ENSR
10461 Old Placerville Road, Suite 170, Sacramento, California, 95827-2508
T 916.362.7100 F 916.362.8100 www.ensr.aecom.com

July 10, 2006

Ms. Kasey Ashley
North Coast Water Board
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 94503-2097

RE: Semiannual Reporting of Quarterly Groundwater Monitoring Results, First and Second Quarters 2006
Former Unocal Bulk Plant No. 762248
359 Main Street, Fortuna, California
RWQCB No. 1NHU248
ENSR Project No. 06940-407-100

Dear Ms. Ashley:

ENSR Corporation (ENSR) has been authorized by Union Oil Company of California (Unocal) to perform quarterly groundwater monitoring at the site located at 359 Main Street, Fortuna, California (Site) (**Figure 1**). The Site, a former bulk plant, is currently vacant with a chain link fence around its perimeter. The locations of former and current site features are illustrated on **Figure 2**. Quarterly groundwater monitoring is intended to evaluate the distribution of petroleum hydrocarbon constituents in groundwater beneath the Site. This report summarizes results of the samples collected from the Site during the first and second quarter of 2006. The work was performed in accordance with the field methods and procedures included in **Appendix A**.

Groundwater Level Measurements

Depths to groundwater were measured on February 21 and May 15, 2006 in monitoring wells MW-1 through MW-10, MW-13 through MW-15, MW-16A, MW-16B, and MW-17 through MW-21 and are presented in **Table 1**. Groundwater elevation measurements were used to construct groundwater elevation contour maps for each measurement date for the shallow water-bearing zone and for a deeper water-bearing zone. The maps are included as **Figure 3** and **Figure 4**, respectively, for February 21, 2006 and **Figure 5** and **Figure 6**, respectively, for May 15, 2006. The groundwater flow direction was toward the south with a hydraulic gradient of approximately 0.02 feet per foot (ft/ft) in the shallow zone and toward the northeast, with a hydraulic gradient of approximately 0.001 ft/ft in the deep zone for the February 21, 2006 monitoring event. For the May 15, 2006 monitoring event, the groundwater flow direction was toward the southwest with a hydraulic gradient of approximately 0.02 ft/ft in the shallow zone and toward the northeast with a hydraulic gradient of approximately 0.025 ft/ft in the deep zone. Copies of the groundwater sampling information sheets are included in **Appendix B**. A summary of groundwater elevations measured to date is presented in **Table 1**.

First Quarter 2006 Groundwater Sampling and Analytical Results

On February 21 and 22, 2006, first quarter 2006 groundwater samples were collected from monitoring wells MW-1 through MW-10, MW-13 through MW-15, MW-16A, MW-16B, and MW-17 through MW-21. For quality control purposes, one duplicate groundwater sample was collected from MW-3 and labeled as MW-31. Groundwater samples and a trip blank were submitted to California Laboratory Services (CLS) in Rancho Cordova, California (a state-certified laboratory) under chain-of-custody (COC) protocols. The samples from wells MW-1, MW-3 through MW-6, MW-13 through MW-15, MW-16A, MW-16B, and MW-17 through MW-21 were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) by Environmental Protection

Agency (EPA) Method 8021B, total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 8015M, and total petroleum hydrocarbons as diesel (TPHd) by EPA Method 8015M with silica gel treatment (SGT) by EPA Method 3630. Wells MW-2, and MW-7 through MW-10 were analyzed by EPA Method 8015M with SGT by EPA Method 3630 for TPHd only. Cumulative groundwater sampling results are summarized in **Table 1**. A map depicting dissolved concentrations of TPHd, TPHg, and benzene in groundwater for first quarter 2006 is included as **Figure 7**. Iso-concentration maps of TPHd, TPHg, and benzene in the shallow zone are included as **Figures 8** through **10**, respectively. **Figure 11** is an isoconcentration map for TPHg in the deep zone. TPHd concentrations are those reported for analysis using SGT. A copy of the certified laboratory analytical report with COC documentation is included in **Appendix C**.

During the first quarter 2006 TPHd, TPHg and benzene were detected in shallow zone monitoring wells MW-3, MW-4, MW-13, MW-16A, MW-18, MW-19, MW-20 and MW-21. In shallow zone well MW-5, TPHg and benzene were detected but TPHd was not. In shallow zone well MW-6, TPHg was detected but TPHd and benzene were not. Maximum concentrations of TPHd were detected in MW-13 at 5,900 micrograms per liter (µg/L). TPHg was detected at a maximum concentration of 88,000 µg/L in MW-4. Benzene was detected at a maximum concentration of 7,700 µg/L, in MW-18.

Of the five monitoring wells screened across the deep zone (MW-1, MW-14, MW-15, MW-16B, and MW-17), TPHg was only detected in MW-1, at 3,900 µg/L. TPHd and benzene were not reported above laboratory reporting limits in the first quarter 2006 for the deep zone wells.

Second Quarter 2006 Groundwater Sampling and Analytical Results

On May 16, 2006, second quarter 2006 groundwater samples were collected from monitoring wells MW-13 through MW-15, MW-16A, MW-16B, and MW-17 through MW-21. One duplicate groundwater sample was collected from MW-18 and labeled as MW-18B. Groundwater samples along with a trip blank were submitted to CLS under COC protocols. Samples were analyzed for BTEX by EPA Method 8021B, TPHg by EPA Method 8015M, and TPHd by EPA Method 8015M with SGT by EPA Method 3630. CLS reported that one of the sample containers for MW-18 broke; therefore, the TPHd analysis could not be performed. Since a duplicate sample was collected from MW-18, ENSR is reporting the TPHd duplicate result for MW-18.

Cumulative groundwater sampling results are summarized in **Table 1**. A map depicting dissolved concentrations of TPHd, TPHg, and benzene in groundwater for second quarter 2006 is included as **Figure 12**. Iso-concentration maps of TPHd, TPHg, and benzene in the shallow zone are included as **Figures 13** through **15**, respectively. TPHd concentrations are those reported for analysis using SGT. A copy of the certified laboratory analytical report with COC documentation is included in **Appendix C**.

During the second quarter 2006, TPHd, TPHg and benzene were detected in shallow zone wells MW-13, MW-16A, MW-18, MW-19, MW-20 and MW-21. TPHd was detected at a maximum concentration of 6,300 µg/L in MW-13. TPHg was detected at a maximum concentration of 17,000 µg/L in both MW-13 and MW-21. Benzene was detected at a maximum concentration of 11,000 µg/L in MW-18 (12,000 µg/L in MW-18 duplicate). Of the four monitoring wells screened across the deep zone that were sampled (MW-14, MW-15, MW-16B, and MW-17), TPHd, TPHg and benzene were not reported above laboratory reporting limits in the second quarter 2006.

Conclusions/Recommendations

ENSR recommends continued monitoring and sampling of groundwater at the Site.

Future Work

The next semiannual monitoring report will be submitted on or before January 15, 2007 and will report on the quarterly monitoring events scheduled for August and November 2006.

Remarks/Signatures

The interpretations in this report represent ENSR's professional opinions and are based, in part, on the information supplied by the client. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

If you have any questions regarding this project, please contact Jennifer Johnston at (916) 362-7100.

Sincerely,
ENSR Corporation

Jennifer Johnston
Project Manager

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

JJ/dk

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

Attachments

Table:
1. Groundwater Monitoring Data and Analytical Results

Figures:
1. Site Location Map
2. Site Map
3. Shallow Zone Groundwater Elevation Contour Map (February 2006)
4. Deep Zone Groundwater Elevation Contour Map (February 2006)
5. Shallow Zone Groundwater Elevation Contour Map (May 2006)
6. Deep Zone Groundwater Elevation Contour Map (May 2006)
7. Petroleum Hydrocarbon Concentration Map (February 2006)
8. Shallow TPHd Iso-Concentration Map (February 2006)
9. Shallow TPHg Iso-Concentration Map (February 2006))
10. Shallow Benzene Iso-Concentration Map (February 2006)
11. Deep TPHg Iso-Concentration Map (February 2006)
12. Petroleum Hydrocarbon Concentration Map (May 2006)
13. Shallow TPHd Iso-Concentration Map (May 2006)
14. Shallow TPHg Iso-Concentration Map (May 2006)
15. Shallow Benzene Iso-Concentration Map (May 2006)

Appendices:
A Field Methods and Procedures
B Groundwater Sampling Information Sheets
C Laboratory Analytical Results with Chain-of-Custody Documentation

cc: Mr. John Frary, Unocal (Chevron)
Mr. Mark Verhey, Humboldt County
Mr. Larry Montgomery

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-1	03/26/91	23.66	21.96	0.00	ND	5,600	200	750	150	1,100	--	--
45.62	05/01/91	24.54	21.08	0.00	--	--	--	--	--	--	--	--
	07/08/91	25.89	19.73	0.00	ND	150	40	ND	4.0	5.1	--	--
	10/21/91	26.90	18.72	0.00	ND	400	86	5.4	5.3	15	--	--
	01/23/92	26.29	19.33	0.00	ND	390	5.7	6.8	1.6	2.9	--	--
	05/01/92	25.15	20.47	0.00	ND	3,300	1,500	570	190	490	--	--
	07/02/92	26.77	18.85	0.00	--	--	--	--	--	--	--	--
	07/17/92	26.95	18.67	0.00	120	60	10	1.7	ND	1.6	--	--
	10/02/92	27.79	17.83	0.00	ND	60	1.0	1.4	ND	0.7	--	ND[3]
	03/03/93	23.48	22.14	0.00	ND	11,000	1,200	410	94	490	--	ND[3]
	06/22-23/93	24.54	21.08	0.00	1,500	3,800	1,300	210	120	390	--	--
	09/22-23/93	26.90	18.72	0.00	450	58	ND	ND	ND	ND	--	--
	12/22/93	26.45	19.17	0.00	68[7]	56	1.9	4.2	4.3	16	--	--
	03/28-29/94	25.40	20.22	0.00	150	ND	0.72	0.54	ND	1.1	--	--
	06/23-24/94	26.43	19.19	0.00	650[7]	2,500	1,100	ND	36	ND	--	--
	09/21/94	27.45	18.17	0.00	ND	ND	ND	ND	ND	ND	--	--
	12/21/94	26.13	19.49	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/02-03/95	24.15	21.47	0.00	190[7]	ND	ND	ND	ND	ND	--	--
	06/01/95	25.05	20.57	0.00	860[7]	3,000	130	20	76	550	--	--
	09/05-06/95	26.65	18.97	0.00	130[8]	ND	ND	ND	ND	ND	--	--
	12/10-11/95	26.62	19.00	0.00	150[8]	ND	ND	ND	ND	ND	--	--
	03/11/96	24.87	20.75	0.00	140	94[9]	0.78	ND	ND	ND	--	--
	06/03-04/96	24.88	20.74	0.00	ND	60[9]	ND	ND	ND	ND	--	--
	09/04-05/96	26.45	19.17	0.00	90[8]	ND	ND	ND	ND	ND	--	--
	12/02-03/96	25.65	19.97	0.00	82	ND	ND	ND	ND	ND	--	--
	03/10-11/97	22.60	23.02	0.00	410[8]	ND	ND	ND	ND	ND	--	--
	06/09-10/97	24.00	21.62	0.00	160	ND	ND	ND	ND	ND	ND	--
	09/08-09/97	25.42	20.20	0.00	ND	ND	ND	ND	ND	ND	--	--
	12/03-04/97	23.86	21.76	0.00	160[8]	ND	ND	ND	ND	ND	--	--
	03/23-24/98	19.45	26.17	0.00	140	120	33	1.3	ND	5.1	--	--

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359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-1	06/07-08/98	22.47	23.15	0.00	220	420	180	ND[11]	ND[11]	4.7	--	--
(Cont.)	09/16/98	24.75	20.87	0.00	170	ND	ND	ND	ND	1.1	ND	--
	12/16/98	23.11	22.51	0.00	150	ND	ND	ND	ND	ND	--	--
	03/23/99	21.31	24.31	0.00	150	530	160	ND[11]	ND[11]	22	ND[22]	--[23]
	06/14/99	23.25	22.37	0.00	210[27]	140	79	ND	ND	0.93	--	--
	09/13-14/99	25.10	20.52	0.00	110[15]	ND	ND	ND	ND	ND	--	--
	12/16/99	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	03/16-17/00	21.80	23.82	0.00	120[15]	180[28]	73	ND	1	7.1	--	--
	06/26-27/00	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	09/21/00	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	11/08/00	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	02/08/01	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	05/09/01	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	08/07/01	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	11/27/01	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	02/05/02	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	05/07/02	23.61	22.01	0.00	5,000/3,700[38,43]	560	41	89	3.6	92	--	--
	08/14/02	25.51	20.11	0.00	2,000/1,000[38]	77	<0.50	3.1	<0.50	3.4	--	--
	11/12/02	25.64	19.98	0.00	6,200/91[38]	3,800	160	1,400	34	530	--	--
	02/12/03	22.72	22.90	0.00	5,000/130[38]	2,300	25	400	3.8	410	--	--
	06/09-10/03	23.22	22.40	0.00	4,400/1,700[38]	14,000[45]	1,300[45]	2,800[45]	41[45]	2,700[45]	--	--
45.62	08/14/03	25.00	20.62	0.00	430/150[38]	550	56	9.7	3.6	85	--	--
	12/11/03	24.20	21.42	0.00	1,700	99	2.8	18	1.8	17	--	--
	03/23/04	22.40	23.22	0.00	8,100[49]/470[38,49]	26,000	2,400	6,700	430	4,400	--	--
	08/10/04	25.60	20.02	0.00	270 [49]	310 [50]	40	7.2	7.2	37	--	--
	02/08/05	23.22	24.19	0.00	87 [49]	510	14	90	6.3	150	--	--
47.41	05/18/05	22.08	25.33	0.00	--	--	--	--	--	--	--	--
	08/17-18/05	24.70	22.71	0.00	<50 [38]	<50	<0.50	<0.50	<0.50	<1.0	--	--
	11/01-02/05	25.40	22.01	0.00	--	--	--	--	--	--	--	--
	02/21-22/06	**22.04**	**25.37**	**0.00**	**<50 [38]**	**3,900**	**<5.0**	**290**	**14**	**1,200**	**--**	**--**
	05/15-16/06	**22.61**	**24.80**	**0.00**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**

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Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-2	03/26/91	7.12	41.47	0.00	ND	ND	ND	ND	ND	ND	--	--
48.59	05/01/91	7.37	41.22	0.00	--	--	--	--	--	--	--	--
	07/08/91	8.28	40.31	0.00	ND	ND	ND	ND	ND	ND	--	--
	10/21/91	10.76	37.83	0.00	ND	ND	ND	0.5	ND	1.0	--	--
	01/23/92	10.36	38.23	0.00	ND	ND	ND	0.5	ND	ND	--	--
	05/01/92	8.80	39.79	0.00	ND	ND	ND	0.9	ND	ND	--	--
	07/02/92	8.77	39.82	0.00	--	--	--	--	--	--	--	--
	07/17/92	8.97	39.62	0.00	ND	ND	ND	ND	ND	ND	--	--
	10/02/92	11.29	37.30	0.00	ND	ND	ND	ND	ND	ND	--	ND
	03/03/93	8.35	40.24	0.00	ND	ND	ND	ND	ND	ND	--	ND
	06/22-23/93	7.20	41.39	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/22-23/93	10.04	38.55	0.00	ND	ND	ND	ND	ND	ND	--	--
	12/22/93	10.45	38.14	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/28-29/94	7.82	40.77	0.00	ND	ND	ND	ND	ND	ND	--	--
	06/23-24/94	8.32	40.27	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/21/94	INACCESSIBLE		--	--	--	--	--	--	--	--	--
	12/21/94	INACCESSIBLE (CONNECTED TO REMEDIATION SYSTEM)					--	--	--	--	--	--
	03/02-03/95	INACCESSIBLE		--	--	--	--	--	--	--	--	--
	06/01/95	INACCESSIBLE		--	--	--	--	--	--	--	--	--
	09/05-06/95	INACCESSIBLE		--	--	--	--	--	--	--	--	--
	12/10-11/95	INACCESSIBLE		--	--	--	--	--	--	--	--	--
	03/11/96	INACCESSIBLE (CONNECTED TO REMEDIATION SYSTEM)					--	--	--	--	--	--
	06/03-04/96	7.48	41.11	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/04-05/96	10.54	38.05	0.00	ND	ND	ND	ND	ND	ND	--	--
	12/02-03/96	10.72	37.87	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/10-11/97	7.13	41.46	0.00	ND	ND	ND	ND	ND	ND	--	--
	06/09-10/97	7.91	40.68	0.00	ND	ND	ND	ND	ND	ND	ND	--
	09/08-09/97	11.39	37.20	0.00	ND	ND	ND	ND	ND	ND	--	--
	12/03-04/97	10.09	38.50	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/23-24/98	6.25	42.34	0.00	ND	ND	ND	ND	ND	ND	--	--

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MW-2	06/07-08/98	6.49	42.10	0.00	ND	ND	ND	ND	ND	ND	--	--
(Cont.)	09/16/98	9.33	39.26	0.00	ND	ND	ND	ND	ND	ND	ND	--
	12/16/98	7.86	40.73	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/23/99	6.22	42.37	0.00	ND	ND	ND	0.54	ND	ND	2.6[22]	--[24]
	06/14/99	7.34	41.25	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/13-14/99[31]	10.18	38.41	0.00	57[15]	ND	ND	ND	ND	ND	--	--
	12/16/99	9.30	39.29	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/16-17/00	6.84	41.75	0.00	ND	ND	ND	ND	ND	ND	--	--
	06/26-27/00	8.21	40.38	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/21/00	10.42	38.17	0.00	ND	ND	ND	ND	ND	ND	--	--
	11/08/00	10.88	37.71	0.00	ND	ND	ND	ND	ND	ND	--	--
	02/08/01	8.22	40.37	0.00	ND	ND	ND	ND	ND	ND	--	--
	05/09/01	7.22	41.37	0.00	ND	ND	ND	ND	ND	ND	--	--
	08/07/01	9.47	39.12	0.00	<50	<50	<0.50	<0.50	<0.50	<0.50	--	--
	11/27/01	10.53	38.06	0.00	<50	<50	<0.50	<0.50	<0.50	<0.50	--	--
	02/05/02	7.04	41.55	0.00	<50	<50	<0.50	<0.50	<0.50	<0.50	--	--
	05/07/02	7.06	41.53	0.00	[43]670/690[38,43]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	08/14/02	9.35	39.24	0.00	<56	<50	<0.50	<0.50	<0.50	<0.50	--	--
	11/12/02	11.19	37.40	0.00	<50[38,44]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	02/12/03	8.03	40.56	0.00	<56	<50	<0.50	<0.50	<0.50	<0.50	--	--
	06/09-10/03	6.96	41.84	0.00	71/<54[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
48.80	08/14/03	9.14	39.66	0.00	<54	<50	<0.50	<0.50	<0.50	<0.50	--	--
	12/11/03	9.75	39.05	0.00	89/88[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	03/23/04	7.05	41.75	0.00	360[49]/170[38,49]	--	--	--	--	--	--	--
	08/10/04	9.95	38.85	0.00	--	--	--	--	--	--	--	--
	02/08/05	7.22	43.38	0.00	<50	--	--	--	--	--	--	--
50.60	05/18/05	4.73	45.87	0.00	--	--	--	--	--	--	--	--
	08/17-18/05	8.44	42.16	0.00	--	--	--	--	--	--	--	--
	11/01-02/05	10.03	40.57	0.00	--	--	--	--	--	--	--	--
	02/21-22/06	**6.47**	**44.13**	**0.00**	**<50 [38]**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
	05/15-16/06	**6.29**	**44.31**	**0.00**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**

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Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-3	03/26/91	6.27	40.32	0.00	ND	11,000	1,900	2,600	470	2,200	--	--
46.59	05/01/91	6.93	39.66	0.00	--	--	--	--	--	--	--	--
	07/08/91	7.62	38.97	0.00	ND	10,000	1,600	2,000	330	1,400	--	--
	10/21/91	9.95	36.64	0.00	ND	3,100	550	420	77	470	--	--
	01/23/92	9.20	37.39	0.00	ND	19,000	690	760	180	960	--	--
	05/01/92	6.52	40.07	0.00	ND	11,000	1,700	1,800	450	1,700	--	--
	07/02/92	7.86	38.73	0.00	--	--	--	--	--	--	--	--
	07/17/92	7.95	38.64	0.00	680	4,600	860	800	200	930	--	--
	10/02/92	10.70	35.89	0.00	160[4]	2,000	350	290	52	400	--	ND[5]
	03/03/93	7.12	39.47	Sheen	ND	27,000	820	1,700	320	1,700	--	ND[5]
	06/22-23/93	6.21	40.38	0.00	--	--	--	--	--	--	--	--
	09/22-23/93	9.40	37.19	0.00	--	--	--	--	--	--	--	--
	12/22/93	9.51	37.08	0.00	1,600[7]	9,700	1,500	1,300	300	2,300	--	--
	03/28-29/94	6.78	39.81	Sheen	1,900[7]	19,000	2,300	1,800	530	3,500	--	--
	06/23-24/94	7.42	39.17	0.00	1,700[7]	14,000	1,500	760	400	2,900	--	--
	09/21/94	10.50	36.09	0.00	7,800[7]	13,000	1,000	860	1,800	270	--	--
	12/21/94	INACCESSIBLE (CONNECTED TO REMEDIATION SYSTEM)					--	--	--	--	--	--
	03/02-03/95	1.15	45.44	0.00	490[7]	2,200	ND	9.6	ND	230	--	--
	06/01/95	6.58	40.01	Sheen	17,000[7]	20,000	1,400	3,300	570	4,300	--	--
	09/05-06/95	9.60	36.99	0.00	4,400[8]	26,000	580	740	620	7,200	--	--
	12/10-11/95	9.57	37.02	0.00	200[8]	260	5.8	ND	ND	ND	--	--
	03/11/96	3.11	43.48	0.00	1,300[8]	7,700	36	15	ND	1,700	--	--
	06/03-04/96	7.01	39.58	0.00	1,400[7]	1,000	70	2.8	28	140	--	--
	09/04-05/96	10.00	36.59	0.00	23,000[8]	17,000	87	ND	160	1,400	--	--
	12/02-03/96	9.90	36.69	0.00	1,600[7]	3,200	68	31	75	1,000	--	--
	03/10-11/97	6.35	40.24	0.00	3,000[7]	11,000	190	130	400	2,300	--	--
	06/09-10/97	7.15	39.44	0.00	3,000[7]	10,000	120	ND	140	960	ND	--
	09/08-09/97	11.80	34.79	0.00	450[7]	5,300	100	21	97	580	--	--
	12/03-04/97	9.34	37.25	0.00	1,100[7]	6,200	120	ND	57	700	--	--
	03/23-24/98	5.51	41.08	0.00	4,400[10]	4,200	21	ND[11]	20	240	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-3	06/07-08/98	5.99	40.60	0.00	80[14]	540	10	ND[11]	5.7	41	--	--
(Cont.)	09/16/98	8.68	37.91	0.00	3,400[17]	1,400[18]	26	ND[11]	14	130	ND[11]	--
	12/16/98	7.65	38.94	0.00	9,100[10]	4,200	31	ND[11]	17	170	--	--
	03/23/99	5.65	40.94	0.00	610[21]	1,900	27	2.6	21	130	ND[22]	--[25]
	06/14/99	6.66	39.93	0.00	1,700[21]	3,500	44	ND[11]	20	170	--	--
	09/13-14/99[31]	9.91	36.68	0.00	6,500[21]	1,200[28]	10	ND	3.8	35	--	--
	12/16/99	8.91	37.68	0.00	4,400[33]	1,790[28]	27.3	ND[11]	9.55	81.4	--	--
	03/16-17/00	5.58	41.01	0.00	440[21]	1,300[28]	ND[11]	ND[11]	ND[11]	73	--	--
	06/26-27/00	8.25	38.34	0.00	470[14]	2,000[28]	22	ND[11]	10	120	--	--
	09/21/00	10.92	35.67	0.00	96.2[37]	210[28]	2.2	0.64	0.99	8.4	--	--
	11/08/00	11.27	35.32	0.00	215[21]	880[28]	21	ND[11]	8.0	52	--	--
	02/08/01	7.93	38.66	0.00	[21]82/58[14,38]	933[28]	41.1	14.3	7.51	38.4	--	--
	05/09/01	6.23	40.36	0.00	[15]80/ND[38]	390[28]	20	4.6	20	68	--	--
	08/07/01	8.90	37.69	0.00	<50	120	3.3	<0.50	<0.50	4.0	--	--
	11/27/01	9.95	36.64	0.00	[41]100/100[38,41]	170	2.0	<0.50	0.65	5.5	--	--
	02/05/02	5.51	41.08	0.00	[41]510/300[38,41]	480	21	<0.50	2.1	29	--	--
	05/07/02	INACCESSIBLE - TRACTOR OVER WELL				--	--	--	--	--	--	--
	08/14/02	8.37	38.22	0.00	[41]2,300/2,000[38,41]	5,800	120	11	65	280	--	--
	11/12/02	9.94	36.65	0.00	1,900/570[38]	1,800	70	1.1	26	110	--	--
	02/12/03	5.64	40.95	0.00	1,800/410[38]	1,400	54	0.67	19	95	--	--
	06/09-10/03	5.62	40.95	0.00	2,900/1,600[38]	5,000	320	6.9	170	650	--	--
46.57	08/14/03	7.96	38.61	0.00	[41]1,900/990[38,41]	4,000	220	6.7	110	460	--	--
	12/11/03	8.25	38.32	0.00	1,100	340	6.8	<0.50	1.4	16	--	--
	03/23/04	6.00	40.57	0.00	1,200[49]/260[38,49]	1,800[50]	150	130	40	310	--	--
	08/10/04	9.20	37.37	0.00	610 [49]	1,300 [50]	49	2.5	18	140	--	--
	02/08/05	6.17	42.18	0.00	580 [49]	2,100 [51]	150	3.1	12	160	--	--
48.35	05/18/05	4.03	44.32	0.00	--	--	--	--	--	--	--	--
	08/17-18/05	7.61	40.74	0.00	570 [38, 49]	1,200 [51]	40	1	13	71	--	--
	11/01-02/05	9.60	38.75	0.00	--	--	--	--	--	--	--	--
Duplicate	**02/21-22/06**	**--**	**--**	**--**	**2,500 [38, 49]**	**3,200**	**150**	**15**	**21**	**260**	**--**	**--**
	02/21-22/06	**5.52**	**42.83**	**0.00**	**2,900 [38, 49]**	**3,300**	**180**	**16**	**21**	**250**	**--**	**--**
	05/15-16/06	**5.39**	**42.96**	**0.00**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-4	03/26/91	9.85	40.46	0.00	ND	55,000	13,000	16,000	2,000	13,000	--	--
50.31	05/01/91	10.13	40.18	0.00	--	--	--	--	--	--	--	--
	07/08/91	11.08	39.23	0.00	ND	33,000	7,900	3,900	1,400	3,900	--	--
	10/21/91	13.45	36.86	0.06	--	--	--	--	--	--	--	--
	01/23/92	13.25	37.06	0.08	--	--	--	--	--	--	--	--
	05/01/92	10.41	39.90	0.00	14,000[4]	29,000	5,400	12,000	1,900	750	--	--
	07/02/92	11.62	38.69	0.02	--	--	--	--	--	--	--	--
	07/17/92	11.79	38.52	0.00	12,000	68,000	5,900	9,700	2,400	9,900	--	--
	10/02/92	13.67	36.64	0.25/Sheen	--	--	--	--	--	--	--	--
	03/03/93	10.69	39.62	0.54/Sheen	--	--	--	--	--	--	--	--
	06/22-23/93	7.65	42.66	0.00	--	--	--	--	--	--	--	--
	09/22-23/93	12.85	37.46***	0.30	--	--	--	--	--	--	--	--
	12/22/93	13.20	37.30**	0.25	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	03/28-29/94	10.31	40.00	<0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	06/23-24/94	101.96	-51.65	<0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	09/21/94	13.81	36.50	<0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	12/21/94	12.32	38.33**	0.44	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	03/02-03/95	10.96	39.35	0.00	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	06/01/95	10.38	39.93	Sheen	2,500[8]	27,000	3,600	7,000	730	400	--	--
	09/05-06/95	13.35	36.98**	0.02	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	12/10-11/95	13.38	36.95**	0.03	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	03/11/96	INACCESSIBLE (CONNECTED TO REMEDIATION SYSTEM)					--	--	--	--	--	--
	06/03-04/96	6.83	43.48	Sheen	19,000[7]	81,000	4,600	15,000	2,300	13,000	--	--
	09/04-05/96	12.80	37.51	Sheen	4,500[8]	100,000	7,600	5,300	1,200	7,200	--	--
	12/02-03/96	12.36	37.95	Sheen	4,200[7]	46,000	4,500	15,000	1,900	11,000	--	--
	03/10-11/97	9.53	40.78	Sheen	3,400[7]	36,000	1,400	7,400	1,100	8,000	--	--
	06/09-10/97	10.60	39.71	Sheen	3,900[7]	94,000	1,800	7,700	1,100	9,100	ND	--
	09/08-09/97	13.76	36.55	Sheen	8,200[7]	170,000	1,700	6,400	2,900	18,000	--	--
	12/03-04/97	12.10	38.21	Sheen	6,100[7]	100,000	4,800	12,000	2,300	15,000	--	--
	03/23-24/98	8.07	42.24	0.00	3,400[10]	100,000	12,000	21,000	2,000	11,000	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-4	06/07-08/98	8.90	41.43**	0.02/Sheen	4,900[12]	83,000	8,500	14,000	1,900	13,000	--	--
(Cont.)	09/16/98	11.34	38.99**	0.02/Sheen	4,200[12]	110,000	9,000	12,000	1,900	12,000	ND[11]	--
	12/16/98	9.40	40.91	Sheen	1,900[10]	64,000	10,000	12,000	1,500	7,900	--	--
	03/23/99	8.25	42.06	Sheen	2,500[21]	51,000	6,600	9,100	1,100	5,500	ND[22]	--[26]
	06/14/99	9.42	40.89	0.00	2,300[21]	49,000	6,400	6,700	1,100	5,200	--	--
	09/13-14/99	11.83	38.48	0.00	1,400[21]	39,000[28,30]	1,800	900	220	920	--	--
	12/16/99	11.01	39.30	0.00	7,700[14]	61,100[28]	6,670	6,870	1,280	6,130	--	--
	03/16-17/00	8.88	41.43	0.00	2,500[14]	35,000[28]	7,100	7,500	1,400	6,400	--	--
	06/26-27/00[36]	10.89	39.42	0.00	1,400[14]	19,000[28]	5,800	6,400	930	4,900	--	--
	09/21/00	12.77	37.54	Sheen	2,160[37]	30,000[28]	4,900	4,000	730	3,600	--	--
	11/08/00	13.12	37.19	0.00	1,760[21]	57,000[28]	6,200	7,100	1,100	6,400	--	--
	02/08/01	10.62	39.69	0.00	[14]2,800/2,300[14,38]	48,600[28]	6,930	6,630	1,020	5,370	--	--
	05/09/01	9.73	40.58	0.00	[39]4,100/3,700[14,38]	48,000[28]	4,800	10,000	1,400	7,200	--	--
	08/07/01	11.86	38.45	0.00	[41]2,100/2,700[38,41]	28,000[40]	9,600[40]	6,400[40]	1,000[40]	5,000[40]	--	--
	11/27/01	12.03	38.28	0.00	[41]1,000/1,000[38,41]	43,000	9,800	6,700	1,200	5,400	--	--
	02/05/02	8.56	41.75	0.00	--[42]	56,000	9,700	10,000	1,500	7,000	--	--
	05/07/02	9.37	40.94	0.00	[43]19,000/14,000[38,43]	81,000	2,200	6,300	1,700	13,000	--	--
	08/14/02	11.56	38.75	0.00	[41]3,100/3,600[38,41]	56,000	3,900	10,000	1,800	12,000	--	--
	11/12/02	12.73	37.58	0.00	8,000[38,44]	110,000	7,400	22,000	3,900	22,000	--	--
	02/12/03	8.98	41.33	0.00	3,800/2,000[38]	67,000	7,800	12,000	2,000	11,000	--	--
	06/09-10/03	9.34	40.95	0.00	9,000/6,700[38]	48,000	1,900	5,100	1,400	10,000	--	--
50.29	08/14/03	11.26	39.03	0.00	[41]2,000/1,900[38,41]	46,000	2,200	5,400	1,100	7,500	--	--
	12/11/03	11.54	38.75	0.00	2,800	24,000	3,900	2,800	890	4,200	--	--
	03/23/04	9.10	41.19	0.00	5200[49]/2,000[38,49]	24,000	5,300	3,800	580	2,400	--	--
	08/10/04	12.00	38.29	0.00	2,600 [49]	17,000 [50]	2,800	1,600	370	2,000	--	--
	02/08/05	9.28	42.79	0.00	4,000 [49]	32,000	4,100	4,500	860	5,100	--	--
52.07	05/18/05	8.02	44.05	0.00	--	--	--	--	--	--	--	--
	08/17-18/05	10.68	41.39	0.00	40,000 [38]	120,000 [51]	10,000	18,000	3,400	23,000	--	--
	11/01-02/05	12.25	39.82	0.00	--	--	--	--	--	--	--	--
	02/21-22/06	**8.53**	**43.54**	**0.00**	**3,200 [38, 49]**	**88,000**	**7,000**	**4,100**	**980**	**5,000**	**--**	**--**
	05/15-16/06	**8.54**	**43.53**	**0.00**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-5	03/26/91	9.22	38.35	0.00	ND	64,000	22,000	16,000	2,000	13,000	--	--
47.57	05/01/91	9.01	38.56	0.00	--	--	--	--	--	--	--	--
	07/08/91	10.00	37.57	Sheen	ND	120,000	25,000	18,000	1,400	15,000	--	--
	10/21/91	12.05	35.52***	0.25/Sheen	--	--	--	--	--	--	--	--
	01/23/92	11.05	36.52***	0.02/Sheen	--	--	--	--	--	--	--	--
	05/01/92	9.13	38.44	0.00	ND	89,000	18,000	16,000	3,200	13,000	--	--
	07/02/92	10.23	37.34***	0.01/Sheen	--	--	--	--	--	--	--	--
	07/17/92	10.49	37.08	0.00	12,000	72,000	14,000	12,000	2,700	8,700	--	--
	10/02/92	11.97	35.60***	0.95/Sheen	--	--	--	--	--	--	--	--
	03/03/93	9.70	37.87***	1.22/Sheen	--	--	--	--	--	--	--	--
	06/22-23/93[6]	8.06	39.51***	0.75/Sheen	--	--	--	--	--	--	--	--
	09/22-23/93	11.35	36.22***	0.10/Sheen	--	--	--	--	--	--	--	--
	12/22/93	11.10	36.53**	0.08	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	03/28-29/94	9.05	38.52	<0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	06/23-24/94	10.02	37.55	<0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	09/21/94	11.85	35.73**	0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	12/21/94	10.32	37.50**	0.32	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	03/02-03/95	9.02	38.55	0.00	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	06/01/95	9.32	38.33**	0.10	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	09/05-06/95	12.36	35.33**	0.16	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	12/10-11/95	12.40	35.25**	0.11	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	03/11/96	INACCESSIBLE (CONNECTED TO REMEDIATION SYSTEM)					--	--	--	--	--	--
	06/03-04/96	7.11	40.48**	0.02	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	09/04-05/96	11.33	36.25**	0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	12/02-03/96	10.25	37.33**	0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	03/10-11/97	8.45	39.13**	0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	06/09-10/97	9.76	37.82**	0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	09/08-09/97	12.51	35.07**	0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	12/03-04/97	10.12	37.45	Sheen	43,000[7]	480,000	13,000	16,000	3,700	21,000	--	--
	03/23-24/98	7.80	41.16**	1.80	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--

