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July 13, 2006

4563.04

Humboldt County Department of Health and Human Services
Division of Environmental Health
100 H Street, Suite 100
Eureka, California 95501

Attention: Mr. Mark Verhey, C.E.G.

Subject: Groundwater Monitoring Report, Second Quarter 2006
Former Fortuna Shell, 809 Main Street, Fortuna, California
LOP No. 12672, USTCF Claim No. 13624

Dear Mr. Verhey:

LACO ASSOCIATES (LACO) presents the results of groundwater monitoring for the second quarter of 2006 for the former Fortuna Shell, presently operating as Gas-4-Less. The site is located in Fortuna, California; please refer to Figures 1 and 2. This groundwater monitoring report has been prepared on behalf of W & S Enviro.

The following elements are included within this report:

- Summary of work performed
- Site chronology
- Bulleted summary of hydraulic gradients
- Figures representing shallow and perched zone hydraulic gradients
- Charts illustrating analyte concentration rebound post 2004 pilot test
- Statement of future work

Please call (707) 443-5054 if you have any questions or concerns.

Sincerely,
LACO ASSOCIATES

Amy M. Thomson
Staff Geologist

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PROFESSIONAL GEOLOGIST
CHRISTOPHER JOHN WATT
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AMT:jg

Attachments

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GROUNDWATER MONITORING REPORT, SECOND QUARTER 2006

Former Fortuna Shell, 809 Main Street, Fortuna, California

LOP No. 12672, USTCF Claim No. 13624, LACO Project No. 4563.03

INTRODUCTION

This report presents the results of quarterly groundwater monitoring conducted at the former Fortuna Shell (hereafter referred to as the 'site'). Groundwater field activities were conducted on May 2, 2006, in accordance with generally accepted practices at this or similar locations. Monitoring well sampling protocol is included in LACO's *Standard Operating Procedures No. 2,* on file at your office. Details of the May 2nd groundwater monitoring sampling event are presented below in Table A. Groundwater monitoring field sampling forms for May 2nd are included as Attachment 1, a key to abbreviations used in tables and charts is included as Attachment 2, and a copy of the current laboratory results and case narratives from North Coast Laboratories are included as Attachment 3.

RESPONSE TO CORRESPONDENCE

In correspondence dated January 25, 2006, the Humboldt County Division of Environmental Health (HCDEH) requested soil data from monitoring well and boring installations. In the *First Quarter 2006 Groundwater Monitoring Report,* dated March 10, 2006, LACO submitted the requested soil data, however, this table was incomplete. Please find included a complete soil data table for monitoring well and boring investigations for this site (Attachment 4).

The soil data presented with this report indicates that sufficient investigation has been performed in the area surrounding monitoring wells MW3, MW5, and MW8. Boring B2-00 was completed to 24 feet below ground surface (bgs), and the soil sample collected at 24 feet bgs was reported as non-detect. This suggests the vertical extent of methyl tertiary butyl ether (MTBE) has been delineated in this area.

Investigations performed by LACO indicate that MTBE has not been detected below 20 feet bgs throughout this site. Boring B1-00, the deepest boring installed on-site, was completed to 39 feet

bgs, with soil samples collected at 8, 10, 17, 24, 27, 29, 34, and 39 feet bgs, with no MTBE detection below 17 feet bgs. This suggests that the MTBE detections in borings B12 and B14 (160 parts per billion [ppb] and 100 ppb), associated with LOP No. 12156, are not associated with the subject site.

Table A: Field Sampling Details for May 2, 2006

Monitoring Well ID	Screened Interval (feet)	DTW (feet)	Purge Method	Water Quality Parameters	Organic Analyticals	Lead Scavengers	Sampling Schedule
MW1	6-10	4.45	DHP	pH, T, ECw, ORP, DO	TPHg, TPHd, TPHmo, BTEX, MTBE, DIPE, ETBE, TAME, TBA	1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichloroethane 1,2-Dibromoethane (EDB) Chlorobenzene	Quarterly
MW2	5-10	4.22					
MW3	5-12	4.53					
MW4	5-10	4.07					
MW5	5-10	4.14	CAM Pump	---			
MW6	12-20	4.65	DHP	pH, T, ECw, ORP, DO			
MW7	10-15	4.17					
MW8	15-20	10.48					
MW9	12-15	7.73			TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA		
MW10	12.5-15.5	6.27					
MW11	12.5-15.5	9.24					
MW12	12.5-15	9.01					
MW13	12.5-15	---	---	---	---	---	
MW14	5-10	4.71	DHP	pH, T, ECw, ORP, DO	TPHg, TPHd, TPHmo, BTEX, MTBE, DIPE, ETBE, TAME, TBA	1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichloroethane 1,2-Dibromoethane (EDB) Chlorobenzene	
MW15	5-10	4.56					
MW16	5-10	4.06					
MW17S	22.5-24.5	22.78	¾" Bailer	---	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA		
MW17D	26-28	25.53					

SITE CHRONOLOGY

1998: Eleven temporary borings (B1 through B11) were installed to investigate the underground storage tank (UST) closure.

1999: Four USTs were removed from the site. One 2,000-gallon UST, one 8,000-gallon UST, two 10,000-gallon USTs, and approximately 140 cubic yards of soil was excavated and removed from the site.

2000: A domestic well survey was conducted, monitoring wells MW1 through MW8 were installed, and temporary borings B1-00 through B20-00 were installed.

2001: LACO personnel performed bail and slug tests on monitoring wells MW1 and MW2 to determine hydraulic conductivities in the perched zone. Monitoring wells MW9 through MW13 were installed offsite, and temporary borings HP1 through HP6 were installed.

2002: Four temporary borings were installed to further characterize soils at the site. A *Corrective Action Plan* was submitted to the HCDEH.

2003: A *Remedial Action Plan* (RAP) was submitted to the HCDEH detailing the proposed scope of work to install, operate, and conduct an oxygen sparging pilot test to assess the reduction of the on-site secondary source petroleum hydrocarbon mass.

2004: Monitoring wells MW14, MW15, and MW16 were installed to serve as monitoring points for the forthcoming remediation program. Temporary borings B12 and B13 were installed, and the presence of dissolved-phase MTBE in one boring led to the installation of two additional monitoring wells, MW17S and MW17D (S = shallow, D = deep).

Two sparge wells were installed at the site for an oxygen sparging pilot test. The oxygen sparging pilot test was in operation from April 4 to November 30, 2004.

2005: A RAP Addendum was submitted to the HCDEH, and approved in letter correspondence dated July 26, 2005.

2006: A cost proposal for the Pay-for-Performance program was submitted to the Underground Storage Tank Cleanup Fund (USTCF).

HYDROGEOLOGY AND HYDRAULIC GRADIENT

Stratigraphic data from boring and monitoring well installations to date confirm that several primarily sand and gravel water-bearing units exist, and are primarily separated by layers of dense clayey silt to depths of approximately 40 feet bgs. Previous investigations found that the upper contact of the dense, well-graded gravel of the Rohnerville formation occurs from 38 to 45 feet bgs. The Rohnerville formation functions as a confined artesian water-bearing unit in the vicinity of the subject property.

Equipotential maps for the perched and shallow zones were generated using the hydraulic head elevations calculated from depth to water measurements made on May 2, 2006, and are presented as Figures 3 and 4, respectively. The hydraulic gradient in the perched zone was calculated using the three-point method in the area defined by monitoring wells MW1, MW3, and MW14. The hydraulic gradient in the shallow zone was calculated using the three-point method in the area defined by monitoring wells MW7, MW11, and MW12. These monitoring wells were selected because they are located along the site perimeter and are considered representative of the hydraulic gradients of the site.

Hydraulic gradient (May 2, 2006), perched zone (Figure 3)

- N58°W direction at 0.02 feet per feet

Hydraulic gradient (May 2, 2006), shallow zone (Figure 4)

- N83°W direction at 0.06 feet per feet

Calculated hydraulic gradients for the shallow and perched zones are consistent with previous groundwater monitoring events (Table 1). Current and historical hydraulic head elevations are presented in Table 2.

LABORATORY ANALYTICAL RESULTS AND DISCUSSION

Groundwater analytical data collected on May 2nd from on- and off-site monitoring wells is included below in Table B. Historical and current groundwater analytical results are tabulated and are presented in Table 2, and a copy of the current laboratory results and case narratives from North Coast Laboratories is included as Attachment 3.

Table B: Laboratory Analytical Results for May 2, 2006													
Monitoring WELL ID	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Other Analytes (µg/L)
MW1	4,100	240		4.4	7.0	44	17.8	ND<1.0					
MW2	5,800	630		18	6.3	40	26.6	ND<7.0	ND<10	ND<1.0			All ND<1.0
MW3	1,800	210		2.8	0.58	ND<0.50	1.66	6.7		1.0			
MW4	1,600	140	ND<170	8.5	0.90	5.7	1.5	3.5	ND<70	ND<1.0	ND<1.0	ND<1.0	
MW5	9,300	780		280	14	140	80.6	ND<60	ND<50	2.6			All ND<1.0-2.0
MW6	ND<50	ND<50						10	ND<10	ND<1.0			All ND<1.0
MW7	360	51						310	ND<100	16	ND<2.0		
MW8	1,700	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2,100	440	81	8.3	ND<4.0	1,2 Dichloroethane= 1.7 others = ND<1.0
MW9								4.6					
MW10	ND<50	---	---					5.0	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0
MW11								3.2					
MW12	670							620		25	ND<4.0	ND<2.0	
MW13	Well Inaccessable												
MW14	210	100	ND<170	0.73	ND<0.50	ND<0.50	ND<0.50	2.1	ND<10	ND<1.0	ND<1.0		
MW15	1,600	79	200	79	2.2	11	3.8	50	ND<30	2.8	ND<1.0	ND<1.0	
MW16	6,600	300	ND<170	790	21	22	51.3	300	ND<100	8.5	3.8		All ND<1.0
MW17S	410	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	340	77	2.8	ND<4.0	ND<3.0	
MW17D	80							7.0	ND<10	ND<1.0	ND<1.0	ND<1.0	

Laboratory results reported for samples collected during the May 2, 2006, quarterly sampling event are consistent within the range of results historically reported for active wells. Total petroleum hydrocarbons as gasoline (TPHg) concentrations in down-gradient monitoring wells MW1, MW4, and MW7 have rebounded since the oxygen sparging pilot test was performed (April through November 2004) as illustrated in Charts 1 through 3. In monitoring well MW1, the concentration of TPHg initially decreased two orders of magnitude (from 4,500 µg/L to 80 µg/L) then rebounded two orders of magnitude (4,100 µg/L). In monitoring well MW4, the concentration of TPHg decreased two orders of magnitude (from 10,000 µg/L to 170 µg/L) then rebounded one order of magnitude (1,600 µg/L). The concentration of TPHg in monitoring well MW7 initially increased one order of magnitude (1,300 µg/L) then decreased one order of magnitude to 360 µg/L.

Following the pilot test, it is interpreted that a portion of the untreated petroleum hydrocarbon plume up-gradient of the remediation system migrated down-gradient through the key monitoring wells, an increase (rebound) in TPHg concentrations was detected. The TPHg concentration for monitoring well MW6 did not rebound following the pilot test (Chart 4).

FUTURE WORK

- The next quarterly monitoring event is scheduled for August 2006.
- A cost proposal for RAP implementation was submitted to the USTCF on June 14, 2006.
- Monitoring wells MW9, MW10, MW11, MW17S, and MW17D will be changed to a bi-annual sampling schedule, with regulatory concurrence dated June 15, 2006.

LIMITATIONS

LACO has exercised a standard of care equal to that generated for this industry to ensure that the information contained in this report is current and accurate. LACO disclaims any and all liability for any errors, omissions, or inaccuracies in the information and data presented in this report and/or any consequences arising there from, whether attributable to inadvertence or otherwise. LACO makes no representations or warranties of any kind including, but not limited to, any implied warranties with respect to the accuracy or interpretations of the data furnished. LACO assumes no responsibility of any third party reliance on the data presented and that data generated for this report represents information gathered at that time and at the indicated locations. It should not be utilized by any third party to represent data for any other time or location. This report is valid solely for the purpose, site, and project described within this document. Any alteration, unauthorized distribution, or deviation from this description will invalidate this report.

LIST OF FIGURES, TABLES, CHARTS, AND ATTACHMENTS

Figure 1: Location Map

Figure 2: Site Map

Figure 3: Hydrologic Gradient, Perched Wells (5/02/06)

Figure 4: Hydrologic Gradient, Shallow Wells (5/02/06)

Table 1: Historical Hydraulic Gradients

Table 2: Monitoring Well Data and Groundwater Analytical Results

Chart 1: TPHg Concentrations vs. Cumulative Days in Monitoring Well MW1

Chart 2: TPHg Concentrations vs. Cumulative Days in Monitoring Well MW4

Chart 3: TPHg Concentrations vs. Cumulative Days in Monitoring Well MW7

Chart 4: TPHg Concentrations vs. Cumulative Days in Monitoring Well MW6

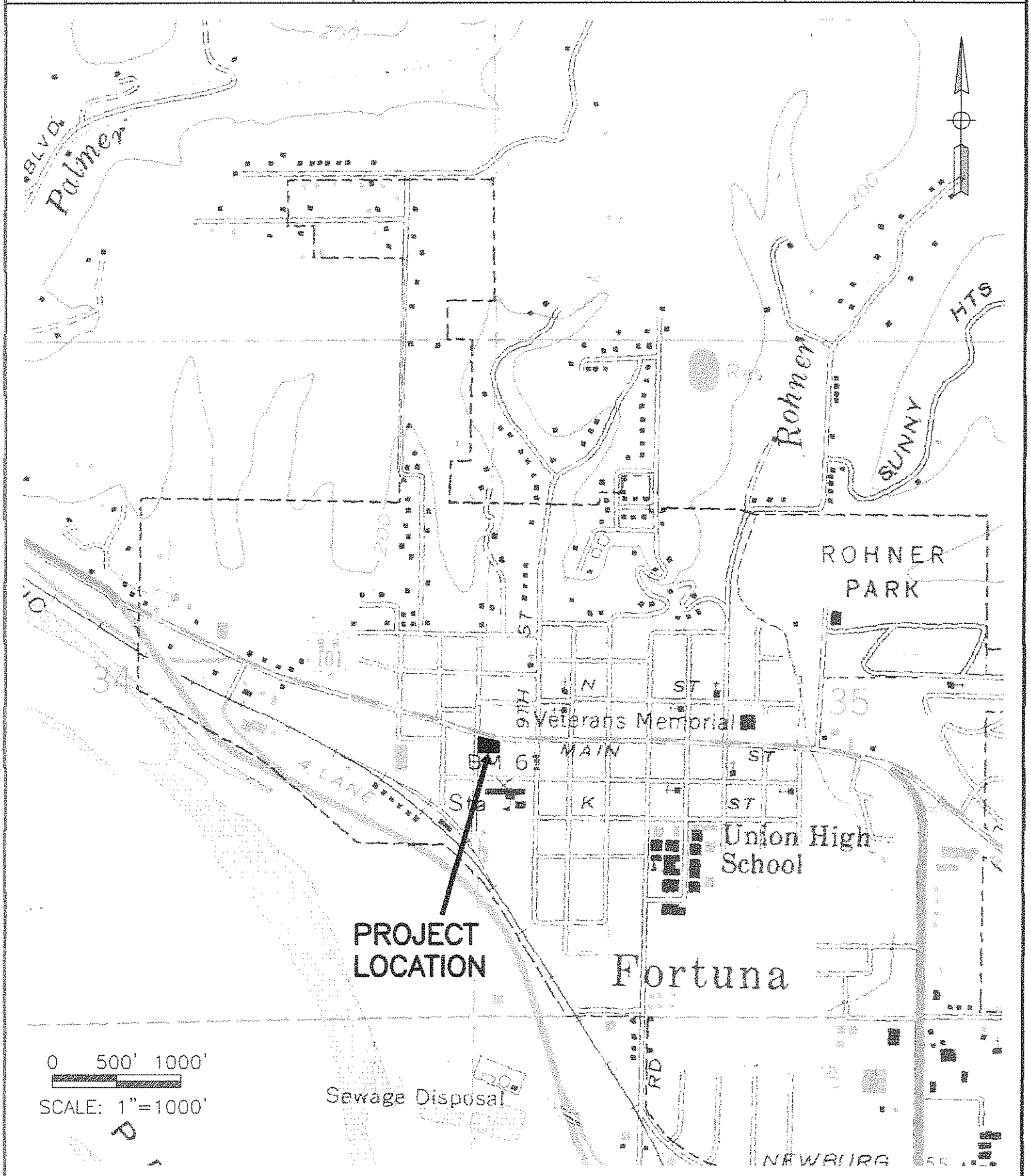
Attachment 1: Field Sampling Forms

Attachment 2: Key to Abbreviations

Attachment 3: Current Laboratory Analytical Results

Attachment 4: Historical Soil Analytical Results

LACO ASSOCIATES CONSULTING ENGINEERS 21 W 4TH ST. EUREKA, CA 95501 (707)443-5054	PROJECT GROUNDWATER MONITORING REPORT	BY RJM	FIGURE 1
	CLIENT W & S ENVIRO	DATE 6/28/06	
	LOCATION FORTUNA SHELL	CHECK RWT	JOB NO. 4563.04
	LOCATION MAP	SCALE 1"=1000'	



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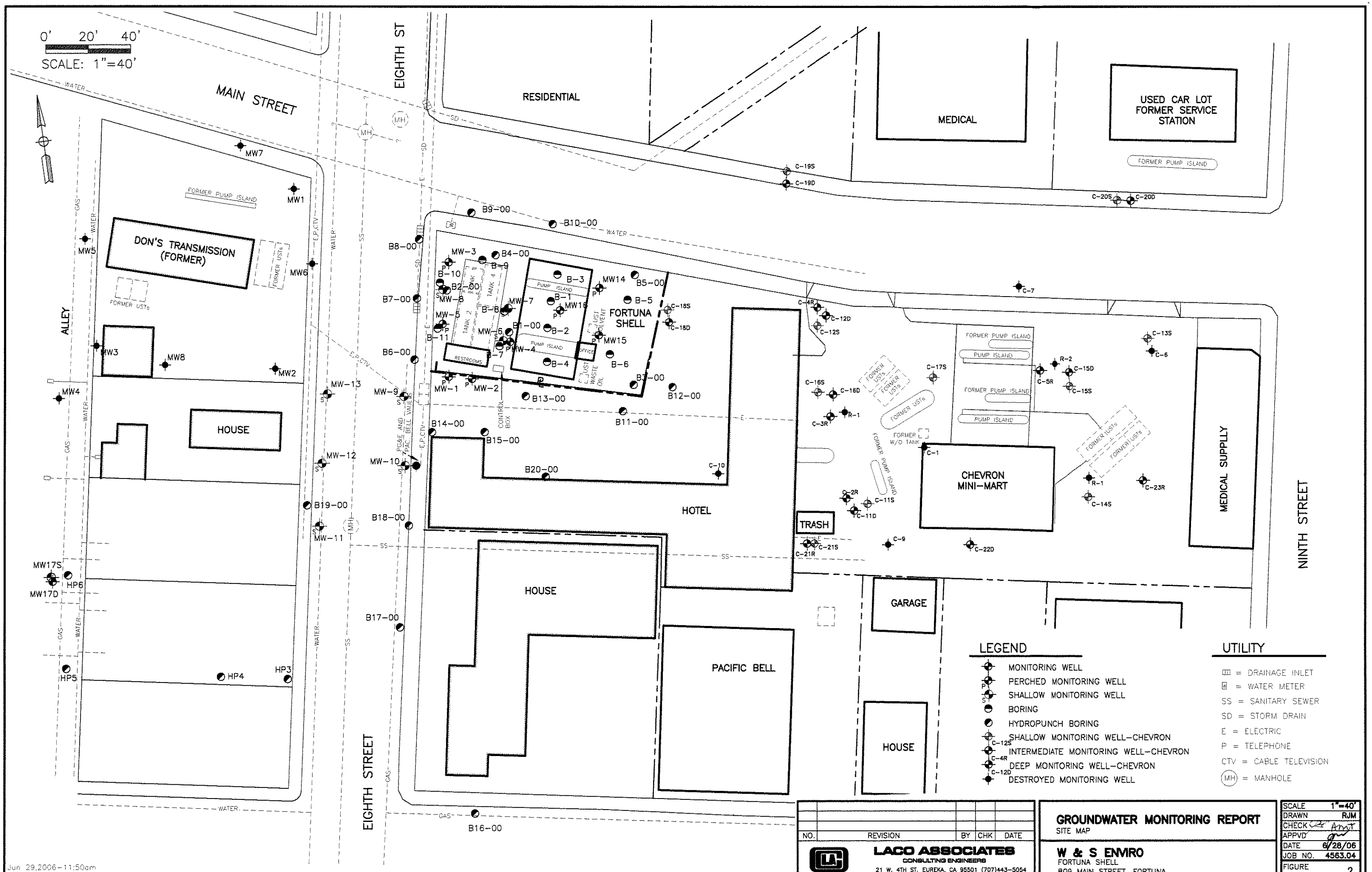

