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May 19, 2005

4629.03

California Regional Water Quality Control Board (CRWQCB)
5550 Skylane Boulevard, Suite A
Santa Rosa, California 95403

Attention: Mr. Cody Walker

Subject: Groundwater Monitoring Report; First Quarter 2005
HPI/Former Shell Bulk Plant, Underground Storage Tanks (UST) Area
400 Eighth Street, Fortuna, California
CRWQCB Case No. 1THU116

Dear Mr. Walker:

LACO ASSOCIATES (LACO) presents the results of groundwater monitoring for the first quarter of 2005. This report includes data indicating the 50 percent milestone of the Pay-for-Performance Program has been reached. This report has been prepared for Humboldt Petroleum., Inc. (HPI). Please call or email if you have any questions or concerns.

Sincerely,
LACO ASSOCIATES

for

Todd B. Becker
Junior Geologist

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

PROFESSIONAL GEOLOGIST
CHRISTOPHER JOHN WATT
No. 7586
Exp.03/31/
STATE OF CALIFORNIA

TBB:lnm

Attachments

cc: Jim Seiler, Humboldt Petroleum, Inc. (electronically sent)

P:\4000\4629 HPI Bulk Plant\submittals\GW Mon Reports\2005\4629.03_1Q05_ GMR\4629.03_UST 1Q05GMR.doc

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www.lacoassociates.us

GROUNDWATER MONITORING REPORT FIRST QUARTER 2005

Humboldt Petroleum Inc., Former Shell Bulk Plant, Underground Storage Tank Area;
400 Eighth Street, Fortuna, California
California Regional Water Quality Control Board Case No. 1THU116
LACO ASSOCIATES Project No. 4629.03

Introduction

Field activities were conducted on January 11, February 15, March 30, and April 27, 2005, in accordance with generally accepted practices at this or similar locations. Please refer to Table A through Table D for the current groundwater monitoring regime and to LACO ASSOCIATES' (LACO's) *Standard Operating Procedures* on file at your office for details. A location and site map are provided as Figures 1 and 2, respectively.

Site Chronology

- 1993 though 2003: The monitoring well network is constructed.
- 1996: One 3000-gallon and one 4000-gallon underground storage tanks (USTs) are removed.
- November 2000: 550 cubic yards of petroleum hydrocarbon contaminated soil are excavated.
- August 2002: 510 cubic yards of petroleum hydrocarbon contaminated soil are excavated.
- May-June 2004: An *in-situ* chemical oxidation system was installed for remediation of petroleum hydrocarbon contaminated soil and groundwater.

Monitoring Regime

Table A: Monitoring Event for January 11, 2005							
MONITORING WELL ID	SCREENED INTERVAL (feet)	DTW (feet)	PURGE METHOD	WATER QUALITY PARAMETERS	ANALYTICALS		SAMPLING SCHEDULE
					ORGANICS	INORGANICS	
MW1A	5-15	---					Quarterly
MW15	4.5-14						
MW16	3-14.5						
MW19	22.5-25						
MW20	15.5-19.5						
MW23	5-10						
MW24	5-10						
MW25	5-10						
MW27	5-10	5.78	DHP	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	Dis Fe	Monthly
MW28	5-10	1.56					
MW29	5-10	---					Quarterly
MW30	5-10	0.73	Cam Pump	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	Dis Fe	Monthly
MW33	14-17.5	---					Quarterly
MW34	14-18	2.81	DHP	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	Dis Fe	Monthly
MW35	17-20	---					Quarterly
MW36	13-14.5						
MW37	17.25-19						
MW38	12-14	1.29	DHP	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	Dis Fe	Monthly
MW39	17.75-19	---					Quarterly
MW40	13.25-16						
MW41	16.5-18						
MW42	12-14.5						
MW43	16-18	1.63	Cam Pump	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	Dis Fe	Monthly
MW44	12-15	0.99					

Table B: Monitoring Event for February 15, 2005							
MONITORING WELL ID	SCREENED INTERVAL (feet)	DTW (feet)	PURGE METHOD	WATER QUALITY PARAMETERS	ANALYTICALS		SAMPLING SCHEDULE
					ORGANICS	INORGANICS	
MW1A	5-15	---					Quarterly
MW15	4.5-14						
MW16	3-14.5						
MW19	22.5-25						
MW20	15.5-19.5						
MW23	5-10						
MW24	5-10						
MW25	5-10						
MW27	5-10	4.65	DHP	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	---	Monthly
MW28	5-10	2.16					
MW29	5-10	---					Quarterly
MW30	5-10	1.25	Cam Pump	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	---	Monthly
MW33	14-17.5	---					Quarterly
MW34	14-18	5.46	DHP	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	---	Monthly
MW35	17-20	---					Quarterly
MW36	13-14.5						
MW37	17.25-19						
MW38	12-14	1.84	DHP	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	---	Monthly
MW39	17.75-19	---					Quarterly
MW40	13.25-16						
MW41	16.5-18						
MW42	12-14.5						
MW43	16-18	2.49	Cam Pump	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	---	Monthly
MW44	12-15	2.55					

Table C: Monitoring Event for March 30, 2005							
MONITORING WELL ID	SCREENED INTERVAL (feet)	DTW (feet)	PURGE METHOD	WATER QUALITY PARAMETERS	ANALYTICALS		SAMPLING SCHEDULE
					ORGANICS	INORGANICS	
MW1A	5-15	---					Quarterly
MW15	4.5-14						
MW16	3-14.5						
MW19	22.5-25						
MW20	15.5-19.5						
MW23	5-10						
MW24	5-10						
MW25	5-10						
MW27	5-10	4.35	DHP	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	---	Monthly
MW28	5-10	3.22					
MW29	5-10	---					Quarterly
MW30	5-10	0.57	Cam Pump	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	---	Monthly
MW33	14-17.5	---					Quarterly
MW34	14-18	2.64	DHP	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	---	Monthly
MW35	17-20	---					Quarterly
MW36	13-14.5						
MW37	17.25-19						
MW38	12-14	1.16	DHP	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	---	Monthly
MW39	17.75-19	---					Quarterly
MW40	13.25-16						
MW41	16.5-18						
MW42	12-14.5						
MW43	16-18	2.06	Cam Pump	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	---	Monthly
MW44	12-15	1.34					

Table D: Monitoring Event for April 27, 2005							
MONITORING WELL ID	SCREENED INTERVAL (feet)	DTW (feet)	PURGE METHOD	WATER QUALITY PARAMETERS	ANALYTICALS		SAMPLING SCHEDULE
					ORGANICS	INORGANICS	
MW1A	5-15	1.67	DHP	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	---	Quarterly
MW15	4.5-14	---					
MW16	3-14.5	12.07	1/2" Bailer	---			
MW19	22.5-25	13.85	3/4 " Bailer				
MW20	15.5-19.5	9.96					
MW23	5-10	5.90	DHP	pH, T, ECw, ORP, DO			
MW24	5-10	5.58					
MW25	5-10	2.32					
MW27	5-10	4.50					Monthly
MW28	5-10	3.59					
MW29	5-10	2.20	Cam Pump				Quarterly
MW30	5-10	2.15					Monthly
MW33	14-17.5	2.23	DHP				Quarterly
MW34	14-18	6.69					Monthly
MW35	17-20	6.01					Quarterly
MW36	13-14.5	5.80					
MW37	17.25-19	2.64					
MW38	12-14	2.80					Monthly
MW39	17.75-19	2.18					Quarterly
MW40	13.25-16	3.05					
MW41	16.5-18	3.78					
MW42	12-14.5	3.65					
MW43	16-18	2.02	Cam Pump				Monthly
MW44	12-15	3.14					

The Key to abbreviations is included as Attachment 1, and the field sampling data sheets for monitoring conducted during the period of January through April 2005 are included as Attachment 2.

Hydraulic Gradient

Hydraulic gradients were calculated from hydraulic head measurements in three different water-bearing units (Unit 1, Unit 2, and Unit 3), utilizing the three-point method with wells identified below. Surfer 7.0 software was used to create potentiometric contours. Hydraulic gradients and potentiometric surfaces calculated for Units 1, 2, and 3 are presented as Figure 3, Figure 4, and Figure 5, respectively.

The hydraulic heads calculated for Unit 1 monitoring wells (MW23 through MW25 and MW27 through MW30) were used with Surfer 7.0 software for generation of a potentiometric surface. Using the three-point method and hydraulic head elevations of monitoring wells MW27, MW28,

and MW30, the aquifer exhibited a hydraulic gradient of 6.4 percent in a N79°W direction (Figure 3).

The hydraulic heads calculated for Unit 2 monitoring wells (MW33, MW34, MW36, MW38, MW40, MW42, and MW44) were used with Surfer 7.0 software for generation of a potentiometric surface. Using the three-point method and hydraulic head elevations of monitoring wells MW33, MW38, and MW42, the aquifer exhibited a hydraulic gradient of 3.1 percent in a S87°W direction (Figure 4).

The hydraulic heads calculated for Unit 3 monitoring wells (MW33 through MW35, MW37, MW39, MW41, and MW43) were used with Surfer 7.0 software for generation of a potentiometric surface. Using the three-point method and hydraulic head elevations of monitoring wells MW33, MW37, and MW41, the aquifer exhibited a hydraulic gradient of 3.5 percent in a N85°W direction (Figure 5).

Laboratory Results

Laboratory analytical results from the April 27, 2005, quarterly sampling event for Unit 1, Unit 2, and Unit 3 are included below in Table E, Table F, and Table G, respectively. Current and historical groundwater analytical data are included in Table 1, and copies of the laboratory analytical reports for this reporting period are included as Attachment 3.

Table E: Laboratory Analytical Results UST Unit 1 (April 27, 2005)

WELL	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)
MW23	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---
MW24	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---
MW25	**230**	ND<50	---	ND<1.5	ND<5.0	ND<0.50	ND<0.50	ND<3.0	---
MW27	**1,100**	**92**	---	**250**	**5.7**	**8.2**	**2.5**	ND<20	---
MW28	**620**	**97**	---	**58**	**2.9**	**6.7**	**0.84**	ND<10	---
MW29	ND<50	**210**	---	**1.1**	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---
MW30	**19,000**	**530**	---	**4,500**	**180**	**680**	**532**	ND<300	---

Analyte concentrations reported for monitoring wells screened within Unit 1 are consistent within the range of results reported for the previous quarter (Table 1).

Table F: Laboratory Analytical Results UST Unit 2 (April 27, 2005)									
WELL	**TPHg (µg/L)**	**TPHd (µg/L)**	**TPHmo (µg/L)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Xylenes (µg/L)**	**MTBE (µg/L)**	**Other Analytes (µg/L)**
MW33	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---
MW34	**4,200**	**290**	---	**74**	**41**	**110**	**179**	ND<100	---
MW36	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**5.8**	---
MW38	**100**	ND<50	---	**19**	**0.61**	ND<0.50	ND<0.50	**11**	---
MW40	ND<50	ND<50	---	**0.51**	ND<0.50	ND<0.50	ND<0.50	**11**	---
MW42	**58**	ND<50	---	**1.5**	ND<0.50	ND<0.50	ND<1.0	**5.6**	---
MW44	**4,500**	**82**	---	**2,300**	**9.8**	**8.5**	**8.3**	ND<50	---
NOTE: MW-33 and MW-34 are screened in both Unit 2 and Unit 3									

Analyte concentrations reported for monitoring wells screened within Unit 2 are consistent within the range of results reported for the previous quarter (Table 1).

Table G: Laboratory Analytical Results UST Unit 3 (April 27, 2005)									
WELL	**TPHg (µg/L)**	**TPHd (µg/L)**	**TPHmo (µg/L)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Xylenes (µg/L)**	**MTBE (µg/L)**	**Other Analytes (µg/L)**
MW33	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---
MW34	**4,200**	**290**	---	**74**	**41**	**110**	**179**	ND<100	---
MW35	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**10**	---
MW37	ND<50	ND<50	---	**0.82**	ND<0.50	ND<0.50	ND<0.50	**5.2**	---
MW39	ND<50	**63**	---	**0.95**	ND<0.50	ND<0.50	ND<0.50	**14**	---
MW41	ND<50	ND<50	---	**0.95**	ND<0.50	ND<0.50	ND<0.50	**5.9**	---
MW43	**670**	**66**	---	**220**	**0.70**	**1.2**	**1.6**	ND<40	---
NOTE: MW-33 and MW-34 are screened in both Unit 2 and Unit 3									

Analyte concentrations reported for monitoring wells screened within Unit 3 are consistent within the range of results reported for the previous quarter (Table 1).

Discussion of Groundwater Results

Analytical results from sampling performed during the period of July 20, 2004 through April 27, 2005, indicate that the sum of benzene, toluene, ethylbenzene, and total xylenes (BTEX) concentrations, exceeded the achievement of the 50 percent milestone goal for reduction in BTEX concentrations from baseline levels in key Pay-for-Performance (PFP) monitoring wells MW27, MW28, MW30, and MW44. Table H (below) summarizes the baseline concentrations of total petroleum hydrocarbons as gasoline (TPHg), BTEX, and methyl tertiary butyl ether (MTBE) as well as laboratory analytical results from sampling performed in key PFP monitoring wells MW27, MW28, MW30, and MW44, for the period of July 2004 through April 2005.

TABLE H: PAY-FOR-PEFORMANCE MILESTONE ACHIEVEMENT									
Well ID/ DATE		TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	% BTEX Reduction
Target		**500**	**250**	**42**	**29**	**17**	**338**	**13**	
MW27	Baseline	8600	3500	26	81	23.6	3631	NA	
MW28	Baseline	16000	6100	35	83	28.4	6246.4	NA	
MW30	Baseline	22000	7700	150	900	481	9231	NA	
MW44	Baseline	4800	3000	10	26	6.8	3042.8	NA	
Sum COC			20300	221	1090	539.8	22151		
MW27	7/20/2004	2700	810	17	12	5.0	844	ND<3.0	
MW28	7/20/2004	10000	4800	28	31	15	4874	ND<30	
MW30	7/20/2004	31000	9400	230	840	437	10907	ND<300	
MW44	7/20/2004	12000	6500	22	27	14.6	6563.6	ND<60	
Sum COC			21510	297	910	472	23189		**-5%**
MW27	8/24/2004	3700	960	17	24	7.2	1008	ND<30	
MW28	8/24/2004	15000	6100	43	46	21	6210	ND<100	
MW30	8/24/2004	33000	10000	190	630	273	11093	ND<300	
MW44	8/24/2004	2700	2100	5.0	5.0	5.0	2115	ND<70	
Sum COC			19160	255	705	306	20426		**8%**
MW27	9/23/2004	2000	280	15	11	6.0	312	ND<40	
MW28	9/23/2004	9400	4700	34	40	18	4792	ND<80	
MW30	9/23/2004	20000	6200	150	470	576	7396	ND<300	
MW44	9/23/2004	8800	4600	14	32	13.1	4659.1	ND<60	
Sum COC			15780	213	553	613	17159		**24%**
MW27	10/21/2004	1100	170	8.2	16	6.0	200.2	10	
MW28	10/21/2004	130	53	0.50	0.90	0.61	55.01	ND<3.0	
MW30	10/21/2004	31000	9100	300	1400	870	11670	ND<300	
MW44	10/21/2004	3500	1600	4.7	3.7	6.8	1615.2	ND<40	
Sum COC			10923	313	1421	883	13540		**41%**
MW27	11/16/2004	1100	150	14	8.7	5.1	177.8	ND<25	
MW28	11/16/2004	980	500	3.6	4.4	3.2	511.2	ND<13	
MW30	11/16/2004	30000	9200	320	2000	930	12450	ND<300	
MW44	11/16/2004	3100	1700	6.6	8.4	9.6	1724.6	ND<60	
Sum COC			11550	344	2022	948	14864		**35%**
MW27	12/14/2004	1100	170	8.2	14	3.2	195.4	ND<20	
MW28	12/14/2004	1000	350	5.1	7.0	3.8	365.9	ND<20	
MW30	12/14/2004	26000	7300	270	1300	810	9680	ND<300	
MW44	12/14/2004	3000	1400	4.7	5.6	6.5	1416.8	ND<40	
Sum COC			9220	288	1327	824	11658		**50%**
MW27	1/11/2005	1300	310	7.6	9.9	6.0	333.5	ND<25	
MW28	1/11/2005	760	150	4.9	7.6	3.3	165.8	ND<20	
MW30	1/11/2005	25000	8100	310	1200	920	10530	ND<300	
MW44	1/11/2005	4000	2200	7.1	1.6	9.0	2217.7	ND<80	
Sum COC			10760	330	1219	938	13247		**43%**

TABLE H: PAY-FOR-PEFORMANCE MILESTONE ACHIEVEMENT CONT.									
Well ID/ DATE		TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	% BTEX Reduction
MW27	2/15/2005	990	60	10	7.4	5.0	82.4	ND<20	
MW28	2/15/2005	640	94	3.3	6.2	2.4	105.9	ND<15	
MW30	2/15/2005	22000	6100	200	890	670	7860	ND<300	
MW44	2/15/2005	2900	1400	4.8	2.3	6.0	1413.1	ND<50	
Sum COC			7654	218	906	683	9461		**61%**
MW27	3/30/2005	1300	300	7.9	6.8	3.5	318.2	ND<30	
MW28	3/30/2005	780	100	4.2	8.5	1.7	114.4	ND<20	
MW30	3/30/2005	18000	5600	180	800	590	7170	ND<300	
MW44	3/30/2005	3600	1800	6.7	4.3	7.1	1818.1	ND<70	
Sum COC			7800	199	820	602	9421		**61%**
MW27	4/27/2005	1100	250	5.7	8.2	2.5	266.4	ND<20	
MW28	4/27/2005	620	58	2.9	6.7	0.84	68.44	ND<10	
MW30	4/27/2005	19000	4500	180	680	532	5892	ND<300	
MW44	4/27/2005	4500	2300	9.8	8.5	8.3	2326.6	ND<50	
Sum COC			7108	198	703	543.6	8553.4		**65%**

Notes:

BTEX results reported as non-detectable (ND) were included at the value for the minimum detection limit.

The 25% through 75% milestones are reached based on the sum of BTEX concentrations for all key wells. For the 100% milestone, each individual well must meet the PARG.

In-Situ Chemical Oxidation (ISCO) Remediation System

As of May 4, 2005, approximately 8,183 kilowatts per hour (Kwh) of electricity has been used to operate the master panel of the remediation system. The master panel of the remediation system was turned off from November 30, 2004 through April 15, 2005. Field forms for system checks occurring between February 2, 2005 and May 4, 2005, are included as Attachment 4. LACO continues with the bi-monthly to weekly system checks and quarterly sampling of the wells.

Groundwater Intrinsics

Monitoring wells MW1A, MW23, MW24, MW25, MW27 through MW30, and MW33 through MW44 were monitored for field intrinsic bioremediation indicators dissolved oxygen (DO) and oxidation-reduction potential (ORP) (Table 2). A concentration of DO greater than 2.0 mg/L and an ORP voltage of 50 mV or greater is an indication of aerobic conditions, while values less than these are an indication of anaerobic conditions. For the period of January through April 2005, water quality parameters monitored in the field indicate that anaerobic conditions exist at all monitoring wells. Anaerobic conditions indicate that DO is being consumed by organic material at the site.

Future Work

- Monthly monitoring of key and perimeter PFP monitoring wells will continue.

List of Figures, Tables, and Attachments

Figure 1: Location Map

Figure 2: Site Map

Figure 3: Hydraulic Gradient Unit 1

Figure 4: Hydraulic Gradient Unit 2

Figure 4: Hydraulic Gradient Unit 3

Table 1: Well Data and Groundwater Analytical Results

Table 2: Field Intrinsic Indicator Results (DO and ORP)

Table 3: Sum of COCs/PFP Milestone Achievement

Attachment 1: Key to Abbreviations

Attachment 2: Groundwater Sampling: Field Data Sheets

Attachment 3: Laboratory Analytical Reports

Attachment 4: ISCO Operation and Maintenance: Field Data Sheets

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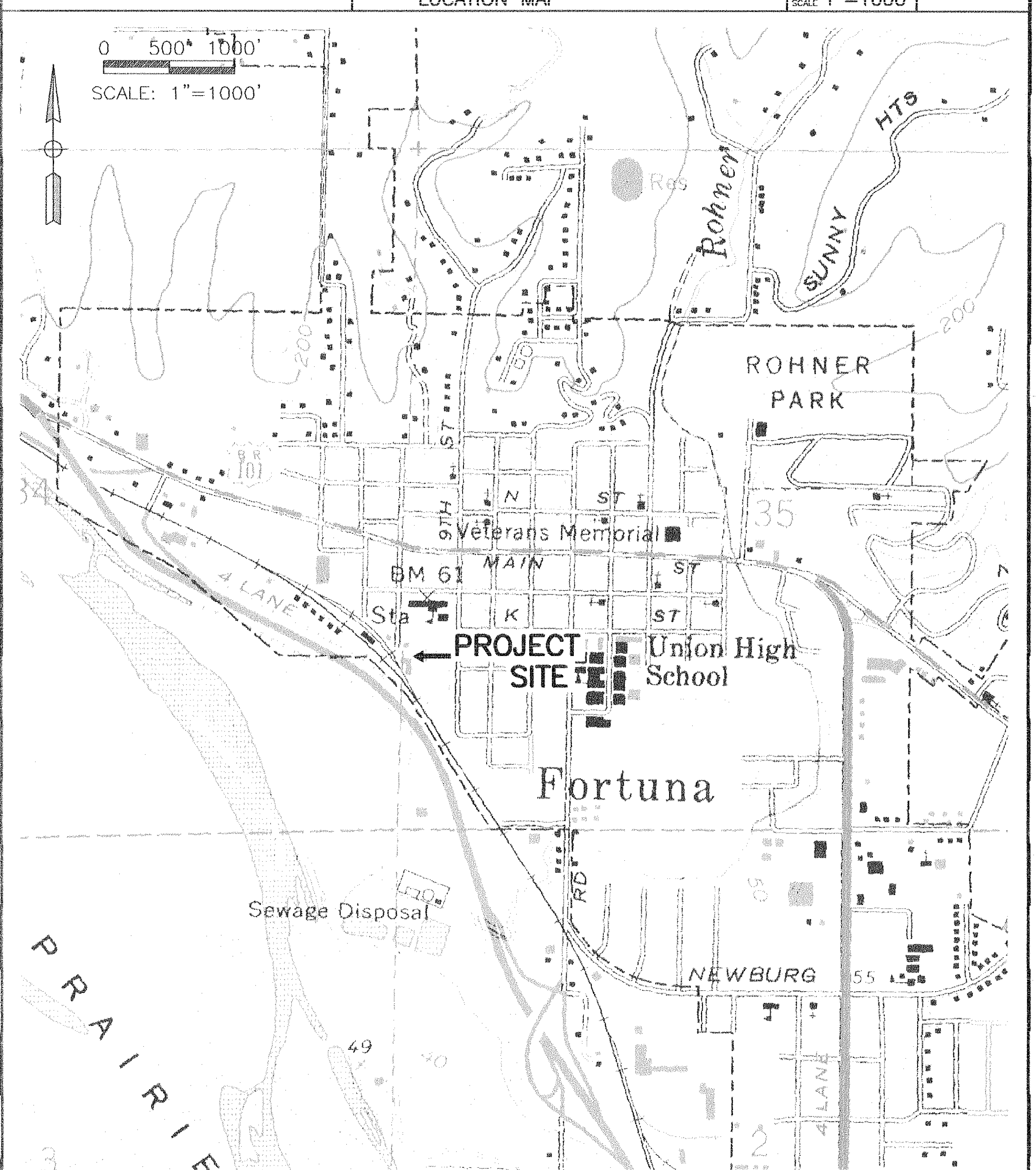
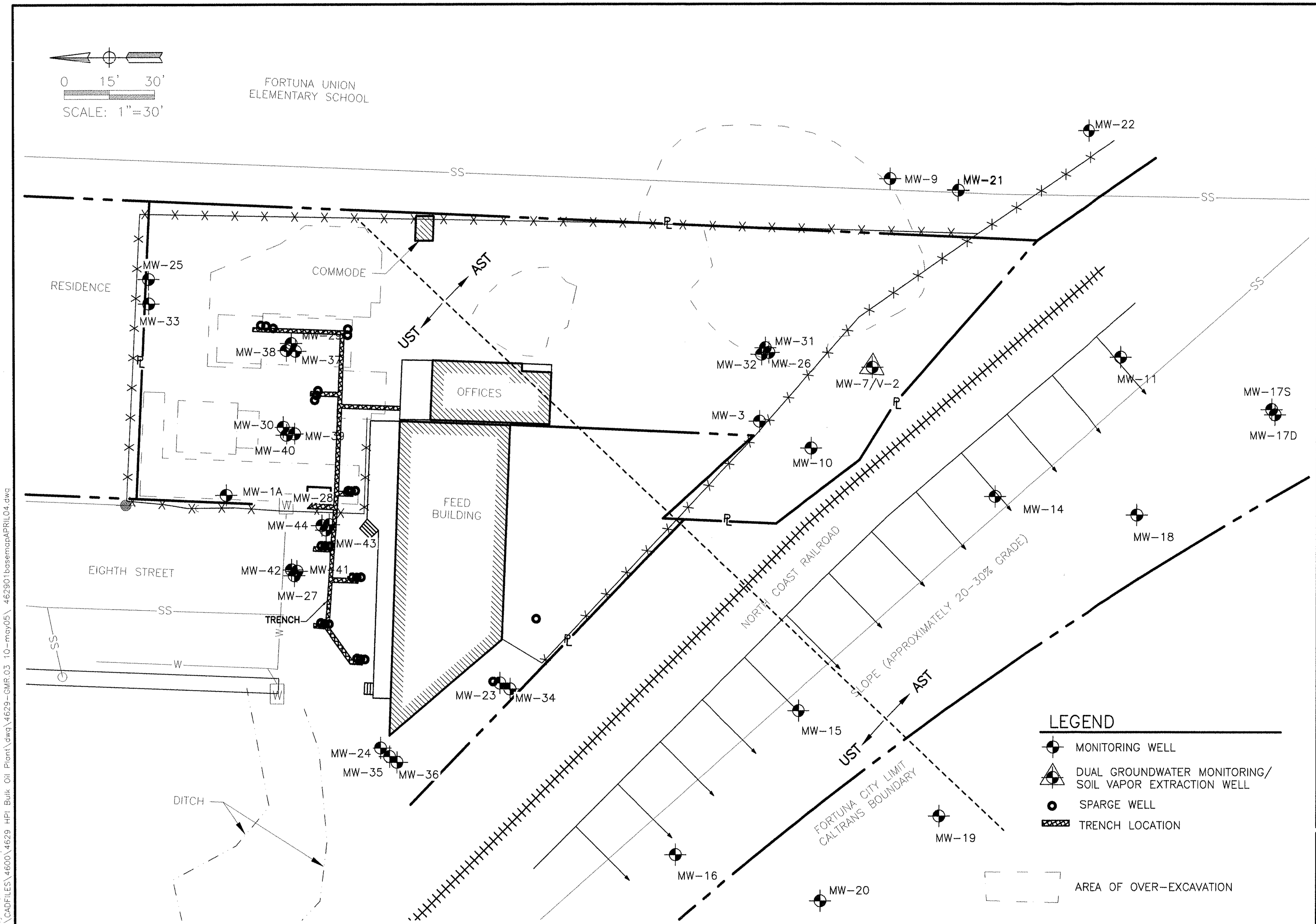
LACO ASSOCIATES CONSULTING ENGINEERS 21 W 4TH ST. EUREKA, CA 95501 (707)443-5054	PROJECT	GROUNDWATER MONITORING REPORT	BY RJM	FIGURE
	CLIENT	HUMBOLDT PETROLEUM INC	DATE 5/16/05	1
	LOCATION	FORMER BULK PLANT, FORTUNA, CA	CHECK	JOB NO.
		LOCATION MAP	SCALE 1"=1000'	4629.03





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

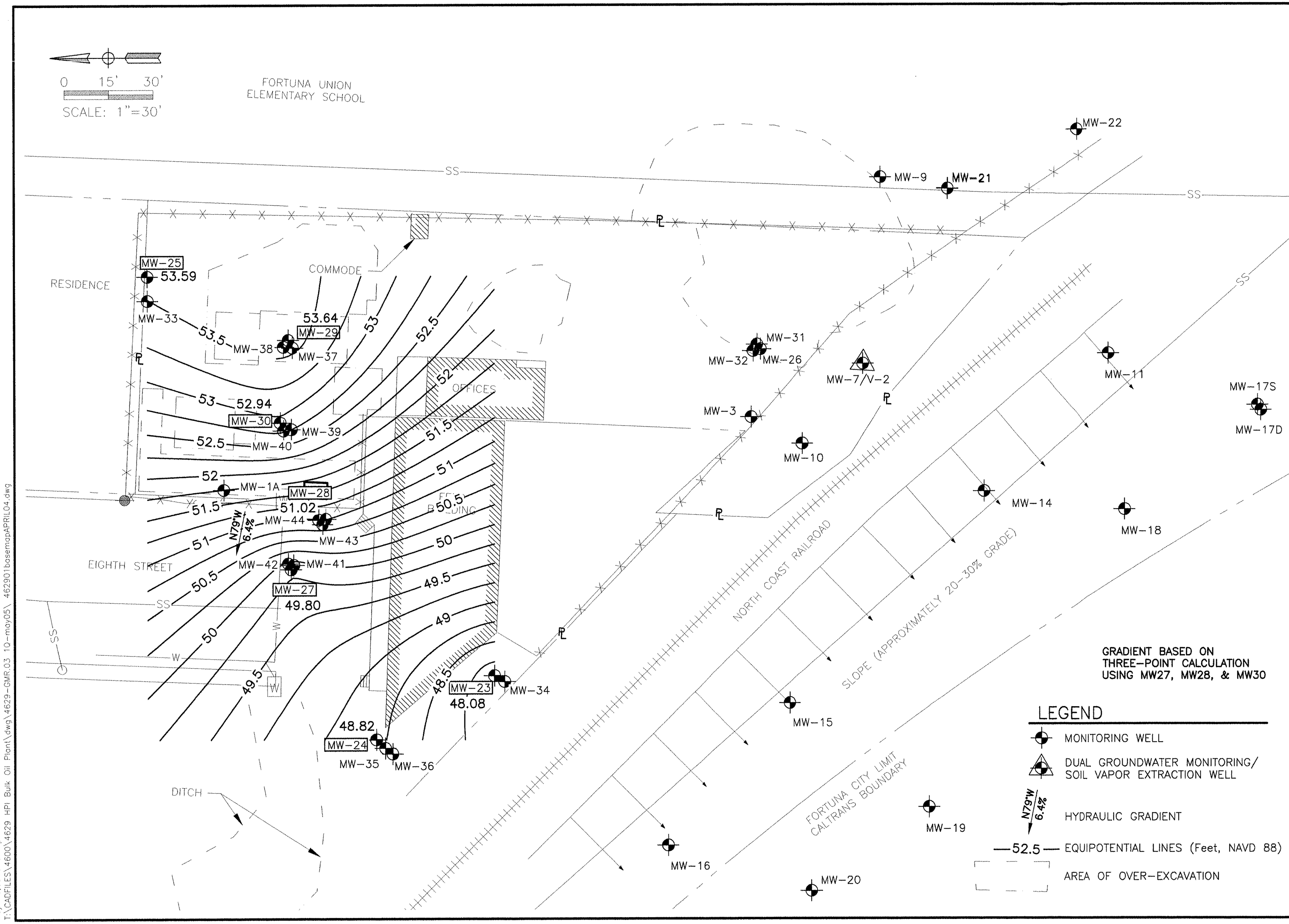
NO.	REVISION	BY	CHK	DATE

GROUNDWATER MONITORING REPORT - UST AREA
SITE MAP

HUMBOLDT PETROLEUM, INC
FORMER BULK PLANT, FORTUNA, CA

SCALE	1"=30'
DRAWN	RJM
CHECK	BRH
APPVD	
DATE	5/12/05
JOB NO.	4629.03
FIGURE	2

May 19,2005-2:37pm
T:\CADFILES\4600\4629 HPI Bulk Oil Plant\dwg\4629-GMR.03 10-may05\ 462901basemapAPRIL04.dwg



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

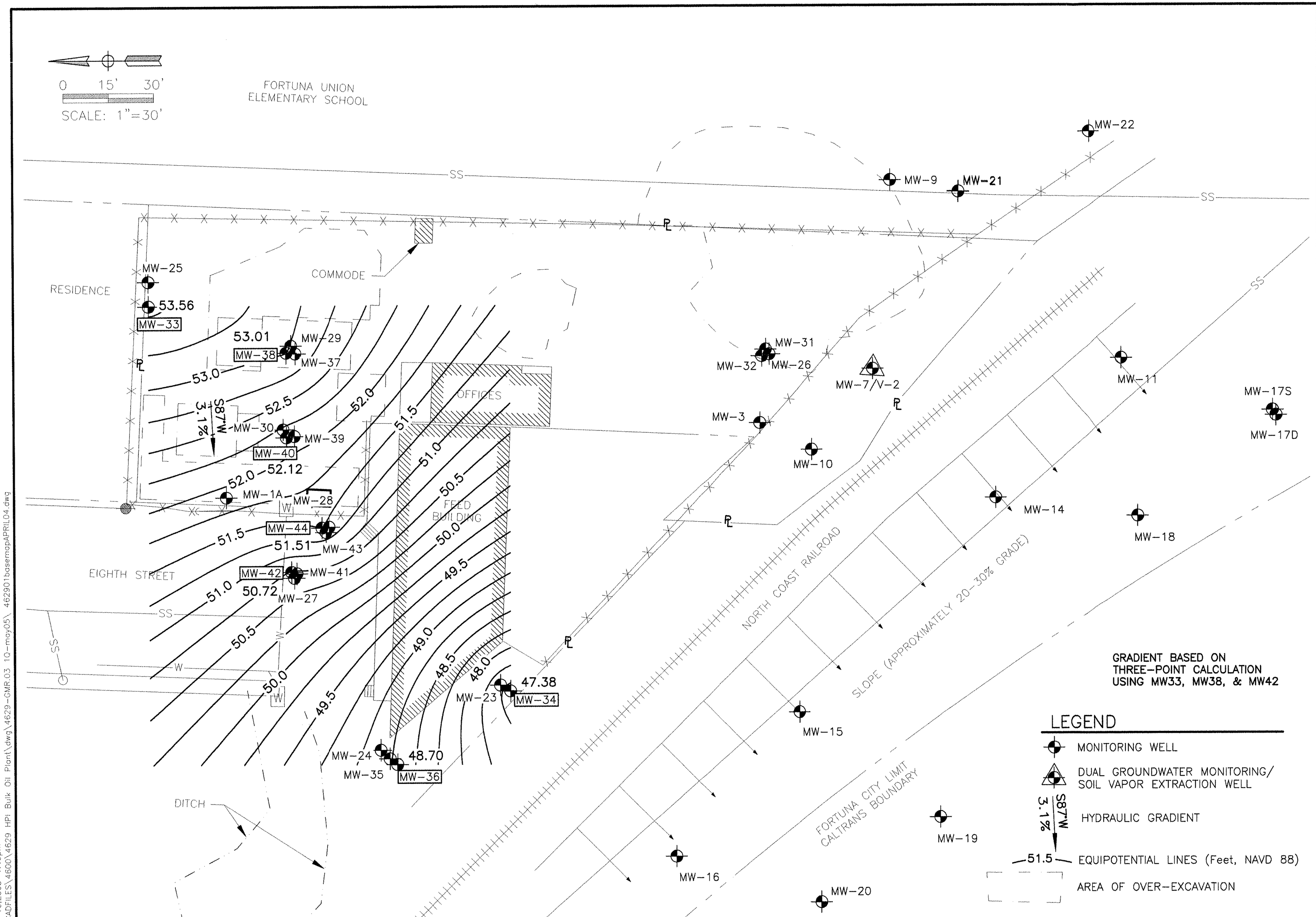
NO.	REVISION	BY	CHK	DATE

GROUNDWATER MONITORING REPORT - UST AREA
HYDRAULIC GRADIENT MAP IN UNIT 1 (4/27/05)

HUMBOLDT PETROLEUM, INC
FORMER BULK PLANT, FORTUNA, CA

SCALE	1"=30'
DRAWN	RJM
CHECK	TBB
APPVD	
DATE	5/16/05
JOB NO.	4629.03
FIGURE	3

May 16,2005-2:11pm
T:\CADFILES\4600\4629 HPI Bulk Oil Plant\dwg\4629-GMR.03 10-may05\ 4629011basemapAPRIL04.dwg