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Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-5	06/07-08/98	9.65	38.88**	1.25	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
(Cont.)	09/16/98	12.10	35.53**	0.08	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	12/16/98	8.25	39.35**	0.04	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	03/23/99	7.19	40.56**	0.24	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	06/14/99	8.61	39.35**	0.51	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	09/13-14/99	10.76	36.99**	0.24	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	12/16/99	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	03/16-17/00	7.01	40.56	0.00	18,000[34]	41,000[28]	720	2,700	950	6,600	--	--
	06/26-27/00	INACCESSIBLE		--	--	--	--	--	--	--	--	--
	09/21/00	INACCESSIBLE		--	--	--	--	--	--	--	--	--
	11/08/00	INACCESSIBLE		--	--	--	--	--	--	--	--	--
	02/08/01	INACCESSIBLE		--	--	--	--	--	--	--	--	--
	05/09/01	INACCESSIBLE		--	--	--	--	--	--	--	--	--
	08/07/01	INACCESSIBLE		--	--	--	--	--	--	--	--	--
	11/27/01	INACCESSIBLE		--	--	--	--	--	--	--	--	--
	02/05/02	INACCESSIBLE		--	--	--	--	--	--	--	--	--
	05/07/02	7.20	40.37	0.00	25,000/21,000[38]	84,000	6,500	7,400	1,800	15,000	--	--
	08/14/02	9.80	37.77	0.00	29,000/15,000[38]	75,000	8,200	11,000	750	16,000	--	--
	11/12/02	8.83	38.74	0.00	24,000[38,44]	57,000	5,400	6,300	410	14,000	--	--
	02/12/03	5.79	41.78	0.00	36,000/4,600[38]	30,000	2,100	2,200	230	8,300	--	--
	06/09-10/03	7.03	40.42	0.00	12,000/8,000[38]	45,000	3,300	6,500	490	11,000	--	--
47.45	08/14/03	9.33	38.12	0.00	[41]9,100/6,100[38,41]	44,000	2,600	4,200	460	8,300	--	--
	12/11/03	7.58	39.87	0.00	130,000	55,000	4,500	4,800	810	14,000	--	--
	03/23/04	6.20	41.25	0.00	19,000[49]/2,200[38,49]	16,000	1,300	3,900	270	8,500	--	--
	08/10/04	10.13	37.32	0.00	7,700 [49]	40,000	2,000	3,000	560	9,400	--	--
	02/08/05	6.09	43.18	0.00	2,200 [49]	24,000	950	1,000	310	5,300	--	--
49.27	05/18/05	5.52	43.75	0.00	--	--	--	--	--	--	--	--
	08/17-18/05	8.80	40.47	0.00	3,700 [38, 49]	23,000 [51]	2,500	390	660	8,400	--	--
	11/01-02/05	10.62	38.65	0.00	--	--	--	--	--	--	--	--
	02/21-22/06	**5.92**	**43.35**	**0.00**	**<50 [38]**	**14,000**	**670**	**180**	**410**	**3,400**	**--**	**--**
	05/15-16/06	**5.31**	**43.96**	**0.00**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-6	03/26/91	4.61	38.28	0.00	ND	2,400	310	13	63	210	--	--
42.89	05/01/91	6.58	36.31	0.00	--	--	--	--	--	--	--	--
	07/08/91	7.68	35.21	0.00	ND	410	97	1.1	1.2	1.9	--	--
	10/21/91	9.65	33.24	0.00	ND	ND	11	1.6	ND	1.6	--	--
	01/23/92	7.60	35.29	0.00	ND	2,900	180	32	6.3	32	--	--
	05/01/92	4.50	38.39	0.00	870[1]	2,000	94	79	15	79	--	--
	07/02/92	6.40	36.49	0.00	--	--	--	--	--	--	--	--
	07/17/92	7.74	35.15	0.00	730[2]	50	5.4	ND	ND	ND	--	--
	10/02/92	7.35	35.54	0.00	ND	90	7.5	1.8	ND	2.0	--	ND[13]
	03/03/93	4.60	38.29	0.00	ND	8,500	460	2.0	130	86	--	ND[13]
	06/22-23/93	6.16	36.73	0.00	2,300	1,900	300	ND	93	59	--	--
	09/22-23/93	8.00	34.89	0.00	170	ND	ND	ND	ND	ND	--	--
	12/22/93	5.70	37.19	0.00	440[7]	1,200	350	15	120	150	--	--
	03/28-29/94	5.22	37.67	0.00	2,000[7]	9,900	1,300	9.2	240	410	--	--
	06/23-24/94	6.39	36.50	0.00	5,900[7]	29,000	3,500	3,000	1,000	3,400	--	--
	09/21/94	9.06	33.83	0.00	200[7]	220	7.2	ND	0.83	5.8	--	--
	12/21/94	5.41	37.48	0.00	1,200[7]	5,700	550	ND	70	58	--	--
	03/02-03/95	5.51	37.38	0.00	2,600[7]	6,400	350	ND	38	24	--	--
	06/01/95	6.03	36.86	0.00	130[8]	4,100	490	ND	50	14	--	--
	09/05-06/95	9.12	33.77	0.00	7,000[8]	25,000	540	680	600	6,900	--	--
	12/10-11/95	9.13	33.76	0.00	3,300[7]	8,900	1,600	ND	280	430	--	--
	03/11/96	6.12	36.77	0.00	2,200[7]	4,000	290	0.57	66	81	--	--
	06/03-04/96	6.98	35.91	0.00	1,600[7]	4,400	690	ND	100	89	--	--
	09/04-05/96	8.11	34.78	0.00	580[7]	720	36	ND	7.3	4.0	--	--
	12/02-03/96	4.85	38.04	0.00	2,300[7]	1,800	290	8.2	50	24	--	--
	03/10-11/97	5.10	37.79	0.00	2,100[7]	3,000	300	5.7	56	22	--	--
	06/09-10/97	6.38	36.51	0.00	1,000[7]	2,000	240	10	23	8.6	25	--
	09/08-09/97	9.12	33.77	0.00	110[7]	520	10	0.61	ND	6.0	--	--
	12/03-04/97	5.99	36.90	0.00	2,900[7]	11,000	990	11	230	430	--	--
	03/23-24/98	4.06	38.83	0.00	820[12]	1,700	130	ND[11]	23	14	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-6	06/07-08/98	INACCESSIBLE		--	--	--	--	--	--	--	--	--
(Cont.)	09/16/98	INACCESSIBLE		--	--	--	--	--	--	--	--	--
	12/16/98	INACCESSIBLE		--	--	--	--	--	--	--	--	--
	03/23/99	INACCESSIBLE		--	--	--	--	--	--	--	--	--
	06/14/99	INACCESSIBLE		--	--	--	--	--	--	--	--	--
	09/13-14/99	INACCESSIBLE		--	--	--	--	--	--	--	--	--
	12/16/99	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	03/16-17/00	4.05	38.84	0.00	2,600[21]	1,900[28]	150	11	10	ND[11]	--	--
	06/26-27/00	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	09/21/00	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	11/08/00	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	02/08/01	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	05/09/01	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	08/07/01	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	11/27/01	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	02/05/02	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	05/07/02	8.51	34.38	0.00	3,300/56[38]	1,900	160	6.6	8.8	1.9	--	--
	08/14/02	7.15	35.74	0.00	2,100/310[38]	710	36	2.7	3.6	<1.2	--	--
	11/12/02	6.51	36.38	0.00	3,200[38,44]	1,900	60	<2.5	5.8	<2.5	--	--
	02/12/03	4.60	38.29	0.00	7,300/910[38]	2,900	450	6.8	26	4.7	--	--
	06/09-10/03	5.75	36.98	0.00	2,300/760[38]	820	98	4.1	6.0	0.90	--	--
42.73	08/14/03	7.07	35.66	0.00	880/510[38,41]	480	21	1.6	2.8	1.5	--	--
	12/11/03	5.44	37.29	0.00	4,500	350	48	0.69[46]	2.0	<0.50	--	--
	03/23/04	5.61	37.12	0.00	610[49]/200[38,49]	680	88	16	7.4	20	--	--
	08/10/04	8.00	34.73	0.00	340 [49]	<50	<0.50	<0.50	<0.50	<1.0	--	--
	02/08/05	5.19	39.36	0.00	54 [49]	81 [51]	6.4	0.77	0.66	1.1	--	--
44.55	05/18/05	4.16	40.39	0.00	--	--	--	--	--	--	--	--
	08/17-18/05	6.90	37.65	0.00	2,300 [38, 49]	150	<0.50	2	<0.50	<1.0	--	--
	11/01-02/05	7.80	36.75	0.00	--	--	--	--	--	--	--	--
	02/21-22/06	**5.14**	**39.41**	**0.00**	**<50 [38]**	**62**	**<0.50**	**1.5**	**<0.50**	**<1.0**	**--**	**--**
	05/15-16/06	**5.38**	**39.17**	**0.00**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-7	07/02/92	2.90	32.76	0.00	--	--	--	--	--	--	--	--
35.66	07/17/92	--	--	--	--	--	--	--	--	--	--	--
	10/02/92	5.02	30.64	0.00	220	ND	ND	ND	ND	ND	--	--
	03/03/93	0.82	34.84	0.00	ND	ND	ND	ND	ND	ND	--	ND
	06/22-23/93	3.07	32.59	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/22-23/93	4.35	31.31	0.00	ND	ND	ND	ND	ND	ND	--	--
	12/22/93	1.70	33.96	0.00	58[7]	ND	ND	ND	ND	0.66	--	--
	03/28-29/94	1.50	34.16	0.00	ND	ND	ND	ND	ND	ND	--	--
	06/23-24/94	3.22	32.44	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/21/94	6.25	29.41	0.00	ND	ND	ND	ND	ND	ND	--	--
	12/21/94	0.69	34.97	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/02-03/95	1.08	34.58	0.00	ND	ND	ND	ND	ND	ND	--	--
	06/01/95	3.45	32.21	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/05-06/95	6.32	29.34	0.00	ND	ND	ND	ND	ND	ND	--	--
	12/10-11/95	6.27	29.39	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/11/96	3.57	32.09	0.00	ND	320	ND	ND	ND	0.8	--	--
	06/03-04/96	5.77	29.89	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/04-05/96	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	12/02-03/96	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	03/10-11/97	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	06/09-10/97	2.49	33.17	0.00	ND	ND	ND	ND	ND	ND	ND	--
	09/08-09/97	4.25	31.41	0.00	ND	ND	ND	ND	ND	ND	--	--
	12/03-04/97	1.20	34.46	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/23-24/98	0.00	35.66	0.00	ND	ND	ND	ND	ND	ND	--	--
	06/07-08/98	1.60	34.06	0.00	52[15]	ND	ND	ND	ND	ND	--	--
	09/16/98	3.94	31.72	0.00	58	ND	ND	0.84	ND	1.2	ND	--
	12/16/98	0.31	35.35	0.00	ND[11]	ND	ND	ND	ND	ND	--	--
	03/23/99	0.50	35.16	0.00	ND	ND	ND	0.98	ND	1.7	ND[22]	--[24]
	06/14/99	2.55	33.11	0.00	67[15]	ND	ND	ND	ND	ND	--	--
	09/13-14/99	3.95	31.71	0.00	100[15,29]	ND	ND	ND	ND	ND	--	--

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Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-7	12/16/99	0.68	34.98	0.00	54[15]	ND	ND	ND	ND	ND	--	--
(Cont.)	03/16-17/00	0.00	35.66	0.00	120[15]	ND	ND	ND	ND	ND	--	--
	06/26-27/00	3.41	32.25	0.00	90[15]	ND	ND	ND	ND	ND	--	--
	09/21/00	4.52	31.14	0.00	134[37]	82[29]	ND	38	ND	ND	--	--
	11/08/00	2.45	33.21	0.00	149[21]	ND	ND	0.99	ND	ND	--	--
	02/08/01	1.65	34.01	0.00	[15]91/ND[38]	ND	ND	ND	ND	ND	--	--
	05/09/01	2.39	33.27	0.00	[15]68/ND[38]	ND	ND	ND	ND	ND	--	--
	08/07/01	4.86	30.80	0.00	[41]78/<50[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	11/27/01	0.97	34.69	0.00	[41]69/69[38,41]	<50	<0.50	<0.50	<0.50	<0.50	--	--
35.66	02/05/02	1.13	34.53	0.00	[41]180/<50[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	05/07/02	1.56	34.10	0.00	[41]120/<50[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	08/14/02	4.53	31.13	0.00	[41]110/<56[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	11/12/02	2.50	33.16	0.00	210[38,44]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	02/12/03	1.21	34.45	0.00	240/<50[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	06/09-10/03	2.39	33.27	0.00	200/<51[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	08/14/03	3.64	32.02	0.00	[41]160/75[38,41]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	12/11/03	0.05	35.61	0.00	180/130[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	03/23/04	1.85	33.81	0.00	<50/<50 [38]	--	--	--	--	--	--	--
	08/10/04	3.72	31.94	0.00	--	--	--	--	--	--	--	--
	02/08/05	1.00	36.41	0.00	<50	--	--	--	--	--	--	--
37.41	05/18/05	0.00	37.41	0.00	--	--	--	--	--	--	--	--
	08/17-18/05	3.22	34.19	0.00	--	--	--	--	--	--	--	--
	11/01-02/05	5.18	32.23	0.00	--	--	--	--	--	--	--	--
	02/21-22/06	**1.44**	**35.97**	**0.00**	**<50 [38]**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
	05/15-16/06	**2.09**	**35.32**	**0.00**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-8	07/02/92	8.50	33.99	0.00	--	--	--	--	--	--	--	--
42.49	07/17/92	9.11	33.38	0.00	ND	ND	ND	ND	ND	ND	--	--
	10/02/92	11.19	31.30	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/03/93	5.55	36.94	0.00	ND	ND	ND	ND	ND	ND	--	ND
	06/22-23/93	7.85	34.64	0.00	ND	ND	ND	ND	ND	ND	--	--

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Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
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Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-8	09/22-23/93	10.40	32.09	0.00	ND	ND	ND	ND	ND	ND	--	--
(Cont.)	12/22/93	9.45	33.04	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/28-29/94	7.55	34.94	0.00	ND	ND	ND	0.59	ND	0.82	--	--
	06/23-24/94	8.86	33.63	0.00	58[7]	ND	ND	ND	ND	ND	--	--
	09/21/94	11.27	31.22	0.00	ND	ND	ND	ND	ND	ND	--	--
	12/21/94	5.70	36.79	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/02-03/95	6.03	36.46	0.00	73[7]	ND	ND	ND	ND	ND	--	--
	06/01/95	9.21	33.28	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/05-06/95	12.08	30.41	0.00	ND	ND	ND	ND	ND	ND	--	--
	12/10-11/95	12.10	30.39	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/11/96	7.80	34.69	0.00	ND	ND	ND	ND	ND	0.65	--	--
	06/03-04/96	7.96	34.53	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/04-05/96	10.13	32.36	0.00	ND	ND	ND	ND	ND	ND	--	--
	12/02-03/96	5.83	36.66	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/10-11/97	6.37	36.12	0.00	ND	ND	ND	ND	ND	ND	--	--
	06/09-10/97	7.70	34.79	0.00	ND	ND	ND	ND	ND	ND	ND	--
	09/08-09/97	10.58	31.91	0.00	ND	ND	ND	ND	ND	ND	--	--
	12/03-04/97	6.23	36.26	0.00	70[8]	ND	ND	ND	ND	ND	--	--
	03/23-24/98	5.33	37.16	0.00	ND	ND	ND	ND	ND	ND	--	--
	06/07-08/98	7.33	35.16	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/16/98	10.16	32.33	0.00	ND	ND	ND	ND	ND	ND	ND	--
	12/16/98	6.67	35.82	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/23/99	6.79	35.70	0.00	ND	ND	ND	ND	ND	ND	ND[22]	--[24]
	06/14/99	9.79	32.70	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/13-14/99	10.30	32.19	0.00	57[15]	ND	ND	ND	ND	ND	--	--
	12/16/99	6.26	36.23	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/16-17/00	5.64	36.85	0.00	68[15]	ND	ND	ND	ND	ND	--	--
	06/26-27/00	8.03	34.46	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/21/00	10.32	32.17	0.00	ND	ND	ND	ND	ND	ND	--	--
	11/08/00	9.46	33.03	0.00	91.2[21]	ND	ND	ND	ND	ND	--	--
	02/08/01	7.27	35.22	0.00	ND	ND	ND	ND	ND	ND	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-8	05/09/01	9.83	32.66	0.00	ND	ND	ND	ND	ND	ND	--	--
(Cont.)	08/07/01	11.40	31.09	0.00	<50	<50	<0.50	<0.50	<0.50	<0.50	--	--
	11/27/01	7.44	35.05	0.00	[41]52/52[38,41]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	02/05/02	7.49	35.00	0.00	[41]150/<50[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	05/07/02	7.02	35.47	0.00	[41]73/<50[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	08/14/02	10.31	32.18	0.00	[41]98/<56[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	11/12/02	8.30	34.19	0.00	180/<50[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	02/12/03	6.55	35.94	0.00	170/<56[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	06/09-10/03	8.25	34.24	0.00	150/<51[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	08/14/03	9.76	32.73	0.00	[41]110/120[38,41]	<50	<0.50	<0.50	<0.50	<0.50	--	--
42.49	12/11/03	7.74	34.75	0.00	160/92[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	03/23/04	6.42	36.07	0.00	<50/<50 [38]	--	--	--	--	--	--	--
	08/10/04	7.25	35.24	0.00	--	--	--	--	--	--	--	--
	02/08/05	5.42	38.79	0.00	<50	--	--	--	--	--	--	--
44.21	05/18/05	4.44	39.77	0.00	--	--	--	--	--	--	--	--
	08/17-18/05	6.96	37.25	0.00	--	--	--	--	--	--	--	--
	11/01-02/05	8.80	35.41	0.00	--	--	--	--	--	--	--	--
	02/21-22/06	**5.31**	**38.90**	**0.00**	**<50 [38]**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
	05/15-16/06	**5.22**	**38.99**	**0.00**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-9	07/02/92	4.50	30.70	0.00	--	--	--	--	--	--	--	--
35.20	07/17/92	5.45	29.75	0.00	ND	ND	ND	ND	ND	ND	--	--
	10/02/92	5.69	29.51	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/03/93	3.71	31.49	0.00	ND	ND	ND	ND	ND	ND	--	ND
	06/22-23/93	4.88	30.32	0.00	120	ND	ND	ND	ND	ND	--	--
	09/22-23/93	6.70	28.50	0.00	70	ND	ND	ND	ND	ND	--	--
	12/22/93	INACCESSIBLE		--	--	--	--	--	--	--	--	--
	03/28-29/94	4.39	30.81	0.00	ND	ND	ND	ND	ND	ND	--	--
	06/23-24/94	5.09	30.11	0.00	58[7]	ND	ND	ND	ND	ND	--	--
	09/21/94	7.12	28.08	0.00	ND	ND	ND	ND	ND	ND	--	--
	12/21/94	3.90	31.30	0.00	140[7]	ND	ND	ND	ND	ND	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-9	03/02-03/95	1.35	33.85	0.00	ND	ND	ND	ND	ND	ND	--	--
(Cont.)	06/01/95	3.83	31.37	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/05-06/95	7.04	28.16	0.00	ND	ND	ND	ND	ND	ND	--	--
	12/10-11/95	7.08	28.12	0.00	230[7]	ND	ND	ND	ND	ND	--	--
	03/11/96	3.69	31.51	0.00	ND	ND	ND	ND	ND	ND	--	--
	06/03-04/96	5.92	29.28	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/04-05/96	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	12/02-03/96	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	03/10-11/97	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	06/09-10/97	4.89	30.31	0.00	62	ND	ND	ND	ND	ND	ND	--
	09/08-09/97	7.04	28.16	0.00	ND	ND	ND	ND	ND	ND	--	--
	12/03-04/97	3.08	32.12	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/23-24/98	3.31	31.89	0.00	ND	ND	ND	ND	ND	ND	--	--
	06/07-08/98	4.42	30.78	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/16/98	7.29	27.91	0.00	75	ND	ND	ND	ND	ND	ND	--
	12/16/98	4.14	31.06	0.00	83[20]	ND	ND	ND	ND	ND	--	--
	03/23/99	4.11	31.09	0.00	ND	ND	ND	1.0	ND	1.1	ND[22]	--[24]
	06/14/99	5.55	29.65	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/13-14/99	7.85	27.35	0.00	71[15]	ND	ND	ND	ND	ND	--	--
	12/16/99	3.77	31.43	0.00	440[21]	63.4[32]	ND	31.8	ND	ND	--	--
	03/16-17/00	3.47	31.73	0.00	180[15]	120[29]	0.60	160	ND	ND	--	--
	06/26-27/00	5.17	30.03	0.00	100[15]	ND	ND	ND	ND	ND	--	--
	09/21/00	6.90	28.30	0.00	103[37]	ND	ND	ND	ND	ND	--	--
	11/08/00	4.06	31.14	0.00	159[21]	ND	ND	ND	ND	ND	--	--
	02/08/01	4.14	31.06	0.00	[15]160/ND[38]	436[29]	ND[11]	274	ND[11]	ND[11]	--	--
	05/09/01	4.71	30.49	0.00	[15]85/53[15,38]	ND	ND	ND	ND	ND	--	--
	08/07/01	7.16	28.04	0.00	[41]150/<50[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	11/27/01	3.85	31.35	0.00	[41]200/200[38,41]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	02/05/02	4.23	30.97	0.00	[41]420/170[38,41]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	05/07/02	4.01	31.19	0.00	[41]100/<50[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	08/14/02	7.02	28.18	0.00	[41]130/<56[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-9	11/12/02	3.78	31.42	0.00	240[38,44]	<50	<0.50	<0.50	<0.50	<0.50	--	--
(Cont.)	02/12/03	4.15	31.05	0.00	570/160[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	06/09-10/03	4.87	30.33	0.00	300/120[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	08/14/03	5.87	29.33	0.00	[41]98/98[38,41]	<50	<0.50	<0.50	<0.50	<0.50	--	--
35.20	12/11/03	4.75	30.45	0.00	1,500	<50	<0.50	<0.50	<0.50	<0.50	--	--
	03/23/04	4.05	31.15	0.00	<50/<50 [38]	--	--	--	--	--	--	--
	08/10/04	6.45	28.75	0.00	--	--	--	--	--	--	--	--
	02/08/05	3.99	33.04	0.00	<50	--	--	--	--	--	--	--
37.03	05/18/05	3.55	33.48	0.00	--	--	--	--	--	--	--	--
	08/17-18/05	5.16	31.87	0.00	--	--	--	--	--	--	--	--
	11/01-02/05	7.44	29.59	0.00	--	--	--	--	--	--	--	--
	02/21-22/06	**3.61**	**33.42**	**0.00**	**<50 [38]**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
	05/15-16/06	**4.91**	**32.12**	**0.00**	--	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-10	07/02/92	7.67	41.76	0.00	--	--	--	--	--	--	--	--
49.43	07/17/92	7.95	41.48	0.00	ND	ND	ND	ND	ND	ND	--	--
	10/02/92	10.73	38.70	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/03/93	1.89	47.54	0.00	ND	ND	ND	ND	ND	ND	--	ND
	06/22-23/93	2.65	46.78	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/22-23/93	9.20	40.23	0.00	ND	ND	ND	ND	ND	ND	--	--
	12/22/93	7.09	42.34	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/28-29/94	2.03	47.40	0.00	ND	ND	ND	ND	ND	ND	--	--
	06/23-24/94	6.51	42.92	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/21/94	10.31	39.12	0.00	ND	ND	ND	0.92	ND	1.3	--	--
	12/21/94	3.57	45.86	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/02-03/95	2.08	47.35	0.00	ND	ND	ND	ND	ND	ND	--	--
	06/01/95	6.95	42.48	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/05-06/95	10.11	39.32	0.00	ND	ND	ND	ND	ND	ND	--	--
	12/10-11/95	10.05	39.38	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/11/96	1.97	47.46	0.00	ND	ND	ND	ND	ND	ND	--	--
	06/03-04/96	3.30	46.13	0.00	ND	ND	ND	ND	ND	ND	--	--

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Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-10	09/04-05/96	8.99	40.44	0.00	ND	ND	ND	ND	ND	ND	--	--
(Cont.)	12/02-03/96	5.51	43.92	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/10-11/97	1.23	48.20	0.00	ND	ND	ND	ND	ND	ND	--	--
	06/09-10/97	4.80	44.63	0.00	ND	ND	ND	ND	ND	ND	ND	--
	09/08-09/97	9.20	40.23	0.00	ND	ND	ND	ND	ND	ND	--	--
	12/03-04/97	3.26	46.17	0.00	58[8]	ND	ND	ND	ND	ND	--	--
	03/23-24/98	0.04	49.39	0.00	ND	ND	ND	ND	ND	ND	--	--
	06/07-08/98	1.23	48.20	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/16/98	7.18	42.25	0.00	ND	ND	ND	ND	ND	ND	ND	--
	12/16/98	1.47	47.96	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/23/99	0.68	48.75	0.00	ND	ND	ND	1.6	ND	1.5	ND[22]	--[24]
	06/14/99	2.92	46.51	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/13-14/99	8.24	41.19	0.00	62[15]	ND	ND	ND	ND	ND	--	--
	12/16/99	3.06	46.37	0.00	ND	ND	ND	ND	ND	ND	--	--
	03/16-17/00	1.29	48.14	0.00	ND	ND	ND	ND	ND	ND	--	--
	06/26-27/00	5.55	43.88	0.00	ND	ND	ND	ND	ND	ND	--	--
	09/21/00	8.97	40.46	0.00	ND	ND	ND	ND	ND	ND	--	--
	11/08/00	9.87	39.56	0.00	63.6[21]	ND	ND	ND	ND	ND	--	--
	02/08/01	2.31	47.12	0.00	ND	ND	ND	ND	ND	ND	--	--
	05/09/01	2.71	46.72	0.00	ND	ND	ND	ND	ND	ND	--	--
	08/07/01	7.93	41.50	0.00	<50	<50	<0.50	<0.50	<0.50	<0.50	--	--
	11/27/01	9.15	40.28	0.00	[41]78/78[38,41]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	02/05/02	1.76	47.67	0.00	[41]100/53[38,41]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	05/07/02	2.16	47.27	0.00	<50	<50	<0.50	<0.50	<0.50	<0.50	--	--
	08/14/02	8.30	41.13	0.00	<56	<50	<0.50	<0.50	<0.50	<0.50	--	--
	11/12/02	10.78	38.65	0.00	60[38,44]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	02/12/03	1.67	47.76	0.00	370/220[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	06/09-10/03	3.30	46.13	0.00	280/190[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
49.43	08/14/03	8.15	41.28	0.00	<55	<50	<0.50	<0.50	<0.50	<0.50	--	--
	12/11/03	8.00	41.43	0.00	110	<50	<0.50	<0.50	<0.50	<0.50	--	--
	03/23/04	1.95	47.48	0.00	<50/<50 [38]	--	--	--	--	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-10	08/10/04	8.58	40.85	0.00	--	--	--	--	--	--	--	--
(Cont.)	02/08/05	1.55	49.71	0.00	<50	--	--	--	--	--	--	--
51.26	05/18/05	1.48	49.78	0.00	--	--	--	--	--	--	--	--
	08/17-18/05	6.75	44.51	0.00	--	--	--	--	--	--	--	--
	11/01-02/05	9.22	42.04	0.00	--	--	--	--	--	--	--	--
	02/21-22/06	**1.28**	**49.98**	**0.00**	**<50 [38]**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
	05/15-16/06	**2.20**	**49.06**	**0.00**	--	**--**	**--**	**--**	**--**	**--**	**--**	**--**
	12/22/93	--	--	--	--	--	--	--	--	--	--	--
MW-11	03/28/94	7.22	--	0.04	--	--	--	--	--	--	--	--
	NOT MONITORED/SAMPLED											
	12/22/93	--	--	--	--	--	--	--	--	--	--	--
MW-12	03/28/94	7.35	--	0.00	--	--	--	--	--	--	--	--
	NOT MONITORED/SAMPLED											
MW-13	06/09-10/03	6.55	39.44	0.00	6,400/5,000[38]	32,000	1,600	400	1,500	4,100	--	--
45.99	08/14/03	7.87	38.12	0.00	[41]3,300/2,600[38,41]	28,000	1,000	540	1,300	5,100	--	--
	12/11/03	7.00	38.99	0.00	4,900	18,000	800	360	1,300	4,900	--	--
	03/23/04	6.32	39.67	0.00	6,900[49]/410[38,49]	14,000	930	320	1,100	4,100	--	--
	05/18/04	7.05	38.94	0.00	10 [49]	14,000	840	200	970	4,700	--	--
	08/10/04	8.68	37.31	0.00	1,500 [49]	16,000 [50]	850	130	920	3,400	--	--
	11/09/04	8.03	37.96	0.00	4,400 [49]	24,000 [50]	1,200	290	1,300	4,500	--	--
	02/08/05	6.20	41.59	0.00	4,500 [49]	17,000 [51]	1,000	210	1,100	3,800	--	--
47.79	05/18/05	5.23	42.56	0.00	3,900 [49]	12,000	830	220	780	3,400	--	--
	08/17-18/05	7.70	40.09	0.00	2,600 [38, 49]	6,600 [51]	650	96	440	1,800	--	--
	11/01-02/05	8.80	38.99	0.00	6,000 [38, 49]	17,000 [51]	820	76	1,100	3,700	--	--
	02/21-22/06	**6.11**	**41.68**	**0.00**	**5,900 [38, 49]**	**18,000**	**1,900**	**180**	**1,200**	**3,800**	**--**	**--**
	05/15-16/06	**6.85**	**40.94**	**0.00**	**6,300 [38,49]**	**17,000**	**1,800**	**170**	**1,500**	**4,900**	**--**	**--**

