



James Oil Co  
Enumclaw  
Release 2363

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June 20, 2013

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Washington State Department of Ecology  
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Bellevue, Washington 98008

DEPT OF ECOLOGY  
TCP - NWRO

**Subject:** Fourth Quarter 2012 Groundwater Monitoring and Sampling Report  
Former Unocal Site No. 0964 - 76 Products Facility No. 351393  
666 Griffin Avenue  
Enumclaw, Washington  
Washington State Department of Ecology LUST Program ID # 1565

Ms. Musa,

On behalf of Chevron Environmental Management Company for itself and as Attorney-in-Fact for Union Oil Company of California (EMC), SAIC Energy, Environment & Infrastructure, LLC (SAIC) submits this Groundwater Monitoring and Sampling Report for the above-referenced site. Quarterly groundwater monitoring and sampling activities were conducted by Blaine Tech Services, Inc. (Blaine Tech) on November 29, 2012. The Blaine Tech groundwater monitoring and sampling packages are provided as Attachment A.

### FIELD ACTIVITIES



On November 29, 2012, depth to groundwater was measured in wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-11. The groundwater elevation ranged from 738.53 (MW-5) to 733.53 (MW-11) feet based on a relative to an assigned benchmark. Groundwater flow direction is to the east at a gradient of approximately 0.008 to 0.05 feet per foot (ft/ft). A potentiometric map is shown on Figure 1.

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

Groundwater samples were submitted for the following analyses:

- Total petroleum hydrocarbons (TPH) as gasoline-range hydrocarbons by Northwest Method NWTPH-Gx;
- TPH as diesel-range hydrocarbons and TPH as heavy oil-range hydrocarbons by Northwest Method NWTPH-Dx with both quick silica gel/acid cleanup and 10-gram column silica gel/acid cleanup; and
- Benzene, toluene, ethylbenzene, total xylenes, and ethanol by United States Environmental Protection Agency Method 8260B.

Laboratory analytical results are included as Attachment B and groundwater analytical results are summarized in Table 1.

## RESULTS

The results of the fourth quarter 2012 sampling event indicate that petroleum-hydrocarbon constituent concentrations are generally consistent with respect to historical data. In addition, the groundwater elevation, flow direction, and gradient appear consistent with historical measurements.

The following analytes were detected at concentrations exceeding their respective Model Toxics Control Act Method A cleanup levels:

- TPH-G was detected in monitoring wells MW-1 and MW-4;
- TPH-D was detected in monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6;
- Benzene was detected in monitoring well MW-3.

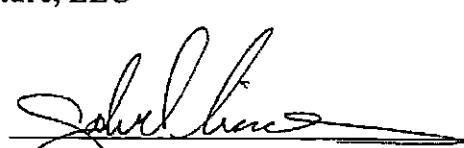
Blaine Tech will continue to perform site groundwater monitoring and sampling on a quarterly basis.

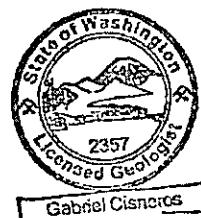
Please contact Don Wyll, the SAIC project manager, at (425) 482-3315 or [wylld@saic.com](mailto:wylld@saic.com) if you have any questions or comments about the information provided herein.

Sincerely,

**SAIC Energy, Environment & Infrastructure, LLC**

  
Julie Wartes  
Project Scientist

  
Gabriel Cisneros LG #2357  
Geologist



Enclosures:

Figure 1 – Potentiometric Map

Table 1 – Groundwater Monitoring Data and Analytical Results

Attachment A – Groundwater Monitoring and Sampling Data Package

Attachment B – Laboratory Analysis Report

cc: Dan Carrier – Chevron Environmental Management Company

Richard James – James Oil Company, Inc. (electronic)

Donna Musa – Department of Ecology

Project File

## **REPORT LIMITATIONS**

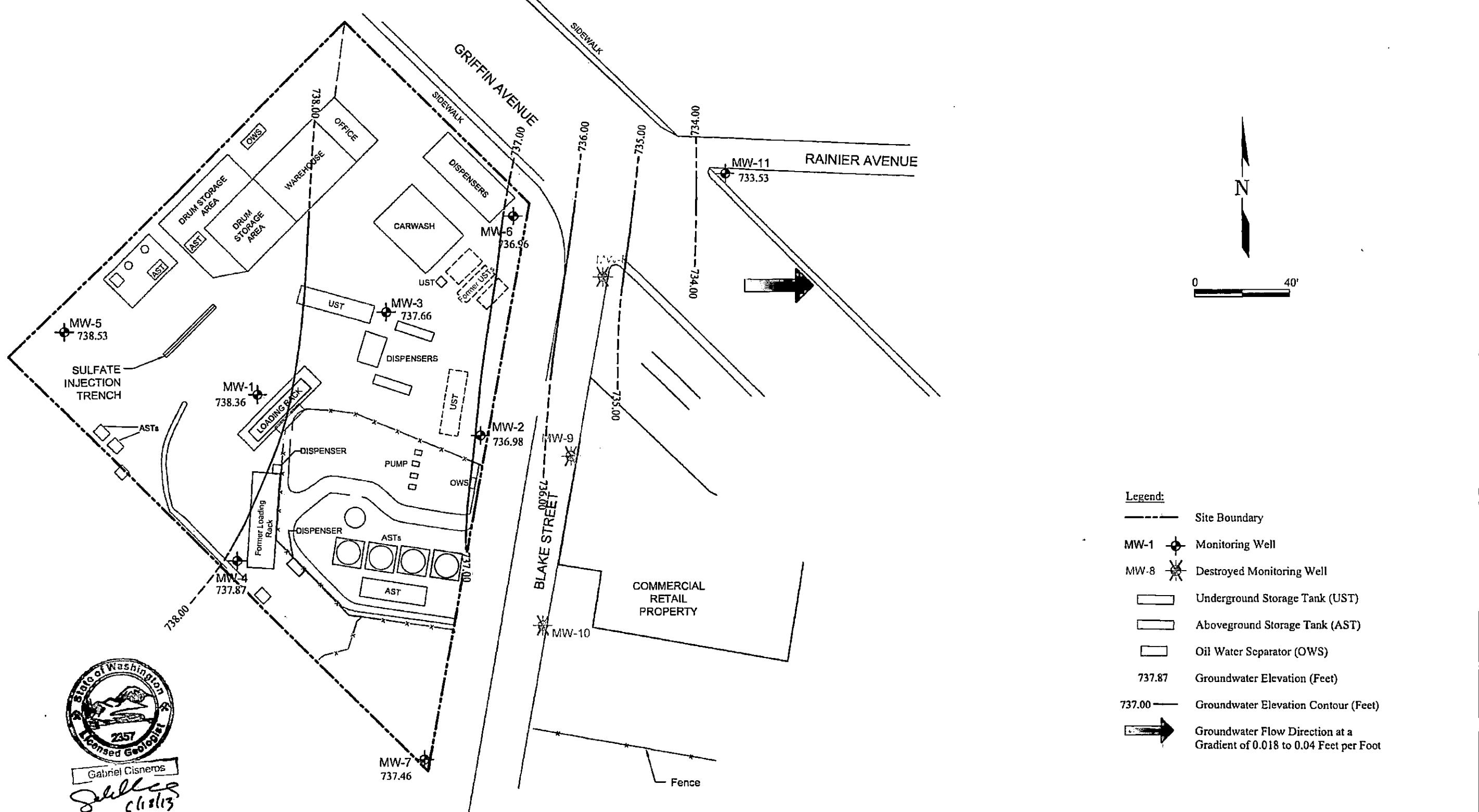
This technical document was prepared on behalf of Chevron and is intended for its sole use and for use by the local, state or federal regulatory agency that the technical document was sent to by SAIC. Any other person or entity obtaining, using, or relying on this technical document hereby acknowledges that they do so at their own risk, and that SAIC shall have no responsibility or liability for the consequences thereof.

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

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

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

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



**SAIC**

Reference: "Site Plan" by Arcadis, dated January 17, 2012.

76 Products Facility No. 351393  
Former Unocal Site No. 0965  
666 Griffin Avenue  
Enumclaw, Washington

**FIGURE 1**  
**Potentiometric Map**  
November 29, 2012

DATE: 6/6/2013 DRAWING: 351393 Site Map.dwg

**TABLE I**  
**Groundwater Monitoring Data and Analytical Results**  
**Former Unocal Site No. 351393**  
**666 Griffin Avenue**  
**Enumclaw, Washington**  
**Concentrations reported in (µg/L)**

Well ID/Date	TOC	Depth to Water (ft)	GW Elevation (ft)	TPH-G (µg/L)	TPH-D (10-gram Column Cleanup <sup>1</sup> ) (µg/L)	TPH-D <sup>2</sup> (µg/L)	TPH-O (10-gram Column Cleanup <sup>1</sup> ) (µg/L)	TPH-O <sup>2</sup> (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	EDC (µg/L)	EDB (µg/L)	Ethanol (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
<b>MW-1</b>																		
02/16/99	740.28	1.75	738.53	2,550	--	<350	--	<700	111	5.2	8.06	1.23	2.58	--	--	--	--	
08/30/00	740.28	3.65	736.63	710	--	757	--	<500	23.7	1.81	0.947	<1	<5.00	--	--	--	--	
11/16/00	740.28	2.32	737.96	2,070	--	388	--	<500	101	<3.85	6.33	<7.40	<5.00	--	--	--	--	
02/22/01	740.28	2.25	738.03	2,170	--	726	--	<500	90.0	<3.60	14.2	<5	2.54	--	--	--	--	
05/1/01	740.28	2.48	737.80	3,700	--	<250	--	545	95.6	3.21	9.87	1.14	--	--	--	--	--	
08/22/01	740.28	4.10	736.18	3,210	--	3,500	--	1,270	124	7.45	14.4	13.9	--	--	--	--	--	
11/8/01	740.28	2.02	738.26	2,680	--	<250	--	<500	120	4.35	9.33	3.63	--	--	--	--	--	
02/05/02	740.28	2.09	738.19	3,450	--	<250	--	<500	114	7.35	10.4	<1	Detected	--	--	--	--	
05/23/02	740.28	2.06	738.22	6,350	--	<250	--	<500	131	<10.0	12.3	<30	<20.0	--	--	--	--	
08/13/02	740.28	3.28	737.00	3,300	--	540	--	<500	140	8.9	12.0	<15	<50	--	--	--	--	
11/06/02	740.28	3.62	736.66	3,700	--	340	--	<500	220	14	25	<7.5	<25	--	--	--	--	
02/05/03	740.28	1.36	738.92	2,930	--	<250	--	<500	91.4	4.27	8.75	5.77	<2	--	--	--	--	
05/21/03	740.28	1.86	738.42	1,320	--	1,400	--	<500	86.7	3.03	5.63	1.70	<2	--	--	--	--	
08/20/03	740.28	4.47	735.81	4,960	--	<250	--	<500	107	2.99	8.39	<1	<2	--	--	--	--	
11/24/03	740.28	2.19	738.09	2,320	--	8,540	--	3,550	93.5	4.16	5.05	2.57	0.83	--	--	--	--	
02/19/04	740.28	1.55	738.73	4,230	--	2,440	--	1,480	113	<5	6.75	<10	<5	--	--	--	--	
05/19/04	740.28	2.40	737.88	4,040	--	1,810	--	670	183	10.7	24.6	<10	<5	--	--	--	--	
08/12/04	740.28	2.59	737.69	2,740	--	939	--	<495	74.4	3.72	3.77	<2	<1	--	--	--	--	
11/11/04	740.28	1.61	738.67	2,610	--	1,420	--	508	96.3	7.08	8.07	8.73	2.6	--	--	--	--	
02/21/05	740.28	1.49	738.79	2,760	--	1,390	--	<489	95.1	<10	<10	<20	<10	--	--	--	--	
05/16/05	740.28	2.23	738.05	2,410	--	884	--	<504	81.5	11.40	8.73	5.67	<5	--	--	--	--	
07/18/05	740.28	2.37	737.91	1,950	--	1,510	--	955	57.2	4.54	5.28	<2	<1	--	--	--	--	
09/06/05	740.28	2.82	737.46	1,800	--	2,300	--	670	28	4.0	3.0	--	--	--	--	--	--	
10/20/05	740.28	1.77	738.51	2,200	--	2,600	--	<90	46	4.0	6.0	3.0	<0.5	--	--	--	--	
11/15/05	740.28	1.51	738.77	1,700	--	2,800	--	1,200	12	3.9	2.3	3.9	--	--	--	--	--	
12/12/05	740.28	--	1,600	--	2,900	--	1,700	12	5.0	2.0	3.0	--	--	--	--	--	--	
01/10/06	740.28	--	1,700	--	3,200	--	1,500	12	4.0	2.0	3.0	--	--	--	--	--	--	
01/23/06	740.28	1.13	739.15	1,900	--	2,300	--	1,080	17	4.0	3.0	2.0	<0.5	--	--	--	--	
04/12/06	740.28	1.47	738.81	2,000	--	2,200	--	300	17	4.0	1.0	2.0	<0.5	--	--	--	--	
07/24/06	740.28	3.05	737.23	2,000	--	2,800	--	1,200	13	4.0	2.0	2.0	<0.5	--	--	--	--	
10/24/06	740.28	2.70	737.58	1,900	--	7,200	--	3,200	25	3.0	2.0	1.0	0.8	--	--	--	--	
01/30/07	740.28	1.85	738.43	1,300	--	3,400	--	<500	9.0	3.0	2.0	1.0	--	--	--	>	--	
02/26/07	740.28	1.36	738.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
03/12/07	740.28	1.05	739.23	<48	--	1,100	--	430	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	
05/26/07	740.28	1.03	739.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/09/07	740.28	1.41	738.87	1,021	--	1,461	--	894	2.56	1.55	1.15	<0.8	--	--	--	--	--	
04/23/07	740.28	1.65	738.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/26/07	740.28	1.87	738.41	1,437	--	2,171	--	<1,000	11.7	2.79	3.08	1.66	--	--	--	--	--	
05/07/07	740.28	2.08	738.20	1,700	--	2,300	--	770	9	4	3	3	--	--	--	--	--	

**TABLE I**  
**Groundwater Monitoring Data and Analytical Results**  
**Former Unocal Site No. 351393**  
**666 Griffin Avenue**  
**Enumclaw, Washington**  
**Concentrations reported in (µg/L)**