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

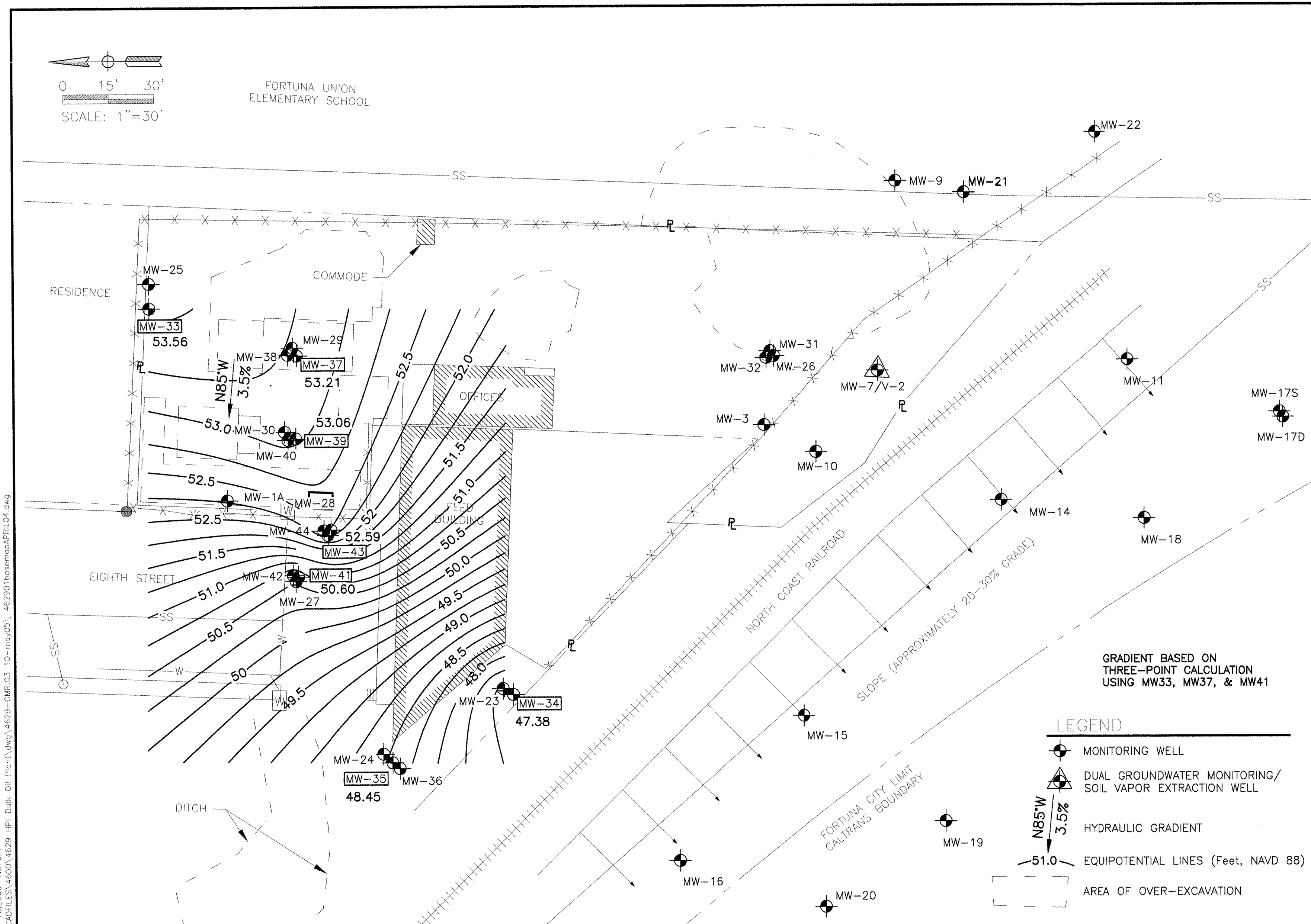
NO.	REVISION	BY	CHK	DATE

GROUNDWATER MONITORING REPORT - UST AREA
HYDRAULIC GRADIENT MAP IN UNIT 2 (4/27/05)

HUMBOLDT PETROLEUM, INC
FORMER BULK PLANT, FORTUNA, CA

SCALE	1"=30'
DRAWN	RJM
CHECK	TBB
APPVD	
DATE	5/16/05
JOB NO.	4629.03
FIGURE	4

May 16,2005-1:40pm
T:\CADFILES\4600\4629 HPI Bulk Oil Plant\dwg\4629-GMR.03 10-may05\ 462901basemapAPRIL04.dwg



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

NO.	REVISION	BY	CHK	DATE

GROUNDWATER MONITORING REPORT - UST AREA
HYDRAULIC GRADIENT MAP IN UNIT 3 (4/27/05)

HUMBOLDT PETROLEUM, INC
FORMER BULK PLANT, FORTUNA, CA

SCALE	1"=30'
DRAWN	RJM
CHECK	TBB
APPVD	
DATE	5/13/05
JOB NO.	4629.03
FIGURE	5

May 16,2005-1:37pm
T:\CADFILES\4600\4629 HPI Bulk Oil Plant\dwg\4629-GMR.03 10-may05\ 462901basemapAPRIL04.dwg

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-1	50.87													
10/7/1993		46.27	4.60	4,500	560 [5, 7]	ND <500	---	2,000	110	ND	195	---	---	---
11/11/1993		43.55	7.32	---	---	---	---	---	---	---	---	---	---	---
12/29/1993		48.20	2.67	---	---	---	---	---	---	---	---	---	---	---
1/24/1994		49.75	1.12	16,000	1,300	ND <500	---	5,300	270	120	490	---	---	---
2/24/1994		50.19	0.68	---	---	---	---	---	---	---	---	---	---	---
3/28/1994		49.34	1.53	---	---	---	---	---	---	---	---	---	---	---
4/25/1994		49.36	1.51	14,000	5,500	---	ND	5,500	64	ND	150	---	---	---
5/12/1994		48.84	2.03	---	---	---	---	---	---	---	---	---	---	---
6/3/1994		48.13	2.74	---	---	---	---	---	---	---	---	---	---	---
7/19/1994		45.78	5.09	0.02	feet free product									---
9/21/1994		43.07	7.80	---	---	---	---	---	---	---	---	---	---	---
10/25/1994		42.05	8.82	---	---	---	---	---	---	---	---	---	---	---
11/16/1994		47.71	3.16	---	---	---	---	---	---	---	---	---	---	---
12/8/1994		48.63	2.24	---	---	---	---	---	---	---	---	---	---	---
1/9/1995		50.07	0.80	15,000	390,000	---	310	3,100	180	330	800	---	---	5.0
2/7/1995		50.59	0.28	---	---	---	---	---	---	---	---	---	---	---
3/7/1995		49.75	1.12	---	---	---	---	---	---	---	---	---	---	---
4/5/1995		49.48	1.39	11,000	21,000	---	19	4,900	140	200	380	---	---	4.0
4/5/95 (D)		duplicate sample		13,000	24,000	---	18	4,300	120	160	380	---	---	---
6/23/1995		48.41	2.46	---	---	---	---	---	---	---	---	---	---	---
7/5/1995		47.39	3.48	17,000	23,000	---	8.1	6,800	510	190	610	---	---	3.0
8/3/1995		46.55	4.32	---	---	---	---	---	---	---	---	---	---	---
9/6/1995		46.06	4.81	---	---	---	---	---	---	---	---	---	---	---
10/9/1995		46.36	4.51	5,800	8,100	---	ND	2,100	48	100	150	---	---	1.5
11/16/1995		46.89	3.98	---	---	---	---	---	---	---	---	---	---	---
1/16/1996		49.90	0.97	20,000	25,000	---	23	7,100	400	380	940	---	---	2.0
4/23/1996		50.17	0.70	17,000	23,000	---	11	6,600	280	300	730	---	---	3.0
4/23/96 (D)		duplicate sample		19,000	17,000	---	3.1	6,100	250	290	590	---	---	---
7/10/1996		48.17	2.70	11,000	13,000	---	ND	4,700	160	290	510	---	---	3.0
10/22/1996		46.59	4.28	12,000	8,800	---	1.8	3,800	110	160	280	---	---	3.0
1/21/1997		50.17	0.70	15,000	9,100	---	4.7	4,800	180	220	550	ND	---	4.0
4/15/1997		49.17	1.70	11,000	5,400	---	7.3	3,900	130	210	470	ND	---	3.0
4/15/97 (D)		duplicate sample		10,000	5,300	---	---	3,700	140	210	490	260	---	---
5/20/1997		48.82	2.05	---	---	---	---	---	---	---	---	---	---	---
7/29/1997		46.92	3.95	11,000	21,000	---	---	3,300	68	150	220	ND	---	3.0
10/15/1997		47.12	3.75	13,000	11,000 [8]	---	1.8	5,500	140	120	380	250	---	4.0
1/20/1998		50.67	0.20	2,600	5,300 [6]	---	ND	880	24	30	78	ND	---	3.0
1/20/98 (D)		50.87		2,700	1,900	---	---	780	ND	ND	69	ND	---	---
4/15/1998		50.07	0.80	12,000	8,000	---	50.0	3,400	93	210	380	ND	---	3.8
7/28/1998		46.67	4.20	7,300	5,500 [6]	---	5.7	1,700	53	120	190	ND <2.5	---	2.6
1/26/2000		50.04	0.83	14,000	10,000	1,900	---	3,300	100	70	252	---	---	---
					6,300 w/silica gel cleanup	*700 w/silica gel cleanup*								

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-1 Continued														
5/3/2000		49.60	1.27	**3,700**	**3,200**	**190**	---	**1,100**	**62**	**110**	**169**	ND<100	---	---
8/3/2000		45.62	5.25	**11,000**	**7,600**	**340**	---	**2,700**	**79**	**72**	**158**	ND<150		1.7
10/11/2000		44.39	6.48	**9,900**	**6,200**	**360**	---	**3,400**	**61**	**69**	**178**	ND<10	---	---
11/14/2000		well destroyed												
MW-1A	51.08													
2/1/2001		well reinstalled												
2/14/2001		46.54	4.33	**500**	**210**	ND<170	---	**77**	**3.1**	**1.3**	**5.0**	ND<1.0	ND<2.5-50	---
4/12/2001		49.30	1.78	**900**	***200 w/ sgc***	ND< 170	---	**110**	**4.3**	**3.9**	**5.1**	ND<1.0	ND<1-50	1
7/10/2001		46.19	4.89	**1,400**	**680**	ND<170	---	**41**	**4.0**	**5.1**	**3.5**	ND<1.0	ND<1-20	0.5
11/1/2001		45.70	5.38	**200**	ND<50	ND<170	---	**15**	**0.71**	**0.64**	**1.2**	ND<1.0	ND<1-20	---
12/10/2001		50.56	0.52	**88**	**53**	ND<170	---	**8.7**	ND<0.50	ND<0.50	**0.73**	ND<1.0	**COD - 63,000**	0.4
3/28/2002		49.63	1.45	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	1.0
6/27/2002		47.26	3.82	**65**	ND<50	ND<170	---	**1.8**	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-20	0.4
9/11/2002		44.17	6.91	**190**	ND<50	ND<170	---	**17**	ND<0.50	**0.52**	**0.68**	ND<1.0	ND<1-20	---
1/31/2003		48.26	2.82	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-20	4.4
3/26/2003		50.86	0.22	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-20	2.84
6/19/2003		48.00	3.08	ND<50	ND<50	ND<170	---	**11**	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-20	0.94
9/24/2003		44.47	6.61	**150**	ND<50	ND<170	---	**0.71**	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-20	0.00
12/18/2003		50.28	0.80	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-20	0.62
3/23/2004		49.24	1.84	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	0.20
6/29/2004		46.96	4.12	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	0.56
9/23/2004		43.23	7.85	**310**	ND<50	---	---	**28**	ND<2.0	ND<0.50	**0.51**	ND<15	---	0.27
12/14/2004		49.58	1.50	**250**	ND<50	---	---	**12**	ND<1.0	ND<0.50	ND<0.50	ND<13	**Iron = 690**	---
4/27/2005		49.41	1.67	**170**	ND<50	---	---	**3.2**	ND<1.5	ND<0.50	ND<0.50	ND<3.0	---	0.38
MW-2	51.86													
10/7/1993		42.20	9.66	**11,000**	**870** [6,7]	ND <500	---	**4,200**	**55**	ND <10	**19**	---	Tannin/Lignin = 20	---
11/11/1993		42.58	9.28	---	---	---	---	---	---	---	---	---	---	---
12/29/1993		46.65	5.21	---	---	---	---	---	---	---	---	---	---	---
1/24/1994		51.65	0.21	**12,000**	**1,500**	ND <500	---	**3,800**	**68**	**82**	**243**	---	---	---
2/24/1994		51.31	0.55	---	---	---	---	---	---	---	---	---	---	---
3/28/1994		50.03	1.83	---	---	---	---	---	---	---	---	---	---	---
4/25/1994		50.50	1.36	**22,000**	**6,500**	---	ND	**6,800**	**99**	**210**	**420**	---	Tannin/Lignin = 74	---
5/12/1994		47.82	4.04	---	---	---	---	---	---	---	---	---	---	---
6/3/1994		46.78	5.08	---	---	---	---	---	---	---	---	---	---	---
7/19/1994		44.68	7.18	**16,000**	**8,600**	---	3,500	**4,400**	**120**	**160**	**300**	---	Tannin/Lignin: ND	3.2
9/21/1994		42.26	9.60	---	---	---	---	---	---	---	---	---	---	---
10/25/1994		40.99	10.87	**17,000**	**3,400**	---	ND	**6,400**	ND	**120**	**190**	---	Tannin/Lignin = 83	2.0
11/16/1994		45.85	6.01	---	---	---	---	---	---	---	---	---	---	---
12/8/1994		48.17	3.69	---	---	---	---	---	---	---	---	---	---	---
1/9/1995		51.81	0.05	**13,000**	**7,500**	---	ND	**3,200**	**75**	**160**	**890**	---	Tannin/Lignin = 55	3.0
2/7/1995		50.77	1.09	---	---	---	---	---	---	---	---	---	---	---
3/7/1995		50.35	1.51	---	---	---	---	---	---	---	---	---	---	---
4/5/1995		49.96	1.90	**20,000**	**8,800**	---	ND	**5,900**	**150**	**450**	**2,000**	---	Tannin/Lignin = 77	5.0

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-2 continued														
6/23/1995		46.93	4.93	---	---	---	---	---	---	---	---	---	---	---
7/5/1995		45.91	5.95	19,000	11,000	---	ND	6,400	140	330	1,100	---	Tannin/Lignin = 120	3.5
8/3/1995		44.79	7.07	---	---	---	---	---	---	---	---	---	---	---
9/6/1995		43.83	8.03	---	---	---	---	---	---	---	---	---	---	---
10/9/1995		42.99	8.87	14,000	8,800	---	ND	7,000	140	230	470	---	Tannin/Lignin = 83	2.0
11/16/1995		42.41	9.45	---	---	---	---	---	---	---	---	---	---	---
1/16/1996		51.59	0.27	10,000	11,000	---	1.5	3,100	74	110	490	---	Tannin/Lignin = 57	3.0
4/23/1996		50.59	1.27	13,000	14,000	---	2.3	3,700	85	190	920	---	Tannin/Lignin = 74	4.0
7/10/1996		46.26	5.60	15,000	13,000	---	ND	4,600	160	220	760	---	Tannin/Lignin = 86	4.0
10/22/1996		43.31	8.55	7,100	8,500	---	2.8	3,300	77	96	180	340	Tannin/Lignin = 220	3.0
1/21/1997		50.41	1.45	12,000	9,700	---	4.6	2,500	60	110	660	ND	Tannin/Lignin = 43	3.0
1/21/97 (D)		duplicate sample		11,000	10,000	---	---	2,400	58	100	650	ND		---
4/15/1997		47.31	4.55	9,500	7,300	---	3.6	2,600	60	110	470	160	Tannin/Lignin = 47	3.0
5/20/1997		46.91	4.95	---	---	---	---	---	---	---	---	---	---	---
7/29/1997		44.76	7.10	14,000	8,600	---	---	5,100	110	140	280	ND	---	3.0
7/29/97 (D)		duplicate sample		14,000	8,400	---	---	4,800	120	130	250	ND	---	---
10/15/1997		44.86	7.00	19,000	8,700 [8]	---	1.3	4,500	130	120	170	ND <250	---	3.0
10/15/97 (D)		duplicate sample		16,000	6,300 [8]	---	---	4,200	120	100	150	ND <250	---	---
1/20/1998		51.61	0.25	7,900	8,100	---	ND	1,700	40	72	200	ND	---	2.0
4/15/1998		51.03	0.83	9,900	8,500	---	65	2,300	50	100	280	ND	Tannin/Lignin = 42	2.2
7/28/1998		45.33	6.53	9,700	5,300	---	ND <5.0	2,400	81	140	400	ND <25	Tannin/Lignin = 34	2.4
7/28/98 (D)		duplicate sample		9,300	4,500	---	---	2,400	80	140	390	31	---	---
1/26/2000		50.83	1.03	7,900	2,400	ND <500	---	3,300	70	93	84	ND<10		---
5/3/2000		48.64	3.22	5,800	55	ND<170	---	1,600	ND<80	120	214	ND<30	---	---
8/3/2000		44.74	7.12	10,000	92	ND<170	---	3,200	69	90	108	ND<200	---	0.8
10/11/2000		42.37	9.49	11,000	ND<50	ND<170	---	4,900	97	100	76	ND<20	---	0.6
1/4/2001		46.09	5.77	3,000	280	ND<170	---	670	20	37	34.6	ND<2.0	---	---
4/12/2001		49.59	2.27	1,100	*65 w/ silica gel cleanup*	*ND<170*	---	230	2.4	14	7.7	ND<2.0	---	0.8
7/10/2001		44.86	7.00	5,600	3,100	270	---	1,700	23	39	29	ND<10	ND<10-200	0.3
11/1/2001		40.81	11.05	10,000	360	ND<170	---	3,900	53	41	37.3	ND<5.0	ND<5-100	---
12/10/2001		47.36	4.50	10,000	140	ND<170	---	4,600	77	53	41.5	ND<1.0	**COD - 380,000**	2.8
3/28/2002		48.49	3.37	6,200	270	ND<170	---	1,900	34	34	37	ND<50	ND<50-1000	1.0
6/27/2002		44.83	7.03	5,800	310	ND<170	---	3,800	56	34	ND<25	ND<50	ND<50-1000	0.5
9/11/2002		45.78	6.08	7,700	160	ND<170	---	2,600	50	39	25	ND<50	ND<50-1000	---
12/4/2002		well destroyed												
MW-3	50.87													
10/7/1993		40.28	10.59	340	230 [5]	ND <500	---	140	3.0	1.3	2.8	---	---	---
11/11/1993		39.48	11.39	---	---	---	---	---	---	---	---	---	---	---
12/29/1993		43.91	6.96	---	---	---	---	---	---	---	---	---	---	---
1/24/1994		49.57	1.30	690	170	ND <500	---	150	5.4	2.6	4.2	---	---	---
2/24/1994		47.11	3.76	---	---	---	---	---	---	---	---	---	---	---
3/28/1994		45.63	5.24	---	---	---	---	---	---	---	---	---	---	---

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-3 continued														
4/25/1994		46.27	4.60	860	1,100	---	ND	190	ND	ND	ND	---	---	---
5/12/1994		44.45	6.42	---	---	---	---	---	---	---	---	---	---	---
6/3/1994		43.85	7.02	---	---	---	---	---	---	---	---	---	---	---
7/19/1994		41.95	8.92	980	2,200	---	ND	240	10	4.7	11	---	---	4.0
9/21/1994		39.38	11.49	---	---	---	---	---	---	---	---	---	---	---
10/25/1994		38.40	12.47	530	1,200	---	ND	170	ND	ND	ND	---	---	3.0
11/16/1994		39.47	11.40	---	---	---	---	---	---	---	---	---	---	---
12/8/1994		44.48	6.39	---	---	---	---	---	---	---	---	---	---	---
1/9/1995		50.83	0.04	510	1,100	---	ND	110	2.0	1.6	2.3	---	---	5.0
2/7/1995		46.51	4.36	---	---	---	---	---	---	---	---	---	---	---
3/7/1995		46.11	4.76	---	---	---	---	---	---	---	---	---	---	---
4/5/1995		45.76	5.11	480	1,500	---	ND	130	3.1	ND	2.7	---	---	3.0
6/23/1995		43.92	6.95	---	---	---	---	---	---	---	---	---	---	---
7/5/1995		43.38	7.49	560	1,700	---	ND	130	4.6	1.6	2.1	---	---	3.0
8/3/1995		42.40	8.47	---	---	---	---	---	---	---	---	---	---	---
9/6/1995		41.19	9.68	---	---	---	---	---	---	---	---	---	---	2.5
10/9/1995		40.46	10.41	570	2,300	---	ND	210	3.8	ND	4.6	---	---	---
11/16/1995		39.82	11.05	---	---	---	---	---	---	---	---	---	---	---
1/16/1996		48.44	2.43	680	2,200	---	1.4	200	3.8	ND	3.1	---	---	4.0
4/23/1996		46.17	4.70	520	2,300	---	ND	160	2.2	ND	2.2	---	---	4.0
7/10/1996		44.12	6.75	680	2,100	---	ND	240	5.4	ND	5.9	---	---	4.0
10/22/1996		42.17	8.70	550	2,600	---	ND	210	2.2	ND	3.9	27	---	4.0
1/21/1997		45.47	5.40	370	1,400	---	ND	87	1.2	ND	1.1	7.7	---	3.0
4/15/1997		44.12	6.75	820	1,800	---	ND	170	3.3	2.5	4.2	32	---	4.0
7/29/1997		43.27	7.60	790	2,300	---	---	230	ND	ND	ND	ND	---	4.0
10/15/1997		43.62	7.25	210	2,100 [8]	---	ND <1.2	49	0.60	ND <0.50	0.57	4.9	---	3.0
1/20/1998		49.59	1.28	370	1,100	---	ND	67	ND	ND	0.80	15	---	3.0
4/15/1998		46.37	4.50	1,600	2,600	---	17	310	ND	ND	ND	ND	---	2.6
7/28/1998		42.72	8.15	960	2,900	---	ND <5.0	230	6.2	3.8	4.2	6.7	---	2.0
1/26/2000		46.87	4.00	1,400	370	ND <500	---	270	7.5	2.2	3.9	ND<8.0	---	---
5/3/2000		44.88	5.99	640	ND<50	ND<170	---	200	ND<10	2.5	1.7	ND<10	---	---
8/3/2000		42.07	8.80	1,000	ND<50	ND<170	---	210	8.5	2.8	3.0	ND<30	---	0.7
10/11/2000		39.62	11.25	5,800	ND<50	ND<170	---	500	39	47	22.2	ND<20	---	0.8
1/4/2001		43.01	7.86	1,800	94	ND<170	---	580	9.1	3.3	4.0	ND<2	---	---
4/12/2001		45.38	5.49	ND<100	*ND<50 w/ silica gel*	ND<170	---	10	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	0.9
7/10/2001		41.70	9.17	2,300	94	ND<170	---	610	12	4.3	8.14	ND<1.0	**TBA - 20** **DIPE-1.8**	1.0
11/1/2001		Well is buried		---	---	---	---	---	---	---	---	---	---	---
12/10/2001		46.15	4.72	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-20	5.1
3/28/2002		45.80	5.07	82	62	ND<170	---	11	ND<0.50	ND<0.50	0.61	ND<1.0	ND<1-20	---
6/27/2002		Well inaccessible		---	---	---	---	---	---	---	---	---	---	---
3/25/2003		---	---	---	---	---	---	---	---	---	---	---	---	
9/23/2003		40.90	9.97	1,000	65	ND<170	---	200	3.9	1.2	2.0	ND<1.0	ND<1-20	0.63
3/23/2004		44.55	6.32	710	ND<50	ND<170	---	130	2.1	0.71	1.2	ND<1.0	ND<1-10	0.65

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-3 Continued														
9/22/2004		39.64	11.23	**2,100**	**110**	ND<170	---	**480**	**16**	**3.9**	**6.9**	ND<20	---	0.52
3/30/2005		48.64	2.23	**180**	ND<50	ND<170	---	**38**	**1.2**	ND<0.50	**0.59**	ND<3.0	---	0.51
4/26/2005		44.58	6.29	**1,400**	**71**	---	---	**270**	**11**	**2.7**	**4.5**	ND<20	---	0.42
MW-4	52.62													
6/3/1994		48.79	3.83	---	---	---	---	---	---	---	---	---	---	---
7/19/1994		47.27	5.35	ND	ND	---	**2,800**	ND	ND	ND	ND	---	Tannin/Lignin = ND	3.0
9/21/1994		44.29	8.33	---	---	---	---	---	---	---	---	---	---	---
10/25/1994		42.99	9.63	ND	ND	---	ND	ND	ND	ND	ND	---	---	7.0
11/16/1994		47.75	4.87	---	---	---	---	---	---	---	---	---	---	---
12/8/1994		49.87	2.75	---	---	---	---	---	---	---	---	---	---	---
1/9/1995		52.62	0.00	ND	**300**	---	ND	ND	ND	ND	ND	---	---	6.0
2/7/1995		51.76	0.86	---	---	---	---	---	---	---	---	---	---	---
3/7/1995		51.43	1.19	---	---	---	---	---	---	---	---	---	---	---
4/5/1995		51.07	1.55	ND	**86**	---	ND	ND	ND	ND	ND	---	---	4.0
6/23/1995		49.47	3.15	---	---	---	---	---	---	---	---	---	---	---
7/5/1995		48.87	3.75	ND	**130**	---	ND	ND	ND	ND	ND	---	---	2.5
8/3/1995		47.69	4.93	---	---	---	---	---	---	---	---	---	---	---
9/6/1995		46.42	6.20	---	---	---	---	---	---	---	---	---	---	---
10/9/1995		46.21	6.41	ND	**69**	---	ND	ND	ND	ND	ND	---	---	2.5
1/16/1996		51.75	0.87	ND	**95**	---	**1.1**	ND	ND	ND	ND	---	---	4.5
4/23/1996		51.42	1.20	ND	**59**	---	ND	ND	ND	ND	ND	---	---	4.0
7/10/1996		48.37	4.25	ND	**53**	---	ND	ND	ND	ND	ND	---	---	4.0
10/22/1996		46.10	6.52	ND	**86**	---	ND	ND	ND	ND	ND	ND	---	4.0
1/21/1997		51.37	1.25	ND	**81**	---	ND	ND	ND	ND	ND	ND	---	3.0
4/15/1997		49.62	3.00	ND	ND	---	ND	ND	ND	ND	ND	ND	---	3.0
5/20/1997		49.10	3.52	---	---	---	---	---	---	---	---	---	---	---
7/29/1997		46.97	5.65	ND	**210**	---	---	ND	ND	ND	ND	ND	---	3.0
10/15/1997		46.67	5.95	ND <50	ND <50	---	ND <1.3	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <2.5	---	2.0
1/20/1998		49.97	2.65	ND	**140**	---	ND	ND	ND	ND	ND	ND	---	2.0
4/15/1998		51.27	1.35	ND	ND	---	**1.0**	ND	ND	ND	ND	ND	---	2.4
7/28/1998		47.72	4.90	ND <50	**75**	---	ND <5.0	ND <0.50	**1.1**	ND <0.50	ND <0.50	ND <2.5	---	3.2
1/26/2000		51.85	0.77	ND<50	ND<50	ND<500	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**37**	---	---
5/3/2000		51.13	1.49	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
8/3/2000		48.33	4.29	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	1.2
8/3/2000		duplicate sample		ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
10/11/2000		45.65	6.97	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	---	0.8
1/4/2001		49.91	2.71	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	---	---
4/12/2001		50.81	1.81	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	---	1.2
7/10/2001		47.20	5.42	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.50-20	0.4
11/1/2001		45.55	7.07	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.50-20	---
12/10/2001		51.56	1.06	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	**COD - 7700**	0.6
3/28/2002		51.06	1.56	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<1-20	1.0
6/27/2002		47.96	4.66	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<1-20	0.8
9/11/2002		45.22	7.40	ND<50	ND<50	ND<170	---	**1.6**	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<1-20	---
12/4/2002		Well destroyed												

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-5	52.40													
6/3/1994		47.96	4.44	---	---	---	---	---	---	---	---	---	---	---
7/19/1994		46.57	5.83	ND	**400**	---	ND	ND	ND	ND	ND	---	---	4.0
9/21/1994		43.70	8.70	---	---	---	---	---	---	---	---	---	---	---
10/25/1994		42.40	10.00	ND	**78**	---	ND	ND	ND	ND	ND	---	---	1.0
11/16/1994		47.42	4.98	---	---	---	---	---	---	---	---	---	---	---
12/8/1994		48.75	3.65	---	---	---	---	---	---	---	---	---	---	---
1/9/1995		51.32	1.08	ND	**330**	---	ND	**1.8**	ND	ND	**2.2**	---	---	5.0
2/7/1995		50.54	1.86	---	---	---	---	---	---	---	---	---	---	---
3/7/1995		50.02	2.38	---	---	---	---	---	---	---	---	---	---	---
4/5/1995		49.84	2.56	**53**	**380**	---	ND	**2.4**	**0.53**	**0.53**	**3.0**	---	---	3.0
6/23/1995		48.33	4.07	---	---	---	---	---	---	---	---	---	---	---
7/5/1995		47.59	4.81	ND	**400**	---	ND	ND	ND	ND	ND	---	---	4.0
7/5/95 (D)		duplicate sample		ND	**370**	---	ND	ND	ND	ND	ND	---	---	---
8/3/1995		46.50	5.90	---	---	---	---	---	---	---	---	---	---	---
9/6/1995		45.56	6.84	---	---	---	---	---	---	---	---	---	---	---
10/9/1995		45.08	7.32	ND	**50**	---	ND	ND	ND	ND	ND	---	---	6.0
11/16/1995		44.77	7.63	---	---	---	---	---	---	---	---	---	---	---
1/16/1996		51.30	1.10	ND	**560**	---	**1.4**	**4.2**	**0.78**	**0.58**	**2.9**	---	---	3.0
4/23/1996		50.30	2.10	ND	**590**	---	ND	**2.3**	ND	ND	**1.1**	---	---	4.0
7/10/1996		47.65	4.75	ND	**380**	---	ND	ND	ND	ND	ND	---	---	3.0
7/10/1996		duplicate sample		ND	**380**	---	ND	**0.52**	ND	ND	ND	---	---	---
10/22/1996		45.50	6.90	ND	**320**	---	ND	ND	ND	ND	ND	ND	---	3.0
1/21/1997		50.05	2.35	75	**630**	---	ND	**0.90**	ND	ND	**0.82**	**3.2**	---	3.0
4/15/1997		48.40	4.00	ND	**330**	---	ND	**0.69**	ND	ND	ND	ND	---	3.0
5/20/1997		48.72	3.68	---	---	---	---	---	---	---	---	---	---	---
7/29/1997		46.70	5.70	ND	**450**	---	---	ND	ND	ND	ND	ND	---	3.0
10/15/1997		46.05	6.35	ND <50	**450** [8]	---	ND <1.1	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <2.5	---	3.0
1/20/1998		50.25	2.15	ND	**430**	---	ND	ND	ND	ND	ND	ND	---	3.0
4/15/1998		50.35	2.05	ND	**550**	---	**6.4**	**0.5**	ND	ND	ND	ND	---	2.8
7/28/1998		46.90	5.50	ND <50	**220**	---	ND <5.0	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <2.5	---	2.6
1/26/2000		Well not found		---	---	---	---	---	---	---	---	---	---	---
5/3/2000		Well not found		---	---	---	---	---	---	---	---	---	---	---
8/3/2000		Well not found		---	---	---	---	---	---	---	---	---	---	---
10/11/2000		Well not found		---	---	---	---	---	---	---	---	---	---	---
1/4/2001		Well not found		---	---	---	---	---	---	---	---	---	---	---
4/12/2001		49.65	2.75	ND <50	ND<50	ND<170	ND <5.0	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <2.5	---	0.7
7/10/2001		46.32	6.08	ND <50	ND<50	ND<170	ND <5.0	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <1.0	ND<0.50-20	0.4
11/1/2001		43.95	8.45	ND <50	ND<50	ND<170	ND <5.0	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <1.0	ND<0.50-20	---
12/10/2001		50.40	2.00	ND <50	ND<50	ND<170	ND <5.0	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <1.0	ND<0.50-20	1.4
3/28/2002		50.21	2.19	ND <50	ND<50	ND<170	ND <5.0	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <1.0	ND<0.50-20	0.9
6/27/2002		48.30	4.10	ND <50	ND<50	ND<170	ND <5.0	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <1.0	ND<0.50-20	0.35
9/11/2002		Well not found	---	---	---	---	---	---	---	---	---	---	---	---
12/4/2002		Well destroyed												

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-6	50.63													
6/3/1994		46.32	4.31	---	---	---	---	---	---	---	---	---	---	---
7/19/1994		44.63	6.00	ND	ND	---	ND	ND	ND	ND	ND	---	---	2.0
9/21/1994		42.17	8.46	---	---	---	---	---	---	---	---	---	---	---
10/25/1994		41.30	9.33	ND	ND	---	ND	ND	ND	ND	ND	---	---	2.0
11/16/1994		48.24	2.39	---	---	---	---	---	---	---	---	---	---	---
12/8/1994		48.75	1.88	---	---	---	---	---	---	---	---	---	---	---
1/9/1995		49.62	1.01	ND	**150**	---	ND	ND	ND	ND	ND	---	---	3.0
2/7/1995		49.01	1.62	---	---	---	---	---	---	---	---	---	---	---
3/7/1995		48.28	2.35	---	---	---	---	---	---	---	---	---	---	---
4/5/1995		48.20	2.43	ND	**87**	---	ND	**0.81**	ND	ND	ND	---	---	2.0
6/23/1995		47.46	3.17	---	---	---	---	---	---	---	---	---	---	---
7/5/1995		46.65	3.98	ND	**120**	---	ND	ND	ND	ND	ND	---	---	3.5
8/3/1995		46.03	4.60	---	---	---	---	---	---	---	---	---	---	---
9/6/1995		46.13	4.50	---	---	---	---	---	---	---	---	---	---	---
10/9/1995		47.14	3.49	ND	**150**	---	ND	ND	ND	ND	ND	---	---	1.5
11/16/1995		48.11	2.52	---	---	---	---	---	---	---	---	---	---	---
1/16/1996		49.70	0.93	ND	**200**	---	**1.3**	ND	ND	ND	ND	---	---	2.0
4/23/1996		49.38	1.25	ND	**140**	---	ND	ND	ND	ND	ND	---	---	3.0
7/10/1996		47.78	2.85	ND	**120**	---	ND	ND	ND	ND	ND	---	---	3.0
10/22/1996		47.40	3.23	ND	**120**	---	ND	ND	ND	ND	ND	---	---	3.0
10/22/96 (D)		duplicate sample		ND	**140**	---	ND	ND	ND	ND	ND	ND	---	---
1/21/1997		50.08	0.55	ND	**120**	---	ND	ND	ND	ND	ND	**3.7**	---	3.0
4/15/1997		48.88	1.75	ND	ND	---	ND	ND	ND	ND	ND	ND	---	3.0
5/20/1997		47.96	2.67	---	---	---	---	---	---	---	---	---	---	---
7/29/1997		47.13	3.50	ND	**99**	---	---	ND	ND	ND	ND	ND	---	3.0
10/15/1997		47.53	3.10	ND <50	**86** [8]	---	ND <1.0	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <2.5	---	3.0
1/20/1998		49.38	1.25	ND	**52** [8]	---	ND	ND	ND	ND	ND	ND	---	2.0
4/15/1998		49.28	1.35	ND	ND	---	**2.8**	ND	ND	ND	ND	ND	---	2.6
7/28/1998		47.15	3.48	ND <50	**74** [8]	---	ND <5.0	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <2.5	---	2.4
1/26/2000		49.23	1.40	ND<50	ND<50	ND<500	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	**37**	---	---
5/3/2000		47.95	2.68	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<3.0	---	---
8/3/2000		44.50	6.13	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	**5.7**	---	0.7
10/11/2000		44.83	5.80	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	**31**	---	1.0
1/4/2001		46.56	4.07	ND<50	ND<50	ND<170	---	**5.8**	ND <0.50	ND <0.50	ND <0.50	**23**	---	---
4/12/2001		48.70	1.93	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	**10**	---	1.1
7/10/2001		44.97	5.66	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	**31**	ND<0.50-20	0.5
11/1/2001		45.14	5.49	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	**25**	ND<1-20	---
12/10/2001		49.27	1.36	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	**14**	ND<1-20	0.4
3//28/02		48.33	2.30	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	**0.51**	**32**	**TAME - 1.7**	0.9
6/27/2002		46.43	4.20	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	**14**	ND<1-20	1.1
9/11/2002		43.73	6.90	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	**15**	ND<1-20	---
12/5/2002		Well destroyed												