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Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-14	06/09-10/03	21.90	22.34	0.00	200/83[38]	<50	1.2	<0.50	<0.50	<0.50	--	--
44.24	08/14/03	23.92	20.32	0.00	[41]93/<58[38]	<50	0.54	<0.50	<0.50	<0.50	--	--
	12/11/03	22.65	21.59	0.00	230	<50	<0.50	<0.50	<0.50	1.7	--	--
	03/23/04	21.15	23.09	0.00	<50/<50 [38]	<50	<0.50	<0.50	0.71	1.3	--	--
	05/18/04	22.55	21.69	0.00	<50	68	1.8	1.2	4.6	14	--	--
	08/10/04	24.20	20.04	0.00	<50	<50	<0.50	<0.50	<0.50	1.1	--	--
	11/09/04	24.11	20.13	0.00	<50	<50	0.88	<0.50	0.91	2.0	--	--
	02/08/05	21.97	24.05	0.00	<50	<50	<0.50	0.57	<0.50	<1.0	--	--
46.02	05/18/05	20.84	25.18	0.00	<50 [49]	<50	<0.50	<0.50	<0.50	<1.0	--	--
	08/17-18/05	23.20	22.82	0.00	<50 [38]	<50	<0.50	<0.50	<0.50	1	--	--
	11/01-02/05	24.00	22.02	0.00	<50 [38]	<50	<0.50	<0.50	<0.50	<1.0	--	--
	02/21-22/06	**20.66**	**25.36**	**0.00**	**<50 [38]**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**--**	**--**
	05/15-16/06	**20.31**	**25.71**	**0.00**	**<50 [38]**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**--**	**--**
MW-15	06/09-10/03	19.47	22.32	0.00	220/73[38]	<50	<0.50	<0.50	<0.50	<0.50	--	--
41.79	08/14/03	21.18	20.61	0.00	[41]120/70[38,41]	<50	<0.50	<0.50	<0.50	<0.50	--	--
	12/11/03	20.23	21.56	0.00	230	<50	<0.50	<0.50	<0.50	<0.50	--	--
	03/23/04	18.75	23.04	0.00	<50/<50 [38]	<50	<0.50	<0.50	0.76	1.3	--	--
	05/18/04	20.11	21.68	0.00	<50	100	2.2	2.1	7.7	22	--	--
	08/10/04	21.80	19.99	0.00	<50	<50	<0.50	<0.50	<0.50	1.3	--	--
	11/09/04	21.77	20.02	0.00	<50	<50	0.83	0.71	<0.50	<1.0	--	--
	02/08/05	19.56	24.02	0.00	<50	<50	<0.50	<0.50	<0.50	<1.0	--	--
43.58	05/18/05	18.34	25.24	0.00	<50 [49]	<50	<0.50	<0.50	<0.50	<1.0	--	--
	08/17-18/05	20.80	22.78	0.00	<50 [38]	<50	<0.50	<0.50	<0.50	<1.0	--	--
	11/01-02/05	21.60	21.98	0.00	<50 [38]	<50	<0.50	<0.50	<0.50	<1.0	--	--
	02/21-22/06	**18.24**	**25.34**	**0.00**	**<50 [38]**	**<50**	**<0.50**	**<0.50**	**0.50**	**3.1**	**--**	**--**
	05/15-16/06	**17.90**	**25.68**	**0.00**	**<50 [38]**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**--**	**--**

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-16A	02/08/05	8.88	42.78	0.00	490 [49]	3,000 [51]	200	220	68	520	--	--
51.66	05/18/05	8.71	42.95	0.00	<50	670	61	33	24	140	--	--
	08/17-18/05	9.35	42.31	0.00	630 [38, 49]	2,700 [51]	250	120	120	570	--	--
	11/01-02/05	11.80	39.86	0.00	1,000 [38, 49]	4,000 [50]	600	69	180	1,400	--	--
	02/21-22/06	**8.13**	**43.53**	**0.00**	**370 [38, 49]**	**1,400**	**200**	**22**	**69**	**280**	**--**	**--**
	05/15-16/06	**9.15**	**42.51**	**0.00**	**530 [38, 49]**	**2,900**	**360**	**31**	**130**	**500**	**--**	**--**
MW-16B	02/08/05	27.65	24.07	0.00	<50	<50	<0.50	0.58	<0.50	1.7	--	--
51.72	05/18/05	26.49	25.23	0.00	<50 [49]	<50	<0.50	<0.50	<0.50	<1.0	--	--
	08/17-18/05	28.90	22.82	0.00	<50 [38]	<50	<0.50	<0.50	<0.50	<1.0	--	--
	11/01-02/05	29.70	22.02	0.00	<50 [38]	<50	<0.50	<0.50	<0.50	<1.0	--	--
	02/21-22/06	**26.34**	**25.38**	**0.00**	**<50 [38]**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**--**	**--**
	05/15-16/06	**25.97**	**25.75**	**0.00**	**<50 [38]**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**--**	**--**
MW-17	02/08/05	26.42	23.99	0.00	53 [49]	60 [51]	3.0	2.7	1.9	7.0	--	--
50.41	05/18/05	25.22	25.19	0.00	<50 [49]	<50	1.2	<0.50	<0.50	<1.0	--	--
	08/17-18/05	27.66	22.75	0.00	<50 [38]	<50	<0.50	<0.50	<0.50	<1.0	--	--
	11/01-02/05	28.48	21.93	0.00	<50 [38]	<50	<0.50	<0.50	<0.50	<1.0	--	--
	02/21-22/06	**25.11**	**25.30**	**0.00**	**<50 [38]**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**--**	**--**
	05/15-16/06	**24.74**	**25.67**	**0.00**	**<50 [38]**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**--**	**--**
MW-18	02/08/05	3.33	40.48	0.00	<50	4,500 [51]	2,300	4.5	47	89	--	--
43.81	05/18/05	2.51	41.30	0.00	1,100 [49]	9,200 [51]	6,500	20	510	1,400	--	--
	08/17-18/05	4.80	39.01	0.00	580 [38,49]	12,000 [51]	5,400	14	350	540	--	--
	11/01-02/05	5.63	38.18	0.00	960 [38,49]	11,000 [50]	5,900	<100	210	<200	--	--
	02/21-22/06	**3.26**	**40.55**	**0.00**	**1,400 [38, 49]**	**14,000**	**7,700**	**160**	**780**	**1,700**	**--**	**--**
DUPLICATE	**05/15-16/06**	**--**	**--**	**--**	**3,200 [38,49]**	**15,000**	**12,000**	**32**	**1,400**	**2,900**	**--**	**--**
	05/15-16/06	**3.65**	**40.16**	**0.00**	**NA [52]**	**15,000**	**11,000**	**27**	**1,500**	**3,200**	**--**	**--**
MW-19	02/08/05	5.94	39.83	0.00	310 [49]	4,400 [51]	1,500	2.0	43	150	--	--
45.77	05/18/05	5.12	40.65	0.00	2,000 [49]	13,000 [51]	980	240	430	1,900	--	--
	08/17-18/05	7.68	38.09	0.00	610 [38, 49]	6,400 [51]	2,300	4	87	400	--	--
	11/01-02/05	8.80	36.97	0.00	1,200 [38,49]	6,700 [51]	3,500	<50	62	310	--	--
	02/21-22/06	**5.72**	**40.05**	**0.00**	**1,300 [38, 49]**	**5,300**	**4,500**	**2.1**	**140**	**620**	**--**	**--**
	05/15-16/06	**6.18**	**39.59**	**0.00**	**980 [38,49]**	**5,700**	**2,800**	**2.7**	**130**	**420**	**--**	**--**

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
MW-20	02/08/05	3.30	40.57	0.00	510 [49]	4,200 [51]	700	220	110	590	--	--
43.87	05/18/05	2.11	41.76	0.00	120 [49]	2,000 [51]	420	110	110	330	--	--
	08/17-18/05	8.78	35.09	0.00	1,100 [38,49]	8,100 [51]	4,100	390	920	660	--	--
	11/01-02/05	6.95	36.92	0.00	2,000 [38,49]	11,000 [51]	4,600	79	770	320	--	--
	02/21-22/06	**3.71**	**40.16**	**0.00**	**680 [38, 49]**	**5,900**	**2,700**	**59**	**360**	**420**	**--**	**--**
	05/15-16/06	**4.71**	**39.16**	**0.00**	**220 [38,49]**	**1,700**	**2,200**	**42**	**240**	**90**	**--**	**--**
MW-21	02/08/05	6.08	42.38	0.00	2,500 [49]	29,000 [51]	2,800	1,300	1,300	5,200	--	--
48.46	05/18/05	6.60	41.86	0.00	610 [49]	3,500 [51]	2,600	4.0	120	430	--	--
	08/17-18/05	7.54	40.92	0.00	2,000 [38,49]	4,600 [51]	770	220	230	920	--	--
	11/01-02/05	8.85	39.61	0.00	13,000 [38,49]	24,000 [51]	3,400	430	1,400	4,600	--	--
	02/21-22/06	**5.92**	**42.54**	**0.00**	**3,100 [38, 49]**	**21,000**	**4,000**	**2,000**	**990**	**4,000**	**--**	**--**
	05/15-16/06	**6.24**	**42.22**	**0.00**	**4,200 [38,49]**	**17,000**	**3,200**	**900**	**800**	**3,200**	**--**	**--**
	06/23-24/94	8.61	--	0.70	--	--	--	--	--	--	--	--
PZ-1	09/21/94	10.58	--	1.10	--	--	--	--	--	--	--	--
	12/21/94	8.90	--	0.02	--	--	--	--	--	--	--	--
	03/02-03/95	8.45	--	--[16]	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	05/31/95	9.58	--	0.40	--	--	--	--	--	--	--	--
	09/05-06/95	12.56	--	0.30	--	--	--	--	--	--	--	--
	12/10-11/95	12.55	--	0.02	--	--	--	--	--	--	--	--
	03/11/96	8.21	--	0.01	--	--	--	--	--	--	--	--
	06/03-04/96	8.46	--	0.05	--	--	--	--	--	--	--	--
	09/04-05/96	9.55	--	0.00	--	--	--	--	--	--	--	--
	12/02-03/96	7.84	--	0.00	--	--	--	--	--	--	--	--
	03/10-11/97	6.30	--	0.02	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	06/09-10/97	7.74	--	0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--	--
	09/08-09/97	INACCESSIBLE DUE TO CONSTRUCTION				--	--	--	--	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
PZ-1	12/03-04/97	INACCESSIBLE DUE TO CONSTRUCTION				--	--	--	--	--	--	--
(Cont.)	03/23-24/98	INACCESSIBLE DUE TO CONSTRUCTION				--	--	--	--	--	--	--
	06/07-08/98	INACCESSIBLE DUE TO CONSTRUCTION				--	--	--	--	--	--	--
	09/16/98[19]	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	12/16/98	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	03/23/99	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	06/14/99	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	09/13-14/99	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	12/16/99	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	03/16-17/00	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	06/26-27/00	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	09/21/00	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	11/08/00	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	02/08/01	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	05/09/01	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	08/07/01	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	11/27/01	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	02/05/02	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	05/07/02	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	08/14/02	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	11/12/02	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	UNABLE TO LOCATE											
	06/23-24/94	8.68	--	0.00	--	--	--	--	--	--	--	--
PZ-2	09/21/94	10.65	--	0.00	--	--	--	--	--	--	--	--
	12/21/94	7.67	--	0.00	--	--	--	--	--	--	--	--
	03/02-03/95	7.60	--	0.00	1,900[7]	1,600	16	44	20	100	--	--
	05/31/95	8.64	--	0.00	--	--	--	--	--	--	--	--
	09/05-06/95	11.58	--	0.00	--	--	--	--	--	--	--	--
	12/10-11/95	11.53	--	0.00	--	--	--	--	--	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
PZ-2	03/11/96	7.38	--	0.00	--	--	--	--	--	--	--	--
(Cont.)	06/03-04/96	7.61	--	0.00	--	--	--	--	--	--	--	--
	09/04-05/96	10.18	--	0.00	--	--	--	--	--	--	--	--
	12/02-03/96	7.67	--	0.00	--	--	--	--	--	--	--	--
	03/10-11/97	6.55	--	0.00	--	--	--	--	--	--	--	--
	06/09-10/97	8.05	--	0.00	--	--	--	--	--	--	--	--
	09/08-09/97	11.13	--	0.00	--	--	--	--	--	--	--	--
	12/03-04/97	8.25	--	0.00	4,500[7]	8,500	69	400	150	1,000	--	--
	03/23-24/98	5.01	--	0.00	--	--	--	--	--	--	--	--
	06/07-08/98	6.11	--	0.00	--	--	--	--	--	--	--	--
	09/16/98	8.54	--	0.00	--	--	--	--	--	--	--	--
	12/16/98	5.68	--	0.00	--	--	--	--	--	--	--	--
	03/23/99	5.35	--	0.00	--	--	--	--	--	--	--	--
	06/14/99	6.60	--	0.00	--	--	--	--	--	--	--	--
	09/13-14/99	9.03	--	0.00	--	--	--	--	--	--	--	--
	12/16/99	UNABLE TO LOCATE		0.00	--	--	--	--	--	--	--	--
	03/16-17/00	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	06/26-27/00	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	09/21/00	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	11/08/00	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	02/08/01	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	05/09/01	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	08/07/01	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	11/27/01	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	02/05/02	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	05/07/02	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	08/14/02	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--
	11/12/02	UNABLE TO LOCATE		--	--	--	--	--	--	--	--	--

UNABLE TO LOCATE

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

WELL ID / TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPHd (ug/L)	TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	VOCs (ug/L)
Trip Blank												
TB-LB	03/23-24/98	--	--	--	ND	ND	ND	ND	ND	ND	--	--
	06/07-08/98	--	--	--	--	ND	ND	ND	ND	ND	--	--
	09/16/98	--	--	--	--	ND	ND	ND	ND	ND	ND	--
	12/16/98	--	--	--	--	ND	ND	ND	ND	ND	--	--
	03/23/99	--	--	--	--	ND	ND	ND	ND	ND	--	--
	06/14/99	--	--	--	--	ND	ND	ND	ND	ND	--	--
	09/13-14/99	--	--	--	--	ND	ND	ND	ND	ND	--	--
	12/16/99	--	--	--	--	ND	ND	ND	ND	ND	--	--
	03/16-17/00	--	--	--	--	ND	ND	ND	ND	ND	--	--
	06/26-27/00[35]	--	--	--	--	ND	ND	ND	ND	ND	--	--
	09/21/00	--	--	--	--	ND	ND	ND	ND	ND	--	--
	11/08/00	--	--	--	--	ND	ND	ND	ND	ND	--	--
	02/08/01	--	--	--	--	ND	ND	ND	ND	ND	--	--
	05/09/01	--	--	--	--	ND	ND	ND	ND	ND	--	--
	08/07/01	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	--	--
	11/27/01	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	--	--
	02/05/02	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	--	--
	05/07/02	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	--	--
QA	08/14/02	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	--	--
	11/12/02	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	--	--
	02/12/03	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	--	--
	06/09-10/03	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	--	--
	08/14/03	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	--	--
	12/11/03	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	--	--
	05/18/04	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--
	08/10/04	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--
	11/09/04	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--
	02/08/05	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--
	5/18/05[40]	--	--	--	--	<50	1.6	<0.50	<0.50	<1.0	--	--
	08/17-18/05	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--
	11/01-02/05	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--
	02/21-22/06	**--**	**--**	**--**	**--**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**--**	**--**
	05/16/06	**--**	**--**	**--**	**<50**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**--**	**--**

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to December 11, 2003, 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
TPHd = Total Petroleum Hydrocarbons as Diesel by EPA Method 8015B-SVOA
MtBE = Methyl tertiary butyl ether

TPHg = Total Petroleum Hydrocarbons as Gasoline by EPA Method 8015B/8021B
B = Benzene by EPA Method 8015B/8021B
T = Toluene by EPA Method 8015B/8021B
E = Ethylbenzene by EPA Method 8015B/8021B
X = Xylenes by EPA Method 8015B/8021B

VOCs = Volatile Organic Compounds
(ug/L) = Micrograms per Liter
ND = Not Detected
-- = Not Measured/Not Analyzed
QA = Quality Assurance/Trip Blank

* TOC elevations for the following wells (MW-1 through MW-6 and MW-13, MW-14, & MW-15) were surveyed on 05/14/03, by Oscar Larsen & Associates. TOC elevations have been surveyed relative to msl. Data provided by RESNA, Inc.

** GWE was corrected for the presence of free product; correction factor: (TOC - DTW) + (Product Thickness x 0.77).

*** GWE was not corrected for the presence of free product.

[1] Hydrocarbons detected as TPHd appear to be both heavier and lighter hydrocarbons than diesel.
[2] Hydrocarbons detected as TPHd appear to be heavier hydrocarbons than diesel.
[3] On 10/02/92 and 03/03/93, 1,2-Dichloroethane (1,2-DCA) was detected at 94 ppb and 300 ppb, respectively.
[4] Hydrocarbons detected as TPHd appear to be lighter hydrocarbons than diesel.
[5] On 10/02/92, acetone was detected at 46 ppb and on 03/03/93 1,2-DCA was detected at 13 ppb.
[6] Skimmers installed. Could not get accurate product thickness.
[7] Laboratory report indicates the hydrocarbons detected appeared to be a diesel and non-diesel mixture.
[8] Laboratory report indicates the hydrocarbons detected did not appear to be diesel.
[9] Laboratory report indicates the hydrocarbons detected did not appear to be gasoline.
[10] Laboratory report indicates diesel and unidentified hydrocarbons <C16.
[11] Detection limit raised. Refer to analytical reports.
[12] Laboratory report indicates diesel and unidentified hydrocarbons <C14.
[13] On 10/02/92, acetone was detected at 11 ppb and on 03/03/93, 1,2-DCA was detected at 2.2 ppb.
[14] Laboratory report indicates unidentified hydrocarbons <C16.
[15] Laboratory report indicates unidentified hydrocarbons >C16.
[16] Product was present but thickness could not be measured.
[17] Laboratory report indicates diesel and unidentified hydrocarbons <C15.
[18] Laboratory report indicates gasoline and unidentified hydrocarbons C6-C12.
[19] Unable to locate well (with metal detector).
[20] Laboratory report indicates unidentified hydrocarbons >C14.

Table 1
Groundwater Monitoring Data and Analytical Results
Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

EXPLANATIONS: (cont)

21 Laboratory report indicates unidentified hydrocarbons C9-C24.

22 MtBE by EPA Method 8260.

23 All Volatile Organic Compounds (VOCs) by EPA Method 8260 were ND except for the following: benzene at 220 ppb; 1,2-DCA at 13 ppb; total Xylenes at 22 ppb; and 1-ethyl-2-methyl-benzene at 16 ppb.

24 All VOCs by EPA Method 8260 were ND.

25 All VOCs by EPA Method 8260 were ND except for the following: benzene at 30 ppb; n-Butylbenzene at 12 ppb; sec-Butylbenzene at 5.2 ppb; 1,2-DCA at 7.3 ppb; Ethyl Benzene at 21 ppb; Isopropylbenzene at 8.7 ppb; Naphthalene at 27 ppb; n-Propylbenzene at 17 ppb; 1,2-4-Trimethylbenzene at 160 ppb; 1,3-5 Trimethylbenzene at 54 ppb; Total-Xylenes at 130 ppb; methyl-cyclohexane at 17 ppb; 1-ethyl-3-methyl-Benzene at 130 ppb; 1-ethyl-4-methyl-Benzene at 65 ppb; 1-ethyl-2-methyl-Benzene at 95 ppb; 1-ethyl-2,3-dimethyl-Benzene at 43 ppb; 1-ethyl-1,3-dimethyl-Benzene at 45 ppb; 2,3-Dihydro-1-methylindene at 24 ppb; 1,2,3,5-tetramethyl-Benzene at 29 ppb.

26 All VOCs by EPA Method 8260 were ND except for the following: benzene at 8,100 ppb; 1,2-DCA at 110 ppb; Ethyl Benzene at 1,500 ppb; Naphthalene at 310 ppb; n-Propylbenzene at 220 ppb; Toluene at 11,000 ppb; 1,2,4-Trimethylbenzene at 1,200 ppb; 1,3,5-Trimethylbenzene at 340 ppb; Total-Xylenes at 7,700 ppb; 2-methyl-Propane at 340 ppb; Butane at 360 ppb; 2-methyl-Butane at 380 ppb; 1-ethyl-2-methyl-Benzene at 910 ppb; 1-ethyl-4-methyl-Benzene at 310 ppb.

27 Laboratory report indicates unidentified hydrocarbons >C12.

28 Laboratory report indicates gasoline C6-C12.

29 Laboratory report indicates discrete peaks.

30 Laboratory 24.2

31 Initial results reported by laboratory did not correlate with historical data. Requested sample be re-analyzed (past hold time).

32 Laboratory report indicates unidentified hydrocarbons C6-C12.

33 Laboratory report indicates diesel C9-C24.

34 Laboratory report indicates diesel C9-C24 + unidentified hydrocarbons <C16.

35 Laboratory report indicates that this sample was analyzed outside of the EPA recommended holding time.

36 Laboratory report indicates that this sample was originally analyzed within EPA recommended holding time
05/15-16/0(22.61 0
above maximum calibration range. The sample was re-analyzed past EPA recommended holding time.

37 Laboratory report indicates unidentified hydrocarbons C10-C24.

38 TPHd with silica gel cleanup.

39 Laboratory report indicates unidentified hydrocarbons C9-C40.

40 Laboratory report indicates sample was originally analyzed within holding time. Re-analysis for confirmation or dilution was performed past the recommended holding time.

Table 1
Groundwater Monitoring Data and Analytical Results
Former Unocal Bulk Plant No. 762248
359 Main Street
Fortuna, California

EXPLANATIONS: (cont)

41 Laboratory report indicates hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.

42 TPHd results for MW-4 are unavailable due to loss of extract during extraction process.

43 Laboratory report indicates diesel + unidentified hydrocarbons C10-C28.

44 Laboratory report indicates sample was analyzed as TPHd with silica gel cleanup on the original extraction, although the chain of custody indicated otherwise.

45 Laboratory confirmed results.

46 Primary and confirmation results varied by greater than 40% RPD. The results may still be useful for their intended purpose.

47 The surrogate recovery for this sample cannot be accuratley quantified due to interference from coeluting organic compounds present in the sample extract.

48 The surrogate recovery was outside control limits. The result may still be useful for its intended purpose.

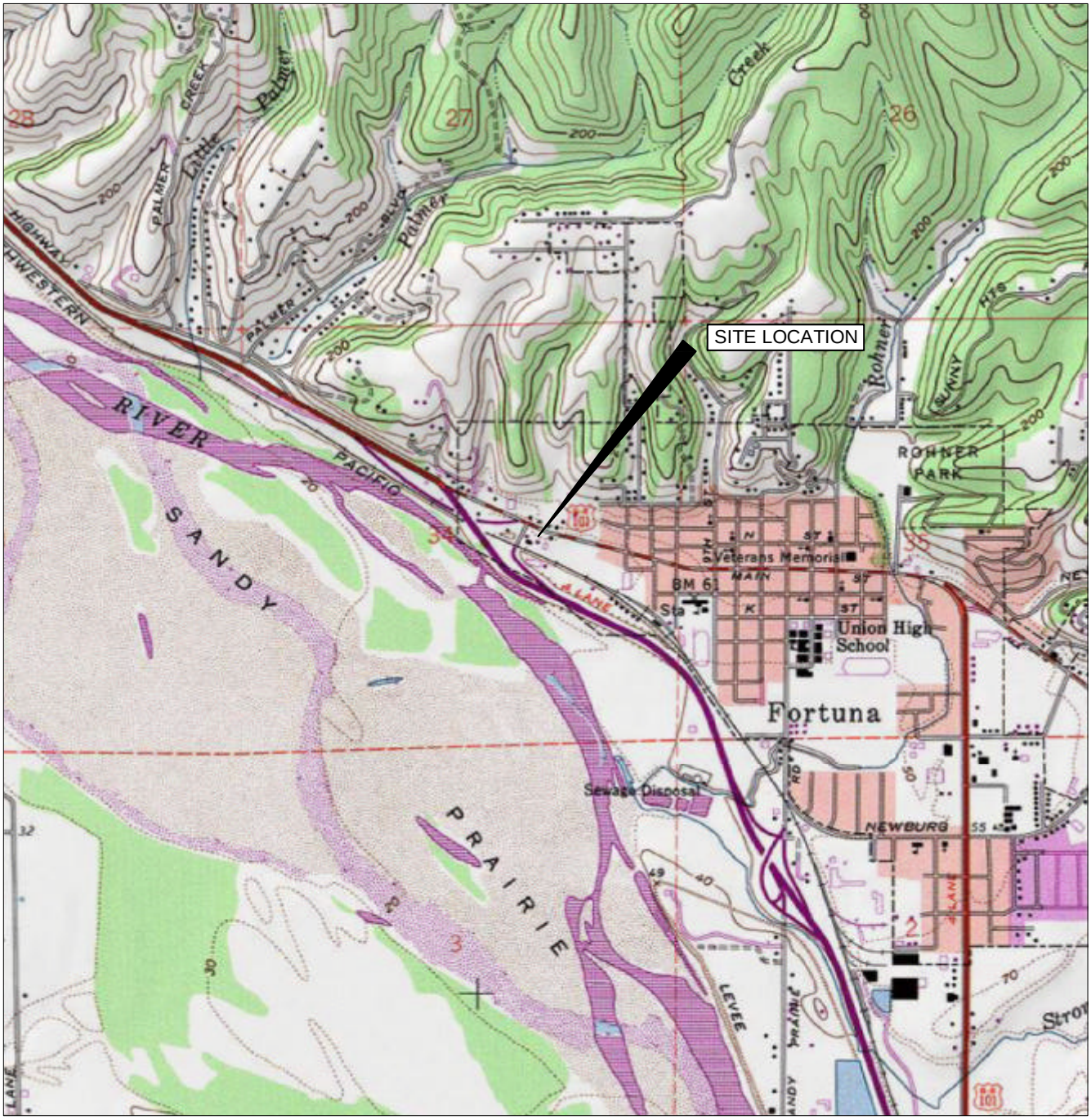
49 Although sample contains compounds in the retention time range associated with diesel, the chromatogram was not consistent with the expected chromatographic pattern or "fingerprint". However, the reported concentration is based on diesel.

50 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.

51 Weathered gasoline.

52 Sample was broken in the lab and was not analysed for TPHd.

NOTE: All EPA Method 8010 constituents were ND, except as noted above.