NO.	REVISION	BY	CHK	DATE

LACO ASSOCIATES
CONSULTING ENGINEERS
21 W. 4TH ST. EUREKA, CA 95501 (707)443-5054

GROUNDWATER MONITORING REPORT
SITE MAP

W & S ENVIRO
FORTUNA SHELL
809 MAIN STREET, FORTUNA

SCALE	1"=40'
DRAWN	RJM
CHECK	
APPVD	
DATE	6/28/06
JOB NO.	4563.04
FIGURE	2

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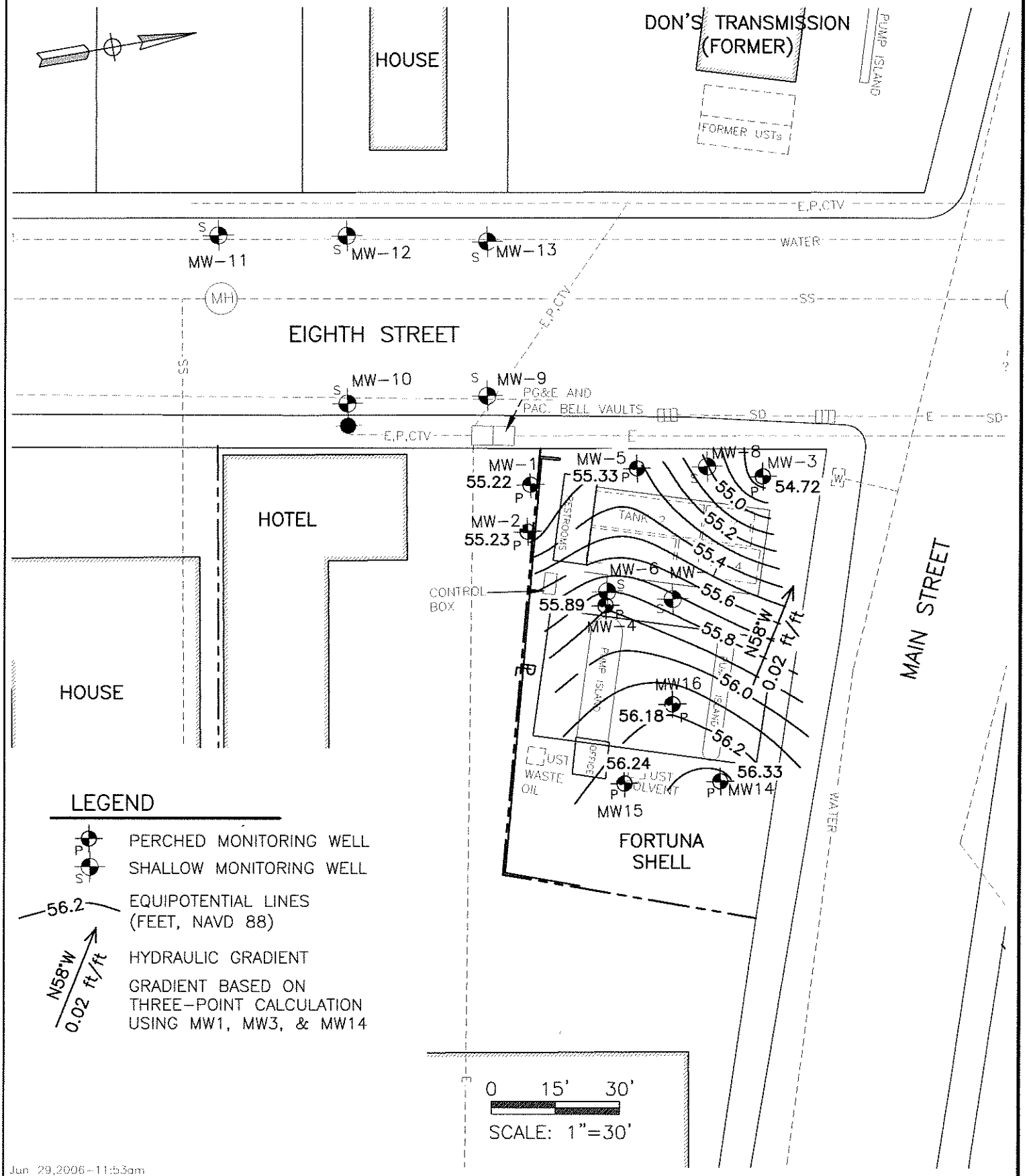
LACO ASSOCIATES CONSULTING ENGINEERS 21 W 4TH ST. EUREKA, CA 95501 (707)443-5054	PROJECT GROUNDWATER MONITORING REPORT	BY RJM	FIGURE 3
	CLIENT W & S ENVIRO	DATE 6/28/06	
	LOCATION FORTUNA SHELL, 809 MAIN ST.	CHECK AMT	JOB NO. 4563.04
	HYDRAULIC GRADIENT, PERCHED WELLS (5/02/06)	SCALE 1"=30'	



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LACO ASSOCIATES CONSULTING ENGINEERS 21 W 4TH ST. EUREKA, CA 95501 (707)443-5054	PROJECT GROUNDWATER MONITORING REPORT	BY RJM	FIGURE 4
	CLIENT W & S ENVIRO	DATE 6/28/06	
	LOCATION FORTUNA SHELL, 809 MAIN ST.	CHECK AMT	JOB NO. 4563.04
	HYDRAULIC GRADIENT, SHALLOW WELLS (5/02/06)	SCALE 1"=30'	

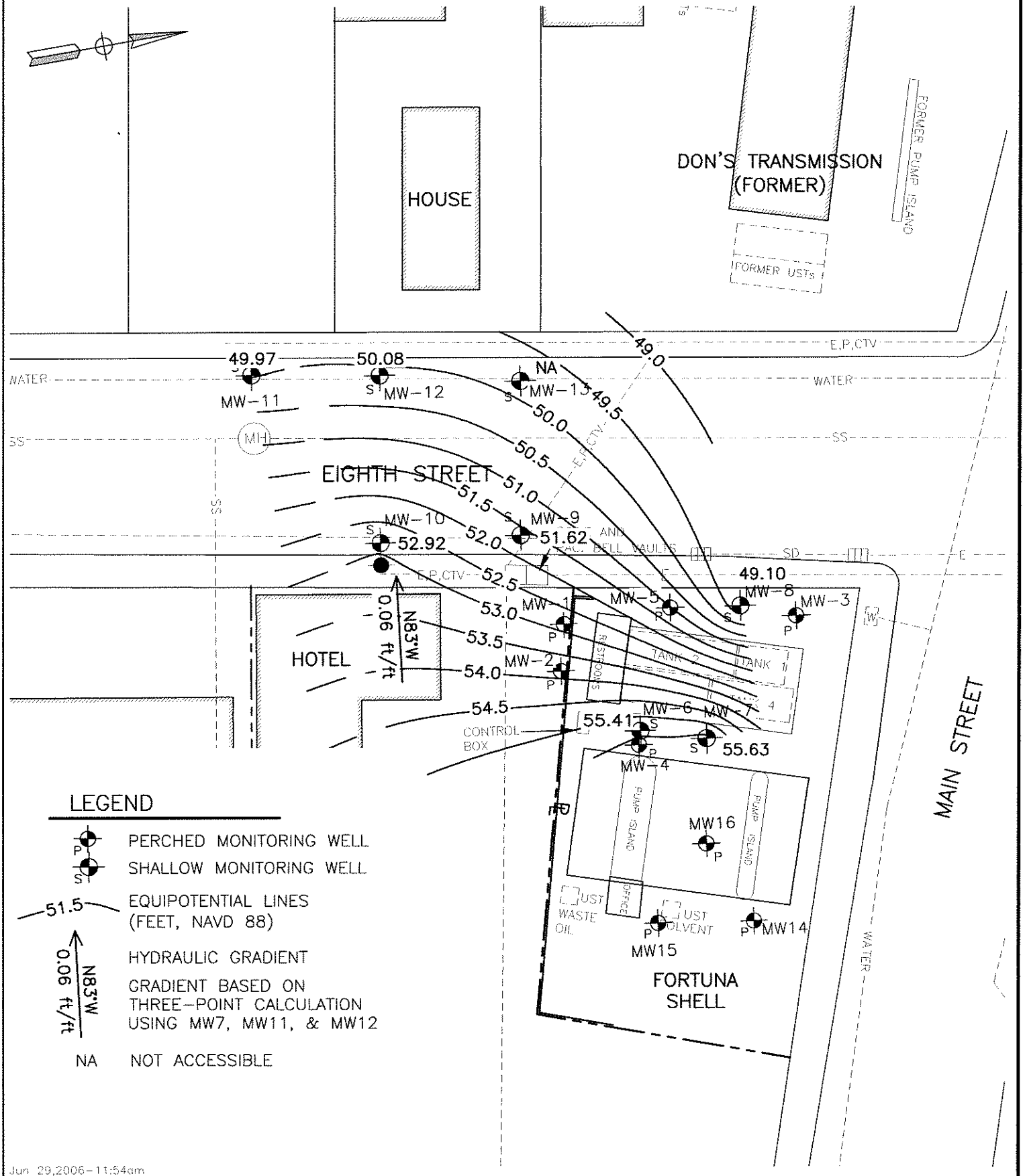

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TABLE 1: HISTORICAL HYDRAULIC GRADIENTS
Fortuna Shell; 809 Main St., Fortuna, California
LOP No. 12672; LACO No. 4563.04

	Shallow Aquifer		Perched Aquifer	
Date	Gradient Direction	Slope (ft/ft)	Gradient Direction	Slope (ft/ft)
9/2000	S2°E	<0.01	S48°W	0.01
10/2000	S2°E	<0.01	S45°E	0.01
11/2000	S22°E	<0.01	S34°W	0.02
12/12/2000	S56°W	0.06	---	---
1/8/2000	S64°W	0.11	---	---
3/12/2001	S37°W	0.14	---	---
6/2001	S43°W	0.14	S31°W	0.03
7/2001	S43°W	0.13	S34°W	0.02
8/2001	S71°E	0.24	S27°W	0.01
9/2001	S54°W	0.16	S29°W	0.01
10/2001	S54°W	0.16	S37°W	0.01
11/2001	S54°W	0.15	S32°W	<0.01
2/5/2002	N35°W	0.07	N19°E	0.02
5/9/2002	S49°W	0.14	S62°W	0.02
8/15/2002	S30°W	0.06	S24°W	0.12
12/20/2002	S56°W	0.07	S22°W	0.02
2/11/2003	S47°W	0.07	N8°E	0.02
5/13/2003	---	---	N19°E	0.02
8/14/2003	S13°W	0.04	S1°W	0.02
11/4/2003	S24°W	0.22	S3°E	0.02
2/2/2004	S37°W	0.02	N13°E	0.03
5/4/2004	S26°W	0.03	N62°W	0.02
8/3/2004	N65°W	0.02	N79°W	0.02
11/10/2004	N88°W	0.04	N81°W	<0.01
2/1/2005	S86°W	0.04	N47°W	0.02
5/3/2005	S79°W	0.05	N35°W	0.03
8/2/2005	S74°W	0.04	N66°W	0.02
11/1/2005	S67°W	0.04	N60°W	0.02
1/31/2006	N75°W	0.04	N19°W	0.04
5/2/2006	N83°W	0.06	N58°W	0.02

TABLE 2: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Fortuna Shell; 809 Main St., Fortuna, California
LOP No. 12672; LACO No. 4563.03

	Groundwater Measurements			Analytical Results													
WELL Sample Date	Well Head Elevation (feet NAVD 88)	Hydraulic Head Elevation (feet NAVD 88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	BTEX sum	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Other Analytes (µg/L)
MW1	59.67	Screened Interval = 6-10 feet bgs															
8/4/2000		53.51	6.16	---	---	---	---	---	---	---		---	---	---	---	---	
8/7/2000		53.41	6.26	3,600	230	ND<170	42	5	27	20.1	94.1	500	ND<20	56	ND<1.0	ND<1.0	
9/8/2000		52.64	7.03	---	---	---	---	---	---	---	0	---	---	---	---	---	
10/12/2000		52.15	7.52	---	---	---	---	---	---	---	0	---	---	---	---	---	
11/3/2000		53.91	5.76	2,900	210	ND<170	9.2	1.4	8.1	5.5	24.2	250	120	27	ND<1.0	ND<1.0	
12/12/2000		54.60	5.07	---	---	---	---	---	---	---	0	---	---	---	---	---	
1/8/2001		54.83	4.84	---	---	---	---	---	---	---	0	---	---	---	---	---	
2/6/2001		54.83	4.84	2,800	570	ND<170	23	2.4	12	4.8	42.2	74	ND<20	ND<2.0	ND<2.0	ND<2.0	
3/12/2001		55.47	4.20	---	---	---	---	---	---	---	0	---	---	---	---	---	
4/20/2001		54.87	4.80	---	---	---	---	---	---	---	0	---	---	---	---	---	
5/8/2001		54.69	4.98	3,400	420	ND<200	37	3.9	19	7.52	67.42	120	ND<10	ND<1.0	ND<1.0	ND<1.0	
6/8/2001		54.42	5.25	---	---	---	---	---	---	---	0	---	---	---	---	---	
7/16/2001		53.69	5.98	---	---	---	---	---	---	---	0	---	---	---	---	---	
8/7/2001		53.21	6.46	2,300	190	ND<170	25	3.6	18	9.42	56.02	130	ND<5.0	ND<1.0	ND<1.0	ND<1.0	
9/17/2001		52.69	6.98	---	---	---	---	---	---	---	0	---	---	---	---	---	
10/24/2001		52.15	7.52	---	---	---	---	---	---	---	0	---	---	---	---	---	
11/6/2001		52.13	7.54	4,300	350	ND<170	25	2.2	15	7.5	49.7	94	53	9.2	ND<1.0	ND<1.0	
2/5/2002		55.60	4.07	2,100	99	---	16	3.9	24	8.5	52.4	20	25	2.6	ND<1.0	ND<1.0	
5/9/2002		54.85	4.82	2,300	130	ND<170	18	2.6	16	3.6	40.2	8.7	ND<5.0	1.0	ND<1.0	ND<1.0	
8/15/2002		53.11	6.56	1,500	130	ND<170	6.6	1.2	7.3	8.4	23.5	9.9	ND<5.0	ND<1.0	ND<1.0	ND<1.0	
12/20/2002		56.52	3.15	410	ND<50	ND<170	0.5	0.5	0.5	0.50	2	ND<1.0	ND<20	ND<1.0	ND<1.0	ND<1.0	
2/11/2003		55.42	4.25	1,700	140	ND<170	13	4.6	17	4.8	39.4	15	ND<20	1.1	ND<1.0	ND<1.0	**1,2-EDB=1.1**
5/13/2003		54.79	4.88	320	ND<50	ND<170	3.1	1.5	5.9	2.4	12.9	1.8	ND<20	ND<1.0	ND<1.0	ND<1.0	
8/14/2003		52.47	7.20	1,700	ND<50	ND<170	7.0	1.3	7.7	3.5	19.53	13	ND<20	1.4	ND<1.0	ND<1.0	
11/4/2003		51.72	7.95	4,500	320	ND<170	31	3.8	17	12	63.8	ND<70	ND<20	2.8	ND<1.0	ND<1.0	
2/2/2004		56.71	2.96	80	ND<50	ND<170	0.5	0.5	0.5	0.5	2	ND<1.0	ND<10	ND<1.0	ND<1.0	ND<1.0	
5/4/2004		54.27	5.40	130	ND<50	ND<170	0.5	0.5	0.5	0.5	2	ND<1.0	ND<0.10	ND<1.0	ND<1.0	ND<1.0	
8/3/2004		52.12	7.55	1,400	180	ND<170	4.7	0.87	3.7	1.5	10.77	ND<6.0	ND<10	ND<1.0	ND<1.0	ND<1.0	
11/10/2004		54.27	5.40	61	ND<50	ND<170	0.5	0.5	0.5	0.5	2	ND<1.0	ND<0.10	ND<1.0	ND<1.0	ND<1.0	
2/1/2005		55.07	4.60	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	ND<1.0	ND<10	ND<1.0	ND<1.0	ND<1.0	
5/3/2005		54.62	5.05	3,900	370	ND<170	4.4	3.7	18	6.78	32.88	ND<1.0	ND<10	ND<1.0	ND<1.0	ND<1.0	
8/2/2005		53.29	6.38	2,400	290	ND<170	3.6	1.5	12	3.61	20.71	ND<1.0	ND<20	ND<1.0	ND<1.0	ND<1.0	
11/1/2005		52.43	7.24	460	ND<50	ND<170	0.65	0.5	1.8	0.5	3.45	ND<1.0	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0-3.0
1/31/2006		57.38	2.29	ND<50	ND<50	ND<170	0.50	0.50	0.50	0.50	2	ND<1.0	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0
5/2/2006		55.22	4.45	4,100	240	ND<170	4.4	7.0	44	17.8	73.2	ND<1.0	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0

TABLE 2: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Fortuna Shell; 809 Main St., Fortuna, California
LOP No. 12672; LACO No. 4563.03

	Groundwater Measurements			Analytical Results													
WELL Sample Date	Well Head Elevation (feet NAVD 88)	Hydraulic Head Elevation (feet NAVD 88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	BTEX sum	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Other Analytes (µg/L)
MW2	59.45	Screened Interval = 5-10 feet bgs															
8/4/2000		53.49	5.96	---	---	---	---	---	---	---	---	---	---	---	---	---	
8/7/2000		53.45	6.00	8,000	330	ND<170	160	8.6	34	49	251.6	790	ND<50	82	ND<2.5	ND<2.5	
9/8/2000		52.62	6.83	---	---	---	---	---	---	---	0	---	---	---	---	---	
10/12/2000		52.12	7.33	---	---	---	---	---	---	---	0	---	---	---	---	---	
11/3/2000		53.98	5.47	8,600	510	ND<170	130	6.2	25	32	193.2	680	420	86	ND<2.5	ND<2.5	
12/12/2000		54.59	4.86	---	---	---	---	---	---	---	0	---	---	---	---	---	
1/8/2001		54.87	4.58	---	---	---	---	---	---	---	0	---	---	---	---	---	
2/6/2001		54.68	4.77	8,200	590	ND<170	150	9.6	39	40	238.6	310	ND<50	ND<5.0	ND<5.0	ND<5.0	
3/12/2001		55.04	4.41	---	---	---	---	---	---	---	0	---	---	---	---	---	
4/20/2001		54.91	4.54	---	---	---	---	---	---	---	0	---	---	---	---	---	
5/8/2001		54.65	4.80	8,000	950	ND<200	110	6.9	30	32	178.9	280	ND<25	ND<2.5	ND<2.5	ND<2.5	
6/8/2001		54.42	5.03	---	---	---	---	---	---	---	0	---	---	---	---	---	---
7/16/2001		53.75	5.70	---	---	---	---	---	---	---	0	---	---	---	---	---	---
8/7/2001		53.23	6.22	5,900	300	ND<170	47	4.5	17	19	87.5	180	ND<25	ND<2.5	ND<2.5	ND<2.5	
9/17/2001		52.74	6.71	---	---	---	---	---	---	---	0	---	---	---	---	---	
10/24/2001		52.25	7.20	---	---	---	---	---	---	---	0	---	---	---	---	---	
11/6/2001		52.17	7.28	8,400	580	ND<170	100	8.7	33	33	174.7	160	ND<50	15	ND<5.0	ND<5.0	
2/5/2002		---	---	9,900	460	---	160	13	71	51	295	170	100	21	ND<3.0	ND<3.0	
5/9/2002		54.81	4.64	7,800	360	ND<170	100	8.6	44	37	189.6	54	ND<30	6.1	ND<3.0	ND<3.0	
8/15/2002		50.84	8.61	6,400	720	ND<170	110	11	42	44	207	65	ND<40	5.6	ND<4	ND<4	
12/20/2002		56.25	3.20	5,200	330	ND<170	20	5	18	16	59	ND<20	ND<200	ND<10	ND<10	ND<10	
2/11/2003		54.93	4.52	7,900	610	ND<170	100	10	50	49.3	209.3	ND<300	92	10	ND<1.0	ND<1.0	**1,2-EDB=1.1 1,2-DCA=1.9**
5/13/2003		55.39	4.06	6,200	600	ND<170	51	7.7	41	37.8	137.5	ND<100	ND<20	5.2	ND<1.0	ND<1.0	**1,2-DCA=1.2**
8/14/2003		52.40	7.05	9,400	810	ND<170	70	7.3	34	29.7	141	ND<180	31	7.6	ND<1.0	ND<1.0	
11/4/2003	Well was inaccessible		---	---	---	---	---	---	---	---	0	---	---	---	---	---	
2/2/2004		56.17	3.28	5,900	730	ND<170	21	5.4	27	20.3	73.7	ND<14	ND<10	1.1	ND<1.0	ND<1.0	
5/4/2004		54.20	5.25	7,000	500	ND<170	60	11	51	40	162	ND<45	ND<20	2.4	ND<1.0	ND<1.0	
8/3/2004		52.13	7.32	7,300	740	ND<170	47	7.9	39	31.3	125.2	ND<36	ND<10	1.8	ND<1.0	ND<1.0	
11/10/2004		54.14	5.31	6,300	980	ND<170	32	6.3	34	27.2	99.5	ND<15	ND<10	1.0	ND<1.0	ND<1.0	
2/1/2005		55.03	4.42	7,600	220	ND<170	34	6.3	41	35.6	116.9	ND<10	ND<10	ND<1.0	ND<1.0	ND<1.0	
5/3/2005		54.70	4.75	11,000	990	ND<170	30	5.7	33	26.3	95	ND<10	ND<15	1.1	ND<1.0	ND<1.0	
8/2/2005		53.34	6.11	4,500	820	ND<170	23	5.4	26	20	74.4	ND<7	ND<0	ND<1.0	ND<1.0	ND<1.0	
11/1/2005		52.38	7.07	6,100	500	ND<170	28	4.4	24	18	74.4	ND<7.0	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0-3.0
1/31/2006		56.14	3.31	4,700	570	ND<170	4	2.4	18	12.84	37.24	ND<1.0	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0
5/2/2006		55.23	4.22	5,800	630	ND<170	18	6.3	40	26.6	90.9	ND<7.0	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0

TABLE 2: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Fortuna Shell; 809 Main St., Fortuna, California
LOP No. 12672; LACO No. 4563.03

	Groundwater Measurements			Analytical Results													
WELL Sample Date	Well Head Elevation (feet NAVD 88)	Hydraulic Head Elevation (feet NAVD 88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	BTEX sum	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Other Analytes (µg/L)
MW3	59.25	Screened Interval = 5-12 feet bgs															
8/4/2000		53.06	6.19	---	---	---	---	---	---	---	0	---	---	---	---	---	---
8/7/2000		53.11	6.14	2,300	74	ND<170	4.3	4	4	4	16.3	5,600	2,500	550			
9/8/2000		52.58	6.67	---	---	---	---	---	---	---	0	---	---	---	---	---	---
10/12/2000				---	---	---	---	---	---	---	0	---	---	---	---	---	
11/3/2000		53.46	5.79	2,000	59	ND<170	2	2	2	2	8	4,000	1,300	490	ND<5.0	ND<5.0	
12/12/2000		53.85	5.40	---	---	---	---	---	---	---	0	---	---	---	---	---	
1/8/2001		53.94	5.31	---	---	---	---	---	---	---	0	---	---	---	---	---	
2/6/2001		54.32	4.93	1,900	ND<50	ND<170	7.6	5	5	5	22.6	2,000	ND<100	200	ND<10	ND<10	
3/12/2001		53.70	5.55	---	---	---	---	---	---	---	0	---	---	---	---	---	
4/20/2001		54.23	5.02	---	---	---	---	---	---	---	0	---	---	---	---	---	
5/8/2001		53.92	5.33	1,200	56	ND<200	1.4	1.3	1.3	1.3	5.3	1100	270	130	ND<2.5	ND<2.5	
6/8/2001		53.68	5.57	---	---	---	---	---	---	---	0	---	---	---	---	---	
7/16/2001		53.16	6.09	---	---	---	---	---	---	---	0	---	---	---	---	---	
8/7/2001		52.95	6.30	740	ND<50	ND<170	5.1	1.3	1.3	1.3	9	970	200	94	ND<2.5	ND<2.5	
9/17/2001		52.75	6.50	---	---	---	---	---	---	---	0	---	---	---	---	---	
10/24/2001		52.22	7.03	---	---	---	---	---	---	---	0	---	---	---	---	---	
11/6/2001		51.92	7.33	880	ND<50	ND<170	1.5	1	1	1	4.5	1,100	160	99	ND<2.0	ND<2.0	
2/5/2002		54.58	4.67	600	ND<50	---	0.74	0.5	0.5	0.5	2.24	740	310	86	2.2	ND<1.0	
5/9/2002		54.23	5.02	920	ND<50	ND<170	5.3	0.5	0.81	0.5	7.11	470	100	40	ND<1.0	ND<1.0	
8/15/2002		52.96	6.29	590	71	ND<170	6.3	0.56	0.95	1.8	9.61	420	150	30	1.1	ND<1.0	
12/20/2002		54.97	4.28	99	ND<50	ND<170	0.90	0.5	0.5	0.59	2.49	91	ND<70	4	ND<1.0	ND<1.0	
2/11/2003		54.54	4.71	740	ND<50	ND<170	2.8	1.1	0.5	5.06	9.46	720	300	57	ND<1.0	ND<1.0	
5/13/2003		54.96	4.29	1,300	220	ND<170	25.0	4.3	1.2	22.9	53.4	680	300	60	ND<1.0	ND<1.0	
8/14/2003		52.36	6.89	820	95	ND<170	3.4	0.7	0.5	3.9	8.5	1,000	180	73	ND<1.0	ND<1.0	
11/4/2003		51.79	7.46	650	ND<50	ND<170	0.5	0.5	0.5	1.54	3.04	940	78	65	1.2	ND<1.0	
2/2/2004		55.27	3.98	3,600	490	ND<170	26	1.4	0.81	6.4	34.61	180	79	15	ND<1.0	ND<1.0	
5/4/2004		53.84	5.41	2,200	310	ND<170	4.6	1.0	0.5	2.58	8.68	81	ND<40	5.3	ND<1.0	ND<1.0	
8/3/2004		52.06	7.19	960	140	ND<170	0.68	0.5	0.5	1.32	3	220	42	14	ND<1.0	ND<1.0	
11/10/2004		53.31	5.94	910	190	ND<170	0.5	0.5	0.5	0.5	2	290	ND<50	19	ND<1.0	ND<1.0	
2/1/2005		54.46	4.79	2,900	460	ND<170	8.4	0.89	0.56	3.5	13.35	44	ND<30	3.1	ND<1.0	ND<1.0	
5/3/2005		53.58	5.67	1,600	280	ND<170	1.1	0.5	0.5	1.29	3.39	23	ND<20	2.0	ND<1.0	ND<1.0	
8/2/2005		53.03	6.22	830	160	ND<170	0.5	0.5	0.5	0.5	2	45	ND<20	3.2	ND<1.0	ND<1.0	
11/1/2005		51.94	7.31	280	69	ND<170	0.5	0.5	0.5	0.5	2	76	ND<22	4.7	ND<1.0	ND<1.0	All ND<1.0-3.0
1/31/2006		55.35	3.90	2,000	270	200	2.5	0.76	0.67	2.2	6.13	8.1	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0
5/2/2006		54.72	4.53	1,800	210	ND<170	2.8	0.58	ND<0.50	1.66	5.0	6.7	ND<10	1.0	ND<1.0	ND<1.0	All ND<1.0