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-7/ V-2	51.05													
6/3/1994		42.49	8.56	---	---	---	---	---	---	---	---	---	---	---
7/19/1994		40.62	10.43	5,100	4,700	---	2,700	460	87	160	130	---	---	3.0
9/21/1994		36.83	14.22	---	---	---	---	---	---	---	---	---	---	---
10/25/1994		35.87	15.18	4,000	2,500	---	ND	430	46	95	59	---	---	1.0
11/16/1994		39.29	11.76	---	---	---	---	---	---	---	---	---	---	---
12/8/1994		43.88	7.17	---	---	---	---	---	---	---	---	---	---	---
1/9/1995		49.78	1.27	3,400	3,000	---	ND	350	66	99	73	---	---	5.0
2/7/1995		46.73	4.32	---	---	---	---	---	---	---	---	---	---	---
3/7/1995		46.41	4.64	---	---	---	---	---	---	---	---	---	---	---
4/5/1995		45.95	5.10	2,900	2,100	---	ND	340	38	61	39	---	---	4.0
6/23/1995		42.86	8.19	---	---	---	---	---	---	---	---	---	---	---
7/5/1995		42.75	8.30	3,500	2,700	---	ND	390	60	74	30	---	---	3.0
8/3/1995		41.31	9.74	---	---	---	---	---	---	---	---	---	---	---
9/6/1995		39.47	11.58	---	---	---	---	---	---	---	---	---	---	---
10/9/1995		38.01	13.04	2,500	4,300	---	ND	330	45	55	35	---	---	2.5
11/16/1995		36.76	14.29	---	---	---	---	---	---	---	---	---	---	---
1/16/1996		47.83	3.22	1,900	4,900	---	3.1	250	38	49	43	---	---	4.0
1/16/96 (D)		duplicate sample		2,100	3,300	---	---	290	46	34	47	---	---	---
4/23/1996		46.40	4.65	2,400	2,100	---	2.2	250	32	41	20	---	---	3.0
7/10/1996		43.85	7.20	3,900	3,900	---	ND	570	54	110	83	---	---	3.0
10/22/1996		38.25	12.80	3,200	4,100	---	2.2	390	54	57	43	87	---	4.0
1/21/1997		45.95	5.10	2,900	5,500	---	2.5	370	15	41	33	250	---	3.0
4/15/1997		43.50	7.55	4,200	3,000	---	2.9	340	37	50	45	ND	---	4.0
5/20/1997		43.40	7.65	---	---	---	---	---	---	---	---	---	---	---
7/29/1997		40.70	10.35	3,800	4,200	---	---	450	41	67	54	ND	---	4.0
10/15/1997		39.00	12.05	3,900	7,300 [a]	---	1.8	350	55	58	35	120	---	4.0
1/20/1998		49.90	1.15	2,000	2,300	---	1.1	140	23	ND	17	64	---	3.0
4/15/1998		46.60	4.45	6,300	3,600	---	30	530	34	37	63	ND	---	3.0
7/28/1998		41.40	9.65	3,100	2,600	---	ND <5.0	360	29	32	26	36	---	2.6
1/26/2000		46.69	4.36	3,700	1,000	ND<500	---	280	ND<0.50	27	19	ND<30	---	---
5/3/2000		44.66	6.39	400	89	ND<170	---	61	ND<10	ND<3.0	ND<3.0	ND<10	---	---
8/3/2000		40.27	10.78	890	ND<50	ND<170	---	120	14	9	5.3	ND<50	---	0.9
10/11/2000		37.03	14.02	390	ND<50	ND<170	---	180	ND<1.0	ND<1.0	ND<1.0	ND<1.0	---	0.8
1/4/2001		41.42	9.63	3,200	260	ND<170	---	340	24	25	18.6	ND<1.0	---	---
4/12/2001		45.41	5.64	380	*ND<50 w/ silica*	ND<170	---	39	1.4	1.4	ND<1.0	ND<1.0	---	0.5
7/10/2001		40.11	10.94	4,500	420	ND<170	---	380	33	36	32.6	ND<1.0	ND<1-20	2.0
11/1/2001		35.98	15.07	2,600	220	ND<170	---	340	26	26	21.7	ND<2.0	ND<2-40	---
12/10/2001		46.31	4.74	ND<50	ND<50	ND<170	---	2.5	ND <0.50	ND <0.50	ND <0.50	ND<1.0	COD - 76000	3.7
3/28/2002		46.40	4.65	1,000	140	ND<170	---	41	3.4	4.4	4.0	ND<1.0	ND<1-20	1.0
6/27/2002		42.89	8.16	2,700	350	ND<170	---	370	25	23	19	ND<10	ND<1-200	0.4
9/11/2002		39.70	11.35	4,100	270	ND<170	---	320	22	ND<2.5	20	ND<5.0	TBA - 120	1.4
3/27/2003		---	---	3,300	140	ND<170	---	130	16	22	19.8	ND<1.0	ND<1.0-20	
9/23/2003		40.05	11.00	1,200	74	ND<170	---	120	11	12	7.0	ND<1.0	ND<1.0-20	0.0
3/23/2004		44.96	6.09	690	ND <50	ND<170	---	26	2.4	3.0	2.7	ND<1.0	ND<1-10	0.68

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-7/ V-2 continued														
9/22/2004		37.89	13.16	**1,800**	**75**	ND<170	---	**230**	**28**	**16**	**10**	ND<70	---	0.25
4/26/2005		45.25	5.80	**500**	ND <50	---	---	**13**	**4.9**	**2.8**	**2.1**	ND<18	---	0.65
MW-8	51.13													
5/20/1997		43.70	7.43	ND	**74**	---	ND	ND	ND	ND	ND	ND	---	---
7/29/1997		41.78	9.35	ND	**150**	---	---	ND	ND	ND	ND	ND	---	2.0
10/15/1997		39.86	11.27	ND <50	**160** [8]	---	ND <1.1	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <2.5	---	3.0
1/20/1998		49.28	1.85	ND	**110**	---	ND	ND	ND	ND	ND	ND	---	2.0
4/15/1998		48.13	3.00	ND	ND	---	**4.1**	ND	ND	ND	ND	ND	---	2.2
7/28/1998		42.68	8.45	ND <50	ND <50	---	ND <5.0	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <2.5	---	2.6
1/26/2000		48.08	3.05	ND<50	ND<50	ND<500	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<3.0	---	---
5/3/2000		44.47	6.66	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<3.0	---	---
8/3/2000		41.85	9.28	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<3.0	---	1.6
10/11/2000		39.06	12.07	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<0.5	---	1.0
1/4/2001		40.89	10.24	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<0.5	---	---
4/12/2001		44.16	6.97	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<0.5	---	1
7/10/2001		42.13	9.00	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<0.5	ND<1.0-20	0.4
11/1/2001		37.89	13.24	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<0.5	ND<1.0-20	---
12/10/2001		44.01	7.12	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<0.5	ND<1.0-20	4.7
3/28/2002		46.25	4.88	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<0.5	ND<1.0-20	1.0
6/20/2002		Well Destroyed	---	---	---	---	---	---	---	---	---	---	---	---
MW-9	53.13													
5/20/1997		42.95	10.18	**1,200**	**1,700**	---	**7.6**	**400**	ND	ND	ND	ND	---	---
7/29/1997		40.93	12.20	**530**	**5,500**	---	---	**150**	ND	ND	ND	ND	---	2.0
10/15/1997		39.13	14.00	**3,200**	**13,000** [6]	---	**13**	**160**	ND <2.5	ND <2.5	ND <2.5	**18**	---	3.0
1/20/1998		49.23	3.90	**150**	**990**	---	ND	**34**	ND	ND	ND	ND	---	2.0
4/15/1998		47.18	5.95	**460**	**940**	---	**26**	**2.5**	ND	ND	ND	ND	---	2.6
7/28/1998		41.93	11.20	**240**	**1,200**	---	ND <5.0	**66**	ND <0.50	ND <0.50	ND <0.50	ND <2.5	---	2.2
1/26/2000		46.88	6.25	**1300**	**280**	ND<500	---	**470**	**2.6**	**1.9**	ND <0.50	ND<3.0	---	---
5/3/2000		43.88	9.25	**340**	ND<50	ND<170	---	**100**	**1.1**	**0.93**	ND<0.50	ND<3.0	---	---
8/3/2000		41.33	11.80	**350**	ND<50	ND<170	---	**120**	**1.1**	**1.2**	ND<1.5	ND<15	---	1.1
10/11/2000		38.85	14.28	**810**	ND<50	ND<170	---	**390**	ND <2.0	ND <2.0	ND <2.0	ND <2.0	---	0.7
1/4/2001		40.69	12.44	**950**	**230**	ND<170	---	**380**	**2.2**	ND<1.0	ND<1.0	ND<1.0	---	---
4/12/2001		42.44	10.69	**1,600**		ND< 170	---	**740**	**5.4**	**2.1**	ND<2.0	ND<1.0	---	1.7
					67 w/ silca gel cleanup									
7/10/2001		41.35	11.78	**360**	**730**	ND< 170	---	**45**	**1.2**	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	4.0
11/1/2001		37.34	15.79	**1,100**	**160**	ND< 170	---	**310**	**3.2**	**0.62**	**0.80**	ND<1.0	ND<1.0-20	
12/10/2001		43.83	9.30	**270**	ND<50	ND< 170	---	**39**	ND <0.50	ND <0.50	ND <0.50	ND<1.0	ND<1.0-20	
3/28/2002		45.59	7.54	**350**	**91**	ND< 170	---	**1.8**	ND <0.50	ND <0.50	**0.59**	ND<1.0	ND<1.0-20	1.0
6/27/2002		42.44	10.69	**130**	**62**	---	---	**8.3**	ND<1.0	ND <0.50	ND <0.50	ND<1.0	ND<1.0-20	---
9/11/2002		39.47	13.66	**690**	**110**	ND< 170	---	**2.7**	ND<1.0	ND <0.50	ND <0.50	ND<1.0	ND<1.0-20	0.7
3/27/2003		46.97	6.16	**240**	**58**	**250**	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<1.0	ND<1.0-20	3.52
9/23/2003		41.11	12.02	**330**	ND<50	ND< 170	---	**0.78**	ND <0.50	ND <0.50	ND <0.50	ND<1.0	ND<1.0-20	0.00

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-9 Continued														
3/23/2004		44.24	8.89	**130**	ND<50	ND< 170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<1.0	ND<1-10	0.28
9/22/2004		38.51	14.62	**280**	**69**	ND< 170	---	ND <3.0	ND <1.0	ND <0.50	ND <0.50	ND<3.0	---	0.71
4/26/2005		44.57	8.56	**160**	**69**	---	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<3.0	---	0.54
MW-10	51.42													
5/20/1997		43.05	8.37	ND	**910**	---	**7.6**	ND	ND	ND	ND	ND	---	---
7/29/1997		41.82	9.60	ND	**1,100**	---	---	ND	ND	ND	ND	ND	---	3.0
10/15/1997		41.72	9.70	ND <50	**860** [8]	---	ND <1.1	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <2.5	---	2.0
1/20/1998		48.17	3.25	ND	**640**	---	ND	ND	ND	ND	ND	ND	---	2.0
4/15/1998		45.17	6.25	ND	**800**	---	**5.6**	ND	ND	ND	ND	ND	---	2.4
7/28/1998		41.37	10.05	ND <50	**740**	---	ND <5.0	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <2.5	---	2.6
1/26/2000		45.67	5.75	ND<50	**69**	ND<500	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<3.0	---	---
5/3/2000		43.75	7.67	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<3.0	---	---
8/3/2000		40.14	11.28	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<3.0	---	0.8
10/11/2000		37.04	14.38	ND<500	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<2.0	---	1.4
1/4/2001		41.78	9.64	ND<500	ND<50	ND<170	---	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	---	---
4/12/2001		44.39	7.03	ND<250	ND<50	ND<170	---	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	---	1.2
7/10/2001		39.92	11.50	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<1.0	ND<1.0-20	0.5
11/1/2001		36.15	15.27	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<1.0	ND<1.0-20	---
12/10/2001		45.16	6.26	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<1.0	ND<1.0-20	4.7
3/28/2002		44.80	6.62	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<1.0	ND<1.0-20	1.1
6/27/2002		42.05	9.37	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<1.0	ND<1.0-20	0.95
9/11/2002		38.63	12.79	ND<50	ND<50	ND<170	---	**1.6**	ND <0.50	ND <0.50	ND <0.50	ND<1.0	ND<1.0-20	1.8
3/27/2003		47.16	4.26	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<1.0	ND<1.0-20	3.65
9/23/2003		39.10	12.32	**61**	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<1.0	ND<1.0-20	0.00
3/23/2004		43.85	7.57	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<1.0	ND<1-10	0.48
9/22/2004		37.62	13.80	ND<50	ND<50	ND<170	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<3.0	---	0.26
3/30/2005		47.71	3.71	---	---	---	---	---	---	---	---	---	---	---
4/26/2005		44.07	7.35	ND<50	ND<50	---	---	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND<3.0	---	0.68
MW-11	48.30													
5/20/1997		34.34	13.96	ND	---	---	---	ND	ND	ND	ND	---	---	---
7/29/1997		32.30	16.00	----- Insufficient amount of water to sample -----										
10/15/1997		32.45	15.85	----- Insufficient amount of water to sample -----										
1/20/1998		---	---	----- Well Inaccessible -----										
4/15/1998		---	---	----- Well Inaccessible -----										
5/14/1998		---	---	ND	**320**	---	---	ND	ND	ND	ND	---	---	---
7/28/1998		33.05	15.25	----- Insufficient amount of water to sample -----										
1/26/2000		37.89	10.41	ND<50	ND<50	ND<500	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
5/3/2000		35.13	13.17	ND<50	ND<50	ND<170	---	ND<0.50	**0.73**	ND<0.50	ND<0.50	ND<3.0	---	---
8/3/2000	----- Insufficient amount of water to sample -----			----- Insufficient amount of water to sample -----										
10/11/2000	----- Insufficient amount of water to sample -----			----- Insufficient amount of water to sample -----										
1/4/2001	----- Insufficient amount of water to sample -----			----- Insufficient amount of water to sample -----										
4/12/2001		34.92	13.38	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	2.1
7/10/2001	----- Insufficient amount of water to sample -----			----- Insufficient amount of water to sample -----										
11/1/2001	----- Insufficient amount of water to sample -----			----- Insufficient amount of water to sample -----										
12/10/2001		35.45	12.85	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	5.4
3/28/2002		37.06	11.24	ND<50	ND<50	**210**	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	1.69

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-11 Continued														
6/27/2002	----- Insufficient amount of water to sample -----					----- Insufficient amount of water to sample -----								
9/11/2002	----- Insufficient amount of water to sample -----					----- Insufficient amount of water to sample -----								
3/27/2003		40.69	7.61	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	3.7
9/23/2003	----- Insufficient amount of water to sample -----					----- Insufficient amount of water to sample -----								
3/23/2004		35.06	13.24	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	---
9/22/2004	----- Insufficient amount of water to sample -----					----- Insufficient amount of water to sample -----								
3/30/2005		39.58	8.72	---	---	---	---	---	---	---	---	---	---	---
4/26/2005		35.34	12.96	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
MW-12	51.11													
5/20/1997		47.67	3.44	47,000	7,000	---	7.8	12,000	1,600	1,000	2,600	ND	---	---
7/29/1997		43.76	7.35	67,000	4,500	---	---	24,000	640	1,500	1,900	ND	---	4.0
10/15/1997		46.74	4.37	24,000	2,600 [8]	---	2.1	8,300	160	560	770	ND <500	---	4.0
1/20/1998		47.66	3.45	17	4,500 [8]	---	1.4	5,200	350	730	1,500	ND	---	3.0
4/15/1998		48.91	2.20	110,000	2,900	---	36	42,000	ND	1,800	ND	ND	---	---
4/15/98 (D)		duplicate sample		110,000	2,500	---	---	36,000	2,500	1,700	3,400	ND	---	---
7/28/1998		46.16	4.95	72,000	4,900 [8]	---	ND <5.0	23,000	830	1,700	2,200	ND <2.5	---	---
1/26/2000		49.17	1.94	12,000	410	ND<500	---	3,300	60	ND<5.0	52	ND<100	---	---
5/3/2000		47.50	3.61	32,000	ND<50	ND<170	---	17,000	380	610	880	ND<300	---	---
5/3/2000		duplicate sample		31,000	---	---	---	17,000	360	560	800	ND<150	---	---
8/3/2000		44.14	6.97	60,000	ND<50	ND<170	---	44,000	390	1200	417	ND<600	---	0.8
10/11/2000		43.83	7.28	84,000	ND<50	ND<170	---	52,000	300	1,300	130	ND<100	---	0.8
1/4/2001		46.94	4.17	85,000	270	ND<170	---	45,000	180	1,000	ND<100	ND<100	---	---
4/12/2001		48.37	2.74	15,000	180 *w/ silica gel cleanup*	ND<170	---	7,100	88	350	358	ND<20	---	0.6
7/10/2001		44.61	6.50	52,000	300	ND<170	---	41,000	250	1,100	318	ND<20	ND<20-400	0.6
11/1/2001		44.87	6.24	48,000	220	ND<170	---	50,000	190	700	321	ND<50	ND<20-400	---
12/10/2001		49.51	1.60	19,000	100	ND<170	---	7,900	62	150	138	ND<5.0	**COD - 160000**	0.2
3/28/2002		48.33	2.78	20,000	180	ND<170	---	6,300	42	82	64	ND<50	ND<50-1000	0.9
6/27/2002		46.22	4.89	19,000	480	ND<170	---	10,000	140	410	504	ND<4.0	ND<1-20	0.48
9/11/2002		43.01	8.10	91,000	200	ND<170	---	45,000	190	750	184	ND<50	ND<50-1000	---
12/6/2002		Well destroyed												
MW-13	50.19													
5/20/1997		44.09	6.10	38,000	3,400	---	ND	8,900	2,600	1,200	2,000	ND	---	---
7/29/1997		45.19	5.00	37,000	3,200	---	---	7,400	1,700	1,300	1,400	ND	---	4.0
10/15/1997		43.59	6.60	27,000	2,700 [8]	---	3.8	7,600	1,300	1,300	1,000	ND <500	---	3.0
1/20/1998		46.79	3.40	25,000	2,200 [8]	---	2.3	6,000	2,400	1,200	910	ND	---	2.0
4/15/1998		44.54	5.65	26,000	2,400	---	8.6	5,200	2,500	1,100	1,400	ND	---	3.4
7/28/1998		42.59	7.60	18,000	2,200 [8]	---	ND <5.0	3,800	1,200	870	720	ND <2.5	---	3.0
1/26/2000		Well Not Found												
5/3/2000		43.95	6.24	2,800	ND<50	ND<170	---	440	210	180	234	ND<100	---	---
8/3/2000		40.31	9.88	14,000	ND<50	ND<170	---	1,800	560	770	580	ND<350	---	0.8
10/11/2000		39.69	10.50	13,000	ND<50	ND<170	---	1,900	290	760	356	14	---	1.2

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-13 Continued														
1/4/2001		42.82	7.37	**7,500**	**230**	ND<170	---	**620**	**350**	**320**	**294**	**4.7**	---	---
4/12/2001		44.50	5.69	**210**	ND<50	ND<170	---	**34**	**2.7**	**3.8**	**7.58**	ND<0.50	---	1.3
7/10/2001		40.27	9.92	**6,100**	**150**	ND<170	---	**580**	**230**	**300**	**281**	ND<10	ND<10-200	1.0
11/1/2001		40.44	9.75	**3,100**	**77**	ND<170	---	**610**	**52**	**120**	**68**	ND<20	ND<1-60	---
12/10/2001		46.61	3.58	ND<50	ND<50	ND<170	---	**0.93**	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-20	---
3/28/2002		45.46	4.73	ND<50	ND<50	ND<170	---	**2.2**	ND<0.50	**0.51**	**0.75**	**1.4**	ND<1-20	1.0
6/27/2002		41.52	8.67	**520**	ND<50	ND<170	---	**50**	**15**	**35**	**22.7**	ND<1.0	ND<1-20	0.66
9/11/2002		38.64	11.55	**2,800**	**100**	ND<170	---	**320**	**49**	**180**	**71.1**	**2.2**	ND<1-20	2.22
12/9/2002		Well destroyed												
MW-14	47.89													
1/26/2000		38.00	9.89	ND<50	ND<50	ND<500	---	**1.1**	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
5/3/2000		36.27	11.62	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
8/3/2000		33.44	14.45					----- Insufficient amount of water to sample -----						
10/11/2000		33.30	14.59					----- Insufficient amount of water to sample -----						
1/4/2001		33.55	14.34					----- Insufficient amount of water to sample -----						
4/12/2001		36.01	11.88	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	1.3
7/10/2001		33.32	14.57					----- Insufficient amount of water to sample -----						
11/1/2001	----- Insufficient amount of water to sample -----							----- Insufficient amount of water to sample -----						
12/10/2001		33.34	14.55					----- Insufficient amount of water to sample -----						
3/28/2002		39.02	8.87	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-20	1.01
6/27/2002		33.32	14.57					----- Insufficient amount of water to sample -----						
9/11/2002		33.27	14.62					----- Insufficient amount of water to sample -----						
3/27/2003		42.11	5.78	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-20	3.4
9/23/2003		33.29	14.60	---	---	---	---	---	---	---	---	---	---	---
3/23/2004		37.28	10.61	ND<50	ND<50	ND<170	---	ND<0.50	**0.68**	ND<0.50	ND<0.50	ND<1.0	ND<1-10	---
9/22/2004	----- monitoring well can not be located -----			---	---	---	---	---	---	---	---	---	---	---
3/30/2005		41.79	6.10	---	---	---	---	---	---	---	---	---	---	---
4/26/2005		37.61	10.28	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
MW-15	49.28													
1/26/2000		42.26	7.02	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
5/3/2000		39.12	10.16	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
8/3/2000		35.74	13.54	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
10/11/2000	----- Insufficient amount of water to sample -----							----- Insufficient amount of water to sample -----						
1/4/2001		35.03	14.25					----- Insufficient amount of water to sample -----						
4/12/2001		40.42	8.86	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	1.2
7/10/2001		35.58	13.70					----- Insufficient amount of water to sample -----						
11/1/2001	----- Insufficient amount of water to sample -----							----- Insufficient amount of water to sample -----						
12/10/2001		42.99	6.29	ND<50	ND<50	**270**	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	1.8
3/28/2002		41.43	7.85	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-20	1.62
6/27/2002		36.76	12.52					----- Insufficient amount of water to sample -----						3.1
9/11/2002		34.83	14.45					----- Insufficient amount of water to sample -----						
1/31/2003		---	---	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-20	4.6
3/26/2003		46.68	2.60	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-20	3.8
6/19/2003		37.88	11.40	ND<50	---	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-20	4.2
9/24/2003		35.18	14.10							----- Well not sampled -----				

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-15 Continued														
12/18/2003		42.47	6.81	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-20	na
3/23/2004		40.55	8.73	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	---
6/29/2004		35.58	13.70					----- Insufficient amount of water to sample -----						
9/23/2004		---	---					----- Insufficient amount of water to sample -----						
12/14/2004		---	---	---	---	---	---	---	---	---	---	---	---	---
4/27/2005		---	---	---	---	---	---	---	---	---	---	---	---	---
MW-16	48.88													
1/26/2000		41.51	7.37	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
5/3/2000		36.77	12.11	ND<50	ND<50	ND<170	---	**3**	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
8/3/2000		34.47	14.41					----- Insufficient amount of water to sample -----						
10/11/2000		34.43	14.45					----- Insufficient amount of water to sample -----						
1/4/2001		34.61	14.27					----- Insufficient amount of water to sample -----						
4/12/2001		38.33	10.55	ND<50	ND<50	ND<170	---	**6**	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	1.1
7/10/2001		34.39	14.49					----- Insufficient amount of water to sample -----						
11/1/2001		34.39	14.49					----- Insufficient amount of water to sample -----						
12/10/2001		41.86	7.02	ND<50	ND<50	**340**	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
3/28/2002		40.48	8.40	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-20	0.80
6/27/2002		34.33	14.55					----- Insufficient amount of water to sample -----						
9/11/2002		34.26	14.62					----- Insufficient amount of water to sample -----						
1/31/2003		42.93	5.95	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-20	2.6
3/27/2003		43.20	5.68	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-20	2.55
6/19/2003		35.73	13.15	ND<50	---	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-20	4.4
9/24/2003		34.29	14.59					----- Well not sampled -----						
12/18/2003		41.40	7.48	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-20	na
3/23/2004		38.01	10.87	**95**	ND<50	ND<170	---	**0.77**	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	---
6/29/2004		---	---					----- Insufficient amount of water to sample -----						
9/23/2004		34.38	14.50					----- Insufficient amount of water to sample -----						
12/14/2004		37.43	11.45	**93**	ND<50	---	---	**8.3**	**1.1**	**0.52**	**0.73**	ND<7.0	**Iron = 270**	---
4/27/2005		36.81	12.07	ND<50	ND<50	---	---	**1.6**	**0.66**	ND<0.50	ND<0.50	ND<3.0	---	---
MW-17S	30.92													
10/1/2001	----- Insufficient amount of water to sample -----							----- Insufficient amount of water to sample -----						
11/1/2001	----- Insufficient amount of water to sample -----							----- Insufficient amount of water to sample -----						
12/10/2001		27.84	3.08	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	4.7
3/28/2002		27.94	2.98	ND<50	ND<50	**720**	---	ND<0.50	ND<0.50	ND<0.50	**0.50**	ND<1.0	ND<1-20	2.49
6/27/2002		18.23	12.69	---	---	---		----- Insufficient amount of water to sample -----				---	---	---
9/11/2002	----- Insufficient amount of water to sample -----							----- Insufficient amount of water to sample -----						
3/27/2003		28.25	2.67	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-20	4.6
9/23/2003	----- Insufficient amount of water to sample -----							----- Insufficient amount of water to sample -----						
12/18/2003														
3/23/2004		27.18	3.74	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	---
9/22/2004	----- Insufficient amount of water to sample -----							----- Insufficient amount of water to sample -----						
4/26/2005		27.45	3.47	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-17D	30.82													
10/1/2001		14.38	16.44	ND<50	**120**	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	---
11/1/2001		14.42	16.40	ND<50	ND<50	**820**	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	---
12/10/2001		23.09	7.73	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	6.4
3/28/2002		21.79	9.03	ND<50	ND<50	**1,800**	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	2.18
6/27/2002		16.62	14.20	ND<50	ND<50	**310**	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	9.9
9/11/2002		14.45	16.37	ND<50	ND<50	**360**	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	3.46
3/27/2003		23.25	7.57	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	4.7
9/23/2003		15.32	15.50	ND<50	ND<50	**1,400**	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	1.48
3/23/2004		21.26	9.56	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	---
9/22/2004		14.85	15.97	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
3/30/2005		23.34	7.48	---	---	---	---	---	---	---	---	---	---	---
4/26/2005		22.49	8.33	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
MW-18	30.82													
10/1/2001		14.31	16.51	**110**	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	**DIPE = 270**	---
11/1/2001		12.93	17.89	**130**	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	**DIPE = 340**	---
12/10/2001		-------Standing water-------					-------Standing water-------							
3/28/2002		26.22	4.6	**140**	ND<50	**360**	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	**DIPE = 190**	0.84
6/27/2002		16.04	14.78	**110**	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	**DIPE = 200**	2.6
9/11/2002		13.57	17.25	**120**	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	**DIPE = 230**	3.41
3/27/2003		-------Standing water-------					-------Standing water-------							
9/23/2003		13.98	16.84	**140**	ND<50	**230**	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	**DIPE = 160** All others ND<1.0-20	---
3/23/2004		26.10	4.72	**66**	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	**DIPE = 99** All others ND<1.0-10	---
9/22/2004		13.64	17.18	**310**	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
3/30/2005		Well inaccessible							Well inaccessible					
4/26/2005		Well inaccessible							Well inaccessible					
MW-19	31.56													
10/1/2001		13.23	18.33	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	---
11/1/2001		13.50	18.06	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	---
12/10/2001		10.24	21.32	ND<50	ND<50	**660**	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	1.5
3/28/2002		18.07	13.49	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	2.53
6/27/2002		13.62	17.94	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	5.9
9/11/2002		13.21	18.35	ND<50	ND<50	**210**	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	2.97
1/31/2003		28.16	3.40	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	6.7
3/27/2003		29.59	1.97	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	4.71
6/19/2003		15.70	15.86	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	8.3
9/24/2003		13.59	17.97	**79**	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	---
12/18/2003		19.23	12.33	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	na
3/23/2004		17.31	14.25	**140**	ND<50	**190**	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	---
6/30/2004		13.82	17.74	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-10	---
9/23/2004		13.19	18.37	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
12/14/2004		22.33	9.23	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	**Iron = 200**	---
4/27/2005		17.71	13.85	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-20	30.69													
10/1/2001		13.46	17.23	ND<50	ND<50	**690**	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**2.7**	ND<1.0-20	---
11/1/2001		13.25	17.44	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**3.0**	ND<1.0-20	---
12/10/2001		24.72	5.97	ND<50	ND<50	**510**	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	2
3/28/2002		26.47	4.22	ND<50	ND<50	**380**	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	1.73
6/27/2002		15.41	15.28	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	2.8
9/11/2002		---	---	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**2.8**	ND<1.0-20	4.61
1/31/2003		26.19	4.50	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	3.5
3/27/2003		27.61	3.08	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	2.25
6/19/2003		17.12	13.57	ND<50	ND<50	**210**	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**4.2**	ND<1.0-20	4.1
9/24/2003		13.76	16.93	ND<50	ND<50	ND<170		ND<0.50	ND<0.50	ND<0.50	ND<0.50	**3.7**	ND<1.0-20	---
12/18/2003		25.65	5.04	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	na
3/23/2004		20.42	10.27	**320**	ND<50	**180**	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	---
6/30/2004		14.94	15.75	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**4.1**	ND<1-10	---
9/23/2004		13.15	17.54	ND<50	**180**	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**4.6**	---	---
12/14/2004		16.23	14.46	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	**Iron = 6600**	---
4/27/2005		20.73	9.96	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
MW-21	50.99													
3/28/2002		50.99	5.97	**1,200**	**190**	ND<170	---	**11**	ND<0.50	**1.0**	**0.80**	ND<1.0	ND<1-20	0.94
6/27/2002		45.02	8.79	**840**	**170**	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	2.14
9/11/2002	----- Insufficient amount of water to sample -----				---	---	---	---	---	---	---	---	---	---
3/27/2003		46.52	4.47	**230**	**91**	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	3.27
9/23/2003		41.11	9.88	**190**	**150**	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	---
3/23/2004		44.04	6.95	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	---
9/22/2004	----- Insufficient amount of water to sample -----							----- Insufficient amount of water to sample -----						
4/26/2005		44.30	6.69	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	0.4
MW-22	50.52													
3/28/2002		---	---	ND<50	*	*	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	1.59
6/27/2002		41.73	8.79	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	2.64
9/11/2002		---	---	---	---	---	---	---	---	---	---	---	---	---
3/27/2003		---	---	---	---	---	---	---	---	---	---	---	---	---
9/23/2003		---	---	---	---	---	---	---	---	---	---	---	---	---
3/23/2004	----- monitoring well can not be located -----													---

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-23	53.98													
1/31/2003		50.42	3.56	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**35**	**TAME=18** All others ND	3.32
3/25/2003		49.66	4.32	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**36**	**TAME=16** All others ND	2.90
6/19/2003	----- Insufficient amount of water to sample -----				---	---	---	---	---	---	---	---	---	---
9/24/2003		44.71	9.27	**97**	ND<50	ND<170	---	ND<0.50	**1.1**	ND<0.50	0.66	ND<8.0	**TAME=1.6** All others ND	---
12/18/2003		49.68	4.30	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**4.6**	ND<1.0-20	0.82
3/23/2004		48.03	5.95	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	0.39
6/29/2004		46.63	7.35	**77**	ND<50	ND<170	---	**0.54**	**1.9**	**0.81**	**1.2**	ND<1.0	ND<1-10	0.68
9/23/2004		44.18	9.80					----- Insufficient amount of water to sample -----						
12/14/2004		48.56	5.42	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	ND<100	---
4/27/2005		48.08	5.90	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	0.58
MW-24	54.40													
1/31/2003		50.83	3.57	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**3.7**	ND<1.0-20	2.55
3/25/2003		51.03	3.37	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**8.8**	ND<1.0-20	2.87
6/19/2003		47.84	6.56	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**5.8**	ND<1.0-20	4.2
9/24/2003		45.19	9.21	ND<50	ND<50	ND<170	---	ND<0.50	**7.0**	ND<0.50	ND<0.50	**1.8**	ND<1.0-20	---
12/18/2003		50.76	3.64	ND<50	ND<50	ND<170	---	**4.5**	ND<0.50	ND<0.50	ND<0.50	**10.0**	ND<1.0-20	
3/23/2004		48.93	5.47	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	0.61
6/29/2004		48.61	5.79	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	0.78
9/23/2004		44.93	9.47	ND<50	ND<170	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
12/14/2004		48.82	5.58	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	ND<100	---
4/27/2005		48.82	5.58	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	0.41
MW-25	55.91													
1/31/2003		53.93	1.98	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	2.82
3/25/2003		54.48	1.43	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	2.5
6/19/2003		52.16	3.75	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	1.38
9/24/2003		49.20	6.71	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	0.15
12/18/2003		54.25	1.66	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	0.64
3/23/2004		53.20	2.71	**120**	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	0.24
6/29/2004		50.80	5.11	**69**	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	0.70
9/23/2004		47.39	8.52	**56**	ND<50	---	---	ND<1.0	ND<1.0	ND<0.50	ND<0.50	ND<3.0	---	0.59
12/14/2004		53.27	2.64	**470**	ND<50	---	---	**5.3**	**6.2**	ND<0.50	ND<0.50	ND<12	**Iron = 15,000**	0.37
4/27/2005		53.59	2.32	**230**	ND<50	---	---	ND<1.5	ND<5.0	ND<0.50	ND<0.50	ND<3.0	---	0.70
MW-26	54.74													
1/31/2003		50.51	4.23	ND<50	ND<50	ND<170	---	**0.98**	ND<0.50	ND<0.50	ND<0.50	ND<1.0	**TBA=30** All others ND	4.68
2/10/2003		50.90	3.84	ND<50	ND<50	ND<170	---	**12**	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	2.5
3/27/2003		53.26	1.48	ND<50	**51**	ND<170	---	**5.4**	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	3.24
9/23/2003		45.43	9.31	**690**	---	---	---	**2.1**	**0.53**	**0.54**	ND<0.50	ND<1.0	ND<1.0-20	---
3/23/2004		49.49	5.25	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	0.59
9/22/2004		45.48	9.26	ND<50	**420**	**920**	---	**1.3**	**0.65**	ND<0.50	ND<0.50	ND<3.0	---	---
4/26/2005		49.83	4.91	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	0.59

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Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-27	54.30													
1/31/2003		49.83	4.47	4,400	150	ND<170	---	900	10	0.61	29.3	ND<10	TBA=22 All others ND	3.59
3/26/2003		52.87	1.43	3,800	160	ND<170	---	1,100	8.2	25	14.2	ND<10	ND<1.0-20	2.85
6/19/2003		48.98	5.32	12,000	280	ND<170	---	3,800	28	87	38.7	ND<10	TBA=25 All others ND	1.41
9/24/2003		48.11	6.19	11,000	270	ND<170	---	4,700	26	72	26.8	ND<10	ND<1.0-20	0.40
12/18/2003		50.38	3.92	4,600	130	ND<170	---	3,100	15	42	12.9	ND<10	ND<1.0-20	0.64
3/23/2004		50.38	3.92	6,800	160	ND<170	---	2,300	12	19	10.6	ND<12	ND<1.0-35	0.97
6/29/2004		48.80	5.50	5,800	270	ND<170	---	2,600	18	32	16.8	ND<8.0	ND<1.0-30	0.41
7/20/2004		48.07	6.23	2,700	ND<50	---	---	810	17	12	ND<5.0	ND<3.0	---	0.57
8/24/2004		47.40	6.90	3,700	110	---	---	960	17	24	7.2	ND<30	---	1.38
9/23/2004		46.47	7.83	2,000	130	---	---	280	15	11	6.0	ND<40	F-Hyde = 14 A-Hyde = 11 Cr = ND<10	2.15
10/21/2004		48.43	5.87	1,100	89	---	---	170	8.2	16	ND<6.0	10	---	0.90
11/16/2004		49.34	4.96	1,100	120	---	---	150	ND<14	8.7	5.1	ND<25	---	0.55
12/14/2004		49.03	5.27	1,100	100	---	---	170	8.2	14	3.2	ND<20	Iron = 14,000	0.45
1/11/2005		48.52	5.78	1,300	98	---	---	310	7.6	9.9	ND<6.0	ND<25	16,000	0.40
2/15/2005		49.65	4.65	990	91	---	---	60	ND<10	7.4	ND<5.0	ND<20	---	0.48
3/30/2005		49.95	4.35	1,300	80	---	---	300	7.9	6.8	3.5	ND<30	---	0.49
4/27/2005		49.80	4.50	1,100	92	---	---	250	5.7	8.2	2.5	ND<20	---	0.34
MW-28	54.61													
1/31/2003		47.31	7.30	10,000	120	ND<170	---	4,800	14	30	61.9	ND<10	ND<1.0-20	4.16
3/26/2003		53.04	1.57	13,000	470	ND<170	---	6,100	24	10	81.8	ND<10	ND<1.0-20	2.81
6/19/2003		49.80	4.81	13,000	520	ND<170	---	9,700	29	56	45.5	6.8	TBA=24 All others ND	1.62
9/24/2003		47.68	6.93	23,000	250	ND<170	---	11,000	33	49	41.6	ND<12	ND<1.0-20	0.45
12/18/2003		52.13	2.48	21,000	470	ND<170	---	8,900	60	170	98.0	ND<6	ND<1.0-20	---
3/23/2004		50.54	4.07	18,000	150	ND<170	---	9,600	27	15	24	ND<16	ND<1.0-45	0.49
6/29/2004		49.36	5.25	15,000	210	ND<170	---	7,600	48	61	46.2	ND<7.0	ND<1.0-20	0.43
7/20/2004		48.16	6.45	10,000	76	---	---	4,800	28	31	15	ND<30	---	0.63
8/24/2004		46.88	7.73	15,000	180	---	---	6,100	43	46	21	ND<100	---	1.67
9/23/2004		45.87	8.74	9,400	82	---	---	4,700	34	40	18	ND<80	F-Hyde = 11 A-Hyde = ND<5.0 Cr = ND<10	---
10/21/2004		49.43	5.18	130	ND<50	---	---	53	ND<0.50	0.90	0.61	ND<3.0	---	1.45
11/16/2004		50.54	4.07	980	71	---	---	500	3.6	4.4	3.2	ND<13	---	0.70
12/14/2004		51.71	2.90	1,000	70	---	---	350	5.1	7.0	3.8	ND<20	Iron = 3,200	0.45
1/11/2005		53.05	1.56	760	84	---	---	150	4.9	7.6	3.3	ND<20	Iron = 2,900	0.39
2/15/2005		52.45	2.16	640	75	---	---	94	3.3	6.2	2.4	ND<15	---	0.46
3/30/2005		51.39	3.22	780	81	---	---	100	4.2	8.5	1.7	ND<20	---	0.51
4/27/2005		51.02	3.59	620	97	---	---	58	2.9	6.7	0.84	ND<10	---	0.89

