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November 9, 2005

4629.03

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

Attention: Mr. Cody Walker

Subject: Groundwater Monitoring Report; Second and Third Quarters 2005
HPI/Former Shell Bulk Plant, Underground Storage Tanks Area
400 Eighth Street, Fortuna, California; CRWQCB Case No. 1THU116

Dear Mr. Walker:

LACO ASSOCIATES (LACO) presents to you the combined results of groundwater monitoring for the second and third quarters of 2005. This report includes data indicating that the 75 percent milestone of the Pay-for-Performance (PFP) Program has been reached. Also included with this report are two copies of the *Remediation Milestone Achievement Approval Form* and two self-addressed stamped envelopes (Attachment 1). If you concur with the PFP milestone achievement presented in this report, please check the corresponding box, sign and date the bottom of each form, and send to the appropriate parties using the provided envelopes.

This report has been prepared for Humboldt Petroleum., Inc. (HPI). Please call (707) 443-5054 if you have any questions or concerns.

Sincerely,
LACO ASSOCIATES

Amy M. Thomson
Staff Geologist

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

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

Attachments

AMT:jg

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

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GROUNDWATER MONITORING REPORT
SECOND and THIRD QUARTERS 2005

Humboldt Petroleum Inc., Former Shell Bulk Plant, Underground Storage Tank Area
400 Eighth Street, Fortuna, California
CRWQCB Case No. 1THU116; LACO Project No. 4629.03

INTRODUCTION

Field activities were conducted on May 24, June 20, August 11, August 30, and September 29, 2005, in accordance with generally accepted practices at this or similar locations. Please refer below to Table A through Table E 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 was constructed.
- **1996**: Two underground storage tanks (USTs), one 3000-gallon and one 4000-gallon, were removed.
- **November 2000**: 550 cubic yards of petroleum hydrocarbon impacted soil were excavated.
- **August 2002**: 510 cubic yards of petroleum hydrocarbon impacted soil were excavated.
- **May through June 2004**: An *in-situ* chemical oxidation system was installed for remediation of petroleum hydrocarbon impacted soil and groundwater.

MONITORING REGIME

The key to abbreviations is included as Attachment 2, and the field sampling data sheets for monitoring conducted during the period of May through September 2005 are included as Attachment 3.

Table A: Monitoring Event for May 24, 2005

MONITORING WELL ID	SCREENED INTERVAL (feet)	DTW (feet)	PURGE METHOD	WATER QUALITY PARAMETERS	ANALYTICALS		SAMPLING SCHEDULE
					ORGANICS	INORGANICS	
MW27	5-10	4.92	DHP	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	---	Monthly
MW28	5-10	2.95					
MW30	5-10	2.11	Cam Pump	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	---	Monthly
MW34	14-18	6.42	DHP	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	---	Monthly
MW38	12-14	2.62	DHP	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	---	Monthly
MW43	16-18	3.01	Cam Pump	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	---	Monthly
MW44	12-15	2.96					

Table B: Monitoring Event for June 20, 2005							
MONITORING WELL ID	SCREENED INTERVAL (feet)	DTW (feet)	PURGE METHOD	WATER QUALITY PARAMETERS	ANALYTICALS		SAMPLING SCHEDULE
					ORGANICS	INORGANICS	
MW1A	5-15	1.08	DHP	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	---	Quarterly
MW15	4.5-14	Well obstructed, unable to sample					
MW16	3-14.5						
MW19	22.5-25	12.5	¾" Bailer	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	---	
MW20	15.5-19.5	5.62					
MW23	5-10	5.16	DHP				
MW24	5-10	4.56					
MW25	5-10	2.26					
MW27	5-10	2.72					Monthly
MW28	5-10	2.65					
MW29	5-10	2.32	Cam Pump				Quarterly
MW30	5-10	2.00					Monthly
MW33	14-17.5	2.17	DHP				Quarterly
MW34	14-18	5.85					Monthly
MW35	17-20	4.97					Quarterly
MW36	13-14.5	5.06					
MW37	17.25-19	3.36					
MW38	12-14	3.11					Monthly
MW39	17.75-19	2.38					Quarterly
MW40	13.25-16	3.86					
MW41	16.5-18	3.24					
MW42	12-14.5	3.58					
MW43	16-18	3.30	Cam Pump				Monthly
MW44	12-15	3.20					

Table C: Monitoring Event for August 11, 2005						
MONITORING WELL ID	SCREENED INTERVAL (feet)	DTW (feet)	PURGE METHOD	WATER QUALITY PARAMETERS	ANALYTICALS	SAMPLING SCHEDULE
					ORGANICS	
MW27	5-10	5.79	DHP	pH, T, ECw, ORP, DO	INTRINSICS ONLY	Monthly
MW28	5-10	5.15				
MW30	5-10	5.24	Cam Pump	pH, T, ECw, ORP, DO		Monthly
MW34	14-18	9.34	DHP	pH, T, ECw, ORP, DO		Monthly
MW38	12-14	5.94	DHP	pH, T, ECw, ORP, DO		Monthly
MW43	16-18	5.98	Cam Pump	pH, T, ECw, ORP, DO		Monthly
MW44	12-15	6.01				

Table D: Monitoring Event for August 30, 2005						
MONITORING WELL ID	SCREENED INTERVAL (feet)	DTW (feet)	PURGE METHOD	WATER QUALITY PARAMETERS	ANALYTICALS	SAMPLING SCHEDULE
					ORGANICS	
MW27	5-10	6.56	Cam Pump	pH, T, ECw, ORP, DO	INTRINSICS ONLY	Monthly
MW28	5-10	8.11				
MW30	5-10	6.03		pH, T, ECw, ORP, DO		Monthly
MW34	14-18	11.01		pH, T, ECw, ORP, DO		Monthly
MW38	12-14	6.72		pH, T, ECw, ORP, DO		Monthly
MW43	16-18	7.52		pH, T, ECw, ORP, DO		Monthly
MW44	12-15	7.15				

Table E: Monitoring Event for September 29, 2005							
MONITORING WELL ID	SCREENED INTERVAL (feet)	DTW (feet)	PURGE METHOD	WATER QUALITY PARAMETERS	ANALYTICALS		SAMPLING SCHEDULE
					ORGANICS	INORGANICS	
MW1A	5-15	7.14	DHP	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	---	Quarterly
MW15	4.5-14	Well Obstructed, unable to sample					
MW16	3-14.5	Well Obstructed, unable to sample					
MW19	22.5-25	17.98	½" Bailer	---	TPHg, TPHd, BTEX, MTBE	---	
MW20	15.5-19.5	16.78	½" Bailer	---		---	
MW23	5-10	Insuffecient Water to Sample					
MW24	5-10	Insuffecient Water to Sample					
MW25	5-10	7.99	DHP	pH, T, ECw, ORP, DO	TPHg, TPHd, BTEX, MTBE	---	
MW27	5-10	7.64	Cam Pump		TPHg, TPHd, BTEX, MTBE, Diss Cr6, Se, Va, Mo, Bromate		Monthly
MW28	5-10	8.01					
MW29	5-10	6.80			TPHg, TPHd, BTEX, MTBE		Quarterly
MW30	5-10	7.49			TPHg, TPHd, BTEX, MTBE, Diss Cr6, Se, Va, Mo, Bromate		Monthly
MW33	14-17.5	6.94			TPHg, TPHd, BTEX, MTBE		Quarterly
MW34	14-18	12.12	DHP		TPHg, TPHd, BTEX, MTBE, Diss Cr6, Se, Va, Mo, Bromate		Monthly
MW35	17-20	11.00			TPHg, TPHd, BTEX, MTBE		Quarterly
MW36	13-14.5	11.52					
MW37	17.25-19	7.59	Cam Pump				
MW38	12-14	7.68			TPHg, TPHd, BTEX, MTBE, Diss Cr6, Se, Va, Mo, Bromate		Monthly
MW39	17.75-19	8.06			TPHG, TPHd, BTEX, MTBE		Quarterly
MW40	13.25-16	7.93					
MW41	16.5-18	8.1					
MW42	12-14.5	8.04					
MW43	16-18	7.58			TPHg, TPHd, BTEX, MTBE, Diss Cr6, Se, Va, Mo, Bromate		Monthly
MW44	12-15	8.48					

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 the monitoring 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 for the June and September sampling events are presented as Figure 3 through Figure 8, respectively.

For the June 20, 2005, sampling event, the following hydraulic gradients were determined for Units 1 through Unit 3.

Unit 1- Monitoring Wells MW27, MW28, and MW30 (Figure 3)

- S87°W at 0.02 ft/ft

Unit 2- Monitoring Wells MW33, MW38, and MW42 (Figure 4)

- S75°W at 0.02 ft/ft

Unit 3- Monitoring Wells MW33, MW37, and MW41 (Figure 5)

- S55°W at 0.02 ft/ft

For the September 29, 2005, sampling event, the following hydraulic gradients were determined for Units 1 through Unit 3.

Unit 1- Monitoring Wells MW27, MW28, and MW30 (Figure 6)

- S25°W at 0.03 ft/ft

Unit 2- Monitoring Wells MW33, MW38, and MW42 (Figure 7)

- South at 0.02 ft/ft

Unit 3- Monitoring Wells MW33, MW37, and MW41 (Figure 8)

- West at 0.02 ft/ft

HYDRAULIC CONDUCTIVITY

On September 9 and October 20, 2005, LACO personnel performed a series of slug/bail tests to determine the conductivity of specified aquifers, which are intersected by select monitoring wells. Hydraulic conductivity is a function of both the fluid and the porous medium through which the fluid is flowing. Hydraulic conductivity values are high for sand and gravel, and low values for silty and clay rich formations (Freeze and Cherry, 1979).

Hydraulic conductivities were estimated by performing slug/bail tests. The slug test method involves lowering an electronic pressure transducer data-logger and a slug (1¾-inch PVC pipe filled with cement) into the monitoring well. The slug displaces water in the well which creates pressure changes forcing the water to flow into the exposed formation. The slug remains in the well, allowing the well water to re-equilibrate to static water level. The slug is then removed, allowing water to recharge the well to static level.

The data-logger, (HOBO® U20 Water Level Logger Part # U20-001-01) with a 2.1cm (0.07 feet) accuracy range in water, measures absolute pressure (atmospheric pressure plus water head) over time. The data is then converted to hydraulic head measurements by software provided by the data-logger manufacturer. Hydraulic conductivities for the aquifers were estimated using

Aquifer Test v3.0 software, presented in Charts A-J. A summary of hydraulic conductivities at the former Fortuna Bulk Plant are presented below in Table F. Hydraulic conductivities submitted in the November 2001 *Subsurface Investigation Status Report*, were determined to be $6.2E10^{-5}$ centimeters per second (cm/s) for Unit 2 and $1.32E10^{-4}$ (cm/s) for Unit 3, respectively. Hydraulic conductivities for the November 2001 aquifer characterization event are similar to estimates produced during this quarter, $5.95E10^{-5}$ (cm/s) for Unit 2 and $1.48E10^{-5}$ (cm/s) for Unit 3, respectively. According to the estimated Range of Hydraulic Conductivities and Permeabilities for soil types by Freeze and Cherry (1979), these values are typical of silt loess (ML) and silty sands (SM). Additional slug/bail tests should be performed during wet weather months to ensure sufficient groundwater is present in the shallow monitoring wells (Unit1).

Table F: Slug Test Aquifer Characterization (9/9/05 and 10/20/05)

Well Data				Test Data		
Monitoring Well	Screen Interval (ft bgs)	Unit	Total Depth (ft)	Test Phase	Recovery Time (s)	Hydraulic Conductivity (cm/s)
MW35	17-20	3	20	Slug Bail	1080	3.21E-05
MW36	13-14.5	2	15	Slug Bail	1500	1.17E-04
MW37	12-16	3	20	Slug Bail	4080	4.40E-06
MW38	16-20	2	20	Slug Bail	13800	2.12E-06
MW41	16-20	3	20	Slug Bail	3360	7.79E-06

LABORATORY RESULTS

Laboratory analytical results from the May 24, 2005, June 20, 2005, and the September 29, 2005, sampling events for Unit 1, Unit 2, and Unit 3 are included below in Table G through Table O, 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 4.

Table G: Laboratory Analytical Results Unit 1 UST (May 24, 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)
MW27	820	85	---	280	4.9	6.1	2.06	ND<15	---
MW28	570	76	---	93	3.4	8.6	2.3	ND<16	---
MW30	12,000	830	---	3,100	150	530	400	ND<3.0	---

Table H: Laboratory Analytical Results Unit 2 UST (May 24, 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)
MW34	5,000	450	---	82	52	150	241	ND<180	---
MW38	100	ND<50	---	16	0.87	0.80	0.57	12	---
MW44	4,800	ND<50	---	2,900	13	13	10.6	ND<60	---
NOTE: MW-33 and MW-34 are screened in both Unit 2 and Unit 3									

Table I: Laboratory Analytical Results Unit 3 UST (May 24, 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)
MW34	5,000	450	---	82	52	150	241	ND<180	---
MW43	1,100	ND<50	---	490	1.4	4.2	2.4	ND<60	---

Table J: Laboratory Analytical Results Unit 1 UST (June 20, 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)
MW1A	72	ND<50	---	0.98	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---
MW15	Well is obstructed, unable to sample								
MW16	Well is obstructed, unable to sample								
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	160	ND<50	---	ND<1.0	ND<4.0	ND<0.50	ND<0.50	ND<3.0	---
MW27	500	ND<50	---	56	ND<5.0	2.6	2.38	ND<7.0	---
MW28	430	100	---	48	ND<3.0	4.2	ND<0.50	ND<8.0	---
MW29	ND<50	910	---	21	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---
MW30	14,000	560	---	3,900	150	570	463	ND<150	---
NOTE: MW1A, MW15, and MW16 are screened in both Unit 1 and Unit 2									

Table K: Laboratory Analytical Results Unit 2 UST (June 20, 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)
MW1A	72	ND<50	---	0.98	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---
MW15	Well is obstructed, unable to sample								
MW16	Well is obstructed, unable to sample								
MW33	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---
MW34	8,500	570	---	59	64	130	366	ND<150	---
MW36	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	6.20	---
MW38	84	65	---	12	0.65	0.56	ND<0.50	10	---
MW40	ND<50	51	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	10	---
MW42	95	62	---	1.8	ND<0.50	ND<0.50	ND<0.50	7.6	---
MW44	6,800	71	---	3,900	15	12	11.4	ND<50	---
NOTE: MW-33 and MW-34 are screened in both Unit 2 and Unit 3									

Table L: Laboratory Analytical Results UNIT 3 UST (June 20, 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)**
MW19	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---
MW20	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---
MW33	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---
MW34	**8,500**	**570**	---	**59**	**64**	**130**	**366**	ND<150	---
MW35	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**10**	---
MW37	ND<50	ND<50	---	**1.0**	ND<0.50	ND<0.50	ND<0.50	**5.8**	---
MW39	ND<50	ND<50	---	**0.88**	ND<0.50	ND<0.50	ND<0.50	**13**	---
MW41	ND<50	**60**	---	**0.54**	ND<0.50	ND<0.50	ND<0.50	**6.2**	---
MW43	**1,800**	**59**	---	**980**	ND<3.0	**7.0**	**1.2**	ND<70	---
NOTE: MW-33 and MW-34 are screened in both Unit 2 and Unit 3									

Table M: Laboratory Analytical Results Unit 1 UST (September 29, 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)**
MW1A	**280**	**51**	---	**2.6**	ND<3.0	ND<0.50	**0.88**	ND<3.0	ND<25
MW25	**88**	ND<50	---	ND<0.50	ND<2.0	ND<0.50	ND<0.50	ND<3.0	---
MW27	**880**	**110**	---	**12**	ND<10	**8.3**	ND<1.5	ND<10	---
MW28	**210**	ND<50	---	**23**	**0.74**	**1.4**	**0.62**	ND<3.0	ND<25
MW29	**450**	**180**	---	**100**	**1.9**	**1.7**	**0.89**	ND<3.0	---
MW30	**4,700**	**270**	---	**1,900**	**31**	**51**	**45**	ND<3.0	ND<25
NOTE: MW1A is screened in both Unit 1 and Unit 2									

Table N: Laboratory Analytical Results Unit 2 UST (September 29, 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)**
MW1A	**280**	**51**	---	**2.6**	ND<3.0	ND<0.50	**0.88**	ND<3.0	---
MW33	ND<50	ND<50	---	**2.3**	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---
MW34	**4,700**	**300**	---	**61**	**20**	**50**	**37.6**	ND<100	ND<25
MW36	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**8.9**	---
MW38	**64**	ND<50	---	**10**	ND<0.50	ND<0.50	ND<0.50	**8.5**	ND<25
MW40	ND<50	ND<50	---	**4.2**	ND<0.50	ND<0.50	ND<0.50	**10**	---
MW42	**71**	ND<50	---	**1.9**	**0.62**	**1.2**	**1.9**	**5.1**	---
MW44	**5,600**	**73**	---	**2,800**	**14**	**24**	**12.5**	ND<50	ND<25
NOTE: MW-33 and MW-34 are screened in both Unit 2 and Unit 3									

Table O: Laboratory Analytical Results UNIT 3 UST (September 29, 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)
MW19	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---
MW20	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**5.2**	---
MW33	ND<50	ND<50	---	**2.3**	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---
MW34	**4,700**	**300**	---	**61**	**20**	**50**	**37.6**	ND<100	---
MW35	ND<50	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**12**	---
MW37	ND<50	ND<50	---	**11**	ND<0.50	ND<0.50	ND<0.50	**4.5**	---
MW39	**52**	ND<50	---	**9.6**	ND<0.50	**1.1**	**0.9**	**11**	---
MW41	ND<50	ND<50	---	**1.0**	ND<0.50	**0.7**	**0.79**	**4.4**	---
MW43	**1,600**	ND<50	---	**840**	**1.4**	**6.8**	**3.0**	ND<50	ND<25
NOTE: MW-33 and MW-34 are screened in both Unit 2 and Unit 3									

DISCUSSION OF GROUNDWATER RESULTS

Analyte concentrations reported on September 29, 2005, for monitoring wells screened within Units 1 through 3 are consistent within the range of results reported for a period of similar hydrologic conditions (September 23, 2004) (Table 1). Analytical results from sampling performed during the period of May 24, 2005, through September 29, 2005, indicate that the sum of benzene, toluene, ethylbenzene, and total xylenes (BTEX) concentrations exceeded the achievement of the 75 percent milestone goal for reduction in BTEX concentrations from baseline levels in key PFP monitoring wells MW27, MW28, MW30, and MW44. Table P 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 September 2005.

TABLE P: 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%**

TABLE P: 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	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%**
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%**
MW27	5/24/2005	820	280	4.9	6.1	2.06	293.1	ND<20	
MW28	5/24/2005	570	93	3.4	8.6	2.3	107.3	ND<10	
MW30	5/24/2005	12,000	3,100	150	530	400	4180.0	ND<300	
MW44	5/24/2005	4,800	2,900	13	13	10.6	2936.6	ND<60	
Sum COC			6373	171.3	557.7	414.96	7516.96		**70%**
MW27	6/20/2005	500	56	5	2.6	2.38	65.98	ND<7	
MW28	6/20/2005	430	48	3	4.2	2	57.2	ND<80	
MW30	6/20/2005	14000	3900	150	570	463	5083	ND<150	
MW44	6/20/2005	6800	3900	15	12	11.4	3938.4	ND<50	
Sum COC			7904	173	589	478.8	9144.6		**63%**
MW27	9/29/2005	880	12	10	8.3	4.5	34.8	ND<10	
MW28	9/29/2005	210	23	0.74	1.4	0.62	25.76	ND<3.0	
MW30	9/29/2005	4700	1900	31	51	46	2028	ND<30	
MW44	9/29/2005	5600	2800	14	24	12.5	2850.5	ND<50	
Sum COC			4735	56	85	63.6	4939.1		**83%**

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 September 7, 2005, approximately 17,904 kilowatts per hour (Kwh) of electricity has been used to operate the master panel of the remediation system. Field forms for system checks occurring between May 25, 2005, and September 7, 2005, are included as Attachment 5. Table 2 presents the injection totals for oxygen into Unit 1, and ozone into Units 2 and 3. To date, 727.16 kilograms (kg) of oxygen has been injected into Unit 1, and 5.27 kg of ozone has been injected into Units 2 and 3. LACO continues with the weekly to bi-monthly system checks and quarterly sampling of monitoring 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 3). 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 May through September 2005, water quality parameters monitored in the field indicate that anaerobic conditions exist throughout the majority of the site. However, at monitoring wells MW23, MW28, and MW29 (all screened in Unit 1) marginal conditions exist, and at monitoring well MW24 (also screened in Unit 1), aerobic conditions exist. The increase in DO content is resultant of the remediation system, and excess oxygen being produced. Aerobic conditions indicate an abundance of oxygen and anaerobic conditions indicate that microbial activity is occurring at the site.

