ENSR
10461 Old Placerville Road Suite 170, Sacramento, CA 95827
T 916.362.7100 F 916.362.8100 www.ensr.aecom.com

April 21, 2006

Ms. Jo Bentz
North Coast Water Board
5550 Skylane Boulevard, Suite A
Santa Rosa, California 95403

RE: Semiannual Groundwater Monitoring Results Report, First Half 2006
Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue, Santa Rosa, California 95404
ENSR Project Number 06940-362-100

Dear Ms. Bentz:

ENSR Corporation (ENSR) has been authorized by Union Oil Company of California (Unocal) to perform semiannual groundwater monitoring at the former Unocal facility No. 1975 located at 1051 Spencer Avenue, Santa Rosa, California **(Figure 1)**. The locations of former and current site features are illustrated on **Figure 2**. Semiannual groundwater monitoring is intended to evaluate the distribution of petroleum hydrocarbon constituents in groundwater beneath the site. This report summarizes results of groundwater sampling conducted during March 2006. The work was performed in accordance with the field methods and procedures presented in **Attachment A**.

Site Closure Activity

The *Addendum to Human Health Risk Assessment (HHRA)* Executive Summary was revised and submitted on June 21, 2005, after discussions with the North Coast Water Board (NCWB) and Office of Environmental Health Hazard Assessment (OEHHA). On June 30, 2005, ENSR's *Corrective Action Plan* (CAP) was prepared and submitted in accordance with the California Code of Regulations, Title 23, Division 3, Chapter 16, Article 11, Section 2725 as required by the NCWB in a letter dated June 22, 2004, to Unocal. The remedial approach recommended in the CAP is enhanced in-situ bioremediation using an in-well oxygen diffuser developed by the University of Waterloo. In a letter dated February 9, 2006, the NCWB approved ENSR's June 30, 2005, CAP. In response to a request from the NCWB in a letter dated December 13, 2005, ENSR submitted a *Work Plan for Additional Subsurface Assessment* dated March 9, 2006.

Groundwater Level Measurements

On March 9, 2006, depth to groundwater measurements were recorded for monitoring wells MW-1 through MW-12, and DW-1 **(Table 1)** and were used to construct the groundwater elevation contour map **(Figure 3)**. Well DW-1 was not used in preparing the contour map because this well is screened in a deeper water-bearing zone. The general groundwater flow direction on March 9, 2006, was southwest with a gradient of approximately 0.003 feet per foot (ft/ft). Evidence was seen of groundwater mounding beneath the northern portion of the site which has been observed in previous monitoring events. There was also an apparent groundwater depression surrounding MW-2 which ENSR has not observed in previous events. ENSR will watch for this depression in the future to determine if the occurrence during this event was anomalous. Copies of the groundwater sampling field sheets are included in **Attachment B**. A summary of groundwater elevations is presented in **Table 1**.

Groundwater Sampling and Analytical Activities

Groundwater samples were collected from monitoring wells MW-2, MW-3, and MW-6 through MW-12 on March 9, 2006. The groundwater samples and a trip blank were submitted under chain-of-custody (COC) protocols to California Laboratory Services, a State-of-California certified laboratory in Rancho Cordova, California. The samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and total petroleum hydrocarbons as diesel (TPHd) by United States Environmental Protection Agency (EPA) Method 8015 Modified and for volatile organic compounds (VOCs) by EPA Method 8260B. Groundwater samples were also analyzed for TPHd using EPA method 8015 Modified with a silica gel cleanup (SGC). The purpose of using the SGC method is to remove non-fuel hydrocarbons including anthropogenic and naturally occurring organic compounds from the sample, therefore precluding them from being falsely quantified as diesel. Samples from MW-2, MW-3, and MW-11 were also analyzed for CAM-17 metals by EPA Methods 200.7, 200.8, and 245.1. Samples from MW-2 and MW-3 were also analyzed for semi-volatile organic compounds (SVOCs) by EPA Method 8270C. Copies of the certified laboratory analytical reports with COC documentation are included in **Attachment C**. Groundwater monitoring data and analytical results are summarized in **Tables 1** through **5**. Historical groundwater monitoring data and analytical results are included in **Attachment D**. **Figure 4** depicts dissolved concentrations of TPHd, TPHg, and benzene in groundwater during the March 2006 sampling event. Isoconcentration maps of TPHd, TPHg and benzene in groundwater are shown on **Figures 5**, **6,** and **7**, respectively. Groundwater elevation and concentration trends over time for selected wells are depicted in **Attachment E**.

Approximately 70 gallons of groundwater were purged from monitoring wells during the sampling event. NRC Environmental of Alameda, California provides transport of the purge water as non-hazardous waste to Evergreen Oil of Newark, California for disposal. Transport and disposal is performed according to applicable protocols. The non-hazardous waste manifest will be sent under separate cover.

Results and Conclusions

Groundwater elevation increased approximately 10 feet since the September 2005 monitoring and sampling event. Typical seasonal water level fluctuations over the monitoring history are approximately 8.25 feet. The observed increase in groundwater elevations appears to be regional and seasonal in nature.

The reported TPHd concentrations using SGC were 700 micrograms per liter (µg/L) in MW-2, 100 µg/L in MW-3, and 140 µg/L in MW-11. TPHd concentrations without SGC were 1,800 µg/L in MW-2, 120 µg/L in MW-3, and 270 µg/L in MW-11. The lower TPHd concentrations reported after SGC imply that non-fuel organic compounds are present in the groundwater beneath the site. TPHd was not detected in any other sampled wells.

The reported TPHg concentrations were 1,500 µg/L in well MW-2, and 100 µg/L in well MW-3. TPHg concentrations were reported below laboratory reporting limits in seven wells (MW-6 through MW-12). TPHg concentrations in these wells have been below reporting limits since at least the 1996 second semiannual monitoring event.

Naphthalene was detected at 20 µg/L (by EPA 8270C) and at 20 µg/L (by EPA 8260B) in MW-2.

VOC concentrations in wells MW-2 and MW-3 were lower than in the previous sampling event in September 2005. VOC concentrations generally appear to decrease as the groundwater table elevation increases. The compound 2-methylnaphthalene was detected at a concentration of 33 µg/L in MW-2. Ethanol was detected in three wells (MW-3, MW-9, and MW-12) at concentrations of 21 µg/L, 9.1 µg/L, and 12 µg/L, respectively.

CAM-17 dissolved-phase metal analytical results were similar to results from March 2005, with arsenic and barium being reported above the detection limits. Lead was not detected above the laboratory reporting limit of 5.0 µg/L in the wells sampled.

Recommendations and Future Work

The next semiannual groundwater monitoring and sampling event is scheduled for September 2006. ENSR will initiate the proposed additional site assessment activities described in the work plan submitted on March 9, 2006 upon regulatory approval. Following completion of additional assessment activities, ENSR proposes to meet with the NCWB to discuss the results, and develop a remedial action plan for the site.

Remarks/Signatures

The interpretations in this report represent our professional opinions and are based, in part, on 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 Mr. William Glenn at (714) 973-3373.

Sincerely,

Jeremy Coerper
Geologist

William S. Glenn, Jr., P.G. # 7737
Project Manager

D. N. Peacock, Ph.D., P.G. # 7801
Sr. Project Manager

PROFESSIONAL GEOLOGIST
DAVID N. PEACOCK
No. 7801
STATE OF CALIFORNIA

Tables: 1 - Groundwater Monitoring Data and Analytical Results
2 - Groundwater Analytical Results - Semi-Volatile Organic Compounds
3 - Groundwater Analytical Results – Additional Volatile Organic Compounds
4 - Groundwater Analytical Results - CAM 17 Metals
5 - Groundwater Analytical Results - Fuel Oxygenate Compounds by EPA Method 8260

Figures: 1 - Site Location Map
2 - Site Map
3 - Groundwater Elevation Contour Map
4 - Concentration Map
5 - TPHd Iso-Concentration Map
6 - TPHg Iso-Concentration Map
7 - Benzene Iso-Concentration Map

Attachments:
A - Field Methods and Procedures
B - Groundwater Sampling Data Sheets
C - Laboratory Analytical Results with Chain-of-Custody Documentation
D - Historical Groundwater Elevation and Analytical Data
E - Groundwater Elevation and Concentration Trends

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

Tables

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

WELL ID/ TOC (ft.)	DATE	DTW (ft.)	GWE (msl)	TPHd (µg/L)	TPHd (SGC)[4] (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ehylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
MW-1											
169.64*	3/11/2004	4.42	165.22	--	--	--	--	--	--	--	--
	9/20/2004	14.35	155.29	--	--	--	--	--	--	--	--
	3/23/2005	3.03	166.61	--	--	--	--	--	--	--	--
	9/6/2005	11.80	157.84	--	--	--	--	--	--	--	--
	3/9/2006	**2.03**	**167.61**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-2											
171.08*	3/11/2004	5.47	165.61	450	--	540	<0.5	<0.5	12	1.2	<1.0
	9/20/2004	15.75	155.33	410 [1]	--	1,400 [2]	8.6	4.9	1,400	170	<0.5
	3/23/2005	4.60	166.48	1,000 [1]	--	1,500 [3]	<0.50	0.64	42	5.9	<0.50
	9/6/2005	13.10	157.98	--	--	--	--	--	--	--	--
	9/7/2005	--	--	5,700 [1]	1,900	5,100 [3]	6.2	4.0	370	36	<0.50
	3/9/2006	**4.79**	**166.29**	**1,800 [1]**	**700 [1]**	**1,500**	**0.90**	**0.75**	**64**	**4.2**	**<0.50**
MW-3											
170.21*	3/11/2004	5.50	164.71	630	--	960	64	2.8	33	38	<1.0
	9/20/2004	15.40	154.81	1,300 [1]	--	1,600 [2]	140	3.5	17	11	<0.5
	3/23/2005	4.85	165.36	<50	--	98 [3]	10	<0.50	2.6	5.7	<0.50
	9/6/2005	13.15	157.06	--	--	--	--	--	--	--	--
	9/7/2005	--	--	1,600 [1]	940	3,400 [3]	210	7.4	6.1	5.8	<0.50
	3/9/2006	**3.44**	**166.77**	**120 [1]**	**100 [1]**	**100**	**5.5**	**<0.50**	**4.0**	**2.7**	**<0.50**
MW-4											
169.99**	3/11/2004	4.85	165.14	--	--	--	--	--	--	--	--
	9/20/2004	15.30	154.69	--	--	--	--	--	--	--	--
	3/23/2005	3.75	166.24	--	--	--	--	--	--	--	--
	9/6/2005	12.62	157.37	--	--	--	--	--	--	--	--
	3/9/2006	**2.58**	**167.41**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**

Table 1
Groundwater Monitoring Data and Analytical Results
Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

WELL ID/ TOC (ft.)	DATE	DTW (ft.)	GWE (msl)	TPHd (µg/L)	TPHd (SGC)[4] (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ehylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
MW-5											
170.17**	3/11/2004	4.75	165.42	--	--	--	--	--	--	--	--
	9/20/2004	15.30	154.87	--	--	--	--	--	--	--	--
	3/23/2005	3.90	166.27	--	--	--	--	--	--	--	--
	9/6/2005	12.60	157.57	--	--	--	--	--	--	--	--
	3/9/2006	**2.43**	**167.74**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-6											
171.35**	3/11/2004	6.48	164.87	--	--	--	--	--	--	--	--
	9/20/2004	17.00	154.35	190 [1]	--	<50	0.73	<0.50	0.74	<1.0	--
	3/23/2005	6.25	165.10	--	--	--	--	--	--	--	--
	9/6/2005	14.43	156.92	<50	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50
	3/9/2006	**4.69**	**166.66**	**<50**	**<50**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**
MW-7											
171.16**	3/11/2004	6.82	164.34	--	--	--	--	--	--	--	--
	9/20/2004	17.00	154.16	180 [1]	--	<50	<0.50	<0.50	<0.50	<1.0	--
	3/23/2005	6.85	164.31	--	--	--	--	--	--	--	--
	9/6/2005	14.52	156.64	<50	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50
	3/9/2006	**5.13**	**166.03**	**<50**	**<50**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**
MW-8											
170.75**	3/11/2004	6.27	164.48	--	--	--	--	--	--	--	--
	9/20/2004	16.25	154.50	330 [1]	--	<50	<0.50	<0.50	<0.50	<1.0	--
	3/23/2005	6.26	164.49	--	--	--	--	--	--	--	--
	9/6/2005	13.81	156.94	<50	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50
	3/9/2006	**4.31**	**166.44**	**<50**	**<50**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

WELL ID/ TOC (ft.)	DATE	DTW (ft.)	GWE (msl)	TPHd (µg/L)	TPHd (SGC)[4] (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ehylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
MW-9											
170.46**	3/11/2004	5.75	164.71	--	--	--	--	--	--	--	--
	9/20/2004	15.85	154.61	260 [1]	--	<50	<0.50	<0.50	<0.50	<1.0	--
	3/23/2005	5.56	164.90	--	--	--	--	--	--	--	--
	9/6/2005	13.50	156.96	--	--	--	--	--	--	--	--
	9/7/2005	--	--	<50	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50
	3/9/2006	**3.87**	**166.59**	**<50**	**<50**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**
MW-10											
171.89**	3/11/2004	6.65	165.24	--	--	--	--	--	--	--	--
	9/20/2004	17.00	154.89	210 [1]	--	<50	<0.50	<0.50	<0.50	<0.50	<0.5
	3/23/2005	6.35	165.54	--	--	--	--	--	--	--	--
	9/6/2005	14.51	157.38	--	--	--	--	--	--	--	--
	9/7/2005	--	--	<50	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50
	3/9/2006	**4.67**	**167.22**	**<50**	**<50**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**
MW-11											
170.43**	3/11/2004	5.00	165.43	310	--	<50	<0.5	<0.5	<0.5	<1.0	<1.0
	9/20/2004	15.15	155.28	2400 [1]	--	<50	<0.50	<0.50	<0.50	<0.50	<0.5
	3/23/2005	3.65	166.78	420 [1]	--	<50	<0.50	<0.50	<0.50	<1.0	<0.50
	9/6/2005	12.60	157.83	--	--	--	--	--	--	--	--
	9/7/2005	--	--	<50	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50
	3/9/2006	**2.61**	**167.82**	**270 [1]**	**140 [1]**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

WELL ID/ TOC (ft.)	DATE	DTW (ft.)	GWE (msl)	TPHd (µg/L)	TPHd (SGC)[4] (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ehylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
MW-12											
168.84**	3/11/2004	5.65	163.19	--	--	--	--	--	--	--	--
	9/20/2004	16.50	152.34	220 [1]	--	<50	<0.50	<0.50	<0.50	<0.50	<0.5
	3/23/2005	5.53	163.31	--	--	--	--	--	--	--	--
	9/6/2005	12.95	155.89	--	--	--	--	--	--	--	--
	9/7/2005	--	--	<50	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50
	3/9/2006	**3.54**	**165.30**	**<50**	**<50**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**
DW-1											
171.27**	3/11/2004	6.07	165.20	<50	--	<50	<0.5	<0.5	<0.5	<1.0	<1.0
	9/20/2004	16.70	154.57	510 [1]	--	<50	<0.50	<0.50	<0.50	<0.50	<0.5
	3/23/2005	5.50	165.77	--	--	--	--	--	--	--	--
	9/6/2005	14.00	157.27	--	--	--	--	--	--	--	--
	3/9/2006	**3.97**	**167.30**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
QA											
	3/11/2004	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.0	<1.0
	9/20/2004	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<0.5
	3/23/2005	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<0.50
	9/6/2005	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<0.50
	3/9/2006	**--**	**--**	**--**	**--**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**--**

Table 1
Groundwater Monitoring Data and Analytical Results
Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to March 16, 2004, were compiled from reports prepared by Gettler-Ryan, Inc.

TOC = Top of Casing
ft. = Feet
DTW = Depth to Water
GWE = Groundwater Elevation
msl = Mean sea level
TPHg = Total Petroleum Hydrocarbons as Gasoline
TPHd = Total Petroleum Hydrocarbons as Diesel

MTBE = Methyl tertiary butyl ether
ND = Not Detected
-- = Not Measured/Not Analyzed
D = Duplicate Sample
QA = Quality Assurance/Trip Blank
µg/L = Micrograms per Liter

* TOC elevations have been surveyed relative to msl, in 1991
** TOC elevations have been surveyed relative to msl, in 1994

1. Although sample contains compounds in the retention time range associated with diesel, the chromatogram was not consistent with the expected chromatographic pattern or "fingerprint". However, the reported concentration is based on diesel.
2. Although sample contains compounds in the retention time range associated with gasoline, the chromatogram was not consistent with the expected chromatographic pattern or "fingerprint". However, the reported concentration is based on gasoline.
3. Weathered gasoline.
4. Sample analyzed for TPHd by EPA Method 8015 Modified with silica gel cleanup.

Table 2

Groundwater Analytical Results - Semi-Volatile Organic Compounds.

Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

WELL ID	DATE	Bis(2 ethylhexyl) phthalate (µg/L)	2-Methyl naphthalene (µg/L)	Naphthalene (µg/L)
MW-2	3/11/2004	<10	<10	13
	9/20/2004	<10	<10	<10
	3/23/2005	<10	32	17
	9/6/2005	<10	180	170
	3/9/2006	**<10**	**33**	**20**
MW-3	3/11/2004	<10	15	15
	9/20/2004	<10	<10	<10
	3/23/2005	<10	<10	<10
	9/6/2005	<10	27	<10
	3/9/2006	**<10**	**<10**	**<10**
MW-11	3/11/2004	<10	<10	<10
	9/20/2004	--	--	--
	3/23/2005	--	--	--
	9/6/2005	--	--	--
	3/9/2006	**--**	**--**	**--**
DW-1	3/11/2004	39	<10	<10
	9/20/2004	<10	<10	<10
	3/23/2005	--	--	--
	9/6/2005	--	--	--
	3/9/2006	**--**	**--**	**--**

EXPLANATIONS:

µg/L = Micrograms per Liter
-- = Not Analyzed
ND = Not Detected

ANALYTICAL METHODS:

EPA Method 8270C for Semi-Volatile Organic Compounds

Table 3

Groundwater Analytical Results - Additional Volatile Organic Compounds

Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

WELL ID	DATE	n-BB (µg/L)	sec-BB (µg/L)	IPB (µg/L)	p-IPT (µg/L)	M Chlor (µg/L)	NAPHT (µg/L)	n-PB (µg/L)	1,2,4-TCB (µg/L)	TCE (µg/L)	1,2,4-TMB (µg/L)	1,3,5-TMB (µg/L)
MW-2	3/11/2004	8.4	3.3	12	<0.50	<0.50	12	32	<0.50	<0.50	0.63	0.53
	9/20/2004	51	26	260	7.0	<0.50	430	380	0.79	<0.50	120	110
	3/23/2005	52	17	60	0.59	<0.50	5.1	150	<0.50	<0.50	<0.50	<0.50
	9/7/2005	67	43	190	2.2	<0.50	190	510	<0.50	<0.50	13	9.9
	3/9/2006	**--**	**--**	**--**	**--**	**--**	**20**	**--**	**<10**	**--**	**--**	**--**
MW-3	3/11/2004	9.1	2.4	22	<0.50	<0.50	10	50	<0.50	<0.50	27	9.9
	9/20/2004	14	9.5	54	<0.50	<0.50	18	110	<0.50	<0.50	7.2	3.3
	3/23/2005	0.64	<0.50	2.2	<0.50	<0.50	4.6	4.3	<0.50	<0.50	0.97	0.54
	9/7/2005	29	20	120	<0.50	<0.50	1.2	210	<0.50	<0.50	<0.50	0.54
	3/9/2006	**--**	**--**	**--**	**--**	**--**	**<10**	**--**	**<10**	**--**	**--**	**--**
MW-6	3/11/2004	--	--	--	--	--	--	--	--	--	--	--
	9/21/2004	<0.50	<0.50	<0.50	<0.50	0.80	2.6	1.2	<0.50	<0.50	<0.50	<0.50
	3/23/2005	--	--	--	--	--	--	--	--	--	--	--
	9/6/2005	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/9/2006	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-7	3/11/2004	--	--	--	--	--	--	--	--	--	--	--
	9/20/2004	<0.50	<0.50	<0.50	<0.50	0.65	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/23/2005	--	--	--	--	--	--	--	--	--	--	--
	9/6/2005	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/9/2006	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-8	3/11/2004	--	--	--	--	--	--	--	--	--	--	--
	9/20/2004	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/23/2005	--	--	--	--	--	--	--	--	--	--	--
	9/6/2005	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/9/2006	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**

Table 3

Groundwater Analytical Results - Additional Volatile Organic Compounds

Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

WELL ID	DATE	n-BB (µg/L)	sec-BB (µg/L)	IPB (µg/L)	p-IPT (µg/L)	M Chlor (µg/L)	NAPHT (µg/L)	n-PB (µg/L)	1,2,4-TCB (µg/L)	TCE (µg/L)	1,2,4-TMB (µg/L)	1,3,5-TMB (µg/L)
MW-9	3/11/2004	--	--	--	--	--	--	--	--	--	--	--
	9/20/2004	<0.50	<0.50	<0.50	<0.50	0.72	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/23/2005	--	--	--	--	--	--	--	--	--	--	--
	9/7/2005	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/9/2006	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-10	3/11/2004	--	--	--	--	--	--	--	--	--	--	--
	9/20/2004	<0.50	<0.50	<0.50	<0.50	0.72	<0.50	<0.50	<0.50	1.3	<0.50	<0.50
	3/23/2005	--	--	--	--	--	--	--	--	--	--	--
	9/7/2005	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.3	<0.50	<0.50
	3/9/2006	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-11	3/11/2004	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	9/20/2004	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/23/2005	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	9/7/2005	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/9/2006	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-12	3/11/2004	--	--	--	--	--	--	--	--	--	--	--
	9/20/2004	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/23/2005	--	--	--	--	--	--	--	--	--	--	--
	9/7/2005	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/9/2006	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
DW-1	3/11/2004	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	9/20/2004	<0.50	<0.50	<0.50	<0.50	0.51	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/23/2005	--	--	--	--	--	--	--	--	--	--	--
	9/6/2005	--	--	--	--	--	--	--	--	--	--	--
	3/9/2006	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**

Table 3

Groundwater Analytical Results - Additional Volatile Organic Compounds

Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

WELL ID	DATE	n-BB (µg/L)	sec-BB (µg/L)	IPB (µg/L)	p-IPT (µg/L)	M Chlor (µg/L)	NAPHT (µg/L)	n-PB (µg/L)	1,2,4-TCB (µg/L)	TCE (µg/L)	1,2,4-TMB (µg/L)	1,3,5-TMB (µg/L)
QA	9/20/2004	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/23/2005	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	9/6/2005	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/9/2006	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**