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-29	55.84													
1/31/2003		54.84	1.00	130	130	ND<170	---	18	1.0	4.1	3.65	ND<1.0	ND<1.0-20	2.8
3/25/2003		54.70	1.14	90	ND<50	ND<170	---	4.8	ND<0.50	6.2	1.4	ND<1.0	ND<1.0-20	3.89
6/19/2003		52.32	3.52	130	59	ND<170	---	8.2	ND<0.50	6.9	ND<0.50	ND<1.0	ND<1.0-20	4.7
9/24/2003		49.25	6.59	2,400	140	ND<170	---	840	25	120	14.2	ND<1.0	ND<1.0-20	0.54
12/18/2003		54.32	1.52	400	ND<50	ND<170	---	110	3.4	15	5.1	ND<1.0	ND<1.0-20	0.47
3/23/2004		53.39	2.45	63	ND<50	ND<170	---	2.4	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	0.16
6/29/2004		51.09	4.75	230	ND<50	ND<170	---	80	1.4	3.4	0.79	ND<3.0	---	1.59
9/23/2004		48.60	7.24	3,400	84	---	---	1,900	29	16	20	ND<35	---	0.51
12/14/2004		53.03	2.81	ND<49	ND<50	---	---	0.69	ND<0.50	ND<0.50	ND<0.50	ND<30	ND<100	4.05
4/27/2005		53.64	2.20	ND<50	210	---	---	1.1	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	0.99
MW-30	55.09													
1/31/2003		50.99	4.10	48,000	570	ND<170	---	13,000	210	2,000	1,810	ND<1.0	ND<1.0-20	2.6
3/26/2003		54.77	0.32	33,000	430	ND<170	---	13,000	150	1,200	714	ND<50	ND<50-1,000	2.69
6/19/2003		51.68	3.41	29,000	710	ND<170	---	12,000	150	1,300	753	ND<4.0	ND<1.0-20	2.2
9/24/2003		48.08	7.01	34,000	550	ND<170	---	14,000	150	540	416	ND<50	ND<50-1,000	1.14
12/18/2003		53.56	1.53	39,000	220	ND<170	---	16,000	140	790	523	ND<50	ND<50-1,000	0.52
3/23/2004		52.68	2.41	23,000	170	ND<170	---	7,600	110	830	409	ND<4.0	ND<1-10	0.22
6/29/2004		50.47	4.62	29,000	860	ND<170	---	10,000	250	880	507	ND<360	---	0.79
7/20/2004		49.32	5.77	31,000	280	---	---	9,400	230	840	437	ND<300	---	0.57
8/24/2004		47.62	7.47	33,000	310	---	---	10,000	190	630	273	ND<300	---	1.30
9/23/2004		46.60	8.49	20,000	370	---	---	6,200	150	470	576	ND<300	**F-Hyde = 59** **A-Hyde = 32** Cr = ND<10	---
10/21/2004		50.57	4.52	31,000	590	---	---	9,100	300	1,400	870	ND<300	---	0.32
11/16/2004		51.04	4.05	30,000	740	---	---	9,200	320	2,000	930	ND<300	---	0.58
12/14/2004		52.41	2.68	26,000	840	---	---	7,300	270	1,300	810	ND<300	**Iron = 21,000**	---
1/11/2005		54.36	0.73	25,000	600	---	---	8,100	310	1,200	920	ND<300	**Iron = 17,000**	0.22
2/15/2005		53.84	1.25	22,000	770	---	---	6,100	200	890	670	ND<300	---	0.41
3/30/2005		54.52	0.57	18,000	580	---	---	5,600	180	800	590	ND<300	---	0.43
4/27/2005		52.94	2.15	19,000	530	---	---	4,500	180	680	532	ND<300	---	0.19
MW-31	54.61													
1/31/2003		49.96	4.65	3,800	650	300	---	1,000	9.0	2.3	3.9	ND<1.0	ND<1.0-20	5.05
3/27/2003		52.21	2.40	3,200	1,100	500	---	910	9.7	3.2	3.33	ND<1.0	ND<1.0-20	3.75
9/23/2003		44.78	9.83	7,900	270	ND<170	---	800	9.4	3.3	5.5	ND<1.0	ND<1.0-20	0.0
3/23/2004		49.27	5.34	2,700	210	ND<170	---	840	6.7	ND<0.50	4.5	ND<1.0	ND<1-10	0.55
9/22/2004		42.89	11.72	3,200	190	ND<170	---	940	24	6.9	7.5	ND<30	---	0.30
3/30/2005		52.49	2.12	1,100	82	ND<170	---	240	ND<20	ND<5.0	ND<5.0	ND<8.0	---	0.44
4/26/2005		49.65	4.96	1,000	83	---	---	270	7.9	ND<5.0	ND<5.0	ND<7.0	---	0.49
MW-32	54.63													
1/31/2003		47.67	6.96	4,800	91	ND<170	---	1,500	12	1.6	5.2	ND<1.0	ND<1.0-20	4.38
3/27/2003		52.21	2.42	2,900	110	ND<170	---	930	9.3	1.0	2.8	ND<1.0	ND<1.0-20	2.74
9/23/2003		44.78	9.85	3,500	120	180	---	620	7.0	2.4	3.46	ND<1.0	ND<1.0-20	0.00
3/23/2004		49.26	5.37	1,100	53	ND<170	---	430	2.3	0.70	0.51	ND<1.0	ND<1.0-20	0.78
9/22/2004		41.95	12.68	1,400	72	ND<170	---	450	ND<15	4.0	ND<12.5	ND<10	---	0.30
3/30/2005		52.14	2.49	2,000	160	ND<170	---	680	13.0	ND<10	ND<15.0	ND<20	---	0.32
4/26/2005		50.34	4.29	2,400	150	---	---	630	15	ND<12	ND<12	ND<20	---	0.57

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-33	55.79													
1/31/2003		51.24	4.55	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	5.0
3/25/2003		54.39	1.40	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	2.99
6/19/2003		52.16	3.63	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	0.00
9/24/2003		49.20	6.59	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	0.00
12/18/2003		54.24	1.55	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	---
3/23/2004		53.21	2.58	**88**	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1-10	0.21
6/29/2004		50.78	5.01	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	0.63
9/23/2004		47.36	8.43	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	0.26
12/14/2004		53.46	2.33	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	**Iron = 1,300**	0.41
4/27/2005		53.56	2.23	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	0.62
MW-34	54.07													
1/31/2003		49.07	5.00	**15,000**	**120**	ND<170	---	**690**	**970**	**110**	**1,090**	ND<25	**TAME=22** All others ND	4.3
3/25/2003		49.02	5.05	**14,000**	**190**	ND<170	---	**380**	**580**	**440**	**730**	ND<40	**TAME=10** All others ND	3.41
6/19/2003		46.17	7.90	**4,500**	**320**	ND<170	---	**300**	**200**	**260**	**242**	ND<40	**TAME=9.1** All others ND	3.6
9/24/2003		42.40	11.67	**8,200**	**360**	ND<170	---	**450**	**76**	**360**	**197**	ND<16	**TAME=2.5** All others ND	1.08
12/18/2003		48.56	5.51	**9,100**	**200**	ND<170	---	**400**	**320**	**380**	**350**	ND<10	**TAME=1.7** All others ND	0.62
3/23/2004		47.18	6.89	**9,100**	**240**	ND<170	---	**460**	**230**	**400**	**295**	ND<12	**TAME=1.7** All others ND<1.0-10	0.92
6/29/2004		46.62	7.45	**11,000**	**530**	ND<170	---	**540**	**200**	**640**	**505**	ND<300	---	0.56
7/20/2004		43.54	10.53	**9,100**	**230**	---	---	**490**	**120**	**380**	**220**	ND<300	---	0.57
8/24/2004		42.35	11.72	**11,000**	**320**	---	---	**490**	**84**	**390**	**248**	ND<400	---	1.97
9/23/2004		41.79	12.28	**7,700**	**250**	---	---	**390**	**63**	**200**	**118**	ND<350	**F-Hyde = 10** **A-Hyde = 8.5** Cr = ND<10	0.96
10/21/2004		46.53	7.54	**8,200**	**260**	---	---	**260**	**99**	**160**	**410**	ND<300	---	0.59
11/16/2004		47.82	6.25	**8,500**	**340**	---	---	**250**	**110**	**170**	**438**	ND<300	---	0.48
12/14/2004		47.58	6.49	**4,100**	**260**	---	---	**160**	**73**	**130**	**200**	ND<170	**Iron = 3,500**	---
1/11/2005		51.26	2.81	**5,300**	**380**	---	---	**170**	**69**	**130**	**295**	ND<180	**Iron = 3,900**	0.39
2/15/2005		48.61	5.46	**3,400**	**310**	---	---	**120**	**39**	**120**	**167**	ND<100	---	0.37
3/30/2005		51.43	2.64	**5,500**	**190**	---	---	**95**	**58**	**120**	**255**	ND<180	---	0.54
4/27/2005		47.38	6.69	**4,200**	**290**	---	---	**74**	**41**	**110**	**179**	ND<100	---	0.51
MW-35	54.46													
1/31/2003		50.01	4.45	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**13**	**TAME=2.1** All others ND	4.6
3/25/2003		50.48	3.98	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**10**	**TAME=1.5** All others ND	2.71
6/19/2003		47.64	6.82	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**15**	**TAME=2.1** All others ND	3.6
9/24/2003		44.19	10.27	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**13**	**TAME=2.1** All others ND	0.00
12/18/2003		50.39	4.07	ND<50	ND<50	ND<170	---	**1.2**	ND<0.50	ND<0.50	ND<0.50	**11**	**TAME=1.9** All others ND	---

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Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-35 Continued														
3/23/2004		48.68	5.78	**84**	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**14**	**TAME=2.1** All others ND<1.0-10	0.19
6/29/2004		48.28	6.18	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**12**	---	0.54
9/23/2004		43.52	10.94	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**12**	---	0.32
12/14/2004		49.21	5.25	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**11**	**Iron = 3,600**	---
4/27/2005		48.45	6.01	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**10**	---	0.33
MW-36	54.50													
1/31/2003		40.25	14.25	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**9.8**	**TAME=1.9** All others ND	3.71
3/25/2003		50.95	3.55	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**5.9**	ND<1.0-20	2.28
6/19/2003		47.58	6.92	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**9.5**	ND<1.0-20	0.56
9/24/2003		44.19	10.31	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**9.5**	**TAME=1.6** All others ND	0.00
12/18/2003		50.43	4.07	ND<50	ND<50	ND<170	---	**2.3**	ND<0.50	ND<0.50	ND<0.50	**5.2**	ND<1.0-20	---
3/23/2004		48.76	5.74	**86**	ND<50	ND<170	---	**0.89**	ND<0.50	**0.53**	ND<0.50	**7.0**	ND<1-10	0.58
6/29/2004		48.21	6.29	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**6.0**	---	0.68
9/23/2004		43.01	11.49	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**11**	---	0.31
12/14/2004		49.11	5.39	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**7.7**	**Iron = 1,300**	---
4/27/2005		48.70	5.80	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**5.8**	---	0.38
MW-37	55.85													
1/31/2003		44.57	11.28	**1,100**	**51**	ND<170	---	**74**	**3.3**	**18**	**39.8**	ND<1.0	ND<1.0-20	5.56
3/25/2003		53.48	2.37	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**1.6**	ND<1.0-20	2.78
6/19/2003		51.90	3.95	--- --- --- --- --- --- --- --- --- --- No Sample Collected --- --- --- --- --- --- --- --- --- ---											---
9/24/2003		48.72	7.13	**420**	ND<50	ND<170	---	**11**	**0.53**	**4.8**	**1.8**	ND<6.0	ND<1.0-20	0.33
12/18/2003		53.71	2.14	**92**	ND<50	ND<170	---	**2.9**	ND<0.50	**0.89**	**0.80**	**3.4**	ND<1.0-20	0.80
3/23/2004		52.97	2.88	**120**	ND<50	**180**	---	**2.8**	ND<0.50	**0.98**	**0.63**	**4.3**	ND<1-10	0.46
6/29/2004		51.40	4.45	ND<50	ND<50	ND<170	---	**3.4**	ND<0.50	ND<0.50	ND<0.50	ND<13	---	0.58
9/23/2004		46.68	9.17	ND<50	ND<50	---	---	**1.5**	ND<0.50	ND<0.50	ND<0.50	ND<10	---	0.16
12/14/2004		53.70	2.15	ND<50	ND<50	---	---	**0.88**	ND<0.50	ND<0.50	ND<0.50	**5.1**	ND<100	0.45
4/27/2005		53.21	2.64	ND<50	ND<50	---	---	**0.82**	ND<0.50	ND<0.50	ND<0.50	**5.2**	---	0.66
MW-38	55.81													
1/31/2003		53.99	1.82	**7,100**	**280**	ND<170	---	**2,100**	**41**	**180**	**134**	ND<1.0	ND<1.0-20	3.40
3/25/2003		54.10	1.71	**1,300**	**79**	ND<170	---	**99**	ND<2.5	ND<2.5	**25.5**	ND<20	ND<5.0-100	2.25
6/19/2003		51.82	3.99	**3,000**	**160**	ND<170	---	**1,300**	**16**	**37**	**39.4**	**12**	**TBA=32** All others ND	3.8
9/24/2003		48.56	7.25	**680**	**62**	ND<170	---	**130**	**2.1**	**7.0**	**3.52**	**11**	ND<1.0-20	0.31
12/18/2003		53.81	2.00	**980**	ND<50	ND<170	---	**330**	**6.5**	**28.0**	**12.10**	**11**	ND<1.0-20	---
3/23/2004		52.86	2.95	**640**	ND<50	ND<170	---	**150**	**2.7**	**9.9**	**5.1**	**12**	ND<1.0-26	0.40
6/29/2004		50.67	5.14	**140**	ND<50	ND<170	---	**21**	ND<1.8	**0.70**	**0.70**	**14**	---	0.89
7/20/2004		49.48	6.33	**270**	**56**	---	---	**40**	ND<3.0	**1.4**	**0.74**	**14**	---	0.64
8/24/2004		47.90	7.91	**94**	ND<50	---	---	**10**	ND<1.0	**0.66**	**0.50**	**11**	---	3.28
9/23/2004		46.55	9.26	ND<50	ND<50	---	---	**1.6**	ND<0.50	ND<0.50	ND<0.50	**10**	F-Hyde = ND<5.0 A-Hyde = ND<5.0 Cr = ND<10	0.85

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Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-38 Continued														
10/21/2004		49.19	6.62	83	ND<50	---	---	11	ND<1.0	ND<0.50	0.50	12	---	0.55
11/16/2004		50.68	5.13	82	ND<50	---	---	12	0.60	ND<0.50	0.58	11	---	2.87
12/14/2004		52.54	3.27	72	ND<50	---	---	13	0.54	ND<0.50	ND<0.50	11	Iron = 150	2.78
1/11/2005		54.52	1.29	270	ND<50	---	---	80	2.3	2.1	1.5	17	Iron = 210	1.12
2/15/2005		53.97	1.84	250	ND<50	---	---	47	2.1	2.0	2.0	12	---	0.38
3/30/2005		54.65	1.16	200	ND<50	---	---	28	1.5	1.3	1.2	14	---	0.66
4/27/2005		53.01	2.80	100	ND<50	---	---	19	0.61	ND<0.50	ND<0.50	11	---	0.49
MW-39	55.24													
1/31/2003		41.37	13.87	Did not sample, bailer dropped into well										4.79
2/10/2003		44.34	10.90	760	53	ND<170	---	40	0.53	2.9	38.7	17	ND<1.0-20	3.5
3/26/2003		50.08	5.16	350	ND<50	ND<170	---	21	ND<0.50	ND<0.50	9.8	12	ND<1.0-20	4.08
6/19/2003		51.24	4.00	1,600	ND<50	ND<170	---	22	ND<0.50	1.8	ND<0.50	16	ND<1.0-20	---
9/24/2003		47.37	7.87	890	ND<50	ND<170	---	9.3	ND<0.50	1.7	0.72	12	ND<1.0-20	0.52
12/18/2003		53.21	2.03	140	ND<50	310	---	17.0	ND<0.50	1.4	0.88	13	ND<1.0-20	0.57
3/23/2004		52.20	3.04	170	ND<50	170	---	4.7	ND<0.50	0.95	0.56	18	ND<1-10	0.85
6/29/2004		50.14	5.10	57	ND<50	ND<170	---	7.9	ND<0.50	1.5	0.88	17	---	0.29
9/23/2004		46.56	8.68	ND<50	ND<50	---	---	4.3	ND<0.50	0.83	0.62	14	---	0.14
12/14/2004		51.39	3.85	ND<50	ND<50	---	---	1.6	ND<0.50	0.51	ND<0.50	13	Iron = 10,000	0.51
4/27/2005		53.06	2.18	ND<50	63	---	---	0.95	ND<0.50	ND<0.50	ND<0.50	14	---	0.33
MW-40	55.17													
1/31/2003		43.75	11.42	120	92	ND<170	---	1.4	ND<0.50	ND<0.50	ND<0.50	21	ND<1.0-20	4.51
3/26/2003		53.59	1.58	ND<50	77	ND<170	---	7.8	ND<0.50	0.71	ND<0.50	16	ND<1.0-20	3.69
6/19/2003		51.36	3.81	720	ND<50	ND<170	---	110	ND<0.50	2.3	0.63	27	ND<1.0-20	---
9/24/2003		47.73	7.44	170	ND<50	ND<170	---	60	ND<0.50	ND<0.50	ND<0.50	20	ND<1.0-20	0.25
12/18/2003		52.45	2.72	150	ND<50	ND<170	---	34	ND<0.50	1.4	1.0	15	ND<1.0-20	0.83
3/23/2004		52.35	2.82	120	ND<50	ND<170	---	6.8	ND<0.50	ND<0.50	ND<0.50	20	ND<1.0-46	0.84
6/29/2004		48.77	6.40	74	ND<50	ND<170	---	17	ND<0.50	1.4	ND<3.7	19	---	0.31
9/23/2004		46.27	8.90	ND<50	ND<50	---	---	8.3	ND<0.50	ND<0.50	ND<0.50	14	---	1.10
12/14/2004		50.95	4.22	ND<50	ND<50	---	---	0.76	ND<0.50	ND<0.50	ND<0.50	11	Iron = 16,000	0.81
4/27/2005		52.12	3.05	ND<50	ND<50	---	---	0.51	ND<0.50	ND<0.50	ND<0.50	11	---	0.36
MW-41	54.38													
2/10/2003		50.98	3.40	ND<50	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	6.8	ND<1.0-20	3.2
3/26/2003		53.08	1.30	ND<50	ND<50	ND<170	---	2.2	ND<0.50	ND<0.50	ND<0.50	4.7	ND<1.0-20	3.51
6/19/2003		49.80	4.58	120	ND<50	ND<170	---	38	ND<0.50	ND<0.50	ND<0.50	10	TBA=22 All others ND	4.48
9/24/2003		46.82	7.56	720	ND<50	220	---	5.6	ND<0.50	ND<0.50	ND<0.50	5.2	ND<1.0-20	0.28
12/18/2003		51.87	2.51	600	ND<50	ND<170	---	4.5	ND<0.50	ND<0.50	ND<0.50	4.3	ND<1.0-20	0.59
3/23/2004		50.46	3.92	230	ND<50	ND<170	---	8.0	ND<0.50	ND<0.50	ND<0.50	6.8	ND<1-10	0.80
6/29/2004		49.57	4.81	ND<50	ND<50	ND<170	---	6.8	ND<0.50	ND<0.50	ND<1.4	8.2	---	0.50
9/23/2004		45.79	8.59	ND<50	ND<50	---	---	3.7	ND<0.50	ND<0.50	ND<2.0	ND<10	---	1.39
12/14/2004		51.00	3.38	ND<50	ND<50	---	---	1.6	ND<0.50	ND<0.50	ND<5.0	5.5	Iron = 7,700	0.45
4/27/2005		50.60	3.78	ND<50	ND<50	---	---	0.95	ND<0.50	ND<0.50	ND<0.50	5.9	---	0.30
MW-42	54.37													
1/31/2003		51.72	2.65	140	ND<50	ND<170	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	7.9	ND<1.0-20	4.6
3/26/2003		52.94	1.43	ND<50	72	ND<170	---	0.81	ND<0.50	ND<0.50	ND<0.50	5.4	ND<1.0-20	3.16
6/19/2003		49.80	4.57	700	ND<50	ND<170	---	230	ND<0.50	ND<0.50	ND<0.50	7.8	TBA=41 All others ND	4.17

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-42 Continued														
9/24/2003		46.84	7.53	**480**	ND<50	ND<170	---	**230**	**0.75**	**0.64**	ND<0.50	**6.5**	**TBA=31** All others ND	0.43
12/18/2003		51.96	2.41	**230**	ND<50	ND<170	---	**80**	**0.67**	ND<0.50	ND<0.50	**6.2**	ND<1.0-20	---
3/23/2004		50.46	3.91	**300**	ND<50	ND<170	---	**62**	**0.54**	ND<0.50	ND<0.50	**7.2**	ND<1.0-40	0.68
6/29/2004		49.54	4.83	**240**	ND<50	ND<170	---	**51**	ND<1.8	ND<2.0	ND<1.5	ND<20	---	0.41
9/23/2004		46.11	8.26	**150**	ND<50	---	---	**19**	ND<0.50	ND<2.0	ND<1.5	ND<20	---	1.40
12/14/2004		51.00	3.37	**66**	ND<50	---	---	**3.2**	ND<0.50	ND<0.50	ND<0.50-1.5	ND<12	**Iron = 21,000**	0.43
4/27/2005		50.72	3.65	**58**	ND<50	---	---	**1.5**	ND<0.50	ND<0.50	ND<0.50-1.0	**5.6**	—	0.33
MW-43	54.61													
2/10/2003		50.71	3.90	**43,000**	**98**	**260**	---	**17,000**	**3.3**	ND<0.50	**37**	ND<1.0	**TBA=64** All others ND	2.9
3/26/2003		52.86	1.75	**44,000**	**65**	**400**	---	**11,000**	**2.3**	**2.0**	**25.3**	ND<20	**TBA=29** All others ND	2.79
6/19/2003		50.64	3.97	**17,000**	ND<50	ND<170	---	**11,000**	**1.7**	**4.9**	**16.8**	ND<30	**TBA=71** All others ND	---
9/24/2003		46.80	7.81	**3,300**	ND<50	ND<170	---	**4,000**	**1.3**	**2.9**	**2.9**	**9.4**	**TBA=42** All others ND	1.46
12/18/2003		52.00	2.61	**1,500**	**85**	ND<170	---	**230**	ND<0.50	**1.7**	**1.2**	**11.0**	**TBA=35** All others ND	1.09
3/23/2004		51.09	3.52	**910**	**51**	ND<170	---	**400**	ND<0.50	**0.68**	**1.0**	**12**	**TBA=46** All others ND<1.0	0.81
6/29/2004		48.46	6.15	**1,900**	ND<50	ND<170	---	**1,100**	**1.2**	**4.2**	**3.7**	ND<60	---	1.05
7/20/2004		48.10	6.51	**3,500**	ND<50	---	---	**2,000**	ND<5.0	ND<5.0	ND<5.0	ND<30	---	1.40
8/24/2004		45.95	8.66	**12,000**	ND<50	---	---	**5,700**	**18**	**23**	**13.5**	ND<30	---	1.54
9/23/2004		45.21	9.40	**3,800**	ND<50	---	---	**1,500**	ND<7.0	**29**	**4.5**	ND<130	**F-Hyde = 15** **A-Hyde = 16** Cr = ND<10	2.19
10/21/2004		49.54	5.07	**410**	ND<50	---	---	**260**	ND<0.50	**0.80**	**0.83**	ND<30	---	0.48
11/16/2004		50.41	4.20	**870**	**62**	---	---	**360**	**1.1**	**6.2**	**2.0**	ND<50	---	---
12/14/2004		51.89	2.72	**1,000**	ND<50	---	---	**270**	**1.2**	**0.91**	**2.6**	ND<70	ND<100	0.14
1/11/2005		52.98	1.63	**350**	ND<50	---	---	ND<6.0	ND<2.0	ND<0.50	**0.60**	ND<100	ND<100	0.28
2/15/2005		52.12	2.49	**320**	ND<50	---	---	ND<4.0	ND<1.5	ND<0.50	ND<0.50	ND<40	---	0.35
3/30/2005		52.55	2.06	**650**	ND<50	---	---	**120**	ND<2.0	ND<2.0	**1.6**	ND<80	---	0.74
4/27/2005		52.59	2.02	**670**	**66**	---	---	**220**	**0.70**	**1.2**	**1.6**	ND<40	---	0.61
MW-44	54.65													
2/10/2003		51.15	3.50	**54,000**	**180**	ND<170	---	**22,000**	**92**	**30**	**78**	ND<1.0	**TBA=59** All others ND	3.2
3/26/2003		53.04	1.61	**23,300**	**100**	ND<170	---	**11,000**	**26**	**59**	ND<25	ND<50	ND<50-1,000	3.86
6/19/2003		50.52	4.13	**6,100**	**61**	ND<170	---	**3,800**	**16**	**50**	**9.3**	ND<3.0	ND<1.0-20	3.91
9/24/2003		46.64	8.01	**4,900**	ND<50	ND<170	---	**7,100**	**19**	**30**	**7.0**	**7.1**	**TBA=34** All others ND	1.60
12/18/2003		52.78	1.87	**4,200**	ND<50	ND<170	---	**5,700**	**6.4**	**24**	**4.5**	**5.0**	ND<1.0-20	0.76
3/23/2004		51.23	3.42	**5,600**	ND<50	ND<170	---	**2,800**	**3.6**	**18**	**4.1**	ND<6.0	ND<1.0-30	0.42
6/29/2004		48.45	6.20	**11,000**	**81**	ND<170	---	**6,000**	**26**	**30**	**16.7**	ND<60	---	0.28
7/20/2004		47.98	6.67	**12,000**	ND<50	---	---	**6,500**	**22**	**27**	**14.6**	ND<60	---	0.51
8/24/2004		47.11	7.54	**2,700**	**53**	---	---	**2,100**	ND<5.0	ND<5.0	ND<5.0	ND<70	---	2.59

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.02/03; CRWQCB Case No. 1THU116

WELL/ Sample Date	Well Head Elevation (feet, NAVD88)	Groundwater Elevation (feet, NAVD88)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	TPHir (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Other Analytes (µg/L)	Dissolved Oxygen (mg/L)
MW-44 Continued														
9/23/2004		45.75	8.90	**8,800**	**69**	---	---	**4,600**	**14**	**32**	**13.1**	ND<60	**F-Hyde = 5.5** **A-Hyde = 5.1** Cr = ND<10	2.04
10/21/2004		49.53	5.12	**3,500**	**59**	---	---	**1,600**	**4.7**	**3.7**	**6.8**	ND<40	----	0.27
11/16/2004		50.63	4.02	**3,100**	**72**	---	---	**1,700**	**6.6**	**8.4**	**9.6**	ND<60	----	0.56
12/14/2004		51.76	2.89	**3,000**	**56**	---	---	**1,400**	**4.7**	**5.6**	**6.5**	ND<40	**Iron = 3,500**	0.29
1/11/2005		53.66	0.99	**4,000**	**57**	---	---	**2,200**	**7.1**	**1.6**	**9.0**	ND<80	**Iron = 4,600**	0.36
2/15/2005		52.10	2.55	**2,900**	**55**	---	---	**1,400**	**4.8**	**2.3**	**6.0**	ND<50	---	0.36
3/30/2005		53.26	1.39	**3,600**	ND<50	---	---	**1,800**	**6.7**	**4.3**	**7.1**	ND<70	---	0.39
4/27/2005		51.51	3.14	**4,500**	**82**	---	---	**2,300**	**9.8**	**8.5**	**8.3**	ND<50	---	0.75
Duplicate Samples														
MW-13														
1/4/2001				**6,800**	---	---	---	**580**	**340**	**300**	**281**	**4.4**	---	---
MW-13														
4/12/2001				**240**	---	---	---	**35**	**2.9**	**4.2**	**8.06**	ND<0.50	---	---
MW-6														
7/10/2001				ND<50	---	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**32**	---	---
MW-19														
11/1/2001				ND<50	---	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-20	---
MW-9														
11/1/2001				**900**	---	---	---	**330**	**3.1**	**0.60**	**0.72**	ND<1.0	ND<1.0-20	---

NOTES:
feet msl - feet above mean sea level
TPHg - total petroleum hydrocarbons as gasoline
TPHd - total petroleum hydrocarbons as diesel
TPHmo - total petroleum hydrocarbons as motor oil
TPHir - total petroleum hydrocarbons by infrared method
Xylenes - total is reported from m,p-xylene and o-xylene.
Other analytes inlcude the Fuel Oxygenates:
MTBE - methyl tertiary butyl ether
DIPE - di-isopropyl ether
ETBE - ethyl tertiary butyl ehter
TBA - tertiary butyl alcohol
TAME - tertiary amyl methyl ether
A-Hyde - Acetaldehyde
F-Hyde - Formaldehyde
Cr - Dissolved Chromium
COD - Chemical oxygen demand
All results reported in micrograms per liter (µg/L)
ND<50 - non-detect at reporting limits shown
--- = sample not analyzed for parameter
* - sample broken in laboratory and not analyzed

TABLE 2: FIELD INTRINSIC INDICATOR RESULTS (DO AND ORP)
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.03; CRWQCB Case No. 1THU116

Well ID / Sample Date	ORP (mV)	DO (mg/L)
MW1A		
9/23/2004	Ur	0.27
11/16/2004	---	---
12/14/2004	-49	0.49
4/27/2005	-63	0.38
MW15		
9/23/2004	---	---
11/16/2004	---	---
12/14/2004	---	---
4/27/2005	---	---
MW16		
9/23/2004	---	---
11/16/2004	---	---
12/14/2004	---	---
4/27/2005	---	---
MW19		
9/23/2004	---	---
11/16/2004	---	---
12/14/2004	---	---
4/27/2005	---	---
MW20		
9/23/2004	---	---
11/16/2004	---	---
12/14/2004	---	---
4/27/2005	---	---
MW23		
9/23/2004	---	---
11/16/2004	---	---
12/14/2004	-15	0.99
4/27/2005	10	0.58
MW24		
9/23/2004	---	---
11/16/2004	---	---
12/14/2004	12	3.07
4/27/2005	22	0.41
MW25		
9/23/2004	-59	0.59
11/16/2004	---	---
12/14/2004	Ur	0.37
4/27/2005	-37	0.70

TABLE 2: FIELD INTRINSIC INDICATOR RESULTS (DO AND ORP)
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.03; CRWQCB Case No. 1THU116

Well ID / Sample Date	ORP (mV)	DO (mg/L)
MW27		
7/20/2004	-83	0.57
8/24/2004	Ur	1.38
9/8/2004	Ur	0.35
9/23/2004	Ur	2.15
10/21/2004	-90	0.90
11/16/2004	Ur	0.55
12/14/2004	Ur	0.45
1/11/2005	Ur	0.40
2/15/2005	Ur	0.48
3/30/2005	Ur	0.49
4/27/2005	Ur	0.34
MW28		
7/20/2004	Ur	0.63
8/24/2004	Ur	1.67
9/8/2004	Ur	0.62
9/23/2004	---	---
10/21/2004	43	1.45
11/16/2004	Ur	0.70
12/14/2004	-94	0.45
1/11/2005	Ur	0.39
2/15/2005	Ur	0.46
3/30/2005	Ur	0.51
4/27/2005	-66	0.89
MW29		
9/23/2004	-93	0.51
11/16/2004	---	---
12/14/2004	-8	4.05
4/27/2005	-7	0.99
MW30		
7/20/2004	Ur	0.57
8/24/2004	Ur	1.30
9/8/2004	Ur	0.32
9/23/2004	---	---
10/21/2004	Ur	0.32
11/16/2004	Ur	0.58
12/14/2004	Ur	0.52
1/11/2005	Ur	0.22
2/15/2005	Ur	0.41
3/30/2005	Ur	0.43
4/27/2005	-85	0.19
MW33		
9/23/2004	-23	0.26
11/16/2004	---	---
12/14/2004	-48	0.41
4/27/2005	-12	0.62

TABLE 2: FIELD INTRINSIC INDICATOR RESULTS (DO AND ORP)
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.03; CRWQCB Case No. 1THU116

Well ID / Sample Date	ORP (mV)	DO (mg/L)
MW34		
7/20/2004	-33	0.57
8/24/2004	Ur	1.97
9/8/2004	-42	0.52
9/23/2004	-31	0.96
10/21/2004	-44	0.59
11/16/2004	-76	0.48
12/14/2004	Ur	1.14
1/11/2005	-84	0.39
2/15/2005	-92	0.37
3/30/2005	-79	0.54
4/27/2005	-94	0.51
MW35		
9/23/2004	-41	0.32
11/16/2004	---	---
12/14/2004	Ur	0.51
4/27/2005	-73	0.33
MW36		
9/23/2004	-4	0.31
11/16/2004	---	---
12/14/2004	-53	0.74
4/27/2005	-74	0.38
MW37		
9/23/2004	-4	0.16
11/16/2004	---	---
12/14/2004	-17	0.45
4/27/2005	15	0.66
MW38		
7/20/2004	12	0.64
8/24/2004	59	3.28
9/8/2004	59	0.77
9/23/2004	53	0.85
10/21/2004	47	0.55
11/16/2004	55	2.87
12/14/2004	61	2.78
1/11/2005	26	1.12
2/15/2005	-53	0.38
3/30/2005	-55	0.66
4/27/2005	-5	0.49
MW39		
9/23/2004	-54	0.14
11/16/2004	---	---
12/14/2004	-60	0.51
4/27/2005	-31	0.33

TABLE 2: FIELD INTRINSIC INDICATOR RESULTS (DO AND ORP)
Former Shell Bulk Plant
400 Eighth Street, Fortuna
LACO No. 4629.03; CRWQCB Case No. 1THU116

Well ID / Sample Date	ORP (mV)	DO (mg/L)
MW40		
9/23/2004	-91	1.10
11/16/2004	---	---
12/14/2004	-69	0.81
4/27/2005	-39	0.36
MW41		
9/23/2004	Ur	1.39
11/16/2004	---	---
12/14/2004	-48	0.45
4/27/2005	-51	0.30
MW42		
9/23/2004	-92	1.40
11/16/2004	---	---
12/14/2004	-77	0.43
4/27/2005	-75	0.33
MW43		
7/20/2004	-64	1.40
8/24/2004	Ur	1.54
9/8/2004	-60	0.29
9/23/2004	-61	2.19
10/21/2004	-33	0.48
11/16/2004	-18	0.79
12/14/2004	7	0.14
1/11/2005	31	0.28
2/15/2005	6	0.35
3/30/2005	-42	0.74
4/27/2005	-38	0.61
MW44		
7/20/2004	-63	0.51
8/24/2004	Ur	2.59
9/8/2004	-49	1.65
9/23/2004	-57	2.04
10/21/2004	-31	0.27
11/16/2004	-23	0.56
12/14/2004	-37	0.29
1/11/2005	-46	0.36
2/15/2005	-82	0.36
3/30/2005	-55	0.39
4/27/2005	-45	0.75

Notes:
DO - Dissolved Oxygen (mg/L)
ORP - Oxygen Reduction Potential (mV)
Ur - Under range of instrument

TABLE 3: Sum of COCs/ PFP Milestone Achievement
Former Bulkplant - UST Area
LACO Project No. 4629.03
Case No. 1THU116
Claim No. 016125

TABLE H: PAY-FOR-PEFORMANCE MILESTONE ACHIEVEMENT									
Well ID/ DATE		TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	% BTEX Reduction
Target		**500**	**250**	**42**	**29**	**17**	**338**	**13**	
MW27	Baseline	8600	3500	26	81	23.6	3631	NA	
MW28	Baseline	16000	6100	35	83	28.4	6246.4	NA	
MW30	Baseline	22000	7700	150	900	481	9231	NA	
MW44	Baseline	4800	3000	10	26	6.8	3042.8	NA	
Sum COC			20300	221	1090	539.8	22151		
MW27	7/20/2004	2700	810	17	12	5.0	844	ND<3.0	
MW28	7/20/2004	10000	4800	28	31	15	4874	ND<30	
MW30	7/20/2004	31000	9400	230	840	437	10907	ND<300	
MW44	7/20/2004	12000	6500	22	27	14.6	6563.6	ND<60	
Sum COC			21510	297	910	472	23189		**-5%**
MW27	8/24/2004	3700	960	17	24	7.2	1008	ND<30	
MW28	8/24/2004	15000	6100	43	46	21	6210	ND<100	
MW30	8/24/2004	33000	10000	190	630	273	11093	ND<300	
MW44	8/24/2004	2700	2100	5.0	5.0	5.0	2115	ND<70	
Sum COC			19160	255	705	306	20426		**8%**
MW27	9/23/2004	2000	280	15	11	6.0	312	ND<40	
MW28	9/23/2004	9400	4700	34	40	18	4792	ND<80	
MW30	9/23/2004	20000	6200	150	470	576	7396	ND<300	
MW44	9/23/2004	8800	4600	14	32	13.1	4659.1	ND<60	
Sum COC			15780	213	553	613	17159		**24%**
MW27	10/21/2004	1100	170	8.2	16	6.0	200.2	10	
MW28	10/21/2004	130	53	0.50	0.90	0.61	55.01	ND<3.0	
MW30	10/21/2004	31000	9100	300	1400	870	11670	ND<300	
MW44	10/21/2004	3500	1600	4.7	3.7	6.8	1615.2	ND<40	
Sum COC			10923	313	1421	883	13540		**41%**

TABLE 3: Sum of COCs/ PFP Milestone Achievement
Former Bulkplant - UST Area
LACO Project No. 4629.03
Case No. 1THU116
Claim No. 016125

TABLE H: PAY-FOR-PEFORMANCE MILESTONE ACHIEVEMENT									
Well ID/ DATE		TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	% BTEX Reduction
MW27	11/16/2004	1100	150	14	8.7	5.1	177.8	ND<25	
MW28	11/16/2004	980	500	3.6	4.4	3.2	511.2	ND<13	
MW30	11/16/2004	30000	9200	320	2000	930	12450	ND<300	
MW44	11/16/2004	3100	1700	6.6	8.4	9.6	1724.6	ND<60	
Sum COC			11550	344	2022	948	14864		**35%**
MW27	12/14/2004	1100	170	8.2	14	3.2	195.4	ND<20	
MW28	12/14/2004	1000	350	5.1	7.0	3.8	365.9	ND<20	
MW30	12/14/2004	26000	7300	270	1300	810	9680	ND<300	
MW44	12/14/2004	3000	1400	4.7	5.6	6.5	1416.8	ND<40	
Sum COC			9220	288	1327	824	11658		**50%**
MW27	1/11/2005	1300	310	7.6	9.9	6.0	333.5	ND<25	
MW28	1/11/2005	760	150	4.9	7.6	3.3	165.8	ND<20	
MW30	1/11/2005	25000	8100	310	1200	920	10530	ND<300	
MW44	1/11/2005	4000	2200	7.1	1.6	9.0	2217.7	ND<80	
Sum COC			10760	330	1219	938	13247		**43%**
MW27	2/15/2005	990	60	10	7.4	5.0	82.4	ND<20	
MW28	2/15/2005	640	94	3.3	6.2	2.4	105.9	ND<15	
MW30	2/15/2005	22000	6100	200	890	670	7860	ND<300	
MW44	2/15/2005	2900	1400	4.8	2.3	6.0	1413.1	ND<50	
Sum COC			7654	218	906	683	9461		**61%**
MW27	3/30/2005	1300	300	7.9	6.8	3.5	318.2	ND<30	
MW28	3/30/2005	780	100	4.2	8.5	1.7	114.4	ND<20	
MW30	3/30/2005	18000	5600	180	800	590	7170	ND<300	
MW44	3/30/2005	3600	1800	6.7	4.3	7.1	1818.1	ND<70	
Sum COC			7800	199	820	602	9421		**61%**
MW27	4/27/2005	1100	250	5.7	8.2	2.5	266.4	ND<20	
MW28	4/27/2005	620	58	2.9	6.7	0.84	68.44	ND<10	
MW30	4/27/2005	19000	4500	180	680	532	5892	ND<300	
MW44	4/27/2005	4500	2300	9.8	8.5	8.3	2326.6	ND<50	
Sum COC			7108	198	703	543.6	8553.4		**65%**

Notes:

BTEX results reported as non-detectable (ND) were included at the value for the minimum detection limit.
The 25% through 75% milestones are reached based on the sum of BTEX concentrations for all key wells. For the 100% milestone, each individual well must meet the PARG.