Well ID/Date	TOC	Depth to Water (ft)	GW Elevation (ft)	TPH-G (µg/L)	TPH-D (10-gram Column Cleanup) <sup>1</sup> (µg/L)	TPH-D <sup>2</sup> (µg/L)	TPH-O (10-gram Column Cleanup) <sup>3</sup> (µg/L)	TPH-O <sup>2</sup> (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	EPC (µg/L)	EDB (µg/L)	Ethanol (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
<b>MW-1 (cont)</b>																		
05/21/07	740.28	1.71	738.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/04/07	740.28	1.95	738.33	1,600	--	2,900	--	2,300	3	4	2	2	--	--	--	--	--	--
06/18/07	740.28	2.25	738.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/02/07	740.28	1.71	738.57	1,400	--	2,400	--	1,600	2	3	1	4	--	--	--	--	--	--
07/16/07	740.28	2.26	738.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/26/07	740.28	2.22	738.06	1,600	--	3,200	--	1,200	9	2	2	1	--	--	--	--	--	--
07/30/07	740.28	2.22	738.06	1,500	--	3,200	--	1,500	4	3	1	2	--	--	--	--	--	--
10/24/07	740.28	2.01	738.27	1,000	--	4,000	--	1,500	7	3	1	1	<0.5	--	--	--	--	--
01/23/08	740.28	2.35	737.93	1,500	--	4,500	--	<950	9	4	2	3	--	--	--	--	--	--
04/23/08	740.28	1.93	738.35	1,100	--	2,100	--	430	5	3	1	3	--	--	--	--	--	--
07/24/08	740.28	2.92	737.36	1,800	--	2,600	--	320	4	3	0.9	2	<0.5	--	--	--	--	--
10/20/08	740.28	2.25	738.03	1,900	--	3,700	--	1,100	10	3	2	3	--	--	--	--	--	--
01/14/09	740.28	1.60	738.68	1,510	--	150	--	<63	3.9	3.8	1.1	<3.0	--	--	--	--	--	--
01/14/09 Re-extraction - No Cleanup																		
01/14/09 Re-extraction - Silica Gel Cleanup																		
04/27/09	740.28	2.35	737.93	1,310 <sup>a</sup>	--	180	--	<420	4.9	4.9	2.2	4.0	<1.0	<1.0	<0.016	--	<1.0	<1.0
07/28/09	740.28	3.66	736.62	2,900	--	144	--	<385	22.5	4.3	5.3	5.7	--	--	--	--	--	--
10/20/09	740.28	2.37	737.91	1,710	--	754	--	<388	21.9	7.3	4.3	9.5	--	--	--	--	--	--
01/18/10	740.28	1.90	737.62	1,830 S2	--	340 <sup>b,c,d</sup>	--	<388	6.8	5.4	2.8	6.4	--	--	--	--	--	--
04/20/10	740.28	1.70	738.58	1620 S2	--	255	--	<388	3	3.7	1.4	3.4	--	--	--	--	--	--
07/19/10	740.28	2.73	738.62	1380 S5	--	249	--	<388	1.6	3.1	1.1	3.6	--	--	--	--	--	--
10/1/10	740.28	2.10	738.18	1,750	--	335	--	<392	5.7	3.7	1.8	3.9	--	--	--	--	--	--
01/23/11	740.28	1.29	739.62	1,900	--	245	--	<392	1.7	3.5	<1.0	3.3	--	--	--	--	--	--
04/11/11	740.28	1.30	738.98	2,510	--	378	--	<392	<1.0	3.0	<1.0	3.4	--	--	--	--	--	--
07/05/11	740.28	1.79	740.62	1,970	--	287	--	<396	<1.0	2.7	<1.0	3.7	--	--	--	--	--	--
11/30/11	740.28	1.91	738.37	1,900	190	1,900	<67	460	3	4	2	3	--	--	<50	--	--	--
03/02/12	740.28	1.63	741.62	1,700	93	2,400	<67	230	2	4	1	3	--	--	<50	--	--	--
05/09/12	740.28	1.84	738.44	1,500	140	980	<71	1	3	0.8	3	--	--	<50	--	--	--	
11/29/12	740.28	1.92	742.62	1,900	130	2,600	<70	360	5	4	2	3	--	--	<50	--	--	--
<b>MW-2</b>																		
02/16/99	738.78	1.33	737.45	1,548	--	<350	--	<700	30.7	0.911	2.46	<1.0	NA	--	--	--	--	--
08/31/00	738.78	2.53	736.25	634	--	660	--	<300	27.1	2.23	1.12	<2.00	<10	--	--	--	--	--
11/16/00	738.78	2.07	736.71	994	--	596	--	<500	62.9	<2.80	<1.50	<2.15	<5	--	--	--	--	--
02/22/01	738.78	2.36	736.42	1,240	--	839	--	<500	40.2	2.55	<1.76	1.83	4.29	--	--	--	--	--
05/31/01	738.78	1.93	736.85	1,440	--	<250	--	<500	33.6	2.11	0.76	<1.00	--	--	--	--	--	--
08/22/01	738.78	2.95	735.85	1,120	--	5,280	--	<500	56.2	3.07	0.87	1.09	--	--	--	--	--	--
11/08/01	738.78	1.78	737.00	1,880	--	<250	--	<500	108.0	4.42	1.88	<2.00	--	--	--	--	--	--
02/05/02	738.78	1.73	737.05	1,870	--	<250	--	<500	53.1	5.66	2.40	2.71	Detected	--	--	--	--	--
05/23/02	738.78	1.56	737.22	4,750	--	1,020	--	<500	9.8	2.55	1.37	5.25	<20	--	--	--	--	--
08/13/02	738.78	2.45	736.33	980	--	740	--	<500	21.0	2.40	0.73	<1.5	<5	--	--	--	--	--
11/06/02	738.78	2.58	736.20	1,500	--	430	--	<500	39.0	6.10	2.00	<1.5	<5	--	--	--	--	--
02/05/03	738.78	1.18	737.60	2,180	--	972	--	<500	45.0	3.80	2.32	3.52	<2	--	--	--	--	--

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**Former Unocal Site No. 351393**  
**666 Griffin Avenue**  
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**Concentrations reported in (µg/L)**

Well ID/Date	TOC	Depth to Water (ft)	GW Elevation (ft)	TPH-G (µg/L)	TPH-D (10-gram Column Cleanup <sup>1</sup> ) (µg/L)	TPH-D <sup>2</sup> (µg/L)	TPH-O (10-gram Column Cleanup <sup>1</sup> ) (µg/L)	TPH-O <sup>2</sup> (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	EDC (µg/L)	EDB (µg/L)	Ethanol (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
<b>MW-2 (cont)</b>																		
05/21/03	738.78	1.40	737.38	958	--	2,150	--	<500	15.4	1.87	0.62	<1	<2	--	--	--	--	
08/21/03	738.78	3.20	735.58	780	--	<250	--	<500	3.77	0.94	<0.500	<1	<2	--	--	--	--	
11/24/03	738.78	1.36	737.42	1,850	--	9,410	--	1,860	35.2	2.36	1.23	2.03	<0.5	--	--	--	--	
02/19/04	738.78	1.32	737.46	2,560	--	5,690	--	<247	15.8	<5	<5	<10	<5	--	--	--	--	
05/19/04	738.78	1.86	736.92	1,590	--	1,530	--	<241	5.62	2.24	1.60	<2	6.28	--	--	--	--	
08/12/04	738.78	1.72	737.06	1,460	--	2,030	--	<197	1.02	<1	<1	<2	<1	--	--	--	--	
11/11/04	738.78	1.56	737.22	1,160	--	2,820	--	<174	3.78	<1	<1	<2	2.14	--	--	--	--	
02/21/05	738.78	1.85	736.93	1,190	--	1,330	--	<191	2.36	<1	<1	<2	<1	--	--	--	--	
05/16/05	738.78	1.60	737.18	818	--	1,130	--	<526	3.21	1.65	<1	<2	2.48	--	--	--	--	
07/18/05	738.78	2.40	736.38	1,040	--	878	--	<506	1.03	<1	<1	<2	<1	--	--	--	--	
09/06/05	738.78	2.18	736.60	770	--	5,550	--	480	1.0	<0.7	<0.8	<0.8	--	--	--	--	--	
10/20/05	738.78	1.23	737.55	618	--	8,800	--	<500	4.0	0.90	<0.5	0.60	<0.5	--	--	--	--	
11/15/05	738.78	1.39	737.39	860	--	10,000	--	470	2.5	1.0	0.4	1.3	--	--	--	--	--	
12/12/05	738.78	--	--	920	--	6,100	--	580	2.0	0.9	<0.8	<0.8	--	--	--	--	--	
01/10/06	738.78	--	--	850	--	5,500	--	1,000	3.0	0.7	<0.8	<0.8	--	--	--	--	--	
01/23/06	738.78	0.87	737.91	690	--	2,600	--	<980	3.0	<0.7	<0.8	<0.8	<0.5	--	--	--	--	
04/12/06	738.78	1.54	737.24	850	--	3,900	--	310	3.0	0.8	<0.8	<0.8	<0.5	--	--	--	--	
07/24/06	738.93	1.35	737.58	620	--	3,000	--	<500	<1.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--	
10/24/06	738.93	1.90	737.03	810	--	4,500	--	940	5.0	0.8	<0.8	<0.8	<0.5	--	--	--	--	
01/31/07	738.93	1.20	737.73	750	--	12,000	--	<500	78	11	<0.8	<0.8	--	--	--	--	--	
02/26/07	738.93	0.38	738.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
03/12/07	738.93	1.11	737.82	1,100	--	6,100	--	<980	92	23	1	<0.8	--	--	--	--	--	
03/26/07	738.93	1.15	737.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/09/07	738.93	1.12	737.81	854	--	4,877	--	<980	12.2	1.53	<0.8	<0.8	--	--	--	--	--	
04/23/07	738.93	1.37	737.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/26/07	738.93	1.39	737.54	809	--	4,022	--	468	54.6	30.1	0.81	1.09	--	--	--	--	--	
05/07/07	738.93	1.32	737.61	770	--	3,800	--	<480	46	14	<0.8	<0.8	--	--	--	--	--	
05/21/07	738.93	1.36	737.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
06/04/07	738.93	1.47	737.46	900	--	4,900	--	560	40	15	<0.8	<0.8	--	--	--	--	--	
06/18/07	738.93	1.66	737.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/02/07	738.93	1.17	737.76	720	--	4,600	--	<490	13	4	<0.8	<0.8	--	--	--	--	--	
07/16/07	738.93	1.54	737.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/26/07	738.93	1.74	737.19	910	--	5,400	--	460	8	8	<0.8	<0.8	--	--	--	--	--	
07/30/07	738.93	1.84	737.09	610	--	4,400	--	<180	6	4	<0.8	<0.8	--	--	--	--	--	
10/24/07	738.93	1.35	737.58	690	--	5,600	--	1,000	1	3	<0.8	<0.8	<0.5	--	--	--	--	
01/23/08	738.93	1.54	737.39	730	--	4,700	--	<170	2	2	<0.8	0.8	--	--	--	--	--	
04/23/08	738.93	1.56	737.37	530	--	2,100	--	<190	0.8	2	<0.8	<0.8	--	--	--	--	--	
07/24/08	738.93	1.8	737.13	780	--	3,000	--	160	<0.5	2	<0.5	0.5	<0.5	--	--	--	--	
10/20/08	738.93	1.70	737.23	800	--	3,100	--	290	2	1	<0.8	<0.8	--	--	--	--	--	
01/14/09	738.93	1.53	737.40	449	--	240	--	<63	2.6	1.2	<1.0	<3.0	--	--	--	--	--	
04/27/09	738.93	1.60	737.33	973	--	400	--	<420	2.8	2.1	<1.0	<3.0	<1.0	<1.0	<0.010	--	2.9	
07/28/09	738.93	2.27	736.66	917	--	122	--	<388	<1.0	<1.0	1.2	3.1	--	--	--	--	--	

**TABLE 1**  
**Groundwater Monitoring Data and Analytical Results**  
**Former Unocal Site No. 351393**  
**666 Griffin Avenue**  
**Enumclaw, Washington**  
**Concentrations reported in (µg/L)**

Well ID/Date	TOC	Depth to Water (ft)	GW Elevation (ft)	TPH-G (µg/L)	TPH-D (10-gram Column Cleanup <sup>1</sup> ) (µg/L)	TPH-D <sup>2</sup> (µg/L)	TPH-O (10-gram Column Cleanup <sup>1</sup> ) (µg/L)	TPH-O <sup>2</sup> (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	EDC (µg/L)	EDB (µg/L)	Ethanol (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
<b>MW-2 (cont)</b>																		
10/20/09	738.93	1.76	737.17	1,040	--	985	--	<385	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	
01/18/10	738.93	1.65	737.28	972	--	572 <sup>1,2</sup>	--	<385	3.7	2.7	1.4	4.4	--	--	--	--	--	
04/20/10	738.93	1.60	737.33	764	--	648	--	<388	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	
07/19/10	738.93	1.75	737.18	755	--	511	--	<392	<1.0	<1.0	<1.0	<3.0	e	--	--	--	--	
10/18/10	738.93	1.90	737.03	988	--	744	--	<388	2.8	1.0	<1.0	<3.0	--	--	--	--	--	
01/25/11	738.93	1.42	737.51	987	--	631	--	<392	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	
04/11/11	738.93	1.53	737.40	1,430	--	990	--	<392	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	
07/05/11	738.93	1.70	737.23	989	--	691	--	<392	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	
11/30/11	738.93	1.70	737.23	890	280	5,900	<70	<330	0.8	0.5	<0.5	<0.5	--	--	--	<50	--	
03/02/12	738.93	1.47	737.46	620	490	3,900	<67	280	<0.5	<0.5	<0.5	<0.5	--	--	--	<50	--	
05/09/12	738.93	1.55	737.38	520	430	2,900	<69	270	<0.5	<0.5	<0.5	<0.5	--	--	--	<30	--	
11/29/12	738.93	1.95	736.98	.540	300	6,000	<70	330	<0.5	<0.5	<0.5	<0.5	--	--	--	<50	--	
<b>MW-3</b>																		
02/16/09	740.07	2.10	737.97	484	--	<400	--	<800	16.8	1.21	2.41	<1.0	13.3	--	--	--	--	
08/30/09	740.07	3.83	736.24	2,530	--	<250	--	<500	96.4	<4.63	<3.7	2.87	43.6	--	--	--	--	
11/16/09	740.07	2.60	737.47	1,250	--	<250	--	<500	68.4	<2.50	<5.40	<8.20	39.8	--	--	--	--	
02/22/01	740.07	2.35	737.72	1,060	--	271	--	<500	44.9	<3.08	<8.12	2.31	56.4	--	--	--	--	
05/31/01	740.07	2.62	737.45	2,340	--	<250	--	<500	40.2	1.69	4.26	1.36	44.6	--	--	--	--	
08/22/01	740.07	3.79	736.28	1,600	--	1,590	--	<500	12.3	5.43	4.80	<1	49	--	--	--	--	
11/08/01	740.07	2.15	737.92	1,290	--	<250	--	<500	41.5	2.18	4.90	4.70	28.1	--	--	--	--	
02/05/02	740.07	2.05	738.02	1,170	--	<250	--	<500	37.2	3.17	5.84	<1	30.5	--	--	--	--	
05/23/02	740.07	2.36	737.71	3,170	--	<250	--	<500	36.2	<10	<10	<30	30.8	--	--	--	--	
08/13/02	740.07	3.69	736.38	1,100	--	<250	--	<500	44	7.7	8.0	<1.5	31	--	--	--	--	
11/06/02	740.07	3.95	736.12	1,200	--	<250	--	<500	75	11.0	9.3	4.8	30	--	--	--	--	
02/15/03	740.07	1.68	738.39	2,170	--	<250	--	<500	218	75.6	7.08	39.3	39.9	--	--	--	--	
05/21/03	740.07	2.02	738.05	1,670	--	960	--	<500	336	52.9	3.64	12.2	43.7	--	--	--	--	
08/20/03	740.07	4.86	735.21	1,740	--	<250	--	<500	147	10.3	<1	4.72	35.3	--	--	--	--	
11/24/03	740.07	2.05	738.02	1,710	--	4,050	--	2,191	941	71.5	27.20	42.34	9.19	--	--	--	--	
02/19/04	740.07	1.77	738.30	1,410	--	606	--	<245	1,080	51.9	12.00	18.62	37	--	--	--	--	
05/19/04	740.07	2.46	737.61	2,490	--	1,010	--	<238	445	33.2	10.30	10.30	47.6	--	--	--	--	
08/12/04	740.07	3.47	736.60	3,690	--	770	--	<495	697	30.0	<10	<20	34.3	--	--	--	--	
11/11/04	740.07	2.36	737.71	2,150	--	724	--	<496	306	11.6	<10	<20	<10	--	--	--	--	
02/21/05	740.07	2.79	737.28	2,270	--	782	--	<496	225	<10	<10	<20	12.9	--	--	--	--	
05/16/05	740.07	1.48	738.59	2,350	--	1,120	--	<495	198	10.60	13.40	<2	18.9	--	--	--	--	
07/18/05	740.07	2.38	737.69	1,630	--	496	--	<501	189	4.63	2.53	6.15	15.6	--	--	--	--	
09/06/05	740.07	3.08	736.99	590	--	690	--	380	89	1.0	0.8	3.0	--	--	--	--	--	
10/19/05	740.07	2.41	737.66	1,200	--	1,500	--	370	140	5.0	2.0	5.0	7.0	--	--	--	--	
11/15/05	740.07	1.90	738.17	940	--	1,400	--	530	170	3.6	1.3	<5	--	--	--	--	--	
12/12/05	740.07	--	--	740	--	950	--	310	250	4.0	2.0	5.0	--	--	--	--	--	
01/10/06	740.07	--	--	720	--	1,200	--	320	260	3.0	1.0	3.0	--	--	--	--	--	
01/23/06	740.07	2.04	738.03	1,200	--	760	--	310	99	3.0	3.0	2.0	12	--	--	--	--	
04/12/06	740.07	2.26	737.81	1,000	--	680	--	150	33	1.0	<0.8	1.0	21	--	--	--	--	

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**Groundwater Monitoring Data and Analytical Results**  
**Former Unocal Site No. 351393**  
**666 Griffin Avenue**  
**Enumclaw, Washington**  
**Concentrations reported in (µg/L)**

