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November 9, 2005

4563.01

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; Third Quarter 2005
Former Fortuna Shell; 819 Main Street, Fortuna, California
LOP No. 12672

Dear Mr. Verhey:

LACO ASSOCIATES (LACO) presents the results of groundwater monitoring for the third quarter of 2005, for the presently operating Gas-4-Less. The site, former Fortuna Shell of Humboldt Petroleum, Incorporated (HPI) is located in Fortuna, California (Figure 1). A site map and a sparge well location map are included as Figures 2 and 3, respectively. This report has been prepared on behalf of Jim Seiler.

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

Sincerely,
LACO ASSOCIATES

Amy Thomson
Staff Geologist

Christopher J. Watt
PG 7586, Exp. 03/31/06

AMT:jg

Attachments

cc: Jim Seiler, Humboldt Petroleum (electronically sent)

P:\4000\4563 HPI Fortuna Shell\Submittals\GMRs\2005\3rd_Q\4563_3Q05_GMR.doc

PROFESSIONAL GEOLOGIST
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GROUNDWATER MONITORING REPORT; THIRD QUARTER 2005

Former Fortuna Shell; 819 Main Street, Fortuna, California

LOP No. 12672; LACO Project No. 4563.01

INTRODUCTION

This report presents the cumulative results of groundwater monitoring conducted at the former Fortuna Shell (hereafter referred to as 'site') since 2000. Field activities were conducted on August 2, 2005, in accordance with generally accepted practices at this or similar locations. Monitoring well sampling protocol is included in LACO ASSOCIATES' (LACO's) *Standard Operating Procedures,* on file at your office. Details of the current groundwater monitoring sampling event are presented below in Table A. A location map and site map are included as Figures 1 and 2, respectively; and a sparge well location map is included as Figure 3. Field sampling forms are included as Attachment 1.

SITE CHRONOLOGY

1999: Four underground storage tanks (USTs) were removed from the site.

- Tank 1: 2000-gallon
- Tank 2: 10,000-gallon
- Tank 3: 10,000-gallon
- Tank 4: 8000-gallon

The impacted cavity fill and excavated soil (approximately 140 cubic yards) was temporarily stockpiled on-site.

2001: Monitoring wells MW1 through MW13 were installed throughout the site for purposes of site characterization.

2002: Groundwater sampling was performed to extend the investigation and site characterization. An oxygen sparging pilot system and sparge wells were recommended for remediation.

2004: Two sparge wells were installed and a pilot test conducted. Monitoring wells MW14, MW17S, and MW17D were installed.

TABLE A - SAMPLING EVENT: 8/2/2005						
MONITORING WELL ID	SCREENED INTERVAL (feet)	DTW (feet)	PURGE METHOD	WATER QUALITY PARAMETERS	ANALYTICALS	SAMPLING SCHEDULE
					ORGANICS	
MW1	6-10	6.38	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW2	5-10	6.11	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW3	5-12	6.22	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW4	5-10	6.03	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA, TPHd, TPHmo	Quarterly
MW5	5-10	5.45	1½" Bailer	---	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA, TPHd, TPHmo	Quarterly
MW6	12-20	6.12	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA, TPHd, TPHmo	Quarterly
MW7	10-15	6.02	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA, TPHd, TPHmo	Quarterly
MW8	15-20	11.18	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA, TPHd, TPHmo	Quarterly
MW9	12-15	9.24	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW10	12.5-15.5	10.18	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW11	12.5-15.5	10.45	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW12	12.5-15	10.02	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW13	12.5-15	9.01	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW14	5-10	6.67	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA, TPHd, TPHmo	Quarterly
MW15	5-10	6.28	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA, TPHd, TPHmo	Quarterly
MW16	5-10	6.12	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA, TPHd, TPHmo	Quarterly
MW17S	22.5-24.5	22.45	¾" Bailer	---	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly
MW17D	26-28	26.45	¾" Bailer	---	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly

HYDROGEOLOGY AND HYDRAULIC GRADIENT

Stratigraphic data from boring and monitoring well installations to date indicate that several primarily sand and gravel water-bearing units exist, separated by layers of primarily dense clayey silt to a depth of approximately 40 feet below ground surface (bgs). Previous investigations have indicated that the upper contact of the dense, well-graded gravel of the Rohnerville formation occurs at 38 to 45 feet below the site. 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 aquifers were generated using the August 2, 2005, hydraulic head elevations, and are presented as Figures 4 and 5, respectively. The hydraulic gradient in the perched aquifer was calculated using the three-point method in the area defined by monitoring wells MW1, MW3, and MW14. The hydraulic gradient in the shallow aquifer was calculated using the three-point method in the area defined by monitoring wells MW7, MW11, and MW13. These monitoring wells were selected because they are located along the site perimeter and represent the hydraulic gradient of the site.

Hydraulic gradient for the perched wells (Figure 4)

- N66°W direction at 0.02 ft/ft

Hydraulic gradient of the shallow wells (Figure 5)

- S74°W direction at 0.04 ft/ft

The calculated gradients for the shallow and perched aquifers are consistent with previous monitoring events (Table 1). Current and historic hydraulic head elevations are presented in Table 2.

LABORATORY ANALYTICAL RESULTS

Groundwater analytical data from the current sampling event is included below in Table B. Copies of the current laboratory results and case narratives from the laboratory are included as Attachment 2. Historic and current groundwater analytical results are presented in Table 2.

TABLE B: CURRENT ANALYTICAL RESULTS FOR THE AUGUST 2, 2005 SAMPLING EVENT													
WELL Sample Date	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	2,400	290	ND<170	3.6	1.5	12	3.6	ND<1.0	ND<20	ND<1.0	ND<1.0	ND<1.0	ND<1.0
MW2	4,500	820	ND<170	23	5.4	26	20	ND<7	ND<10	ND<1.0	ND<1.0	ND<1.0	ND<1.0
MW3	830	160	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	45	ND<20	3.2	ND<1.0	ND<1.0	ND<1.0
MW4	220	60	ND<170	2.6	ND<0.50	ND<0.50	ND<0.50	1.7	ND<10	ND<1.0	ND<1.0	ND<1.0	ND<1.0
MW5	29,000	8,000	3,500	550	18	56	153.2	ND<300	53	4.3	ND<1.0	ND<1.0	ND<1.0
MW6	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	10	ND<10	ND<1.0	ND<1.0	ND<1.0	ND<1.0
MW7	170	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	150	ND<30	5.7	ND<1.0	ND<1.0	1,2-DCA=1.1
MW8	1,800	ND<50	ND<170	0.88	ND<0.50	ND<0.50	ND<0.50	2,500	450	97	9.1	ND<3.0	1,2-DCA=1.9
MW9	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.7	ND<10	ND<1.0	ND<1.0	ND<1.0	ND<1.0
MW10	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	ND<1.0	ND<1.0	ND<1.0
MW11	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.0	ND<10	ND<1.0	ND<1.0	ND<1.0	ND<1.0
MW12	750	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	790	ND<10	32	2.6	1.3	ND<1.0
MW13	200	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	230	ND<10	7.1	ND<1.0	ND<1.0	ND<1.0
MW14	880	160	ND<170	0.93	ND<0.50	1.1	ND<0.50	ND<14	ND<10	ND<1.0	ND<1.0	ND<1.0	ND<1.0
MW15	2,100	250	ND<170	120	3.5	23	7.5	ND<100	ND<30	2.4	ND<1.0	ND<1.0	ND<1.0
MW16	4,600	570	320	680	14	22	33.6	360	220	8	3.9	ND<1.0	ND<1.0
MW17S	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	13	ND<20	ND<1.0	ND<1.0	ND<1.0	1,2-DCA=1.1
MW17D	130	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	50	ND<10	ND<1.0	ND<1.0	ND<1.0	1,2-DCA=1.1
WQOs	*50*	*50*	*50*	*1*	*42*	*29*	*42*	*13*	*2*	*3*	*3*	*0.8*	*0.5*

When the current analytical results are compared to the analytical results of similar hydraulic conditions (August 3, 2004), it appears that benzene, toluene, ethylbenzene, and total xylenes (BTEX) and methyl tertiary butyl ether (MTBE) concentrations have generally decreased. In monitoring well MW4, the concentration of total petroleum hydrocarbons as gasoline (TPHg) has decreased by two orders of magnitude since sampling began. The proximity of the source area and the down gradient location of the monitoring wells caused analyte concentrations in monitoring well MW1 to increase within the same order of magnitude, and TPHg in monitoring well MW5 to increase within the same order of magnitude since August 4, 2004, when hydraulic conditions were similar.

Since the pilot test was performed (March through August 2004), current and historic analytical results indicate that the on-site MTBE plume has been partially degraded but continues to migrate off-site in the southwest direction (Figure 6). (Please note that the asterisk (*) on Figure 6 indicates that the reported analyte concentration for monitoring well MW5 is from the May 3, 2005 sampling event.) The migration direction of the core of the MTBE plume varies with seasonal changes in hydraulic gradient at the source and within the off-site plume as evidenced by time series graphs, Charts 1 through 5. These changes in hydraulic gradient over time (Table 1) cause fluctuating groundwater elevations in the monitoring wells, which causes variable MTBE concentrations to be reported, as in monitoring well MW13 (Chart 5). Even so, the peak MTBE concentrations reported over time are declining, suggesting attenuation of the plume source.

Based on estimates from exponential trend lines fit to the groundwater data, MTBE levels have already reached the water quality objective (WQO) of 13 μg/L in monitoring wells MW9, MW10, and MW11, represented in Charts 1-3. Declining trend estimates calculated for monitoring well MW12 (Chart 4) and monitoring well MW13 (Chart 5) indicate that the WQO will be reached within 7 years and 2 years, respectively. Historically, the hydraulic gradient for this site has been in the southwest direction toward these monitoring wells. Overall, these five monitoring wells (MW9 through MW13) display declining trends which represent natural attenuation.

Reported analyte concentrations in monitoring wells MW14, MW15, and MW16 are increasing. However, the aquifer volume in these monitoring wells has been decreasing during the summer months, causing less dilution of the petroleum hydrocarbons. The next sampling event is scheduled for November 2005, which will complete one full year of sampling since the pilot test was conducted. This will make it possible to produce analyte concentration comparisons for periods of similar hydraulic conditions following the remediation actions.

FUTURE WORK

- Regular monitoring and reporting will continue; the next sampling event is scheduled for November 2005.
- Due to low concentrations of MTBE reported at monitoring wells MW9, MW10, and MW11, LACO has changed to a bi-annual (February & August) sampling regime.
- In April 2003 the Humboldt County Division of Environmental Health approved the proposed *Remedial Action Plan*, and we are now waiting for approval of the *Proposal for Pay-For-Performance (PFP) Program, Condition of Payment, and Remedial Action Plan* proposal that was submitted to the Underground Storage Tank Cleanup Fund on May 19, 2005.

LIMITATIONS

LACO ASSOCIATES 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 ASSOCIATES 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 ASSOCIATES makes no representations or warranties of any kind, including but not limited to any implied warranties

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LIST OF FIGURES, TABLES, CHARTS, AND ATTACHMENTS

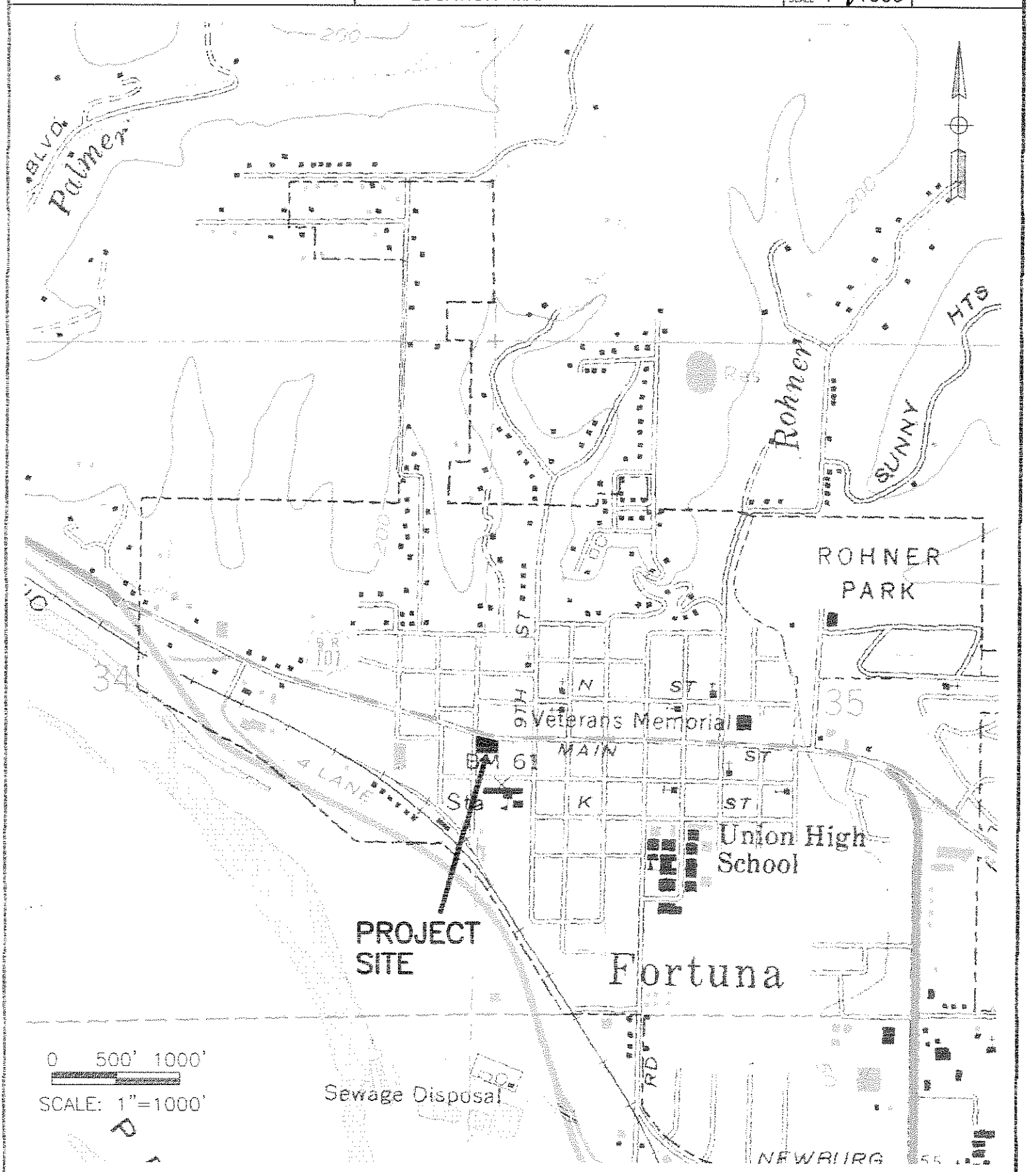
Figure 1: Location Map
Figure 2: Site Map
Figure 3: Sparge Well Location
Figure 4: Hydrologic Gradient Map, Perched Wells (8/02/05)
Figure 5: Hydrologic Gradient Map, Shallow Wells (8/02/05)
Figure 6: MTBE Isoconcentration Contour Map (8/02/05)

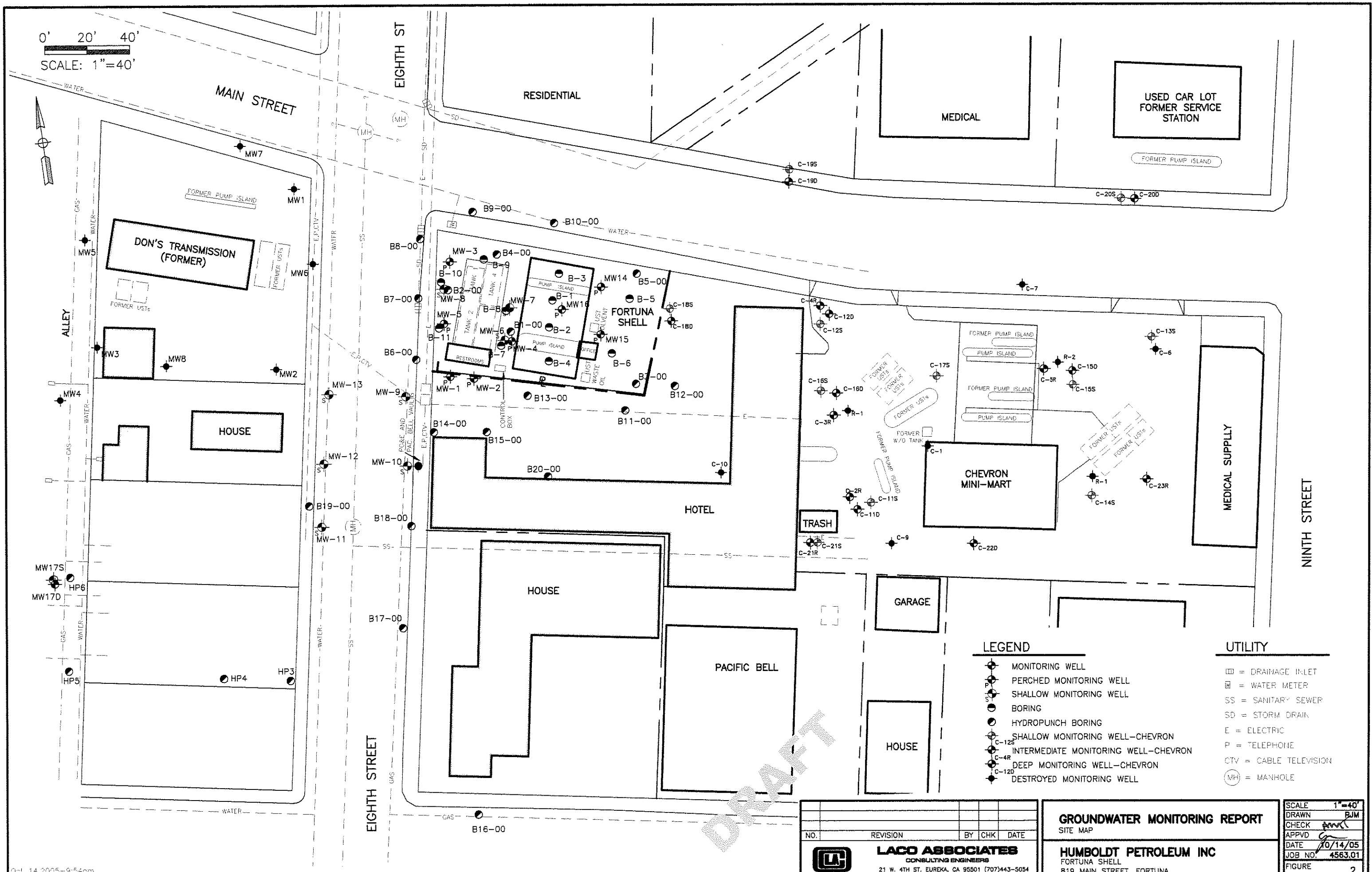
Table 1: Historic Hydraulic Gradients
Table 2: Well Data and Groundwater Analytical Results

