ENSR INTERNATIONAL

ENSR International
10411 Old Placerville Road
Suite 210
Sacramento, CA 95827-2508
(916) 362-7100
FAX (916) 362-8100
www.ensr.com

July 18, 2005

Mr. Craig Hunt
Regional Water Quality Control Board
North Coast Region
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 94503-2097

RE: Quarterly Groundwater Monitoring Results/ Remedial System Status Report, Second Quarter 2005
Former Unocal Bulk Plant No. 0813
122 Leslie Street, Ukiah California
RWQCB No. 1NMC405

Dear Mr. Hunt:

ENSR Corporation (ENSR) has been authorized by Union Oil Company of California (Unocal) to perform quarterly groundwater monitoring at the site located at 122 Leslie Street, Ukiah, California (**Figure 1**). The site is a former bulk plant with a chain link fence around its perimeter. The locations of former and current site features are illustrated on **Figure 2**. Quarterly groundwater monitoring is intended to evaluate the distribution of petroleum hydrocarbon constituents in groundwater beneath the site. This report summarizes results of the samples collected from the site during the second quarter 2005. A section has been added to this report summarizing the status of the ozone sparging system that began operation in April 2005. The field work was performed in accordance with the field methods and procedures included in **Attachment A**.

Background

Two groundwater monitoring wells (MW-7 and MW-12) were installed as part of a soil and groundwater investigation associated with the former D.Z., Inc. Bulk Plant located adjacent to the former Unocal southern property boundary at 134 Leslie Street. In 1999, a soil and groundwater investigation was conducted that included advancement of on-site soil borings B-1 through B-7. A supplemental evaluation of soil and groundwater that included the advancement of on-site soil boring B-8 and the installation on-site groundwater monitoring wells MW-1 and MW-2 followed. A supplemental evaluation of soil and groundwater beneath and in the vicinity of the site was conducted that included drilling eight soil borings and installing groundwater monitoring wells MW-3 through MW-6 and MW-8 in 2002. A door-to-door groundwater receptor survey within a 500-foot radius of the site and an underground utility search within the vicinity of the site were conducted in 2002.

In a letter dated November 20, 2003, the Regional Water Quality Control Board, North Coast Region (RWQCB) approved a Corrective Action Plan prepared by Environmental Resolutions, Inc. (ERI) dated June 18, 2003. On May 20, 2004, the (RWQCB) verbally approved a remedial design plan (RDP) prepared by ERI and reviewed by ENSR dated February 3, 2004, for the

subject site. The approved remedial options were ozone microsparging (C-Sparge™) and soil vapor extraction (SVE).

In late July 2003, ERI installed the nine C-Sparge/SVE wells associated with the remediation system at the site. Upon review of the completion depths of the C-Sparge/SVE wells, it is ENSR's opinion that the C-Sparge wells may be set too deep to effectively remediate the groundwater beneath the site. In a telephone conversation with the RWQCB on October 14, 2004, ENSR proposed collecting groundwater samples from selected on-site C-Sparge wells for chemical analysis to determine if the groundwater has been impacted at the screened interval depths (approximately 32 to 35 feet below ground surface) of the C-Sparge wells. Based on the analytical results, ENSR submitted a *Revised Remedial Design Plan* dated December 7, 2004. ENSR received a verbal approval from the RWQCB in mid-December 2004 and began implementation of the RDP in early January 2005.

On January 12 and 13, 2005, a geologist from ENSR observed Woodward Drilling Company of Rio Vista, California (C57# 710079) advance soil borings SP-10 through SP-18 each to an approximate depth of 20 feet below ground surface (bgs). The borings were advanced using a truck mounted drill rig using 8.25-inch diameter hollow stem augers. The soil borings were completed as air sparge wells SP-10 through SP-18. Sparge well construction details will be provided in the upcoming Advanced Oxidation Process/ Biostimulation System Installation Report.

A construction subcontractor (WA Craig Inc.) installed the ozone sparging system at the Site in March and April 2005 under ENSR supervision. System operation began on April 18, 2005.

Groundwater Level Measurements

Depth to groundwater levels were measured in monitoring wells MW-1 through MW-9 on May 19, 2005 and are presented in **Table 1.** The ozone sparging system was shut down and groundwater levels were able to stabilize for a period of two hours prior to collecting groundwater elevation measurements. The groundwater elevations were used to construct a groundwater elevation contour map included as **Figure 3**.

The groundwater flow direction was generally southeast with an average hydraulic gradient of approximately 0.006 feet per foot (ft/ft). This is consistent with hydraulic gradients typically observed at the site. The groundwater elevation recorded at MW-2 is inconsistent with the groundwater elevations measured in the surrounding monitoring wells. This is thought to be an erroneous data point due to field error or possibly the result of the influence of the ozone sparging system. Copies of the groundwater sampling information sheets are included in **Attachment B**. A summary of groundwater elevations measured to date is presented in **Table 1**.

Groundwater Sampling and Analytical Results

Groundwater samples were collected from monitoring wells MW-1 through MW-9 on May 19, 2005. Groundwater samples were submitted to Alpha Analytical Laboratories in Ukiah, California (a state-certified laboratory) under chain of custody protocol. Samples were analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX) by EPA Method 8021B, total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 8260, total petroleum hydrocarbons as diesel (TPHd) by EPA Method 8015M, and total lead by EPA Method 200.7 or 200.8. Additionally, the samples taken from MW-1 and MW-2 were analyzed for bromate and bromide by EPA Method 300.0, hexavalent chromium by EPA Method 7199, molybdenum and vanadium by EPA Method 200.7, selenium by EPA Method 200.9, and pH by EPA Method 150.1. These analyses were added to monitor for the formation of dissolved phase metals resulting from the oxidation reaction created by the ozone application.

Cumulative groundwater sampling results are summarized in **Table 1**. A map depicting dissolved concentrations of TPHg, TPHd, and benzene in groundwater for the first quarter 2005 is included as **Figure 4**. A copy of the certified laboratory analytical report with chain-of-custody documentation is included in **Attachment C**.

Ozone Sparging System Description

The Advanced Oxidation Process/ Biostimulation (AOP/B) system is primarily an ozone sparging system with capabilities for enhanced chemical oxidation and biostimulation through the addition of other oxidizing agents and/or nutrients.

The AOP/B system delivers ozonated air from inside a modified freight container (remediation enclosure), to the subsurface via sparge tubing and PVC piping. The ozonated air is delivered through micro porous sparge points installed in the bottom of sparge wells several feet below the water table. Ozonated air is typically delivered at flows of approximately one to five standard cubic feet per minute (SCFM) and at pressures from seven to 25 pounds per square inch (PSI), depending on subsurface conditions. Ozone concentrations in the process flow stream typically range from 1,500 parts per million by volume (ppmv) to 10,000 ppmv.

The AOP/B system is a PLC-automated system capable of operating individual sparge points or several sparge points in any desired sequence. The system is equipped with an ozone sensor that transmits a signal to the PLC which is programmed to shut the system down in the event of an ozone leak within the remediation enclosure. The remediation enclosure is air conditioned and thermally insulated to maintain a constant temperature and protect the electronic components. The thermal insulation also serves as a sound barrier that reduces noise levels outside of the remediation enclosure created by the operation of the air compressor, air conditioner, and cooling fans.

Ozone Sparging System Operation

ENSR personnel performed the AOP/B system startup testing from April 14 to April 18, 2005. Details of the system installation and startup testing will be provided in the upcoming Advanced Oxidation Process/ Biostimulation System and Remediation Well Installation Report. Continuous operation of the AOP/B system began on April 18, 2005.

During startup testing, ENSR personnel established the sparging sequence and flow parameters for the 18 sparge points at the Site. The system currently cycles between sparge points on a 37-minute sequence per cycle. Each sequence begins with 5 minutes of air flow, followed by 30 minutes of air/ozone flow, and followed by two minutes of air flow (to purge the conveyance piping and tubing). The program executes 12 air-ozone-air cycles, shuts down for 15 minutes, and repeats the entire sequence.

Sparging is performed on a sequence between sparge points to minimize the local impacts to the hydraulic gradient and prevent further mobilization of the contaminant plume. The ozone application time interval relates to the approximate time it takes for a consistent flow pattern to develop and to achieve the optimum radius of influence. The system shuts down after the entire sequence to allow the equipment to cool.

Ozone Sparging System Performance

ENSR is documenting the AOP/B system performance with monthly monitoring and sampling at MW-1 and MW-2. Monthly samples have been collected at MW-1 and MW-2 since the system startup in April 2005. These groundwater samples are being analyzed for TPHg, TPHd, and BTEX compounds. Additional analyses were also performed to determine the possible presence of dissolved metals, notably hexavalent chromium (Cr VI). Results for samples collected at MW-1 and MW-2 as part of the remedial status evaluation are provided in **Table 2**. ENSR will continue with monthly sampling at MW-1 and MW-2 through the first six months of system operation.

Conclusions/Recommendations

Elevated levels of TPHd continue to be detected in monitoring wells MW-1 and MW-2, with a maximum concentration of 4,500 micrograms per liter (µg/L) in MW-1. TPHg continues to be detected in monitoring wells MW-1, MW-2, and MW-3 with a maximum concentration of 1,100 µg/L in MW-1. Benzene concentrations were not detected above the laboratory reporting limits in any monitoring wells sampled during the second quarter 2005 event.

Initial results from monthly sampling at MW-1 and MW-2 indicate a slight reduction in contaminant concentrations. ENSR recommends continuing quarterly groundwater monitoring to assess the dissolved concentrations of petroleum hydrocarbon constituents.

Future Work

The next quarterly groundwater monitoring and sampling event is scheduled for August 2005. ENSR will also be monitoring performance of the ozone sparging system with monthly monitoring at MW-2 and providing the North Coast RWQCB with quarterly updates.

Remarks/Signatures

The interpretations in this report represent our professional opinions and are based, in part, on the information supplied by the client. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended. If you have any questions regarding this project, please contact Paul Wadding at (916) 362-7100.

Sincerely,
ENSR Corporation

Paul R. Wadding, R.C.E. 64845
Project Manager

John M. Warren, P.E.
Senior Program Manager

KH/dk

Ref. 06940-264-100

Attachments

cc: Mr. John Frary, Union Oil Company of California

REGISTERED PROFESSIONAL ENGINEER
PAUL R. WADDING
No. 64845
Exp. 6/30/2007
CIVIL
STATE OF CALIFORNIA

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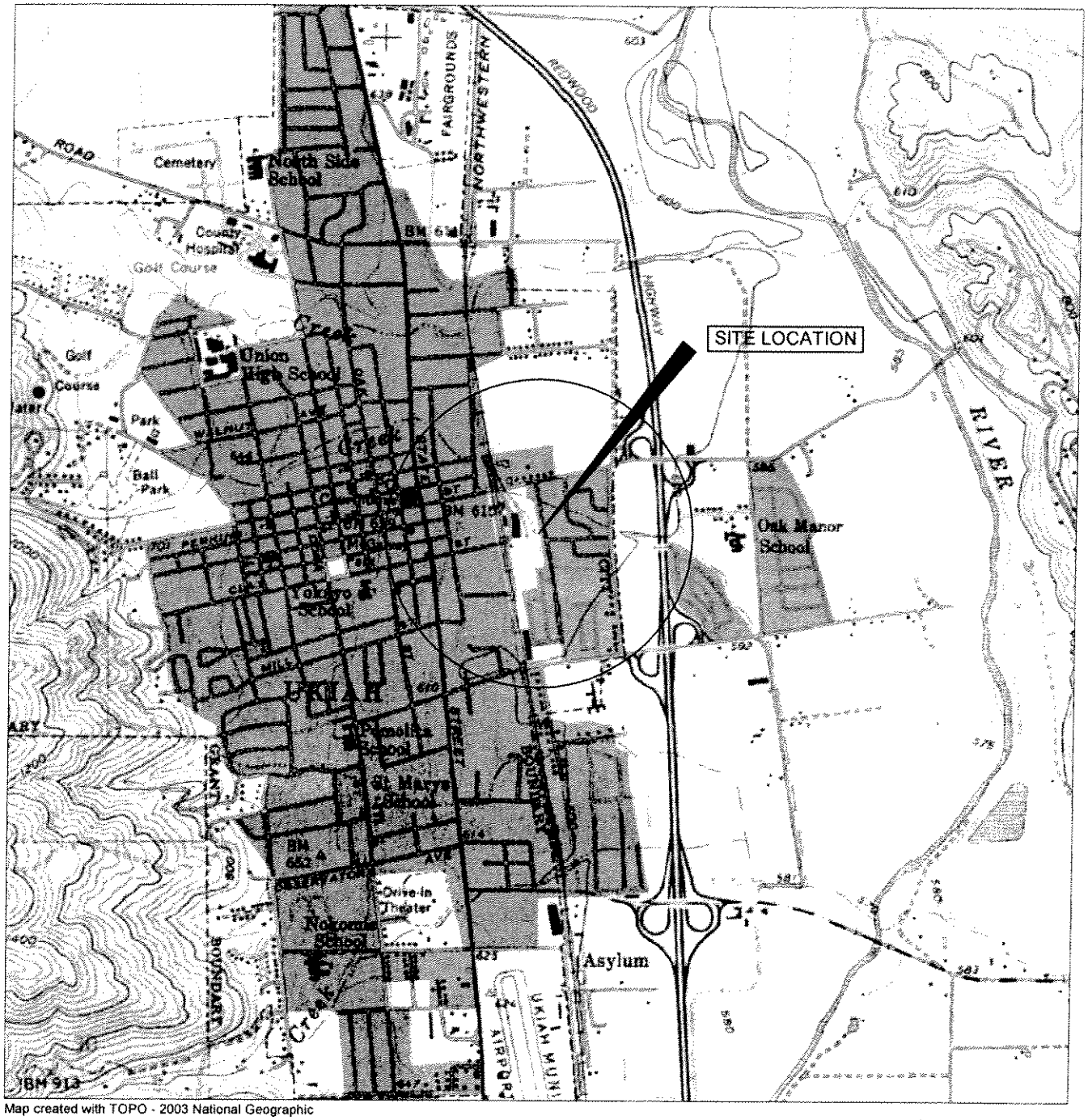