FUTURE WORK

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

LIMITATIONS

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LIST OF FIGURES, TABLES, AND ATTACHMENTS

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Table 1: Well Data and Groundwater Analytical Results
Table 2: Ozone and Oxygen Injection Records
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Chart A: Hydraulic Conductivity MW35 SLUG
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Chart I: Hydraulic Conductivity MW41 SLUG
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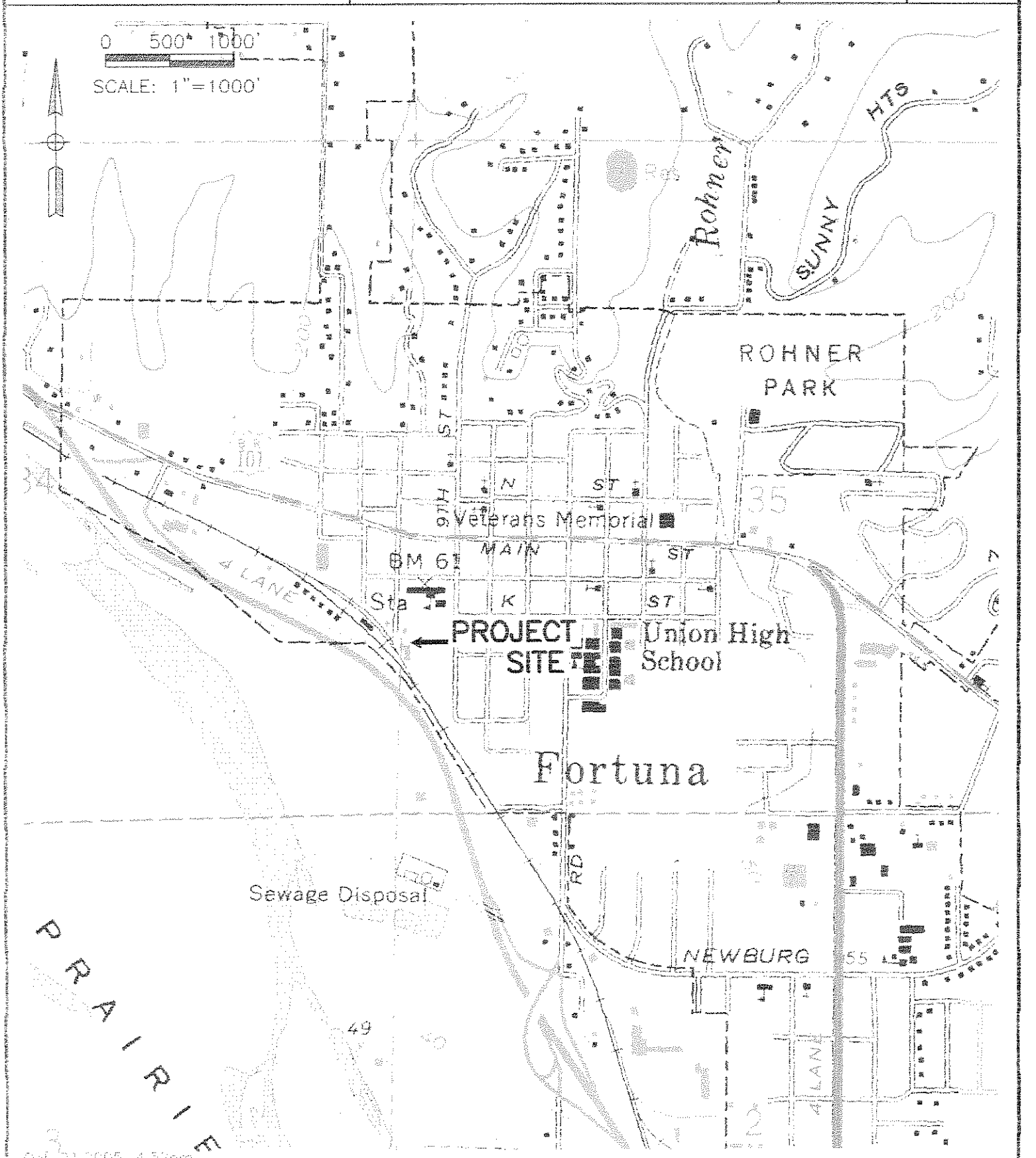
Attachment 1: Remediation Milestone Achievement Approval Form and Envelopes
Attachment 2: Key to Abbreviations
Attachment 3: Groundwater Sampling: Field Data Sheets
Attachment 4: Laboratory Analytical Reports
Attachment 5: ISCO Operation and Maintenance: Field Data Sheets

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	10/21/05	1
	LOCATION	FORMER BULK PLANT, FORTUNA, CA	CHECK		JOB NO.
		LOCATION MAP	SCALE	1"=1000'	4629.03



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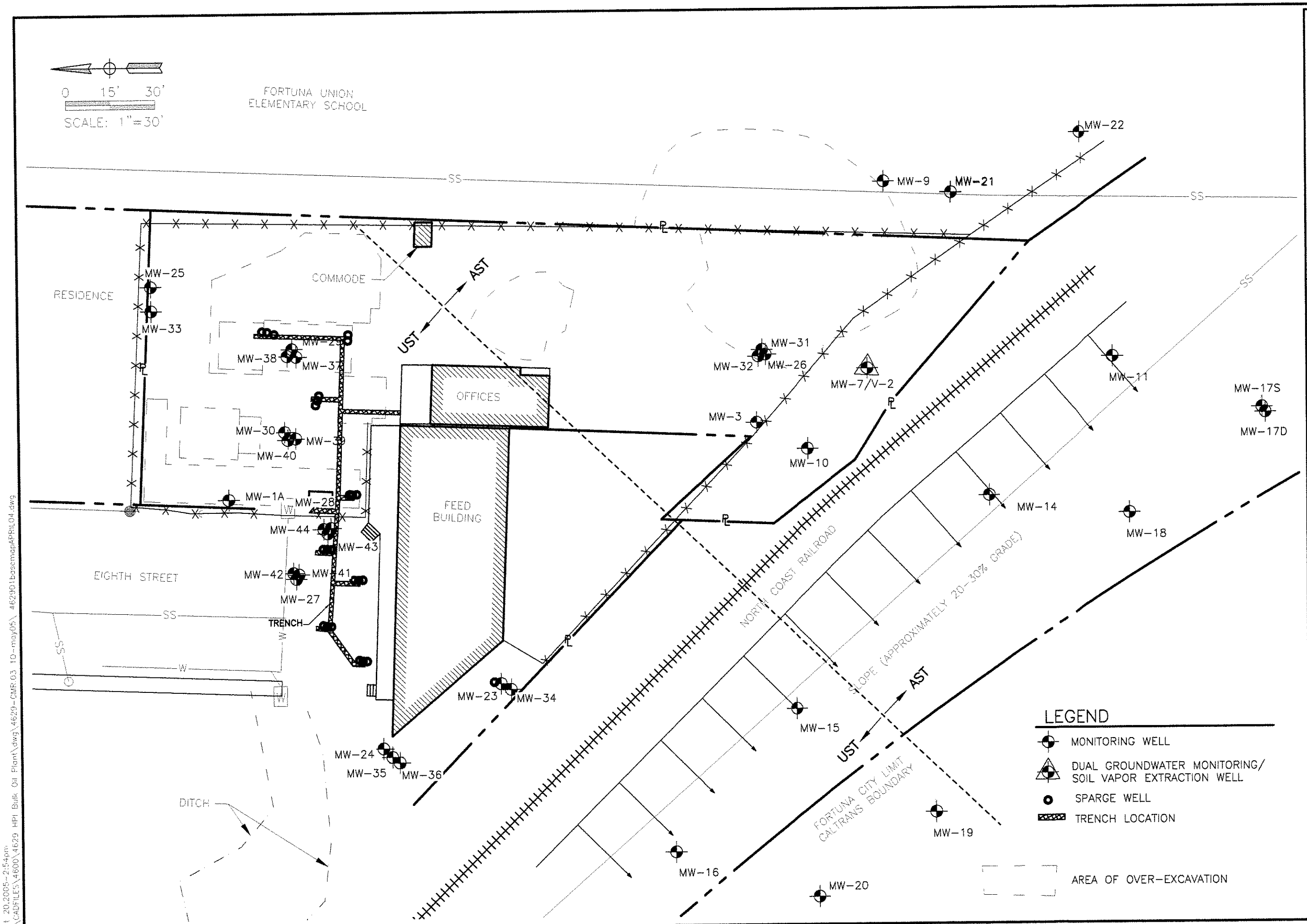
0 15' 30'
SCALE: 1"=30'
FORTUNA UNION ELEMENTARY SCHOOL
RESIDENCE
COMMODE
AST
UST
OFFICES
FEED BUILDING
EIGHTH STREET
TRENCH
DITCH
NORTH COAST RAILROAD
SLOPE (APPROXIMATELY 20-30% GRADE)
FORTUNA CITY LIMIT
CALTRANS BOUNDARY
SS
W
MW-1A
MW-3
MW-7/V-2
MW-9
MW-10
MW-11
MW-14
MW-15
MW-16
MW-17S
MW-17D
MW-18
MW-19
MW-20
MW-21
MW-22
MW-23
MW-24
MW-25
MW-26
MW-27
MW-28
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MW-31
MW-32
MW-33
MW-34
MW-35
MW-36
MW-37
MW-38
MW-39
MW-40
MW-41
MW-42
MW-43
MW-44
LEGEND
MONITORING WELL
DUAL GROUNDWATER MONITORING/ SOIL VAPOR EXTRACTION WELL
SPARGE WELL
TRENCH LOCATION
AREA OF OVER-EXCAVATION
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 AMT
APPVD
DATE 10/20/05
JOB NO. 4629.03
FIGURE 2
Oct 20,2005-2:54pm
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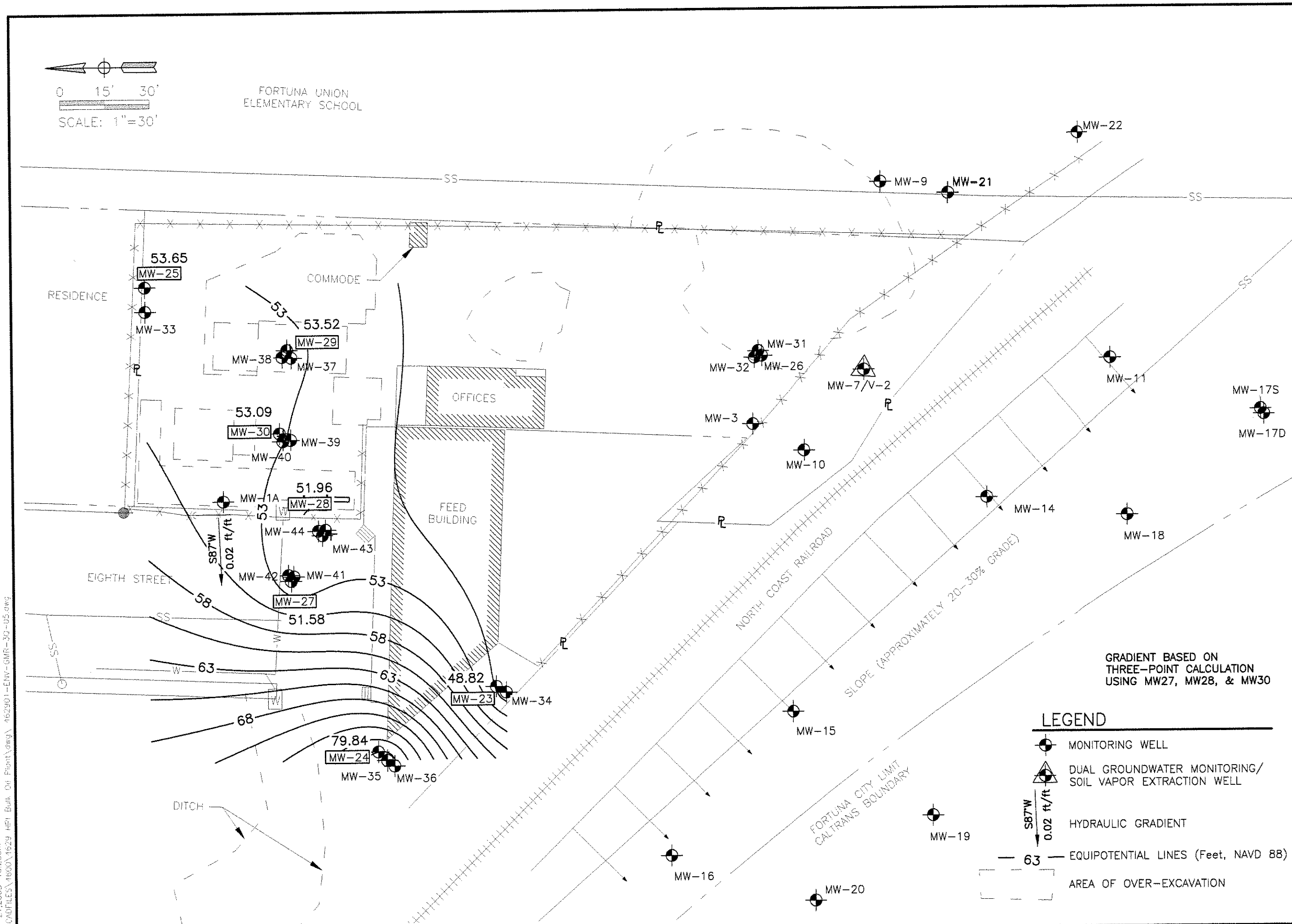

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21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

NO.	REVISION	BY	CHK	DATE

GROUNDWATER MONITORING REPORT - UST AREA
HYDRAULIC GRADIENT MAP IN UNIT 1 (6/20/05)

HUMBOLDT PETROLEUM, INC
FORMER BULK PLANT, FORTUNA, CA

SCALE	1"=30'
DRAWN	RJM
CHECK	AMT
APPVD	
DATE	10/21/05
JOB NO.	4629.03
FIGURE	3

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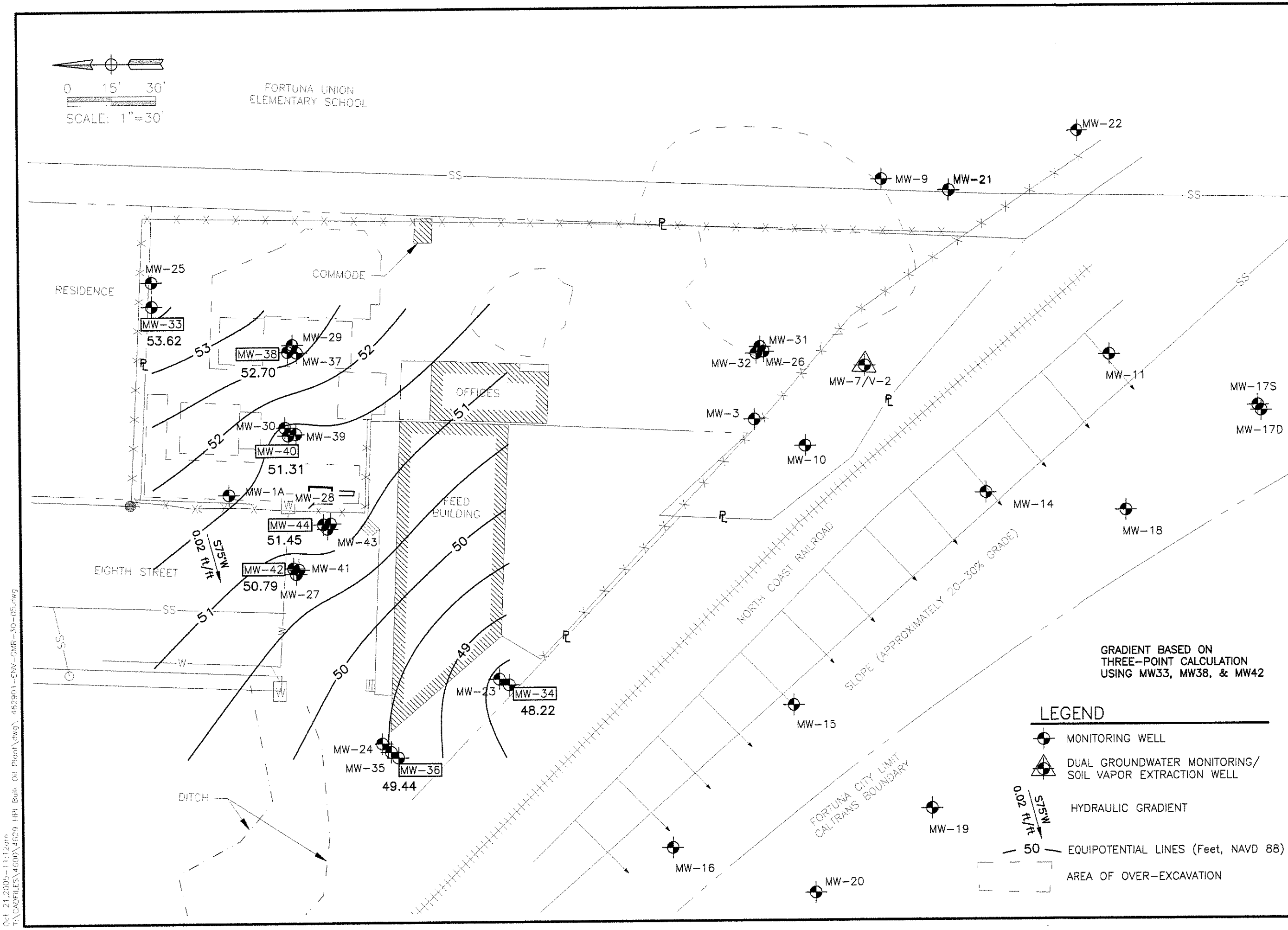

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NO.	REVISION	BY	CHK	DATE

GROUNDWATER MONITORING REPORT - UST AREA
HYDRAULIC GRADIENT MAP IN UNIT 2 (6/20/05)

HUMBOLDT PETROLEUM, INC
FORMER BULK PLANT, FORTUNA, CA

SCALE	1"=30'
DRAWN	RJM
CHECK	AMT
APPVD	
DATE	10/21/05
JOB NO.	4629.03
FIGURE	4

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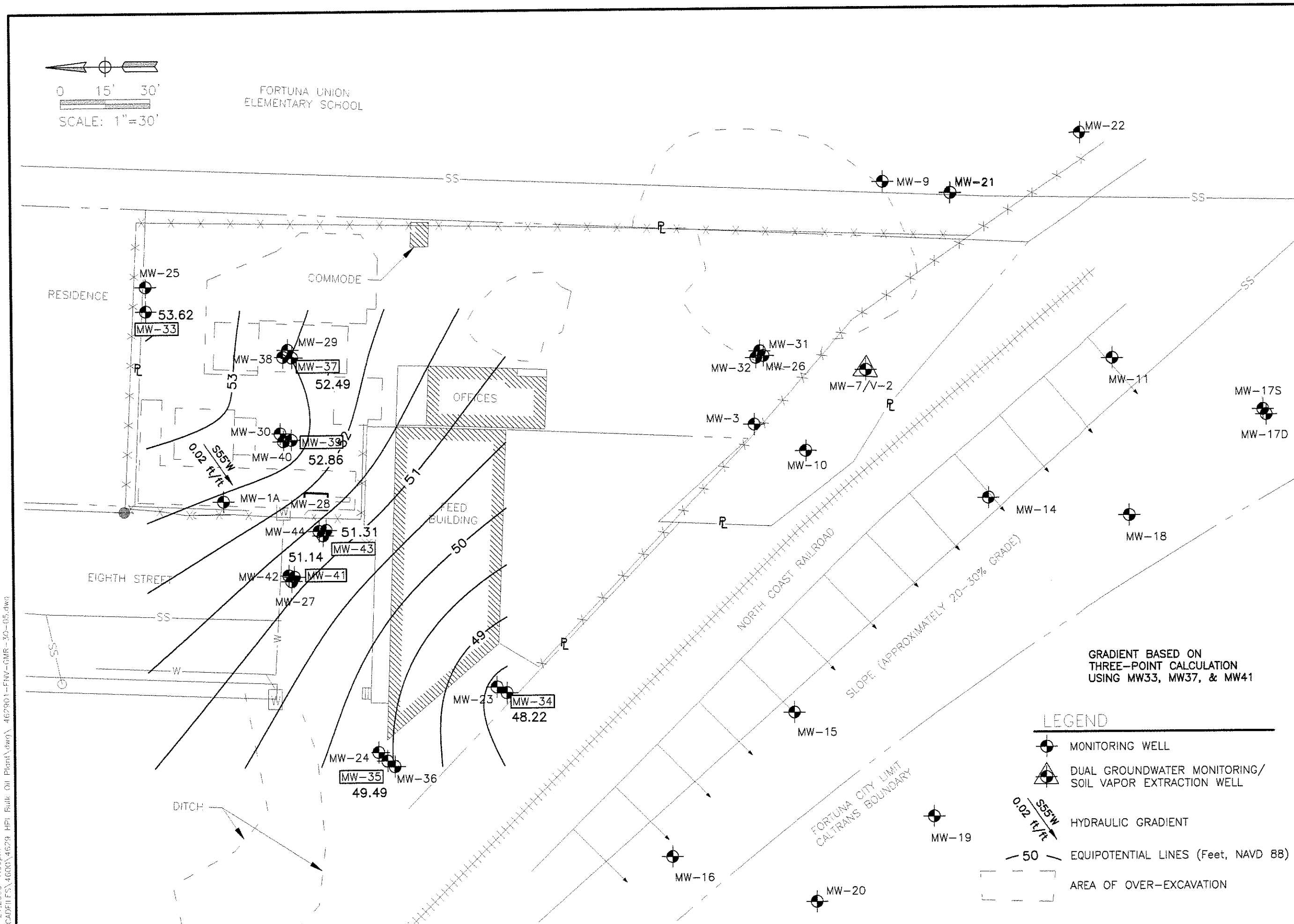

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21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

NO.	REVISION	BY	CHK	DATE

GROUNDWATER MONITORING REPORT - UST AREA
HYDRAULIC GRADIENT MAP IN UNIT 3 (6/20/05)