Map created with TOPO - 2003 National Geographic

MAP LOCATION

SOURCE: BASE MAP FROM USGS FORTUNA, CA
7.5 MINUTE TOPOGRAPHIC 1972

N

0 2000

Approximate Scale
in Feet

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SITE LOCATION MAP

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FORMER UNOCAL BULK PLANT 762248
359 MAIN STREET
FORTUNA, CALIFORNIA

FIGURE NUMBER: 1

DRAWN BY:	DATE:	PROJECT NUMBER:	SHEET NUMBER:
E.Cowan	7/5/06 PR	06940-407-100	1

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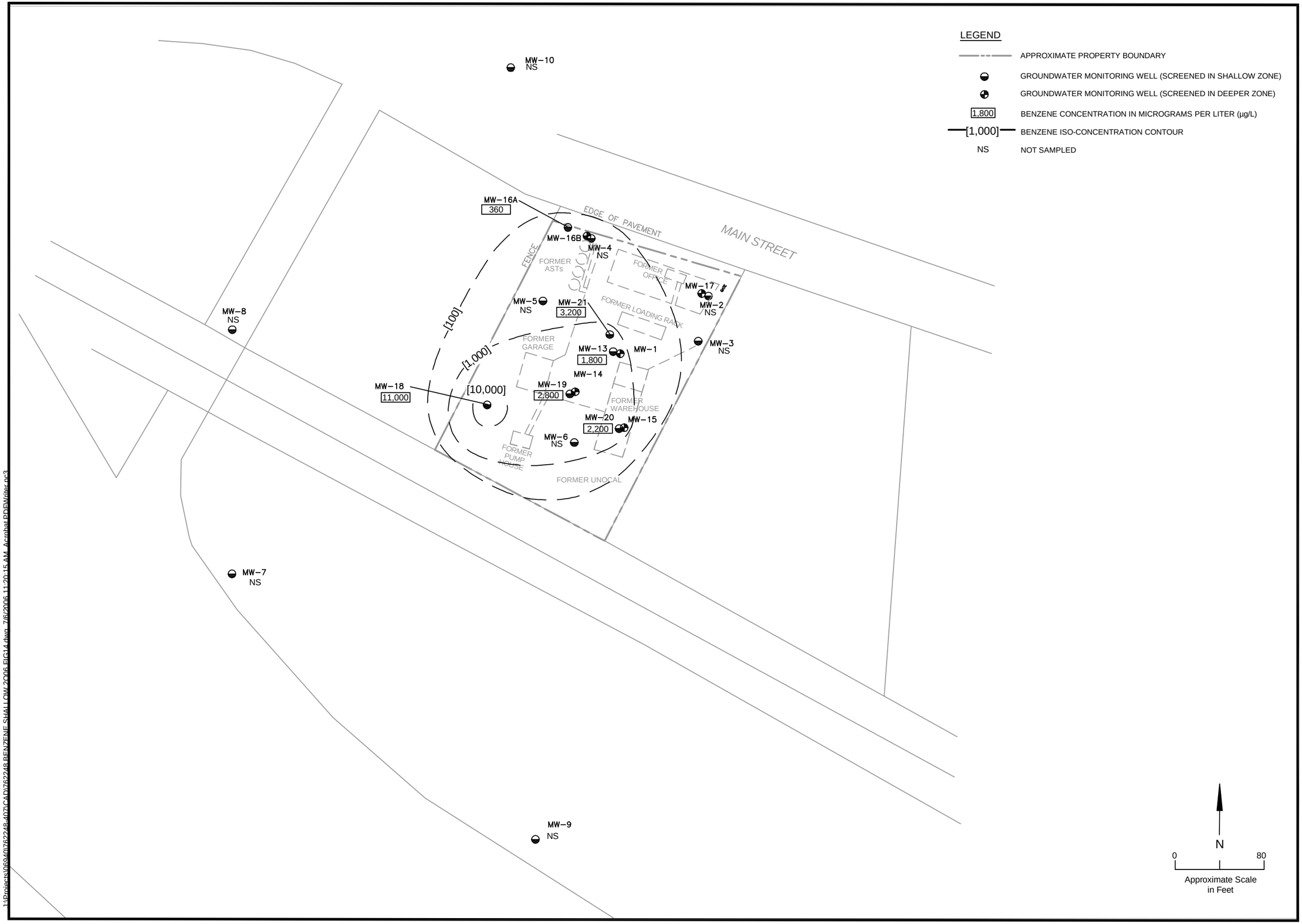

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DRAWN BY: K.P.B.
CHECKED BY: S.W.
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10461 OLD PLACERVILLE ROAD SUITE 170
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SHALLOW BENZENE ISO-CONCENTRATION MAP

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(MAY 2006)
FORMER UNOCAL BULK PLANT 762248
359 MAIN STREET
FORTUNA, CALIFORNIA

SCALE: 1"=80'
DATE: 6/15/06 PR
PROJECT NUMBER: 06940-407-100

FIGURE NUMBER: 15

SHEET NUMBER: 1

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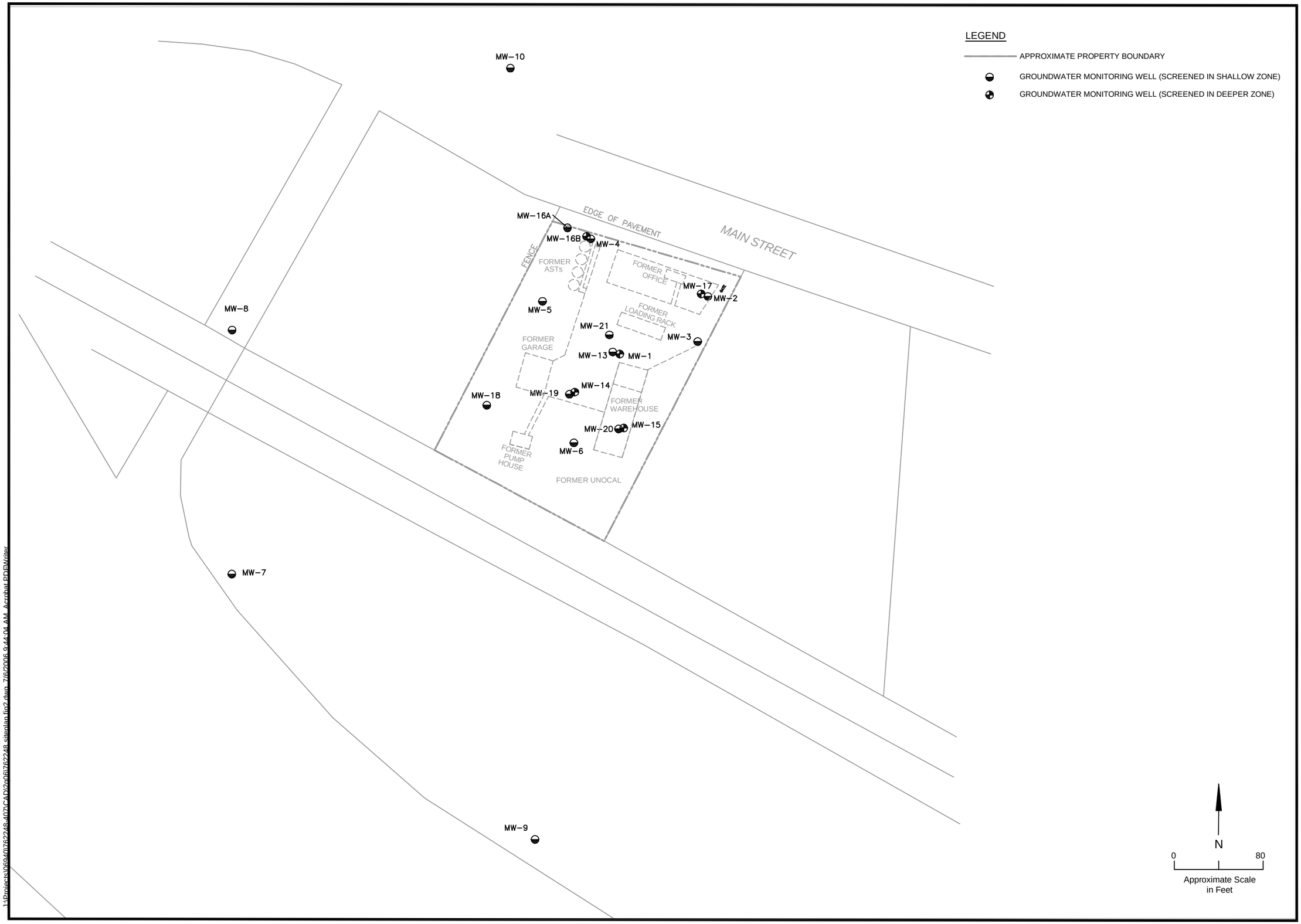

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SITE MAP

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FORTUNA, CALIFORNIA

SCALE: 1"=80'
DATE: 7/5/06 PR
PROJECT NUMBER: 06940-407-100

FIGURE NUMBER: 2

SHEET NUMBER: 1

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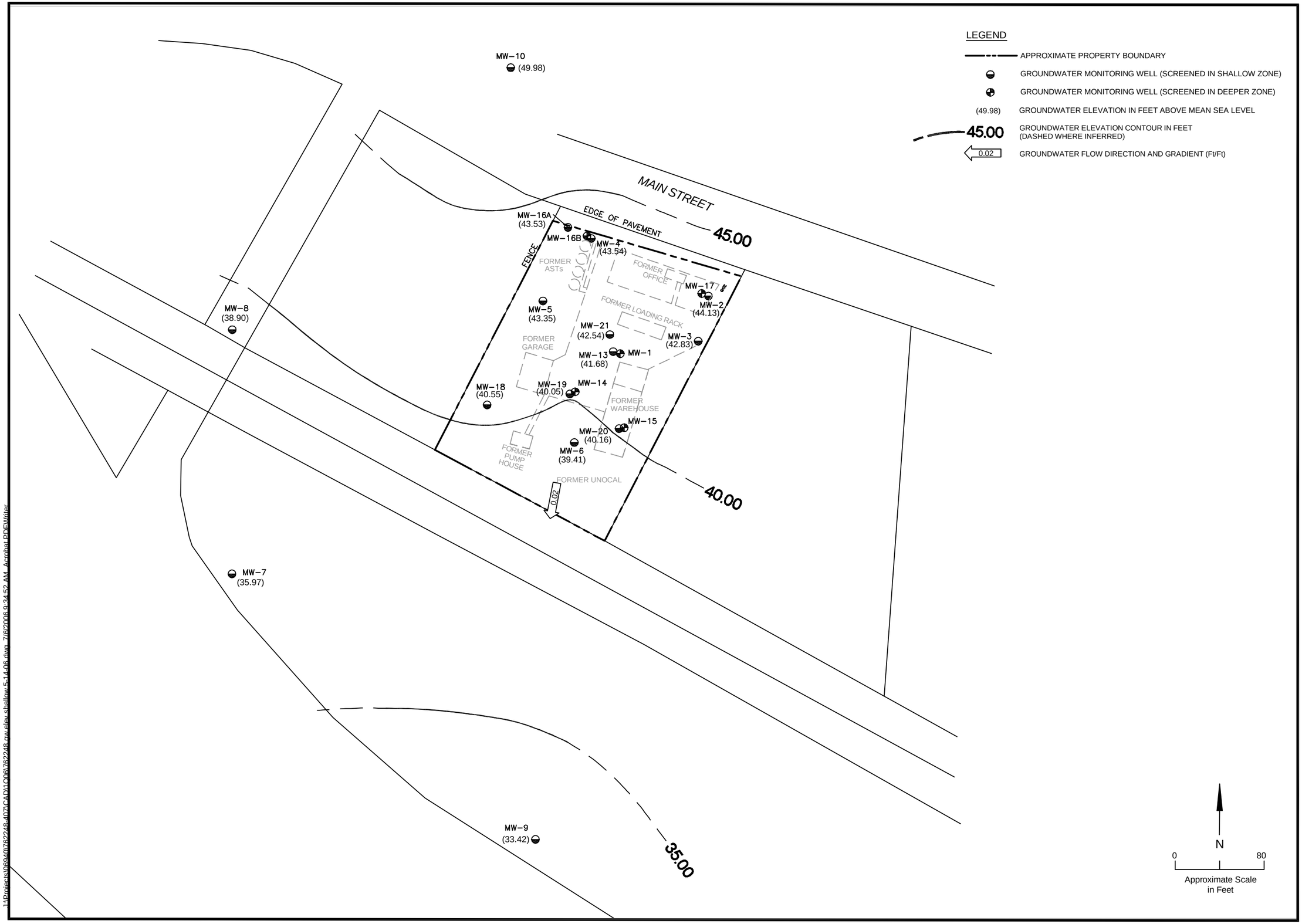

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SHALLOW ZONE GROUNDWATER ELEVATION MAP

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SCALE:	DATE:	PROJECT NUMBER:
1"=80'	5/14/06 PR	06940-407-100

FIGURE NUMBER: 3

SHEET NUMBER: 1

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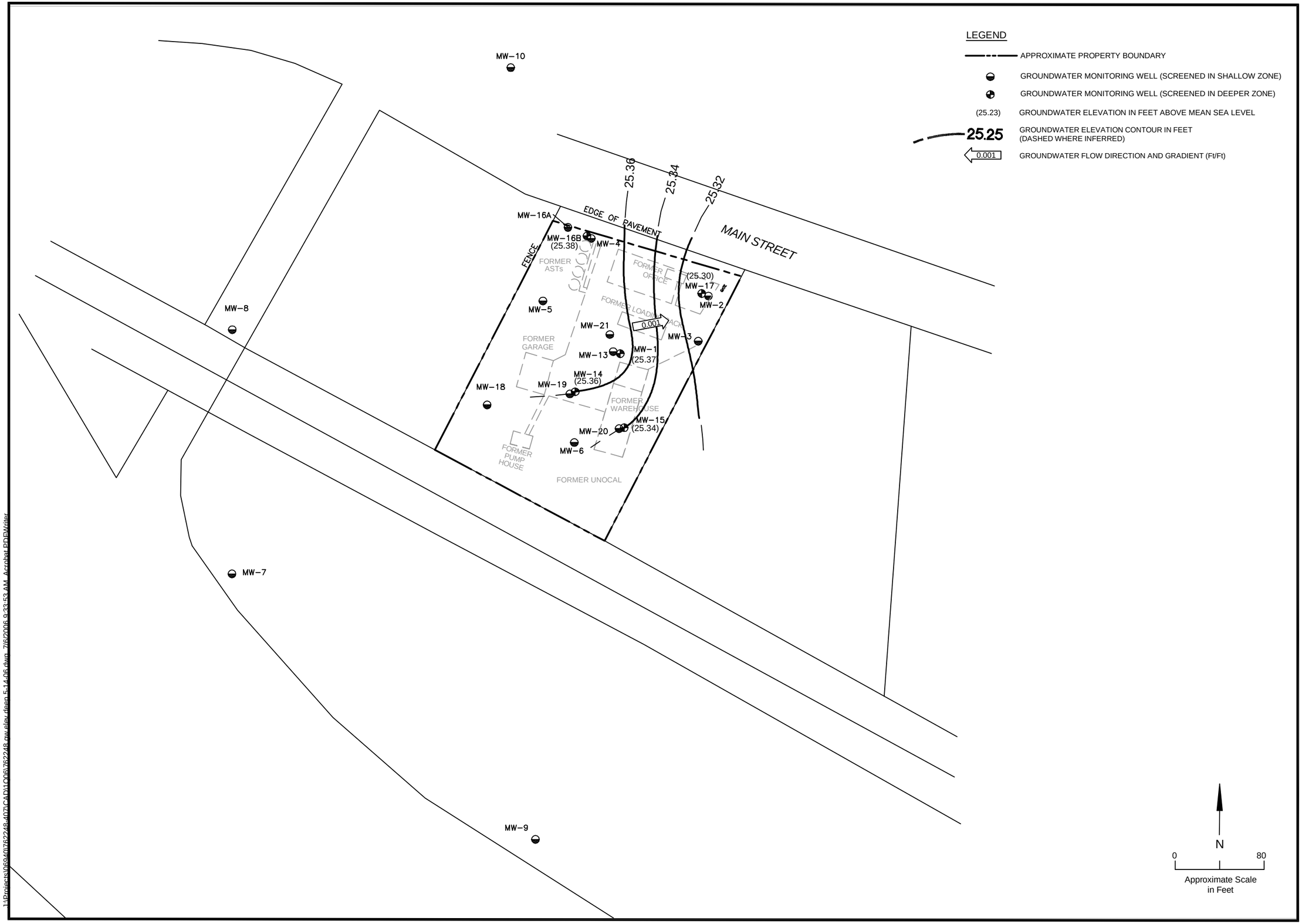

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DEEP ZONE GROUNDWATER ELEVATION MAP

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SCALE: 1"=80'
DATE: 5/17/06 PR
PROJECT NUMBER: 06940-407-100

FIGURE NUMBER: 4

SHEET NUMBER: 1

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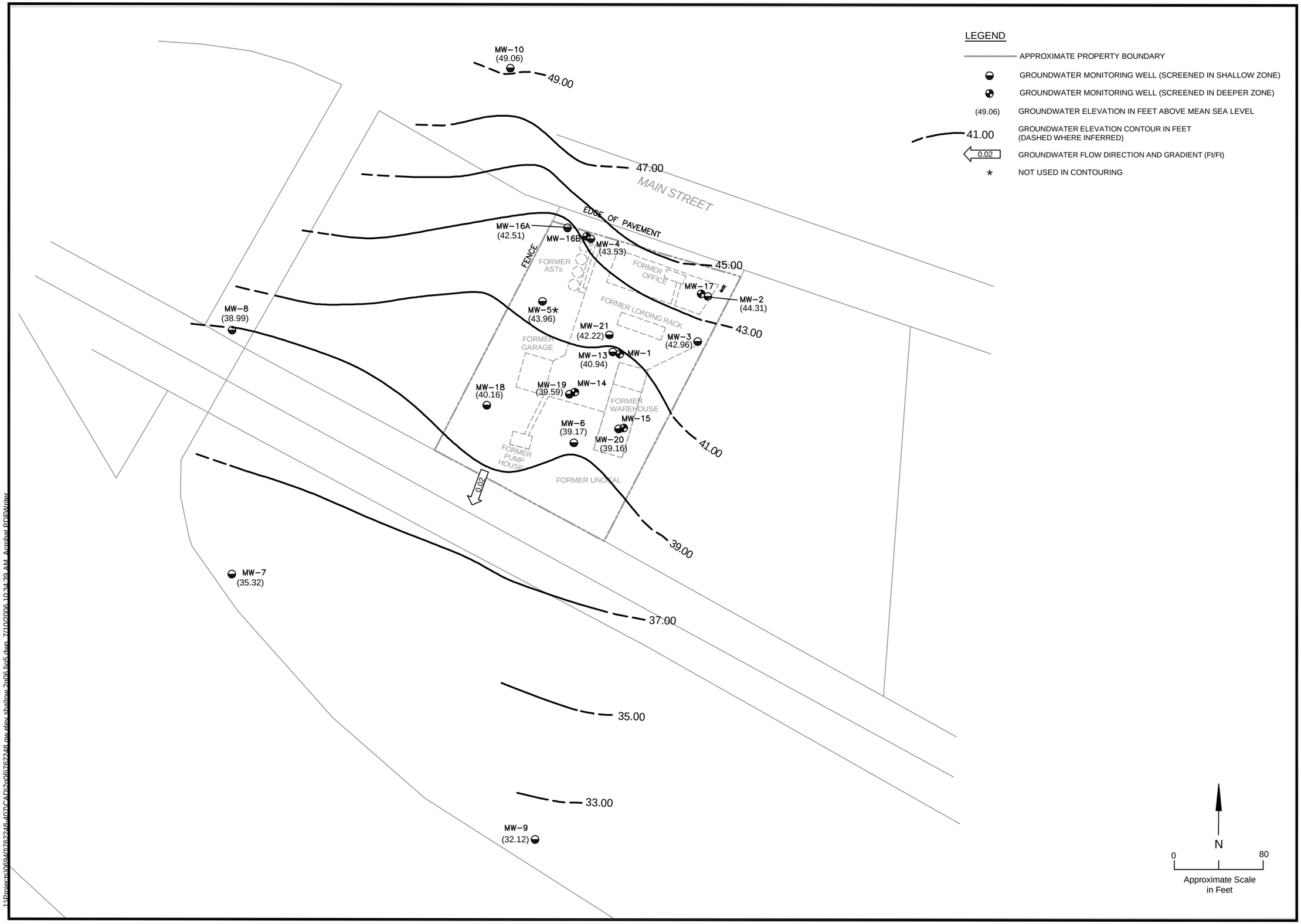

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SHALLOW ZONE GROUNDWATER ELEVATION MAP

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SCALE: 1"=80'
DATE: 6/14/06 PR
PROJECT NUMBER: 06940-407-100

FIGURE NUMBER: 5

SHEET NUMBER: 1

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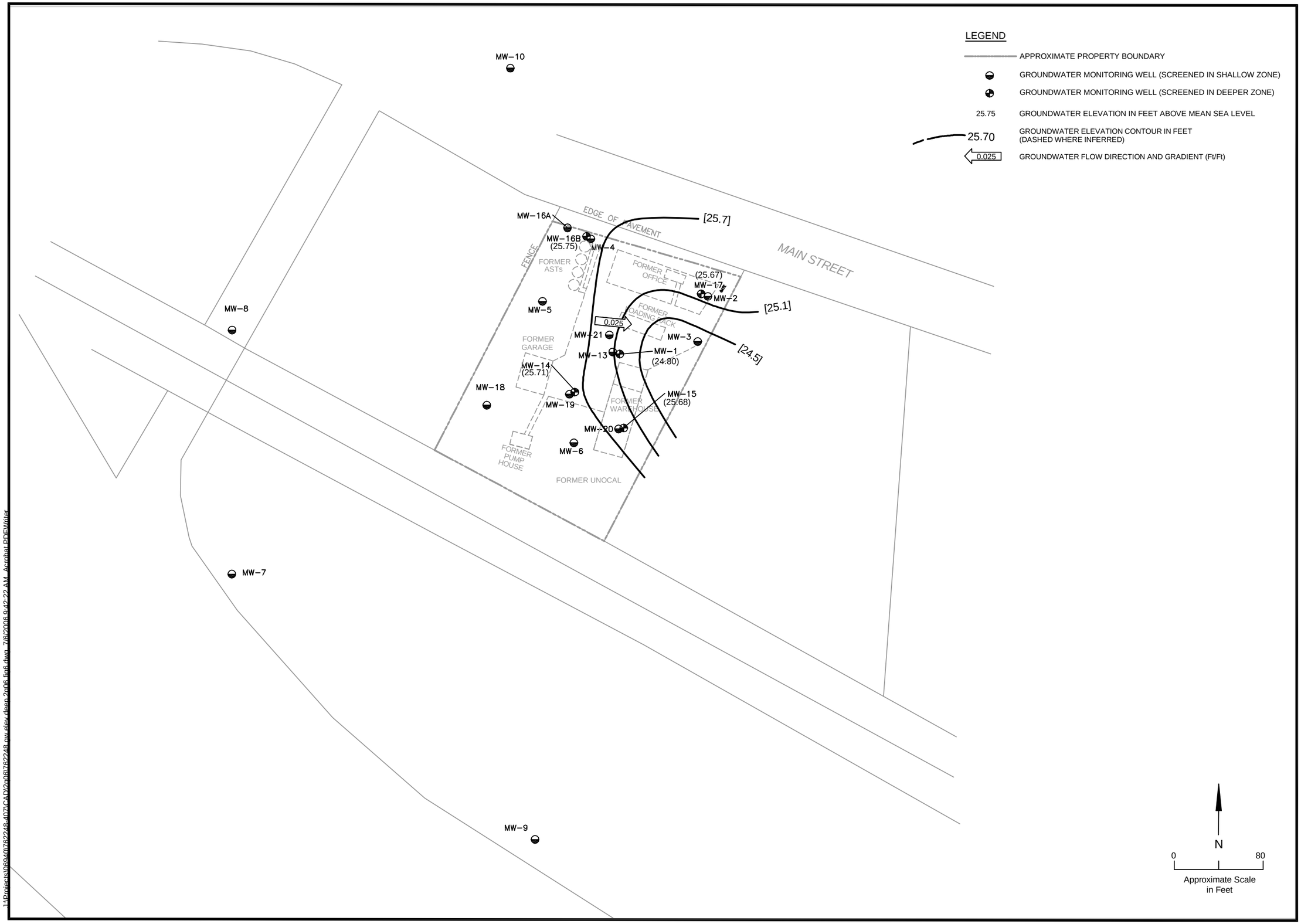

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DEEP ZONE GROUNDWATER ELEVATION MAP

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SCALE: 1"=80'
DATE: 6/15/06 PR
PROJECT NUMBER: 06940-407-100

FIGURE NUMBER: 6

SHEET NUMBER: 1

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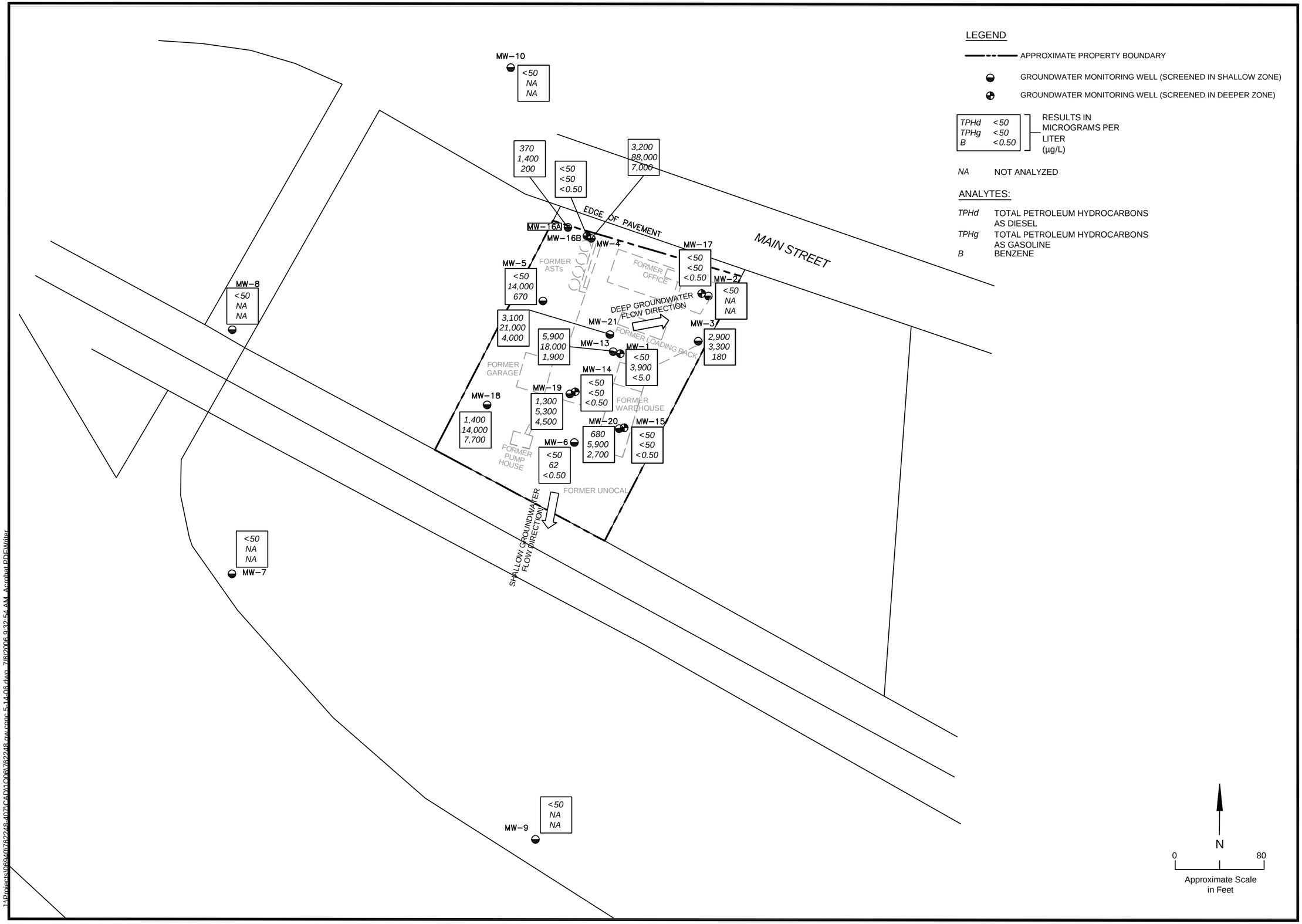

LEGEND

APPROXIMATE PROPERTY BOUNDARY

GROUNDWATER MONITORING WELL (SCREENED IN SHALLOW ZONE)

GROUNDWATER MONITORING WELL (SCREENED IN DEEPER ZONE)

TPHd	*<50*
TPHg	*<50*
B	*<0.50*

RESULTS IN MICROGRAMS PER LITER (µg/L)

NA NOT ANALYZED

ANALYTES:

TPHd TOTAL PETROLEUM HYDROCARBONS AS DIESEL

TPHg TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

B BENZENE

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PETROLEUM HYDROCARBON CONCENTRATION MAP

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SCALE: 1"=80'

DATE: 5/17/06 PR

PROJECT NUMBER: 06940-407-100

FIGURE NUMBER: 7

SHEET NUMBER: 1

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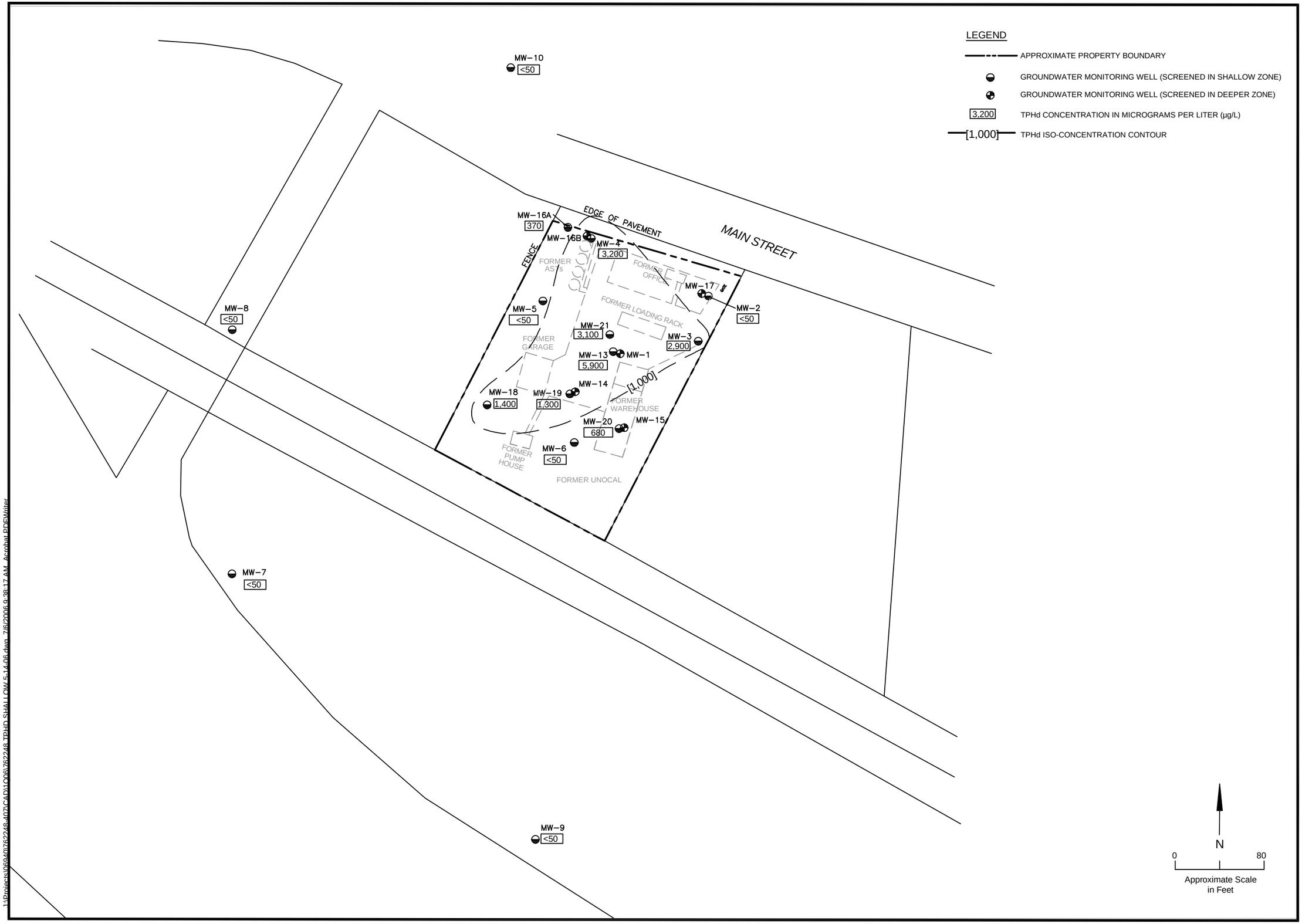

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SHALLOW TPHd ISO-CONCENTRATION

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SCALE:	DATE:	PROJECT NUMBER:
1"=80'	5/17/06 PR	06940-407-100

FIGURE NUMBER:
8

SHEET NUMBER:
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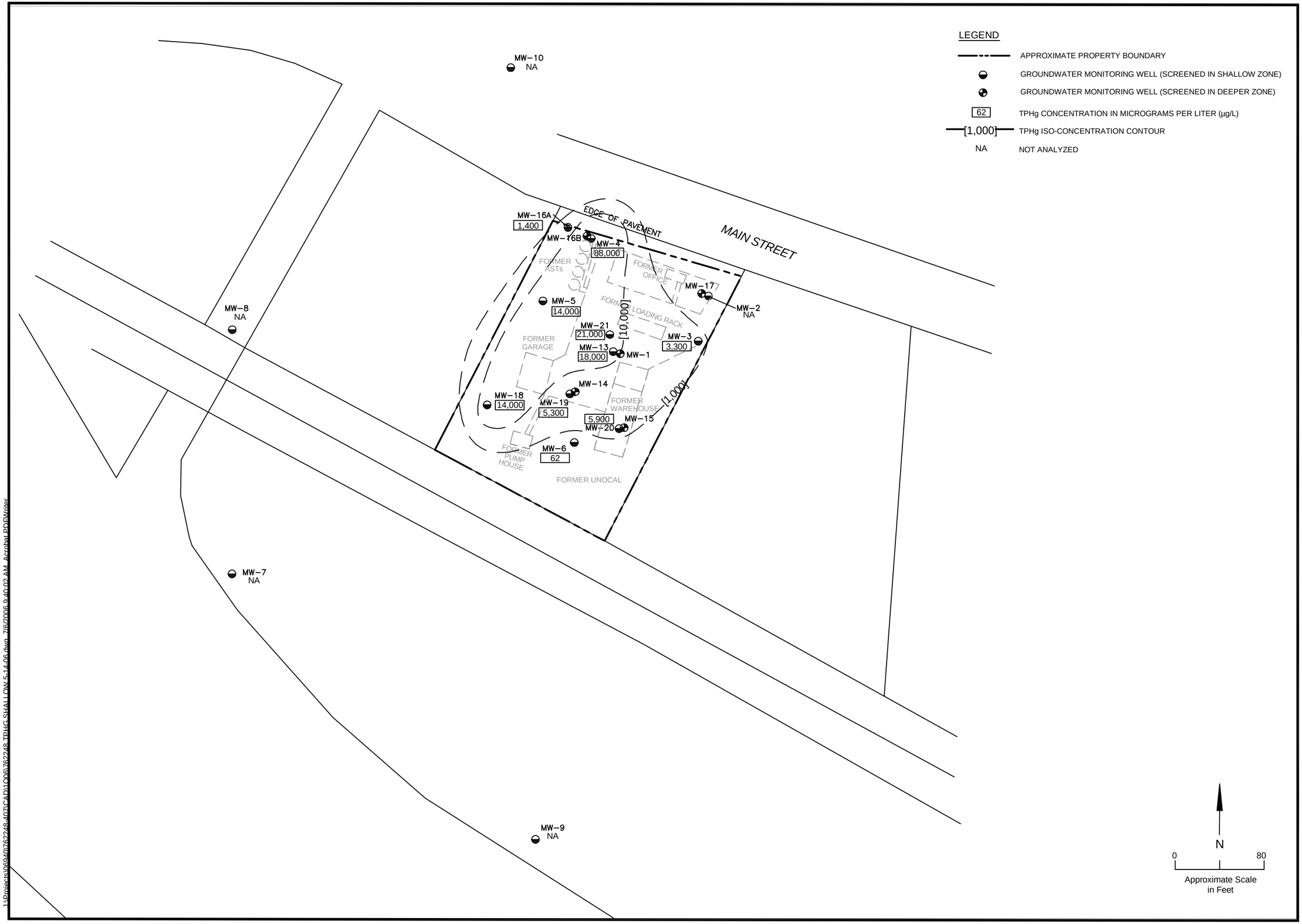