EXPLANATIONS:

n-BB = n-Butylbenzene
sec-BB = sec-Butylbenzene
IPB = Isopropylbenzene
p-IPT = p- Isopropyltoluene
M Chlor = Methylene chloride
NAPHT = Naphthalene
n-PB = n-Propylbenzene
1,2,4 TCB = 1,2,4 Trichlorobenzene
TCE = Trichloroethene
1,2,4-TMB = 1,2,4-Trimethylbenzene
1,3,5-TMB = 1,3,5-Trimethylbenzene

µg/L = Micrograms per Liter
-- = Not Analyzed
ND = Not Detected

ANALYTICAL METHODS:

EPA Method 8260B for Volatile Organic Compounds

Table 4

Groundwater Analytical Results - CAM 17 Metals

Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

WELL ID	DATE	Arsenic (µg/L)	Barium (µg/L)	Chromium (µg/L)	Cobalt (µg/L)	Copper (µg/L)	Nickel (µg/L)	Selenium (µg/L)	Thallium (µg/L)	Vanadium (µg/L)	Zinc (µg/L)	Dissolved Lead (µg/L)
MW-2	3/11/2004	39	36	<20	<20	<20	<20	<5.0	<10	<20	<20	<5.0
	9/20/2004	<5.0	140	<20	<20	<20	<20	<5.0	<10	<20	30	<5.0
	3/23/2005	46	42	<20	<20	<20	<20	<5.0	<10	<20	<20	<5.0
	9/7/2005	13	96	<20	<20	<20	<20	<5.0	<10	<20	<20	<5.0
	3/9/2006	**29**	**54**	**<20**	**<20**	**<20**	**<20**	**<5.0**	**<10**	**<20**	**<20**	**<5.0**
MW-3	3/11/2004	<5.0	110	<20	<20	<20	37	<5.0	<10	<20	<20	<5.0
	9/20/2004	11	110	<20	<20	<20	25	<5.0	<10	<20	<20	<5.0
	3/23/2005	<5.0	50	<20	<20	<20	<20	<5.0	<10	<20	<20	<5.0
	9/7/2005	12	190	<20	<20	<20	43	<5.0	<10	<20	<20	<5.0
	3/9/2006	**<5.0**	**51**	**<20**	**<20**	**<20**	**<20**	**<5.0**	**<10**	**<20**	**<20**	**<5.0**
MW-11	3/11/2004	18	42	<20	<20	<20	<20	<5.0	<10	<20	31	<5.0
	9/20/2004	11	140	<20	<20	<20	35	<5.0	<10	<20	28	<5.0
	3/23/2005	16	48	<20	<20	<20	<20	<5.0	<10	<20	<20	<5.0
	9/7/2005	13	92	<20	<20	<20	<20	<5.0	<10	<20	<20	<5.0
	3/9/2006	**19**	**42**	**<20**	**<20**	**<20**	**<20**	**<5.0**	**<10**	**<20**	**<20**	**<5.0**
DW-1	3/11/2004	--	--	--	--	--	--	--	--	--	--	**--**
	9/20/2004	--	--	--	--	--	--	--	--	--	--	<5.0
	3/23/2005	--	--	--	--	--	--	--	--	--	--	--
	9/6/2005	--	--	--	--	--	--	--	--	--	--	--
	3/9/2006	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**

EXPLANATIONS:

µg/L = Micrograms per Liter
-- = Not Analyzed
ND = Not Detected

ANALYTICAL METHODS:

EPA Methods 200.7, 200.8, and 245.1

Table 5

Groundwater Analytical Results - Fuel Oxygenate Compounds by EPA Method 8260

Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

WELL ID	DATE	TAME (µg/L)	TBA (µg/L)	DIPE (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	ETBE (µg/L)	MTBE (µg/L)	Methanol (µg/L)
MW-2	03/28/00	--	--	--	< 5.00	< 5.00	--	--	< 5.00	--
	03/27/01	< 2.0	< 50	< 2.0	< 2.0	< 2.0	< 500	< 2.0	< 2.0	--
	09/27/01	< 100	< 2,000	< 100	< 100	< 100	< 10,000	< 100	< 100	--
	03/23/02	< 2.0	< 20	< 2.0	< 2.0	< 2.0	< 500	< 2.0	< 2.0	<100
	09/26/02	< 25	< 250	< 25	< 25	< 25	< 2,500	< 25	< 25	--
	03/31/03	< 25	< 250	< 25	< 25	< 25	< 2,500	< 25	< 25	--
	09/29/03	< 25	<500	< 25	<12	<12	< 2,500	< 25	<12	--
	03/11/04	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--
	09/20/04	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	03/23/05	--	--	--	--	--	19	--	--	--
	09/07/05	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	--
	03/09/06	**<0.50**	**<5.0**	**<0.50**	**<0.50**	**<0.50**	**<5.0**	**<0.50**	**<0.50**	--
MW-3	03/28/00	--	--	--	< 5.00	< 5.00	--	--	< 10.0	--
	03/27/01	< 2.0	< 50	< 2.0	< 2.0	< 2.0	< 500	< 2.0	< 2.0	--
	09/27/01	< 100	< 2,000	< 100	< 100	< 100	< 10,000	< 100	< 100	--
	03/23/02	< 2.0	< 20	< 2.0	< 2.0	< 2.0	< 500	< 2.0	< 2.0	<100
	09/26/02	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 500	< 5.0	< 5.0	--
	03/31/03	< 5.0	< 100	< 5.0	< 5.0	< 5.0	< 500	< 5.0	< 5.0	--
	09/29/03	<10	<200	<10	< 5.0	<5	<1,000	<10	<5	--
	03/11/04	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--
	09/20/04	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	03/23/05	--	--	--	--	--	18	--	--	--
	09/07/05	<0.50	<5.0	<0.50	<0.50	<0.50	20	<0.50	<0.50	--
	03/09/06	**<0.50**	**<5.0**	**<0.50**	**<0.50**	**<0.50**	**21**	**<0.50**	**<0.50**	--

Table 5

Groundwater Analytical Results - Fuel Oxygenate Compounds by EPA Method 8260

Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

WELL ID	DATE	TAME (µg/L)	TBA (µg/L)	DIPE (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	ETBE (µg/L)	MTBE (µg/L)	Methanol (µg/L)
MW-6	09/27/01	< 1.0	< 20	< 1.0	< 0.50	< 0.50	< 100	< 1.0	< 0.50	--
	09/21/04	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	03/23/05	--	--	--	--	--	--	--	--	--
	09/06/05	<0.50	<5.0	<0.50	<0.50	<0.50	12	<0.50	<0.50	--
	03/09/06	**<0.50**	**<5.0**	**<0.50**	**<0.50**	**<0.50**	**<5.0**	**<0.50**	**<0.50**	--
MW-7	09/27/01	< 1.0	< 20	< 1.0	< 0.50	< 0.50	< 100	< 1.0	< 0.50	--
	09/29/03	<0.5	<5	<0.5	<0.5	<0.5	<100	<0.5	< 0.50	--
	09/20/04	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	03/23/05	--	--	--	--	--	--	--	--	--
	09/06/05	<0.50	<5.0	<0.50	<0.50	<0.50	13	<0.50	<0.50	--
	03/09/06	**<0.50**	**<5.0**	**<0.50**	**<0.50**	**<0.50**	**<5.0**	**<0.50**	**<0.50**	--
MW-8	09/27/01	< 1.0	< 20	< 1.0	< 0.50	< 0.50	< 100	< 1.0	< 0.50	--
	09/29/03	<0.5	<5	<0.5	<0.5	<0.5	<100	<0.5	< 0.50	--
	09/20/04	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	03/23/05	--	--	--	--	--	--	--	--	--
	09/06/05	<0.50	<5.0	<0.50	<0.50	<0.50	6.2	<0.50	<0.50	--
	03/09/06	**<0.50**	**<5.0**	**<0.50**	**<0.50**	**<0.50**	**<5.0**	**<0.50**	**<0.50**	--
MW-9	09/27/01	< 1.0	< 20	< 1.0	< 0.50	< 0.50	< 100	< 1.0	< 0.50	--
	09/29/03	<0.5	<5	<0.5	<0.5	<0.5	<100	<0.5	< 0.50	--
	09/20/04	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	03/23/05	--	--	--	--	--	--	--	--	--
	09/07/05	<0.50	<5.0	<0.50	<0.50	<0.50	13	<0.50	<0.50	--
	03/09/06	**<0.50**	**<5.0**	**<0.50**	**<0.50**	**<0.50**	**9.1**	**<0.50**	**<0.50**	--

Table 5

Groundwater Analytical Results - Fuel Oxygenate Compounds by EPA Method 8260

Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

WELL ID	DATE	TAME (µg/L)	TBA (µg/L)	DIPE (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	ETBE (µg/L)	MTBE (µg/L)	Methanol (µg/L)
MW-10	09/27/01	< 1.0	< 20	< 1.0	< 0.50	< 0.50	< 100	< 1.0	< 0.50	--
	09/29/03	<0.5	<5	<0.5	<0.5	<0.5	<100	<0.5	< 0.50	--
	09/20/04	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	03/23/05	--	--	--	--	--	--	--	--	--
	09/07/05	<0.50	<5.0	<0.50	<0.50	<0.50	11	<0.50	<0.50	--
	03/09/06	**<0.50**	**<5.0**	**<0.50**	**<0.50**	**<0.50**	**<5.0**	**<0.50**	**<0.50**	--
MW-11	03/28/00	--	--	--	< 5.00	< 5.00	--	--	< 1.00	--
	03/27/01	< 2.0	< 50	< 2.0	< 2.0	< 2.0	< 500	< 2.0	< 2.0	--
	09/27/01	< 1.0	< 20	< 1.0	< 0.50	< 0.50	< 100	< 1.0	< 0.50	--
	03/23/02	< 2.0	< 20	< 2.0	< 2.0	< 2.0	< 500	< 2.0	< 2.0	<100
	09/26/02	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 50	< 0.50	< 0.50	--
	03/31/03	< 1.0	< 20	< 1.0	< 1.0	< 1.0	< 100	< 1.0	< 1.0	--
	09/29/03	<1	<20	<1	< 0.50	< 0.50	<100	(ug/L) = Microg	< 0.50	--
	03/11/04	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	--
	09/20/04	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	03/23/05	--	--	--	--	--	12	--	--	--
	09/07/05	<0.50	<5.0	<0.50	<0.50	<0.50	9.0	<0.50	<0.50	--
	03/09/06	**<0.50**	**<5.0**	**<0.50**	**<0.50**	**<0.50**	**<5.0**	**<0.50**	**<0.50**	--
MW-12	09/27/01	< 1.0	< 20	< 1.0	< 0.50	< 0.50	< 100	< 1.0	< 0.50	--
	09/29/03	<0.5	<5	<0.5	<0.5	<0.5	<100	<0.5	< 0.50	--
	09/20/04	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	03/23/05	--	--	--	--	--	--	--	--	--
	09/07/05	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	--
	03/09/06	**<0.50**	**<5.0**	**<0.50**	**<0.50**	**<0.50**	**12**	**<0.50**	**<0.50**	--

Table 5

Groundwater Analytical Results - Fuel Oxygenate Compounds by EPA Method 8260

Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

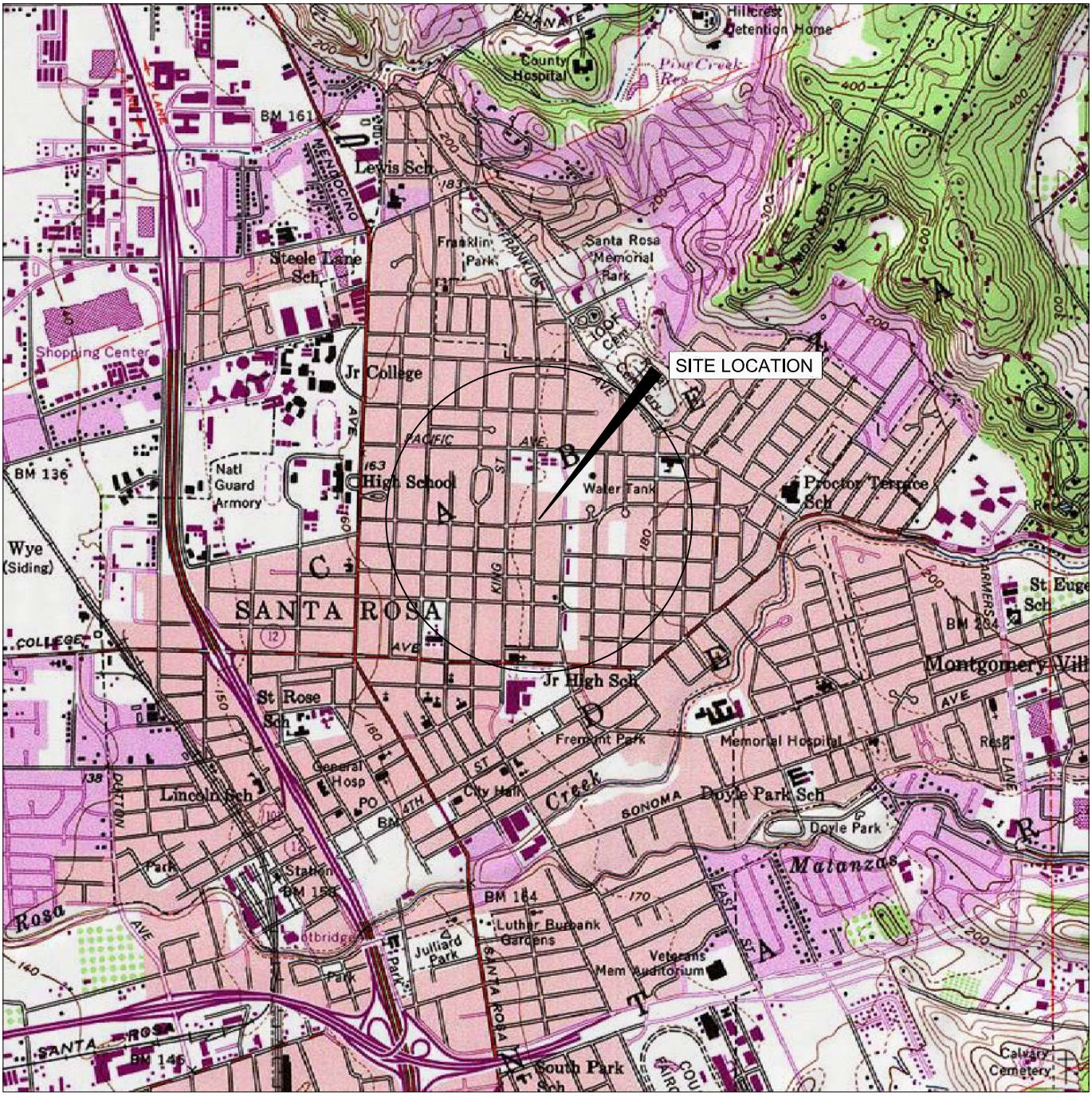
WELL ID	DATE	TAME (µg/L)	TBA (µg/L)	DIPE (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	ETBE (µg/L)	MTBE (µg/L)	Methanol (µg/L)
DW-1	03/11/04	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	**--**
	09/20/04	<0.5	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**--**
	03/23/05	--	--	--	--	--	--	--	--	--
	09/06/05	--	--	--	--	--	--	--	--	--
	03/09/06	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
QA	9/6/2005[1]	<0.5	43	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	03/09/06	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**

Explanations:

TAME = Tert-amyl methyl ether
TBA = Tert-butyl alcohol
DIPE = Di-isopropyl ether
EDB = 1,2-Dibromoethane
1,2-DCA = 1,2-Dichloroethane
ETBE = Ethyl tert-butyl ether
MTBE = Methyl terteriary butyl ether
-- = Not analyzed
µg/L = Micrograms per Liter

1 Acetone was detected at 18 (µg/L)

Figures



Map created with TOPO - 2003 National Geographic

MAP LOCATION

SOURCE: BASE MAP FROM USGS SANTA ROSA, CA
7.5 MINUTE TOPOGRAPHIC 1994

N

0 2000

Approximate Scale in Feet

ENSR | AECOM

ENSR CORPORATION
1420 HARBOR BAY PKWY STE 120
ALAMEDA, CALIFORNIA 94502
PHONE: (510) 748-6700
FAX: (510) 748-6799
WEB: HTTP://WWW.ENSR.AECOM.COM

SITE LOCATION MAP

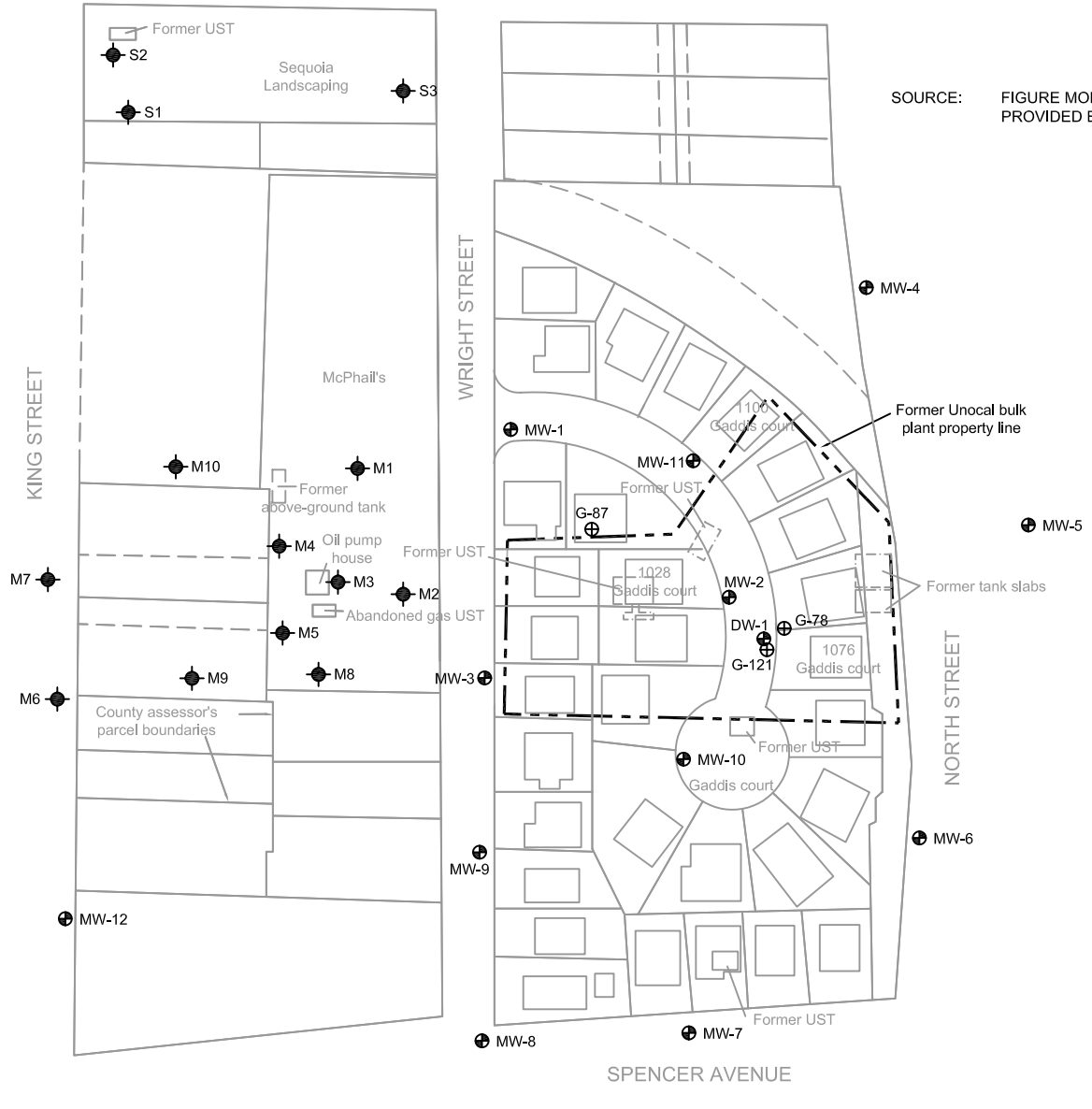
SEMI-ANNUAL MONITORING REPORT 1st HALF 2006
FORMER UNOCAL STATION 1975
1051 SPENCER AVENUE
SANTA ROSA, CALIFORNIA

FIGURE NUMBER: 1

DRAWN BY:	DATE:	PROJECT NUMBER:	SHEET NUMBER:
E. COWAN	04/06/06	06940-362-100	X

1975 SLM 1Q06

1975 SITE MAP 1Q06



SOURCE: FIGURE MODIFIED FROM EXISTING DRAWING PROVIDED BY GETTLER RYAN INC.