Well ID/Date	TOC	Depth to Water (ft)	GW Elevation (ft)	TPH-G (µg/L)	TPH-D (10-gram Column Cleanup <sup>1</sup> ) (µg/L)	TPH-D <sup>2</sup> (µg/L)	TPH-O (10-gram Column Cleanup <sup>1</sup> ) (µg/L)	TPH-O <sup>2</sup> (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	EDC (µg/L)	EDB (µg/L)	Ethanol (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
<b>MW-3 (cont.)</b>																		
07/24/06	740.07	3.41	736.66	870	--	1,100	--	260	35	1.0	<0.8	1.0	15	--	--	--	--	
10/24/06	740.07	2.77	737.30	920	--	1,700	--	450	15	0.8	<0.8	<0.8	13	--	--	--	--	
01/30/07	740.07	2.27	737.80	880	--	1,400	--	270	12	<0.7	2.0	<0.8	--	--	--	--	--	
02/26/07	740.07	1.59	738.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
03/12/07	740.07	1.41	738.66	1,100	--	2,300	--	770	26	<0.7	4	<0.8	--	--	--	--	--	
03/26/07	740.07	1.41	738.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/09/07	740.07	1.65	738.42	1,335	--	1,481	--	354	36.8	<0.7	8.75	<0.8	--	--	--	--	--	
04/23/07	740.07	2.02	738.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/26/07	740.07	2.01	738.06	1,003	--	1,515	--	442	13.3	<0.7	1.75	<0.8	--	--	--	--	--	
05/07/07	740.07	2.04	738.03	820	--	1,100	--	680	25	<0.7	4	<0.8	--	--	--	--	--	
05/21/07	740.07	2.02	738.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
06/04/07	740.07	2.17	737.90	760	--	2,000	--	930	18	<0.7	1	<0.8	0.6	--	--	--	--	
06/18/07	740.07	2.15	737.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/02/07	740.07	2.17	737.90	300	--	1,200	--	350	4	<0.7	<0.8	<0.8	--	--	--	--	--	
07/16/07	740.07	2.64	737.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/26/07	740.07	2.08	737.99	580	--	1,300	--	320	3	<0.7	<0.8	<0.8	7	--	--	--	--	
07/31/07	740.07	2.30	737.77	120	--	1,600	--	650	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	
10/24/07	740.07	2.11	737.96	700	--	1,800	--	680	4	<0.7	<0.8	<0.8	1	--	--	--	--	
01/23/08	740.07	2.17	737.90	470	--	1,200	--	230	2	<0.7	<0.8	<0.8	2	--	--	--	--	
04/23/08	740.07	2.22	737.85	450	--	540	--	<25	2	<0.7	<0.8	<0.8	0.9	--	--	--	--	
07/24/08	740.07	2.81	737.26	680	--	590	--	<98	0.6	<0.5	<0.5	0.6	0.6	--	--	--	--	
10/20/08	740.07	2.32	737.75	720	--	860	--	220	270	2	<0.8	<0.8	--	--	--	--	--	
01/14/09	740.07	1.84	738.23	643	--	180	--	<63	420	9.4	<1.0	<3.0	--	--	--	--	--	
04/27/09	740.07	2.34	737.73	972	--	<34	--	<120	607	31.5	<1.0	3.3	<1.0	<1.0	<0.10	--	<1.0	
07/28/09	740.07	3.25	736.82	1,120	--	117	--	<400	254	8.1	2.2	4.2	--	--	--	--	--	
10/20/09	740.07	2.66	737.41	1,230	--	244	--	<388	596	13.0	6.3	39.3	--	--	--	--	--	
01/18/10	740.07	2.02	738.05	1,200	--	136 <sup>b</sup> , <sup>c</sup>	--	<388	487 <sup>b</sup>	1.7 ln	19.3 ln	90.0 ln	--	--	--	--	--	
04/20/10	740.07	2.25	737.82	1,120	--	95.4	--	<388	855.0	1.3	20.0	58.9	--	--	--	--	--	
07/19/10	740.07	2.78	737.29	1,080	--	94	--	<396	223	<1.0	12.4	15.8	--	--	--	--	--	
10/18/10	740.07	2.24	737.83	874	--	145	--	<392	403	5.5	3.2	5.3	--	--	--	--	--	
01/25/11	740.07	1.77	738.30	881	--	131	--	<392	246	3.6	7.0	<3.0	--	--	--	--	--	
04/11/11	740.07	2.11	737.96	1,340	--	233	--	<392	545	6.9	6.8	5.9	--	--	--	--	--	
07/05/11	740.07	2.50	737.57	1,130	--	193	--	<388	381	8.4	2.6	5.8	--	--	--	--	--	
11/30/11	740.07	1.14	738.93	660	77	1,200	<70	150	420	12	1	2	--	--	<50	--	--	
03/02/12	740.07	2.02	738.05	840	49	1,100	<67	240	550	6	2	4	--	--	<50	--	--	
05/09/12	740.07	2.21	737.86	740	73	1,200	<70	290	380	7	3	3	--	--	<50	--	--	
11/29/12	740.07	2.41	737.66	790	60	1,500	<71	240	180	<5	<5	<5	--	--	<500	--	--	
<b>MW-4</b>																		
02/19/09	740.07	2.10	737.97	484	--	<400	--	<800	16.8	1.21	2.41	<1.0	13.3	--	--	--	--	
08/30/09	740.07	3.83	736.24	1,460	--	1,880	--	<500	<1.43	<0.910	<0.950	<1	<5	--	--	--	--	
11/16/09	740.07	2.60	737.47	1,140	--	1,920	--	<500	<7.20	<0.690	<2.82	<1.35	<5	--	--	--	--	
02/22/01	740.07	2.35	737.72	1,380	--	3,410	--	<500	<2.02	<1.36	<1.92	<2	6.01	--	--	--	--	

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**666 Griffin Avenue**  
**Enumclaw, Washington**  
**Concentrations reported in ( $\mu\text{g/L}$ )**

Well ID/Date	TOC	Depth to Water (ft)	GW Elevation (ft)	TPH-G ( $\mu\text{g/L}$ )	TPH-D (10-gram Column Cleanup) <sup>1</sup> ( $\mu\text{g/L}$ )	TPH-D <sup>2</sup> ( $\mu\text{g/L}$ )	TPH-O (10-gram Column Cleanup) <sup>1</sup> ( $\mu\text{g/L}$ )	TPH-O <sup>2</sup> ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethyl-benzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	EDC ( $\mu\text{g/L}$ )	EDB ( $\mu\text{g/L}$ )	Ethanol ( $\mu\text{g/L}$ )	Total Lead ( $\mu\text{g/L}$ )	Dissolved Lead ( $\mu\text{g/L}$ )
<b>MW-4 (cont)</b>																		
05/31/01	740.07	2.62	737.15	1,880	--	9,950	--	<500	1.37	<0.5	1.76	<1	<2	--	--	--	--	
08/22/01	740.07	3.79	736.28	1,710	--	3,790	--	649	6.66	<0.5	<0.500	<1	Detected	--	--	--	--	
11/08/01	740.07	2.15	737.92	1,060	--	5,230	--	<500	2.01	1.35	0.99	<2	Detected	--	--	--	--	
02/05/02	740.07	2.05	738.02	1,300	--	1,990	--	<500	2.63	<0.5	1.24	<1	22.9	--	--	--	--	
05/23/02	740.07	2.36	737.71	2,540	--	438	--	<500	1.77	<1	1.07	<3	<2	--	--	--	--	
08/13/02	740.07	3.69	736.38	1,000	--	450	--	<500	12.00	4.1	1.30	<1.5	<5	--	--	--	--	
11/06/02	740.07	3.95	736.12	830	--	740	--	<500	8.00	3.6	1.70	<1.5	<5	--	--	--	--	
02/05/03	740.07	1.68	738.39	1,300	--	2,160	--	<500	0.59	0.89	1.01	<1	<2	--	--	--	--	
05/21/03	740.07	2.02	738.05	569	--	1,350	--	<500	0.94	<0.5	<0.5	<1	<2	--	--	--	--	
08/20/03	740.07	4.86	735.21	919	--	649	--	<500	0.55	<0.5	<0.5	<1	<2	--	--	--	--	
11/24/03	740.07	2.05	738.02	1,680	--	4,310	--	1,310	7.31	1.19	1.5	2.83	<0.5	--	--	--	--	
02/19/04	740.07	1.77	738.30	3,100	--	10,400	--	345	9.95	<5.0	<5.0	<10	<5	--	--	--	--	
05/19/04	740.07	2.46	737.61	2,160	--	5,510	--	249	6.61	4.46	4.19	<2	16	--	--	--	--	
08/12/04	740.07	3.47	736.60	1,680	--	7,160	--	<501	2.35	<1.0	<1.0	<2.0	<1.0	--	--	--	--	
11/11/04	740.07	2.36	737.71	1,400	--	8,920	--	<498	1.82	<1.0	1.11	<2.0	3.08	--	--	--	--	
02/21/05	740.07	2.79	737.28	1,580	--	3,620	--	<495	<10	<10	<10	<20	<10	--	--	--	--	
05/16/05	740.07	1.48	738.59	1,360	--	6,220	--	<496	3.80	2.91	1.51	<2	23.90	--	--	--	--	
07/18/05	740.07	2.38	737.69	1,110	--	1,040	--	<477	2.34	<1.0	<1.0	<2.0	<1.0	--	--	--	--	
09/06/05	740.07	3.08	736.99	1,800	--	3,400	--	350	6.0	<0.7	5.0	1.0	--	--	--	--	--	
10/19/05	740.07	2.41	737.66	890	--	6,200	--	<80	2.0	<0.5	0.70	<0.5	<0.5	--	--	--	--	
11/15/05	740.07	1.90	738.17	1,300	--	2,800	--	560	2.5	2.6	2.0	<3	--	--	--	--	--	
12/12/05	740.07	--	--	1,200	--	3,400	--	400	4.0	1.0	4.0	2.0	--	--	--	--	--	
01/10/06	740.07	--	--	1,300	--	2,500	--	770	3.0	<0.7	2.0	<0.8	--	--	--	--	--	
01/23/06	740.07	2.04	738.03	920	--	5,700	--	<980	1.0	<0.7	<0.8	<0.8	<0.5	--	--	--	--	
04/12/06	740.07	2.26	737.81	1,200	--	2,400	--	220	1.0	<0.7	<0.8	<0.8	<0.5	--	--	--	--	
07/24/06	740.07	3.41	736.66	840	--	2,800	--	<500	0.9	<0.7	<0.8	<0.8	<0.5	--	--	--	--	
10/24/06	740.07	2.77	737.30	930	--	3,100	--	680	0.8	<0.7	<0.8	<0.8	<0.5	--	--	--	--	
01/30/07	740.07	2.27	737.80	680	--	2,900	--	<500	0.7	<0.7	<0.8	<0.8	--	--	--	--	--	
02/26/07	740.07	1.59	738.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
03/12/07	740.07	1.41	738.66	1,300	--	2,200	--	<500	1	<0.7	<0.8	<0.8	--	--	--	--	--	
03/26/07	740.07	1.41	738.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/09/07	740.07	1.65	738.42	1,090	--	1,964	--	<500	1.15	<0.7	0.870	<0.8	--	--	--	--	--	
04/23/07	740.07	2.02	738.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/26/07	740.07	2.01	738.06	598	--	7,450	--	<1,000	0.66	1.40	<0.8	3.37	--	--	--	--	--	
05/07/07	740.07	2.04	738.03	1,200	--	2,500	--	<480	1	<0.7	2	<0.8	--	--	--	--	--	
05/21/07	740.07	2.02	738.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
06/04/07	740.07	2.17	737.90	1,400	--	18,000	--	<980	2	0.7	1	3	--	--	--	--	--	
06/18/07	740.07	2.15	737.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/02/07	740.07	2.17	737.90	1,100	--	15,000	--	<500	1	<0.7	1	<0.8	--	--	--	--	--	
07/16/07	740.07	2.61	737.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/26/07	740.07	2.08	737.99	690	--	5,500	--	<180	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	
07/30/07	740.07	2.30	737.77	1,200	--	8,400	--	<480	4	1	2	2	--	--	--	--	--	

**TABLE 1**  
**Groundwater Monitoring Data and Analytical Results**  
**Former Unocal Site No. 351393**  
**666 Griffin Avenue**  
**Enumclaw, Washington**  
**Concentrations reported in (µg/L)**

Well ID/Date	TOC	Depth to Water (ft)	GW Elevation (ft)	TPH-G (µg/L)	TPH-D (10-gram Column Cleanup <sup>1</sup> ) (µg/L)	TPH-D <sup>2</sup> (µg/L)	TPH-O (10-gram Column Cleanup <sup>1</sup> ) (µg/L)	TPH-O <sup>2</sup> (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	EDC (µg/L)	EDB (µg/L)	Ethanol (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
<b>MW-4 (cont.)</b>																		
10/24/07	740.07	2.1	737.97	1,100	--	3,100	--	<950	1	<0.7	<0.8	<0.8	<0.5	--	--	--	--	
01/23/08	740.07	2.19	737.88	950	--	2,300	--	270	0.9	<0.7	<0.8	<0.8	--	--	--	--	--	
04/25/08	740.07	2.31	737.76	750	--	3,000	--	<190	1	<0.7	<0.8	<0.8	--	--	--	--	--	
07/24/08	740.07	3.23	736.84	1,100	--	1,500	--	110	1	0.60	1.00	0.90	<1.5	--	--	--	--	
10/20/08	740.07	2.30	737.77	1,500	--	2,100	--	360	4	<0.7	1	1	--	--	--	--	--	
01/14/09	740.07	2.05	738.02	1,280	--	510	--	<63	2.0	<1.0	1.9	<3.0	--	--	--	--	--	
01/14/09	740.07	--	--	--	--	1,900	--	930	--	--	--	--	--	--	--	--	--	
01/14/09	740.07	--	--	--	--	690	--	190	1	--	--	--	--	--	--	--	--	
04/27/09	740.07	2.42	737.65	1,590	--	350	--	<430	3.0	1.4	2.7	<3.0	<1.0	<1.0	<0.010	--	<1.0	
07/28/09	740.07	3.9	736.17	1,310	--	<77.7	--	<388	2.8	<1.0	2.1	3.3	--	--	--	--	--	
10/20/09	740.07	2.41	737.66	1,510	--	745	--	<388	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	
01/18/10	740.07	2.14	737.93	1,310	--	626 <sup>b*,F2</sup>	--	<385	2.7	2.1	1.7	<3.0	--	--	--	--	--	
04/20/10	740.07	2.16	737.91	1,200	--	542	--	<385	1.2	<1.0	<1.0	<3.0	--	--	--	--	--	
07/19/10	740.07	2.97	737.10	874	--	410	--	<388	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	
10/18/10	740.07	2.27	737.80	1,450	--	547	--	<392	1.2	<1.0	<1.0	<3.0	--	--	--	--	--	
01/25/11	740.07	1.51	738.56	1,460	--	401	--	<392	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	
04/11/11	740.07	1.69	738.38	2,390	--	452	--	<392	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	
07/05/11	740.07	2.64	737.43	1,730	--	579	--	<392	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	
11/30/11	740.07	2.16	737.91	1,400	380	1,700	<71	130	0.9	0.7	<0.5	1	--	--	<50	--	--	
03/02/12	740.07	2.31	737.76	1,000	370	1,500	<67	200	0.7	<0.5	<0.5	<0.5	--	--	<50	--	--	
05/09/12	740.07	2.11	737.96	770	650	1,700	<70	250	<0.5	<0.5	<0.5	<0.5	--	--	<50	--	--	
11/29/12	740.07	2.20	737.87	1,100	270	1,900	<70	290	0.5	<0.5	<0.5	<0.5	--	--	<50	--	--	
<b>MW-5</b>																		
02/16/99	740.29	1.65	738.64	<80	--	<400	--	<300	<0.5	<0.5	<0.5	<1.0	<2.0	--	--	--	--	
08/31/00	740.29	2.84	737.45	<50	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<5	--	--	--	--	
11/16/00	740.29	2.25	738.04	55	--	<250	--	<500	<0.5	<0.5	0.64	2.30	<5	--	--	--	--	
02/22/01	740.29	1.92	738.37	<50	--	<250	--	<500	<0.5	<0.5	<0.5	1.02	<1	--	--	--	--	
05/31/01	740.29	2.22	738.07	101	--	<250	--	<500	<0.5	<0.5	<0.5	<1	--	--	--	--	--	
08/22/01	740.29	2.53	737.76	<80	--	827	--	622	<0.5	<0.5	<0.5	<1	--	--	--	--	--	
11/04/01	740.29	1.73	738.56	103	--	<250	--	<500	<0.5	<0.5	<0.5	<2	--	--	--	--	--	
02/05/02	740.29	1.51	738.78	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<2	--	--	--	--	
05/23/02	740.29	1.60	738.69	<100	--	<323	--	<645	<1	<1	<1	<3	<2	--	--	--	--	
08/13/02	740.29	3.15	737.14	<100	--	<250	--	<500	<0.5	<0.5	<0.5	<1.5	<5	--	--	--	--	
11/06/02	740.29	3.63	736.66	<100	--	<250	--	<500	<0.5	<0.5	<0.5	<1.5	<5	--	--	--	--	
02/05/03	740.29	1.30	738.99	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<2	--	--	--	--	
05/21/03	740.29	1.36	738.93	<80	--	1,390	--	739	<0.5	<0.5	<0.5	<1	<2	--	--	--	--	
08/20/03	740.29	4.18	736.11	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<2	--	--	--	--	
11/24/03	740.29	1.62	738.67	308	--	1,830	--	2,360	0.49	<0.5	<0.5	0.87	<0.5	--	--	--	--	
02/19/04	740.29	1.49	738.80	105	--	<124	--	<248	<1	<1	<1	1.08	<1	--	--	--	--	
05/19/04	740.29	2.00	738.29	120	--	215	--	<238	<1	<1	<1	<2	<1	--	--	--	--	
08/12/04	740.29	3.06	737.23	<100	--	<251	--	<502	<1	<1	<1	<2	<1	--	--	--	--	
11/11/04	740.29	1.74	738.55	<100	--	322	--	<499	<1	<1	<1	<2	<1	--	--	--	--	

**TABLE I**  
**Groundwater Monitoring Data and Analytical Results**  
**Former Unocal Site No. 351393**  
**666 Griffin Avenue**  
**Enumclaw, Washington**  
**Concentrations reported in ( $\mu\text{g/L}$ )**