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SHALLOW TPHg ISO-CONCENTRATION

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FORTUNA, CALIFORNIA

SCALE: 1"=80'
DATE: 5/17/06 PR
PROJECT NUMBER: 06940-407-100

FIGURE NUMBER:
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SHEET NUMBER:
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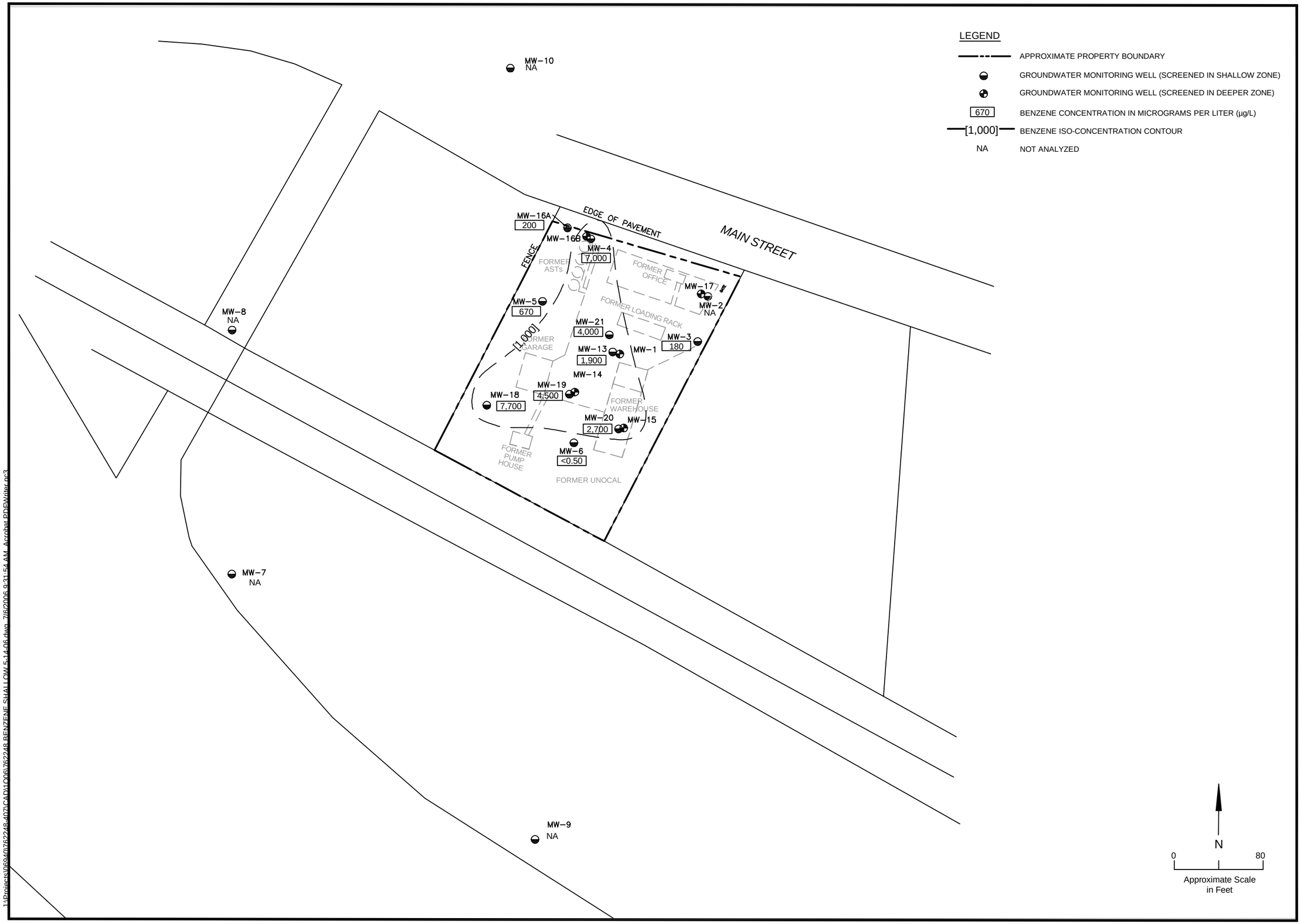

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SHALLOW BENZENE ISO-CONCENTRATION MAP

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SCALE: 1"=80'
DATE: 5/17/06 PR
PROJECT NUMBER: 06940-407-100

FIGURE NUMBER: 10

SHEET NUMBER: 1

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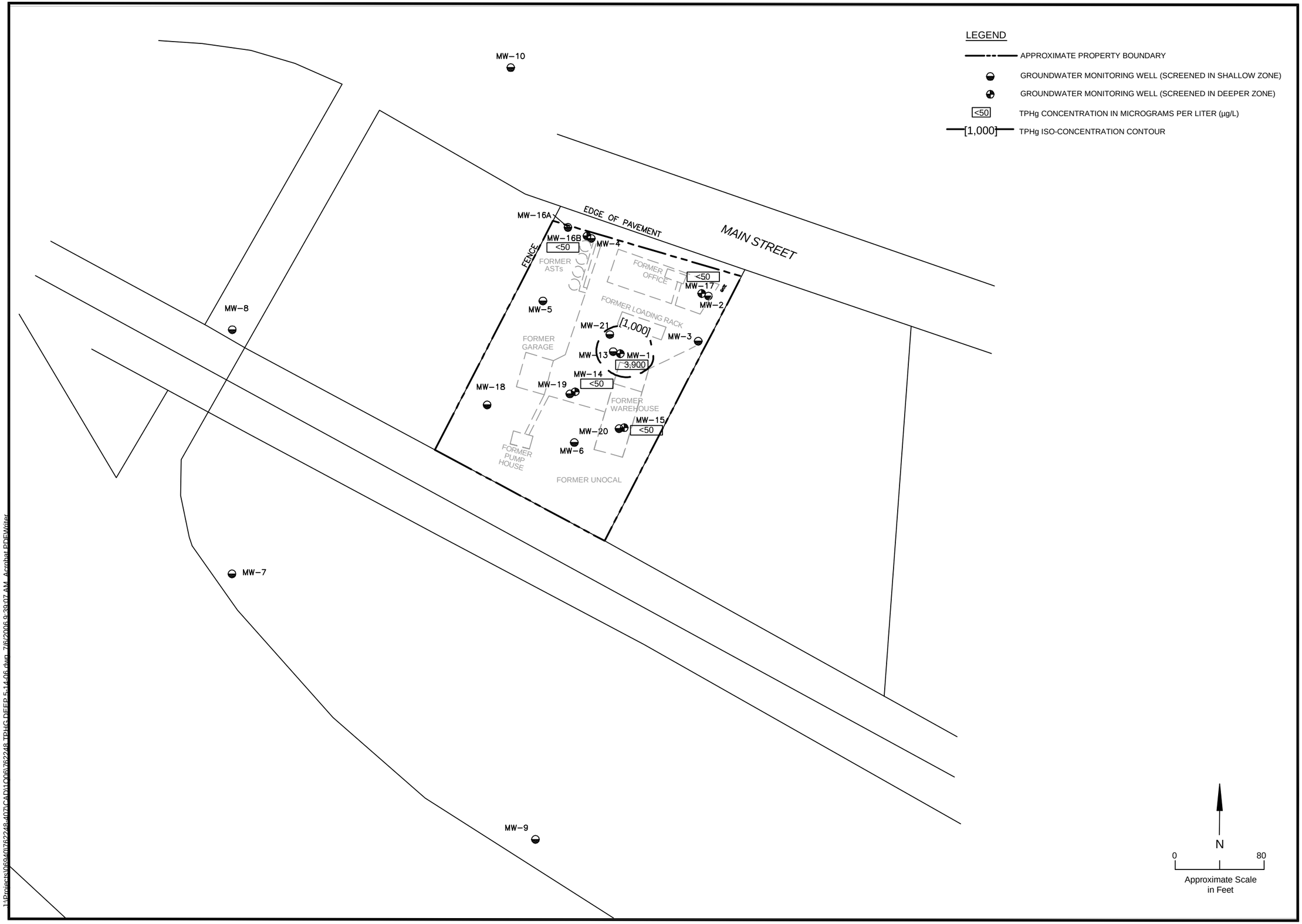

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DEEP TPHg ISO-CONCENTRATION MAP

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FORTUNA, CALIFORNIA

SCALE: 1"=80'
DATE: 5/17/06 PR
PROJECT NUMBER: 06940-407-100

FIGURE NUMBER: 11

SHEET NUMBER: 1

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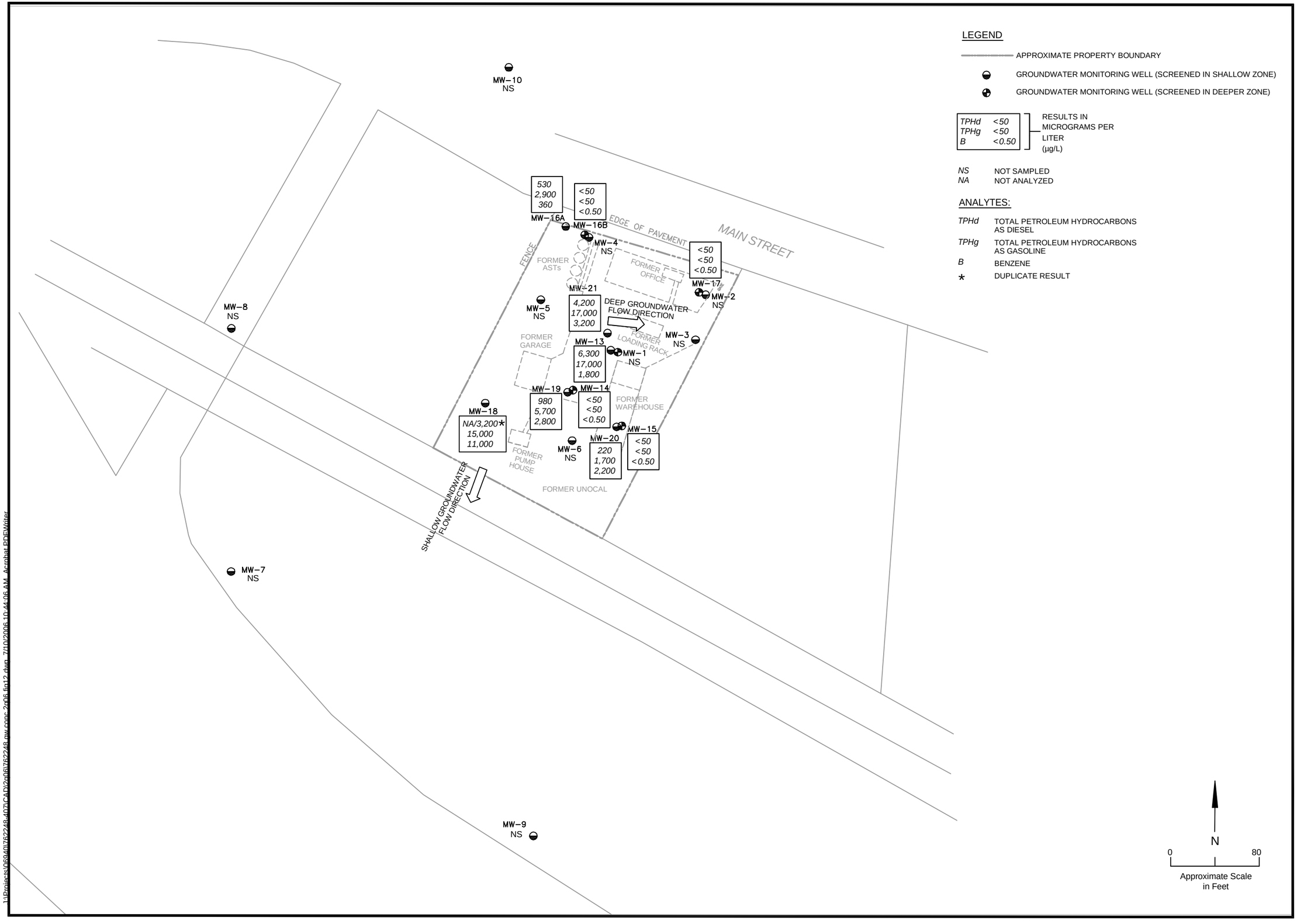

LEGEND

APPROXIMATE PROPERTY BOUNDARY

GROUNDWATER MONITORING WELL (SCREENED IN SHALLOW ZONE)

GROUNDWATER MONITORING WELL (SCREENED IN DEEPER ZONE)

TPHd	*<50*
TPHg	*<50*
B	*<0.50*

RESULTS IN MICROGRAMS PER LITER (µg/L)

NS NOT SAMPLED
NA NOT ANALYZED

ANALYTES:

TPHd TOTAL PETROLEUM HYDROCARBONS AS DIESEL

TPHg TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

B BENZENE

* DUPLICATE RESULT

REVISIONS			
NO:	DESCRIPTION:	DATE:	BY:

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PETROLEUM HYDROCARBON CONCENTRATION MAP

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(MAY 2006)
FORMER UNOCAL BULK PLANT 762248
359 MAIN STREET
FORTUNA, CALIFORNIA

SCALE: 1"=80'
DATE: 6/15/06 PR
PROJECT NUMBER: 06940-407-100

FIGURE NUMBER: 12

SHEET NUMBER: 1

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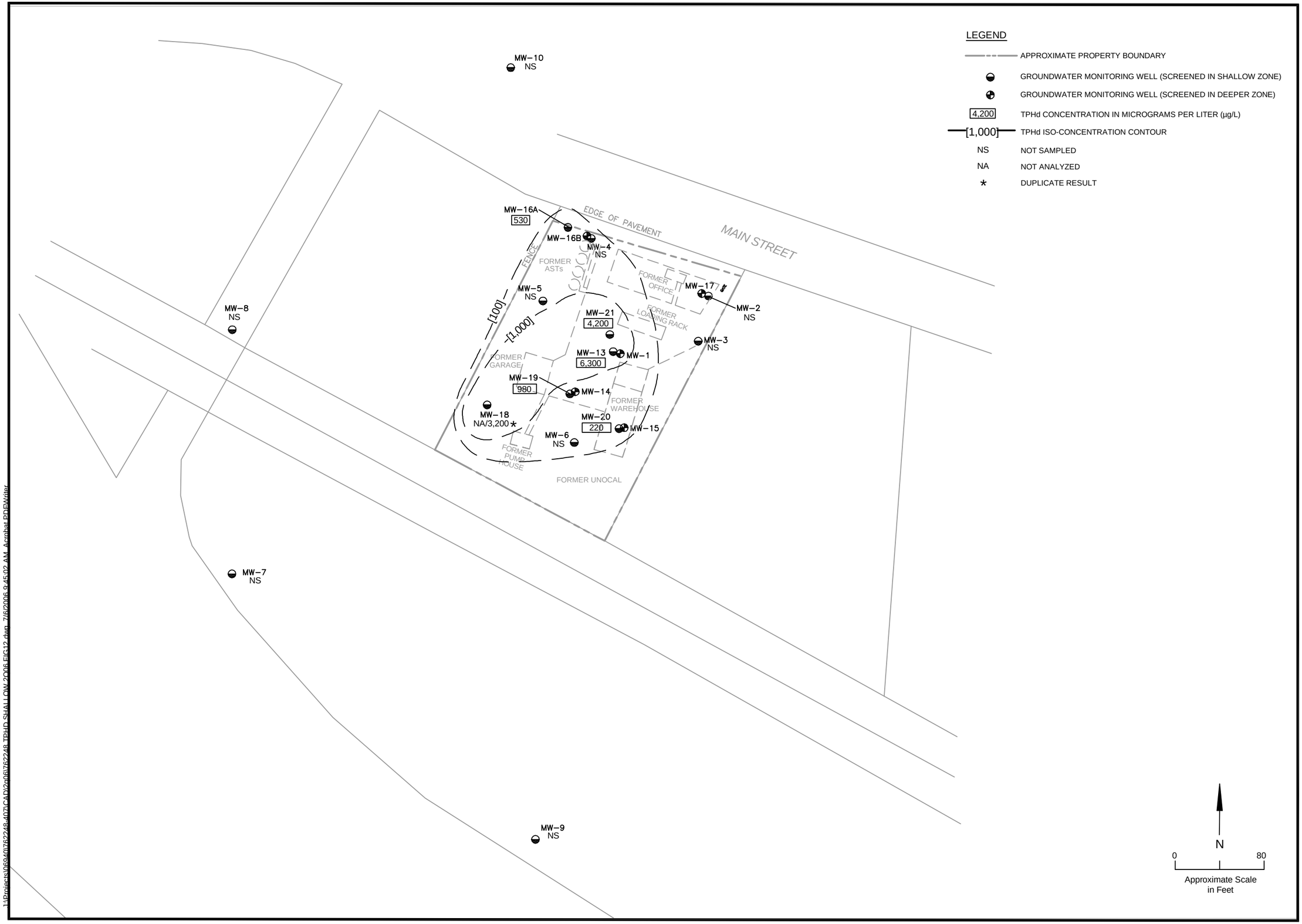

REVISIONS			
NO:	DESCRIPTION:	DATE:	BY:

DESIGNED BY: X
DRAWN BY: K.P.B.
CHECKED BY: S.W.
APPROVED BY: X

ENSR | AECOM
ENSR CORPORATION
10461 OLD PLACERVILLE ROAD SUITE 170
SACRAMENTO, CALIFORNIA 95827
PHONE: (916) 362-7100
FAX: (916) 362-8100
WEB: HTTP://WWW.ENSR.AECOM.COM

SHALLOW TPHd ISO-CONCENTRATION

SEMI-ANNUAL MONITORING REPORT - 1ST HALF 2006
(MAY 2006)
FORMER UNOCAL BULK PLANT 762248
359 MAIN STREET
FORTUNA, CALIFORNIA

SCALE: 1"=80'
DATE: 6/15/06 PR
PROJECT NUMBER: 06940-407-100

FIGURE NUMBER: 13

SHEET NUMBER: 1

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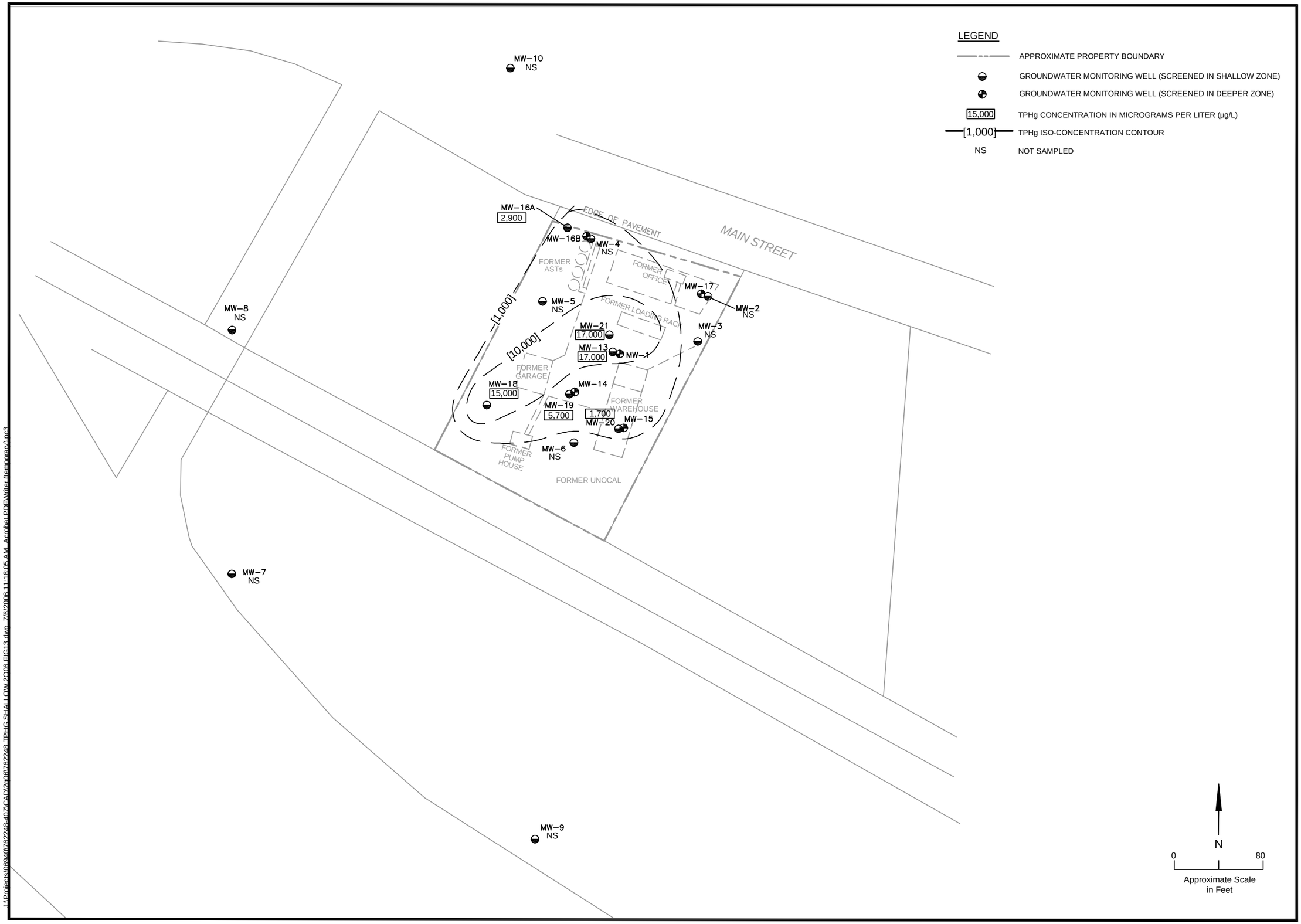

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10461 OLD PLACERVILLE ROAD SUITE 170
SACRAMENTO, CALIFORNIA 95827
PHONE: (916) 362-7100
FAX: (916) 362-8100
WEB: HTTP://WWW.ENSR.AECOM.COM

SHALLOW TPHg ISO-CONCENTRATION

SEMI-ANNUAL MONITORING REPORT - 1ST HALF 2006
(MAY 2006)
FORMER UNOCAL BULK PLANT 762248
359 MAIN STREET
FORTUNA, CALIFORNIA

SCALE: 1"=80'
DATE: 6/15/06 PR
PROJECT NUMBER: 06940-407-100

FIGURE NUMBER: 14

SHEET NUMBER: 1

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APPENDIX A

FIELD METHODS AND PROCEDURES

FIELD METHODS AND PROCEDURES
Unocal Site No. 762248, 359 Main Street, Fortuna, CA (Site)
ENSR Project No. 06940-407

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

1. HEALTH AND SAFETY PLAN

The performance of fieldwork and other project services by ENSR and ENSR's subcontractors will be conducted according to guidelines established in the most current, Site-specific Health And Safety Plan (HASP). The HASP describes the hazards that may be encountered in the field and specifies protective equipment, work procedures, and emergency information. A copy of the HASP is maintained at the Site. Prior to performing work at the Site, personnel will have read the HASP, and sign that they have read the HASP and will perform work at the Site in accordance with the HASP.

2. DECONTAMINATION

Decontamination of equipment brought to and used at the Site is performed in accordance with ENSR SOP No. 7600. The soap solution and rinse water used for decontamination are collected and properly disposed of as described in Section 7.

3. GROUNDWATER DEPTH ASSESSMENT

Initially, all wells for groundwater depth assessment are opened and allowed to equilibrate to atmospheric pressure. Measuring the thickness of liquid-phase hydrocarbons (LPH), if present, and the depth to groundwater are performed in accordance with the applicable sections of ENSR SOP No. 7130. The water level measurement probe is subjectively analyzed for LPH sheen after each measurement.

4. SUBJECTIVE ANALYSIS OF GROUNDWATER

Prior to purging for groundwater monitoring, a groundwater 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.

5. GROUNDWATER SAMPLE COLLECTION

5.1 Purged Groundwater Sample

The purging and collection of a groundwater sample are performed in accordance with ENSR SOP No. 7130. Well purging completion standards include minimum purge volumes, and the stabilization of specific groundwater parameters prior to sample collection. Typical groundwater

parameters used to measure stability are electrical conductivity, pH, and temperature as described in ENSR SOP Nos. 7124, 7121, and 7123, respectively. Groundwater parameter readings are obtained at regular intervals during the purging process (no less than once per case volume).

5.2 Dissolved Oxygen Measurement

Dissolved oxygen (D.O.) readings are collected in accordance with ENSR SOP No. 7122 using HORIBA meters (e.g. HORIBA Model U-22 or equivalent D.O. meter). These meters are equipped with a stirring device that enables the collection of in-situ readings.

5.3 Oxidation Reduction Potential (Redox Potential) Measurement

Redox potential readings are obtained with HORIBA meters (e.g. HORIBA Models U-22 or equivalent ORP meter). The meter is cleaned between wells as described above. The meter is calibrated at the start of each day according to the manufacturer's instruction manual.

5.4 Grab Groundwater Sample Collection

A grab groundwater sample is collected by lowering a disposable bailer to sufficient depth that the length of the bailer is below the water table.

6. PACKAGING AND SHIPMENT OF SAMPLES

Soil, groundwater, and/or gas samples from field work are packaged and shipped in accordance with ENSR SOP No. 7510.

7. INVESTIGATION-DERIVED WASTE MANAGEMENT

The purge water, decontamination residuals, and aqueous-based, liquid wastes from field work are placed in 55-gallon drums and temporarily stored on-site pending evaluation of disposal options. Solid wastes, such as disposable bailers and paper wipes, generated during field work are packaged in an appropriate container and separately from liquid wastes. Final disposal is performed consistent with accepted regulatory requirements and consistent with requirements specified by Unocal.

8. QUALITY CONTROL

Quality control samples are collected and submitted for analysis. The quality control samples may include field blanks, rinsate blanks, duplicate sample(s), and matrix spike/matrix spike duplicate samples as described in Section 5.0 of ENSR SOP No. 7130.

9. DOCUMENTATION

Documentation of field work is performed consistent with Section 6.0 of ENSR SOP No. 7130 and ENSR SOP No. 7515.

APPENDIX B

GROUNDWATER SAMPLING INFORMATION SHEETS

First Quarter (dated February 21-22, 2006)
Second Quarter (dated May 15-16, 2006)

ENSR | AECOM

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

Site Address: 359 Main St., Fortuna, CA
ENSR No. 06940-407-100
Unocal No. 762248

Date: 2-21-06
Recorded by: Troy Wenham

Well No. Sampling Order	Time Opened	CGI	PID	O2	Time Measured	Depth to Gr. Water	Measured Total Depth	Depth to Product	Product Thickness	Comments (TOC/TOB) (product skimmer in well)
MW-9	0830	–	0.0	–	1034	3.61	15.51	–	–	Buried with mud/Dirt/rock, Dig/clear
MW-7	0845	–	0.0	–	1037	1.44	10.50	–	–	Buried with mud/Dirt/rock, Dig/clear
MW-8	0850	–	0.0	–	1040	5.31	20.55	–	–	well box full of water, Bail water
MW-10	0910	–	0.0	–	1042	1.28	19.69	–	–	well box full of water, Bail water
MW-16B	0918	–	0.0	–	1047	26.34	40.68	–	–	well box full of water, Bail water
MW-17	0922	–	0.0	–	1050	25.11	40.29	–	–	
MW-2	0927	–	0.0	–	1051	6.47	22.50	–	–	
MW-1	0932	–	325	–	1053	22.04	38.50	–	–	water inside wellbox, Bail water
MW-14	0937	–	0.0	–	1054	20.66	37.20	–	–	well box full of water, Bail water
MW-15	0942	–	0.0	–	1055	18.24	38.35	–	–	
MW-6	0946	–	0.0	–	1056	5.14	16.70	–	–	
MW-3	0951	–	8.1	–	1058	5.52	24.70	–	–	
MW-16A	0956	–	422	–	1059	8.13	20.27	–	–	
MW-19	1000	–	99.0	–	1101	5.72	20.32	–	–	
MW-20	1004	–	227	–	1102	3.71	20.15	–	–	
MW-18	1008	–	452	–	1103	3.26	20.24	–	–	
MW-13	1012	–	191	–	1105	6.11	17.96	–	–	
MW-5	1016	–	2.7	–	1106	5.92	14.55	–		
MW-21	1020	–	97.1	–	1107	5.92	20.35	–	–	
MW-4	1024	–	484	–	1108	8.53	19.95			well box full of water, Bail water

Notes:

GROUNDWATER SAMPLING DATA SHEET
Site Address: 359 Main St., Fortuna, CA
ENSR No. 06940-407-100
Unocal No. 762248

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

Well [x] Piezometer [ ]

ENSR | AECOM

Well Purging:
Date Purged: 2-21-06
Purge Method: Disposable bailer/other Grundfos pump

Field Tech(s): Troy Wenbaum
Weather Conditions: Sunny, Windy, cool (50°F)

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 15.51 ft from TOC
Depth to Water: 3.61 ft from TOC
Water Column: 11.9 ft.
Water Column Volume: 1.9 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) = 5.99 (9.52)

Depth to water after recovery: 5.98 Time: 1258

Time		Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other
1230	0	0.5	8.4	-9	14.7	0.200	5.8	438	clear	No odor
1238	1	2.4	4.9	-14	14.4	0.198	5.7	66.3	clear	No odor
1246	2	4.3	4.9	-23	14.5	0.222	5.7	56.5	clear	No odor
1254	3	6.2	3.7	-41	15.1	0.224	5.8	46.3	clear	No odor
	4									

Sample Collection:
Date Sampled: 2-21-06 Sampling Method: Disposable Bailer/Other Bailed Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-9	1	250 mL Amber	Ice	TPHd (8015M)	1304

Comments: Grundfos control set @ 85.00 H
Replaced well cap & well cap lock

Signature: [signature] Date: 2-21-06

GROUNDWATER SAMPLING DATA SHEET
Site Address: 359 Main St., Fortuna, CA
ENSR No. 06940-407-100
Unocal No. 762248

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

Well [x] Piezometer [ ]

ENSR | AECOM

Well Purging:
Date Purged: 2-21-06
Purge Method: Disposable bailer/other Grundfos pump

Field Tech(s): Troy Wenham
Weather Conditions: Sunny, Windy, cool (50°F)

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 10.50 ft from TOC
Depth to Water: 1.44 ft from TOC
Water Column: 9.06 ft.
Water Column Volume: 1.4 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) = 3.26 (7.24)

Depth to water after recovery: 1.82 Time: 1344

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
1319	0 0.5	8.3	1	14.1	0.238	5.8	-5.0	Brown/cloudy	No odor
1326	1 1.9	4.6	28	13.6	0.231	5.7	158	Clear	No odor
1333	2 3.3	4.1	29	13.9	0.190	5.7	47.3	Clear	No odor
1340	3 4.7	3.4	33	14.0	0.219	5.7	37.2	Clear	No odor
	4								

Sample Collection:
Date Sampled: 2-21-06 Sampling Method: Disposable Bailer/Other Bailed Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-7	1	250 mL Amber	Ice	TPHd (8015M)	1350

Comments: Grundfos control set @ 85.00 H
Replace well cap & well cap lock

Signature: [signature] Date: 2-21-06

GROUNDWATER SAMPLING DATA SHEET
Site Address: 359 Main St., Fortuna, CA
ENSR No. 06940-407-100
Unocal No. 762248

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

Well [x] Piezometer [ ]

ENSR | AECOM

Well Purging:
Date Purged: 2-21-06
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: 20.55 ft from TOC
Depth to Water: 5.31 ft from TOC
Water Column: 15.24 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) = 8.35 (12.19)

Depth to water after recovery: 6.04 Time: 1433

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (~~uS/cm~~) mS/cm	pH	Turbidity (NTUs)	Color/Clarity	Other
1405	0 0.5	6.4	-95	16.3	41.5	6.2	331	clear	No odor
1413	1 2.9	3.4	-62	16.5	43.8	6.0	85.5	clear	No odor
1421	2 5.3	3.0	-62	16.6	73.0	5.9	135	clear	No odor
1429	3 7.7	2.9	-70	16.6	0.183 S/m	5.9	48.5	clear	No odor
	4								

Sample Collection:
Date Sampled: 2-21-06 Sampling Method: Disposable Bailer/Other Bailed Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-8	1	250 mL Amber	Ice	TPHd (8015M)	1440