TABLE 2: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Fortuna Shell; 809 Main St., Fortuna, California
LOP No. 12672; LACO No. 4563.03

	Groundwater Measurements			Analytical Results													
WELL Sample Date	Well Head Elevation (feet NAVD 88)	Hydraulic Head Elevation (feet NAVD 88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	BTEX sum	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Other Analytes (µg/L)
MW4	59.96	Screened Interval = 5-10 feet bgs															
8/4/2000		53.73	6.23	---	---	---	---	---	---	---	---	---	---	---	---	---	
8/7/2000		53.67	6.29	11,000	530	ND<170	900	32	69	159	1160	620		45	ND<1.0	ND<1.0	
9/8/2000		52.85	7.11	---	---	---	---	---	---	---	0	---	---	---	---	---	
10/12/2000		52.33	7.63	---	---	---	---	---	---	---	0	---	---	---	---	---	
11/3/2000		53.87	6.09	6,400	61	ND<170	600	20	80	82.5	782.5	180	ND<100	ND<5.0	ND<5.0	ND<5.0	
12/12/2000		54.67	5.29	---	---	---	---	---	---	---	0	---	---	---	---	---	
1/8/2001		54.72	5.24	---	---	---	---	---	---	---	0	---	---	---	---	---	
2/6/2001		55.21	4.75	5,400	550	ND<170	540	12	47	38	637	140	ND<100	ND<10	ND<10	ND<10	
3/12/2001		55.44	4.52	---	---	---	---	---	---	---	0	---	---	---	---	---	
4/20/2001		55.21	4.75	---	---	---	---	---	---	---	0	---	---	---	---	---	
5/8/2001		54.96	5.00	6,200	920	ND<200	620	24	120	76.2	840.2	210	ND<50	ND<5.0	ND<5.0	ND<5.0	
6/8/2001		54.84	5.12	---	---	---	---	---	---	---	0	---	---	---	---	---	
7/16/2001		54.04	5.92	---	---	---	---	---	---	---	0	---	---	---	---	---	
8/7/2001		53.43	6.53	5,900	520	570	660	26	130	98.8	914.8	190	ND<100	ND<10	ND<10	ND<10	
9/17/2001		52.96	7.00	---	---	---	---	---	---	---	0	---	---	---	---	---	
10/24/2001		52.39	7.57	---	---	---	---	---	---	---	0	---	---	---	---	---	
11/6/2001		52.36	7.60	7,200	200	ND<170	670	30	100	77	877	120	ND<100	ND<10	ND<10	ND<10	
2/5/2002		55.56	4.40	4,800	83	---	340	14	48	27	429	100	32	5.8	ND<3.0	ND<3.0	
5/9/2002		55.47	4.49	3,800	260	ND<170	300	19	74	48.6	441.6	52	ND<30	ND<3.0	ND<3.0	ND<3.0	
8/15/2002		54.07	5.89	4,700	280	ND<170	350	21	82	46.7	499.7	81	ND<50	ND<5.0	ND<5.0	ND<5.0	
12/20/2002		55.80	4.16	6,900	260	ND<170	430	32	97	52	611	ND<150	ND<1000	ND<50	ND<50	ND<50	
2/11/2003		55.58	4.38	5,700	64	ND<170	430	24	57	55.9	566.9	500	230	28	1.1	ND<1.0	1,2-DCA=1.3
5/13/2003		54.91	5.05	5,500	500	ND<170	360	27	85	65.7	537.7	ND<200	47	8.1	ND<1.0	ND<1.0	1,2-DCA=1.0
8/14/2003		52.90	7.06	7,400	440	ND<170	480	22	79	47.4	628.4	120	51	5.6	1.1	ND<1.0	
11/4/2003		52.01	7.95	10,000	700	ND<170	600	35	110	71.8	816.8	ND<150	ND<20	4.4	ND<1.0	ND<1.0	1,2-DCA=1.0
2/2/2004		56.19	3.77	8,400	740	ND<170	450	27	85	63	625	ND<150	ND<60	4.6	ND<1.0	ND<1.0	
5/4/2004		54.77	5.19	3,500	120	ND<170	74	8.5	26	27.1	135.6	ND<80	ND<50	2.0	ND<1.0	ND<1.0	
8/3/2004		52.65	7.31	420	ND<50	ND<170	4.3	0.66	2.1	1.9	8.96	ND<1.0	ND<10	ND<1.0	ND<1.0	ND<1.0	
11/10/2004		54.16	5.80	190	ND<50	ND<170	1.1	0.5	0.95	0.99	3.54	ND<2.0	ND<10	ND<1.0	ND<1.0	ND<1.0	
2/1/2005		55.48	4.48	170	ND<50	ND<170	0.71	0.5	0.5	0.5	2.21	ND<4.0	ND<10	ND<1.0	ND<1.0	ND<1.0	
5/3/2005		55.35	4.61	300	ND<50	ND<170	1.3	0.5	0.5	0.55	2.85	1.8	ND<15	ND<1.0	ND<1.0	ND<1.0	
8/2/2005		53.93	6.03	220	60	ND<170	2.6	0.5	0.5	0.5	4.1	1.7	ND<10	ND<1.0	ND<1.0	ND<1.0	
11/1/2005		52.51	7.45	2,300	240	ND<170	9.5	1.2	9.1	5.0	24.8	ND<8.0	41	ND<1.0	ND<1.0	ND<1.0	All ND<1.0-3.0
1/31/2006		56.42	3.54	1,100	130	ND<170	5.4	0.58	3.1	0.94	10.02	ND<6.0	ND<50	ND<1.0	ND<1.0	ND<1.0	All ND<1.0
5/2/2006		55.89	4.07	1,600	140	ND<170	8.5	0.90	5.7	1.5	16.6	3.5	ND<70	ND<1.0	ND<1.0	ND<1.0	All ND<1.0

TABLE 2: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Fortuna Shell; 809 Main St., Fortuna, California
LOP No. 12672; LACO No. 4563.03

	Groundwater Measurements			Analytical Results													
WELL Sample Date	Well Head Elevation (feet NAVD 88)	Hydraulic Head Elevation (feet NAVD 88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	BTEX sum	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Other Analytes (µg/L)
MW5	59.47	Screened Interval = 5-10 feet bgs															
8/4/2000		53.10	6.37	---	---	---	---	---	---	---		---	---	---	---	---	
8/7/2000		53.31	6.16	23,000	1,900	ND<170	3,600	61	590	1,556	5807	4,500	ND<500	ND<25	ND<25	ND<25	
9/8/2000		53.02	6.45	---	---	---	---	---	---	---	0	---	---	---	---	---	
10/12/2000		52.47	7.00	---	---	---	---	---	---	---	0	---	---	---	---	---	
11/3/2000		53.59	5.88	17,000	1,200	930	2,500	60	800	940	4300	2,300	ND<500	ND<25	ND<25	ND<25	
12/12/2000		54.28	5.19	---	---	---	---	---	---	---	0	---	---	---	---	---	
1/8/2001		54.26	5.21	---	---	---	---	---	---	---	0	---	---	---	---	---	
2/6/2001		54.45	5.02	17,000	890	ND<170	2,600	49	370	320	3339	2,300	ND<500	ND<50	ND<50	ND<50	
3/12/2001		54.83	4.64	---	---	---	---	---	---	---	0	---	---	---	---	---	
4/20/2001		54.76	4.71	---	---	---	---	---	---	---	0	---	---	---	---	---	
5/8/2001		54.56	4.91	14,000	1,300	ND<200	2,300	48	510	555	3413	1,700	ND<500	ND<25	ND<25	ND<25	
6/8/2001		54.45	5.02	---	---	---	---	---	---	---	0	---	---	---	---	---	
7/16/2001		53.68	5.79	---	---	---	---	---	---	---	0	---	---	---	---	---	
8/7/2001		53.33	6.14	14,000	1,100	330	2,200	52	390	420	3062	2,000	ND<250	ND<25	ND<25	ND<25	
9/17/2001		52.98	6.49	---	---	---	---	---	---	---	0	---	---	---	---	---	
10/24/2001		52.48	6.99	---	---	---	---	---	---	---	0	---	---	---	---	---	
11/6/2001		52.34	7.13	20,000	1,100	420	2,500	48	550	493	3591	2,300	550	21	ND<20	ND<20	
2/5/2002		55.26	4.21	15,000	660	---	2,100	42	390	391	2923	2,200	890	48	ND<20	ND<20	
5/9/2002		54.76	4.71	10,000	810	210	1,400	33	260	270	1963	790	ND<200	21	ND<20	ND<20	
8/15/2002		53.68	5.79	13,000	1,300	960	1,200	33	210	280	1723	910	ND<200	24	ND<20	ND<20	
12/20/2002		55.23	4.24	40,000	6,900	13,000	1,800	51	460	380	2691	ND<1800	ND<1000	ND<50	ND<50	ND<50	
																	1,2-DCA=2.7
2/11/2003		56.06	3.41	13,000	880	1,200	1,500	34	200	239.7	1973.7	710	230	25	3.5	ND<1.0	**1,2-EDB=1.0**
5/13/2003		54.79	4.68	13,000	1,100	1,100	1,000	33	230	230	1493	590	ND<1000	ND<50	ND<50	ND<50	
8/14/2003		53.09	6.38	18,000	1,500	610	1,700	44	340	240	2324	760	ND<1000	ND<50	ND<50	ND<50	
11/4/2003		52.25	7.22	52,000	37,000	56,000	1,500	33	340	259.4	2132.4	ND<1200	ND<200	17	ND<10	ND<10	
2/2/2004		56.17	3.30	19,000	2,200	300	1,300	29	240	208.1	1777.1	680	99	16	ND<5.5	ND<1.0	**1,2-DCA=2.3**
5/4/2004		54.59	4.88	31,000	6,500	5,100	1,500	37	310	217.4	2064.4	ND<1000	82	14	2.3	ND<10	
8/3/2004		52.92	6.55	21,000	2,900	1,100	1,600	32	220	160	2012	530	ND<500	ND<50	ND<50	ND<50	
11/10/2004		54.14	5.33	140,000	25,000	12,000	830	20	50	401	1301	ND<850	59	8	2	ND<1.0	
2/1/2005		54.86	4.61	23,000	6,000	3,200	910	24	130	134.1	1198.1	400	34	8.1	1.4	ND<1.0	
5/3/2005		55.28	4.19	21,000	3,900	2,000	640	18	180	112.5	950.5	210	75	6.9	1.2	ND<1.0	
8/2/2005		54.02	5.45	29,000	8,000	3,500	550	18	56	153.2	777.2	ND<300	53	4.3	ND<1.0	ND<1.0	
11/1/2005		51.70	7.77	13,000	12,000	7,100	630	15	97	80	822	ND<400	61	6.2	ND<1.0	ND<1.0	All ND<1.0-3.0
1/31/2006		55.98	3.49	6,900	550	180	490	15	93	77	675	ND<300	ND<50	5.2	ND<1.0	ND<1.0	All ND<1.0
5/2/2006		55.33	4.14	9,300	780	ND<170	280	14	140	80.6	514.6	ND<60	ND<50	2.6	ND<1.0	ND<1.0	All ND<1.0-2.0

TABLE 2: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Fortuna Shell; 809 Main St., Fortuna, California
LOP No. 12672; LACO No. 4563.03

	Groundwater Measurements			Analytical Results													
WELL Sample Date	Well Head Elevation (feet NAVD 88)	Hydraulic Head Elevation (feet NAVD 88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	BTEX sum	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Other Analytes (µg/L)
MW6	60.06	Screened Interval = 12-20 feet bgs															
8/4/2000		52.86	7.20	---	---	---	---	---	---	---	0	---	---	---	---	---	
8/7/2000		52.14	7.92	1,200	140	ND<170	2.6	2.5	1.1	1.9	8.1	820			5.4	3.0	
9/8/2000		51.64	8.42	---	---	---	---	---	---	---	0	---	---	---	---	---	
10/12/2000		50.96	9.10	---	---	---	---	---	---	---	0	---	---	---	---	---	
11/3/2000		51.51	8.55	670	ND<50	ND<170	1.6	0.5	0.5	0.65	3.25	900	130	10	8.8	5.0	1,2 DCA=8.5
12/12/2000		53.24	6.82	---	---	---	---	---	---	---	0	---	---	---	---	---	
1/8/2001		52.99	7.07	---	---	---	---	---	---	---	0	---	---	---	---	---	
2/6/2001		53.55	6.51	900	ND<50	ND<170	2.5	2.5	2.5	2.5	10	1,200	ND<50	35	7.8	ND<5.0	1,2 DCA=7.3
3/12/2001		52.75	7.31	---	---	---	---	---	---	---	0	---	---	---	---	---	
4/20/2001		55.35	4.71	---	---	---	---	---	---	---	0	---	---	---	---	---	
5/8/2001		52.49	7.57	570	51	ND<200	1.5	2.5	2.5	2.5	9	860	68	37	5.0	ND<2.5	1,2 DCA=4.6
6/8/2001		52.34	7.72	---	---	---	---	---	---	---	0	---	---	---	---	---	
7/16/2001		52.24	7.82	---	---	---	---	---	---	---	0	---	---	---	---	---	
8/7/2001		51.91	8.15	680	ND<50	ND<170	1.3	1.3	1.3	1.3	5.2	1,100	200	38	6.4	2.6	1,2 DCA=4.9
9/17/2001		51.59	8.47	---	---	---	---	---	---	---	0	---	---	---	---	---	
10/24/2001		51.06	9.00	---	---	---	---	---	---	---	0	---	---	---	---	---	
11/6/2001		50.84	9.22	750	ND<50	ND<170	1	1	1	1	4	910	150	35	4.9	2.1	1,2 DCA=3.9
2/5/2002		54.17	5.89	710	ND<50	---	1	1	1	1	4	1,300	350	92	7.8	3.1	Pb Scavs=3.7
5/9/2002		53.79	6.27	630	ND<50	---	2	2	2	2	6	1,100	160	54	3.5	ND<3.0	Pb Scavs=3.5
8/15/2002		52.88	7.18	930	ND<50	ND<170	1	1	1	1.7	4.7	980	160	54	5.1	2.3	
12/20/2002		54.47	5.59	910	ND<50	ND<170	1	1	1	0.5	2	1,200	480	64	4.9	2.7	1,2-DCA=4.0
2/11/2003		54.39	5.67	1,100	ND<50	ND<170	0.58	1	1	0.5	2.08	1,300	450	74	5.2	ND<4.0	1,2-DCA=3.6
5/13/2003		54.53	5.53	380	ND<50	ND<170	1	1	1	1	2	960	180	62	3.6	1.5	1,2-DCA=3.1
8/14/2003		51.35	8.71	720	ND<50	ND<170	1	1	1	1	2	1,000	210	72	4.8	2.1	1,2-DCA=2.4
11/4/2003		49.54	10.52	670	ND<50	ND<170	1	1	1	1	2	1,000	190	58	3.5	1.7	1,2-DCA=2.3
2/2/2004		53.95	6.11	1,100	ND<50	ND<170	1	1	1	1	2	1,100	270	64	ND<8.0	2.0	
5/4/2004		52.16	7.90	450	ND<50	ND<170	1	1	1	1	2	480	55	29	1.8	ND<1.0	
8/3/2004		50.44	9.62	160	ND<50	ND<170	1	1	1	1	2	180	ND<22	6.9	ND<1.0	ND<1.0	
11/10/2004		51.64	8.42	ND<50	ND<50	ND<170	1	1	1	1	2	30	ND<10	ND<1.0	ND<1.0	ND<1.0	
2/1/2005		54.72	5.34	ND<50	ND<50	ND<170	1	1	1	1	2	21	ND<10	ND<1.0	ND<1.0	ND<1.0	
5/3/2005		54.73	5.33	ND<50	ND<50	ND<170	1	1	1	1	2	7	ND<10	ND<1.0	ND<1.0	ND<1.0	
8/2/2005		53.94	6.12	ND<50	ND<50	ND<170	1	1	1	1	2	10	ND<10	ND<1.0	ND<1.0	ND<1.0	
11/1/2005		52.07	7.99	ND<50	ND<50	ND<170	1	1	1	1	2	11	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0-3.0
1/31/2006		55.63	4.43	ND<50	51	ND<170	0.5	0.5	0.5	0.5	2	1.6	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0
5/2/2006		55.41	4.65	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0	10	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0

TABLE 2: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Fortuna Shell, 809 Main St., Fortuna, California
LOP No. 12672; LACO No. 4563.03

	Groundwater Measurements			Analytical Results													
WELL Sample Date	Well Head Elevation (feet NAVD 88)	Hydraulic Head Elevation (feet NAVD 88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	BTEX sum	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Other Analytes (µg/L)
MW7	59.80	Screened Interval = 10-15 feet bgs															
8/4/2000		53.63	6.17	---	---	---	---	---	---	---	0	---	---	---	---	---	
8/7/2000		53.60	6.20	3,700	190	ND<170	33	2.8	2	67.4	105.2	3,000	700	220			
9/8/2000		52.97	6.83	---	---	---	---	---	---	---	0	---	---	---	---	---	
10/12/2000		52.35	7.45	---	---	---	---	---	---	---	0	---	---	---	---	---	
11/3/2000		53.50	6.30	910	110	ND<170	2.2	1	1.2	1.9	6.3	1,200	280	90	4.2	ND<2.5	
12/12/2000		53.78	6.02	---	---	---	---	---	---	---	0	---	---	---	---	---	
1/8/2001		54.13	5.67	---	---	---	---	---	---	---	0	---	---	---	---	---	
2/6/2001		54.39	5.41	1,700	170	280	5.2	5	5	5	20.2	1,800	440	160	ND<10	ND<10	
3/12/2001		54.73	5.07	---	---	---	---	---	---	---	0	---	---	---	---	---	
4/20/2001		54.61	5.19	---	---	---	---	---	---	---	0	---	---	---	---	---	
5/8/2001		54.39	5.41	1,100	160	ND<200	6.6	5	5	5	21.6	2,000	450	200	ND<5.0	ND<5.0	
6/8/2001		54.17	5.63	---	---	---	---	---	---	---	0	---	---	---	---	---	
7/16/2001		54.00	5.80	---	---	---	---	---	---	---	0	---	---	---	---	---	
8/7/2001		53.70	6.10	1,400	ND<50	ND<170	8.3	5	5	5	23.3	2,100	670	180	ND<10	ND<10	
9/17/2001		53.39	6.41	---	---	---	---	---	---	---	0	---	---	---	---	---	
10/24/2001		52.85	6.95	---	---	---	---	---	---	---	0	---	---	---	---	---	
11/6/2001		52.63	7.17	1,400	ND<50	ND<170	1.5	1.5	1.5	1.5	6	1,800	430	150	4.6	ND<3.0	
2/5/2002		55.40	4.40	1,500	ND<50	---	31	1.5	1.5	1.5	35.5	2,000	750	190	7.9	3.8	1,2-DCA=3.3
5/9/2002		54.88	4.92	1,100	ND<50	ND<170	51	2.5	2.5	2.5	58.5	1,800	280	96	ND<5.0	ND<5.0	
8/15/2002		53.06	6.74	1,500	53	ND<170	4.6	1.5	1.5	2.6	10.2	1,500	290	110	5.3	ND<3.0	
12/20/2002		55.83	3.97	750	ND<50	ND<170	0.64	0.5	0.5	0.57	2.21	1,200	510	78	3.4	ND<1.0	1,2-DCA=1.3
2/11/2003		55.32	4.48	1,400	ND<50	ND<170	36	0.69	0.74	0.61	38.04	1,300	550	78	ND<8.0	ND<4.0	1,2-DCA=2.8
5/13/2003		53.78	6.02	620	ND<50	ND<170	18	0.64	0.79	1.21	20.64	1,000	190	64	3.4	1.9	1,2-DCA=2.7
8/14/2003		52.90	6.90	830	54	ND<170	1.4	0.5	0.5	0.5	2.9	1,100	250	85	4.0	1.1	
11/4/2003		52.04	7.76	570	ND<50	ND<170	1.4	0.5	0.5	0.5	2.9	780	140	48	2.7	ND<1.0	1,2-DCA=1.2
2/2/2004		55.82	3.98	1,300	50	ND<170	7.6	0.5	0.56	0.5	9.16	1,200	240	69	4.6	ND<4.5	1,2-DCA=2.2
5/4/2004		54.43	5.37	800	ND<50	ND<170	0.5	0.5	0.5	0.5	2	870	ND<50	67	2.8	ND<1.0	
8/3/2004		52.23	7.57	710	ND<50	ND<170	0.5	0.5	0.5	0.5	2	720	42	48	2.4	ND<1.0	
11/10/2004		53.67	6.13	ND<50	56	ND<170	0.5	0.5	0.5	0.5	2	7.0	ND<10	ND<1.0	ND<1.0	ND<1.0	
2/1/2005		55.24	4.56	140	ND<50	ND<170	0.66	0.5	0.5	0.5	2.16	130	ND<10	5.3	ND<1.0	ND<1.0	
5/3/2005		55.13	4.67	150	ND<50	ND<170	0.5	0.5	0.5	0.5	2	140	ND<20	7.3	ND<1.0	ND<1.0	
8/2/2005		53.78	6.02	170	ND<50	ND<170	0.5	0.5	0.5	0.5	2	150	ND<30	5.7	ND<1.0	ND<1.0	1,2-DCA=1.1
11/1/2005		52.68	7.12	230	ND<50	ND<170	0.5	0.5	0.5	0.5	2	280	ND<65	12	1.3	ND<1.0	All ND<1.0-3.0
1/31/2006		56.18	3.62	380	60	ND<170	0.5	0.5	0.5	0.5	2	320	ND<80	17	ND<3.0	ND<1.0	1,2-DCA=1.1
5/2/2006		55.63	4.17	360	51	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0	310	ND<100	16	ND<2.0	ND<1.0	All ND<1.0-2.0