Chart 1: MTBE vs. Time in Monitoring Well MW9
Chart 2: MTBE vs. Time in Monitoring Well MW10
Chart 3: MTBE vs. Time in Monitoring Well MW11
Chart 4: MTBE vs. Time in Monitoring Well MW12
Chart 5: MTBE vs. Time in Monitoring Well MW13

Attachment 1: Field Sampling Forms
Attachment 2: Current Laboratory Analytical Results

LACO ASSOCIATES CONSULTING ENGINEERS 21 W 4TH ST. EUREKA, CA 95501 (707)443-5054	PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE
	CLIENT	HUMBOLDT PETROLEUM INC	DATE	8/31/05	1
	LOCATION	FORTUNA SHELL	CHECK		JOB NO.
		LOCATION MAP	SCALE	1"=1000'	4563.01





NO.	REVISION	BY	CHK	DATE

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

GROUNDWATER MONITORING REPORT
SITE MAP

HUMBOLDT PETROLEUM INC
FORTUNA SHELL
819 MAIN STREET, FORTUNA

SCALE	1"=40'
DRAWN	RJM
CHECK	
APPVD	
DATE	10/14/05
JOB NO.	4563.01
FIGURE	2

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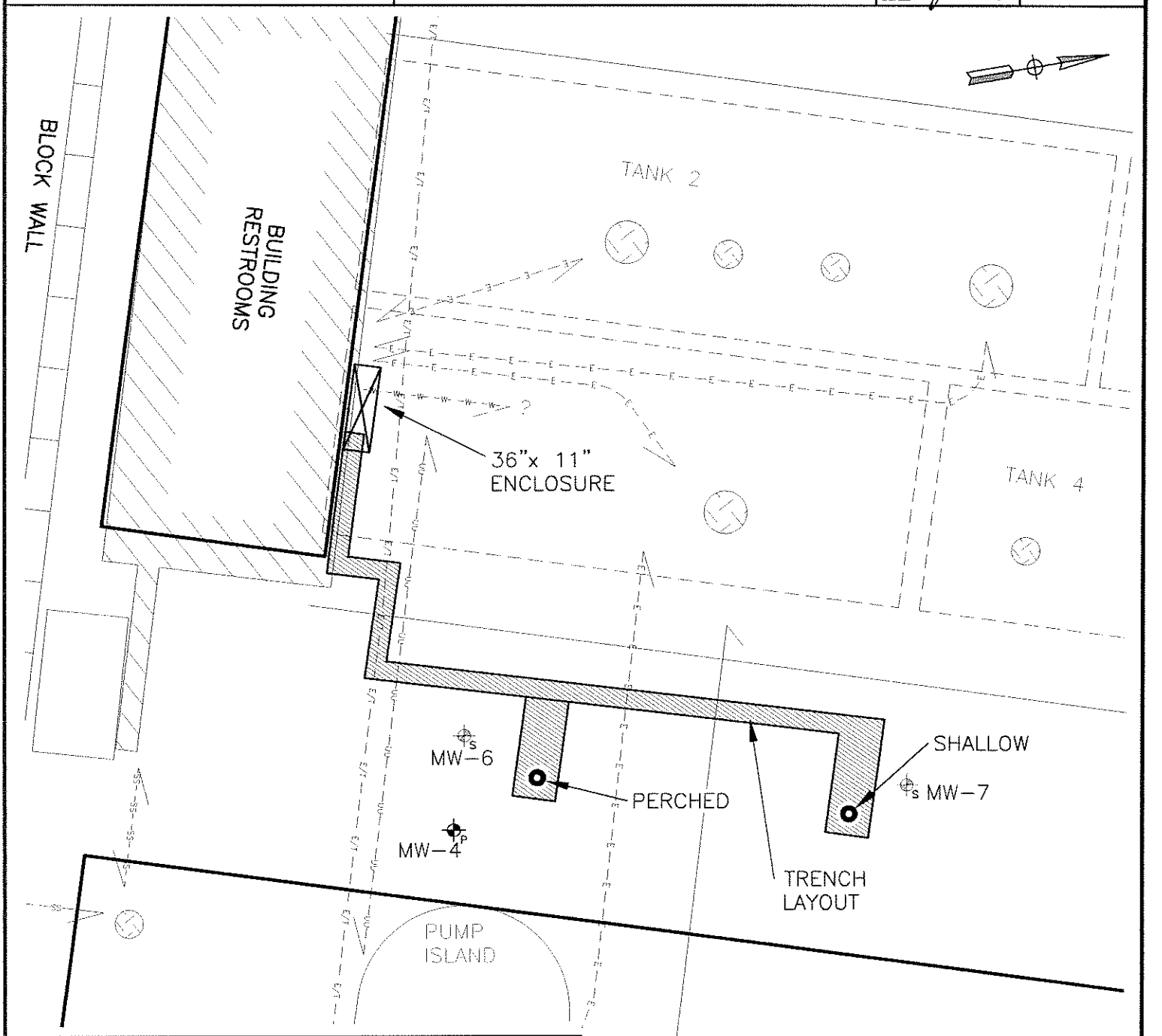
LACO ASSOCIATES CONSULTING ENGINEERS 21 W 4TH ST. EUREKA, CA 95501 (707)443-5054	PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE
	CLIENT	HUMBOLDT PETROLEUM INC.	DATE	8/31/05	3
	LOCATION	FORTUNA SHELL	CHECK		JOB NO.
		SPARGE WELL LOCATION	SCALE	1" = 5'	4563.01



LEGEND

- PERCHED MONITORING WELL
- SHALLOW MONITORING WELL
- SPARGE WELL LOCATION
- ELECTRIC (NORCAL GEO. CONSULTANTS INC.)
- ELECTRIC/WATER (NORCAL GEO. CONSULTANTS INC.)
- STORM DRAIN (NORCAL GEO. CONSULTANTS INC.)
- SANITARY SEWER (NORCAL GEO. CONSULTANTS INC.)

0 2.5' 5'

SCALE: 1"=5'

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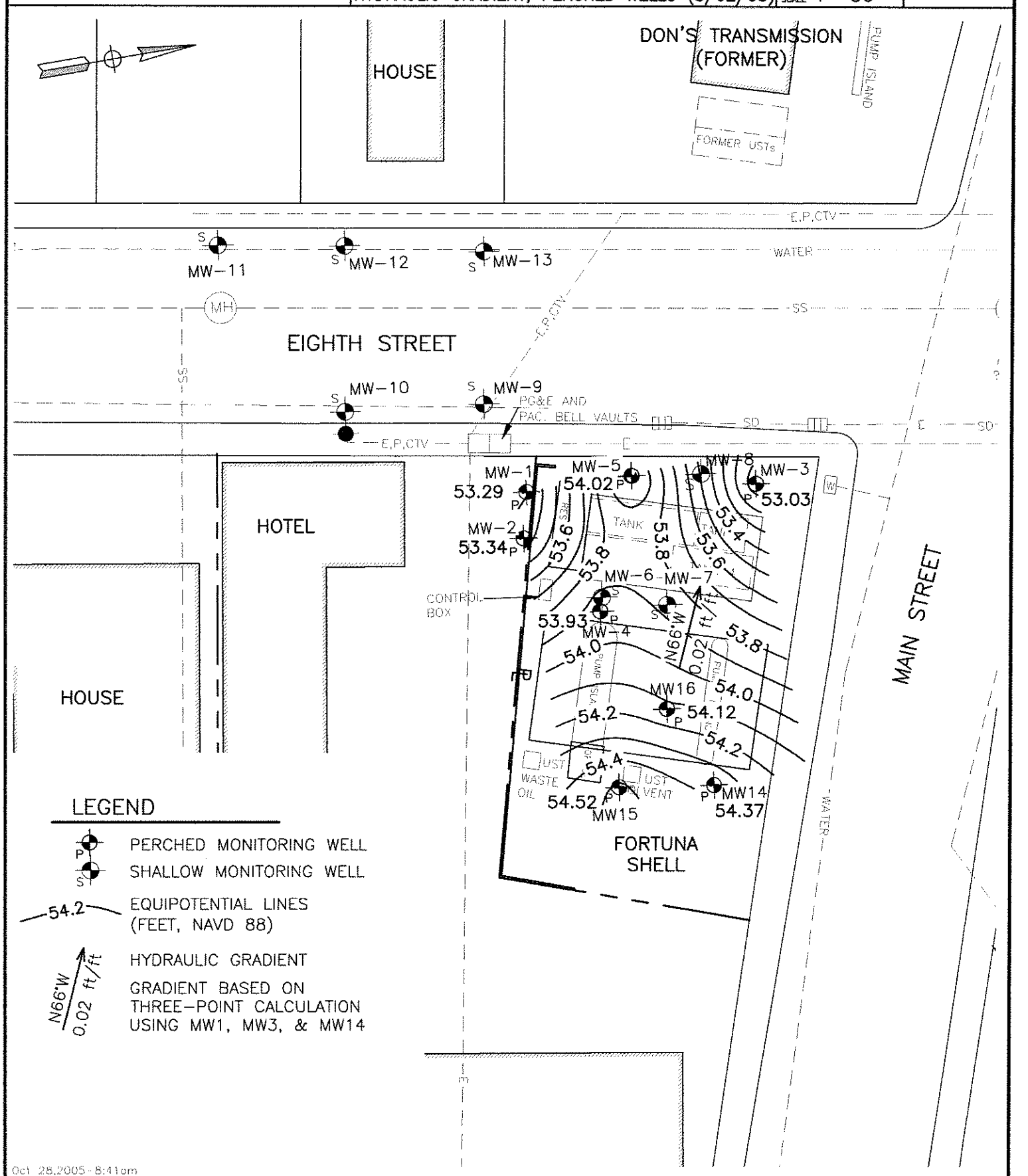
LACO ASSOCIATES CONSULTING ENGINEERS 21 W 4TH ST. EUREKA, CA 95501 (707)443-5054	PROJECT GROUNDWATER MONITORING REPORT	BY RJM	FIGURE 4
	CLIENT HUMBOLDT PETROLEUM, INC.	DATE 10/28/05	
	LOCATION FORTUNA SHELL, 819 MAIN ST.	CHECK RJM	JOB NO. 4563.01
	HYDRAULIC GRADIENT, PERCHED WELLS (8/02/05)	SCALE 1"=30'	



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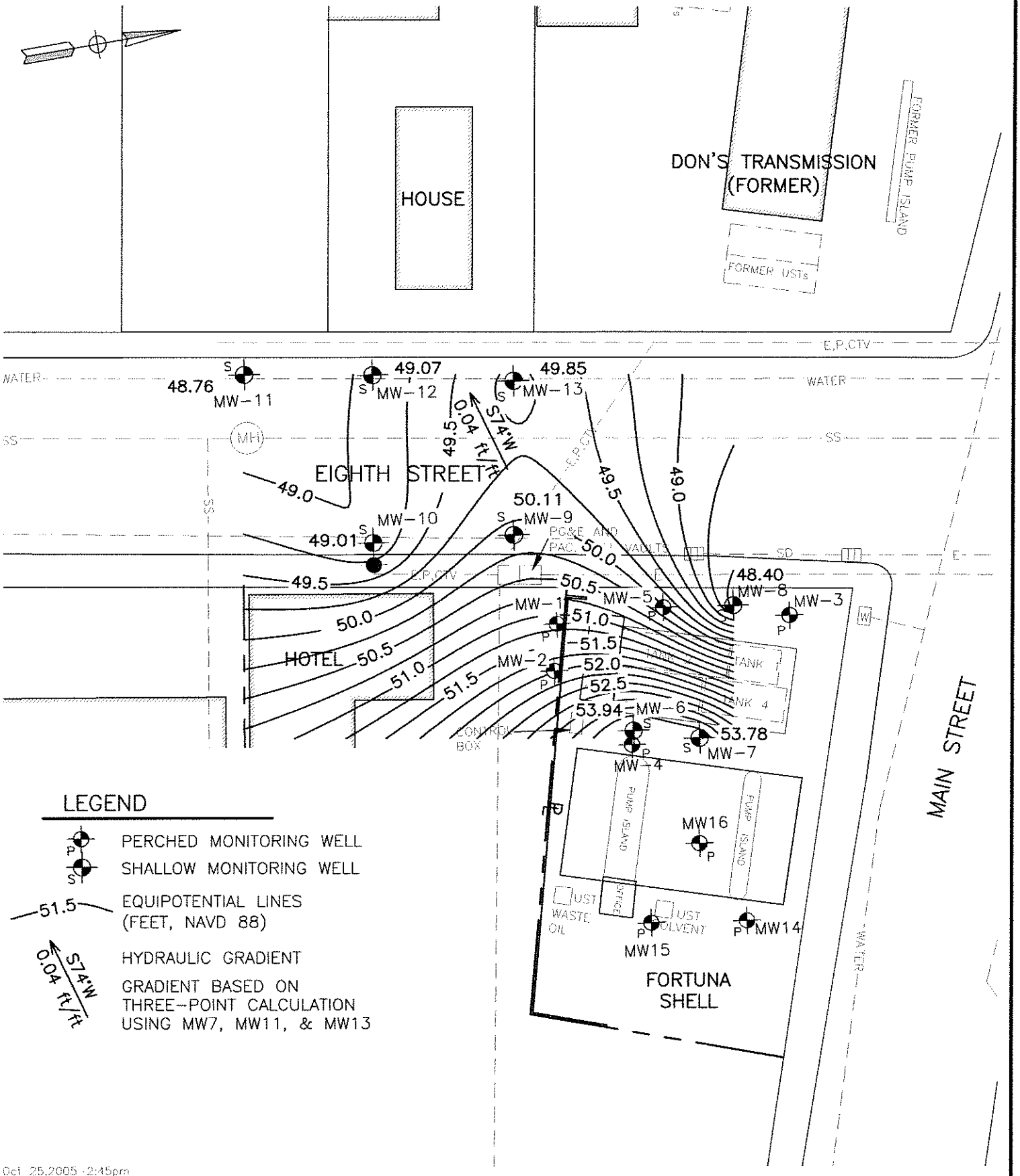
LACO ASSOCIATES CONSULTING ENGINEERS 21 W 4TH ST. EUREKA, CA 95501 (707)443-5054	PROJECT GROUNDWATER MONITORING REPORT	BY RJM	FIGURE 5
	CLIENT HUMBOLDT PETROLEUM, INC.	DATE 10/14/05	
	LOCATION FORTUNA SHELL, 819 MAIN ST.	CHECK	JOB NO. 4563.01
	HYDRAULIC GRADIENT, SHALLOW WELLS (8/02/05)	SCALE 1"=30'	



