons) 152.0

TIME (2400 hr)	WATER LEVEL (ft) ± 0.3	pH (units) ± 0.1	COND (mS/cm) ± 3%	DO (mg/L) ± 10%	TEMP °C	TURB. ±10% if >10NTU	ORP (mV) ±10mV	CUM. VOL. (gal)
1224	5.99	6.13	0.753	11.78	11.48	0.1	43.8	
1228	6.45	6.18	0.757	11.47	11.47	33.2	45.6	
1232	6.53	6.17	0.764	0.77	11.44	22.2	36.8	
1236	6.65	6.17	0.773	0.77	11.37	19.1	37.1	
1240	6.74	6.13	0.780	0.73	11.29	14.6	40.8	
1244	6.80	6.15	0.780	0.71	11.37	13.2	36.4	

Purge Equipment	Peristaltic pump YSI 6920 FC	Sampling Equipment	Same
Laboratory	Onsite Environmental/ARI	Date Sent to Lab	1-22-14
Chain-of-Custody (yes/no)	Yes	Field QC Sample Number	NA
Shipment Method	Courier	Split with (name(s)/organization)	NA

Well Integrity	Good
Remarks	Water has an orange tint and a sulfur odor
Signature	Walter Harvey
Page	1 of 1

* to 1218 readings took to soon ysi 6920 had not yet stabilized

Parametrix, Inc.

Well #: MW-132
Sample #: CHEV-GW-MW132-0120

Groundwater Sampling Field Data Sheet

Project Number	2331896107 03/02	Date	1-21-14
Project Name	Former Chevron Property	Location	Chevron Lower yard
Project Address	1310 Highland Ave, Bremerto	Sampled By	Walter Harvey
Client Name	City of Bremerton	Purged By	Walter Harvey

Casing Diameter: 2" _____ 4" _____ 6" _____ Other X 3/4" _____

Depth to Water (feet)	8.58	Purge Vol. Meas. Method	-Meas. cup/stopwatch
Depth of Well (feet)	14.86	Date Purged	1-21-14
Reference Point (surveyors notch/etc)	TOC	Purge Time (from/to)	1618-1632
Date/Time Sampled	1-21-14 1630		

Purge Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)(\# \text{ Casing volumes})$
Purge Volume (gallons) for 2" = $(0.16)(h)(\#Cv)$; 4" = $(0.653)(h)(\#Cv)$; 6" = $(1.48)(h)(\#Cv)$
Calculated Purge Volume (gallons) _____ Actual Purge Volume (gallons) 0.5

TIME (2400 hr)	WATER LEVEL (ft) ± 0.3	pH (units) ± 0.1	COND (mS/cm) ± 3%	DO (mg/L) ± 10%	TEMP °C	TURB. ±10% if >10NTU	ORP (mV) ±10mV	CUM. VOL. (gal)
1618	14.23	6.93	5.208	3.20	9.93	14.5	80.7	
1632	13.97	7.01	5.245	3.29	9.78	10.4	80.1	

Purge Equipment	Peristaltic pump YSI 6920 FC	Sampling Equipment	Same
Laboratory	Onsite Environmental/ARI	Date Sent to Lab	
Chain-of-Custody (yes/no)	Yes	Field QC Sample Number	NA
Shipment Method	Courier	Split with (name(s)/organization)	NA

Well Integrity WELL MON CASING IS TO HIGH WEL MONUMENT COVER WELL
Remarks WELL RUNS DRY IN LESS THAN A MIN NOT SET CORRECTLY
Signature [Signature] Page 1 of 1

Parametrix, Inc.

Well #: MW-20R
Sample #: CHEV-GW-MW-20R-0110

Groundwater Sampling Field Data Sheet

Project Number	2331896107 03/02	Date	1-21-14
Project Name	Former Chevron Property	Location	Chevron Lower yard
Project Address	1310 Highland Ave, Bremerto	Sampled By	Walter Harvey
Client Name	City of Bremerton	Purged By	Walter Harvey

Casing Diameter: 2" ☒ 4" ☐ 6" ☐ Other ☒ 3/4"

Depth to Water (feet)	7.70	Purge Vol. Meas. Method	-Meas. cup/stopwatch
Depth of Well (feet)	13.80	Date Purged	1-21-14
Reference Point (surveyors notch/etc)	TOC	Purge Time (from/to)	1028 - 1045
Date/Time Sampled	1-21-14 1058		200 mL / min

Purge Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)(\# \text{ Casing volumes})$
Purge Volume (gallons) for 2" = $(0.16)(h)(\#Cv)$; 4" = $(0.653)(h)(\#Cv)$; 6" = $(1.48)(h)(\#Cv)$
Calculated Purge Volume (gallons) _____ Actual Purge Volume (gallons) 1.5641

TIME (2400 hr)	WATER LEVEL (ft) ± 0.3	pH (units) ± 0.1	COND (mS/cm) ± 3%	DO (mg/L) ± 10%	TEMP °C	TURB. ±10% if >10NTU	ORP (mV) ±10mV	CUM. VOL. (gal)
1028	7.77	5.78	0.755	1.07	10.73	14.1	178.0	
1032	7.85	5.85	0.736	0.79	10.74	7.0	174.6	
1036	7.92	5.90	0.724	0.70	10.73	8.1	172.5	
1041	7.98	5.96	0.724	0.58	10.31	4.4	169.2	
1045	7.99	5.98	0.724	0.56	10.33	6.1	166.3	

Purge Equipment	Peristaltic pump YSI 6920 FC	Sampling Equipment	Same
Laboratory	Onsite Environmental/ARI	Date Sent to Lab	1-22-14
Chain-of-Custody (yes/no)	Yes	Field QC Sample Number	NA
Shipment Method	Courier	Split with (name(s)/organization)	NA

Well Integrity	Good
Remarks	water clean no odor
Signature	<i>[Signature]</i>
Page	1 of 1

Duplicate CHEV-GW-MW01-1100

Parametrix, Inc.

Well #: MW-21R
Sample #: CHEV-GW-MW 21R-040

Groundwater Sampling Field Data Sheet

Project Number	2331896107 03/02	Date	1-21-14
Project Name	Former Chevron Property	Location	Chevron Lower yard
Project Address	1310 Highland Ave, Bremerto	Sampled By	Walter Harvey
Client Name	City of Bremerton	Purged By	Walter Harvey

Casing Diameter: 2" _____ 4" _____ 6" _____ Other X 3/4" _____

Depth to Water (feet) #	7.50 6.50	Purge Vol. Meas. Method	-Meas. cup/stopwatch
Depth of Well (feet)	11.82	Date Purged	1-21-14
Reference Point (surveyors notch/etc)	TOC	Purge Time (from/to) #	10:35 12:51
Date/Time Sampled	1-21-14 12:55		200 mL/min

Purge Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)(\# \text{ Casing volumes})$
Purge Volume (gallons) for 2" = $(0.16)(h)(\#Cv)$; 4" = $(0.653)(h)(\#Cv)$; 6" = $(1.48)(h)(\#Cv)$
Calculated Purge Volume (gallons) _____ Actual Purge Volume (gallons) 2.0

TIME (2400 hr)	WATER LEVEL (ft) ± 0.3	pH (units) ± 0.1	COND (mS/cm) ± 3%	DO (mg/L) ± 10%	TEMP °C	TURB. ±10% if >10NTU	ORP (mV) ±10mV	CUM. VOL. (gal)
1235	6.50	6.82	3.733	0.75	11.55	16.9	-160.6	
1239	6.52	6.84	3.724	0.48	11.74	12.6	-86.9	
1243	6.60	6.87	3.697	0.43	11.84	7.1	-58.2	
1247	6.61	6.88	3.665	0.40	11.92	6.7	-50.3	
1251	6.52	6.84	3.606	0.36	11.99	5.7	-31.7	

Purge Equipment	Peristaltic pump YSI 6920 FC	Sampling Equipment	Same
Laboratory	Onsite Environmental/ARI	Date Sent to Lab	1-22-14
Chain-of-Custody (yes/no)	Yes	Field QC Sample Number	NA
Shipment Method	Courier	Split with (name(s)/organization)	NA

Well Integrity	Good
Remarks	Heavy Petroleum odor with clean water floating debris
Signature	<u>Walter Harvey</u>
	Page 1 of 1

Groundwater Sampling Field Data Sheet

Well #: MW-22R
Sample #: CHEV-GW-MW 22R-0130

Well Integrity Good
Remarks Water clean no odor
Signature [Signature] Page 1 of 1

Parametrix, Inc.