HUMBOLDT PETROLEUM, INC
FORMER BULK PLANT, FORTUNA, CA

SCALE	1"=30'
DRAWN	RJM
CHECK	AMT
APPVD	
DATE	10/21/05
JOB NO.	4629.03
FIGURE	5

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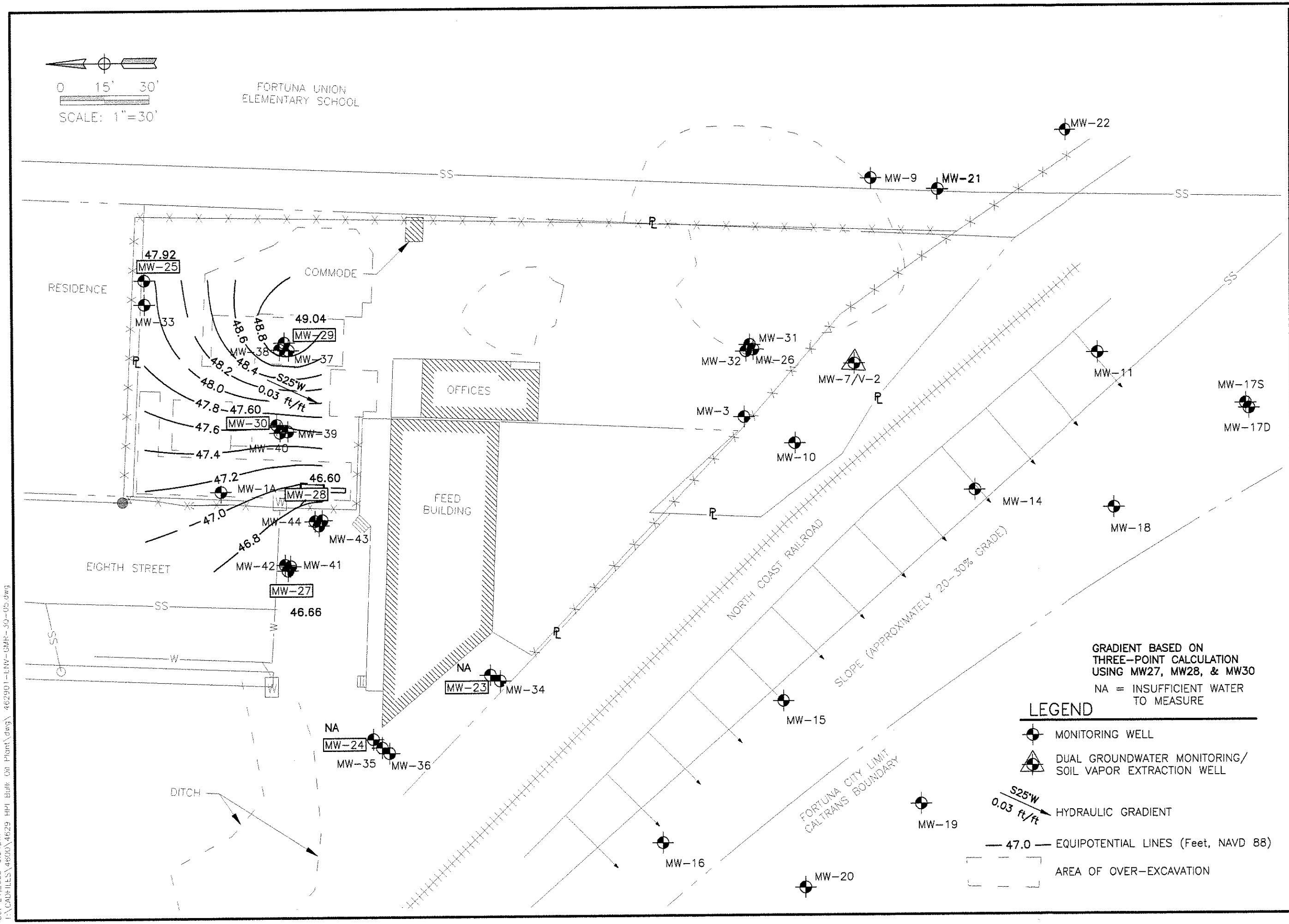

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NO.	REVISION	BY	CHK	DATE

GROUNDWATER MONITORING REPORT - UST AREA
HYDRAULIC GRADIENT MAP IN UNIT 1 (9/29/05)

HUMBOLDT PETROLEUM, INC
FORMER BULK PLANT, FORTUNA, CA

SCALE	1"=30'
DRAWN	RJM
CHECK	AMT
APPVD	
DATE	10/21/05
JOB NO.	4629.03
FIGURE	6

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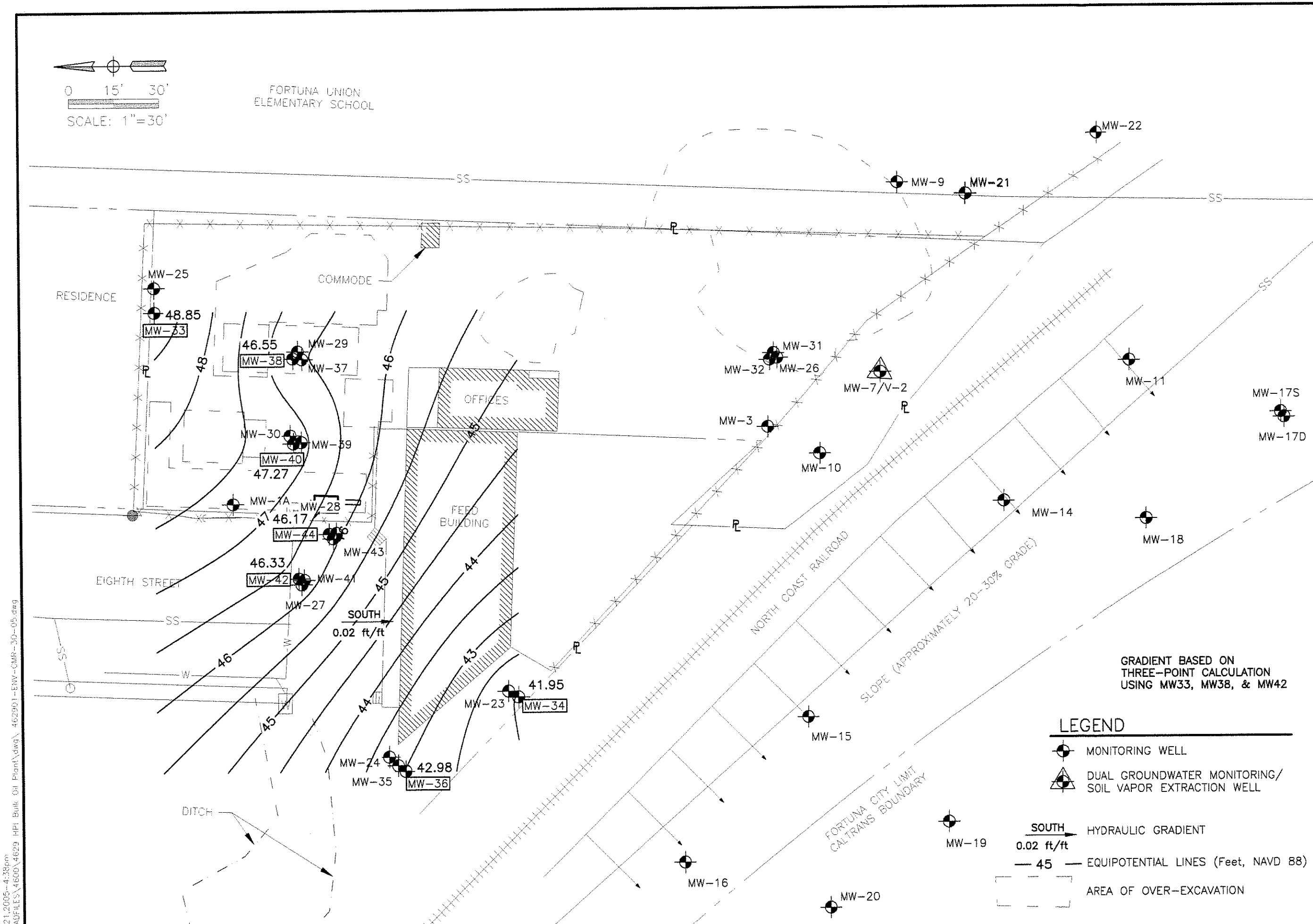

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NO.	REVISION	BY	CHK	DATE

GROUNDWATER MONITORING REPORT - UST AREA
HYDRAULIC GRADIENT MAP IN UNIT 2 (9/29/05)

HUMBOLDT PETROLEUM, INC
FORMER BULK PLANT, FORTUNA, CA

SCALE	1"=30'
DRAWN	RJM
CHECK	AMT
APPVD	
DATE	10/21/05
JOB NO.	4629.03
FIGURE	7

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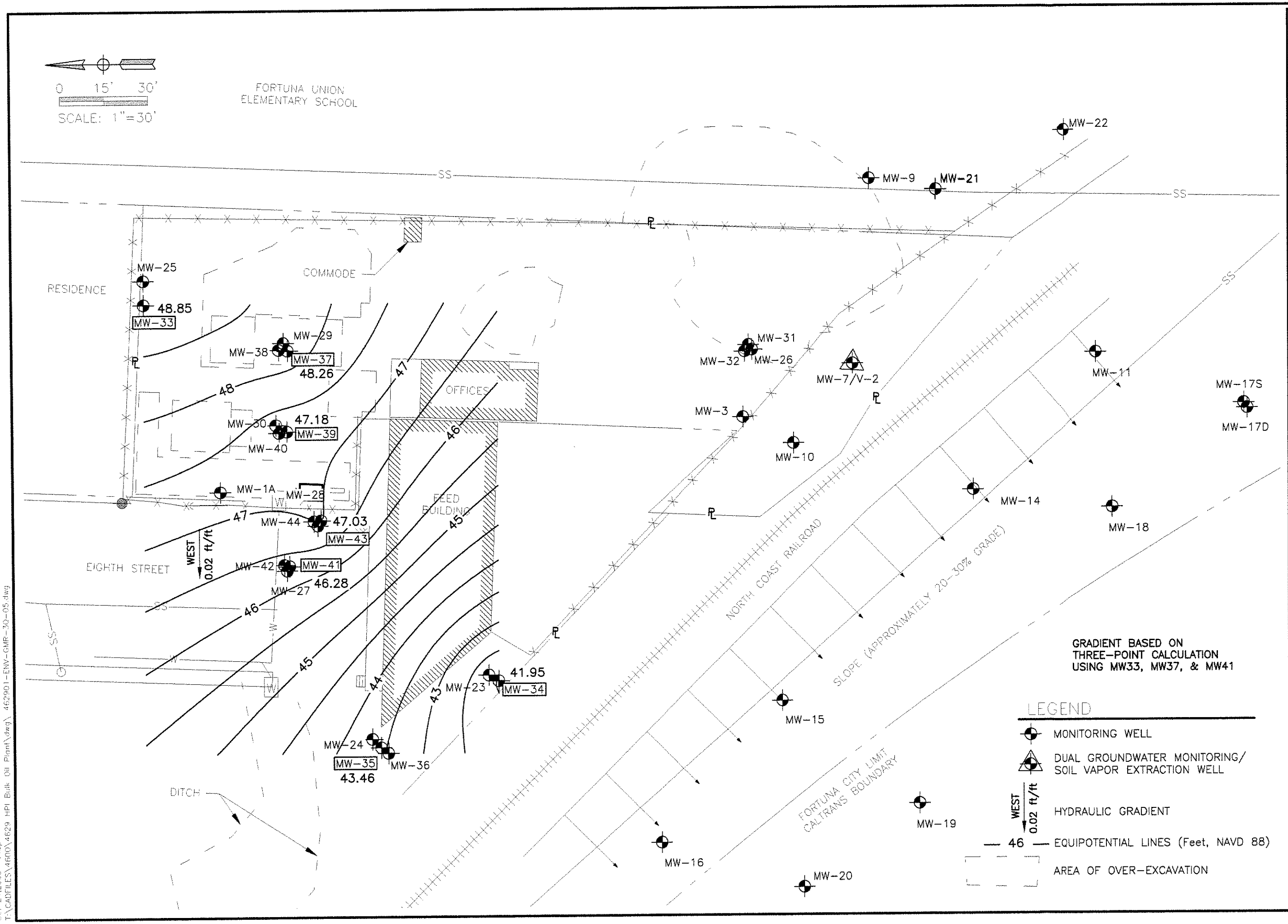

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21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

NO.	REVISION	BY	CHK	DATE

GROUNDWATER MONITORING REPORT - UST AREA
HYDRAULIC GRADIENT MAP IN UNIT 3 (9/29/05)

HUMBOLDT PETROLEUM, INC
FORMER BULK PLANT, FORTUNA, CA

SCALE	1"=30'
DRAWN	RJM
CHECK	AMT
APPVD	
DATE	10/21/05
JOB NO.	4629.03
FIGURE	8

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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	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	---	1.8	5,500	140	120	380	250	---	4.0
1/20/1998		50.67	0.20	2,600	5,300	---	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	---	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
6/20/2005		50.00	1.08	72	ND<50	---	---	0.98	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	0.35
9/29/2005		43.94	7.14	280	51	---	---	2.6	ND<3.0	ND<0.50	0.88	ND<3.0	---	---
MW-2	51.86													
10/7/1993		42.20	9.66	11,000	870	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	---	1.3	4,500	130	120	170	ND <250	---	3.0
10/15/97 (D)		duplicate sample		16,000	6,300	---	---	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	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	---	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
5/24/2005		44.71	6.16	1,700	91	ND<170	---	400	12	3.3	7.0	ND<20	---	0.34
6/27/2005		44.02	6.85	1,800	110	ND<170	---	440	10	2.8	6.9	ND<18	---	2.52
7/28/2005		42.86	8.01	1,600	130	---	---	360	11	1.9	5.5	ND<15	---	0.38
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	---	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	---	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	---	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	---	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	---	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	---	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	---	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	---	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
5/24/2005		44.29	7.13	---	---	---	---	---	---	---	---	---	---	---
6/27/2005		44.81	6.61	---	---	---	---	---	---	---	---	---	---	---
7/28/2005		42.10	9.32	---	---	---	---	---	---	---	---	---	---	---
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	---	---
5/24/2005		35.67	12.63	---	---	---	---	---	---	---	---	---	---	---
6/27/2005		34.58	13.72	---	---	---	---	---	---	---	---	---	---	---
7/28/2005	----- Insufficient amount of water to sample -----													
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	---	2.1	8,300	160	560	770	ND <500	---	4.0
1/20/1998		47.66	3.45	17	4,500	---	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	---	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		ND<170	---	7,100	88	350	358	ND<20	---	0.6
					180 *w/ silica gel cleanup*									
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	---	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	---	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	---	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	---	---
5/24/2005		38.19	9.70	---	---	---	---	---	---	---	---	---	---	---
6/27/2005		35.82	12.07	---	---	---	---	---	---	---	---	---	---	---
7/28/2005		33.49	14.40	---	---	---	---	---	---	---	---	---	---	---
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)	TPHlr (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		---	---	---	---	---	---	---	---	---	---	---	---	---
6/20/2005			Well is obstructed, unable to sample											
9/29/2005			Well is obstructed, unable to sample											
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	---	---
6/20/2005			Well is obstructed, unable to sample											
9/29/2005			Well is obstructed, unable to sample											
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	---	---
5/24/2005		21.49	9.33	---	---	---	---	---	---	---	---	---	---	---
6/27/2005		20.25	10.57	---	---	---	---	---	---	---	---	---	---	---
7/28/2005		16.91	13.91	---	---	---	---	---	---	---	---	---	---	---
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					
5/24/2005		Well inaccessible							Well inaccessible					
6/27/2005		18.07	12.75	**240**	**52**	ND<170	---	ND<0.50	ND<2.0	ND<0.50	ND<2.0	ND<3.0	---	---
7/28/2005		17.40	13.42	**250**	**60**	---	---	ND<0.50	ND<0.50	ND<0.50	ND<1.5	ND<3.0	---	---
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	---	---
6/20/2005		19.06	12.50	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
9/29/2005		13.58	17.98	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	---	---
6/20/205		25.07	5.62	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
9/29/2005		13.91	16.78	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	**5.2**	---	---
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)	TPHlr (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
6/20/2005		48.82	5.16	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	5.76
9/29/2005	----- Insufficient amount of water to sample -----													
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
6/20/2005		49.84	4.56	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	8.05
9/29/2005	----- Insufficient amount of water to sample -----													
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
6/20/2005		53.65	2.26	**160**	ND<50	---	---	ND<1.0	ND<4.0	ND<0.50	ND<0.50	ND<3.0	---	0.34
9/29/2005		47.92	7.99	**88**	ND<50	---	---	ND<0.50	ND<2.0	ND<0.50	ND<0.50	ND<3.0	---	0.59
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

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-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
5/24/2005		49.38	4.92	820	85	---	---	280	4.9	6.1	2.06	ND<15	---	0.43
6/20/2005		51.58	2.72	500	ND<50	---	---	56	ND<5.0	2.6	2.38	ND<7.0	---	0.31
8/11/2005		48.51	5.79			Intrinsics Only								0.64
8/30/2005		47.74	6.56			Intrinsics Only								0.64
9/29/2005		46.66	7.64	880	110	---	---	12	ND<10	8.3	ND<1.5	ND<10	---	0.92
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
5/24/2005		51.66	2.95	570	76	---	---	93	3.4	8.6	2.3	ND<16	---	0.33
6/20/2005		51.96	2.65	430	100	---	---	48	ND<3.0	4.2	ND<2.0	ND<8.0	---	0.37
8/11/2005		49.46	5.15			Intrinsics Only								0.44
8/30/2005		46.50	8.11			Intrinsics Only								2.56
9/29/2005		46.60	8.01	210	ND<50	---	---	23	0.74	1.4	0.62	ND<3.0	---	5.79

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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-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
6/20/2005		53.52	2.32	ND<50	910	---	---	21	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	0.20
9/29/2005		49.04	6.80	450	180	---	---	100	1.9	1.7	0.89	ND<3.0	---	3.10
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
5/24/2005		52.98	2.11	12,000	830	---	---	3,100	150	530	400	ND<300	---	0.31
6/20/2005		53.09	2.00	14,000	560	---	---	3,900	150	570	463	ND<150	---	0.32
8/11/2005		49.85	5.24			Intrinsics Only								0.31
8/30/2005		49.06	6.03			Intrinsics Only								0.38
9/29/2005		47.60	7.49	4,700	270	---	---	1,900	31	51	45	ND<30	---	0.36
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
5/1/2405		49.67	4.94	1,500	140	ND<170	---	330	ND<20	ND<6.0	ND<6.0	ND<10	---	0.30
6/27/2005		48.51	6.10	860	110	ND<170	---	190	ND<10	ND<4.0	ND<3.0	ND<6.0	---	0.59
7/28/2005		47.30	7.31	980	140	---	---	210	6.3	ND<3.0	ND<3.0	ND<6.0	---	0.64
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
5/24/2005		49.29	5.34	2,100	170	ND<170	---	640	13	ND<10	ND<10	ND<20	---	0.36
6/27/2005		47.71	6.92	1,900	160	ND<170	---	600	12	ND<10	ND<10	ND<20	---	0.52
7/28/2005		47.16	7.47	2,600	190	---	---	590	15	ND<10	ND<10	ND<6.0	---	0.28

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
6/20/2005		53.62	2.17	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	0.31
9/29/2005		48.85	6.94	ND<50	ND<50	---	---	**2.3**	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	0.12
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
5/24/2005		47.65	6.42	**5,000**	**450**	---	---	**82**	**52**	**150**	**241**	ND<180	---	0.42
6/20/2005		48.22	5.85	**8,500**	**570**	---	---	**59**	**64**	**130**	**366**	ND<150	---	0.37
8/11/2005		44.73	9.34			Intrinsics Only								0.48
8/30/2005		43.06	11.01			Intrinsics Only								0.40
9/29/2005		41.95	12.12	**4,700**	**300**	---	---	**61**	**20**	**50**	**37.6**	ND<100	---	0.62
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	---

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-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
6/20/2005		49.49	4.97	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	10		0.54
9/29/2005		43.46	11.00	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	12	---	0.67
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
6/20/2005		49.44	5.06	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	6.2	---	0.35
9/29/2005		42.98	11.52	ND<50	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	8.9	---	0.43
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	---	---	---	---	---	---	---	---	---	---	---
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
6/20/2005		52.49	3.36	ND<50	ND<50	---	---	1.0	ND<0.50	ND<0.50	ND<0.50	5.8	---	0.85
9/29/2005		48.26	7.59	ND<50	ND<50	---	---	11	ND<0.50	ND<0.50	ND<0.50	4.5	---	0.22
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

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-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
5/24/2005		53.19	2.62	100	ND<50	---	---	16	0.87	0.80	0.57	12	---	0.44
6/20/2005		52.70	3.11	84	65	---	---	12	0.65	0.56	ND<0.50	10	---	0.48
8/11/2005		49.87	5.94			Intrinsics Only								0.31
8/30/2005		49.09	6.72			Intrinsics Only								0.34
9/29/2005		48.13	7.68	64	ND<50	---	---	10	ND<0.50	ND<0.50	ND<0.50	8.5	---	0.22
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
6/20/2005		52.86	2.38	ND<50	ND<50	---	---	0.88	ND<0.50	ND<0.50	ND<0.50	13	---	0.41
9/29/2005		47.18	8.06	52	ND<50	---	---	9.60	ND<0.50	1.1	0.9	11	---	0.21
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
6/20/2005		51.31	3.86	ND<50	51	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	10	---	0.71
9/29/2005		47.24	7.93	ND<50	ND<50	---	---	4.2	ND<0.50	ND<0.50	ND<0.50	10	---	0.50
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
6/20/2005		51.14	3.24	ND<50	60	---	---	0.54	ND<0.50	ND<0.50	ND<0.50	6.2	---	0.43
9/29/2005		46.28	8.10	ND<50	ND<50	---	---	1.0	ND<0.50	0.7	0.79	4.4	---	0.26
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
6/20/2005		50.79	3.58	95	62	---	---	1.8	ND<0.50	ND<0.50	ND<0.50-1.0	7.6	---	0.78
9/29/2005		46.33	8.04	71	ND<50	---	---	1.9	0.62	1.2	1.9	5.1	---	0.22
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
5/24/2005		51.60	3.01	1,100	ND<50	---	---	490	1.4	4.2	2.4	ND<60	---	0.47
6/20/2005		51.31	3.30	1,800	59	---	---	980	ND<3.0	7.0	1.2	ND<70	---	1.39
8/11/2005		48.63	5.98			Intrinsics Only								0.54
8/30/2005		47.09	7.52			Intrinsics Only								1.00
9/29/2005		47.03	7.58	1,600	ND<50	---	---	840	1.4	6.8	3.0	ND<50	---	0.51
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
5/24/2005		51.69	2.96	4,800	ND<50	---	---	2,900	13	13	10.6	ND<60	---	0.48
6/20/2005		51.45	3.20	6,800	71	---	---	3,900	15	12	11.4	ND<60	---	0.29
8/11/2005		48.64	6.01			Intrinsics Only								0.48
8/30/2005		47.50	7.15			Intrinsics Only								0.70
9/29/2005		46.17	8.48	5,600	73	---	---	2,800	14	24	12.5	ND<50	---	0.81
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: OZONE AND OXYGEN INJECTION RECORDS
Former Shell Bulk Plant
400 Eigth Street, Fortuna
LACO Project No. 4629.03; CRWQCB Case No. 1THU116