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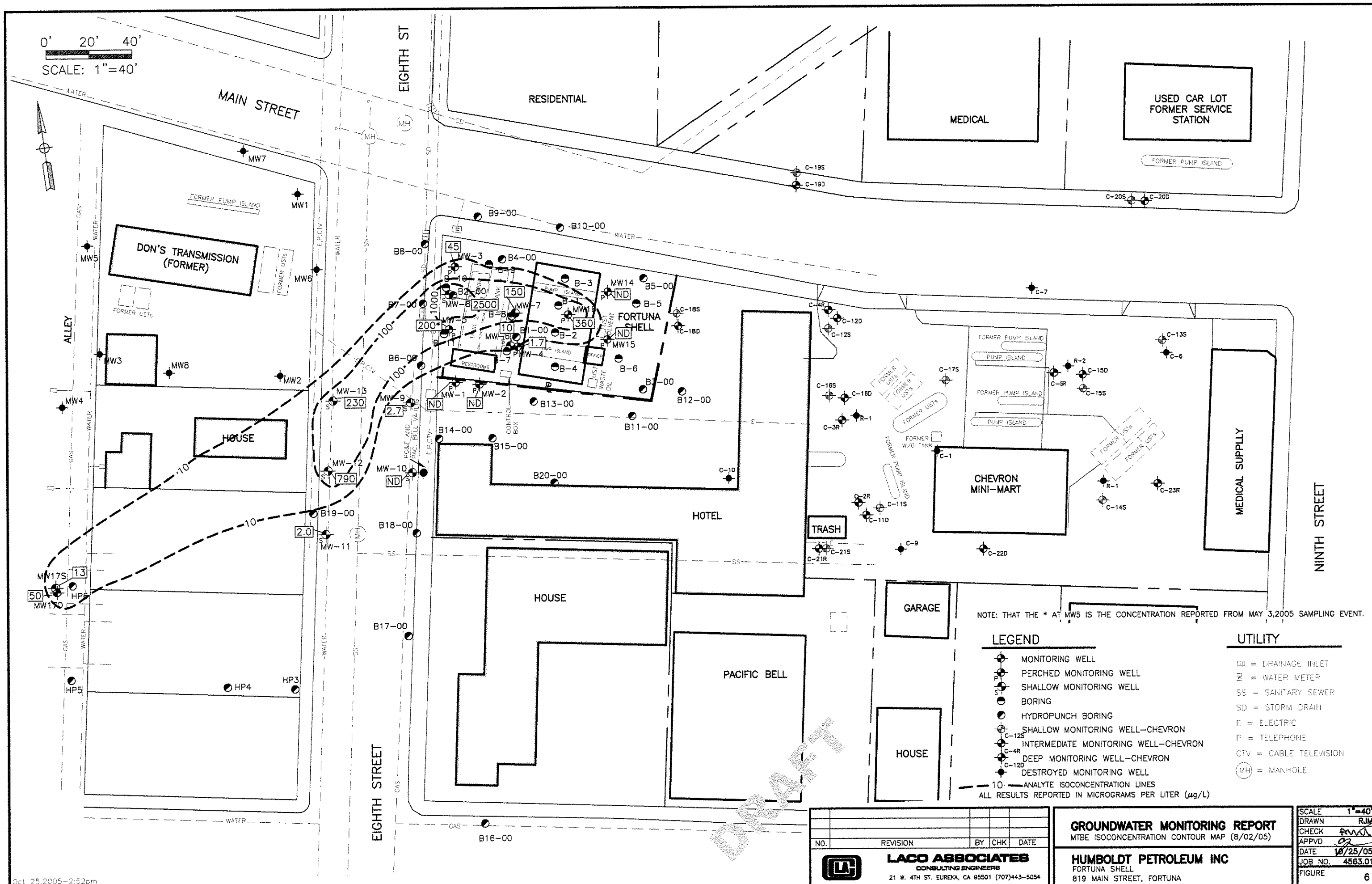
0' 20' 40'
SCALE: 1"=40'
MAIN STREET
EIGHTH ST
RESIDENTIAL
MEDICAL
USED CAR LOT FORMER SERVICE STATION
FORMER PUMP ISLAND
DON'S TRANSMISSION (FORMER)
FORMER USTs
ALLEY
HOUSE
FORTUNA SHELL
RESTROOMS
OFFICE
HOTEL
CHEVRON MINI-MART
MEDICAL SUPPLLY
NINTH STREET
TRASH
GARAGE
PACIFIC BELL
EIGHTH STREET
NOTE: THAT THE * AT MW5 IS THE CONCENTRATION REPORTED FROM MAY 3,2005 SAMPLING EVENT.
LEGEND
MONITORING WELL
PERCHED MONITORING WELL
SHALLOW MONITORING WELL
BORING
HYDROPUNCH BORING
SHALLOW MONITORING WELL-CHEVRON
INTERMEDIATE MONITORING WELL-CHEVRON
DEEP MONITORING WELL-CHEVRON
DESTROYED MONITORING WELL
ANALYTE ISOCONCENTRATION LINES
ALL RESULTS REPORTED IN MICROGRAMS PER LITER (µg/L)
UTILITY
= DRAINAGE INLET
= WATER METER
SS = SANITARY SEWER
SD = STORM DRAIN
E = ELECTRIC
P = TELEPHONE
CTV = CABLE TELEVISION
= MANHOLE
DRAFT
NO. REVISION BY CHK DATE
LACO ASSOCIATES
CONSULTING ENGINEERS
21 W. 4TH ST. EUREKA, CA 95501 (707)443-5054
GROUNDWATER MONITORING REPORT
MTBE ISOCONCENTRATION CONTOUR MAP (8/02/05)
HUMBOLDT PETROLEUM INC
FORTUNA SHELL
819 MAIN STREET, FORTUNA
SCALE 1"=40'
DRAWN RJM
CHECK
APPVD
DATE 10/25/05
JOB NO. 4563.01
FIGURE 6
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TABLE 1: HISTORIC HYDRAULIC GRADIENTS
Fortuna Shell, 819 Main St. Fortuna, California
LOP No. 12672; LACO Project No. 4563.01

	Shallow Aquifer		Perched Aquifer	
Date	Gradient Direction	Gradient Slope (ft/ft)	Gradient Direction	Gradient Slope (ft/ft)
9/2000	S2°E	<0.01	S48°W	0.10
10/2000	S2°E	<0.01	S45°E	0.10
11/2000	S22°E	<0.01	S34°W	0.20
12/12/2000	S56°W	0.60	---	---
1/8/2000	S64°W	0.11	---	---
3/12/2001	S37°W	0.14	---	---
6/2001	S43°W	0.14	S31°W	0.30
7/2001	S43°W	0.13	S34°W	0.20
8/2001	S71°E	0.24	S27°W	0.14
9/2001	S54°W	0.16	S29°W	0.12
10/2001	S54°W	0.16	S37°W	0.12
11/2001	S54°W	0.15	S32°W	<0.01
2/5/2002	N35°W	0.74	N19°E	0.22
5/9/2002	S49°W	0.14	S62°W	0.20
8/15/2002	S30°W	0.70	S24°W	0.12
12/20/2002	S56°W	0.70	S22°W	0.20
2/11/2003	S47°W	0.70	N8°E	0.24
5/13/2003	---	---	N19°E	0.21
8/14/2003	S13°W	0.45	S1°W	0.23
11/4/2003	S24°W	0.22	S3°E	0.23
2/2/2004	S37°W	0.20	N13°E	0.30
5/4/2004	S26°W	0.30	N62°W	0.23
8/3/2004	N65°W	0.20	N79°W	0.22
11/10/2004	N88°W	0.40	N81°W	<0.01
2/1/2005	S86°W	0.50	N47°W	0.20
5/3/2005	S79°W	0.50	N35°W	0.32
8/2/2005	S74°W	0.40	N66°W	0.20

TABLE 2: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Fortuna Shell, 819 Main St, Fortuna, California
LOP No. 12672; LACO Project No. 4563.01

WELL Sample Date	Groundwater Measurements: Well Head Elevation (feet NAVD 88)	Hydraulic Head Elevation (feet NAVD 88)	Depth to Water (feet)	Analytical Results: 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	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	500	ND<20	56	ND<1.0	ND<1.0	
9/8/2000		52.64	7.03	---	---	---	---	---	---	---	---	---	---	---	---	
10/12/2000		52.15	7.52	---	---	---	---	---	---	---	---	---	---	---	---	
11/3/2000		53.91	5.76	2,900	210	ND<170	9.2	1.4	8.1	5.5	250	120	27	ND<1.0	ND<1.0	
12/12/2000		54.60	5.07	---	---	---	---	---	---	---	---	---	---	---	---	
1/8/2001		54.83	4.84	---	---	---	---	---	---	---	---	---	---	---	---	
2/6/2001		54.83	4.84	2,800	570	ND<170	23	2.4	12	4.8	74	ND<20	ND<2.0	ND<2.0	ND<2.0	
3/12/2001		55.47	4.20	---	---	---	---	---	---	---	---	---	---	---	---	
4/20/2001		54.87	4.80	---	---	---	---	---	---	---	---	---	---	---	---	
5/8/2001		54.69	4.98	3,400	420	ND<200	37	3.9	19	7.52	120	ND<10	ND<1.0	ND<1.0	ND<1.0	
6/8/2001		54.42	5.25	---	---	---	---	---	---	---	---	---	---	---	---	
7/16/2001		53.69	5.98	---	---	---	---	---	---	---	---	---	---	---	---	
8/7/2001		53.21	6.46	2,300	190	ND<170	25	3.6	18	9.42	130	ND<5.0	ND<1.0	ND<1.0	ND<1.0	
9/17/2001		52.69	6.98	---	---	---	---	---	---	---	---	---	---	---	---	
10/24/2001		52.15	7.52	---	---	---	---	---	---	---	---	---	---	---	---	
11/6/2001		52.13	7.54	4,300	350	ND<170	25	2.2	15	7.5	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	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	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	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	ND<50	ND<50	ND<50	0.50	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	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	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	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	ND<70	ND<20	2.8	ND<1.0	ND<1.0	
2/2/2004		56.71	2.96	80	ND<50	ND<170	ND<50	ND<50	ND<50	ND<50	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	ND<50	ND<0.50	ND<50	ND<0.50	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	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	ND<50	ND<0.50	ND<50	ND<0.50	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	ND<0.50	ND<0.50	ND<50	ND<0.50	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	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	ND<1.0	ND<20	ND<1.0	ND<1.0	ND<1.0	
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	790	ND<50	82	ND<2.5	ND<2.5	
9/8/2000		52.62	6.83	---	---	---	---	---	---	---	---	---	---	---	---	
10/12/2000		52.12	7.33	---	---	---	---	---	---	---	---	---	---	---	---	
11/3/2000		53.98	5.47	8,600	510	ND<170	130	6.2	25	32	680	420	86	ND<2.5	ND<2.5	
12/12/2000		54.59	4.86	---	---	---	---	---	---	---	---	---	---	---	---	
1/8/2001		54.87	4.58	---	---	---	---	---	---	---	---	---	---	---	---	
2/6/2001		54.68	4.77	8,200	590	ND<170	150	9.6	39	40	310	ND<50	ND<5.0	ND<5.0	ND<5.0	
3/12/2001		55.04	4.41	---	---	---	---	---	---	---	---	---	---	---	---	
4/20/2001		54.91	4.54	---	---	---	---	---	---	---	---	---	---	---	---	
5/8/2001		54.65	4.80	8,000	950	ND<200	110	6.9	30	32	280	ND<25	ND<2.5	ND<2.5	ND<2.5	
6/8/2001		54.42	5.03	---	---	---	---	---	---	---	---	---	---	---	---	---
7/16/2001		53.75	5.70	---	---	---	---	---	---	---	---	---	---	---	---	---
8/7/2001		53.23	6.22	5,900	300	ND<170	47	4.5	17	19	180	ND<25	ND<2.5	ND<2.5	ND<2.5	
9/17/2001		52.74	6.71	---	---	---	---	---	---	---	---	---	---	---	---	
10/24/2001		52.25	7.20	---	---	---	---	---	---	---	---	---	---	---	---	
11/6/2001		52.17	7.28	8,400	580	ND<170	100	8.7	33	33	160	ND<50	15	ND<5.0	ND<5.0	

TABLE 2: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Fortuna Shell, 819 Main St, Fortuna, California
LOP No. 12672; LACO Project No. 4563.01

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)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Other Analytes (µg/L)
MW2 Continued																
2/5/2002		---	---	9,900	460	---	160	13	71	51	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	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	65	ND<40	5.6	ND<4	ND<4	
12/20/2002		56.25	3.20	5,200	330	ND<170	20	ND<5.0	18	16	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	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	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	ND<180	31	7.6	ND<1.0	ND<1.0	
11/4/2003	Well was inaccessible		---	---	---	---	---	---	---	---	---	---	---	---	---	
2/2/2004		56.17	3.28	5,900	730	ND<170	21	5.4	27	20.3	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	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	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	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	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	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	ND<7	ND<0	ND<1.0	ND<1.0	ND<1.0	
MW3	59.25	Screened Interval = 5-12 feet bgs														
8/4/2000		53.06	6.19	---	---	---	---	---	---	---	---	---	---	---	---	---
8/7/2000		53.11	6.14	2,300	74	ND<170	4.3	ND<4.0	ND<4.0	ND<4.0	5,600	2,500	550			
9/8/2000		52.58	6.67	---	---	---	---	---	---	---	---	---	---	---	---	---
10/12/2000				---	---	---	---	---	---	---	---	---	---	---	---	
11/3/2000		53.46	5.79	2,000	59	ND<170	ND<2.0	ND<2.0	ND<2.0	ND<2.0	4,000	1,300	490	ND<5.0	ND<5.0	
12/12/2000		53.85	5.40	---	---	---	---	---	---	---	---	---	---	---	---	
1/8/2001		53.94	5.31	---	---	---	---	---	---	---	---	---	---	---	---	
2/6/2001		54.32	4.93	1,900	ND<50	ND<170	7.6	ND<5.0	ND<5.0	ND<5.0	2,000	ND<100	200	ND<10	ND<10	
3/12/2001		53.70	5.55	---	---	---	---	---	---	---	---	---	---	---	---	
4/20/2001		54.23	5.02	---	---	---	---	---	---	---	---	---	---	---	---	
5/8/2001		53.92	5.33	1,200	56	ND<200	1.4	ND<1.3	ND<1.3	ND<1.3	1100	270	130	ND<2.5	ND<2.5	
6/8/2001		53.68	5.57	---	---	---	---	---	---	---	---	---	---	---	---	
7/16/2001		53.16	6.09	---	---	---	---	---	---	---	---	---	---	---	---	
8/7/2001		52.95	6.30	740	ND<50	ND<170	5.1	ND<1.3	ND<1.3	ND<1.3	970	200	94	ND<2.5	ND<2.5	
9/17/2001		52.75	6.50	---	---	---	---	---	---	---	---	---	---	---	---	
10/24/2001		52.22	7.03	---	---	---	---	---	---	---	---	---	---	---	---	
11/6/2001		51.92	7.33	880	ND<50	ND<170	1.5	ND<1.0	ND<1.0	ND<1.0	1,100	160	99	ND<2.0	ND<2.0	
2/5/2002		54.58	4.67	600	ND<50	---	0.74	ND<0.50	ND<0.50	ND<0.50	740	310	86	2.2	ND<1.0	
5/9/2002		54.23	5.02	920	ND<50	ND<170	5.3	ND<0.50	0.81	ND<0.50	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	420	150	30	1.1	ND<1.0	
12/20/2002		54.97	4.28	99	ND<50	ND<170	0.90	ND<0.50	ND<0.50	0.59	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	ND<0.50	5.06	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	680	300	60	ND<1.0	ND<1.0	
8/14/2003		52.36	6.89	820	95	ND<170	3.4	0.7	ND<0.50	3.9	1,000	180	73	ND<1.0	ND<1.0	
11/4/2003		51.79	7.46	650	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	1.54	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	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	ND<0.50	2.58	81	ND<40	5.3	ND<1.0	ND<1.0	
8/3/2004		52.06	7.19	960	140	ND<170	0.68	ND<0.50	ND<0.50	1.32	220	42	14	ND<1.0	ND<1.0	
11/10/2004		53.31	5.94	910	190	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	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	ND<0.50	ND<0.50	1.29	23	ND<20	2.0	ND<1.0	ND<1.0	
8/2/2005		53.03	6.22	830	160	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	45	ND<20	3.2	ND<1.0	ND<1.0	

TABLE 2: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Fortuna Shell, 819 Main St, Fortuna, California
LOP No. 12672; LACO Project No. 4563.01

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)	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	620		45	ND<1.0	ND<1.0	
9/8/2000		52.85	7.11	---	---	---	---	---	---	---	---	---	---	---	---	
10/12/2000		52.33	7.63	---	---	---	---	---	---	---	---	---	---	---	---	
11/3/2000		53.87	6.09	6,400	61	ND<170	600	20	80	82.5	180	ND<100	ND<5.0	ND<5.0	ND<5.0	
12/12/2000		54.67	5.29	---	---	---	---	---	---	---	---	---	---	---	---	
1/8/2001		54.72	5.24	---	---	---	---	---	---	---	---	---	---	---	---	
2/6/2001		55.21	4.75	5,400	550	ND<170	540	12	47	38	140	ND<100	ND<10	ND<10	ND<10	
3/12/2001		55.44	4.52	---	---	---	---	---	---	---	---	---	---	---	---	
4/20/2001		55.21	4.75	---	---	---	---	---	---	---	---	---	---	---	---	
5/8/2001		54.96	5.00	6,200	920	ND<200	620	24	120	76.2	210	ND<50	ND<5.0	ND<5.0	ND<5.0	
6/8/2001		54.84	5.12	---	---	---	---	---	---	---	---	---	---	---	---	
7/16/2001		54.04	5.92	---	---	---	---	---	---	---	---	---	---	---	---	
8/7/2001		53.43	6.53	5,900	520	570	660	26	130	98.8	190	ND<100	ND<10	ND<10	ND<10	
9/17/2001		52.96	7.00	---	---	---	---	---	---	---	---	---	---	---	---	
10/24/2001		52.39	7.57	---	---	---	---	---	---	---	---	---	---	---	---	
11/6/2001		52.36	7.60	7,200	200	ND<170	670	30	100	77	120	ND<100	ND<10	ND<10	ND<10	
2/5/2002		55.56	4.40	4,800	83	---	340	14	48	27	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	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	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	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	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	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	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	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	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	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	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	ND<0.50	0.95	0.99	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	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	0.55	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	ND<0.50	ND<0.50	ND<0.50	1.7	ND<10	ND<1.0	ND<1.0	ND<1.0	
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	4,500	ND<500	ND<25	ND<25	ND<25	
9/8/2000		53.02	6.45	---	---	---	---	---	---	---	---	---	---	---	---	
10/12/2000		52.47	7.00	---	---	---	---	---	---	---	---	---	---	---	---	
11/3/2000		53.59	5.88	17,000	1,200	930	2,500	60	800	940	2,300	ND<500	ND<25	ND<25	ND<25	
12/12/2000		54.28	5.19	---	---	---	---	---	---	---	---	---	---	---	---	
1/8/2001		54.26	5.21	---	---	---	---	---	---	---	---	---	---	---	---	
2/6/2001		54.45	5.02	17,000	890	ND<170	2,600	49	370	320	2,300	ND<500	ND<50	ND<50	ND<50	
3/12/2001		54.83	4.64	---	---	---	---	---	---	---	---	---	---	---	---	
4/20/2001		54.76	4.71	---	---	---	---	---	---	---	---	---	---	---	---	
5/8/2001		54.56	4.91	14,000	1,300	ND<200	2,300	48	510	555	1,700	ND<500	ND<25	ND<25	ND<25	
6/8/2001		54.45	5.02	---	---	---	---	---	---	---	---	---	---	---	---	
7/16/2001		53.68	5.79	---	---	---	---	---	---	---	---	---	---	---	---	
8/7/2001		53.33	6.14	14,000	1,100	330	2,200	52	390	420	2,000	ND<250	ND<25	ND<25	ND<25	
9/17/2001		52.98	6.49	---	---	---	---	---	---	---	---	---	---	---	---	
10/24/2001		52.48	6.99	---	---	---	---	---	---	---	---	---	---	---	---	

TABLE 2: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Fortuna Shell, 819 Main St, Fortuna, California
LOP No. 12672; LACO Project No. 4563.01