N

0 150

Approximate Scale in Feet

NOTE:

MW = SHALLOW MONITORING WELL (APPROXIMATE 20 FEET DEEP)

DW = DEEP MONITORING WELL (APPROXIMATE 40 FEET DEEP)

LEGEND

- GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELLS (OFFSITE)
- FORMER GADDIS WELLS

ENSR | AECOM

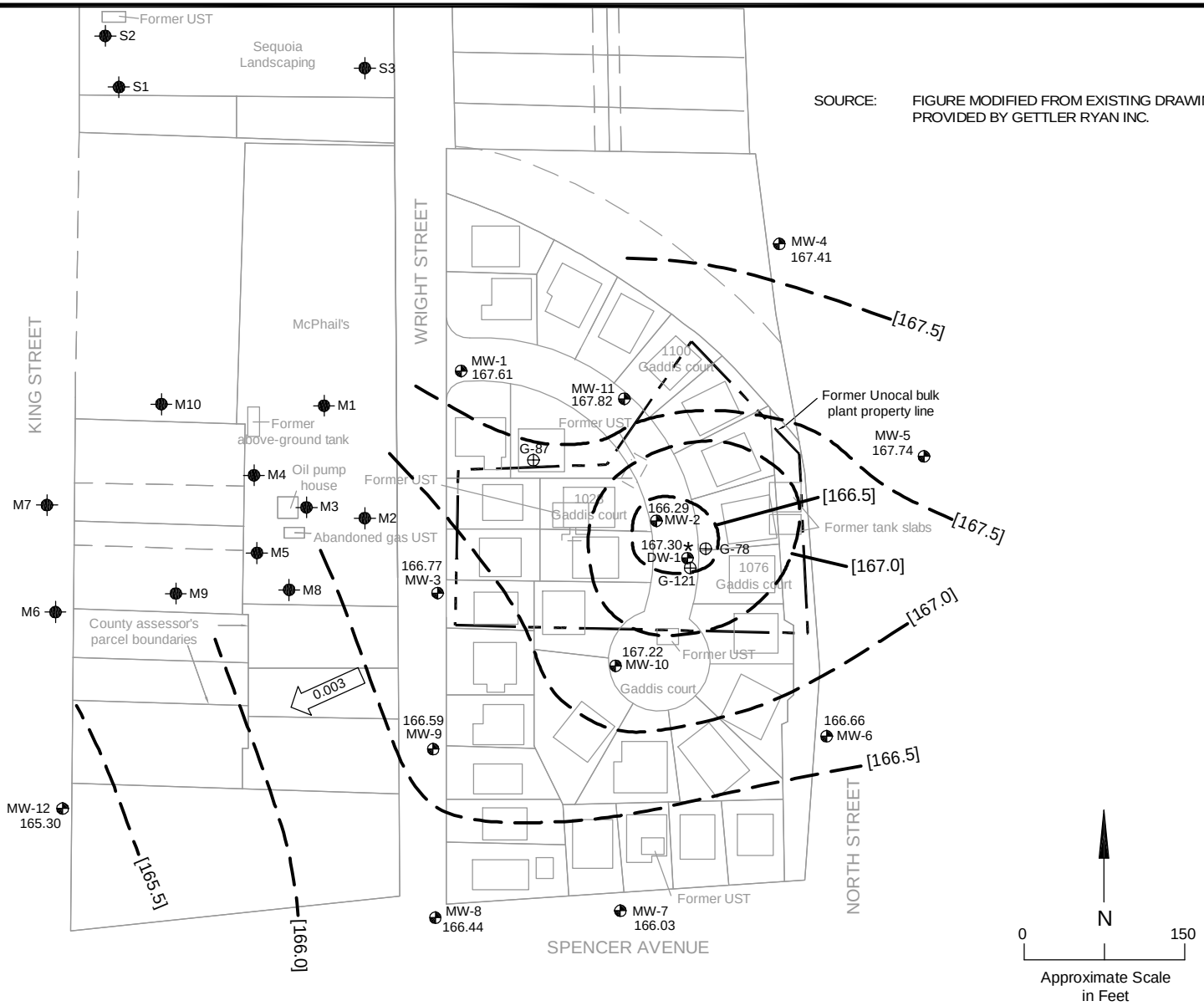
ENSR CORPORATION
1420 HARBOR BAY PKWY STE 120
ALAMEDA, CALIFORNIA 94502
PHONE: (510) 748-6700
FAX: (510) 748-6799
WEB: HTTP://WWW.ENSR.AECOM.COM

SITE MAP

SEMI-ANNUAL MONITORING REPORT 1st HALF 2006
FORMER UNOCAL STATION 1975
1051 SPENCER AVENUE
SANTA ROSA, CALIFORNIA

FIGURE NUMBER:			
2			
DRAWN BY:	DATE:	PROJECT NUMBER:	SHEET NUMBER:
E. COWAN	04/06/06	06940-362-100	1

1975 GW ELEV 1Q06



SOURCE: FIGURE MODIFIED FROM EXISTING DRAWING PROVIDED BY GETTLER RYAN INC.

NOTE:

MW = SHALLOW MONITORING WELL (APPROXIMATE 20 FEET DEEP)

DW = DEEP MONITORING WELL (APPROXIMATE 40 FEET DEEP)

LEGEND

⊕	GROUNDWATER MONITORING WELL
⊕	GROUNDWATER MONITORING WELLS (OFFSITE)
⊕	FORMER GADDIS WELLS
167.82	GROUNDWATER ELEVATION IN FEET MEAN SEA LEVEL
[167.5]	GROUNDWATER ELEVATION CONTOUR
0.003	APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT IN Ft/Ft
*	NOT USED FOR CONTOURING

ENSR | AECOM

ENSR CORPORATION
1420 HARBOR BAY PKWY STE 120
ALAMEDA, CALIFORNIA 94502
PHONE: (510) 748-6700
FAX: (510) 748-6799
WEB: HTTP://WWW.ENSR.AECOM.COM

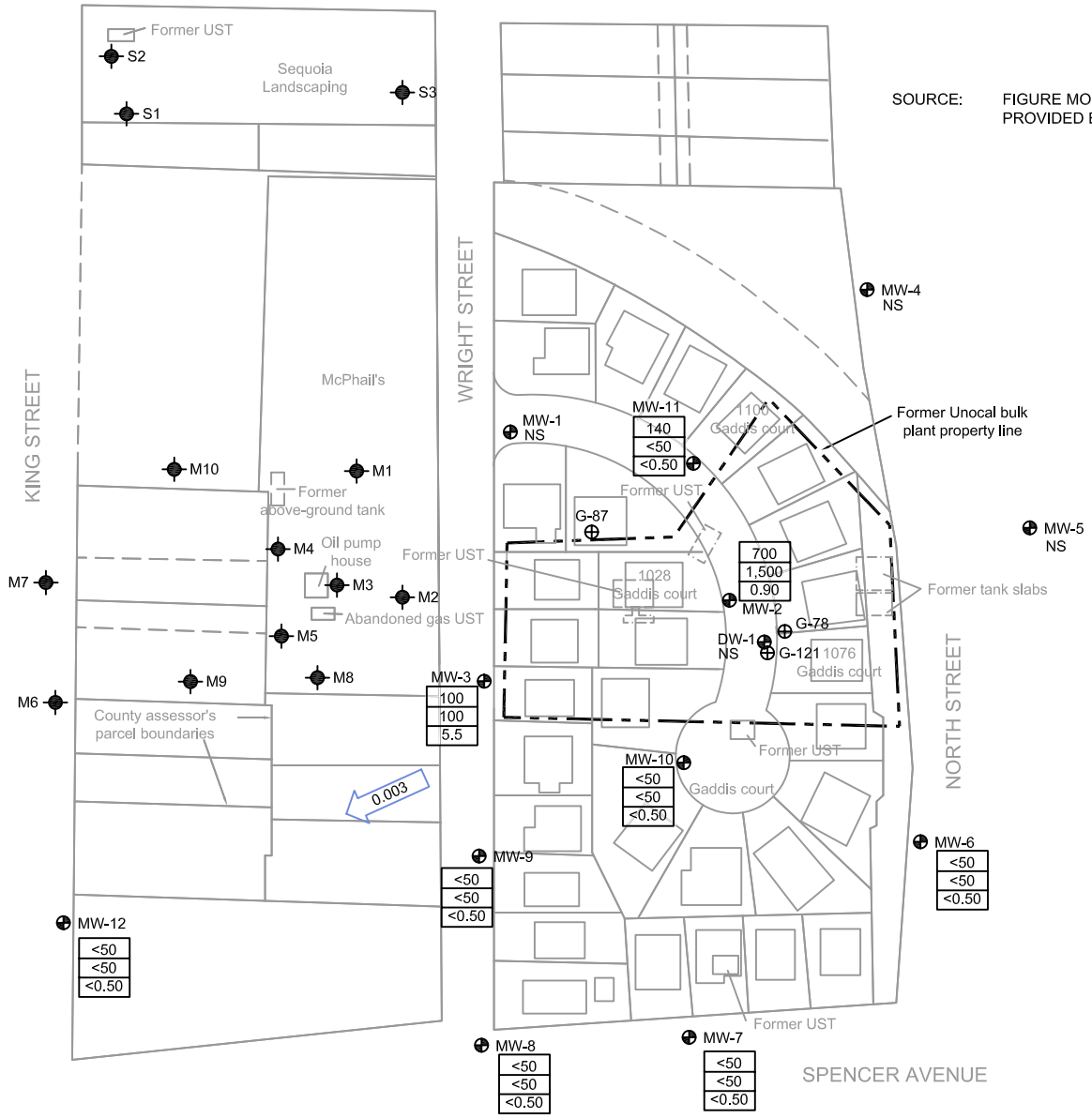
GROUNDWATER ELEVATION CONTOUR MAP

SEMI-ANNUAL MONITORING REPORT 1st HALF 2006
FORMER UNOCAL STATION 1975
1051 SPENCER AVENUE
SANTA ROSA, CALIFORNIA

FIGURE NUMBER:	
3	

DRAWN BY:	DATE:	PROJECT NUMBER:	SHEET NUMBER:
E. COWAN	04/06/06	06940-362-100	1

SOURCE: FIGURE MODIFIED FROM EXISTING DRAWING PROVIDED BY GETTLER RYAN INC.



N

0 150

Approximate Scale in Feet

NOTE:

MW = SHALLOW MONITORING WELL (APPROXIMATE 20 FEET DEEP)

DW = DEEP MONITORING WELL (APPROXIMATE 40 FEET DEEP)

LEGEND

- GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELLS (OFFSITE)
- FORMER GADDIS WELLS
- <50 / <50 / <0.50 — TPHd WITH SILICA GEL CLEANUP CONCENTRATION IN ug/L; TPHg CONCENTRATION IN ug/L; BENZENE IN ug/L
- NS — NOT SAMPLED
- 0.003 — APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT IN Ft/Ft

ENSR | AECOM

ENSR CORPORATION
1420 HARBOR BAY PKWY STE 120
ALAMEDA, CALIFORNIA 94502
PHONE: (510) 748-6700
FAX: (510) 748-6799
WEB: HTTP://WWW.ENSR.AECOM.COM

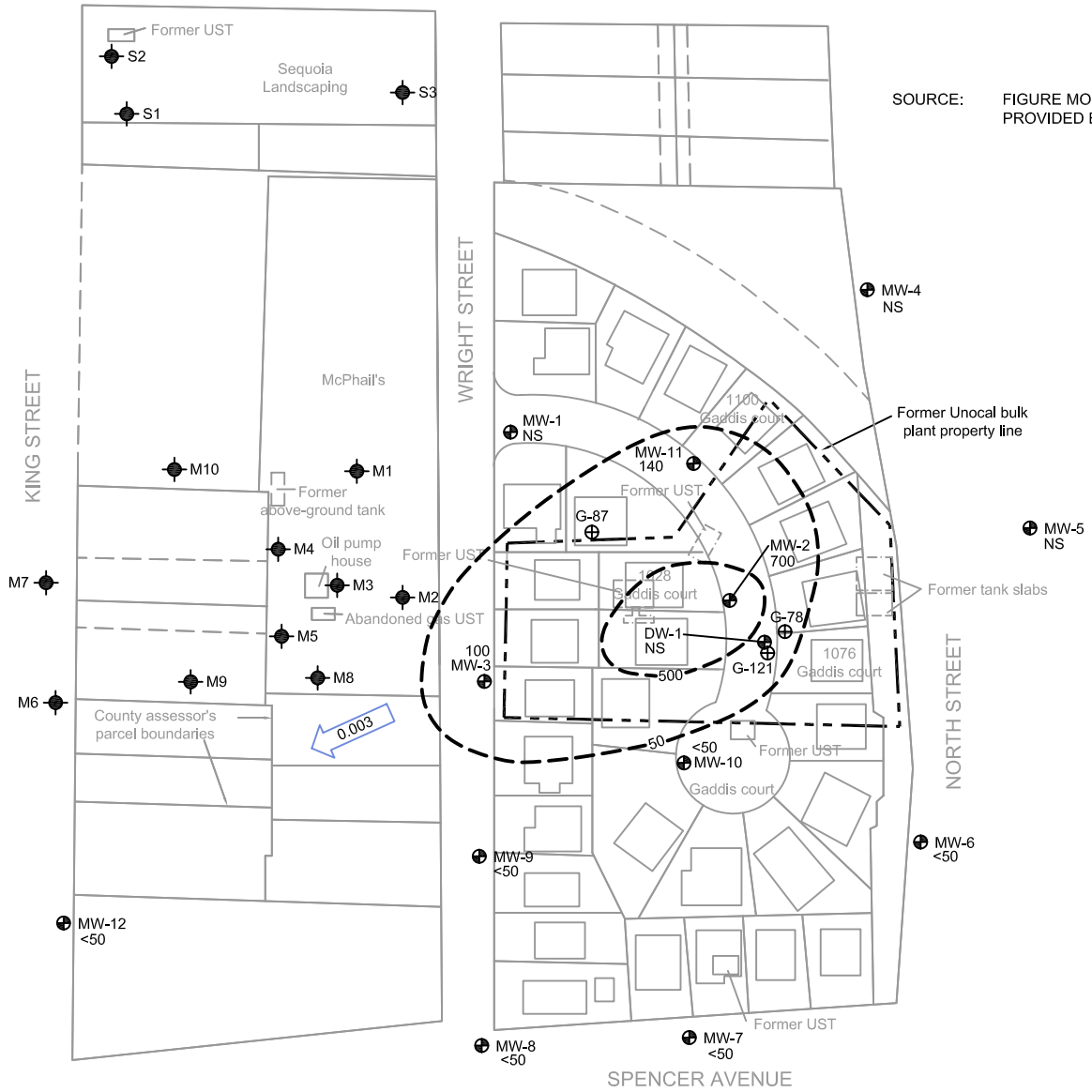
CONCENTRATION MAP

SEMI-ANNUAL MONITORING REPORT 1st HALF 2006
FORMER UNOCAL STATION 1975
1051 SPENCER AVENUE
SANTA ROSA, CALIFORNIA

FIGURE NUMBER:	
4	

DRAWN BY:	DATE:	PROJECT NUMBER:	SHEET NUMBER:
E. COWAN	04/06/06	06940-362-100	1

1975 TPHd CONC 1Q06



SOURCE: FIGURE MODIFIED FROM EXISTING DRAWING PROVIDED BY GETTLER RYAN INC.

N

0 150

Approximate Scale in Feet

NOTE:

MW = SHALLOW MONITORING WELL (APPROXIMATE 20 FEET DEEP)

DW = DEEP MONITORING WELL (APPROXIMATE 40 FEET DEEP)

LEGEND

- GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELLS (OFFSITE)
- FORMER GADDIS WELLS
- 500 — TPHd ISO-CONCENTRATION IN ug/L
- NS — NOT SAMPLED
- <50 — TPHd WITH SILICA GEL CLEANUP CONCENTRATION in ug/L
- 0.003 — APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT IN Ft/Ft

ENSR | AECOM

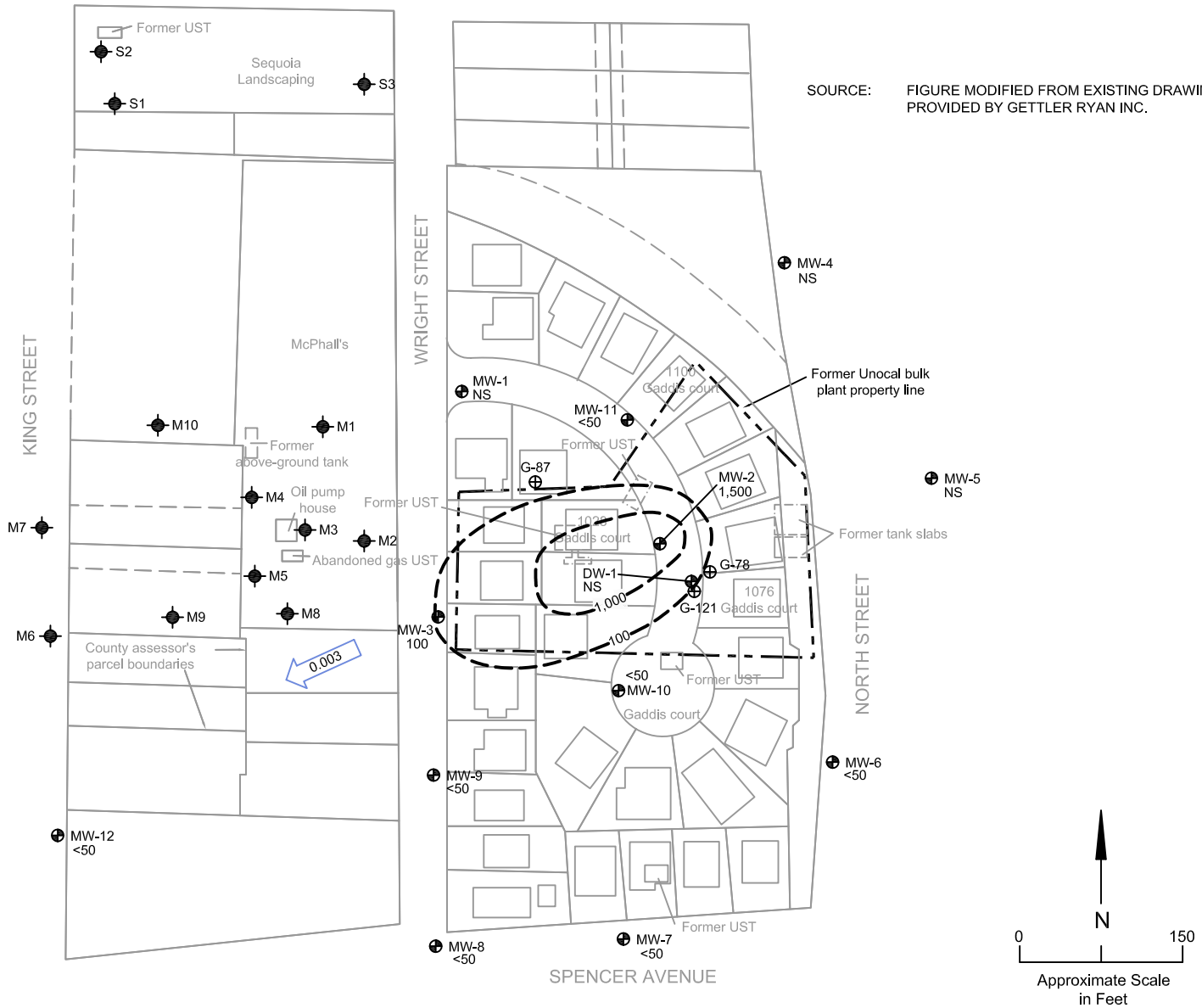
ENSR CORPORATION
1420 HARBOR BAY PKWY STE 120
ALAMEDA, CALIFORNIA 94502
PHONE: (510) 748-6700
FAX: (510) 748-6799
WEB: HTTP://WWW.ENSR.AECOM.COM

TPHd ISO-CONCENTRATION MAP

SEMI-ANNUAL MONITORING REPORT 1st HALF 2006
FORMER UNOCAL STATION 1975
1051 SPENCER AVENUE
SANTA ROSA, CALIFORNIA

FIGURE NUMBER:			
5			
DRAWN BY:	DATE:	PROJECT NUMBER:	SHEET NUMBER:
E. COWAN	04/06/06	06940-362-100	1

1975 TPHg CONC 1Q06



SOURCE: FIGURE MODIFIED FROM EXISTING DRAWING PROVIDED BY GETTLER RYAN INC.

NOTE:
MW = SHALLOW MONITORING WELL (APPROXIMATE 20 FEET DEEP)
DW = DEEP MONITORING WELL (APPROXIMATE 40 FEET DEEP)

LEGEND

- GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELLS (OFFSITE)
- FORMER GADDIS WELLS
- 1,000 TPHg ISO-CONCENTRATION IN ug/L
- NS NOT SAMPLED
- <50 TPHg CONCENTRATION IN ug/L
- 0.003 APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT IN Ft/Ft

ENSR | AECOM

ENSR CORPORATION
1420 HARBOR BAY PKWY STE 120
ALAMEDA, CALIFORNIA 94502
PHONE: (510) 748-6700
FAX: (510) 748-6799
WEB: HTTP://WWW.ENSR.AECOM.COM

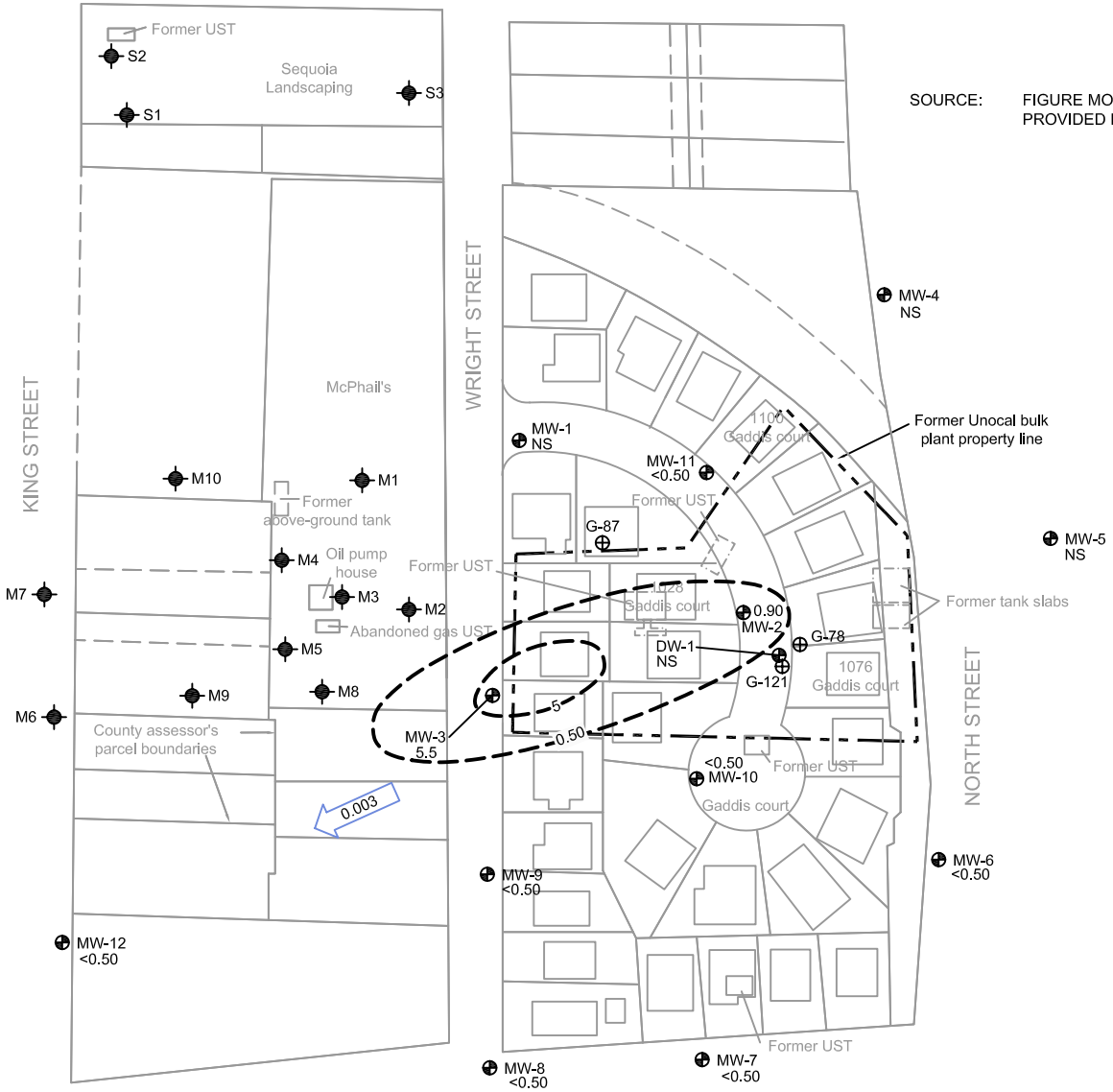
TPHg ISO-CONCENTRATION MAP

SEMI-ANNUAL MONITORING REPORT 1st HALF 2006
FORMER UNOCAL STATION 1975
1051 SPENCER AVENUE
SANTA ROSA, CALIFORNIA

FIGURE NUMBER:	
6	

DRAWN BY:	DATE:	PROJECT NUMBER:	SHEET NUMBER:
E. COWAN	04/06/06	06940-362-100	1

1975 BENZENE 1Q06



SOURCE: FIGURE MODIFIED FROM EXISTING DRAWING PROVIDED BY GETTLER RYAN INC.