Well ID/Date	TOC	Depth to Water (ft)	GW Elevation (ft)	TPH-G ( $\mu\text{g/L}$ )	TPH-D (10-gram Column Cleanup) ( $\mu\text{g/L}$ )	TPH-D <sup>2</sup> ( $\mu\text{g/L}$ )	TPH-O (10-gram Column Cleanup) ( $\mu\text{g/L}$ )	TPH-O <sup>2</sup> ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethyl-benzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	EDC ( $\mu\text{g/L}$ )	EDB ( $\mu\text{g/L}$ )	Ethanol ( $\mu\text{g/L}$ )	Total Lead ( $\mu\text{g/L}$ )	Dissolved Lead ( $\mu\text{g/L}$ )
<b>MW-5 (cont.)</b>																		
02/21/05	740.29	2.36	737.93	<100	--	<247	--	<494	<1	<1	<1	<2	<1	--	--	--	--	
05/16/05	740.29	1.23	739.06	1,250	--	725	--	<508	3.42	2.86	<1	<2	18.8	--	--	--	--	
07/18/05	740.29	1.94	738.35	179	--	771	--	<476	<1	<1	<1	<2	<1	--	--	--	--	
11/19/05	740.29	1.58	738.71	<48	--	1,310	--	550	<0.5	<0.5	0.50	1.0	<0.5	--	--	--	--	
01/23/06	740.29	1.21	739.08	<48	--	3,310	--	1,400	<0.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--	
04/12/06	740.29	1.39	738.90	<48	--	3,000	--	1,100	<0.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--	
07/24/06	740.28	2.98	737.30	<48	--	3,300	--	2,000	<0.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--	
10/24/06	740.28	2.43	737.85	130	--	1,500	--	1,100	<0.5	<0.7	<0.8	1.0	<0.5	--	--	--	--	
01/30/07	740.28	1.86	738.42	<48	--	3,300	--	860	<0.5	<0.7	<0.8	<0.8	>	--	--	--	--	
02/26/07	740.28	1.23	739.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
03/12/07	740.28	0.99	739.29	100	--	2,500	--	1,500	<0.5	<0.7	<0.8	1	>	--	--	--	--	
03/26/07	740.28	1.09	739.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/09/07	740.28	1.24	739.04	<50	--	2,778	--	1,158	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	
04/23/07	740.28	1.56	738.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/26/07	740.28	1.57	738.71	52.8	--	2,741	--	766	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	
05/07/07	740.28	1.56	738.72	74	--	1,900	--	1,600	<0.5	<0.7	<0.8	1	>	--	--	--	--	
05/21/07	740.28	1.41	738.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
06/04/07	740.28	1.85	738.43	120	--	3,600	--	2,500	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	
06/18/07	740.28	1.78	738.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/02/07	740.28	1.49	738.79	130	--	1,900	--	970	<0.5	<0.7	1	3	--	--	--	--	--	
07/16/07	740.28	2.26	738.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/26/07	740.28	1.62	738.66	77	--	2,900	--	2,000	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	
07/30/07	740.28	1.91	738.37	100	--	2,500	--	1,900	<0.5	<0.7	0.8	0.8	--	--	--	--	--	
10/24/07	740.28	1.58	738.70	78	--	3,100	--	2,100	<0.5	<0.7	1	3	<5	--	--	--	--	
01/23/08	740.28	1.81	738.47	67	--	3,500	--	970	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	
04/23/08	740.28	1.91	738.37	81	--	2,900	--	2,200	<0.5	<0.7	<0.8	2	--	--	--	--	--	
07/24/08	740.28	2.91	737.37	<50	--	1,800	--	1,100	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
10/20/08	740.28	2.16	738.12	280	--	1,900	--	650	60	31	2	7	--	--	--	--	--	
01/14/09	740.28	1.50	738.78	202	--	54 <sup>1</sup>	--	<63	64	15	9.9	30	--	--	--	--	--	
01/14/09 Re-extraction - No Cleanup		--	--	--	--	2,800	--	1,900	--	--	--	--	--	--	--	--	--	
01/14/09 Re-extraction - Silica Gel Cleanup		--	--	--	--	130	--	<61	--	--	--	--	--	--	--	--	--	
04/27/09	740.28	1.99	738.29	381	--	98	--	<420	46.7	29.4	9.2	39.7	<1.0	<0.010	--	<1.0	<1.0	
<b>Inaccessible</b>																		
10/20/09	740.28	2.03	738.25	1,610	--	462	--	<396	47.9	67.8	47.5	345	--	--	--	--	--	
01/18/10	740.28	1.60	738.68	288	--	101 <sup>1a, P3</sup>	--	<385	24.4 3n	21.3	14.6 3n	38.2	--	--	--	--	--	
04/20/10	740.28	1.70	738.58	1,430	--	83.9	--	<388	209	372	75.9	368	--	--	--	--	--	
07/19/10	740.28	2.58	737.7	579	--	115	--	<392	83.5	21.6	40	115.0	--	--	--	--	--	
10/18/10	740.28	1.90	738.38	3,840	--	412	--	<396	371	179	160	753	--	--	--	--	--	
01/25/11	740.28	1.41	738.87	533	--	155	--	<392	24.1	4.7	24.6	74.0	--	--	--	--	--	
04/11/11	740.28	1.24	739.04	269	--	258	--	<392	5.4	<1.0	9.2	30.4	--	--	--	--	--	
07/05/11	740.28	1.98	738.3	582	--	170	--	<100	61.5	1.2	30.9	53.3	--	--	--	--	--	
11/30/11	740.28	1.48	738.8	660	76	3,400	<69	1,200	39	2	44	82	--	--	--	<50	--	

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**666 Griffin Avenue**  
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**Concentrations reported in (µg/L)**

Well ID/Date	TOC	Depth to Water (ft)	GW Elevation (ft)	TPH-G (µg/L)	TPH-D (10-gram Column Cleanup <sup>1</sup> ) (µg/L)	TPH-D <sup>2</sup> (µg/L)	TPH-O (10-gram Column Cleanup <sup>1</sup> ) (µg/L)	TPH-O <sup>2</sup> (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	EDC (µg/L)	EDB (µg/L)	Ethanol (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
<b>MW-5 (cont)</b>																		
03/02/12	740.28	1.71	738.57	5100	48	3,300	<67	700	23	2	31	90	--	--	--	<50	--	--
05/09/12	740.28	1.71	738.57	510	43	2,900	<69	530	14	1	28	77	--	--	--	<50	--	--
11/29/12	740.28	1.75	738.53	370	63	3,200	<71	490	4	1	17	31	--	--	--	<50	--	--
<b>MW-6</b>																		
04/27/00	739.35	--	--	3,000	--	<250	--	<500	64.5	162	62.3	533	21.1	--	--	--	--	--
08/31/00	739.35	2.85	736.50	642	--	<250	--	<500	44.7	147	8.99	3.84	19.1	--	--	--	--	--
11/16/00	739.35	2.68	736.67	488	--	<250	--	<500	33.3	<0.17	7.14	<2.95	13.4	--	--	--	--	--
02/22/01	739.35	2.50	736.85	473	--	<250	--	<500	47.7	<1.64	3.21	<1	9.55	--	--	--	--	--
05/31/01	739.35	2.68	736.67	613	--	<250	--	<500	42.3	<0.5	<0.5	<1	2.36	--	--	--	--	--
08/22/01	739.35	3.89	735.46	214	--	412	--	<500	<0.5	<0.5	<1	4.29	--	--	--	--	--	--
11/08/01	739.35	2.59	736.76	423	--	<250	--	<500	3.84	<0.5	<0.5	<2	<2	--	--	--	--	--
02/05/02	739.35	2.18	737.17	359	--	<250	--	<500	14.4	4.14	<0.5	<1	<2	--	--	--	--	--
05/23/02	739.35	2.24	737.11	1,530	--	292	--	<500	240	1.15	<1.00	<3	<2	--	--	--	--	--
08/13/02	739.35	2.94	736.41	550	--	<250	--	<500	29	1.30	3.40	<2	<5	--	--	--	--	--
11/06/02	739.35	3.82	735.53	440	--	<250	--	<500	12	0.78	2.90	1.80	<5	--	--	--	--	--
02/05/03	739.35	2.20	737.15	77,300	--	<250	--	<500	6,170	19,300	1,430	7,090	<400	--	--	--	--	--
03/28/03	739.35	2.02	737.33	37,100	--	--	--	--	2,380	7,910	1,280	6,420	--	--	--	--	--	--
05/21/03	739.35	2.16	737.19	14,000	--	<250	--	<500	1,290	1,830	568	2,310	<40	--	--	--	--	--
08/21/03	739.35	4.26	735.09	3,250	--	<250	--	<500	776	11.20	206	102	<40	--	--	--	--	--
11/24/03	739.35	2.24	737.11	1,830	--	2,200	--	1,050	249	2.83	23.8	107.56	1.85	--	--	--	--	--
02/19/04	739.35	2.08	737.27	1,870	--	645	--	253	180	<5	14.1	60.0	<5	--	--	--	--	--
05/19/04	739.35	2.41	736.94	1,550	--	865	--	520	89.3	1.94	3.93	16.7	3.16	--	--	--	--	--
08/12/04	739.35	--	--	--	--	--	Well not accessible	--	--	--	--	--	--	--	--	--	--	--
11/11/04	739.35	1.46	737.89	111	--	<246	--	<491	<1	<1	<1	<2	1.63	--	--	--	--	--
02/21/05	739.35	1.95	737.40	1,030	--	371	--	<493	6.98	<1	<1	<2	<1	--	--	--	--	--
05/16/05	739.35	2.17	737.18	384	--	324	--	<494	1.73	<1	1.14	1.59	<1	--	--	--	--	--
07/18/05	739.35	2.06	737.29	348	--	<249	--	<498	12.30	<1	<1	<2	<1	--	--	--	--	--
10/20/05	739.35	2.22	737.13	320	--	500	--	150	5.0	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
01/23/06	739.35	1.92	737.43	170	--	210	--	260	110	1.0	<0.8	<0.8	1.0	--	--	--	--	--
14/12/06	739.35	2.38	736.97	450	--	<400	--	<500	180	4.0	10	3.0	3.0	--	--	--	--	--
07/24/06	739.49	2.74	736.75	470	--	400	--	<99	42	1.0	<0.8	0.8	1.0	--	--	--	--	--
10/24/06	739.49	2.98	736.51	300	--	320	--	<95	1.0	<0.7	<0.8	<0.8	0.8	--	--	--	--	--
01/30/07	739.49	2.23	737.26	180	--	390	--	200	0.9	<0.7	<0.8	<0.8	--	--	--	--	--	--
04/26/07	739.49	2.20	737.29	329	--	132	--	<100	5.71	<0.7	<0.8	<0.8	--	--	--	--	--	--
05/21/07	739.49	2.36	737.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/26/07	739.49	2.16	737.33	360	--	370	--	98	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--
10/24/07	739.49	1.95	737.54	330	--	390	--	230	1	11	<0.8	<0.8	<0.5	--	--	--	--	--
01/23/08	739.49	2.14	737.35	290	--	240	--	<94	0.8	<0.7	<0.8	<0.8	--	--	--	--	--	--
10/23/08	739.49	2.24	737.25	380	--	130	--	<95	0.8	<0.7	<0.8	<0.8	--	--	--	--	--	--
07/24/08	739.49	2.45	737.04	570	--	310	--	<97	<0.5	3	<0.5	<0.5	<0.5	--	--	--	--	--
10/20/08	739.49	2.33	737.16	480	--	130	--	<99	<0.5	1	<0.8	<0.8	<0.8	--	--	--	--	--
01/14/09	739.49	2.05	737.44	327	--	<38	--	<63	11	9.1	<1.0	<3.0	--	--	--	--	--	--

**TABLE I**  
**Groundwater Monitoring Data and Analytical Results**  
**Former Unocal Site No. 351393**  
**666 Griffin Avenue**  
**Enumclaw, Washington**  
**Concentrations reported in (µg/L)**

Well ID/Date	TOC	Depth to Water (ft)	GW Elevation (ft)	TPH-G (µg/L)	TPH-D (10-gram Column Cleanup <sup>1</sup> ) (µg/L)	TPH-D <sup>2</sup> (µg/L)	TPH-O (10-gram Column Cleanup <sup>1</sup> ) (µg/L)	TPH-O <sup>2</sup> (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	EDC (µg/L)	EDB (µg/L)	Ethanol (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
<b>MW-6 (cont)</b>																		
04/27/09	739.49	2.05	737.44	568	--	<15	--	<430	<1.0	1.5	<1.0	<3.0	<1.0	<1.0	<0.010	--	<1.0	<1.0
07/28/09	739.49	2.92	736.57	450	--	<76.9	--	<385	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--
10/20/09	739.49	2.45	737.04	400	--	204	--	<385	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--
01/18/10	739.49	2.24	737.25	335	--	77.5 <sup>b,12</sup>	--	<386	34.2 <sup>1a</sup>	<1.0 <sup>a</sup>	<1.0 <sup>a</sup>	<3.0	--	--	--	--	--	--
04/20/10	739.49	2.06	737.43	148	--	<76.9	--	<385	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--
07/19/10	739.49	2.65	736.84	392	--	<79.2	--	<396	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--
10/18/10	739.49	2.43	737.06	259	--	99.1	--	<388	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--
01/25/11	739.49	2.23	737.26	219	--	<78.4	--	<392	4.0	<1.0	<1.0	<3.0	--	--	--	--	--	--
04/11/11	739.49	2.32	737.17	455	--	95.7	--	<392	1.3	<1.0	<1.0	<3.0	--	--	--	--	--	--
07/05/11	739.49	2.45	737.04	344	--	85.0	--	<392	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--
11/3/11	739.49	2.36	737.13	570	67	740	<69	<71	<0.5	<0.5	<0.5	<0.5	--	--	--	<50	--	--
03/02/12	739.49	2.41	737.08	430	68	480	<67	<67	<0.5	<0.5	<0.5	<0.5	--	--	--	<50	--	--
05/09/12	739.49	2.45	737.04	250	<30	270	<70	<70	<0.5	<0.5	<0.5	<0.5	--	--	--	<50	--	--
11/29/12	739.49	2.53	736.96	500	79	1100	<69	<69	<0.5	<0.5	<0.5	<0.5	--	--	--	<50	--	--
<b>MW-7</b>																		
04/27/00	739.02	--	--	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1.0	<2.0	--	--	--	--	--
08/30/00	739.02	4.07	734.95	<50	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<5	--	--	--	--	--
11/16/00	739.02	2.92	736.10	<50	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<5	--	--	--	--	--
02/22/01	739.02	4.84	734.18	<50	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<1	--	--	--	--	--
05/31/01	739.02	3.11	733.91	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--
08/22/01	739.02	3.38	735.64	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--
11/08/01	739.02	2.40	736.62	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<2	--	--	--	--	--	--
02/05/02	739.02	2.15	736.87	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<2	--	--	--	--	--
05/23/02	739.02	2.74	736.28	<100	--	<250	--	<500	<1	<1	<1	<3	<2	--	--	--	--	--
08/13/02	739.02	4.31	734.71	<100	--	<250	--	<500	<0.5	<0.5	<0.5	<1.5	<5	--	--	--	--	--
11/06/02	739.02	4.38	734.64	<100	--	<250	--	<500	<0.5	<0.5	<0.5	<1.5	<5	--	--	--	--	--
02/05/03	739.02	1.72	737.30	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<2	--	--	--	--	--
05/21/03	739.02	2.31	736.71	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<2	--	--	--	--	--
08/20/03	739.02	5.66	733.36	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<2	--	--	--	--	--
11/24/03	739.02	1.67	737.35	129	--	<120	--	<480	0.89	<0.5	<0.5	<1	<0.5	--	--	--	--	--
02/19/04	739.02	1.64	737.38	<100	--	<123	--	<246	<1	<1	<1	<2	<1	--	--	--	--	--
05/19/04	739.02	2.77	736.25	<100	--	<120	--	<239	<1	<1	<1	<2	<1	--	--	--	--	--
08/12/04	739.02	3.50	735.52	<100	--	<245	--	<490	<1	<1	<1	<2	<1	--	--	--	--	--
11/11/04	739.02	2.58	736.44	<100	--	<247	--	<494	<1	<1	<1	<2	<1	--	--	--	--	--
02/21/05	739.02	3.19	735.83	<100	--	<263	--	<531	<1	<1	<1	<2	<1	--	--	--	--	--
05/16/05	739.02	1.68	737.34	<100	--	<247	--	<493	<1	<1	<1	<2	<1	--	--	--	--	--
07/18/05	739.02	2.77	736.25	<100	--	<261	--	<521	<1	<1	<1	<2	<1	--	--	--	--	--
10/19/05	739.02	2.22	736.80	<48	--	79	--	<98	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
01/23/06	739.02	2.14	736.88	<48	--	<78	--	170	<0.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--	--
01/12/06	739.02	2.30	736.72	<48	--	<78	--	<97	<0.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--	--
07/24/06	739.27	3.95	733.32	<48	--	<78	--	<98	<0.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--	--
10/24/06	739.27	3.14	736.13	<48	--	<79	--	140	<0.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--	--

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**Groundwater Monitoring Data and Analytical Results**  
**Former Unocal Site No. 351393**  
**666 Griffin Avenue**  
**Enumclaw, Washington**  
**Concentrations reported in (µg/L)**