Well #: MW-25
Sample #: CHEV-GW-MW25-0110

Groundwater Sampling Field Data Sheet

Project Number	2331896107 03/02	Date	1-22-14
Project Name	Former Chevron Property	Location	Chevron Lower yard
Project Address	1310 Highland Ave, Bremerto	Sampled By	Walter Harvey
Client Name	City of Bremerton	Purged By	Walter Harvey

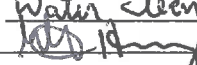
Casing Diameter: 2" ☒ 4" ☐ 6" ☐ Other ☒

Depth to Water (feet)	7.88	Purge Vol. Meas. Method	-Meas. cup/stopwatch
Depth of Well (feet)	9.12	Date Purged	1-22-14
Reference Point (surveyors notch/etc)	TOC	Purge Time (from/to)	0849 - 0910
Date/Time Sampled	1-22-14 0910		220 mL/min

Purge Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)(\# \text{ Casing volumes})$
Purge Volume (gallons) for 2" = $(0.16)(h)(\#Cv)$; 4" = $(0.653)(h)(\#Cv)$; 6" = $(1.48)(h)(\#Cv)$
Calculated Purge Volume (gallons) _____ Actual Purge Volume (gallons) 1.5

TIME (2400 hr)	WATER LEVEL (ft) ± 0.3	pH (units) ± 0.1	COND (mS/cm) ± 3%	DO (mg/L) ± 10%	TEMP °C	TURB. ± 10% if > 10 NTU	ORP (mV) ± 10 mV	CUM. VOL. (gal)
0849	7.88	5.45	4.641	1.28	9.55	9.4	216.3	
0853	8.38	5.74	4.396	0.91	9.54	6.6	197.8	
0857	8.52	5.85	3.789	0.87	9.68	4.4	190.4	
0901	8.63	5.87	3.696	0.96	9.74	7.8	175.0	
0905	8.72	5.80	4.776	0.80	10.41	8.1	178.9	

Purge Equipment	Peristaltic pump YSI 6920 FC	Sampling Equipment	Same
Laboratory	Onsite Environmental/ARI	Date Sent to Lab	1-22-14
Chain-of-Custody (yes/no)	Yes	Field QC Sample Number	NA
Shipment Method	Courier	Split with (name(s)/organization)	NA

Well Integrity	Good
Remarks	Water clean no odor
Signature	
Page	1 of 1

Groundwater Sampling Field Data Sheet

Well #: MW-26R
Sample #: CHEV-GW-MW 26R-0110

Well Integrity Good
Remarks Heavy petroleum odor/organics
Signature [Signature] Page 1 of 1

Parametrix, Inc.

Well #: MW-27
Sample #: CHEV-GW-MW27-0110

Groundwater Sampling Field Data Sheet

Project Number	2331896107 03/02	Date	1-22-14
Project Name	Former Chevron Property	Location	Chevron Lower yard
Project Address	1310 Highland Ave, Bremerto	Sampled By	Walter Harvey
Client Name	City of Bremerton	Purged By	Walter Harvey

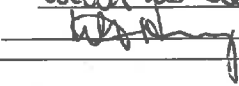
Casing Diameter: 2" _____ 4" _____ 6" _____ Other X 3/4"

Depth to Water (feet)	6.93	Purge Vol. Meas. Method	-Meas. cup/stopwatch
Depth of Well (feet)	14.00	Date Purged	1-22-14
Reference Point (surveyors notch/etc)	TOC	Purge Time (from/to)	1518-1534
Date/Time Sampled	1-22-14 1540		200 ml/min

Purge Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)(\# \text{ Casing volumes})$
Purge Volume (gallons) for 2" = $(0.16)(h)(\#Cv)$; 4" = $(0.653)(h)(\#Cv)$; 6" = $(1.48)(h)(\#Cv)$
Calculated Purge Volume (gallons) _____ Actual Purge Volume (gallons) 1.25

TIME (2400 hr)	WATER LEVEL (ft) ± 0.3	pH (units) ± 0.1	COND (mS/cm) $\pm 3\%$	DO (mg/L) $\pm 10\%$	TEMP °C	TURB. $\pm 10\%$ if >10 NTU	ORP (mV) $\pm 10\text{mV}$	CUM. VOL. (gal)
1518	7.20	6.63	0.750	0.97	10.75	20.6	-44.2	
1522	7.22	6.55	0.749	0.74	10.88	12.9	-40.9	
1526	7.24	6.52	0.750	0.63	10.93	6.0	-41.2	
1530	7.20	6.50	0.753	0.58	10.91	2.9	-52.8	
1534	7.25	6.50	0.767	0.53	10.90	9.2	-60.3	

Purge Equipment	Peristaltic pump YSI 6920 FC	Sampling Equipment	Same
Laboratory	Onsite Environmental/ARI	Date Sent to Lab	1-22-14
Chain-of-Custody (yes/no)	Yes	Field QC Sample Number	NA
Shipment Method	Courier	Split with (name(s)/organization)	NA

Well Integrity	Well casing monument was filled with water		
Remarks	Water is clear, slight odor of sulfur		
Signature		Page	1 of 1



OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Page 1 of 2

Turnaround Request (in working days) (Check One) ☐ Same Day ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ Standard (7 Days) (TPH analysis 5 Days) ☐ (other) _____			Laboratory Number:																				
Company: PARAMETRIX 3331896107 Project Name: FORMER CHEVRON PROPE-2-1 Project Manager: DAVID DINKUHN Sampled by: WALTER HARVEY			Number of Containers																				
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total PCRA Metals/ MTCA Metals (circle one)	TCLP Metals	HEM (oil and grease) 1664A	CONVENTIONAL	TOTAL LEAD	DIS METHANE	DIS MANGANESE*	% Moisture
	CHEV-GW-MW101-1100	1-21-14	1100	GW			X												X	X	X	X	
	CHEV-GW-MW04R-0140	1-22-14	1015	GW		X	X												X	X	X	X	
	CHEV-GW-MW09R-0150	1-22-14	1410	GW		X	X												X	X	X	X	
	CHEV-GW-MW10R-0130	1-22-14	1140	GW		X	X												X	X	X	X	
	CHEV-GW-MW11-0100	1-22-14	1250	GW		X	X												X	X	X	X	
	CHEV-GW-MW13R-0130	1-21-14	1630	GW		X	X												X	X	X	X	
	CHEV-GW-MW20R-0110	1-21-14	1050	GW		X	X												X	X	X	X	
	CHEV-GW-MW21R-0110	1-21-14	1255	GW		X	X												X	X	X	X	
	CHEV-GW-MW22R-0130	1-21-14	1415	GW		X	X												X	X	X	X	
	CHEV-GW-MW25-0110	1-22-14	0910	GW		X	X												X	X	X	X	
Signature 					Date 1-22-14		Time 5:00		Comments/Special Instructions * FIELD FILTERED ** SILICA GEL CLEAN UP ON DSL														
Relinquished					PARAMETRIX		1-22-14																
Received					T-Dog		1-22-14 5:00																
Relinquished																							
Received																							
Relinquished																							
Received																							
Reviewed/Date					Reviewed/Date																		
Data Package: Level III ☐ Level IV ☐					Electronic Data Deliverables (EDDs) ☐																		
Chromatograms with final report ☐																							

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: NORM		Turn-around Requested: NORM		Date: 1-22-14	
ARI Client Company: ONSITE ENVIRONMENTAL INC		Phone:		Page: 1 of 2	
Client Contact:		Cooler Temps:		No. of Coolers: 1	
Client Project Name: FORMER CHLORON		Samplers: W. HARVEY		Analysis Requested	
Client Project #:				Notes/Comments	
Sample ID	Date	Time	Matrix	No. Containers	
CHLUV-GW-MW01-0100	1-21-14	1100	GW	1	
CHLUV-GW-MW04R-0100	1-22-14	1015	GW	1	
CHLUV-GW-MW09R-0100	1-22-14	1410	GW	1	
CHLUV-GW-MW10R-0100	1-22-14	1140	GW	1	
CHLUV-GW-MW11-0100	1-22-14	1250	GW	1	
CHLUV-GW-MW13R-0100	1-21-14	1630	GW	1	
CHLUV-GW-MW20R-0100	1-21-14	1050	GW	1	
CHLUV-GW-MW21R-0100	1-21-14	1255	GW	1	
CHLUV-GW-MW22R-0100	1-21-14	1525	GW	1	
CHLUV-GW-MW25R-0100	1-22-14	0910	GW	1	

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.

Sample Retention Policy: Unless specified by workorder or contract, all water/soil samples submitted to ARI will be discarded or returned, no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer. Sediment samples submitted under PSD/DAP/SEP/SMS protocol will be stored frozen for up to one year and then discarded.



Analytical Resources, Incorporated
Analytical Chemists and Consultants
4811 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Relinquished by: (Signature) WALTER HARVEY	Received by: (Signature) Danny Reynolds
Printed Name: WALTER HARVEY	Printed Name: Danny Reynolds
Company: PARAMETRIX	Company:
Date & Time: 1-22-14 1700	Date & Time: 1/22/14 5:00

ARI Assigned Number:	Turn-around Requested:	Date:
	NORM	1-22-14
ARI Client Company:	Phone:	Page: 2 of 2
ONSITE ENVIRONMENTAL INC		
Client Contact:	No. of Coolers:	Cooler Temps:
	1	

[illegible]

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for sold services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.

Sample Retention Policy: Unless specified by workorder or contract, all water/soil samples submitted to ARI will be discarded or returned, no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer. Sediment samples submitted under PSDDA/PSEP/SMS protocol will be stored frozen for up to one year and then discarded.

4660 KITSAP WAY, SUITE A
BREMERTON, WA 98312-2357
T. 360.377.0014 F. 360.479.5961
www.parametrix.com

TECHNICAL MEMORANDUM

Date: February 19, 2014
To: Project File
From: Lisa Gilbert
Subject: Quality Assurance/Quality Control Review for Former Chevron Property
cc: David Dinkuhn
Project Number: 233-1896-107
Project Name: Former Chevron Property Remediation Performance Monitoring January 2014

INTRODUCTION

This technical memorandum summarizes the results of an internal quality assurance/quality control (QA/QC) review of analytical results for groundwater samples collected on January 21 and 22, 2014. Twelve groundwater samples, including one field duplicate (CHEV-GW-MW20R-1100), were submitted to OnSite Environmental, Inc. (Redmond, WA) for analysis. The samples were accompanied by one gasoline/BTEX trip blank (TRIP BLANK). Ferrous iron analyses were subcontracted to Analytical Resources, Inc. due to the short holding time.