NOTE:

MW = SHALLOW MONITORING WELL (APPROXIMATE 20 FEET DEEP)

DW = DEEP MONITORING WELL (APPROXIMATE 40 FEET DEEP)

LEGEND

- GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELLS (OFFSITE)
- FORMER GADDIS WELLS
- 5 BENZENE CONCENTRATION IN ug/L
- NS NOT SAMPLED
- 5 BENZENE ISO-CONCENTRATION IN ug/L
- 0.003 APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT IN Ft/Ft

ENSR | AECOM

ENSR CORPORATION
1420 HARBOR BAY PKWY STE 120
ALAMEDA, CALIFORNIA 94502
PHONE: (510) 748-6700
FAX: (510) 748-6799
WEB: HTTP://WWW.ENSR.AECOM.COM

BENZENE ISO-CONCENTRATION MAP

SEMI-ANNUAL MONITORING REPORT 1st HALF 2006
FORMER UNOCAL STATION 1975
1051 SPENCER AVENUE
SANTA ROSA, CALIFORNIA

FIGURE NUMBER:	
7	

DRAWN BY:	DATE:	PROJECT NUMBER:	SHEET NUMBER:
E. COWAN	04/06/06	06940-362-100	1

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.

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 Data Sheets

ENSR | AECOM

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

Site Address: 1051 Spencer Avenue, Santa Rosa, Ca.
ENSR No. 06940-362-100
Unocal NO. 1975

Date: 3-9-06
Recorded by: TW & HT - recorder

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-1 X	10:41	N/A	0.4	N/A	10:45	2.03	18.94	N/A	N/A	water in well head
MW-2	10:57		329.0		10:59	4.79	18.98	N/A	N/A	under pressure!
MW-3	10:36		0.3		10:39	3.44	19.58	N/A	N/A	water in well head
MW-4 X		—	0.3	—		2.58	19.66	N/A	N/A	water in well head
MW-5 X	0925	—	0.0	—		2.43	19.84	N/A	N/A	water in well head
MW-6		—	0.1	—		4.69	19.71	N/A	N/A	
MW-7	11:09	N/A	0.3	N/A	11:13	5.13	19.59	N/A	N/A	
MW-8	10:25		0.1		10:29	4.31	19.67	N/A	N/A	water in well head.
MW-9	10:31		0.1		10:34	3.87	19.75	N/A	N/A	water in well head
MW-10	10:47		0.2		10:50	4.67	19.56	N/A	N/A	
MW-11	11:27		0.3		11:31	2.61	19.66	N/A	N/A	vehicle parked over well - had to move
MW-12	11:15		0.2		11:19	3.54	19.86	N/A	N/A	
DW-1 X	10:52		0.2		10:55	3.97	40.53 NA	N/A	N/A	water in well head

Notes:

ENSR | AECOM

GROUNDWATER SAMPLING DATA SHEET
Site Address: 1051 Spencer Avenue, Santa Rosa, CA
ENSR No. 06940-362-100
Unocal No. 1975

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

Well ☐ Piezometer ☐

Well Purging:
Date Purged:_____
Purge Method: Disposable bailer/other_____

Field Tech(s):_____

Weather Conditions:_____

Casing Material: _____
Well Diameter: 2.00 in.
Total Depth: 18.94 ft from TOC
Depth to Water: 2.03 ft from TOC
Water Column: _____ ft.
Water Column Volume: _____ 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

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

Depth to water after recovery:_____ Time:_____

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
	0									
	1									
	2									
	3									
	4									

Sample Collection: NOT SAMPLED
Date Sampled:_____
Sampling Method: Disposable Bailer/Other_____
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
				Monitor Only	

Comments: **DTW ONLY / NOT SAMPLED**

Signature _____ Date_____

ENSR | AECOM

GROUNDWATER SAMPLING DATA SHEET
Site Address: 1051 Spencer Avenue, Santa Rosa, Ca.
ENSR No. 06940-362-100
Unocal No. 1975

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

Well ☒ Piezometer ☐

Well Purging:
Date Purged: 3-9-06
Purge Method: Disposable bailer/other Grundfos pump

Field Tech(s): Troy Wentworth
Weather Conditions: Sunny, windy, cool

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 18.98 ft from TOC
Depth to Water: 4.79 ft from TOC
Water Column: 14.19 ft.
Water Column Volume: 2.2 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

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 11.352 7.52

Depth to water after recovery: 4.33 Time:

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (~~uS/cm~~)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
1200	0 0.5	2.4	-45	16.9	81.0 mS/cm	6.4	30.6	clear	odor present	
1206	1 2.7	1.9	-103	18.2	0.299 s/m	6.5	0.0	clear	odor present	
1212	2 4.9	1.6	-125	18.8	0.638 s/m	6.6	0.0	clear	odor present	
1218	3 7.1	1.6	-134	18.7	0.512 s/m	6.6	0.0	clear	odor present	
	4									

Sample Collection: SEMI-ANNUAL
Date Sampled: 3-9-06
Sampling Method: Disposable Bailer/Other Bailed
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-2	6	40-mL Glass Vial	Ice/HCl	TPHg (8015M) / BTEX, VOCs, 5-Oxys, 1,2-DCA, EDB (8260)	1245
MW-2	1	250-mL Amber Glass	Ice	TPHd (8015M)	1245
MW-2	1	250-mL Amber Glass	Ice	TPHd with Silica Gel Clean-Up (8015M)	1245
MW-2	1	1-L Amber Glass	Ice/NP	SVOC (8270)	1245
MW-2	1	500-mL Poly	Ice/NP	CAM-17 Dissolved Metals (200.8)	1245

Comments: Grundfos control set @ 85.00 for stabilization & prevent dewatering

Signature [signature] Date 3-9-06

ENSR | AECOM

GROUNDWATER SAMPLING DATA SHEET
Site Address: 1051 Spencer Avenue, Santa Rosa, Ca.
ENSR No. 06940-362-100
Unocal No. 1975

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

Well [X] Piezometer [ ]

Well Purging:
Date Purged: 3-9-06
Purge Method: Disposable bailer/other Grundfospump

Field Tech(s): Troy Wentworth

Weather Conditions: Sunny, partly cloudy, windy, cool

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 19.58 ft from TOC
Depth to Water: 3.44 ft from TOC
Water Column: 16.14 ft.
Water Column Volume: 2.5 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

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 12.912 6.66

Depth to water after recovery: 3.45 Time: 1330

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity ~~(uS/cm)~~	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
1258	0 0.5	2.4	-97	15.3	0.814 s/m	6.5	824	clear	odor present	
1308	1 3.0	1.8	-35	15.1	0.892 s/m	6.2	42.3	clear	odor present	
1316	2 5.5	1.8	2	15.8	0.867 s/m	6.2	10.8	clear	odor present	
1326	3 8.0	1.6	13	15.7	0.892 s/m	6.3	10.0	clear	odor present	
	4									

Sample Collection: SEMI-ANNUAL
Date Sampled: 3-9-06
Sampling Method: Disposable Bailer/Other Bailed
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-3	6	40-mL Glass Vial	Ice/HCl	TPHg (8015M) / BTEX, VOCs, 5-Oxys, 1,2-DCA, EDB (8260)	1340
MW-3	1	250-mL Amber Glass	Ice	TPHd (8015M)	1340
MW-3	1	250-mL Amber Glass	Ice	TPHd with Silica Gel Clean-Up (8015M)	1340
MW-3	1	1-L Amber Glass	Ice/NP	SVOC (8270)	1340
MW-3	1	500-mL Poly	Ice/NP	CAM-17 Dissolved Metals (200.8)	1340

Comments: Grundfos control set @ 85.00 H for stablization & prevent dewatering

Signature [signature] Date 3-9-06

ENSR | AECOM

GROUNDWATER SAMPLING DATA SHEET
Site Address: 1051 Spencer Avenue, Santa Rosa, Ca.
ENSR No. 06940-362-100
Unocal No. 1975

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

Well ☐ Piezometer ☐

Well Purging:
Date Purged:_____
Purge Method: Disposable bailer/other_____

Field Tech(s):_____

Weather Conditions:_____

Casing Material: _____
Well Diameter: 2.00 in.
Total Depth: 19.66 ft from TOC
Depth to Water: 2.58 ft from TOC
Water Column: _____ ft.
Water Column Volume: _____ 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

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

Depth to water after recovery:_____Time:_____

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
	0									
	1									
	2									
	3									
	4									

Sample Colle Sample Collection: NOT SAMPLED
Date Sampled:_____
Sampling Method: Disposable Bailer/Other_____
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
				Monitor Only	

Comments: _____

Signature _____ Date_____

ENSR | AECOM

GROUNDWATER SAMPLING DATA SHEET
Site Address: 1051 Spencer Avenue, Santa Rosa, Ca.
ENSR No. 06940-362-100
Unocal No. 1975

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

Well ☐ Piezometer ☐

Well Purging:
Date Purged: _____
Purge Method: Disposable bailer/other _____

Field Tech(s): _____

Weather Conditions: _____

Casing Material: _____
Well Diameter: 2.00 in.
Total Depth: 19.84 ft from TOC
Depth to Water: 2.43 ft from TOC
Water Column: _____ ft.
Water Column Volume: _____ 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

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

Depth to water after recovery: _____ Time: _____

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
	0									
	1									
	2									
	3									
	4									

Sample Collection: NOT SAMPLED
Date Sampled: _____
Sampling Method: Disposable Bailer/Other _____
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
				Monitor Only	

Comments: _____

Signature _____ Date _____

ENSR | AECOM

GROUNDWATER SAMPLING DATA SHEET
Site Address: 1051 Spencer Avenue, Santa Rosa, Ca.
ENSR No. 06940-362-100
Unocal No. 1975

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

Well ☒ Piezometer ☐

Well Purging:
Date Purged: 3-9-06
Purge Method: Disposable bailer/other Grundfos pump

Field Tech(s): Troy Wenham
Weather Conditions: Sunny, Windy, cool

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 19.71 ft from TOC
Depth to Water: 4.69 ft from TOC
Water Column: 15.02 ft.
Water Column Volume: 2.4 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

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 7.69 (12.016)

Depth to water after recovery: 4.72 Time: 1033

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
1005	0 0.5	5.7	176	15.5	0.098	5.9	~50	Brown/cloudy	None	
1013	1 2.9	3.0	170	17.0	0.139	6.1	98.0	clear	None	
1021	2 5.3	2.4	169	17.5	0.219	6.2	13.5	clear	None	
1028	3 7.7	2.4	169	17.7	0.24	6.2	3.7	clear	None	
	4									

Sample Collection: ANNUAL
Date Sampled: 3-9-06
Sampling Method: Disposable Bailer/Other Bailed
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-6	6	40-mL Glass Vial	Ice/HCl	TPHg (8015M) / BTEX, VOCs, 5-Oxys, 1,2-DCA, EDB (8260)	1048
MW-6	1	250-mL Amber Glass	Ice	TPHd (8015M)	1048
MW-6	1	250-mL Amber Glass	Ice	TPHd with Silica Gel Clean-Up (8015M)	1048
					~~1049~~

Comments: Grundfos control set @ 85.00 H for stabilization & to prevent dewatering

Signature [signature] Date 3-9-06

ENSR | AECOM

GROUNDWATER SAMPLING DATA SHEET
Site Address: 1051 Spencer Avenue, Santa Rosa, Ca.
ENSR No. 06940-362-100
Unocal No. 1975

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

Well ☒ Piezometer ☐

Field Tech(s): Heather Tausher

Weather Conditions: clear windy 60's

Well Purging:
Date Purged: 3/9/06
Purge Method: Disposable bailer/other Bailed

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 19.59 ft from TOC
Depth to Water: 5.13 ft from TOC
Water Column: 14.46 ft.
Water Column Volume: 2.31 gal (WC X VF)

Volume Factor (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) = 8.03

Depth to water after recovery: 5.15 Time: 14:35

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other Down hole DO/Temp
14:17	0 0.5	8.9	210	16.9	41	6.05	250	clear	no odor	N/A
14:23	1 2.81	8.3	199	17.0	41	5.79	170	clear	no odor	3.59 / 16.8
14:27	2 4.81	7.2	191	17.2	44	5.85	110	clear	no odor	3.24 / 17.1
14:32	3 6.81	6.8	189	17.5	43	5.85	110	clear	no odor	3.70 / 17.0
	4									

Sample Collection: ANNUAL
Date Sampled: 3/9/06
Sampling Method: Disposable Bailer/Other Bailed
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-7	6	40-mL Glass Vial	Ice/HCl	TPHg (8015M) / BTEX, VOCs, 5-Oxys, 1,2-DCA, EDB (8260)	14:39
↓	1	250-mL Amber Glass	Ice	TPHd (8015M)	↓
↓	1	250-mL Amber Glass	Ice	TPHd with Silica Gel Clean-Up (8015M)	↓

Comments: Down hole in-situ DO is 2.92 mg/L and 17.0 °C.

Signature Heather Tausher Date 3/9/06

ENSR | AECOM

GROUNDWATER SAMPLING DATA SHEET
Site Address: 1051 Spencer Avenue, Santa Rosa, Ca.
ENSR No. 06940-362-100
Unocal No. 1975

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

Well ☒ Piezometer ☐

Well Purging:
Date Purged: 3-9-06
Purge Method: Disposable bailer/other Grundfos pump

Field Tech(s): Troy Wentram

Weather Conditions: Sunny, partly cloudy, windy, cool

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 19.67 ft from TOC
Depth to Water: 4.31 ft from TOC
Water Column: 15.36 ft.
Water Column Volume: 2.4 gal (WC X VF)

Volume Factor (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) = 7.38 (12.288)

Depth to water after recovery: 4.33 Time: 1412

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
1352	0 0.5	3.0	40	16.4	74.9 mS/m	6.5	53.3	clear	No odor	
1358	1 2.9	3.0	52	17.2	76.6 mS/m	6.4	53.7	clear	No odor	
1403	2 5.3	3.2	62	17.6	78.4 mS/m	6.4	5.2	clear	No odor	
1408	3 7.7	3.2	68	17.7	78.8 mS/m	6.4	15.0	clear	No odor	
	4									

Sample Collection: ANNUAL
Date Sampled: 3-9-06
Sampling Method: Disposable Bailer/Other Bailed
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-8	6	40-mL Glass Vial	Ice/HCl	TPHg (8015M) / BTEX, VOCs, 5-Oxys, 1,2-DCA, EDB (8260)	1420
MW-8	1	250-mL Amber Glass	Ice	TPHd (8015M)	1420
MW-8	1	250-mL Amber Glass	Ice	TPHd with Silica Gel Clean-Up (8015M)	1420
					1420
					1420

Comments: Grundfos control set @ 85.00H for stabilization & prevent dewatering

Signature [signature] Date 3-9-06

ENSR | AECOM

GROUNDWATER SAMPLING DATA SHEET
Site Address: 1051 Spencer Avenue, Santa Rosa, Ca.
ENSR No. 06940-362-100
Unocal No. 1975

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

Well ☒ Piezometer ☐

Field Tech(s): Heather Tausher

Weather Conditions: clear windy 60's

Well Purging:
Date Purged: 3/9/06
Purge Method: Disposable bailer/other Bailed

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 19.75 ft from TOC
Depth to Water: 3.87 ft from TOC
Water Column: 15.88 ft.
Water Column Volume: 2.54 gal (WC X VF)

Volume Factor (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) = 7.05

Depth to water after recovery: 3.89 Time: 13:50

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
13:31	0 0.5	9.8	123	17.4	51	6.01	0	clear	no odor	
13:36	1 3.04	8.0	103	16.9	52	5.81	93	clear	no odor	
13:42	2 6.04	7.7	102	16.9	54	5.79	35	clear	no odor	
13:47	3 9.04	7.2	110	16.8	53	5.80	40	clear	no odor	
	4	See below Comments for down hole DO								

Sample Collection: ANNUAL
Date Sampled: 3/9/06
Sampling Method: Disposable Bailer/Other Bailed
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-9	6	40-mL Glass Vial	Ice/HCl	TPHg (8015M) / BTEX, VOCs, 5-Oxys, 1,2-DCA, EDB (8260)	13:56
↓	1	250-mL Amber Glass	Ice	TPHd (8015M)	↓
↓	1	250-mL Amber Glass	Ice	TPHd with Silica Gel Clean-Up (8015M)	

Comments: Down hole in-situ DO is 3.24 mg/L and 16.7 °C.

Signature Heather Tausher Date 3/9/06

ENSR | AECOM

GROUNDWATER SAMPLING DATA SHEET
Site Address: 1051 Spencer Avenue, Santa Rosa, Ca.
ENSR No. 06940-362-100
Unocal No. 1975

Well/Piezo ID: **MW-10**

Well ☒ Piezometer ☐

Field Tech(s): Heather Tausher

Weather Conditions: windy 60's

Well Purging:
Date Purged: 3/9/06
Purge Method: Disposable bailer/other Bailed

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 19.56 ft from TOC
Depth to Water: 4.67 ft from TOC
Water Column: 14.89 ft.
Water Column Volume: 2.34 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

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 7.65

Depth to water after recovery: 4.69 Time: 12:18

Time		Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
12:04	0	0.5	8.9	80	17.6	65	5.30	480	clear	no odor	
12:08	1	2.88	6.9	96	18.0	57	5.33	310	clear	no odor	
12:12	2	4.88	N/A	96	18.1	56	5.42	250	clear	no odor	
12:16	3	6.88	N/A	92	18.1	57	5.50	240	clear	no odor	
	4		See comments below								

Sample Collection: ANNUAL
Date Sampled: 3/9/06
Sampling Method: Disposable Bailer/Other Bailed
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-10	6	40-mL Glass Vial	Ice/HCl	TPHg (8015M) / BTEX, VOCs, 5-Oxys, 1,2-DCA, EDB (8260)	12:21
MW-10	1	250-mL Amber Glass	Ice	TPHd (8015M)	↓
MW-10	1	250-mL Amber Glass	Ice	TPHd with Silica Gel Clean-Up (8015M)	↓

Comments: Brown hole in-situ DO is 1.04 mg/L and 17.7 °C.

Signature: [signature] Date: 3/9/06

ENSR | AECOM

GROUNDWATER SAMPLING DATA SHEET
Site Address: 1051 Spencer Avenue, Santa Rosa, Ca.
ENSR No. 06940-362-100
Unocal No. 1975

Well/Piezo ID: **MW-11**

Well ☒ Piezometer ☐

Field Tech(s): Heather Tausler

Weather Conditions: windy 60's

Well Purging:
Date Purged: 3/9/06
Purge Method: Disposable bailer/other Bailed

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 19.66 ft from TOC
Depth to Water: 2.61 ft from TOC
Water Column: 17.05 ft.
Water Column Volume: 2.72 gal (WC X VF)

Volume Factor (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) = 16.02

Depth to water after recovery: 2.69 Time: 12:59

Time		Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
12:44	0	0.5	7.4	-87	18.1	43	5.94	280	clear	odor	
12:47	1	3.22	5.3	-115	17.9	44	5.77	200	clear	odor	
12:52	2	6.22	4.9	-122	18.1	43	5.81	120	clear	odor	
12:57	3	9.22	4.6	-129	18.1	43	5.85	120	clear	odor	
	4										

Sample Collection: SEMI-ANNUAL
Date Sampled: 3/9/06
Sampling Method: Disposable Bailer/Other Bailed
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-11	6	40-mL Glass Vial	Ice/HCl	TPHg (8015M) / BTEX, VOCs, 5-Oxys, 1,2-DCA, EDB (8260)	13:04
	1	250-mL Amber Glass	Ice	TPHd (8015M)	
	1	250-mL Amber Glass	Ice	TPHd with Silica Gel Clean-Up (8015M)	
	1	500-mL Poly	Ice/NP	CAM-17 Dissolved Metals (200.8)	

Comments: Down hole in-situ DO is 0.37 mg/L and 17.5 °C.