Map created with TOPO - 2003 National Geographic

MAP LOCATION

SOURCE: BASE MAP FROM USGS UKIAH, CA
7.5 MINUTE TOPOGRAPHIC 1975

N

0 2000

Approximate Scale in Feet

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10411 Old Placerville Road Ste 210
Sacramento, California 95827
Phone: (916) 362-7100
Fax: (916) 362-8100
Web: WWW.ENSR.COM

SITE LOCATION MAP

Former UNOCAL Bulk Plant 0813
122 Leslie Street
Ukiah, California

DRAWN BY	DATE	PROJECT NUMBER
G BORCHARDT	12/18/2003	06940-264

FIGURE

1

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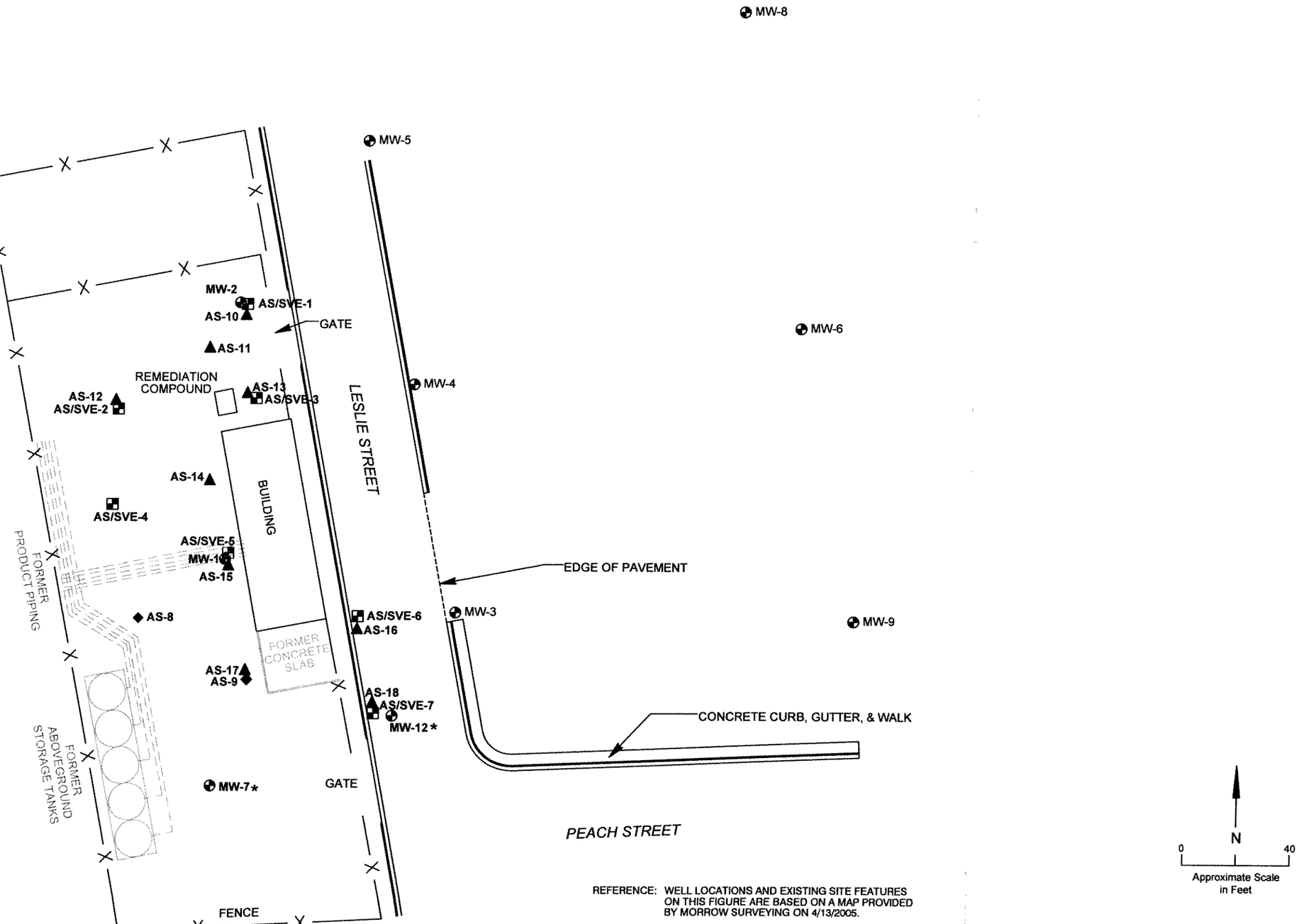

MW-9 GROUNDWATER MONITORING WELL

MW-7* D.Z., INC. GROUNDWATER MONITORING WELL

SPARGE WELL (LOWER AQUIFER)

AS/SVE WELL

AS-10 SPARGE WELL (UPPER AQUIFER)

REFERENCE: WELL LOCATIONS AND EXISTING SITE FEATURES ON THIS FIGURE ARE BASED ON A MAP PROVIDED BY MORROW SURVEYING ON 4/13/2005.

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SITE PLAN

Former UNOCAL Station 0813
122 Leslie Street
Ukiah, California

Quarterly Monitoring Report
2nd Quarter 2005

DRAWN BY	REVIEWED BY	DATE	PROJECT NUMBER
P RHOADS	W SPETH	6/24/2005	06940-264

FIGURE 2

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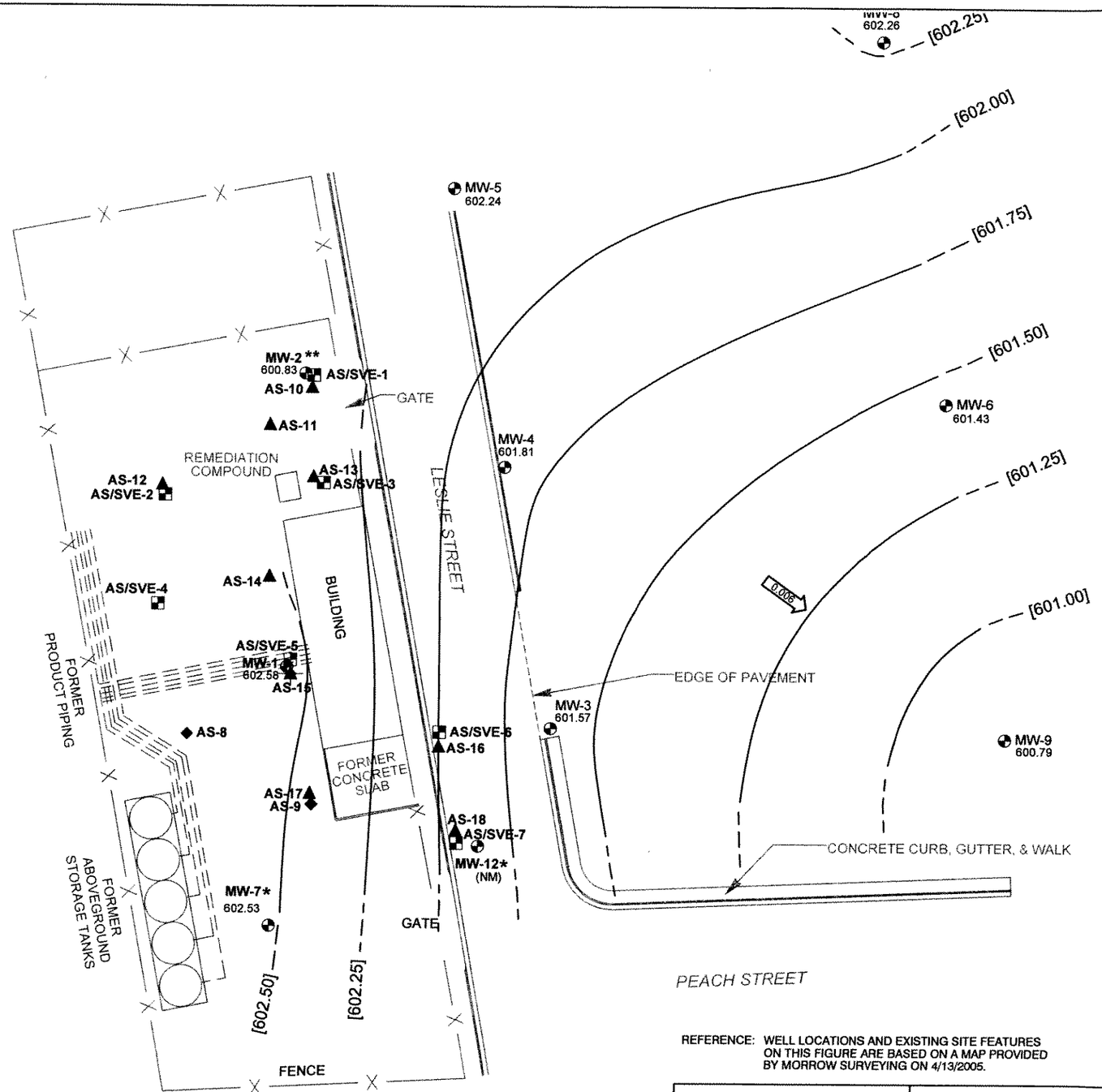

REFERENCE: WELL LOCATIONS AND EXISTING SITE FEATURES ON THIS FIGURE ARE BASED ON A MAP PROVIDED BY MORROW SURVEYING ON 4/13/2005.

MW-9	GROUNDWATER MONITORING WELL
MW-7*	D.Z., INC. GROUNDWATER MONITORING WELL
◆	SPARGE WELL (LOWER AQUIFER)
■	AS/SVE WELL
▲ AS-10	SPARGE WELL (UPPER AQUIFER)
601.89	GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
[601.00]	GROUNDWATER ELEVATION CONTOUR
0.006	APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT IN Ft/Ft
**	NOT USED IN CONTOURING

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Sacramento, California 95827
Phone: (916) 362-7100
Fax: (916) 362-8100
Web: WWW.ENSR.COM

GROUNDWATER ELEVATION CONTOUR MAP MAY 19, 2005

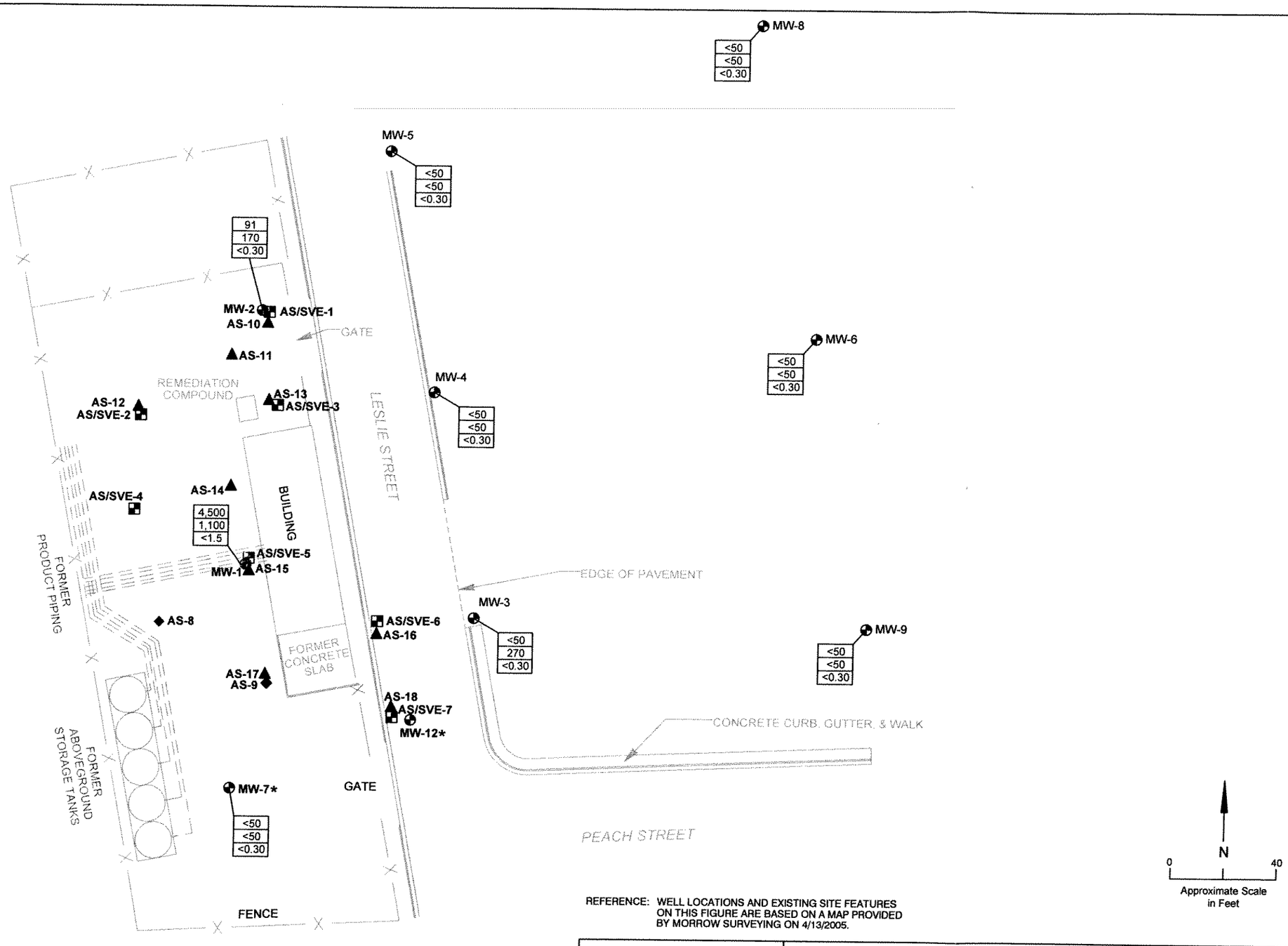
Former UNOCAL Station 0813
122 Leslie Street
Ukiah, California

Quarterly Monitoring Report
2nd Quarter 2005

DRAWN BY	REVIEWED BY	DATE	PROJECT NUMBER
P RHOADS		6/24/2005	06940-264

FIGURE 3

\\03DCSACRAMENTO\Projects\Projects\06940\0813-264\Working\CAD\2q05\0813 GW ELEV 2Q05 revised 7-14-05.dwg, 7/14/2005 12:05:26 PM



MW-9 GROUNDWATER MONITORING WELL

MW-7 * D.Z., INC. GROUNDWATER MONITORING WELL

SPARGE WELL (LOWER AQUIFER)

AS/SVE WELL

AS-10 SPARGE WELL (UPPER AQUIFER)

<50	TPHd
<50	TPHg
<0.50	BENZENE

NOTE: ALL CONCENTRATIONS IN MICROGRAMS PER LITER

REFERENCE: WELL LOCATIONS AND EXISTING SITE FEATURES ON THIS FIGURE ARE BASED ON A MAP PROVIDED BY MORROW SURVEYING ON 4/13/2005.