All samples were analyzed for gasoline/BTEX, diesel/lube oil, dissolved manganese, nitrate, sulfate, alkalinity, chloride and dissolved methane, with the following exceptions:

- CHEV-GW-MW13R-0130 was analyzed for gasoline/BTEX, diesel/lube oil, and dissolved methane only.
- CHEV-GW-MW09R-0150 was also analyzed for dissolved and total lead.
- The trip blank (TRIP BLANK) was analyzed for gasoline/BTEX only.

Final laboratory data were submitted to Parametrix via a Tier II-type data report and EIM EDDs (OnSite Laboratory Reference Number 1401-156). All data and analytical QC elements were reviewed against laboratory and method QC criteria, and qualifiers were applied where judged appropriate.

DATA REVIEW SUMMARY

All samples collected were prepared and analyzed using standard methods. All analyses requested on the COC were conducted. No laboratory method or trip blank contamination was reported.

The COC was corrected. Sample CHEV-GW-MW01-1100 was changed to CHEV-GW-MW20R-1100. The ARI report uses the original sample name.

On-Site Environmental, Inc. noted the following:

- Sulfate PQLs were qualified “U1” as elevated due to interference (25 mg/L instead of 5.0 or 10 mg/L) for sample CHEV-GW-MW27-0110. Sulfate was non-detected in this sample.
- Some diesel results were qualified with “U1” (CHEV-GW-MW04R-0140, CHEV-GW-MW09R-0150, CHEV-GW-MW21R-0110) indicating an elevated practical quantitation limit due to interferences present

in the sample. These results were not qualified based on this data review since all other analytical QC results were in control, indicating acceptable analytical accuracy and precision.

- Diesel range hydrocarbon results for CHEV-GW-MW25-0150 were qualified with “M” indicating that hydrocarbons in the diesel range are impacting lube oil range results. Gasoline range hydrocarbon results for this sample were qualified “O” indicating heavier fuels were present and impacted the gasoline result.
- All diesel range hydrocarbon sample extracts were qualified “X1” indicating the sample extract was treated with sulfuric acid/silica gel cleanup procedure.

A comparison of results between the sample and duplicate results were within acceptable ranges of precision.

CONCLUSION

Appropriate standard methods were used. No laboratory method blank contamination was observed. Analytical accuracy and precision were determined to be generally acceptable based on this review.

All data reported should be considered valid as qualified and acceptable for further use.



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

February 4, 2014

David Dinkuhn
Parametrix, Inc.
4660 Kitsap Way, Suite A
Bremerton, WA 98312

Re: Analytical Data for Project 233-1896-107
Laboratory Reference No. 1401-156

Dear Dave:

Enclosed are the analytical results and associated quality control data for samples submitted on January 23, 2014.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal line extending to the right.

David Baumeister
Project Manager

Enclosures

Date of Report: February 4, 2014
Samples Submitted: January 23, 2014
Laboratory Reference: 1401-156
Project: 233-1896-107

Case Narrative

Samples were collected on January 21 and 22, 2014 and received by the laboratory on January 23, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Sulfate ASTM D516-07 Analysis

Sample CHEV-GW-MW27-0110 (01-156-12) PQL was increased due to sample interference.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

NWTPH-Gx/BTEX

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: CHEV-GW-MW20R-1100						
Laboratory ID: 01-156-01						
Benzene	4.3	1.0	EPA 8021B	1-27-14	1-27-14	
Toluene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Ethyl Benzene	4.9	1.0	EPA 8021B	1-27-14	1-27-14	
m,p-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
o-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Gasoline	280	100	NWTPH-Gx	1-27-14	1-27-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	93	71-112				
Client ID: CHEV-GW-MW04R-0140						
Laboratory ID: 01-156-02						
Benzene	35	1.0	EPA 8021B	1-27-14	1-27-14	
Toluene	1.8	1.0	EPA 8021B	1-27-14	1-27-14	
Ethyl Benzene	3.1	1.0	EPA 8021B	1-27-14	1-27-14	
m,p-Xylene	2.5	1.0	EPA 8021B	1-27-14	1-27-14	
o-Xylene	1.3	1.0	EPA 8021B	1-27-14	1-27-14	
Gasoline	560	100	NWTPH-Gx	1-27-14	1-27-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	91	71-112				
Client ID: CHEV-GW-MW09R-0150						
Laboratory ID: 01-156-03						
Benzene	87	10	EPA 8021B	1-29-14	1-29-14	
Toluene	3.4	1.0	EPA 8021B	1-27-14	1-27-14	
Ethyl Benzene	13	1.0	EPA 8021B	1-27-14	1-27-14	
m,p-Xylene	6.4	1.0	EPA 8021B	1-27-14	1-27-14	
o-Xylene	2.4	1.0	EPA 8021B	1-27-14	1-27-14	
Gasoline	660	100	NWTPH-Gx	1-27-14	1-27-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	99	71-112				

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

NWTPH-Gx/BTEX

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: CHEV-GW-MW10R-0130						
Laboratory ID: 01-156-04						
Benzene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Toluene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Ethyl Benzene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
m,p-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
o-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Gasoline	ND	100	NWTPH-Gx	1-27-14	1-27-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	92	71-112				
Client ID: CHEV-GW-MW11-0100						
Laboratory ID: 01-156-05						
Benzene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Toluene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Ethyl Benzene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
m,p-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
o-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Gasoline	ND	100	NWTPH-Gx	1-27-14	1-27-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	92	71-112				
Client ID: CHEV-GW-MW13R-0130						
Laboratory ID: 01-156-06						
Benzene	4.8	1.0	EPA 8021B	1-27-14	1-27-14	
Toluene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Ethyl Benzene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
m,p-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
o-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Gasoline	120	100	NWTPH-Gx	1-27-14	1-27-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	93	71-112				

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

NWTPH-Gx/BTEX

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: CHEV-GW-MW20R-0110						
Laboratory ID: 01-156-07						
Benzene	4.5	1.0	EPA 8021B	1-27-14	1-27-14	
Toluene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Ethyl Benzene	5.0	1.0	EPA 8021B	1-27-14	1-27-14	
m,p-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
o-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Gasoline	290	100	NWTPH-Gx	1-27-14	1-27-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	94	71-112				
Client ID: CHEV-GW-MW21R-0110						
Laboratory ID: 01-156-08						
Benzene	29	1.0	EPA 8021B	1-27-14	1-27-14	
Toluene	9.1	1.0	EPA 8021B	1-27-14	1-27-14	
Ethyl Benzene	95	1.0	EPA 8021B	1-27-14	1-27-14	
m,p-Xylene	80	1.0	EPA 8021B	1-27-14	1-27-14	
o-Xylene	4.1	1.0	EPA 8021B	1-27-14	1-27-14	
Gasoline	2600	100	NWTPH-Gx	1-27-14	1-27-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	101	71-112				
Client ID: CHEV-GW-MW22R-0130						
Laboratory ID: 01-156-09						
Benzene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Toluene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Ethyl Benzene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
m,p-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
o-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Gasoline	ND	100	NWTPH-Gx	1-27-14	1-27-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	94	71-112				

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

NWTPH-Gx/BTEX

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: CHEV-GW-MW25-0110						
Laboratory ID: 01-156-10						
Benzene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Toluene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Ethyl Benzene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
m,p-Xylene	1.0	1.0	EPA 8021B	1-27-14	1-27-14	
o-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Gasoline	420	100	NWTPH-Gx	1-27-14	1-27-14	O
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	92	71-112				

Client ID: CHEV-GW-MW26R-0110						
Laboratory ID: 01-156-11						
Benzene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Toluene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Ethyl Benzene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
m,p-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
o-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Gasoline	ND	100	NWTPH-Gx	1-27-14	1-27-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	89	71-112				

Client ID: CHEV-GW-MW27-0110						
Laboratory ID: 01-156-12						
Benzene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Toluene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Ethyl Benzene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
m,p-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
o-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Gasoline	ND	100	NWTPH-Gx	1-27-14	1-27-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	93	71-112				

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

NWTPH-Gx/BTEX

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TRIP BLANK					
Laboratory ID:	01-156-13					
Benzene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Toluene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Ethyl Benzene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
m,p-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
o-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Gasoline	ND	100	NWTPH-Gx	1-27-14	1-27-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	93	71-112				

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

**NWTPH-Gx/BTEX
 METHOD BLANK QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0127W1					
Benzene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Toluene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Ethyl Benzene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
m,p-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
o-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Gasoline	ND	100	NWTPH-Gx	1-27-14	1-27-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	94	71-112				
Laboratory ID:	MB0127W3					
Benzene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Toluene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Ethyl Benzene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
m,p-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
o-Xylene	ND	1.0	EPA 8021B	1-27-14	1-27-14	
Gasoline	ND	100	NWTPH-Gx	1-27-14	1-27-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	91	71-112				
Laboratory ID:	MB0129W1					
Benzene	ND	1.0	EPA 8021B	1-29-14	1-29-14	
Toluene	ND	1.0	EPA 8021B	1-29-14	1-29-14	
Ethyl Benzene	ND	1.0	EPA 8021B	1-29-14	1-29-14	
m,p-Xylene	ND	1.0	EPA 8021B	1-29-14	1-29-14	
o-Xylene	ND	1.0	EPA 8021B	1-29-14	1-29-14	
Gasoline	ND	100	NWTPH-Gx	1-29-14	1-29-14	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	94	71-112				