Attachment 1

Attachment 2

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

Project Name: **Former Shell Bulk Plant - PFP**
Project No.: **4629.03**
Date: 1-11-05
Golbal ID No.: **T0602300107**
PM: **CJW**

Tech: SJD
Mob/Demob time: .25/.25
Travel time: 1.0
Time on site: 10:10
Time off site: 3:15
Mileage: 35

WELL No.:	MW27		MW28		MW30		MW34		MW38	
DIAMETER (in)	2.00		2.00		2.00		1.50		1.50	
SCREENED INTERVAL (ft)	5-10		5-10		5-10		14-18		12-14	
DEPTH TO WATER (ft)	5.78		1.56		0.73		2.81		1.29	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.9	6.6	6.9	6.7	7.0	6.7	6.5	6.4	6.5	6.3
TEMP (°C)	11.5	14.3	11.4	12.1	10.8	12.7	11.4	12.5	11.5	13.4
Ecw (µmohs)	472	354	286	272	264	250	240	227	268	262
ORP (mV)	-98	Ur	Ur	Ur	Ur	Ur	-93	-84	0	26
DO (mg/L)	1.12	0.40	1.45	0.39	1.45	0.22	1.35	0.39	2.44	1.12
OTHER (units)	—		—		—		—		—	
PURGE: TIME	10:48	10:58	11:23	11:29	2:33	2:39	11:58	12:08	12:44	12:54
METHOD (DHP/CB/B)	DHP		DHP		CAM PUMP		DHP		DHP	
RATE (Lpm)	0.18		0.19		0.21		0.16		0.16	
VOLUME (L)	1.80		1.10		1.25		1.60		1.60	
COLOR	CLEAR	CLOUDY	LT. GREY TINT	LT. GREY TINT	CLEAR	LIGHT GREY TURBID	CLEAR	CLOUDY	CLOUDY	LT. YELLOW/ BROWN CLOUDY
ODOR	MED. FUEL / RUBBER		MED. SULFUR / FUEL		STRONG RUBBER / SULFUR		MED. FUEL		NONE	
INTAKE DEPTH (FEET)	8.0		8.0		9.0		16.0		13.0	
SAMPLE: TIME	10:59		11:30		2:40		12:09		12:55	
METHOD (DHP/CB/B)	DHP		DHP		CAM PUMP		DHP		DHP	
ANALYTES	TPHg/BTEX; TPHd w/SGC; Diss. Iron		TPHg/BTEX; TPHd w/SGC; Diss. Iron		TPHg/BTEX; TPHd w/SGC; Diss. Iron		TPHg/BTEX; TPHd w/SGC; Diss. Iron		TPHg/BTEX; TPHd w/SGC; Diss. Iron	
TOTAL DRAWDOWN (FEET)	1.02		2.14		1.78		1.97		0.91	
REMARKS	—		—		—		—		—	
WELL CONDITION	good		good		good		good		good	
WASTE DRUMS	NO DOT DRUMS ONSITE									

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

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

LACO ASSOCIATES
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Project Name: **Former Shell Bulk Plant - PFP**
Project No.: **4629.03**
Date: 1-11-05
Golbal ID No.: **T0602300107**
PM: **CJW**

Tech: SJD
Mob/Demob time: .25/.25
Travel time: 1.0
Time on site: 10:10
Time off site: 3:15
Mileage: 35

WELL No.:	MW43		MW44							
DIAMETER (in)	2.00		2.00							
SCREENED INTERVAL (ft)	16-18		12-15							
DEPTH TO WATER (ft)	1.63		0.99							
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.6	6.4	6.9	6.6						
FIELD INTRINSICS: TEMP (°C)	11.1	13.0	10.8	12.5						
FIELD INTRINSICS: Ecw (µmohs)	288	277	284	269						
FIELD INTRINSICS: ORP (mV)	-12	31	-43	-46						
FIELD INTRINSICS: DO (mg/L)	2.18	0.28	1.61	0.36						
FIELD INTRINSICS: OTHER (units)	—		—							
PURGE: TIME	1:25	1:35	2:02	2:10						
PURGE: METHOD (DHP/CB/B)	CAM PUMP		CAM PUMP							
PURGE: RATE (Lpm)	0.20		0.25							
PURGE: VOLUME (L)	2.0		2.0							
PURGE: COLOR	CLOUDY	LT. ORANGE/ BROWN CLOUDY	CLEAR	LIGHT YELLOW						
PURGE: ODOR	YES?		MED. FUEL							
PURGE: INTAKE DEPTH (FEET)	17.0		13.5							
SAMPLE: TIME	1:36		2:11							
SAMPLE: METHOD (DHP/CB/B)	CAM PUMP		CAM PUMP							
SAMPLE: ANALYTES	TPHg/BTEX; TPHd w/SGC; Diss. Iron		TPHg/BTEX; TPHd w/SGC; Diss. Iron							
SAMPLE: TOTAL DRAWDOWN (FEET)	6.89		7.53							
SAMPLE: REMARKS	—		—							
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

LACO ASSOCIATES
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Project Name: FORMER SHELL BULK PLANT - PFP
Project No.: 4629.03
Tech: SJD
Date: 1-11-05

WELL ID:	METER ACCURACY RANGE				
MW27	+/- 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)
10:50	6.7	12.7	428	Ur	0.82
10:52	6.7	13.6	400	Ur	0.75
10:54	6.6	14.1	380	Ur	0.46
10:56	6.6	14.2	362	Ur	0.40
10:58	6.6	14.3	354	Ur	0.40

WELL ID: MW28

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
~~11:25~~	~~6.7~~	~~12.1~~	~~279~~	~~Ur~~	~~0.44~~
11:27	6.7	12.1	275	Ur	0.40
11:29	6.7	12.1	272	Ur	0.39

WELL ID: MW34

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
12:00	6.4	11.6	238	-89	1.03
12:02	6.4	11.9	234	-89	0.72
12:04	6.4	12.0	232	-86	0.56
12:06	6.4	12.3	228	-85	0.41
12:08	6.4	12.5	227	-84	0.39

WELL ID: MW38

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
12:46	6.4	12.2	268	11	2.22
12:48	6.4	13.1	264	22	1.64
12:50	6.4	13.3	262	26	1.32
12:52	6.3	13.3	262	26	1.11
12:54	6.3	13.4	262	26	1.12

WELL ID: MW43

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
1:27	6.5	12.1	284	7	0.67
1:29	6.4	12.9	281	24	0.69
1:31	6.4	12.9	280	29	0.53
1:33	6.4	13.0	280	31	0.30
1:35	6.4	13.0	277	31	0.28

WELL ID: MW44

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
2:04	6.6	12.4	274	-46	0.44
2:06	6.6	12.8	271	-47	0.50
2:08	6.6	12.7	270	-46	0.45
2:10	6.6	12.5	269	-46	0.36

LACO ASSOCIATES
CONSULTING ENGINEERS
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FAX 707.443.0553

Project Name: Former Shell Bulk Plant - PTP
Project No.: 4629.03
Tech: SJD
Date: 1-11-05

WELL ID:	METER ACCURACY RANGE				
MW30	+/- 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)
2:35	6.7	12.2	253	Ur	0.33
2:37	6.7	12.6	251	Ur	0.23
2:39	6.7	12.7	250	Ur	0.22

WELL ID:

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

WELL ID:

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

WELL ID:

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

WELL ID:

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

WELL ID:

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

WELL ID:

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

LACO ASSOCIATES
CONSULTING ENGINEERS

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

Project Name: FORMER SHELL BULK PLANT - PFP
Project No.: 4629.03

Tech: SJD
Date: 1-11-05

WELL ID: MW27		WELL ID: MW28		WELL ID: MW30		WELL ID: MW34		WELL ID: MW38		WELL ID: MW43	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
10:30	5.78	10:32	1.56	10:38	0.73	10:44	2.81	10:40	1.29	10:34	1.63
10:46	5.78	11:20	1.56	2:30	0.73	11:55	2.81	12:40	1.29	1:22	1.63

WELL ID: MW44		WELL ID:		WELL ID:		WELL ID:		WELL ID:		WELL ID:	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
10:36	0.99										
2:00	0.99										

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

WASTE DISPOSAL FORM

Project No. 4629.03 Date 1-11-05

Location BULK PLANT By SJD

Number of Soil Drums Ø Number of Water Drums Ø

Please Insert a Check Mark

	Yes	No	Condition of Drums: Good	Fair	Deteriorated
Soil DOT drums	☐	☑	☐	☐	☐
Water DOT drums	☐	☑	☐	☐	☐

Other _____

* **Please describe location of all drums with references with the site, or write any comments, below.**

NORTH COAST LABORATORIES LTD.
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 c/o Christopher Watt
Address: 21 West Fourth Street, Eureka CA
Phone: (707) 443-5054
Copies of Report to:
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: 4629.03
Project Name: FORMER SHELL BULK PLANT - PFP
Purchase Order Number: TASK 3020

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS: TPHg/BTEX (CONTAINER 9, PRESERVATIVE b)	ANALYSIS: TPHd w/SGC (CONTAINER 7, PRESERVATIVE ----)	ANALYSIS: Dissolved Iron (CONTAINER 2, PRESERVATIVE ----)	SAMPLE CONDITION/SPECIAL INSTRUCTIONS
	4629-MW27-W	1-11-05	AM	GW	3	1		GEOTRACKER
	4629-MW28-W	↓	↓	↓	3	1		
	4629-MW30-W				3	1		
	4629-MW34-W				3	1		
	4629-MW38-W				3	1		
	4629-MW43-W				3	1		
	4629-MW44-W				3	1		
	4629-QCTB-W	↓	PM	↓	1			

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

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

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

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

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

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

Project Name: Former Shell Bulk Plant - PFP
Project No.: 4629.03
Date: 2-15-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD
Mob/Demob time: .30/.25
Travel time: 1.25
Time on site: 8:20
Time off site: 1:00
Mileage: 35

WELL No.:	MW27		MW28		MW30		MW34		MW38	
DIAMETER (in)	2.00		2.00		2.00		1.50		1.50	
SCREENED INTERVAL (ft)	5-10		5-10		5-10		14-18		12-14	
DEPTH TO WATER (ft)	4.65		2.16		1.25		5.46		1.84	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	7.6	6.6	6.8	6.7	6.9	6.7	6.8	6.4	6.7	6.4
TEMP (°C)	10.7	12.7	11.0	11.2	14.0	13.3	12.0	13.2	14.0	13.7
Ecw (µmohs)	363	304	251	247	224	224	223	217	224	233
ORP (mV)	Ur	Ur	Ur	Ur	Ur	Ur	-78	-92	-64	-53
DO (mg/L)	1.17	0.48	1.35	0.46	2.24	0.41	1.48	0.37	1.57	0.38
OTHER (units)										
PURGE: TIME	9:17	9:25	9:43	9:51	12:17	12:23	10:18	10:26	10:44	10:54
METHOD (DHP/CB/B)	DHP		DHP		CAM PUMP		DHP		DHP	
RATE (Lpm)	0.20		0.19		0.20		0.19		0.18	
VOLUME (L)	1.60		1.50		1.20		1.50		1.80	
COLOR	CLEAR	CLEAR	MED. GREY TINT	MED GREY TINT	MED. GREY TINT	MED. GREY TINT	CLOUDY	CLOUDY	CLOUDY	CLOUDY
ODOR	MED. FUEL		STRONG SULFUR / SLIGHT FUEL		STRONG FUEL / RUBBER		MED. FUEL / SLIGHT RUBBER		SLIGHT FUEL / SWEET	
INTAKE DEPTH (FEET)	8.0		7.5		7.5		16.0		13.0	
SAMPLE: TIME	9:26		9:52		12:24		10:27		10:55	
METHOD (DHP/CB/B)	DHP		DHP		CAM PUMP		DHP		DHP	
ANALYTES	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC	
TOTAL DRAWDOWN (FEET)	1.25		1.56		1.21		1.99		1.21	
REMARKS										
WELL CONDITION	good		good		good		good		good	
WASTE DRUMS										

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

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

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

Project Name: **Former Shell Bulk Plant - PFP**
Project No.: **4629.03**
Date: 2-15-05
Golbal ID No.: **T0602300107**
PM: **CJW**

Tech: SJD
Mob/Demob time: .30/.25
Travel time: 1.25
Time on site: 8:20
Time off site: 1:00
Mileage: 35

WELL No.:	MW43		MW44								
DIAMETER (in)	2.00		2.00								
SCREENED INTERVAL (ft)	16-18		12-15								
DEPTH TO WATER (ft)	2.49		2.55								
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	
FIELD INTRINSICS: pH	6.8	6.4	6.8	6.6							
FIELD INTRINSICS: TEMP (°C)	12.9	12.7	13.1	12.6							
FIELD INTRINSICS: Ecw (µmohs)	233	242	242	233							
FIELD INTRINSICS: ORP (mV)	-22	6	-72	-82							
FIELD INTRINSICS: DO (mg/L)	1.76	0.35	1.02	0.36							
FIELD INTRINSICS: OTHER (units)	—		—								
PURGE: TIME	11:20	11:30	11:47	11:55							
PURGE: METHOD (DHP/CB/B)	cam Pump		cam Pump								
PURGE: RATE (Lpm)	0.20		0.20								
PURGE: VOLUME (L)	2.0		1.60								
PURGE: COLOR	CLEAR	YELLOW/ ORANGE TINT	CLEAR	ORANGE/ YELLOW TINT							
PURGE: ODOR	SWEET - CITRUS		MED. FUEL								
PURGE: INTAKE DEPTH (FEET)	17.0		13.5								
SAMPLE: TIME	11:31		11:56								
SAMPLE: METHOD (DHP/CB/B)	cam Pump		cam Pump								
SAMPLE: ANALYTES	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC								
SAMPLE: TOTAL DRAWDOWN (FEET)	6.32		6.44								
SAMPLE: REMARKS	—		—								
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

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Project Name: FORMER SHELL BULK PLANT - PFP
Project No.: 4629.03
Tech: SJD
Date: 2-15-05

WELL ID:	METER ACCURACY RANGE				
MW27	+/- 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)
9:19	6.8	11.5	336	Ur	0.90
9:21	6.7	12.2	324	Ur	0.67
9:23	6.6	12.7	313	Ur	0.52
9:25	6.6	12.7	304	Ur	0.48

WELL ID: MW28

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
9:45	6.7	11.2	253	Ur	0.87
9:47	6.7	11.2	250	Ur	0.60
9:49	6.7	11.2	249	Ur	0.52
9:51	6.7	11.2	247	Ur	0.46

WELL ID: MW34

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:20	6.5	12.6	221	-83	1.00
10:22	6.4	12.8	220	-88	0.74
10:24	6.4	13.0	218	-93	0.45
10:26	6.4	13.2	217	-92	0.37

WELL ID: MW38

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:46	6.6	13.7	230	-69	1.00
10:48	6.5	13.6	231	-68	0.62
10:50	6.4	13.5	232	-54	0.54
10:52	6.4	13.6	233	-54	0.45
10:54	6.4	13.7	233	-53	0.38

WELL ID: MW43

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:22	6.5	12.9	239	-2	1.17
11:24	6.4	12.9	240	1	0.97
11:26	6.4	12.8	241	4	0.66
11:28	6.4	12.7	242	6	0.44
11:30	6.4	12.7	242	6	0.35

WELL ID: MW44

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:49	6.7	12.9	240	-77	0.32
11:51	6.6	12.8	237	-81	0.47
11:53	6.6	12.6	235	-81	0.38
11:55	6.6	12.6	233	-82	0.36

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Project Name: Former Shell Bulk Plant - PFP
Project No.: 4629.03
Tech: SJD
Date: 2-15-05

METER ACCURACY RANGE

WELL ID: MW30	+/- 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)
12:19	6.7	13.4	227	Ur	0.50
12:21	6.7	13.3	226	Ur	0.44
12:23	6.7	13.3	224	Ur	0.41

WELL ID:

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

WELL ID:

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

WELL ID:

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

WELL ID:

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

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)

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Project Name: Former Shell Bulk Plant - PFP
Project No.: 4629.03
Tech: SJD
Date: 2-15-05

WELL ID: mw27		WELL ID: mw28		WELL ID: mw30		WELL ID: mw34		WELL ID: mw38		WELL ID: mw43	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
8:38	4.66	8:40	2.18	8:44	1.25	8:49	5.46	8:46	1.84	8:41	2.49
8:52	4.65	8:53	2.16	8:58	1.25	9:02	5.46	8:59	1.84	8:55	2.49
9:05	4.65	9:07	2.16								

WELL ID: mw44		WELL ID:		WELL ID:		WELL ID:		WELL ID:		WELL ID:	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
8:43	2.55										
8:56	2.55										

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

WASTE DISPOSAL FORM

Project No. 4629.03 Date 2-15-05

Location FORMER SHELL BULK PLANT By SJD

Number of Soil Drums Ø Number of Water Drums Ø

Please Insert a Check Mark

	Yes	No	Condition of Drums: Good	Fair	Deteriorated
Soil DOT drums	☐	☑	☐	☐	☐
Water DOT drums	☐	☑	☐	☐	☐

Other _____

* Please describe location of all drums with references with the site, or write any comments, below.

NORTH COAST LABORATORIES LTD.
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 c/o Christopher Watt
Address: 21 West Fourth Street, Eureka CA
Phone: (707) 443-5054
Copies of Report to:
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: 4629.03
Project Name: FORMER SHELL BULK PLANT - PFP
Purchase Order Number: TASK 3020

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	CONTAINER	PRESERVATIVE	ANALYSIS: TPHg/BTEX	ANALYSIS: TPHd w/SGC
	4629-MW27-W	2-15-05	AM	GW	9	b	3	1
	4629-MW28-W				7	----	3	1
	4629-MW30-W						3	1
	4629-MW34-W						3	1
	4629-MW38-W						3	1
	4629-MW43-W						3	1
	4629-MW44-W						3	1
	4629-QCTB-W		PM				1	

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

GEOTRACKER

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

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

LACO ASSOCIATES
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FAX 707.443.0553

Project Name: Former Shell Bulk Plant - PFP
Project No.: 4629.03
Date: 3-30-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD
Mob/Demob time: .25/.25
Travel time: .75
Time on site: 10:30
Time off site: 2:50
Mileage: 18

WELL No.:	MW27		MW28		MW30		MW34		MW38	
DIAMETER (in)	2.00		2.00		2.00		1.50		1.50	
SCREENED INTERVAL (ft)	5-10		5-10		5-10		14-18		12-14	
DEPTH TO WATER (ft)	4.35		3.22		0.57		2.64		1.16	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	7.6	6.9	7.2	7.0	7.3	7.0	7.6	6.9	7.1	6.7
TEMP (°C)	14.6	14.7	12.4	12.5	14.1	14.7	13.5	13.9	13.3	15.4
Ecw (µmohs)	585	449	317	314	296	289	293	279	332	317
ORP (mV)	-93	Ur	Ur	Ur	Ur	Ur	-73	-79	-75	-55
DO (mg/L)	1.24	0.49	1.42	0.51	2.27	0.43	1.12	0.54	1.31	0.66
OTHER (units)										
PURGE: TIME	11:04	11:14	12:17	12:27	2:07	2:15	11:41	11:49	12:46	12:56
METHOD (DHP/CB/B)	DHP		DHP		CAM PUMP		DHP		DHP	
RATE (Lpm)	0.18		0.19		0.24		0.19		0.17	
VOLUME (L)	1.80		1.90		1.90		1.50		1.70	
COLOR	CLEAR	CLOUDY	MED. GREY TINT	DK. GREY TINT	CLEAR	LT. GREY TINT	CLOUDY	LT. GREY CLOUDY	CLOUDY	CLOUDY
ODOR	MED. FUEL		MED. SULFUR / LIGHT FUEL		STRONG RUBBER / FUEL		LIGHT FUEL / SULFUR		LIGHT SULFUR	
INTAKE DEPTH (FEET)	8.0		8.0		8.0		16.0		13.0	
SAMPLE: TIME	11:15		12:28		2:17		11:50		12:57	
METHOD (DHP/CB/B)	DHP		DHP		CAM PUMP		DHP		DHP	
ANALYTES	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC	
TOTAL DRAWDOWN (FEET)	1.59		0.76		1.53		1.77		1.26	
REMARKS					NEW 2" PLUG					
WELL CONDITION	good		good		good		good		good	
WASTE DRUMS										

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

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

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

Project Name: Former Shell Bulk Plant - PFP
Project No.: 4629.03
Date: 3-30-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD
Mob/Demob time: .25/.25
Travel time: .75
Time on site: 10:30
Time off site: 2:50
Mileage: 18

WELL No.:	MW43		MW44							
DIAMETER (in)	1.50		1.50							
SCREENED INTERVAL (ft)	16-18		12-15							
DEPTH TO WATER (ft)	2.06		1.39							
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	7.2	6.9	7.4	7.0						
TEMP (°C)	13.7	12.9	13.3	13.1						
Ecw (µmohs)	311	314	309	306						
ORP (mV)	-53	-42	-63	-75						
DO (mg/L)	1.65	0.74	1.35	0.39						
OTHER (units)	—		—							
PURGE: TIME	1:17	1:25	1:41	1:47						
METHOD (DHP/CB/B)	CAM PUMP		CAM PUMP							
RATE (Lpm)	0.20		0.23							
VOLUME (L)	1.60		1.30							
COLOR	CLEAR	CLEAR	CLEAR	CLEAR						
ODOR	SLIGHT SHOE STORE		VERY SLIGHT SHOE STORE							
INTAKE DEPTH (FEET)	17.0		13.5							
SAMPLE: TIME	1:27		1:49							
METHOD (DHP/CB/B)	CAM PUMP		CAM PUMP							
ANALYTES	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC							
TOTAL DRAWDOWN (FEET)	5.05		6.90							
REMARKS	—		—							
WELL CONDITION	good		good							
WASTE DRUMS										

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

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Project Name: FORMER SHELL BULK PLANT - PFP
Project No.: 4629.03
Tech: SJD
Date: 3-30-05

WELL ID:	METER ACCURACY RANGE				
MW27	+/- 0.2 pH	+/- 0.5 °C	+/- 20 µmohs	+/- 2 mv	+/- 0.3 mg/L
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:06	7.1	14.8	533	-99	1.08
11:08	7.0	14.8	499	Ur	0.68
11:10	7.0	14.7	479	Ur	0.50
11:12	6.9	14.7	460	Ur	0.49
11:14	6.9	14.7	449	Ur	0.49

WELL ID: MW34

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
~~11:43~~	~~7.1~~	~~13.7~~	~~294~~	~~-71~~	~~0.90~~
11:45	7.0	13.7	286	-75	0.77
11:47	6.9	13.8	283	-78	0.58
11:49	6.9	13.9	279	-79	0.54

WELL ID: MW28

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
12:19	7.1	12.2	320	Ur	1.22
12:21	7.1	12.1	321	Ur	0.90
12:23	7.0	12.2	318	Ur	0.71
12:25	7.0	12.4	318	Ur	0.53
12:27	7.0	12.5	314	Ur	0.51

WELL ID: MW38

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
12:48	6.9	14.2	330	-78	1.28
12:50	6.9	14.8	325	-71	0.97
12:52	6.9	15.1	322	-58	0.76
12:54	6.7	15.3	320	-55	0.73
12:56	6.7	15.4	317	-55	0.66

WELL ID: MW43

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
1:19	7.0	13.2	317	-43	0.94
1:21	6.9	12.9	317	-42	1.02
1:23	6.9	12.9	315	-42	0.79
1:25	6.9	12.9	314	-42	0.74

WELL ID: MW44

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
1:43	7.0	13.0	311	-71	0.50
1:45	7.0	13.1	307	-74	0.41
1:47	7.0	13.1	306	-75	0.39

LACO ASSOCIATES
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FAX 707.443.0553

Project Name: FORMER SHELL BULK PLANT - PFP
Project No.: 4629.03
Tech: SJD
Date: 3-30-05

WELL ID:	METER ACCURACY RANGE				
MW30	+/- 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)
2:09	7.1	14.4	295	Ur	0.62
2:11	7.1	14.5	294	Ur	0.52
2:13	7.0	14.6	291	Ur	0.47
2:15	7.0	14.7	289	Ur	0.43

WELL ID:

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

WELL ID:

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

WELL ID:

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

WELL ID:

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

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)

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FAX 707.443.0553

Project Name: FORMER SHELL BULK PLANT - PFP
Project No.: 4629.03
Tech: SJD
Date: 3-30-05

WELL ID: mw27		WELL ID: mw28		WELL ID: mw30		WELL ID: mw34		WELL ID: mw38		WELL ID: mw43	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
0:38	4.35	10:40	3.22	10:42	0.57	10:45	2.44	10:47	1.16	10:49	2.06
:00	4.35	12:14	3.22	2:03	0.57	11:38	2.44	12:42	1.16	1:14	2.06

WELL ID: mw44		WELL ID:		WELL ID:		WELL ID:		WELL ID:		WELL ID:	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
:51	1.39										
:38	1.39										

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

NORTH COAST LABORATORIES LTD.
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 c/o Christopher Watt
Address: 21 West Fourth Street, Eureka CA
Phone: (707) 443-5054
Copies of Report to:
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: 4629.03
Project Name: FORMER SHELL BULK PLANT - PFP
Purchase Order Number: TASK 3020

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	TPHg/BTEX (CONTAINER 9, PRESERVATIVE b)	TPHd w/SGC (CONTAINER 7, PRESERVATIVE ----)	SAMPLE CONDITION/SPECIAL INSTRUCTIONS
	4629-MW27-W	3-30-05	AM	GW	3	1	GEOTRACKER
	4629-MW28-W	↓	↓	↓	3	1	
	4629-MW30-W				3	1	
	4629-MW34-W				3	1	
	4629-MW38-W				3	1	
	4629-MW43-W				3	1	
	4629-MW44-W				3	1	
	4629-QCTB-W	↓	PM	↓	1		

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

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

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

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

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

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

Project Name: Bulk Plant - HPI (UST)
Project No.: 4629.03
Date: 4-27-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD
Mob/Demob time: .25/.25
Travel time: 1.0
Time on site: 6:30
Time off site: 8:00
Mileage: 36

WELL No.:	1A		MW15		MW16		MW19		MW20	
DIAMETER (in)	2.00		0.75		0.75		1.10		1.10	
SCREENED INTERVAL (ft)	5-15		4.5-14		3-14.5		22.5-25		15.5-19.5	
DEPTH TO WATER (ft)	1.67		—		12.07		13.85		9.96	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.8	6.7								
TEMP (°C)	17.1	16.8								
Ecw (µmohs)	273	272								
ORP (mV)	-33	-63								
DO (mg/L)	1.04	0.38								
OTHER (units)	—									
PURGE: TIME	10:50	11:00								
METHOD (DHP/CB/B)	DHP									
RATE (Lpm)	0.19									
VOLUME (L)	1.90									
COLOR	CLEAR	CLOUDY								
ODOR	LIGHT RUBBER/SULFUR									
INTAKE DEPTH (FEET)	10.0									
SAMPLE: TIME	11:02									
METHOD (DHP/CB/B)	DHP				1/2" B		3/4" B		3/4" B	
ANALYTES	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC	
TOTAL DRAWDOWN (FEET)	1.82		—		—		—		—	
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

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Date: 4-27-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD
Mob/Demob time: .25/.25
Travel time: 1.0
Time on site: 6:30
Time off site: 3:00
Mileage: 36

WELL No.:	MW23		MW24		MW25		MW27		MW28	
DIAMETER (in)	2.00		2.00		2.00		2.00		2.00	
SCREENED INTERVAL (ft)	5-10		5-10		5-10		5-10		5-10	
DEPTH TO WATER (ft)	5.90		5.58		2.32		4.50		3.59	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH					6.6	6.3			7.7	6.6
TEMP (°C)					17.6	15.8			11.5	12.4
Ecw (µmohs)					280	282			438	369
ORP (mV)					-23	-37			-29	-66
DO (mg/L)					0.96	0.70			0.96	0.89
OTHER (units)										
PURGE: TIME					9:27	9:39			7:35	7:47
METHOD (DHP/CB/B)					DHP				DHP	
RATE (Lpm)					0.17				0.17	
VOLUME (L)					2.0				2.0	
COLOR					CLEAR	CLEAR			MED. GREY TINT	→
ODOR					MED. SULFUR				MED. FUEL	
INTAKE DEPTH (FEET)					8.0				8.0	
SAMPLE: TIME					9:41				7:49	
METHOD (DHP/CB/B)					DHP				DHP	
ANALYTES	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC	
TOTAL DRAWDOWN (FEET)					0.67				2.09	
REMARKS										
WELL CONDITION	good		good		good		good		good	
WASTE DRUMS										

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Mob/Demob time: .25/.25
Travel time: 1.0
Time on site: 6:30
Time off site: 3:00
Mileage: 36

WELL No.:	MW29		MW30		MW33		MW34		MW35	
DIAMETER (in)	2.00		2.00		1.50		1.50		1.50	
SCREENED INTERVAL (ft)	5-10		5-10		14-17.5		14-18		17-20	
DEPTH TO WATER (ft)	2.20		2.15		2.23		6.69		6.01	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	7.1	7.1	6.8	6.5	6.6	6.3				
TEMP (°C)	17.8	16.0	16.7	15.8	18.1	16.4				
Ecw (µmohs)	251	253	264	253	272	260				
ORP (mV)	-30	-7	-79	-85	-31	-12				
DO (mg/L)	2.11	0.99	0.93	0.19	1.29	0.62				
OTHER (units)	—		—		—					
PURGE: TIME	11:29	11:39	1:58	2:08	10:00	10:14				
METHOD (DHP/CB/B)	CAM PUMP		CAM PUMP		DHP					
RATE (Lpm)	0.20		0.22		0.18					
VOLUME (L)	2.0		2.20		2.50					
COLOR	LT. BROWN CLOUDY	LT. BROWN CLOUDY w/ SPOTS OF SHEEN	CLEAR	LT. GREY TINT	LT. GREY CLOUDY	→				
ODOR	LIGHT FUEL/MO		STRONG RUBBER/FUEL		MED. SULFUR					
INTAKE DEPTH (FEET)	8.0		8.0		16.0					
SAMPLE: TIME	11:42		2:10		10:16					
METHOD (DHP/CB/B)	CAM PUMP		CAM PUMP		DHP					
ANALYTES	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC	
TOTAL DRAWDOWN (FEET)	0.15		2.33		1.05		—		—	
REMARKS	DHP HIT OBSTRUCTION @ 6'		—		—		—		—	
WELL CONDITION	good		good		good		good		good	
WASTE DRUMS										

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Date: 4-27-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD
Mob/Demob time: .25/.25
Travel time: 1.0
Time on site: 6:30
Time off site: 3:00
Mileage: 36

WELL No.	MW41		MW42		MW43		MW44			
DIAMETER (in)	1.50		1.50		1.50		1.50			
SCREENED INTERVAL (ft)	16.5-18		12-14.5		16-18		12-15			
DEPTH TO WATER (ft)	3.78		3.65		2.02		3.14			
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH					6.7	6.4	6.7	6.5		
TEMP (°C)					13.0	13.1	12.3	12.8		
Ecw (µmohs)					417	383	350	339		
ORP (mV)					-32	-38	-45	-45		
DO (mg/L)					1.96	0.61	1.34	0.75		
OTHER (units)										
PURGE: TIME					8:11	8:19	8:45	8:55		
METHOD (DHP/CB/B)					CAM PUMP		CAM PUMP			
RATE (Lpm)					0.25		0.23			
VOLUME (L)					2.0		2.25			
COLOR					CLEAR	CLEAR	CLEAR	CLEAR		
ODOR					MED. RUBBER/FUEL		MED. SHOE STORE			
INTAKE DEPTH (FEET)					17.0		14.0			
SAMPLE: TIME					8:21		8:58			
METHOD (DHP/CB/B)					CAM PUMP		CAM PUMP			
ANALYTES	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC			
TOTAL DRAWDOWN (FEET)	—		—		8.63		8.18			
REMARKS	—		—		—		—			
WELL CONDITION	good		good		good		good			
WASTE DRUMS										

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Project Name: BULK PLANT-HPI (UST)
Project No.: 4629.03
Tech: SJD
Date: 4-27-05

WELL ID: MW28

METER ACCURACY RANGE				
+/- 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)
7:37	7.0	11.9	414	-44	0.45
7:39	6.8	12.2	400	-54	0.45
7:41	6.7	12.2	390	-61	0.49
7:43	6.7	12.3	381	-64	0.76
7:45	6.7	12.3	375	-65	0.87
7:47	6.6	12.4	369	-66	0.89

WELL ID: MW43

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
8:13	6.5	12.8	404	-34	1.10
8:15	6.4	13.0	395	-37	0.69
8:17	6.4	13.1	388	-38	0.69
8:19	6.4	13.1	383	-38	0.61

WELL ID: MW44

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
8:47	6.6	12.6	349	-41	1.01
8:49	6.6	12.8	347	-41	1.20
8:51	6.5	12.8	346	-42	0.91
8:53	6.5	12.8	343	-45	0.79
8:55	6.5	12.8	339	-45	0.75