TABLE 2: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Fortuna Shell; 809 Main St., Fortuna, California
LOP No. 12672; LACO No. 4563.03

	Groundwater Measurements			Analytical Results													
WELL Sample Date	Well Head Elevation (feet NAVD 88)	Hydraulic Head Elevation (feet NAVD 88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	BTEX sum	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Other Analytes (µg/L)
MW8	59.58	Screened Interval = 15-20 feet bgs															
8/4/2000		52.05	7.53	---	---	---	---	---	---	---	0	---	---	---	---	---	
8/7/2000		50.81	8.77	4,800	98	ND<170	10	10	10	10	40	11,000	2,100	36	54		1,2 DCA=42
9/8/2000		51.60	7.98	---	---	---	---	---	---	---	0	---	---	---	---	---	
10/12/2000		51.17	8.41	---	---	---	---	---	---	---	0	---	---	---	---	---	
11/3/2000		52.58	7.00	3,200	65	ND<170	4	4	4	4	16	7,800	1,300	50	56	ND<10	
12/12/2000		52.82	6.76	---	---	---	---	---	---	---	0	---	---	---	---	---	
1/8/2001		52.77	6.81	---	---	---	---	---	---	---	0	---	---	---	---	---	
2/6/2001		53.29	6.29	5,700	ND<50	ND<170	10	10	10	10	40	8,000	1,100	61	47	ND<20	
3/12/2001		53.66	5.92	---	---	---	---	---	---	---	0	---	---	---	---	---	
4/20/2001		53.26	6.32	---	---	---	---	---	---	---	0	---	---	---	---	---	
5/8/2001		52.85	6.73	4,600	ND<50	ND<200	6.3	6.3	6.3	6.3	25.2	6,900	620	83	35	ND<13	
6/8/2001		52.70	6.88	---	---	---	---	---	---	---	0	---	---	---	---	---	
7/16/2001		52.58	7.00	---	---	---	---	---	---	---	0	---	---	---	---	---	
8/7/2001		51.61	7.97	4,700	ND<50	ND<170	13	13	13	13	52	7,600	ND<250	120	41	ND<25	
9/17/2001		50.80	8.78	---	---	---	---	---	---	---	0	---	---	---	---	---	
10/24/2001		50.28	9.30	---	---	---	---	---	---	---	0	---	---	---	---	---	
11/6/2001		50.68	8.90	4,800	ND<50	ND<170	10	10	10	10	40	7,000	920	98	37	ND<20	
2/5/2002		53.62	5.96	2,600	ND<50	---	5	5	5	5	20	6,200	860	170	37	ND<10	
5/9/2002		53.05	6.53	2,800	ND<50	ND<170	5	5	5	5	20	6,500	850	130	24	ND<10	
8/15/2002		52.25	7.33	4,400	ND<50	ND<170	5	5	5	5	20	5,600	820	160	33	ND<10	
12/20/2002		53.52	6.06	3,100	ND<50	ND<170	0.63	0.5	0.5	0.62	2.25	5,700	ND<6000	160	31	4	1,2-DCA=3.0
2/11/2003		54.41	5.17	4,500	ND<50	ND<170	0.5	0.5	0.5	0.5	2	6,200	1,800	110	29.0	4.0	1,2-DCA=3.7
5/13/2003		53.56	6.02	950	ND<50	ND<170	0.5	0.5	0.5	0.5	2	4,500	1,100	140	20.0	2.5	1,2-DCA=3.0
8/14/2003		50.53	9.05	1,300	ND<50	ND<170	0.5	0.5	0.5	0.5	2	4,600	1,100	150	24.0	3.2	1,2-DCA=2.2
11/4/2003		50.70	8.88	1,500	ND<50	ND<170	1.5	0.5	0.51	0.5	3.01	4,700	1,100	130	21	2.9	1,2-DCA=2.3
2/2/2004		53.82	5.76	4,200	ND<50	ND<170	0.5	0.5	0.5	0.5	2	4,700	1,000	150	21	3.1	1,2-DCA=3.0
5/4/2004		52.56	7.02	2,900	ND<50	ND<170	0.5	0.5	0.5	0.5	2	4,300	1,100	140	20	3.1	
8/3/2004		49.60	9.98	3,000	ND<50	ND<170	0.5	0.5	0.5	0.5	2	4,100	920	110	17	2.7	
11/10/2004		49.26	10.32	3,100	ND<50	ND<170	0.5	0.5	0.5	0.5	2	3,500	810	110	14	ND<4.0	
2/1/2005		49.74	9.84	2,600	ND<50	ND<170	0.5	0.5	0.5	0.5	2	3,500	640	130	14	ND<4.0	1,2-DCA=2.9
5/3/2005		49.24	10.34	1,900	ND<50	ND<170	0.5	0.5	0.5	0.5	2	3,300	890	ND<200	12	2.2	1,2-DCA=1.8
8/2/2005		48.40	11.18	1,800	ND<50	ND<170	0.88	0.5	0.5	0.5	2.38	2,500	450	97	9.1	ND<3.0	1,2-DCA=1.9
11/1/2005		50.93	8.65	1,200	110	ND<170	1.3	0.5	0.5	0.5	2.8	3,000	420	80	9.8	2.1	All ND<1.0-3.0
1/31/2006		50.00	9.58	1,900	ND<50	ND<170	0.5	0.5	0.5	0.5	2	2,300	330	84	8.8	ND<4.0	1,2-DCA=2.1
5/2/2006		49.10	10.48	1,700	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0	2,100	440	81	8.3	ND<4.0	1,2-DCA=1.7 All Others = ND<1.0

TABLE 2: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Fortuna Shell; 809 Main St., Fortuna, California
LOP No. 12672; LACO No. 4563.03

	Groundwater Measurements			Analytical Results													
WELL Sample Date	Well Head Elevation (feet NAVD 88)	Hydraulic Head Elevation (feet NAVD 88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	BTEX sum	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Other Analytes (µg/L)
MW9	59.35	Screened Interval = 12-15 feet bgs															
11/6/2001		46.34	13.01	160	ND<50	ND<170	0.5	0.5	0.5	0.5	2	210	ND<5.0	17	ND<1.0	ND<1.0	
2/5/2002		52.11	7.24	92	ND<50	---	0.5	0.5	0.5	0.5	2	210	ND<5.0	20	ND<1.0	ND<1.0	
5/9/2002		49.62	9.73	88	ND<50	ND<170	0.5	0.5	0.5	0.5	2	180	ND<5.0	13	ND<1.0	ND<1.0	
8/15/2002		49.90	9.45	100	ND<50	ND<170	0.5	0.5	0.69	1.8	3.49	81	ND<5.0	7.1	ND<1.0	ND<1.0	
12/20/2002		51.46	7.89	ND<50	---	---	0.5	0.5	0.5	0.53	2.03	30	ND<20	1.8	ND<1.0	ND<1.0	
2/11/2003		53.66	5.69	51	ND<50	ND<170	0.5	0.5	0.5	0.5	2	29	ND<20	1.8	ND<1.0	ND<1.0	
5/13/2003		52.43	6.92	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	10	ND<20	ND<1.0	ND<1.0	ND<1.0	
8/14/2003		49.68	9.67	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	12	ND<20	1.1	ND<1.0	ND<1.0	
11/4/2003		49.12	10.23	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	21	ND<20	1.5	ND<1.0	ND<1.0	
2/2/2004		52.79	6.56	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	10	ND<10	ND<1.0	ND<1.0	ND<1.0	
5/4/2004		51.06	8.29	76	ND<50	ND<170	0.5	0.5	0.5	0.5	2	7.8	ND<10	ND<1.0	ND<1.0	ND<1.0	
8/3/2004		49.48	9.87	65	ND<50	ND<170	0.5	0.5	0.5	0.5	2	5.1	ND<10	ND<1.0	ND<1.0	ND<1.0	
11/10/2004		50.28	9.07	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	6.8	ND<10	ND<1.0	ND<1.0	ND<1.0	
2/1/2005		51.69	7.66	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	4.3	ND<10	ND<1.0	ND<1.0	ND<1.0	
5/3/2005		51.29	8.06	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	4.1	ND<10	ND<1.0	ND<1.0	ND<1.0	
8/2/2005		50.11	9.24	ND<50	---	---	0.5	0.5	0.5	0.5	2	2.7	ND<10	ND<1.0	ND<1.0	ND<1.0	
11/1/2005		49.14	10.21	ND<50	---	---	0.5	0.5	0.5	0.5	2	5.8	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0-3.0
1/31/2006		52.37	6.98	ND<50	---	---	0.5	0.5	0.5	0.5	2	5.0	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0
5/2/2006		51.62	7.73	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0	4.6	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0
MW10	59.19	Screened Interval = 12.5-15.5 feet bgs															
11/6/2001		48.64	10.55	61	ND<50	ND<170	0.5	0.5	0.5	0.5	2	82	17	2.9	ND<1.0	ND<1.0	
2/5/2002		52.12	7.07	55	ND<50	---	0.5	0.5	0.5	0.5	2	47	11	ND<1.0	ND<1.0	ND<1.0	
5/9/2002		51.17	8.02	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	34	ND<5.0	ND<1.0	ND<1.0	ND<1.0	
8/15/2002		48.04	11.15	87	ND<50	ND<170	0.5	0.5	1.3	3.4	5.7	41	ND<5.0	ND<1.0	ND<1.0	ND<1.0	
12/20/2002		51.68	7.51	53	190	2,800	0.5	0.5	0.5	0.5	2	63	ND<20	2.2	ND<1.0	ND<1.0	
2/11/2003		45.71	13.48	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	44	ND<20	1.4	ND<1.0	ND<1.0	
5/13/2003		48.49	10.70	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	15	ND<20	ND<1.0	ND<1.0	ND<1.0	
8/14/2003		47.55	11.64	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	38	ND<20	1.9	ND<1.0	ND<1.0	
11/4/2003		46.54	12.65	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	45	ND<20	2.3	ND<1.0	ND<1.0	
2/2/2004		48.11	11.08	86	ND<50	ND<170	0.5	0.5	0.5	0.5	2	52	ND<20	2.5	ND<1.0	ND<1.0	
5/4/2004		47.69	11.50	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	15	ND<10	ND<1.0	ND<1.0	ND<1.0	
8/3/2004		46.27	12.92	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	17	ND<10	ND<1.0	ND<1.0	ND<1.0	
11/10/2004		46.58	12.61	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	28	ND<10	1.4	ND<1.0	ND<1.0	
2/1/2005		50.36	8.83	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	11	ND<10	ND<1.0	ND<1.0	ND<1.0	
5/3/2005		49.79	9.40	ND<50	ND<50	210	0.5	0.5	0.5	0.5	2	9	ND<10	ND<1.0	ND<1.0	ND<1.0	
8/2/2005		49.01	10.18	ND<50	---	---	0.5	0.5	0.5	0.5	2	ND<1.0	ND<10	ND<1.0	ND<1.0	ND<1.0	
11/1/2005		49.35	9.84	99	---	---	0.5	0.5	0.5	0.5	2	4.1	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0-3.0
1/31/2006		51.72	7.47	ND<50	ND<50	ND<170	0.5	0.95	0.5	0.5	2.45	5.4	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0
5/2/2006		52.92	6.27	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0	5.0	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0

TABLE 2: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Fortuna Shell; 809 Main St., Fortuna, California
LOP No. 12672; LACO No. 4563.03

	Groundwater Measurements			Analytical Results													
WELL Sample Date	Well Head Elevation (feet NAVD 88)	Hydraulic Head Elevation (feet NAVD 88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	BTEX sum	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Other Analytes (µg/L)
MW11	59.21	Screened Interval = 12.5-15.5 feet bgs															
11/6/2001		47.85	11.36	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	10	ND<50	ND<1.0	ND<1.0	ND<1.0	
2/5/2002		50.97	8.24	ND<50	ND<50	---	0.5	0.5	0.5	0.5	2	6.3	ND<50	ND<1.0	ND<1.0	ND<1.0	
5/9/2002		50.45	8.76	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	1.1	ND<50	ND<1.0	ND<1.0	ND<1.0	
8/15/2002		48.00	11.21	ND<50	ND<50	ND<170	0.5	0.5	0.52	1.2	2.72	0.9	ND<5.0	ND<1.0	ND<1.0	ND<1.0	
12/20/2002		51.92	7.29	ND<50	ND<50	240	0.5	0.5	0.5	0.5	2	1.4	ND<20	ND<1.0	ND<1.0	ND<1.0	
2/11/2003		50.79	8.42	ND<50	ND<50	230	0.5	0.5	0.5	0.5	2	2.8	ND<20	ND<1.0	ND<1.0	ND<1.0	
5/13/2003		51.24	7.97	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	ND<1.0	ND<20	ND<1.0	ND<1.0	ND<1.0	
8/14/2003		48.11	11.10	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	2.1	ND<20	ND<1.0	ND<1.0	ND<1.0	
11/4/2003		45.99	13.22	ND<50	ND<50	270	0.5	0.5	0.5	0.5	2	9.2	ND<20	ND<1.0	ND<1.0	ND<1.0	
2/2/2004		51.18	8.03	52	ND<50	ND<170	0.5	0.5	0.5	0.5	2	18	ND<10	ND<1.0	ND<1.0	ND<1.0	
5/4/2004		50.04	9.17	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	2.7	ND<10	ND<1.0	ND<1.0	ND<1.0	
8/3/2004		47.41	11.80	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	1.8	ND<10	ND<1.0	ND<1.0	ND<1.0	
11/10/2004		49.59	9.62	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	1.7	ND<10	ND<1.0	ND<1.0	ND<1.0	
2/1/2005		50.38	8.83	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	3.7	ND<10	ND<1.0	ND<1.0	ND<1.0	
5/3/2005		49.76	9.45	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	3.0	ND<10	ND<1.0	ND<1.0	ND<1.0	
8/2/2005		48.76	10.45	ND<50	---	---	0.5	0.5	0.5	0.5	2	2.0	ND<10	ND<1.0	ND<1.0	ND<1.0	
11/1/2005		47.51	11.70	ND<50	---	---	0.5	0.5	0.5	0.5	2	2.2	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0-3.0
1/31/2006		51.12	8.09	ND<50	---	---	0.5	0.5	0.5	0.5	2	3.9	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0
5/2/2006		49.97	9.24	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0	3.2	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0
MW12	59.09	Screened Interval = 12.5-15 feet bgs															
11/6/2001		48.05	11.04	1,700	ND<50	ND<170	2.5	2.5	2.5	2.5	10	2,400	250	51	11	ND<1.0	
2/5/2002	Well was inaccessible		---	---	---	---	---	---	---	---	0	---	---	---	---	---	
5/9/2002		50.67	8.42	1,300	ND<50	ND<170	2.5	2.5	2.5	2.5	10	2,900	110	75	6.3	ND<5.0	
8/15/2002		48.97	10.12	1,800	ND<50	ND<170	2.5	2.5	2.5	2.5	10	2,300	96	92	9.4	ND<5.0	
12/20/2002		52.42	6.67	1,800	ND<50	ND<170	0.5	0.5	0.5	0.5	2	2,600	430	94	9.0	3.3	
2/11/2003	Well was inaccessible		---	---	---	---	---	---	---	---	0	---	---	---	---	---	
5/13/2003		51.41	7.68	470	ND<50	ND<170	0.5	0.5	0.5	0.5	2	1,400	94	72	5.0	1.7	
8/14/2003		48.71	10.38	740	ND<50	ND<170	0.5	0.5	0.5	0.5	2	1,600	76	82	6.6	2.3	
11/4/2003		48.20	10.89	840	ND<50	ND<170	0.5	0.5	0.5	0.5	2	1,600	ND<50	68	4.7	1.9	
2/2/2004		51.69	7.40	1,500	ND<50	ND<170	0.5	0.5	0.5	0.5	2	1,700	ND<60	72	5.6	2.3	
5/4/2004		50.28	8.81	1,200	ND<50	ND<170	0.5	0.5	0.5	0.5	2	1,400	ND<45	69	4.5	1.8	
8/3/2004		48.34	10.75	2,100	76	ND<170	0.5	0.5	0.5	0.5	2	1,300	110	96	9.5	2.7	
11/10/2004		49.78	9.31	1,200	ND<50	ND<170	0.5	0.5	0.5	0.5	2	1,200	45	47	3.4	1.6	
2/1/2005		50.58	8.51	990	ND<50	ND<170	0.5	0.5	0.5	0.5	2	950	56	40	3.4	1.5	
5/3/2005		49.98	9.11	640	ND<50	ND<170	0.5	0.5	0.5	0.5	2	720	ND<15	34	3.2	1.6	
8/2/2005		49.07	10.02	750	---	---	0.5	0.5	0.5	0.5	2	790	ND<10	32	2.6	1.3	
11/1/2005		48.06	11.03	340	---	---	0.5	0.5	0.5	0.5	2	580	ND<10	21	1.8	1.1	All ND<1.0-3.0
1/31/2006		51.01	8.08	660	---	---	0.5	0.5	0.5	0.5	2	630	ND<10	27	ND<4.0	1.2	All ND<1.0
5/2/2006		50.08	9.01	670	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0	620	ND<10	25	ND<4.0	ND<2.0	All ND<1.0

TABLE 2: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Fortuna Shell; 809 Main St., Fortuna, California
LOP No. 12672; LACO No. 4563.03

	Groundwater Measurements			Analytical Results													
WELL Sample Date	Well Head Elevation (feet NAVD 88)	Hydraulic Head Elevation (feet NAVD 88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	BTEX sum	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Other Analytes (µg/L)
MW13	58.86	Screened Interval = 12.5-15 feet bgs															
11/6/2001		48.82	10.04	2,000	ND<50	ND<170	2.5	2.5	2.5	2.5	10	2,800	330	110	9.8	ND<5.0	
2/5/2002		51.58	7.28	1,300	ND<50	---	1.5	1.5	1.5	1.5	6	2,800	370	160	11.0	4.0	
5/9/2002	Well was inaccessible		---	---	---	---	---	---	---	---	0	---	---	---	---	---	
8/15/2002		51.01	7.85	1,000	ND<50	ND<170	1	1	1	1.3	4.3	1,200	51	70	5.7	ND<2.0	
12/20/2002		53.68	5.18	ND<50	54	570	0.5	1.0	0.5	0.5	2.5	38	ND<20	1.8	ND<1.0	ND<1.0	
2/11/2003	Well was inaccessible		---	---	---	---	---	---	---	---	0	---	---	---	---	---	
5/13/2003		52.06	6.80	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	2	21	ND<20	1.9	ND<1.0	ND<1.0	
8/14/2003		49.48	9.38	160	ND<50	ND<170	0.5	0.5	0.5	0.5	2	260	ND<20	13	ND<1.0	ND<1.0	
11/4/2003		49.12	9.74	170	ND<50	ND<170	0.5	0.5	0.5	0.5	2	210	ND<20	13	ND<1.0	ND<1.0	
2/2/2004		52.09	6.77	330	ND<50	ND<170	0.5	0.5	0.5	0.5	2	360	ND<20	13	ND<2.5	ND<1.0	
5/4/2004		50.89	7.97	270	ND<50	ND<170	0.5	0.5	0.5	0.5	2	280	ND<10	12	ND<2.5	ND<1.0	
8/3/2004		49.13	9.73	960	ND<50	ND<170	0.5	0.5	0.5	0.5	2	820	ND<100	34	2.2	1.3	
11/10/2004		50.52	8.34	400	ND<50	ND<170	0.5	0.5	0.5	0.5	2	370	ND<25	16	ND<2.0	ND<1.0	
2/1/2005		51.10	7.76	270	ND<50	270	0.5	0.5	0.5	0.5	2	260	ND<40	9.5	ND<1.0	ND<1.0	
5/3/2005		50.60	8.26	63	ND<50	ND<170	0.5	0.5	0.5	0.5	2	63	ND<10	1.7	ND<1.0	ND<1.0	
8/2/2005		49.85	9.01	200	---	---	0.5	0.5	0.5	0.5	2	230	ND<10	7.1	ND<1.0	ND<1.0	
11/1/2005		48.92	9.94	250	---	---	0.5	0.5	0.5	0.5	2	390	ND<10	14	ND<1.0	ND<1.0	All ND<1.0-3.0
1/31/2006	Well was inaccessible																
5/2/2006	Well was inaccessible																
MW14	61.04	Screened Interval = 5-10 feet bgs															
11/10/2004		53.89	7.15	1,100	150	ND<170	0.62	0.5	1.2	0.5	2.82	ND<30	ND<20	1.7	ND<1.0	ND<1.0	
2/1/2005		55.76	5.28	580	120	ND<170	0.77	0.5	0.65	0.5	2.42	ND<15	ND<10	ND<1.0	ND<1.0	ND<1.0	
5/3/2005		55.70	5.34	1,000	140	ND<170	1.3	0.55	1.3	0.59	3.74	7.9	ND<10	1.2	ND<1.0	ND<1.0	
8/2/2005		54.37	6.67	880	160	ND<170	0.93	0.5	1.1	0.5	3.03	ND<14	ND<10	ND<1.0	ND<1.0	ND<1.0	
11/1/2005		53.57	7.47	920	92	ND<190	0.88	0.5	1.3	0.5	3.18	6.6	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0-3.0
1/31/2006		56.61	4.43	300	66	ND<170	0.73	0.5	0.5	0.5	2.23	5.2	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0
5/2/2006		56.33	4.71	210	100	ND<170	0.73	ND<0.50	ND<0.50	ND<0.50	0.73	2.1	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0
MW15	60.80	Screened Interval = 5-10 feet bgs															
11/10/2004		54.37	6.43	1,600	90	ND<170	97	2.7	15	6.3	121	70	ND<40	2.6	ND<1.0	ND<1.0	
2/1/2005		56.34	4.46	1,100	120	ND<170	40	1.4	8.9	3.4	53.7	ND<30	ND<10	ND<1.0	ND<1.0	ND<1.0	
5/3/2005		55.84	4.96	2,200	170	ND<170	75	2.4	15	5.74	98.14	ND<70	ND<20	1.9	ND<1.0	ND<1.0	
8/2/2005		54.52	6.28	2,100	250	ND<170	120	3.5	23	7.5	154	ND<100	ND<30	2.4	ND<1.0	ND<1.0	
11/1/2005		53.15	7.65	2,500	99	ND<210	180	4.4	35	12	231.4	ND<120	ND<28	2.6	ND<1.0	ND<1.0	All ND<1.0-3.0
1/31/2006		56.32	4.48	1,600	110	ND<170	110	2.9	19	5.3	137.2	ND<100	ND<35	2.5	ND<1.0	ND<1.0	All ND<1.0
5/2/2006		56.24	4.56	1,600	79	200	79	2.2	11	3.8	96	50	ND<30	2.8	ND<1.0	ND<1.0	All ND<1.0
MW16	60.24	Screened Interval = 5-10 feet bgs															
11/10/2004		54.45	5.79	3,900	200	ND<170	480	13	22	31.9	546.9	500	61	12	5.2	ND<1.0	
2/1/2005		55.75	4.49	5,600	340	ND<170	580	16	31	40.8	667.8	490	25	13	5.5	ND<1.0	
5/3/2005		55.69	4.55	7,900	370	ND<170	580	15	35	33.7	663.7	470	300	14	4.3	ND<1.0	
8/2/2005		54.12	6.12	4,600	570	320	680	14	22	33.6	749.6	360	220	8	3.9	ND<1.0	
11/1/2005		53.21	7.03	6,100	860	1,800	1,000	16	27	36	1079	430	280	11	4.5	ND<1.0	All ND<1.0-3.0
1/31/2006		56.61	3.63	5,800	250	ND<170	680	22	35	53.6	790.6	ND<400	ND<90	7.9	2.9	ND<1.0	All ND<1.0
5/2/2006		56.18	4.06	6,600	300	ND<170	790	21	22	51.3	884.3	300	ND<100	8.5	3.8	ND<1.0	All ND<1.0