Signature Heather Tausler Date 3/9/06

ENSR | AECOM

GROUNDWATER SAMPLING DATA SHEET
Site Address: 1051 Spencer Avenue, Santa Rosa, Ca.
ENSR No. 06940-362-100
Unocal No. 1975

Well/Piezo ID: **MW-12**

Well ☒ Piezometer ☐

Well Purging:
Date Purged: 3-9-06
Purge Method: Disposable bailer/other Grundfos pump

Field Tech(s): Troy Wenthum
Weather Conditions: Sunny, partly cloudy, windy, cool

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 19.86 ft from TOC
Depth to Water: 3.54 ft from TOC
Water Column: 16.32 ft.
Water Column Volume: 2.6 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

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 6.80 (13.058)

Depth to water after recovery: 3.58 Time: 1456

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
1431	0 0.5	4.7	88	17.5	67.0 mS/cm	6.5	32.4	Clear	No odor	
1438	1 3.1	4.7	95	17.5	65.6 mS/cm	6.5	19.0	Clear	No odor	
1445	2 5.7	4.5	107	17.6	68.5 mS/cm	6.5	0.0	Clear	No odor	
1452	3 8.3	4.5	116	17.9	67.8 mS/cm	6.5	0.0	Clear	No odor	
	4									

Sample Collection: ANNUAL
Date Sampled: 3-9-06
Sampling Method: Disposable Bailer/Other Bailed
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-12	6	40-mL Glass Vial	Ice/HCl	TPHg (8015M) / BTEX, VOCs, 5-Oxys, 1,2-DCA, EDB (8260)	1504
MW-12	1	250-mL Amber Glass	Ice	TPHd (8015M)	1504
MW-12	1	250-mL Amber Glass	Ice	TPHd with Silica Gel Clean-Up (8015M)	1504

Comments:

Signature [signature] Date 3-9-06

ENSR | AECOM

GROUNDWATER SAMPLING DATA SHEET
Site Address: 1051 Spencer Avenue, Santa Rosa, Ca.
ENSR No. 06940-362-100
Unocal No. 1975

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

Well ☐ Piezometer ☐

Well Purging:
Date Purged: MONITOR ONLY
Purge Method: Disposable bailer/other_____ **spigot**

Field Tech(s):_____

Weather Conditions:_____

Casing Material: _____
Well Diameter: 6.00 in.
Total Depth: 40.53 UNK ft from TOC
Depth to Water: 3.97 ft from TOC
Water Column: _____ ft.
Water Column Volume: _____ 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

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

Depth to water after recovery:_____Time:_____

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other	Other
	0									
	1									
	2									
	3									
	4									

Sample Collection: 3rd QTR 2004 ONLY
Date Sampled:_____
Sampling Method: Disposable Bailer/Other_____
Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
	6	40-mL Glass Vial	Ice/HCl	TPHg (8015M) / BTEX, 5-Oxys, 1,2-DCA, EDB, VOCs (8260) / SVOCs (8270)	
	1	250-mL Amber Glass	Ice/NP	TPHd with Silica Gel Clean Up (8015M)	
	1	500-mL Poly	Ice/NP	Dissolved Lead (200.8)	
	1	1-Liter Amber Glass	Ice/NP	OCL Pesticides (8081A)	
	1	1-Liter Amber Glass	Ice/NP	SVOCs (8270)	

Comments: **ONE TIME SAMPLE REQUESTED BY RWQCB-NCR 3RD QTR 2004**

Signature _____ Date_____

Attachment C
Laboratory Analytical Results with Chain-of-Custody Documentation

CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

March 20, 2006

CLS Work Order #: CPC0374
COC #: None

Katie Hickling
ENSR - Sacramento
10461 Old Placerville Rd., Suite 170
Sacramento, CA 95827-2508

Project Name: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa

Enclosed are the results of analyses for samples received by the laboratory on 03/10/06 08:40. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,

James Liang, Ph.D.
Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

ENSR | AECOM

CHAIN OF CUSTODY

Page 1 of 1

CPC0374

Lab: CLS

TAT: Standard

Report results to:

Name: Katie Hickling
Company: ENSR
Mailing Address: 10411 Old Placerville Road, Suite 210
City, State, Zip: Sacramento, CA 95827-2508
Telephone No.: 916-362-7100
Fax No.: 916-362-8100

Project Information

Site Address: 1051 Spencer Avenue, Santa Rosa, CA
ENSR No.: 06940-362-100
Unocal No.: 1975
Global ID No.: T0609700636

Special instructions and/or specific regulatory requirements:
-Detection limit for MTBE by 8260 must be <0.5ppb
MW-2 and MW-3 require poly bottles and field screening for metals
MW-11 and DW-1 require poly bottles and field screening for metals
-Provide a chromatograph for both diesel analyses.
-Metals bottles are unpreserved

Analyses Requested

	Sample Identification	Date Sampled	Time Sampled	Matrix/ Media	No. of Conts.	TPHg 8015	BTEX / VOCs 8260	TPHd 8015M	TPHd w/ Silica Gel Clean-Up 8015M	TBA, MTBE, DIPE, ETBE, TAME, 1,2-DCA, EDB, Ethanol 8260	CAM-17 DISSOLVED METALS*	SVOC's 8270					Sample Condition/Comments	Preservative
1	MW-2	3-9-06	1245	GW	10	X	X	X	X	X	X	X						HCL
2	MW-3	3-9-06	1340	GW	10	X	X	X	X	X	X	X					* Field filtered	HCL
3	MW-6	3-9-06	1048	GW	8	X	X	X	X	X								HCL
4	MW-7	3-9-06	1439	GW	8	X	X	X	X	X								HCL
5	MW-8	3-9-06	1420	GW	8	X	X	X	X	X								HCL
6	MW-9	3-9-06	1356	GW	8	X	X	X	X	X								HCL
7	MW-10	3-9-06	1221	GW	8	X	X	X	X	X								HCL
8	MW-11	3-9-06	1304	GW	9	X	X	X	X	X	X							HCL
9	MW-12	3-9-06	1504	GW	8	X	X	X	X	X								HCL
10	QA	3-9-06	–	GW	1	X	X											N/A

Collected by: Troy Wentham *Date/Time* 3-9-06 *Collector's Signature:* [signature] *Date/Time* 3-9-06

Relinquished by: Troy Wentham *Date/Time* 3-10-06 0840 *Received by:* [signature] *Date/Time*

Relinquished by: *Date/Time* *Received by:* [signature] *Date/Time* 3-10-06 0840

Method of Shipment:

Sample Condition on Receipt: 0°

*

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

CAM 17 Metals (Dissolved Metals)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (CPC0374-01) Water Sampled: 03/09/06 12:45 Received: 03/10/06 08:40									
Antimony	ND	50	µg/L	1	CP01930	03/15/06	03/15/06	EPA 200.7	
Barium	**54**	20	"	"	"	"	"	"	
Beryllium	ND	5.0	"	"	"	"	"	"	
Cadmium	ND	10	"	"	"	"	"	"	
Cobalt	ND	20	"	"	"	"	"	"	
Chromium	ND	20	"	"	"	"	"	"	
Copper	ND	20	"	"	"	"	"	"	
Molybdenum	ND	20	"	"	"	"	"	"	
Nickel	ND	20	"	"	"	"	"	"	
Silver	ND	10	"	"	"	"	"	"	
Vanadium	ND	20	"	"	"	"	"	"	
Zinc	ND	20	"	"	"	"	"	"	
Arsenic	**29**	5.0	"	"	CP01928	03/15/06	03/15/06	EPA 200.8	
Lead	ND	5.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	10	"	"	"	"	"	"	
Mercury	ND	0.20	"	"	CP01866	03/13/06	03/14/06	EPA 245.1	
MW-3 (CPC0374-03) Water Sampled: 03/09/06 13:40 Received: 03/10/06 08:40									
Antimony	ND	50	µg/L	1	CP01930	03/15/06	03/15/06	EPA 200.7	
Barium	**51**	20	"	"	"	"	"	"	
Beryllium	ND	5.0	"	"	"	"	"	"	
Cadmium	ND	10	"	"	"	"	"	"	
Cobalt	ND	20	"	"	"	"	"	"	
Chromium	ND	20	"	"	"	"	"	"	
Copper	ND	20	"	"	"	"	"	"	
Molybdenum	ND	20	"	"	"	"	"	"	
Nickel	ND	20	"	"	"	"	"	"	
Silver	ND	10	"	"	"	"	"	"	
Vanadium	ND	20	"	"	"	"	"	"	
Zinc	ND	20	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	CP01928	03/15/06	03/15/06	EPA 200.8	
Lead	ND	5.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	10	"	"	"	"	"	"	

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

CAM 17 Metals (Dissolved Metals)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (CPC0374-03) Water Sampled: 03/09/06 13:40 Received: 03/10/06 08:40									
Mercury	ND	0.20	µg/L	1	CP01866	03/13/06	03/14/06	EPA 245.1	
MW-11 (CPC0374-15) Water Sampled: 03/09/06 13:04 Received: 03/10/06 08:40									
Antimony	ND	50	µg/L	1	CP01930	03/15/06	03/15/06	EPA 200.7	
Barium	**42**	20	"	"	"	"	"	"	
Beryllium	ND	5.0	"	"	"	"	"	"	
Cadmium	ND	10	"	"	"	"	"	"	
Cobalt	ND	20	"	"	"	"	"	"	
Chromium	ND	20	"	"	"	"	"	"	
Copper	ND	20	"	"	"	"	"	"	
Molybdenum	ND	20	"	"	"	"	"	"	
Nickel	ND	20	"	"	"	"	"	"	
Silver	ND	10	"	"	"	"	"	"	
Vanadium	ND	20	"	"	"	"	"	"	
Zinc	ND	20	"	"	"	"	"	"	
Arsenic	**19**	5.0	"	"	CP01928	03/15/06	03/15/06	EPA 200.8	
Lead	ND	5.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	10	"	"	"	"	"	"	
Mercury	ND	0.20	"	"	CP01866	03/13/06	03/14/06	EPA 245.1	

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

Extractable Petroleum Hydrocarbons by EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (CPC0374-01) Water Sampled: 03/09/06 12:45 Received: 03/10/06 08:40									
Diesel	**1.8**	0.050	mg/L	1	CP01816	03/10/06	03/10/06	EPA 8015M	D-DSL
MW-2 (SGT Cleanup) (CPC0374-02) Water Sampled: 03/09/06 12:45 Received: 03/10/06 08:40									**EXT-3**
Diesel	**0.70**	0.050	mg/L	1	CP01816	03/10/06	03/10/06	EPA 8015M	D-DSL
MW-3 (CPC0374-03) Water Sampled: 03/09/06 13:40 Received: 03/10/06 08:40									
Diesel	**0.12**	0.050	mg/L	1	CP01816	03/10/06	03/10/06	EPA 8015M	D-DSL
MW-3 (SGT Cleanup) (CPC0374-04) Water Sampled: 03/09/06 13:40 Received: 03/10/06 08:40									**EXT-3**
Diesel	**0.10**	0.050	mg/L	1	CP01816	03/10/06	03/10/06	EPA 8015M	D-DSL
MW-6 (CPC0374-05) Water Sampled: 03/09/06 10:48 Received: 03/10/06 08:40									
Diesel	ND	0.050	mg/L	1	CP01816	03/10/06	03/10/06	EPA 8015M	
MW-6 (SGT Cleanup) (CPC0374-06) Water Sampled: 03/09/06 10:48 Received: 03/10/06 08:40									**EXT-3**
Diesel	ND	0.050	mg/L	1	CP01816	03/10/06	03/10/06	EPA 8015M	
MW-7 (CPC0374-07) Water Sampled: 03/09/06 14:39 Received: 03/10/06 08:40									
Diesel	ND	0.050	mg/L	1	CP01816	03/10/06	03/10/06	EPA 8015M	
MW-7 (SGT Cleanup) (CPC0374-08) Water Sampled: 03/09/06 14:39 Received: 03/10/06 08:40									**EXT-3**
Diesel	ND	0.050	mg/L	1	CP01816	03/10/06	03/10/06	EPA 8015M	
MW-8 (CPC0374-09) Water Sampled: 03/09/06 14:20 Received: 03/10/06 08:40									
Diesel	ND	0.050	mg/L	1	CP01816	03/10/06	03/10/06	EPA 8015M	

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

Extractable Petroleum Hydrocarbons by EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-8 (SGT Cleanup) (CPC0374-10) Water Sampled: 03/09/06 14:20 Received: 03/10/06 08:40									**EXT-3**
Diesel	ND	0.050	mg/L	1	CP01816	03/10/06	03/10/06	EPA 8015M	
MW-9 (CPC0374-11) Water Sampled: 03/09/06 13:56 Received: 03/10/06 08:40									
Diesel	ND	0.050	mg/L	1	CP01816	03/10/06	03/10/06	EPA 8015M	
MW-9 (SGT Cleanup) (CPC0374-12) Water Sampled: 03/09/06 13:56 Received: 03/10/06 08:40									**EXT-3**
Diesel	ND	0.050	mg/L	1	CP01816	03/10/06	03/10/06	EPA 8015M	
MW-10 (CPC0374-13) Water Sampled: 03/09/06 12:21 Received: 03/10/06 08:40									
Diesel	ND	0.050	mg/L	1	CP01816	03/10/06	03/10/06	EPA 8015M	
MW-10 (SGT Cleanup) (CPC0374-14) Water Sampled: 03/09/06 12:21 Received: 03/10/06 08:40									**EXT-3**
Diesel	ND	0.050	mg/L	1	CP01816	03/10/06	03/10/06	EPA 8015M	
MW-11 (CPC0374-15) Water Sampled: 03/09/06 13:04 Received: 03/10/06 08:40									
Diesel	**0.27**	0.050	mg/L	1	CP01816	03/10/06	03/10/06	EPA 8015M	D-DSL
MW-11 (SGT Cleanup) (CPC0374-16) Water Sampled: 03/09/06 13:04 Received: 03/10/06 08:40									**EXT-3**
Diesel	**0.14**	0.050	mg/L	1	CP01816	03/10/06	03/10/06	EPA 8015M	D-DSL
MW-12 (CPC0374-17) Water Sampled: 03/09/06 15:04 Received: 03/10/06 08:40									
Diesel	ND	0.050	mg/L	1	CP01816	03/10/06	03/10/06	EPA 8015M	
MW-12 (SGT Cleanup) (CPC0374-18) Water Sampled: 03/09/06 15:04 Received: 03/10/06 08:40									**EXT-3**
Diesel	ND	0.050	mg/L	1	CP01816	03/10/06	03/10/06	EPA 8015M	

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (CPC0374-01) Water Sampled: 03/09/06 12:45 Received: 03/10/06 08:40									
Acenaphthene	ND	10	µg/L	1	CP01787	03/10/06	03/13/06	EPA 8270C	
Acenaphthylene	ND	10	"	"	"	"	"	"	
Anthracene	ND	10	"	"	"	"	"	"	
Benzo (a) anthracene	ND	10	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	10	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	"	"	"	"	"	"	
Benzyl alcohol	ND	10	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	10	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	10	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	10	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	10	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	10	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	10	"	"	"	"	"	"	
4-Chloroaniline	ND	10	"	"	"	"	"	"	
2-Chloronaphthalene	ND	10	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	10	"	"	"	"	"	"	
Chrysene	ND	10	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	10	"	"	"	"	"	"	
Dibenzofuran	ND	10	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	10	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	10	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	10	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	10	"	"	"	"	"	"	
3,3´-Dichlorobenzidine	ND	20	"	"	"	"	"	"	
Diethyl phthalate	ND	10	"	"	"	"	"	"	
Dimethyl phthalate	ND	10	"	"	"	"	"	"	
2,4-Dinitrotoluene (2,4-DNT)	ND	10	"	"	"	"	"	"	
2,6-Dinitrotoluene (2,6-DNT)	ND	10	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	10	"	"	"	"	"	"	
Fluoranthene	ND	10	"	"	"	"	"	"	
Fluorene	ND	10	"	"	"	"	"	"	
Hexachlorobenzene	ND	10	"	"	"	"	"	"	
Hexachlorobutadiene	ND	10	"	"	"	"	"	"	

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (CPC0374-01) Water Sampled: 03/09/06 12:45 Received: 03/10/06 08:40									
Hexachlorocyclopentadiene	ND	10	µg/L	1	CP01787	03/10/06	03/13/06	EPA 8270C	
Hexachloroethane	ND	10	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	10	"	"	"	"	"	"	
Isophorone	ND	10	"	"	"	"	"	"	
2-Methylnaphthalene	**33**	10	"	"	"	"	"	"	
Naphthalene	**20**	10	"	"	"	"	"	"	
2-Nitroaniline	ND	25	"	"	"	"	"	"	
3-Nitroaniline	ND	25	"	"	"	"	"	"	
4-Nitroaniline	ND	25	"	"	"	"	"	"	
Nitrobenzene (NB)	ND	10	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	10	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	10	"	"	"	"	"	"	
Phenanthrene	ND	10	"	"	"	"	"	"	
Pyrene	ND	10	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	10	"	"	"	"	"	"	
Benzoic acid	ND	25	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	10	"	"	"	"	"	"	
2-Chlorophenol	ND	10	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	10	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	10	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	25	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	25	"	"	"	"	"	"	
2-Methylphenol	ND	10	"	"	"	"	"	"	
3 & 4-Methylphenol	ND	10	"	"	"	"	"	"	
2-Nitrophenol	ND	10	"	"	"	"	"	"	
4-Nitrophenol	ND	25	"	"	"	"	"	"	
Pentachlorophenol	ND	25	"	"	"	"	"	"	
Phenol	ND	10	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	10	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	10	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*58.3 %*	*21-110*		"	"	"	"	
Surrogate: Phenol-d6		*46.3 %*	*10-110*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*70.0 %*	*35-114*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*77.6 %*	*43-116*		"	"	"	"	

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (CPC0374-01) Water Sampled: 03/09/06 12:45 Received: 03/10/06 08:40									
Surrogate: 2,4,6-Tribromophenol		*82.7 %*	*10-123*		*CP01787*	*03/10/06*	*03/13/06*	*EPA 8270C*	
Surrogate: Terphenyl-dl4		*67.0 %*	*33-141*		*"*	*"*	*"*	*"*	
MW-3 (CPC0374-03) Water Sampled: 03/09/06 13:40 Received: 03/10/06 08:40									
Acenaphthene	ND	10	µg/L	1	CP01787	03/10/06	03/13/06	EPA 8270C	
Acenaphthylene	ND	10	"	"	"	"	"	"	
Anthracene	ND	10	"	"	"	"	"	"	
Benzo (a) anthracene	ND	10	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	10	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	10	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	"	"	"	"	"	"	
Benzyl alcohol	ND	10	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	10	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	10	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	10	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	10	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	10	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	10	"	"	"	"	"	"	
4-Chloroaniline	ND	10	"	"	"	"	"	"	
2-Chloronaphthalene	ND	10	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	10	"	"	"	"	"	"	
Chrysene	ND	10	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	10	"	"	"	"	"	"	
Dibenzofuran	ND	10	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	10	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	10	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	10	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	10	"	"	"	"	"	"	
3,3´-Dichlorobenzidine	ND	20	"	"	"	"	"	"	
Diethyl phthalate	ND	10	"	"	"	"	"	"	
Dimethyl phthalate	ND	10	"	"	"	"	"	"	
2,4-Dinitrotoluene (2,4-DNT)	ND	10	"	"	"	"	"	"	
2,6-Dinitrotoluene (2,6-DNT)	ND	10	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	10	"	"	"	"	"	"	

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (CPC0374-03) Water Sampled: 03/09/06 13:40 Received: 03/10/06 08:40									
Fluoranthene	ND	10	µg/L	1	CP01787	03/10/06	03/13/06	EPA 8270C	
Fluorene	ND	10	"	"	"	"	"	"	
Hexachlorobenzene	ND	10	"	"	"	"	"	"	
Hexachlorobutadiene	ND	10	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	10	"	"	"	"	"	"	
Hexachloroethane	ND	10	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	10	"	"	"	"	"	"	
Isophorone	ND	10	"	"	"	"	"	"	
2-Methylnaphthalene	ND	10	"	"	"	"	"	"	
Naphthalene	ND	10	"	"	"	"	"	"	
2-Nitroaniline	ND	25	"	"	"	"	"	"	
3-Nitroaniline	ND	25	"	"	"	"	"	"	
4-Nitroaniline	ND	25	"	"	"	"	"	"	
Nitrobenzene (NB)	ND	10	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	10	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	10	"	"	"	"	"	"	
Phenanthrene	ND	10	"	"	"	"	"	"	
Pyrene	ND	10	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	10	"	"	"	"	"	"	
Benzoic acid	ND	25	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	10	"	"	"	"	"	"	
2-Chlorophenol	ND	10	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	10	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	10	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	25	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	25	"	"	"	"	"	"	
2-Methylphenol	ND	10	"	"	"	"	"	"	
3 & 4-Methylphenol	ND	10	"	"	"	"	"	"	
2-Nitrophenol	ND	10	"	"	"	"	"	"	
4-Nitrophenol	ND	25	"	"	"	"	"	"	
Pentachlorophenol	ND	25	"	"	"	"	"	"	
Phenol	ND	10	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	10	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	10	"	"	"	"	"	"	

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (CPC0374-03) Water Sampled: 03/09/06 13:40 Received: 03/10/06 08:40									
Surrogate: 2-Fluorophenol		*55.5 %*	*21-110*		*CP01787*	*03/10/06*	*03/13/06*	*EPA 8270C*	
Surrogate: Phenol-d6		*43.5 %*	*10-110*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*78.8 %*	*35-114*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*75.2 %*	*43-116*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*79.2 %*	*10-123*		"	"	"	"	
Surrogate: Terphenyl-dl4		*67.4 %*	*33-141*		"	"	"	"	

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

TPH-Gasoline by GC FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (CPC0374-01) Water Sampled: 03/09/06 12:45 Received: 03/10/06 08:40									
Gasoline	**1500**	50	µg/L	1	CP01812	03/10/06	03/10/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*96.0 %*	*65-135*		"	"	"	"	
MW-3 (CPC0374-03) Water Sampled: 03/09/06 13:40 Received: 03/10/06 08:40									
Gasoline	**100**	50	µg/L	1	CP01812	03/10/06	03/14/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*89.0 %*	*65-135*		"	"	"	"	
MW-6 (CPC0374-05) Water Sampled: 03/09/06 10:48 Received: 03/10/06 08:40									
Gasoline	ND	50	µg/L	1	CP01812	03/10/06	03/10/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*89.0 %*	*65-135*		"	"	"	"	
MW-7 (CPC0374-07) Water Sampled: 03/09/06 14:39 Received: 03/10/06 08:40									
Gasoline	ND	50	µg/L	1	CP01812	03/10/06	03/10/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*87.0 %*	*65-135*		"	"	"	"	
MW-8 (CPC0374-09) Water Sampled: 03/09/06 14:20 Received: 03/10/06 08:40									
Gasoline	ND	50	µg/L	1	CP01812	03/10/06	03/10/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*89.0 %*	*65-135*		"	"	"	"	
MW-9 (CPC0374-11) Water Sampled: 03/09/06 13:56 Received: 03/10/06 08:40									
Gasoline	ND	50	µg/L	1	CP01812	03/10/06	03/10/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*90.0 %*	*65-135*		"	"	"	"	
MW-10 (CPC0374-13) Water Sampled: 03/09/06 12:21 Received: 03/10/06 08:40									
Gasoline	ND	50	µg/L	1	CP01812	03/10/06	03/10/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*89.0 %*	*65-135*		"	"	"	"	

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

TPH-Gasoline by GC FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-11 (CPC0374-15) Water Sampled: 03/09/06 13:04 Received: 03/10/06 08:40									
Gasoline	ND	50	µg/L	1	CP01812	03/10/06	03/10/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*89.0 %*	*65-135*		"	"	"	"	
MW-12 (CPC0374-17) Water Sampled: 03/09/06 15:04 Received: 03/10/06 08:40									
Gasoline	ND	50	µg/L	1	CP01996	03/14/06	03/16/06	EPA 8015M	
Surrogate: 1,4-Difluorobenzene		*112 %*	*65-135*		"	"	"	"	
QA (CPC0374-19) Water Sampled: 03/09/06 00:00 Received: 03/10/06 08:40									
Gasoline	ND	50	µg/L	1	CP01996	03/14/06	03/16/06	EPA 8015M	
Surrogate: 1,4-Difluorobenzene		*111 %*	*65-135*		"	"	"	"	

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (CPC0374-01) Water Sampled: 03/09/06 12:45 Received: 03/10/06 08:40									
Ethanol	ND	5.0	µg/L	1	CP01808	03/10/06	03/10/06	EPA 8260B	
Surrogate: Toluene-d8		*97.3 %*	*66-135*		"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	CP01806	03/10/06	03/10/06	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Benzene	**0.90**	0.50	"	"	"	"	"	"	
Toluene	**0.75**	0.50	"	"	"	"	"	"	
Ethylbenzene	**64**	0.50	"	"	"	"	"	"	
Xylenes (total)	**4.2**	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*99.2 %*	*72-125*		"	"	"	"	
MW-3 (CPC0374-03) Water Sampled: 03/09/06 13:40 Received: 03/10/06 08:40									
Ethanol	**21**	5.0	µg/L	1	CP01808	03/10/06	03/10/06	EPA 8260B	
Surrogate: Toluene-d8		*94.3 %*	*66-135*		"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	CP01806	03/10/06	03/10/06	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Benzene	**5.5**	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	**4.0**	0.50	"	"	"	"	"	"	
Xylenes (total)	**2.7**	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*94.8 %*	*72-125*		"	"	"	"	