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

**NWTPH-Gx/BTEX
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	01-158-01							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
Fluorobenzene				94	94	71-112		
MATRIX SPIKES								
Laboratory ID:	01-158-02							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
Fluorobenzene				94	93	71-112		
Laboratory ID:	01-158-01							
	MS	MSD	MS	MSD	MS	MSD		
Benzene	54.1	52.9	50.0	50.0	ND	108 106	78-120	2 12
Toluene	54.9	53.6	50.0	50.0	ND	110 107	80-121	2 12
Ethyl Benzene	55.2	53.8	50.0	50.0	ND	110 108	81-120	3 13
m,p-Xylene	55.6	53.9	50.0	50.0	ND	111 108	81-119	3 13
o-Xylene	55.3	53.9	50.0	50.0	ND	111 108	79-117	3 13
<i>Surrogate:</i>								
Fluorobenzene					94	93	71-112	

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

NWTPH-Dx

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: CHEV-GW-MW20R-1100						
Laboratory ID:	01-156-01					
Diesel Range Organics	ND	0.26	NWTPH-Dx	1-24-14	1-24-14	X1
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	1-24-14	1-24-14	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	101	50-150				

Client ID: CHEV-GW-MW04R-0140						
Laboratory ID:	01-156-02					
Diesel Range Organics	ND	0.36	NWTPH-Dx	1-24-14	1-24-14	U1,X1
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	1-24-14	1-24-14	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	87	50-150				

Client ID: CHEV-GW-MW09R-0150						
Laboratory ID:	01-156-03					
Diesel Range Organics	ND	0.30	NWTPH-Dx	1-24-14	1-24-14	U1,X1
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	1-24-14	1-24-14	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	102	50-150				

Client ID: CHEV-GW-MW10R-0130						
Laboratory ID:	01-156-04					
Diesel Range Organics	ND	0.26	NWTPH-Dx	1-24-14	1-24-14	X1
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	1-24-14	1-24-14	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	97	50-150				

Client ID: CHEV-GW-MW11-0100						
Laboratory ID:	01-156-05					
Diesel Range Organics	ND	0.26	NWTPH-Dx	1-24-14	1-24-14	X1
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	1-24-14	1-24-14	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	96	50-150				

Client ID: CHEV-GW-MW13R-0130						
Laboratory ID:	01-156-06					
Diesel Range Organics	ND	0.27	NWTPH-Dx	1-24-14	1-24-14	X1
Lube Oil Range Organics	ND	0.43	NWTPH-Dx	1-24-14	1-24-14	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	95	50-150				

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

NWTPH-Dx

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: CHEV-GW-MW20R-0110						
Laboratory ID:	01-156-07					
Diesel Range Organics	ND	0.26	NWTPH-Dx	1-24-14	1-24-14	X1
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	1-24-14	1-24-14	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	95	50-150				

Client ID: CHEV-GW-MW21R-0110						
Laboratory ID:	01-156-08					
Diesel Range Organics	ND	0.77	NWTPH-Dx	1-24-14	1-24-14	U1,X1
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	1-24-14	1-24-14	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	102	50-150				

Client ID: CHEV-GW-MW22R-0130						
Laboratory ID:	01-156-09					
Diesel Range Organics	ND	0.26	NWTPH-Dx	1-24-14	1-24-14	X1
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	1-24-14	1-24-14	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	99	50-150				

Client ID: CHEV-GW-MW25-0110						
Laboratory ID:	01-156-10					
Diesel Range Organics	0.70	0.26	NWTPH-Dx	1-24-14	1-24-14	X1,M
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	1-24-14	1-24-14	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	106	50-150				

Client ID: CHEV-GW-MW26R-0110						
Laboratory ID:	01-156-11					
Diesel Range Organics	ND	0.25	NWTPH-Dx	1-24-14	1-24-14	X1
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	1-24-14	1-24-14	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	101	50-150				

Client ID: CHEV-GW-MW27-0110						
Laboratory ID:	01-156-12					
Diesel Range Organics	ND	0.26	NWTPH-Dx	1-24-14	1-24-14	X1
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	1-24-14	1-24-14	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	94	50-150				

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

**NWTPH-Dx
QUALITY CONTROL**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0124W1					
Diesel Range Organics	ND	0.25	NWTPH-Dx	1-24-14	1-24-14	X1
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	1-24-14	1-24-14	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	86	50-150				

Analyte	Result		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags	
DUPLICATE									
Laboratory ID:	01-144-01								
	ORIG	DUP							
Diesel Range Organics	ND	ND					NA	NA	X1
Lube Oil Range Organics	ND	ND					NA	NA	X1
Surrogate:									
o-Terphenyl			102	88	50-150				
Laboratory ID:	01-156-01								
	ORIG	DUP							
Diesel Range Organics	ND	ND					NA	NA	X1
Lube Oil Range Organics	ND	ND					NA	NA	X1
Surrogate:									
o-Terphenyl			101	92	50-150				

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

NITRATE (as Nitrogen)
EPA 353.2

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	CHEV-GW-MW20R-1100					
Laboratory ID:	01-156-01					
Nitrate	6.4	0.10	EPA 353.2	1-29-14	1-29-14	

Client ID:	CHEV-GW-MW04R-0140					
Laboratory ID:	01-156-02					
Nitrate	ND	0.050	EPA 353.2	1-29-14	1-29-14	

Client ID:	CHEV-GW-MW09R-0150					
Laboratory ID:	01-156-03					
Nitrate	0.076	0.050	EPA 353.2	1-29-14	1-29-14	

Client ID:	CHEV-GW-MW10R-0130					
Laboratory ID:	01-156-04					
Nitrate	0.58	0.050	EPA 353.2	1-29-14	1-29-14	

Client ID:	CHEV-GW-MW11-0100					
Laboratory ID:	01-156-05					
Nitrate	30	0.50	EPA 353.2	1-29-14	1-29-14	

Client ID:	CHEV-GW-MW20R-0110					
Laboratory ID:	01-156-07					
Nitrate	6.3	0.10	EPA 353.2	1-29-14	1-29-14	

Client ID:	CHEV-GW-MW21R-0110					
Laboratory ID:	01-156-08					
Nitrate	0.062	0.050	EPA 353.2	1-29-14	1-29-14	

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

NITRATE (as Nitrogen)
EPA 353.2

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	CHEV-GW-MW22R-0130					
Laboratory ID:	01-156-09					
Nitrate	0.50	0.050	EPA 353.2	1-29-14	1-29-14	

Client ID:	CHEV-GW-MW25-0110					
Laboratory ID:	01-156-10					
Nitrate	7.6	0.10	EPA 353.2	1-29-14	1-29-14	

Client ID:	CHEV-GW-MW26R-0110					
Laboratory ID:	01-156-11					
Nitrate	0.41	0.050	EPA 353.2	1-29-14	1-29-14	

Client ID:	CHEV-GW-MW27-0110					
Laboratory ID:	01-156-12					
Nitrate	ND	0.050	EPA 353.2	1-29-14	1-29-14	

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

NITRATE (as Nitrogen)
EPA 353.2
QUALITY CONTROL

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0129W1					
Nitrate	ND	0.050	EPA 353.2	1-29-14	1-29-14	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	01-152-01							
	ORIG	DUP						
Nitrate	ND	ND	NA	NA	NA	NA	16	

MATRIX SPIKE								
Laboratory ID:	01-152-01							
	MS	MS		MS				
Nitrate	2.22	2.00	ND	111	84-119	NA	NA	

SPIKE BLANK								
Laboratory ID:	SB0129W1							
	SB	SB		SB				
Nitrate	2.20	2.00	NA	110	86-114	NA	NA	

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

SULFATE
ASTM D516-07

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	CHEV-GW-MW20R-1100					
Laboratory ID:	01-156-01					
Sulfate	43	10	ASTM D516-07	1-27-14	1-27-14	

Client ID:	CHEV-GW-MW04R-0140					
Laboratory ID:	01-156-02					
Sulfate	ND	10	ASTM D516-07	1-27-14	1-27-14	

Client ID:	CHEV-GW-MW09R-0150					
Laboratory ID:	01-156-03					
Sulfate	ND	5.0	ASTM D516-07	1-27-14	1-27-14	

Client ID:	CHEV-GW-MW10R-0130					
Laboratory ID:	01-156-04					
Sulfate	43	10	ASTM D516-07	1-27-14	1-27-14	

Client ID:	CHEV-GW-MW11-0100					
Laboratory ID:	01-156-05					
Sulfate	45	25	ASTM D516-07	1-27-14	1-27-14	

Client ID:	CHEV-GW-MW20R-0110					
Laboratory ID:	01-156-07					
Sulfate	38	10	ASTM D516-07	1-27-14	1-27-14	

Client ID:	CHEV-GW-MW21R-0110					
Laboratory ID:	01-156-08					
Sulfate	ND	5.0	ASTM D516-07	1-27-14	1-27-14	

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

SULFATE
ASTM D516-07

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	CHEV-GW-MW22R-0130					
Laboratory ID:	01-156-09					
Sulfate	240	100	ASTM D516-07	1-27-14	1-27-14	

Client ID:	CHEV-GW-MW25-0110					
Laboratory ID:	01-156-10					
Sulfate	170	50	ASTM D516-07	1-27-14	1-27-14	