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PETROLEUM HYDROCARBON CONCENTRATION MAP MAY 19, 2005

Former UNOCAL Station 0813
122 Leslie Street
Ukiah, California

Quarterly Monitoring Report
2nd Quarter 2005

DRAWN BY	REVIEWED BY	DATE	PROJECT NUMBER
P RHOADS	W SPETH	6/24/2005	06940-264

FIGURE 4

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Table 1
Groundwater Monitoring Data and Analytical Results
Former Unocal Bulk Plant No. 0813
122 Leslie Street
Ukiah, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	T. Lead (ug/L)	TOG (ug/L)	PRE-PURGE D.O. (mg/L)
MW-1												
607.93	08/07/02[1]	16.11	591.82	1,400	370[2]	<0.50	<0.50	1.3	<0.50	<75	<5,000	--
	11/13/02	17.35	590.58	1,500	740	<0.50	<0.50	6.7	<0.50	<75	<5,000	--
	02/28/03	7.26	600.67	1,100	89	<0.50	<0.50	<0.50	<0.50	<75	<5,000	--
	04/30/03	4.29	603.64	570	640	<0.50	<0.50	1.8	<0.50	<75	<5,000	--
	08/21/03	13.93	594.00	690	180	1.5	<0.50	0.87	2.1	<50	<5,000	--
	11/13/03	20.25	587.68	3,100	410	<0.50	<0.50	0.64	<0.50	<75	<5,000	--
	03/15/04	6.65	601.28	4,900	230[4]	<0.50	<0.50	<0.50	2.0	7.6	<5,000	--
	05/19/04	10.50	597.43	8,600	720	<0.50	<0.50	3.8	3.7	9.0	5,000	--
	08/11/04	16.81	591.12	25,000	470[4]	1.4	<1.0[6]	2.2	4.5	15	<5,000	--
	11/11/04	17.73	590.20	5,500	750[4]	1.3	4.1	11	6.4	6.8	<5,000	--
	02/11/05	7.67	600.26	11,000	610[4]	<0.50	0.62	2.5	3.4	<5.0	<5,000	--
608.62	**05/19/05**	**6.04**	**602.58**	**4,500**	**1,100**	**<1.5**	**<1.5**	**<2.5**	**<2.5**	**5.4**	**--**	**--**
MW-2												
607.78	08/07/02[1]	17.35	590.43	260	170[2]	<0.50	<0.50	0.91	<0.50	<75	<5,000	--
	11/13/02	20.23	587.55	2,100	1,200	<1.0	<1.0	19	<1.0	<75	<5,000	--
	02/28/03	7.55	600.23	1,500	330	<0.50	<0.50	2.4	0.57	<75	<5,000	--
	04/30/03	4.87	602.91	1,500	<50	<0.50	<0.50	<0.50	<0.50	<75	<5,100	--
	08/21/03	14.54	593.24	3,100[2]	160	<0.50	0.60	1.1	4.0	<50	<5,000	--
	11/13/03	21.04	586.74	450	160	<0.50	<0.50	0.67	<0.50	<75	<5,000	--
	03/15/04	7.13	600.65	500	57[4]	<0.50	<0.50	<0.50	<1.0	8.4	<5,000	--
	05/19/04	10.77	597.01	640	72	<0.50	<0.50	1.7	2.9	6.9	<5,000	--
	08/11/04	18.00	589.78	1,300	69[4]	<0.50	<0.50	0.88	2.0	12	<5,000	--
	11/11/04	20.08	587.70	240	94[4]	<0.50	0.99	2.0	2.5	<5.0	<5,000	--
	02/11/05	7.37	600.41	340	84[4]	<0.50	0.87	1.5	<1.0	<5.0	<5,000	--
608.56	**05/19/05**	**7.73**	**600.83**	**91**	**170**	**<0.30**	**<0.30**	**<0.50**	**<0.50**	**2.2**	**--**	**--**

Table 1
Groundwater Monitoring Data and Analytical Results
Former Unocal Bulk Plant No. 0813
122 Leslie Street
Ukiah, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	T. Lead (ug/L)	TOG (ug/L)	PRE-PURGE D.O. (mg/L)
MW-3												
607.14	08/07/02[1]	17.29	589.85	28,000	1,300[2]	<0.50	<0.50	7.8	<0.50	360	5,300	--
	11/13/02	20.73	586.41	9,100	570	<5.0	<5.0	<5.0	<5.0	<75	5,400	--
	02/28/03	7.78	599.36	220	<50	<0.50	<0.50	<0.50	<0.50	<75	<5,000	--
	04/30/03	5.04	602.10	420	56	<0.50	<0.50	1.0	<0.50	<75	<5,000	--
	08/21/03	14.45	592.69	460	71	1.6	<0.50	<0.50	1.1	<50	<5,000	--
	11/13/03	21.45	585.69	1,300	260	2.4	<0.50	<0.50	<0.50	<75	<5,000	--
	03/15/04	7.38	599.76	360	87	0.71	<0.50	<0.50	<1.0	<5.0	<5,000	--
	05/19/04	10.90	596.24	430	110	<0.50	0.74	0.99	<1.0	<5.0	<5,000	--
	08/11/04	17.88	589.26	1,200	140[4]	<0.50	0.56	1.3	2.4	<5.0	<5,000	--
	11/11/04	20.30	586.84	1,900	310[4]	0.77	1.1	5.6	4.5	<5.0	<5,000	--
	02/11/05	7.64	599.50	230	<50	<0.50	0.59	0.82	<1.0	<5.0	<5,000	--
607.88	**05/19/05**	**6.31**	**601.57**	**<50**	**270**	**<0.30**	**<0.30**	**<0.50**	**<0.50**	**<2.0**	--	--
MW-4												
607.29	08/07/02[1]	17.16	590.13	69	<50	<0.50	<0.50	<0.50	<0.50	540	<5,000	--
	11/13/02	20.35	586.94	130	<50	<0.50	<0.50	<0.50	<0.50	<75	<5,000	--
	02/28/03	7.49	599.80	240	<50	<0.50	<0.50	<0.50	<0.50	<75	<5,000	--
	04/30/03	4.82	602.47	240	<50	<0.50	<0.50	<0.50	<0.50	<75	<5,100	--
	08/21/03	14.54	592.75	120[2]	<50	<0.50	<0.50	<0.50	<0.50	<50	<5,000	--
	11/13/03	21.25	586.04	NS*	NS*	NS*	NS*	NS*	NS*	NS*	NS*	NS*
	03/15/04	7.02	600.27	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	--
	05/19/04	10.60	596.69	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	--
	08/11/04	17.77	589.52	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	--
	11/11/04	20.00	587.29	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	--
	02/11/05	7.28	600.01	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	--
608.07	**05/19/05**	**6.26**	**601.81**	**<50**	**<50**	**<0.30**	**<0.30**	**<0.50**	**<0.50**	**<2.0**	--	--

Table 1
Groundwater Monitoring Data and Analytical Results
Former Unocal Bulk Plant No. 0813
122 Leslie Street
Ukiah, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	T. Lead (ug/L)	TOG (ug/L)	PRE-PURGE D.O. (mg/L)
MW-5												
607.64	08/07/02[1]	17.33	590.31	4,100	210[2]	<0.50	<0.50	<0.50	<0.50	310	<5,000	--
	11/13/02	20.38	587.26	1,100	74	<0.50	<0.50	<0.50	<0.50	<75	<5,000	--
	02/28/03	7.39	600.25	6,300	<50	<0.50	<0.50	<0.50	<0.50	<75	11,000	--
	04/30/03	4.81	602.83	3,700	<50	<0.50	<0.50	<0.50	<0.50	<75	6,600	--
	08/21/03	14.44	593.20	880[2]	<50	<0.50	<0.50	<0.50	<0.50	<50	<5,000	--
	11/13/03	21.15	586.49	30,000	61	<0.50	<0.50	<0.50	<0.50	130	7,300	--
	03/15/04	6.92	600.72	1,600[5]	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	--
	05/19/04	10.58	597.06	<50	<50	<0.50	<0.50	0.53	1.0	<5.0	17,000	--
	08/11/04	17.92	589.72	8,800[5]	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	--
	11/11/04	20.02	587.62	4,800[5]	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	--
	02/11/05	7.15	600.49	<50	<50	<0.50	<0.50	<0.50	<1.0	5.3	<5,000	--
608.40	**05/19/05**	**6.16**	**602.24**	**<50**	**<50**	**<0.30**	**<0.30**	**<0.50**	**<0.50**	**<2.0**	--	--
MW-6												
606.60	08/07/02[1]	16.75	589.85	<50[3]	<50	<0.50	<0.50	<0.50	<0.50	260	<5,000	--
	11/13/02	20.57	586.03	<50	<50	<0.50	<0.50	<0.50	<0.50	<75	<5,000	--
	02/28/03	7.10	599.50	<50	<50	<0.50	<0.50	<0.50	<0.50	<75	<5,000	--
	04/30/03	4.70	601.90	72	<50	<0.50	<0.50	<0.50	<0.50	<75	<5,200	--
	08/21/03	13.88	592.72	<50	<50	<0.50	<0.50	<0.50	<0.50	<50	<5,000	--
	11/13/03	21.00	585.60	230	<50	<0.50	<0.50	<0.50	<0.50	190	<5,000	3.08
	03/15/04	6.66	599.94	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	--
	05/19/04	10.15	596.45	<50	<50	<0.50	0.56	0.73	2.0	<5.0	<5,000	--
	08/11/04	17.32	589.28	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	--
	11/11/04	19.72	586.88	<50	<50	<0.50	<0.50	<0.50	<1.0	8.3	<5,000	--
	02/11/05	6.94	599.66	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	--
607.36	**05/19/05**	**5.93**	**601.43**	**<50**	**<50**	**<0.30**	**<0.30**	**<0.50**	**<0.50**	**13**	--	--

Table 1
Groundwater Monitoring Data and Analytical Results
Former Unocal Bulk Plant No. 0813
122 Leslie Street
Ukiah, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	T. Lead (ug/L)	TOG (ug/L)	PRE-PURGE D.O. (mg/L)
MW-7												
607.29	08/07/02[1]	15.50	591.79	56	<50	<0.50	<0.50	<0.50	<0.50	<75	<5,000	--
	11/13/02	16.58	590.71	<50	<50	<0.50	<0.50	<0.50	<0.50	<75	<5,000	--
	02/28/03	6.93	600.36	66	<50	<0.50	<0.50	<0.50	<0.50	<75	<5,000	--
	04/30/03	3.77	603.52	64	<50	<0.50	<0.50	<0.50	<0.50	<75	<5,200	--
	08/21/03	13.39	593.90	<50	<50	<0.50	<0.50	<0.50	<0.50	<50	<5,000	--
	11/13/03	19.60	587.69	<50	<50	<0.50	<0.50	<0.50	<0.50	<75	<5,000	0.83
	03/15/04	6.36	600.93	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	--
	05/19/04	10.10	597.19	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	--
	08/11/04	16.18	591.11	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	--
	11/11/04	17.05	590.24	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	--
	02/11/05	6.72	600.57	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	--
608.07	**05/19/05**	**5.54**	**602.53**	**<50**	**<50**	**<0.30**	**<0.30**	**<0.50**	**<0.50**	**<2.0**	**--**	**--**
MW-8												
606.53	08/07/02[1]	16.30	590.23	<50[3]	<50	<0.50	<0.50	<0.50	<0.50	190	<5,000	--
	11/13/02	20.15	586.38	<50	<50	<0.50	<0.50	<0.50	<0.50	<75	<5,000	--
	02/28/03	6.18	600.35	<50	<50	<0.50	<0.50	<0.50	<0.50	<75	<5,000	--
	04/30/03	3.98	602.55	59	<50	<0.50	<0.50	<0.50	<0.50	<75	<5,000	--
	08/21/03	13.33	593.20	<50	<50	<0.50	0.56	<0.50	<0.50	<50	<5,000	--
	11/13/03	20.60	585.93	140	<50	<0.50	<0.50	<0.50	<0.50	<75	<5,000	--
	03/15/04	5.72	600.81	<50	<50	<0.50	<0.50	<0.50	<0.50	<5.0	<5,000	--
	05/19/04	9.40	597.13	<50	<50	<0.50	<0.50	0.66	1.9	<5.0	<5,000	--
	08/11/04	16.85	589.68	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	--
	11/11/04	19.07	587.46	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	--
	02/11/05	6.03	600.50	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	--
607.30	**05/19/05**	**5.04**	**602.26**	**<50**	**<50**	**<0.30**	**<0.30**	**<0.50**	**<0.50**	**4.9**	**--**	**--**