WELL ID: MW25

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
9:29	6.4	15.6	288	-20	0.64
9:31	6.3	15.3	288	-24	0.61
9:33	6.3	15.3	285	-29	0.60
9:35	6.3	15.5	284	-34	0.66
9:37	6.3	15.6	284	-37	0.68
9:39	6.3	15.8	282	-37	0.70

WELL ID: MW33

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:02	6.5	16.6	279	-34	0.74
10:04	6.4	16.2	278	-32	0.65
10:06	6.4	16.2	273	-26	0.69
10:08	6.4	16.2	269	-21	0.71
10:10	6.4	16.3	267	-15	0.70
10:12	6.3	16.4	264	-13	0.61
10:14	6.3	16.4	260	-12	0.62

WELL ID: MW1A

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:52	6.7	16.7	276	-48	0.61
10:54	6.7	16.5	275	-54	0.53
10:56	6.7	16.6	273	-59	0.47
10:58	6.7	16.8	272	-62	0.39
11:00	6.7	16.8	272	-63	0.38

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Project Name: BULK PLANT - HPI (UST)
Project No.: 4629.03
Tech: SJD
Date: 4-27-05

WELL ID: mw29	METER ACCURACY RANGE				
	+/- 0.2 pH	+/- 0.5 °C	+/- 20 µmohs	+/- 2 mv	+/- 0.3 mg/L
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:31	7.1	16.8	252	-20	1.52
11:33	7.1	16.0	254	-13	1.44
11:35	7.1	15.9	254	-9	1.23
11:37	7.1	15.9	253	-7	1.00
11:39	7.1	16.0	253	-7	0.99

WELL ID: mw37

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
12:03	6.2	16.3	291	20	0.96
12:05	6.2	16.1	291	17	0.80
12:07	6.2	16.2	289	16	0.70
12:09	6.2	16.4	286	15	0.66

WELL ID: mw38

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
2:31	6.4	16.8	273	-22	0.88
2:33	6.4	16.9	273	-23	0.75
2:35	6.4	16.9	274	-17	0.70
2:37	6.3	16.8	274	-9	0.62
2:39	6.3	16.6	276	-6	0.54
2:41	6.3	16.6	276	-5	0.49

WELL ID: mw39

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
1:04	6.5	16.8	284	-25	0.70
1:06	6.5	16.3	285	-28	0.43
1:08	6.4	15.7	286	-30	0.39
1:10	6.4	16.0	283	-31	0.33

WELL ID: mw40

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
:31	6.5	16.7	276	-34	0.48
:33	6.4	16.3	275	-37	0.46
:35	6.4	16.3	273	-39	0.45
:37	6.4	16.2	273	-39	0.36

WELL ID: mw30

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
2:00	6.7	16.1	262	-84	0.43
2:02	6.6	15.7	261	-87	0.30
2:04	6.6	15.6	259	-88	0.25
2:06	6.5	15.7	257	-86	0.21
2:08	6.5	15.8	253	-85	0.19

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Project Name: Bulk Plant - HPI (UST)
Project No.: 4629.03
Date: 4/27/05
Golbal ID No.: T0602300107
PM: CJW

Tech: ~~SeD~~ JLS
Mob/Demob time: 25/25
Travel time: 1.0
Time on site: 6:30 am
Time off site: 3:00 p.m
Mileage: 36

WELL No.:	MW23		MW24		MW25		MW27		MW28	
DIAMETER (in)	2.00		2.00		2.00		2.00		2.00	
SCREENED INTERVAL (ft)	5-10		5-10		5-10		5-10		5-10	
DEPTH TO WATER (ft)	5.90		5.58				4.50			
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.82	6.84	6.68	6.61			6.70	6.67		
TEMP (°C)	13.4	14.1	14.6	14.5			16.5	18.1		
Ecw (µmohs)	232	233	310	319			564	503		
ORP (mV)	-14	10	-12	22			Ur	Ur		
DO (mg/L)	1.26	0.58	1.12	0.41			1.01	0.34		
OTHER (units)	—		—				—			
PURGE: TIME	10:12	10:22	12:30	12:44			1:17	1:29		
METHOD (DHP/CB/B)	DHP		DHP				DHP			
RATE (Lpm)	0.20		0.21				0.21			
VOLUME (L)	2.0		3.0				2.5			
COLOR	Clear	Milky Gray	Clear	Clear			Clear	Lt Brown		
ODOR	Slight		None				Slight			
INTAKE DEPTH (FEET)	8.00		8.00				7.50			
SAMPLE: TIME	10:27		10:47				1:34			
METHOD (DHP/CB/B)	DHP		DHP				DHP			
ANALYTES	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC	
TOTAL DRAWDOWN (FEET)	1.65		0.26				2.15			
REMARKS	—		—				—			
WELL CONDITION	Good		Good				Good			
WASTE DRUMS										

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PM: CJW

Tech: ~~SJD~~ JLS
Mob/Demob time: .25/.25
Travel time: 1.0
Time on site: 6:30 am
Time off site: 3:00 pm
Mileage: 36

WELL No.:	MW29		MW30		MW33		MW34		MW35	
DIAMETER (in)	2.00		2.00		1.50		1.50		1.50	
SCREENED INTERVAL (ft)	5-10		5-10		14-17.5		14-18		17-20	
DEPTH TO WATER (ft)							6.69		6.01	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH							6.75	6.51	6.54	6.54
TEMP (°C)							14.3	15.7	15.8	16.0
Ecw (µmohs)							392	324	399	385
ORP (mV)							Ur	-94	-98	-73
DO (mg/L)							1.85	0.51	1.09	0.33
OTHER (units)							—		—	
PURGE: TIME							9:39	9:49	11:55	12:09
METHOD (DHP/CB/B)							DHP		DHP	
RATE (Lpm)							0.15		0.21	
VOLUME (L)							1.5		3.0	
COLOR							Clear	Milky Gray	Black	Black
ODOR							Mild Pond water		Rotten Eggs	
INTAKE DEPTH (FEET)							16.00'		18.50	
SAMPLE: TIME							9:55		12:13	
METHOD (DHP/CB/B)							DHP		DHP	
ANALYTES	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC	
TOTAL DRAWDOWN (FEET)							2.42		1.10	
REMARKS							—		—	
WELL CONDITION							Good		Good	
WASTE DRUMS										

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Tech: SdD JLS
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Travel time: 1.0
Time on site: 6:30 am
Time off site: 3:00 pm
Mileage: 36

WELL No.	MW36		MW37		MW38		MW39		MW40	
DIAMETER (in)	1.50		1.50		1.50		1.50		1.50	
SCREENED INTERVAL (ft)	13-14.5		17.25-19		12-14		17.75-19		13.25-16	
DEPTH TO WATER (ft)	5.80									
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.62	6.58								
TEMP (°C)	14.4	15.8								
Ecw (µmohs)	367	331								
ORP (mV)	-99	-74								
DO (mg/L)	0.97	0.38								
OTHER (units)	—									
PURGE: TIME	11:08	11:28								
METHOD (DHP/CB/B)	DHP									
RATE (Lpm)	0.15									
VOLUME (L)	3.0									
COLOR	Clear	Black								
ODOR	Rotten Eggs									
INTAKE DEPTH (FEET)	13.50									
SAMPLE: TIME	11:32									
METHOD (DHP/CB/B)	DHP									
ANALYTES	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC	
TOTAL DRAWDOWN (FEET)	1.70									
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

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

Project Name: Bulk Plant - HPI (UST)
Project No.: 4629.03
Date: 4-27-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD
Mob/Demob time: 1.25/.25
Travel time: 1.0
Time on site: 6:30
Time off site: 3:00
Mileage: 36

WELL No.:	MW36		MW37		MW38		MW39		MW40	
DIAMETER (in)	1.50		1.50		1.50		1.50		1.50	
SCREENED INTERVAL (ft)	13-14.5		17.25-19		12-14		17.75-19		13.25-16	
DEPTH TO WATER (ft)	5.80		2.64		2.80		2.18		3.05	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH			6.4	6.2	6.6	6.3	6.6	6.4	6.7	6.4
TEMP (°C)			16.8	16.4	17.1	16.6	17.1	16.0	17.6	16.2
Ecw (µmohs)			287	286	269	276	279	283	274	273
ORP (mV)			20	15	-21	-5	-23	-31	-37	-39
DO (mg/L)			2.11	0.66	1.02	0.49	1.11	0.33	0.97	0.36
OTHER (units)										
PURGE: TIME			12:01	12:09	12:29	12:41	1:02	1:10	1:29	1:37
METHOD (DHP/CB/B)			DHP		DHP		DHP		DHP	
RATE (Lpm)			0.18		0.17		0.20		0.20	
VOLUME (L)			1.40		2.0		1.60		1.60	
COLOR			CLEAR	CLEAR	LT. BROWN CLOUDY	CLOUDY	CLOUDY	CLOUDY	CLEAR	CLEAR
ODOR			SLIGHT ORGANIC		SLIGHT SULFUR		SLIGHT SWEET?		LIGHT SULFUR	
INTAKE DEPTH (FEET)			18.25		13.0		18.25		14.5	
SAMPLE: TIME			12:11		12:43		1:12		1:39	
METHOD (DHP/CB/B)			DHP		DHP		DHP		DHP	
ANALYTES	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC	
TOTAL DRAWDOWN (FEET)			3.62		1.92		5.62		4.50	
REMARKS										
WELL CONDITION	good		good		good		good		good	
WASTE DRUMS										

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

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

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

Project Name: Bulk Plant - HPI (UST)
Project No.: 4629.03
Date: 4/27/05
Golbal ID No.: T0602300107
PM: CJW

Tech: ~~SJD~~ JLS
Mob/Demob time: .25/.25
Travel time: 1.0
Time on site: 6:30 a.m.
Time off site: 3:00 p.m
Mileage: 36

WELL No.:	MW41		MW42		MW43		MW44			
DIAMETER (in)	1.50		1.50		1.50		1.50			
SCREENED INTERVAL (ft)	16.5-18		12-14.5		16-18		12-15			
DEPTH TO WATER (ft)	3.78		3.65							
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.56	6.41	6.74	6.63						
TEMP (°C)	16.7	17.8	16.5	17.6						
Ecw (µmohs)	490	506	482	479						
ORP (mV)	-54	-51	-78	-75						
DO (mg/L)	0.80	0.30	0.83	0.33						
OTHER (units)	—		—							
PURGE: TIME	1:50	2:00	2:21	2:31						
METHOD (DHP/CB/B)	DHP		DHP							
RATE (Lpm)	0.15		0.15							
VOLUME (L)	1.5		1.5							
COLOR	Clear	Clear	Clear	Lt Brown						
ODOR	Slight		Dirt							
INTAKE DEPTH (FEET)	17.25		13.25							
SAMPLE: TIME	2:08		2:39							
METHOD (DHP/CB/B)	DHP		DHP							
ANALYTES	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC			
TOTAL DRAWDOWN (FEET)	3.03		5.48							
REMARKS	—		—							
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

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

Project Name: Bulk Plant (UST)
Project No.: 4629.03
Tech: JLS
Date: 4/27/05

WELL ID:	METER ACCURACY RANGE				
MW #34	+/- 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)
9:41	6.67	16.3	344	Ur	2.91
9:43	6.53	16.5	328	-98	1.57
9:45	6.52	15.8	327	-97	0.62
9:47	6.50	15.6	327	-96	0.59
9:49	6.51	15.7	324	-94	0.51

WELL ID: MW #23

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:14	6.78	15.2	230	-3	2.04
10:16	6.78	15.0	232	0	0.86
10:18	6.80	14.6	232	4	0.59
10:20	6.82	14.1	231	8	0.53
10:22	6.84	14.1	233	10	0.58

WELL ID: MW #36

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:10	6.59	17.0	378	Ur	1.48
11:12	6.59	17.1	379	Ur	0.72
11:14	6.59	16.9	366	Ur	0.74
11:16	6.59	16.6	356	-96	0.52
11:18	6.58	16.1	341	-91	0.50
11:20	6.57	16.2	340	-85	0.48
11:22	6.57	16.1	335	-80	0.43
11:24	6.58	16.1	330	-77	0.49
11:26	6.58	15.7	331	-75	0.39
11:28	6.58	15.8	327	-74	0.38

WELL ID: MW #24

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
12:32	6.62	16.8	312	2	1.10
12:34	6.62	15.6	317	7	0.70
12:36	6.61	15.4	317	11	0.63
12:38	6.61	14.9	317	14	0.58
12:40	6.61	15.0	318	17	0.53
12:42	6.61	14.4	318	20	0.42
12:44	6.61	14.5	319	22	0.41

WELL ID: MW #35

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:57	6.66	17.5	419	Ur	0.49
11:59	6.62	16.5	413	-98	0.50
12:01	6.59	16.6	406	-91	0.48
12:03	6.56	16.4	400	-84	0.41
12:05	6.55	16.3	394	-79	0.37
12:07	6.54	16.1	388	-75	0.34
12:09	6.54	16.0	385	-73	0.33

WELL ID: MW #27

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
1:19	6.67	18.4	536	Ur	1.33
1:21	6.67	17.5	529	Ur	0.58
1:23	6.68	17.0	525	Ur	0.42
1:25	6.67	17.5	520	Ur	0.36
1:27	6.67	18.1	511	Ur	0.38
1:29	6.67	18.1	503	Ur	0.34

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

Project Name: Bulk Plant (UST)
Project No.: 4629.03
Tech: JLS
Date: 4/27/05

WELL ID:	METER ACCURACY RANGE				
MW#41	+/- 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)
1:52	6.47	18.0	497	-52	1.04
1:54	6.45	17.3	497	-53	0.57
1:56	6.43	17.2	500	-52	0.36
1:58	6.43	17.7	508	-53	0.35
2:00	6.41	17.8	506	-51	0.30

WELL ID: MW#42

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
2:23	6.65	16.9	483	-72	0.99
2:25	6.64	16.9	483	-73	0.59
2:27	6.63	17.0	480	-74	0.44
2:29	6.67	17.3	481	-76	0.43
2:31	6.63	17.6	479	-75	0.33

WELL ID:

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

WELL ID:

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

WELL ID:

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

WELL ID:

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

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

Project Name: Bulk Plant (UST)
Project No.: 4629.03
Tech: JLS
Date: 4/27/05

WELL ID: #15		WELL ID: #16		WELL ID: #19		WELL ID: #20		WELL ID: #34		WELL ID: #23	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
DHT	STUCK	8:45	12.18	7:50	13.85	8:19	9.87	9:24	6.70	10:00	5.90
N WELL-		8:50	12.08	7:55	13.85	8:24	9.95	9:29	6.69	10:05	5.90
ANNOT		8:55	12.07			8:29	9.96				
REMOVE-											
NO ROOM TO											
SET DTW METER											
DOWN WELL											

WELL ID: MW#36		WELL ID: MW#35		WELL ID: MW#24		WELL ID: MW#27		WELL ID: MW#41		WELL ID: MW#42	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
0:50	5.80	10:51	5.85	10:52	5.57	1:05	4.51	1:06	3.77	1:07	3.64
0:55	5.80	11:40	6.00	12:23	5.58	1:10	4.50	1:42	3.78	2:15	3.65
		11:45	6.01								

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

WASTE DISPOSAL FORM

Project No. 4629.03 Date 4-27-05

Location FORMER SHELL BULK PLANT By SJD

Number of Soil Drums Ø Number of Water Drums 1

Please Insert a Check Mark

	Yes	No	Condition of Drums: Good	Fair	Deteriorated
Soil DOT drums	☐	☑	☐	☐	☐
Water DOT drums	☑	☐	☑	☐	☐

Other _____

Please describe location of all drums with references with the site, or write any comments, below.

NORTH COAST LABORATORIES LTD.
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 West Fourth Street, Eureka CA 95501
Phone: (707) 443-5054
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: 4629.03
Project Name: HPI - Bulk Plant-UST
Purchase Order Number: task 3023

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS: TPHg/BTEX (CONTAINER 9, PRESERVATIVE b)	ANALYSIS: TPHd w/SGC (CONTAINER 7, PRESERVATIVE ---)
	4629-MW29-W	4-27-05	AM	GW	3	1
	4629-MW30-W				3	1
	4629-MW33-W				3	1
	4629-MW34-W				3	1
	4629-MW35-W				3	1
	4629-MW36-W				3	1
	4629-MW37-W				3	1
	4629-MW38-W				3	1
	4629-MW39-W				3	1
	4629-MW40-W		PM		3	1

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

GEOTRACKER
Cooler temp 5°

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
STEVE DAVIS	4-27-05 3:58 pm	16:00	4/27/05

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

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

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

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

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

Chain of Custody

LABORATORY NUMBER:

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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: 4629.03
Project Name: HPI - Bulk Plant-UST
Purchase Order Number: task 3023

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	CONTAINER	PRESERVATIVE	ANALYSIS: TPHg/BTEX	ANALYSIS: TPHd w/SGC	SAMPLE CONDITION/SPECIAL INSTRUCTIONS
	4629-MW1A-W	4-27-05	AM	GW			3	1	GEOTRACKER
	[redacted]						[redacted]	[redacted]	
	4629-MW16-W						3	1	cooler temp 8°
	4629-MW19-W						3	1	
	4629-MW20-W						3	1	
	4629-MW23-W						3	1	
	4629-MW24-W						3	1	
	4629-MW25-W						3	1	
	4629-MW27-W						3	1	
	4629-MW28-W		PM				3	1	

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
STEVE DAVIS	4-27-05 3:52 pm	16:00	4/27/05

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

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

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

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

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

Chain of Custody

LABORATORY NUMBER:

Attention: Accounts Payable
Results & Invoice to: LACO ASSOCIATES
Address: 21 West Fourth Street, Eureka, CA 95501

Phone: (707) 443-5054
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: 4629.03
Project Name: HPI - Bulk Plant-UST
Purchase Order Number: task 3023

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS: TPHg/BTEX (CONTAINER 9, PRESERVATIVE b)	ANALYSIS: TPHd w/SGC (CONTAINER 7, PRESERVATIVE ---)
	4629-MW41-W	4-27-05	AM	GW	3	1
	4629-MW42-W	↓	↓	↓	3	1
	4629-MW43-W				3	1
	4629-MW44-W		PM		3	1
	[redacted]				[redacted]	

SAMPLE CONDITION/SPECIAL INSTRUCTIONS
GEOTRACKER
Cooler temp 8°

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
STEVE DAVIS	4-27-05 3:52 pm	1800	4/27/05

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 3

RECEIVED
LACO ASSOCIATES
JAN 25 2005
BY: JG

NORTH COAST LABORATORIES LTD.

January 24, 2005

DRG
CJW

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

Order No.: 0501204
Invoice No.: 47690
PO No.: TASK 3020
ELAP No. 1247-Expires July 2006

Attn: Accounts Payable

RE: 4629.03, FORMER SHELL BULK PLANT-PFP

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	4629-MW27-W
01D	4629-MW27-W
01E	4629-MW27-W (Dissolved)
02A	4629-MW28-W
02D	4629-MW28-W
02E	4629-MW28-W (Dissolved)
03A	4629-MW30-W
03D	4629-MW30-W
03E	4629-MW30-W (Dissolved)
04A	4629-MW34-W
04D	4629-MW34-W
04E	4629-MW34-W (Dissolved)
05A	4629-MW38-W
05D	4629-MW38-W
05E	4629-MW38-W (Dissolved)
06A	4629-MW43-W
06D	4629-MW43-W
06E	4629-MW43-W (Dissolved)
07A	4629-MW44-W
07D	4629-MW44-W
07E	4629-MW44-W (Dissolved)
08A	4629-QCTB-W

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

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

REPORT CERTIFIED BY

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

Printed on Recycled Paper

CLIENT: LACO Associates
Project: 4629.03, FORMER SHELL BULK PLANT-PF
Lab Order: 0501204

CASE NARRATIVE

TPH as Diesel with Silica Gel Cleanup:
Samples 4629-MW27-W, 4629-MW28-W, 4629-MW30-W, 4629-MW34-W and 4629-MW44-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.

TPH as Gasoline:
Sample 4629-MW34-W appears to be similar to gasoline but certain peak ratios are not that of a fresh gasoline standard. The reported result represents the amount of material in the gasoline range.

The gasoline values for samples 4629-MW27-W, 4629-MW28-W, 4629-MW30-W, 4629-MW43-W and 4629-MW44-W include the reported gasoline components in addition to other peaks in the gasoline range.

The gasoline value for sample 4629-MW38-W includes the reported gasoline components and additives in addition to other peaks in the gasoline range.

BTEX:
Some reporting limits were raised for samples 4629-MW27-W, 4629-MW28-W, 4629-MW43-W and 4629-MW44-W due to matrix interference.

Sample 4629-MW34-W was diluted and the reporting limits raised additionally due to matrix interference.

The surrogate for sample 4629-MW43-W could not be quantified due to a large amount of early eluting material.

Suggest the confirmation of the positive MTBE result for sample 4629-MW38-W by GC/MS.

Sample 4629-MW30-W was reported as ND with a dilution due to matrix interference.

NORTH COAST LABORATORIES
5680 West End Road • Arcata, California 95521-9202 • 707-822-4649 • FAX 707-822-6831
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Date: 24-Jan-05
WorkOrder: 0501204

ANALYTICAL REPORT

Client Sample ID: 4629-MW27-W **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-01A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	25	µg/L	1.0		1/20/05
Benzene	310	25	µg/L	50		1/20/05
Toluene	7.6	5.0	µg/L	10		1/20/05
Ethylbenzene	9.9	5.0	µg/L	10		1/20/05
m,p-Xylene	ND	6.0	µg/L	1.0		1/20/05
o-Xylene	ND	2.0	µg/L	1.0		1/20/05
Surrogate: Cis-1,2-Dichloroethylene	90.7	85-115	% Rec	10		1/20/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	1,300	50	µg/L	1.0		1/20/05

Client Sample ID: 4629-MW27-W **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-01D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	98	50	µg/L	1.0	1/19/05	1/20/05
Surrogate: N-Tricosane	81.6	34-145	% Rec	1.0	1/19/05	1/20/05

Client Sample ID: 4629-MW27-W (Dissolved) **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-01E **Matrix:** Groundwater

Test Name: ICAP Metals with Acid Digestion **Reference:** EPA 200.7

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Iron	16,000	100	µg/L	1.0	1/11/05	1/14/05

Date: 24-Jan-05
WorkOrder: 0501204

ANALYTICAL REPORT

Client Sample ID: 4629-MW28-W **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-02A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	20	µg/L	1.0		1/19/05
Benzene	150	50	µg/L	100		1/19/05
Toluene	4.9	0.50	µg/L	1.0		1/19/05
Ethylbenzene	7.6	0.50	µg/L	1.0		1/19/05
m,p-Xylene	2.1	0.50	µg/L	1.0		1/19/05
o-Xylene	1.2	0.50	µg/L	1.0		1/19/05
Surrogate: Cis-1,2-Dichloroethylene	95.7	85-115	% Rec	100		1/19/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	760	50	µg/L	1.0		1/19/05

Client Sample ID: 4629-MW28-W **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-02D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	84	50	µg/L	1.0	1/19/05	1/20/05
Surrogate: N-Tricosane	93.9	34-145	% Rec	1.0	1/19/05	1/20/05

Client Sample ID: 4629-MW28-W (Dissolved) **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-02E **Matrix:** Groundwater

Test Name: ICAP Metals with Acid Digestion **Reference:** EPA 200.7

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Iron	2,900	100	µg/L	1.0	1/11/05	1/14/05

Date: 24-Jan-05
WorkOrder: 0501204

ANALYTICAL REPORT

Client Sample ID: 4629-MW30-W **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-03A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	300	µg/L	100		1/20/05
Benzene	8,100	500	µg/L	1,000		1/20/05
Toluene	310	50	µg/L	100		1/20/05
Ethylbenzene	1,200	500	µg/L	1,000		1/20/05
m,p-Xylene	780	50	µg/L	100		1/20/05
o-Xylene	140	50	µg/L	100		1/20/05
Surrogate: Cis-1,2-Dichloroethylene	88.8	85-115	% Rec	100		1/20/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	25,000	5,000	µg/L	100		1/20/05

Client Sample ID: 4629-MW30-W **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-03D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	600	50	µg/L	1.0	1/19/05	1/20/05
Surrogate: N-Tricosane	86.8	34-145	% Rec	1.0	1/19/05	1/20/05

Client Sample ID: 4629-MW30-W (Dissolved) **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-03E **Matrix:** Groundwater

Test Name: ICAP Metals with Acid Digestion **Reference:** EPA 200.7

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Iron	17,000	100	µg/L	1.0	1/11/05	1/14/05

Date: 24-Jan-05
WorkOrder: 0501204

ANALYTICAL REPORT

Client Sample ID: 4629-MW34-W **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-04A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	180	µg/L	10		1/19/05
Benzene	170	25	µg/L	50		1/19/05
Toluene	69	25	µg/L	50		1/19/05
Ethylbenzene	130	25	µg/L	50		1/19/05
m,p-Xylene	230	25	µg/L	50		1/19/05
o-Xylene	65	25	µg/L	50		1/19/05
Surrogate: Cis-1,2-Dichloroethylene	102	85-115	% Rec	50		1/19/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	5,300	500	µg/L	10		1/19/05

Client Sample ID: 4629-MW34-W **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-04D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	380	50	µg/L	1.0	1/19/05	1/20/05
Surrogate: N-Tricosane	84.4	34-145	% Rec	1.0	1/19/05	1/20/05

Client Sample ID: 4629-MW34-W (Dissolved) **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-04E **Matrix:** Groundwater

Test Name: ICAP Metals with Acid Digestion **Reference:** EPA 200.7

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Iron	3,900	100	µg/L	1.0	1/11/05	1/14/05

Date: 24-Jan-05
WorkOrder: 0501204

ANALYTICAL REPORT

Client Sample ID: 4629-MW38-W **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-05A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	17	3.0	µg/L	1.0		1/19/05
Benzene	80	5.0	µg/L	10		1/19/05
Toluene	2.3	0.50	µg/L	1.0		1/19/05
Ethylbenzene	2.1	0.50	µg/L	1.0		1/19/05
m,p-Xylene	1.5	0.50	µg/L	1.0		1/19/05
o-Xylene	0.53	0.50	µg/L	1.0		1/19/05
Surrogate: Cis-1,2-Dichloroethylene	93.7	85-115	% Rec	10		1/19/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	270	50	µg/L	1.0		1/19/05

Client Sample ID: 4629-MW38-W **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-05D **Matrix:** Groundwater

Test Name: TPH as Diesel with 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	1/19/05	1/20/05
Surrogate: N-Tricosane	100	34-145	% Rec	1.0	1/19/05	1/20/05

Client Sample ID: 4629-MW38-W (Dissolved) **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-05E **Matrix:** Groundwater

Test Name: ICAP Metals with Acid Digestion **Reference:** EPA 200.7

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Iron	210	100	µg/L	1.0	1/11/05	1/14/05

Date: 24-Jan-05
WorkOrder: 0501204

ANALYTICAL REPORT

Client Sample ID: 4629-MW43-W **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-06A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	100	µg/L	1.0		1/19/05
Benzene	ND	6.0	µg/L	1.0		1/19/05
Toluene	ND	2.0	µg/L	1.0		1/19/05
Ethylbenzene	ND	0.50	µg/L	1.0		1/19/05
m,p-Xylene	ND	0.50	µg/L	1.0		1/19/05
o-Xylene	0.60	0.50	µg/L	1.0		1/19/05
Surrogate: Cis-1,2-Dichloroethylene	NQ	85-115	% Rec	1.0		1/19/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	350	50	µg/L	1.0		1/19/05

Client Sample ID: 4629-MW43-W **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-06D **Matrix:** Groundwater

Test Name: TPH as Diesel with 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	1/19/05	1/20/05
Surrogate: N-Tricosane	85.1	34-145	% Rec	1.0	1/19/05	1/20/05

Client Sample ID: 4629-MW43-W (Dissolved) **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-06E **Matrix:** Groundwater

Test Name: ICAP Metals with Acid Digestion **Reference:** EPA 200.7

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Iron	ND	100	µg/L	1.0	1/11/05	1/14/05

Date: 24-Jan-05
WorkOrder: 0501204

ANALYTICAL REPORT

Client Sample ID: 4629-MW44-W **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-07A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	80	µg/L	1.0		1/20/05
Benzene	2,200	500	µg/L	1,000		1/20/05
Toluene	7.1	0.50	µg/L	1.0		1/20/05
Ethylbenzene	1.6	0.50	µg/L	1.0		1/20/05
m,p-Xylene	4.0	0.50	µg/L	1.0		1/20/05
o-Xylene	5.0	0.50	µg/L	1.0		1/20/05
Surrogate: Cis-1,2-Dichloroethylene	90.5	85-115	% Rec	1,000		1/20/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	4,000	500	µg/L	10		1/20/05

Client Sample ID: 4629-MW44-W **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-07D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	57	50	µg/L	1.0	1/19/05	1/20/05
Surrogate: N-Tricosane	73.4	34-145	% Rec	1.0	1/19/05	1/20/05

Client Sample ID: 4629-MW44-W (Dissolved) **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-07E **Matrix:** Groundwater

Test Name: ICAP Metals with Acid Digestion **Reference:** EPA 200.7

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Iron	4,600	100	µg/L	1.0	1/11/05	1/14/05

Date: 24-Jan-05
WorkOrder: 0501204

ANALYTICAL REPORT

Client Sample ID: 4629-QCTB-W **Received:** 1/11/05 **Collected:** 1/11/05 0:00
Lab ID: 0501204-08A **Matrix:** Trip Blank

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		1/19/05
Benzene	ND	0.50	µg/L	1.0		1/19/05
Toluene	ND	0.50	µg/L	1.0		1/19/05
Ethylbenzene	ND	0.50	µg/L	1.0		1/19/05
m,p-Xylene	ND	0.50	µg/L	1.0		1/19/05
o-Xylene	ND	0.50	µg/L	1.0		1/19/05
Surrogate: Cis-1,2-Dichloroethylene	95.7	85-115	% Rec	1.0		1/19/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		1/19/05

North Coast Laboratories, Ltd.

Date: 24-Jan-05

CLIENT: LACO Associates
Work Order: 0501204
Project: 4629.03, FORMER SHELL BULK PLANT-PFP

QC SUMMARY REPORT

Method Blank

Sample ID: **MB-1/19/05** Batch ID: **R32950** Test Code: **BTXEW** Units: **µg/L** Analysis Date: **1/19/05 5:53:08 PM** Prep Date:
Client ID: Run ID: **ORGC8_050119B** SeqNo: **477845**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	1.215	3.0									J
Benzene	ND	0.50									
Toluene	ND	0.50									
Ethylbenzene	ND	0.50									
m,p-Xylene	0.2428	0.50									J
o-Xylene	ND	0.50									
Cis-1,2-Dichloroethylene	0.880	0.10	1.00	0	88.0%	85	115	0			

Sample ID: **MB-12793P** Batch ID: **12793** Test Code: **ICPX** Units: **µg/L** Analysis Date: **1/14/05 2:04:00 PM** Prep Date: **1/11/05**
Client ID: Run ID: **INICP1_050114A** SeqNo: **476806**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	ND	100									

Sample ID: **MB-12813** Batch ID: **12813** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date: **1/20/05 5:19:50 PM** Prep Date: **1/19/05**
Client ID: Run ID: **ORGC5_050120A** SeqNo: **477986**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	29.43	50									J
N-Tricosane	53.6	0.10	50.0	0	107%	34	145	0			

Sample ID: **MB-1/19/05** Batch ID: **R32948** Test Code: **TPHCGW** Units: **µg/L** Analysis Date: **1/19/05 5:53:08 PM** Prep Date:
Client ID: Run ID: **ORGC8_050119A** SeqNo: **477824**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	ND	50									

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: 24-Jan-05

CLIENT: LACO Associates
Work Order: 0501204
Project: 4629.03, FORMER SHELL BULK PLANT-PFP

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **LCS-05043** Batch ID: **R32950** Test Code: **BTXEW** Units: **µg/L** Analysis Date: **1/19/05 2:58:58 PM** Prep Date:

Client ID: Run ID: **ORGC8_050119B** SeqNo: **477843**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	44.56	3.0	40.0	0	111%	85	115	0			
Benzene	5.062	0.50	5.00	0	101%	85	115	0			
Toluene	5.205	0.50	5.00	0	104%	85	115	0			
Ethylbenzene	5.144	0.50	5.00	0	103%	85	115	0			
m,p-Xylene	10.69	0.50	10.0	0	107%	85	115	0			
o-Xylene	5.364	0.50	5.00	0	107%	85	115	0			
Cis-1,2-Dichloroethylene	1.12	0.10	1.00	0	112%	85	115	0			

Sample ID: **LCSD-05043** Batch ID: **R32950** Test Code: **BTXEW** Units: **µg/L** Analysis Date: **1/19/05 3:33:50 PM** Prep Date:

Client ID: Run ID: **ORGC8_050119B** SeqNo: **477844**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	43.65	3.0	40.0	0	109%	85	115	44.6	2.06%	15	
Benzene	5.102	0.50	5.00	0	102%	85	115	5.06	0.780%	15	
Toluene	5.133	0.50	5.00	0	103%	85	115	5.20	1.39%	15	
Ethylbenzene	5.157	0.50	5.00	0	103%	85	115	5.14	0.252%	15	
m,p-Xylene	10.67	0.50	10.0	0	107%	85	115	10.7	0.168%	15	
o-Xylene	5.293	0.50	5.00	0	106%	85	115	5.36	1.34%	15	
Cis-1,2-Dichloroethylene	1.05	0.10	1.00	0	105%	85	115	1.12	6.83%	15	

Sample ID: **LCS-12793P** Batch ID: **12793** Test Code: **ICPX** Units: **µg/L** Analysis Date: **1/14/05 2:08:00 PM** Prep Date: **1/11/05**

Client ID: Run ID: **INICP1_050114A** SeqNo: **476807**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	469.4	100	500	0	93.9%	85	115	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: 0501204
Project: 4629.03, FORMER SHELL BULK PLANT-PFP

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **LCS-12813** Batch ID: **12813** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date: **1/20/05 3:25:12 PM** Prep Date: **1/19/05**
Client ID: Run ID: **ORGC5_050120A** SeqNo: **477984**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	350.0	50	500	0	70.0%	33	92	0			
N-Tricosane	51.1	0.10	50.0	0	102%	34	145	0			

Sample ID: **LCSD-12813** Batch ID: **12813** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date: **1/20/05 3:53:50 PM** Prep Date: **1/19/05**
Client ID: Run ID: **ORGC5_050120A** SeqNo: **477985**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	330.6	50	500	0	66.1%	33	92	350	5.71%	13	
N-Tricosane	52.5	0.10	50.0	0	105%	34	145	51.1	2.60%	11	

Sample ID: **LCS-05044** Batch ID: **R32948** Test Code: **TPHCGW** Units: **µg/L** Analysis Date: **1/19/05 4:08:44 PM** Prep Date:
Client ID: Run ID: **ORGC8_050119A** SeqNo: **477822**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	485.3	50	500	0	97.1%	81	126	0			

Sample ID: **LCSD-05044** Batch ID: **R32948** Test Code: **TPHCGW** Units: **µg/L** Analysis Date: **1/19/05 4:43:32 PM** Prep Date:
Client ID: Run ID: **ORGC8_050119A** SeqNo: **477823**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	493.4	50	500	0	98.7%	81	126	485	1.66%	15	

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

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Chain of Custody

LABORATORY NUMBER: 0501204

Attention: Accounts Payable
Results & Invoice to: LACO ASSOCIATES c/o Christopher Watt
Address: 21 West Fourth Street, Eureka CA
Phone: (707) 443-5054
Copies of Report to:
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: 4629.03
Project Name: FORMER SHELL BULK PLANT - PFP
Purchase Order Number: TASK 3020

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS: TPHg/BTEX (CONTAINER 9, PRESERVATIVE b)	ANALYSIS: TPHd w/SGC (CONTAINER 7, PRESERVATIVE ----)	ANALYSIS: Dissolved Iron (CONTAINER 2, PRESERVATIVE ----)	SAMPLE CONDITION/SPECIAL INSTRUCTIONS
	4629-MW27-W	1-11-05	AM	GW	3	1	\	GEOTRACKER
	4629-MW28-W	↓	↓	↓	3	1	\	
	4629-MW30-W				3	1	\	
	4629-MW34-W				3	1	\	
	4629-MW38-W				3	1	\	
	4629-MW43-W				3	1	\	
	4629-MW44-W				3	1	\	
	4629-QCTB-W	↓	PM	↓	1			cold, intact

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
STEVE DAVIS	1-11-05 4:40 pm		1/11/05 1640

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.

March 09, 2005

JG

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

DRG
CJW

Order No.: 0502383
Invoice No.: 48604
PO No.: TASK 3020
ELAP No. 1247-Expires July 2006

Attn: Chris Watt

RE: 4629.03, FORMER SHELL BULK PLANT-PFP

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	4629-MW27-W
01D	4629-MW27-W
02A	4629-MW28-W
02D	4629-MW28-W
03A	4629-MW30-W
03D	4629-MW30-W
04A	4629-MW34-W
04D	4629-MW34-W
05A	4629-MW38-W
05D	4629-MW38-W
06A	4629-MW43-W
06D	4629-MW43-W
07A	4629-MW44-W
07D	4629-MW44-W
08A	4629-QCTB-W

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

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

REPORT CERTIFIED BY

Laboratory Supervisor(s)	QA Unit	Jesse G. Chaney, Jr. Laboratory Director

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CLIENT: LACO Associates
Project: 4629.03, FORMER SHELL BULK PLANT-PF
Lab Order: 0502383

CASE NARRATIVE

All samples submitted for a silica gel cleanup were initially analyzed for diesel. The samples showing no detectable levels of the analyte were not subjected to the cleanup procedure.