Comments: Grundfos control set @ 85.00 H
Replace well cap lock

Signature: [signature] Date: 2-21-06

GROUNDWATER SAMPLING DATA SHEET
Site Address: 359 Main St., Fortuna, CA
ENSR No. 06940-407-100
Unocal No. 762248

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

Well [x] Piezometer [ ]

ENSR | AECOM

Well Purging:
Date Purged: 2-21-06
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: 19.69 ft from TOC
Depth to Water: 1.28 ft from TOC
Water Column: 18.41 ft.
Water Column Volume: 2.9 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) = 14.72 4.96

Depth to water after recovery: 1.88 Time: 1523

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other
1453	0 0.5	10.6	71	13.9	0.090 s/m	5.9	-5.0	gray/cloudy	No odor
1502	1 3.4	3.8	128	12.7	15.6 mS/m	5.3	104	clear	No odor
1511	2 6.3	3.5	129	12.7	15.4 mS/m	5.3	60.0	clear	No odor
1520	3 9.2	3.4	131	12.7	15.3 mS/m	5.2	54.2	clear	No odor
	4								

Sample Collection:
Date Sampled: 2-21-06 Sampling Method: Disposable Bailer/Other Bailer Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-10	1	250 mL Amber	Ice	TPHd (8015M)	1530

Comments: Grundfos control setting 85.00H
replaced well cap lock

Signature: [signature] Date: 2-21-06

GROUNDWATER SAMPLING DATA SHEET
Site Address: 359 Main St., Fortuna, CA
ENSR No. 06940-407-100
Unocal No. 762248

Well/Piezo ID: **MW-16B**

Well [x] Piezometer [ ]

ENSR | AECOM

Well Purging:
Date Purged: 2/21/06
Purge Method: Disposable bailer/other DC PUMP

Field Tech(s): JDR

Weather Conditions: COOL + CLR

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 40.68 ft from TOC
Depth to Water: 26.34 ft from TOC
Water Column: 14.34 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) = 29.21' (11.47)

Depth to water after recovery: 26.82'

Time: 1348

Time		Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other
1330	0	0.5	5.67	276	16.6	31.6	5.05	-5.0	DRK MUSTARD	
1334	1	2.7	2.89	268	16.7	27.5	5.23	922.0	LT GREY	
1338	2	4.9	2.47	261	16.8	27.3	5.29	430	LT GREY	
1343	3	7.1	2.52	260	10.8	27.3	5.28	84.4	CLR	
	4									

Sample Collection:
Date Sampled: 2/21/06

Sampling Method: Disposable Bailer/Other DC PUMP

Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-16B	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8021)	1355
MW-16B	1	250 mL Amber	Ice	TPHd (8015M)	1355

Comments: Dun Horse DO = 4.7 mg/l (45# 550A)

Signature: [signature]

Date: 2/21/06

GROUNDWATER SAMPLING DATA SHEET
Site Address: 359 Main St., Fortuna, CA
ENSR No. 06940-407-100
Unocal No. 762248

Well/Piezo ID: **MW-17**

Well [x] Piezometer [ ]

ENSR | AECOM

Well Purging:
Date Purged: 2/21/06
Purge Method: Disposable bailer/other DC PUMP

Field Tech(s): JDR

Weather Conditions: COOL + CLR

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 40.29 ft from TOC
Depth to Water: 25.11 ft from TOC
Water Column: 15.18 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) = 28.14 (12.14)

Depth to water after recovery: 25.32 Time: 1432

Time		Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other
1415	0	0.5	3.81	278	16.4	33.7	5.57	-5.0	DK MUSTARD	
1418	1	2.9	2.94	260	16.2	34.6	5.68	-5.0	LT MUSTARD	
1422	2	5.3	2.02	245	16.3	[illegible].5	5.77	878	LT BRWN SOUP	
1426	3	7.7	1.65	247	16.4	34.4	5.78	137	LEMON AID	
	4									

Sample Collection:
Date Sampled: 2/21/06 Sampling Method: Disposable Bailer/Other DC PUMP Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-17	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8021)	1438
MW-17	1	250 mL Amber	Ice	TPHd (8015M)	

Comments: DWN HOLE DO = 3.6 mg/l (4/1550A)

Signature: [signature] Date: 2/21/06

GROUNDWATER SAMPLING DATA SHEET
Site Address: 359 Main St., Fortuna, CA
ENSR No. 06940-407-100
Unocal No. 762248

Well/Piezo ID: **MW-14**

Well [X] Piezometer [ ]

ENSR | AECOM

Well Purging:
Date Purged: 2/21/06
Purge Method: Disposable bailer/other DC PUMP

Field Tech(s): JDR

Weather Conditions: COLD + CLR

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 37.20 ft from TOC
Depth to Water: 20.66 ft from TOC
Water Column: 16.54 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) = 23.96 (13.23)

Depth to water after recovery: 20.88 Time: 1514

Time		Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other
1455	0	0.5	5.58	242	16.4	42.8	5.88	827	DK MUSTARD	
1459	1	3.1	3.97	234	16.3	42.3	5.98	414	LT BRWN	
1503	2	5.7	3.40	232	16.4	42.3	5.99	125	CLR	
1508	3	8.3	3.11	233	16.4	42.9	5.97	46	CLR	
	4									

Sample Collection:
Date Sampled: 2/21/06 Sampling Method: Disposable Bailer/Other DC PUMP Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-14	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8021)	1520
MW-14	1	250 mL Amber	Ice	TPHd (8015M)	1520

Comments: DWN HOLE DO = 3.3 mg/l (451 550A)

Signature: [signature] Date: 2/21/06

GROUNDWATER SAMPLING DATA SHEET
Site Address: 359 Main St., Fortuna, CA
ENSR No. 06940-407-100
Unocal No. 762248

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

Well [x] Piezometer [ ]

ENSR | AECOM

Well Purging:
Date Purged: 2-22-06
Purge Method: Disposable bailer/other Grundfos pump

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

Casing Material: PVC
Well Diameter: 4.00 in.
Total Depth: 22.50 ft from TOC
Depth to Water: 6.47 ft from TOC
Water Column: 16.03 ft.
Water Column Volume: 10.5 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) = 9.67 (12.82)

Depth to water after recovery: 9.62 Time: 0928

Time		Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other
0830	0	0.5	11.3	201	15.3	31.7 mS/cm	5.3	15.2	clear	No odor
0848	1	11.0	8.9	210	17.1	30.8 mS/cm	5.7	106.0	clear	No odor
0856	2	21.5	5.1	213	19.1	29.3 mS/cm	5.8	133.0	clear	No odor
0904	3	32.0	4.1	218	19.2	32.3 mS/cm	6.0	232.0	clear	No odor
	4									

Sample Collection:
Date Sampled: 2-22-06 Sampling Method: Disposable Bailer/Other Bailed Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-2	1	250 mL Amber	Ice	TPHd (8015M)	0930

Comments: Grundfos control set @ 145.00 Hz, for low (flow) to prevent Dewater. ≈20min RECHG
YSI 550A Downhole DO reading/parameters: 3.3 mg/L @
Add well box bolts to lid

Signature: [signature] Date: 2-22-06

GROUNDWATER SAMPLING DATA SHEET
Site Address: 359 Main St., Fortuna, CA
ENSR No. 06940-407-100
Unocal No. 762248

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

Well [X] Piezometer [ ]

ENSR | AECOM

Well Purging:
Date Purged: 2-22-06
Purge Method: Disposable bailer/other Grundfos pump

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

Casing Material: PVC
Well Diameter: 4.00 in.
Total Depth: 38.50 ft from TOC
Depth to Water: 22.04 ft from TOC
Water Column: 16.46 ft.
Water Column Volume: 10.8 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) = 25.33 (13.16)

Depth to water after recovery: 24.03 Time: 1052

Time		Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm) mS/m	pH	Turbidity (NTUs)	Color/Clarity	Other
0950	0	0.5	8.1	-98	16.9	71.7	6.0	225	clear	No odor
1004	1	11.3	5.1	-100	17.0	71.3	6.0	265	clear	No odor
1018	2	22.1	4.8	-95	17.2	70.5	6.1	69.9	clear	No odor
1032	3	32.9	4.6	-91	17.3	70.0	6.0	52.2	clear	No odor
	4									

Sample Collection:
Date Sampled: 2-22-06 Sampling Method: Disposable Bailer/Other Bailed Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-1	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8021)	1054
MW-1	1	250 mL Amber	Ice	TPHd (8015M)	1054

Comments: Grundfos pump set @145.00 ft, for low flow to prevent Dewater ≈ 20 min RCHG
YSI 550A Down Hole DO parameter: 3.8 mg/L

Signature: [signature] Date: 2-22-06

GROUNDWATER SAMPLING DATA SHEET
Site Address: 359 Main St., Fortuna, CA
ENSR No. 06940-407-100
Unocal No. 762248

Well/Piezo ID: **MW-15**

Well [x] Piezometer [ ]

ENSR | AECOM

Well Purging:
Date Purged: 2-22-06
Purge Method: Disposable bailer/other Grundfos pump

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

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 38.35 ft from TOC
Depth to Water: 18.24 ft from TOC
Water Column: 20.11 ft.
Water Column Volume: 3.2 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) = 22.26 (16.08)

Depth to water after recovery: 18.26 Time: 1139

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity ~~(uS/cm)~~ mS/m	pH	Turbidity (NTUs)	Color/Clarity	Other
1110	0 0.5	4.6	16	15.7	73.9 mS/m	6.0	-50	Brown/dark	No odor
1118	1 3.7	4.4	25	15.7	99.9 mS/m	6.0	833	Clear	No odor
1126	2 6.9	3.6	55	15.6	0.107 S/m	5.9	81.0	clear	No odor
1134	3 10.1	3.6	66	15.6	0.260 S/m	5.8	425	clear	No odor
	4								

Sample Collection:
Date Sampled: 2-22-06 Sampling Method: Disposable Bailer/Other Bailed Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-15	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8021)	1145
MW-15	1	250 mL Amber	Ice	TPHd (8015M)	1145

Comments: Grundfos control set @ 145.00 H
YSI 556 Down Hole DO probe: 3.5 mg/L

Signature: [signature] Date: 2-22-06

GROUNDWATER SAMPLING DATA SHEET
Site Address: 359 Main St., Fortuna, CA
ENSR No. 06940-407-100
Unocal No. 762248

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

Well [x] Piezometer [ ]

ENSR | AECOM

Well Purging:
Date Purged: 2-22-06
Purge Method: Disposable bailer/other Grundfos pump

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

Casing Material: PVC
Well Diameter: 4.00 in.
Total Depth: 16.70 ft from TOC
Depth to Water: 5.14 ft from TOC
Water Column: 11.56 ft.
Water Column Volume: 7.6 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) = 7.45 (9.24)

Depth to water after recovery: 7.40 Time: 1249

Time		Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other
1152	0	0.5	4.0	4	14.4	74.0 mS/m	6.0	123	clear	No odor
1213	1	8.1	3.8	-47	14.2	0.090 S/m	6.1	153	clear	No odor
1224	2	15.7	3.7	-36	14.4	0.344 S/m	5.9	419	clear	No odor
1234	3	23.3	3.7	-73	16.0	0.509 S/m	5.9	394	clear	No odor
	4									

Sample Collection:
Date Sampled: 2-22-06 Sampling Method: Disposable Bailer/Other Bailed Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-6	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8021)	1252
MW-6	1	250 mL Amber	Ice	TPHd (8015M)	1252

Comments: Grundfos pump (control) Set @ 140.00 ft. Low flow to prevent Dewatering ≈ 20 min Recharge
YSI 550A Down Hole DO DO parameter 3.7 mg/L
Replace well cap lock

Signature: [signature] Date: 2-22-06

GROUNDWATER SAMPLING DATA SHEET
Site Address: 359 Main St., Fortuna, CA
ENSR No. 06940-407-100
Unocal No. 762248

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

Well [x] Piezometer [ ]

ENSR | AECOM

Well Purging:
Date Purged: 2-22-06
Purge Method: Disposable bailer/other Grundfos pump

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

Casing Material: PVC
Well Diameter: 4.00 in.
Total Depth: 24.70 ft from TOC
Depth to Water: 5.52 ft from TOC
Water Column: 19.18 ft.
Water Column Volume: 12.65 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) = 15.34 9.35

Depth to water after recovery: 9.23 Time: 1414

Time		Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (~~uS/cm~~)	pH	Turbidity (NTUs)	Color/Clarity	Other
1310	0	0.5	4.4	-70	15.1	83.7 mS/m	6.0	253	Clear	No odor
1324	1	13.1	3.4	-67	14.7	86.3 mS/m	5.9	113	Clear	No odor
1339	2	25.80	3.4	-63	14.5	99.9 mS/m	5.9	104	Clear	No odor
1354	3	38.4	3.3	-54	14.5	0.207 S/m	5.8	96.1	Clear	No odor
	4									

Sample Collection:
Date Sampled: 2-22-06 Sampling Method: Disposable Bailer/Other Bailed Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-3	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8021)	1418
MW-3	1	250 mL Amber	Ice	TPHd (8015M)	1418

Comments: Grundfos control set @ 145.00H Low flow to prevent Dewatering ≈ 20min RECHRG
YSI 550A Down Hole DO parameter: 3.4 mg/L
Replace well cap lock

Signature: [signature] Date: 2-22-06

GROUNDWATER SAMPLING DATA SHEET
Site Address: 359 Main St., Fortuna, CA
ENSR No. 06940-407-100
Unocal No. 762248

Well/Piezo ID: **MW-16A**

Well [x] Piezometer [ ]

ENSR | AECOM

Well Purging:
Date Purged: 2-22-06
Purge Method: Disposable bailer/other Grundfos pump

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

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 20.27 ft from TOC
Depth to Water: 8.13 ft from TOC
Water Column: 12.14 ft.
Water Column Volume: 1.9 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) = 10.56 (9.71)

Depth to water after recovery: 10.48 Time: 1525

Time		Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity ~~(uS/cm)~~	pH	Turbidity (NTUs)	Color/Clarity	Other
1440	0	0.5	4.6	8	15.5	41.4	6.0	692	clear	odor present
1448	1	2.4	4.1	17	15.2	48.5	6.0	249	clear	odor present
1456	2	4.3	3.9	22	15.0	58.1	6.0	102	clear	odor present
1504	3	6.2	3.8	10	15.0	73.6	6.0	69.8	clear	odor present
~~[illegible]~~	4									

Sample Collection:
Date Sampled: 2-22-06 Sampling Method: Disposable Bailer/Other Bailed Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-16A	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8021)	1530
MW-16A	1	250 mL Amber	Ice	TPHd (8015M)	1530

Comments: Grundfos control set @ 100.0 Hz, low flow to prevent dewater ≥ 20 min RECHARGE
YSI-550A down hole DO parameter: 3.5 mg/L
Replaced well cap lock

Signature: [signature] Date: 2-22-06

GROUNDWATER SAMPLING DATA SHEET
Site Address: 359 Main St., Fortuna, CA
ENSR No. 06940-407-100
Unocal No. 762248

Well/Piezo ID: **MW-19**

Well [x] Piezometer [ ]

ENSR | AECOM

Well Purging:
Date Purged: 2/22/06
Purge Method: Disposable bailer/other DC Pump

Field Tech(s): JDR

Weather Conditions: COOL + CLR

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 20.32 ft from TOC
Depth to Water: 5.72 ft from TOC
Water Column: 14.60 ft.
Water Column Volume: 2.3 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) = 11.68 8.64

Depth to water after recovery: 8.23 Time: ~~0850~~ 0850

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other
0826	0 0.5	5.38	19	16.3	98.3	6.03	645	LT GREY	
0830	1 2.8	4.68	-15	16.4	99.9	6.20	721	LT BRWN	
0833	2 5.1	3.11	-25	16.6	99.9	6.19	523	LT BRWN	
0837	3 7.4	2.98	-34	16.7	99.9	6.	-5.0	LT BRWN	
	4								

Sample Collection:
Date Sampled: 2/22/06 Sampling Method: Disposable Bailer/Other BAIL Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-19	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8021)	0900
MW-19	1	250 mL Amber	Ice	TPHd (8015M)	

Comments: * WELL SLOW TO RECHARGE ≈ 30 MIN.
* PWR HOLE DO = 4.1 mg/L (YSI 550A)

Signature: [signature] Date: 2/22/06

GROUNDWATER SAMPLING DATA SHEET
Site Address: 359 Main St., Fortuna, CA
ENSR No. 06940-407-100
Unocal No. 762248

Well/Piezo ID: **MW-20**

Well [x] Piezometer [ ]

ENSR | AECOM

Well Purging:
Date Purged: 2/22/06
Purge Method: Disposable bailer/other DC PUMP

Field Tech(s): JDR

Weather Conditions: COOL + CLR

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 20.15 ft from TOC
Depth to Water: 3.71 ft from TOC
Water Column: 16.44 ft.
Water Column Volume: 2.6 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) = 6.99 (13.15)

Depth to water after recovery: 5.47 Time: 1035

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other
0922	0 0.5	5.62	-52	16.5	99.4	10.40	-5.0	LT GREY	LEMON AID
0926	1 3.1	4.47	-39	15.9	94.6	6.44	549	LEMON AID	
0939	2 5.7	4.52	-34	16.4	92.8	6.45	220	LEMON AID	
0944	3 8.3	4.44	-32	16.4	91.6	6.39	204	LEMON AID	
	4								

Sample Collection:
Date Sampled: 2/22/06 Sampling Method: Disposable Bailer/Other BAIL Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-20	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8021)	1040
MW-20	1	250 mL Amber	Ice	TPHd (8015M)	

Comments: * WELL DEWATERS AFTER ≈ 8 GAL. SLOW TO RECHARGE @ ≈ 45 MIN. TO 80%.
* DWN HOLE DO 5.6 mg/L (95% SOA)

Signature: [signature] Date: 2/22/06

GROUNDWATER SAMPLING DATA SHEET
Site Address: 359 Main St., Fortuna, CA
ENSR No. 06940-407-100
Unocal No. 762248

Well/Piezo ID: **MW-18**

Well [x] Piezometer [ ]

ENSR | AECOM

Field Tech(s): JDR

Weather Conditions: COOL + CLR

Well Purging:
Date Purged: 2/22/00
Purge Method: Disposable bailer/other DR PUMP

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 20.24 ft from TOC
Depth to Water: 3.26 ft from TOC
Water Column: 16.98 ft.
Water Column Volume: 2.7 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) = 13.58 6.66

Depth to water after recovery: 6.00 Time: 1115

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other
1018	0 0.5	6.44	37	14.8	99.9	6.20	540	LT BRWN	
1022	1 3.2	3.78	36	14.5	99.9	6.08	-5.0	LT BRWN	
1026	2 5.9	3.45	-20	14.9	0.5 mg/m	6.76	323	LT BRWN	
1030	3 8.6	3.80	-38	15.1	0.5 mg/m	7.10	147	LT BRWN	
	4								

Sample Collection:
Date Sampled: 2/22/00 Sampling Method: Disposable Bailer/Other BAIL Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-18	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8021)	1120
MW-18	1	250 mL Amber	Ice	TPHd (8015M)	

Comments: * MW-18 slow to recharge to 80% at 45 min.
* Dup Note DO = 7.80 mg/l (4S1 550A)

Signature: [signature] Date: 2/22/00

GROUNDWATER SAMPLING DATA SHEET
Site Address: 359 Main St., Fortuna, CA
ENSR No. 06940-407-100
Unocal No. 762248

Well/Piezo ID: **MW-13**

Well [x] Piezometer [ ]

ENSR | AECOM

Field Tech(s): Joe

Weather Conditions: Cool + Clr

Well Purging:
Date Purged: 2/22/06
Purge Method: Disposable bailer/other DC Pump

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 17.96 ft from TOC
Depth to Water: 6.11 ft from TOC
Water Column: 11.85 ft.
Water Column Volume: 1.8 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) = 8.48 (9.48)

Depth to water after recovery: 8.32'

Time: 1200

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other
1058	0 0.5	6.85	-28	15.7	99.9	6.28	859	Lt Gray	
1104	1 2.3	6.23	-65	16.0	97.0	6.48	-5.0	Lemon Aid	
1108	2 4.1	6.04	-66	16.3	95.9	6.40	919	Lemon Aid	
1111	3 5.9	6.17	-66	16.2	93.9	6.42	934	Lemon Aid	
	4								

Sample Collection:
Date Sampled: 2/22/06 Sampling Method: Disposable Bailer/Other Bail Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-13	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8021)	1210
MW-13	1	250 mL Amber	Ice	TPHd (8015M)	1210

Comments: When DE waters at 8 gal. Very slow to recharge ≈ 45 min to 80%
Dwp Hole DO @ 0.4 mg/L (YSI 550A)

Signature: [signature] Date: 2/22/06

GROUNDWATER SAMPLING DATA SHEET
Site Address: 359 Main St., Fortuna, CA
ENSR No. 06940-407-100
Unocal No. 762248

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

Well [x] Piezometer [ ]

ENSR | AECOM

Field Tech(s): JDR

Weather Conditions: COOL + CLR

Well Purging:
Date Purged: 2/22/00
Purge Method: Disposable bailer/other DC PUMP

Casing Material: PVC
Well Diameter: 4.00 in.
Total Depth: 14.55 ft from TOC
Depth to Water: 5.92 ft from TOC
Water Column: 8.63 ft.
Water Column Volume: 5.6 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) = 6.90 7.64

Depth to water after recovery: 12.20 Time: 1600

Time	Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other
1230	0 0.5	6.77	-74	15.2	58.1	6.43	-5	GREY	ODOR OF PRODUCT
1236	1 5.0	4.82	-69	15.4	58.3	6.36	-5	LT GREY	
1242	2 10.1	4.54	-67	15.2	59.6	6.27	-5	LT GREY	
1245	3 12.2	4.24	-63	15.0	60.3	6.30	-5	LT YELLOW BROWN	
	4								

Sample Collection:
Date Sampled: 2/22/00 Sampling Method: Disposable Bailer/Other BAIL Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-5	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8021)	1600
MW-5	1	250 mL Amber	Ice	TPHd (8015M)	1600

Comments: * WELL DEWATERS ≈ 12.5 GAL. RECHARGES VERY SLOW ~2600 ml/min * ONLY DW @ 12.20! WATER AND GREY SLUDGE ON PUMP HOSE. PUMP OFF BOTTOM OF WELL. NO DO TAKEN

Signature: Date:

GROUNDWATER SAMPLING DATA SHEET
Site Address: 359 Main St., Fortuna, CA
ENSR No. 06940-407-100
Unocal No. 762248

Well/Piezo ID: **MW-21**

Well [x] Piezometer [ ]

ENSR | AECOM

Well Purging:
Date Purged: 2/22/06
Purge Method: Disposable bailer/other DC PUMP

Field Tech(s): JDR

Weather Conditions: COLD + CLR

Casing Material: PVC
Well Diameter: 2.00 in.
Total Depth: 20.35 ft from TOC
Depth to Water: 5.92 ft from TOC
Water Column: 14.43 ft.
Water Column Volume: 2.3 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) = 11.54 8.80

Depth to water after recovery: 8.04 Time: 1415

Time		Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other
1330	0	0.5	4.27	-82	15.8	89.7	6.15	816	GREY	
1334	1	2.8	3.51	-81	16.0	89.9	6.22	704	GREY	
1338	2	5.1	4.07	-79	16.4	90.6	6.21	633	LT GREY	
1344	3	7.4	3.88	-61	16.1	90.2	6.30	492	LT GREY	
	4									

Sample Collection:
Date Sampled: 2/22/06 Sampling Method: Disposable Bailer/Other BAIL Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-21	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8021)	1420
MW-21	1	250 mL Amber	Ice	TPHd (8015M)	1420

Comments: WELL SLOW TO RECHARGE ≈ 30 MIN. TO 80%
DWN HOLE DO = 5.8 MGR (YSI 550A)

Signature: [signature] Date: 2/22/06

GROUNDWATER SAMPLING DATA SHEET
Site Address: 359 Main St., Fortuna, CA
ENSR No. 06940-407-100
Unocal No. 762248

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

Well [x] Piezometer [ ]

ENSR | AECOM

Well Purging:
Date Purged: 2/22/06
Purge Method: Disposable bailer/other DC PUMP

Field Tech(s): JDR

Weather Conditions: COLD + CLR

Casing Material: PVC
Well Diameter: 4.00 in.
Total Depth: 19.95 ft from TOC
Depth to Water: 8.53 ft from TOC
Water Column: 11.42 ft.
Water Column Volume: 7.5 gal (WC X VF)

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

80% Recovery from TOC: = Total Depth - (Water Column X .8) = 9.14 10.81'

Depth to water after recovery: 10.12 Time: 1510

Time		Volume Removed (gal)	DO (mg/L)	Redox Potential (ORP) (mVolts)	Temperature (°C)	Specific Conductivity (uS/cm)	pH	Turbidity (NTUs)	Color/Clarity	Other
1424	0	0.5	5.45	-47	16.1	78.2	6.22	85	CLR	
1430	1	8.0	3.87	-49	15.9	79.3	6.17	140	CLR	
1437	2	15.5	4.34	-51	16.2	81.6	6.18	-5	CLOUDY WHITE	
1445	3	23.0	4.93	-53	16.5	85.7	6.17	-5	CLOUDY WHITE/CLR	
	4									

Sample Collection:
Date Sampled: 2/22/06 Sampling Method: Disposable Bailer/Other BAIL Sample Type: Grab

Sample ID	# of containers	Container Type	Preservation	Analysis	Time
MW-4	3	40 mL glass vial	Ice/HCl	TPHg (8015), BTEX (8021)	1515
MW-4	1	250 mL Amber	Ice	TPHd (8015M)	1515

Comments: * WELL DEWATERS ≈ 25 GAL SLOW TO RECHARGE ≈ 25 MIN TO 80%
* SOME PRODUCT ODOR (NOT BAD) NOTHING IN BAILER POST PURGE.
* POST RUN HOLE DO = 6.4 mg/l (YSI 550A)

Signature: [signature] Date: 2/22/06

ENSR | AECOM

WELL GAUGING SHEET

Site Address: 359 Main St., Fortuna, CA

ENSR Job #: 06940-407-100

Unocal Job #: 762248

Date: 5/15/06

Recorded by: Heather Tauscher

	Well ID	PID	TOC/ TOB	Casing Diameter	Time Gauged	Depth to Water	Total Depth	Depth to Product	Product Thickness	Notes
	MW-2	0.1	TOC	4"	16:01	6.29	22.70	N/A	N/A	
	MW-7	0.1		2"	15:19	2.09	10.65			
	MW-8	1.1		2"	14:50	5.22	20.71			water in well head
	MW-9	0.1		2"	15:27	4.91	15.62			
	MW-10	0.9		2"	14:47	2.20	19.71			no bolts water in well head
3	MW-14	1.0		2"	16:53	20.31	38.94			
4	MW-15	1.1		2"	16:57	17.90	38.95			
2	MW-16B	0.3		2"	16:43	25.97	40.54			water in well head
1	MW-17	0.8		2"	16:36	24.74	40.16			
	MW-6	0.5		4"	16:19	5.38	17.08			
	MW-1	622.0		4"	16:29	22.61	38.84			water in well
5	MW-16A	309.0		2"	17:03	9.15	20.29			
7	MW-20	177.0		2"	17:17	4.71	20.21			
	MW-3	0.4		4"	15:48	5.39	25.04			pvc cracked

COMMENTS:

ENSR | AECOM

WELL GAUGING SHEET

Site Address: 359 Main St., Fortuna, CA

ENSR Job #: 06940-407-100

Unocal Job #: 762248

Date: 5/15/06

Recorded by: Heather Tuscher

	Well ID	PID	TOC/ TOB	Casing Diameter	Time Gauged	Depth to Water	Total Depth	Depth to Product	Product Thickness	Notes
10	MW-21	136.0	TOC	2"	17:33	6.24	20.39	N/A	N/A	
8	MW-18	47.9		2"	17:25	3.65	20.28			
9	MW-13	49.6		2"	17:29	6.85	18.16			
6	MW-19	4.6		2"	17:12	6.18	20.33			
	MW-5	15.0		4"	16:13	5.31	14.52			no lock
	MW-4	703.0		4"	16:07	8.54	20.13			water in well head pvc cracked - water accessing well

COMMENTS:

ENSR | AECOM

WELL SAMPLING INFORMATION SHEET

CLIENT: Unocal

PROJECT NO.: 06940-407-100

SITE: 762248

WELL DESIGNATION: **MW-13**

SAMPLER: FRANK SPETH

START DATE/TIME: 5/16/06 16:50

Is setup of traffic control devices required? (NO) YES
Is there standing water in the well box? (NO) YES (above TOC below TOC)
Is well cap sealed and locked? NO (YES) (If NO, please explain in remarks)

Well diameter: (2") ____ 3" ____ 4" ____ 6" ____ 8" ____

Purge Vol. Multiplier: (0.16) 0.37 0.65 1.47 2.61

Depth to Bottom (DTB): 17.96 Depth to water (DTW): 6.85 Water column (Ft): 11.11

Case Volume: 1.77 80% Recharge: 9.08 = DTB - (Water column (Ft) x 0.80) 8.88

Purging Equipment:
X Disposable bailer
____ Dedicated tubing
____ Watera
____ Submersible pump
____ Positive air displacement
____ Peristaltic pump
____ Other

PRE PURGE
DO: .08 mg/L TEMP: 16.6°C ORP: -51 mV

POST PURGE -93mV
DO: .42 mg/L TEMP: 15.0°C ORP: ____

Time	Temp (F) (C)	Conductivity µs | ms	pH	Volume (Gal.)	Observations
16:58	14.9	56.9 mS/m	7.52	2	
17:03	14.9	54.3 mS/m	7.48	4	
17:09	14.7	53.6 mS/m	7.44	6	

Total Volume Removed: 6
Sample Appearance: PALE YELLOW
QC Samples collected at this well: ____
Samped with: Disposable bailer: X Teflon bailer: ____ Dedicated tubing: ____
Sampling Time: ~~15:30~~ 17:30 FS Sampling Date: ____ Depth to Water: 9.01
Field Filter: ____

Sample bottles & associated lab analysis
3- 40-mL glass vial / Ice/HCl / TPHg (8015), BTEX (8021)
1- 250-mL Amber / Ice / TPHd (8015M)

Remarks: ____

(write on back if additional space is needed)

Signature: Frank Speth Review: ____

ENSR | AECOM

WELL SAMPLING INFORMATION SHEET

CLIENT: Unocal PROJECT NO.: 06940-407-100

SITE: 762248 WELL DESIGNATION: **MW-14**

SAMPLER: Heather Tausher START DATE/TIME: 5/16/06 13:25

Is setup of traffic control devices required? (NO) YES
Is there standing water in the well box? NO (YES) (above TOC (below TOC))
Is well cap sealed and locked? NO (YES) (If NO, please explain in remarks)

Well diameter: (2") ____ 3" ____ 4" ____ 6" ____ 8" ____

Purge Vol. Multiplier: (0.16) 0.37 0.65 1.47 2.61

Depth to Bottom (DTB): 37.20 Depth to water (DTW): 20.31 Water column (Ft): 16.89

Case Volume: 2.70 80% Recharge: 23.69 = DTB - (Water column (Ft) x 0.80) 13.51

Purging Equipment:
X Disposable bailer
____ Dedicated tubing
____ Watera
____ Submersible pump
____ Positive air displacement
____ Peristaltic pump
____ Other

PRE PURGE	POST PURGE
DO: 2.92 TEMP: 16.1 ORP: 183	DO: 0.33 TEMP: 16.0 ORP: 188

Time	Temp (F) ((C))	Conductivity µs | ms	pH	Volume (Gal.)	Observations
13:44	16.6	40.0 mS/m	5.87	2.75	Clear
13:52	16.4	43.3 mS/m	6.09	5.50	Clear
13:58	16.6	42.9 mS/m	6.10	8.25	Clear

Total Volume Removed: 8.25
Sample Appearance: ____
QC Samples collected at this well: no
Samped with: Disposable bailer: X Teflon bailer: ____ Dedicated tubing: ____
Sampling Time: 14:00 Sampling Date: 5/16/06 Depth to Water: 20.59
Field Filter: ____

Sample bottles & associated lab analysis
3- 40-mL glass vial / Ice/HCl / TPHg (8015), BTEX (8021)
1- 250-mL Amber / ice / TPHd (8015M)

Remarks: Moderate cracks in apron

(write on back if additional space is needed)