Table 1
Groundwater Monitoring Data and Analytical Results
Former Unocal Bulk Plant No. 0813
122 Leslie Street
Ukiah, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	T. Lead (ug/L)	TOG (ug/L)	PRE-PURGE D.O. (mg/L)
MW-9	08/21/03[1]	14.25	592.42	<50	<50	<0.50	<0.50	<0.50	<0.50	<50	<5,000	1.7
606.67	11/13/03	21.45	585.22	55	<50	<0.50	<0.50	<0.50	<0.50	79	<5,000	--
	03/15/04	7.50	599.17	<50	<50	<0.50	<0.50	<0.50	<0.50	<5.0	<5,000	--
	05/19/04	10.78	595.89	<50	<50	0.94	0.77	0.95	3.2	<5.0	<5,000	--
	08/11/04	17.67	589.00	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	--
	11/11/04	20.23	586.44	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<5,000	--
	02/11/05	7.77	598.90	<50	<50	<0.50	<0.50	<0.50	<0.50	<5.0	<5,000	--
607.44	**05/19/05**	**6.65**	**600.79**	**<50**	**<50**	**<0.30**	**<0.30**	**<0.50**	**<0.50**	**7.4**	--	--
MW-12												
607.33	NOT MONITORED/NOT SAMPLED			--	--	--	--	--	--	--	--	--
608.08	**05/19/05**	**NOT MONITORED/NOT SAMPLED**										
Trip Blank												
QA	08/07/02	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	--	--	--
	11/13/02	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	--	--	--
	02/28/03	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	--	--	--
	04/30/03	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	--	--	--
	08/21/03	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	--	--	--
	11/13/03	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	--	--	--
	05/19/04	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	--	--	--
	08/11/04	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--	--
	11/11/04	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--	--
	02/11/05	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--	--
	05/19/05	--	--	--	**<50**	**<0.30**	**<0.30**	**<0.50**	**<0.50**	--	--	--

Table 1
Groundwater Monitoring Data and Analytical Results
Former Unocal Bulk Plant No. 0813
122 Leslie Street
Ukiah, California

EXPLANATIONS:

TOC = Top of Casing
DTW = Depth to Water
(ft.) = Feet
GWE = Groundwater Elevation
(msl) = Mean sea level
TPHd = Total Petroleum Hydrocarbons as Diesel
NS* Unable to access well due to parked car

TPHg = Total Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
T. Lead = Total Lead

TOG = Total Oil and Grease
(ppb) = Parts per billion
-- = Not Measured/Not Analyzed
QA = Quality Assurance/Trip Blank
D.O. = Dissolved Oxygen
mg/L = Milligrams per liter

* TOC elevations were re-surveyed on April 13, 2005 by Morrow Surveying. Historically, TOC elevation for MW-9 was surveyed September 4, 2003, by Morrow Surveying, Inc. referencing the previous benchmark. TOC elevations are referenced to msl, and were surveyed June 24, 2002, by Morrow Surveying, Inc. The benchmark used for the survey was a City of Ukiah benchmark.

1 Well development performed.

3 Laboratory report indicates no sample remained for re-extraction.

4 Although sample contains compounds in the retention time range associated gasoline, the chromatogram was not consistent with the expected chromatographic pattern or "fingerprint". However, the reported concentration is based on gasoline.

5 Although sample contains compounds in the retention time range associated diesel, the chromatogram was not consistent with the expected chromatographic pattern or "fingerprint". However, the reported concentration is based on diesel.

6 The sample was diluted due to the presence of high levels of non-target analytes resulting in elevated reporting limits.

Table 2
Ozone Sparging System Monitoring
Data and Analytical Results for MW-1 and MW-2
Former Unocal Bulk Plant No. 0813
122 Leslie Street
Ukiah, California

WELL ID/ TOC*(ft.)	DATE	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	Cr+6 (ug/L)
MW-1								
608.62	04/14/05	4,700	1,100	ND	ND	ND	ND	ND
	04/20/05	260	160	ND	ND	ND	ND	ND
	05/09/05	97	540	ND	ND	ND	ND	ND
	05/19/05	4,500	1,100	ND	ND	ND	ND	ND
	06/17/05	180	220	ND	ND	ND	ND	ND
MW-2								
608.56	04/14/05	79	ND	ND	ND	ND	ND	ND
	04/20/05	2,500	290	ND	ND	ND	ND	ND
	05/09/05	310	190	ND	ND	ND	ND	ND
	05/19/05	91	170	ND	ND	ND	ND	ND
	06/17/05	260	ND	ND	ND	ND	ND	0.1

-- = Not sampled

ND = Non-detect

Note: Samples collected as part of the monthly ozone system monitoring sampling were collected as grab samples. The sample collected on 5/19/05 was collected as part of the quarterly groundwater monitoring program and was collected after a three-case volume purge.

ATTACHMENT A

FIELD METHODS AND PROCEDURES

FIELD METHODS AND PROCEDURES

The following section describes field procedures that are to be used by ENSR personnel in the performance of the tasks involved with this project.

1. HEALTH AND SAFETY PLAN

Fieldwork performed by ENSR and ENSR's subcontractors at the site will be conducted according to guidelines established in a Health And Safety Plan (HASP). The HASP is a document that describes the hazards that may be encountered in the field and specifies protective equipment, work procedures and emergency information. A copy of the HASP will be at the site and available for reference by appropriate parties during work at the site.

2. GROUNDWATER DEPTH ASSESSMENT

A water/product interface probe is used to assess the liquid-phase hydrocarbons (LPH) thickness, if present, and a water level indicator is used to measure the groundwater depth in monitoring wells that do not contain LPH. Depth to groundwater or LPH is measured from a datum point at the top of each monitoring well casing. The datum point is typically a notch cut in the north side of the casing edge. If a water level indicator is used, the tip is subjectively analyzed for LPH sheen.

3. SUBJECTIVE ANALYSIS OF GROUNDWATER

Prior to purging, a water sample is collected from the monitoring well for subjective assessment. The sample is retrieved by gently lowering a clean, disposable bailer to approximately one-half the bailer length past the air/liquid interface. The bailer is then retrieved and the sample contained within the bailer is examined for floating LPH and the appearance of a LPH sheen.

4. MONITORING WELL SAMPLING

Monitoring wells are purged using a pump or bailer until pH, temperature and conductivity of the purge water has stabilized and a minimum of three well volumes of water has been removed. The purge water is placed in 55-gallon drums and temporarily stored on-site pending evaluation of disposal options. If three well volumes cannot be removed in one-half an hour's time, the well is allowed to recharge to 80 percent of original level. After recharging, a groundwater sample is then removed from each of the wells using a pump or disposable bailer. The water sample is collected, labeled and handled according to the Quality Assurance Plan. Water generated during the monitoring event is disposed of according to the accepted regulatory method pertaining to the site.

5. QUALITY ASSURANCE PLAN

This section describes the field and analytical procedures to be followed by ENSR throughout the investigation.

5.1 General Sample Collection and Handling Procedures

Proper collection and handling are essential to ensure the quality of a sample. Each sample will be collected in the appropriate container, preserved correctly for the intended analysis and stored, prior to analysis, for no longer than the maximum allowable holding time.

Details on the procedures for collection and handling of soil samples from this project can be found in previous sections.

5.2 Sample Identification and Chain-of-Custody Procedures

Sample identification and chain-of-custody procedures ensure sample integrity and document sample possession from the time of collection to its ultimate disposal. Each sample container submitted for analysis will have a label affixed to identify the job number, sampler, date and time of sample collection and a sample number unique to that sample. During soil sampling, this information, in addition to a description of the sample, field measurements made, sampling methodology, names of on-site personnel and any other pertinent field observations will be recorded on the borehole log or in the field records.

ATTACHMENT B

GROUNDWATER SAMPLING INFORMATION DATA

ENSR

GROUNDWATER/LIQUID LEVEL DATA
(measurements in feet below TOC)

Site Address: 122 Leslie St., Ukiah, CA
ENSR No. 06940-264-100
Unocal No. 813

Date: 5/19/05
Recorded by:

Sampling Order/ Well No.	Time Opened	CGI	PID	O2	Time Measured	Depth to Gr. Water	Measured Total Depth	Depth to Product	Product Thickness	Comments (TOC/TOB) (product skimmer in well)
MW-9	15:32	N/A	N/A	N/A	15:35	6.65	24.61	N/A	N/A	TAKE D.O. READING
MW-6	15:41	↓	↓	↓	15:44	5.93	23.41	↓	↓	
MW-8	15:47	↓	↓	↓	15:49	5.64	24.79	↓	↓	
MW-7	1603	↓	↓	↓	1607	5.[illegible]4	24.58	↓	↓	
MW-4	15:58	↓	↓	↓	16:01	6.24	25.91	↓	↓	
MW-3	16:04	↓	↓	↓	16:06	6.31	25.91	↓	↓	
MW-2	1601	↓	↓	↓	1609	7.73	24.29	↓	↓	under pressure cap popped off
MW-5	15:53	↓	↓	↓	15:56	6.16	23.39	↓	↓	
MW-1	1605	↓	↓	↓	1609	6.29	24.11	↓	↓	~~under pressure cap popped~~
MW-12	NA	NA	NA	NA	NA	NA	NA	↓	↓	DO NOT SAMPLE

Notes:

ENSR

GROUNDWATER SAMPLING DATA SHEET
Site Address: 122 Leslie St., Ukiah, CA
ENSR No. 06940-264-100
Unocal No. 813

Well/Piezo ID: **MW-1**

Well [X] Piezometer [ ]

Field Tech(s): Heather Tausher

Weather Conditions: Sunny, breezy

Well Purging:
Date Purged: 5/19/05
Purge Method: Disposable bailer/other bailed

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 24.11 ft from TOC
Depth to Water: 6.04 ft from TOC
Water Column: 18.07 ft.
Water Column Volume: 2.89 gal (WC X VF)

Volume Factor (VF)	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

(9.6)

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 6.34 actual

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity ~~(uS/cm)~~	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
19:00	0 0.5	7.60	198.0	17.15	30.9	7.42	157.0	clear	no odor	
19:04	1 2.89	8.18	64.0	16.53	31.3	7.24	935.0	clear	~~no~~ odor	
19:09	2 5.89	7.81	-15.0	16.52	30.1	7.06	-5.0	cloudy	odor	
19:13	3 8.67	8.19	-24.0	16.44	28.9	7.00	-5.0	cloudy	odor	
	4									

Sample Collection:
Date Sampled: 5/19/05
Sampling Method: Disposable Bailer/Other Bailed
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-1	3	40-mL VOA	Ice/HCl	TPHg / BTEX (8260)	19:23
MW-1	1	1-L Amber	None	TRPH (1664)	
MW-1	1	250-mL Amber	None	TPHd (8015M)	
MW-1	1	500-mL Poly	HNO3	Total Lead (6010)	
MW-1	1	250-mL Amber	None	Bromate (300)	
MW-1	1	500-mL Poly	None	Bromide (300.0)	
MW-1	1	500-mL Poly	None	Chromium VI (7199) / pH (150.1)	
MW-1	1	500-mL Poly	HNO3	Molybdenum (200.7) / Selenium (200.9) / Vanadium (200.7)	

Comments (8.67)

Signature [signature] Date 5/19/05

ENSR

GROUNDWATER SAMPLING DATA SHEET
Site Address: 122 Leslie St., Ukiah, CA
ENSR No. 06940-264-100
Unocal No. 813

Well/Piezo ID: **MW-2**

Well [X] Piezometer [ ]

Well Purging:
Date Purged: 5-19-05
Purge Method: Disposable bailer/other Bailed

Field Tech(s): Tanya Ahoual
Weather Conditions: Sunny 70's

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 25.91 ft from TOC
Depth to Water: 7.73 ~~8.29~~ ft from TOC
Water Column: 16.56 ~~7.73~~ ft.
Water Column Volume: 2.64 ~~16~~ gal (WC X VF)

Volume	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
Factor (VF)	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

(11.04)

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 8.22 actual

Time		Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
1934	0	1.0	7.51	209	16.47	0.26	6.45	999	Greyish	Oil sheen	
1937	1	3.0	4.49	209	16.32	0.28	6.41	999		"	"
1942	2	5.8	6.04	201	16.04	0.30	6.50	999		"	"
1947	3	8.0	5.81	200	16.04	0.29	6.49	999			
	4										

Sample Collection:
Date Sampled: 5/19/05
Sampling Method: Disposable Bailer/Other Bailed
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW2	3	40-mL VOA	Ice/HCl	TPHg / BTEX (8260)	1949
	1	1-L Amber	None	TRPH (1664)	
	1	250-mL Amber	None	TPHd (8015M)	
	1	500-mL Poly	HNO3	Total Lead (6010)	
	1	250-mL Amber	None	Bromate (300)	
	1	500-mL Poly	None	Bromide (300.0)	
	1	500-mL Poly	None	Chromium VI (7199) / pH (150.1)	
	1	500-mL Poly	HNO3	Molybdenum (200.7) / Selenium (200.9) / Vanadium (200.7)	

Comments 7.9

Signature Tanya J Ahoual Date 5/19/05

ENSR

GROUNDWATER SAMPLING DATA SHEET
Site Address: 122 Leslie St., Ukiah, CA
ENSR No. 06940-264-100
Unocal No. 813