Client ID:	CHEV-GW-MW26R-0110					
Laboratory ID:	01-156-11					
Sulfate	2400	1000	ASTM D516-07	1-27-14	1-27-14	

Client ID:	CHEV-GW-MW27-0110					
Laboratory ID:	01-156-12					
Sulfate	ND	25	ASTM D516-07	1-27-14	1-27-14	U1

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

**SULFATE
 ASTM D516-07
 QUALITY CONTROL**

Matrix: Water

Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0127W1					
Sulfate	ND	5.0	ASTM D516-07	1-27-14	1-27-14	
Laboratory ID:	MB0127F1					
Sulfate	ND	5.0	ASTM D516-07	1-27-14	1-27-14	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	01-152-01							
	ORIG	DUP						
Sulfate	8.02	7.65	NA	NA	NA	5	10	
Laboratory ID:	01-156-03							
	ORIG	DUP						
Sulfate	ND	ND	NA	NA	NA	NA	10	

MATRIX SPIKE

Laboratory ID:	01-152-01							
	MS	MS		MS				
Sulfate	18.9	10.0	8.02	109	82-123	NA	NA	
Laboratory ID:	01-156-03							
	MS	MS		MS				
Sulfate	9.64	10.0	ND	96	82-123	NA	NA	

SPIKE BLANK

Laboratory ID:	SB0127W1							
	SB	SB		SB				
Sulfate	10.5	10.0	NA	105	91-114	NA	NA	
Laboratory ID:	SB0127F1							
	SB	SB		SB				
Sulfate	10.9	10.0	NA	109	91-114	NA	NA	

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

TOTAL ALKALINITY
SM 2320B

Matrix: Water
 Units: mg CaCO₃/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	CHEV-GW-MW20R-1100					
Laboratory ID:	01-156-01					
Total Alkalinity	250	2.0	SM 2320B	1-28-14	1-28-14	
Client ID:	CHEV-GW-MW04R-0140					
Laboratory ID:	01-156-02					
Total Alkalinity	3300	2.0	SM 2320B	1-28-14	1-28-14	
Client ID:	CHEV-GW-MW09R-0150					
Laboratory ID:	01-156-03					
Total Alkalinity	740	2.0	SM 2320B	1-28-14	1-28-14	
Client ID:	CHEV-GW-MW10R-0130					
Laboratory ID:	01-156-04					
Total Alkalinity	280	2.0	SM 2320B	1-28-14	1-28-14	
Client ID:	CHEV-GW-MW11-0100					
Laboratory ID:	01-156-05					
Total Alkalinity	190	2.0	SM 2320B	1-28-14	1-28-14	
Client ID:	CHEV-GW-MW20R-0110					
Laboratory ID:	01-156-07					
Total Alkalinity	270	2.0	SM 2320B	1-28-14	1-28-14	
Client ID:	CHEV-GW-MW21R-0110					
Laboratory ID:	01-156-08					
Total Alkalinity	2000	2.0	SM 2320B	1-28-14	1-28-14	

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

TOTAL ALKALINITY
SM 2320B

Matrix: Water
 Units: mg CaCO₃/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	CHEV-GW-MW22R-0130					
Laboratory ID:	01-156-09					
Total Alkalinity	280	2.0	SM 2320B	1-28-14	1-28-14	
Client ID:	CHEV-GW-MW25-0110					
Laboratory ID:	01-156-10					
Total Alkalinity	150	2.0	SM 2320B	1-28-14	1-28-14	
Client ID:	CHEV-GW-MW26R-0110					
Laboratory ID:	01-156-11					
Total Alkalinity	160	2.0	SM 2320B	1-28-14	1-28-14	
Client ID:	CHEV-GW-MW27-0110					
Laboratory ID:	01-156-12					
Total Alkalinity	360	2.0	SM 2320B	1-28-14	1-28-14	

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

**TOTAL ALKALINITY
 SM 2320B
 QUALITY CONTROL**

Matrix: Water
 Units: mg CaCO₃/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0128W1					
Total Alkalinity	ND	2.0	SM 2320B	1-28-14	1-28-14	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	01-152-01							
	ORIG	DUP						
Total Alkalinity	164	174	NA	NA	NA	NA	6	10

SPIKE BLANK								
Laboratory ID:	SB0128W1							
	SB		SB		SB			
Total Alkalinity	96.0		100	NA	96	89-112	NA	NA

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

CHLORIDE
SM 4500-Cl E

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	CHEV-GW-MW20R-1100					
Laboratory ID:	01-156-01					
Chloride	43	2.0	SM 4500-Cl E	1-24-14	1-24-14	

Client ID:	CHEV-GW-MW04R-0140					
Laboratory ID:	01-156-02					
Chloride	260	10	SM 4500-Cl E	1-24-14	1-24-14	

Client ID:	CHEV-GW-MW09R-0150					
Laboratory ID:	01-156-03					
Chloride	31	2.0	SM 4500-Cl E	1-24-14	1-24-14	

Client ID:	CHEV-GW-MW10R-0130					
Laboratory ID:	01-156-04					
Chloride	16	2.0	SM 4500-Cl E	1-24-14	1-24-14	

Client ID:	CHEV-GW-MW11-0100					
Laboratory ID:	01-156-05					
Chloride	25	2.0	SM 4500-Cl E	1-24-14	1-24-14	

Client ID:	CHEV-GW-MW20R-0110					
Laboratory ID:	01-156-07					
Chloride	42	2.0	SM 4500-Cl E	1-24-14	1-24-14	

Client ID:	CHEV-GW-MW21R-0110					
Laboratory ID:	01-156-08					
Chloride	100	4.0	SM 4500-Cl E	1-24-14	1-24-14	

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

CHLORIDE
SM 4500-Cl E

Matrix: Water
 Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	CHEV-GW-MW22R-0130					
Laboratory ID:	01-156-09					
Chloride	1300	40	SM 4500-Cl E	1-24-14	1-24-14	

Client ID:	CHEV-GW-MW25-0110					
Laboratory ID:	01-156-10					
Chloride	1300	40	SM 4500-Cl E	1-24-14	1-24-14	

Client ID:	CHEV-GW-MW26R-0110					
Laboratory ID:	01-156-11					
Chloride	11000	500	SM 4500-Cl E	1-24-14	1-24-14	

Client ID:	CHEV-GW-MW27-0110					
Laboratory ID:	01-156-12					
Chloride	34	2.0	SM 4500-Cl E	1-24-14	1-24-14	

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

**CHLORIDE
 SM 4500-Cl E
 QUALITY CONTROL**

Matrix: Water

Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0124W1					
Chloride	ND	2.0	SM 4500-Cl E	1-24-14	1-24-14	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	01-152-01							
	ORIG	DUP						
Chloride	39.3	40.6	NA	NA	NA	3	11	

MATRIX SPIKE

Laboratory ID:	01-152-01							
	MS	MS		MS				
Chloride	98.5	50.0	39.3	118	94-126	NA	NA	

SPIKE BLANK

Laboratory ID:	SB0124W1							
	SB	SB		SB				
Chloride	55.6	50.0	NA	111	94-124	NA	NA	

Date of Report: February 4, 2014
Samples Submitted: January 23, 2014
Laboratory Reference: 1401-156
Project: 233-1896-107

TOTAL LEAD
EPA 200.8

Matrix: Water
Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	EPA Method	Prepared	Analyzed	Flags
Lab ID:	01-156-03					
Client ID:	CHEV-GW-MW09R-0150					
Lead	2.8	1.0	200.8	1-28-14	1-29-14	

Date of Report: February 4, 2014
Samples Submitted: January 23, 2014
Laboratory Reference: 1401-156
Project: 233-1896-107

TOTAL LEAD
EPA 200.8
METHOD BLANK QUALITY CONTROL

Date Extracted: 1-28-14
Date Analyzed: 1-29-14

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB0128WH1

Analyte	Method	Result	PQL
Lead	200.8	ND	1.0

Date of Report: February 4, 2014
Samples Submitted: January 23, 2014
Laboratory Reference: 1401-156
Project: 233-1896-107

**TOTAL LEAD
EPA 200.8
DUPLICATE QUALITY CONTROL**

Date Extracted: 1-28-14

Date Analyzed: 1-29-14

Matrix: Water

Units: ug/L (ppb)

Lab ID: 01-145-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Lead	ND	ND	NA	1.0	

Date of Report: February 4, 2014
Samples Submitted: January 23, 2014
Laboratory Reference: 1401-156
Project: 233-1896-107

TOTAL LEAD
EPA 200.8
MS/MSD QUALITY CONTROL

Date Extracted: 1-28-14

Date Analyzed: 1-29-14

Matrix: Water

Units: ug/L (ppb)

Lab ID: 01-145-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Lead	100	98.7	99	100	100	2	

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

**DISSOLVED METHANE
RSK 175**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: CHEV-GW-MW20R-1100						
Laboratory ID:	01-156-01					
Methane	930	75	RSK 175	1-28-14	1-28-14	
Client ID: CHEV-GW-MW04R-0140						
Laboratory ID:	01-156-02					
Methane	600	50	RSK 175	1-28-14	1-28-14	
Client ID: CHEV-GW-MW09R-0150						
Laboratory ID:	01-156-03					
Methane	11000	500	RSK 175	1-28-14	1-28-14	
Client ID: CHEV-GW-MW10R-0130						
Laboratory ID:	01-156-04					
Methane	37	2.5	RSK 175	1-28-14	1-28-14	
Client ID: CHEV-GW-MW11-0100						
Laboratory ID:	01-156-05					
Methane	190	10	RSK 175	1-28-14	1-28-14	
Client ID: CHEV-GW-MW13R-0130						
Laboratory ID:	01-156-06					
Methane	220	10	RSK 175	1-28-14	1-28-14	
Client ID: CHEV-GW-MW20R-0110						
Laboratory ID:	01-156-07					
Methane	840	50	RSK 175	1-28-14	1-28-14	
Client ID: CHEV-GW-MW21R-0110						
Laboratory ID:	01-156-08					
Methane	4200	500	RSK 175	1-28-14	1-28-14	