IN-SITU CHEMICAL OXIDATION REMEDIATION SYSTEM HISTORY						
Units 2 and 3 (C-Sparger #2 & #5)						
Remediation Unit	**Date**	**Ozone Master Panel Runtime Indicator (hr)**	**Ozone Injection Interval (hr)**	**Ozone Injection Rate (g/hr)**	**Total Ozone Injected per Interval (kg)**	**Total Ozone (kg)**
C-Sparger #2						
	7/2/2004 (startup)	7,497	0.0	4.0	0.00	0.00
	7/6/2004	7,527.8	30.9	4.0	0.12	0.12
	7/8/2204	7561.06	33.3	4.0	0.13	0.26
	7/21/2004	7576.46	15.4	4.0	0.06	0.32
	8/3/2004	7656.83	80.4	4.0	0.32	0.64
	8/12/2004	7659.18	2.4	4.0	0.01	0.65
	8/24/2004	7808.1	148.9	4.0	0.60	1.24
	9/8/2004	System Off				
C-Sparger #5						
	11/4/2004	7.01	0.0	4.0	0.00	1.24
	11/5/2004	16.65	9.6	4.0	0.04	1.28
	11/18/2004	269.44	252.8	4.0	1.01	2.29
	11/30/2004	System Off				
	4/15/2005	377.23	107.8	4.0	0.43	2.73
	7/8/2005	389.21	12.0	4.0	0.05	2.77
	7/11/2005	499.47	110.3	4.0	0.44	3.21
	7/12/2005	504.25	4.8	4.0	0.02	3.23
	7/18/2005	544.00	39.8	4.0	0.16	3.39
	8/9/2005	783.52	239.5	4.0	0.96	4.35
	8/16/2005	885.62	102.1	4.0	0.41	4.76
	8/23/2005	983.2	97.6	4.0	0.39	5.15
	9/7/2005	1012.8	29.6	4.0	0.12	5.27

TABLE 2: OZONE AND OXYGEN INJECTION RECORDS
Former Shell Bulk Plant
400 Eigth Street, Fortuna
LACO Project No. 4629.03; CRWQCB Case No. 1THU116

IN-SITU CHEMICAL OXIDATION REMEDIATION SYSTEM HISTORY, continued						
Unit 1 (102-M, LACO Master Panel, Oxygen Concentrator #5)						
Remediation Unit	**Date**	**Master Panel Runtime Indicator (hr)**	**Oxygen Injection Interval (hr)**	**Oxygen Injection Rate (g/hr)**	**Oxygen Injected per Interval (kg)**	**Total Oxygen (kg)**
M-102 Air Compressor						
	7/2/2004	0	0	6.79	0.00	0.00
	7/6/2004	96	96	6.79	0.65	0.65
	7/8/2004	144	48	6.79	0.33	0.98
	7/21/2004	456	312	6.79	2.12	3.10
	8/3/2004	768	312	6.79	2.12	5.21
	Reset Runtime Indicator					
	8/12/2004	0.73	0	6.79	0.00	5.21
	8/24/2004	1.89	1.16	6.79	0.01	5.22
	9/8/2004	380.21	378.32	6.79	2.57	7.79
	9/23/2004	707	326.79	6.79	2.22	10.01
	10/6/2004	1017.57	310.57	6.79	2.11	12.12
	10/21/2004	1370.73	353.16	6.79	2.40	14.52
Oxygen Concentrator #5						
	10/26/2004	1489.6	118.87	266.5	31.68	46.20
	Reset Runtime Indicator					
	10/26/2004	0.1	0	266.5	0.00	46.20
	11/4/2005	164.5	164.4	266.5	43.81	90.01
	11/5/2004	179.4	14.9	266.5	3.97	93.98
	11/18/2004	395.2	215.8	266.5	57.51	151.49
	11/30/2004	System Off				
	12/16/2004	634.1	0	266.5	0.00	151.49
	4/15/2005	634.2	0.1	266.5	0.03	151.52
	Reset Runtime Indicator					
	5/4/2005	0	0	266.5	0.00	151.52
	5/11/2005	168	168	266.5	44.77	196.29
	5/25/2005	336	168	266.5	44.77	241.06
	6/9/2005	360	24	266.5	6.40	247.46
	7/8/2005	696	336	266.5	89.54	337.00
	7/11/2005	768	72	266.5	19.19	356.19
	7/12/2005	792	24	266.5	6.40	362.58
	7/18/2005	936	144	266.5	38.38	400.96
	8/9/2005	1464	528	266.5	140.71	541.67
	8/16/2005	1632	168	266.5	44.77	586.44
	9/7/2005	2160	528	266.5	140.71	727.16

TABLE 3: 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
6/20/2005	-67	0.35
9/29/2005	-88	0.68
MW15		
9/23/2004	---	---
11/16/2004	---	---
12/14/2004	---	---
4/27/2005	---	---
6/20/2005	---	---
9/29/2005	---	---
MW16		
9/23/2004	---	---
11/16/2004	---	---
12/14/2004	---	---
4/27/2005	---	---
6/20/2005	---	---
9/29/2005	---	---
MW19		
9/23/2004	---	---
11/16/2004	---	---
12/14/2004	---	---
4/27/2005		
6/20/2005	---	---
9/29/2005	---	---
MW20		
9/23/2004	---	---
11/16/2004	---	---
12/14/2004	---	---
4/27/2005	---	---
6/20/2005	---	---
9/29/2005	---	---
MW23		
9/23/2004	---	---
11/16/2004	---	---
12/14/2004	-15	0.99
4/27/2005	10	0.58
6/20/2005	30	5.76
9/29/2005	---	---

TABLE 3: 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)
MW24		
9/23/2004	---	---
11/16/2004	---	---
12/14/2004	12	3.07
4/27/2005	22	0.41
6/20/2005	76	8.05
9/29/2005	---	---
MW25		
9/23/2004	-59	0.59
11/16/2004	---	---
12/14/2004	Ur	0.37
4/27/2005	-37	0.70
6/20/2005	-57	0.34
9/29/2005	-87	0.59
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
5/24/2005	-92	0.43
6/20/2005	43	0.31
8/11/2005	-82	0.64
8/30/2005	-68	0.64
9/29/2005	-112	0.92
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
5/24/2005	-92	0.33
6/20/2005	-51	0.37
8/11/2005	-81	0.44
8/30/2005	-31	2.56
9/29/2005	-39	5.79
MW29		
9/23/2004	-93	0.51
11/16/2004	---	---
12/14/2004	-8	4.05
4/27/2005	-7	0.99
6/20/2005	-45	0.2
9/29/2005	-56	3.1

TABLE 3: 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)
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
5/24/2005	-56	0.31
6/20/2005	-86	0.32
8/11/2005	-91	0.31
8/30/2005	-55	0.38
9/29/2005	-92	0.36
MW33		
9/23/2004	-23	0.26
11/16/2004	---	---
12/14/2004	-48	0.41
4/27/2005	-12	0.62
6/20/2005	-29	0.31
9/29/2005	-5	0.12
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
5/24/2005	-54	0.42
6/20/2005	-21	0.37
8/11/2005	-38	0.48
8/30/2005	-17	0.40
9/29/2005	-77	0.62
MW35		
9/23/2004	-41	0.32
11/16/2004	---	---
12/14/2004	Ur	0.51
4/27/2005	-73	0.33
6/20/2005	-18	0.54
9/29/2005	-65	0.67

TABLE 3: 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)
MW36		
9/23/2004	-4	0.31
11/16/2004	---	---
12/14/2004	-53	0.74
4/27/2005	-74	0.38
6/20/2005	-49	0.35
9/29/2005	-71	0.43
MW37		
9/23/2004	-4	0.16
11/16/2004	---	---
12/14/2004	-17	0.45
4/27/2005	15	0.66
6/20/2005	-3.0	0.85
9/29/2005	-6	0.22
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
5/24/2005	-12	0.44
6/20/2005	-35	0.48
8/11/2005	-39	0.31
8/30/2005	6	0.34
9/29/2005	-1	0.22
MW39		
9/23/2004	-54	0.14
11/16/2004	---	---
12/14/2004	-60	0.51
4/27/2005	-31	0.33
6/20/2005	-49	0.41
9/29/2005	-32	0.21
MW40		
9/23/2004	-91	1.10
11/16/2004	---	---
12/14/2004	-69	0.81
4/27/2005	-39	0.36
6/20/2005	-47	0.71
9/29/2005	-59	0.5

TABLE 3: 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)
MW41		
9/23/2004	Ur	1.39
11/16/2004	---	---
12/14/2004	-48	0.45
4/27/2005	-51	0.30
6/20/2005	0.33	0.43
9/29/2005	-55	0.26
MW42		
9/23/2004	-92	1.40
11/16/2004	---	---
12/14/2004	-77	0.43
4/27/2005	-75	0.33
6/20/2005	-65	0.78
9/29/2005	-82	0.22
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
5/24/2005	-56	0.47
6/20/2005	-69	1.39
8/11/2005	-50	0.54
8/30/2005	-41	1.00
9/29/2005	-80	0.51
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
5/24/2005	-42	0.48
6/20/2005	-38	0.29
8/11/2005	-42	0.48
8/30/2005	-44	0.70
9/29/2005	-60	0.81

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

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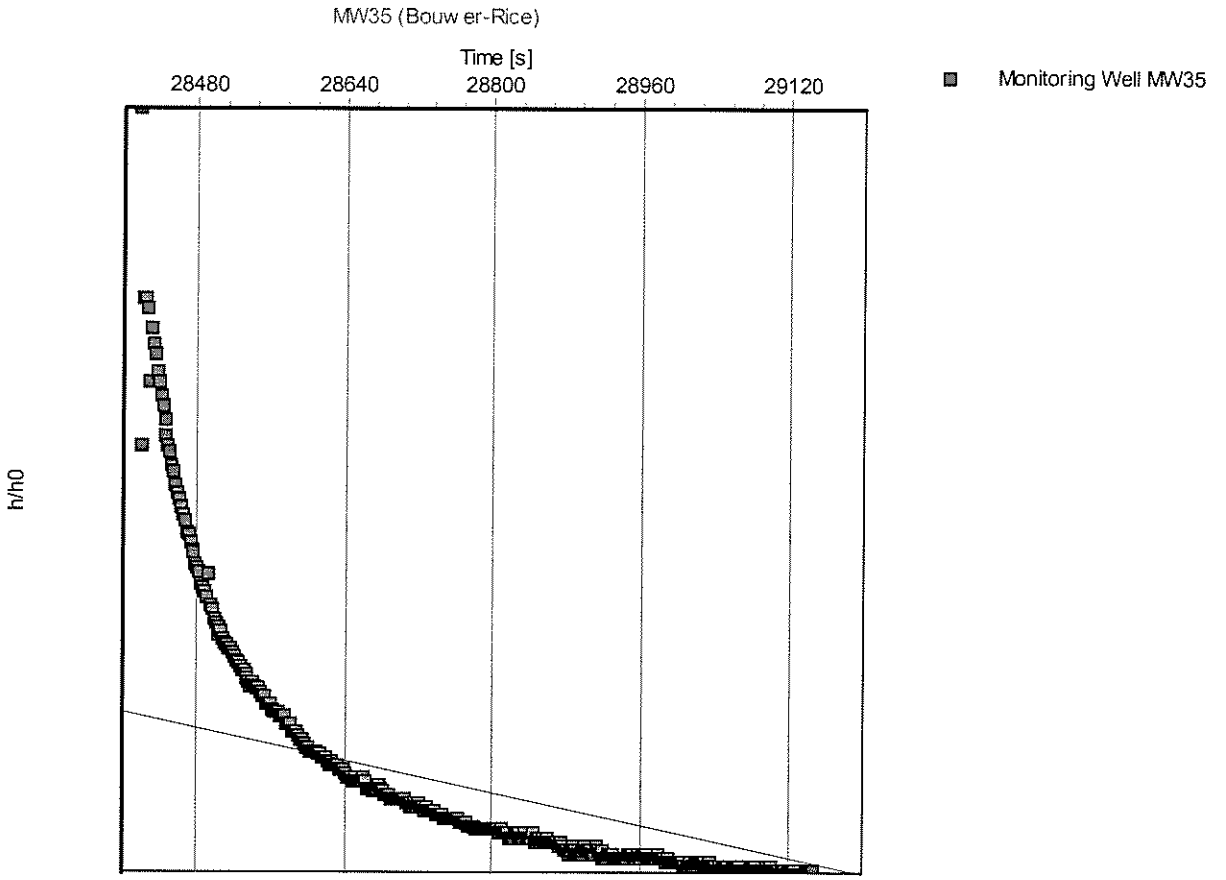
SlugTest Analysis Chart A



Test name: **MW35 SLUG**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 1.43E-7 [m/s]

Test parameters:				
	Test well:	Monitoring Well	Aquifer thickness:	18 [ft]
	Screen radius:	0.17 [ft]	Gravel pack Porosity (%)	25
	Screen length:	3 [ft]		
	Casing radius:	0.17 [ft]		
	r(eff):	0.170 [ft]		

Comments:

Evaluated by: AMT
Date: 9/9/2005

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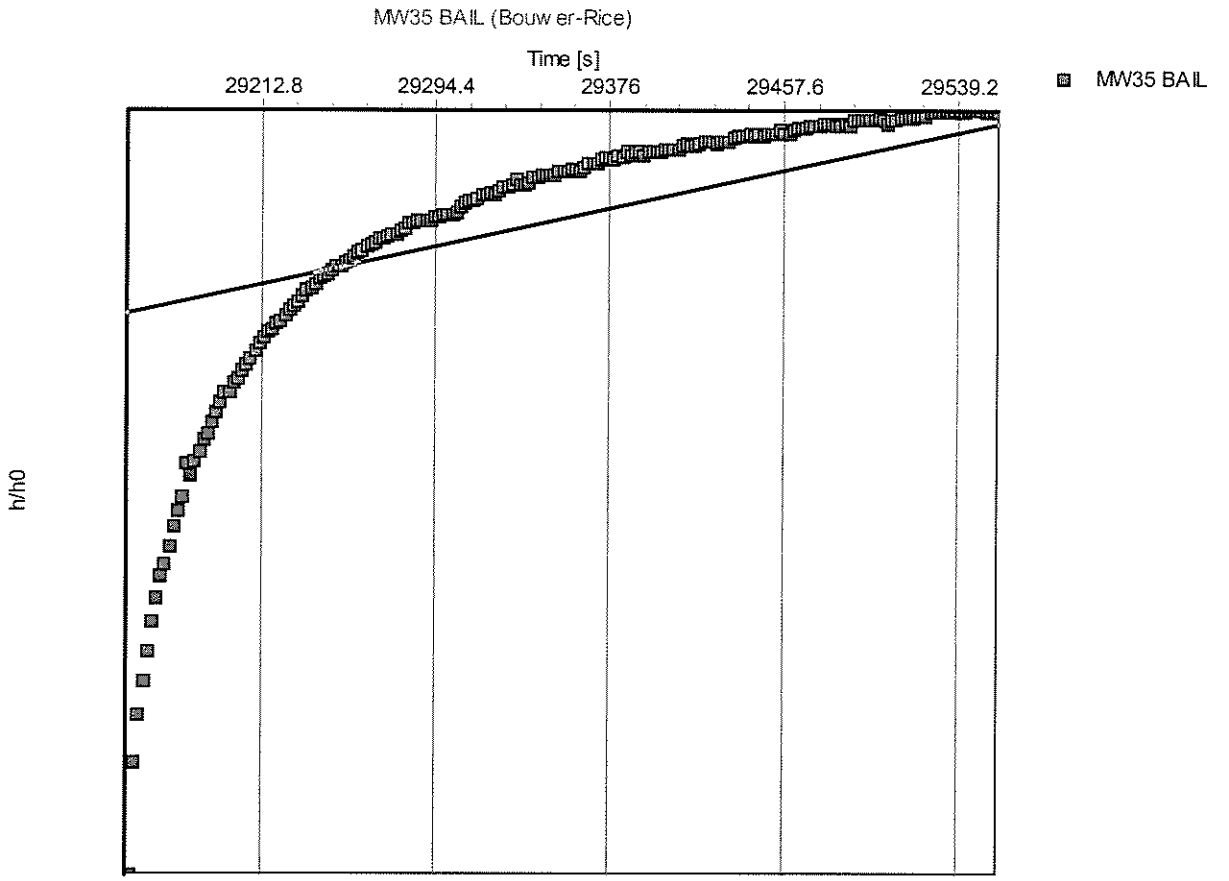
Bail Test Analysis Chart B



Test name: **MW35 BAIL**

Analysis method: **Bouwer-Rice**

Analysis results: Conductivity: 5.00E-7 [m/s]

Test parameters:				
	Test well:	Monioring Well W35	Aquifer thickness:	18 [ft]
	Screen radius:	0.17 [ft]	Gravel pack Porosity (%)	25
	Screen length:	3 [ft]		
	Casing radius:	0.17 [ft]		
	r(eff):	0.170 [ft]		

Comments:

Evaluated by: AMT
Date: 9/9/2005

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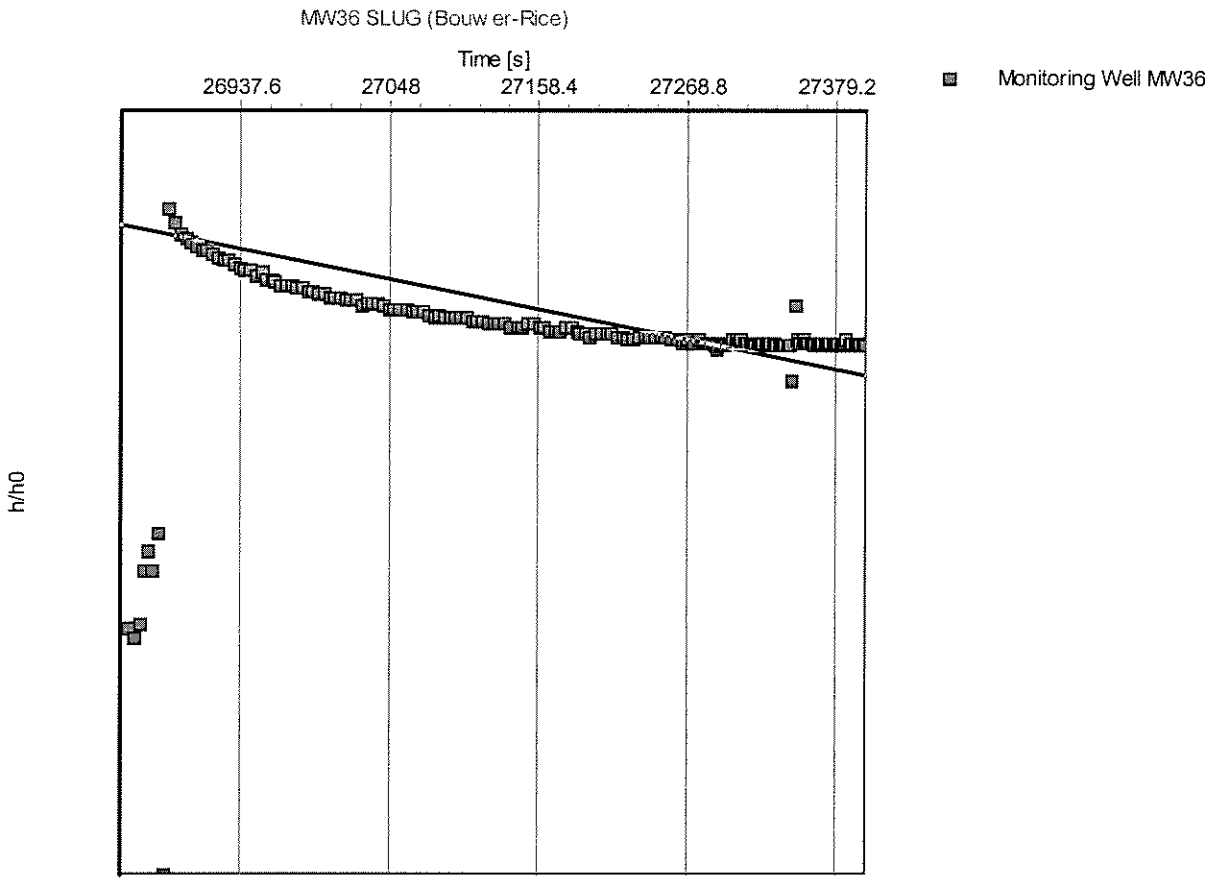
SlugTest Analysis Chart C



Test name: **MW36 SLUG**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 1.11E-6 [m/s]

Test parameters:				
	Test well:	Monitoring Well	Aquifer thickness:	18 [ft]
	Screen radius:	0.17 [ft]	Gravel pack Porosity (%)	25
	Screen length:	1.5 [ft]		
	Casing radius:	0.17 [ft]		
	r(eff):	0.170 [ft]		

Comments:

Evaluated by: AMT
Date: 9/9/2005

Bail Test Analysis Chart D

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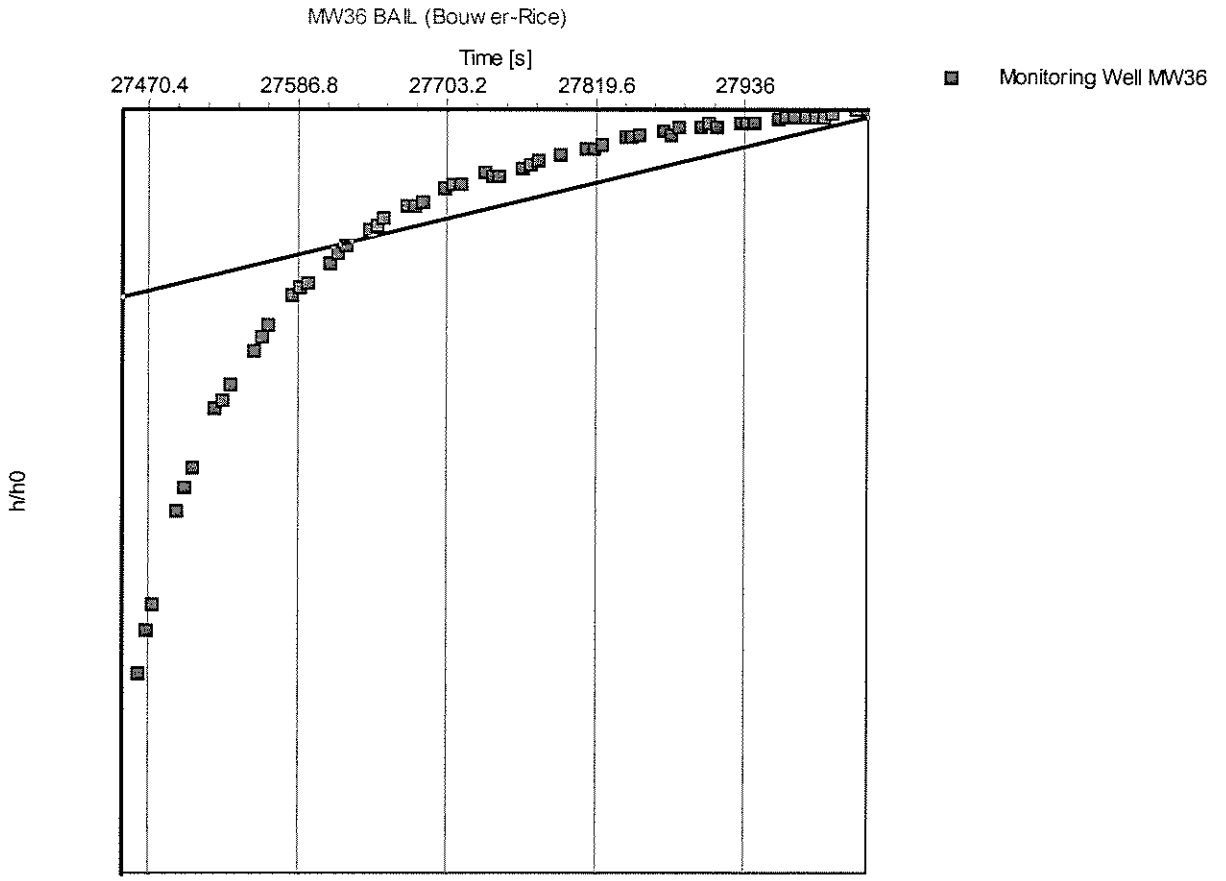

Test name: **MW36 BAIL**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 1.22E-6 [m/s]

Test parameters:				
	Test well:	Monitoring Well	Aquifer thickness:	18 [ft]
	Screen radius:	0.17 [ft]	Gravel pack Porosity (%)	25
	Screen length:	1.5 [ft]		
	Casing radius:	0.17 [ft]		
	r(eff):	0.170 [ft]		

Comments:

Evaluated by: AMT
Date: 9/9/2005

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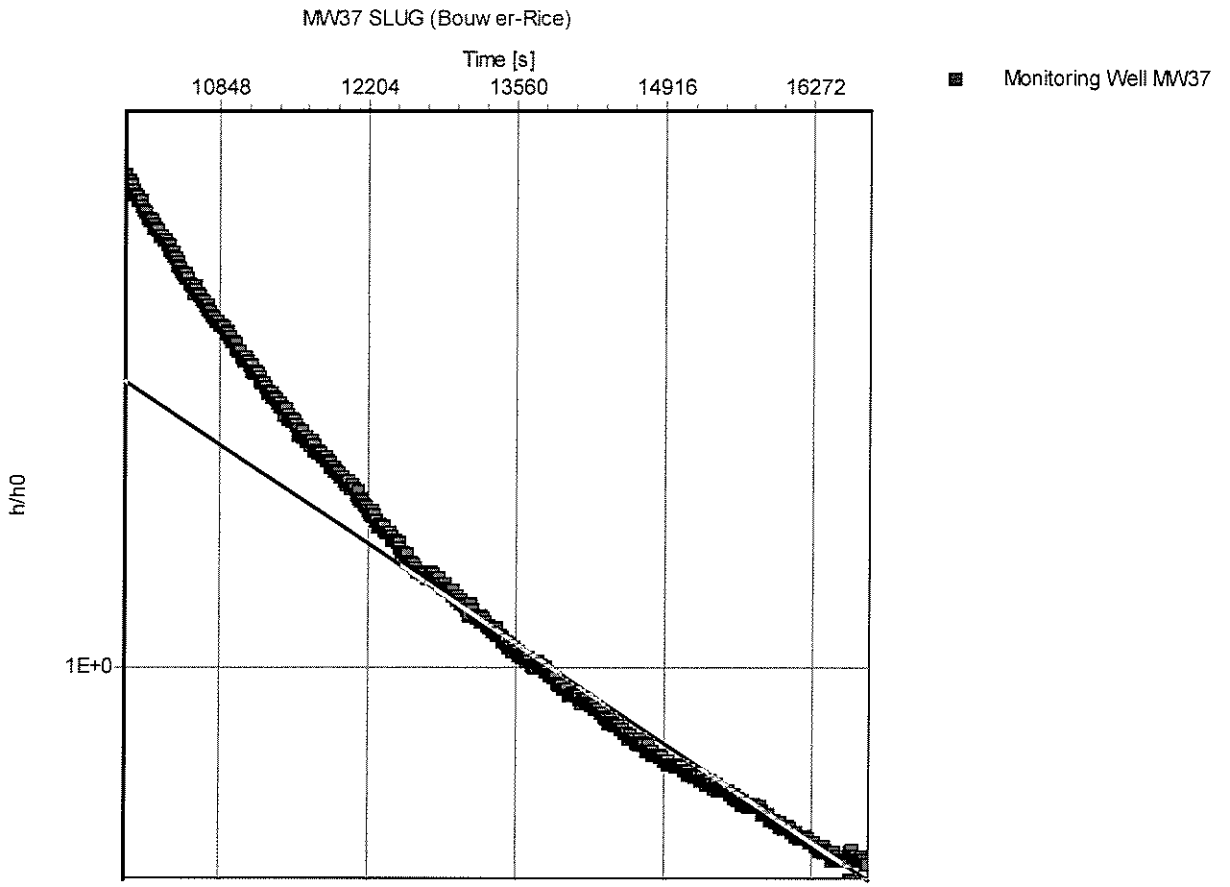
SlugTest Analysis Chart E



Test name: **MW37 SLUG**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 2.47E-8 [m/s]

Test parameters:

Test well:	Monitoring Well	Aquifer thickness:	18 [ft]
Screen radius:	0.17 [ft]	Gravel pack Porosity (%)	25
Screen length:	1.5 [ft]		
Casing radius:	0.17 [ft]		
r(eff):	0.170 [ft]		

Comments:

Evaluated by: AMT
Date: 10/20/20

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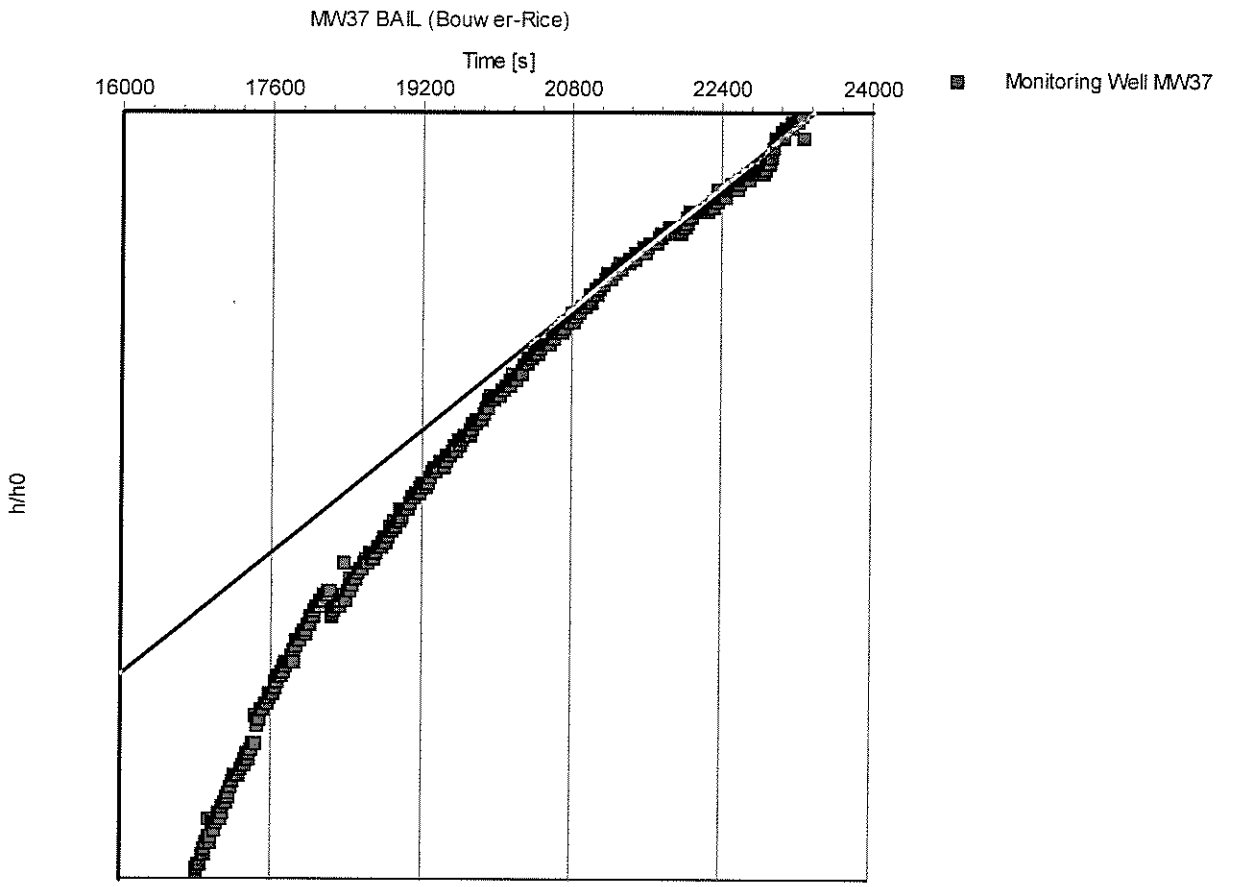
Bail Test Analysis Chart F



Test name: **MW37 BAIL**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 1.77E-8 [m/s]

Test parameters:				
	Test well:	Monitoring Well	Aquifer thickness:	18 [ft]
	Screen radius:	0.17 [ft]	Gravel pack Porosity (%)	25
	Screen length:	1.5 [ft]		
	Casing radius:	0.17 [ft]		
	r(eff):	0.170 [ft]		

Comments:

Evaluated by: AMT
Date: 10/20/20

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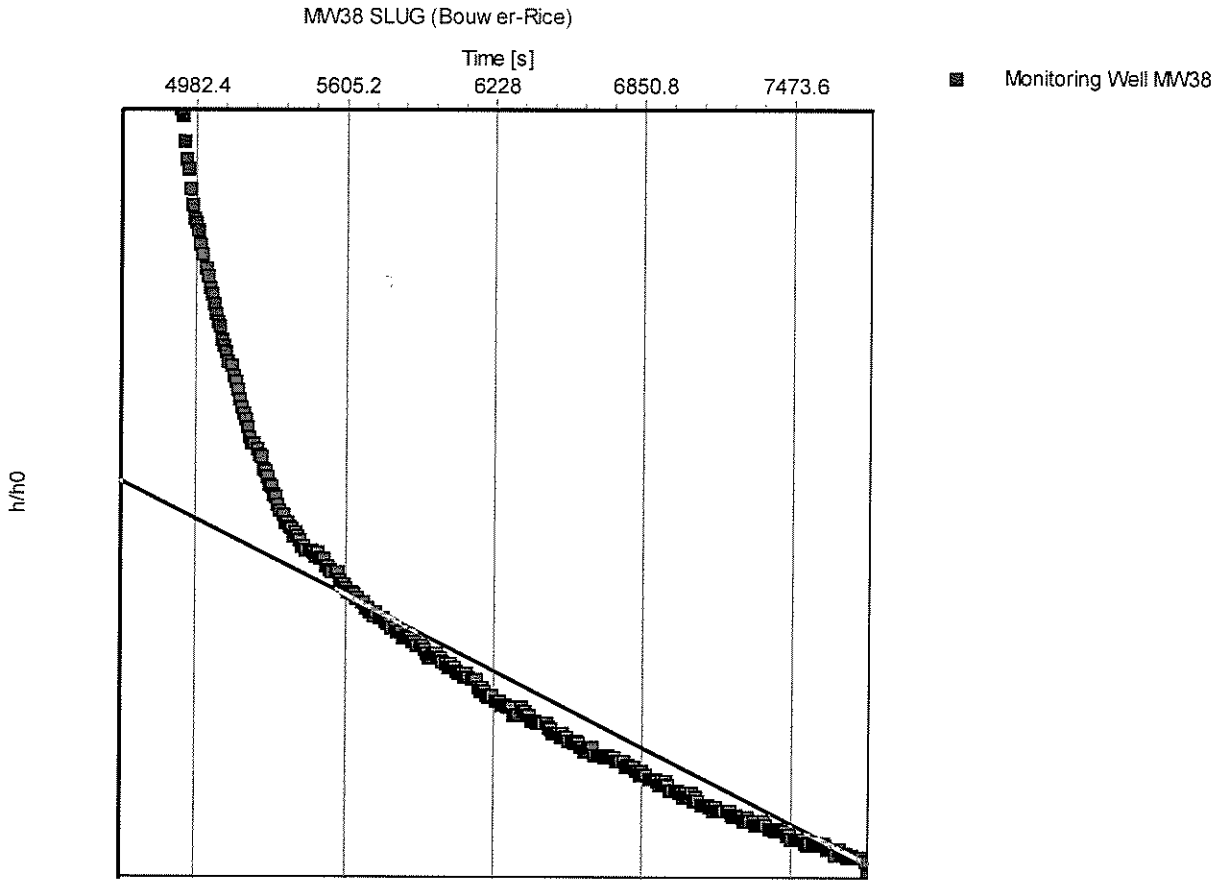
SlugTest Analysis Chart G



Test name: **MW38 SLUG**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 4.85E-8 [m/s]

Test parameters:				
	Test well:	Monitoring Well	Aquifer thickness:	18 [ft]
	Screen radius:	0.17 [ft]	Gravel pack Porosity (%)	25
	Screen length:	1.5 [ft]		
	Casing radius:	0.17 [ft]		
	r(eff):	0.170 [ft]		

Comments:

Evaluated by: AMT
Date: 10/20/20

BailTest Analysis Chart H

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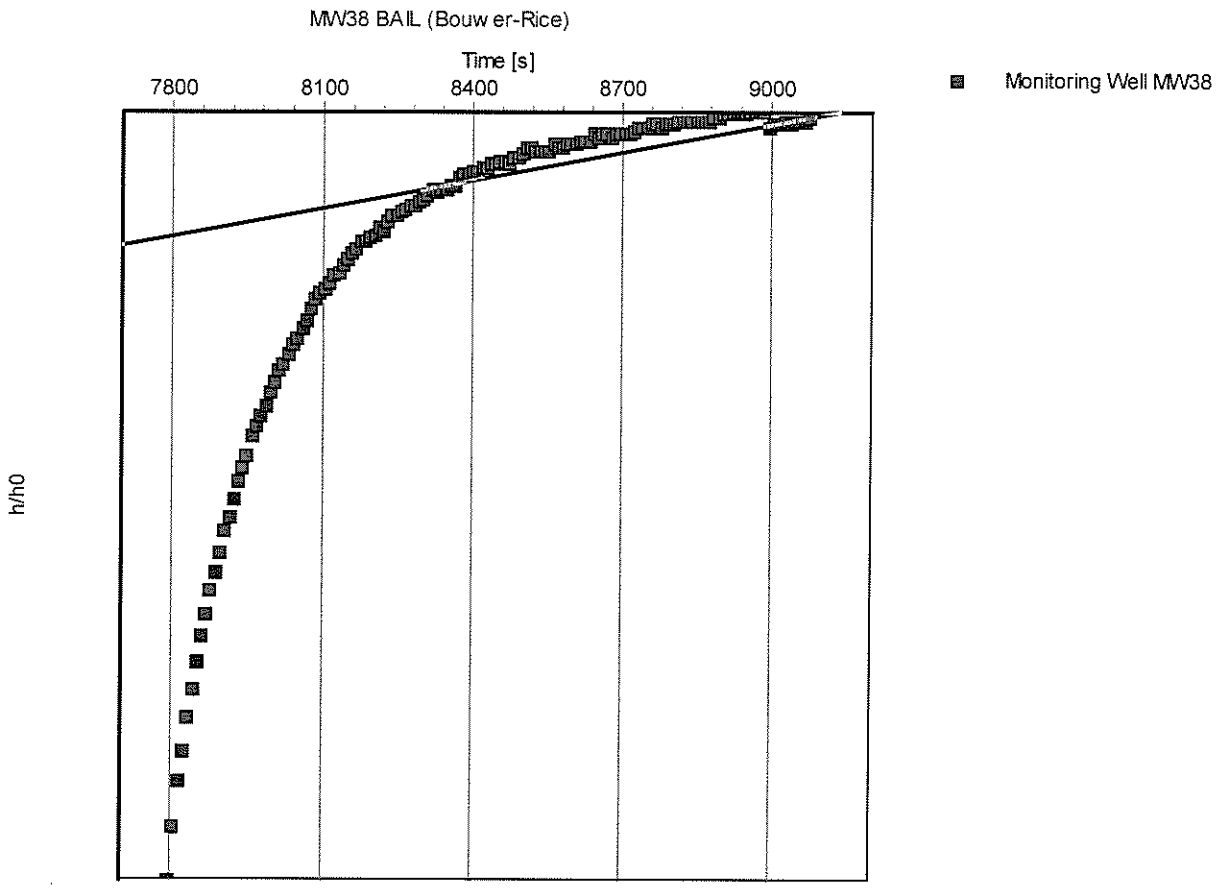

Test name: **MW38 BAIL**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 3.95E-8 [m/s]

Test parameters:				
	Test well:	Monitoring Well	Aquifer thickness:	18 [ft]
	Screen radius:	0.17 [ft]	Gravel pack Porosity (%)	25
	Screen length:	1.5 [ft]		
	Casing radius:	0.17 [ft]		
	r(eff):	0.170 [ft]		

Comments:

Evaluated by: AMT

Date: 10/20/20

Slug Test Analysis Chart I

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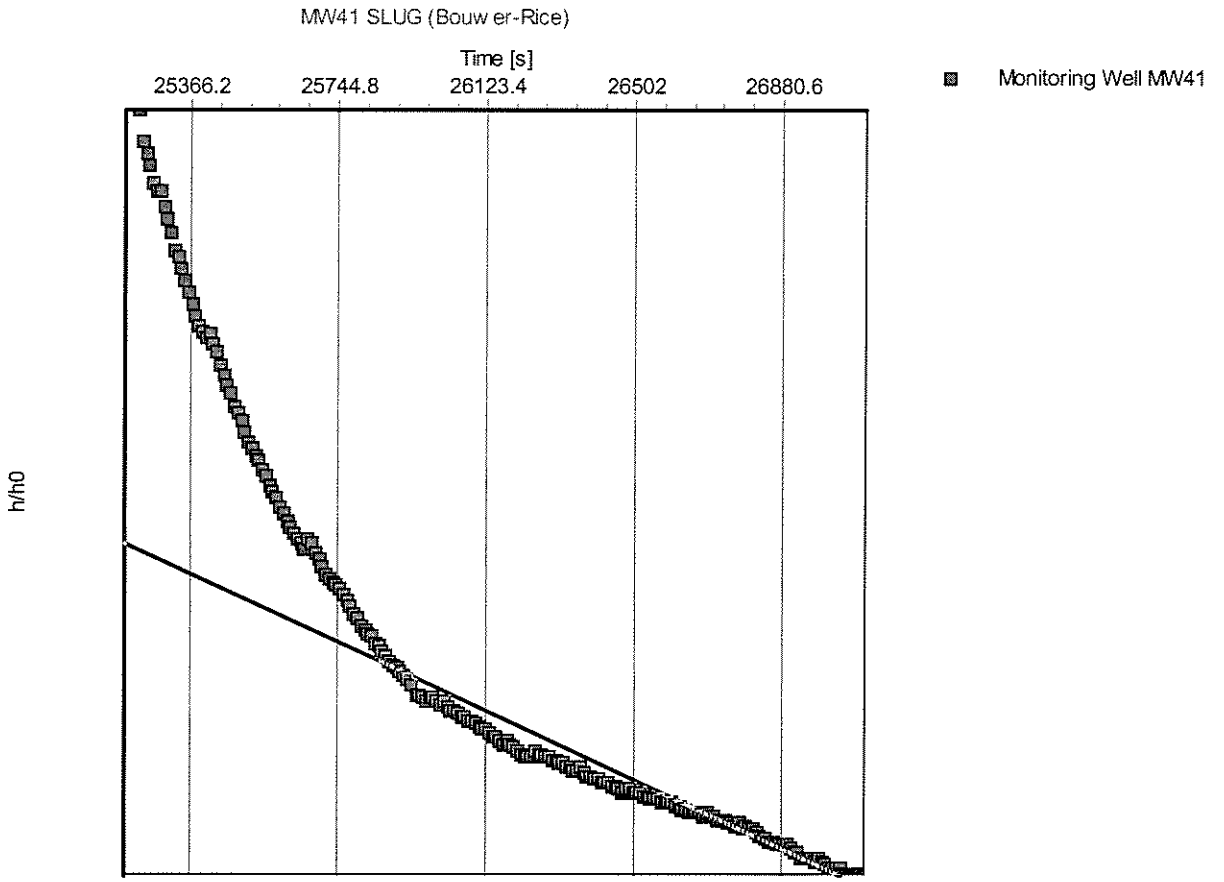