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6 (CPC0374-05) Water Sampled: 03/09/06 10:48 Received: 03/10/06 08:40									
Ethanol	ND	5.0	µg/L	1	CP01808	03/10/06	03/10/06	EPA 8260B	
Surrogate: Toluene-d8		*94.3 %*	*66-135*		"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	CP01806	03/10/06	03/10/06	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*95.2 %*	*72-125*		"	"	"	"	
MW-7 (CPC0374-07) Water Sampled: 03/09/06 14:39 Received: 03/10/06 08:40									
Ethanol	ND	5.0	µg/L	1	CP01808	03/10/06	03/10/06	EPA 8260B	
Surrogate: Toluene-d8		*93.0 %*	*66-135*		"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	CP01806	03/10/06	03/10/06	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*95.6 %*	*72-125*		"	"	"	"	

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-8 (CPC0374-09) Water Sampled: 03/09/06 14:20 Received: 03/10/06 08:40									
Ethanol	ND	5.0	µg/L	1	CP01808	03/10/06	03/10/06	EPA 8260B	
Surrogate: Toluene-d8		*92.7 %*	*66-135*		"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	CP01806	03/10/06	03/10/06	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*97.6 %*	*72-125*		"	"	"	"	
MW-9 (CPC0374-11) Water Sampled: 03/09/06 13:56 Received: 03/10/06 08:40									
Ethanol	**9.1**	5.0	µg/L	1	CP01808	03/10/06	03/10/06	EPA 8260B	
Surrogate: Toluene-d8		*93.0 %*	*66-135*		"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	CP01806	03/10/06	03/10/06	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*98.1 %*	*72-125*		"	"	"	"	

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-10 (CPC0374-13) Water Sampled: 03/09/06 12:21 Received: 03/10/06 08:40									
Ethanol	ND	5.0	µg/L	1	CP01808	03/10/06	03/10/06	EPA 8260B	
Surrogate: Toluene-d8		*94.0 %*	*66-135*		"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	CP01806	03/10/06	03/10/06	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*95.6 %*	*72-125*		"	"	"	"	
MW-11 (CPC0374-15) Water Sampled: 03/09/06 13:04 Received: 03/10/06 08:40									
Ethanol	ND	5.0	µg/L	1	CP01808	03/10/06	03/10/06	EPA 8260B	
Surrogate: Toluene-d8		*97.3 %*	*66-135*		"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	CP01806	03/10/06	03/10/06	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*95.2 %*	*72-125*		"	"	"	"	

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-12 (CPC0374-17) Water Sampled: 03/09/06 15:04 Received: 03/10/06 08:40									
Ethanol	**12**	5.0	µg/L	1	CP01808	03/10/06	03/10/06	EPA 8260B	
Surrogate: Toluene-d8		*94.3 %*	*66-135*		"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	CP01806	03/10/06	03/10/06	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*94.1 %*	*72-125*		"	"	"	"	
QA (CPC0374-19) Water Sampled: 03/09/06 00:00 Received: 03/10/06 08:40									
Benzene	ND	0.50	µg/L	1	CP01806	03/10/06	03/10/06	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Toluene-d8		*91.7 %*	*72-125*		"	"	"	"	

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

CAM 17 Metals (Dissolved Metals) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP01866 - EPA 7470A										
Blank (CP01866-BLK1)				Prepared: 03/13/06		Analyzed: 03/14/06				
Mercury	ND	0.20	µg/L							
LCS (CP01866-BS1)				Prepared: 03/13/06		Analyzed: 03/14/06				
Mercury	5.42	0.20	µg/L	5.00		108	75-125			
LCS Dup (CP01866-BSD1)				Prepared: 03/13/06		Analyzed: 03/14/06				
Mercury	5.05	0.20	µg/L	5.00		101	75-125	7.07	25	
Matrix Spike (CP01866-MS1)		**Source: CPC0374-01**		Prepared: 03/13/06		Analyzed: 03/14/06				
Mercury	4.77	0.20	µg/L	5.00	ND	95.4	75-125			
Matrix Spike Dup (CP01866-MSD1)		**Source: CPC0374-01**		Prepared: 03/13/06		Analyzed: 03/14/06				
Mercury	4.86	0.20	µg/L	5.00	ND	97.2	75-125	1.87	25	
Batch CP01928 - EPA 3020A										
Blank (CP01928-BLK1)				Prepared & Analyzed: 03/15/06						
Arsenic	ND	5.0	µg/L							
Lead	ND	5.0	"							
Selenium	ND	5.0	"							
Thallium	ND	10	"							
LCS (CP01928-BS1)				Prepared & Analyzed: 03/15/06						
Arsenic	89.7	5.0	µg/L	100		89.7	80-120			
Lead	95.8	5.0	"	100		95.8	80-120			
Selenium	95.7	5.0	"	100		95.7	80-120			
Thallium	100	10	"	100		100	80-120			

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

CAM 17 Metals (Dissolved Metals) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP01928 - EPA 3020A										
LCS Dup (CP01928-BSD1)				Prepared & Analyzed: 03/15/06						
Arsenic	91.8	5.0	µg/L	100		91.8	80-120	2.31	20	
Lead	96.2	5.0	"	100		96.2	80-120	0.417	20	
Selenium	101	5.0	"	100		101	80-120	5.39	20	
Thallium	99.4	10	"	100		99.4	80-120	0.602	20	
Matrix Spike (CP01928-MS1)		**Source: CPC0374-01**		Prepared & Analyzed: 03/15/06						
Arsenic	115	5.0	µg/L	100	29	86.0	75-125			
Lead	93.8	5.0	"	100	0.38	93.4	75-125			
Selenium	103	5.0	"	100	4.8	98.2	75-125			
Thallium	98.9	10	"	100	0.23	98.7	75-125			
Matrix Spike Dup (CP01928-MSD1)		**Source: CPC0374-01**		Prepared & Analyzed: 03/15/06						
Arsenic	113	5.0	µg/L	100	29	84.0	75-125	1.75	25	
Lead	89.8	5.0	"	100	0.38	89.4	75-125	4.36	25	
Selenium	99.8	5.0	"	100	4.8	95.0	75-125	3.16	25	
Thallium	94.4	10	"	100	0.23	94.2	75-125	4.66	25	
Batch CP01930 - EPA 3010A										
Blank (CP01930-BLK1)				Prepared & Analyzed: 03/15/06						
Antimony	ND	50	µg/L							
Barium	ND	20	"							
Beryllium	ND	5.0	"							
Cadmium	ND	10	"							
Cobalt	ND	20	"							
Chromium	ND	20	"							
Copper	ND	20	"							
Molybdenum	ND	20	"							
Nickel	ND	20	"							
Silver	ND	10	"							
Vanadium	ND	20	"							
Zinc	ND	20	"							

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

CAM 17 Metals (Dissolved Metals) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP01930 - EPA 3010A										
LCS (CP01930-BS1)				Prepared & Analyzed: 03/15/06						
Antimony	563	50	µg/L	500		113	80-120			
Barium	2140	20	"	2000		107	80-120			
Beryllium	54.7	5.0	"	50.0		109	80-120			
Cadmium	57.4	10	"	50.0		115	80-120			
Cobalt	544	20	"	500		109	80-120			
Chromium	220	20	"	200		110	80-120			
Copper	265	20	"	250		106	80-120			
Molybdenum	548	20	"	500		110	80-120			
Nickel	541	20	"	500		108	80-120			
Silver	45.6	10	"	50.0		91.2	80-120			
Vanadium	539	20	"	500		108	80-120			
Zinc	534	20	"	500		107	80-120			
LCS Dup (CP01930-BSD1)				Prepared & Analyzed: 03/15/06						
Antimony	574	50	µg/L	500		115	80-120	1.93	20	
Barium	2130	20	"	2000		106	80-120	0.468	20	
Beryllium	54.7	5.0	"	50.0		109	80-120	0.00	20	
Cadmium	56.3	10	"	50.0		113	80-120	1.93	20	
Cobalt	549	20	"	500		110	80-120	0.915	20	
Chromium	225	20	"	200		112	80-120	2.25	20	
Copper	267	20	"	250		107	80-120	0.752	20	
Molybdenum	555	20	"	500		111	80-120	1.27	20	
Nickel	546	20	"	500		109	80-120	0.920	20	
Silver	46.6	10	"	50.0		93.2	80-120	2.17	20	
Vanadium	538	20	"	500		108	80-120	0.186	20	
Zinc	536	20	"	500		107	80-120	0.374	20	
Matrix Spike (CP01930-MS1)		**Source: CPC0374-01**		Prepared & Analyzed: 03/15/06						
Antimony	573	50	µg/L	500	ND	115	75-125			
Barium	2190	20	"	2000	54	107	75-125			
Beryllium	55.4	5.0	"	50.0	ND	111	75-125			
Cadmium	53.5	10	"	50.0	ND	107	75-125			

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

CAM 17 Metals (Dissolved Metals) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP01930 - EPA 3010A										
Matrix Spike (CP01930-MS1)		**Source: CPC0374-01**		Prepared & Analyzed: 03/15/06						
Cobalt	537	20	µg/L	500	ND	107	75-125			
Chromium	218	20	"	200	ND	109	75-125			
Copper	262	20	"	250	ND	105	75-125			
Molybdenum	553	20	"	500	ND	111	75-125			
Nickel	541	20	"	500	ND	108	75-125			
Silver	37.0	10	"	50.0	ND	74.0	75-125			QM-7
Vanadium	533	20	"	500	ND	107	75-125			
Zinc	528	20	"	500	ND	106	75-125			
Matrix Spike Dup (CP01930-MSD1)		**Source: CPC0374-01**		Prepared & Analyzed: 03/15/06						
Antimony	572	50	µg/L	500	ND	114	75-125	0.175	25	
Barium	2220	20	"	2000	54	108	75-125	1.36	25	
Beryllium	56.0	5.0	"	50.0	ND	112	75-125	1.08	25	
Cadmium	53.2	10	"	50.0	ND	106	75-125	0.562	25	
Cobalt	538	20	"	500	ND	108	75-125	0.186	25	
Chromium	221	20	"	200	ND	110	75-125	1.37	25	
Copper	265	20	"	250	ND	106	75-125	1.14	25	
Molybdenum	555	20	"	500	ND	111	75-125	0.361	25	
Nickel	534	20	"	500	ND	107	75-125	1.30	25	
Silver	37.1	10	"	50.0	ND	74.2	75-125	0.270	25	QM-7
Vanadium	535	20	"	500	ND	107	75-125	0.375	25	
Zinc	529	20	"	500	ND	106	75-125	0.189	25	

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

Extractable Petroleum Hydrocarbons by EPA Method 8015M - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP01816 - EPA 3510B GCNV										
Blank (CP01816-BLK1)				Prepared & Analyzed: 03/10/06						
Diesel	ND	0.050	mg/L							
Motor Oil	ND	0.050	"							
LCS (CP01816-BS1)				Prepared & Analyzed: 03/10/06						
Diesel	2.82	0.050	mg/L	2.50		113	65-135			
LCS Dup (CP01816-BSD1)				Prepared & Analyzed: 03/10/06						
Diesel	2.72	0.050	mg/L	2.50		109	65-135	3.61	30	
Matrix Spike (CP01816-MS1)		**Source: CPC0241-01**		Prepared & Analyzed: 03/10/06						
Diesel	2.36	0.050	mg/L	2.50	ND	94.4	46-137			
Matrix Spike Dup (CP01816-MSD1)		**Source: CPC0241-01**		Prepared & Analyzed: 03/10/06						
Diesel	2.45	0.050	mg/L	2.50	ND	98.0	46-137	3.74	30	

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP01787 - EPA 3510B GCMS										
Blank (CP01787-BLK1)				Prepared: 03/10/06 Analyzed: 03/13/06						
Acenaphthene	ND	10	µg/L							
Acenaphthylene	ND	10	"							
Anthracene	ND	10	"							
Benzo (a) anthracene	ND	10	"							
Benzo (b) fluoranthene	ND	10	"							
Benzo (k) fluoranthene	ND	10	"							
Benzo (g,h,i) perylene	ND	10	"							
Benzo (a) pyrene	ND	10	"							
Benzyl alcohol	ND	10	"							
Bis(2-chloroethyl)ether	ND	10	"							
Bis(2-chloroethoxy)methane	ND	10	"							
Bis(2-chloroisopropyl)ether	ND	10	"							
Bis(2-ethylhexyl)phthalate	ND	10	"							
4-Bromophenyl phenyl ether	ND	10	"							
Butyl benzyl phthalate	ND	10	"							
4-Chloroaniline	ND	10	"							
2-Chloronaphthalene	ND	10	"							
4-Chlorophenyl phenyl ether	ND	10	"							
Chrysene	ND	10	"							
Dibenz (a,h) anthracene	ND	10	"							
Dibenzofuran	ND	10	"							
Di-n-butyl phthalate	ND	10	"							
1,2-Dichlorobenzene	ND	10	"							
1,3-Dichlorobenzene	ND	10	"							
1,4-Dichlorobenzene	ND	10	"							
3,3´-Dichlorobenzidine	ND	20	"							
Diethyl phthalate	ND	10	"							
Dimethyl phthalate	ND	10	"							
2,4-Dinitrotoluene (2,4-DNT)	ND	10	"							
2,6-Dinitrotoluene (2,6-DNT)	ND	10	"							
Di-n-octyl phthalate	ND	10	"							

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP01787 - EPA 3510B GCMS										
Blank (CP01787-BLK1)				Prepared: 03/10/06 Analyzed: 03/13/06						
Fluoranthene	ND	10	µg/L							
Fluorene	ND	10	"							
Hexachlorobenzene	ND	10	"							
Hexachlorobutadiene	ND	10	"							
Hexachlorocyclopentadiene	ND	10	"							
Hexachloroethane	ND	10	"							
Indeno (1,2,3-cd) pyrene	ND	10	"							
Isophorone	ND	10	"							
2-Methylnaphthalene	ND	10	"							
Naphthalene	ND	10	"							
2-Nitroaniline	ND	25	"							
3-Nitroaniline	ND	25	"							
4-Nitroaniline	ND	25	"							
Nitrobenzene (NB)	ND	10	"							
N-Nitrosodiphenylamine	ND	10	"							
N-Nitrosodi-n-propylamine	ND	10	"							
Phenanthrene	ND	10	"							
Pyrene	ND	10	"							
1,2,4-Trichlorobenzene	ND	10	"							
Benzoic acid	ND	25	"							
4-Chloro-3-methylphenol	ND	10	"							
2-Chlorophenol	ND	10	"							
2,4-Dichlorophenol	ND	10	"							
2,4-Dimethylphenol	ND	10	"							
4,6-Dinitro-2-methylphenol	ND	25	"							
2,4-Dinitrophenol	ND	25	"							
2-Methylphenol	ND	10	"							
3 & 4-Methylphenol	ND	10	"							
2-Nitrophenol	ND	10	"							
4-Nitrophenol	ND	25	"							
Pentachlorophenol	ND	25	"							

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP01787 - EPA 3510B GCMS										
Blank (CP01787-BLK1)				Prepared: 03/10/06 Analyzed: 03/13/06						
Phenol	ND	10	µg/L							
2,4,5-Trichlorophenol	ND	10	"							
2,4,6-Trichlorophenol	ND	10	"							
Surrogate: 2-Fluorophenol	*39.3*		*"*	*75.0*		*52.4*	*21-110*			
Surrogate: Phenol-d6	*34.0*		*"*	*75.0*		*45.3*	*10-110*			
Surrogate: Nitrobenzene-d5	*38.7*		*"*	*50.0*		*77.4*	*35-114*			
Surrogate: 2-Fluorobiphenyl	*33.7*		*"*	*50.0*		*67.4*	*43-116*			
Surrogate: 2,4,6-Tribromophenol	*50.7*		*"*	*75.0*		*67.6*	*10-123*			
Surrogate: Terphenyl-dl4	*31.0*		*"*	*50.0*		*62.0*	*33-141*			
LCS (CP01787-BS1)				Prepared & Analyzed: 03/10/06						
Acenaphthene	38.8	10	µg/L	50.0		77.6	46-118			
1,4-Dichlorobenzene	34.3	10	"	50.0		68.6	36-117			
2,4-Dinitrotoluene (2,4-DNT)	35.0	10	"	50.0		70.0	24-116			
N-Nitrosodi-n-propylamine	46.9	10	"	50.0		93.8	41-126			
Pyrene	41.8	10	"	50.0		83.6	26-127			
1,2,4-Trichlorobenzene	37.0	10	"	50.0		74.0	39-118			
4-Chloro-3-methylphenol	66.3	10	"	75.0		88.4	23-117			
2-Chlorophenol	63.8	10	"	75.0		85.1	23-134			
4-Nitrophenol	42.4	25	"	75.0		56.5	10-108			
Pentachlorophenol	53.5	25	"	75.0		71.3	10-113			
Phenol	40.4	10	"	75.0		53.9	5-112			
Surrogate: 2-Fluorophenol	*53.9*		*"*	*75.0*		*71.9*	*21-110*			
Surrogate: Phenol-d6	*45.1*		*"*	*75.0*		*60.1*	*10-110*			
Surrogate: Nitrobenzene-d5	*46.9*		*"*	*50.0*		*93.8*	*35-114*			
Surrogate: 2-Fluorobiphenyl	*39.2*		*"*	*50.0*		*78.4*	*43-116*			
Surrogate: 2,4,6-Tribromophenol	*60.5*		*"*	*75.0*		*80.7*	*10-123*			
Surrogate: Terphenyl-dl4	*40.1*		*"*	*50.0*		*80.2*	*33-141*			

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP01787 - EPA 3510B GCMS										
LCS Dup (CP01787-BSD1)				Prepared & Analyzed: 03/10/06						
Acenaphthene	36.5	10	µg/L	50.0		73.0	46-118	6.11	31	
1,4-Dichlorobenzene	31.5	10	"	50.0		63.0	36-117	8.51	28	
2,4-Dinitrotoluene (2,4-DNT)	33.3	10	"	50.0		66.6	24-116	4.98	38	
N-Nitrosodi-n-propylamine	44.0	10	"	50.0		88.0	41-126	6.38	38	
Pyrene	39.4	10	"	50.0		78.8	26-127	5.91	31	
1,2,4-Trichlorobenzene	34.0	10	"	50.0		68.0	39-118	8.45	28	
4-Chloro-3-methylphenol	61.7	10	"	75.0		82.3	23-117	7.19	42	
2-Chlorophenol	59.4	10	"	75.0		79.2	23-134	7.14	40	
4-Nitrophenol	40.4	25	"	75.0		53.9	10-108	4.83	45	
Pentachlorophenol	53.2	25	"	75.0		70.9	10-113	0.562	45	
Phenol	37.7	10	"	75.0		50.3	5-112	6.91	42	
Surrogate: 2-Fluorophenol	*53.2*		*"*	*75.0*		*70.9*	*21-110*			
Surrogate: Phenol-d6	*45.5*		*"*	*75.0*		*60.7*	*10-110*			
Surrogate: Nitrobenzene-d5	*46.6*		*"*	*50.0*		*93.2*	*35-114*			
Surrogate: 2-Fluorobiphenyl	*38.7*		*"*	*50.0*		*77.4*	*43-116*			
Surrogate: 2,4,6-Tribromophenol	*62.2*		*"*	*75.0*		*82.9*	*10-123*			
Surrogate: Terphenyl-dl4	*40.2*		*"*	*50.0*		*80.4*	*33-141*			

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

TPH-Gasoline by GC FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP01812 - EPA 5030 Water GC										
Blank (CP01812-BLK1)				Prepared: 03/10/06		Analyzed: 03/14/06				
Gasoline	ND	50	µg/L							
Surrogate: o-Chlorotoluene (Gas)	*18.5*		*"*	*20.0*		*92.5*	*65-135*			
LCS (CP01812-BS1)				Prepared: 03/10/06		Analyzed: 03/14/06				
Gasoline	527	50	µg/L	500		105	65-135			
Surrogate: o-Chlorotoluene (Gas)	*22.9*		*"*	*20.0*		*114*	*65-135*			
LCS Dup (CP01812-BSD1)				Prepared: 03/10/06		Analyzed: 03/14/06				
Gasoline	499	50	µg/L	500		99.8	65-135	5.46	30	
Surrogate: o-Chlorotoluene (Gas)	*23.6*		*"*	*20.0*		*118*	*65-135*			
Matrix Spike (CP01812-MS1)		**Source: CPC0374-03**		Prepared: 03/10/06		Analyzed: 03/14/06				
Gasoline	598	50	µg/L	500	100	99.6	68-132			
Surrogate: o-Chlorotoluene (Gas)	*19.0*		*"*	*20.0*		*95.0*	*65-135*			
Matrix Spike Dup (CP01812-MSD1)		**Source: CPC0374-03**		Prepared: 03/10/06		Analyzed: 03/14/06				
Gasoline	376	50	µg/L	500	100	55.2	68-132	45.6	32	QM-7
Surrogate: o-Chlorotoluene (Gas)	*19.4*		*"*	*20.0*		*97.0*	*65-135*			
Batch CP01996 - EPA 5030 Water GC										
Blank (CP01996-BLK1)				Prepared: 03/14/06		Analyzed: 03/16/06				
Gasoline	ND	50	µg/L							
Surrogate: 1,4-Difluorobenzene	*11.3*		*"*	*10.0*		*113*	*65-135*			
LCS (CP01996-BS1)				Prepared: 03/14/06		Analyzed: 03/16/06				
Gasoline	508	25	µg/L	500		102	65-135			
Surrogate: 1,4-Difluorobenzene	*12.6*		*"*	*10.0*		*126*	*65-135*			

CALIFORNIA LABORATORY SERVICES

 03/20/06 12:04

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

TPH-Gasoline by GC FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP01996 - EPA 5030 Water GC										
LCS Dup (CP01996-BSD1)				Prepared: 03/14/06 Analyzed: 03/16/06						
Gasoline	494	25	µg/L	500		98.8	65-135	2.79	30	
Surrogate: 1,4-Difluorobenzene	*12.5*		*"*	*10.0*		*125*	*65-135*			