TABLE 2: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Fortuna Shell; 809 Main St., Fortuna, California
LOP No. 12672; LACO No. 4563.03

	Groundwater Measurements			Analytical Results													
WELL Sample Date	Well Head Elevation (feet NAVD 88)	Hydraulic Head Elevation (feet NAVD 88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	BTEX sum	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Other Analytes (µg/L)
MW17S	56.96	**Screened Interval = 22.5-24.5 feet bgs**															
11/10/2004		**35.70**	**21.26**	**64**	---	---	0.5	0.5	0.5	0.5	**2**	**33**	ND<35	ND<1.0	ND<1.0	ND<1.0	
2/1/2005		**34.71**	**22.25**	**180**	**70**	ND<170	0.5	0.5	0.5	0.5	**2**	**180**	ND<50	ND<1.0	ND<1.0	**1.2**	
5/3/2005		**35.13**	**21.83**	**320**	ND<50	ND<170	0.5	0.5	0.5	0.5	**2**	**300**	ND<15	**2.1**	**1.7**	**1.8**	
8/2/2005		**34.51**	**22.45**	ND<50	---	---	0.5	0.5	0.5	0.5	**2**	**13**	ND<10	ND<1.0	ND<1.0	ND<1.0	**1,2-DCA=1.1**
11/1/2005		**34.76**	**22.20**	ND<50	---	---	0.5	0.5	0.5	0.5	**2**	**4.1**	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0-3.0
1/31/2006		**36.74**	**20.22**	**61**	---	---	0.5	0.5	0.5	0.5	**2**	**3.9**	ND<10	ND<1.0	ND<3.0	ND<3.0	**1,2-DCA=1.0**
5/2/2006		**34.18**	**22.78**	**410**	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0	**340**	**77**	**2.8**	ND<4.0	ND<3.0	All ND<1.0
MW17D	56.95	**Screened Interval = 26-28 feet bgs**															
11/10/2004		**32.42**	**24.53**	ND<50	ND<50	ND<170	0.5	0.5	0.5	0.5	**2**	**5.0**	ND<20	ND<1.0	ND<1.0	ND<1.0	
2/1/2005		**32.76**	**24.19**	**120**	ND<50	ND<170	0.5	0.5	0.5	0.5	**2**	**110**	**55**	ND<1.0	ND<1.0	**2.0**	
5/3/2005		**31.95**	**25.00**	**130**	ND<50	ND<170	0.5	0.5	0.5	0.5	**2**	**100**	ND<20	ND<1.0	ND<1.0	**2.0**	
8/2/2005		**30.50**	**26.45**	**130**	---	---	0.5	0.5	0.5	0.5	**2**	**50**	ND<10	ND<1.0	ND<1.0	ND<1.0	**1,2-DCA=1.1**
11/1/2005		**30.69**	**26.26**	**92**	---	---	0.5	0.5	0.5	0.5	**2**	**64**	ND<35	ND<1.0	ND<1.0	ND<1.0	All ND<1.0-3.0
1/31/2006		**31.43**	**25.52**	ND<50	---	---	0.5	0.5	0.5	0.5	**2**	**12**	ND<35	ND<1.0	ND<1.0	ND<1.0	All ND<1.0
5/2/2006		**31.42**	**25.53**	**80**	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0	**7.0**	ND<10	ND<1.0	ND<1.0	ND<1.0	All ND<1.0

NOTES:
Bold results indicate analyte detection
--- sample not analyzed for parameter
ND<50 - non-detect at reporting limits shown
Total Xylenes = sum of m,p-xylene and o-xylene
Other Analytes Include: 1,2-dichloroethane (1,2 DCA);1,2-dichlorobenzene; 1,3-dichlorobenzene; 1,4-dichlorobenzene; Ethylene dibromide (EDB); Methanol, Ethanol

CHART 1: TPHg CONCENTRATIONS VS. CUMULATIVE DAYS IN MONITORING WELL MW1
Fortuna Shell; 809 Main St., Fortuna, California
LOP No. 12672; LACO No. 4563.03

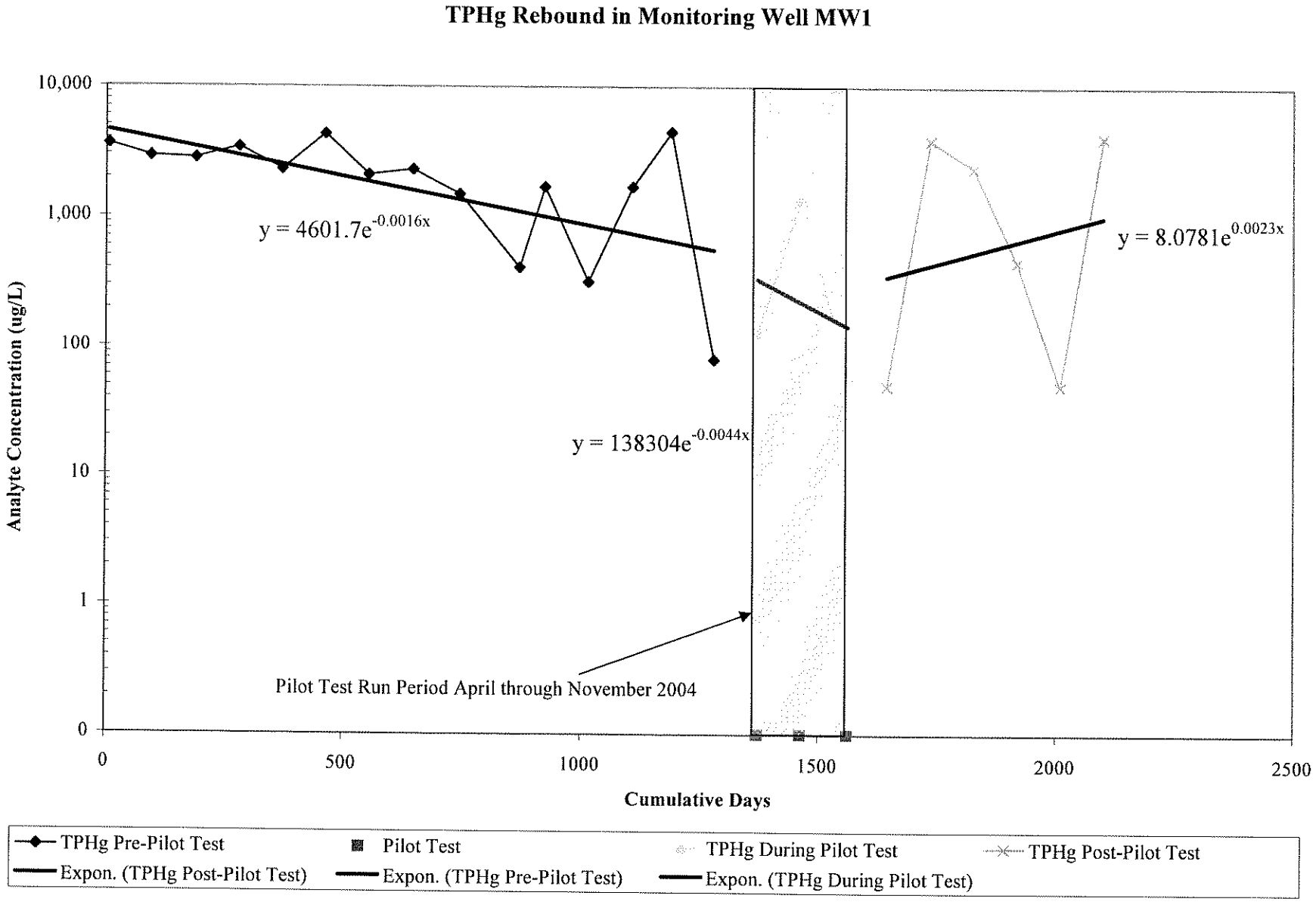


CHART 2: TPHg CONCENTRATIONS VS. CUMULATIVE DAYS IN MONITORING WELL MW4
Fortuna Shell; 809 Main St., Fortuna, California
LOP No. 12672; LACO No. 4563.03

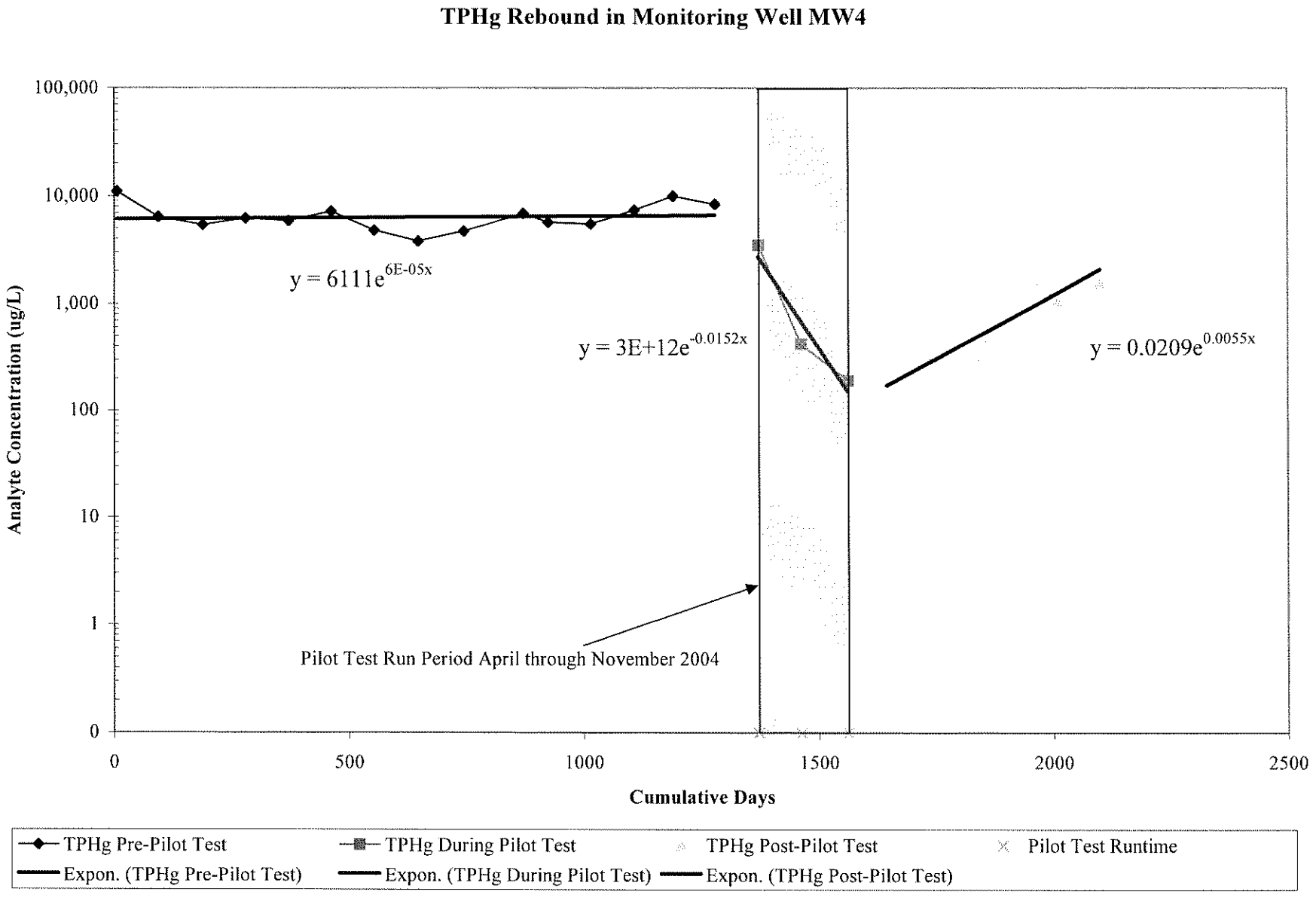


CHART 3: TPHg CONCENTRATIONS VS. CUMULATIVE DAYS IN MONITORING WELL MW7
Fortuna Shell; 809 Main St., Fortuna, California
LOP No. 12672; LACO No. 4563.03

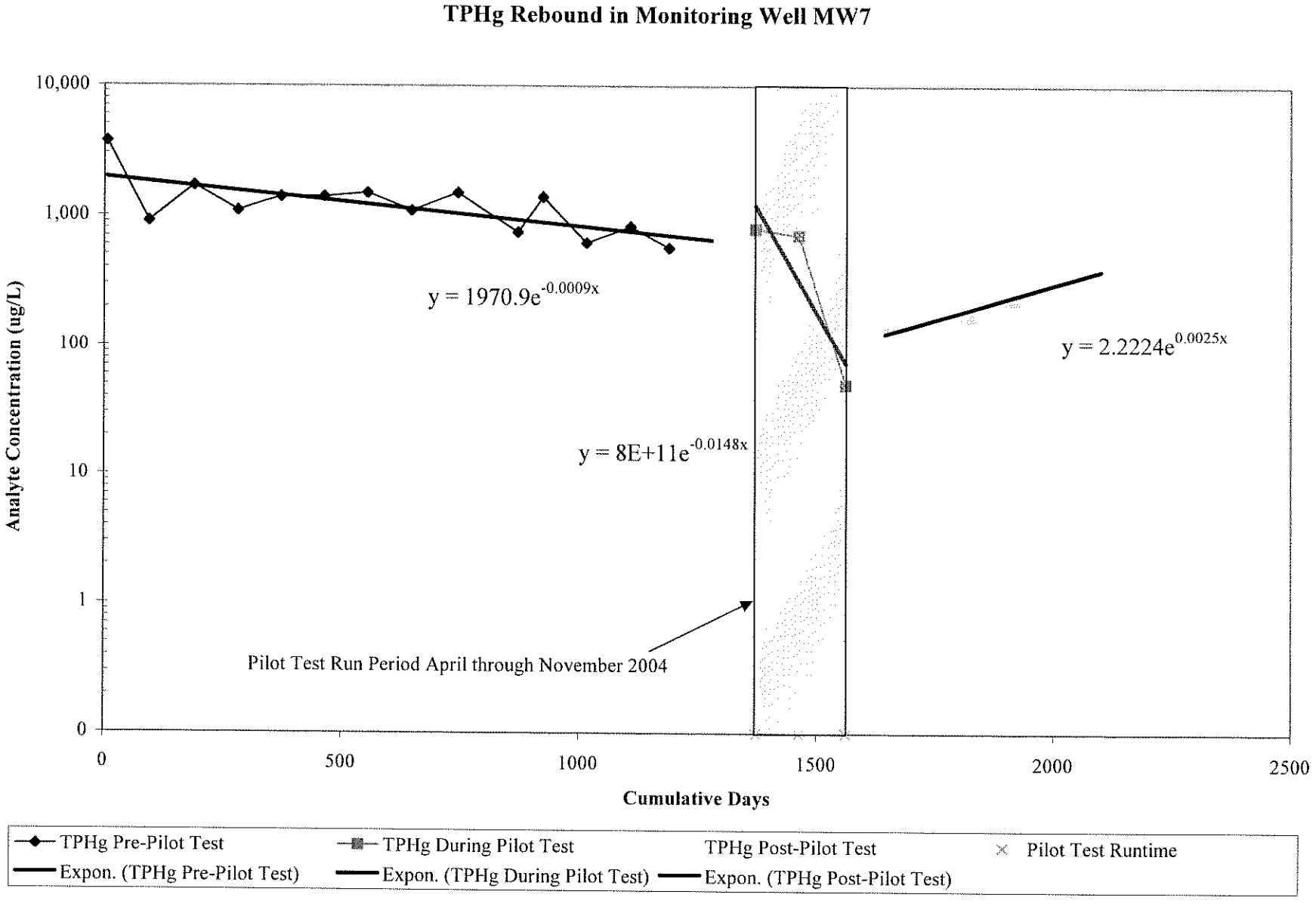
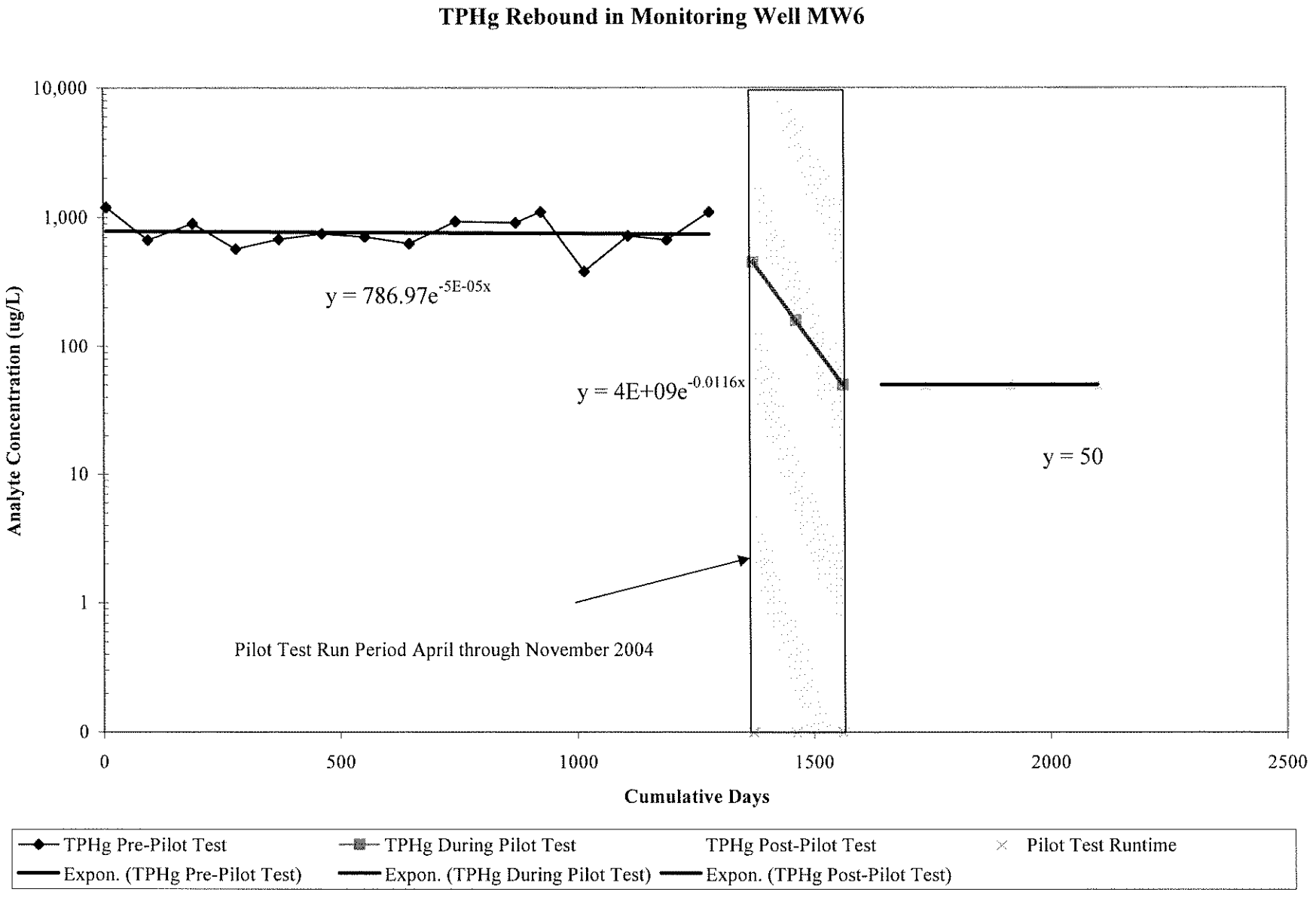


CHART 4: TPHg CONCENTRATIONS VS. CUMULATIVE DAYS IN MONITORING WELL MW6
Fortuna Shell; 809 Main St., Fortuna, California
LOP No. 12672; LACO No. 4563.03



Attachment 1

LACO ASSOCIATES
CONSULTING ENGINEERS
21 West Fourth Street, Eureka, CA 95501
TEL 707.443.5054
FAX 707.443.0553

Project Name: Fortuna Shell - W&S
Project No.: 4563.03
Date: 5-2-06
Golbal ID No.: T0602300471
PM: CJW

Tech: SJD / RLD
Mob/Demob time: .50/.50
Travel time: 1.0
Time on site: 8:00
Time off site: 11:15
Mileage: 36

WELL No.:	MW17S		MW17D		MW11		MW10		MW9	
DIAMETER (in)	1.50		1.50		2.00		2.00		2.00	
SCREENED INTERVAL (ft)	22.5-24.5		26-28		12.5-15.5		12.5-15.5		12-15	
DEPTH TO WATER (ft)	22.78		25.53		9.34		6.27		7.75	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH					6.3	6.4	6.9	6.9	6.7	7.1
TEMP (°C)					14.5	15.6	19.0	18.1	16.4	16.6
Ecw (µmohs)					310	300	200	190	270	260
ORP (mV)					45	37	NR	NR	NR	NR
DO (mg/L)					1.18	0.86	1.03	0.76	1.09	0.59
OTHER (units)	—		—		—		—		—	
PURGE: TIME	8:15	8:21	8:25	8:31	9:03	9:09	11:07	11:13	9:25	9:31
METHOD (DHP/CB/B)	3/4" B		3/4" B		DHP		DHP		DHP	
RATE (Lpm)	0.18		0.18		0.25		0.25		0.25	
VOLUME (L)	1.0		1.0		1.5		1.5		1.5	
COLOR	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR	GREY TINT	CLEAR	CLEAR
ODOR	MED - STRONG SULFUR		MED - STRONG SULFUR		NONE		MED SULFUR		MED STRONG SULFUR	
INTAKE DEPTH (FEET)	23.5		27.0		13.5		13.5		13.5	
SAMPLE: TIME	8:23		8:33		9:11		11:15		9:33	
METHOD (DHP/CB/B)	3/4" B		3/4" B		DHP		DHP		DHP	
ANALYTES	8260 List 5		8260 List 5		8260 List 5		8260 List 5		8260 List 5	
TOTAL DRAWDOWN (FEET)	—		—		1.10		1.74		2.12	
REMARKS	NOT ENOUGH TO PUMP		NOT ENOUGH TO PUMP		—		—		—	
WELL CONDITION	GOOD		GOOD		GOOD		GOOD		GOOD	
WASTE DRUMS										

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED

LACO ASSOCIATES
CONSULTING ENGINEERS
21 West Fourth Street, Eureka, CA 95501
TEL 707.443.5054
FAX 707.443.0553

Project Name: Fortuna Shell - W&S
Project No.: 4563.03
Date: 5-2-06
Golbal ID No.: T0602300471
PM: CJW

Tech: SJD/RLD
Mob/Demob time: .50/.50
Travel time: 1.0
Time on site: 8:00
Time off site: 11:15
Mileage: 36