Test name: **MW41 SLUG**

Analysis method: **Bouwer-Rice**

Analysis results:

Conductivity: 6.31E-8 [m/s]

Test parameters:				
	Test well:	Monitoring Well	Aquifer thickness:	18 [ft]
	Screen radius:	0.17 [ft]	Gravel pack Porosity (%)	25
	Screen length:	1.5 [ft]		
	Casing radius:	0.17 [ft]		
	r(eff):	0.170 [ft]		

Comments:

Evaluated by: AMT
Date: 10/20/20

Bail Test Analysis Chart J

LACO ASSOCIATES
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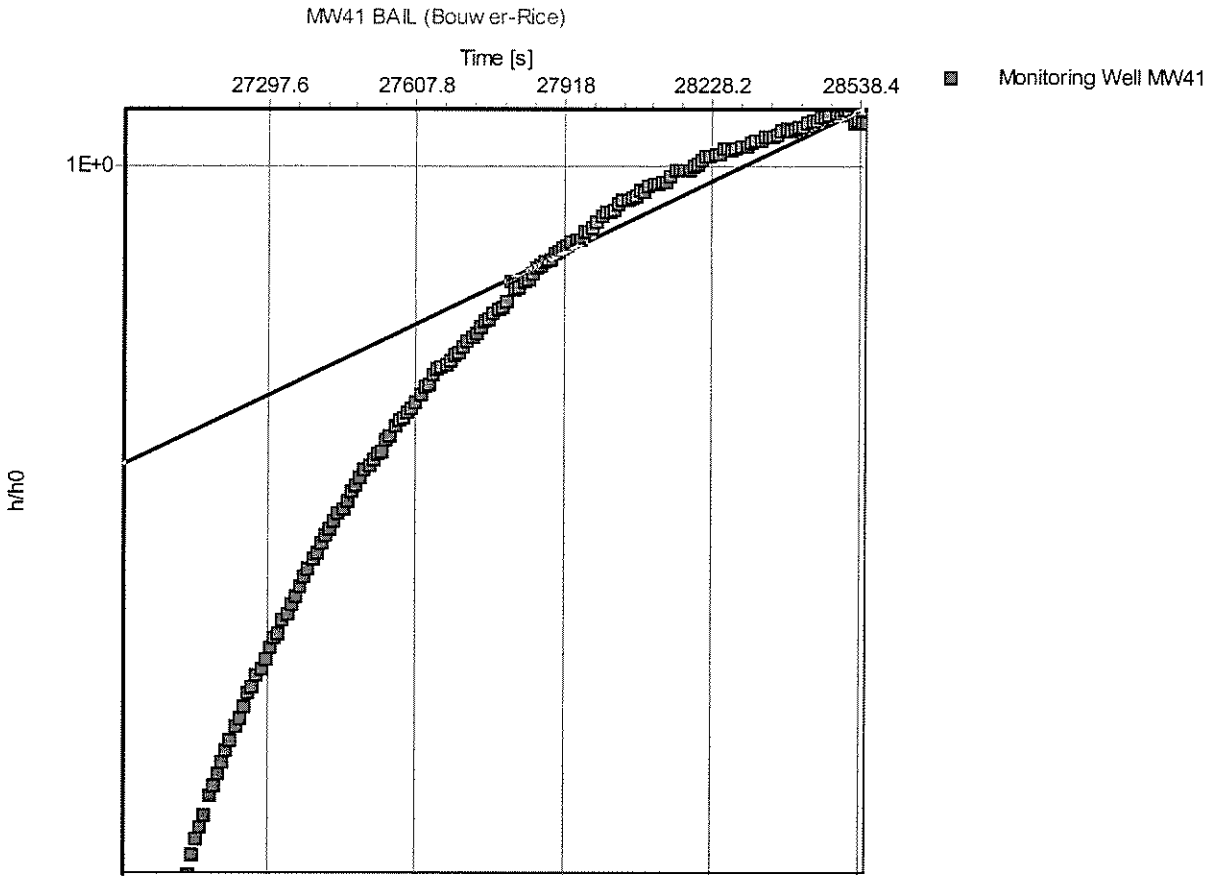

Test name: **MW41 BAIL**

Analysis method: **Bouwer-Rice**

Analysis results: Conductivity: 9.26E-8 [m/s]

Test parameters:				
	Test well:	Monitoring Well	Aquifer thickness:	18 [ft]
	Screen radius:	0.17 [ft]	Gravel pack Porosity (%)	25
	Screen length:	1.5 [ft]		
	Casing radius:	0.17 [ft]		
	r(eff):	0.170 [ft]		

Comments:

Evaluated by: AMT
Date: 10/20/20

Attachment 1

LACO ASSOCIATES
ENGINEERS · GEOLOGISTS · ENVIRONMENTAL CONSULTANTS
P.O. Box 1023 · Eureka, California 95502 · 707.443.5054

REMEDIATION MILESTONE ACHIEVEMENT APPROVAL FORM

Claim No.:	16125
Reviewer:	Cody Walker
Reviewing Agency:	State Water Resources Control Board
Site Name:	Fortuna Bulk Plant PFP
Site Address:	400 Eighth Street
	Fortuna, California
Claimant:	Jim Seiler, Humboldt Petroleum, Inc.

The above-referenced site, managed by LACO ASSOCIATES, has met the following remediation milestone:

- ☐ Remediation System Startup
- ☐ 25% Reduction in COCs
- ☐ 50% Reduction in COCs
- ☐ 75% Reduction in COCs
- ☐ 100% Reduction in COCs
- ☐ ARGs maintained for four quarters

Reductions in COCs, if applicable, are illustrated below:

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 Continued									
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%**
MW27	5/24/2005	820	280	4.9	6.1	2.06	293.1	ND<20	
MW28	5/24/2005	570	93	3.4	8.6	2.3	107.3	ND<10	
MW30	5/24/2005	12,000	3,100	150	530	400	4180.0	ND<300	
MW44	5/24/2005	4,800	2,900	13	13	10.6	2936.6	ND<60	
Sum COC			6373	171.3	557.7	414.96	7516.96		**70%**
MW27	6/20/2005	500	56	5	2.6	2.38	65.98	ND<7	
MW28	6/20/2005	430	48	3	4.2	2	57.2	ND<80	
MW30	6/20/2005	14000	3900	150	570	463	5083	ND<150	
MW44	6/20/2005	6800	3900	15	12	11.4	3938.4	ND<50	
Sum COC			7904	173	589	478.8	9144.6		**63%**
MW27	9/29/2005	880	12	10	8.3	4.5	34.8	ND<10	
MW28	9/29/2005	210	23	0.74	1.4	0.62	25.76	ND<3.0	
MW30	9/29/2005	4700	1900	31	51	46	2028	ND<30	
MW44	9/29/2005	5600	2800	14	24	12.5	2850.5	ND<50	
Sum COC			4735	56	85	63.6	4939.1		**83%**

Notes:

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

milestone, each individual well must meet the PARG.

Cody Walker
State Water Resources Control Board

Date

P:\4000\4629 HPI Bulk Plant\submittals\GW Mon Reports\2005\3Q05\REMEDIATION MILESTONE ACHIEVEMENT VERIFICATIONv2.doc

LACO ASSOCIATES
ENGINEERS · GEOLOGISTS · ENVIRONMENTAL CONSULTANTS
P.O. Box 1023 · Eureka, California 95502 · 707.443.5054

REMEDIATION MILESTONE ACHIEVEMENT APPROVAL FORM

Claim No.:	16125
Reviewer:	Cody Walker
Reviewing Agency:	State Water Resources Control Board
Site Name:	Fortuna Bulk Plant PFP
Site Address:	400 Eighth Street
	Fortuna, California
Claimant:	Jim Seiler, Humboldt Petroleum, Inc.

The above-referenced site, managed by LACO ASSOCIATES, has met the following remediation milestone:

- ☐ Remediation System Startup
- ☐ 25% Reduction in COCs
- ☐ 50% Reduction in COCs
- ☐ 75% Reduction in COCs
- ☐ 100% Reduction in COCs
- ☐ ARGs maintained for four quarters

Reductions in COCs, if applicable, are illustrated below:

Attachment 2

KEY TO ABBREVIATIONS
Former Shell Bulk Plant
LACO Project No. 4629.03

Case No. 1THU116	**KEY TO ABBREVIATIONS**
Alk	-- Alkalinity
As	-- Arsenic
BTEX	-- Benzene; Toluene; Ethylbenzene; m,p- and o- Xylenes
Cam Pump	--
Cl	-- Chloride
CO_2	-- Carbon dioxide
COC	-- Chain of custody
Cr	-- Chromium
DHP	-- Down-hole-pump (submersible pump)
DIPE	-- Di-isopropyl Ether
Dis	-- Dissolved
DO	-- Dissolved Oxygen; accuracy range of the DO meter is ± 0.3 mg/L
DTW	-- Depth-to-Water
ECw	-- Electrical Conductivity in water; accuracy range of the ECw meter is ± 20 µmohs
ETBE	-- Ethyl Tertiary Butyl Ether
Fe	-- Iron
FP	-- Free Product
Mn	-- Manganese
MTBE	-- Methyl Tertiary Butyl Ether
N	-- Nitrogen
ND<50	-- non-detect at reporting limits shown
NO_3	-- Nitrate
NOT ACTIVE	-- Sample not analyzed for parameter during current sampling event
ORP	-- Oxidation Reduction Potential; accuracy range of the ORP meter is ± 2 mV
P	-- Phosphorous
PCP/TCP	-- penta- tetra- tri- chlorophenols
pH	-- Potential of hydrogen; accuracy range of the pH meter is ± 0.2 pH
SGC	-- Silica gel cleanup
SO_4	-- Sulfate
T	-- Temperature; accuracy range of the temperature meter is ± 0.5 °C
T&P	-- Tape and Paste
TAME	-- Tertiary Amyl Methyl Ether
TBA	-- Tetiary Butyl Alcohol
TBF	-- Tertiary Butyl Formate
TIC	-- Total Inorganic Carbon
TOC	-- Total Organic Carbon
Tot	-- Total
TPHd	-- Total Petroluem Hydrocarbons as Diesel
TPHg	-- Total Petroluem Hydrocarbons as Gasoline
TPHk	-- Total Petroluem Hydrocarbons as Kerosene
TPHmo	-- Total Petroluem Hydrocarbons as Motor Oil
TPHs	-- Total Petroluem Hydrocarbons as Solvent
µg/L	-- Micro grams per liter (parts per billion)

Attachment 3

LAGO 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: 5-24-05
Golbal ID No.: **T0602300107**
PM: **CJW**

Tech: SJD
Mob/Demob time: .50/.25
Travel time: .60
Time on site: 12:10
Time off site: 4:25
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)	4.92		2.95		2.11		6.42		2.62	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.83	6.76	6.96	6.86	6.62	6.49	6.82	6.67	6.60	6.44
TEMP (°C)	19.3	18.5	17.2	16.9	18.0	16.9	16.8	16.1	18.5	17.7
Ecw (µmohs)	621	490	390	359	297	290	276	276	334	332
ORP (mV)	-77	-92	-85	-92	-59	-56	-49	-54	-29	-12
DO (mg/L)	1.13	0.43	0.96	0.33	0.91	0.31	1.22	0.42	0.96	0.44
OTHER (units)										
PURGE: TIME	1:01	1:09	1:25	1:33	3:37	3:45	1:52	2:00	2:16	2:28
METHOD (DHP/CB/B)	DHP		DHP		CAM PUMP		DHP		DHP	
RATE (Lpm)	0.19		0.18		0.20		0.18		0.17	
VOLUME (L)	1.50		1.40		1.60		1.40		2.0	
COLOR	CLEAR	YELLOW/ BROWN CLOUDY	CLEAR W/ GREY TINT	CLEAR W/ SLIGHT GREY TINT	CLEAR	LT. GREY TURBID	LT. GREY CLOUDY	LT. GREY CLOUDY	GREYISH BROWN CLOUDY	YELLOWISH BROWN CLOUDY
ODOR	MED. RUBBER/FUEL		LIGHT RUBBER/FUEL		STRONG RUBBER/FUEL/SULFUR		LIGHT RUBBER/SULFUR		LIGHT SULFUR	
INTAKE DEPTH (FEET)	8.0		8.0		9.0		16.0		13.0	
SAMPLE: TIME	1:11		1:35		3:48		2:02		2:30	
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)	1.11		1.67		2.16		2.04		1.35	
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

REVISED:5/19/05

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: 5-24-05
Golbal ID No.: **T0602300107**
PM: **CJW**

Tech: SJD
Mob/Demob time: 1.50/1.25
Travel time: 1.60
Time on site: 12:05
Time off site: 4:25
Mileage: 18

WELL No.:	MW43		MW44							
DIAMETER (in)	1.50		1.50							
SCREENED INTERVAL (ft)	16-18		12-15							
DEPTH TO WATER (ft)	3.01		2.96							
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.78	6.68	6.90	6.81						
TEMP (°C)	18.0	15.9	18.6	15.9						
Ecw (µmohs)	318	316	299	304						
ORP (mV)	-40	-56	-40	-42						
DO (mg/L)	1.69	0.47	1.37	0.48						
OTHER (units)	—		—							
PURGE: TIME	2:45	2:53	3:14	3:20						
METHOD (DHP/CB/B)	CAM PUMP		CAM PUMP							
RATE (Lpm)	0.22		0.20							
VOLUME (L)	1.75		1.20							
COLOR	CLEAR	YELLOW TINT	CLEAR	ORANGE YELLOW TINT						
ODOR	SLIGHT RUBBER/SWEET		LIGHT FUEL/RUBBER							
INTAKE DEPTH (FEET)	17.0		14.0							
SAMPLE: TIME	2:55		3:23							
METHOD (DHP/CB/B)	CAM PUMP		CAM PUMP							
ANALYTES	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC							
TOTAL DRAWDOWN (FEET)	6.85		6.11							
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: 5-24-05

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)
1:03	6.81	18.5	568	-89	0.70
1:05	6.77	18.4	531	-93	0.54
1:07	6.76	18.4	502	-93	0.48
1:09	6.76	18.5	490	-92	0.43

WELL ID: MW28

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
1:27	6.91	16.8	385	-89	0.61
1:29	6.89	16.7	374	-94	0.42
1:31	6.87	16.9	361	-93	0.34
1:33	6.86	16.9	359	-92	0.33

WELL ID: MW34

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
1:54	6.73	16.1	281	-49	0.46
1:56	6.69	15.8	279	-52	0.45
1:58	6.68	16.0	277	-54	0.39
2:00	6.67	16.1	276	-54	0.42

WELL ID: MW38

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
2:18	6.58	17.9	339	-32	0.52
2:20	6.52	17.5	338	-26	0.49
2:22	6.49	17.5	335	-20	0.50
2:24	6.46	17.8	334	-16	0.43
2:26	6.45	17.8	333	-13	0.40
2:28	6.44	17.7	332	-12	0.44

WELL ID: MW43

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
2:47	6.69	16.9	324	-49	0.52
2:49	6.68	15.9	321	-53	0.57
2:51	6.68	15.8	319	-55	0.53
2:53	6.68	15.9	316	-56	0.47

WELL ID: MW44

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
3:16	6.82	16.9	304	-41	0.46
3:18	6.81	16.1	305	-42	0.51
3:20	6.81	15.9	304	-42	0.48

LACO ASSOCIATES
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Project Name: FORMER SHELL BULK PLANT - AFP
Project No.: 4629.03
Tech: SJD
Date: 5-24-05

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)
3:39	6.60	17.2	297	-64	0.30
3:41	6.56	16.8	295	-56	0.31
3:43	6.50	16.8	292	-56	0.30
3:45	6.49	16.9	290	-56	0.31

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: 5-24-05

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)
12:24	4.92	12:26	2.95	12:32	2.11	12:35	6.43	12:31	2.62	12:27	3.21
12:38	4.93	12:40	2.95	12:48	2.11	12:52	6.43	12:46	2.62	12:42	3.21

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)
12:29	2.96										
12:44	2.96										

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)

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 3023

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS: TPHg/BTEX (CONTAINER 9, PRESERVATIVE b)	ANALYSIS: TPHd w/SGC (CONTAINER 7, PRESERVATIVE ----)	SAMPLE CONDITION/SPECIAL INSTRUCTIONS
	4629-MW27-W	5-24-05	pm	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				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: 6-20-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD
Mob/Demob time: .75/.35
Travel time: 1.15
Time on site: 8:40
Time off site: 4:30
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)	1.08		—		—		12.50		5.62	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	7.1	6.8								
TEMP (°C)	18.8	17.0								
Ecw (µmohs)	176	187								
ORP (mV)	-51	-67								
DO (mg/L)	1.18	0.35								
OTHER (units)	—						—		—	
PURGE: TIME	1:54	2:02					10:10	10:14	9:52	9:56
METHOD (DHP/CB/B)	DHP						3/4" B		3/4" B	
RATE (Lpm)	0.19						0.25		0.25	
VOLUME (L)	1.50						1.0		1.0	
COLOR	CLEAR	CLOUDY					CLEAR	CLOUDY	CLEAR	CLOUDY
ODOR	LIGHT SULFUR/RUBBER						STRONG SULFUR		STRONG SULFUR	
INTAKE DEPTH (FEET)	10.0						—		—	
SAMPLE: TIME	2:04		—		—		10:18		9:59	
METHOD (DHP/CB/B)	DHP		—		—		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)	1.57		—		—		—		—	
REMARKS	—		—		—		LOTS OF WATER IN RAVINE		LOTS OF WATER IN RAVINE	
WELL CONDITION	good		DHT STUCK IN WELL - WELL BLOCKED COMPLETELY @ 4.5'		HIT OBSTRUCTION AT 7.2' w/ DTW METER - UNABLE TO SAMPLE		good		good - LOCK BUSTED OFF	
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: Bulk Plant - HPI (UST)
Project No.: 4629.03
Date: 6-20-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD
Mob/Demob time: .75/.35
Travel time: 1.15
Time on site: 8:40
Time off site: 4:30
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)	5.16		4.56		2.26		2.73		2.65	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.7	6.4	6.6	6.4	6.6	6.5				
TEMP (°C)	17.6	15.7	17.5	16.4	18.1	17.0				
Ecw (µmohs)	232	212	275	259	370	385				
ORP (mV)	24	30	-7	76	-43	-57				
DO (mg/L)	3.80	5.76	4.27	8.05	1.32	0.34				
OTHER (units)	—		—		—					
PURGE: TIME	11:16	11:26	11:43	11:59	2:21	2:29				
METHOD (DHP/CB/B)	DHP		DHP		DHP					
RATE (Lpm)	0.19		0.19		0.19					
VOLUME (L)	1.90		3.0		1.50					
COLOR	CLOUDY	LT. BROWN CLOUDY	CLEAR	CLEAR	CLEAR	YELLOW TINT				
ODOR	LIGHT SULFUR		LIGHT SULFUR		LIGHT RUBBER/FUEL					
INTAKE DEPTH (FEET)	8.0		8.0		8.0					
SAMPLE: TIME	11:28		12:01		2:32					
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)	1.56		0.12		1.26					
REMARKS	—		—		—					
WELL CONDITION	good		good		good		good		good	
WASTE DRUMS										

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

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LACO ASSOCIATES
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FAX 707.443.0553

Project Name: Bulk Plant - HPI (UST)
Project No.: 4629.03
Date: 6-20-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD
Mob/Demob time: .75/.35
Travel time: 1.15
Time on site: 8:40
Time off site: 4:30
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)	2.32		2.09		2.17		5.85		4.97	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH			6.7	6.4	6.9	6.2	6.3	6.4	6.5	6.2
TEMP (°C)			18.0	17.8	20.1	16.7	16.9	15.2	17.1	15.2
Ecw (µmohs)			359	363	324	292	294	276	357	341
ORP (mV)			-79	-86	-62	-29	38	-21	-61	-18
DO (mg/L)			1.12	0.32	1.16	0.31	0.97	0.37	1.12	0.54
OTHER (units)										
PURGE: TIME			4:00	4:08	2:47	2:59	10:50	11:00	12:20	12:32
METHOD (DHP/CB/B)			CAM PUMP		DHP		DHP		DHP	
RATE (Lpm)			0.20		0.19		0.18		0.19	
VOLUME (L)			1.60		2.25		1.80		2.25	
COLOR			CLEAR	LT. GREY TINT	LT. GREY CLOUDY	CLOUDY	MED. BROWN CLOUDY	CLOUDY	CLOUDY	CLOUDY
ODOR			STRONG FUEL/RUBBER		MED. SULFUR		MED. FUEL		MED. SULFUR	
INTAKE DEPTH (FEET)			9.0		15.5		16.0		18.0	
SAMPLE: TIME			4:10		3:01		11:02		12:34	
METHOD (DHP/CB/B)			CAM PUMP		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)			1.58		1.38		1.15		0.96	
REMARKS										
WELL CONDITION	good		good		good		good		good	
WASTE DRUMS										