Well/Piezo ID: **MW-3**

Well ☒ Piezometer ☐

Field Tech(s): Heather Tauscher

Weather Conditions: Sunny, breezy

Well Purging:
Date Purged: 5/19/05
Purge Method: Disposable bailer/other Bailed

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 24.29 ft from TOC
Depth to Water: 16.31 ft from TOC
Water Column: 19.6 ft.
Water Column Volume: 3.1 gal (WC X VF)

Volume Factor (VF)				
	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

10.23

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 6.86 actual

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity ~~(uS/cm)~~ S/M	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
18:13	0 0.5	8.08	221.0	18.65	40.0	7.31	52.9	clear	no odor	
18:18	1 3.1	9.44	221.0	17.04	40.5	7.27	196.0	clear	no odor	
18:22	2 6.2	8.06	151.0	16.99	41.6	7.08	216.0	cloudy	slight odor	
18:28	3 9.4	8.17	87.0	16.75	42.3	7.09	239.0	cloudy	slight odor	
	4									

Sample Collection:
Date Sampled: 5/19/05
Sampling Method: Disposable Bailer/Other Bailed
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-3	3	40-mL VOA	Ice/HCl	TPHg (8015), BTEX (8021)	18:39
MW-3	1	1-L Amber	None	TRPH (1664)	18:39
MW-3	1	250-mL Amber	None	TPHd (8015M)	18:39
MW-3	1	500-mL Poly	HNO3	Total Lead (6010)	18:39

(9.4)

Comments

Signature [signature] Date 5/19/05

ENSR

GROUNDWATER SAMPLING DATA SHEET
Site Address: 122 Leslie St., Ukiah, CA
ENSR No. 06940-264-100
Unocal No. 813

Well/Piezo ID: **MW-4**

Well ☒ Piezometer ☐

Field Tech(s): Heather Tausher

Weather Conditions: Sunny, breezy

Well Purging:
Date Purged: ~~pvc~~ 5/19/05
Purge Method: Disposable bailer/other bailed

Casing Material: pvc
Well Diameter: 2.00 in.
Total Depth: 25.91 ft from TOC
Depth to Water: 6.26 ft from TOC
Water Column: 19.45 ft.
Water Column Volume: 3gal gal (WC X VF)

Volume	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
Factor (VF)	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

(10.19)

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 6.37 actual

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity ~~(uS/cm)~~ S/M	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
17:32	0 0.5	6.63	211.0	17.91	34.4	6.39	93.9	clear	no odor	
17:38	1 3.1	8.57	210.0	16.57	32.6	6.59	387.0	clear	no odor	
17:43	2 6.2	8.90	208.0	16.72	30.9	6.61	462.0	clear	no odor	
17:48	3 9.4	8.34	208.0	17.35	30.6	6.58	574.0	little cloudy	no odor	
	4									

Sample Collection:
Date Sampled: 5/19/05
Sampling Method: Disposable Bailer/Other Bailed
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-4	3	40-mL VOA	Ice/HCl	TPHg (8015), BTEX (8021)	17:54
MW-4	1	1-L Amber	None	TRPH (1664)	17:54
MW-4	1	250-mL Amber	None	TPHd (8015M)	17:54
MW-4	1	500-mL Poly	HNO3	Total Lead (6010)	17:54

Comments (7.4)

Signature [signature] Date 5/19/05

ENSR

GROUNDWATER SAMPLING DATA SHEET
Site Address: 122 Leslie St., Ukiah, CA
ENSR No. 06940-264-100
Unocal No. 813

Well/Piezo ID: **MW-5**

Well [X] Piezometer [ ]

Field Tech(s): Heather Tausher

Weather Conditions: Sunny, breezy

Well Purging:
Date Purged: 5/19/05
Purge Method: Disposable bailer/other Bailed

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 23.39 ft from TOC
Depth to Water: 6.16 ft from TOC
Water Column: 17.23 ft.
Water Column Volume: 2.75 gal (WC X VF)

Volume	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
Factor (VF)	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 6.22 actual (9.63)

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity ~~(uS/cm)~~ S/m	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
16:50	0 0.5	7.27	165.0	17.82	24.8	6.18	218.0	clear	no odor	
16:56	1 2.75	9.04	105.0	16.85	25.5	6.38	410.0	~~clear~~	no odor	flocties
17:02	2 5.75	8.64	55.0	16.73	25.3	6.41	592.0	cloudy	no odor	
17:06	3 8.2	8.25	53.0	16.67	25.1	6.51	743.0	cloudy	no odor	
	4									

Sample Collection:
Date Sampled: 5/19/05
Sampling Method: Disposable Bailer/Other Bailed
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-5	3	40-mL VOA	Ice/HCl	TPHg (8015), BTEX (8021)	17:17
MW-5	1	1-L Amber	None	TRPH (1664)	17:17
MW-5	1	250-mL Amber	None	TPHd (8015M)	17:17
MW-5	1	500-mL Poly	HNO3	Total Lead (6010)	17:17

Comments (8.2)

Signature [signature] Date 5/19/05

ENSR

GROUNDWATER SAMPLING DATA SHEET
Site Address: 122 Leslie St., Ukiah, CA
ENSR No. 06940-264-100
Unocal No. 813

Well/Piezo ID: **MW-6**

Well [X] Piezometer [ ]

Well Purging:
Date Purged: 5 19 05
Purge Method: Disposable bailer/other Bailed

Field Tech(s): Tanya Ahmad
Weather Conditions: Sunny 70's

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 23.41 ft from TOC
Depth to Water: 5.93 ft from TOC
Water Column: 17.48 ft.
Water Column Volume: 2.71 gal (WC X VF)

Volume Factor (VF)				
	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

(9.4)

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 6.09 actual

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
1721	0 .50	5.79	192	14.89	0.20	6.49	471	clear		
1725	1 3.0	7.01	191	14.14	0.20	6.63	over 1000			
1732	2 6.0	7.43	185	14.57	0.20	6.70	999			
1741	3 9.0	7.37	181	13.99	0.20	6.82	999			
	4									

Sample Collection:
Date Sampled: 5-19-05
Sampling Method: Disposable Bailer/Other Bailed
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW6	3	40-mL VOA	Ice/HCl	TPHg (8015), BTEX (8021)	1745
	1	1-L Amber	None	TRPH (1664)	
	1	250-mL Amber	None	TPHd (8015M)	
	1	500-mL Poly	HNO3	Total Lead (6010)	

Comments ~~MW-6 Locked in parking lot, need to contact 2nd floor occupant for access~~

8.3

Signature Tanya J Ahmad Date 5-19-05

ENSR

GROUNDWATER SAMPLING DATA SHEET
Site Address: 122 Leslie St., Ukiah, CA
ENSR No. 06940-264-100
Unocal No. 813

Well/Piezo ID: **MW-7**

Well [X] Piezometer [ ]

Well Purging:
Date Purged: 5-19-05
Purge Method: Disposable bailer/other DC pump

Field Tech(s): Tanya Aboud
Weather Conditions: Sunny 70's

Casing Material: PVC
Well Diameter: 4.00 in.
Total Depth: 24.58 ft from TOC
Depth to Water: 5.54 ft from TOC
Water Column: 19.04 ft.
Water Column Volume: 12.56 gal (WC X VF)

Volume Factor (VF)	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

(9.3)

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 5.59 Actual

Time		Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
1846	0	3.0	13.18	194	15.24	0.21	6.79	36.1	clear		
1850	1	6.0	2.67	211	14.78	0.20	6.19	12.4	clear		
1855	2	9.0	2.45	211	14.78	0.20	6.17	11.5			
1859	3	12.0	2.43	210	14.79	0.20	6.20	10.2	clear		
	4										

Sample Collection:
Date Sampled: 5-19-05
Sampling Method: Disposable Bailer/Other Bailed
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW7	3	40-mL VOA	Ice/HCl	TPHg (8015), BTEX (8021)	1913
	1	1-L Amber	None	TRPH (1664)	
	1	250-mL Amber	None	TPHd (8015M)	
	1	500-mL Poly	HNO3	Total Lead (6010)	

Comments (37.6)

Signature [signature] Date 5-19-05

ENSR

GROUNDWATER SAMPLING DATA SHEET
Site Address: 122 Leslie St., Ukiah, CA
ENSR No. 06940-264-100
Unocal No. 813

Well/Piezo ID: **MW-8**

Well [X] Piezometer [ ]

Field Tech(s): Tanya Nhoual

Weather Conditions: Sunny 70's

Well Purging:
Date Purged: 5-19-05
Purge Method: Disposable bailer/other Bailed

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 24.79 ft from TOC
Depth to Water: 5.04 ft from TOC
Water Column: 19.75 ft.
Water Column Volume: 3.16 gal (WC X VF)

Volume Factor (VF)	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

(8.9)

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 5.11 actual

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
1803	0 10	7.51	196	13.91	0.22	6.67	over 1000			
1806	1 4.0	5.38	190	14.09	0.21	6.66	999			
1809	2 7.0	3.81	158	14.10	0.21	6.66	893			
1813	3 10.0	858	182	14.12	0.21	6.66	797			
	4									

Sample Collection:
Date Sampled: 5-19-05
Sampling Method: Disposable Bailer/Other Bailed
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW8	3	40-mL VOA	Ice/HCl	TPHg (8015), BTEX (8021)	1814
	1	1-L Amber	None	TRPH (1664)	
	1	250-mL Amber	None	TPHd (8015M)	
	1	500-mL Poly	HNO3	Total Lead (6010)	

Comments (9.4)

Signature Tanya Nhoual Date 5-19-05

ENSR

GROUNDWATER SAMPLING DATA SHEET
Site Address: 122 Leslie St., Ukiah, CA
ENSR No. 06940-264-100
Unocal No. 813

Well/Piezo ID: **MW-9**

Well [X] Piezometer [ ]

Well Purging:
Date Purged: 5.19.05
Purge Method: Disposable bailer/other Bailed

Field Tech(s): Tanya Mosal

Weather Conditions: Sunny 60's to 70's

Casing Material: pvc
Well Diameter: 2.00 in.
Total Depth: 24.61 ft from TOC
Depth to Water: 6.65 ft from TOC
Water Column: 17.96 ft.
Water Column Volume: 2.87 gal (WC X VF)

Volume Factor (VF)	3/4" = 0.02	1" = 0.04	2" = .16	3" = .38
	4" = .66	5" = 1.02	6" = 1.50	12" = 5.80

(10.2)

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 7.01

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
1648	0 0.50	10.97	198	15.41	0.23	6.69	83.1			
1652	1 2.9	8.78	198	14.58	0.21	6.70	896			
1655	2 6.0	6.89	196	14.08	0.21	6.60	972			
1659	3 9.0	6.45	188	14.37	0.21	6.58	934			
	4									

Sample Collection:
Date Sampled: 5-19-05
Sampling Method: Disposable Bailer/Other Bailed
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW9	3	40-mL VOA	Ice/HCl	TPHg (8015), BTEX (8021)	1706
	1	1-L Amber	None	TRPH (1664)	
	1	250-mL Amber	None	TPHd (8015M)	
	1	500-mL Poly	HNO3	Total Lead (6010)	

Comments Added third bail all on now (8.6)

Signature [signature] Date 5.19.05

ATTACHMENT C

LABORATORY ANALYTICAL RESULTS WITH CHAIN-OF-CUSTODY DOCUMENTATION

Alpha Analytical Laboratories Inc. 208 Mason Street, Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

07 June 2005

Margret Riggin
ENSR International
10411 Old Placerville Rd., Suite 210
Sacramento, CA 95827-2508
RE: Unocal #0813, Ukiah
Work Order: A505596

Enclosed are the results of analyses for samples received by the laboratory on 05/20/05 14:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Sheri Speaks

Sheri L. Speaks For Karen A. Daly
Project Manager

Alpha Analytical Laboratories Inc. 208 Mason Street, Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

Sacramento CA, 95827-2508 ENSR International 10411 Old Placerville Rd., Suite 210	Project Manager: Margret Riggin Project: Unocal #0813, Ukiah Project Number: 06940-264-100	Reported: 06/07/05 10:13

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	A505596-01	Water	05/19/05 19:23	05/20/05 14:45
MW-2	A505596-02	Water	05/19/05 19:49	05/20/05 14:45
MW-3	A505596-03	Water	05/19/05 18:39	05/20/05 14:45
MW-4	A505596-04	Water	05/19/05 17:54	05/20/05 14:45
MW-5	A505596-05	Water	05/19/05 17:17	05/20/05 14:45
MW-6	A505596-06	Water	05/19/05 17:45	05/20/05 14:45
MW-7	A505596-07	Water	05/19/05 19:03	05/20/05 14:45
MW-8	A505596-08	Water	05/19/05 18:14	05/20/05 14:45
MW-9	A505596-09	Water	05/19/05 17:06	05/20/05 14:45
QA	A505596-10	Water	05/19/05 00:00	05/20/05 14:45

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sheri Speaks

Sheri L. Speaks For Karen A. Daly, Project Manager

Alpha Analytical Laboratories Inc.
208 Mason Street, Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

Sacramento CA, 95827-2508 ENSR International 10411 Old Placerville Rd., Suite 210	Project Manager: Margret Riggin Project: Unocal #0813, Ukiah Project Number: 06940-264-100	Reported: 06/07/05 10:13