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)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Other Analytes (µg/L)
MW5 Continued																
11/6/2001		52.34	7.13	20,000	1,100	420	2,500	48	550	493	2,300	550	21	ND<20	ND<20	
2/5/2002		55.26	4.21	15,000	660	---	2,100	42	390	391	2,200	890	48	ND<20	ND<20	
5/9/2002		54.76	4.71	10,000	810	210	1,400	33	260	270	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	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	ND<1800	ND<1000	ND<50	ND<50	ND<50	
2/11/2003		56.06	3.41	13,000	880	1,200	1,500	34	200	239.7	710	230	25	3.5	ND<1.0	1,2-DCA=2.7 1,2-EDB=1.0
5/13/2003		54.79	4.68	13,000	1,100	1,100	1,000	33	230	230	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	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	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	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	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	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	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	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	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	ND<300	53	4.3	ND<1.0	ND<1.0	
MW6	60.06	Screened Interval = 12-20 feet bgs														
8/4/2000		52.86	7.20	---	---	---	---	---	---	---	---	---	---	---	---	
8/7/2000		52.14	7.92	1,200	140	ND<170	2.6	ND<2.5	1.1	1.9	820			5.4	3.0	
9/8/2000		51.64	8.42	---	---	---	---	---	---	---	---	---	---	---	---	
10/12/2000		50.96	9.10	---	---	---	---	---	---	---	---	---	---	---	---	
11/3/2000		51.51	8.55	670	ND<50	ND<170	1.6	ND<0.5	ND<0.5	0.65	900	130	10	8.8	5.0	1,2 DCA=8.5
12/12/2000		53.24	6.82	---	---	---	---	---	---	---	---	---	---	---	---	
1/8/2001		52.99	7.07	---	---	---	---	---	---	---	---	---	---	---	---	
2/6/2001		53.55	6.51	900	ND<50	ND<170	ND<2.5	ND<2.5	ND<2.5	ND<2.5	1,200	ND<50	35	7.8	ND<5.0	1,2 DCA=7.3
3/12/2001		52.75	7.31	---	---	---	---	---	---	---	---	---	---	---	---	
4/20/2001		55.35	4.71	---	---	---	---	---	---	---	---	---	---	---	---	
5/8/2001		52.49	7.57	570	51	ND<200	1.5	ND<2.5	ND<2.5	ND<2.5	860	68	37	5.0	ND<2.5	1,2 DCA=4.6
6/8/2001		52.34	7.72	---	---	---	---	---	---	---	---	---	---	---	---	
7/16/2001		52.24	7.82	---	---	---	---	---	---	---	---	---	---	---	---	
8/7/2001		51.91	8.15	680	ND<50	ND<170	ND<1.3	ND<1.3	ND<1.3	ND<1.3	1,100	200	38	6.4	2.6	1,2 DCA=4.9
9/17/2001		51.59	8.47	---	---	---	---	---	---	---	---	---	---	---	---	
10/24/2001		51.06	9.00	---	---	---	---	---	---	---	---	---	---	---	---	
11/6/2001		50.84	9.22	750	ND<50	ND<170	ND<1.0	ND<1.0	ND<1.0	ND<1.0	910	150	35	4.9	2.1	1,2 DCA=3.9
2/5/2002		54.17	5.89	710	ND<50	---	ND<1.0	ND<1.0	ND<1.0	ND<1.0	1,300	350	92	7.8	3.1	Pb Scavs=3.7
5/9/2002		53.79	6.27	630	ND<50	---	ND<1.5	ND<1.5	ND<1.5	ND<1.5	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	ND<1.0	ND<1.0	ND<1.0	1.7	980	160	54	5.1	2.3	
12/20/2002		54.47	5.59	910	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	960	180	62	3.6	1.5	1,2-DCA=3.1
8/14/2003		51.35	8.71	720	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1,100	270	64	ND<8.0	2.0	

TABLE 2: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Fortuna Shell, 819 Main St, Fortuna, California
LOP No. 12672; LACO Project No. 4563.01

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)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Other Analytes (µg/L)
MW6 Continued																
5/4/2004		52.16	7.90	450	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	480	55	29	1.8	ND<1.0	
8/3/2004		50.44	9.62	160	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	180	ND<22	6.9	ND<1.0	ND<1.0	
11/10/2004		51.64	8.42	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	10	ND<10	ND<1.0	ND<1.0	ND<1.0	
MW7	59.80	Screened Interval = 10-15 feet bgs														
8/4/2000		53.63	6.17	---	---	---	---	---	---	---	---	---	---	---	---	
8/7/2000		53.60	6.20	3,700	190	ND<170	33	2.8	2	67.4	3,000	700	220			
9/8/2000		52.97	6.83	---	---	---	---	---	---	---	---	---	---	---	---	
10/12/2000		52.35	7.45	---	---	---	---	---	---	---	---	---	---	---	---	
11/3/2000		53.50	6.30	910	110	ND<170	2.2	ND<1.0	1.2	1.9	1,200	280	90	4.2	ND<2.5	
12/12/2000		53.78	6.02	---	---	---	---	---	---	---	---	---	---	---	---	
1/8/2001		54.13	5.67	---	---	---	---	---	---	---	---	---	---	---	---	
2/6/2001		54.39	5.41	1,700	170	280	5.2	ND<5.0	ND<5.0	ND<5.0	1,800	440	160	ND<10	ND<10	
3/12/2001		54.73	5.07	---	---	---	---	---	---	---	---	---	---	---	---	
4/20/2001		54.61	5.19	---	---	---	---	---	---	---	---	---	---	---	---	
5/8/2001		54.39	5.41	1,100	160	ND<200	6.6	ND<5.0	ND<5.0	ND<5.0	2,000	450	200	ND<5.0	ND<5.0	
6/8/2001		54.17	5.63	---	---	---	---	---	---	---	---	---	---	---	---	
7/16/2001		54.00	5.80	---	---	---	---	---	---	---	---	---	---	---	---	
8/7/2001		53.70	6.10	1,400	ND<50	ND<170	8.3	ND<5.0	ND<5.0	ND<5.0	2,100	670	180	ND<10	ND<10	
9/17/2001		53.39	6.41	---	---	---	---	---	---	---	---	---	---	---	---	
10/24/2001		52.85	6.95	---	---	---	---	---	---	---	---	---	---	---	---	
11/6/2001		52.63	7.17	1,400	ND<50	ND<170	ND<1.5	ND<1.5	ND<1.5	ND<1.5	1,800	430	150	4.6	ND<3.0	
2/5/2002		55.40	4.40	1,500	ND<50	---	31	ND<1.5	ND<1.5	ND<1.5	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	ND<2.5	ND<2.5	ND<2.5	1,800	280	96	ND<5.0	ND<5.0	
8/15/2002		53.06	6.74	1,500	53	ND<170	4.6	ND<1.5	ND<1.5	2.6	1,500	290	110	5.3	ND<3.0	
12/20/2002		55.83	3.97	750	ND<50	ND<170	0.64	ND<0.50	ND<0.50	0.57	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	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	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	ND<0.50	ND<0.50	ND<0.50	1,100	250	85	4.0	1.1	
11/4/2003		52.04	7.76	570	ND<50	ND<170	1.4	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	0.56	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	870	ND<50	67	2.8	ND<1.0	
8/3/2004		52.23	7.57	710	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	720	42	48	2.4	ND<1.0	
11/10/2004		53.67	6.13	ND<50	56	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	130	ND<10	5.3	ND<1.0	ND<1.0	
5/3/2005		55.13	4.67	150	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	140	ND<20	7.3	ND<1.0	ND<1.0	
8/2/2005		53.78	6.02	170	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	150	ND<30	5.7	ND<1.0	ND<1.0	1,2-DCA=1.1
MW8	59.58	Screened Interval = 15-20 feet bgs														
8/4/2000		52.05	7.53	---	---	---	---	---	---	---	---	---	---	---	---	
8/7/2000		50.81	8.77	4,800	98	ND<170	ND<10	ND<10	ND<10	ND<10	11,000	2,100	36	54		1,2 DCA=42
9/8/2000		51.60	7.98	---	---	---	---	---	---	---	---	---	---	---	---	
10/12/2000		51.17	8.41	---	---	---	---	---	---	---	---	---	---	---	---	
11/3/2000		52.58	7.00	3,200	65	ND<170	ND<4.0	ND<4.0	ND<4.0	ND<4.0	7,800	1,300	50	56	ND<10	
12/12/2000		52.82	6.76	---	---	---	---	---	---	---	---	---	---	---	---	
1/8/2001		52.77	6.81	---	---	---	---	---	---	---	---	---	---	---	---	
2/6/2001		53.29	6.29	5,700	ND<50	ND<170	ND<10	ND<10	ND<10	ND<10	8,000	1,100	61	47	ND<20	
3/12/2001		53.66	5.92	---	---	---	---	---	---	---	---	---	---	---	---	

TABLE 2: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Fortuna Shell, 819 Main St, Fortuna, California
LOP No. 12672; LACO Project No. 4563.01

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)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Other Analytes (µg/L)
MW8 Continued																
4/20/2001		53.26	6.32	---	---	---	---	---	---	---	---	---	---	---	---	
5/8/2001		52.85	6.73	4,600	ND<50	ND<200	ND<6.3	ND<6.3	ND<6.3	ND<6.3	6,900	620	83	35	ND<13	
6/8/2001		52.70	6.88	---	---	---	---	---	---	---	---	---	---	---	---	
7/16/2001		52.58	7.00	---	---	---	---	---	---	---	---	---	---	---	---	
8/7/2001		51.61	7.97	4,700	ND<50	ND<170	ND<13	ND<13	ND<13	ND<13	7,600	ND<250	120	41	ND<25	
9/17/2001		50.80	8.78	---	---	---	---	---	---	---	---	---	---	---	---	
10/24/2001		50.28	9.30	---	---	---	---	---	---	---	---	---	---	---	---	
11/6/2001		50.68	8.90	4,800	ND<50	ND<170	ND<10	ND<10	ND<10	ND<10	7,000	920	98	37	ND<20	
2/5/2002		53.62	5.96	2,600	ND<50	---	ND<5.0	ND<5.0	ND<5.0	ND<5.0	6,200	860	170	37	ND<10	
5/9/2002		53.05	6.53	2,800	ND<50	ND<170	ND<5.0	ND<5.0	ND<5.0	ND<5.0	6,500	850	130	24	ND<10	
8/15/2002		52.25	7.33	4,400	ND<50	ND<170	ND<5.0	ND<5.0	ND<5.0	ND<5.0	5,600	820	160	33	ND<10	
12/20/2002		53.52	6.06	3,100	ND<50	ND<170	0.63	ND<0.50	ND<0.50	0.62	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	0.51	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4,300	1,100	140	20	3.1	
8/3/2004		49.60	9.98	3,000	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4,100	920	110	17	2.7	
11/10/2004		49.26	10.32	3,100	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3,500	810	110	14	ND<4.0	
2/1/2005		49.74	9.84	2,600	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	2,500	450	97	9.1	ND<3.0	1,2-DCA=1.9
MW9	59.35	Screened Interval = 12.5-15.5 feet bgs														
11/6/2001		46.34	13.01	160	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	210	ND<5.0	17	ND<1.0	ND<1.0	
2/5/2002		52.11	7.24	92	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	210	ND<5.0	20	ND<1.0	ND<1.0	
5/9/2002		49.62	9.73	88	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	180	ND<5.0	13	ND<1.0	ND<1.0	
8/15/2002		49.90	9.45	100	ND<50	ND<170	ND<0.50	ND<0.50	0.69	1.8	81	ND<5.0	7.1	ND<1.0	ND<1.0	
12/20/2002		51.46	7.89	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	0.53	30	ND<20	1.8	ND<1.0	ND<1.0	
2/11/2003		53.66	5.69	51	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	29	ND<20	1.8	ND<1.0	ND<1.0	
5/13/2003		52.43	6.92	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	12	ND<20	1.1	ND<1.0	ND<1.0	
11/4/2003		49.12	10.23	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	21	ND<20	1.5	ND<1.0	ND<1.0	
2/2/2004		52.79	6.56	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	10	ND<10	ND<1.0	ND<1.0	ND<1.0	
5/4/2004		51.06	8.29	76	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.1	ND<10	ND<1.0	ND<1.0	ND<1.0	
8/2/2005		50.11	9.24	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.7	ND<10	ND<1.0	ND<1.0	ND<1.0	
MW10	59.19	Screened Interval = 12-15 feet bgs														
11/6/2001		48.64	10.55	61	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	82	17	2.9	ND<1.0	ND<1.0	
2/5/2002		52.12	7.07	55	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	47	11	ND<1.0	ND<1.0	ND<1.0	
5/9/2002		51.17	8.02	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	1.3	3.4	41	ND<5.0	ND<1.0	ND<1.0	ND<1.0	
12/20/2002		51.68	7.51	53	190	2,800	ND<0.50	ND<0.50	ND<0.50	ND<0.50	63	ND<20	2.2	ND<1.0	ND<1.0	
2/11/2003		45.71	13.48	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	44	ND<20	1.4	ND<1.0	ND<1.0	
5/13/2003		48.49	10.70	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	38	ND<20	1.9	ND<1.0	ND<1.0	

TABLE 2: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Fortuna Shell, 819 Main St, Fortuna, California
LOP No. 12672; LACO Project No. 4563.01

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)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Other Analytes (µg/L)
MW10 Continued																
11/4/2003		46.54	12.65	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	45	ND<20	2.3	ND<1.0	ND<1.0	
2/2/2004		48.11	11.08	86	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	52	ND<20	2.5	ND<1.0	ND<1.0	
5/4/2004		47.69	11.50	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	28	ND<10	1.4	ND<1.0	ND<1.0	
2/1/2005		50.36	8.83	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	11	ND<10	ND<1.0	ND<1.0	ND<1.0	
5/3/2005		49.79	9.40	ND<50	ND<50	210	ND<0.50	ND<0.50	ND<0.50	ND<0.50	9	ND<10	ND<1.0	ND<1.0	ND<1.0	
8/2/2005		49.01	10.18	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	ND<1.0	ND<1.0	
MW11	59.21	Screened Interval = 12.5-15.5 feet bgs														
11/6/2001		47.85	11.36	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	10	ND<50	ND<1.0	ND<1.0	ND<1.0	
2/5/2002		50.97	8.24	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	0.52	1.2	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.0	ND<10	ND<1.0	ND<1.0	ND<1.0	
8/2/2005		48.76	10.45	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.0	ND<10	ND<1.0	ND<1.0	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	ND<2.5	ND<2.5	ND<2.5	ND<2.5	2,400	250	51	11	ND<1.0	
2/5/2002	Well was inaccessible		---	---	---	---	---	---	---	---	---	---	---	---	---	
5/9/2002		50.67	8.42	1,300	ND<50	ND<170	ND<2.5	ND<2.5	ND<2.5	ND<2.5	2,900	110	75	6.3	ND<5.0	
8/15/2002		48.97	10.12	1,800	ND<50	ND<170	ND<2.5	ND<2.5	ND<2.5	ND<2.5	2,300	96	92	9.4	ND<5.0	
12/20/2002		52.42	6.67	1,800	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2,600	430	94	9.0	3.3	
2/11/2003	Well was inaccessible		---	---	---	---	---	---	---	---	---	---	---	---	---	
5/13/2003		51.41	7.68	470	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1,400	94	72	5.0	1.7	
8/14/2003		48.71	10.38	740	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1,600	76	82	6.6	2.3	
11/4/2003		48.20	10.89	840	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1,600	ND<50	68	4.7	1.9	
2/2/2004		51.69	7.40	1,500	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1,700	ND<60	72	5.6	2.3	
5/4/2004		50.28	8.81	1,200	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1,400	ND<45	69	4.5	1.8	
8/3/2004		48.34	10.75	2,100	76	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1,300	110	96	9.5	2.7	
11/10/2004		49.78	9.31	1,200	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1,200	45	47	3.4	1.6	
2/1/2005		50.58	8.51	990	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	950	56	40	3.4	1.5	
5/3/2005		49.98	9.11	640	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	720	ND<15	34	3.2	1.6	
8/2/2005		49.07	10.02	750	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	790	ND<10	32	2.6	1.3	
MW13	58.86	Screened Interval = 12.5-15 feet bgs														
11/6/2001		48.82	10.04	2,000	ND<50	ND<170	ND<2.5	ND<2.5	ND<2.5	ND<2.5	2,800	330	110	9.8	ND<5.0	
2/5/2002		51.58	7.28	1,300	ND<50	---	ND<1.5	ND<1.5	ND<1.5	ND<1.5	2,800	370	160	11.0	4.0	
5/9/2002	Well was inaccessible		---	---	---	---	---	---	---	---	---	---	---	---	---	
8/15/2002		51.01	7.85	1,000	ND<50	ND<170	ND<1.0	ND<1.0	ND<1.0	1.3	1,200	51	70	5.7	ND<2.0	
12/20/2002		53.68	5.18	ND<50	54	570	ND<0.50	1.0	ND<0.50	ND<0.50	38	ND<20	1.8	ND<1.0	ND<1.0	
2/11/2003	Well was inaccessible		---	---	---	---	---	---	---	---	---	---	---	---	---	
5/13/2003		52.06	6.80	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	21	ND<20	1.9	ND<1.0	ND<1.0	
8/14/2003		49.48	9.38	160	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	260	ND<20	13	ND<1.0	ND<1.0	
11/4/2003		49.12	9.74	170	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	210	ND<20	13	ND<1.0	ND<1.0	
2/2/2004		52.09	6.77	330	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	360	ND<20	13	ND<2.5	ND<1.0	
5/4/2004		50.89	7.97	270	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	280	ND<10	12	ND<2.5	ND<1.0	

TABLE 2: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Fortuna Shell, 819 Main St, Fortuna, California
LOP No. 12672; LACO Project No. 4563.01