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

**DISSOLVED METHANE
RSK 175**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	CHEV-GW-MW22R-0130					
Laboratory ID:	01-156-09					
Methane	5.4	0.50	RSK 175	1-28-14	1-28-14	

Client ID:	CHEV-GW-MW25-0110					
Laboratory ID:	01-156-10					
Methane	3.2	0.50	RSK 175	1-28-14	1-28-14	

Client ID:	CHEV-GW-MW26R-0110					
Laboratory ID:	01-156-11					
Methane	1.0	0.50	RSK 175	1-28-14	1-28-14	

Client ID:	CHEV-GW-MW27-0110					
Laboratory ID:	01-156-12					
Methane	5900	500	RSK 175	1-28-14	1-28-14	

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

**DISSOLVED METHANE
 RSK 175
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0128W1					
Methane	ND	0.50	RSK 175	1-28-14	1-28-14	
Laboratory ID:	MB0129W1					
Methane	ND	0.50	RSK 175	1-29-14	1-29-14	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB0128W1										
	SB	SBD	SB	SBD		SB	SBD				
Methane	4.80	4.91	4.42	4.42	N/A	109	111	75-125	2	25	
Laboratory ID:	SB0129W1										
	SB	SBD	SB	SBD		SB	SBD				
Methane	4.35	4.47	4.42	4.42	N/A	98	101	75-125	3	25	

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

**DISSOLVED METALS
 EPA 6010C/200.8**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID: 01-156-01						
Client ID: CHEV-GW-MW20R-1100						
Manganese	390	11	6010C		1-30-14	
Lab ID: 01-156-02						
Client ID: CHEV-GW-MW04R-0140						
Manganese	5500	50	6010C		1-31-14	
Lab ID: 01-156-03						
Client ID: CHEV-GW-MW09R-0150						
Lead	ND	1.0	200.8		1-29-14	
Manganese	4700	50	6010C		1-31-14	
Lab ID: 01-156-04						
Client ID: CHEV-GW-MW10R-0130						
Manganese	2000	11	6010C		1-30-14	
Lab ID: 01-156-05						
Client ID: CHEV-GW-MW11-0100						
Manganese	1100	11	6010C		1-30-14	
Lab ID: 01-156-07						
Client ID: CHEV-GW-MW20R-0110						
Manganese	390	11	6010C		1-30-14	

Date of Report: February 4, 2014
 Samples Submitted: January 23, 2014
 Laboratory Reference: 1401-156
 Project: 233-1896-107

DISSOLVED METALS
EPA 6010C/200.8

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-156-08					
Client ID:	CHEV-GW-MW21R-0110					
Manganese	3300	50	6010C		1-31-14	
Lab ID:	01-156-09					
Client ID:	CHEV-GW-MW22R-0130					
Manganese	400	11	6010C		1-30-14	
Lab ID:	01-156-10					
Client ID:	CHEV-GW-MW25-0110					
Manganese	250	11	6010C		1-30-14	
Lab ID:	01-156-11					
Client ID:	CHEV-GW-MW26R-0110					
Manganese	77	11	6010C		1-30-14	
Lab ID:	01-156-12					
Client ID:	CHEV-GW-MW27-0110					
Manganese	5400	50	6010C		1-31-14	

Date of Report: February 4, 2014
Samples Submitted: January 23, 2014
Laboratory Reference: 1401-156
Project: 233-1896-107

**DISSOLVED MANGANESE
EPA 6010C
METHOD BLANK QUALITY CONTROL**

Date Analyzed: 1-30-14

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB0130D1

Analyte	Method	Result	PQL
Manganese	6010C	ND	11

Date of Report: February 4, 2014
Samples Submitted: January 23, 2014
Laboratory Reference: 1401-156
Project: 233-1896-107

**DISSOLVED LEAD
EPA 200.8
METHOD BLANK QUALITY CONTROL**

Date Analyzed: 1-30-14

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB0129D1

Analyte	Method	Result	PQL
Lead	200.8	ND	1.0

Date of Report: February 4, 2014
Samples Submitted: January 23, 2014
Laboratory Reference: 1401-156
Project: 233-1896-107

**DISSOLVED MANGANESE
EPA 6010C
DUPLICATE QUALITY CONTROL**

Date Analyzed: 1-30-14

Matrix: Water

Units: ug/L (ppb)

Lab ID: 01-156-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Manganese	388	385	1	11	

Date of Report: February 4, 2014
Samples Submitted: January 23, 2014
Laboratory Reference: 1401-156
Project: 233-1896-107

**DISSOLVED LEAD
EPA 200.8
DUPLICATE QUALITY CONTROL**

Date Analyzed: 1-30-14

Matrix: Water
Units: ug/L (ppb)

Lab ID: 01-165-02

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Lead	ND	ND	NA	1.0	

Date of Report: February 4, 2014
Samples Submitted: January 23, 2014
Laboratory Reference: 1401-156
Project: 233-1896-107

**DISSOLVED MANGANESE
EPA 6010C
MS/MSD QUALITY CONTROL**

Date Analyzed: 1-30-14

Matrix: Water
Units: ug/L (ppb)

Lab ID: 01-156-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Manganese	1110	1400	91	1400	91	0	

Date of Report: February 4, 2014
Samples Submitted: January 23, 2014
Laboratory Reference: 1401-156
Project: 233-1896-107

**DISSOLVED LEAD
EPA 200.8
MS/MSD QUALITY CONTROL**

Date Analyzed: 1-30-14

Matrix: Water
Units: ug/L (ppb)

Lab ID: 01-165-02

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Lead	200	205	102	208	104	2	



Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical _____.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference



Analytical Resources, Incorporated
Analytical Chemists and Consultants

27 January 2014

David Baumeister
OnSite Environmental, Inc.
14648 NE 95th
Redmond, WA 98052

RE: Client Project: Former Chevron
ARI Job No: XV74

Dear David:

Please find enclosed the chain-of-custody (COC) record and the final results for the samples from the project referenced above. Analytical Resources, Inc. (ARI) accepted twelve water samples on January 23, 2014. The samples were analyzed for ferrous iron as requested.

These analyses proceeded without incident of note.

An electronic copy of these reports will remain on file at ARI. Should you have any questions, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Mark D. Harris
Project Manager
206/695-6210
markh@arilabs.com

Enclosures

cc: file XV74

MDH/mdh

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: **XV74** Turn-around Requested: **NORM**
 ARI Client Company: **ONSITE ENVIRONMENTAL INC** Phone:
 Client Contact:



Analytical Resources, Incorporated
 Analytical Chemists and Consultants
 4611 South 134th Place, Suite 100
 Tukwila, WA 98168
 206-695-6200 206-695-6201 (fax)

Client Project Name: FORMER CHEVRON				Analysis Requested				Notes/Comments				
Client Project #: W. HARVEY												
Sample ID	Date	Time	Matrix	No. Containers								
CHEV-GW-MW01-010	1-21-14	1100	GW	1								
CHEV-GW-MW04R	1-22-14	1015	GW	1								
CHEV-GW-MW09R	1-22-14	1410	GW	1								
CHEV-GW-MW10R	1-22-14	1140	GW	1								
CHEV-GW-MW11	1-22-14	1250	GW	1								
CHEV-GW-MW3R-0130	1-21-14	1630	GW	1								
CHEV-GW-MW20R-0110	1-21-14	1050	GW	1								
CHEV-GW-MW21R-0110	1-21-14	1255	GW	1								
CHEV-GW-MW22R-0130	1-21-14	1525	GW	1								
CHEV-GW-MW25R	1-22-14	0910	GW	1								
Comments/Special Instructions	Relinquished by: WALTER HARVEY (Signature) WALTER HARVEY Printed Name: WALTER HARVEY Company: PARA METRIX Date & Time: 1-22-14 1700			Relinquished by: Danny Reynolds (Signature) Danny Reynolds Printed Name: Danny Reynolds Company: T-Dog Date & Time: 1/23/14 5:00			Received by: Danny Reynolds (Signature) Danny Reynolds Printed Name: Danny Reynolds Company: T-Dog Date & Time: 1/23/14 8:35			Received by: Jennifer Millsap (Signature) Jennifer Millsap Printed Name: Jennifer Millsap Company: ARI Date & Time: 1/23/14 835		

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.

Sample Retention Policy: Unless specified by workorder or contract, all water/soil samples submitted to ARI will be discarded or returned, no sooner than 90 days after submission of hardcopy data, whichever is longer. Sediment samples submitted under PSD/PA/SEP/SMS protocol will be stored frozen for up to one year and then discarded.

XV74: 00002

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

[illegible]

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.

Sample Retention Policy: Unless specified by workorder or contract, all water/soil samples submitted to ARI will be discarded or returned, no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer. Sediment samples submitted under PSDDA/PSEP/SMS protocol will be stored frozen for up to one year and then discarded.