Metals by EPA 200 Series Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (A505596-01) Water	**Sampled: 05/19/05 19:23**	**Received: 05/20/05 14:45**								
Lead	**0.0054**		0.0020	mg/l	1	AE52303	05/23/05	05/31/05	EPA 200.9	
MW-2 (A505596-02) Water	**Sampled: 05/19/05 19:49**	**Received: 05/20/05 14:45**								
Lead	**0.0022**		0.0020	mg/l	1	AE52303	05/23/05	05/31/05	EPA 200.9	
MW-3 (A505596-03) Water	**Sampled: 05/19/05 18:39**	**Received: 05/20/05 14:45**								
Lead	ND		0.0020	mg/l	1	AE52303	05/23/05	05/31/05	EPA 200.9	
MW-4 (A505596-04) Water	**Sampled: 05/19/05 17:54**	**Received: 05/20/05 14:45**								
Lead	ND		0.0020	mg/l	1	AE52303	05/23/05	05/31/05	EPA 200.9	
MW-5 (A505596-05) Water	**Sampled: 05/19/05 17:17**	**Received: 05/20/05 14:45**								
Lead	ND		0.0020	mg/l	1	AE52303	05/23/05	05/31/05	EPA 200.9	
MW-6 (A505596-06) Water	**Sampled: 05/19/05 17:45**	**Received: 05/20/05 14:45**								
Lead	**0.013**		0.0020	mg/l	1	AE52303	05/23/05	05/31/05	EPA 200.9	
MW-7 (A505596-07) Water	**Sampled: 05/19/05 19:03**	**Received: 05/20/05 14:45**								
Lead	ND		0.0020	mg/l	1	AE52303	05/23/05	05/31/05	EPA 200.9	
MW-8 (A505596-08) Water	**Sampled: 05/19/05 18:14**	**Received: 05/20/05 14:45**								
Lead	**0.0049**		0.0020	mg/l	1	AE52303	05/23/05	05/31/05	EPA 200.9	
MW-9 (A505596-09) Water	**Sampled: 05/19/05 17:06**	**Received: 05/20/05 14:45**								
Lead	**0.0074**		0.0020	mg/l	1	AE52303	05/23/05	05/31/05	EPA 200.9	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sheri Speaks

Sheri L. Speaks For Karen A. Daly, Project Manager

Alpha Analytical Laboratories Inc. 208 Mason Street, Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

Sacramento CA, 95827-2508 ENSR International 10411 Old Placerville Rd., Suite 210	Project Manager: Margret Riggin Project: Unocal #0813, Ukiah Project Number: 06940-264-100	Reported: 06/07/05 10:13

Metals (Dissolved) by EPA 200 Series Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (A505596-01) Water Sampled: 05/19/05 19:23 Received: 05/20/05 14:45										
Molybdenum, dissolved	ND	0.0014	0.020	mg/l	1	AE51717	05/23/05	06/06/05	EPA 200.7	U
Selenium, dissolved	ND		0.0050	"	"	"	"	05/27/05	EPA 200.9	
Vanadium, dissolved	ND	0.0022	0.010	"	"	"	"	06/06/05	EPA 200.7	U
MW-2 (A505596-02) Water Sampled: 05/19/05 19:49 Received: 05/20/05 14:45										
Molybdenum, dissolved	**0.0016**	0.0014	0.020	mg/l	1	AE51717	05/23/05	06/06/05	EPA 200.7	J
Selenium, dissolved	ND		0.0050	"	"	"	"	05/27/05	EPA 200.9	
Vanadium, dissolved	ND	0.0022	0.010	"	"	"	"	06/06/05	EPA 200.7	U

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Sheri Speaks

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Sacramento CA, 95827-2508 ENSR International 10411 Old Placerville Rd., Suite 210	Project Manager: Margret Riggin Project: Unocal #0813, Ukiah Project Number: 06940-264-100	Reported: 06/07/05 10:13

Metals by EPA 6000/7000 Series Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (A505596-01) Water Sampled: 05/19/05 19:23 Received: 05/20/05 14:45										
Chromium, hexavalent	ND	0.00011	0.0010	mg/l	1	AE52015	05/20/05	05/20/05	EPA 7199	U
MW-2 (A505596-02) Water Sampled: 05/19/05 19:49 Received: 05/20/05 14:45										
Chromium, hexavalent	ND	0.00011	0.0010	mg/l	1	AE52015	05/20/05	05/20/05	EPA 7199	U

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sheri Speaks

Sheri L. Speaks For Karen A. Daly, Project Manager

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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

Sacramento CA, 95827-2508 ENSR International 10411 Old Placerville Rd., Suite 210	Project Manager: Margret Riggin Project: Unocal #0813, Ukiah Project Number: 06940-264-100	Reported: 06/07/05 10:13

Conventional Chemistry Parameters by APHA/EPA Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (A505596-01) Water Sampled: 05/19/05 19:23 Received: 05/20/05 14:45										
pH	**6.6**		1.0	pH Units	1	AE52022	05/20/05	05/20/05	EPA 150.1	
MW-2 (A505596-02) Water Sampled: 05/19/05 19:49 Received: 05/20/05 14:45										
pH	**6.7**		1.0	pH Units	1	AE52022	05/20/05	05/20/05	EPA 150.1	

Alpha Analytical Laboratories Inc. 208 Mason Street, Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

Sacramento CA, 95827-2508	Project Manager: Margret Riggin	
ENSR International	Project: Unocal #0813, Ukiah	Reported:
10411 Old Placerville Rd., Suite 210	Project Number: 06940-264-100	06/07/05 10:13

TPH by EPA/LUFT GC/GCMS Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (A505596-01) Water Sampled: 05/19/05 19:23 Received: 05/20/05 14:45										
TPH as Diesel	**4500**		50	ug/l	1	AE53113	05/31/05	06/01/05	8015DRO	
TPH as Gasoline	**1100**		250	"	5	AE52719	05/25/05	05/28/05	8260GRO	
Surrogate: Tetratetracontane		*94.4 %*	*20-152*			*AE53113*	*05/31/05*	*06/01/05*	*8015DRO*	
Surrogate: Toluene-d8		*110 %*	*70-129*			*AE52719*	*05/25/05*	*05/28/05*	*8260GRO*	
MW-2 (A505596-02) Water Sampled: 05/19/05 19:49 Received: 05/20/05 14:45										
TPH as Diesel	**91**		50	ug/l	1	AE53113	05/31/05	06/01/05	8015DRO	
TPH as Gasoline	**170**		50	"	"	AE52719	05/25/05	05/27/05	8260GRO	
Surrogate: Tetratetracontane		*98.0 %*	*20-152*			*AE53113*	*05/31/05*	*06/01/05*	*8015DRO*	
Surrogate: Toluene-d8		*119 %*	*70-129*			*AE52719*	*05/25/05*	*05/27/05*	*8260GRO*	
MW-3 (A505596-03) Water Sampled: 05/19/05 18:39 Received: 05/20/05 14:45										
TPH as Diesel	ND		50	ug/l	1	AF50122	06/01/05	06/01/05	8015DRO	
TPH as Gasoline	**270**		50	"	"	AE52719	05/25/05	05/27/05	8260GRO	
Surrogate: Tetratetracontane		*71.2 %*	*20-152*			*AF50122*	*06/01/05*	*06/01/05*	*8015DRO*	
Surrogate: Toluene-d8		*116 %*	*70-129*			*AE52719*	*05/25/05*	*05/27/05*	*8260GRO*	
MW-4 (A505596-04) Water Sampled: 05/19/05 17:54 Received: 05/20/05 14:45										
TPH as Diesel	ND		50	ug/l	1	AF50122	06/01/05	06/02/05	8015DRO	
TPH as Gasoline	ND		50	"	"	AE52719	05/25/05	05/27/05	8260GRO	
Surrogate: Tetratetracontane		*78.0 %*	*20-152*			*AF50122*	*06/01/05*	*06/02/05*	*8015DRO*	
Surrogate: Toluene-d8		*112 %*	*70-129*			*AE52719*	*05/25/05*	*05/27/05*	*8260GRO*	
MW-5 (A505596-05) Water Sampled: 05/19/05 17:17 Received: 05/20/05 14:45										
TPH as Diesel	ND		50	ug/l	1	AF50122	06/01/05	06/02/05	8015DRO	
TPH as Gasoline	ND		50	"	"	AE52719	05/25/05	05/27/05	8260GRO	
Surrogate: Tetratetracontane		*63.2 %*	*20-152*			*AF50122*	*06/01/05*	*06/02/05*	*8015DRO*	
Surrogate: Toluene-d8		*118 %*	*70-129*			*AE52719*	*05/25/05*	*05/27/05*	*8260GRO*	

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Sheri Speaks

Sheri L. Speaks For Karen A. Daly, Project Manager

Alpha Analytical Laboratories Inc. 208 Mason Street, Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

Sacramento CA, 95827-2508 ENSR International 10411 Old Placerville Rd., Suite 210	Project Manager: Margret Riggin Project: Unocal #0813, Ukiah Project Number: 06940-264-100	Reported: 06/07/05 10:13

TPH by EPA/LUFT GC/GCMS Methods
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6 (A505596-06) Water Sampled: 05/19/05 17:45 Received: 05/20/05 14:45										
TPH as Gasoline	ND		50	ug/l	1	AE52719	05/25/05	05/27/05	8260GRO	
TPH as Diesel	ND		50	"	"	AF50122	06/01/05	06/02/05	8015DRO	
Surrogate: Tetratetracontane		*65.2 %*	*20-152*			"	"	"	"	
Surrogate: Toluene-d8		*116 %*	*70-129*			*AE52719*	*05/25/05*	*05/27/05*	*8260GRO*	
MW-7 (A505596-07) Water Sampled: 05/19/05 19:03 Received: 05/20/05 14:45										
TPH as Gasoline	ND		50	ug/l	1	AE52719	05/25/05	05/27/05	8260GRO	
TPH as Diesel	ND		50	"	"	AF50122	06/01/05	06/02/05	8015DRO	
Surrogate: Tetratetracontane		*76.4 %*	*20-152*			"	"	"	"	
Surrogate: Toluene-d8		*116 %*	*70-129*			*AE52719*	*05/25/05*	*05/27/05*	*8260GRO*	
MW-8 (A505596-08) Water Sampled: 05/19/05 18:14 Received: 05/20/05 14:45										
TPH as Diesel	ND		50	ug/l	1	AF50122	06/01/05	06/02/05	8015DRO	
TPH as Gasoline	ND		50	"	"	AE52719	05/25/05	05/27/05	8260GRO	
Surrogate: Tetratetracontane		*75.2 %*	*20-152*			*AF50122*	*06/01/05*	*06/02/05*	*8015DRO*	
Surrogate: Toluene-d8		*118 %*	*70-129*			*AE52719*	*05/25/05*	*05/27/05*	*8260GRO*	
MW-9 (A505596-09) Water Sampled: 05/19/05 17:06 Received: 05/20/05 14:45										
TPH as Diesel	ND		50	ug/l	1	AF50122	06/01/05	06/02/05	8015DRO	
TPH as Gasoline	ND		50	"	"	AE52719	05/25/05	05/27/05	8260GRO	
Surrogate: Tetratetracontane		*70.4 %*	*20-152*			*AF50122*	*06/01/05*	*06/02/05*	*8015DRO*	
Surrogate: Toluene-d8		*118 %*	*70-129*			*AE52719*	*05/25/05*	*05/27/05*	*8260GRO*	
QA (A505596-10) Water Sampled: 05/19/05 00:00 Received: 05/20/05 14:45										
TPH as Gasoline	ND		50	ug/l	1	AE52719	05/25/05	05/27/05	8260GRO	
Surrogate: Toluene-d8		*118 %*	*70-129*			"	"	"	"	

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Alpha Analytical Laboratories Inc. 208 Mason Street, Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

Sacramento CA, 95827-2508 ENSR International 10411 Old Placerville Rd., Suite 210	Project Manager: Margret Riggin Project: Unocal #0813, Ukiah Project Number: 06940-264-100	Reported: 06/07/05 10:13

Volatile Organic Compounds by EPA Method 8260B
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (A505596-01) Water Sampled: 05/19/05 19:23 Received: 05/20/05 14:45										**R-06**
Benzene	ND		1.5	ug/l	5	AE53121	05/25/05	05/28/05	EPA 8260B	
Toluene	ND		1.5	"	"	"	"	"	"	
Ethylbenzene	ND		2.5	"	"	"	"	"	"	
Xylenes (total)	ND		2.5	"	"	"	"	"	"	
Surrogate: Bromofluorobenzene		*114 %*	*45-147*			"	"	"	"	
Surrogate: Dibromofluoromethane		*103 %*	*85-129*			"	"	"	"	
Surrogate: Toluene-d8		*110 %*	*74-137*			"	"	"	"	
MW-2 (A505596-02) Water Sampled: 05/19/05 19:49 Received: 05/20/05 14:45										
Benzene	ND		0.30	ug/l	1	AE53121	05/25/05	05/27/05	EPA 8260B	
Toluene	ND		0.30	"	"	"	"	"	"	
Ethylbenzene	ND		0.50	"	"	"	"	"	"	
Xylenes (total)	ND		0.50	"	"	"	"	"	"	
Surrogate: Bromofluorobenzene		*116 %*	*45-147*			"	"	"	"	
Surrogate: Dibromofluoromethane		*106 %*	*85-129*			"	"	"	"	
Surrogate: Toluene-d8		*119 %*	*74-137*			"	"	"	"	
MW-3 (A505596-03) Water Sampled: 05/19/05 18:39 Received: 05/20/05 14:45										
Benzene	ND		0.30	ug/l	1	AE53121	05/25/05	05/27/05	EPA 8260B	
Toluene	ND		0.30	"	"	"	"	"	"	
Ethylbenzene	ND		0.50	"	"	"	"	"	"	
Xylenes (total)	ND		0.50	"	"	"	"	"	"	
Surrogate: Bromofluorobenzene		*119 %*	*45-147*			"	"	"	"	
Surrogate: Dibromofluoromethane		*103 %*	*85-129*			"	"	"	"	
Surrogate: Toluene-d8		*116 %*	*74-137*			"	"	"	"	