Well ID/Date	TOC	Depth to Water (ft)	GW Elevation (ft)	TPH-G (µg/L)	TPH-D (10-gram Column Cleanup <sup>1</sup> ) (µg/L)	TPH-D <sup>2</sup> (µg/L)	TPH-O (10-gram Column Cleanup <sup>1</sup> ) (µg/L)	TPH-O <sup>2</sup> (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	EDC (µg/L)	EDB (µg/L)	Ethanol (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
<b>MW-7 (cont)</b>																		
01/30/07	739.27	2.59	736.68															
04/26/07	739.27	2.22	737.05															
07/26/07	739.27	2.24	737.03															
10/24/07	739.27	2.01	737.26															
01/23/08	739.27	2.30	736.97															
04/23/08	739.27	2.15	737.12															
07/24/08	739.27	—	—															
10/20/08	739.27	2.20	737.07															
01/14/09	739.27	1.60	737.67															
04/27/09	739.27	2.76	736.51	<50.0	--	<34	--	<420	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<0.010	--	<1.0	<1.0
07/28/09	739.27	4.00	735.27	<50.0	--	<77.7	--	<383	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--
10/20/09	739.27	2.19	737.08	<50.0	--	<77.7	--	<388	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--
01/18/10	739.27	1.68	737.59	<50.0	--	<76.9	--	<385	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--
04/20/10	739.27	2.54	736.73	<50.0	--	<77.7	--	<388	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--
07/19/10	739.27	3.65	735.62	<50.0	--	<78.4	--	<392	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--
10/18/10	739.27	2.50	736.77	<50.0	--	<78.4	--	<392	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--
01/25/11	739.27	1.54	737.73	<50.0	--	<77.7	--	<388	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--
04/11/11	739.27	1.58	737.69	<50.0	--	<78.4	--	<392	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--
07/05/11	739.27	3.32	735.95	<50.0	--	<77.7	--	<388	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--
11/30/11	739.27	1.79	737.48	<50	<28	<30	<66	<70	<0.5	<0.5	<0.5	<0.5	--	--	<50	--	--	--
03/02/12	739.27	1.77	737.5	<50	<29	<29	<67	<67	<0.5	<0.5	<0.5	<0.5	--	--	<50	--	--	--
05/09/12	739.27	2.21	737.06	<50	<30	<30	<70	<70	<0.5	<0.5	<0.5	<0.5	--	--	<50	--	--	--
11/29/12	739.27	1.81	737.46	<50	<30	<69	<70	<70	<0.5	<0.5	<0.5	<0.5	--	--	<50	--	--	--
<b>MW-8</b>																		
04/27/00	738.79	--	--	<80	--	<250	--	<500	<0.5	2.57	1.31	8.96	<2.0	--	--	--	--	--
08/30/00	738.79	7.81	730.98	<50	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<5	--	--	--	--	--
11/16/00	738.79	4.96	733.83	<50	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<5	--	--	--	--	--
02/22/01	738.79	5.97	732.82	<50	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<1	--	--	--	--	--
05/31/01	738.79	6.68	732.11	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--
08/22/01	738.79	8.68	730.11	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--
11/04/01	738.79	6.54	732.25	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<2	--	--	--	--	--	--
02/05/02	738.79	5.59	733.20	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<2	--	--	--	--	--
05/23/02	738.79	5.86	732.93	<100	--	<33	--	<667	<1	<1	<1	<3	<2	--	--	--	--	--
08/13/02	738.79	7.78	731.01	<100	--	<250	--	<500	<0.5	<0.5	<0.5	<1.5	<5	--	--	--	--	--
11/06/02	738.79	8.15	730.64	<100	--	<250	--	<500	<0.5	<0.5	<0.5	<1.5	<5	--	--	--	--	--
02/05/03	738.79	4.72	734.07	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<2	--	--	--	--	--
05/21/03	738.79	5.25	733.54	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<2	--	--	--	--	--
08/20/03	738.79	8.36	730.43	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<2	--	--	--	--	--
11/24/03	738.79	4.49	734.30	53.50	--	<126	--	<252	<0.25	<0.5	<0.5	<1	<0.5	--	--	--	--	--
02/19/04	738.79	5.07	733.72	<100	--	<127	--	<254	<1	<1	<1	<2	<1	--	--	--	--	--
05/19/04	738.79	6.02	732.77	<100	--	<118	--	<237	<1	<1	<1	<2	<1	--	--	--	--	--
08/12/04	738.79	7.54	731.25	<100	--	<248	--	<196	<1	<1	<1	<2	<1	--	--	--	--	--

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**666 Griffin Avenue**  
**Enumclaw, Washington**  
**Concentrations reported in (µg/L)**

Well ID/Date	TOC	Depth to Water (ft)	GW Elevation (ft)	TPH-G (µg/L)	TPH-D (10-gram Column Cleanup <sup>1</sup> ) (µg/L)	TPH-D <sup>2</sup> (µg/L)	TPH-O (10-gram Column Cleanup) (µg/L)	TPH-O <sup>2</sup> (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	EDC (µg/L)	EDB (µg/L)	Ethanol (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)					
<b>MW-8 (cont)</b>																							
11/1/04	738.79	5.99	732.80	<100	--	<250	--	<500	<1	<1	<1	<2	<1	--	--	--	--						
02/21/05	738.79	6.35	732.44	<100	--	<244	--	<488	<1	<1	<1	<2	<1	--	--	--	--						
05/16/05	738.79	3.82	734.97	<100	--	<259	--	<518	<1	<1	<1	<2	<1	--	--	--	--						
07/18/05	738.79	5.58	733.21	<100	--	<257	--	<515	<1	<1	<1	<2	<1	--	--	--	--						
10/19/05	738.79	5.59	733.20	<48	--	110	--	<97	<0.5	<0.5	<0.5	<0.5	<1.5	--	--	--	--						
01/24/06	738.79	3.43	735.36	<48	--	<77	--	<96	<0.5	<0.7	<0.8	<0.8	<1.5	--	--	--	--						
04/12/06	738.79	4.60	734.19	<48	--	<80	--	<100	<0.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--						
07/24/06	738.94	6.57	732.37	<48	--	<79	--	<98	<0.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--						
10/24/06	738.94	3.48	735.46	<48	--	<76	--	<94	<0.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--						
01/30/07	738.94	5.05	733.89						Gauge only														
04/26/07	738.94	4.43	734.51						Gauge only														
07/26/07	738.94	4.77	734.17						Gauge only														
10/24/07	738.94	4.24	734.70						Gauge only														
01/23/08	738.94	+30	734.64						Gauge only														
04/23/08	738.94	3.98	734.96						Gauge only														
07/24/08	738.94	--	--						Well was not gauged														
10/20/08	738.94	--	--						Well Destroyed - Not gauged or sampled														
<b>MW-9</b>																							
04/27/00	738.66	--	--	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<0.0	<2.0	--	--	--	--	--	--	--	--	--	--
08/30/00	738.66	4.22	734.44	<50	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<5	--	--	--	--	--	--	--	--	--	--
11/16/00	738.66	5.29	733.37	<50	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<5	--	--	--	--	--	--	--	--	--	--
02/22/01	738.66	4.49	734.17	<50	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<1	--	--	--	--	--	--	--	--	--	--
05/31/01	738.66	4.65	734.01	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	--	--	--	--
08/22/01	738.66	2.77	735.93	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	--	--	--	--
11/08/01	738.66	4.82	733.84	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<2	--	--	--	--	--	--	--	--	--	--	--
02/05/02	738.66	3.92	734.74	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<2	--	--	--	--	--	--	--	--	--	--
05/23/02	738.66	3.88	734.78	<100	--	272	--	<500	<1	<1	<1	<3	<2	--	--	--	--	--	--	--	--	--	--
08/13/02	738.66	6.65	732.01	<100	--	<250	--	<500	<0.5	<0.5	<0.5	<1.5	<5	--	--	--	--	--	--	--	--	--	--
11/06/02	738.66	6.33	732.33	<100	--	<250	--	<500	<0.5	<0.5	<0.5	<5	<1	--	--	--	--	--	--	--	--	--	--
02/05/03	738.66	3.05	735.61	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<2	--	--	--	--	--	--	--	--	--	--
05/21/03	738.66	2.53	736.13	251	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<2	--	--	--	--	--	--	--	--	--	--
08/20/03	738.66	7.28	731.38	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1	<2	--	--	--	--	--	--	--	--	--	--
11/24/03	738.66	3.38	735.28	<100	--	<120	--	<240	<0.25	<0.5	<0.5	<1	<0.5	--	--	--	--	--	--	--	--	--	--
02/19/04	738.66	2.97	735.69	<100	--	<124	--	<248	<1	<1	<1	<2	<1	--	--	--	--	--	--	--	--	--	--
05/19/04	738.66	4.11	734.55	<100	--	<119	--	<238	<1	<1	<1	<2	<1	--	--	--	--	--	--	--	--	--	--
08/12/04	738.66	6.49	732.17	<100	--	<238	--	<476	<1	<1	<1	<2	<1	--	--	--	--	--	--	--	--	--	--
11/11/04	738.66	4.71	733.95	<100	--	<248	--	<496	<1	<1	<1	<2	<1	--	--	--	--	--	--	--	--	--	--
02/21/05	738.66	5.69	732.97	<100	--	<244	--	<488	<1	<1	<1	<2	<1	--	--	--	--	--	--	--	--	--	--
05/16/05	738.66	2.91	735.75	<100	--	<242	--	<483	<1	<1	<1	<2	<1	--	--	--	--	--	--	--	--	--	--
07/18/05	738.66	4.05	734.61	<100	--	<245	--	<490	<1	<1	<1	<2	<1	--	--	--	--	--	--	--	--	--	--
10/19/05	738.66	3.11	735.55	<48	--	<78	--	<97	<0.5	<0.5	<0.5	<1.5	<1.5	--	--	--	--	--	--	--	--	--	--
01/24/06	738.66	2.71	735.95	<48	--	<77	--	<96	<0.5	<0.7	<0.8	<0.8	<1.5	--	--	--	--	--	--	--	--	--	--

**TABLE I**  
**Groundwater Monitoring Data and Analytical Results**  
**Former Unocal Site No. 361393**  
**666 Griffin Avenue**  
**Enumclaw, Washington**  
**Concentrations reported in (µg/L)**

Well ID/Date	TOC	Depth to Water (ft)	GW Elevation (ft)	TPH-G (µg/L)	TPH-D (10-gram Column Cleanup <sup>1</sup> ) (µg/L)	TPH-D <sup>2</sup> (µg/L)	TPH-O (10-gram Column Cleanup <sup>1</sup> ) (µg/L)	TPH-O <sup>2</sup> (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	EDC (µg/L)	EDB (µg/L)	Ethanol (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
<b>MW-9 (cont.)</b>																		
14/12/06	738.06	3.14	735.52	<48	--	<160	--	<200	<0.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--	
07/24/06	738.81	5.03	733.78	<48	--	<79	--	<99	<0.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--	
10/24/06	738.81	5.02	733.79	<48	--	<87	--	<110	<0.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--	
01/30/07	738.81	3.38	735.43															
04/26/07	738.81	2.62	736.19															
07/26/07	738.81	2.71	736.10															
10/24/07	738.81	2.68	736.13															
01/23/08	738.81	2.68	736.13															
04/23/08	738.81	2.43	736.38															
07/24/08	738.81	5.55	733.26	<50	--	<78	--	<97	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
10/20/08	738.81	--	--															
Well Destroyed - Not gauged or sampled																		
<b>MW-10</b>																		
04/27/00	739.25	--	--	<80	--	<250	--	<500	<0.5	<0.5	<0.5	<1.0	<2.0	--	--	--	--	
08/31/00	739.25	5.99	733.26	<50	--	<250	--	<500	<0.5	<0.5	<1	<5	--	--	--	--	--	
11/16/00	739.25	6.83	732.42	<50	--	<250	--	<500	<0.5	<0.5	<1	<5	--	--	--	--	--	
02/22/01	739.25	7.74	731.51	<50	--	<250	--	<500	<0.5	<0.5	<1	<1	--	--	--	--	--	
05/31/01	739.25	5.02	734.23	<80	--	<250	--	<500	<0.5	<0.5	<1	--	--	--	--	--	--	
08/22/01	739.25	6.08	733.17	<80	--	<250	--	<500	<0.5	<0.5	<1	--	--	--	--	--	--	
11/08/01	739.25	4.18	735.07	<80	--	<250	--	<500	<0.5	<0.5	<2	--	--	--	--	--	--	
02/05/02	739.25	3.90	735.35	<80	--	<250	--	<500	<0.5	<0.5	<1	<2	--	--	--	--	--	
05/23/02	739.25	4.90	734.35	<100	--	<250	--	<500	<1	<1	<3	<2	--	--	--	--	--	
08/13/02	739.25	6.15	733.10	<100	--	<250	--	<500	<0.5	<0.5	<1.5	<5.0	--	--	--	--	--	
11/06/02	739.25	6.23	733.02	<100	--	<250	--	<500	<0.5	<0.5	<1.5	<5.0	--	--	--	--	--	
02/05/03	739.25	3.74	735.51	<80	--	<250	--	<500	<0.5	<0.5	<1	<2	--	--	--	--	--	
05/21/03	739.25	4.85	734.40	<80	--	<250	--	<500	<0.5	<0.5	<1	<2	--	--	--	--	--	
08/21/03	739.25	7.25	732.00	<80	--	<250	--	<500	<0.5	<0.5	<1	<2	--	--	--	--	--	
11/24/03	739.25	3.25	736.00	<100	--	--	--	--	<0.25	<0.5	<1	<0.5	--	--	--	--	--	
02/19/04	739.25	4.45	734.80	<100	--	<125	--	<250	<1	<1	<2	<1	--	--	--	--	--	
05/19/04	739.25	5.60	733.65	<100	--	<118	--	<236	<1	<1	<2	<1	--	--	--	--	--	
08/12/04	739.25	6.68	732.57	<100	--	<246	--	<492	<1	<1	<2	<1	--	--	--	--	--	
11/11/04	739.25	5.21	734.04	<100	--	<269	--	<539	<1	<1	<2	<1	--	--	--	--	--	
02/21/05	739.25	5.66	733.59	<100	--	<245	--	<490	<1	<1	<2	<1	--	--	--	--	--	
05/16/05	739.25	4.39	734.86	<100	--	<246	--	<493	<1	<1	<2	<1	--	--	--	--	--	
07/18/05	739.25	5.59	733.66	<100	--	<248	--	<496	<1	<1	<2	<1	--	--	--	--	--	
10/19/05	739.25	5.22	734.03	<48	--	210	--	170	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
01/24/06	739.25	4.30	734.95	<48	--	<77	--	<96	<0.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--	
04/12/06	739.25	5.12	734.13	<48	--	<77	--	<96	<0.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--	
07/24/06	739.43	6.35	733.08	<48	--	<80	--	<100	<0.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--	
10/25/06	739.43	6.36	733.07	<48	--	<78	--	150	<0.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--	
01/30/07	739.43	4.79	734.64															
04/26/07	739.43	5.09	734.34															
07/26/07	739.43	5.60	733.83															

**TABLE I**  
**Groundwater Monitoring Data and Analytical Results**  
**Former Unocal Site No. 351393**  
**666 Griffin Avenue**  
**Enumclaw, Washington**  
**Concentrations reported in (µg/L)**

Well ID/Date	TOC	Depth to Water (ft)	GW Elevation (ft)	TPH-G (µg/L)	TPH-D (10-gram Column Cleanup) <sup>1</sup> (µg/L)	TPH-D* (µg/L)	TPH-O (10-gram Column Cleanup) (µg/L)	TPH-O <sup>2</sup> (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	EDC (µg/L)	EDB (µg/L)	Ethanol (µg/L)	Total Lead (µg/L)	Dissolved Lead (µg/L)
<b>MW-10 (cont)</b>																		
10/24/07	739.43	4.68	734.75															
01/23/08	739.43	4.83	734.60															
04/23/08	739.43	4.99	734.44															
07/24/08	739.43	6.24	731.19	<50	--	<78	--	<97	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
10/20/08	739.43	--	--															
Well Destroyed - Not gauged or sampled																		
<b>MW-11</b>																		
08/20/03	736.64	13.27	723.37	<80	--	<57	--	<714	<0.5	<0.5	<0.5	<1	<2	--	--	--	--	
11/24/03	736.64	6.35	731.29	<100	--	<120	--	<241	<0.25	<0.5	<0.5	<1	<1.5	--	--	--	--	
02/19/04	736.64	5.26	731.38	<100	--	<131	--	<262	<1	<1	<1	<2	<1	--	--	--	--	
03/19/04	736.64	7.18	729.46	<100	--	<124	--	<249	<1	<1	<1	<2	<1	--	--	--	--	
08/12/04	736.64	12.53	724.11	<100	--	<271	--	<542	<1	<1	<1	<2	<1	--	--	--	--	
11/11/04	736.64	7.17	729.47	<100	--	<267	--	<533	<1	<1	<1	<2	<1	--	--	--	--	
02/21/05	736.64	7.33	729.31	<100	--	<246	--	<491	<1	<1	<1	<2	<1	--	--	--	--	
03/16/05	736.64	3.61	733.03	<100	--	<245	--	<489	<1	<1	<1	<2	<1	--	--	--	--	
07/18/05	736.64	5.42	731.22	<100	--	<249	--	<479	<1	<1	<1	<2	<1	--	--	--	--	
10/19/05	736.64	6.05	731.59	<48	--	<800	--	<1,000	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
01/24/06	736.64	3.63	733.01	<48	--	<77	--	<96	<0.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--	
04/12/06	736.64	4.46	732.18	<48	--	<160	--	<200	<0.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--	
07/24/06	738.36	7.72	730.64	<48	--	<83	--	<100	<0.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--	
10/24/06	738.36	8.32	730.04	<48	--	<78	--	<98	<0.5	<0.7	<0.8	<0.8	<0.5	--	--	--	--	
01/31/07	738.36	5.58	722.78															
04/26/07	738.36	4.46	733.90															
07/26/07	738.36	4.48	733.88															
10/24/07	738.36	5.02	733.34															
01/23/08	738.36	4.67	733.69															
04/23/08	738.36	4.37	733.99															
07/24/08	738.36	--	--															
10/20/08	738.36	4.80	733.56															
01/14/09	738.36	3.68	734.68	<25	--	<38	--	<63	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	
04/27/09	738.36	4.30	734.06	<50.0	--	<44	--	<420	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<0.010	--	<1.0	
07/28/09	738.36	8.17	730.19	<50.0	--	<76.9	--	<185	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	
10/20/09	738.36	3.19	733.17	<50.0	--	<78.4	--	<192	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	
01/18/10	738.36	3.79	734.57	<50.0	--	<77.7	--	<188	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	
04/20/10	738.36	4.14	734.22	<50.0	--	<78.4	--	<192	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	
07/19/10	738.36	4.74	733.62	<50.0	--	<78.4	--	<192	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	
10/18/10	738.36	4.72	733.64	<50.0	--	<78.4	--	<192	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	
01/25/11	738.36	2.45	735.91	<50.0	--	<77.7	--	<188	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	
04/11/11	738.36	3.25	735.11	<50.0	--	<77.7	--	<188	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	
07/05/11	738.36	4.61	733.75	<50.0	--	<77.7	--	<188	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	
11/30/11	738.36	3.72	734.64	<30	<30	<29	<70	<67	<0.5	<0.5	<0.5	<0.5	--	--	<50	--	--	
03/02/12	738.36	3.38	734.98	<50	<29	<29	<67	<67	<0.5	<0.5	<0.5	<0.5	--	--	<50	--	--	
05/09/12	738.36	3.47	734.89	<50	<30	<30	<70	<70	<0.5	<0.5	<0.5	<0.5	--	--	<50	--	--	