2019



Cooler Receipt Form

ARI Client: Onsite

Project Name: Former Chevron

COC No(s): NA

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: NA

Assigned ARI Job No: XV74

Tracking No: T-DOG NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES NO

Were custody papers included with the cooler? YES YES NO

Were custody papers properly filled out (ink, signed, etc.) YES YES NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)

Time: 1.1

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 9087732

Cooler Accepted by: JM Date: 1/23/14 Time: 835

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES NO

What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: NA

Was sufficient ice used (if appropriate)? NA YES NO

Were all bottles sealed in individual plastic bags? YES NO

Did all bottles arrive in good condition (unbroken)? YES NO

Were all bottle labels complete and legible? YES NO

Did the number of containers listed on COC match with the number of containers received? YES NO

Did all bottle labels and tags agree with custody papers? YES NO

Were all bottles used correct for the requested analyses? YES NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)... NA YES NO

Were all VOC vials free of air bubbles? NA YES NO

Was sufficient amount of sample sent in each bottle? YES NO

Date VOC Trip Blank was made at ARI: NA

Was Sample Split by ARI: NA YES Date/Time: 1/23/14 Equipment: 1428 Split by: NA

Samples Logged by: JM Date: 1/23/14 Time: 1428

** Notify Project Manager of discrepancies or concerns **

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC
CHEV-GW-MW01R-0140	CHEV-GW-MW01R-	CHEV-GW-MW25-0110	CHEV-GW-MW25-
CHEV-GW-MW01R-0150	CHEV-GW-MW01R-	CHEV-GW-MW27-0110	CHEV-GW-MW27-
CHEV-GW-MW10R-0150	CHEV-GW-MW10R-1		
CHEV-GW-MW11-0100	CHEV-GW-MW11-		

Additional Notes, Discrepancies, & Resolutions:

Used IDs from bottles.

By: JM Date: 1/23/14



Small → "sm" (< 2 mm)

Peabubbles → "pb" (2 to < 4 mm)

Large → "lg" (4 to < 6 mm)

Headspace → "hs" (> 6 mm)

Subject: COC Sample ID changes for Ferrous Iron Project Former Chevron
From: David Baumeister <dbaumeister@onsite-env.com>
Date: 1/24/2014 10:55 AM
To: Mark Harris <markh@arilabs.com>

Good morning Mark.

Will you make the changes as they are written on the attached COC? Some of the IDs had some missing info on the original. Also, the project number should be 233-1896-107.

Please call or e-mail me with any questions.
Thank you,
David

David A. Baumeister
Project Manager
[cid:image004.png@01CF18F2.CECC9520]
Celebrating 20 years in business
14648 NE 95th Street, Redmond, WA 98052
T: 425.883.3881 C: 206.550.2483
dbaumeister@onsite-env.com<mailto:dbaumeister@onsite-env.com>
www.onsite-env.com<<http://www.onsite-env.com>/>

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[cid:image003.gif@01CF18F2.CC6A1410]

Attachments:

20140124_115830.pdf

625 KB

Chain of Custody Record & Laboratory Analysis Request

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-8200 206-695-8201 (fax)



Date: 1-22-14
Page: 1 of 2
No. of Coolers: 1
Cooler Temps: 1

ARI Assigned Number: NOR-1
Turn-around Requested: NOR-1
ARI Client Company: ON SITE ENVIRONMENTAL INC
Phone: 206-695-8200
Client Contact: W. HARVEY

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested	Notes/Comments
CHEV-GW-MW01-0100	1-21-14	1100	GW	1	FERROUS	
CHEV-GW-MW04R-0100	1-22-14	1015	GW	1		
CHEV-GW-MW09R-0100	1-22-14	1410	GW	1		
CHEV-GW-MW10R-0100	1-22-14	1140	GW	1		
CHEV-GW-MW11-0100	1-22-14	1250	GW	1		
CHEV-GW-MW13R-0100	1-21-14	1630	GW	1		
CHEV-GW-MW20R-0100	1-21-14	1050	GW	1		
CHEV-GW-MW21R-0100	1-21-14	1255	GW	1		
CHEV-GW-MW22R-0100	1-21-14	1525	GW	1		
CHEV-GW-MW25R-0100	1-22-14	0910	GW	1		

Received by: (Signature) *[Signature]*
Printed Name: WALTER HARVEY
Company: PARAMETRIX
Date & Time: 1-22-14 1700

Relinquished by: (Signature) *[Signature]*
Printed Name: Danny Reynolds
Company: T-DOG
Date & Time: 1/22/14 5:00

Comments/Special Instructions: *[Blank]*

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.

Sample Retention Policy: Unless specified by workorder or contract, all water/soil samples submitted to ARI will be discarded or returned, no sooner than 90 days after submission of hardcopy data, whichever is longer. Sediment samples submitted under PSDDA/PSEP/SMS protocol will be stored frozen for up to one year and then discarded.



OnSite Environmental Inc.

Analytical Laboratory Testing Services
14648 NE 96th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Page 1 of 2

Turnaround Request (in working days)			Laboratory Number:																							
(Check One)																										
☐ Same Day	☐ 1 Day																									
☐ 2 Days	☐ 3 Days																									
☐ Standard (7 Days)	☐ (TPH analysis 5 Days)																									
☐	(other)																									
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-GX/BTEX	NWTPH-GX	NWTPH-DX/10*	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCPA Metals/ MTCA Metals (circle one)	TCLP Metals	HEM (oil and grease) 1664A	CONVENTIONAL	TOTAL LEAD	DISMETHANE	DISMETHANE*	% Moisture	
CHEV-GW-MW101-1100		1-21-14	1100	GW					X													X	X	X	X	X
CHEV-GW-MW104R-0140		1-22-14	1015	GW					X													X	X	X	X	X
CHEV-GW-MW109R-0150		1-22-14	1410	GW					X													X	X	X	X	X
CHEV-GW-MW101R-0130		1-22-14	1140	GW					X													X	X	X	X	X
CHEV-GW-MW111-0100		1-22-14	1250	GW					X													X	X	X	X	X
CHEV-GW-MW13R-0130		1-21-14	1630	GW					X																	
CHEV-GW-MW20R-0110		1-21-14	1050	GW					X													X	X	X	X	X
CHEV-GW-MW21R-0110		1-21-14	1255	GW					X													X	X	X	X	X
CHEV-GW-MW22R-0130		1-21-14	1415	GW					X													X	X	X	X	X
CHEV-GW-MW25-0110		1-22-14	0910	GW					X													X	X	X	X	X
Signature: <i>[Signature]</i>						Company: PARAMETRIX	Date: 1-22-14	Time: 5:00	Comments/Special Instructions: * FIELD FILTERED ** SILICA GEL CLEAN UP ON DSL																	
Relinquished																										
Received																										
Relinquished																										
Received																										
Relinquished																										
Received																										
Reviewed/Date																										

Chromatograms with final report ☐

Electronic Data Deliverables (EDDs) ☐

Data Package: Level III ☐ Level IV ☐

PRESERVATION VERIFICATION 01/23/14

Page 1 of 1



ARI Job No: XV74

PC: Mark

VTSR: 01/23/14

Inquiry Number: NONE

Analysis Requested: 01/23/14

Contact: Baumeister, David

Client: OnSite Environmental, Inc.

Logged by: JM

Sample Set Used: Yes-481

Validatable Package: No

Deliverables:

Project #:

Project: Former Chevron

Sample Site:

SDG No:

Analytical Protocol: In-house

LOGNUM ARI ID	CLIENT ID	CN >12	WAD >12	NH3 <2	COD <2	FOG <2	MET <2	PHEN <2	PHOS <2	TKN <2	NO23 <2	TOC <2	S2 >9	TPHD <2	Fe2+ <2	DMET DOC FLT FLT	PARAMETER	ADJUSTED TO	LOT NUMBER	AMOUNT ADDED	DATE/BY
14-1327 XV74A	CHEV-GW-MW01-1100														NC						
14-1328 XV74B	CHEV-GW-MW04R-0140														NC						
14-1329 XV74C	CHEV-GW-MW09R-0150														NC						
14-1330 XV74D	CHEV-GW-MW10R-0130														NC						
14-1331 XV74E	CHEV-GW-MW11-0100														NC						
14-1332 XV74F	CHEV-GW-MW13R-0130														NC						
14-1333 XV74G	CHEV-GW-MW20R-0110														NC						
14-1334 XV74H	CHEV-GW-MW21R-0110														NC						
14-1335 XV74I	CHEV-GW-MW22R-0130														NC						
14-1336 XV74J	CHEV-GW-MW25-0110														NC						
14-1337 XV74K	CHEV-GW-MW26R-0110														NC						
14-1338 XV74L	CHEV-GW-MW27-0110														NC						

NC = Not checked

Checked By

JM

Date

1/23/14

Sample ID Cross Reference Report



ARI Job No: XV74
Client: OnSite Environmental, Inc.
Project Event: N/A
Project Name: Former Chevron

Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1. CHEV-GW-MW01-1100	XV74A	14-1327	Water	01/21/14 11:00	01/23/14 08:35
2. CHEV-GW-MW04R-0140	XV74B	14-1328	Water	01/22/14 10:15	01/23/14 08:35
3. CHEV-GW-MW09R-0150	XV74C	14-1329	Water	01/22/14 14:10	01/23/14 08:35
4. CHEV-GW-MW10R-0130	XV74D	14-1330	Water	01/22/14 11:40	01/23/14 08:35
5. CHEV-GW-MW11-0100	XV74E	14-1331	Water	01/22/14 12:50	01/23/14 08:35
6. CHEV-GW-MW13R-0130	XV74F	14-1332	Water	01/21/14 16:30	01/23/14 08:35
7. CHEV-GW-MW20R-0110	XV74G	14-1333	Water	01/21/14 10:50	01/23/14 08:35
8. CHEV-GW-MW21R-0110	XV74H	14-1334	Water	01/21/14 12:55	01/23/14 08:35
9. CHEV-GW-MW22R-0130	XV74I	14-1335	Water	01/21/14 15:25	01/23/14 08:35
10. CHEV-GW-MW25-0110	XV74J	14-1336	Water	01/22/14 09:10	01/23/14 08:35
11. CHEV-GW-MW26R-0110	XV74K	14-1337	Water	01/21/14 14:15	01/23/14 08:35
12. CHEV-GW-MW27-0110	XV74L	14-1338	Water	01/22/14 15:40	01/23/14 08:35



Data Reporting Qualifiers

Effective 12/31/13

Inorganic Data

- U Indicates that the target analyte was not detected at the reported concentration
- * Duplicate RPD is not within established control limits
- B Reported value is less than the CRDL but $\geq$ the Reporting Limit
- N Matrix Spike recovery not within established control limits
- NA Not Applicable, analyte not spiked
- H The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
- L Analyte concentration is ≤ 5 times the Reporting Limit and the replicate control limit defaults to ± 1 RL instead of the normal 20% RPD

Organic Data

- U Indicates that the target analyte was not detected at the reported concentration
- * Flagged value is not within established control limits
- B Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
- J Estimated concentration when the value is less than ARI's established reporting limits
- D The spiked compound was not detected due to sample extract dilution
- E Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.



**Analytical Resources,
Incorporated**
Analytical Chemists and
Consultants

- Q Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).
- S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte
- NA The flagged analyte was not analyzed for
- NR Spiked compound recovery is not reported due to chromatographic interference
- NS The flagged analyte was not spiked into the sample
- M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"
- Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.
- EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" (**Dioxin/Furan analysis only**)
- C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column
- P The analyte was detected on both chromatographic columns but the quantified values differ by $\geq 40\%$ RPD with no obvious chromatographic interference
- X Analyte signal includes interference from polychlorinated diphenyl ethers. (**Dioxin/Furan analysis only**)
- Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. (**Dioxin/Furan analysis only**)



**Analytical Resources,
Incorporated**
Analytical Chemists and
Consultants

Geotechnical Data

- A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.
- F Samples were frozen prior to particle size determination
- SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations
- SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis
- W Weight of sample in some pipette aliquots was below the level required for accurate weighting

INORGANICS ANALYSIS DATA SHEET
Ferrous Iron by Method SM3500 FeD



Data Release Authorized: 
Reported: 01/27/14
Date Received: 01/23/14
Page 1 of 1

QC Report No: XV74-OnSite Environmental, Inc.
Project: Former Chevron
233-1896-107

Client/ ARI ID	Date Sampled	Matrix	Analysis Date & Batch	RL	Result
CHEV-GW-MW01-1100 XV74A 14-1327	01/21/14	Water	01/23/14 012314#1	0.040	0.088
CHEV-GW-MW04R-0140 XV74B 14-1328	01/22/14	Water	01/23/14 012314#1	0.800	9.64
CHEV-GW-MW09R-0150 XV74C 14-1329	01/22/14	Water	01/23/14 012314#1	2.00	36.9
CHEV-GW-MW10R-0130 XV74D 14-1330	01/22/14	Water	01/23/14 012314#1	0.080	2.14
CHEV-GW-MW11-0100 XV74E 14-1331	01/22/14	Water	01/23/14 012314#1	0.800	6.88
CHEV-GW-MW13R-0130 XV74F 14-1332	01/21/14	Water	01/23/14 012314#1	0.040	0.286
CHEV-GW-MW20R-0110 XV74G 14-1333	01/21/14	Water	01/23/14 012314#1	0.040	0.078
CHEV-GW-MW21R-0110 XV74H 14-1334	01/21/14	Water	01/23/14 012314#1	0.400	7.42
CHEV-GW-MW22R-0130 XV74I 14-1335	01/21/14	Water	01/23/14 012314#1	0.040	< 0.040 U
CHEV-GW-MW25-0110 XV74J 14-1336	01/22/14	Water	01/23/14 012314#1	0.040	0.088
CHEV-GW-MW26R-0110 XV74K 14-1337	01/21/14	Water	01/23/14 012314#1	0.040	0.196
CHEV-GW-MW27-0110 XV74L 14-1338	01/22/14	Water	01/23/14 012314#1	2.00	32.4

Reported in mg/L

RL-Analytical reporting limit
U-Undetected at reported detection limit

METHOD BLANK RESULTS-CONVENTIONALS
XV74-OnSite Environmental, Inc.



Matrix: Water
Data Release Authorized: 
Reported: 01/27/14

Project: Former Chevron
Event: 233-1896-107
Date Sampled: NA
Date Received: NA

Analyte	Date/Time	Units	Blank
Ferrous Iron	01/23/14 15:35	mg/L	< 0.040 U

LAB CONTROL RESULTS-CONVENTIONALS
XV74-OnSite Environmental, Inc.



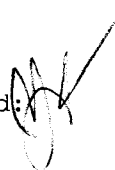
Matrix: Water
Data Release Authorized: 
Reported: 01/27/14

Project: Former Chevron
Event: 233-1896-107
Date Sampled: NA
Date Received: NA

Analyte	Date/Time	Units	LCS	Spike Added	Recovery
Ferrous Iron	01/23/14 15:35	mg/L	0.488	0.500	97.6%

REPLICATE RESULTS-CONVENTIONALS
XV74-OnSite Environmental, Inc.



Matrix: Water
Data Release Authorized: 
Reported: 01/27/14

Project: Former Chevron
Event: 233-1896-107
Date Sampled: 01/21/14
Date Received: 01/23/14

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: XV74A Client ID: CHEV-GW-MW01-1100					
Ferrous Iron	01/23/14	mg/L	0.088	0.088	0.0%

MS/MSD RESULTS-CONVENTIONALS
XV74-OnSite Environmental, Inc.



Matrix: Water
Data Release Authorized
Reported: 01/27/14

Project: Former Chevron
Event: 233-1896-107
Date Sampled: 01/21/14
Date Received: 01/23/14

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: XV74A Client ID: CHEV-GW-MW01-1100						
Ferrous Iron	01/23/14	mg/L	0.088	0.476	0.400	97.0%

Chain of Custody

Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.on-site-env.com										
Company: PARAMETRIX										
Project Number: 2334896-107										
Project Name: FORMER CHEVRON PROPERTY										
Project Manager: DAVID DINKUHN										
Sampled by: WALTER HARVEY										
Turnaround Request (in working days) (Check One) ☐ Same Day ☐ 1 Day ☐ 2 Days ☐ 3 Days ☒ Standard (7 Days) (TPH analysis 5 Days) ☐ (other) _____										
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers					Laboratory Number: 01-1563
1	CHEV-GW-MW01-1100	1-22-14	1100	GW	11	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx 120 (ACU/SG)	
2	CHEV-GW-MW04R-0140	1-22-14	1015	GW	1	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	
3	CHEV-GW-MW09R-0150	1-22-14	1410	GW		PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	
4	CHEV-GW-MW10R-0130	1-22-14	1140	GW		Total RCRA Metals/ MTCA Metals (circle one)	TCLP Metals	HEM (oil and grease) 1664A	CONVENTIONAL **	
5	CHEV-GW-MW11-0100	1-22-14	1250	GW					TOTAL LEAD	
6	CHEV-GW-MW13R-0130	1-21-14	1630	GW	7				DISMETHANE	
7	CHEV-GW-MW20R-0110	1-21-14	1050	GW	11				DIS METALS *	
8	CHEV-GW-MW21R-0110	1-21-14	1255	GW					DISSOLVED LEAD *	
9	CHEV-GW-MW22R-0130	1-21-14	1415	GW					% Moisture	
10	CHEV-GW-MW25-0110	1-22-14	0910	GW						
Signature		Company		Date	Time	Comments/Special Instructions				
[Signature]		PARAMETRIX		1-22-14		* FIELD FILTERED				
[Signature]		T-Dog		1-22-14	5:00	** NITRATE, SULFATE, ALKALINITY, CHLORIDE				
[Signature]		T-Dog		1-23-14	9:42	FIMEDDs				
[Signature]		O-GITO		1-23-14	942					
Received		Reviewed/Date		Reviewed/Date		Chromatograms with final report ☐				

Chain of Custody

Company: PARAMETRIX										Turnaround Request (in working days)										Laboratory Number: 01-156																													
Project Number: 233-189/0107										☐ Same Day ☐ 1 Day										Standard (7 Days) (TPH analysis 5 Days)																													
Project Name: FORMER CHEVRON										☐ 2 Days ☐ 3 Days																																							
Project Manager: DAVID DIKUHN										☐ (other)																																							
Sampled by: WALTER HARVEY																																																	
Lab ID										Date Sampled										Time Sampled										Matrix																			
11										CHEV-GW-MWGR-0110										1-22-14										1415										GW									
12										CHEV-GW-MWGR-0110										1-22-14										1540										GW									
13										TRIP BLANK										—										—										GW									
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