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Sheri L. Speaks For Karen A. Daly, Project Manager

Alpha Analytical Laboratories Inc. 208 Mason Street, Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

Sacramento CA, 95827-2508 ENSR International 10411 Old Placerville Rd., Suite 210	Project Manager: Margret Riggin Project: Unocal #0813, Ukiah Project Number: 06940-264-100	Reported: 06/07/05 10:13

Volatile Organic Compounds by EPA Method 8260B
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (A505596-04) Water Sampled: 05/19/05 17:54 Received: 05/20/05 14:45										
Benzene	ND		0.30	ug/l	1	AE53121	05/25/05	05/27/05	EPA 8260B	
Toluene	ND		0.30	"	"	"	"	"	"	
Ethylbenzene	ND		0.50	"	"	"	"	"	"	
Xylenes (total)	ND		0.50	"	"	"	"	"	"	
Surrogate: Bromofluorobenzene		*117 %*	*45-147*			"	"	"	"	
Surrogate: Dibromofluoromethane		*98.4 %*	*85-129*			"	"	"	"	
Surrogate: Toluene-d8		*112 %*	*74-137*			"	"	"	"	
MW-5 (A505596-05) Water Sampled: 05/19/05 17:17 Received: 05/20/05 14:45										
Benzene	ND		0.30	ug/l	1	AE53121	05/25/05	05/27/05	EPA 8260B	
Toluene	ND		0.30	"	"	"	"	"	"	
Ethylbenzene	ND		0.50	"	"	"	"	"	"	
Xylenes (total)	ND		0.50	"	"	"	"	"	"	
Surrogate: Bromofluorobenzene		*117 %*	*45-147*			"	"	"	"	
Surrogate: Dibromofluoromethane		*102 %*	*85-129*			"	"	"	"	
Surrogate: Toluene-d8		*118 %*	*74-137*			"	"	"	"	
MW-6 (A505596-06) Water Sampled: 05/19/05 17:45 Received: 05/20/05 14:45										
Benzene	ND		0.30	ug/l	1	AE53121	05/25/05	05/27/05	EPA 8260B	
Toluene	ND		0.30	"	"	"	"	"	"	
Ethylbenzene	ND		0.50	"	"	"	"	"	"	
Xylenes (total)	ND		0.50	"	"	"	"	"	"	
Surrogate: Bromofluorobenzene		*117 %*	*45-147*			"	"	"	"	
Surrogate: Dibromofluoromethane		*106 %*	*85-129*			"	"	"	"	
Surrogate: Toluene-d8		*116 %*	*74-137*			"	"	"	"	

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Sheri L. Speaks For Karen A. Daly, Project Manager

Alpha Analytical Laboratories Inc. 208 Mason Street, Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

Sacramento CA, 95827-2508 ENSR International 10411 Old Placerville Rd., Suite 210	Project Manager: Margret Riggin Project: Unocal #0813, Ukiah Project Number: 06940-264-100	Reported: 06/07/05 10:13

Volatile Organic Compounds by EPA Method 8260B
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 (A505596-07) Water Sampled: 05/19/05 19:03 Received: 05/20/05 14:45										
Benzene	ND		0.30	ug/l	1	AE53121	05/25/05	05/27/05	EPA 8260B	
Toluene	ND		0.30	"	"	"	"	"	"	
Ethylbenzene	ND		0.50	"	"	"	"	"	"	
Xylenes (total)	ND		0.50	"	"	"	"	"	"	
Surrogate: Bromofluorobenzene		*116 %*	*45-147*			"	"	"	"	
Surrogate: Dibromofluoromethane		*90.8 %*	*85-129*			"	"	"	"	
Surrogate: Toluene-d8		*116 %*	*74-137*			"	"	"	"	
MW-8 (A505596-08) Water Sampled: 05/19/05 18:14 Received: 05/20/05 14:45										
Benzene	ND		0.30	ug/l	1	AE53121	05/25/05	05/27/05	EPA 8260B	
Toluene	ND		0.30	"	"	"	"	"	"	
Ethylbenzene	ND		0.50	"	"	"	"	"	"	
Xylenes (total)	ND		0.50	"	"	"	"	"	"	
Surrogate: Bromofluorobenzene		*113 %*	*45-147*			"	"	"	"	
Surrogate: Dibromofluoromethane		*109 %*	*85-129*			"	"	"	"	
Surrogate: Toluene-d8		*118 %*	*74-137*			"	"	"	"	
MW-9 (A505596-09) Water Sampled: 05/19/05 17:06 Received: 05/20/05 14:45										
Benzene	ND		0.30	ug/l	1	AE53121	05/25/05	05/27/05	EPA 8260B	
Toluene	ND		0.30	"	"	"	"	"	"	
Ethylbenzene	ND		0.50	"	"	"	"	"	"	
Xylenes (total)	ND		0.50	"	"	"	"	"	"	
Surrogate: Bromofluorobenzene		*115 %*	*45-147*			"	"	"	"	
Surrogate: Dibromofluoromethane		*106 %*	*85-129*			"	"	"	"	
Surrogate: Toluene-d8		*118 %*	*74-137*			"	"	"	"	

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Sheri L. Speaks For Karen A. Daly, Project Manager

Alpha Analytical Laboratories Inc. 208 Mason Street, Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

Sacramento CA, 95827-2508	Project Manager: Margret Riggin	
ENSR International	Project: Unocal #0813, Ukiah	Reported:
10411 Old Placerville Rd., Suite 210	Project Number: 06940-264-100	06/07/05 10:13

Volatile Organic Compounds by EPA Method 8260B
Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
QA (A505596-10) Water Sampled: 05/19/05 00:00 Received: 05/20/05 14:45										
Benzene	ND		0.30	ug/l	1	AE53121	05/25/05	05/27/05	EPA 8260B	
Toluene	ND		0.30	"	"	"	"	"	"	
Ethylbenzene	ND		0.50	"	"	"	"	"	"	
Xylenes (total)	ND		0.50	"	"	"	"	"	"	
Surrogate: Bromofluorobenzene		*112 %*	*45-147*			"	"	"	"	
Surrogate: Dibromofluoromethane		*107 %*	*85-129*			"	"	"	"	
Surrogate: Toluene-d8		*118 %*	*74-137*			"	"	"	"	

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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

Sacramento CA, 95827-2508 ENSR International 10411 Old Placerville Rd., Suite 210	Project Manager: Margret Riggin Project: Unocal #0813, Ukiah Project Number: 06940-264-100	Reported: 06/07/05 10:13

Metals by EPA 200 Series Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE52303 - EPA 200.2 Hot Plate											
Blank (AE52303-BLK1)					Prepared: 05/23/05 Analyzed: 05/31/05						
Lead	ND		0.0020	mg/l							
LCS (AE52303-BS1)					Prepared: 05/23/05 Analyzed: 05/31/05						
Lead	0.106		0.020	mg/l	0.100		106	85-115			
LCS Dup (AE52303-BSD1)					Prepared: 05/23/05 Analyzed: 05/31/05						
Lead	0.0926		0.020	mg/l	0.100		92.6	85-115	13.5	20	
Duplicate (AE52303-DUP1)		**Source: A505380-01**			Prepared: 05/23/05 Analyzed: 05/31/05						
Lead	ND		0.0020	mg/l		ND				20	
Matrix Spike (AE52303-MS1)		**Source: A505380-01**			Prepared: 05/23/05 Analyzed: 05/31/05						
Lead	0.0907		0.020	mg/l	0.100	ND	90.7	70-130			
Matrix Spike Dup (AE52303-MSD1)		**Source: A505380-01**			Prepared: 05/23/05 Analyzed: 05/31/05						
Lead	0.0899		0.020	mg/l	0.100	ND	89.9	70-130	0.886	20	

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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

Sacramento CA, 95827-2508	Project Manager: Margret Riggin	
ENSR International	Project: Unocal #0813, Ukiah	Reported:
10411 Old Placerville Rd., Suite 210	Project Number: 06940-264-100	06/07/05 10:13

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE51717 - EPA 200.2 Hot Plate											
Blank (AE51717-BLK1)					Prepared: 05/17/05 Analyzed: 05/20/05						
Molybdenum, dissolved	ND	0.0014	0.020	mg/l							U
Selenium, dissolved	ND		0.0050	"							
Vanadium, dissolved	ND	0.0022	0.010	"							U
LCS (AE51717-BS1)					Prepared: 05/17/05 Analyzed: 05/20/05						
Molybdenum, dissolved	0.103	0.0014	0.020	mg/l	0.100		103	85-115			
Selenium, dissolved	0.00858		0.0050	"	0.0100		85.8	85-115			
Vanadium, dissolved	0.0978	0.0022	0.010	"	0.100		97.8	85-115			
LCS Dup (AE51717-BSD1)					Prepared: 05/17/05 Analyzed: 05/20/05						
Molybdenum, dissolved	0.102	0.0014	0.020	mg/l	0.100		102	85-115	0.976	20	
Selenium, dissolved	0.00884		0.0050	"	0.0100		88.4	85-115	2.99	20	
Vanadium, dissolved	0.0975	0.0022	0.010	"	0.100		97.5	85-115	0.307	20	
Duplicate (AE51717-DUP1)		**Source: A505267-01**			Prepared: 05/17/05 Analyzed: 05/20/05						
Molybdenum, dissolved	ND	0.0014	0.020	mg/l		ND				20	U
Selenium, dissolved	ND		0.0050	"		ND				20	
Vanadium, dissolved	ND	0.0022	0.010	"		ND				20	U
Matrix Spike (AE51717-MS1)		**Source: A505267-01**			Prepared: 05/17/05 Analyzed: 05/20/05						
Molybdenum, dissolved	0.103	0.0014	0.020	mg/l	0.100	ND	103	70-130			
Selenium, dissolved	0.00824		0.0050	"	0.0100	ND	82.4	70-130			
Vanadium, dissolved	0.0999	0.0022	0.010	"	0.100	ND	99.9	70-130			
Matrix Spike Dup (AE51717-MSD1)		**Source: A505267-01**			Prepared: 05/17/05 Analyzed: 05/20/05						
Molybdenum, dissolved	0.103	0.0014	0.020	mg/l	0.100	ND	103	70-130	0.00	20	
Selenium, dissolved	0.00780		0.0050	"	0.0100	ND	78.0	70-130	5.49	20	
Vanadium, dissolved	0.0982	0.0022	0.010	"	0.100	ND	98.2	70-130	1.72	20	

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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

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Metals by EPA 6000/7000 Series Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE52015 - General Preparation											
Blank (AE52015-BLK1)					Prepared & Analyzed: 05/20/05						
Chromium, hexavalent	ND	0.00011	0.0010	mg/l							U
LCS (AE52015-BS1)					Prepared & Analyzed: 05/20/05						
Chromium, hexavalent	0.00187	0.00011	0.0010	mg/l	0.00200		93.5	80-120			
LCS Dup (AE52015-BSD1)					Prepared & Analyzed: 05/20/05						
Chromium, hexavalent	0.00184	0.00011	0.0010	mg/l	0.00200		92.0	80-120	1.62	20	
Duplicate (AE52015-DUP1)		**Source: A505596-01**			Prepared & Analyzed: 05/20/05						
Chromium, hexavalent	ND	0.00011	0.0010	mg/l		ND				30	U
Matrix Spike (AE52015-MS1)		**Source: A505596-01**			Prepared & Analyzed: 05/20/05						
Chromium, hexavalent	0.00384	0.00011	0.0010	mg/l	0.00400	ND	96.0	70-130			
Matrix Spike Dup (AE52015-MSD1)		**Source: A505596-01**			Prepared & Analyzed: 05/20/05						
Chromium, hexavalent	0.00373	0.00011	0.0010	mg/l	0.00400	ND	93.2	70-130	2.91	20	

Alpha Analytical Laboratories Inc. 208 Mason Street, Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

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Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE52022 - General Preparation											
Duplicate (AE52022-DUP2)		**Source: A505612-01**		Prepared: 05/20/05 Analyzed: 05/23/05							
pH	7.59		1.0	pH Units		7.6			0.132	20	

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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

Sacramento CA, 95827-2508 ENSR International 10411 Old Placerville Rd., Suite 210	Project Manager: Margret Riggin Project: Unocal #0813, Ukiah Project Number: 06940-264-100	Reported: 06/07/05 10:13

TPH by EPA/LUFT GC/GCMS Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE52719 - EPA 5030 Water GCMS											
Blank (AE52719-BLK1)					Prepared: 05/25/05 Analyzed: 05/26/05						
TPH as Gasoline	ND		50	ug/l							
Surrogate: Toluene-d8	*29.1*			"	*25.0*		*116*	*70-129*			
LCS (AE52719-BS1)					Prepared: 05/25/05 Analyzed: 05/27/05						
TPH as Gasoline	194		50	ug/l	200		97.0	65-137			
Surrogate: Toluene-d8	*27.7*			"	*25.0*		*111*	*70-129*			
LCS Dup (AE52719-BSD1)					Prepared: 05/25/05 Analyzed: 05/27/05						
TPH as Gasoline	182		50	ug/l	200		91.0	65-137	6.38	20	
Surrogate: Toluene-d8	*28.0*			"	*25.0*		*112*	*70-129*			
Matrix Spike (AE52719-MS1)		**Source: A505531-02**			Prepared: 05/25/05 Analyzed: 05/27/05						
TPH as Gasoline	409		50	ug/l	200	200	104	65-137			
Surrogate: Toluene-d8	*28.1*			"	*25.0*		*112*	*70-129*			
Batch AE53113 - EPA 3510B Water											
Blank (AE53113-BLK1)					Prepared & Analyzed: 05/31/05						
TPH as Diesel	ND		50	ug/l							
Surrogate: Tetratetracontane	*22.2*			"	*25.0*		*88.8*	*20-152*			
LCS (AE53113-BS1)					Prepared & Analyzed: 05/31/05						
TPH as Diesel	1540		50	ug/l	2000		77.0	52-136			
Surrogate: Tetratetracontane	*27.4*			"	*25.0*		*110*	*20-152*			
Matrix Spike (AE53113-MS1)		**Source: A505513-01**			Prepared & Analyzed: 05/31/05						
TPH as Diesel	1560		50	ug/l	2000	ND	78.0	61-129			
Surrogate: Tetratetracontane	*26.8*			"	*25.0*		*107*	*20-152*			