**TABLE I**  
**Groundwater Monitoring Data and Analytical Results**  
**Former Unocal Site No. 351393**  
**666 Griffin Avenue**  
**Enumclaw, Washington**  
**Concentrations reported in ( $\mu\text{g/L}$ )**

Well ID/Date	TOC	Depth to Water (ft)	GW Elevation (ft)	TPH-G ( $\mu\text{g/L}$ )	TPH-D (10-gram Column Cleanup) <sup>1</sup> ( $\mu\text{g/L}$ )	TPH-D <sup>2</sup> ( $\mu\text{g/L}$ )	TPH-O (10-gram Column Cleanup) <sup>1</sup> ( $\mu\text{g/L}$ )	TPH-O <sup>2</sup> ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethyl-benzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	EDC ( $\mu\text{g/L}$ )	EDB ( $\mu\text{g/L}$ )	Ethanol ( $\mu\text{g/L}$ )	Total Lead ( $\mu\text{g/L}$ )	Dissolved Lead ( $\mu\text{g/L}$ )
<b>MW-11 (cont)</b>																		
11/29/12	738.30	4.83	733.53	<50	<30	<31	<70	<72	<0.5	<0.5	<0.5	<0.5	--	--	--	<50	--	--
	MTCA Method A Cleanup Levels:			1,000/800*	500	500	500	500	5	1,000	700	1,000	20	5	0.01	NE	15	15

**NOTES:**

All concentrations are in micrograms per liter ( $\mu\text{g/L}$ )

GW Elevation = Groundwater elevation in feet relative to top of casing elevation

TOC = Top of casing elevation in feet

TPH-G = Gasoline range hydrocarbons by Ecology Method NWTPH-Gx

TPH-D and TPH-O = Diesel and oil range hydrocarbons, respectively, by Ecology Method NWTPH-Dx

BTEx = Benzene, Toluene, Ethylbenzene, and Total Xylenes by EPA Method X260B; previous results by 8021B or 8260B, refer to laboratory reports

MTBE = Methyl tert-butyl ether by EPA Method 8260B

EDC = 1,2-Dichloroethane by EPA Method 8260

EDB = 1,2-Dibromoethane by EPA Method 8011

Total and dissolved lead by EPA Method 6020

-- = Not Analyzed or Sampled

< = Less than the stated laboratory reporting limits

NE = Not established

In = Analysis conducted outside the COP holding time, but within the EPA method holding time

3n = Analyte was detected in the associated method blank as well as in the sample. The concentration found in the sample was ten times greater than the amount found in the blank

Bt = Analyte was detected in the associated method blank as well as in the sample

P2 = Re-extraction or re-analysis could not be performed due to insufficient sample amount

S2 = Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis)

SS = Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis)

<sup>1</sup> = 10-gram column silica gel cleanup method used

<sup>2</sup> = Quick silica gel cleanup used

**Bolded values exceed Model Toxics Control Act (MTCA) Method A Cleanup Levels**

\* MTCA Method A levels for TPH-G are 1000  $\mu\text{g/L}$  when no Benzene is present and 800  $\mu\text{g/L}$  when Benzene is present

<sup>b</sup> The Method reporting limit is above the MTCA Method A cleanup levels

<sup>c</sup> Surrogates were not spiked due to analyst error. The sample was reanalyzed out of hold with in control surrogate recoveries. Because the concentration for gasoline range organics was identical to the original analysis, the results were reported from the original analysis

Data prior to 11/30/11 was provided to ARCADIS by Stantec Inc

Attachment A:

**Groundwater Monitoring and Sampling Data Package**

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## WELL GAUGING DATA

Project # 121129-531 Date 11/29/12 Client CHEVRON

Site 666 GREEN AVE. GLENDALE

## **LOW FLOW WELL MONITORING DATA SHEET**

Project #:	121129-JB1	Client:	CHEVRON
Sampler:	JB	Gauging Date:	11/29/12
Well I.D.:	SW-1	Well Diameter (in.):	(2) 3 4 6 8
Total Well Depth (ft.):	14.52	Depth to Water (ft.):	1.92
Depth to Free Product:	—	Thickness of Free Product (feet):	—
Referenced to:	PVC	Grade	Flow Cell Type: 751556

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

Start Purge Time: 102 Flow Rate: 200 ml/min Pump Depth: 9'

Start Purge Time: 1102 Flow Rate: 20 ml/min Pump Depth: 9'

Start Purge Time: 1102 Flow Rate: 20 ml/min Pump Depth: 9'

Did well dewater? Yes  No  Amount actually evacuated: 3 L

Sampling Time: 11:18 Sampling Date: 11/29/12

Sample I.D.: mw.1 Laboratory: lancaster

Analyzed for:  TPH-G  BTEX  MTBE  TPH-D  Other: *see lab*

Equipment Blank I.D.:  Time  Duplicate I.D.:

**Blame Tech Services, Inc. 1660 Rogers Ave., San Jose, CA 95112 (408) 573-0555**

## LOW FLOW WELL MONITORING DATA SHEET

Project #:	121129-531	Client:	CHEVRON
Sampler:	53	Gauging Date:	11/29/12
Well I.D.:	MW-2	Well Diameter (in.) :	(2) 3 4 6 8
Total Well Depth (ft.):	15.35	Depth to Water (ft.):	19.5
Depth to Free Product:	—	Thickness of Free Product (feet):	—
Referenced to:	PVC	Grade	Flow Cell Type: 751 556

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

Start Purge Time: 0843 Flow Rate: 200 mL/min. Pump Depth: 10'

Start Purge Time: 05:43 Flow Rate: 22.2 ml/min Pump Depth: 100

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Cond.

Did well dewater? Yes  No  Amount actually evacuated: 3 1

Sampling Time: 0859 Sampling Date: 11/29/12

Sample I.D.: mw-2 Laboratory: Lancaster

Analyzed for:  TPH-G  BTEX  MTBE  TPH-D  Other: ~~see back~~

Equipment Blank I.D.: @ Time Duplicate I.D.:

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

## **LOW FLOW WELL MONITORING DATA SHEET**

Project #:	121129-531	Client:	CHEVRON
Sampler:	53	Gauging Date:	11/29/12
Well I.D.:	MW-3A	Well Diameter (in.):	(2) 3 4 6 8
Total Well Depth (ft.):	17.15	Depth to Water (ft.):	2.41
Depth to Free Product:	—	Thickness of Free Product (feet):	—
Referenced to:	(PVC)	Grade	Flow Cell Type: 751556

Purge Method: 2" Grundfos Pump

Sampling Method: Dedicated Tubing

## Peristaltic Pump

### New Tubing

## Bladder Pump

Other

Start Purge Time: 1127

Flow Rate: 200 ml/min

Pump Depth: 10'

Did well dewater? Yes  No

Amount actually evacuated: 3 L

Sampling Time: 1143

Sampling Date: 1/29/13

Sample I.D.: 000-30

Laboratory: ~~for you~~

Analyzed for:

ZPH-G ZTEX MTBE ZPH-D

Other 111-106

### Equipment Blank I.D.:

1

Duplicate ID :

## **LOW FLOW WELL MONITORING DATA SHEET**

Project #:	121129-531	Client:	Chevron
Sampler:	53	Gauging Date:	11/29/12
Well I.D.:	MW-4	Well Diameter (in.):	(2) 3 4 6 8
Total Well Depth (ft.):	17.30	Depth to Water (ft.):	2.20
Depth to Free Product:	—	Thickness of Free Product (feet):	—
Referenced to:	PVC	Grade	Flow Cell Type: 251556

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

Camping Method: Solated Tubing New Tubing Other \_\_\_\_\_

Start Purge Time: 1025 Flow Rate: 200ml/min Pump Depth: 10'

Start Purge Time: 1025 Flow Rate: 200ml/min Pump Depth: 10'

Start Purge Time: 1025 Flow Rate: 200ml/min Pump Depth: 10'

Start Purge Time: 1025 Flow Rate: 200ml/min Pump Depth: 10'

Did well dewater? Yes  No  Amount actually evacuated: 3 L

Sampling Time: 1041 Sampling Date: 11-29-12

Sample I.D.: MW-4 Laboratory: Lancaster

Analyzed for:  TPH-G  BTEX  MTBE  TPH-D  Other *see col*

Equipment Blank I.D.: @ Time Duplicate I.D.:

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

## LOW FLOW WELL MONITORING DATA SHEET

Project #:	12129-531	Client:	CHEVRON
Sampler:	SB	Gauging Date:	11/29/12
Well I.D.:	MW-5	Well Diameter (in.) :	(2) 3 4 6 8
Total Well Depth (ft.):	14.58	Depth to Water (ft.):	1.75
Depth to Free Product:	—	Thickness of Free Product (feet):	—
Referenced to:	PVC	Grade	Flow Cell Type: 251 556

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

Start Purge Time: 0918 Flow Rate: 200 ml/min Pump Depth: 10'

Did well dewater? Yes  No  Amount actually evacuated: 3 L

Sampling Time: 0934 Sampling Date: 11/29/12

Sample I.D.: MW-5 Laboratory: DURRER

Analyzed for:  TPH-G  BTEX  MTBE  TPH-D  Other *see lab*

Equipment Blank I.D.: @ Time Duplicate I.D.:

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

## **LOW FLOW WELL MONITORING DATA SHEET**

Project #:	121129-TB1	Client:	CHEVRON
Sampler:	TB	Gauging Date:	11/29/12
Well I.D.:	MW-6	Well Diameter (in.) :	(2) 3 4 6 8
Total Well Depth (ft.):	12.05	Depth to Water (ft.):	2.53
Depth to Free Product:	—	Thickness of Free Product (feet):	—
Referenced to:	PVC	Grade	Flow Cell Type: 751556

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

Start Purge Time: 1205 Flow Rate: 200 mL/min Pump Depth: 5'

Did well dewater? Yes  No  Amount actually evacuated: 3 L

Sampling Time: 1221 Sampling Date: 11-29-12

Sample I.D.: mw.6 Laboratory: ~~louisville~~

Analyzed for: TPH-G BTEX MTBE TPH-I Other: *see col*

Equipment Blank I.D.: @ Time Duplicate I.D.:

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

## LOW FLOW WELL MONITORING DATA SHEET

Project #:	121129-531	Client:	CHURCH
Sampler:	5A	Gauging Date:	11/29/12
Well I.D.:	MW-7	Well Diameter (in.):	2 3 4 6 8
Total Well Depth (ft.):	12.80	Depth to Water (ft.):	1.81
Depth to Free Product:	—	Thickness of Free Product (feet):	—
Referenced to:	PVC	Grade	Flow Cell Type: 75155L

Purge Method: 2" Grundfos Pump

Sampling Method: Dedicated Tubing

## **Peristaltic Pump**

### New Tubing

### **Bladder Pump**

#### **Other**

Start Purge Time: 0953

Flow Rate: 3-20 ml/min?

Pump Depth: 8'

Did well dewater? Yes  No

Amount actually evacuated: 3 4

Sampling Time: 1-2-3

Sampling Date: 11/29/12

Sample I.D.: 84-2

Laboratory: SECRET

Analyzed for:

TRW G RTEV MTRE ERLE

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Equipment Blanks, Ltd.

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### Duplicate I.D.:

## LOW FLOW WELL MONITORING DATA SHEET

Project #:	121129-5B1	Client:	CHURCH
Sampler:	5B	Gauging Date:	11/29/12
Well I.D.:	MW-11	Well Diameter (in.) :	(2) 3 4 6 8
Total Well Depth (ft.):	14.80	Depth to Water (ft.):	4.83
Depth to Free Product:	—	Thickness of Free Product (feet):	—
Referenced to:	(PVC)	Grade:	Flow Cell Type: 351556

Purge Method:      2" Grundfos Pump      Reristaltic Pump      Bladder Pump

Sampling Method:  Dedicated Tubing  New Tubing  Other

Start Purge Time: 0740 Flow Rate: 200 ml/m<sup>2</sup> Pump Depth: 10'

Did well dewater? Yes  No  Amount actually evacuated: 3 L

Sampling Time: 0756 Sampling Date: 11/29/12

Sample I.D.: MW-11 Laboratory: Worcester

Analyzed for:  TPH-G  BTEX  MTBE  TPH-D  Other *see box*

Equipment Blank I.D.: @ Time Duplicate I.D.:

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

**CHAIN OF CUSTODY FORM**

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

COC 1 of 1

Chevron Site Number: <u>35-1393</u> Program Designation: <u>CMP</u> Site Address (street, city, state / county): <u>666 Griffin Ave, Enumclaw, WA</u> Chevron PM: Chevron PM Phone No.: <input type="checkbox"/> Retail and Terminal Business Unit (RTBU) Job <input type="checkbox"/> Construction/Retail Job				Chevron Consultant: <u>ARCADIS</u> Address: <u>3240 El Camino Real, Irvine, CA</u> Consultant Contact: <u>Colleen Martin</u> Consultant Phone No. <u>503-220-8201</u> Consultant Project No. <u>121129-73</u> Sampling Company: <u>Blaine Tech Services</u> Sampled By (Print): <u>Sgt. Blaine Martin</u> Sampler Signature: <u>[Signature]</u>		<b>ANALYSES REQUIRED</b>						
										<small>Preservation Codes</small> H = HCl T = Thioculfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other		
										<small>Special Instructions</small> <i>"Run both the 10g silica gel clean up and the quick silica gel clean up methods."</i>		
Charge Code: NWRTB-0351393-O-OML NWRTB OOSITE NUMBER-O-OML <b>WBS ELEMENTS:</b> SITE ASSESSMENT: A1L REMEDIATION IMPLEMENTATION: R5L SITE MONITORING: OML OPERATION MAINTENANCE & MONITORING: M1L				<b>Lancaster Laboratories</b> <input checked="" type="checkbox"/> Lancaster, PA Lab Contact: Megan Moeller 2425 New Holland Pike, Lancaster, PA 17601 Phone No: (717)656-2300	Other Lab <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	Temp, Blank Check Time      Temp. <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	TPH-D <sup>a</sup> w/ SILICA GEL CLEANUP (97-602M) (NWTPH-DX w/ sec) TPH-ORO w/ SILICA GEL CLEANUP (97-602M) (NWTPH-DX w/ sec)	TPH-HRO w/ SILICA GEL CLEANUP (97-602M) (NWTPH-DX w/ sec) 8260B FULL LISTED ETHANOL <sup>b</sup> PAH's <sup>c</sup> CPAH's <sup>d</sup> 8270 SIM TPH-G (NWTPH-GX)	TOTAL LEAD (6020) DISSOLVED LEAD (6020) TPH-D AND TPH-O BY (NWTPH-DX)			
<b>SAMPLE ID</b>				Sample Time	# of Containers	Container Type						
Field Point Name	Matrix	Top Depth	Date (yyymmdd)									
MW-1	W	—	121129	1118	8	600 mm/sec	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
MW-2		—		0859	1		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
MW-3A		—		1143	1		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
MW-4		—		1041	1		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
MW-5		—		0934	1		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
MW-6		—		1221	1		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
MW-7		—		1009	1		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
MW-11	↓	—		0756	1		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
QA	T	—	↓	0730	3	600	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Relinquished By			Company		Date/Time:		Relinquished To		Company		Date/Time	
Relinquished By			Blaine Tech Services		12/11/2011		Shipped via FedEx		Date/Time		Turnaround Time:	
Relinquished By			Company		Date/Time		Relinquished To		Company		Date/Time	
Relinquished By			Company		Date/Time		Relinquished To		Company		Date/Time	
											Intact: <input checked="" type="checkbox"/>	
									On Ice: <input checked="" type="checkbox"/>		Temp: <input checked="" type="checkbox"/>	
											COC #: <input checked="" type="checkbox"/>	