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)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Other Analytes (µg/L)
MW13 Continued																
8/3/2004		49.13	9.73	960	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	820	ND<100	34	2.2	1.3	
11/10/2004		50.52	8.34	400	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	370	ND<25	16	ND<2.0	ND<1.0	
2/1/2005		51.10	7.76	270	ND<50	270	ND<0.50	ND<0.50	ND<0.50	ND<0.50	260	ND<40	9.5	ND<1.0	ND<1.0	
5/3/2005		50.60	8.26	63	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	63	ND<10	1.7	ND<1.0	ND<1.0	
8/2/2005		49.85	9.01	200	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	230	ND<10	7.1	ND<1.0	ND<1.0	
MW14	61.04	Screened Interval = 5-10 feet bgs														
11/10/2004		53.89	7.15	1,100	150	ND<170	0.62	ND<0.50	1.2	ND<0.50	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	ND<0.50	0.65	ND<0.50	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	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	ND<0.50	1.1	ND<0.50	ND<14	ND<10	ND<1.0	ND<1.0	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	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	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	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	ND<100	ND<30	2.4	ND<1.0	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	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	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	470	300	14	4.3	ND<1.0	
8/2/2005		54.12	6.12	4,600	570	320	680	14	22	33.6	360	220	8	3.9	ND<1.0	
MW17S	56.96	Screened Interval = 22.5-24.5 feet bgs														
11/10/2004		35.70	21.26	64	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	33	ND<35	ND<1.0	ND<1.0	ND<1.0	
2/1/2005		34.71	22.25	180	70	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	180	ND<50	ND<1.0	ND<1.0	1.2	
5/3/2005		35.13	21.83	320	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	300	ND<15	2.1	1.7	1.8	
8/2/2005		34.51	22.45	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	13	ND<10	ND<1.0	ND<1.0	ND<1.0	1,2-DCA=1.1
MW17D	56.95	Screened Interval = 26-28 feet bgs														
11/10/2004		32.42	24.53	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50	110	55	ND<1.0	ND<1.0	2.0	
5/3/2005		31.95	25.00	130	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	100	ND<20	ND<1.0	ND<1.0	2.0	
8/2/2005		30.50	26.45	130	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	50	ND<10	ND<1.0	ND<1.0	ND<1.0	1,2-DCA=1.1

NOTES:

TPHg - total petroleum hydrocarbons as gasoline
TPHd - total petroleum hydrocarbons as diesel
TPHmo - total petroleum hydrocarbons as motor oil
xylenes = sum of m,p-xylene and 0-xylene
MTBE - methyl tertiary butyl ether
Other Analytes include the fuel oxygenates and lead scavengers:
TAME - tertiary amyl methyl ether
TBA - tertiary butyl alcohol
DIPE - di-isopropyl ether
ETBE - ethyl tertiary butyl ether
Methanol, ethanol
1,2-dichlorobenzene
1,3-dichlorobenzene
1,4-dichlorobenzene
1,2-dichloroethane (1,2 DCA)
Ethylene dibromide (EDB)

--- sample not analyzed for parameter
ND<50 - non-detect at reporting limits shown
Bold results indicate analyte detection

Chart 1: MTBE vs. Time
in Monitoring Well MW9
Former Fortuna Shell: LACO Project No. 4563.01

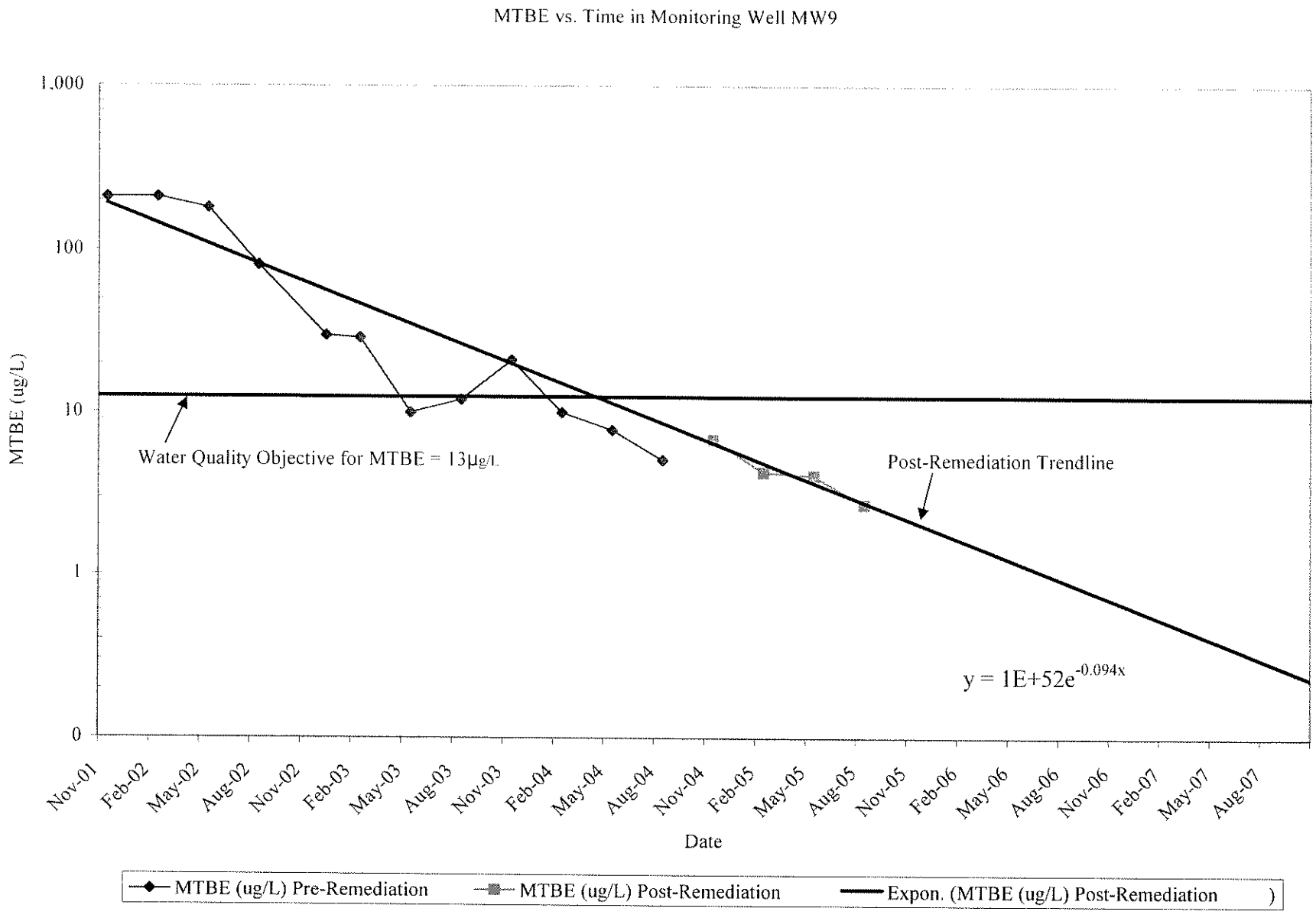


Chart 2: MTBE vs. Time
in Monitoring Well MW10
Former Fortuna Shell: LACO Project No. 4563.01

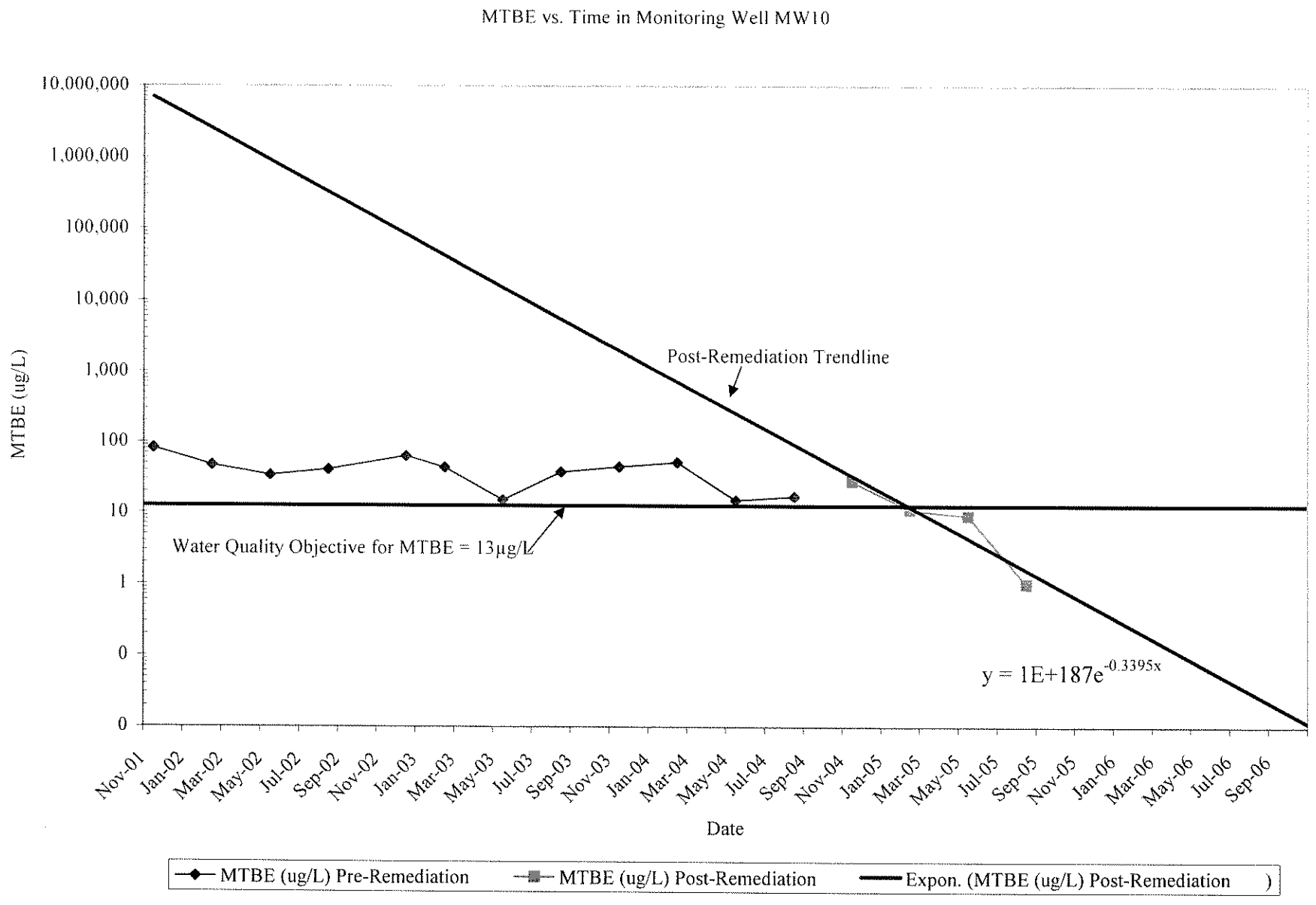


Chart 3: MTBE vs. Time
in Monitoring Well MW11
Former Fortuna Shell; LACO Project No. 4563.01

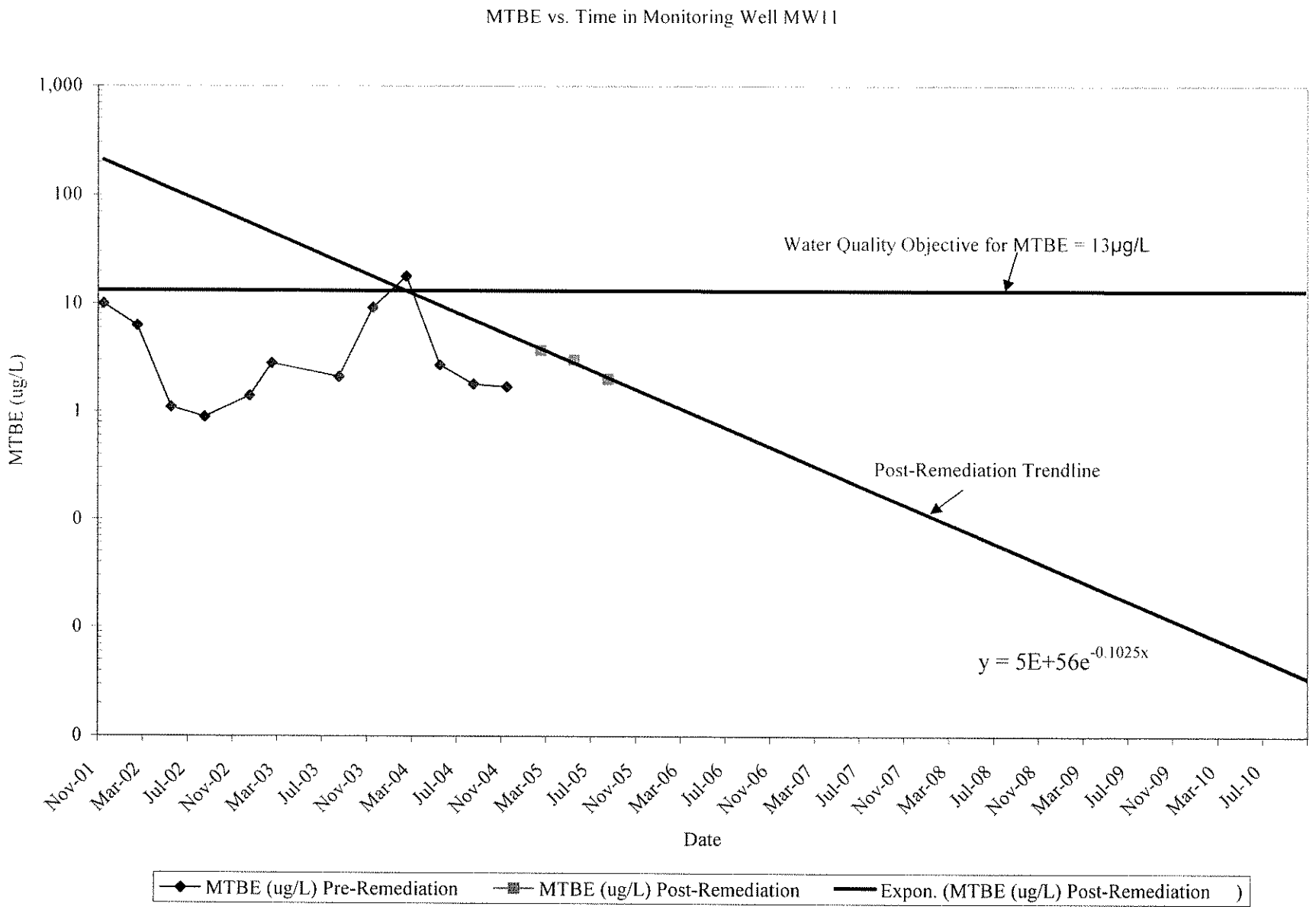


Chart 4: MTBE vs. Time
in Monitoring Well MW12
Former Fortuna Shell: LACO Project No. 4563.01

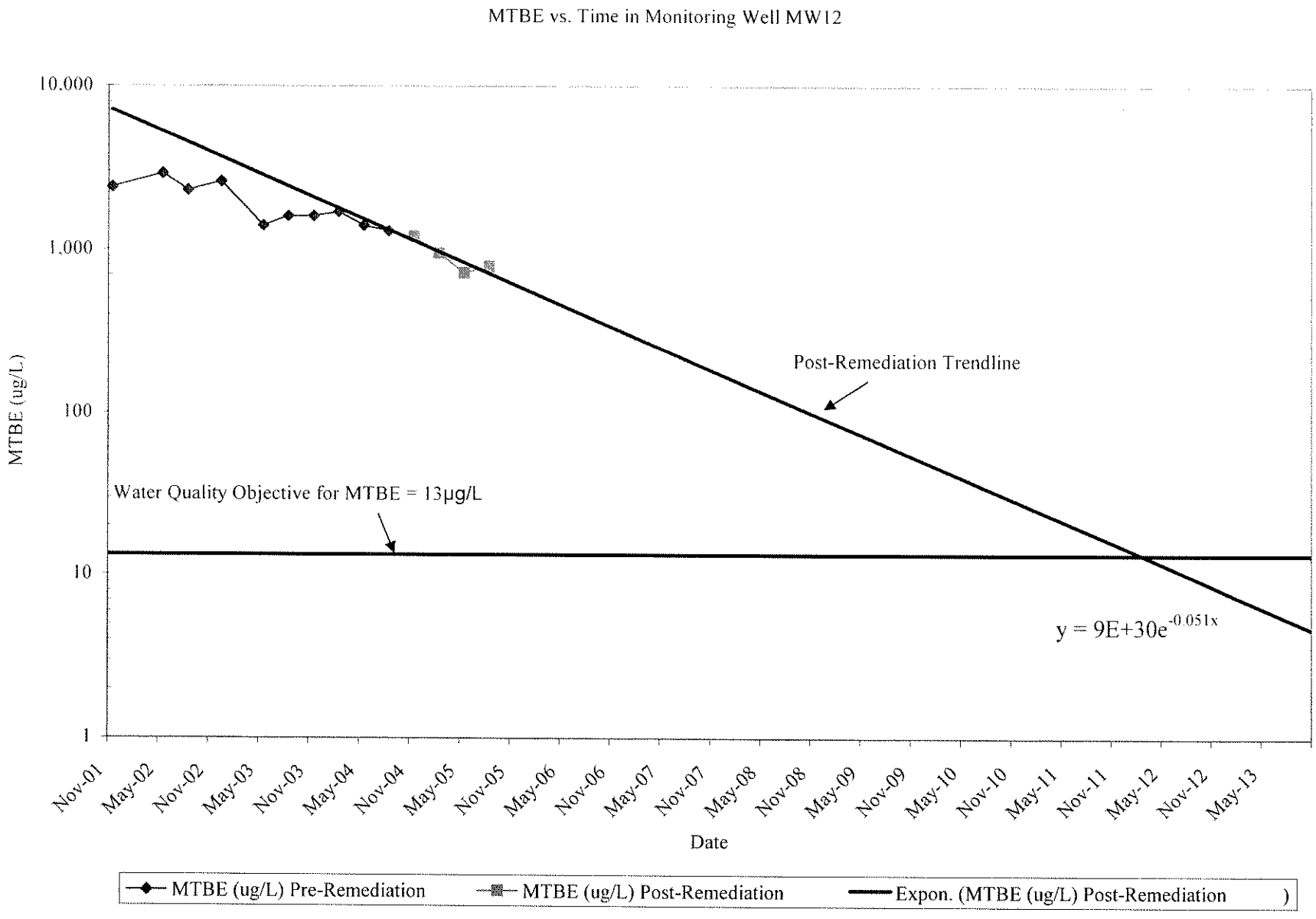
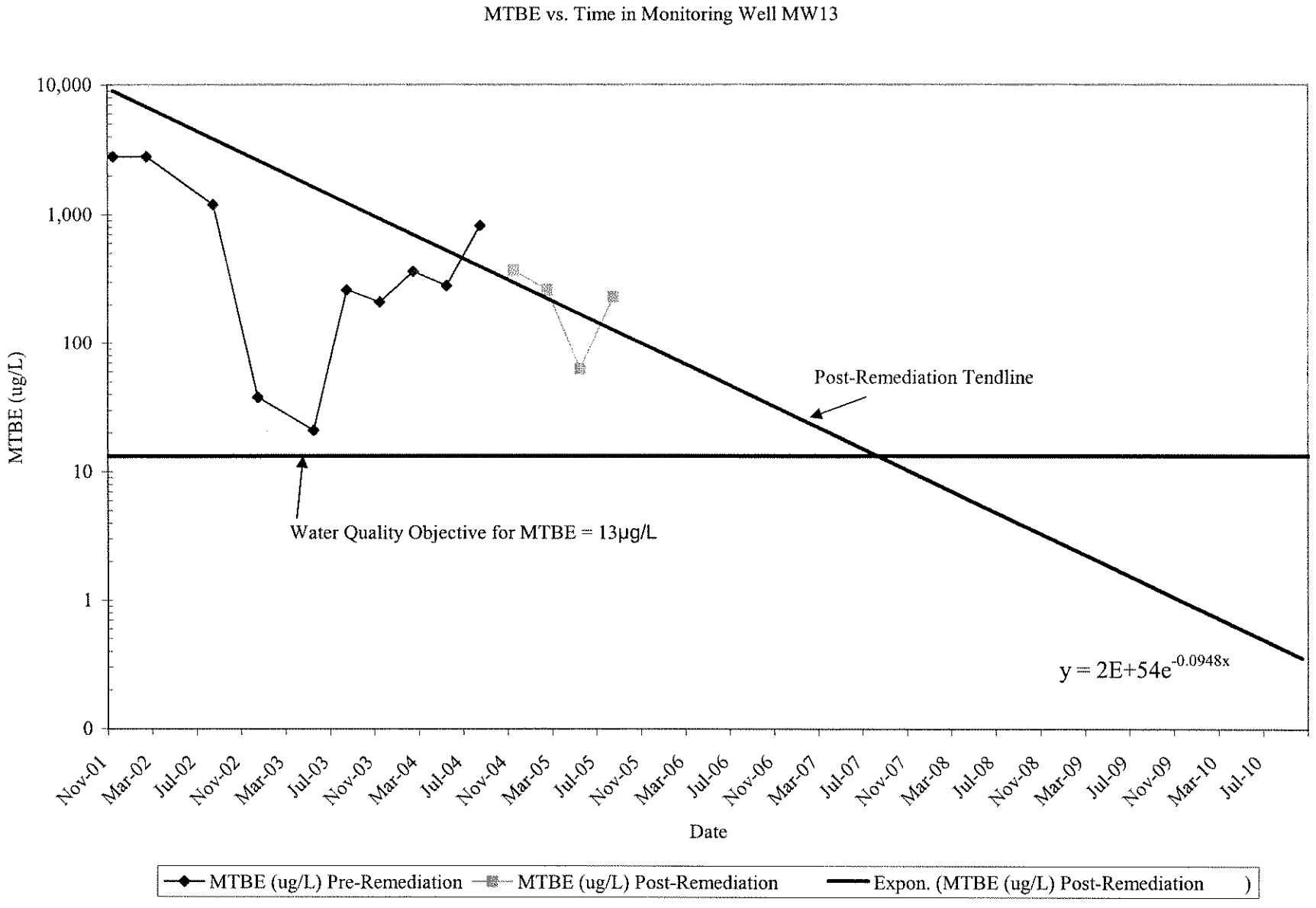