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Project Name: Bulk Plant - HPI (UST)
Project No.: 4629.03
Date: 6-20-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD
Mob/Demob time: .75 / .35
Travel time: 1.15
Time on site: 8:40
Time off site: 4:30
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)	5.06		3.36		3.11		2.38		3.86	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.7	6.4					6.5	6.4		
TEMP (°C)	18.0	15.6					17.5	16.9		
Ecw (µmohs)	336	309					422	432		
ORP (mV)	-68	-49					-39	-49		
DO (mg/L)	1.40	0.35					1.06	0.41		
OTHER (units)	—						—			
PURGE: TIME	12:50	1:00					3:18	3:24		
METHOD (DHP/CB/B)	DHP						DHP			
RATE (Lpm)	0.18						0.20			
VOLUME (L)	1.75						1.20			
COLOR	LT. GREY CLOUDY	LT. GREY CLOUDY					CLEAR	CLOUDY		
ODOR	MED. SULFUR						LIGHT SULFUR			
INTAKE DEPTH (FEET)	13.5						18.25			
SAMPLE: TIME	1:02						3:27			
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)	1.03						3.84			
REMARKS	—						—			
WELL CONDITION	good		TWD = 16.82		good		good		good	
WASTE DRUMS										

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Project Name: Bulk Plant - HPI (UST)
Project No.: 4629.03
Date: 6-20-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD
Mob/Demob time: .75/.35
Travel time: 1.15
Time on site: 8:40
Time off site: 4:30
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)	3.24		3.56		3.30		3.20			
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH										
TEMP (°C)										
Ecw (µmohs)										
ORP (mV)										
DO (mg/L)										
OTHER (units)										
PURGE: TIME										
METHOD (DHP/CB/B)										
RATE (Lpm)										
VOLUME (L)										
COLOR										
ODOR										
INTAKE DEPTH (FEET)										
SAMPLE: TIME										
METHOD (DHP/CB/B)										
ANALYTES	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC			
TOTAL DRAWDOWN (FEET)										
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: 6-20-05

WELL ID:	METER ACCURACY RANGE				
mw34	+/- 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)
10:52	6.4	16.1	290	5	0.76
10:54	6.4	15.1	285	-6	0.55
10:56	6.4	15.1	283	-18	0.50
10:58	6.4	15.1	280	-20	0.43
11:00	6.4	15.2	276	-21	0.37

WELL ID: mw23

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:18	6.5	16.2	237	30	3.33
11:20	6.5	15.5	228	23	5.84
11:22	6.4	15.3	222	29	5.91
11:24	6.4	15.5	216	31	5.64
11:26	6.4	15.7	212	30	5.76

WELL ID: mw24

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:45	6.4	16.2	276	-11	4.90
11:47	6.4	16.1	266	12	6.61
11:49	6.4	16.3	261	29	7.40
11:51	6.4	16.4	258	50	7.65
11:53	6.4	16.5	257	66	7.84
11:55	6.4	16.5	258	72	8.10
11:57	6.4	16.5	260	75	8.18
11:59	6.4	16.4	259	76	8.05

WELL ID: mw35

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
12:22	6.5	16.2	361	-63	1.10
12:24	6.4	15.4	356	-45	0.74
12:26	6.3	15.2	348	-33	0.77
12:28	6.3	15.1	345	-22	0.69
12:30	6.3	15.1	342	-19	0.60
12:32	6.2	15.2	341	-18	0.54

WELL ID: mw36

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
2:52	6.5	16.8	340	-72	0.93
2:54	6.4	16.1	324	-63	0.44
2:56	6.4	15.6	319	-55	0.39
2:58	6.4	15.6	312	-50	0.41
:00	6.4	15.6	309	-49	0.35

WELL ID: mw1A

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
1:56	6.9	17.3	184	-61	0.82
1:58	6.9	17.0	182	-64	0.67
2:00	6.9	17.0	184	-67	0.42
2:02	6.8	17.0	187	-67	0.35

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Project Name: BULK PLANT - HPI (UST)
Project No.: 4629.03
Tech: SJD
Date: 6-20-05

METER ACCURACY RANGE

+/- 0.2 pH	+/- 0.5 °C	+/- 20 µmohs	+/- 2 mv	+/- 0.3 mg/L

WELL ID: mw25

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
2:23	6.5	17.2	378	-48	0.85
2:25	6.5	16.9	381	-53	0.50
2:27	6.5	17.1	382	-56	0.38
2:29	6.5	17.0	385	-57	0.34

WELL ID: mw33

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
2:49	6.6	17.6	330	-64	0.75
2:51	6.5	16.7	326	-54	0.57
2:53	6.4	16.7	315	-50	0.34
2:55	6.3	16.9	301	-38	0.30
2:57	6.3	16.7	295	-30	0.28
2:59	6.2	16.7	292	-29	0.31

WELL ID: mw39

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
3:20	6.4	16.8	433	-45	0.60
3:22	6.4	16.8	433	-48	0.47
3:24	6.4	16.9	432	-49	0.41

WELL ID: mw30

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
4:02	6.4	17.9	361	-79	0.71
4:04	6.4	17.6	364	-82	0.46
4:06	6.4	17.9	361	-85	0.34
4:08	6.4	17.8	363	-86	0.32

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: Bulk Plant - HPI (UST)
Project No.: 4629.03
Date: 6-20-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD RLD
Mob/Demob time: .75/.35
Travel time: 1.15
Time on site: 8:40
Time off site: 4:30
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)										
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH										
TEMP (°C)										
Ecw (µmohs)										
ORP (mV)										
DO (mg/L)										
OTHER (units)										
PURGE: TIME										
METHOD (DHP/CB/B)										
RATE (Lpm)										
VOLUME (L)										
COLOR										
ODOR										
INTAKE DEPTH (FEET)										
SAMPLE: TIME										
METHOD (DHP/CB/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)										
REMARKS										
WELL CONDITION										
WASTE DRUMS										

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

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Project No.: 4629.03
Date: 6-20-05
Golbal ID No.: T0602300107
PM: CJW

Tech: ~~SJD~~ RLD
Mob/Demob time: .75/.35
Travel time: 1.15
Time on site: 8:40
Time off site: 4:30
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)							2.72		2.65	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH							6.50	6.51	6.91	6.66
TEMP (°C)							20.0	19.5	17.7	18.4
Ecw (µmohs)							475	447	315	297
ORP (mV)							92	43	-92	-51
DO (mg/L)							1.07	0.31	0.62	0.37
OTHER (units)							—		—	
PURGE: TIME							9:37	9:47	11:31	11:39
METHOD (DHP/CB/B)							DHP		DHP	
RATE (Lpm)							0.15		0.25	
VOLUME (L)							1.5		2.0	
COLOR							CLEAR	CLOUDY	CLEAR	GREY TRACE
ODOR							LIGHT SWEET		SLIGHT SULFUR LIGHT FUEL	
INTAKE DEPTH (FEET)							7.0		7.0	
SAMPLE: TIME							9:50		11:41	
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)							2.14		3.06	
REMARKS							—		—	
WELL CONDITION							GOOD		GOOD	
WASTE DRUMS										

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Golbal ID No.: T0602300107
PM: CJW

Tech: ~~SJD~~ RLD
Mob/Demob time: .75/.35
Travel time: 1.15
Time on site: 8:40
Time off site: 4:30
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)	2.32									
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	8.15	6.91								
TEMP (°C)	18.7	18.8								
Ecw (µmohs)	293	290								
ORP (mV)	-1.0	-45								
DO (mg/L)	18.05	0.20								
OTHER (units)	—									
PURGE: TIME	2:00	2:08								
METHOD (DHP/CB/B)	CAM PUMP									
RATE (Lpm)	0.31									
VOLUME (L)	2.5									
COLOR	GREY TONGY	GREY HEAVY SEDIMENT								
ODOR	MED FUEL									
INTAKE DEPTH (FEET)	7.5									
SAMPLE: TIME	2:10									
METHOD (DHP/CB/B)	CAM PUMP									
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)	0.00									
REMARKS	—									
WELL CONDITION	GOOD									
WASTE DRUMS										

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Date: 6-20-05
Golbal ID No.: T0602300107
PM: CJW

Tech: ~~SJD~~ RLD
Mob/Demob time: .75/1.35
Travel time: 1.15
Time on site: 8:40
Time off site: 4:30
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)			3.36		3.11				3.86	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH			6.40	6.37	6.65	6.63			6.63	6.60
TEMP (°C)			17.5	18.0	18.9	17.7			17.4	16.7
Ecw (µmohs)			335	332	312	316			321	321
ORP (mV)			-5.0	-3.0	-62	-35			-51	-47
DO (mg/L)			0.90	0.85	0.32	0.48			1.30	0.71
OTHER (units)			—		—				—	
PURGE: TIME			2:38	2:42	3:05	3:13			3:40	3:46
METHOD (DHP/CB/B)			DHP		DHP				DHP	
RATE (Lpm)			0.25		0.25				0.25	
VOLUME (L)			1.0		2.0				1.5	
COLOR			GREY CLOUDY	GREY CLOUDY	GREY CLOUDY	GREY SEDIMENT			LIGHT GREY	LIGHT GREY
ODOR			MED SULFUR / MED FUEL		LIGHT SULFUR / MED FUEL				LIGHT SULFUR / LIGHT SWEET	
INTAKE DEPTH (FEET)			16.0		13.0				14.0	
SAMPLE: TIME			2:44		3:15				3:48	
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)			5.14		3.09				6.34	
REMARKS			STAC WELL DEPTH @ 16.80		—				—	
WELL CONDITION			FILLING IN W/ SEDIMENT		GOOD				GOOD	
WASTE DRUMS										

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Project No.: 4629.03
Date: 6-20-05
Golbal ID No.: T0602300107
PM: CJW

Tech: ~~SJD~~ RLD
Mob/Demob time: 751.35
Travel time: 1.15
Time on site: 8:40
Time off site: 4:30
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)	3.24		3.58		3.36		3.20			
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.62	6.52	6.63	6.62	6.79	[illegible]	6.91	6.85		
TEMP (°C)	17.6	16.3	18.6	17.8	17.8	[illegible]	18.0	16.9		
Ecw (µmohs)	366	380	502	[illegible]	359	352	312	318		
ORP (mV)	-55	-33	-53	[illegible]	-66	-69	-66	-38		
DO (mg/L)	0.64	0.43	1.18	0.78	1.95	1.39	0.71	0.29		
OTHER (units)	—	—	—	—	—	—	—	—		
PURGE: TIME	11:01	11:07	10:14	10:20	12:07	12:13	12:38	12:44		
METHOD (DHP/CB/B)	DHP		DHP		CAM PUMP		CAM PUMP			
RATE (Lpm)	0.25		0.17		0.25		0.25			
VOLUME (L)	1.5		1.0		1.5		1.5			
COLOR	GREY FOGGY	GREY FOGGY	CLEAR	LIGHT CLOUDY	CLEAR	CLEAR YELLOW	CLEAR	CLEAR		
ODOR	MED SULFUR		LIGHT SULFUR		LIGHT FUEL		LIGHT SULFUR			
INTAKE DEPTH (FEET)	17.0		13.0		[illegible]		14.0			
SAMPLE: TIME	11:09		10:20		12:15		12:46			
METHOD (DHP/CB/B)	DHP		DHP		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)	5.56		1.28		8.85		8.01			
REMARKS	—		—		—		—			
WELL CONDITION	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 - HDI (UST)
Project No.: 41629.03
Tech: RLD
Date: 6-20-05

ELL ID:	METER ACCURACY RANGE				
W27	+/- 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)
:39	6.48	20.4	451	58	0.63
:41	6.55	20.3	452	54	0.65
:43	6.54	20.0	445	47	0.78
:45	6.55	19.7	447	44	0.69
9:47	6.51	19.5	447	43	0.31

WELL ID: MW 42					
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:16	6.65	18.0	458	-60	1.07
10:18	6.63	17.9	447	-62	0.85
10:20	6.62	17.8	445	-65	0.75
~~10:22~~					

ELL ID: MW 41					
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
:03	6.56	17.5	382	-39	0.44
:05	6.53	16.9	382	-34	0.40
:07	6.52	16.8	380	-33	0.43

WELL ID: MW 28					
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:33	6.80	18.1	308	-73	0.46
11:35	6.75	18.6	306	-62	0.40
11:37	6.68	18.2	299	-53	0.37
11:39	6.66	18.4	297	-51	0.37

ELL ID: MW 43					
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
:09	6.80	16.1	354	-66	1.66
:11	6.79	16.0	355	-68	1.46
:13	6.78	16.3	352	-69	1.39

WELL ID: MW 44					
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
12:40	6.91	17.2	310	-58	0.69
12:42	6.89	16.6	314	-46	0.31
12:44	6.85	16.9	318	-38	0.29

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FAX 707.443.0553

Project Name: BULK PLANT - HPT (UST)
Project No.: 4629.03
Tech: RLD
Date: 6-20-05

WELL ID:	METER ACCURACY RANGE				
MW29	+/- 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)
2:02	7.38	18.7	295	18.0	18.62
:04	6.90	18.8	294	-42	0.19
:06	6.91	18.7	291	-44	0.19
:08	6.91	18.8	290	-45	0.20

WELL ID: MW 37					
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
2:40	6.40	18.0	332	-3.0	0.88
2:42	6.37	18.0	332	-3.0	0.85

WELL ID: MW 38					
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
3:07	6.70	17.9	311	-62	0.31
3:09	6.68	17.5	314	-58	0.41
:11	6.64	17.7	317	-45	0.45
3:13	6.63	17.7	316	-35	0.48

WELL ID: MW 40					
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
3:42	6.63	16.9	317	-47	0.70
3:44	6.61	16.6	318	-46	0.65
3:46	6.60	16.7	321	-47	0.71

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
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Project Name: BULK PLANT - HPI (OST)
Project No.: 4629.03
Tech: SJD/RLD
Date: 6-20-05

WELL ID: MW1A		WELL ID: MW15		WELL ID: MW16		WELL ID: MW19		WELL ID: MW20		WELL ID: MW23	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
:50	1.28	—	—	—	—	10:07	12.50	9:48	5.62	11:13	5.16

WELL ID: MW24		WELL ID: MW25		WELL ID: MW27		WELL ID: MW28		WELL ID: MW29		WELL ID: MW30	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
1:39	4.56	2:18	2.26	9:24	2.72	11:27	2.65	1:55	2.32	3:56	2.00
				9:34	2.72						

WELL ID: MW33		WELL ID: MW34		WELL ID: MW35		WELL ID: MW36		WELL ID: MW37		WELL ID: MW38	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
2:44	2.17	10:46	5.85	12:17	4.97	12:47	5.06	2:35	3.36	3:01	3.11

LACO ASSOCIATES
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FAX 707.443.0553

Project Name: BULK PLANT - HP1 (UST)

Project No.: 4629.03

Tech: SJD/RLD

Date: 6-20-05

WELL ID: MW39		WELL ID: MW40		WELL ID: MW41		WELL ID: MW42		WELL ID: MW43		WELL ID: MW44	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
3:15	2.38	3:35	3.86	10:57	3.24	10:10	3.58	12:03	3.30	12:34	3.20

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)

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)

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

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	6-20-05	Am	GW	3	1
	~~4629-MW15-W~~				~~3~~	~~1~~
	~~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

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

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

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

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

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

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

Chain of Custody

LABORATORY NUMBER:

Attention: Accounts Payable
Results & Invoice to: LACO ASSOCIATES
Address: 21 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:

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	6-20-05	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

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

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

SAMPLE CONDITION/SPECIAL INSTRUCTIONS
GEOTRACKER

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.

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Chain of Custody

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☑ STD (2–3 Wk) ☐ Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

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

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	CONTAINER	PRESERVATIVE
					TPHg/BTEX	9	b
					TPHd w/SGC	7	—
	4629-MW41-W	6-20-05	AM	GW			
	4629-MW42-W				3	1	
	4629-MW43-W				3	1	
	4629-MW44-W				3	1	
	4629-QCTB-W		PM		3	1	
					1		

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

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

SAMPLE CONDITION/SPECIAL INSTRUCTIONS
GEOTRACKER

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: 8-11-05
Golbal ID No.: **T0602300107**
PM: **CJW**

Tech: RLD
Mob/Demob time: .75/1.35
Travel time: 1.15
Time on site: 7:45
Time off site: 12:55
Mileage: 86

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)	5.79		5.15		5.24		9.34		5.94	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.63	6.57	6.76	6.65	6.74	6.60	6.66	6.49	6.58	6.51
TEMP (°C)	18.1	21.1	18.8	19.7	21.6	22.0	16.5	16.3	18.7	20.3
Ecw (µmohs)	267	272	255	241	249	236	233	236	242	238
ORP (mV)	-48	-82	-63	-81	-73	-91	-33	-38	-26	-39
DO (mg/L)	0.76	0.64	0.43	0.44	0.51	0.31	0.60	0.48	0.59	0.31
OTHER (units)	—		—		—		—		—	
PURGE: TIME	8:48	8:56	9:22	9:30	11:20	11:28	9:59	10:07	10:30	10:38
METHOD (DHP/CB/B)	DHP		DHP		CAM		DHP		DHP	
RATE (Lpm)	0.25		0.25		0.25		0.19		0.19	
VOLUME (L)	2.0		2.0		2.0		1.5		1.5	
COLOR	CLEAR	LT. GREY	CLEAR	CLEAR	CLEAR	LIGHT GREY	CLEAR	CLEAR CLEAR	YELLOW TINT	YELLOW TINT
ODOR	LIGHT SULFUR LIGHT SWEET		LIGHT FUEL LIGHT ANISE		STRONG FUEL MED SULFUR		MED SULFUR SLIGHT FUEL		MED SULFUR	
INTAKE DEPTH (FEET)	3.9		8.0		8.0		15.0		13.0	
SAMPLE: TIME										
METHOD (DHP/CB/B)										
ANALYTES	INTRINSICS ONLY		INTRINSICS ONLY		INTRINSICS ONLY		INTRINSICS ONLY		INTRINSICS ONLY	
TOTAL DRAWDOWN (FEET)	0.93		1.77		2.02		0.28		0.68	
REMARKS	—		—		—		—		—	
WELL CONDITION	GOOD		GOOD		REPLACED DHT "IT WAS NASTY" 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: 8-11-05
Golbal ID No.: **T0602300107**
PM: **CJW**

Tech: SJD
Mob/Demob time: .75/.35
Travel time: 1.15
Time on site: 7:45
Time off site: 12:55
Mileage: 36

WELL No.:	MW43		MW44							
DIAMETER (in)	1.50		1.50							
SCREENED INTERVAL (ft)	16-18		12-15							
DEPTH TO WATER (ft)	5.98		6.01							
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.68	6.64	6.70	6.68						
TEMP (°C)	17.8	18.8	18.6	16.6						
Ecw (µmohs)	360	371	315	318						
ORP (mV)	-47	-50	-50	-42						
DO (mg/L)	0.99	0.54	0.97	0.48						
OTHER (units)	—		—							
PURGE: TIME	12:00	12:08	12:29	12:35						
METHOD (DHP/CB/B)	CAM		CAM							
RATE (Lpm)	0.25		0.25							
VOLUME (L)	2.0		1.5							
COLOR	CLEAR	YELLOW TINT	CLEAR	CLOUDY CLEAR						
ODOR	LIGHT SWEET		LIGHT SULFUR							
INTAKE DEPTH (FEET)	17.0		13.5							
SAMPLE: TIME										
METHOD (DHP/CB/B)										
ANALYTES	INTRINSICS ONLY		INTRINSICS ONLY							
TOTAL DRAWDOWN (FEET)	5.85		4.10							
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
TEL 707.443.5054
FAX 707.443.0553

Project Name: FORMER SHELL BULK PLANT PEP

Project No.: 4629.03

Tech: RLD

Date: 8-11-05

WELL ID:	METER ACCURACY RANGE				
MW44	+/- 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)
12:31	6.69	18.4	315	-50	1.02
12:33	6.68	16.9	317	-43	0.56
12:35	6.68	16.6	318	-42	0.48

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 FFP
Project No.: 4629.03

Tech: RLD
Date: 8-11-05

METER ACCURACY RANGE

	+/- 0.2 pH	+/- 0.5 °C	+/- 20 µmohs	+/- 2 mv	+/- 0.3 mg/L

WELL ID: MW27

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
8:50	6.61	18.9	268	-63	0.66
8:52	6.60	19.8	268	-75	0.56
8:54	6.58	20.6	267	-81	0.63
8:56	6.57	21.1	272	-82	0.64

WELL ID: MW28

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
9:24	6.68	19.1	247	-72	0.71
9:26	6.67	19.2	243	-76	0.51
9:28	6.66	19.4	241	-79	0.46
9:30	6.65	19.7	241	-81	0.44

WELL ID: MW34

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
[illegible]	6.52	16.2	235	-35	0.37
[illegible]	6.50	16.2	236	-37	0.37
[illegible]	6.50	16.3	236	-38	0.47
10:07	6.49	16.3	236	-38	0.48

WELL ID: MW38

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:32	6.49	19.4	239	-33	1.18
10:34	6.51	19.8	237	-39	0.44
10:36	6.50	19.9	238	-39	0.39
10:38	6.51	20.0	238	-39	0.31

WELL ID: MW30

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:22	6.60	21.3	241	-81	0.33
11:24	6.60	21.7	240	-87	0.71
11:26	6.60	22.0	238	-93	0.30
11:28	6.60	22.0	236	-91	0.31

WELL ID: MW43

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
12:02	6.68	18.0	371	-48	0.62
12:04	6.67	18.4	370	-48	0.48
12:06	6.66	18.8	371	-49	0.52
12:08	6.64	18.8	371	-50	0.54