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP01806 - EPA 5030 Water MS										
Blank (CP01806-BLK1)				Prepared & Analyzed: 03/10/06						
Di-isopropyl ether	ND	0.50	µg/L							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	"							
tert-Amyl methyl ether	ND	0.50	"							
Xylenes (total)	ND	1.0	"							
Tert-butyl alcohol	ND	5.0	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	1.0	"							
Surrogate: Toluene-d8	*9.72*		*"*	*10.0*		*97.2*	*72-125*			
Surrogate: Toluene-d8	*9.72*		*"*	*10.0*		*97.2*	*72-125*			
LCS (CP01806-BS1)				Prepared & Analyzed: 03/10/06						
Benzene	20.3	0.50	µg/L	20.0		102	60-135			
Toluene	20.2	0.50	"	20.0		101	60-137			
Methyl tert-butyl ether	21.2	0.50	"	20.0		106	52-130			
Surrogate: Toluene-d8	*10.6*		*"*	*10.0*		*106*	*72-125*			
Surrogate: Toluene-d8	*10.6*		*"*	*10.0*		*106*	*72-125*			
LCS Dup (CP01806-BSD1)				Prepared & Analyzed: 03/10/06						
Benzene	19.1	0.50	µg/L	20.0		95.5	60-135	6.09	25	
Toluene	19.5	0.50	"	20.0		97.5	60-137	3.53	25	
Methyl tert-butyl ether	21.2	0.50	"	20.0		106	52-130	0.00	30	

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP01806 - EPA 5030 Water MS										
LCS Dup (CP01806-BSD1)				Prepared & Analyzed: 03/10/06						
Surrogate: Toluene-d8	*10.9*		*µg/L*	*10.0*		*109*	*72-125*			
Surrogate: Toluene-d8	*10.9*		*"*	*10.0*		*109*	*72-125*			
Batch CP01808 - EPA 5030 Water MS										
Blank (CP01808-BLK1)				Prepared & Analyzed: 03/10/06						
Ethanol	ND	5.0	µg/L							
Surrogate: Toluene-d8	*27.6*		*"*	*30.0*		*92.0*	*66-135*			
LCS (CP01808-BS1)				Prepared & Analyzed: 03/10/06						
Ethanol	86.8	5.0	µg/L	100		86.8	42-150			
Surrogate: Toluene-d8	*27.6*		*"*	*30.0*		*92.0*	*66-135*			
LCS Dup (CP01808-BSD1)				Prepared & Analyzed: 03/10/06						
Ethanol	89.2	5.0	µg/L	100		89.2	42-150	2.73	35	
Surrogate: Toluene-d8	*27.8*		*"*	*30.0*		*92.7*	*66-135*			

ENSR - Sacramento	Project: Frmr. Unocal 1975, 1051 Spencer Ave., Santa Rosa	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-362-100	**CLS Work Order #: CPC0374**
Sacramento, CA 95827-2508	Project Manager: Katie Hickling	COC #: None

Notes and Definitions

QM-7	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
EXT-3	The sample extract has undergone silica-gel clean-up, EPA Method 3630, which is specific to polar compound contamination.
D-DSL	Although sample contains compounds in the retention time range associated with diesel, the chromatogram was not consistent with the expected chromatographic pattern or "fingerprint". However, the reported concentration is based on diesel.
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

Attachment D
Historical Groundwater Elevation and Analytical Data

Historical Summary of Groundwater Analytical Results for
TPH, BTEX, MTBE, Lead, and Nitrate
Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

WELL NUMBER	DATE	TPH-D (ppb)	TPH-G (ppb)	BENZENE (ppb)	TOLUENE (ppb)	ETHYL-BENZENE (ppb)	XYLENES (ppb)	MTBE (10) (ppb)	TOTAL LEAD (ppm)		NITRATE (ppm)
MW1	06/04/91	ND	ND	ND	ND	ND	ND		0.047	(1)	4.3
	09/11/91	ND	ND	ND	ND	ND	ND		0.030	(1)	--
	10/18/91	---	ND	ND	ND	ND	ND		0.031	(1)	5.8
	11/14/91	ND	ND	ND	ND	ND	ND		0.021	(1)	--
	03/11/92	ND	ND	ND	ND	ND	ND		0.026	(1)	--
	06/18/92	ND	ND	ND	ND	ND	ND		ND	(1)	22
	09/04/92	ND	ND	ND	ND	ND	ND		0.05	(1)	--
	11/12/92*	ND	ND	ND	ND	ND	ND		ND	(1)	15
	03/25/93	ND	ND	ND	ND	ND	ND		0.006	(1)	--
	06/15/93	ND	ND	ND	ND	ND	ND		0.022	(1)	4.2
	08/17/93	ND	ND	ND	ND	ND	ND		ND	(1)	5.8
	12/14/93	ND	ND**	ND**	ND**	ND**	ND**		ND		--
	03/14/94	ND	ND	ND	ND	ND	ND		ND	(1)	12
	05/17/94	ND	ND	ND	ND	ND	ND		ND		12
	07/07/94	ND	ND	ND	ND	ND	ND		ND		12
	11/30/94	ND	ND	ND	ND	ND	ND		ND		--
	03/02/95	ND	ND	ND	ND	ND	ND		ND		--
	05/17/95	ND	ND	ND	ND	ND	ND		ND		--
	09/28/95	ND	ND	ND	ND	ND	ND		ND		--
	11/21/95	ND	ND	ND	ND	ND	ND		--		--
	03/28/96	ND	ND	ND	ND	ND	ND		--		--
	5/9/1996	ND	ND	ND	ND	ND	ND		--		--
	8/19/1996	ND	ND	ND	ND	ND	ND		--		--
	12/13/1996	ND	ND	ND	ND	ND	ND		--		--
	3/5/1997	ND	ND	ND	ND	ND	ND		--		--
	6/27/1997	ND	ND	ND	ND	ND	ND		--		--
	9/29/1997	ND	ND	ND	ND	ND	ND		--		--
	12/17/1997	ND	ND	ND	ND	ND	ND		--		--
	3/17/1998	ND	ND	ND	ND	ND	ND		--		--
	6/29/1998	ND	ND	ND	ND	ND	ND		--		--
	9/19/1998	ND	ND	ND	ND	ND	ND		--		--

Historical Summary of Groundwater Analytical Results for
TPH, BTEX, MTBE, Lead, and Nitrate
Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

WELL NUMBER	DATE	TPH-D (ppb)		TPH-G (ppb)	BENZENE (ppb)	TOLUENE (ppb)	ETHYL-BENZENE (ppb)	XYLENES (ppb)	MTBE (10) (ppb)	TOTAL LEAD (ppm)		NITRATE (ppm)
MW2	06/04/91	5,600		40,000	380	380	1,600	7,100		0.026	(1)	ND
	09/11/91	NS		NS	NS	NS	NS	NS		NS	(1)	--
	10/18/91	NS		NS	NS	NS	NS	NS		NS	(1)	ND
	11/14/91	NS		NS	NS	NS	NS	NS		NS	(1)	--
	03/11/92	NS		NS	NS	NS	NS	NS		NS	(1)	--
	06/18/92	NS		48,000	300	350	1,500	8,400		ND	(1)	ND
	09/04/92	NS		57,000	1,000	830	5,100	16,000		0.09	(1)	--
	11/12/92*	NS		51,000	500	520	4,400	13,000		ND	(1)	ND
	03/25/93	6,000		14,000	41	51	1,000	2,000		0.0088	(1)	--
	06/15/93	17,000		4,700	50	ND	330	400		0.012	(1)	ND
	08/17/93	1,800		48,000	120	180	3,900	9,200		ND	(1)	ND
	12/14/93	10,000		9,400	ND	ND	520	710		ND		--
	03/14/94	1,500		5,000	47	10	320	260		ND	(1)	ND
	05/17/94	3,100		22,000	48	48	2,200	2,600		ND		ND
	07/07/94	UA		UA	UA	UA	UA	UA		UA		UA
	11/30/94	3,500	(2)	34,000	95	110	3,000	5,200		ND		--
	03/03/95	1,500		5400	9.0	ND	490	370		ND		- -
	05/18/95	1,900		10,000	17	ND	760	580		ND		--
	09/28/95	6,900		32,000	84	40	2,700	3,400***		ND		--
	11/21/95	6,000		42,000	84	40	2,700	3,4000***		ND		--
	03/28/96	880		1,900	17	ND	130	39		ND		--
	5/9/1996	630		900	11	ND	35	9		ND		--
	8/16/1996	3,500	(4)	20,000	31	22	2,100	1600		ND		--
	12/12/1996	1,700		7,200	ND	ND	520	320		ND		--
	3/5/1997	770	(6)	3,100	44	ND	260	72		ND		--
	6/27/1997	4,500		14,000	69	ND	1,400	590		ND		--
	9/30/1997	6,000		31,000	200	27	3,200	2,700		ND		--
	12/18/1997	2,400	(6)	4,500	21	ND	310	110		ND		--
	3/17/1998	640	(6)	1,400	12	ND	180	34		ND		--
	6/30/1998	410	(6)	690	ND	ND	26	5.0		ND		--
	9/18/1998	5,000	(6)	12,000	37	ND	2,300	980		ND		--
	3/17/1999	1,200	(6)	4,600	55	ND	590	130	130	ND		--
	9/20/1999	4,700	(6), (9)	23,000	ND	ND	2,300	890	ND	ND		--
	3/28/2000	593	(6), (9)	1,650	1.01	ND	110	10.6	*10* (11)	ND		--
	10/12/2000	3,800	(12)	14,000	81	ND	2,100	370	290	ND		ND
	3/27/2001	620	(6)	2,500	32	ND	210	9	*81* (11)	ND		--
	9/27/2001	2,500	(13)	25,000	31	13	3,100	1,100	--	ND		--
	3/23/2002	560	(13)	1,900	19	4.8	63	5.6	--	ND		--
	9/26/2002	300	(13)	10,000	130	19	2,000	570	--	--		--
	3/31/2003	860	(13)	2,200	ND	ND	60	6.7	--	--		--
	9/29/2003	2,500		4,800	ND	ND	320	21.0	ND	ND		--

Historical Summary of Groundwater Analytical Results for
TPH, BTEX, MTBE, Lead, and Nitrate
Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

WELL NUMBER	DATE	TPH-D (ppb)		TPH-G (ppb)	BENZENE (ppb)	TOLUENE (ppb)	ETHYL-BENZENE (ppb)	XYLENES (ppb)	MTBE [10] (ppb)	TOTAL LEAD (ppm)		NITRATE (ppm)
MW3	06/04/91	2,600		31,000	640	ND	220	1,800		0.15	(1)	ND
	09/11/91	5,000		24,000	500	1,300	1,200	2,400		0.085	(1)	--
	10/18/91	NS		NS	NS	NS	NS	NS		NS	(1)	ND
	11/14/91	3,500		18,000	710	960	140	2,100		0.038	(1)	--
	03/11/92	3,900		9,900	550	300	38	1,000		0.043	(1)	--
	06/18/92	ND		11,000	570	58	18	770		ND	(1)	23
	09/04/92	ND		18,000	1,600	76	53	1,200		0.15	(1)	--
	11/12/92*	ND		14,000	ND	40	440	2,300		ND	(1)	ND
	03/25/93	6,200		6,500	290	27	380	720		0.012	(1)	--
	06/15/93	20,000		8,100	640	50	540	890		0.022	(1)	ND
	08/17/93	8,800		5,900	660	23	21	460		ND	(1)	ND
	12/14/93	980		7,700**	970**	35**	420**	590**		ND		--
	03/14/94	2,600		11,000	690	37	480	750		ND	(1)	ND
	05/17/94	1,200		3,900	420	13	180	240		ND		ND
	07/06/94	2,500	(2)	11,000	1,200	32	300	360		ND		ND
	11/30/94	2,400	(2)	11,000	870	43	410	770		ND		--
	03/03/95	ND		ND	ND	ND	ND	ND		ND		--
	05/18/95	660		2,100	120	9.1	120	120		ND		--
	09/27/95	2,500		9,200	1,100	35	360	280***		0.0059		--
	11/21/95	2,100		9,800	1,000	ND	350	270		0.0062		--
	03/28/96	330		1,400	160	7.1	77	90		ND		--
	5/9/1996	960		2,100	410	21	220	220		0.081		--
	8/16/1996	1,700	(4)	4,300	680	18	170	150		ND		--
	12/12/1996	810		3,500	120	9	220	320		ND		--
	3/5/1997	500	(6)	2,600	320	15	130	110		ND		--
	6/27/1997	800	(6)	1,400	95	ND	44	60		ND		--
	9/30/1997	1,200	(6)	10,000	1,100	ND	140	98		ND		--
	12/18/1997	2,200	(6)	8,400	380	50	350	490		ND		--
	3/17/1998	210	(6)	1,300	100	5.9	41	75		ND		--
	6/30/1998	1,000	(6)	2,200	300	11.0	91	150		ND		--
	9/18/1998	1,400	(6)	3,000	580	13	120	160		ND		--
	3/17/1999	230	(6)	590	75	2.4	25	40	34	ND		--
	9/20/1999	1,600	(6), (9)	5,200	450	14	140	150	200	ND		--
	3/28/2000	212	(6), (9)	1,120	117	5.24	51.8	59.9	*6.98* [11]	ND		--
	10/12/2000	890	(12)	4,400	520	6.7	51	48	170	ND		ND
	3/27/2001	630	(12)	810	240	ND	ND	9	ND	ND		--
	9/27/2001	930	(13)	6,900	360	ND	180	45	--	ND		--
	3/23/2002	420	(13)	340	34	1.3	0.99	5.9	--	ND		--
	9/26/2002	80	(13)	3,300	500	ND	32	29	--	--		--
	3/31/2003	100	(13)	420	35	1.6	15	20	--	--		--
	9/29/2003	910		4,000	360	8.5	12	13	ND	ND		--

Historical Summary of Groundwater Analytical Results for
TPH, BTEX, MTBE, Lead, and Nitrate
Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

WELL NUMBER	DATE	TPH-D (ppb)	TPH-G (ppb)	BENZENE (ppb)	TOLUENE (ppb)	ETHYL-BENZENE (ppb)	XYLENES (ppb)	MTBE [10] (ppb)	TOTAL LEAD (ppm)	NITRATE (ppm)
MW4	07/07/94	ND	ND	ND	ND	ND	ND		ND	5.0
	11/29/94	ND	ND	ND	ND	ND	ND		ND	--
	03/03/95	ND	ND	ND	ND	ND	ND		ND	--
	05/18/95	ND	ND	ND	ND	ND	ND		ND	--
	09/27/95	55	ND	ND	ND	ND	ND		ND	--
	11/20/95	57	ND	ND	ND	ND	ND		ND	--
	03/27/96	ND	ND	ND	ND	ND	ND		--	--
	5/9/1996	ND	ND	ND	ND	ND	ND		--	--
	8/19/1996	ND	ND	ND	ND	ND	ND		--	--
	12/13/1996	59	ND	ND	ND	ND	ND		--	--
	3/4/1997	ND	ND	ND	ND	ND	ND		--	--
	6/27/1997	ND	ND	ND	ND	ND	ND		--	--
	9/29/1997	ND	ND	ND	ND	ND	ND		--	--
	12/17/1997	ND	ND	ND	ND	ND	ND		--	--
	3/16/1998	ND	ND	ND	ND	ND	ND		--	--
	6/29/1998	ND	ND	ND	ND	ND	ND		--	--
	9/17/1998	50	ND	ND	ND	ND	ND		--	--
	9/29/2003	ND	ND	ND	ND	ND	ND		ND	--
MW5	07/07/94	ND	ND	ND	ND	ND	1.0		ND	12
	11/30/94	ND	ND	ND	ND	ND	ND		ND	--
	03/02/95	ND	ND	ND	ND	ND	ND		ND	--
	05/18/95	ND	ND	ND	ND	ND	ND		ND	--
	09/28/95	ND	ND	ND	ND	ND	ND		ND	--
	11/20/95	ND	ND	ND	ND	ND	ND		ND	--
	03/28/96	ND	ND	ND	ND	ND	ND		--	--
	5/10/1996	ND	ND	ND	ND	ND	ND		--	--
	8/19/1996	ND	ND	ND	ND	ND	ND		--	--
	12/13/1996	ND	ND	ND	ND	ND	ND		--	--
	3/4/1997	ND	ND	ND	ND	ND	ND		--	--
	6/27/1997	ND	ND	ND	ND	ND	ND		--	--
	9/29/1997	ND	ND	ND	ND	ND	ND		--	--
	12/17/1997	ND	ND	ND	ND	ND	ND		--	--
	3/16/1998	ND	ND	ND	ND	ND	ND		--	--
	6/29/1998	ND	ND	ND	ND	ND	ND		--	--
	9/17/1998	ND	ND	ND	ND	ND	ND		--	--

Historical Summary of Groundwater Analytical Results for
TPH, BTEX, MTBE, Lead, and Nitrate
Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

WELL NUMBER	DATE	TPH-D (ppb)		TPH-G (ppb)	BENZENE (ppb)	TOLUENE (ppb)	ETHYL-BENZENE (ppb)	XYLENES (ppb)	MTBE (10) (ppb)	TOTAL LEAD (ppm)	NITRATE (ppm)
MW6	07/07/94	ND		ND	ND	ND	ND	ND		ND	11
	11/29/94	ND		ND	ND	ND	ND	ND		ND	--
	03/03/95	ND		ND	ND	ND	ND	ND		ND	--
	05/18/95	ND		ND	ND	ND	ND	ND		ND	--
	09/27/95	ND		ND	ND	ND	ND	ND		ND	--
	11/20/95	ND		ND	ND	ND	ND	ND		ND	--
	03/27/96	ND		ND	ND	ND	ND	ND		--	--
	5/10/1996	ND		ND	ND	ND	ND	ND		--	--
	8/19/1996	ND		ND	ND	ND	ND	ND		--	--
	12/13/1996	ND		ND	ND	ND	ND	ND		--	--
	3/4/1997	120	(6)	ND	ND	ND	ND	ND		--	--
	6/27/1997	ND		ND	ND	ND	ND	ND		--	--
	9/29/1997	ND		ND	ND	ND	ND	ND		--	--
	12/17/1997	ND		ND	ND	ND	ND	ND		--	--
	3/16/1998	ND		ND	ND	ND	ND	ND		--	--
	6/29/1998	ND		ND	ND	ND	ND	ND		--	--
	9/17/1998	NA	(7)	ND	ND	ND	ND	ND		--	--
	9/20/1999	55	(8), (9)	ND	ND	ND	ND	ND	4.1	--	--
	10/12/2000	64	(8)	ND	ND	ND	ND	ND	ND	--	--
	9/27/2001	ND		ND	ND	ND	ND	ND	--	--	--
	3/23/2002	ND		ND	ND	ND	ND	ND	--	--	--
	9/26/2002	ND		ND	ND	ND	ND	ND	--	--	--
MW7	07/06/94	ND		ND	ND	ND	ND	ND		ND	19
	11/29/94	ND		ND	ND	ND	ND	ND		ND	--
	03/03/95	ND		ND	ND	ND	ND	ND		ND	--
	05/17/95	ND		ND	0.89	ND	ND	2.3		ND	--
	09/27/95	ND		ND	ND	ND	ND	ND		ND	--
	11/20/95	ND		ND	ND	ND	ND	ND		ND	--
	03/28/96	ND		ND	ND	ND	ND	ND		--	--
	5/10/1996	ND		ND	ND	ND	ND	ND		--	--
	8/19/1996	ND		ND	ND	ND	ND	ND		--	--
	12/13/1996	ND		ND	ND	ND	ND	ND		--	--
	3/4/1997	ND		ND	ND	ND	ND	ND		--	--
	6/27/1997	ND		ND	ND	ND	ND	ND		--	--
	9/29/1997	ND		ND	ND	ND	ND	ND		--	--
	12/18/1997	ND		ND	ND	ND	ND	ND		--	--
	3/16/1998	ND		ND	ND	ND	ND	ND		--	--
	6/29/1998	ND		ND	ND	ND	ND	0.55		--	--
	9/17/1998	NA	(7)	ND	ND	ND	ND	0.55		--	--
	9/20/1999	51	(8), (9)	ND	ND	ND	ND	ND	3.8	--	--
	10/12/2000	ND		ND	ND	ND	ND	ND	ND	--	--
	9/27/2001	ND		ND	ND	ND	ND	0.55	--	--	--
	3/23/2002	ND		ND	ND	ND	ND	ND	--	--	--
	9/26/2002	ND		ND	ND	ND	ND	ND	--	--	--
	9/29/2003	ND		ND	ND	ND	ND	ND	ND	--	--

Historical Summary of Groundwater Analytical Results for
TPH, BTEX, MTBE, Lead, and Nitrate
Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

WELL NUMBER	DATE	TPH-D (ppb)		TPH-G (ppb)	BENZENE (ppb)	TOLUENE (ppb)	ETHYL-BENZENE (ppb)	XYLENES (ppb)	MTBE [10] (ppb)	TOTAL LEAD (ppm)	NITRATE (ppm)
MW8	07/07/94	ND		ND	ND	ND	ND	ND		ND	17
	11/30/94	ND		ND	ND	ND	ND	ND		ND	--
	03/03/95	ND		ND	ND	ND	ND	ND		ND	--
	05/17/95	81		ND	ND	ND	ND	ND		ND	--
	09/28/95	ND		ND	ND	ND	ND	ND		ND	--
	11/21/95	ND		ND	ND	ND	ND	ND		ND	--
	03/27/96	ND		ND	ND	ND	ND	ND		--	--
	5/10/1996	ND		ND	ND	ND	ND	ND		--	--
	8/19/1996	ND		ND	ND	ND	ND	ND		--	--
	12/13/1996	ND		ND	ND	ND	ND	ND		--	--
	3/4/1997	ND		ND	ND	ND	ND	ND		--	--
	6/27/1997	ND		ND	ND	ND	ND	ND		--	--
	9/29/1997	ND		ND	ND	ND	ND	ND		--	--
	12/17/1997	ND		ND	ND	ND	ND	ND		--	--
	3/16/1998	ND		ND	ND	ND	ND	ND		--	--
	6/29/1998	ND		ND	ND	ND	1.2	ND		--	--
	9/17/1998	ND		ND	ND	ND	ND	ND		--	--
	9/20/1999	140	(8), (9)	ND	ND	ND	ND	ND	2.7	--	--
	10/12/2000	370	(8)	ND	ND	ND	ND	ND	ND	--	--
	9/27/2001	54	(13)	ND	ND	ND	ND	ND	--	--	--
	3/23/2002	ND		ND	ND	ND	ND	ND	--	--	--
	9/26/2002	ND		ND	ND	ND	ND	ND	--	--	--
	9/29/2003	ND		ND	ND	ND	ND	ND	ND	--	--
MW9	07/06/94	ND		ND	ND	ND	ND	ND		ND	10
	11/30/94	ND		ND	ND	ND	ND	ND		ND	--
	03/03/95	ND		ND	ND	ND	ND	ND		ND	--
	05/17/95	ND		ND	ND	ND	ND	ND		ND	--
	09/28/95	ND		ND	ND	ND	ND	ND		ND	--
	11/21/95	ND		ND	ND	ND	ND	ND		ND	--
	03/27/96	ND		ND	ND	ND	ND	ND		--	--
	5/10/1996	ND		ND	ND	ND	ND	ND		--	--
	8/19/1996	ND		ND	ND	ND	ND	ND		--	--
	12/13/1996	ND		ND	ND	ND	ND	ND		--	--
	3/4/1997	ND		ND	ND	ND	ND	ND		--	--
	6/27/1997	ND		ND	ND	ND	ND	ND		--	--
	9/29/1997	ND		ND	ND	ND	ND	ND		--	--
	12/17/1997	ND		ND	ND	ND	ND	ND		--	--
	3/17/1998	ND		ND	ND	ND	ND	ND		--	--
	6/29/1998	ND		ND	ND	ND	ND	ND		--	--
	9/17/1998	ND		ND	ND	ND	ND	ND		--	--
	9/20/1999	130	(8), (9)	ND	ND	ND	ND	ND	2.7	--	--
	10/12/2000	190	(8)	ND	ND	ND	ND	ND	ND	--	8.7
	9/27/2001	ND		ND	ND	ND	ND	ND	--	--	--
	3/23/2002	ND		ND	ND	ND	ND	ND	--	--	--
	9/26/2002	ND		ND	ND	ND	ND	ND	--	--	--
	9/29/2003	370		ND	ND	ND	ND	ND	ND	--	--