## **WELLHEAD INSPECTION FORM**

Client: chevera Site: 666 griffin ave suwanee Date: 11/29/13  
Job #: 121129-331 Technician: SS Page 1 of 1

**NOTES:** \_\_\_\_\_

CHEVRON-WASHINGTON/OREGON TYPE A BILL OF LADING

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

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

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

35-1393 Marcus W. Gullis  
CHEVRON # Chevron Project Manager  
666 Gaffey Ave SAN JOSE CA  
Street number street name city state

WELL I.D.	GALS.	WELL I.D.	GALS.
<u>Mw-1</u>	/	/	/
<u>Mw-2</u>	/	/	/
<u>Mw-3A</u>	/	/	/
<u>Mw-4</u>	/	/	/
<u>Mw-5</u>	/	/	/
<u>Mw-6</u>	/	/	/
<u>Mw-7</u>	/	/	/
<u>Mw-11</u>	/	/	/
	/	/	/
	/	/	/
added equip.		any other	
rinse water	/ \$3	adjustments	/
<b>TOTAL GALS.</b>		loaded onto	
<b>RECOVERED</b>	<u>16</u>	BTS vehicle #	<u>88</u>
BTS event #	time	date	
<u>121129-331</u>	<u>1230</u>	<u>11/29/12</u>	
signature			



# GENERAL PERMIT TO WORK / TAILGATE MEETING – Chevron

Project Name:

35-1393

Project Location (Address):

COLLEGE MEETIN

Chevron Project Manager:

Bob GILLEN, AOE, GURDIAW

Version 01.04.2012

Permit ID:

(Facility #) Year Month Day

Template: 1129170 - 11 - 12 - 05 | Section not required - for filing only

35-1393

Chevron Facility #:

Total # of Companies at Site:

Valid Date (if day): 11/29/12 Person Conducting Meeting: SAR BUSTED JR

Modifications to this form may not be made unless approved by the ARCADIS-Chevron Principal in Charge (PIC) – John Vorzege. This Permit is intended to be completed in the field by a qualified and predetermined Permit Approver. The individual completing this permit shall communicate each section to field staff during the daily safety meeting. It is intended to serve as a tool for identifying and mitigating hazards that affect every worker on site. Solely input from persons attending the safety meeting during permit completion. Resolve all "NO" responses prior to starting work.

1a.	Have necessary work permits (local, state and/or federal) been obtained (including those for subcontractors)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
1b.	If CONFINED SPACE activities are to be conducted has the CONFINED SPACE portion of the HIGH RISK WORK PERMIT been completed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
1c.	If EXCAVATION / TRENCHING / DRILLING / OVERHEAD CLEARANCE activities deeper than 4 feet and/or within 10 feet of a high pressure gas line and/or within 3 feet of a buried active product of electric line or overhead work involving equipment within 15 feet of an overhead electric line or pole supporting the line are to be conducted has the applicable portion of the HIGH RISK WORK PERMIT been completed? In Latin America, will drilling activities be conducted? (See Back Page Section on HIGH RISK WORK PERMIT completed?)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
1d.	If HOTWORK activities are to be conducted has the HOTWORK and FIRE MONITOR OR ACTIVITY LOG portions of the HIGH RISK WORK PERMIT been completed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
1e.	If LOCK OUT / TAG OUT (LOTO) activities are to be conducted has the LOTO portion of the HIGH RISK WORK PERMIT been completed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
1f.	If DIVING activities are to be conducted has the DIVING portion of the HIGH RISK WORK PERMIT been completed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
1g.	If workers are WORKING AT AN ELEVATION over 6 feet has the WORKING AT ELEVATION portion of the HIGH RISK WORK PERMIT been completed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
1h.	If workers are GROUNTING or WORKING NEAR OPEN WATER has the applicable portion of the HIGH RISK WORK PERMIT been completed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
1i.	If DEMOLITION, REMOVAL OF PIPELINES AND BURIED STRUCTURES work activities are to be conducted has the EXCAVATION / TRENCHING / DRILLING / OVERHEAD CLEARANCE and DEMOLITION, REMOVAL OF PIPELINES AND BURIED STRUCTURES portions of the HIGH RISK WORK PERMIT been completed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
2.	Have applicable pre-print paperwork (JIP and vendor inspection checklist) been completed by ARCADIS personnel and ARCADIS subcontractors (if applicable)? Has subcontractor paperwork been inspected?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
3.	HASP: Has all sections of the Health & Safety Plan (E-HASP) applying to today's tasks been reviewed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
4.	HASP: Has the E-HASP been signed by appropriate on-site personnel?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
5.	HASP: Have all visitors and workers completed the E-HASP written test? Have all tested been graded? Deficiencies reviewed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
6.	HASP: Have the action levels and work zones been identified and reviewed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
7.	HASP: Will traffic control efforts comply with Chevron and ARCADIS requirements? (See Back Page for Chevron Requirements)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
8a.	Air Monitoring: Air monitoring being conducted? (If yes, then complete 8b – 8d)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
8b.	Air Monitoring: Is monitoring equipment present and properly calibrated?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
8c.	Air Monitoring: Have E-HASP requirements for air monitoring been reviewed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
8d.	Air Monitoring: Will Air Monitoring Log be completed by Health & Safety Supervisor (SSO)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
9.	Has Chevron's hand safety policy, including FOBK prohibition, Stop Work Authority been discussed and highlighted during the health and safety meeting (See Statement on Back Page)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
10.	Have Operational Excellence Targets been discussed and highlighted during the daily health and safety meeting? (See Back Page for Reference)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
11.	Electrical: Will GFCI in-line protectors, positioned next to the power source, be tested and utilized if AC-powered equipment is used?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
12.	Electrical: Have electrical cords and plug inspected prior to use?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
13.	Electrical: If electricals are to be required to work in five panels, have they been trained on NEPA 70E? Are they prepared to comply with NFPA 70E requirements?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
14.	Equipment Operation: Are above-ground utilities identified and clearly visible by equipment operators? Underground cables marked?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
15.	Equipment Operation: Has an equipment inspection checklist been completed for all equipment being used today? Note: Checklists may vary by office, subcontractor and equipment	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
16.	Equipment Operation: Subsurface work: Has the underground/overhead utilities checklist been completed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
17.	+ Have shutoff switches/valves been located (as required by scope work)?	<input type="checkbox"/> N/A <input type="checkbox"/> Electric <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Water <input type="checkbox"/> Other <input type="checkbox"/> N/A
18.	+ Are proper basic and/or fire control measures in-place?	<input type="checkbox"/> Traffic <input type="checkbox"/> Fire Prevention <input checked="" type="checkbox"/> N/A
19.	+ Who is the designated SSD for today?	Name: <u>SAR BUSTED JR</u>
20.	+ Does everyone know his/her role during an emergency? E-HASP section related to emergency roles and responsibilities reviewed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
21.	+ Does everyone know the location, directions, and name of the nearest hospital?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
22.	+ Has a plan been established to ensure emergency responders can easily locate or be acceded to the work site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
23.	+ Where is the nearest working phone located (non-cell phone)	Location: <u>OFFICE</u>
24.	+ Where is the location of the primary first aid kit (to include portable eyewash & CPR shield)?	Location: <u>1st AID</u>
25.	+ Where is the location of the primary fire extinguisher?	Location: <u>1st AID</u>
26.	+ Have signals or alarms (stop work, shearing, evacuation, etc.) been communicated to everyone on site? Without conflicts with other work activity?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
27.	+ Are weather conditions acceptable or have associated risks been mitigated? Are increasing fluids (no caffeine) available to workers? Shade? Shelter within reasonable distance?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
28.	+ Document last inspection date of primary fire extinguisher and aspiration of primary first aid kit contents. Extinguisher: <u>04/2013</u> First Aid Kit: <u>08/2013</u>	
29.	Have modifications to safety procedures or documentation (ie. JWP, TCP) been made and communicated to on-site personnel?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
30.	Are MSDS for ALL chemicals being used at site (oils, detergents, preservatives, etc.) included in E-HASP? Have crews using these chemicals read the MSDS? Are they readily available for quick review or to hand off to EMS personnel?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
31.	Waste labels prepared? Solid waste drums stored on pallets? Liquid waste drums stored on secondary containment? Drums stored at location acceptable to property owner?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
32.	Is waste currently on site? If so, what is the status of the disposal process?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
33.	CIRCLE ONE of the FOLLOWING: 1. Contractor, 2. Owner, 3. Other (check one) <u>1. CONTRACTOR</u> <u>2. TRUCK</u>	3rd Company Responsible <u>JLA prepared and/or reviewed TODAY for each task?</u>
A)	<u>GROUTING FOR SPANNING</u>	<u>B-BINS</u>
B)		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
C)		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
D)		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A

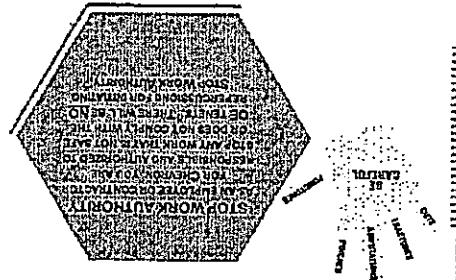
#### Hazard Identification Tool

Use the table below to identify and summarize briefly what hazards exist, where on site and/or as a result of what process. Summarize critical actions necessary to mitigate these hazards. This section should be completed IN ADDITION to the JOB LOSS ANALYSIS (JLA) required for the day and should assist in JLA preparation. This section is intended to serve as a tool and not a duplication of efforts. Be as brief as possible on THIS TABLE.

Energy Source	Hazards	Critical Action(s)
	Gravity Falling objects, collapsing roof and a body impacting	<u>SLIPS, FALLS</u> <u>CLEAR WORK ZONE</u>
	Motion Vehicle, vessel, or equipment movement, flowing water; wind, and body positioning when lifting, straining or bending	<u>VEHICLE MOVING</u> <u>MOVE VEHICLE</u>
	Mechanical Rotating equipment, compressed springs, drive belts, conveyors and motors	<u>PUMP</u> <u>SOP</u>
	Electrical Power lines, transformers, static charges, lightning, energized equipment, wiring and batteries	<u>GENERATOR</u> <u>GFCI</u>
	Pressure Pressure piping, compressed cylinders, control lines, vessels, tanks, hoses, and pneumatic/hydraulic equipment	<u>WASHER</u> <u>PPC</u>
	Temperature Open flame, ignition sources; hot or cold surfaces, liquids or gases, steam, flares; and general environmental and weather conditions	<u>WASHER</u> <u>PPC</u>
	Chemical Flammable vapors, reactive hazards, carcinogens or other toxic compounds, corrosives, pyrophores, combustibles, oxygen-depleting atmospheres, welding fumes, dusts	<u>HCl</u> <u>PPG</u>
	Biological Animals, bacteria, viruses, insects, blood-borne pathogens, improperly handled food and contaminated drinking water	<u>SPIDERS, INSECTS</u> <u>Wear BEGGIE REACHING</u>
	Radiation Lightning strikes, welding arcs, solar rays, microwaves, lasers, X-rays and naturally occurring radioactive material (NORM)	<u>SNR</u> <u>PPC</u>
	Sound Equipment noise, impact noise, vibration, high-pressure release and the impact of noise to communication	<u>GOOFER JR</u> <u>PPC</u>

ALL PERMITS MUST BE RETAINED IN A UNIQUE LOCATION DESIGNATED FOR PERMITS ONLY.

THE UNIVERSITY OF TORONTO LIBRARIES  
SERIALS ACQUISITION DESIGNATION FOR PERIODICALS OUTLET



**Безопасность стационарных**

During the first year of the study, we found no significant difference between the two groups in terms of the number of patients who had at least one visit to the emergency room or hospital admission due to pain. However, in the second year, the group receiving the intervention had significantly fewer visits to the emergency room and hospital admissions due to pain compared to the control group.

## Reference Section

Daily H&S Activity Log / End of Day Summary

Permit Work Approved: 5/20 Date (dd/mm/yy): 12/05/13  
Time Work to Cease (Permit Closed): 12:00

**NOTICE TO ALL WORKERS:** - By signing below, you agree that you have read and fully understand the [ILAS Application Guide](#) to your assigned duties.

### **Signature Section**

Name/Company: Southeastern Date: 11/29/12

### Health and Safety Plan Written Test

Please answer all the following questions.

- 1) Where can I find the address of the site and why is it relevant to know?

SOW , HESP

- 2) If working conditions or behaviors are considered unsafe, what is your responsibility to do?

STOP WORK

- 3) What JSAs are available and useful for this project?

GROUNDWATER SAMPLING

- 4) Where is the Hazard ID Form located?

INCIDENT & EMERGENCY

- 5) Name 3 tools used in the LPS Program.

ASSESS , EVALUATE , ACT

- 6) Where are the emergency equipment kept (e.g. fire extinguishers, first aid kits, etc)?

IN CAB

- 7) Is this site Chevron owned? What are the operational control/reporting boundaries for this site?

N/A

- 8) Have you read the Journey Management Plan?

YES

- 9) What section summarizes emergency procedures and presents directions to the nearest hospitals and emergency telephone numbers?

INCIDENT & EMERGENCY

- 10) What LPS tool should you use every time before you perform a new activity?

ASSESS

- 11) If a near miss occurs, who should you notify...and when?

PM , ASSESS

- 12) Where is the evacuation assembly point/rally point?

IN OWNED OR PROPERTY

## TEST EQUIPMENT CALIBRATION LOG

**Attachment B:**  
**Laboratory Analysis Report**

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Lancaster  
Laboratories

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## Analysis Report

### ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

Chevron  
L4310  
6001 Bollinger Canyon Road  
San Ramon CA 94583

December 14, 2012

Project: 351393

Submittal Date: 12/01/2012  
Group Number: 1353039  
PO Number: 0015100195  
Release Number: INGLIS  
State of Sample Origin: WA

#### Client Sample Description

MW-1 Water  
MW-2 Water  
MW-3A Water  
MW-4 Water  
MW-5 Water  
MW-6 Water  
MW-7 Water  
MW-11 Water  
QA Water

#### Lancaster Labs (LLI) #

6879091  
6879092  
6879093  
6879094  
6879095  
6879096  
6879097  
6879098  
6879099

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

ELECTRONIC Blaine Tech Services  
COPY TO  
ELECTRONIC SAIC  
COPY TO

Attn: Alex Stack  
Attn: Don Wyll



Lancaster  
Laboratories

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## ***Analysis Report***

Respectfully Submitted,

Jill M. Parker  
Senior Specialist

(717) 556-7262



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Laboratories

# Analysis Report

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**Sample Description:** MW-1 Water  
Facility# 351393  
666 Griffin Ave - Enumclaw, WA

LII Sample # WW 6879091  
LII Group # 1353039  
Account # 11255

**Project Name:** 351393

Collected: 11/29/2012 11:18 by JB

Chevron

L4310

6001 Bollinger Canyon Road

San Ramon CA 94583

Submitted: 12/01/2012 09:40

Reported: 12/14/2012 13:53

GAE01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	5	0.5	1
10943 Ethanol		64-17-5	N.D.	.50	1
10943 Ethylbenzene		100-41-4	2	0.5	1
10943 Toluene		108-88-3	4	0.5	1
10943 Xylene (Total)		1330-20-7	3	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	1,900	50	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	2,600	30	1
12005 DRO C12-C24 w/Si Gel		n.a.	130	30	1
02211 HRO C24-C40 w/Si Gel		n.a.	360	70	1
12005 HRO C24-C40 w/Si Gel		n.a.	N.D.	70	1

The reverse surrogate, capric acid, is present at <1%.

## General Sample Comments

State of Washington Lab Certification No. C259

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

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	UST VOCs by 8260B - Water	SW-846 8260B	1	P123451AA	12/10/2012 19:46	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P123451AA	12/10/2012 19:46	Emily R Styer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	12339A94A	12/05/2012 20:04	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12339A94A	12/05/2012 20:04	Catherine J Schwarz	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	123400010A	12/10/2012 12:07	Christine E Dolman	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	123400011A	12/12/2012 17:16	Glorines Suarez-Rivera	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	123400011A	12/05/2012 22:00	Karen L Beyer	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	123400010A	12/05/2012 22:00	Karen L Beyer	1



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# Analysis Report

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Sample Description: MW-2 Water  
Facility# 351393  
666 Griffin Ave - Enumclaw, WA

LLI Sample # WW 6879092  
LLI Group # 1353039  
Account # 11255

Project Name: 351393

Collected: 11/29/2012 08:59 by JB

Chevron

L4310

Submitted: 12/01/2012 09:40

Reported: 12/14/2012 13:53

6001 Bollinger Canyon Road

San Ramon CA 94583

GAE02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethanol		64-17-5	N.D.	50	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	540	50	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	6,000	30	1
12005 DRO C12-C24 w/Si Gel		n.a.	300	30	1
02211 HRO C24-C40 w/Si Gel		n.a.	330	70	1
12005 HRO C24-C40 w/Si Gel		n.a.	N.D.	70	1

The reverse surrogate, capric acid, is present at <1%.