WELL No.	MW3		MW6		MW12		MW7		MW13	
DIAMETER (in)	2.00		2.00		2.00		2.00		2.00	
SCREENED INTERVAL (ft)	5-12		12-20		12.5-15		10 - 15		12.5-15	
DEPTH TO WATER (ft)	4.53		4.65		9.01		4.17		—	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	8.4	7.5	8.3	7.4	6.5	6.4	7.4	7.1	—	—
TEMP (°C)	12.6	14.7	13.0	13.8	17.1	17.6	12.8	13.6	—	—
Ecw (µmohs)	442	371	238	224	390	380	338	331	—	—
ORP (mV)	Ur	Ur	5	49	-67	-94	-88	Ur	—	—
DO (mg/L)	1.12	0.52	1.09	0.62	0.760	0.92	1.15	0.50	—	—
OTHER (units)	—		—		—		—		—	
PURGE: TIME	9:11	9:19	9:36	9:44	10:01	10:07	10:01	10:09	—	—
METHOD (DHP/CB/B)	DHP		DHP		DHP		DHP		—	
RATE (Lpm)	0.18		0.18		0.25		0.18		—	
VOLUME (L)	1.40		1.40		1.5		1.40		—	
COLOR	CLEAR	SLIGHT YELLOW TINT	LT. BROWN CLOUDY	→	CLEAR	CLEAR	CLEAR	CLEAR	—	—
ODOR	MED. RUBBER/FUEL		SLIGHT SWEET?		LIGHT SULFUR		LIGHT SULFUR/SWEET		—	
INTAKE DEPTH (FEET)	10.0		15.0		13.5		12.0		—	
SAMPLE: TIME	9:21		9:46		10:09		10:11		—	
METHOD (DHP/CB/B)	DHP		DHP		DHP		DHP		—	
ANALYTES	8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC		8260 List 5		8260 List 5; TPHd/mo w/SGC		8260 List 5	
TOTAL DRAWDOWN (FEET)	0.92		2.80		1.00		1.33		—	
REMARKS	BLACK FILM ON DHT		—		—		—		CAP OVER WELL	
WELL CONDITION	2 BOLT HOLES STRIPPED		good		GOOD		good		—	
WASTE DRUMS										

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED

LACO ASSOCIATES
CONSULTING ENGINEERS
21 West Fourth Street, Eureka, CA 95501
TEL 707.443.5054
FAX 707.443.0553

Project Name: Fortuna Shell - W&S
Project No.: 4563.03
Date: 5-2-06
Golbal ID No.: T0602300471
PM: CJW

Tech: SJD
Mob/Demob time: .50/.50
Travel time: 1.0
Time on site: 8:00
Time off site: 11:15
Mileage: 36

WELL No.:	MW1		MW4		MW14		MW15		MW16	
DIAMETER (in)	2.00		2.00		1.50		1.50		1.50	
SCREENED INTERVAL (ft)	6-10		5-10		5-10		5-10		5-10	
DEPTH TO WATER (ft)	4.45		4.07		4.71		4.56		4.06	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.6	6.4	7.6	7.1	7.6	7.1	7.6	7.2	8.2	7.5
TEMP (°C)	17.9	18.0	13.2	13.9	14.4	15.8	15.6	15.9	14.9	14.3
Ecw (µmohs)	200	236	330	318	352	352	362	355	360	360
ORP (mV)	-50	-92	Ur	Ur	-92	Ur	-85	-89	Ur	Ur
DO (mg/L)	0.85	0.61	1.22	0.52	2.09	0.70	1.04	0.60	0.89	0.53
OTHER (units)	—		—		—		—		—	
PURGE: TIME	10:37	10:45	10:24	10:30	10:49	10:57	11:14	11:20	11:47	11:53
METHOD (DHP/CB/B)	DHP		DHP		DHP		DHP		DHP	
RATE (Lpm)	0.25		0.19		0.18		0.19		0.19	
VOLUME (L)	2.0		1.10		1.40		1.10		1.10	
COLOR	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR	MED. GREY TURBID	J. GREY TURBID
ODOR	MED-STRONG FUEL		MED. RUBBER / FUEL		LIGHT RUBBER / FUEL		LIGHT RUBBER / SLIGHT PINE		STRONG SHOE STORE	
INTAKE DEPTH (FEET)	7.5		8.0		9.0		9.0		9.0	
SAMPLE: TIME	10:47		10:32		10:59		11:22		11:55	
METHOD (DHP/CB/B)	DHP		DHP		DHP		DHP		DHP	
ANALYTES	8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC	
TOTAL DRAWDOWN (FEET)	0.16		1.13		2.14		2.22		0.54	
REMARKS	—		—		—		—		—	
WELL CONDITION	GOOD		good		good		good		good	
WASTE DRUMS										

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED

LACO ASSOCIATES
CONSULTING ENGINEERS
21 West Fourth Street, Eureka, CA 95501
TEL 707.443.5054
FAX 707.443.0553

Project Name: Fortuna Shell - W&S
Project No.: 4563.03
Date: 5-2-06
Golbal ID No.: T0602300471
PM: CJW

Tech: SJD
Mob/Demob time: .50/1.50
Travel time: 1.0
Time on site: 8:00
Time off site: 11:15
Mileage: 36

WELL No.:	MW2		MW8		MW5					
DIAMETER (in)	2.00		2.00		2.00					
SCREENED INTERVAL (ft)	5-10		15-20		5-10					
DEPTH TO WATER (ft)	4.22		10.48		4.14					
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.6	6.6	8.4	7.4	—	—				
TEMP (°C)	18.7	14.2	16.7	16.4	—	—				
Ecw (µmohs)	370	370	326	330	—	—				
ORP (mV)	ur	ur	-22	-30	—	—				
DO (mg/L)	0.89	0.39	1.93	0.55	—	—				
OTHER (units)	—		—		—					
PURGE: TIME	11:43	11:49	12:19	12:25	12:00	12:05				
METHOD (DHP/CB/B)	DHP		DHP		CAM					
RATE (Lpm)	0.25		0.19		0.10					
VOLUME (L)	1.5		1.10		0.50					
COLOR	CLEAR	CLEAR	CLEAR	CLOUDY	CLEAR	CLEAR				
ODOR	MED FUEL / MED SULFUR		MED. SWEET / LIGHT PINE		STRONG FUEL					
INTAKE DEPTH (FEET)	7.0		17.0		7.5					
SAMPLE: TIME	11:51		12:27		12:07					
METHOD (DHP/CB/B)	DHP		DHP		CAM					
ANALYTES	8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC					
TOTAL DRAWDOWN (FEET)	0.22		2.50		—					
REMARKS	—		—		3' DHT 1-BF					
WELL CONDITION	GOOD		good		GOOD					
WASTE DRUMS										

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED

LACO ASSOCIATES
CONSULTING ENGINEERS

21 West Fourth Street, Eureka, CA 95501
TEL 707.443.5054
FAX 707.443.0553

Project Name: FORTUNA SHELL
Project No.: 4563.03

Tech: SJD
Date: 5-2-06

METER ACCURACY RANGE

WELL ID:	+/- 0.2 pH	+/- 0.5 °C	+/- 20 µmohs	+/- 2 mv	+/- 0.3 mg/L
MW3					
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
9:13	8.0	13.9	410	Ur	0.90
9:15	7.8	14.4	392	Ur	0.64
9:17	7.6	14.5	380	Ur	0.55
9:19	7.5	14.7	371	Ur	0.52

WELL ID: MW6

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
9:38	7.7	13.4	232	36	0.96
9:40	7.6	13.6	231	43	0.89
9:42	7.5	13.7	227	48	0.70
9:44	7.4	13.8	224	49	0.62

WELL ID: MW7

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:03	7.2	13.3	334	-98	0.77
10:05	7.1	13.5	334	Ur	0.70
10:07	7.1	13.6	333	Ur	0.54
10:09	7.1	13.6	331	Ur	0.50

WELL ID:

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:26	7.3	13.6	324	Ur	0.81
10:28	7.1	13.8	320	Ur	0.65
10:30	7.1	13.9	318	Ur	0.52

WELL ID: MW14

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:51	7.3	15.1	357	-99	1.51
10:53	7.1	15.4	355	Ur	1.08
10:55	7.1	15.7	353	Ur	0.73
10:57	7.1	15.8	352	Ur	0.70

WELL ID: MW15

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:16	7.5	15.8	362	-87	0.64
11:18	7.2	15.8	359	-89	0.60
11:20	7.2	15.9	355	-89	0.60

LACO ASSOCIATES
CONSULTING ENGINEERS

21 West Fourth Street, Eureka, CA 95501
TEL 707.443.5054
FAX 707.443.0553

Project Name: FORTUNA SHELL

Project No.: 4563.03

Tech: SJD

Date: 5-2-06

METER ACCURACY RANGE

mw16	+/- 0.2 pH	+/- 0.5 °C	+/- 20 µmohs	+/- 2 mv	+/- 0.3 mg/L
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:49	7.9	14.3	367	Ur	0.63
11:51	7.6	14.2	364	Ur	0.63
11:53	7.5	14.3	360	Ur	0.53

WELL ID: mw8

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
12:21	7.8	16.5	330	-26	0.90
12:23	7.5	16.4	331	-30	0.67
12:25	7.4	16.4	330	-30	0.55

WELL ID:

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)

WELL ID:

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)

WELL ID:

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)

WELL ID:

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)

LACO ASSOCIATES
CONSULTING ENGINEERS

21 West Fourth Street, Eureka, CA 95501
TEL 707.443.5054
FAX 707.443.0553

Project Name: FORTUNA SHELL WTS

Project No.: 4565.02

Tech: RLB

Date: 5-2-06

METER ACCURACY RANGE

	+/- 0.2 pH	+/- 0.5 °C	+/- 20 µmohs	+/- 2 mv	+/- 0.3 mg/L
MW11					
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
9:05	6.4	15.2	300	36	0.92
9:07	6.4	15.5	300	37	0.88
9:09	6.4	15.6	300	37	0.86

WELL ID: MW9

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
9:27	7.0	16.2	270	ur	0.99
9:29	7.1	16.4	270	ur	0.85
9:31	7.1	16.6	260	ur	0.59

WELL ID: MW12

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:03	6.4	17.3	390	-87	1.14
10:05	6.3	17.4	380	-92	1.11
10:07	6.3	17.6	380	-94	0.92

WELL ID: MW1

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:39	6.4	17.9	210	-71	0.83
10:41	6.4	17.6	240	-87	0.66
10:43	6.5	17.5	230	-92	0.60
10:45	6.4	18.0	230	-92	0.61

WELL ID: MW10

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:07	6.9	18.4	200	ur	1.24
11:11	6.9	18.3	190	ur	0.97
11:13	6.9	18.1	190	ur	0.76

WELL ID: MW2

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:45	6.6	14.2	380	ur	0.31
11:47	6.6	14.2	370	ur	0.36
11:49	6.4	14.2	370	ur	0.39

LACO ASSOCIATES
CONSULTING ENGINEERS
21 West Fourth Street, Eureka, CA 95501
TEL 707.443.5054
FAX 707.443.0553

Project Name: FORTUNA SHELL - WBS
Project No.: 4563.03
Tech: SJD
Date: 5-2-06

WELL ID: MW3		WELL ID: MW4		WELL ID: MW5		WELL ID: MW6		WELL ID: MW7		WELL ID: MW8	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
8:36	4.53	8:38	4.07	8:51	4.14	8:39	4.65	8:41	4.17	8:49	10.48
8:54	4.53	8:56	4.07	11:58	4.14	8:58	4.65	9:00	4.17	12:15	10.48

WELL ID: MW14		WELL ID: MW15		WELL ID: MW16		WELL ID:		WELL ID:		WELL ID:	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
8:43	4.71	8:45	4.56	8:47	4.06						
9:02	4.71	9:04	4.56	9:06	4.06						

WELL ID:		WELL ID:		WELL ID:		WELL ID:		WELL ID:		WELL ID:	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)

LACO ASSOCIATES
CONSULTING ENGINEERS

21 West Fourth Street, Eureka, CA 95501
TEL 707.443.5054
FAX 707.443.0553

Project Name: Fortuna SHELL - WES

Tech: RLD

Date: 5-2-06

Project No.: 4563.03

WELL ID: MW17S		WELL ID: MW17D		WELL ID: MW11		WELL ID: MW9		WELL ID: MW12		WELL ID: MW1	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
8:00	22.78	8:05	25.53	8:49	9.24	9:12	7.73	9:46	9.01	10:20	4.45
8:10	22.78	8:12	25.53	8:59	9.24	9:21	7.73	9:56	9.01	10:30	4.45

WELL ID: MW10		WELL ID: MW2		WELL ID:		WELL ID:		WELL ID:		WELL ID:	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
10:55	6.27	11:25	4.22								
11:05	6.27	11:35	4.22								

WELL ID:		WELL ID:		WELL ID:		WELL ID:		WELL ID:		WELL ID:	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)

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5680 West End Road • Arcata • CA 95521-9202
707-822-4649 Fax 707-822-6831

Chain of Custody

LABORATORY NUMBER:

Attention: Accounts Payable
Results & Invoice to: Laco Associates
Address: 21 W. 4th St. Eureka CA 95501

Phone:
Copies of Report to: LACO ; Chris Watt

Sampler (Sign & Print): SJD

TAT: ☐ 24 Hr ☐ 48 Hr ☐ 5 Day ☐ 5–7 Day
☑ STD (2–3 Wk) ☐ Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms ☐
Preliminary: FAX ☑ Verbal ☐ By:
Final Report: FAX ☐ Verbal ☐ By:

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other

PRESERVATIVE CODES: a—HNO_3; b—HCl; c—H_2SO_4; d—$Na_2S_2O_3$; e—NaOH; f—$C_2H_3O_2Cl$; g—other

PROJECT INFORMATION

Project Number: 4563.03
Project Name: FORTUNA SHELL
Purchase Order Number: task 3039

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS: 8260 List 5	ANALYSIS: TPHd/mo w/SGC	CONTAINER	PRESERVATIVE	SAMPLE CONDITION/SPECIAL INSTRUCTIONS
	4563-MW1-W	5-2-06	AM	GW	3	1	9	b	GEOTRACKER
	4563-MW2-W				3	1	7	---	
	4563-MW3-W				3	1			
	4563-MW4-W				3	1			
	4563-MW5-W				3	1			
	4563-MW6-W				3	1			
	4563-MW7-W				3	1			
	4563-MW8-W				3	1			
	4563-MW9-W				3				
	4563-MW10-W		PM		3				

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME

SAMPLE DISPOSAL
☑ NCL Disposal of Non-Contaminated
☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Air-Ex Fed-Ex Bus Hand

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

NORTH COAST LABORATORIES LTD.
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707-822-4649 Fax 707-822-6831

Chain of Custody

LABORATORY NUMBER:

Attention: Accounts Payable
Results & Invoice to: Laco Associates
Address: 21 W. 4th St. Eureka CA 95501
Phone:
Copies of Report to: LACO ; Chris Watt
Sampler (Sign & Print): SJD

TAT: ☐ 24 Hr ☐ 48 Hr ☐ 5 Day ☐ 5–7 Day
☑ STD (2–3 Wk) ☐ Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms ☐
Preliminary: FAX ☑ Verbal ☐ By:
Final Report: FAX ☐ Verbal ☐ By:

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other

PRESERVATIVE CODES: a—HNO_3; b—HCl; c—H_2SO_4; d—$Na_2S_2O_3$; e—NaOH; f—$C_2H_3O_2Cl$; g—other

PROJECT INFORMATION

Project Number: 4563.03
Project Name: FORTUNA SHELL
Purchase Order Number: TASK 3039

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	PRESERVATIVE	CONTAINER	ANALYSIS: 8260 List 5	ANALYSIS: TPHd/mo w/SGC	SAMPLE CONDITION/SPECIAL INSTRUCTIONS
	4563-MW11-W	5-2-06	AM	GW	b	9	3		GEOTRACKER
	4563-MW12-W						3		
	4563-MW14-W						3	1	
	4563-MW15-W						3	1	
	4563-MW16-W						3	1	
	4563- MW17S-W						3		
	4563-MW17D-W						3		
	4563-QCTB-W		PM				1		

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME

SAMPLE DISPOSAL
☑ NCL Disposal of Non-Contaminated
☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Air-Ex Fed-Ex Bus Hand

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

Attachment 2

ATTACHMENT 2: KEY TO ABBREVIATIONS
Fortuna Shell; 809 Main St., Fortuna, California
LACO No. 4563.03; LOP No. 12672

KEY TO ABBREVIATIONS	
Alk	-- Alkalinity
BTEX	-- Benzene; Toluene; Ethylbenzene; m,p- and o- Xylenes
CO_2	-- Carbon dioxide
COC	-- Chain of custody
Cr	-- Chromium
DHP	-- Down-hole-pump (submersible pump)
DIPE	-- Di-isopropyl Ether
Dis	-- Dissolved
DO	-- Dissolved Oxygen
DTW	-- Depth-to-Water
ECw	-- Electrical Conductivity in water
ETBE	-- Ethyl Tertiary Butyl Ether
Fe	-- Iron
FP	-- Free Product
Mn	-- Manganese
MTBE	-- Methyl Tertiary Butyl Ether
N	-- Nitrogen
ND<50	-- non-detect at reporting limits shown
NO_3	-- Nitrate
NOT ACTIVE	-- Sample not analyzed for parameter during current sampling event
ORP	-- Oxidation Reduction Potential
P	-- Phosphorous
PCP/TCP	-- penta- tetra- tri- chlorophenols
pH	-- Potential of hydrogen
SGC	-- Silica gel cleanup
SO_4	-- Sulfate
T	-- Temperature
T&P	-- Tape and Paste
TAME	-- Tertiary Amyl Methyl Ether
TBA	-- Tetiary Butyl Alcohol
TBF	-- Tertiary Butyl Formate
TIC	-- Total Inorganic Carbon
TOC	-- Total Organic Carbon
Tot	-- Total
TPHd	-- Total Petroluem Hydrocarbons as Diesel
TPHg	-- Total Petroluem Hydrocarbons as Gasoline
TPHk	-- Total Petroluem Hydrocarbons as Kerosene
TPHmo	-- Total Petroluem Hydrocarbons as Motor Oil
TPHs	-- Total Petroluem Hydrocarbons as Solvent
µg/L	-- Micro grams per liter (parts per billion)
---	-- Sample not analyzed for parameter

Attachment 3

RECEIVED
LACO ASSOCIATES
JUN 05 2006
BY: CM

NORTH COAST LABORATORIES LTD.

May 31, 2006

CJW

LACO Associates
P.O. Box 1023
Eureka, CA 95502

Order No.: 0605036
Invoice No.: 58440
PO No.: TASK 3039
ELAP No. 1247-Expires July 2006

Attn: Accounts Payable

RE: 4563.03 FORTUNA SHELL

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	4563-MW1-W
01D	4563-MW1-W
02A	4563-MW2-W
02D	4563-MW2-W
03A	4563-MW3-W
03D	4563-MW3-W
04A	4563-MW4-W
04D	4563-MW4-W
05A	4563-MW5-W
05D	4563-MW5-W
06A	4563-MW6-W
06D	4563-MW6-W
07A	4563-MW7-W
07D	4563-MW7-W
08A	4563-MW8-W
08D	4563-MW8-W
09A	4563-MW14-W
09D	4563-MW14-W
10A	4563-MW15-W
10D	4563-MW15-W
11A	4563-MW16-W
11D	4563-MW16-W
12A	4563-MW9-W
13A	4563-MW10-W
14A	4563-MW11-W
15A	4563-MW12-W
16A	4563-MW17S-W
17A	4563-MW17D-W
18A	4563-QCTB-W

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

REPORT CERTIFIED BY

Collen Blackstone — Laboratory Supervisor(s)

T. Shen — QA Unit

Jesse G. Chaney, Jr. — Laboratory Director

5680 West End Road • Arcata California 95521-9202 • 707-822-4649 • FAX 707-822-6831

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CASE NARRATIVE

Gasoline Components/Additives:
Some reporting limits were raised for samples 4563-MW2-W, 4563-MW4-W, 4563-MW5-W, 4563-MW7-W, 4563-MW8-W, 4563-MW15-W, 4563-MW16-W, 4563-MW12-W and 4563-MW17S-W due to matrix interference.

TPH as Gasoline:
Samples 4563-MW3-W and 4563-MW14-W do not present a peak pattern consistent with that of gasoline. The reported results represent the amount of material in the gasoline range.

The gasoline values for samples 4563-MW1-W, 4563-MW2-W, 4563-MW4-W, 4563-MW5-W, 4563-MW15-W and 4563-MW16-W include the reported gasoline components and additives in addition to other peaks in the gasoline range.

The gasoline value for sample 4563-MW17D-W includes the reported gasoline additives in addition to other peaks in the gasoline range.

The gasoline values for samples 4563-MW7-W, 4563-MW8-W, 4563-MW12-W and 4563-MW17S-W are primarily from the reported gasoline additives.

TPH as Diesel/Motor Oil w/Silica Gel Cleanup:
All samples submitted for a silica gel cleanup were initially analyzed for diesel/motor oil. The samples showing no detectable levels of the analytes were not subjected to the cleanup procedure.

Samples 4563-MW1-W, 4563-MW2-W, 4563-MW3-W, 4563-MW5-W, 4563-MW15-W and 4563-MW16-W contain some material lighter than diesel. However, some of this material extends into the diesel range of molecular weights.

Samples 4563-MW1-W, 4563-MW2-W, 4563-MW3-W, 4563-MW4-W, 4563-MW5-W, 4563-MW7-W, 4563-MW14-W, 4563-MW15-W and 4563-MW16-W contain material in the diesel range of molecular weights, but the material does not exhibit the peak pattern typical of diesel oil.

TPH as Diesel/Motor Oil:
The laboratory control sample (LCS) recovery was below the lower acceptance limit for diesel. The laboratory control sample duplicate (LCSD) recovery was within the acceptance limits; therefore, the data were accepted.