Chart 5: MTBE vs. Time
in Monitoring Well MW13
Former Fortuna Shell; LACO Project No. 4563.01



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 - HPI
Project No.: 4563.01
Date: 8-2-05
Golbal ID No.: T0602300471
PM: CJW

Tech: SJD
Mob/Demob time: 1.25/1.35
Travel time: 1.0
Time on site: 7:35
Time off site: 2:40
Mileage: 36

WELL No.:	MW11		MW10		MW9		MW3		MW6	
DIAMETER (in)	2.00		2.00		2.00		2.00		2.00	
SCREENED INTERVAL (ft)	12.5-15.5		12.5-15.5		12-15		5-12		12-20	
DEPTH TO WATER (ft)	10.45		10.15		9.24		6.22		6.12	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH							7.7	6.7	7.4	6.4
TEMP (°C)							17.3	19.1	16.4	17.5
Ecw (µmohs)							4104	336	195	186
ORP (mV)							-79	-79	-36	50
DO (mg/L)							0.89	0.50	1.41	0.74
OTHER (units)										
PURGE: TIME							8:40	8:48	9:24	9:34
METHOD (DHP/CB/B)							DHP		DHP	
RATE (Lpm)							0.19		0.18	
VOLUME (L)							1.50		1.75	
COLOR							CLEAR	SLIGHT GREY TINT	~~YELLOW/BROWN~~ CLOUDY	CLOUDY
ODOR							MED. FUEL		SLIGHT SHIG STORE	
INTAKE DEPTH (FEET)							9.0		16.0	
SAMPLE: TIME							8:50		9:36	
METHOD (DHP/CB/B)							DHP		DHP	
ANALYTES	8260 List 5		8260 List 5		8260 List 5		8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC	
TOTAL DRAWDOWN (FEET)							0.74		2.86	
REMARKS										
WELL CONDITION	good		good		good		ONE BOLT HOLE STRIPPED		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

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Time on site: 7:35
Time off site: 2:40
Mileage: 36

WELL No.:	MW12		MW7		MW13		MW1		MW4	
DIAMETER (in)	2.00		2.00		2.00		2.00		2.00	
SCREENED INTERVAL (ft)	12.5-15		10 - 15		12.5-15		6-10		5-10	
DEPTH TO WATER (ft)	10.02		6.02		9.01		6.38		6.03	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH			6.9	6.6			6.7	6.4	6.6	6.0
TEMP (°C)			17.2	18.1			20.1	20.0	19.5	18.9
Ecw (µmohs)			242	236			234	206	250	250
ORP (mV)			-39	-49			-67	-67	-44	-9
DO (mg/L)			1.05	0.69			0.94	0.29	1.02	0.50
OTHER (units)										
PURGE: TIME			10:26	10:34			10:51	10:59	11:19	11:33
METHOD (DHP/CB/B)			DHP				DHP		DHP	
RATE (Lpm)			0.18				0.20		0.17	
VOLUME (L)			1.40				1.60		2.25	
COLOR			CLEAR	CLEAR			CLEAR	CLEAR	CLEAR	CLEAR
ODOR			MED. SULFUR/SWEET				MED. RUBBER/FUEL		LIGHT SHOE STORE/SLIGHT SULFUR	
INTAKE DEPTH (FEET)			12.5				9.0		9.0	
SAMPLE: TIME			10:36				11:01		11:35	
METHOD (DHP/CB/B)			DHP				DHP		DHP	
ANALYTES	8260 List 5		8260 List 5; TPHd/mo w/SGC		8260 List 5		8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC	
TOTAL DRAWDOWN (FEET)			1.73				0.68		0.86	
REMARKS										
WELL CONDITION	good		good		good		good		good	
WASTE DRUMS										

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

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Date: 8-2-05
Golbal ID No.: T0602300471
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Tech: SJD
Mob/Demob time: .25/.35
Travel time: 1.0
Time on site: 7:35
Time off site: 2:40
Mileage: 36

WELL No.:	MW14		MW15		MW16		MW17S		MW17D	
DIAMETER (in)	1.50		1.50		1.50		1.50		1.50	
SCREENED INTERVAL (ft)	5-10		5-10		5-10		22.5-24.5		26-28	
DEPTH TO WATER (ft)	6.67		6.28		6.12		22.45		26.45	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.7	6.6	6.9	6.5	6.8	6.6				
TEMP (°C)	19.2	20.3	20.1	20.4	19.0	18.0				
Ecw (µmohs)	339	327	320	311	316	305				
ORP (mV)	-51	-69	-71	-77	-80	-76				
DO (mg/L)	0.92	0.53	0.79	0.68	0.50	0.53				
OTHER (units)	—		—		—					
PURGE: TIME	11:55	12:03	12:28	12:34	12:58	1:08				
METHOD (DHP/CB/B)	DHP		DHP		DHP					
RATE (Lpm)	0.18		0.16		0.18					
VOLUME (L)	1.40		1.0		1.80					
COLOR	CLEAR	CLOUDY	CLEAR	CLEAR	DK. GREY CLOUDY	LT. GREY CLOUDY				
ODOR	SLIGHT SKUNK		MED. SHOE STORE		STRONG SHOE STORE					
INTAKE DEPTH (FEET)	9.0		9.0		9.0					
SAMPLE: TIME	12:15		12:38		1:10					
METHOD (DHP/CB/B)	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		8260 List 5	
TOTAL DRAWDOWN (FEET)	2.26		2.64		1.03					
REMARKS	LOWERED DHP TO 9.5' to COLLECT		LOWERED DHP TO 9.5' TO COLLECT		—					
WELL CONDITION	good	SAMPLE	good	SAMPLE	good		good		good	
WASTE DRUMS										

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

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Project Name: Fortuna Shell - HPI
Project No.: 4563.01
Date: 8-2-05
Golbal ID No.: T0602300471
PM: CJW

Tech: SJD
Mob/Demob time: .25/.35
Travel time: 1.0
Time on site: 7:35
Time off site: 2:40
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)	6.11		11.18		5.43					
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH			7.3	6.4						
TEMP (°C)			20.2	20.9						
Ecw (µmohs)			280	284						
ORP (mV)			-55	-32						
DO (mg/L)			1.02	0.39						
OTHER (units)			—							
PURGE: TIME			1:25	1:33	2:13	2:16				
METHOD (DHP/CB/B)			DHP		1½" B					
RATE (Lpm)			0.20		1.0					
VOLUME (L)			1.60		3.0					
COLOR			CLEAR	CLEAR	CLOUDY	MED. BROWN TURBID				
ODOR			MED. SULFUR/SWEET		STRONG FUEL					
INTAKE DEPTH (FEET)			17.0		—					
SAMPLE: TIME			1:35		2:18					
METHOD (DHP/CB/B)			DHP		1½" B					
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)			2.23		—					
REMARKS			—		T+P = NO FP					
WELL CONDITION	good		good		good					
WASTE DRUMS										

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Project Name: FORTUNA SHELL - NPI
Project No.: 4563.01

Tech: SJD
Date: 8-2-05

METER ACCURACY RANGE

WELL ID: MW3	+/- 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)
8:42	7.1	18.1	369	-73	0.81
8:44	6.9	18.6	352	-75	0.53
8:46	6.7	18.9	341	-79	0.54
8:48	6.7	19.1	336	-79	0.50

WELL ID: MW6

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
9:26	6.9	16.8	191	20	1.19
9:28	6.7	17.0	190	36	1.03
9:30	6.5	17.2	189	45	0.88
9:32	6.5	17.4	187	49	0.79
9:34	6.4	17.5	186	50	0.74

WELL ID: MW7

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:28	6.7	17.5	239	-44	1.14
10:30	6.7	17.8	237	-48	0.93
10:32	6.6	18.0	237	-48	0.77
10:34	6.6	18.1	236	-49	0.69

WELL ID: MW1

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:53	6.6	20.0	232	-73	0.68
10:55	6.5	19.8	220	-70	0.42
10:57	6.4	19.8	206	-67	0.36
10:59	6.4	20.0	206	-67	0.29

WELL ID: MW4

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:21	6.4	18.7	256	-48	0.66
11:23	6.3	18.6	254	-30	0.43
11:25	6.2	18.6	251	-20	0.35
11:27	6.0	18.7	248	-6	0.35
11:29	6.0	18.8	245	-2	0.39
11:31	6.0	18.8	248	-8	0.53
11:33	6.0	18.9	250	-9	0.50

WELL ID: MW14

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:57	6.6	19.7	334	-64	0.93
11:59	6.6	19.8	330	-68	0.65
12:01	6.6	20.1	329	-70	0.57
12:03	6.6	20.3	327	-69	0.53

LACO ASSOCIATES
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FAX 707.443.0553

Project Name: FORTUNA SHELL - HPI
Project No.: 4563.01
Tech: SJD
Date: 8-2-05

METER ACCURACY RANGE

WELL ID: mw15	+/- 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)
12:30	6.7	20.0	316	-74	0.97
12:32	6.6	20.4	312	-76	0.72
12:34	6.5	20.4	311	-77	0.68

WELL ID: mw16

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
1:00	6.7	18.3	316	-84	0.53
1:02	6.7	18.0	313	-86	0.64
1:04	6.6	17.9	311	-82	0.74
1:06	6.6	17.9	308	-77	0.62
1:08	6.6	18.0	305	-76	0.53

WELL ID: mw8

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
1:27	6.8	19.7	281	-35	0.90
1:29	6.6	20.4	285	-33	0.54
1:31	6.5	20.7	284	-32	0.46
1:33	6.4	20.9	284	-32	0.39

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
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Project Name: FORTUNA SHELL - HA1
Project No.: 4563.01
Tech: SJD/RLD
Date: 8-2-05

WELL ID: MW1		WELL ID: MW2		WELL ID: MW3		WELL ID: MW4		WELL ID: MW5		WELL ID: MW6	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
8:07	6.38	8:09	6.11	7:56	6.22	7:58	6.03	2:05	5.45	8:00	6.12
8:27	6.38	8:29	6.11	8:14	6.22	8:16	6.03	T+P		8:18	6.12

WELL ID: MW7		WELL ID: MW8		WELL ID: MW9		WELL ID: MW10		WELL ID: MW11		WELL ID: MW12	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
8:02	6.02	8:03	11.18	7:54	9.24	7:56	10.18	7:59	10.45	8:02	10.02
8:20	6.02	8:22	11.18	8:14	9.24	8:16	10.18	8:19	10.45	8:22	10.02

WELL ID: MW13		WELL ID: MW14		WELL ID: MW15		WELL ID: MW16		WELL ID: MW17S		WELL ID: MW17D	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
8:05	9.01	8:06	6.67	8:08	6.28	8:10	6.12	8:34	22.45	8:36	26.45
8:25	9.01	8:25	6.67	8:27	6.28	8:29	6.12	8:44	22.45	8:59	26.45

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Project No.: 4563.01
Date: 8-2-05
Golbal ID No.: T0602300471
PM: CJW

Tech: ~~SJD~~ RLD
Mob/Demob time: .25 / .35
Travel time: 1.0
Time on site: 7:35
Time off site: 2:40
Mileage: 36

WELL No.:	MW11		MW10		MW9		MW3		MW6	
DIAMETER (in)	2.00		2.00		2.00		2.00		2.00	
SCREENED INTERVAL (ft)	12.5-15.5		12.5-15.5		12-15		5-12		12-20	
DEPTH TO WATER (ft)	10.45		10.18		9.24					
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.87	6.34	7.02	6.62	6.69	6.68				
FIELD INTRINSICS: TEMP (°C)	19.7	21.3	22.5	21.6	21.0	21.8				
FIELD INTRINSICS: Ecw (µmohs)	327	61	246	241	262	254				
FIELD INTRINSICS: ORP (mV)	-84	-37	-13	21	-66	-90				
FIELD INTRINSICS: DO (mg/L)	0.65	0.45	3.13	3.28	0.64	0.16				
FIELD INTRINSICS: OTHER (units)	—		—		—					
PURGE: TIME	10:30	10:40	11:05	11:13	11:38	11:44				
PURGE: METHOD (DHP/CB/B)	DHP		DHP		DHP					
PURGE: RATE (Lpm)	0.20		0.19		0.17					
PURGE: VOLUME (L)	2.0		1.5		1.5					
PURGE: COLOR	CLEAR	CLEAR	CLEAR	MILKY YELLOW TINT	CLEAR	CLEAR				
PURGE: ODOR	MED SULFUR		NONE		LIGHT SWEET / LIGHT SULFUR					
PURGE: INTAKE DEPTH (FEET)	12.5		12.5		12.5					
SAMPLE: TIME	10:42		11:15		11:46					
SAMPLE: METHOD (DHP/CB/B)	DHP		DHP		DHP					
SAMPLE: ANALYTES	8260 List 5		8260 List 5		8260 List 5		8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC	
SAMPLE: TOTAL DRAWDOWN (FEET)	2.16		2.20		2.11					
SAMPLE: REMARKS	—		—		—					
WELL CONDITION	GOOD		GOOD		GOOD					
WASTE DRUMS										

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REVISED:7/28/2005

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Project No.: 4563.01
Date: 8-2-05
Golbal ID No.: T0602300471
PM: CJW

Tech: SJD RLD
Mob/Demob time: .25 1.35
Travel time: 1.0
Time on site: 7:35
Time off site: 2:40
Mileage: 86

WELL No.:	MW12		MW7		MW13		MW1		MW4	
DIAMETER (in)	2.00		2.00		2.00		2.00		2.00	
SCREENED INTERVAL (ft)	12.5-15		10 - 15		12.5-15		6-10		5-10	
DEPTH TO WATER (ft)	10.02				9.01					
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.40	6.22			6.73	6.77				
TEMP (°C)	21.2	23.5			23.8	25.4				
Ecw (µmohs)	315	309			306	294				
ORP (mV)	-22	-10			-58	-80				
DO (mg/L)	0.48	0.36			0.52	0.55				
OTHER (units)	—				—					
PURGE: TIME	12:15	12:25			12:50	12:58				
METHOD (DHP/CB/B)	DHP				DHP					
RATE (Lpm)	0.35				0.25					
VOLUME (L)	3.5				2.0					
COLOR	CLEAR	CLEAR			CLEAR	CLEAR				
ODOR	MED SULFUR				LIGHT SWEET / MED SULFUR					
INTAKE DEPTH (FEET)	12.5				11.5					
SAMPLE: TIME	12:27				1:00					
METHOD (DHP/CB/B)	DHP				DHP					
ANALYTES	8260 List 5		8260 List 5; TPHd/mo w/SGC		8260 List 5		8260 List 5; TPHd/mo w/SGC		8260 List 5; TPHd/mo w/SGC	
TOTAL DRAWDOWN (FEET)	1.53				2.40					
REMARKS	—				—					
WELL CONDITION	GOOD				GOOD					
WASTE DRUMS										

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

Project Name: Fortuna Shell - HPI
Project No.: 4563.01
Date: 8-2-05
Golbal ID No.: T0602300471
PM: CJW