Historical Summary of Groundwater Analytical Results for
TPH, BTEX, MTBE, Lead, and Nitrate
Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

WELL NUMBER	DATE	TPH-D (ppb)		TPH-G (ppb)		BENZENE (ppb)	TOLUENE (ppb)	ETHYL-BENZENE (ppb)	XYLENES (ppb)	MTBE [10] (ppb)	TOTAL LEAD (ppm)	NITRATE (ppm)
MW10	07/06/94	ND		ND		ND	ND	ND	ND		ND	ND
	11/30/94	ND		ND		ND	ND	ND	ND		ND	--
	03/02/95	ND		ND		ND	ND	ND	ND		ND	--
	05/18/95	ND		ND		ND	ND	ND	ND		ND	--
	09/28/95	ND		ND		ND	ND	ND	ND		ND	--
	11/20/95	ND		ND		ND	ND	ND	ND		ND	--
	03/28/96	ND		ND		ND	ND	ND	ND		ND	--
	5/9/1996	ND		ND		ND	ND	ND	ND		ND	--
	8/16/1996	ND		ND		ND	ND	ND	ND		ND	--
	12/13/1996	ND		ND		ND	ND	ND	ND		ND	--
	3/5/1997	ND		ND		ND	ND	ND	ND		ND	--
	6/27/1997	ND		ND		ND	ND	ND	ND		ND	--
	9/30/1997	140	(6)	ND		ND	ND	ND	ND		ND	--
	12/18/1997	UA		UA		UA	UA	UA	UA		UA	--
	3/17/1998	ND		ND		ND	ND	ND	ND		ND	--
	6/30/1998	ND		ND		ND	ND	ND	ND		ND	--
	9/19/1998	ND		ND		ND	ND	ND	ND		ND	--
	9/20/1999	55	(8), (9)	ND		ND	ND	ND	ND	3.5	ND	--
	10/12/2000	260	(8)	ND		ND	ND	ND	ND	ND	--	--
	9/27/2001	ND		ND		ND	ND	ND	ND	--	--	--
	3/23/2002	ND		ND		ND	ND	ND	ND	--	--	--
	9/26/2002	ND		ND		ND	ND	ND	ND	--	--	--
	9/29/2003	ND		ND		ND	ND	ND	ND	ND	--	--
MW11	07/07/94	1,600		2,100	(3)	ND	ND	ND	ND		ND	ND
	11/30/94	550	(2)	88		ND	ND	ND	ND		ND	--
	03/02/95	1200	(4)	ND		ND	ND	ND	ND		ND	- -
	05/17/95	620		ND		ND	ND	ND	ND		ND	--
	09/28/95	490		ND		ND	ND	ND	ND		ND	- -
	11/20/95	1,100		ND		ND	ND	ND	ND		ND	--
	03/28/96	660		ND		ND	ND	ND	ND		--	--
	5/9/1996	1300		63	(5)	ND	ND	ND	ND		ND	--
	8/16/1996	350	(4)	ND		ND	ND	ND	ND		ND	--
	12/13/1996	1,100		ND		ND	ND	ND	ND		ND	--
	3/5/1997	950	(6)	ND		ND	ND	ND	ND		ND	--
	6/27/1997	450	(6)	ND		ND	ND	ND	ND		ND	--
	9/30/1997	190	(6)	ND		ND	ND	ND	ND		ND	--
	12/18/1997	530	(6)	ND		ND	ND	ND	ND		ND	--
	3/17/1998	800	(6)	ND		ND	ND	ND	ND		ND	--
	6/30/1998	850	(6)	ND		ND	ND	ND	ND		ND	--
	9/18/1998	NA	(7)	ND		ND	ND	ND	ND		ND	--
	3/17/1999	850	(7)	ND		ND	ND	ND	ND	2.8	ND	--
	9/20/1999	330	(6), (9)	ND		ND	ND	ND	ND	ND	ND	--
	3/28/2000	1910	(6), (9)	ND		ND	ND	ND	ND	ND	ND	--
	10/12/2000	520	(8)	ND		ND	ND	ND	ND	ND	ND	ND
	3/27/2001	230	(8)	ND		ND	ND	ND	ND	ND	ND	--
	9/27/2001	300	(13)	ND		ND	ND	ND	ND	--	ND	--
	3/23/2002	290	(13)	ND		ND	ND	ND	ND	--	ND	--
	9/26/2002	13	(13)	ND		ND	ND	ND	ND	--	--	--
	3/31/2003	1300	(13)	ND		ND	ND	ND	ND	--	--	--
	9/29/2003	ND		ND		ND	ND	ND	ND	ND	ND	--

Historical Summary of Groundwater Analytical Results for
TPH, BTEX, MTBE, Lead, and Nitrate
Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

WELL NUMBER	DATE	TPH-D (ppb)		TPH-G (ppb)	BENZENE (ppb)	TOLUENE (ppb)	ETHYL-BENZENE (ppb)	XYLENES (ppb)	MTBE [10] (ppb)	TOTAL LEAD (ppm)	NITRATE (ppm)
MW12	07/06/94	ND		ND	ND	ND	ND	ND		ND	29
	11/30/94	ND		ND	ND	ND	ND	ND		ND	--
	03/03/95	ND		ND	ND	ND	ND	ND		ND	--
	05/18/95	ND		ND	ND	ND	ND	ND		ND	--
	09/27/95	ND		ND	ND	ND	ND	ND		ND	--
	11/21/95	ND		ND	ND	ND	ND	ND		ND	--
	03/27/96	ND		ND	ND	ND	ND	ND		--	--
	5/10/1996	ND		ND	ND	ND	ND	ND		--	--
	8/19/1996	ND		ND	ND	ND	ND	ND		--	--
	12/13/1996	ND		ND	ND	ND	ND	ND		--	--
	3/4/1997	ND		ND	ND	ND	ND	ND		--	--
	6/27/1997	ND		ND	ND	ND	ND	ND		--	--
	9/30/1997	ND		ND	ND	ND	ND	ND		--	--
	12/18/1997	ND		ND	ND	ND	ND	ND		--	--
	3/16/1998	ND		ND	ND	ND	ND	ND		--	--
	6/30/1998	ND		ND	ND	ND	ND	ND		--	--
	9/17/1998	ND		ND	ND	ND	ND	ND		--	--
	9/20/1999	57	(6), (9)	ND	ND	ND	ND	ND	ND	--	--
	10/12/2000	130	(8)	ND	ND	ND	ND	ND	ND	--	--
	9/27/2001	ND		ND	ND	ND	ND	ND	--	--	--
	3/23/2002	ND		ND	ND	ND	ND	ND	--	--	--
	9/26/2002	ND		ND	ND	ND	ND	ND	--	--	--
	9/29/2003	ND		ND	ND	ND	ND	ND	ND	--	--
DW-1	07/07/94	ND		ND	ND	ND	ND	ND		ND	7.3
	11/30/94	ND		ND	ND	ND	ND	ND		ND	--
	03/02/95	ND		ND	ND	ND	ND	ND		ND	--
	05/18/95	ND		ND	ND	ND	ND	ND		ND	--
	09/28/95	ND		ND	ND	ND	ND	ND		ND	--
	11/21/95	ND		ND	ND	ND	ND	ND		ND	--
	03/27/96	ND		ND	ND	ND	ND	ND		ND	--
	5/9/1996	ND		ND	ND	ND	ND	ND		ND	--
	8/16/1996	ND		ND	ND	ND	ND	ND		ND	--
	12/13/1996	ND		ND	ND	ND	ND	ND		ND	--
	3/5/1997	ND		ND	ND	ND	ND	ND		ND	--
	6/27/1997	ND		ND	ND	ND	ND	ND		ND	--
	9/30/1997	ND		ND	ND	ND	ND	ND		ND	--
	12/18/1997	ND		ND	ND	ND	ND	ND		ND	--
	3/17/1998	ND		ND	ND	ND	ND	ND		ND	--
	6/30/1998	ND		ND	ND	ND	ND	ND		ND	--
	9/18/1998	NA	(7)	ND	ND	ND	ND	ND		ND	--
Detection Limits:		50		50	0.50	0.50	0.50	0.50		0.10	0.1

Historical Summary of Groundwater Analytical Results for
TPH, BTEX, MTBE, Lead, and Nitrate
Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California

NOTES:

TPH-D = Total Petroleum Hydrocarbons as Diesel.
TPH-G = Total Petroleum Hydrocarbons as Gasoline.
ND = Not detected. See laboratory report for detection limits.
NS = Not sampled.
UA = Well was inaccessible.
-- = Analysis not performed.
* = Nitrates and lead sampled on December 2, 1992.
** = Analysis from wells resampled January 7, 1994.
*** = Xylene EPA 8240: MW-2: 5,100 ppb; MW-3: 310 ppb.

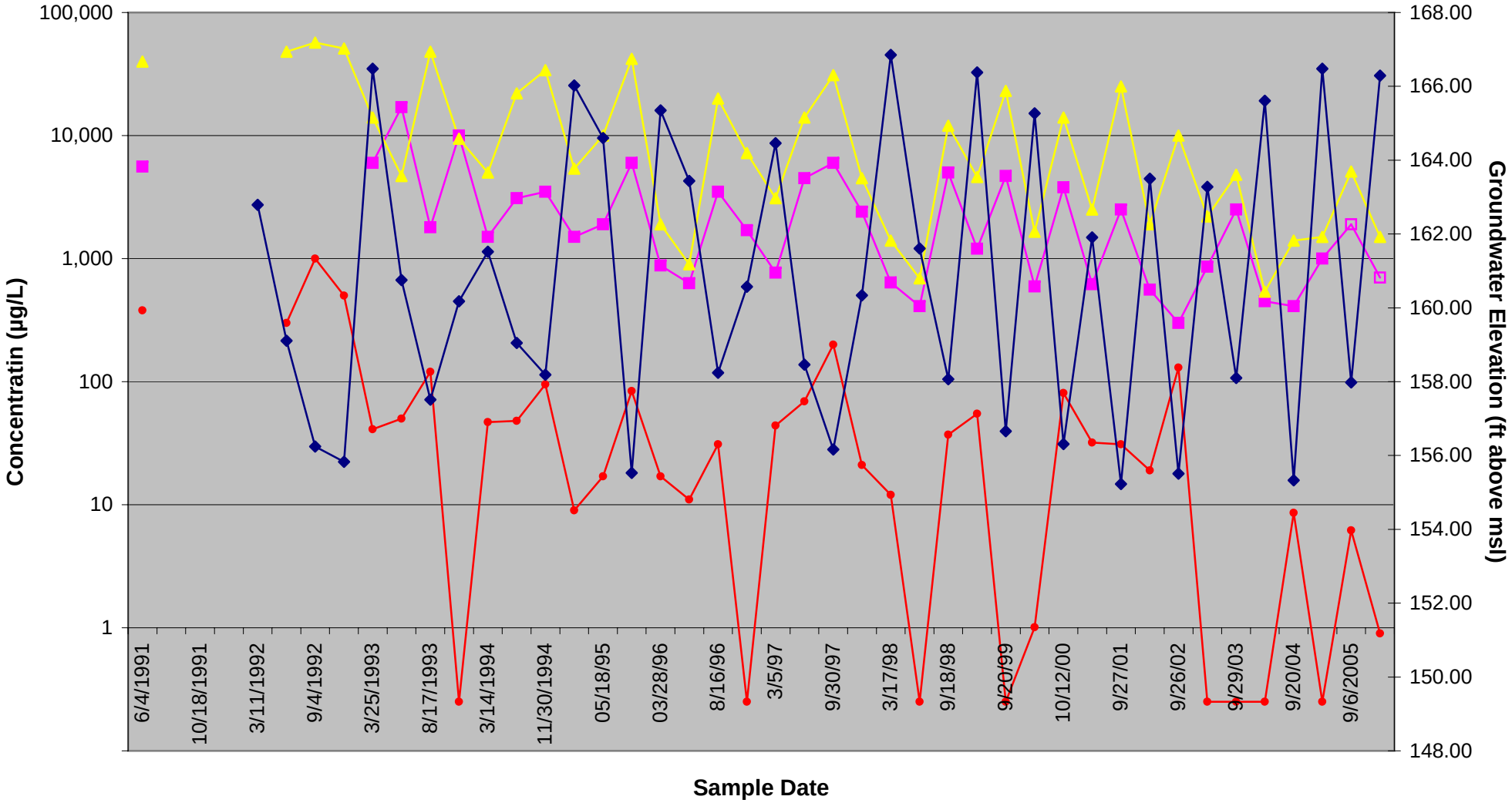
1. Detection Limit was 0.005 mg/L.
2. Laboratory reports chromatogram pattern as being "Non-Diesel < C18".
3. Laboratory reports chromatogram pattern as being "Non-Gas > C8".
4. Laboratory reports chromatogram pattern as being "Non-Diesel > C9".
5. Laboratory reports chromatogram pattern as being "Non-Gas > C11".
6. Laboratory reports unidentified hydrocarbon between C9 and C24.
7. Sample container broken in laboratory.
8. Laboratory reports unidentified hydrocarbon > C16.
9. Laboratory reports detectable levels of hydrocarbons in Method Blank.
10. MTBE results by EPA Method 8020. MTBE has never been confirmed at site by EPA Method 8260.
11. False detection of MTBE as confirmed by EPA Method 8260.
12. Laboratory reports unidentified hydrocarbon < C16.
13. Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.

Attachment E
Groundwater Elevation and Concentration Trends

Graph 1

MW-2 Groundwater Elevation and Concentration Trend

Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California



Open symbol denotes sample analyzed for TPHd by EPA Method 8015 with silica gel cleanup.

TPHd TPHg Benzene GW Elevation

Non-detect values plotted at one-half the reporting limit.

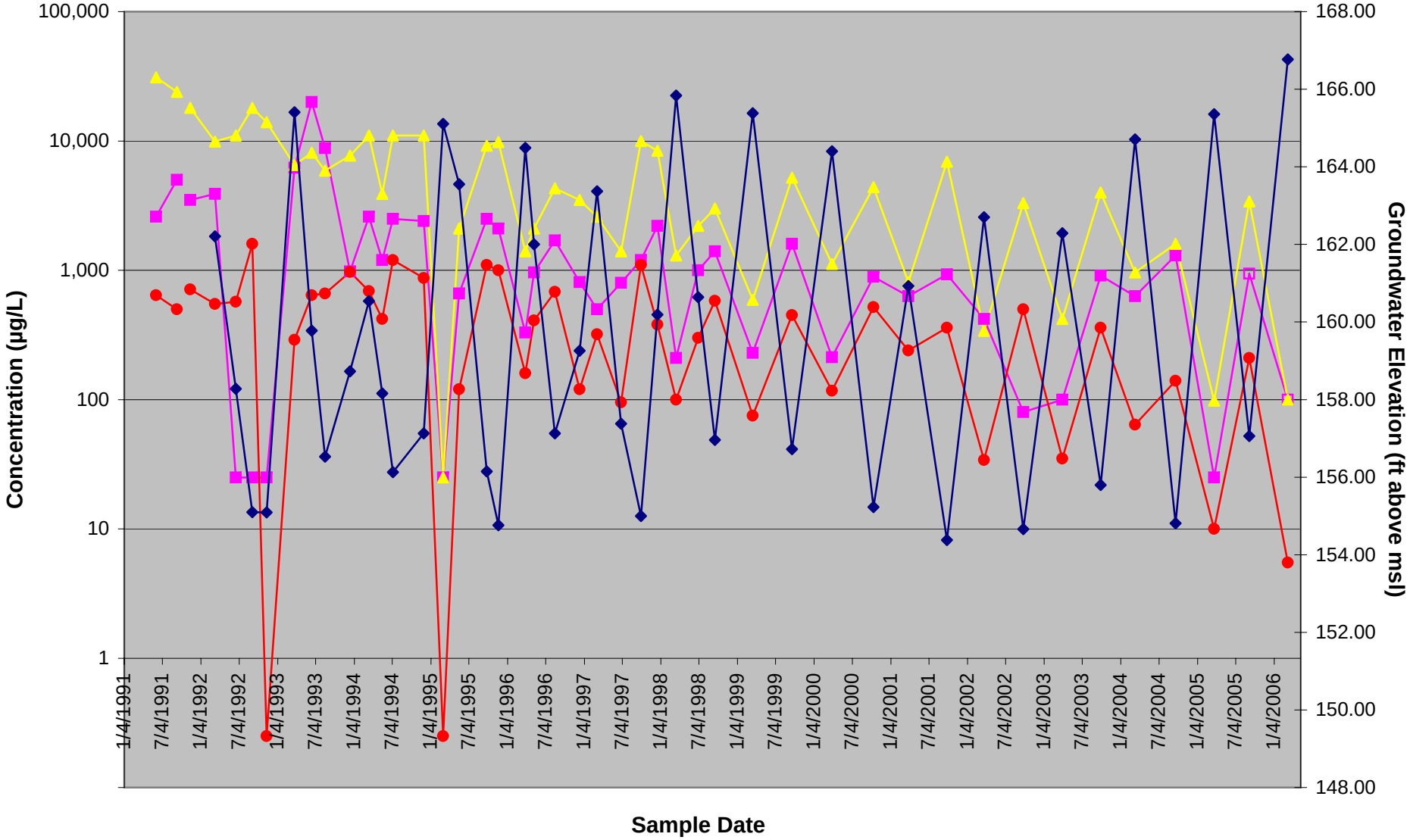
06940-362-100

1Q06

Graph 2

MW-3 Groundwater Elevation and Concentration Trend

Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California



Open symbol denotes sample analyzed for TPHd by EPA Method 8015 with silica gel cleanup.

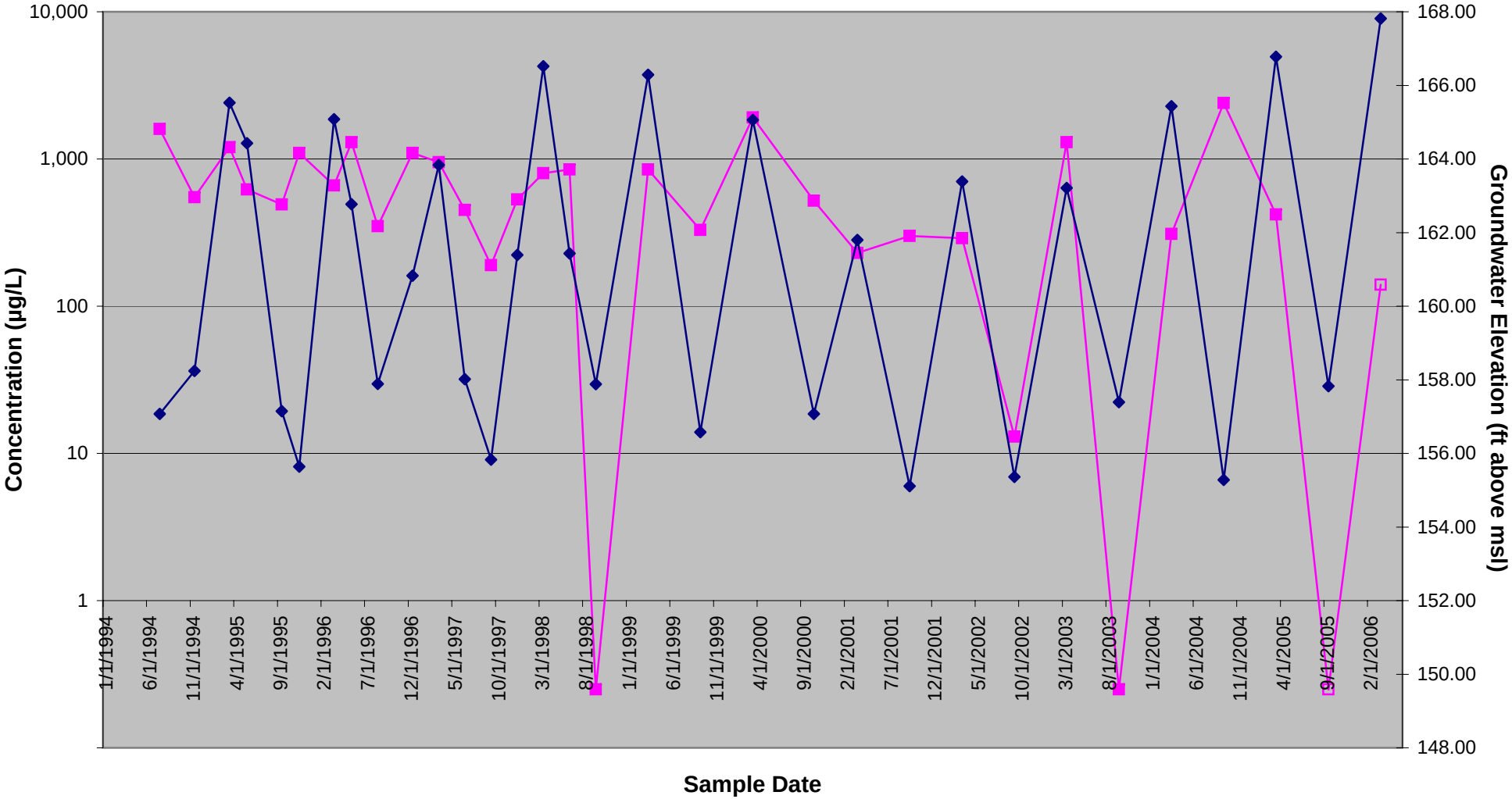
TPHd — TPHg — Benzene — Groundwater Elevation

Non-detect values plotted at one-half the reporting limit.

Graph 3

MW-11 Groundwater Elevation and Concentration Trends

Former Unocal Bulk Plant No. 1975
1051 Spencer Avenue
Santa Rosa, California



Open symbol denotes sample analyzed for TPHd by EPA Method 8015 with silica gel

Non-detect values plotted at one-half the reporting limit.

06940-362-100

1Q06