TPH as Diesel with Silica Gel Cleanup:
Samples 4629-MW27-W, 4629-MW30-W and 4629-MW34-W contain some material lighter than diesel. However, some of this material extends into the diesel range of molecular weights.

Samples 4629-MW27-W, 4629-MW28-W, 4629-MW30-W, 4629-MW34-W and 4629-MW44-W contain material in the diesel range of molecular weights, but the material does not exhibit the peak pattern typical of diesel oil.

TPH as Gasoline:
Sample 4629-MW43-W does not present a peak pattern consistent with that of gasoline. The reported result represents the amount of material in the gasoline range.

The gasoline value for sample 4629-MW38-W includes the reported gasoline components and additives in addition to other peaks in the gasoline range.

The gasoline values for samples 4629-MW27-W, 4629-MW28-W, 4629-MW30-W, 4629-MW34-W and 4629-MW44-W include the reported gasoline components in addition to other peaks in the gasoline range.

BTEX:
Some reporting limits were raised for samples 4629-MW27-W, 4629-MW28-W, 4629-MW43-W and 4629-MW44-W due to matrix interference.

Samples 4629-MW27-W and 4629-MW34-W were diluted and the reporting limits were raised additionally due to matrix interference.

The surrogate for sample 4629-MW43-W could not be quantified due to a large amount of early eluting material.

Suggest the confirmation of the positive MTBE result for samples 4629-MW38-W by GC/MS.

Sample 4629-MW30-W was reported as ND with a dilution due to matrix interference.

The surrogate recovery was below the lower acceptance limit for sample 4629-MW28-W. The response of the reporting limit standard was such that the analytes would have been detected even with the low recovery; therefore, the data were accepted.

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Date: 08-Mar-05
WorkOrder: 0502383

ANALYTICAL REPORT

Client Sample ID: 4629-MW27-W **Received:** 2/17/05 **Collected:** 2/15/05 0:00
Lab ID: 0502383-01A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	20	µg/L	1.0		2/26/05
Benzene	60	5.0	µg/L	10		2/26/05
Toluene	ND	10	µg/L	10		2/26/05
Ethylbenzene	7.4	5.0	µg/L	10		2/26/05
m,p-Xylene	ND	5.0	µg/L	1.0		2/26/05
o-Xylene	ND	1.5	µg/L	1.0		2/26/05
Surrogate: Cis-1,2-Dichloroethylene	93.6	85-115	% Rec	10		2/26/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	990	50	µg/L	1.0		2/26/05

Client Sample ID: 4629-MW27-W **Received:** 2/17/05 **Collected:** 2/15/05 0:00
Lab ID: 0502383-01D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	91	50	µg/L	1.0	3/1/05	3/7/05
Surrogate: N-Tricosane	58.7	34-145	% Rec	1.0	3/1/05	3/7/05

Client Sample ID: 4629-MW28-W **Received:** 2/17/05 **Collected:** 2/15/05 0:00
Lab ID: 0502383-02A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	15	µg/L	1.0		2/26/05
Benzene	94	25	µg/L	50		2/26/05
Toluene	3.3	0.50	µg/L	1.0		2/26/05
Ethylbenzene	6.2	0.50	µg/L	1.0		2/26/05
m,p-Xylene	1.7	0.50	µg/L	1.0		2/26/05
o-Xylene	0.73	0.50	µg/L	1.0		2/26/05
Surrogate: Cis-1,2-Dichloroethylene	82.7	85-115	% Rec	50		2/26/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	640	50	µg/L	1.0		2/26/05

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WorkOrder: 0502383

ANALYTICAL REPORT

Client Sample ID: 4629-MW28-W **Received:** 2/17/05 **Collected:** 2/15/05 0:00
Lab ID: 0502383-02D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	75	50	µg/L	1.0	3/1/05	3/7/05
Surrogate: N-Tricosane	88.4	34-145	% Rec	1.0	3/1/05	3/7/05

Client Sample ID: 4629-MW30-W **Received:** 2/17/05 **Collected:** 2/15/05 0:00
Lab ID: 0502383-03A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	300	µg/L	100		2/26/05
Benzene	6,100	500	µg/L	1,000		2/26/05
Toluene	200	50	µg/L	100		2/26/05
Ethylbenzene	890	500	µg/L	1,000		2/26/05
m,p-Xylene	560	50	µg/L	100		2/26/05
o-Xylene	110	50	µg/L	100		2/26/05
Surrogate: Cis-1,2-Dichloroethylene	88.7	85-115	% Rec	100		2/26/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	22,000	5,000	µg/L	100		2/26/05

Client Sample ID: 4629-MW30-W **Received:** 2/17/05 **Collected:** 2/15/05 0:00
Lab ID: 0502383-03D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	770	50	µg/L	1.0	3/1/05	3/8/05
Surrogate: N-Tricosane	80.9	34-145	% Rec	1.0	3/1/05	3/8/05

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Date: 08-Mar-05
WorkOrder: 0502383

ANALYTICAL REPORT

Client Sample ID: 4629-MW34-W **Received:** 2/17/05 **Collected:** 2/15/05 0:00
Lab ID: 0502383-04A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	100	µg/L	10		2/26/05
Benzene	120	50	µg/L	100		2/26/05
Toluene	39	5.0	µg/L	10		2/26/05
Ethylbenzene	120	50	µg/L	100		2/26/05
m,p-Xylene	130	5.0	µg/L	10		2/26/05
o-Xylene	37	5.0	µg/L	10		2/26/05
Surrogate: Cis-1,2-Dichloroethylene	97.2	85-115	% Rec	100		2/26/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	3,400	500	µg/L	10		2/26/05

Client Sample ID: 4629-MW34-W **Received:** 2/17/05 **Collected:** 2/15/05 0:00
Lab ID: 0502383-04D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	310	50	µg/L	1.0	3/1/05	3/7/05
Surrogate: N-Tricosane	89.4	34-145	% Rec	1.0	3/1/05	3/7/05

Client Sample ID: 4629-MW38-W **Received:** 2/17/05 **Collected:** 2/15/05 0:00
Lab ID: 0502383-05A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	12	3.0	µg/L	1.0		2/26/05
Benzene	47	10	µg/L	20		2/26/05
Toluene	2.1	0.50	µg/L	1.0		2/26/05
Ethylbenzene	2.0	0.50	µg/L	1.0		2/26/05
m,p-Xylene	1.2	0.50	µg/L	1.0		2/26/05
o-Xylene	0.82	0.50	µg/L	1.0		2/26/05
Surrogate: Cis-1,2-Dichloroethylene	87.8	85-115	% Rec	20		2/26/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	250	50	µg/L	1.0		2/26/05

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WorkOrder: 0502383

ANALYTICAL REPORT

Client Sample ID: 4629-MW38-W **Received:** 2/17/05 **Collected:** 2/15/05 0:00
Lab ID: 0502383-05D **Matrix:** Groundwater

Test Name: TPH as Diesel with 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	3/1/05	3/7/05
Surrogate: N-Tricosane	73.6	34-145	% Rec	1.0	3/1/05	3/7/05

Client Sample ID: 4629-MW43-W **Received:** 2/17/05 **Collected:** 2/15/05 0:00
Lab ID: 0502383-06A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	40	µg/L	1.0		2/26/05
Benzene	ND	4.0	µg/L	1.0		2/26/05
Toluene	ND	1.5	µg/L	1.0		2/26/05
Ethylbenzene	ND	0.50	µg/L	1.0		2/26/05
m,p-Xylene	ND	0.50	µg/L	1.0		2/26/05
o-Xylene	ND	0.50	µg/L	1.0		2/26/05
Surrogate: Cis-1,2-Dichloroethylene	NQ	85-115	% Rec	1.0		2/26/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	320	50	µg/L	1.0		2/26/05

Client Sample ID: 4629-MW43-W **Received:** 2/17/05 **Collected:** 2/15/05 0:00
Lab ID: 0502383-06D **Matrix:** Groundwater

Test Name: TPH as Diesel with 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	3/1/05	3/7/05
Surrogate: N-Tricosane	75.9	34-145	% Rec	1.0	3/1/05	3/7/05

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Date: 08-Mar-05
WorkOrder: 0502383

ANALYTICAL REPORT

Client Sample ID: 4629-MW44-W **Received:** 2/17/05 **Collected:** 2/15/05 0:00
Lab ID: 0502383-07A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	50	µg/L	1.0		2/26/05
Benzene	1,400	250	µg/L	500		2/26/05
Toluene	4.8	0.50	µg/L	1.0		2/26/05
Ethylbenzene	2.3	0.50	µg/L	1.0		2/26/05
m,p-Xylene	2.7	0.50	µg/L	1.0		2/26/05
o-Xylene	3.3	0.50	µg/L	1.0		2/26/05
Surrogate: Cis-1,2-Dichloroethylene	88.9	85-115	% Rec	500		2/26/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	2,900	500	µg/L	10		2/26/05

Client Sample ID: 4629-MW44-W **Received:** 2/17/05 **Collected:** 2/15/05 0:00
Lab ID: 0502383-07D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	55	50	µg/L	1.0	3/1/05	3/7/05
Surrogate: N-Tricosane	47.7	34-145	% Rec	1.0	3/1/05	3/7/05

Client Sample ID: 4629-QCTB-W **Received:** 2/17/05 **Collected:** 2/15/05 0:00
Lab ID: 0502383-08A **Matrix:** Trip Blank

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		2/25/05
Benzene	ND	0.50	µg/L	1.0		2/25/05
Toluene	ND	0.50	µg/L	1.0		2/25/05
Ethylbenzene	ND	0.50	µg/L	1.0		2/25/05
m,p-Xylene	ND	0.50	µg/L	1.0		2/25/05
o-Xylene	ND	0.50	µg/L	1.0		2/25/05
Surrogate: Cis-1,2-Dichloroethylene	103	85-115	% Rec	1.0		2/25/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		2/25/05

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North Coast Laboratories, Ltd.

Date: 08-Mar-05

CLIENT: LACO Associates
Work Order: 0502383
Project: 4629.03, FORMER SHELL BULK PLANT-PF

QC SUMMARY REPORT

Method Blank

Sample ID **MB-2/25/05** Batch ID: **R33581** Test Code: **BTXEW** Units: **µg/L** Analysis Date **2/26/05 2:54:48 AM** Prep Date
Client ID: Run ID: **ORGC8_050225B** SeqNo: **486065**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	ND	3.0									
Benzene	ND	0.50									
Toluene	ND	0.50									
Ethylbenzene	ND	0.50									
m,p-Xylene	ND	0.50									
o-Xylene	ND	0.50									
Cis-1,2-Dichloroethylene	0.904	0.10	1.00	0	90.4%	85	115	0			

Sample ID **MB-13069** Batch ID: **13069** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date **3/7/05 7:50:27 PM** Prep Date **3/1/05**
Client ID: Run ID: **ORGC5_050307A** SeqNo: **488391**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	48.96	50									J
N-Tricosane	53.4	0.10	50.0	0	107%	34	145	0			

Sample ID **MB-2/25/05** Batch ID: **R33577** Test Code: **TPHCGW** Units: **µg/L** Analysis Date **2/26/05 2:54:48 AM** Prep Date
Client ID: Run ID: **ORGC8_050225A** SeqNo: **486016**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	ND	50									

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: 08-Mar-05

CLIENT: LACO Associates
Work Order: 0502383
Project: 4629.03, FORMER SHELL BULK PLANT-PF

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID **LCS-05137** Batch ID: **R33581** Test Code: **BTXEW** Units: **µg/L** Analysis Date **2/25/05 10:55:03 PM** Prep Date
Client ID: Run ID: **ORGC8_050225B** SeqNo: **486062**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	37.60	3.0	40.0	0	94.0%	85	115	0			
Benzene	4.994	0.50	5.00	0	99.9%	85	115	0			
Toluene	5.087	0.50	5.00	0	102%	85	115	0			
Ethylbenzene	5.036	0.50	5.00	0	101%	85	115	0			
m,p-Xylene	10.06	0.50	10.0	0	101%	85	115	0			
o-Xylene	5.048	0.50	5.00	0	101%	85	115	0			
Cis-1,2-Dichloroethylene	1.01	0.10	1.00	0	101%	85	115	0			

Sample ID **LCSD-05137** Batch ID: **R33581** Test Code: **BTXEW** Units: **µg/L** Analysis Date **2/25/05 11:29:21 PM** Prep Date
Client ID: Run ID: **ORGC8_050225B** SeqNo: **486063**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	37.23	3.0	40.0	0	93.1%	85	115	37.6	0.972%	15	
Benzene	4.976	0.50	5.00	0	99.5%	85	115	4.99	0.368%	15	
Toluene	5.030	0.50	5.00	0	101%	85	115	5.09	1.13%	15	
Ethylbenzene	5.011	0.50	5.00	0	100%	85	115	5.04	0.498%	15	
m,p-Xylene	10.02	0.50	10.0	0	100%	85	115	10.1	0.445%	15	
o-Xylene	5.025	0.50	5.00	0	100%	85	115	5.05	0.467%	15	
Cis-1,2-Dichloroethylene	1.12	0.10	1.00	0	112%	85	115	1.01	10.2%	15	

Sample ID **LCS-13069** Batch ID: **13069** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date **3/7/05 5:55:07 PM** Prep Date **3/1/05**
Client ID: Run ID: **ORGC5_050307A** SeqNo: **488389**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	324.3	50	500	0	64.9%	33	92	0			
N-Tricosane	52.7	0.10	50.0	0	105%	34	145	0			

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: 0502383
Project: 4629.03, FORMER SHELL BULK PLANT-PF

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID **LCSD-13069** Batch ID: **13069** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date **3/7/05 6:23:51 PM** Prep Date **3/1/05**
Client ID: Run ID: **ORGC5_050307A** SeqNo: **488390**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	357.0	50	500	0	71.4%	33	92	324	9.59%	13	
N-Tricosane	51.1	0.10	50.0	0	102%	34	145	52.7	3.03%	11	

Sample ID **LCS-05138** Batch ID: **R33577** Test Code: **TPHCGW** Units: **µg/L** Analysis Date **2/26/05 12:37:54 AM** Prep Date
Client ID: Run ID: **ORGC8_050225A** SeqNo: **486013**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	538.4	50	500	0	108%	81	126	0			

Sample ID **LCSD-05138** Batch ID: **R33577** Test Code: **TPHCGW** Units: **µg/L** Analysis Date **2/26/05 1:12:10 AM** Prep Date
Client ID: Run ID: **ORGC8_050225A** SeqNo: **486014**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	545.8	50	500	0	109%	81	126	538	1.36%	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

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Chain of Custody

LABORATORY NUMBER: 0502383

Attention: Accounts Payable
Results & Invoice to: LACO ASSOCIATES c/o Christopher Watt
Address: 21 West Fourth Street, Eureka CA
Phone: (707) 443-5054
Copies of Report to:
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: 4629.03
Project Name: FORMER SHELL BULK PLANT - PFP
Purchase Order Number: TASK 3020

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS: TPHg/BTEX (CONTAINER 9, PRESERVATIVE b)	ANALYSIS: TPHd w/SGC (CONTAINER 7, PRESERVATIVE ----)
	4629-MW27-W	2-15-05	AM	GW	3	1
	4629-MW28-W				3	1
	4629-MW30-W				3	1
	4629-MW34-W				3	1
	4629-MW38-W				3	1
	4629-MW43-W				3	1
	4629-MW44-W				3	1
	4629-QCTB-W		PM		1	

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

GEOTRACKER

cold intact

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
STEVE DAVIS	2-17-05 4:04 pm	R. Thompson	2/17/05 1606

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.

RECEIVED
LACO ASSOCIATES
APR 18 2005
BY: JG

April 14, 2005

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

DRG
CJW

Order No.: 0503662
Invoice No.: 49389
PO No.: TASK 3020
ELAP No. 1247-Expires July 2006

Attn: Accounts Payable

RE: 4629.03, FORMER SHELL BULK PLANT-PFP

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	4629-MW27-W
01D	4629-MW27-W
02A	4629-MW28-W
02D	4629-MW28-W
03A	4629-MW30-W
03D	4629-MW30-W
04A	4629-MW34-W
04D	4629-MW34-W
05A	4629-MW38-W
05D	4629-MW38-W
06A	4629-MW43-W
06D	4629-MW43-W
07A	4629-MW44-W
07D	4629-MW44-W
08A	4629-QCTB-W

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

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

REPORT CERTIFIED BY

Laboratory Supervisor(s) | QA Unit | Jesse G. Chaney, Jr. Laboratory Director

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North Coast Laboratories, Ltd. **Date:** *14-Apr-05*

CLIENT: LACO Associates
Project: 4629.03, FORMER SHELL BULK PLANT-PF
Lab Order: 0503662

CASE NARRATIVE

All samples submitted for a silica gel cleanup were initially analyzed for diesel. The samples showing no detectable levels of the analyte were not subjected to the cleanup procedure.

TPH as Diesel with Silica Gel Cleanup:
Samples 4629-MW27-W, 4629-MW28-W, 4629-MW30-W and 4629-MW34-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.

The low surrogate recoveries for samples 4629-MW27-W and 4629-MW34-W may be due to matrix interference.

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries were above the upper acceptance limit for the surrogate. The LCS/LCSD recoveries for diesel were within the acceptance limits; therefore, the data were accepted.

The relative percent difference (RPD) for the laboratory control samples was above the upper acceptance limit for diesel. This indicates that the results could be variable.

TPH as Gasoline:
Samples 4629-MW30-W and 4629-MW34-W appear to be similar to gasoline but certain peak ratios are not that of a fresh gasoline standard. The reported results represent the amount of material in the gasoline range.

The gasoline value for sample 4629-MW38-W includes the reported gasoline components and additives in addition to other peaks in the gasoline range.

The gasoline values for samples 4629-MW27-W, 4629-MW28-W, 4629-MW43-W and 4629-MW44-W include the reported gasoline components in addition to other peaks in the gasoline range.

BTEX:
Some reporting limits were raised for samples 4629-MW27-W, 4629-MW28-W, 4629-MW43-W and 4629-MW44-W due to matrix interference.

Sample 4629-MW34-W was diluted and the reporting limits raised additionally due to matrix interference.

Suggest the confirmation of the positive MTBE result for samples 4629-MW38-W by GC/MS.

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CASE NARRATIVE

Sample 4629-MW30-W was reported as ND with a dilution due to matrix interference.

The surrogate recovery for sample 4629-MW44-W was outside of the acceptance limits. The surrogate recoveries for the quality control samples were within the acceptance limits. This indicates that the low surrogate recovery may be due to matrix effects from the sample.

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Date: 14-Apr-05
WorkOrder: 0503662

ANALYTICAL REPORT

Client Sample ID: 4629-MW27-W **Received:** 3/30/05 **Collected:** 3/30/05 0:00
Lab ID: 0503662-01A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	30	µg/L	1.0		4/9/05
Benzene	300	50	µg/L	100		4/10/05
Toluene	7.9	0.50	µg/L	1.0		4/9/05
Ethylbenzene	6.8	5.0	µg/L	10		4/9/05
m,p-Xylene	2.9	0.50	µg/L	1.0		4/9/05
o-Xylene	1.6	0.50	µg/L	1.0		4/9/05
Surrogate: Cis-1,2-Dichloroethylene	94.8	85-115	% Rec	100		4/10/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	1,300	50	µg/L	1.0		4/9/05

Client Sample ID: 4629-MW27-W **Received:** 3/30/05 **Collected:** 3/30/05 0:00
Lab ID: 0503662-01D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	80	50	µg/L	1.0	4/10/05	4/14/05
Surrogate: N-Tricosane	66.4	70-130	% Rec	1.0	4/10/05	4/14/05

Client Sample ID: 4629-MW28-W **Received:** 3/30/05 **Collected:** 3/30/05 0:00
Lab ID: 0503662-02A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	20	µg/L	1.0		4/9/05
Benzene	100	10	µg/L	20		4/9/05
Toluene	4.2	0.50	µg/L	1.0		4/9/05
Ethylbenzene	8.5	0.50	µg/L	1.0		4/9/05
m,p-Xylene	1.2	0.50	µg/L	1.0		4/9/05
o-Xylene	0.57	0.50	µg/L	1.0		4/9/05
Surrogate: Cis-1,2-Dichloroethylene	98.3	85-115	% Rec	20		4/9/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	780	50	µg/L	1.0		4/9/05

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WorkOrder: 0503662

ANALYTICAL REPORT

Client Sample ID: 4629-MW28-W **Received:** 3/30/05 **Collected:** 3/30/05 0:00
Lab ID: 0503662-02D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	81	50	µg/L	1.0	4/10/05	4/13/05
Surrogate: N-Tricosane	95.5	70-130	% Rec	1.0	4/10/05	4/13/05

Client Sample ID: 4629-MW30-W **Received:** 3/30/05 **Collected:** 3/30/05 0:00
Lab ID: 0503662-03A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	300	µg/L	100		4/10/05
Benzene	5,600	500	µg/L	1,000		4/10/05
Toluene	180	50	µg/L	100		4/10/05
Ethylbenzene	800	50	µg/L	100		4/10/05
m,p-Xylene	490	50	µg/L	100		4/10/05
o-Xylene	100	50	µg/L	100		4/10/05
Surrogate: Cis-1,2-Dichloroethylene	88.9	85-115	% Rec	100		4/10/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	18,000	5,000	µg/L	100		4/10/05

Client Sample ID: 4629-MW30-W **Received:** 3/30/05 **Collected:** 3/30/05 0:00
Lab ID: 0503662-03D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	580	50	µg/L	1.0	4/10/05	4/14/05
Surrogate: N-Tricosane	113	70-130	% Rec	1.0	4/10/05	4/14/05

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Date: 14-Apr-05
WorkOrder: 0503662

ANALYTICAL REPORT

Client Sample ID: 4629-MW34-W **Received:** 3/30/05 **Collected:** 3/30/05 0:00
Lab ID: 0503662-04A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	180	µg/L	10		4/9/05
Benzene	95	5.0	µg/L	10		4/9/05
Toluene	58	5.0	µg/L	10		4/9/05
Ethylbenzene	120	50	µg/L	100		4/9/05
m,p-Xylene	200	5.0	µg/L	10		4/9/05
o-Xylene	55	5.0	µg/L	10		4/9/05
Surrogate: Cis-1,2-Dichloroethylene	91.7	85-115	% Rec	100		4/9/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	5,500	500	µg/L	10		4/9/05

Client Sample ID: 4629-MW34-W **Received:** 3/30/05 **Collected:** 3/30/05 0:00
Lab ID: 0503662-04D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	190	50	µg/L	1.0	4/10/05	4/14/05
Surrogate: N-Tricosane	56.1	70-130	% Rec	1.0	4/10/05	4/14/05

Client Sample ID: 4629-MW38-W **Received:** 3/30/05 **Collected:** 3/30/05 0:00
Lab ID: 0503662-05A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	14	3.0	µg/L	1.0		4/9/05
Benzene	28	5.0	µg/L	10		4/9/05
Toluene	1.5	0.50	µg/L	1.0		4/9/05
Ethylbenzene	1.3	0.50	µg/L	1.0		4/9/05
m,p-Xylene	0.74	0.50	µg/L	1.0		4/9/05
o-Xylene	0.50	0.50	µg/L	1.0		4/9/05
Surrogate: Cis-1,2-Dichloroethylene	93.4	85-115	% Rec	10		4/9/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	200	50	µg/L	1.0		4/9/05

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Date: 14-Apr-05
WorkOrder: 0503662

ANALYTICAL REPORT

Client Sample ID: 4629-MW38-W **Received:** 3/30/05 **Collected:** 3/30/05 0:00
Lab ID: 0503662-05D **Matrix:** Groundwater

Test Name: TPH as Diesel with 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	4/10/05	4/13/05
Surrogate: N-Tricosane	83.8	70-130	% Rec	1.0	4/10/05	4/13/05

Client Sample ID: 4629-MW43-W **Received:** 3/30/05 **Collected:** 3/30/05 0:00
Lab ID: 0503662-06A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	80	µg/L	1.0		4/9/05
Benzene	120	25	µg/L	50		4/10/05
Toluene	ND	2.0	µg/L	1.0		4/9/05
Ethylbenzene	ND	2.0	µg/L	1.0		4/9/05
m,p-Xylene	ND	2.0	µg/L	1.0		4/9/05
o-Xylene	1.6	0.50	µg/L	1.0		4/9/05
Surrogate: Cis-1,2-Dichloroethylene	91.8	85-115	% Rec	50		4/10/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	650	50	µg/L	1.0		4/9/05

Client Sample ID: 4629-MW43-W **Received:** 3/30/05 **Collected:** 3/30/05 0:00
Lab ID: 0503662-06D **Matrix:** Groundwater

Test Name: TPH as Diesel with 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	4/10/05	4/13/05
Surrogate: N-Tricosane	101	70-130	% Rec	1.0	4/10/05	4/13/05

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Date: 14-Apr-05
WorkOrder: 0503662

ANALYTICAL REPORT

Client Sample ID: 4629-MW44-W **Received:** 3/30/05 **Collected:** 3/30/05 0:00
Lab ID: 0503662-07A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	70	µg/L	1.0		4/10/05
Benzene	1,800	500	µg/L	1,000		4/10/05
Toluene	6.7	0.50	µg/L	1.0		4/10/05
Ethylbenzene	4.3	0.50	µg/L	1.0		4/10/05
m,p-Xylene	3.6	0.50	µg/L	1.0		4/10/05
o-Xylene	3.5	0.50	µg/L	1.0		4/10/05
Surrogate: Cis-1,2-Dichloroethylene	78.7	85-115	% Rec	1,000		4/10/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	3,600	500	µg/L	10		4/10/05

Client Sample ID: 4629-MW44-W **Received:** 3/30/05 **Collected:** 3/30/05 0:00
Lab ID: 0503662-07D **Matrix:** Groundwater

Test Name: TPH as Diesel with 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	4/10/05	4/13/05
Surrogate: N-Tricosane	88.4	70-130	% Rec	1.0	4/10/05	4/13/05

Client Sample ID: 4629-QCTB-W **Received:** 3/30/05 **Collected:** 3/30/05 0:00
Lab ID: 0503662-08A **Matrix:** Trip Blank

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		4/9/05
Benzene	ND	0.50	µg/L	1.0		4/9/05
Toluene	ND	0.50	µg/L	1.0		4/9/05
Ethylbenzene	ND	0.50	µg/L	1.0		4/9/05
m,p-Xylene	ND	0.50	µg/L	1.0		4/9/05
o-Xylene	ND	0.50	µg/L	1.0		4/9/05
Surrogate: Cis-1,2-Dichloroethylene	100	85-115	% Rec	1.0		4/9/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		4/9/05

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North Coast Laboratories, Ltd.

Date: 14-Apr-05

CLIENT: LACO Associates
Work Order: 0503662
Project: 4629.03, FORMER SHELL BULK PLANT-PFP

QC SUMMARY REPORT

Method Blank

Sample ID: **MB-4/9/05** Batch ID: **R34303** Test Code: **BTXEW** Units: **µg/L** Analysis Date: **4/9/05 5:38:24 PM** Prep Date:
Client ID: Run ID: **ORGC8_050409B** SeqNo: **497328**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	ND	3.0									
Benzene	ND	0.50									
Toluene	ND	0.50									
Ethylbenzene	ND	0.50									
m,p-Xylene	ND	0.50									
o-Xylene	ND	0.50									
Cis-1,2-Dichloroethylene	0.950	0.10	1.00	0	95.0%	85	115	0			

Sample ID: **MB-13300** Batch ID: **13300** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date: **4/13/05 8:00:47 PM** Prep Date: **4/10/05**
Client ID: Run ID: **ORGC5_050413A** SeqNo: **498135**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	ND	50									
N-Tricosane	45.6	0.10	50.0	0	91.3%	70	130	0			

Sample ID: **MB-4/9/05** Batch ID: **R34302** Test Code: **TPHCGW** Units: **µg/L** Analysis Date: **4/9/05 5:38:24 PM** Prep Date:
Client ID: Run ID: **ORGC8_050409A** SeqNo: **497315**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	ND	50									

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: 14-Apr-05

CLIENT: LACO Associates
Work Order: 0503662
Project: 4629.03, FORMER SHELL BULK PLANT-PFP

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **LCS-05245** Batch ID: **R34303** Test Code: **BTXEW** Units: **µg/L** Analysis Date: **4/9/05 2:43:52 PM** Prep Date:

Client ID: Run ID: **ORGC8_050409B** SeqNo: **497326**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	45.58	3.0	40.0	0	114%	85	115	0			
Benzene	5.374	0.50	5.00	0	107%	85	115	0			
Toluene	5.206	0.50	5.00	0	104%	85	115	0			
Ethylbenzene	5.103	0.50	5.00	0	102%	85	115	0			
m,p-Xylene	10.31	0.50	10.0	0	103%	85	115	0			
o-Xylene	5.134	0.50	5.00	0	103%	85	115	0			
Cis-1,2-Dichloroethylene	1.02	0.10	1.00	0	102%	85	115	0			

Sample ID: **LCSD-05245** Batch ID: **R34303** Test Code: **BTXEW** Units: **µg/L** Analysis Date: **4/9/05 3:18:51 PM** Prep Date:

Client ID: Run ID: **ORGC8_050409B** SeqNo: **497327**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	44.86	3.0	40.0	0	112%	85	115	45.6	1.58%	15	
Benzene	5.273	0.50	5.00	0	105%	85	115	5.37	1.89%	15	
Toluene	5.091	0.50	5.00	0	102%	85	115	5.21	2.24%	15	
Ethylbenzene	5.032	0.50	5.00	0	101%	85	115	5.10	1.39%	15	
m,p-Xylene	10.16	0.50	10.0	0	102%	85	115	10.3	1.44%	15	
o-Xylene	5.067	0.50	5.00	0	101%	85	115	5.13	1.31%	15	
Cis-1,2-Dichloroethylene	1.11	0.10	1.00	0	111%	85	115	1.02	8.82%	15	

Sample ID: **LCS-13300** Batch ID: **13300** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date: **4/13/05 6:03:36 PM** Prep Date: **4/10/05**

Client ID: Run ID: **ORGC5_050413A** SeqNo: **498133**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	401.9	50	500	0	80.4%	40	107	0			
N-Tricosane	67.0	0.10	50.0	0	134%	70	130	0			S

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: 0503662
Project: 4629.03, FORMER SHELL BULK PLANT-PFP

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID: **LCSD-13300** Batch ID: **13300** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date: **4/13/05 6:32:45 PM** Prep Date: **4/10/05**
Client ID: Run ID: **ORGC5_050413A** SeqNo: **498134**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	333.3	50	500	0	66.7%	40	107	402	18.7%	15	R
N-Tricosane	65.2	0.10	50.0	0	130%	70	130	67.0	2.60%	15	S

Sample ID: **LCS-05246** Batch ID: **R34302** Test Code: **TPHCGW** Units: **µg/L** Analysis Date: **4/9/05 3:53:45 PM** Prep Date:
Client ID: Run ID: **ORGC8_050409A** SeqNo: **497313**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	556.3	50	500	0	111%	81	126	0			

Sample ID: **LCSD-05246** Batch ID: **R34302** Test Code: **TPHCGW** Units: **µg/L** Analysis Date: **4/9/05 4:28:41 PM** Prep Date:
Client ID: Run ID: **ORGC8_050409A** SeqNo: **497314**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	551.0	50	500	0	110%	81	126	556	0.964%	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: 0503662

Attention: Accounts Payable
Results & Invoice to: LACO ASSOCIATES c/o Christopher Watt
Address: 21 West Fourth Street, Eureka CA
Phone: (707) 443-5054
Copies of Report to:
Sampler (Sign & Print): SJD Stu

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: 4629.03
Project Name: FORMER SHELL BULK PLANT - PFP
Purchase Order Number: TASK 3020

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS: TPHg/BTEX (CONTAINER 9, PRESERVATIVE b)	ANALYSIS: TPHd w/SGC (CONTAINER 7, PRESERVATIVE ----)
	4629-MW27-W	3-30-05	AM	GW	3	1
	4629-MW28-W				3	1
	4629-MW30-W				3	1
	4629-MW34-W				3	1
	4629-MW38-W				3	1
	4629-MW43-W				3	1
	4629-MW44-W				3	1
	4629-QCTB-W		PM		1	

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

GEOTRACKER

Cold intact

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
Stu STEVE DAVIS	3-30-05 4:25 pm	[signature]	3/30/05 1625

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.

May 11, 2005

RECEIVED
LACO ASSOCIATES
MAY 16 2005
BY: JG

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

Order No.: 0504609
Invoice No.: 50044
PO No.: TASK 3023
ELAP No. 1247-Expires July 2006

Attn: Accounts Payable

RE: 4629.03, HPI-Bulk Plant-UST

DRG
CJW

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	4629-MW1A-W
01D	4629-MW1A-W
02A	4629-MW16-W
02D	4629-MW16-W
03A	4629-MW19-W
03D	4629-MW19-W
04A	4629-MW20-W
04D	4629-MW20-W
05A	4629-MW23-W
05D	4629-MW23-W
06A	4629-MW24-W
06D	4629-MW24-W
07A	4629-MW25-W
07D	4629-MW25-W
08A	4629-MW27-W
08D	4629-MW27-W
09A	4629-MW28-W
09D	4629-MW28-W
10A	4629-MW29-W
10D	4629-MW29-W
11A	4629-MW30-W
11D	4629-MW30-W
12A	4629-MW33-W
12D	4629-MW33-W
13A	4629-MW34-W
13D	4629-MW34-W
14A	4629-MW35-W
14D	4629-MW35-W

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

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

REPORT CERTIFIED BY

Laboratory Supervisor(s) | QA Unit | Jesse G. Chaney, Jr. Laboratory Director

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Printed on Recycled Paper

May 11, 2005

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

Order No.: 0504609
Invoice No.: 50044
PO No.: TASK 3023
ELAP No. 1247-Expires July 2006

Attn: Accounts Payable

RE: 4629.03, HPI-Bulk Plant-UST

SAMPLE IDENTIFICATION

15A	4629-MW36-W
15D	4629-MW36-W
16A	4629-MW37-W
16D	4629-MW37-W
17A	4629-MW38-W
17D	4629-MW38-W
18A	4629-MW39-W
18D	4629-MW39-W
19A	4629-MW40-W
19D	4629-MW40-W
20A	4629-MW41-W
20D	4629-MW41-W
21A	4629-MW42-W
21D	4629-MW42-W
22A	4629-MW43-W
22D	4629-MW43-W
23A	4629-MW44-W
23D	4629-MW44-W

CLIENT: LACO Associates
Project: 4629.03, HPI-Bulk Plant-UST
Lab Order: 0504609

CASE NARRATIVE

All samples submitted for a silica gel cleanup were initially analyzed for diesel. The samples showing no detectable levels of the analyte were not subjected to the cleanup procedure.

TPH as Diesel with Silica Gel Cleanup:
Samples 4629-MW27-W, 4629-MW28-W, 4629-MW30-W and 4629-MW34-W contain some material lighter than diesel, however, some of this material extends into the diesel range of molecular weights.

Samples 4629-MW27-W, 4629-MW28-W, 4629-MW30-W, 4629-MW34-W, 4629-MW39-W, 4629-MW43-W and 4629-MW44-W contain material in the diesel range of molecular weights, but the material does not exhibit the peak pattern typical of diesel oil.

Sample 4629-MW29-W contains material similar to degraded or weathered diesel oil.

The surrogate recoveries for samples 4629-MW27-W, 4629-MW28-W, 4629-MW30-W, 4629-MW34-W, and 4629-MW39-W were outside of the acceptance limits. The surrogate recoveries for the quality control samples were within acceptance limits. This indicates that the low surrogate recoveries may be due to matrix effects from the samples.

There was an interferent present in the method blank, analyzed on 5/6/05, that was above the reporting limit for diesel. The samples analyzed on 5/6/05 were not affected by the interferent; therefore, the data were accepted.

The relative percent difference's (RPD's) for the laboratory control samples analyzed on 5/10/05 were above the upper acceptance limits for diesel and the surrogate. This indicates that the results could be variable.

TPH as Diesel:
The surrogate recoveries were below the lower acceptance limit for sample 4629-MW16-W and the method blank. The response of the reporting limit standard was such that the analyte would have been detected even with the low recoveries; therefore, the data were accepted.

BTEX:
Suggest the confirmation of the positive MTBE results for samples 4629-MW35-W, 4629-MW36-W, 4629-MW37-W, 4629-MW38-W, 4629-MW39-W, 4629-MW40-W, 4629-MW41-W and 4629-MW42-W by GC/MS.

Some reporting limits were raised for samples 4629-MW1A-W, 4629-MW25-W, 4629-MW27-W, 4629-MW28-W, 4629-MW42-W, 4629-MW43-W and 4629-MW44-W due to matrix interference.

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CASE NARRATIVE

Sample 4629-MW34-W was diluted and the reporting limits raised additionally due to matrix interference.

Sample 4629-MW30-W was reported as ND with a dilution due to matrix interference.