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Date: 30-May-06
WorkOrder: 0605036

ANALYTICAL REPORT

Client Sample ID: 4563-MW1-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-01A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1.0		5/10/06
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		5/10/06
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/10/06
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/10/06
Benzene	4.4	0.50	µg/L	1.0		5/10/06
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		5/10/06
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/10/06
Toluene	7.0	0.50	µg/L	1.0		5/10/06
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/10/06
Chlorobenzene	ND	1.0	µg/L	1.0		5/10/06
Ethylbenzene	44	0.50	µg/L	1.0		5/10/06
m,p-Xylene	16	0.50	µg/L	1.0		5/10/06
o-Xylene	1.8	0.50	µg/L	1.0		5/10/06
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/10/06
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/10/06
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/10/06
Surrogate: 1,4-Dichlorobenzene-d4	91.7	80.8-139	% Rec	1.0		5/10/06

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	4,100	50	µg/L	1.0		5/10/06

Client Sample ID: 4563-MW1-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-01D **Matrix:** Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup **Reference:** EPA 3510/3630/GCFID(LUFT)/8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	240	50	µg/L	1.0	5/10/06	5/26/06
TPHC Motor Oil	ND	170	µg/L	1.0	5/10/06	5/26/06

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Date: 30-May-06
WorkOrder: 0605036

ANALYTICAL REPORT

Client Sample ID: 4563-MW2-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-02A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	ND	7.0	µg/L	1.0		5/11/06
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		5/11/06
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/11/06
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/11/06
Benzene	18	0.50	µg/L	1.0		5/11/06
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		5/11/06
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/11/06
Toluene	6.3	0.50	µg/L	1.0		5/11/06
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/11/06
Chlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Ethylbenzene	40	0.50	µg/L	1.0		5/11/06
m,p-Xylene	25	0.50	µg/L	1.0		5/11/06
o-Xylene	1.6	0.50	µg/L	1.0		5/11/06
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Surrogate: 1,4-Dichlorobenzene-d4	89.0	80.8-139	% Rec	1.0		5/11/06

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	5,800	2,500	µg/L	50		5/11/06

Client Sample ID: 4563-MW2-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-02D **Matrix:** Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup **Reference:** EPA 3510/3630/GCFID(LUFT)/8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	630	50	µg/L	1.0	5/10/06	5/26/06
TPHC Motor Oil	ND	170	µg/L	1.0	5/10/06	5/26/06

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Date: 30-May-06
WorkOrder: 0605036

ANALYTICAL REPORT

Client Sample ID: 4563-MW3-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-03A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	6.7	1.0	µg/L	1.0		5/11/06
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		5/11/06
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/11/06
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/11/06
Benzene	2.8	0.50	µg/L	1.0		5/11/06
Tert-amyl methyl ether (TAME)	1.0	1.0	µg/L	1.0		5/11/06
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/11/06
Toluene	0.58	0.50	µg/L	1.0		5/11/06
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/11/06
Chlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Ethylbenzene	ND	0.50	µg/L	1.0		5/11/06
m,p-Xylene	0.96	0.50	µg/L	1.0		5/11/06
o-Xylene	0.70	0.50	µg/L	1.0		5/11/06
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Surrogate: 1,4-Dichlorobenzene-d4	92.1	80.8-139	% Rec	1.0		5/11/06

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	1,800	50	µg/L	1.0		5/11/06

Client Sample ID: 4563-MW3-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-03D **Matrix:** Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup **Reference:** EPA 3510/3630/GCFID(LUFT)/8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	210	50	µg/L	1.0	5/10/06	5/26/06
TPHC Motor Oil	ND	170	µg/L	1.0	5/10/06	5/26/06

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ANALYTICAL REPORT

Client Sample ID: 4563-MW4-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-04A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	3.5	1.0	µg/L	1.0		5/11/06
Tert-butyl alcohol (TBA)	ND	70	µg/L	1.0		5/11/06
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/11/06
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/11/06
Benzene	8.5	0.50	µg/L	1.0		5/11/06
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		5/11/06
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/11/06
Toluene	0.90	0.50	µg/L	1.0		5/11/06
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/11/06
Chlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Ethylbenzene	5.7	0.50	µg/L	1.0		5/11/06
m,p-Xylene	1.5	0.50	µg/L	1.0		5/11/06
o-Xylene	ND	0.50	µg/L	1.0		5/11/06
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Surrogate: 1,4-Dichlorobenzene-d4	93.3	80.8-139	% Rec	1.0		5/11/06

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	1,600	50	µg/L	1.0		5/11/06

Client Sample ID: 4563-MW4-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-04D **Matrix:** Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup **Reference:** EPA 3510/3630/GCFID(LUFT)/8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	140	50	µg/L	1.0	5/10/06	5/26/06
TPHC Motor Oil	ND	170	µg/L	1.0	5/10/06	5/26/06

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ANALYTICAL REPORT

Client Sample ID: 4563-MW5-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-05A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	ND	60	µg/L	1.0		5/11/06
Tert-butyl alcohol (TBA)	ND	50	µg/L	1.0		5/11/06
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/11/06
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/11/06
Benzene	280	25	µg/L	50		5/11/06
Tert-amyl methyl ether (TAME)	2.6	1.0	µg/L	1.0		5/11/06
1,2-Dichloroethane	ND	2.0	µg/L	1.0		5/11/06
Toluene	14	0.50	µg/L	1.0		5/11/06
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/11/06
Chlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Ethylbenzene	140	25	µg/L	50		5/11/06
m,p-Xylene	79	0.50	µg/L	1.0		5/11/06
o-Xylene	1.6	0.50	µg/L	1.0		5/11/06
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Surrogate: 1,4-Dichlorobenzene-d4	91.2	80.8-139	% Rec	1.0		5/11/06

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	9,300	2,500	µg/L	50		5/11/06

Client Sample ID: 4563-MW5-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-05D **Matrix:** Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup **Reference:** EPA 3510/3630/GCFID(LUFT)/8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	780	50	µg/L	1.0	5/10/06	5/26/06
TPHC Motor Oil	ND	170	µg/L	1.0	5/10/06	5/26/06

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ANALYTICAL REPORT

Client Sample ID: 4563-MW6-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-06A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	10	1.0	µg/L	1.0		5/10/06
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		5/10/06
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/10/06
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/10/06
Benzene	ND	0.50	µg/L	1.0		5/10/06
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		5/10/06
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/10/06
Toluene	ND	0.50	µg/L	1.0		5/10/06
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/10/06
Chlorobenzene	ND	1.0	µg/L	1.0		5/10/06
Ethylbenzene	ND	0.50	µg/L	1.0		5/10/06
m,p-Xylene	ND	0.50	µg/L	1.0		5/10/06
o-Xylene	ND	0.50	µg/L	1.0		5/10/06
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/10/06
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/10/06
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/10/06
Surrogate: 1,4-Dichlorobenzene-d4	95.3	80.8-139	% Rec	1.0		5/10/06

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	ND	50	µg/L	1.0		5/10/06

Client Sample ID: 4563-MW6-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-06D **Matrix:** Groundwater

Test Name: TPH as Diesel/Motor Oil **Reference:** EPA 3510/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/5/06	5/6/06
TPHC Motor Oil	ND	170	µg/L	1.0	5/5/06	5/6/06

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ANALYTICAL REPORT

Client Sample ID: 4563-MW7-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-07A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	310	50	µg/L	50		5/11/06
Tert-butyl alcohol (TBA)	ND	100	µg/L	1.0		5/11/06
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/11/06
Ethyl tert-butyl ether (ETBE)	ND	2.0	µg/L	1.0		5/11/06
Benzene	ND	0.50	µg/L	1.0		5/11/06
Tert-amyl methyl ether (TAME)	16	1.0	µg/L	1.0		5/11/06
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/11/06
Toluene	ND	0.50	µg/L	1.0		5/11/06
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/11/06
Chlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Ethylbenzene	ND	0.50	µg/L	1.0		5/11/06
m,p-Xylene	ND	0.50	µg/L	1.0		5/11/06
o-Xylene	ND	0.50	µg/L	1.0		5/11/06
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Surrogate: 1,4-Dichlorobenzene-d4	96.8	80.8-139	% Rec	1.0		5/11/06

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	360	50	µg/L	1.0		5/11/06

Client Sample ID: 4563-MW7-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-07D **Matrix:** Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup **Reference:** EPA 3510/3630/GCFID(LUFT)/8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	51	50	µg/L	1.0	5/10/06	5/26/06
TPHC Motor Oil	ND	170	µg/L	1.0	5/10/06	5/26/06

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ANALYTICAL REPORT

Client Sample ID: 4563-MW8-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-08A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	2,100	50	µg/L	50		5/11/06
Tert-butyl alcohol (TBA)	440	10	µg/L	1.0		5/11/06
Di-isopropyl ether (DIPE)	ND	4.0	µg/L	1.0		5/11/06
Ethyl tert-butyl ether (ETBE)	8.3	1.0	µg/L	1.0		5/11/06
Benzene	ND	0.50	µg/L	1.0		5/11/06
Tert-amyl methyl ether (TAME)	81	1.0	µg/L	1.0		5/11/06
1,2-Dichloroethane	1.7	1.0	µg/L	1.0		5/11/06
Toluene	ND	0.50	µg/L	1.0		5/11/06
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/11/06
Chlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Ethylbenzene	ND	0.50	µg/L	1.0		5/11/06
m,p-Xylene	ND	0.50	µg/L	1.0		5/11/06
o-Xylene	ND	0.50	µg/L	1.0		5/11/06
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Surrogate: 1,4-Dichlorobenzene-d4	94.8	80.8-139	% Rec	1.0		5/11/06

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	1,700	50	µg/L	1.0		5/11/06

Client Sample ID: 4563-MW8-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-08D **Matrix:** Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup **Reference:** EPA 3510/3630/GCFID(LUFT)/8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/10/06	5/26/06
TPHC Motor Oil	ND	170	µg/L	1.0	5/10/06	5/26/06

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ANALYTICAL REPORT

Client Sample ID: 4563-MW14-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-09A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	2.1	1.0	µg/L	1.0		5/11/06
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		5/11/06
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/11/06
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/11/06
Benzene	0.73	0.50	µg/L	1.0		5/11/06
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		5/11/06
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/11/06
Toluene	ND	0.50	µg/L	1.0		5/11/06
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/11/06
Chlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Ethylbenzene	ND	0.50	µg/L	1.0		5/11/06
m,p-Xylene	ND	0.50	µg/L	1.0		5/11/06
o-Xylene	ND	0.50	µg/L	1.0		5/11/06
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Surrogate: 1,4-Dichlorobenzene-d4	93.4	80.8-139	% Rec	1.0		5/11/06

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	210	50	µg/L	1.0		5/11/06

Client Sample ID: 4563-MW14-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-09D **Matrix:** Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup **Reference:** EPA 3510/3630/GCFID(LUFT)/8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	100	50	µg/L	1.0	5/10/06	5/26/06
TPHC Motor Oil	ND	170	µg/L	1.0	5/10/06	5/26/06

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ANALYTICAL REPORT

Client Sample ID: 4563-MW15-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-10A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	50	1.0	µg/L	1.0		5/11/06
Tert-butyl alcohol (TBA)	ND	30	µg/L	1.0		5/11/06
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/11/06
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/11/06
Benzene	79	0.50	µg/L	1.0		5/11/06
Tert-amyl methyl ether (TAME)	2.8	1.0	µg/L	1.0		5/11/06
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/11/06
Toluene	2.2	0.50	µg/L	1.0		5/11/06
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/11/06
Chlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Ethylbenzene	11	0.50	µg/L	1.0		5/11/06
m,p-Xylene	3.8	0.50	µg/L	1.0		5/11/06
o-Xylene	ND	0.50	µg/L	1.0		5/11/06
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Surrogate: 1,4-Dichlorobenzene-d4	93.7	80.8-139	% Rec	1.0		5/11/06

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	1,600	50	µg/L	1.0		5/11/06

Client Sample ID: 4563-MW15-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-10D **Matrix:** Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup **Reference:** EPA 3510/3630/GCFID(LUFT)/8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	79	50	µg/L	1.0	5/10/06	5/26/06
TPHC Motor Oil	200	170	µg/L	1.0	5/10/06	5/26/06

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ANALYTICAL REPORT

Client Sample ID: 4563-MW16-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-11A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	300	50	µg/L	50		5/11/06
Tert-butyl alcohol (TBA)	ND	100	µg/L	1.0		5/11/06
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/11/06
Ethyl tert-butyl ether (ETBE)	3.8	1.0	µg/L	1.0		5/11/06
Benzene	790	25	µg/L	50		5/11/06
Tert-amyl methyl ether (TAME)	8.5	1.0	µg/L	1.0		5/11/06
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/11/06
Toluene	21	0.50	µg/L	1.0		5/11/06
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/11/06
Chlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Ethylbenzene	22	0.50	µg/L	1.0		5/11/06
m,p-Xylene	44	0.50	µg/L	1.0		5/11/06
o-Xylene	7.3	0.50	µg/L	1.0		5/11/06
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Surrogate: 1,4-Dichlorobenzene-d4	90.7	80.8-139	% Rec	1.0		5/11/06

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	6,600	2,500	µg/L	50		5/11/06

Client Sample ID: 4563-MW16-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-11D **Matrix:** Groundwater

Test Name: TPH as Diesel/Motor Oil w/ Silica Gel Cleanup **Reference:** EPA 3510/3630/GCFID(LUFT)/8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	300	50	µg/L	1.0	5/10/06	5/26/06
TPHC Motor Oil	ND	170	µg/L	1.0	5/10/06	5/26/06

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WorkOrder: 0605036

ANALYTICAL REPORT

Client Sample ID: 4563-MW9-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-12A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	4.6	1.0	µg/L	1.0		5/10/06
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		5/10/06
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/10/06
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/10/06
Benzene	ND	0.50	µg/L	1.0		5/10/06
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		5/10/06
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/10/06
Toluene	ND	0.50	µg/L	1.0		5/10/06
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/10/06
Chlorobenzene	ND	1.0	µg/L	1.0		5/10/06
Ethylbenzene	ND	0.50	µg/L	1.0		5/10/06
m,p-Xylene	ND	0.50	µg/L	1.0		5/10/06
o-Xylene	ND	0.50	µg/L	1.0		5/10/06
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/10/06
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/10/06
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/10/06
Surrogate: 1,4-Dichlorobenzene-d4	94.0	80.8-139	% Rec	1.0		5/10/06

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	ND	50	µg/L	1.0		5/10/06

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Date: 30-May-06
WorkOrder: 0605036

ANALYTICAL REPORT

Client Sample ID: 4563-MW10-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-13A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	5.0	1.0	µg/L	1.0		5/10/06
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		5/10/06
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/10/06
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/10/06
Benzene	ND	0.50	µg/L	1.0		5/10/06
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		5/10/06
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/10/06
Toluene	ND	0.50	µg/L	1.0		5/10/06
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/10/06
Chlorobenzene	ND	1.0	µg/L	1.0		5/10/06
Ethylbenzene	ND	0.50	µg/L	1.0		5/10/06
m,p-Xylene	ND	0.50	µg/L	1.0		5/10/06
o-Xylene	ND	0.50	µg/L	1.0		5/10/06
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/10/06
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/10/06
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/10/06
Surrogate: 1,4-Dichlorobenzene-d4	94.9	80.8-139	% Rec	1.0		5/10/06

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	ND	50	µg/L	1.0		5/10/06

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Date: 30-May-06
WorkOrder: 0605036

ANALYTICAL REPORT

Client Sample ID: 4563-MW11-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-14A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	3.2	1.0	µg/L	1.0		5/11/06
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		5/11/06
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/11/06
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/11/06
Benzene	ND	0.50	µg/L	1.0		5/11/06
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		5/11/06
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/11/06
Toluene	ND	0.50	µg/L	1.0		5/11/06
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/11/06
Chlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Ethylbenzene	ND	0.50	µg/L	1.0		5/11/06
m,p-Xylene	ND	0.50	µg/L	1.0		5/11/06
o-Xylene	ND	0.50	µg/L	1.0		5/11/06
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Surrogate: 1,4-Dichlorobenzene-d4	95.5	80.8-139	% Rec	1.0		5/11/06

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	ND	50	µg/L	1.0		5/11/06

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ANALYTICAL REPORT

Client Sample ID: 4563-MW12-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-15A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	620	50	µg/L	50		5/11/06
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		5/11/06
Di-isopropyl ether (DIPE)	ND	2.0	µg/L	1.0		5/11/06
Ethyl tert-butyl ether (ETBE)	ND	4.0	µg/L	1.0		5/11/06
Benzene	ND	0.50	µg/L	1.0		5/11/06
Tert-amyl methyl ether (TAME)	25	1.0	µg/L	1.0		5/11/06
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/11/06
Toluene	ND	0.50	µg/L	1.0		5/11/06
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/11/06
Chlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Ethylbenzene	ND	0.50	µg/L	1.0		5/11/06
m,p-Xylene	ND	0.50	µg/L	1.0		5/11/06
o-Xylene	ND	0.50	µg/L	1.0		5/11/06
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Surrogate: 1,4-Dichlorobenzene-d4	95.1	80.8-139	% Rec	1.0		5/11/06

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	670	50	µg/L	1.0		5/11/06

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ANALYTICAL REPORT

Client Sample ID: 4563-MW17S-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-16A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	340	50	µg/L	50		5/12/06
Tert-butyl alcohol (TBA)	77	10	µg/L	1.0		5/11/06
Di-isopropyl ether (DIPE)	ND	3.0	µg/L	1.0		5/11/06
Ethyl tert-butyl ether (ETBE)	ND	4.0	µg/L	1.0		5/11/06
Benzene	ND	0.50	µg/L	1.0		5/11/06
Tert-amyl methyl ether (TAME)	2.8	1.0	µg/L	1.0		5/11/06
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/11/06
Toluene	ND	0.50	µg/L	1.0		5/11/06
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/11/06
Chlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Ethylbenzene	ND	0.50	µg/L	1.0		5/11/06
m,p-Xylene	ND	0.50	µg/L	1.0		5/11/06
o-Xylene	ND	0.50	µg/L	1.0		5/11/06
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Surrogate: 1,4-Dichlorobenzene-d4	95.6	80.8-139	% Rec	1.0		5/11/06

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	410	50	µg/L	1.0		5/11/06

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ANALYTICAL REPORT

Client Sample ID: 4563-MW17D-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-17A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	7.0	1.0	µg/L	1.0		5/11/06
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		5/11/06
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/11/06
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/11/06
Benzene	ND	0.50	µg/L	1.0		5/11/06
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		5/11/06
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/11/06
Toluene	ND	0.50	µg/L	1.0		5/11/06
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/11/06
Chlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Ethylbenzene	ND	0.50	µg/L	1.0		5/11/06
m,p-Xylene	ND	0.50	µg/L	1.0		5/11/06
o-Xylene	ND	0.50	µg/L	1.0		5/11/06
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/11/06
Surrogate: 1,4-Dichlorobenzene-d4	95.5	80.8-139	% Rec	1.0		5/11/06

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	80	50	µg/L	1.0		5/11/06

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ANALYTICAL REPORT

Client Sample ID: 4563-QCTB-W **Received:** 5/2/06 **Collected:** 5/2/06 0:00
Lab ID: 0605036-18A **Matrix:** Groundwater

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1.0		5/10/06
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		5/10/06
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		5/10/06
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		5/10/06
Benzene	ND	0.50	µg/L	1.0		5/10/06
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		5/10/06
1,2-Dichloroethane	ND	1.0	µg/L	1.0		5/10/06
Toluene	ND	0.50	µg/L	1.0		5/10/06
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		5/10/06
Chlorobenzene	ND	1.0	µg/L	1.0		5/10/06
Ethylbenzene	ND	0.50	µg/L	1.0		5/10/06
m,p-Xylene	ND	0.50	µg/L	1.0		5/10/06
o-Xylene	ND	0.50	µg/L	1.0		5/10/06
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		5/10/06
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		5/10/06
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		5/10/06
Surrogate: 1,4-Dichlorobenzene-d4	95.1	80.8-139	% Rec	1.0		5/10/06

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	ND	50	µg/L	1.0		5/10/06

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North Coast Laboratories, Ltd.

Date: 30-May-06

CLIENT: LACO Associates
Work Order: 0605036
Project: 4563.03 FORTUNA SHELL

QC SUMMARY REPORT

Method Blank

Sample ID **MB-5/10/06** Batch ID: **R41250** Test Code: **8260OXYW** Units: **µg/L** Analysis Date **5/10/06 3:12:00 AM** Prep Date

Client ID: Run ID: **ORGCMS3_060510B** SeqNo: **592040**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	1.0									
Tert-butyl alcohol (TBA)	ND	10									
Di-isopropyl ether (DIPE)	ND	1.0									
Ethyl tert-butyl ether (ETBE)	ND	1.0									
Benzene	ND	0.50									
Tert-amyl methyl ether (TAME)	ND	1.0									
1,2-Dichloroethane	ND	1.0									
Toluene	ND	0.50									
1,2-Dibromoethane (EDB)	ND	1.0									
Chlorobenzene	ND	1.0									
Ethylbenzene	ND	0.50									
m,p-Xylene	ND	0.50									
o-Xylene	ND	0.50									
1,3-Dichlorobenzene	0.1008	1.0									J
1,4-Dichlorobenzene	ND	1.0									
1,2-Dichlorobenzene	ND	1.0									
1,4-Dichlorobenzene-d4	0.952	0.10	1.00	0	95.2%	81	139	0			

Sample ID **MB-5/10/06** Batch ID: **R41249** Test Code: **GASW-MS** Units: **µg/L** Analysis Date **5/10/06 3:12:00 AM** Prep Date

Client ID: Run ID: **ORGCMS3_060510A** SeqNo: **592016**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	24.77	50									J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: LACO Associates
Work Order: 0605036
Project: 4563.03 FORTUNA SHELL

QC SUMMARY REPORT

Method Blank

Sample ID **MB-15674** Batch ID: **15674** Test Code: **SGTPDMW** Units: **µg/L** Analysis Date **5/26/06 2:42:06 PM** Prep Date **5/10/06**
Client ID: Run ID: **ORGC7_060526A** SeqNo: **595851**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	46.67	50									J
TPHC Motor Oil	34.45	170									J

Sample ID **MB-15650** Batch ID: **15650** Test Code: **TPHDMW** Units: **µg/L** Analysis Date **5/5/06 9:00:06 PM** Prep Date **5/5/06**
Client ID: Run ID: **ORGC7_060505B** SeqNo: **590855**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	ND	50									
TPHC Motor Oil	52.70	170									J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

North Coast Laboratories, Ltd.