Signature: Heather Tausher Review: ____

ENSR | AECOM

WELL SAMPLING INFORMATION SHEET

CLIENT: Unocal PROJECT NO.: 06940-407-100

SITE: 762248 WELL DESIGNATION: **MW-15**

SAMPLER: Heather Tausher START DATE/TIME: 5/16/06 14:16

Is setup of traffic control devices required? (NO) YES
Is there standing water in the well box? NO YES (above TOC below TOC)
Is well cap sealed and locked? NO (YES) (If NO, please explain in remarks)

Well diameter: (2") 3" 4" 6" 8"

Purge Vol. Multiplier: (0.16) 0.37 0.65 1.47 2.61

Depth to Bottom (DTB): 38.35 Depth to water (DTW): 17.90 Water column (Ft): 20.45

Case Volume: 3.2-1 80% Recharge: 21.99 = DTB - (Water column (Ft) x 0.80) 16.36

Purging Equipment:
X Disposable bailer
Dedicated tubing
Watera
Submersible pump
Positive air displacement
Peristaltic pump
Other

PRE PURGE
DO: 2.63 TEMP: 15.6 ORP: 208

POST PURGE
DO: 0.21 TEMP: ~~21.8~~ 15.8 ORP: 249

Time	Temp (F) (C)	Conductivity µs ms	pH	Volume (Gal.)	Observations
14:37	16.4	39.0 mS/m	6.66	3.25	cloudy, brown
14:44	16.5	40.6 µ S/m	6.60	6.50	cloudy, brown
14:51	16.4	41.0 µ S/m	6.62	9.75	cloudy, brownish

Total Volume Removed: 9.75
Sample Appearance: clear, little cloudy
QC Samples collected at this well: no
Samped with: Disposable bailer: X Teflon bailer: ____ Dedicated tubing: ____
Sampling Time: 14:59 Sampling Date: 5/16/06 Depth to Water: 18.17
Field Filter: ____

Sample bottles & associated lab analysis
3- 40-mL glass vial / Ice/HCl / TPHg (8015), BTEX (8021)
1- 250-mL Amber / Ice / TPHd (8015M)

Remarks: ____

(write on back if additional space is needed)

Signature: [signature] Review: ____

ENSR | AECOM

WELL SAMPLING INFORMATION SHEET

CLIENT: Unocal

PROJECT NO.: 06940-407-100

SITE: 762248

WELL DESIGNATION: **MW-16A**

SAMPLER: FRANK SPETH

START DATE/TIME: 5/16/06 15:35

Is setup of traffic control devices required? NO YES
Is there standing water in the well box? NO YES (above TOC below TOC)
Is well cap sealed and locked? NO YES (If NO, please explain in remarks)

Well diameter: 2" 3" 4" 6" 8"

Purge Vol. Multiplier: 0.16 0.37 0.65 1.47 2.61

Depth to Bottom (DTB): 20.27 Depth to water (DTW): 9.15 Water column (Ft): 11.12

Case Volume: 1.77 80% Recharge: 11.38 = DTB - (Water column (Ft) x 0.80) 9.39

Purging Equipment:
X Disposable bailer
Dedicated tubing
Watera
Submersible pump
Positive air displacement
Peristaltic pump
Other

PRE PURGE
DO: .35 mg/L TEMP: 15.0°C ORP: 137 mV

POST PURGE
DO: .93 mg/L TEMP: 15.1°C ORP: FS 36 mV

Time	Temp (F) (C)	Conductivity µs | ms	pH	Volume (Gal.)	Observations
15:41	15.0	25.1 mS/m	7.03	2	MUDDY WATER
15:47	15.2	20.4 mS/m	7.02	4	↓ ↓
15:53	14.9	23.1 mS/m	7.12	6	
16:10	15.0	24.2 mS/m	7.18	8	

Total Volume Removed: 8
Sample Appearance: MUDDY
QC Samples collected at this well:
Samped with: Disposable bailer: X Teflon bailer: Dedicated tubing:
Sampling Time: ~~16:20~~ FS 16:18 Sampling Date: 5/16/06 Depth to Water: 10.53
Field Filter:

Sample bottles & associated lab analysis
3- 40-mL glass vial / Ice/HCl / TPHg (8015), BTEX (8021)
1- 250-mL Amber / ice / TPHd (8015M)

Remarks: ~~CHAGED~~ FS CHANGED BATTERIES IN HORIBA @ 15:55

(write on back if additional space is needed)

Signature: Frank Speth Review:

ENSR | AECOM

WELL SAMPLING INFORMATION SHEET

CLIENT: Unocal PROJECT NO.: 06940-407-100

SITE: 762248 WELL DESIGNATION: **MW-16B**

SAMPLER: FRANK SPETH START DATE/TIME: 5/16/06 14:50

Is setup of traffic control devices required? (NO) YES
Is there standing water in the well box? NO (YES) (above TOC (below TOC))
Is well cap sealed and locked? NO (YES) (If NO, please explain in remarks)

Well diameter: (2") 3" 4" 6" 8"

Purge Vol. Multiplier: (0.16) 0.37 0.65 1.47 2.61

Depth to Bottom (DTB): 40.68 Depth to water (DTW): 25.97 Water column (Ft): 14.71

Case Volume: 2.35 80% Recharge: 28.92 = DTB - (Water column (Ft) x 0.80) 11.776

Purging Equipment:
X Disposable bailer
Dedicated tubing
Watera
Submersible pump
Positive air displacement
Peristaltic pump
Other

PRE PURGE
DO: .77 mg/L TEMP: 16.5°C ORP: 287mV

POST PURGE
DO: .40 mg/L TEMP: 16.5°C ORP: 289mV

Time	Temp (F) (C)	Conductivity µs / ms	pH	Volume (Gal.)	Observations
14:57	16.4	25.7mS/m	6.84	2.5	WATER MUDDY
15:03	16.2	25.6mS/m	6.90	5	WATER MUDDY
15:10	16.2	25.9mS/m	6.98	7.5	WATER MUDDY

Total Volume Removed: 7.5
Sample Appearance: MUDDY
QC Samples collected at this well:
Samped with: Disposable bailer: X Teflon bailer: Dedicated tubing:
Sampling Time: 15:18 Sampling Date: 5/16/06 Depth to Water: 26.24
Field Filter:

Sample bottles & associated lab analysis
3- 40-mL glass vial / Ice/HCl / TPHg (8015), BTEX (8021)
1- 250-mL Amber / Ice / TPHd (8015M)

Remarks:

(write on back if additional space is needed)

Signature: Frank Speth Review:

ENSR | AECOM

WELL SAMPLING INFORMATION SHEET

CLIENT: Unocal

PROJECT NO.: 06940-407-100

SITE: 762248

WELL DESIGNATION: **MW-17**

SAMPLER: FRANK SPOTH

START DATE/TIME: 05/16/06 13:35

Is setup of traffic control devices required? (NO) YES
Is there standing water in the well box? (NO) YES (above TOC below TOC)
Is well cap sealed and locked? NO (YES) (If NO, please explain in remarks)

Well diameter: (2") 3" 4" 6" 8"

Purge Vol. Multiplier: (0.16) 0.37 0.65 1.47 2.61

Depth to Bottom (DTB): 40.29 Depth to water (DTW): 24.74 Water column (Ft): 15.55

Case Volume: 2.48 80% Recharge: 27.85 = DTB - (Water column (Ft) x 0.80) 12.44

Purging Equipment:
X Disposable bailer
Dedicated tubing
Watera
Submersible pump
Positive air displacement
Peristaltic pump
Other

PRE PURGE
DO: 1.04 mg/L TEMP: 16.3°C ORP: 254mV

POST PURGE
DO: 1.20 TEMP: 16.1°C ORP: 295mV

Time	Temp (F) (C)	Conductivity µs / ms	pH	Volume (Gal.)	Observations
1341	16.3	32.6 mS/m	7.12	2.5	MUDDY
13:50	16.1	32.7 mS/m	6.99	5	MUDDY
14:02	16.3	32.7 mS/m	7.11	7.5	MUDDY

Total Volume Removed: 7.5
Sample Appearance: MUDDY
QC Samples collected at this well:
Samped with: Disposable bailer: X Teflon bailer: Dedicated tubing:
Sampling Time: 14:08 Sampling Date: 5/16/06 Depth to Water: 25.34
Field Filter:

Sample bottles & associated lab analysis
3- 40-mL glass vial / Ice/HCl / TPHg (8015), BTEX (8021)
1- 250-mL Amber / Ice / TPHd (8015M)

Remarks:

(write on back if additional space is needed)

Signature: Frank Spoth Review:

ENSR | AECOM

WELL SAMPLING INFORMATION SHEET

CLIENT: Unocal

PROJECT NO.: 06940-407-100

SITE: 762248

WELL DESIGNATION: **MW-18**

SAMPLER: Heather Tawker

START DATE/TIME: 5/16/06 16:36

Is setup of traffic control devices required? (NO) YES
Is there standing water in the well box? (NO) YES (above TOC below TOC)
Is well cap sealed and locked? NO (YES) (If NO, please explain in remarks)

Well diameter: (2") 3" 4" 6" 8"

Purge Vol. Multiplier: (0.16) 0.37 0.65 1.47 2.61

Depth to Bottom (DTB): 20.24 Depth to water (DTW): 3.65 Water column (Ft): 16.59

Case Volume: 2.65 80% Recharge: 6.97 = DTB - (Water column (Ft) x 0.80) 13.27

Purging Equipment:
X Disposable bailer
Dedicated tubing
Watera
Submersible pump
Positive air displacement
Peristaltic pump
Other

PRE PURGE
DO: 0.31 TEMP: 14.7 ORP: 24

POST PURGE
DO: 0.33 TEMP: 14.6 ORP: 30

Time	Temp (F) (C)	Conductivity µs | ms	pH	Volume (Gal.)	Observations
16:43	14.7	67.6 mS/m	6.27	2.75	cloudy, odor
16:51	14.4	66.0 mS/m	6.23	5.50	cloudy, odor
16:56	14.8	66.8 mS/m	6.25	8.25	cloudy, odor

Total Volume Removed: 8.25
Sample Appearance: clear
QC Samples collected at this well: yes MW-18B 18:04
Samped with: Disposable bailer: X Teflon bailer: Dedicated tubing:
Sampling Time: 18:00 Sampling Date: 5/16/06 Depth to Water: 4.98 @ 17:56
Field Filter:

Sample bottles & associated lab analysis
3- 40-mL glass vial / Ice/HCl / TPHg (8015), BTEX (8021)
1- 250-mL Amber / Ice / TPHd (8015M)

Remarks: This well also slow recovery, will sample after last well is purged.

(write on back if additional space is needed)

Signature: Heather Tawker Review:

ENSR | AECOM

WELL SAMPLING INFORMATION SHEET

CLIENT: Unocal PROJECT NO.: 06940-407-100

SITE: 762248 WELL DESIGNATION: **MW-19**

SAMPLER: Heather Tausher START DATE/TIME: 5/16/06 15:13

Is setup of traffic control devices required? NO YES
Is there standing water in the well box? NO YES (above TOC below TOC)
Is well cap sealed and locked? NO YES (If NO, please explain in remarks)

Well diameter: 2" ____ 3" ____ 4" ____ 6" ____ 8" ____

Purge Vol. Multiplier: 0.16 0.37 0.65 1.47 2.61

Depth to Bottom (DTB): 20.32 Depth to water (DTW): 6.18 Water column (Ft): 14.14

Case Volume: 2.24 80% Recharge: 9.01 = DTB - (Water column (Ft) x 0.80) 11.31

Purging Equipment:
X Disposable bailer
____ Dedicated tubing
____ Watera
____ Submersible pump
____ Positive air displacement
____ Peristaltic pump
____ Other

PRE PURGE
DO: 0.29 TEMP: 15.8 ORP: 71

POST PURGE
DO: 0.24 TEMP: 15.9 ORP: -20

Time	Temp (F) (C)	Conductivity µs | ms	pH	Volume (Gal.)	Observations
15:19	16.1	50.8 mS/m	6.66	2.25	Cloudy, yellowish, odor
15:26	16.1	58.4 mS/m	6.25	4.50	Cloudy, yellowish, odor
15:31	16.1	59.1 mS/m	6.27	6.75	Cloudy, yellowish, odor

Total Volume Removed: 6.75
Sample Appearance: cloudy yellowish
QC Samples collected at this well: no
Samped with: Disposable bailer: X Teflon bailer: ____ Dedicated tubing: ____
Sampling Time: 15:37 Sampling Date: 5/16/06 Depth to Water: 7.35
Field Filter: ____

Sample bottles & associated lab analysis
3- 40-mL glass vial / Ice/HCl / TPHg (8015), BTEX (8021)
1- 250-mL Amber / Ice / TPHd (8015M)

Remarks: moderately cracked apron

(write on back if additional space is needed)

Signature: [signature] Review: ____

ENSR | AECOM

WELL SAMPLING INFORMATION SHEET

CLIENT: Unocal PROJECT NO.: 06940-407-100

SITE: 762248 WELL DESIGNATION: **MW-20**

SAMPLER: Heather Tausher START DATE/TIME: 5/16/06 15:53

Is setup of traffic control devices required? (NO) YES
Is there standing water in the well box? (NO) YES (above TOC below TOC)
Is well cap sealed and locked? NO (YES) (If NO, please explain in remarks)

Well diameter: (2") 3" 4" 6" 8"

Purge Vol. Multiplier: (0.16) 0.37 0.65 1.47 2.61

Depth to Bottom (DTB): 20.15 Depth to water (DTW): 4.71 Water column (Ft): 15.44

Case Volume: 2.47 80% Recharge: 7.8 = DTB - (Water column (Ft) x 0.80) 12.35

Purging Equipment:
X Disposable bailer
Dedicated tubing
Watera
Submersible pump
Positive air displacement
Peristaltic pump
Other

PRE PURGE
DO: 0.21 TEMP: 16.4 ORP: -67

POST PURGE
DO: 0.16 TEMP: 15.8 ORP: -3

Time	Temp (F) (C)	Conductivity µs | ms	pH	Volume (Gal.)	Observations
16:03	15.8	54.8 mS/m	6.27	2.5	odor
16:11	15.5	53.4 mS/m	6.16	5.0	odor
16:16	15.6	52.9 mS/m	6.19	7.5	cloudy, yellow, odor

Total Volume Removed: 7.5
Sample Appearance: clear
QC Samples collected at this well: no
Samped with: Disposable bailer: X Teflon bailer: _____ Dedicated tubing: _____
Sampling Time: 17:49 Sampling Date: 5/16/06 Depth to Water: 7.01 @ 17:45
Field Filter: _____

Sample bottles & associated lab analysis
3- 40-mL glass vial / Ice/HCl / TPHg (8015), BTEX (8021)
1- 250-mL Amber / Ice / TPHd (8015M)

Remarks: This well is slow to recover will come back to it.

(write on back if additional space is needed)

Signature: Heather M Tausher Review: _____

ENSR | AECOM

WELL SAMPLING INFORMATION SHEET

CLIENT: Unocal

PROJECT NO.: 06940-407-100

SITE: 762248

WELL DESIGNATION: **MW-21**

SAMPLER: Heather Tauscher

START DATE/TIME: 5/16/06 17:08

Is setup of traffic control devices required? NO YES
Is there standing water in the well box? NO YES (above TOC below TOC)
Is well cap sealed and locked? NO YES (If NO, please explain in remarks)

Well diameter: 2" ___ 3" ___ 4" ___ 6" ___ 8" ___

Purge Vol. Multiplier: 0.16 0.37 0.65 1.47 2.61

Depth to Bottom (DTB): 20.35 Depth to water (DTW): 6.24 Water column (Ft): 14.11

Case Volume: 2.25 80% Recharge: 9.07 = DTB - (Water column (Ft) x 0.80) 11.28

Purging Equipment:
X Disposable bailer
___ Dedicated tubing
___ Watera
___ Submersible pump
___ Positive air displacement
___ Peristaltic pump
___ Other

PRE PURGE
DO: 0.24 TEMP: 15.3 ORP: -121

POST PURGE
DO: 0.09 TEMP: 14.9 ORP: -45

Time	Temp (F) (C)	Conductivity µs | ms	pH	Volume (Gal.)	Observations
17:15	15.6	51.5 mS/m	6.47	2.25	cloudy, grey, odor
17:20	15.4	48.2 mS/m	6.37	4.50	cloudy, grey, odor
17:27	15.4	48.1 mS/m	6.39	6.75	cloudy, grey, odor

Total Volume Removed: 6.75
Sample Appearance: cloudy, grey
QC Samples collected at this well: no
Samped with: Disposable bailer: X Teflon bailer: ___ Dedicated tubing: ___
Sampling Time: 17:33 Sampling Date: 5/16/06 Depth to Water: 9.02
Field Filter: ___

Sample bottles & associated lab analysis
3- 40-mL glass vial / Ice/HCl / TPHg (8015), BTEX (8021)
1- 250-mL Amber / Ice / TPHd (8015M)

Remarks: ___

(write on back if additional space is needed)

Signature: [signature] Review: ___

ENSR | AECOM

CHAIN OF CUSTODY

Lab: CLS

TAT: Standard

Report results to:

Name	Jennifer Johnston
Company	ENSR
Mailing Address	10461 Old Placerville Road, Suite 170
City, State, Zip	Sacramento, CA 95827
Telephone No.	916-362-7100
Fax No.	916-362-8100

Project Information

Site Address:	359 Main St., Fortuna
ENSR No.	06940-407-100
Unocal No.	762248
Global ID No.	T0602393213

Special instructions and/or specific regulatory requirements:
*Run TPHd w/ Silica Gel Cleanup on ALL TPHd HITS

Analyses Requested

Sample Identification	Date Sampled	Time Sampled	Matrix/ Media	No. of Conts.	TPHg 8015	BTEX 8021	TPHd 8015 w/SGC	Sample Condition/Comments	Preservative
MW-14	5/16/06	14:06	GW	3	X	X			HCL
MW-14	5/16/06	14:06	GW	1			X		none
MW-15	5/16/06	14:59	GW	3	X	X			HCL
MW-15	5/16/06	14:59	GW	1			X		none
MW-19	5/16/06	15:37	GW	3	X	X			HCL
MW-19	5/16/06	15:37	GW	1			X		none
MW-21	5/16/06	17:33	GW	3	X	X			HCL
MW-21	5/16/06	17:33	GW	1			X		none
MW-18	5/16/06	18:00	GW	3	X	X			HCL
MW-18	5/16/06	18:00	GW	1			X		none
MW-18B	5/16/06	18:04	GW	3	X	X			HCL
MW-18B	5/16/06	18:04	GW	1			X		none
TRIP BLANK	5/16/06	00:00	W	1			X		none
Trip Blank	5/16/06	00:00	W	3 ~~4~~	X	X	~~X~~		HCL/none

Collected by: Heather Tausche Date/Time 5/16/06 Collector's Signature: [signature] Date/Time 5/16/06

Relinquished by: Heather Tausche Date/Time 5/17/06 18:50 Received by: FRANK SPOTH Date/Time 5/17/06 18:50

Relinquished by: FRANK SPOTH Date/Time 5/18/06 8:40 Received by: [signature] MARK SMITH Date/Time 5/18/06 0840

Method of Shipment:

Sample Condition on Rcpt:

Relinq: [signature] 5/18/06 1210 Rcd: [illegible]

ENSR | AECOM

CHAIN OF CUSTODY

Lab: CLS

TAT: Standard

Report results to:

Name	Jennifer Johnston
Company	ENSR
Mailing Address	10461 Old Placerville Road, Suite 170
City, State, Zip	Sacramento, CA 95827
Telephone No.	916-362-7100
Fax No.	916-362-8100

Project Information

Site Address:	359 Main St., Fortuna
ENSR No.	06940-407-100
Unocal No.	762248
Global ID No.	T0602393213

Special instructions and/or specific regulatory requirements:
*Run TPHd w/ Silica Gel Cleanup on ALL TPHd HITS

Analyses Requested

Sample Identification	Date Sampled	Time Sampled	Matrix/ Media	No. of Cons.	TPHg 8015	BTEX 8021	TPHd 8015 w/SGC	Sample Condition/Comments	Preservative
MW-17	5/16/06	14:08	GW	2	X	X			HCL
MW-17	5/16/06	14:08	GW	1			X		None
MW-16B	5/16/06	15:18	GW	3	X	X			HCL
MW-16B	5/16/06	15:18	GW	1			X		None
MW-16A	5/16/06	16:18	GW	3	X	X			HCL
MW-16A	5/16/06	16:18	GW	1			X		None
MW-13	5/16/06	17:30	GW	3	X	X			HCL
MW-13	5/16/06	17:30	GW	1			X		None

Collected by: FRANK SPOTH Date/Time 05/16/06 Collector's Signature [signature] Date/Time 5/16/06

Relinquished by: [signature] Date/Time 5/18/06 8:40 Received by: [signature] Date/Time 5/18/06 0840

Relinquished by: [signature] Date/Time 5/18/06 1210 Received by: [signature] Date/Time 5-18-6 1210

Method of Shipment: Sample Condition on Rcpt:

APPENDIX C

LABORATORY ANALYTICAL RESULTS WITH CHAIN-OF-CUSTODY DOCUMENTATION

First Quarter Data (CLS report dated March 6, 2006)
Second Quarter Data (CLS report dated May 30, 2006)

CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

March 06, 2006

CLS Work Order #: CPB0718
COC #: 40561,40562,40563

Jennifer Johnston
ENSR - Sacramento
10461 Old Placerville Rd., Suite 170
Sacramento, CA 95827-2508

Project Name: Frmr. Unocal 762248-359 Main St.
Fortuna,CA

Enclosed are the results of analyses for samples received by the laboratory on 02/24/06 07:11. 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

 03/06/06 09:55

ENSR - Sacramento	Project: Frmr. Unocal 762248-359 Main St. Fortuna,CA	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-407-100	**CLS Work Order #: CPB0718**
Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: 40561,40562,40563

CPB0718

ENSR INTERNATIONAL

CHAIN OF CUSTODY RECORD

Page 1 of 3

Client/Project Name: ENSR/Unocal #762248

Project Location: 359 Main Street Fortuna, CA

Project Number: 06940-407-100

Field Logbook No.: -

Sampler (Print Name)/(Affiliation): Troy Wenham/ENSR

Signature:

Chain of Custody Tape No.: -

Send Results/Report to: Jennifer Johnston/ENSR 10461 Old Placerville Rd Suite 170 Sacramento, CA 95827

Analysis Requested: TPHg 8015; BTEX 8021; TPHd 8015 w/SGC

TAT-Standard

	Field Sample No./ Identification	Date	Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, Etc.)	Preservative	Field Filtered	TPHg 8015	BTEX 8021	TPHd 8015 w/SGC					Lab I.D.	Remarks
1	MW-1	2-22-06	1054	X		3-40mL/VOA's 1-250mL/Amber	Liquid	ICE/HCL		X	X	X						
2	MW-2	2-22-06	0930	X		1-250mL/Amber	Liquid	Ice				X						
3	MW-3	2-22-06	1418	X		3-40mL/VOA's 1-250mL/Amber	Liquid	Ice/HCL		X	X	X						
4	MW-31	2-22-06	1448	X		3-40mL/VOA's 1-250mL/Amber	Liquid	Ice/HCL		X	X	X						
5	MW-4	2-22-06	1515	X		3-40mL/VOA's 1-250mL/Amber	Liquid	Ice/HCL		X	X	X						
6	MW-5	2-22-06	1600	X		3-40mL/VOA's 1-250mL/Amber	Liquid	Ice/HCL		X	X	X						
7	MW-6	2-22-06	1252	X		3-40mL/VOA's 1-250mL/Amber	Liquid	Ice/HCL		X	X	X						
8	MW-7	2-21-06	1350	X		1-250mL/Amber	Liquid	Ice				X						
9	MW-8	2-21-06	1440	X		1-250mL/Amber	Liquid	Ice				X						
10	MW-9	2-21-06	1304	X		1-250mL/Amber	Liquid	Ice				X						

Relinquished by: (Print Name)/(Affiliation)	Date	Relinquished by: (Print Name)/(Affiliation)	Date
Troy Wenham/ENSR Signature:	2-24-06 Time: 0711	MARC SMITH Signature:	2/24/06 Time: 0711
Relinquished by: (Print Name)/(Affiliation) Signature:	Date: Time:	Relinquished by: (Print Name)/(Affiliation) Signature:	Date: Time:
Relinquished by: (Print Name)/(Affiliation) Signature:	Date: Time:	Relinquished by: (Print Name)/(Affiliation) Signature:	Date: Time:

Analytical Laboratory (Destination):

CLS
3249 Fitzgerald Road
Rancho Cordova, CA
95742

Serial № 40561

FM01008a_902

3°C

CALIFORNIA LABORATORY SERVICES

 03/06/06 09:55

ENSR - Sacramento	Project: Frmr. Unocal 762248-359 Main St. Fortuna,CA	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-407-100	**CLS Work Order #: CPB0718**
Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: 40561,40562,40563

CPB0718

ENSR INTERNATIONAL

CHAIN OF CUSTODY RECORD

Page 2 of 3

Client/Project Name: ENSR / Unocal #762248

Project Location: 359 Main Street Fortuna, CA

Project Number: 06940-407-100

Field Logbook No.: -

Sampler (Print Name)/(Affiliation): Troy Wenham / ENSR

Signature:

Chain of Custody Tape No.: -

Send Results/Report to: Jennifer Johnston / ENSR, 10461 Old Placerville Rd, Suite 170, Sacramento, CA 95827

Analysis Requested: TPH-g 8015; BTEX 8021; TPHd 8015 w/SGC

TAT-Standard

	Field Sample No./ Identification	Date	Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, Etc.)	Preservative	Field Filtered	TPH-g 8015	BTEX 8021	TPHd 8015 w/SGC						Lab I.D.	Remarks
11	MW-10	2-21-06	1530	X		1-250mL/Amber	Liquid	Ice				X							
12	MW-13	2-22-06	1210	X		3-40mL/VOA's 1-250mL/Amber	Liquid	Ice/HCL		X	X	X							
13	MW-14	2-21-06	1520	X		3-40mL/VOA's 1-250mL/Amber	Liquid	Ice/HCL		X	X	X							
14	MW-15	2-22-06	1145	X		3-40mL/VOA's 1-250mL/Amber	Liquid	Ice/HCL		X	X	X							
15	MW-16A	2-22-06	1530	X		3-40mL/VOA's 1-250mL/Amber	Liquid	Ice/HCL		X	X	X							
16	MW-16B	2-21-06	1355	X		3-40mL/VOA's 1-250mL/Amber	Liquid	Ice/HCL		X	X	X							
17	MW-17	2-21-06	1438	X		3-40mL/VOA's 1-250mL/Amber	Liquid	Ice/HCL		X	X	X							
18	MW-18	2-22-06	1120	X		3-40mL/VOA's 1-250mL/Amber	Liquid	Ice/HCL		X	X	X							
19	MW-19	2-22-06	0900	X		3-40mL/VOA's 1-250mL/Amber	Liquid	Ice/HCL		X	X	X							
20	MW-20	2-22-06	1040	X		3-40mL/VOA's 1-250mL/Amber	Liquid	Ice/HCL		X	X	X							

Relinquished by: (Print Name)/(Affiliation)	Date / Time	Relinquished by: (Print Name)/(Affiliation)	Date / Time
Troy Wenham / ENSR Signature:	Date: 2-24-06 Time: 0711	MARK SMITH Signature:	Date: 2/24/06 Time: 0711
Relinquished by: (Print Name)/(Affiliation) Signature:	Date: Time:	Relinquished by: (Print Name)/(Affiliation) Signature:	Date: Time:
Relinquished by: (Print Name)/(Affiliation) Signature:	Date: Time:	Relinquished by: (Print Name)/(Affiliation) Signature:	Date: Time:

Analytical Laboratory (Destination):
CLS
3249 Fitzgerald Road
Rancho Cordova, CA
95742

Serial № 40562

FM01008a_902

CALIFORNIA LABORATORY SERVICES

 03/06/06 09:55

ENSR - Sacramento	Project: Frmr. Unocal 762248-359 Main St. Fortuna,CA	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-407-100	**CLS Work Order #: CPB0718**
Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: 40561,40562,40563

CPB0718

ENSR INTERNATIONAL

CHAIN OF CUSTODY RECORD

Page 3 of 3

Client/Project Name: ENSR/Unocal #762248

Project Location: 359 Main Street Fortuna, CA

Project Number: 06940-407-100

Field Logbook No.:

Sampler (Print Name)/(Affiliation): Troy Wenham/ENSR

Signature:

Chain of Custody Tape No.:

Send Results/Report to: Jennifer Johnston/ENSR 10461 Old Placerville Rd Suite 170 Sacramento, CA 95827

Analysis Requested: TPHg 8015; BTEX 8021; TPHd 8015 w/SGC

TAT-Standard

	Field Sample No./Identification	Date	Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, Etc.)	Preservative	Field Filtered	TPHg 8015	BTEX 8021	TPHd 8015 w/SGC						Lab I.D.	Remarks
01	MW-21	2-22-06	1420	X		3-40mL/VOA's 1-250mL/Amber	Liquid	Ice/HCL		X	X	X							
02	Trip Blank	2-15-06	–	X		3-40mL/VOA's	Liquid	Ice/HCL		X	X								

Relinquished by: (Print Name)/(Affiliation)	Date/Time	Relinquished by: (Print Name)/(Affiliation)	Date/Time
Troy Wenham/ENSR Signature:	Date: 2-24-06 Time: 0711	MARK SMITH Signature:	Date: 2/24/06 Time: 0711
Relinquished by: (Print Name)/(Affiliation) Signature:	Date: Time:	Relinquished by: (Print Name)/(Affiliation) Signature:	Date: Time:
Relinquished by: (Print Name)/(Affiliation) Signature:	Date: Time:	Relinquished by: (Print Name)/(Affiliation) Signature:	Date: Time:

Analytical Laboratory (Destination): CLS 3249 Fitzgerald Road Rancho Cordova, CA 95742

Serial № 40563

FM01008a_902

CALIFORNIA LABORATORY SERVICES

 03/06/06 09:55

ENSR - Sacramento	Project: Frmr. Unocal 762248-359 Main St. Fortuna,CA	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-407-100	**CLS Work Order #: CPB0718**
Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: 40561,40562,40563

Extractable Petroleum Hydrocarbons by EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (CPB0718-01) Water	**Sampled: 02/22/06 10:54**	**Received: 02/24/06 07:11**							**EXT-3**
Diesel	ND	0.050	mg/L	1	CP01446	02/27/06	02/28/06	EPA 8015M	
MW-2 (CPB0718-02) Water	**Sampled: 02/22/06 09:30**	**Received: 02/24/06 07:11**							**EXT-3**
Diesel	ND	0.050	mg/L	1	CP01446	02/27/06	02/28/06	EPA 8015M	
MW-3 (CPB0718-03) Water	**Sampled: 02/22/06 14:18**	**Received: 02/24/06 07:11**							**EXT-3**
Diesel	**2.9**	0.050	mg/L	1	CP01446	02/27/06	02/28/06	EPA 8015M	D-DSL
MW-31 (CPB0718-04) Water	**Sampled: 02/22/06 14:48**	**Received: 02/24/06 07:11**							**EXT-3**
Diesel	**2.5**	0.050	mg/L	1	CP01446	02/27/06	02/28/06	EPA 8015M	D-DSL
MW-4 (CPB0718-05) Water	**Sampled: 02/22/06 15:15**	**Received: 02/24/06 07:11**							**EXT-3**
Diesel	**3.2**	0.050	mg/L	1	CP01446	02/27/06	02/28/06	EPA 8015M	D-DSL
MW-5 (CPB0718-06) Water	**Sampled: 02/22/06 16:00**	**Received: 02/24/06 07:11**							**EXT-3**
Diesel	ND	0.050	mg/L	1	CP01446	02/27/06	02/28/06	EPA 8015M	
MW-6 (CPB0718-07) Water	**Sampled: 02/22/06 12:52**	**Received: 02/24/06 07:11**							**EXT-3**
Diesel	ND	0.050	mg/L	1	CP01446	02/27/06	02/28/06	EPA 8015M	
MW-7 (CPB0718-08) Water	**Sampled: 02/21/06 13:50**	**Received: 02/24/06 07:11**							**EXT-3**
Diesel	ND	0.050	mg/L	1	CP01446	02/27/06	02/28/06	EPA 8015M	
MW-8 (CPB0718-09) Water	**Sampled: 02/21/06 14:40**	**Received: 02/24/06 07:11**							**EXT-3**
Diesel	ND	0.050	mg/L	1	CP01446	02/27/06	02/28/06	EPA 8015M	