The surrogate recoveries were below the lower acceptance limit for samples 4629-MW23-W and 4629-MW24-W. The response of the reporting limit standard was such that the analytes would have been detected even with the low recoveries; therefore, the data were accepted.

The RPD for the laboratory control samples analyzed on 5/5/05 was above the upper acceptance limit for the surrogate. All of the analyte RPD's were within the acceptance limits; therefore, the data were accepted.

TPH as Gasoline:
Sample 4629-MW25-W does not present a peak pattern consistent with that of gasoline. The reported result represents the amount of material in the gasoline range.

Samples 4629-MW30-W and 4629-MW34-W appear to be similar to gasoline but certain peak ratios are not that of a fresh gasoline standard. The reported results represent the amount of material in the gasoline range.

The gasoline values for samples 4629-MW1A-W, 4629-MW27-W, 4629-MW28-W, 4629-MW43-W and 4629-MW44-W include the reported gasoline components in addition to other peaks in the gasoline range.

The gasoline values for samples 4629-MW38-W and 4629-MW42-W include the reported gasoline components and additives in addition to other peaks in the gasoline range.

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Date: 11-May-05
WorkOrder: 0504609

ANALYTICAL REPORT

Client Sample ID: 4629-MW1A-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-01A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		5/6/05
Benzene	3.2	0.50	µg/L	1.0		5/6/05
Toluene	ND	1.5	µg/L	1.0		5/6/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/6/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/6/05
o-Xylene	ND	0.50	µg/L	1.0		5/6/05
Surrogate: Cis-1,2-Dichloroethylene	97.0	85-115	% Rec	1.0		5/6/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	170	50	µg/L	1.0		5/6/05

Client Sample ID: 4629-MW1A-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-01D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/2/05	5/2/05
Surrogate: N-Tricosane	73.6	70-130	% Rec	1.0	5/2/05	5/2/05

Client Sample ID: 4629-MW16-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-02A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		5/5/05
Benzene	1.6	0.50	µg/L	1.0		5/5/05
Toluene	0.66	0.50	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
Surrogate: Cis-1,2-Dichloroethylene	91.2	85-115	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		5/5/05

Date: 11-May-05
WorkOrder: 0504609

ANALYTICAL REPORT

Client Sample ID: 4629-MW16-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-02D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/2/05	5/2/05
Surrogate: N-Tricosane	59.9	70-130	% Rec	1.0	5/2/05	5/2/05

Client Sample ID: 4629-MW19-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-03A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		5/5/05
Benzene	ND	0.50	µg/L	1.0		5/5/05
Toluene	ND	0.50	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
Surrogate: Cis-1,2-Dichloroethylene	97.9	85-115	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		5/5/05

Client Sample ID: 4629-MW19-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-03D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/2/05	5/2/05
Surrogate: N-Tricosane	82.5	70-130	% Rec	1.0	5/2/05	5/2/05

Date: 11-May-05
WorkOrder: 0504609

ANALYTICAL REPORT

Client Sample ID: 4629-MW20-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-04A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		5/5/05
Benzene	ND	0.50	µg/L	1.0		5/5/05
Toluene	ND	0.50	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
Surrogate: Cis-1,2-Dichloroethylene	91.8	85-115	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		5/5/05

Client Sample ID: 4629-MW20-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-04D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/2/05	5/2/05
Surrogate: N-Tricosane	76.0	70-130	% Rec	1.0	5/2/05	5/2/05

Client Sample ID: 4629-MW23-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-05A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		5/5/05
Benzene	ND	0.50	µg/L	1.0		5/5/05
Toluene	ND	0.50	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
Surrogate: Cis-1,2-Dichloroethylene	84.5	85-115	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		5/5/05

Date: 11-May-05
WorkOrder: 0504609

ANALYTICAL REPORT

Client Sample ID: 4629-MW23-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-05D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/2/05	5/2/05
Surrogate: N-Tricosane	79.5	70-130	% Rec	1.0	5/2/05	5/2/05

Client Sample ID: 4629-MW24-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-06A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		5/5/05
Benzene	ND	0.50	µg/L	1.0		5/5/05
Toluene	ND	0.50	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
Surrogate: Cis-1,2-Dichloroethylene	82.7	85-115	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		5/5/05

Client Sample ID: 4629-MW24-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-06D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/2/05	5/2/05
Surrogate: N-Tricosane	82.0	70-130	% Rec	1.0	5/2/05	5/2/05

Date: 11-May-05
WorkOrder: 0504609

ANALYTICAL REPORT

Client Sample ID: 4629-MW25-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-07A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		5/5/05
Benzene	ND	1.5	µg/L	1.0		5/5/05
Toluene	ND	5.0	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
Surrogate: Cis-1,2-Dichloroethylene	92.6	85-115	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	230	50	µg/L	1.0		5/5/05

Client Sample ID: 4629-MW25-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-07D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/3/05	5/6/05
Surrogate: N-Tricosane	72.1	70-130	% Rec	1.0	5/3/05	5/6/05

Client Sample ID: 4629-MW27-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-08A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	20	µg/L	1.0		5/6/05
Benzene	250	50	µg/L	100		5/6/05
Toluene	5.7	0.50	µg/L	1.0		5/6/05
Ethylbenzene	8.2	0.50	µg/L	1.0		5/6/05
m,p-Xylene	1.8	0.50	µg/L	1.0		5/6/05
o-Xylene	0.69	0.50	µg/L	1.0		5/6/05
Surrogate: Cis-1,2-Dichloroethylene	90.5	85-115	% Rec	100		5/6/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	1,100	50	µg/L	1.0		5/6/05

Date: 11-May-05
WorkOrder: 0504609

ANALYTICAL REPORT

Client Sample ID: 4629-MW27-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-08D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	92	50	µg/L	1.0	5/3/05	5/10/05
Surrogate: N-Tricosane	39.3	70-130	% Rec	1.0	5/3/05	5/10/05

Client Sample ID: 4629-MW28-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-09A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	10	µg/L	1.0		5/6/05
Benzene	58	25	µg/L	50		5/6/05
Toluene	2.9	0.50	µg/L	1.0		5/6/05
Ethylbenzene	6.7	0.50	µg/L	1.0		5/6/05
m,p-Xylene	0.84	0.50	µg/L	1.0		5/6/05
o-Xylene	ND	0.50	µg/L	1.0		5/6/05
Surrogate: Cis-1,2-Dichloroethylene	101	85-115	% Rec	50		5/6/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	620	50	µg/L	1.0		5/6/05

Client Sample ID: 4629-MW28-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-09D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	97	50	µg/L	1.0	5/3/05	5/10/05
Surrogate: N-Tricosane	55.0	70-130	% Rec	1.0	5/3/05	5/10/05

Date: 11-May-05
WorkOrder: 0504609

ANALYTICAL REPORT

Client Sample ID: 4629-MW29-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-10A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		5/5/05
Benzene	1.1	0.50	µg/L	1.0		5/5/05
Toluene	ND	0.50	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
Surrogate: Cis-1,2-Dichloroethylene	89.8	85-115	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		5/5/05

Client Sample ID: 4629-MW29-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-10D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	210	50	µg/L	1.0	5/3/05	5/10/05
Surrogate: N-Tricosane	72.3	70-130	% Rec	1.0	5/3/05	5/10/05

Client Sample ID: 4629-MW30-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-11A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	300	µg/L	100		5/6/05
Benzene	4,500	500	µg/L	1,000		5/6/05
Toluene	180	50	µg/L	100		5/6/05
Ethylbenzene	680	50	µg/L	100		5/6/05
m,p-Xylene	440	50	µg/L	100		5/6/05
o-Xylene	92	50	µg/L	100		5/6/05
Surrogate: Cis-1,2-Dichloroethylene	96.5	85-115	% Rec	1,000		5/6/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	19,000	5,000	µg/L	100		5/6/05

Date: 11-May-05
WorkOrder: 0504609

ANALYTICAL REPORT

Client Sample ID: 4629-MW30-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-11D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	530	50	µg/L	1.0	5/3/05	5/10/05
Surrogate: N-Tricosane	61.0	70-130	% Rec	1.0	5/3/05	5/10/05

Client Sample ID: 4629-MW33-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-12A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		5/5/05
Benzene	ND	0.50	µg/L	1.0		5/5/05
Toluene	ND	0.50	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
Surrogate: Cis-1,2-Dichloroethylene	97.3	85-115	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		5/5/05

Client Sample ID: 4629-MW33-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-12D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/2/05	5/2/05
Surrogate: N-Tricosane	81.9	70-130	% Rec	1.0	5/2/05	5/2/05

Date: 11-May-05
WorkOrder: 0504609

ANALYTICAL REPORT

Client Sample ID: 4629-MW34-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-13A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	100	µg/L	10		5/6/05
Benzene	74	5.0	µg/L	10		5/6/05
Toluene	41	5.0	µg/L	10		5/6/05
Ethylbenzene	110	50	µg/L	100		5/6/05
m,p-Xylene	140	5.0	µg/L	10		5/6/05
o-Xylene	39	5.0	µg/L	10		5/6/05
Surrogate: Cis-1,2-Dichloroethylene	87.9	85-115	% Rec	100		5/6/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	4,200	500	µg/L	10		5/6/05

Client Sample ID: 4629-MW34-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-13D **Matrix:** Groundwater

Test Name: TPH as Diesel with 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	5/3/05	5/10/05
Surrogate: N-Tricosane	64.8	70-130	% Rec	1.0	5/3/05	5/10/05

Client Sample ID: 4629-MW35-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-14A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	10	3.0	µg/L	1.0		5/5/05
Benzene	ND	0.50	µg/L	1.0		5/5/05
Toluene	ND	0.50	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
Surrogate: Cis-1,2-Dichloroethylene	101	85-115	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		5/5/05

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WorkOrder: 0504609

ANALYTICAL REPORT

Client Sample ID: 4629-MW35-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-14D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/2/05	5/2/05
Surrogate: N-Tricosane	82.1	70-130	% Rec	1.0	5/2/05	5/2/05

Client Sample ID: 4629-MW36-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-15A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	5.8	3.0	µg/L	1.0		5/5/05
Benzene	ND	0.50	µg/L	1.0		5/5/05
Toluene	ND	0.50	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
Surrogate: Cis-1,2-Dichloroethylene	107	85-115	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		5/5/05

Client Sample ID: 4629-MW36-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-15D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/2/05	5/2/05
Surrogate: N-Tricosane	80.3	70-130	% Rec	1.0	5/2/05	5/2/05

Date: 11-May-05
WorkOrder: 0504609

ANALYTICAL REPORT

Client Sample ID: 4629-MW37-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-16A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	5.2	3.0	µg/L	1.0		5/5/05
Benzene	0.82	0.50	µg/L	1.0		5/5/05
Toluene	ND	0.50	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
Surrogate: Cis-1,2-Dichloroethylene	109	85-115	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		5/5/05

Client Sample ID: 4629-MW37-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-16D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/2/05	5/2/05
Surrogate: N-Tricosane	73.9	70-130	% Rec	1.0	5/2/05	5/2/05

Client Sample ID: 4629-MW38-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-17A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	11	3.0	µg/L	1.0		5/6/05
Benzene	19	5.0	µg/L	10		5/6/05
Toluene	0.61	0.50	µg/L	1.0		5/6/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/6/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/6/05
o-Xylene	ND	0.50	µg/L	1.0		5/6/05
Surrogate: Cis-1,2-Dichloroethylene	104	85-115	% Rec	1.0		5/6/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	100	50	µg/L	1.0		5/6/05

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ANALYTICAL REPORT

Client Sample ID: 4629-MW38-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-17D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/2/05	5/2/05
Surrogate: N-Tricosane	76.1	70-130	% Rec	1.0	5/2/05	5/2/05

Client Sample ID: 4629-MW39-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-18A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	14	3.0	µg/L	1.0		5/5/05
Benzene	0.95	0.50	µg/L	1.0		5/5/05
Toluene	ND	0.50	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
Surrogate: Cis-1,2-Dichloroethylene	107	85-115	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		5/5/05

Client Sample ID: 4629-MW39-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-18D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	63	50	µg/L	1.0	5/3/05	5/10/05
Surrogate: N-Tricosane	60.8	70-130	% Rec	1.0	5/3/05	5/10/05

Date: 11-May-05
WorkOrder: 0504609

ANALYTICAL REPORT

Client Sample ID: 4629-MW40-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-19A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	11	3.0	µg/L	1.0		5/5/05
Benzene	0.51	0.50	µg/L	1.0		5/5/05
Toluene	ND	0.50	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
Surrogate: Cis-1,2-Dichloroethylene	98.5	85-115	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		5/5/05

Client Sample ID: 4629-MW40-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-19D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/3/05	5/10/05
Surrogate: N-Tricosane	74.9	70-130	% Rec	1.0	5/3/05	5/10/05

Client Sample ID: 4629-MW41-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-20A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	5.9	3.0	µg/L	1.0		5/5/05
Benzene	0.95	0.50	µg/L	1.0		5/5/05
Toluene	ND	0.50	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	ND	0.50	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
Surrogate: Cis-1,2-Dichloroethylene	101	85-115	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		5/5/05

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WorkOrder: 0504609

ANALYTICAL REPORT

Client Sample ID: 4629-MW41-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-20D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/3/05	5/6/05
Surrogate: N-Tricosane	72.3	70-130	% Rec	1.0	5/3/05	5/6/05

Client Sample ID: 4629-MW42-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-21A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	5.6	3.0	µg/L	1.0		5/5/05
Benzene	1.5	0.50	µg/L	1.0		5/5/05
Toluene	ND	0.50	µg/L	1.0		5/5/05
Ethylbenzene	ND	0.50	µg/L	1.0		5/5/05
m,p-Xylene	ND	1.0	µg/L	1.0		5/5/05
o-Xylene	ND	0.50	µg/L	1.0		5/5/05
Surrogate: Cis-1,2-Dichloroethylene	99.0	85-115	% Rec	1.0		5/5/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	58	50	µg/L	1.0		5/5/05

Client Sample ID: 4629-MW42-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-21D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	5/5/05	5/9/05
Surrogate: N-Tricosane	76.5	70-130	% Rec	1.0	5/5/05	5/9/05

Date: 11-May-05
WorkOrder: 0504609

ANALYTICAL REPORT

Client Sample ID: 4629-MW43-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-22A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	40	µg/L	1.0		5/6/05
Benzene	220	25	µg/L	50		5/6/05
Toluene	0.70	0.50	µg/L	1.0		5/6/05
Ethylbenzene	1.2	0.50	µg/L	1.0		5/6/05
m,p-Xylene	0.52	0.50	µg/L	1.0		5/6/05
o-Xylene	1.1	0.50	µg/L	1.0		5/6/05
Surrogate: Cis-1,2-Dichloroethylene	85.5	85-115	% Rec	50		5/6/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	670	50	µg/L	1.0		5/6/05

Client Sample ID: 4629-MW43-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-22D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	66	50	µg/L	1.0	5/5/05	5/9/05
Surrogate: N-Tricosane	87.8	70-130	% Rec	1.0	5/5/05	5/9/05

Client Sample ID: 4629-MW44-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-23A **Matrix:** Groundwater

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	50	µg/L	1.0		5/6/05
Benzene	2,300	500	µg/L	1,000		5/6/05
Toluene	9.8	0.50	µg/L	1.0		5/6/05
Ethylbenzene	8.5	5.0	µg/L	10		5/6/05
m,p-Xylene	4.7	0.50	µg/L	1.0		5/6/05
o-Xylene	3.6	0.50	µg/L	1.0		5/6/05
Surrogate: Cis-1,2-Dichloroethylene	94.8	85-115	% Rec	1,000		5/6/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	4,500	500	µg/L	10		5/6/05

Date: 11-May-05
WorkOrder: 0504609

ANALYTICAL REPORT

Client Sample ID: 4629-MW44-W **Received:** 4/27/05 **Collected:** 4/27/05 0:00
Lab ID: 0504609-23D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	82	50	µg/L	1.0	5/5/05	5/9/05
Surrogate: N-Tricosane	79.8	70-130	% Rec	1.0	5/5/05	5/9/05

North Coast Laboratories, Ltd.

Date: 11-May-05

CLIENT: LACO Associates
Work Order: 0504609
Project: 4629.03, HPI-Bulk Plant-UST

QC SUMMARY REPORT

Method Blank

Sample ID: **MB-5/4/05** Batch ID: **R34741** Test Code: **BTXEW** Units: **µg/L** Analysis Date **5/4/05 9:36:59 PM** Prep Date:
Client ID: Run ID: **ORGC8_050504A** SeqNo: **503313**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	ND	3.0									
Benzene	ND	0.50									
Toluene	ND	0.50									
Ethylbenzene	ND	0.50									
m,p-Xylene	ND	0.50									
o-Xylene	ND	0.50									
Cis-1,2-Dichloroethylene	0.910	0.10	1.00	0	91.0%	85	115	0			

Sample ID: **MB-5/5/05** Batch ID: **R34760** Test Code: **BTXEW** Units: **µg/L** Analysis Date **5/5/05 8:40:39 PM** Prep Date:
Client ID: Run ID: **ORGC8_050505C** SeqNo: **503559**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	ND	3.0									
Benzene	ND	0.50									
Toluene	ND	0.50									
Ethylbenzene	ND	0.50									
m,p-Xylene	ND	0.50									
o-Xylene	ND	0.50									
Cis-1,2-Dichloroethylene	0.917	0.10	1.00	0	91.7%	85	115	0			

Sample ID: **MB-13440** Batch ID: **13440** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date **5/6/05 12:12:27 PM** Prep Date: **5/3/05**
Client ID: Run ID: **ORGC5_050506A** SeqNo: **504014**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	126.2	50									
N-Tricosane	44.7	0.10	50.0	0	89.5%	70	130	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: 0504609
Project: 4629.03, HPI-Bulk Plant-UST

QC SUMMARY REPORT

Method Blank

Sample ID: **MB-13454** Batch ID: **13454** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date **5/9/05 3:57:34 PM** Prep Date: **5/5/05**
Client ID: Run ID: **ORGC5_050509A** SeqNo: **504023**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	29.24	50									J
N-Tricosane	45.9	0.10	50.0	0	91.8%	70	130	0			

Sample ID: **MB-13440** Batch ID: **13440** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date **5/10/05 3:29:57 PM** Prep Date: **5/3/05**
Client ID: Run ID: **ORGC5_050510A** SeqNo: **504128**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	41.64	50									J
N-Tricosane	37.3	0.10	50.0	0	74.6%	70	130	0			

Sample ID: **MB-5/4/05** Batch ID: **R34739** Test Code: **TPHCGW** Units: **µg/L** Analysis Date **5/4/05 9:36:59 PM** Prep Date:
Client ID: Run ID: **ORGC8_050505A** SeqNo: **503291**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	ND	50									

Sample ID: **MB-5/5/05** Batch ID: **R34759** Test Code: **TPHCGW** Units: **µg/L** Analysis Date **5/5/05 8:40:39 PM** Prep Date:
Client ID: Run ID: **ORGC8_050505B** SeqNo: **503541**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	ND	50									

Sample ID: **MB-13429** Batch ID: **13429** Test Code: **TPHDIW** Units: **µg/L** Analysis Date **5/2/05 6:35:38 PM** Prep Date: **5/2/05**
Client ID: Run ID: **ORGC7_050502B** SeqNo: **502607**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	ND	50									
N-Tricosane	32.2	0.10	50.0	0	64.3%	70	130	0			S

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: 11-May-05

CLIENT: LACO Associates
Work Order: 0504609
Project: 4629.03, HPI-Bulk Plant-UST

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **LCS-05307** Batch ID: **R34741** Test Code: **BTXEW** Units: **µg/L** Analysis Date **5/4/05 6:05:42 PM** Prep Date:

Client ID: Run ID: **ORGC8_050504A** SeqNo: **503311**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	41.24	3.0	40.0	0	103%	85	115	0			
Benzene	4.922	0.50	5.00	0	98.4%	85	115	0			
Toluene	4.878	0.50	5.00	0	97.6%	85	115	0			
Ethylbenzene	4.856	0.50	5.00	0	97.1%	85	115	0			
m,p-Xylene	9.827	0.50	10.0	0	98.3%	85	115	0			
o-Xylene	4.814	0.50	5.00	0	96.3%	85	115	0			
Cis-1,2-Dichloroethylene	1.03	0.10	1.00	0	103%	85	115	0			

Sample ID: **LCSD-05307** Batch ID: **R34741** Test Code: **BTXEW** Units: **µg/L** Analysis Date **5/5/05 5:08:48 AM** Prep Date:

Client ID: Run ID: **ORGC8_050504A** SeqNo: **503333**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	38.48	3.0	40.0	0	96.2%	85	115	41.2	6.92%	15	
Benzene	4.857	0.50	5.00	0	97.1%	85	115	4.92	1.33%	15	
Toluene	4.745	0.50	5.00	0	94.9%	85	115	4.88	2.77%	15	
Ethylbenzene	4.718	0.50	5.00	0	94.4%	85	115	4.86	2.89%	15	
m,p-Xylene	9.470	0.50	10.0	0	94.7%	85	115	9.83	3.69%	15	
o-Xylene	4.629	0.50	5.00	0	92.6%	85	115	4.81	3.92%	15	
Cis-1,2-Dichloroethylene	1.05	0.10	1.00	0	105%	85	115	1.03	1.97%	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

CLIENT: LACO Associates
Work Order: 0504609
Project: 4629.03, HPI-Bulk Plant-UST

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **LCS-05311** Batch ID: **R34760** Test Code: **BTXEW** Units: **µg/L** Analysis Date **5/5/05 5:44:31 PM** Prep Date:
Client ID: Run ID: **ORGC8_050505C** SeqNo: **503557**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	39.47	3.0	40.0	0	98.7%	85	115	0			
Benzene	4.779	0.50	5.00	0	95.6%	85	115	0			
Toluene	4.735	0.50	5.00	0	94.7%	85	115	0			
Ethylbenzene	4.715	0.50	5.00	0	94.3%	85	115	0			
m,p-Xylene	9.527	0.50	10.0	0	95.3%	85	115	0			
o-Xylene	4.611	0.50	5.00	0	92.2%	85	115	0			
Cis-1,2-Dichloroethylene	0.947	0.10	1.00	0	94.7%	85	115	0			

Sample ID: **LCSD-05311** Batch ID: **R34760** Test Code: **BTXEW** Units: **µg/L** Analysis Date **5/5/05 6:19:44 PM** Prep Date:
Client ID: Run ID: **ORGC8_050505C** SeqNo: **503558**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	39.65	3.0	40.0	0	99.1%	85	115	39.5	0.444%	15	
Benzene	4.775	0.50	5.00	0	95.5%	85	115	4.78	0.0940%	15	
Toluene	4.695	0.50	5.00	0	93.9%	85	115	4.74	0.849%	15	
Ethylbenzene	4.707	0.50	5.00	0	94.1%	85	115	4.72	0.179%	15	
m,p-Xylene	9.522	0.50	10.0	0	95.2%	85	115	9.53	0.0517%	15	
o-Xylene	4.621	0.50	5.00	0	92.4%	85	115	4.61	0.231%	15	
Cis-1,2-Dichloroethylene	1.12	0.10	1.00	0	112%	85	115	0.947	17.0%	15	R

Sample ID: **LCS-13440** Batch ID: **13440** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date **5/6/05 10:16:18 AM** Prep Date: **5/3/05**
Client ID: Run ID: **ORGC5_050506A** SeqNo: **504012**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	342.4	50	500	0	68.5%	40	107	0			B
N-Tricosane	44.8	0.10	50.0	0	89.5%	70	130	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: 0504609
Project: 4629.03, HPI-Bulk Plant-UST

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID: **LCSD-13440** Batch ID: **13440** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date **5/6/05 10:45:34 AM** Prep Date: **5/3/05**
Client ID: Run ID: **ORGC5_050506A** SeqNo: **504013**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	301.1	50	500	0	60.2%	40	107	342	12.8%	15	B
N-Tricosane	49.4	0.10	50.0	0	98.8%	70	130	44.8	9.87%	15	

Sample ID: **LCS-13454** Batch ID: **13454** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date **5/9/05 2:01:46 PM** Prep Date: **5/5/05**
Client ID: Run ID: **ORGC5_050509A** SeqNo: **504021**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	453.5	50	500	0	90.7%	40	107	0			
N-Tricosane	53.6	0.10	50.0	0	107%	70	130	0			

Sample ID: **LCSD-13454** Batch ID: **13454** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date **5/9/05 2:31:11 PM** Prep Date: **5/5/05**
Client ID: Run ID: **ORGC5_050509A** SeqNo: **504022**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	418.5	50	500	0	83.7%	40	107	454	8.03%	15	
N-Tricosane	52.9	0.10	50.0	0	106%	70	130	53.6	1.27%	15	

Sample ID: **LCS-13440** Batch ID: **13440** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date **5/10/05 1:30:28 PM** Prep Date: **5/3/05**
Client ID: Run ID: **ORGC5_050510A** SeqNo: **504126**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	278.9	50	500	0	55.8%	40	107	0			
N-Tricosane	37.0	0.10	50.0	0	73.9%	70	130	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: 0504609
Project: 4629.03, HPI-Bulk Plant-UST

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID: **LCSD-13440** Batch ID: **13440** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date **5/10/05 2:00:18 PM** Prep Date: **5/3/05**
Client ID: Run ID: **ORGC5_050510A** SeqNo: **504127**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	352.9	50	500	0	70.6%	40	107	279	23.4%	15	R
N-Tricosane	45.6	0.10	50.0	0	91.1%	70	130	37.0	20.8%	15	R

Sample ID: **LCS-05303** Batch ID: **R34739** Test Code: **TPHCGW** Units: **µg/L** Analysis Date **5/4/05 7:51:50 PM** Prep Date:
Client ID: Run ID: **ORGC8_050505A** SeqNo: **503289**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	537.6	50	500	0	108%	81	126	0			

Sample ID: **LCSD-05303** Batch ID: **R34739** Test Code: **TPHCGW** Units: **µg/L** Analysis Date **5/5/05 5:43:27 AM** Prep Date:
Client ID: Run ID: **ORGC8_050505A** SeqNo: **503296**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	515.5	50	500	0	103%	81	126	538	4.21%	15	

Sample ID: **LCS-05312** Batch ID: **R34759** Test Code: **TPHCGW** Units: **µg/L** Analysis Date **5/5/05 6:55:02 PM** Prep Date:
Client ID: Run ID: **ORGC8_050505B** SeqNo: **503539**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	552.6	50	500	0	111%	81	126	0			

Sample ID: **LCSD-05312** Batch ID: **R34759** Test Code: **TPHCGW** Units: **µg/L** Analysis Date **5/5/05 7:30:21 PM** Prep Date:
Client ID: Run ID: **ORGC8_050505B** SeqNo: **503540**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	552.7	50	500	0	111%	81	126	553	0.0125%	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

CLIENT: LACO Associates
Work Order: 0504609
Project: 4629.03, HPI-Bulk Plant-UST

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **LCS-13429** Batch ID: **13429** Test Code: **TPHDIW** Units: **µg/L** Analysis Date **5/2/05 5:01:36 PM** Prep Date: **5/2/05**
Client ID: Run ID: **ORGC7_050502B** SeqNo: **502605**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	425.7	50	500	0	85.1%	67	120	0			
N-Tricosane	43.6	0.10	50.0	0	87.2%	70	130	0			

Sample ID: **LCSD-13429** Batch ID: **13429** Test Code: **TPHDIW** Units: **µg/L** Analysis Date **5/2/05 5:20:10 PM** Prep Date: **5/2/05**
Client ID: Run ID: **ORGC7_050502B** SeqNo: **502606**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	441.1	50	500	0	88.2%	67	120	426	3.54%	15	
N-Tricosane	42.4	0.10	50.0	0	84.9%	70	130	43.6	2.71%	15	

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

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

Chain of Custody

LABORATORY NUMBER: 0504609

Attention: Accounts Payable
Results & Invoice to: LACO ASSOCIATES
Address: 21 West Fourth Street

Phone: (707) 443-5054
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: 4629.03
Project Name: HPI - Bulk Plant-UST
Purchase Order Number: task 3023

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS: TPHg/BTEX (CONTAINER 9, PRESERVATIVE b)	ANALYSIS: TPHd w/SGC (CONTAINER 7, PRESERVATIVE ------)
	4629-MW1A-W	4-27-05	AM	GW	3	1
	[redacted]				[redacted]	[redacted]
	4629-MW16-W				3	1
	4629-MW19-W				3	1
	4629-MW20-W				3	1
	4629-MW23-W				3	1
	4629-MW24-W				3	1
	4629-MW25-W				3	1
	4629-MW27-W				3	1
	4629-MW28-W		PM		3	1

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

GEOTRACKER

cooler temp 8°

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
STEVE DAVIS	4-27-05 3:52 PM	16:00	4/27/05

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

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

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

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

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

Chain of Custody

LABORATORY NUMBER: 0904609

Attention: Accounts Payable
Results & Invoice to: LACO ASSOCIATES
Address: 21 West Fourth Street, Eureka CA 95501

Phone: (707) 443-5054
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: 4629.03
Project Name: HPI - Bulk Plant-UST
Purchase Order Number: task 3023

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	PRESERVATIVE	CONTAINER	ANALYSIS: TPHg/BTEX	ANALYSIS: TPHd w/SGC	SAMPLE CONDITION/SPECIAL INSTRUCTIONS
					b	9		7	GEOTRACKER
	4629-MW29-W	4-27-05	AM	GW		3		1	Cooler temp 8°
	4629-MW30-W					3		1	
	4629-MW33-W					3		1	
	4629-MW34-W					3		1	
	4629-MW35-W					3		1	
	4629-MW36-W					3		1	
	4629-MW37-W					3		1	
	4629-MW38-W					3		1	
	4629-MW39-W					3		1	
	4629-MW40-W		PM			3		1	

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
STEVE DAVIS	4-27-05	16:00	4/27/05
	3:58 PM		

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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PROJECT INFORMATION

Project Number: 4629.03
Project Name: HPI - Bulk Plant-UST
Purchase Order Number: task 3023

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS: TPHg/BTEX (CONTAINER 9, PRESERVATIVE b)	ANALYSIS: TPHd w/SGC (CONTAINER 7, PRESERVATIVE ---)
	4629-MW41-W	4-27-05	AM	GW	3	1
	4629-MW42-W	↓	↓	↓	3	1
	4629-MW43-W				3	1
	4629-MW44-W		PM		3	1
	[redacted]					

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

GEOTRACKER
Cooler temp 8°

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
STEVE DAVIS	4-27-05 3:52 pm	1600	4/27/05

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

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

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

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

Attachment 4

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

Project Name: BULK PLANT
Project No.: 4629.03
Task: 413
Date: 2/2/2005
PM: CJW

Tech: RWN
Mobe/Demobe time: .25/.25
Travel time: .5/.5
Time on site: 1315
Time off site: 1420
Mileage: 40

SYSTEM READINGS

UNIT:				UNIT:			
Master Panel Runtime (Hrs):				Master Panel Runtime (Hrs):			
O_2 Concentrator Runtime (Hrs):				O_2 Concentrator Runtime (Hrs):			
System Clock Time:				System Clock Time:			
STATION	MANIFOLD PRESSURE (psi)	SPARGE POINT	WELL HEAD PRESSURE (psi)	STATION	MANIFOLD PRESSURE (psi)	SPARGE POINT	WELL HEAD PRESSURE (psi)
1	MANUAL 2MIN X2 ALL POINTS			1			
2				2			
3				3			
4				4			
5				5			
6				6			
7				7			
8				8			
9				9			
10				10			
11				11			
12				12			

ANCILLARY INFORMATION

Power Meter (Kwh):	7492	Max. Temperature (°F):	
Max. Humidity (%RH):		Ventilation Fan(s):	ON / OFF
Surge Suppression:	ON / OFF	Controller Battery Voltage (volts):	

TROUBLESHOOTING

Ozone Detector Fault:	YES / NO	16A Breaker Fault:	YES / NO
Panel GFI Fault:	YES / NO	Main Circuit Breaker Fault:	YES / NO
Controller Fault:	YES / NO	Fasteners/Fittings:	
Solenoid Malfunction:	1 2 3 4 5 6 7 8 9 10 11 12	Correct Controller Program:	YES / NO
Tubing:		Wires:	

MAINTENANCE

O_2 Concentrator Filter	YES / NO	Reset Temperature/Humidity	YES / NO
Compressor Filter	YES / NO	Check Peroxide Level	YES / NO

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

Project Name:	BULK PLANT	Tech:	BWN
Project No.:	4629.03	Mobe/Demobe time:	1 / 1.5
Task:	413	Travel time:	.5 / 1.5
Date:	4/15/2005	Time on site:	1100
PM:	CJW	Time off site:	1400
		Mileage:	N/C

SYSTEM READINGS

UNIT: C-SPARGER #5				UNIT: LACO MASTER PANEL			
Master Panel Runtime (Hrs):	00377.23			Master Panel Runtime (Hrs):	00634.2		
O_2 Concentrator Runtime (Hrs):	2071.04			O_2 Concentrator Runtime (Hrs):	N/A		
System Clock Time:	SET 12:10 @ 12:10 pm			System Clock Time:	SET 1:07 @ 1:07		
STATION	MANIFOLD PRESSURE (psi)	SPARGE POINT	WELL HEAD PRESSURE (psi)	STATION	MANIFOLD PRESSURE (psi)	SPARGE POINT	WELL HEAD PRESSURE (psi)
1	25			1	19	SP1U1	
2	24			2	20	SP2U1	
3	34			3	18	SP3U1	
4	27			4	19	SP4U1	
5	30			5	—	SP6U2	—
6	23			6	21	SP6U1	
7	24			7	25	SP7U1	
8	23			8			
9	29			9			
10	26			10			
11	24			11			
12	27			12			

ANCILLARY INFORMATION

Power Meter (Kwh):	07492	Max. Temperature (°F):	114°F
Max. Humidity (%RH):	41	Ventilation Fan(s):	(ON) / OFF
Surge Suppression:	(ON) / OFF	Controller Battery Voltage (volts):	N/A

TROUBLESHOOTING

Ozone Detector Fault:	YES / (NO)	16A Breaker Fault:	YES / (NO)
Panel GFI Fault:	YES / (NO)	Main Circuit Breaker Fault:	YES / (NO)
Controller Fault:	YES / (NO)	Fasteners/Fittings:	✓
Solenoid Malfunction:	1 2 3 4 5 6 7 8 9 10 11 12	Correct Controller Program:	(YES) / NO
Tubing:	✓	Wires:	✓

MAINTENANCE

O_2 Concentrator Filter	OK	(YES) / NO	Reset Temperature/Humidity	(YES) / NO
Compressor Filter	OK	(YES) / NO	Check Peroxide Level N/A	YES / NO

Bulk Plant UST / HPI-PFP 4629.03 Task 413
Program information as of ~~11/05/2004~~ 4/15/2005

LACO Master Panel #1

Station#	Well #	Run Time
1	SP1U1	15
2	SP2U1	15
3	SP3U1	15
4	SP4U1	15
5	SP6U2	1
6	SP6U1	15
7	SP7U1	15

Laco Master Panel #1

Start times	A	B	C
1	1200	800	1600
2	200	1000	1800
3	400	1200	2000
4	600	1400	2200

12 CYCLES PER DAY RUNTIME= 91 PER CYCLE

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

Project Name: BULK PLANT
Project No.: 4629.03
Task: H13
Date: 5/4/2005
PM: CJW

Tech: BWN
Mobe/Demobe time: .5 / .25
Travel time: .5 / .5
Time on site: 1000
Time off site: 1200
Mileage: 40

SYSTEM READINGS

UNIT: OXYGEN CONCENTRATOR #5

Master Panel Runtime (Hrs): N/A

O_2 Concentrator Runtime (Hrs): N/A

System Clock Time: N/A

STATION	MANIFOLD PRESSURE (psi)	SPARGE POINT	WELL HEAD PRESSURE (psi)
1	5.5	SP1U1	5.5
2	6	SP2U1	6
3	6	SP3U1	6
4	6	SP4U1	6
5	5.5	SP6U1	5.5
6	5.5	SP7U1	5.5
7		ALL ~8-9 Lpm	
8			
9			
10			
11			
12			

UNIT:

Master Panel Runtime (Hrs):

O_2 Concentrator Runtime (Hrs):

System Clock Time:

STATION	MANIFOLD PRESSURE (psi)	SPARGE POINT	WELL HEAD PRESSURE (psi)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

ANCILLARY INFORMATION

Power Meter (Kwh): 08183

Max. Humidity (%RH): Hi

Surge Suppression: (ON) / OFF

Max. Temperature (°F): 96.1°F SHED / 135°F HEAD

Ventilation Fan(s): (ON) / OFF

Controller Battery Voltage (volts): N/A

TROUBLESHOOTING

Ozone Detector Fault: YES / (NO)

Panel GFI Fault: YES / (NO)

Controller Fault: YES / (NO)

Solenoid Malfunction: 1 2 3 4 5 6 7 8 9 10 11 12

Tubing: ✓

16A Breaker Fault: YES / (NO)

Main Circuit Breaker Fault: YES / (NO)

Fasteners/Fittings: ✓

Correct Controller Program: (YES) / NO

Wires: ✓

MAINTENANCE

O_2 Concentrator Filter (YES) / NO

Compressor Filter (YES) / NO

Reset Temperature/Humidity (YES) / NO

Check Peroxide Level N/A YES / NO