Tech: SJD RLD
Mob/Demob time: .25/1.35
Travel time: 1.0
Time on site: 7:35
Time off site: 2:40
Mileage: 86

WELL No.:	MW14		MW15		MW16		MW17S		MW17D	
DIAMETER (in)	1.50		1.50		1.50		1.50		1.50	
SCREENED INTERVAL (ft)	5-10		5-10		5-10		22.5-24.5		26-28	
DEPTH TO WATER (ft)							22.45		26.45	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH										
TEMP (°C)										
Ecw (µmohs)										
ORP (mV)										
DO (mg/L)										
OTHER (units)										
PURGE: TIME										
METHOD (DHP/CB/B)										
RATE (Lpm)										
VOLUME (L)										
COLOR										
ODOR										
INTAKE DEPTH (FEET)										
SAMPLE: TIME							8:45		9:15	
METHOD (DHP/CB/B)							3/4" B		3/4" B	
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		8260 List 5	
TOTAL DRAWDOWN (FEET)							—		—	
REMARKS							ONLY GET 10 ML PER BAIL		ONLY GET 10 ML PER BAIL	
WELL CONDITION							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

REVISED:7/28/2005

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

Project Name: Fortuna Shell - HPI
Project No.: 4563.01
Date: 8-2-05
Golbal ID No.: T0602300471
PM: CJW

Tech: SJD RLD
Mob/Demob time: .25/1.35
Travel time: 1.0
Time on site: 7:35
Time off site: 2:40
Mileage: 36

WELL No.:	MW2A		MW8		MW5					
DIAMETER (in)	2.00		2.00		2.00					
SCREENED INTERVAL (ft)	5-10		15-20		5-10					
DEPTH TO WATER (ft)	6.11									
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.66	6.55								
TEMP (°C)	24.3	21.8								
Ecw (µmohs)	247	272								
ORP (mV)	-73	-83								
DO (mg/L)	0.66	0.23								
OTHER (units)	—									
PURGE: TIME	1:23	1:29								
METHOD (DHP/CB/B)	DHP									
RATE (Lpm)	0.25									
VOLUME (L)	1.5									
COLOR	CLEAR	CLOUDY CLEAR								
ODOR	MED SULFUR									
INTAKE DEPTH (FEET)	8.0									
SAMPLE: TIME	1:31									
METHOD (DHP/CB/B)	DHP									
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)	0.25									
REMARKS	—									
WELL CONDITION	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

REVISED:7/28/2005

LACO ASSOCIATES
CONSULTING ENGINEERS

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

Project Name: FORTUNA SHELL HPI
Project No.: 4563.01
Tech: RLD
Date: 8-2-05

METER ACCURACY RANGE

WELL ID:	+/- 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)
10:32	6.37	20.5	54	-47	0.51
10:34	6.34	20.2	51	-43	0.57
10:36	6.35	21.1	51	-41	0.42
10:38	6.34	21.2	59	-38	0.44
10:40	6.34	21.3	61	-37	0.45

WELL ID: MW10

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:07	6.75	21.5	244	10	3.51
11:09	6.61	21.2	243	15	3.34
11:11	6.64	21.4	243	19	3.25
11:13	6.62	21.6	241	21	3.28

WELL ID: MW9

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:40	6.69	21.5	259	-81	0.30
11:42	6.68	21.8	254	-88	0.19
11:44	6.68	21.8	254	-90	0.16

WELL ID: MW12

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
12:17	6.29	21.2	315	-24	0.33
12:19	6.28	22.3	315	-21	0.50
12:21	6.21	22.5	310	-11	0.37
12:23	6.23	23.2	310	-11	0.36
12:25	6.22	23.5	309	-10	0.36

WELL ID: MW13

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
12:52	6.73	24.9	302	-72	0.27
12:54	6.78	25.1	298	-77	0.37
12:56	6.77	25.2	293	-80	0.53
12:58	6.77	25.4	294	-80	0.55

WELL ID: MW2

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
1:25	6.57	22.3	279	-79	0.50
1:27	6.55	21.7	270	-82	0.25
1:29	6.55	21.8	272	-83	0.23

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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: 4563.01
Project Name: FORTUNA SHELL
Purchase Order Number: task 3027

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS: 8260 List 5	CONTAINER: 9	PRESERVATIVE: b	ANALYSIS: TPHd/mo w/SGC	CONTAINER: 7	PRESERVATIVE: --
	4563-MW1-W	8-2-05	pm	GW	3	1				
	4563-MW2-W	↓	↓	↓	3	1				
	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					

SAMPLE CONDITION/SPECIAL INSTRUCTIONS
GEOTRACKER

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

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707-822-4649 Fax 707-822-6831

Chain of Custody

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

PROJECT INFORMATION
Project Number: 4563.01
Project Name: FORTUNA SHELL
Purchase Order Number: TASK 3027

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS: 8260 List 5 (CONTAINER 9, PRESERVATIVE b)	ANALYSIS: TPHd/mo w/SGC (CONTAINER 7, PRESERVATIVE -)
	4563-MW11-W	8-2-05	AM	GW	3	
	4563-MW12-W				3	
	4563-MW13-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

LABORATORY NUMBER:

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

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

SAMPLE CONDITION/SPECIAL INSTRUCTIONS
GEOTRACKER
LIMITED VOLUME FOR TPHd/mo w/SGC
LIMITED VOLUME " " "

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

NORTH COAST LABORATORIES LTD.

RECEIVED
LACO ASSOCIATES
AUG 22 2005
BY: JP

August 19, 2005

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

Attn: Accounts Payable

RE: 4563.01, FORTUNA SHELL

Order No.: 0508076
Invoice No.: 52168
PO No.: TASK 3027
ELAP No. 1247-Expires July 2006

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-MW9-W
10A	4563-MW10-W
11A	4563-MW11-W
12A	4563-MW12-W
13A	4563-MW13-W
14A	4563-MW14-W
14D	4563-MW14-W
15A	4563-MW15-W
15D	4563-MW15-W
16A	4563-MW16-W
16D	4563-MW16-W
17A	4563-MW17S-W
18A	4563-MW17D-W

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

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

LMO
✓DRG
DNL
GH
GEO
HPI
FRB
CJW

File
Project #

REPORT CERTIFIED BY

Collin Blackstone (for SKD) T Shen

Laboratory Supervisor(s) 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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North Coast Laboratories, Ltd. **Date:** *19-Aug-05*

CLIENT: LACO Associates
Project: 4563.01, FORTUNA SHELL
Lab Order: 0508076

CASE NARRATIVE

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.

TPH as Diesel/Motor Oil w/ Silica Gel Cleanup:
Samples 4563-MW1-W, 4563-MW2-W, 4563-MW3-W, 4563-MW5-W and 4563-MW16-W contain some material lighter than diesel. However, some of this material extends into the diesel range of molecular weights. These samples, and also sample 4563-MW4-W contain material in the diesel range of molecular weights, but the material does not exhibit the peak pattern typical of diesel oil.

Sample 4563-MW5-W does not have the typical pattern of fresh motor oil. However, the result reported represents the amount of material in the motor oil range.

TPH as Diesel/Motor Oil:
Samples 4563-MW14-W and 4563-MW15-W contain some material lighter than diesel. However, some of this material extends into the diesel range of molecular weights. These samples also contain material in the diesel range of molecular weights, but the material does not exhibit the peak pattern typical of diesel oil.

Gasoline Components/Additives:
The gasoline values for samples 4563-MW1-W, 4563-MW2-W, 4563-MW3-W, 4563-MW4-W, 4563-MW5-W, 4563-MW14-W, 4563-MW15-W, 4563-MW16-W and 4563-MW17D-W include the reported gasoline components and 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-MW13-W are primarily from the reported oxygenates.

Some reporting limits were raised for samples 4563-MW1-W, 4563-MW2-W, 4563-MW3-W, 4563-MW5-W, 4563-MW7-W, 4563-MW8-W, 4563-MW14-W, 4563-MW15-W and 4563-MW16-W due to matrix interference.

Sample 4563-MW5-W was diluted and the reporting limits raised additionally due to matrix interference.

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Date: 19-Aug-05
WorkOrder: 0508076

ANALYTICAL REPORT

Client Sample ID: 4563-MW1-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-01A **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		8/12/05
Tert-butyl alcohol (TBA)	ND	20	µg/L	1.0		8/12/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		8/12/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		8/12/05
Benzene	3.6	0.50	µg/L	1.0		8/12/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		8/12/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		8/12/05
Toluene	1.5	0.50	µg/L	1.0		8/12/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		8/12/05
Chlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Ethylbenzene	12	0.50	µg/L	1.0		8/12/05
m,p-Xylene	3.0	0.50	µg/L	1.0		8/12/05
o-Xylene	0.61	0.50	µg/L	1.0		8/12/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Surrogate: 1,4-Dichlorobenzene-d4	102	80.8-139	% Rec	1.0		8/12/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	2,400	50	µg/L	1.0		8/12/05

Client Sample ID: 4563-MW1-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-01D **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)	290	50	µg/L	1.0	8/13/05	8/17/05
TPHC Motor Oil	ND	170	µg/L	1.0	8/13/05	8/17/05

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Date: 19-Aug-05
WorkOrder: 0508076

ANALYTICAL REPORT

Client Sample ID: 4563-MW2-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-02A **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		8/12/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		8/12/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		8/12/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		8/12/05
Benzene	23	0.50	µg/L	1.0		8/12/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		8/12/05
1,2-Dichloroethane	ND	2.0	µg/L	1.0		8/12/05
Toluene	5.4	0.50	µg/L	1.0		8/12/05
1,2-Dibromoethane (EDB)	ND	2.0	µg/L	1.0		8/12/05
Chlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Ethylbenzene	26	0.50	µg/L	1.0		8/12/05
m,p-Xylene	19	0.50	µg/L	1.0		8/12/05
o-Xylene	1.0	0.50	µg/L	1.0		8/12/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Surrogate: 1,4-Dichlorobenzene-d4	103	80.8-139	% Rec	1.0		8/12/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	4,500	2,500	µg/L	50		8/12/05

Client Sample ID: 4563-MW2-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-02D **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)	820	50	µg/L	1.0	8/13/05	8/17/05
TPHC Motor Oil	ND	170	µg/L	1.0	8/13/05	8/17/05

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Date: 19-Aug-05
WorkOrder: 0508076

ANALYTICAL REPORT

Client Sample ID: 4563-MW3-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-03A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	45	1.0	µg/L	1.0		8/12/05
Tert-butyl alcohol (TBA)	ND	20	µg/L	1.0		8/12/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		8/12/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		8/12/05
Benzene	ND	0.50	µg/L	1.0		8/12/05
Tert-amyl methyl ether (TAME)	3.2	1.0	µg/L	1.0		8/12/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		8/12/05
Toluene	ND	0.50	µg/L	1.0		8/12/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		8/12/05
Chlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Ethylbenzene	ND	0.50	µg/L	1.0		8/12/05
m,p-Xylene	ND	0.50	µg/L	1.0		8/12/05
o-Xylene	ND	0.50	µg/L	1.0		8/12/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Surrogate: 1,4-Dichlorobenzene-d4	101	80.8-139	% Rec	1.0		8/12/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	830	50	µg/L	1.0		8/12/05

Client Sample ID: 4563-MW3-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-03D **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)	160	50	µg/L	1.0	8/13/05	8/17/05
TPHC Motor Oil	ND	170	µg/L	1.0	8/13/05	8/17/05

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Date: 19-Aug-05
WorkOrder: 0508076

ANALYTICAL REPORT

Client Sample ID: 4563-MW4-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-04A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	1.7	1.0	µg/L	1.0		8/11/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		8/11/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		8/11/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		8/11/05
Benzene	2.6	0.50	µg/L	1.0		8/11/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		8/11/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		8/11/05
Toluene	ND	0.50	µg/L	1.0		8/11/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		8/11/05
Chlorobenzene	ND	1.0	µg/L	1.0		8/11/05
Ethylbenzene	ND	0.50	µg/L	1.0		8/11/05
m,p-Xylene	ND	0.50	µg/L	1.0		8/11/05
o-Xylene	ND	0.50	µg/L	1.0		8/11/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		8/11/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		8/11/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		8/11/05
Surrogate: 1,4-Dichlorobenzene-d4	103	80.8-139	% Rec	1.0		8/11/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	220	50	µg/L	1.0		8/11/05

Client Sample ID: 4563-MW4-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-04D **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)	60	50	µg/L	1.0	8/13/05	8/17/05
TPHC Motor Oil	ND	170	µg/L	1.0	8/13/05	8/17/05

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ANALYTICAL REPORT

Client Sample ID: 4563-MW5-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-05A **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	300	µg/L	50		8/12/05
Tert-butyl alcohol (TBA)	53	10	µg/L	1.0		8/12/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		8/12/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		8/12/05
Benzene	550	25	µg/L	50		8/12/05
Tert-amyl methyl ether (TAME)	4.3	1.0	µg/L	1.0		8/12/05
1,2-Dichloroethane	ND	4.0	µg/L	1.0		8/12/05
Toluene	18	0.50	µg/L	1.0		8/12/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		8/12/05
Chlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Ethylbenzene	56	0.50	µg/L	1.0		8/12/05
m,p-Xylene	150	0.50	µg/L	1.0		8/12/05
o-Xylene	3.2	0.50	µg/L	1.0		8/12/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Surrogate: 1,4-Dichlorobenzene-d4	104	80.8-139	% Rec	1.0		8/12/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	29,000	2,500	µg/L	50		8/12/05

Client Sample ID: 4563-MW5-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-05D **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)	8,000	500	µg/L	10	8/13/05	8/18/05
TPHC Motor Oil	3,500	1,700	µg/L	10	8/13/05	8/18/05

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ANALYTICAL REPORT

Client Sample ID: 4563-MW6-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-06A **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		8/11/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		8/11/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		8/11/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		8/11/05
Benzene	ND	0.50	µg/L	1.0		8/11/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		8/11/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		8/11/05
Toluene	ND	0.50	µg/L	1.0		8/11/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		8/11/05
Chlorobenzene	ND	1.0	µg/L	1.0		8/11/05
Ethylbenzene	ND	0.50	µg/L	1.0		8/11/05
m,p-Xylene	ND	0.50	µg/L	1.0		8/11/05
o-Xylene	ND	0.50	µg/L	1.0		8/11/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		8/11/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		8/11/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		8/11/05
Surrogate: 1,4-Dichlorobenzene-d4	102	80.8-139	% Rec	1.0		8/11/05

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		8/11/05

Client Sample ID: 4563-MW6-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-06D **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	8/9/05	8/10/05
TPHC Motor Oil	ND	170	µg/L	1.0	8/9/05	8/10/05

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ANALYTICAL REPORT

Client Sample ID: 4563-MW7-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-07A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	150	50	µg/L	50		8/12/05
Tert-butyl alcohol (TBA)	ND	30	µg/L	1.0		8/12/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		8/12/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		8/12/05
Benzene	ND	0.50	µg/L	1.0		8/12/05
Tert-amyl methyl ether (TAME)	5.7	1.0	µg/L	1.0		8/12/05
1,2-Dichloroethane	1.1	1.0	µg/L	1.0		8/12/05
Toluene	ND	0.50	µg/L	1.0		8/12/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		8/12/05
Chlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Ethylbenzene	ND	0.50	µg/L	1.0		8/12/05
m,p-Xylene	ND	0.50	µg/L	1.0		8/12/05
o-Xylene	ND	0.50	µg/L	1.0		8/12/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Surrogate: 1,4-Dichlorobenzene-d4	103	80.8-139	% Rec	1.0		8/12/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	170	50	µg/L	1.0		8/12/05

Client Sample ID: 4563-MW7-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-07D **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)	ND	50	µg/L	1.0	8/13/05	8/17/05
TPHC Motor Oil	ND	170	µg/L	1.0	8/13/05	8/17/05

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ANALYTICAL REPORT

Client Sample ID: 4563-MW8-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-08A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	2,500	50	µg/L	50		8/12/05
Tert-butyl alcohol (TBA)	450	10	µg/L	1.0		8/12/05
Di-isopropyl ether (DIPE)	ND	3.0	µg/L	1.0		8/12/05
Ethyl tert-butyl ether (ETBE)	9.1	1.0	µg/L	1.0		8/12/05
Benzene	0.88	0.50	µg/L	1.0		8/12/05
Tert-amyl methyl ether (TAME)	97	1.0	µg/L	1.0		8/12/05
1,2-Dichloroethane	1.9	1.0	µg/L	1.0		8/12/05
Toluene	ND	0.50	µg/L	1.0		8/12/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		8/12/05
Chlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Ethylbenzene	ND	0.50	µg/L	1.0		8/12/05
m,p-Xylene	ND	0.50	µg/L	1.0		8/12/05
o-Xylene	ND	0.50	µg/L	1.0		8/12/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Surrogate: 1,4-Dichlorobenzene-d4	103	80.8-139	% Rec	1.0		8/12/05

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		8/12/05

Client Sample ID: 4563-MW8-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-08D **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	8/13/05	8/17/05
TPHC Motor Oil	ND	170	µg/L	1.0	8/13/05	8/17/05

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ANALYTICAL REPORT

Client Sample ID: 4563-MW9-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-09A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	2.7	1.0	µg/L	1.0		8/11/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		8/11/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		8/11/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		8/11/05
Benzene	ND	0.50	µg/L	1.0		8/11/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		8/11/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		8/11/05
Toluene	ND	0.50	µg/L	1.0		8/11/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		8/11/05
Chlorobenzene	ND	1.0	µg/L	1.0		8/11/05
Ethylbenzene	ND	0.50	µg/L	1.0		8/11/05
m,p-Xylene	ND	0.50	µg/L	1.0		8/11/05
o-Xylene	ND	0.50	µg/L	1.0		8/11/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		8/11/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		8/11/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		8/11/05
Surrogate: 1,4-Dichlorobenzene-d4	102	80.8-139	% Rec	1.0		8/11/05