Date: 30-May-06

CLIENT: LACO Associates
Work Order: 0605036
Project: 4563.03 FORTUNA SHELL

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID **LCS-06283** Batch ID: **R41250** Test Code: **8260OXYW** Units: **µg/L** Analysis Date **5/10/06 12:39:00 PM** Prep Date

Client ID: Run ID: **ORGCMS3_060510B** SeqNo: **592038**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	18.89	1.0	20.0	0	94.4%	80	120	0			
Tert-butyl alcohol (TBA)	397.7	10	400	0	99.4%	25	162	0			
Di-isopropyl ether (DIPE)	19.31	1.0	20.0	0	96.6%	80	120	0			
Ethyl tert-butyl ether (ETBE)	18.86	1.0	20.0	0	94.3%	77	120	0			
Benzene	19.85	0.50	20.0	0	99.2%	78	117	0			
Tert-amyl methyl ether (TAME)	20.68	1.0	20.0	0	103%	64	136	0			
1,2-Dichloroethane	20.41	1.0	20.0	0	102%	74	121	0			
Toluene	20.05	0.50	20.0	0	100%	80	120	0			
1,2-Dibromoethane (EDB)	19.44	1.0	20.0	0	97.2%	80	120	0			
Chlorobenzene	20.34	1.0	20.0	0	102%	80	120	0			
Ethylbenzene	18.93	0.50	20.0	0	94.7%	80	120	0			
m,p-Xylene	39.77	0.50	40.0	0	99.4%	80	120	0			
o-Xylene	21.54	0.50	20.0	0	108%	80	120	0			
1,3-Dichlorobenzene	21.01	1.0	20.0	0	105%	81	125	0			
1,4-Dichlorobenzene	20.83	1.0	20.0	0	104%	79	132	0			
1,2-Dichlorobenzene	20.57	1.0	20.0	0	103%	81	134	0			
1,4-Dichlorobenzene-d4	1.01	0.10	1.00	0	101%	81	139	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: LACO Associates
Work Order: 0605036
Project: 4563.03 FORTUNA SHELL

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID **LCSD-06283** Batch ID: **R41250** Test Code: **8260OXYW** Units: **µg/L** Analysis Date **5/11/06 1:51:00 AM** Prep Date
Client ID: Run ID: **ORGCMS3_060510B** SeqNo: **592056**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	19.61	1.0	20.0	0	98.0%	80	120	18.9	3.73%	20	
Tert-butyl alcohol (TBA)	417.3	10	400	0	104%	25	162	398	4.82%	20	
Di-isopropyl ether (DIPE)	20.35	1.0	20.0	0	102%	80	120	19.3	5.25%	20	
Ethyl tert-butyl ether (ETBE)	19.36	1.0	20.0	0	96.8%	77	120	18.9	2.62%	20	
Benzene	20.76	0.50	20.0	0	104%	78	117	19.8	4.48%	20	
Tert-amyl methyl ether (TAME)	21.01	1.0	20.0	0	105%	64	136	20.7	1.61%	20	
1,2-Dichloroethane	20.96	1.0	20.0	0	105%	74	121	20.4	2.62%	20	
Toluene	20.38	0.50	20.0	0	102%	80	120	20.0	1.63%	20	
1,2-Dibromoethane (EDB)	19.80	1.0	20.0	0	99.0%	80	120	19.4	1.86%	20	
Chlorobenzene	20.62	1.0	20.0	0	103%	80	120	20.3	1.35%	20	
Ethylbenzene	19.28	0.50	20.0	0	96.4%	80	120	18.9	1.83%	20	
m,p-Xylene	39.88	0.50	40.0	0	99.7%	80	120	39.8	0.265%	20	
o-Xylene	21.89	0.50	20.0	0	109%	80	120	21.5	1.59%	20	
1,3-Dichlorobenzene	20.81	1.0	20.0	0	104%	81	125	21.0	0.969%	20	
1,4-Dichlorobenzene	20.89	1.0	20.0	0	104%	79	132	20.8	0.307%	20	
1,2-Dichlorobenzene	20.60	1.0	20.0	0	103%	81	134	20.6	0.143%	20	
1,4-Dichlorobenzene-d4	1.02	0.10	1.00	0	103%	81	139	1.01	1.84%	20	

Sample ID **LCS-06284** Batch ID: **R41249** Test Code: **GASW-MS** Units: **µg/L** Analysis Date **5/10/06 1:56:00 AM** Prep Date
Client ID: Run ID: **ORGCMS3_060510A** SeqNo: **592014**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	924.4	50	1,000	0	92.4%	80	120	0			

Sample ID **LCSD-06284** Batch ID: **R41249** Test Code: **GASW-MS** Units: **µg/L** Analysis Date **5/11/06 2:17:00 AM** Prep Date
Client ID: Run ID: **ORGCMS3_060510A** SeqNo: **592030**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	844.9	50	1,000	0	84.5%	80	120	924	8.99%	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

CLIENT: LACO Associates
Work Order: 0605036
Project: 4563.03 FORTUNA SHELL

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID **LCS-15674** Batch ID: **15674** Test Code: **SGTPDMW** Units: **µg/L** Analysis Date **5/26/06 12:47:26 PM** Prep Date **5/10/06**
Client ID: Run ID: **ORGC7_060526A** SeqNo: **595849**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	408.7	50	500	0	81.7%	46	91	0			
TPHC Motor Oil	898.9	170	1,000	0	89.9%	48	113	0			

Sample ID **LCSD-15674** Batch ID: **15674** Test Code: **SGTPDMW** Units: **µg/L** Analysis Date **5/26/06 1:10:08 PM** Prep Date **5/10/06**
Client ID: Run ID: **ORGC7_060526A** SeqNo: **595850**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	407.1	50	500	0	81.4%	46	91	409	0.399%	15	
TPHC Motor Oil	876.4	170	1,000	0	87.6%	48	113	899	2.53%	15	

Sample ID **LCS-15650** Batch ID: **15650** Test Code: **TPHDMW** Units: **µg/L** Analysis Date **5/5/06 6:16:33 PM** Prep Date **5/5/06**
Client ID: Run ID: **ORGC7_060505B** SeqNo: **590850**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	349.4	50	500	0	69.9%	72	124	0			S
TPHC Motor Oil	977.2	170	1,000	0	97.7%	71	139	0			

Sample ID **LCSD-15650** Batch ID: **15650** Test Code: **TPHDMW** Units: **µg/L** Analysis Date **5/5/06 6:36:57 PM** Prep Date **5/5/06**
Client ID: Run ID: **ORGC7_060505B** SeqNo: **590851**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	373.3	50	500	0	74.7%	72	124	349	6.59%	15	
TPHC Motor Oil	1,117	170	1,000	0	112%	71	139	977	13.3%	15	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

NORTH COAST LABORATORIES LTD.
5680 West End Road • Arcata • CA 95521-9202
707-822-4649 Fax 707-822-6831

Chain of Custody

LABORATORY NUMBER: 0605036

Attention: Accounts Payable
Results & Invoice to: Laco Associates
Address: 21 W. 4th St. Eureka CA 95501

Phone:
Copies of Report to: LACO ; Chris Watt

Sampler (Sign & Print): SJD

TAT: ☐ 24 Hr ☐ 48 Hr ☐ 5 Day ☐ 5–7 Day
☑ STD (2–3 Wk) ☐ Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms ☐
Preliminary: FAX ☑ Verbal ☐ By:
Final Report: FAX ☐ Verbal ☐ By:

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other

PRESERVATIVE CODES: a—HNO_3; b—HCl; c—H_2SO_4; d—$Na_2S_2O_3$; e—NaOH; f—$C_2H_3O_2Cl$; g—other

PROJECT INFORMATION

Project Number: 4563.03
Project Name: FORTUNA SHELL
Purchase Order Number: task 3039

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS: 8260 List 5	ANALYSIS: TPHd/mo w/SGC	CONTAINER	PRESERVATIVE	SAMPLE CONDITION/SPECIAL INSTRUCTIONS
							9	b	---
	4563-MW1-W	5-2-06	AM	GW	3	1			GEOTRACKER
	4563-MW2-W				3	1			
	4563-MW3-W				3	1			
	4563-MW4-W				3	1			cold + intact
	4563-MW5-W				3	1			
	4563-MW6-W				3	1			
	4563-MW7-W				3	1			
	4563-MW8-W				3	1			
	4563-MW9-W				3				
	4563-MW10-W		PM		3				

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
STEVE DAVIS	5-2-06 1630	1630 5/2/06	

SAMPLE DISPOSAL
☑ NCL Disposal of Non-Contaminated
☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Air-Ex Fed-Ex Bus Hand

*MATRIX: DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

NORTH COAST LABORATORIES LTD.
5680 West End Road • Arcata • CA 95521-9202
707-822-4649 Fax 707-822-6831

Chain of Custody

LABORATORY NUMBER: 0605036

Attention: Accounts Payable
Results & Invoice to: Laco Associates
Address: 21 W. 4th St. Eureka CA 95501
Phone:
Copies of Report to: LACO ; Chris Watt
Sampler (Sign & Print): SJD

TAT: ☐ 24 Hr ☐ 48 Hr ☐ 5 Day ☐ 5–7 Day
☑ STD (2–3 Wk) ☐ Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms ☐
Preliminary: FAX ☑ Verbal ☐ By:
Final Report: FAX ☐ Verbal ☐ By:

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other

PRESERVATIVE CODES: a—HNO_3; b—HCl; c—H_2SO_4; d—$Na_2S_2O_3$; e—NaOH; f—$C_2H_3O_2Cl$; g—other

PROJECT INFORMATION

Project Number: 4563.03
Project Name: FORTUNA SHELL
Purchase Order Number: TASK 3039

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS: 8260 List 5 (CONTAINER 9, PRESERVATIVE b)	ANALYSIS: TPHd/mo w/SGC (CONTAINER 7, PRESERVATIVE --)	SAMPLE CONDITION/SPECIAL INSTRUCTIONS
	4563-MW11-W	5-2-06	AM	GW	3		GEOTRACKER
	4563-MW12-W	↓	↓	↓	3		
	4563-MW14-W				3	1	
	4563-MW15-W				3	1	Cold + intact
	4563-MW16-W				3	1	
	4563- MW17S-W				3		
	4563-MW17D-W				3		
	4563-QCTB-W	↓	PM	↓	1		

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
STEVE DAVIS	5-2-06		
	1630	1630 5/2/06	

SAMPLE DISPOSAL
☑ NCL Disposal of Non-Contaminated
☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Air-Ex Fed-Ex Bus Hand

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

Attachment 4

ATTACHMENT 4: SOIL ANALYTICAL RESULTS
Fortuna Shell, 809 Main St, Fortuna, CA
LACO No. 4563.03; LOP No. 12672

Sample Location	Sample Depth (feet)	Sample Date	TPHg (µg/g)	TPHd (µg/g)	TPHmo (µg/g)	Benzene (µg/g)	Toluene (µg/g)	Ethylben-zene (µg/g)	Xylenes (µg/g)	Fuel Oxygenates (µg/g)	Lead Scavengers (µg/g)
Pre-UST Closure Investigation											---
4563-B1	5	8/10/1998	3.5	50	---	0.25	ND<0.4	ND<0.2	ND<0.2	MTBE=0.94	---
	10	8/10/1998	8.4	ND<1.0	---	0.011	ND<0.04	ND<0.06	ND<0.06	MTBE=0.069	---
4563-B2	5	8/10/1998	520	38	---	ND<1.5	ND<4.0	ND<8.0	ND<8.0	MTBE=0.74	---
	10	8/10/1998	6.9	ND<1.0	---	ND<0.03	ND<0.04	ND<0.06	ND<0.06	MTBE=0.065	---
4563-B3	5	8/10/1998	400	59	---	ND<1.0	0.3	ND<3.0	ND<7.0	MTBE=0.83	---
	10	8/10/1998	ND<1.0	ND<1.0	---	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.050	---
4563-B4	5	8/10/1998	44	1.3	---	ND<0.07	ND<0.2	ND<0.32	ND<0.32	MTBE=0.088	---
	10	8/10/1998	ND<1.0	ND<1.0	---	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE=0.054	---
4563-B5	5	8/10/1998	ND<1.0	ND<1.0	---	ND<0.005	ND<0.005	ND<0.16	ND<0.16	ND<0.050	---
	10	8/10/1998	ND<1.0	ND<1.0	---	ND<0.005	ND<0.005	ND<0.050	ND<0.050	ND<0.050	---
4563-B6	5	8/10/1998	16	3.2	---	ND<0.04	ND<0.04	ND<0.20	ND<0.20	MTBE=0.085	---
	10	8/10/1998	8.4	6.2	---	ND<0.02	ND<0.10	ND<0.10	ND<0.10	MTBE=0.092	---
4563-B7	5	8/11/1998	230	12	---	0.62	ND<2.0	ND<2.0	ND<2.0	MTBE=1.1	---
	10	8/11/1998	3.4	ND<1.0	---	0.016	ND<0.02	ND<0.04	ND<0.04	MTBE=0.11	---
AUGER	10	8/11/1998	1,400	28	---	3.0	ND<12	17	94	ND<10	---
4563-B9	5	8/11/1998	1.4	ND<1.0	---	0.025	ND<0.005	ND<0.005	ND<0.005	MTBE=0.085	---
	10	8/11/1998	10	ND<1.0	---	ND<0.04	ND<0.08	ND<0.08	ND<0.08	MTBE=0.14	---
4563-B10	5	8/11/1998	520	51	---	1.1	ND<5.0	ND<5.0	ND<2.0	MTBE=2.9	---
	10	8/11/1998	7.8	ND<1.0	---	ND<0.04	ND<0.08	0.07	0.09	MTBE=0.39	---
4563-B11	5	8/11/1998	1,000	27	---	2.7	ND<20	ND<10	ND<10	MTBE=7.3	---
	10	8/11/1998	33	1.2	---	0.082	ND<0.5	0.24	0.34	MTBE=0.78	---
UST Closure											
4563#1	9'	11/11/1998	160	1.4	18	ND<0.050	ND<0.050	0.4	0.39	ND<0.50	---
4563#2	9'	11/11/1998	340	3.9	20	ND<0.050	ND<0.40	1.8	1.3	MTBE= 0.8	---
4563#3	9'	11/11/1998	16	55	320	ND<0.0050	ND<0.020	0.039	0.039	MTBE= 0.065	---
4563#4	9'	11/11/1998	630	---	---	150	ND<0.025	690	450	MTBE= 51	---
4563#5	3'	11/11/1998	2.5	ND<1.0	ND<10	0.092	0.0079	0.014	0.038	MTBE= 0.021	---
4563#6	3'	11/11/1998	34	ND<1.0	10	0.7	0.23	0.59	0.67	MTBE= 3.5	---
4563#7	3'	11/11/1998	62	3.5	ND<10	0.2	ND<0.20	ND<0.40	ND<0.40	MTBE= 0.82	---
4563#8	3'	11/11/1998	9.8	2.9	35	0.14	0.094	0.064	0.12	ND<0.50 MTBE= 0.01	---
4563#9	3'	11/11/1998	1.7	ND<1.0	ND<10	0.061	ND<0.0050	0.0065	0.018	TBA=0.01	---
4563#10	3'	11/11/1998	ND<1.0	ND<1.0	ND<10	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.50	---
2000 Investigation											
MW 1	5.0'	7/25/2000	3.6	ND<1.0	ND<10.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.02
	9.0'	7/25/2000	ND<1000.0	ND<1.0	ND<10.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE = 0.0058	ND<0.02
	10.0'	7/25/2000	ND<1000.0	ND<1.0	ND<10.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE = 0.0066	ND<0.02
MW 2	5.0'	7/25/2000	96	10	ND<10.0	ND<0.016	ND<0.016	ND<0.016	ND<0.016	ND<0.016	ND<0.04
	7.0'	7/25/2000	830	32	10	ND<0.16	ND<0.16	0.18	0.16	ND<0.16	ND<0.04
	10.0'	7/25/2000	ND<1000	ND<1.0	ND<10	0.0071	ND<0.005	ND<0.005	ND<0.005	MTBE = 0.0046	ND<0.02
MW 3	5.0'	7/25/2000	110	13	47	ND<0.04	ND<0.04	ND<0.04	ND<0.04	MTBE = 0.081	ND<0.1
	10.0'	7/25/2000	ND<1000.0	ND<1.0	ND<10.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE = 0.055	ND<0.02
	12.0'	7/25/2000	ND<1.0	ND<1.0	ND<10.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE =0.13	ND<0.02
	15.0'	7/25/2000	ND<1.0	ND<1.0	ND<10.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE = 0.83	ND<0.02
MW 4	2.0'	7/26/2000	4.8	ND<1.0	ND<10.0	0.042	ND<0.005	0.012	0.0404	MTBE =0.018	ND<0.02
	5.0'	7/26/2000	4.9	ND<1.0	ND<10.0	0.059	ND<0.005	ND<0.005	0.013	MTBE = 0.028	ND<0.02
	7.0'	7/26/2000	20	1.4	ND<10.0	0.022	ND<0.008	0.037	0.018	MTBE = 0.013	ND<0.02
	10.0'	7/26/2000	ND<1.0	ND<1.0	ND<10.0	0.016	ND<0.005	ND<0.005	ND<0.005	MTBE =0.013	ND<0.02
MW 5	5.0'	7/26/2000	1500	23	14	1.4	0.17	4.5	7.34	MTBE =0.35	ND<0.4
	8.0'	7/26/2000	670	10	22	0.67	ND<0.8	5.5	2.69	MTBE =0.32	ND<0.002
	10.0'	7/26/2000	17	9.7	21	0.0089	ND<0.005	0.0085	0.0058	MTBE =0.09	ND<0.002
	15.0'	7/26/2000	ND<1.0	ND<1.0	ND<10.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE =0.75	ND<0.002
MW 6	15.0'	7/26/2000	1.5	ND<1.0	ND<10.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE =0.019	ND<0.002
MW 7	5.0'	7/27/2000	730	230	3100	2.4	0.56	1.8	19.58	MTBE =0.12	ND<0.02
	10.0'	7/27/2000	ND<1.0	ND<1.0	ND<10.0	0.016	ND<0.005	ND<0.005	0.0053	MTBE =0.066	ND<0.002
	14.0'	7/27/2000	ND<1.0	ND<1.0	ND<10.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE =0.013	ND<0.002
MW 8	2.0'	7/27/2000	8.2	ND<1.0	ND<10.0	0.093	ND<0.005	0.009	0.026	MTBE =0.2	ND<0.002
	5.0'	7/27/2000	1400	17	44	2.5	0.2	1.7	1.6	MTBE = 1.1	ND<0.4
	10.0'	7/27/2000	ND<1.0	ND<1.0	ND<10.0	0.0052	ND<0.005	ND<0.005	ND<0.005	MTBE =0.5	ND<0.002
	20.0'	7/27/2000	ND<1.0	ND<1.0	ND<10.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE =0.83	ND<0.002
B1-00	8.0'	5/17/2000	1,400	100	610	ND<2.0	ND<8.0	10	25.0	MTBE ND<5.0	---
	10.0'	5/17/2000	ND<1.0	ND<1.0	ND<10	0.014	ND<0.005	ND<0.005	0.0066	MTBE ND<0.05	---
	17.0'	5/17/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	0.0055	ND<0.005	0.0081	MTBE = 0.16	---
	24.0'	5/17/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	0.0062	MTBE ND<0.05	---
	27.0'	5/17/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
	29.0'	5/17/2000	1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
	34.0'	5/17/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
	39	5/17/2000	1.7	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---

ATTACHMENT 4: SOIL ANALYTICAL RESULTS
Fortuna Shell, 809 Main St, Fortuna, CA
LACO No. 4563.03; LOP No. 12672

Sample Location	Sample Depth (feet)	Sample Date	TPHg (µg/g)	TPHd (µg/g)	TPHmo (µg/g)	Benzene (µg/g)	Toluene (µg/g)	Ethylben-zene (µg/g)	Xylenes (µg/g)	Fuel Oxygenates (µg/g)	Lead Scavengers (µg/g)
2000 Investigation, continued											
B2-00	3.0'	5/18/2000	**15**	**1.4**	ND<10	**0.087**	ND<0.08	ND<0.04	ND<0.04	**MTBE = 0.22**	---
	9.0'	5/18/2000	**18**	ND<1.0	ND<10	ND<0.005	ND<0.01	ND<0.1	ND<0.1	**MTBE = 0.065**	---
	14.0'	5/18/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND <0.05	---
	19.0'	5/18/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	**MTBE = .059**	---
	24.0'	5/18/2000	ND<1.0	ND<1.0	ND<10	**0.067**	ND<0.005	ND<0.005	ND<0.01	MTBE ND<0.05	---
B3-00	9.0'	5/22/2000	**9.4**	**170**	**1,100**	ND<0.005	ND<0.01	ND<0.08	ND<0.08	MTBE ND<0.05	---
	14.0'	5/22/2000	**3.2**	**18**	**120**	ND<0.005	ND<0.005	ND<0.02	ND<0.002	MTBE ND<0.05	---
	19.0'	5/22/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
B4-00	3.0'	5/24/2000	**12**	ND<1.0	ND<10	**0.099**	ND<0.1	ND<0.06	ND<0.06	MTBE ND<0.05	---
	6.0'	5/24/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
	9.0'	5/24/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
	14.0'	5/24/2000	**4.9**	ND<1.0	ND<10	**0.0057**	ND<0.03	ND<0.03	ND<0.03	**MTBE = 0.099**	---
	19.0'	5/24/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
B6-00	2.0'	11/22/2000	**1.6**	**1.1**	ND<10	ND<0.005	ND<0.005	**0.005**	**0.014**	MTBE ND<0.05	---
	7.0'	11/22/2000	**670**	**48**	**49**	**0.59**	ND<8.0	ND<10	ND<10	MTBE ND<0.05	---
	9.0'	11/22/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
B7-00	2.0'	11/22/2000	**8.3**	**1.8**	ND<10	**0.0075**	ND<0.04	ND<0.04	**0.05**	MTBE ND<0.05	---
	6.0'	11/22/2000	**4.2**	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.02	ND<0.02	MTBE ND<0.05	---
	9.0'	11/22/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	**MTBE= 0.37**	---
B8-00	2.0'	11/22/2000	ND<1.0	**1.3**	**19**	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
	5.0'	11/22/2000	ND<1.0	**1.1**	**18**	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
	10.0'	11/22/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
	15.0'	11/22/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
B9-00	2.0'	11/22/2000	**2.3**	ND<1.0	ND<10	ND<0.005	ND<0.015	ND<0.005	ND<0.03	MTBE ND<0.05	---
	7.0'	11/22/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
	10.0'	11/22/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
	15.0'	11/22/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
B10-00	2.0'	11/22/2000	**2.3**	ND<1.0	ND<10	ND<0.005	ND<0.01	ND<0.005	ND<0.03	MTBE ND<0.05	---
	5.0'	11/22/2000	ND<1.0	ND<1.0	**10**	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
B11-00	4.5'	11/27/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
	8.0'	11/27/2000	**6.2**	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.07	ND<0.07	MTBE ND<0.05	---
	10.0'	11/27/2000	ND<1.0	**3.6**	**71**	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
B12-00	4.5'	11/27/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
	15.0'	11/27/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
B13-00	4.0'	11/28/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
	7.0'	11/28/2000	**7.2**	**51**	**430**	ND<0.005	ND<0.060	ND<0.15	ND<0.15	MTBE ND<0.05	---
B14-00	4.0'	11/28/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.5	---
	13.0'	11/28/2000	**4.7**	**1.3**	**42**	ND<0.005	ND<0.005	ND<0.04	ND<0.04	MTBE ND<0.05	---
B15-00	4.5'	11/29/2000	**1.8**	ND<1.0	**30**	ND<0.005	ND<0.005	ND<0.02	ND<0.02	MTBE ND<0.05	---
	7.0'	11/29/2000	**2.1**	**2.5**	**120**	ND<0.005	ND<0.01	ND<0.02	ND<0.02	MTBE ND<0.05	---
B16-00	5.0'	12/18/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
	8.0'	12/18/2000	ND<1.0	ND<1.0	**20**	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
B17-00	5.0'	12/18/2000	**1.1**	**3.2**	**17**	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
	15.0'	12/18/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
B18-00	5.0'	12/19/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
	8.0'	12/19/2000	**1.9**	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
	12.0'	12/19/2000	**1.3**	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
	15.0'	12/19/2000	**1.5**	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
B19-00	5.0'	12/19/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
	10.0'	12/19/2000	ND<1.0	ND<1.0	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
B20-00	5.0'	12/20/2000	ND<1.0	ND<1.0	**12**	ND<0.005	ND<0.005	ND<0.005	ND<0.005	MTBE ND<0.05	---
	7.0'	12/20/2000	**3**	**2.1**	**75**	ND<0.005	ND<0.005	ND<0.01	ND<0.005	MTBE ND<0.05	---
	9.0'	12/20/2000	**160**	**3.2**	**42**	ND<0.005	ND<0.3	ND<1.0	ND<1.0	MTBE ND<0.05	---
2004 Investigation											
4563-MW14-S4	4	9/21/2004	**2.6**	---	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.020-0.50	---
4563-MW14-S10	10	9/21/2004	ND<1.0	---	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.020-0.50	---
4563-MW15-S4	4	9/21/2004	**1.7**	---	---	**0.0096**	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.020-0.50	---
4563-MW15-S8	8	9/21/2004	**220**	---	---	**0.039**	ND<0.0050	**0.54**	**2.4**	ND<0.020-0.50	---
4563-MW16-S4	4	9/21/2004	**560**	---	---	**1.8**	**0.26**	**1.0**	**2.6**	ND<1.0-25	---
4563-MW16-S9	9	9/21/2004	**1.8**	---	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	**MTBE=0.057**	---
										All others ND<0.020-0.50	
4563-B12-S12.0	12	9/30/2004	ND<1.0	---	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.020-0.50	---
4563-B12-S16.0	16	9/30/2004	ND<1.0	---	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.020-0.50	---
4563-B12-S20.0	20	9/30/2004	ND<1.0	---	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.020-0.50	---
4563-B12-S24.0	24	9/30/2004	ND<1.0	---	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.020-0.50	---

Notes:
Bold indicates analyte detection
A key to abbreviations is included as Attachment 2.