## General Sample Comments

State of Washington Lab Certification No. C259

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

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	UST VOCs by 8260B - Water	SW-846 8260B	1	P123451AA	12/10/2012 20:14	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P123451AA	12/10/2012 20:14	Emily R Styer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	12339A94A	12/05/2012 20:30	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12339A94A	12/05/2012 20:30	Catherine J Schwarz	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	123400010A	12/10/2012 12:29	Christine E Dolman	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	123400011A	12/12/2012 17:40	Glorines Suarez-Rivera	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	123400011A	12/05/2012 22:00	Karen L Beyer	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	123400010A	12/05/2012 22:00	Karen L Beyer	1



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Laboratories

# Analysis Report

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**Sample Description:** MW-3A Water  
Facility# 351393  
666 Griffin Ave - Enumclaw, WA

LLI Sample # WW 6879093  
LLI Group # 1353039  
Account # 11255

**Project Name:** 351393

Collected: 11/29/2012 11:43 by JB

Chevron

L4310

Submitted: 12/01/2012 09:40

6001 Bollinger Canyon Road

Reported: 12/14/2012 13:53

San Ramon CA 94583

GAE03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene	71-43-2	180	5	10	
10943 Ethanol	64-17-5	N.D.	500	10	
10943 Ethylbenzene	100-41-4	N.D.	5	10	
10943 Toluene	108-88-3	N.D.	5	10	
10943 Xylene (Total)	1330-20-7	N.D.	5	10	
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12	n.a.	790	50	1	
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel	n.a.	1,500	30	1	
12005 DRO C12-C24 w/Si Gel	n.a.	60	30	1	
02211 HRO C24-C40 w/Si Gel	n.a.	240	71	1	
12005 HRO C24-C40 w/Si Gel	n.a.	N.D.	71	1	

The reverse surrogate, capric acid, is present at <1%.

## General Sample Comments

State of Washington Lab Certification No. C259

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

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	UST VOCs by 8260B - Water	SW-846 8260B	1	P123451AA	12/10/2012 20:42	Emily R Styer	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P123451AA	12/10/2012 20:42	Emily R Styer	10
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	12339A94A	12/05/2012 20:55	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12339A94A	12/05/2012 20:55	Catherine J Schwarz	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	123400010A	12/10/2012 12:52	Christine E Dolman	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	123400011A	12/12/2012 18:04	Glorines Suarez-Rivera	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	123400011A	12/05/2012 22:00	Karen L Beyer	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	123400010A	12/05/2012 22:00	Karen L Beyer	1



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# Analysis Report

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**Sample Description:** MW-4 Water  
Facility# 351393  
666 Griffin Ave - Enuclaw, WA

LLI Sample # WW 6879094  
LLI Group # 1353039  
Account # 11255

**Project Name:** 351393

Collected: 11/29/2012 10:41 by JB

Chevron

Submitted: 12/01/2012 09:40

L4310  
6001 Bollinger Canyon Road  
San Ramon CA 94583

Reported: 12/14/2012 13:53

GAE04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	0.5	0.5	
10943 Ethanol		64-17-5	N.D.	50	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	1,100	50	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	1,900	30	1
12005 DRO C12-C24 w/Si Gel		n.a.	270	30	1
02211 HRO C24-C40 w/Si Gel		n.a.	290	70	1
12005 HRO C24-C40 w/Si Gel		n.a.	N.D.	70	1
The reverse surrogate, capric acid, is present at <1%.					

## General Sample Comments

State of Washington Lab Certification No. C259

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

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	UST VOCs by 8260B - Water	SW-846 8260B	1	P123451AA	12/10/2012 21:09	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P123451AA	12/10/2012 21:09	Emily R Styer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	12339A94A	12/05/2012 21:21	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12339A94A	12/05/2012 21:21	Catherine J Schwarz	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	123400010A	12/10/2012 13:15	Christine E Dolman	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	123400011A	12/12/2012 18:28	Glorines Suarez-Rivera	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	123400011A	12/05/2012 22:00	Karen L Beyer	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	123400010A	12/05/2012 22:00	Karen L Beyer	1



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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: MW-5 Water  
Facility# 351393  
666 Griffin Ave - Enumclaw, WA

LLI Sample # WW 6879095  
LLI Group # 1353039  
Account # 11255

Project Name: 351393

Collected: 11/29/2012 09:34 by JB

Chevron

L4310

Submitted: 12/01/2012 09:40

Reported: 12/14/2012 13:53

6001 Bollinger Canyon Road

San Ramon CA 94583

GAE05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/l	ug/l	
10943	Benzene	71-43-2	4	0.5	1
10943	Ethanol	64-17-5	N.D.	50	1
10943	Ethylbenzene	100-41-4	17	0.5	1
10943	Toluene	108-88-3	1	0.5	1
10943	Xylene (Total)	1330-20-7	31	0.5	1
	GC Volatiles	ECY 97-602 NWTPH-Gx	ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	370	50	1
	GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx modified	ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	3,200	30	1
12005	DRO C12-C24 w/Si Gel	n.a.	63	30	1
02211	HRO C24-C40 w/Si Gel	n.a.	490	71	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	71	1

The reverse surrogate, capric acid, is present at <1%.

## General Sample Comments

State of Washington Lab Certification No. C259

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

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	UST VOCs by 8260B - Water	SW-846 8260B	1	P123451AA	12/10/2012 21:37	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P123451AA	12/10/2012 21:37	Emily R Styer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	12339A94A	12/05/2012 17:55	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12339A94A	12/05/2012 17:55	Catherine J Schwarz	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	123400010A	12/10/2012 13:38	Christine E Dolman	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	123400011A	12/12/2012 18:52	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	123400011A	12/05/2012 22:00	Karen L Beyer	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	123400010A	12/05/2012 22:00	Karen L Beyer	1



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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

**Sample Description:** MW-6 Water  
Facility# 351393  
666 Griffin Ave - Enuclaw, WA

LLI Sample # WW 6879096  
LLI Group # 1353039  
Account # 11255

**Project Name:** 351393

Collected: 11/29/2012 12:21 by JB

Chevron

L4310

Submitted: 12/01/2012 09:40

6001 Bollinger Canyon Road

Reported: 12/14/2012 13:53

San Ramon CA 94583

GAE06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene	71-43-2	N.D.	0.5	1	
10943 Ethanol	64-17-5	N.D.	50	1	
10943 Ethylbenzene	100-41-4	N.D.	0.5	1	
10943 Toluene	108-88-3	N.D.	0.5	1	
10943 Xylene (Total)	1330-20-7	N.D.	0.5	1	
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12	n.a.	500	50	1	
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel	n.a.	1,100	30	1	
12005 DRO C12-C24 w/Si Gel	n.a.	79	30	1	
02211 HRO C24-C40 w/Si Gel	n.a.	N.D.	69	1	
12005 HRO C24-C40 w/Si Gel	n.a.	N.D.	69	1	

The reverse surrogate, capric acid, is present at <1%.

## General Sample Comments

State of Washington Lab Certification No. C259

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

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	UST VOCs by 8260B - Water	SW-846 8260B	1	P123451AA	12/10/2012 22:05	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P123451AA	12/10/2012 22:05	Emily R Styer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	12339A94A	12/05/2012 18:21	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12339A94A	12/05/2012 18:21	Catherine J Schwarz	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	123400010A	12/10/2012 14:01	Christine E Dolman	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	123400011A	12/12/2012 16:04	Glorines Suarez-Rivera	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	123400011A	12/05/2012 22:00	Karen L Beyer	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	123400010A	12/05/2012 22:00	Karen L Beyer	1



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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: MW-7 Water  
Facility# 351393  
666 Griffin Ave - Enuclaw, WA

LLI Sample # WW 6879097  
LLI Group # 1353039  
Account # 11255

Project Name: 351393

Collected: 11/29/2012 10:09 by JB

Chevron

L4310

Submitted: 12/01/2012 09:40

Reported: 12/14/2012 13:53

6001 Bollinger Canyon Road  
San Ramon CA 94583

GAE07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethanol		64-17-5	N.D.	.50	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	N.D.	50	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	33	30	1
12005 DRO C12-C24 w/Si Gel		n.a.	N.D.	30	1
02211 HRO C24-C40 w/Si Gel		n.a.	N.D.	70	1
12005 HRO C24-C40 w/Si Gel		n.a.	N.D.	69	1

The reverse surrogate, capric acid, is present at <1%.

## General Sample Comments

State of Washington Lab Certification No. C259

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

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	UST VOCs by 8260B - Water	SW-846 8260B	1	P123451AA	12/10/2012 22:32	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P123451AA	12/10/2012 22:32	Emily R Styer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	12339A94A	12/05/2012 18:47	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12339A94A	12/05/2012 18:47	Catherine J Schwarz	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	123400010A	12/10/2012 14:24	Christine E Dolman	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	123400011A	12/12/2012 16:28	Glorines Suarez-Rivera	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	123400011A	12/05/2012 22:00	Karen L Beyer	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH-Dx 06/97	1	123400010A	12/05/2012 22:00	Karen L Beyer	1



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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

**Sample Description:** MW-11 Water  
Facility# 351393  
666 Griffin Ave - Enumclaw, WA

LLI Sample # WW 6879098  
LLI Group # 1353039  
Account # 11255

**Project Name:** 351393

Collected: 11/29/2012 07:56 by JB

Chevron

L4310

Submitted: 12/01/2012 09:40

Reported: 12/14/2012 13:53

6001 Bollinger Canyon Road  
San Ramon CA 94583

GAE11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethanol		64-17-5	N.D.	50	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273 NWTPH-Gx water C7-C12		n.a.	N.D.	50	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211 DRO C12-C24 w/Si Gel		n.a.	N.D.	31	1
12005 DRO C12-C24 w/Si Gel		n.a.	N.D.	30	1
02211 HRO C24-C40 w/Si Gel		n.a.	N.D.	72	1
12005 HRO C24-C40 w/Si Gel		n.a.	N.D.	70	1
The reverse surrogate, capric acid, is present at <1%.					

## General Sample Comments

State of Washington Lab Certification No. C259

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

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943 UST VOCs by 8260B - Water	SW-846 8260B	1	P123452AA		12/10/2012 13:32	Emily R Styer	1
01163 GC/MS VOA Water Prep	SW-846 5030B	1	P123452AA		12/10/2012 13:32	Emily R Styer	1
08273 NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	12339A94A		12/05/2012 19:13	Catherine J Schwarz	1
01146 GC VOA Water Prep	SW-846 5030B	1	12339A94A		12/05/2012 19:13	Catherine J Schwarz	1
12005 NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH-Dx modified	1	123400010A		12/10/2012 14:46	Christine E Dolman	1
02211 NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	123400011A		12/12/2012 16:52	Glorines Suarez-Rivera	1
02135 Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	123400011A		12/05/2012 22:00	Karen L Beyer	1
12007 NW Dx water w/ 10g column Dx 06/97	ECY 97-602 NWTPH-Dx 06/97	1	123400010A		12/05/2012 22:00	Karen L Beyer	1



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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: QA Water  
Facility# 351393  
666 Griffin Ave - Enuclaw, WA

LLI Sample # WW 6879099  
LLI Group # 1353039  
Account # 11255

Project Name: 351393

Collected: 11/29/2012 07:30

Chevron

L4310

Submitted: 12/01/2012 09:40

6001 Bollinger Canyon Road

Reported: 12/14/2012 13:53

San Ramon CA 94583

GAEQA

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethanol	64-17-5	N.D.	50	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1

## General Sample Comments

State of Washington Lab Certification No. C259

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

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	UST VOCs by 8260B - Water	SW-846 8260B	1	P123472AA	12/12/2012 21:11	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P123472AA	12/12/2012 21:11	Emily R Styer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	12339A94A	12/05/2012 12:48	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12339A94A	12/05/2012 12:48	Catherine J Schwarz	1



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# Analysis Report

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## Quality Control Summary

Client Name: Chevron  
Reported: 12/14/12 at 01:53 PM

Group Number: 1353039

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

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

### Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: P123451AA			Sample number(s): 6879091-6879097					
Benzene	N.D.	0.5	ug/l	93		77-121		
Ethanol	N.D.	50.	ug/l	105		54-149		
Ethylbenzene	N.D.	0.5	ug/l	92		79-120		
Toluene	N.D.	0.5	ug/l	93		79-120		
Xylene (Total)	N.D.	0.5	ug/l	95		77-120		
Batch number: P123452AA			Sample number(s): 6879098					
Benzene	N.D.	0.5	ug/l	87		77-121		
Ethanol	N.D.	50.	ug/l	92		54-149		
Ethylbenzene	N.D.	0.5	ug/l	89		79-120		
Toluene	N.D.	0.5	ug/l	91		79-120		
Xylene (Total)	N.D.	0.5	ug/l	92		77-120		
Batch number: P123472AA			Sample number(s): 6879099					
Benzene	N.D.	0.5	ug/l	88	91	77-121	4	30
Ethanol	N.D.	50.	ug/l	87	94	54-149	8	30
Ethylbenzene	N.D.	0.5	ug/l	89	92	79-120	3	30
Toluene	N.D.	0.5	ug/l	90	95	79-120	6	30
Xylene (Total)	N.D.	0.5	ug/l	92	97	77-120	4	30
Batch number: 12339A94A			Sample number(s): 6879091-6879099					
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	97	97	75-135	0	30
Batch number: 123400010A			Sample number(s): 6879091-6879098					
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	60	63	50-120	4	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 123400011A			Sample number(s): 6879091-6879098					
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	114	102	50-120	11	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: P123451AA	92	93	72-134	1	30			

\*- Outside of specification

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



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# Analysis Report

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## Quality Control Summary

Client Name: Chevron  
Reported: 12/14/12 at 01:53 PM

Group Number: 1353039

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	MS <u>%REC</u>	MSD <u>%REC</u>	MS/MSD <u>Limits</u>	RPD <u>MAX</u>	BKG <u>Conc</u>	DUP <u>Conc</u>	DUP <u>RPD</u>	Dup RPD <u>Max</u>
Ethanol	101	99	53-146	2	30			
Ethylbenzene	92	92	71-134	0	30			
Toluene	93	93	80-125	1	30			
Xylene (Total)	96	96	79-125	0	30			
Batch number: P123452AA			Sample number(s): 6879098 UNSPK: 6879098					
Benzene	91	93	72-134	2	30			
Ethanol	88	91	53-146	4	30			
Ethylbenzene	91	94	71-134	3	30			
Toluene	94	96	80-125	2	30			
Xylene (Total)	94	97	79-125	3	30			

### Surrogate Quality Control

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

Analysis Name: UST VOCs by 8260B - Water

Batch number: P123451AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6879091	101	101	98	94
6879092	103	99	99	97
6879093	101	100	99	97
6879094	102	97	99	97
6879095	102	103	99	97
6879096	103	99	98	98
6879097	103	102	98	95
Blank	101	102	99	96
LCS	99	104	99	97
MS	98	101	99	97
MSD	101	104	99	96
Limits:	80-116	77-113	80-113	78-113

Analysis Name: UST VOCs by 8260B - Water

Batch number: P123452AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6879098	102	101	98	95
Blank	101	101	98	96
LCS	100	103	99	95
MS	102	103	99	95
MSD	103	103	99	97
Limits:	80-116	77-113	80-113	78-113

Analysis Name: UST VOCs by 8260B - Water

Batch number: P123472AA

\*- Outside of specification

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



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# Analysis Report

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## Quality Control Summary

Client Name: Chevron  
Reported: 12/14/12 at 01:53 PM

Group Number: 1353039

### Surrogate Quality Control

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6879099	104	100	98	95
Blank	104	104	96	96
LCS	104	103	97	98
LCSD	103	102	98	97

Limits: 80-116      77-113      80-113      78-113

Analysis Name: NWTPH-Gx water C7-C12  
Batch number: 12339A94A  
Trifluorotoluene-F

6879091	74
6879092	77
6879093	73
6879094	101
6879095	78
6879096	76
6879097	73
6879098	74
6879099	80
Blank	73
LCS	88
LCSD	87

Limits: 63-135

Analysis Name: NWTPH-Dx water w/ 10g Si Gel  
Batch number: 123400010A  
Orthoterphenyl

6879091	70
6879092	67
6879093	74
6879094	74
6879095	70
6879096	65
6879097	78
6879098	69
Blank	69
LCS	83
LCSD	85

Limits: 50-150

Analysis Name: NWTPH-Dx water w/Si Gel  
Batch number: 123400011A  
Orthoterphenyl

6879091	100
6879092	122
6879093	104
6879094	113
6879095	108
6879096	104

\*- Outside of specification

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



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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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## Quality Control Summary

Client Name: Chevron  
Reported: 12/14/12 at 01:53 PM

Group Number: 1353039

### Surrogate Quality Control

6879097	124
6879098	89
Blank	124
LCS	145
LCSD	134

Limits: 50-150

\*- Outside of specification

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

Acct#~~H960~~ Ap#1353039 Sample #6870091-99  
Emp. 11255 CHAIN

③ 8mp 11255

**CHAIN OF CUSTODY FORM**

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

COC 1 of 1

## Explanation of Symbols and Abbreviations

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

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

### U.S. EPA CLP Data Qualifiers:

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

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

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

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

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

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