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		8/11/05

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ANALYTICAL REPORT

Client Sample ID: 4563-MW10-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-10A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1.0		8/11/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		8/11/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		8/11/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		8/11/05
Benzene	ND	0.50	µg/L	1.0		8/11/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		8/11/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		8/11/05
Toluene	ND	0.50	µg/L	1.0		8/11/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		8/11/05
Chlorobenzene	ND	1.0	µg/L	1.0		8/11/05
Ethylbenzene	ND	0.50	µg/L	1.0		8/11/05
m,p-Xylene	ND	0.50	µg/L	1.0		8/11/05
o-Xylene	ND	0.50	µg/L	1.0		8/11/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		8/11/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		8/11/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		8/11/05
Surrogate: 1,4-Dichlorobenzene-d4	102	80.8-139	% Rec	1.0		8/11/05

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		8/11/05

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ANALYTICAL REPORT

Client Sample ID: 4563-MW11-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-11A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	2.0	1.0	µg/L	1.0		8/11/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		8/11/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		8/11/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		8/11/05
Benzene	ND	0.50	µg/L	1.0		8/11/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		8/11/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		8/11/05
Toluene	ND	0.50	µg/L	1.0		8/11/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		8/11/05
Chlorobenzene	ND	1.0	µg/L	1.0		8/11/05
Ethylbenzene	ND	0.50	µg/L	1.0		8/11/05
m,p-Xylene	ND	0.50	µg/L	1.0		8/11/05
o-Xylene	ND	0.50	µg/L	1.0		8/11/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		8/11/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		8/11/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		8/11/05
Surrogate: 1,4-Dichlorobenzene-d4	101	80.8-139	% Rec	1.0		8/11/05

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		8/11/05

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ANALYTICAL REPORT

Client Sample ID: 4563-MW12-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-12A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	790	50	µg/L	50		8/12/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		8/12/05
Di-isopropyl ether (DIPE)	1.3	1.0	µg/L	1.0		8/12/05
Ethyl tert-butyl ether (ETBE)	2.6	1.0	µg/L	1.0		8/12/05
Benzene	ND	0.50	µg/L	1.0		8/12/05
Tert-amyl methyl ether (TAME)	32	1.0	µg/L	1.0		8/12/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		8/12/05
Toluene	ND	0.50	µg/L	1.0		8/12/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		8/12/05
Chlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Ethylbenzene	ND	0.50	µg/L	1.0		8/12/05
m,p-Xylene	ND	0.50	µg/L	1.0		8/12/05
o-Xylene	ND	0.50	µg/L	1.0		8/12/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Surrogate: 1,4-Dichlorobenzene-d4	104	80.8-139	% Rec	1.0		8/12/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	750	50	µg/L	1.0		8/12/05

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ANALYTICAL REPORT

Client Sample ID: 4563-MW13-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-13A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	230	10	µg/L	10		8/15/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		8/11/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		8/11/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		8/11/05
Benzene	ND	0.50	µg/L	1.0		8/11/05
Tert-amyl methyl ether (TAME)	7.1	1.0	µg/L	1.0		8/11/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		8/11/05
Toluene	ND	0.50	µg/L	1.0		8/11/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		8/11/05
Chlorobenzene	ND	1.0	µg/L	1.0		8/11/05
Ethylbenzene	ND	0.50	µg/L	1.0		8/11/05
m,p-Xylene	ND	0.50	µg/L	1.0		8/11/05
o-Xylene	ND	0.50	µg/L	1.0		8/11/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		8/11/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		8/11/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		8/11/05
Surrogate: 1,4-Dichlorobenzene-d4	102	80.8-139	% Rec	1.0		8/11/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	200	50	µg/L	1.0		8/11/05

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Date: 19-Aug-05
WorkOrder: 0508076

ANALYTICAL REPORT

Client Sample ID: 4563-MW14-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-14A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	ND	14	µg/L	1.0		8/11/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		8/11/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		8/11/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		8/11/05
Benzene	0.93	0.50	µg/L	1.0		8/11/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		8/11/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		8/11/05
Toluene	ND	0.50	µg/L	1.0		8/11/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		8/11/05
Chlorobenzene	ND	1.0	µg/L	1.0		8/11/05
Ethylbenzene	1.1	0.50	µg/L	1.0		8/11/05
m,p-Xylene	ND	0.50	µg/L	1.0		8/11/05
o-Xylene	ND	0.50	µg/L	1.0		8/11/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		8/11/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		8/11/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		8/11/05
Surrogate: 1,4-Dichlorobenzene-d4	103	80.8-139	% Rec	1.0		8/11/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	880	50	µg/L	1.0		8/11/05

Client Sample ID: 4563-MW14-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-14D **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)	160	50	µg/L	1.0	8/9/05	8/10/05
TPHC Motor Oil	ND	170	µg/L	1.0	8/9/05	8/10/05

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ANALYTICAL REPORT

Client Sample ID: 4563-MW15-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-15A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	ND	100	µg/L	1.0		8/12/05
Tert-butyl alcohol (TBA)	ND	30	µg/L	1.0		8/12/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		8/12/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		8/12/05
Benzene	120	5.0	µg/L	10		8/15/05
Tert-amyl methyl ether (TAME)	2.4	1.0	µg/L	1.0		8/12/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		8/12/05
Toluene	3.5	0.50	µg/L	1.0		8/12/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		8/12/05
Chlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Ethylbenzene	23	0.50	µg/L	1.0		8/12/05
m,p-Xylene	7.5	0.50	µg/L	1.0		8/12/05
o-Xylene	ND	0.50	µg/L	1.0		8/12/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Surrogate: 1,4-Dichlorobenzene-d4	102	80.8-139	% Rec	1.0		8/12/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	2,100	50	µg/L	1.0		8/12/05

Client Sample ID: 4563-MW15-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-15D **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)	250	50	µg/L	1.0	8/9/05	8/10/05
TPHC Motor Oil	ND	170	µg/L	1.0	8/9/05	8/10/05

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ANALYTICAL REPORT

Client Sample ID: 4563-MW16-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-16A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	360	50	µg/L	50		8/12/05
Tert-butyl alcohol (TBA)	220	10	µg/L	1.0		8/12/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		8/12/05
Ethyl tert-butyl ether (ETBE)	3.9	1.0	µg/L	1.0		8/12/05
Benzene	680	25	µg/L	50		8/12/05
Tert-amyl methyl ether (TAME)	8.0	1.0	µg/L	1.0		8/12/05
1,2-Dichloroethane	ND	3.0	µg/L	1.0		8/12/05
Toluene	14	0.50	µg/L	1.0		8/12/05
1,2-Dibromoethane (EDB)	ND	2.0	µg/L	1.0		8/12/05
Chlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Ethylbenzene	22	0.50	µg/L	1.0		8/12/05
m,p-Xylene	28	0.50	µg/L	1.0		8/12/05
o-Xylene	5.6	0.50	µg/L	1.0		8/12/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Surrogate: 1,4-Dichlorobenzene-d4	102	80.8-139	% Rec	1.0		8/12/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	4,600	2,500	µg/L	50		8/12/05

Client Sample ID: 4563-MW16-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-16D **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)	570	50	µg/L	1.0	8/13/05	8/17/05
TPHC Motor Oil	320	170	µg/L	1.0	8/13/05	8/17/05

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ANALYTICAL REPORT

Client Sample ID: 4563-MW17S-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-17A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	13	1.0	µg/L	1.0		8/12/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		8/12/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		8/12/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		8/12/05
Benzene	ND	0.50	µg/L	1.0		8/12/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		8/12/05
1,2-Dichloroethane	1.1	1.0	µg/L	1.0		8/12/05
Toluene	ND	0.50	µg/L	1.0		8/12/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		8/12/05
Chlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Ethylbenzene	ND	0.50	µg/L	1.0		8/12/05
m,p-Xylene	ND	0.50	µg/L	1.0		8/12/05
o-Xylene	ND	0.50	µg/L	1.0		8/12/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Surrogate: 1,4-Dichlorobenzene-d4	103	80.8-139	% Rec	1.0		8/12/05

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		8/12/05

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ANALYTICAL REPORT

Client Sample ID: 4563-MW17D-W **Received:** 8/2/05 **Collected:** 8/2/05 0:00
Lab ID: 0508076-18A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	50	1.0	µg/L	1.0		8/12/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		8/12/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		8/12/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		8/12/05
Benzene	ND	0.50	µg/L	1.0		8/12/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		8/12/05
1,2-Dichloroethane	1.1	1.0	µg/L	1.0		8/12/05
Toluene	ND	0.50	µg/L	1.0		8/12/05
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1.0		8/12/05
Chlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Ethylbenzene	ND	0.50	µg/L	1.0		8/12/05
m,p-Xylene	ND	0.50	µg/L	1.0		8/12/05
o-Xylene	ND	0.50	µg/L	1.0		8/12/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		8/12/05
Surrogate: 1,4-Dichlorobenzene-d4	104	80.8-139	% Rec	1.0		8/12/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	130	50	µg/L	1.0		8/12/05

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North Coast Laboratories, Ltd.

Date: 19-Aug-05

CLIENT: LACO Associates
Work Order: 0508076
Project: 4563.01, FORTUNA SHELL

QC SUMMARY REPORT

Method Blank

Sample ID **MB 081105** Batch ID: **R36395** Test Code: **8260OXYW** Units: **µg/L** Analysis Date **8/11/05 8:51:00 AM** Prep Date
Client ID: Run ID: **ORGCMS3_050811A** SeqNo: **523747**

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	0.1325	0.50									J
m,p-Xylene	0.1918	0.50									J
o-Xylene	ND	0.50									
1,3-Dichlorobenzene	0.1501	1.0									J
1,4-Dichlorobenzene	0.1508	1.0									J
1,2-Dichlorobenzene	ND	1.0									
1,4-Dichlorobenzene-d4	1.00	0.10	1.00	0	100%	81	139	0			

Sample ID **MB 081105** Batch ID: **R36397** Test Code: **GASW-MS** Units: **µg/L** Analysis Date **8/11/05 8:51:00 AM** Prep Date
Client ID: Run ID: **ORGCMS3_050811B** SeqNo: **523792**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	18.73	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: 0508076
Project: 4563.01, FORTUNA SHELL

QC SUMMARY REPORT

Method Blank

Sample ID **MB-14017** Batch ID: **14017** Test Code: **SGTPDMW** Units: **µg/L** Analysis Date **8/17/05 5:13:29 PM** Prep Date **8/13/05**
Client ID: Run ID: **ORGC5_050817A** SeqNo: **524611**

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	34.66	170									J

Sample ID **MB-13990** Batch ID: **13990** Test Code: **TPHDMW** Units: **µg/L** Analysis Date **8/10/05 11:45:52 AM** Prep Date **8/9/05**
Client ID: Run ID: **ORGC7_050810A** SeqNo: **522479**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	35.27	50									J
TPHC Motor Oil	80.46	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: 19-Aug-05

CLIENT: LACO Associates
Work Order: 0508076
Project: 4563.01, FORTUNA SHELL

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID **LCS-05511** Batch ID: **R36395** Test Code: **8260OXYW** Units: **µg/L** Analysis Date **8/11/05 6:18:00 AM** Prep Date

Client ID: Run ID: **ORGCMS3_050811A** SeqNo: **523745**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	19.20	1.0	20.0	0	96.0%	80	120	0			
Tert-butyl alcohol (TBA)	391.8	10	400	0	98.0%	25	162	0			
Di-isopropyl ether (DIPE)	19.83	1.0	20.0	0	99.2%	80	120	0			
Ethyl tert-butyl ether (ETBE)	19.51	1.0	20.0	0	97.5%	77	120	0			
Benzene	20.38	0.50	20.0	0	102%	78	117	0			
Tert-amyl methyl ether (TAME)	19.12	1.0	20.0	0	95.6%	64	136	0			
1,2-Dichloroethane	20.20	1.0	20.0	0	101%	74	121	0			
Toluene	20.31	0.50	20.0	0	102%	80	120	0			
1,2-Dibromoethane (EDB)	20.40	1.0	20.0	0	102%	80	120	0			
Chlorobenzene	20.43	1.0	20.0	0	102%	80	120	0			
Ethylbenzene	19.76	0.50	20.0	0	98.8%	80	120	0			
m,p-Xylene	40.08	0.50	40.0	0	100%	80	120	0			
o-Xylene	19.36	0.50	20.0	0	96.8%	80	120	0			
1,3-Dichlorobenzene	19.89	1.0	20.0	0	99.4%	81	125	0			
1,4-Dichlorobenzene	20.13	1.0	20.0	0	101%	79	132	0			
1,2-Dichlorobenzene	19.50	1.0	20.0	0	97.5%	81	134	0			
1,4-Dichlorobenzene-d4	1.08	0.10	1.00	0	108%	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: 0508076
Project: 4563.01, FORTUNA SHELL

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID **LCSD-05511** Batch ID: **R36395** Test Code: **8260OXYW** Units: **µg/L** Analysis Date **8/12/05 1:57:00 AM** Prep Date
Client ID: Run ID: **ORGCMS3_050811A** SeqNo: **523776**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	18.99	1.0	20.0	0	95.0%	80	120	19.2	1.07%	20	
Tert-butyl alcohol (TBA)	392.5	10	400	0	98.1%	25	162	392	0.169%	20	
Di-isopropyl ether (DIPE)	19.46	1.0	20.0	0	97.3%	80	120	19.8	1.92%	20	
Ethyl tert-butyl ether (ETBE)	19.03	1.0	20.0	0	95.2%	77	120	19.5	2.49%	20	
Benzene	19.77	0.50	20.0	0	98.8%	78	117	20.4	3.03%	20	
Tert-amyl methyl ether (TAME)	18.59	1.0	20.0	0	92.9%	64	136	19.1	2.81%	20	
1,2-Dichloroethane	19.99	1.0	20.0	0	99.9%	74	121	20.2	1.04%	20	
Toluene	19.34	0.50	20.0	0	96.7%	80	120	20.3	4.85%	20	
1,2-Dibromoethane (EDB)	19.59	1.0	20.0	0	98.0%	80	120	20.4	4.03%	20	
Chlorobenzene	19.85	1.0	20.0	0	99.2%	80	120	20.4	2.92%	20	
Ethylbenzene	18.63	0.50	20.0	0	93.1%	80	120	19.8	5.90%	20	
m,p-Xylene	37.74	0.50	40.0	0	94.3%	80	120	40.1	6.03%	20	
o-Xylene	18.19	0.50	20.0	0	90.9%	80	120	19.4	6.23%	20	
1,3-Dichlorobenzene	19.07	1.0	20.0	0	95.3%	81	125	19.9	4.21%	20	
1,4-Dichlorobenzene	19.48	1.0	20.0	0	97.4%	79	132	20.1	3.27%	20	
1,2-Dichlorobenzene	18.80	1.0	20.0	0	94.0%	81	134	19.5	3.63%	20	
1,4-Dichlorobenzene-d4	1.07	0.10	1.00	0	107%	81	139	1.08	0.945%	20	

Sample ID **LCS-05512** Batch ID: **R36397** Test Code: **GASW-MS** Units: **µg/L** Analysis Date **8/11/05 7:35:00 AM** Prep Date
Client ID: Run ID: **ORGCMS3_050811B** SeqNo: **523790**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	911.4	50	1,000	0	91.1%	80	120	0			

Sample ID **LCSD-05512** Batch ID: **R36397** Test Code: **GASW-MS** Units: **µg/L** Analysis Date **8/12/05 2:22:00 AM** Prep Date
Client ID: Run ID: **ORGCMS3_050811B** SeqNo: **523803**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	857.1	50	1,000	0	85.7%	80	120	911	6.14%	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: 0508076
Project: 4563.01, FORTUNA SHELL

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID **LCS-14017** Batch ID: **14017** Test Code: **SGTPDMW** Units: **µg/L** Analysis Date **8/17/05 3:08:31 PM** Prep Date **8/13/05**
Client ID: Run ID: **ORGC5_050817A** SeqNo: **524609**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	318.1	50	500	0	63.6%	42	96	0			
TPHC Motor Oil	735.4	170	1,000	0	73.5%	52	103	0			

Sample ID **LCSD-14017** Batch ID: **14017** Test Code: **SGTPDMW** Units: **µg/L** Analysis Date **8/17/05 3:39:19 PM** Prep Date **8/13/05**
Client ID: Run ID: **ORGC5_050817A** SeqNo: **524610**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	315.6	50	500	0	63.1%	42	96	318	0.812%	15	
TPHC Motor Oil	747.9	170	1,000	0	74.8%	52	103	735	1.69%	15	

Sample ID **LCS-13990** Batch ID: **13990** Test Code: **TPHDMW** Units: **µg/L** Analysis Date **8/10/05 9:45:33 AM** Prep Date **8/9/05**
Client ID: Run ID: **ORGC7_050810A** SeqNo: **522477**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	560.1	50	500	0	112%	72	124	0			
TPHC Motor Oil	1,204	170	1,000	0	120%	71	139	0			

Sample ID **LCSD-13990** Batch ID: **13990** Test Code: **TPHDMW** Units: **µg/L** Analysis Date **8/10/05 10:05:40 AM** Prep Date **8/9/05**
Client ID: Run ID: **ORGC7_050810A** SeqNo: **522478**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	572.1	50	500	0	114%	72	124	560	2.13%	15	
TPHC Motor Oil	1,218	170	1,000	0	122%	71	139	1,200	1.18%	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: 0508076

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: 4563.01
Project Name: FORTUNA SHELL
Purchase Order Number: task 3027

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS: 8260 List 5 (CONTAINER 9, PRESERVATIVE b)	ANALYSIS: TPHd/mo w/SGC (CONTAINER 7, PRESERVATIVE ---)
	4563-MW1-W	8-2-05	AM	GW	3	1
	4563-MW2-W	↓	↓	↓	3	1
	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	

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

GEOTRACKER

Cold, intact

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
STEVE DAVIS	8-2-05 4:44 pm	K. Thompson	8/2/05 1644

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 707-822-6811

Chain of Custody

0508076

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: 4563.01
Project Name: FORTUNA SHELL
Purchase Order Number: TASK 3027

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS: 8260 List 5	CONTAINER: TPHd/mo w/SGC	PRESERVATIVE
	4563-MW11-W	8-2-05	Am	GW	3		b
	4563-MW12-W	↓	↓	↓	3		---
	4563-MW13-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		
	RID NOT Receive Notified client for						

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

GEOTRACKER

LIMITED VOLUME FOR TPHd/mo w/SGC
LIMITED VOLUME " " "

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
STEVE DAVIS	8-2-05 4:44 pm	[signature]	8/2/05 1644

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