Alpha Analytical Laboratories Inc. 208 Mason Street, Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

Sacramento CA, 95827-2508 ENSR International 10411 Old Placerville Rd., Suite 210	Project Manager: Margret Riggin Project: Unocal #0813, Ukiah Project Number: 06940-264-100	Reported: 06/07/05 10:13

TPH by EPA/LUFT GC/GCMS Methods - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE53113 - EPA 3510B Water											
Matrix Spike Dup (AE53113-MSD1)		**Source: A505513-01**			Prepared & Analyzed: 05/31/05						
TPH as Diesel	1600		50	ug/l	2000	ND	80.0	61-129	2.53	25	
Surrogate: Tetratetracontane	*26.4*			"	*25.0*		*106*	*20-152*			
Batch AF50122 - EPA 3510B Water											
Blank (AF50122-BLK1)					Prepared & Analyzed: 06/01/05						
TPH as Diesel	ND		50	ug/l							
Surrogate: Tetratetracontane	*18.2*			"	*25.0*		*72.8*	*20-152*			
LCS (AF50122-BS1)					Prepared & Analyzed: 06/01/05						
TPH as Diesel	1460		50	ug/l	2000		73.0	52-136			
Surrogate: Tetratetracontane	*19.0*			"	*25.0*		*76.0*	*20-152*			
Matrix Spike (AF50122-MS1)		**Source: A505596-03**			Prepared & Analyzed: 06/01/05						
TPH as Diesel	1510		50	ug/l	2000	26	74.2	61-129			
Surrogate: Tetratetracontane	*18.4*			"	*25.0*		*73.6*	*20-152*			
Matrix Spike Dup (AF50122-MSD1)		**Source: A505596-03**			Prepared: 06/01/05 Analyzed: 06/02/05						
TPH as Diesel	1470		50	ug/l	2000	26	72.2	61-129	2.68	25	
Surrogate: Tetratetracontane	*17.8*			"	*25.0*		*71.2*	*20-152*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sheri Speaks

Sheri L. Speaks For Karen A. Daly, Project Manager

Alpha Analytical Laboratories Inc. 208 Mason Street, Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

Sacramento CA, 95827-2508 ENSR International 10411 Old Placerville Rd., Suite 210	Project Manager: Margret Riggin Project: Unocal #0813, Ukiah Project Number: 06940-264-100	Reported: 06/07/05 10:13

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE53121 - EPA 5030 Water GCMS											
Blank (AE53121-BLK1)					Prepared: 05/25/05 Analyzed: 05/26/05						
Benzene	ND		0.30	ug/l							
Toluene	ND		0.30	"							
Ethylbenzene	ND		0.50	"							
Xylenes (total)	ND		0.50	"							
Surrogate: Bromofluorobenzene	*30.8*			"	*25.0*		*123*	*45-147*			
Surrogate: Dibromofluoromethane	*27.8*			"	*25.0*		*111*	*85-129*			
Surrogate: Toluene-d8	*29.1*			"	*25.0*		*116*	*74-137*			
LCS (AE53121-BS1)					Prepared: 05/25/05 Analyzed: 05/26/05						
Benzene	5.06		0.30	ug/l	5.00		101	79-116			
Toluene	4.72		0.30	"	5.00		94.4	83-120			
Ethylbenzene	5.29		0.50	"	5.00		106	81-119			
Xylenes (total)	15.7		0.50	"	15.0		105	79-121			
Surrogate: Bromofluorobenzene	*32.8*			"	*25.0*		*131*	*45-147*			
Surrogate: Dibromofluoromethane	*27.4*			"	*25.0*		*110*	*85-129*			
Surrogate: Toluene-d8	*27.2*			"	*25.0*		*109*	*74-137*			
LCS Dup (AE53121-BSD1)					Prepared: 05/25/05 Analyzed: 05/26/05						
Benzene	4.81		0.30	ug/l	5.00		96.2	79-116	5.07	25	
Toluene	4.77		0.30	"	5.00		95.4	83-120	1.05	25	
Ethylbenzene	4.88		0.50	"	5.00		97.6	81-119	8.06	25	
Xylenes (total)	14.4		0.50	"	15.0		96.0	79-121	8.64	25	
Surrogate: Bromofluorobenzene	*32.9*			"	*25.0*		*132*	*45-147*			
Surrogate: Dibromofluoromethane	*28.9*			"	*25.0*		*116*	*85-129*			
Surrogate: Toluene-d8	*30.9*			"	*25.0*		*124*	*74-137*			
Matrix Spike (AE53121-MS1)		**Source: A505531-01**			Prepared: 05/25/05 Analyzed: 05/27/05						
Benzene	4.62		0.30	ug/l	5.00	ND	92.4	63-144			
Toluene	4.64		0.30	"	5.00	0.31	86.6	65-145			

Alpha Analytical Laboratories, Inc.

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Sheri Speaks

Sheri L. Speaks For Karen A. Daly, Project Manager

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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

Sacramento CA, 95827-2508 ENSR International 10411 Old Placerville Rd., Suite 210	Project Manager: Margret Riggin Project: Unocal #0813, Ukiah Project Number: 06940-264-100	Reported: 06/07/05 10:13

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Alpha Analytical Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch AE53121 - EPA 5030 Water GCMS											
Matrix Spike (AE53121-MS1)			**Source: A505531-01**		Prepared: 05/25/05 Analyzed: 05/27/05						
Ethylbenzene	4.69		0.50	ug/l	5.00	ND	93.8	57-155			
Xylenes (total)	14.0		0.50	"	15.0	ND	93.3	59-149			
Surrogate: Bromofluorobenzene	*29.8*			"	*25.0*		*119*	*45-147*			
Surrogate: Dibromofluoromethane	*25.6*			"	*25.0*		*102*	*85-129*			
Surrogate: Toluene-d8	*28.7*			"	*25.0*		*115*	*74-137*			

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Sacramento CA, 95827-2508 ENSR International 10411 Old Placerville Rd., Suite 210	Project Manager: Margret Riggin Project: Unocal #0813, Ukiah Project Number: 06940-264-100	Reported: 06/07/05 10:13

Notes and Definitions

U	Analyte included in analysis, but not detected at or above MDL.
R-06	The Reporting Limits for this analysis have been raised to account for matrix interference.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

BSK ANALYTICAL LABORATORIES

BSK Submission Number: 2005051650

06/01/2005

Karen Daly
Alpha Analytical Laboratories Inc
208 Mason Street
Ukiah, CA 95482

Dear Karen Daly,

Thank you for selecting BSK Analytical Laboratories for your analytical testing needs. We have prepared this report in response to your request for analytical services. Please find enclosed the following sections for your complete laboratory report, each uniquely paginated:

CASE NARRATIVE: An overview of the work performed.
CERTIFICATE OF ANALYSIS: Analytical results.
REPORT OF SAMPLE INTEGRITY
CHAIN OF CUSTODY FORM

Certification: I certify that this data package is in compliance with NELAC Standards for applicable analyses under NELAP Certificate #04227CA, and is in compliance with ELAP Standards for applicable certified analyses under ELAP Certificate #1180, except for the conditions listed.

If additional clarification of any information is required, please contact your Client Services Representative, Maria Montes, at (800) 877-8310 or (559) 497-2888.

BSK ANALYTICAL LABORATORIES

Maria Montes
Client Services Representative

1414 Stanislaus Street • Fresno, CA 93706-1623 • Phone 559-497-2888, In CA 800-877-8310 • Fax 559-485-6935

Case Narrative

BSK Submission Number: 2005051650

SAMPLE AND RECEIPT INFORMATION

The sample(s) was received, prepared, and analyzed within the method specified holding times unless otherwise noted on the Certificate of Analysis. Samples, when shipped, arrived within acceptable temperature requirements of 0° to 6° Celsius unless otherwise noted on the Report of Sample Integrity. Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.

QUALITY CONTROL

All analytical quality controls are within established method criteria except when noted in the Quality Control section or on the Certificate of Analysis. All positive results for EPA Methods 504.1, 502.2, and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed. QC samples may include analytes not requested in this submission.

SAMPLE RESULT INFORMATION

Samples are analyzed as received (wet weight basis) unless noted here. The results relate only to the items tested. Any exceptions to be considered when evaluating these results are also listed here, if applicable. Results contained in this package shall not be reproduced, except in full, without written approval of BSK Analytical Laboratories.

ORDER	TEST	ANALYTE	COMMENT

BSK ANALYTICAL LABORATORIES

Certificate of Analysis

NELAP Certificate #04227CA
ELAP Certificate #1180

Karen Daly
Alpha Analytical Laboratories Inc
208 Mason Street
Ukiah, CA 95482

Report Issue Date: 06/01/2005

BSK Submission #: 2005051650
BSK Sample ID #: 585811

Project ID: A505596 Project Desc:
Submission Comments:
Sample Type: Liquid
Sample Description: A505596-01 MW-1
Sample Comments:

Date Sampled: 05/19/2005
Time Sampled: 1923
Date Received: 05/24/2005

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Bromate (BrO3) with Ag/Ba Clean Up	EPA 300.1	**ND**	mg/L	0.005	1	0.005	06/01/05	06/01/05
Bromide (Br)	EPA 300.1	**0.028**	mg/L	0.005	1	0.005	05/25/05	05/25/05

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

Report Authentication Code:

1414 Stanislaus Street Fresno, CA 93706-1623 Phone 559-497-2888, In CA 800-877-8310 Fax 559-485-6935

BSK ANALYTICAL LABORATORIES

Certificate of Analysis

NELAP Certificate #04227CA
ELAP Certificate #1180

Karen Daly
Alpha Analytical Laboratories Inc
208 Mason Street
Ukiah, CA 95482

BSK Submission #: 2005051650
BSK Sample ID #: 585812

Report Issue Date: 06/01/2005

Project ID: A505596 Project Desc:
Submission Comments:
Sample Type: Liquid
Sample Description: A505596-02 MW-2
Sample Comments:

Date Sampled: 05/19/2005
Time Sampled: 1949
Date Received: 05/24/2005

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Bromate (BrO3) with Ag/Ba Clean Up	EPA 300.1	**ND**	mg/L	0.005	1	0.005	06/01/05	06/01/05
Bromide (Br)	EPA 300.1	**0.041**	mg/L	0.005	1	0.005	05/25/05	05/25/05

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
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Report Authentication Code:

1414 Stanislaus Street Fresno, CA 93706-1623 Phone 559-497-2888, In CA 800-877-8310 Fax 559-485-6935

ENSR INTERNATIONAL

CHAIN OF CUSTODY

Lab: Alpha Analytical

TAT: Standard

Report results to:

Name	Margret Riggin
Company	ENSR
Mailing Address	10411 Old Placerville Road
City, State, Zip	Sacramento, CA 95827-2508
Telephone No.	916-362-7100
Fax No.	916-362-8100
E-Mail	mriggin@ensr.com

Project Information

Site Address:	122 Leslie St., Ukiah, CA
ENSR No.	06940-264-100
Unocal No.	813
Global ID No.	T0604593441

Special instructions and/or specific regulatory requirements:

A505596

Sample Identification	Date Sampled	Time Sampled	Matrix/ Media	No. of Conts	TPHg (8015)	BTEX (8021B)	TRPH (1664)	Total Lead (6010)	TPHd (8015)	Bromate (300) / Bromide (300.0)	Chromium VI (7199)	Molybdenum / Vanadium (200.7)	Selenium (200.9)	pH (150.1)		Sample Condition/Comments	Preservative	
MW-1	5-19-05	19:23	GW	10 T.A	X	X	X	X	X	X	X	X	X	X		Per Paul do not run	HCl/HNO3	-01
MW-2	5-19-05	1949	GW	10 T.A	X	X	X	X	X	X	X	X	X	X		TRPH (1664) 5/20/05 3:25 pm	HCl/HNO3	-02
MW-3	5-19-05	1839	GW	6	X	X	X	X	X							[illegible]	HCl/HNO3	-03
MW-4	5-19-05	1754	GW	6	X	X	X	X	X								HCl/HNO3	-04
MW-5	5-19-05	1717	GW	6	X	X	X	X	X								HCl/HNO3	-05
MW-6	5-19-05	1745	GW	6	X	X	X	X	X								HCl/HNO3	-06
MW-7	5-19-05	1903	GW	6	X	X	X	X	X								HCl/HNO3	-07
MW-8	5-19-05	1814	GW	6	X	X	X	X	X								HCl/HNO3	-08
MW-9	5-19-05	1706	GW	6	X	X	X	X	X								HCl/HNO3	-09
QA	5-19-05	0:00	Liquid	2	X	X											Ice	-10

Collected by: Tanya Phoval *Date/Time* 5-19-05 / 1717

Relinquished by: Tanya L Ahouat *Date/Time* 5/20/05

Relinquished by: *Date/Time*

Method of Shipment:

Collector's Signature: Tanya L Ahouat *Date/Time* 5-19-05

Received by: [signature] *Date/Time* 5/20/05 14:45

Received by: *Date/Time*

Sample Condition on Rcpt:

4.8