CALIFORNIA LABORATORY SERVICES

 03/06/06 09:55

ENSR - Sacramento	Project: Frmr. Unocal 762248-359 Main St. Fortuna,CA	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-407-100	**CLS Work Order #: CPB0718**
Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: 40561,40562,40563

Extractable Petroleum Hydrocarbons by EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-9 (CPB0718-10) Water	**Sampled: 02/21/06 13:04**	**Received: 02/24/06 07:11**							**EXT-3**
Diesel	ND	0.050	mg/L	1	CP01446	02/27/06	02/28/06	EPA 8015M	
MW-10 (CPB0718-11) Water	**Sampled: 02/21/06 15:30**	**Received: 02/24/06 07:11**							**EXT-3**
Diesel	ND	0.050	mg/L	1	CP01446	02/27/06	02/28/06	EPA 8015M	
MW-13 (CPB0718-12) Water	**Sampled: 02/22/06 12:10**	**Received: 02/24/06 07:11**							**EXT-3**
Diesel	**5.9**	0.050	mg/L	1	CP01446	02/27/06	02/28/06	EPA 8015M	D-DSL
MW-14 (CPB0718-13) Water	**Sampled: 02/21/06 15:20**	**Received: 02/24/06 07:11**							**EXT-3**
Diesel	ND	0.050	mg/L	1	CP01446	02/27/06	02/28/06	EPA 8015M	
MW-15 (CPB0718-14) Water	**Sampled: 02/22/06 11:45**	**Received: 02/24/06 07:11**							**EXT-3**
Diesel	ND	0.050	mg/L	1	CP01446	02/27/06	02/28/06	EPA 8015M	
MW-16A (CPB0718-15) Water	**Sampled: 02/22/06 15:30**	**Received: 02/24/06 07:11**							**EXT-3**
Diesel	**0.37**	0.050	mg/L	1	CP01446	02/27/06	02/28/06	EPA 8015M	D-DSL
MW-16B (CPB0718-16) Water	**Sampled: 02/21/06 13:55**	**Received: 02/24/06 07:11**							**EXT-3**
Diesel	ND	0.050	mg/L	1	CP01446	02/27/06	02/28/06	EPA 8015M	
MW-17 (CPB0718-17) Water	**Sampled: 02/21/06 14:38**	**Received: 02/24/06 07:11**							**EXT-3**
Diesel	ND	0.050	mg/L	1	CP01446	02/27/06	02/28/06	EPA 8015M	
MW-18 (CPB0718-18) Water	**Sampled: 02/22/06 11:20**	**Received: 02/24/06 07:11**							**EXT-3**
Diesel	**1.4**	0.050	mg/L	1	CP01446	02/27/06	02/28/06	EPA 8015M	D-DSL

CALIFORNIA LABORATORY SERVICES

 03/06/06 09:55

ENSR - Sacramento	Project: Frmr. Unocal 762248-359 Main St. Fortuna,CA	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-407-100	**CLS Work Order #: CPB0718**
Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: 40561,40562,40563

Extractable Petroleum Hydrocarbons by EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-19 (CPB0718-19) Water	**Sampled: 02/22/06 09:00**	**Received: 02/24/06 07:11**							**EXT-3**
Diesel	**1.3**	0.050	mg/L	1	CP01446	02/27/06	02/28/06	EPA 8015M	D-DSL
MW-20 (CPB0718-20) Water	**Sampled: 02/22/06 10:40**	**Received: 02/24/06 07:11**							**EXT-3**
Diesel	**0.68**	0.050	mg/L	1	CP01446	02/27/06	02/28/06	EPA 8015M	D-DSL
MW-21 (CPB0718-21) Water	**Sampled: 02/22/06 14:20**	**Received: 02/24/06 07:11**							**EXT-3**
Diesel	**3.1**	0.050	mg/L	1	CP01407	02/24/06	02/25/06	EPA 8015M	D-DSL

CALIFORNIA LABORATORY SERVICES

 03/06/06 09:55

ENSR - Sacramento	Project: Frmr. Unocal 762248-359 Main St. Fortuna,CA	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-407-100	**CLS Work Order #: CPB0718**
Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: 40561,40562,40563

Gas/BTEX by GC PID/FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (CPB0718-01) Water Sampled: 02/22/06 10:54 Received: 02/24/06 07:11									
Gasoline	**3900**	500	µg/L	10	CP01464	02/27/06	02/27/06	8015M/8021B	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	**290**	5.0	"	"	"	"	"	"	
Ethylbenzene	**14**	5.0	"	"	"	"	"	"	
Xylenes (total)	**1200**	100	"	100	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*100 %*	*65-135*		"	"	"	"	
MW-3 (CPB0718-03) Water Sampled: 02/22/06 14:18 Received: 02/24/06 07:11									
Gasoline	**3300**	500	µg/L	10	CP01463	02/24/06	02/24/06	8015M/8021B	
Benzene	**180**	5.0	"	"	"	"	"	"	
Toluene	**16**	5.0	"	"	"	"	"	"	
Ethylbenzene	**21**	5.0	"	"	"	"	"	"	
Xylenes (total)	**250**	10	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*88.5 %*	*65-135*		"	"	"	"	
MW-31 (CPB0718-04) Water Sampled: 02/22/06 14:48 Received: 02/24/06 07:11									
Gasoline	**3200**	250	µg/L	5	CP01464	02/27/06	02/27/06	8015M/8021B	
Benzene	**150**	2.5	"	"	"	"	"	"	
Toluene	**15**	2.5	"	"	"	"	"	"	
Ethylbenzene	**21**	2.5	"	"	"	"	"	"	
Xylenes (total)	**260**	5.0	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*93.5 %*	*65-135*		"	"	"	"	
MW-4 (CPB0718-05) Water Sampled: 02/22/06 15:15 Received: 02/24/06 07:11									
Gasoline	**88000**	2500	µg/L	50	CP01477	02/28/06	02/28/06	8015M/8021B	
Benzene	**7000**	250	"	500	"	"	"	"	
Toluene	**4100**	250	"	"	"	"	"	"	
Ethylbenzene	**980**	250	"	"	"	"	"	"	
Xylenes (total)	**5000**	500	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*104 %*	*65-135*		"	"	"	"	

CALIFORNIA LABORATORY SERVICES

 03/06/06 09:55

ENSR - Sacramento	Project: Frmr. Unocal 762248-359 Main St. Fortuna,CA	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-407-100	**CLS Work Order #: CPB0718**
Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: 40561,40562,40563

Gas/BTEX by GC PID/FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (CPB0718-06) Water Sampled: 02/22/06 16:00 Received: 02/24/06 07:11									
Gasoline	**14000**	500	µg/L	10	CP01464	02/27/06	02/27/06	8015M/8021B	
Benzene	**670**	50	"	100	"	"	"	"	
Toluene	**180**	5.0	"	10	"	"	"	"	
Ethylbenzene	**410**	50	"	100	"	"	"	"	
Xylenes (total)	**3400**	100	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*94.0 %*	*65-135*		"	"	"	"	
MW-6 (CPB0718-07) Water Sampled: 02/22/06 12:52 Received: 02/24/06 07:11									
Gasoline	**62**	50	µg/L	1	CP01464	02/27/06	02/27/06	8015M/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	**1.5**	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*88.5 %*	*65-135*		"	"	"	"	
MW-13 (CPB0718-12) Water Sampled: 02/22/06 12:10 Received: 02/24/06 07:11									
Gasoline	**18000**	500	µg/L	10	CP01477	02/28/06	02/28/06	8015M/8021B	
Benzene	**1900**	50	"	100	"	"	"	"	
Toluene	**180**	5.0	"	10	"	"	"	"	
Ethylbenzene	**1200**	50	"	100	"	"	"	"	
Xylenes (total)	**3800**	100	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*97.0 %*	*65-135*		"	"	"	"	
MW-14 (CPB0718-13) Water Sampled: 02/21/06 15:20 Received: 02/24/06 07:11									
Gasoline	ND	50	µg/L	1	CP01464	02/27/06	02/27/06	8015M/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*91.0 %*	*65-135*		"	"	"	"	

CALIFORNIA LABORATORY SERVICES

 03/06/06 09:55

ENSR - Sacramento	Project: Frmr. Unocal 762248-359 Main St. Fortuna,CA	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-407-100	**CLS Work Order #: CPB0718**
Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: 40561,40562,40563

Gas/BTEX by GC PID/FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-15 (CPB0718-14) Water Sampled: 02/22/06 11:45 Received: 02/24/06 07:11									
Gasoline	ND	50	µg/L	1	CP01464	02/27/06	02/27/06	8015M/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	**0.50**	0.50	"	"	"	"	"	"	
Xylenes (total)	**3.1**	1.0	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*82.5 %*	*65-135*		"	"	"	"	
MW-16A (CPB0718-15) Water Sampled: 02/22/06 15:30 Received: 02/24/06 07:11									
Gasoline	**1400**	50	µg/L	1	CP01464	02/27/06	02/27/06	8015M/8021B	
Benzene	**200**	5.0	"	10	"	"	"	"	
Toluene	**22**	0.50	"	1	"	"	"	"	
Ethylbenzene	**69**	5.0	"	10	"	"	"	"	
Xylenes (total)	**280**	10	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*89.0 %*	*65-135*		"	"	"	"	
MW-16B (CPB0718-16) Water Sampled: 02/21/06 13:55 Received: 02/24/06 07:11									
Gasoline	ND	50	µg/L	1	CP01464	02/27/06	02/27/06	8015M/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*87.0 %*	*65-135*		"	"	"	"	
MW-17 (CPB0718-17) Water Sampled: 02/21/06 14:38 Received: 02/24/06 07:11									
Gasoline	ND	50	µg/L	1	CP01464	02/27/06	02/27/06	8015M/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*89.0 %*	*65-135*		"	"	"	"	

CALIFORNIA LABORATORY SERVICES

 03/06/06 09:55

ENSR - Sacramento	Project: Frmr. Unocal 762248-359 Main St. Fortuna,CA	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-407-100	**CLS Work Order #: CPB0718**
Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: 40561,40562,40563

Gas/BTEX by GC PID/FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-18 (CPB0718-18) Water Sampled: 02/22/06 11:20 Received: 02/24/06 07:11									
Gasoline	**14000**	1000	µg/L	20	CP01477	02/28/06	02/28/06	8015M/8021B	
Benzene	**7700**	100	"	200	"	"	"	"	
Toluene	**160**	10	"	20	"	"	"	"	
Ethylbenzene	**780**	100	"	200	"	"	"	"	
Xylenes (total)	**1700**	200	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*86.0 %*	*65-135*		"	"	"	"	
MW-19 (CPB0718-19) Water Sampled: 02/22/06 09:00 Received: 02/24/06 07:11									
Gasoline	**5300**	500	µg/L	10	CP01477	02/28/06	02/28/06	8015M/8021B	
Benzene	**4500**	50	"	100	"	"	"	"	
Toluene	**2.1**	0.50	"	1	"	"	"	"	
Ethylbenzene	**140**	5.0	"	10	"	"	"	"	
Xylenes (total)	**620**	10	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*84.5 %*	*65-135*		"	"	"	"	
MW-20 (CPB0718-20) Water Sampled: 02/22/06 10:40 Received: 02/24/06 07:11									
Gasoline	**5900**	1000	µg/L	20	CP01477	02/28/06	02/28/06	8015M/8021B	
Benzene	**2700**	100	"	200	"	"	"	"	
Toluene	**59**	10	"	20	"	"	"	"	
Ethylbenzene	**360**	10	"	"	"	"	"	"	
Xylenes (total)	**420**	20	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*82.0 %*	*65-135*		"	"	"	"	
MW-21 (CPB0718-21) Water Sampled: 02/22/06 14:20 Received: 02/24/06 07:11									
Gasoline	**21000**	2500	µg/L	50	CP01477	02/28/06	02/28/06	8015M/8021B	
Benzene	**4000**	250	"	500	"	"	"	"	
Toluene	**2000**	250	"	"	"	"	"	"	
Ethylbenzene	**990**	25	"	50	"	"	"	"	
Xylenes (total)	**4000**	50	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*85.5 %*	*65-135*		"	"	"	"	

CALIFORNIA LABORATORY SERVICES

 03/06/06 09:55

ENSR - Sacramento	Project: Frmr. Unocal 762248-359 Main St. Fortuna,CA	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-407-100	**CLS Work Order #: CPB0718**
Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: 40561,40562,40563

Gas/BTEX by GC PID/FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
QA (CPB0718-22) Water Sampled: 02/15/06 00:00 Received: 02/24/06 07:11									
Gasoline	ND	50	µg/L	1	CP01477	02/28/06	02/28/06	8015M/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*85.0 %*	*65-135*		"	"	"	"	

ENSR - Sacramento	Project: Frmr. Unocal 762248-359 Main St. Fortuna,CA	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-407-100	**CLS Work Order #: CPB0718**
Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: 40561,40562,40563

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 CP01407 - EPA 3510B GCNV										
Blank (CP01407-BLK1)				Prepared: 02/24/06		Analyzed: 02/25/06				
Diesel	ND	0.050	mg/L							
Motor Oil	ND	0.050	"							
LCS (CP01407-BS1)				Prepared: 02/24/06		Analyzed: 02/25/06				
Diesel	2.21	0.050	mg/L	2.50		88.4	65-135			
LCS Dup (CP01407-BSD1)				Prepared: 02/24/06		Analyzed: 02/25/06				
Diesel	2.25	0.050	mg/L	2.50		90.0	65-135	1.79	30	
Matrix Spike (CP01407-MS1)		**Source: CPB0613-01**		Prepared: 02/24/06		Analyzed: 02/25/06				
Diesel	2.29	0.050	mg/L	2.50	ND	91.6	46-137			
Matrix Spike Dup (CP01407-MSD1)		**Source: CPB0613-01**		Prepared: 02/24/06		Analyzed: 02/25/06				
Diesel	2.21	0.050	mg/L	2.50	ND	88.4	46-137	3.56	30	
Batch CP01446 - EPA 3510B GCNV										
Blank (CP01446-BLK1)				Prepared: 02/27/06		Analyzed: 02/28/06				
Diesel	ND	0.050	mg/L							
LCS (CP01446-BS1)				Prepared: 02/27/06		Analyzed: 02/28/06				
Diesel	2.73	0.050	mg/L	2.50		109	65-135			
LCS Dup (CP01446-BSD1)				Prepared: 02/27/06		Analyzed: 02/28/06				
Diesel	2.63	0.050	mg/L	2.50		105	65-135	3.73	30	

ENSR - Sacramento	Project: Frmr. Unocal 762248-359 Main St. Fortuna,CA	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-407-100	**CLS Work Order #: CPB0718**
Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: 40561,40562,40563

Gas/BTEX by GC PID/FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP01463 - EPA 5030 Water GC										
Blank (CP01463-BLK1)				Prepared & Analyzed: 02/24/06						
Gasoline	ND	50	µg/L							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	1.0	"							
Surrogate: o-Chlorotoluene (BTEX)	*21.6*		*"*	*20.0*		*108*	*65-135*			
Surrogate: o-Chlorotoluene (Gas)	*17.5*		*"*	*20.0*		*87.5*	*65-135*			
LCS (CP01463-BS1)				Prepared & Analyzed: 02/24/06						
Gasoline	348	50	µg/L	500		69.6	65-135			
Surrogate: o-Chlorotoluene (Gas)	*17.6*		*"*	*20.0*		*88.0*	*65-135*			
LCS Dup (CP01463-BSD1)				Prepared & Analyzed: 02/24/06						
Gasoline	344	50	µg/L	500		68.8	65-135	1.16	30	
Surrogate: o-Chlorotoluene (Gas)	*17.1*		*"*	*20.0*		*85.5*	*65-135*			
Batch CP01464 - EPA 5030 Water GC										
Blank (CP01464-BLK1)				Prepared & Analyzed: 02/27/06						
Gasoline	ND	50	µg/L							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	1.0	"							
Surrogate: o-Chlorotoluene (BTEX)	*21.4*		*"*	*20.0*		*107*	*65-135*			
Surrogate: o-Chlorotoluene (Gas)	*17.8*		*"*	*20.0*		*89.0*	*65-135*			

CALIFORNIA LABORATORY SERVICES

 03/06/06 09:55

ENSR - Sacramento	Project: Frmr. Unocal 762248-359 Main St. Fortuna,CA	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-407-100	**CLS Work Order #: CPB0718**
Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: 40561,40562,40563

Gas/BTEX by GC PID/FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP01464 - EPA 5030 Water GC										
LCS (CP01464-BS1)				Prepared & Analyzed: 02/27/06						
Gasoline	387	50	µg/L	500		77.4	65-135			
Surrogate: o-Chlorotoluene (Gas)	*19.2*		*"*	*20.0*		*96.0*	*65-135*			
LCS Dup (CP01464-BSD1)				Prepared & Analyzed: 02/27/06						
Gasoline	405	50	µg/L	500		81.0	65-135	4.55	30	
Surrogate: o-Chlorotoluene (Gas)	*18.8*		*"*	*20.0*		*94.0*	*65-135*			
Batch CP01477 - EPA 5030 Water GC										
Blank (CP01477-BLK1)				Prepared & Analyzed: 02/28/06						
Gasoline	ND	50	µg/L							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	1.0	"							
Surrogate: o-Chlorotoluene (BTEX)	*21.5*		*"*	*20.0*		*108*	*65-135*			
Surrogate: o-Chlorotoluene (Gas)	*18.0*		*"*	*20.0*		*90.0*	*65-135*			
LCS (CP01477-BS1)				Prepared & Analyzed: 02/28/06						
Gasoline	368	50	µg/L	500		73.6	65-135			
Surrogate: o-Chlorotoluene (Gas)	*21.1*		*"*	*20.0*		*106*	*65-135*			
LCS Dup (CP01477-BSD1)				Prepared & Analyzed: 02/28/06						
Gasoline	401	50	µg/L	500		80.2	65-135	8.58	30	
Surrogate: o-Chlorotoluene (Gas)	*19.8*		*"*	*20.0*		*99.0*	*65-135*			
Matrix Spike (CP01477-MS1)		**Source: CPB0718-05**		Prepared & Analyzed: 02/28/06						
Gasoline	276000	25000	µg/L	250000	88000	75.2	65-135			
Surrogate: o-Chlorotoluene (Gas)	*11500*		*"*	*10000*		*115*	*65-135*			

CALIFORNIA LABORATORY SERVICES

 03/06/06 09:55

ENSR - Sacramento	Project: Frmr. Unocal 762248-359 Main St. Fortuna,CA	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-407-100	**CLS Work Order #: CPB0718**
Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: 40561,40562,40563

Gas/BTEX by GC PID/FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP01477 - EPA 5030 Water GC										
Matrix Spike Dup (CP01477-MSD1)		**Source: CPB0718-05**		Prepared & Analyzed: 02/28/06						
Gasoline	218000	25000	µg/L	250000	88000	52.0	65-135	23.5	30	QM-5
Surrogate: o-Chlorotoluene (Gas)	*9500*		*"*	*10000*		*95.0*	*65-135*			

ENSR - Sacramento	Project: Frmr. Unocal 762248-359 Main St. Fortuna,CA	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-407-100	**CLS Work Order #: CPB0718**
Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: 40561,40562,40563

Notes and Definitions

QM-5	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
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

CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

May 30, 2006

CLS Work Order #: CPE0618
COC #: NOne

Jennifer Johnston
ENSR - Sacramento
10461 Old Placerville Rd., Suite 170
Sacramento, CA 95827-2508

Project Name: Frmr. Unocal 762248-359 Main St.
Fortuna,CA

Enclosed are the results of analyses for samples received by the laboratory on 05/18/06 12:10. 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

 05/30/06 13:47

ENSR - Sacramento	Project: Frmr. Unocal 762248-359 Main St. Fortuna,CA	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-407-100	**CLS Work Order #: CPE0618**
Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: NOne

ENSR | AECOM

CHAIN OF CUSTODY

Page 1 of 1

CPE0618

Lab: CLS

TAT: Standard

Report results to:

Name: Jennifer Johnston
Company: ENSR
Mailing Address: 10461 Old Placerville Road, Suite 170
City, State, Zip: Sacramento, CA 95827
Telephone No.: 916-362-7100
Fax No.: 916-362-8100

Project Information

Site Address: 359 Main St., Fortuna
ENSR No.: 06940-407-100
Unocal No.: 762248
Global ID No.: T0602393213

Special instructions and/or specific regulatory requirements:
*Run TPHd w/ Silica Gel Cleanup on ALL TPHd HITS

Analyses Requested

Sample Identification	Date Sampled	Time Sampled	Matrix/ Media	No. of Conts.	TPHg 8015	BTEX 8021	TPHd 8015 w/SGC	Sample Condition/Comments	Preservative
MW-17	5/16/06	14:08	GW	3	X	X			HCL
MW-17	5/16/06	14:08	GW	1			X		NONE
MW-16B	5/16/06	15:18	GW	3	X	X			HCL
MW-16B	5/16/06	15:18	GW	1			X		NONE
MW-16A	5/16/06	16:18	GW	3	X	X			HCL
MW-16A	5/16/06	16:18	GW	1			X		NONE
MW-13	5/16/06	17:30	GW	3	X	X			HCL
MW-13	5/16/06	17:30	GW	1			X		NONE

Collected by: FRANK SPETH Date/Time 05/16/06
Relinquished by: Frank Speth Date/Time 5/18/06 8:40
Relinquished by: Date/Time 5/18/06 12:10
Method of Shipment:

Collector's Signature: Date/Time 5/16/06
Received by: Date/Time 5/18/06 08:40
Received by: Date/Time 5-18-6 12:10
Sample Condition on Rcpt:

CALIFORNIA LABORATORY SERVICES

 05/30/06 13:47

ENSR - Sacramento	Project: Frmr. Unocal 762248-359 Main St. Fortuna,CA	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-407-100	**CLS Work Order #: CPE0618**
Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: NOne

CLS LABS
SAMPLE RECEIVING EXCEPTION REPORTS

C.L.S Labs Job No.: CPE0618

Problem discovered by: C Masten **Date** 5-18-6

Nature of problem:

Project arrived with an extra sample not included on COC. MW-30 was logged in last and assigned the analyses of the project.

Client contacted? Yes _____ No _____ Spoke With: _____

By whom: _____ Date: _____ Time: _____

Client instructions:

Resolution of problem:

entered as routine

H:\Alyssam\samplerecexception.doc

CALIFORNIA LABORATORY SERVICES

 05/30/06 13:47

ENSR - Sacramento	Project: Frmr. Unocal 762248-359 Main St. Fortuna,CA	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-407-100	**CLS Work Order #: CPE0618**
Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: NOne

Extractable Petroleum Hydrocarbons by EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-17 (CPE0618-01) Water	**Sampled: 05/16/06 14:08**	**Received: 05/18/06 12:10**							**EXT-3**
Diesel	ND	0.050	mg/L	1	CP03792	05/22/06	05/22/06	EPA 8015M	
MW-16B (CPE0618-02) Water	**Sampled: 05/16/06 15:18**	**Received: 05/18/06 12:10**							**EXT-3**
Diesel	ND	0.050	mg/L	1	CP03792	05/22/06	05/22/06	EPA 8015M	
MW-16A (CPE0618-03) Water	**Sampled: 05/16/06 16:18**	**Received: 05/18/06 12:10**							**EXT-3**
Diesel	**0.53**	0.050	mg/L	1	CP03792	05/22/06	05/22/06	EPA 8015M	D-DSL
MW-13 (CPE0618-04) Water	**Sampled: 05/16/06 17:30**	**Received: 05/18/06 12:10**							**EXT-3**
Diesel	**6.3**	0.25	mg/L	5	CP03792	05/22/06	05/22/06	EPA 8015M	D-DSL
MW-20 (CPE0618-05) Water	**Sampled: 05/16/06 17:49**	**Received: 05/18/06 12:10**							**EXT-3**
Diesel	**0.22**	0.050	mg/L	1	CP03792	05/22/06	05/22/06	EPA 8015M	D-DSL

CALIFORNIA LABORATORY SERVICES

 05/30/06 13:47

ENSR - Sacramento	Project: Frmr. Unocal 762248-359 Main St. Fortuna,CA	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-407-100	**CLS Work Order #: CPE0618**
Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: NOne

Gas/BTEX by GC PID/FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-17 (CPE0618-01) Water Sampled: 05/16/06 14:08 Received: 05/18/06 12:10									
Gasoline	ND	50	µg/L	1	CP03845	05/22/06	05/24/06	8015M/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*91.0 %*	*65-135*		"	"	"	"	
MW-16B (CPE0618-02) Water Sampled: 05/16/06 15:18 Received: 05/18/06 12:10									
Gasoline	ND	50	µg/L	1	CP03845	05/22/06	05/24/06	8015M/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*90.5 %*	*65-135*		"	"	"	"	
MW-16A (CPE0618-03) Water Sampled: 05/16/06 16:18 Received: 05/18/06 12:10									
Gasoline	**2900**	1000	µg/L	20	CP03883	05/23/06	05/24/06	8015M/8021B	
Benzene	**360**	10	"	"	"	"	"	"	
Toluene	**31**	10	"	"	"	"	"	"	
Ethylbenzene	**130**	10	"	"	"	"	"	"	
Xylenes (total)	**500**	20	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*92.5 %*	*65-135*		"	"	"	"	
MW-13 (CPE0618-04) Water Sampled: 05/16/06 17:30 Received: 05/18/06 12:10									
Gasoline	**17000**	1000	µg/L	20	CP03883	05/23/06	05/24/06	8015M/8021B	
Benzene	**1800**	100	"	200	"	"	"	"	
Toluene	**170**	10	"	20	"	"	"	"	
Ethylbenzene	**1500**	100	"	200	"	"	"	"	
Xylenes (total)	**4900**	200	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*90.0 %*	*65-135*		"	"	"	"	

CALIFORNIA LABORATORY SERVICES

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ENSR - Sacramento	Project: Frmr. Unocal 762248-359 Main St. Fortuna,CA	
10461 Old Placerville Rd., Suite 170	Project Number: 06940-407-100	**CLS Work Order #: CPE0618**
Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: NOne

Gas/BTEX by GC PID/FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-20 (CPE0618-05) Water Sampled: 05/16/06 17:49 Received: 05/18/06 12:10									
Gasoline	**1700**	50	µg/L	1	CP03845	05/22/06	05/24/06	8015M/8021B	
Benzene	**2200**	100	"	200	"	"	"	"	
Toluene	**42**	10	"	20	"	"	"	"	
Ethylbenzene	**240**	10	"	"	"	"	"	"	
Xylenes (total)	**90**	20	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*90.0 %*	*65-135*		"	"	"	"	

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Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	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 CP03792 - EPA 3510B GCNV										
Blank (CP03792-BLK1)				Prepared & Analyzed: 05/22/06						
Diesel	ND	0.050	mg/L							
LCS (CP03792-BS1)				Prepared & Analyzed: 05/22/06						
Diesel	2.60	0.050	mg/L	2.50		104	65-135			
LCS Dup (CP03792-BSD1)				Prepared & Analyzed: 05/22/06						
Diesel	2.54	0.050	mg/L	2.50		102	65-135	2.33	30	

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Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: NOne

Gas/BTEX by GC PID/FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP03845 - EPA 5030 Water GC										
Blank (CP03845-BLK1)				Prepared: 05/22/06		Analyzed: 05/24/06				
Gasoline	ND	50	µg/L							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	1.0	"							
Surrogate: o-Chlorotoluene (BTEX)	*23.3*		*"*	*20.0*		*116*	*65-135*			
Surrogate: o-Chlorotoluene (Gas)	*17.8*		*"*	*20.0*		*89.0*	*65-135*			
LCS (CP03845-BS1)				Prepared: 05/22/06		Analyzed: 05/24/06				
Benzene	19.5	0.50	µg/L	20.0		97.5	70-140			
Toluene	18.5	0.50	"	20.0		92.5	70-140			
Ethylbenzene	19.7	0.50	"	20.0		98.5	70-140			
Xylenes (total)	62.4	1.0	"	60.0		104	70-140			
Surrogate: o-Chlorotoluene (BTEX)	*20.4*		*"*	*20.0*		*102*	*65-135*			
LCS Dup (CP03845-BSD1)				Prepared: 05/22/06		Analyzed: 05/24/06				
Benzene	20.5	0.50	µg/L	20.0		102	70-140	5.00	30	
Toluene	18.9	0.50	"	20.0		94.5	70-140	2.14	30	
Ethylbenzene	20.1	0.50	"	20.0		100	70-140	2.01	30	
Xylenes (total)	63.5	1.0	"	60.0		106	70-140	1.75	30	
Surrogate: o-Chlorotoluene (BTEX)	*20.5*		*"*	*20.0*		*102*	*65-135*			
Matrix Spike (CP03845-MS1)		**Source: CPE0618-01**		Prepared: 05/22/06		Analyzed: 05/24/06				
Gasoline	403	50	µg/L	500	ND	80.6	65-135			
Surrogate: o-Chlorotoluene (Gas)	*19.1*		*"*	*20.0*		*95.5*	*65-135*			
Matrix Spike Dup (CP03845-MSD1)		**Source: CPE0618-01**		Prepared: 05/22/06		Analyzed: 05/24/06				
Gasoline	394	50	µg/L	500	ND	78.8	65-135	2.26	30	
Surrogate: o-Chlorotoluene (Gas)	*19.6*		*"*	*20.0*		*98.0*	*65-135*			

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Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: NOne

Gas/BTEX by GC PID/FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP03883 - EPA 5030 Water GC										
Blank (CP03883-BLK1)				Prepared: 05/23/06		Analyzed: 05/24/06				
Gasoline	ND	50	µg/L							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	1.0	"							
Surrogate: o-Chlorotoluene (BTEX)	*23.0*		*"*	*20.0*		*115*	*65-135*			
Surrogate: o-Chlorotoluene (Gas)	*18.4*		*"*	*20.0*		*92.0*	*65-135*			
LCS (CP03883-BS1)				Prepared: 05/23/06		Analyzed: 05/24/06				
Gasoline	384	50	µg/L	500		76.8	65-135			
Benzene	20.4	0.50	"	20.0		102	70-140			
Toluene	18.5	0.50	"	20.0		92.5	70-140			
Ethylbenzene	19.6	0.50	"	20.0		98.0	70-140			
Xylenes (total)	63.3	1.0	"	60.0		106	70-140			
Surrogate: o-Chlorotoluene (BTEX)	*20.5*		*"*	*20.0*		*102*	*65-135*			
Surrogate: o-Chlorotoluene (Gas)	*16.0*		*"*	*20.0*		*80.0*	*65-135*			
LCS Dup (CP03883-BSD1)				Prepared: 05/23/06		Analyzed: 05/24/06				
Gasoline	456	50	µg/L	500		91.2	65-135	17.1	30	
Benzene	19.6	0.50	"	20.0		98.0	70-140	4.00	30	
Toluene	18.5	0.50	"	20.0		92.5	70-140	0.00	30	
Ethylbenzene	19.6	0.50	"	20.0		98.0	70-140	0.00	30	
Xylenes (total)	62.5	1.0	"	60.0		104	70-140	1.27	30	
Surrogate: o-Chlorotoluene (BTEX)	*20.8*		*"*	*20.0*		*104*	*65-135*			
Surrogate: o-Chlorotoluene (Gas)	*19.0*		*"*	*20.0*		*95.0*	*65-135*			
Matrix Spike (CP03883-MS1)		**Source: CPE0743-01**		Prepared: 05/23/06		Analyzed: 05/24/06				
Gasoline	490	50	µg/L	500	ND	98.0	65-135			
Surrogate: o-Chlorotoluene (Gas)	*20.0*		*"*	*20.0*		*100*	*65-135*			

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Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: NOne

Gas/BTEX by GC PID/FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP03883 - EPA 5030 Water GC										
Matrix Spike Dup (CP03883-MSD1)		**Source: CPE0743-01**		Prepared: 05/23/06	Analyzed: 05/24/06					
Gasoline	475	50	µg/L	500	ND	95.0	65-135	3.11	30	
Surrogate: o-Chlorotoluene (Gas)	*19.1*		*"*	*20.0*		*95.5*	*65-135*			

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Sacramento, CA 95827-2508	Project Manager: Jennifer Johnston	COC #: NOne

Notes and Definitions

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