LACO ASSOCIATES
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Project Name: Former Shell Bulk Plant - PFP
Project No.: 4629.03
Date: 8-30-05
Golbal ID No.: T0602300107
PM: CJW

Tech: RLD
Mob/Demob time: 1.50/1.50
Travel time: 1.15
Time on site: 9:00
Time off site: 2:00
Mileage: 36

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)	6.56		8.11		6.03		11.91		6.72	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	7.68	6.87	7.93	7.62	6.85	6.84	7.31	7.34	6.66	6.58
TEMP (°C)	22.4	22.4	20.9	22.6	20.9	21.3	19.6	19.0	18.8	19.8
Ecw (µmohs)	265	271	232	222	277	268	235	214	348	281
ORP (mV)	-57	-68	-58	-31	-28	-55	-22	-17	16	6
DO (mg/L)	0.63	0.64	4.21	2.56	0.76	0.38	0.72	0.40	0.66	0.34
OTHER (units)	—		—		—		—		—	
PURGE: TIME	11:03	11:11	12:37	12:49	10:39	10:47	11:41	11:51	10:13	10:25
METHOD (DHP/CB/B)	CAM		CAM		CAM		CAM		CAM	
RATE (Lpm)	0.19		0.21		0.25		0.20		0.21	
VOLUME (L)	1.5		2.5		2.0		2.0		2.5	
COLOR	CLEAR	GREY	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR	TURBID TAN	CLOUDY CLEAR	CLOUDY CLEAR
ODOR	LIGHT SWEET LIGHT ANISE		LIGHT FUEL LIGHT ANISE		MED FUEL MED SULFUR		MED SULFUR		LIGHT SULFUR	
INTAKE DEPTH (FEET)	8.5		9.0		8.0		16.0		13.0	
SAMPLE: TIME										
METHOD (DHP/CB/B)										
ANALYTES	INTRINSICS ONLY		INTRINSICS ONLY		INTRINSICS ONLY		INTRINSICS ONLY		INTRINSICS ONLY	
TOTAL DRAWDOWN (FEET)	0.56		0.88		1.29		0.20		1.43	
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

REVISED:8/29/2005

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Project Name: **Former Shell Bulk Plant - PFP**
Project No.: **4629.03**
Date: 8-30-05
Golbal ID No.: **T0602300107**
PM: **CJW**

Tech: RLD
Mob/Demob time: 50/50
Travel time: 1.15
Time on site: 9:00
Time off site: 2:00
Mileage: 36

WELL No.:	MW43		MW44								
DIAMETER (in)	1.50		1.50								
SCREENED INTERVAL (ft)	16-18		12-15								
DEPTH TO WATER (ft)	7.52		7.15								
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	
FIELD INTRINSICS: pH	9.74	7.65	8.21	7.71							
FIELD INTRINSICS: TEMP (°C)	18.9	18.9	21.1	21.5							
FIELD INTRINSICS: Ecw (µmohs)	227	232	219	213							
FIELD INTRINSICS: ORP (mV)	-32	-41	-50	-44							
FIELD INTRINSICS: DO (mg/L)	1.36	1.00	0.78	0.70							
FIELD INTRINSICS: OTHER (units)	—		—								
PURGE: TIME	12:13	12:19	1:01	1:07							
PURGE: METHOD (DHP/CB/B)	CAM		CAM								
PURGE: RATE (Lpm)	0.17		0.17								
PURGE: VOLUME (L)	1.0		1.0								
PURGE: COLOR	CLEAR	CLEAR	CLEAR	CLEAR							
PURGE: ODOR	MED SULFUR		LIGHT SULFUR								
PURGE: INTAKE DEPTH (FEET)	17.0		13.5								
SAMPLE: TIME											
SAMPLE: METHOD (DHP/CB/B)											
SAMPLE: ANALYTES	INTRINSICS ONLY		INTRINSICS ONLY								
SAMPLE: TOTAL DRAWDOWN (FEET)	3.32		2.70								
SAMPLE: REMARKS	—		—								
WELL CONDITION	GOOD		GOOD								
WASTE DRUMS	1 - DOT DRUM										

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

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LACO ASSOCIATES
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Project Name: BULK PLANT
Project No.: 4629.03

Tech: RLD
Date: 8-30-05

METER ACCURACY RANGE

WELL ID:	+/- 0.2 pH	+/- 0.5 °C	+/- 20 µmohs	+/- 2 mv	+/- 0.3 mg/L
MW38					
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:15	6.61	19.4	308	0	0.83
10:17	6.67	19.5	296	-8	0.63
10:19	6.66	19.6	293	-7	0.53
10:21	6.63	19.7	287	-2	0.47
10:23	6.56	19.8	281	4	0.36
10:25	6.58	19.8	281	6	0.34

WELL ID: MW30

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:41	6.88	21.4	274	-44	0.32
10:43	6.88	21.4	270	-51	0.34
10:45	6.86	21.4	270	-53	0.36
10:47	6.84	21.3	268	-55	0.38

WELL ID: MW27

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:05	7.31	22.2	267	-63	0.62
11:07	7.24	22.2	269	-66	0.77
11:09	6.90	22.3	270	-68	0.84
11:11	6.87	22.4	271	-68	0.64

WELL ID: MW34

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:43	7.05	20.7	223	-21	1.65
11:45	6.99	19.5	219	-19	1.04
11:47	7.08	18.8	214	-17	0.63
11:49	7.24	18.9	214	-17	0.47
11:51	7.34	19.0	214	-17	0.40

WELL ID: MW43

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
12:15	7.52	18.8	231	-36	1.05
12:17	7.66	18.8	232	-39	1.03
12:19	7.65	18.9	232	-41	1.00

WELL ID: MW28

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
12:39	7.12	21.0	228	-49	6.50
12:41	7.79	21.9	222	-35	6.25
12:43	7.60	22.3	222	-29	3.97
12:45	7.63	22.1	222	-27	3.90
12:47	7.63	22.6	222	-29	2.99
12:49	7.62	22.6	222	-31	2.56

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Project Name: BULK PLANT
Project No.: 4629.03

Tech: RLD
Date: 8-20-05

WELL ID:	METER ACCURACY RANGE				
MW44	+/- 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)
1:03	7.80	21.6	216	-44	0.71
1:05	7.73	21.5	213	-43	0.71
1:07	7.71	21.5	213	-44	0.70

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: Bulk Plant - HPI (UST)
Project No.: 4629.03
Date: 9-29-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD
Mob/Demob time: .50/.50
Travel time: 1.0
Time on site: 8:00
Time off site: 4:00
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)	7.4		—		—		17.98		16.78	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING — FIELD INTRINSICS: pH										
TEMP (°C)										
Ecw (µmohs)										
ORP (mV)										
DO (mg/L)										
OTHER (units)										
PURGE: TIME										
METHOD (DHP/CB/B)										
RATE (Lpm)										
VOLUME (L)										
COLOR										
ODOR										
INTAKE DEPTH (FEET)										
SAMPLE: TIME										
METHOD (DHP/CB/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)										
REMARKS										
WELL CONDITION	good		OBSTRUCTION @ 4'		NOT ABLE TO GET BAILER DOWN WELL - OBSTRUCTED		good		good	
WASTE DRUMS										

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Project Name: Bulk Plant - HPI (UST)
Project No.: 4629.03
Date: 9-29-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD
Mob/Demob time: .50/.50
Travel time: 1.0
Time on site: 8:00
Time off site: 4:00
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)	DRY		DRY		7.94		7.44		8.01	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH							7.2	6.6	7.1	6.5
TEMP (°C)							15.3	19.7	14.6	16.8
Ecw (µmohs)							373	309	264	243
ORP (mV)							-110	-112	-87	-39
DO (mg/L)							2.81	0.92	2.99	5.79
OTHER (units)										
PURGE: TIME							8:59	9:07	10:38	10:48
METHOD (DHP/CB/B)							CAM PUMP		CAM PUMP	
RATE (Lpm)							0.23		0.20	
VOLUME (L)							1.80		2.0	
COLOR							LT. GREY TINT	LT. GREY/ CLOUDY	CLEAR	LT. GREY TINT
ODOR							STRONG FUEL/RUBBER		MED FUEL/RUBBER	
INTAKE DEPTH (FEET)							9.0		9.5	
SAMPLE: TIME							9:09		10:52	
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; Diss. Cr6, Se, Va, Mo; Bromate		TPHg/BTEX; TPHd w/SGC; Diss. Cr6, Se, Va, Mo; Bromate	
TOTAL DRAWDOWN (FEET)							0.90		1.45	
REMARKS	TD = 9.25 NO H_2O		TD = 9.21 NO H_2O				DISS. METALS = FF		DISS. METALS = FF	
WELL CONDITION	good		good		good		good		good	
WASTE DRUMS										

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

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Project Name: Bulk Plant - HPI (UST)
Project No.: 4629.03
Date: 9-29-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD
Mob/Demob time: .50/.50
Travel time: 1.0
Time on site: 8:00
Time off site: 4:00
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)	6.80		7.49		6.94		12.12		11.00	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.9	6.8	6.9	6.5	6.5	6.2				
TEMP (°C)	19.1	20.4	19.0	19.9	18.5	17.8				
Ecw (µmohs)	226	201	241	234	209	195				
ORP (mV)	-84	-56	-77	-92	-44	-5				
DO (mg/L)	3.76	3.10	1.79	0.36	0.52	0.12				
OTHER (units)	—		—		—					
PURGE: TIME	1:49	2:01	1:16	1:24	3:18	3:30				
METHOD (DHP/CB/B)	CAM PUMP		CAM PUMP		CAM PUMP					
RATE (Lpm)	0.20		0.18		0.20					
VOLUME (L)	2.40		1.40		2.40					
COLOR	LT. BROWN CLOUDY	LT. BROWN CLOUDY	CLEAR	CLEAR	GREY/BROWN CLOUDY	CLOUDY				
ODOR	STRONG RUBBER/SULFUR		STRONG SHOE STORE/RUBBER		MED. SULFUR					
INTAKE DEPTH (FEET)	9.5		9.5		14.0					
SAMPLE: TIME	2:05		1:28		3:33					
METHOD (DHP/CB/B)	CAM PUMP		CAM PUMP		CAM PUMP					
ANALYTES	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC; Diss. Cr6, Se, Va, Mo; Bromate		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC; Diss. Cr6, Se, Va, Mo; Bromate		TPHg/BTEX; TPHd w/SGC	
TOTAL DRAWDOWN (FEET)	1.16		1.26		1.41					
REMARKS	—		DISS. METALS = FF		—					
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

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Project Name: Bulk Plant - HPI (UST)
Project No.: 4629.03
Date: 9-29-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD
Mob/Demob time: .50/.50
Travel time: 1.0
Time on site: 8:00
Time off site: 4:00
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)	11.52		7.59		7.68		8.06		7.93	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING — FIELD INTRINSICS: pH			6.4	6.1	6.9	6.2	6.7	6.4	6.7	6.4
TEMP (°C)			17.9	18.8	18.4	19.3	17.3	17.8	17.6	18.2
Ecw (µmohs)			221	226	223	227	244	250	250	245
ORP (mV)			-9	-6	-35	-1	-22	-32	-52	-59
DO (mg/L)			0.87	0.22	1.17	0.22	1.35	0.21	1.52	0.50
OTHER (units)										
PURGE: TIME			2:19	2:25	2:47	2:59	12:30	12:36	12:55	1:01
METHOD (DHP/CB/B)			CAM PUMP		CAM PUMP		CAM PUMP		CAM PUMP	
RATE (Lpm)			0.20		0.21		0.23		0.20	
VOLUME (L)			1.20		2.50		1.40		1.20	
COLOR			CLEAR	CLEAR	CLEAR	CLOUDY	CLEAR	CLEAR	CLEAR	CLEAR
ODOR			NONE		SLIGHT RUBBER/SULFUR		SLIGHT ORGANIC		LIGHT SULFUR	
INTAKE DEPTH (FEET)			18.5		13.0		18.5		15.0	
SAMPLE: TIME			2:29		3:04		12:38		1:05	
METHOD (DHP/CB/B)			CAM PUMP		CAM PUMP		CAM PUMP		CAM PUMP	
ANALYTES	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC; Diss. Cr6, Se, Va, Mo; Bromate		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC	
TOTAL DRAWDOWN (FEET)			2.69		2.24		3.72		3.34	
REMARKS					DISS. METALS = FF					
WELL CONDITION	good		good		good		good		good	
WASTE DRUMS										

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

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Project Name: **Bulk Plant - HPI (UST)**
Project No.: **4629.03**
Date: 9-29-05
Golbal ID No.: **T0602300107**
PM: **CJW**

Tech: SJD
Mob/Demob time: .50/.50
Travel time: 1.0
Time on site: 8:00
Time off site: 4:00
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)	8.10		8.04		7.98		8.48			
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	6.8	6.4	6.8	6.6	6.7	6.5	6.8	6.6		
TEMP (°C)	15.6	17.0	15.8	18.7	15.0	16.0	15.1	16.7		
Ecw (µmohs)	283	276	281	273	251	249	242	243		
ORP (mV)	-54	-55	-68	-82	-58	-80	-56	-60		
DO (mg/L)	0.79	0.26	0.72	0.22	1.32	0.51	1.93	0.81		
OTHER (units)	—		—		—		—			
PURGE: TIME	9:31	9:37	9:58	10:06	11:12	11:22	11:43	11:51		
METHOD (DHP/CB/B)	CAM PUMP		CAM PUMP		CAM PUMP		CAM PUMP			
RATE (Lpm)	0.20		0.19		0.18		0.18			
VOLUME (L)	1.20		1.50		1.75		1.40			
COLOR	CLEAR	CLEAR	CLOUDY	YELLOW TINT CLOUDY	CLEAR	YELLOW TINT	CLEAR	YELLOW TINT		
ODOR	LIGHT SULFUR		MUSKY ORGANIC		MED. RUBBER/FUEL		MED. SHOE STORE			
INTAKE DEPTH (FEET)	17.0		13.5		17.0		14.0			
SAMPLE: TIME	9:39		10:09		11:25		11:55			
METHOD (DHP/CB/B)	CAM PUMP		CAM PUMP		CAM PUMP		CAM PUMP			
ANALYTES	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC; Diss. Cr6, Se, Va, Mo; Bromate		TPHg/BTEX; TPHd w/SGC; Diss. Cr6, Se, Va, Mo; Bromate			
TOTAL DRAWDOWN (FEET)	2.53		3.48		5.87		3.73			
REMARKS	—		—		DISS. METALS = FF		DISS. METALS = FF			
WELL CONDITION	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

Tech: SJD
Date: 9-29-05

METER ACCURACY RANGE

WELL ID:	+/- 0.2 pH	+/- 0.5 °C	+/- 20 µmohs	+/- 2 mv	+/- 0.3 mg/L
MW27					
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
9:01	6.8	18.6	337	-109	1.79
9:03	6.7	19.2	327	-111	1.33
9:05	6.6	19.7	315	-111	0.94
9:07	6.6	19.7	309	-112	0.92

WELL ID: MW41

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
9:33	6.6	16.3	278	-53	0.42
9:35	6.5	17.0	276	-55	0.32
9:37	6.4	17.0	276	-55	0.26

WELL ID: MW42

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:00	6.7	17.9	277	-72	0.29
10:02	6.7	18.6	275	-77	0.24
10:04	6.6	18.7	275	-81	0.22
10:06	6.6	18.7	273	-82	0.22

WELL ID: MW28

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:40	6.9	15.7	250	-85	2.44
10:42	6.7	16.4	247	-69	6.89
10:44	6.6	16.7	244	-42	6.32
10:46	6.5	16.7	244	-40	5.87
10:48	6.5	16.8	243	-39	5.79

WELL ID: MW43

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:14	6.5	15.7	250	-61	0.74
11:16	6.5	16.0	249	-68	0.76
11:18	6.5	16.0	250	-75	0.61
11:20	6.5	16.0	249	-79	0.52
11:22	6.5	16.0	249	-80	0.51

WELL ID: MW44

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
11:45	6.7	16.1	242	-53	0.65
11:47	6.6	16.5	242	-57	0.76
11:49	6.6	16.6	242	-59	0.86
11:51	6.6	16.7	243	-60	0.81

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Project Name: BULK PLANT - HPI (UST)
Project No.: 4629.03

Tech: SJD
Date: 9-29-05

METER ACCURACY RANGE

	+/- 0.2 pH	+/- 0.5 °C	+/- 20 µmohs	+/- 2 mv	+/- 0.3 mg/L

WELL ID: MW39

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
12:32	6.5	17.7	246	-26	0.43
12:34	6.4	17.6	249	-31	0.26
12:36	6.4	17.8	250	-32	0.21

WELL ID: MW40

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
12:57	6.5	18.3	246	-54	0.71
12:59	6.4	18.3	245	-58	0.52
1:01	6.4	18.2	245	-59	0.50

WELL ID: MW30

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
1:18	6.7	19.8	235	-84	0.74
1:20	6.5	19.9	236	-89	0.53
1:22	6.5	19.8	236	-91	0.42
1:24	6.5	19.9	234	-92	0.36

WELL ID: MW29

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
1:51	6.8	19.9	219	-86	2.54
1:53	6.7	20.3	214	-81	3.88
1:55	6.8	20.4	208	-76	3.65
1:57	6.8	20.4	202	-62	3.49
1:59	6.8	20.5	200	-57	3.22
2:01	6.8	20.4	201	-56	3.10

WELL ID: MW37

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
2:21	6.2	18.3	226	-4	0.27
2:23	6.1	18.7	228	-6	0.22
2:25	6.1	18.8	228	-6	0.22

WELL ID: MW38

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
2:49	6.5	18.9	222	-33	0.67
2:51	6.4	19.2	224	-26	0.41
2:53	6.3	19.3	224	-15	0.34
2:55	6.2	19.3	226	-6	0.25
2:57	6.2	19.3	227	-3	0.22
2:59	6.2	19.3	227	-1	0.22

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FAX 707.443.0553

Project Name: Bulk Plant - HPI (UST)
Project No.: 4629.03
Date: 9-29-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD / RLD
Mob/Demob time: .50
Travel time: .25
Time on site: 7:45
Time off site: 4:30
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)	7.14		PLUGGED		14.40 PLUGGED		19.95		15.73	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	9.5	10.96								
TEMP (°C)	20.6	22.1								
Ecw (µmohs)	851	842								
ORP (mV)	-57	-88								
DO (mg/L)	1.08	0.66								
OTHER (units)										
PURGE: TIME	2:47	2:59								
METHOD (DHP/CB/B)	DHP									
RATE (Lpm)	0.17									
VOLUME (L)	2.0									
COLOR	CLEAR	CLOUDY CLEAR								
ODOR	MED FUEL									
INTAKE DEPTH (FEET)	11.0						20.0		18.5	
SAMPLE: TIME	3:01						10:42		9:35	
METHOD (DHP/CB/B)	DHP						1/2" B		1/2" 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)	1.40						2.52		1.12	
REMARKS			SOMETHING PLUGGED IT UP @ 4'		ABLE TO GET DOWN BUT NOT BAILER					
WELL CONDITION	GOOD		PLUGGED UP		PLUGGED UP		GOOD		GOOD	
WASTE DRUMS										

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

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Project Name: Bulk Plant - HPI (UST)
Project No.: 4629.03
Date: 9-29-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD/RLD
Mob/Demob time: .50
Travel time: .25
Time on site: 7:45
Time off site: 4:30
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)	DRY @ 9.25		DRY @ 9.51		7.99					
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH					12.39	11.16				
TEMP (°C)					21.6	22.8				
Ecw (µmohs)					862	847				
ORP (mV)					-73	-87				
DO (mg/L)					0.70	0.59				
OTHER (units)	—		—		—					
PURGE: TIME					3:19	3:27				
METHOD (DHP/CB/B)					DHP					
RATE (Lpm)					0.25					
VOLUME (L)					1.0					
COLOR					GREY TINT	GREY TINT				
ODOR					MED SULFUR LIGHT FUEL					
INTAKE DEPTH (FEET)					9.6					
SAMPLE: TIME					3:29					
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; Diss. Cr6, Se, Va, Mo; Bromate		TPHg/BTEX; TPHd w/SGC; Diss. Cr6, Se, Va, Mo; Bromate	
TOTAL DRAWDOWN (FEET)	—		—		0.01					
REMARKS	JUST A LITTLE MUD @ BOTTOM		JUST DAMP @ BOTTOM OF WELL		—					
WELL CONDITION	GOOD		GOOD		GOOD					
WASTE DRUMS										

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

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Project Name: Bulk Plant - HPI (UST)
Project No.: 4629.03
Date: 9-29-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD/RLP
Mob/Demob time: .50
Travel time: .25
Time on site: 7:45
Time off site: 4:30
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)							12.12		11.00	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING — FIELD INTRINSICS: pH							OR	2.72	OR	OR
TEMP (°C)							19.2	19.4	18.5	18.0
Ecw (µmohs)							599	406	679	675
ORP (mV)							-69	-77	-74	-65
DO (mg/L)							0.58	0.62	0.70	0.67
OTHER (units)							—		—	
PURGE: TIME							1:35	1:43	12:27	12:37
METHOD (DHP/CB/B)							DHP		DHP	
RATE (Lpm)							0.13		0.15	
VOLUME (L)							1.0		1.5	
COLOR							CLEAR	GREYISH GREEN	CLEAR	GREY
ODOR							MED FUEL SLIGHT ANISE		LIGHT SULFUR	
INTAKE DEPTH (FEET)							16.0		17.0	
SAMPLE: TIME							1:45		12:39	
METHOD (DHP/CB/B)							DHP		DHP	
ANALYTES	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC; Diss. Cr6, Se, Va, Mo; Bromate		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC; Diss. Cr6, Se, Va, Mo; Bromate		TPHg/BTEX; TPHd w/SGC	
TOTAL DRAWDOWN (FEET)							2.21		0.75	
REMARKS							DISS. METALS = FF		—	
WELL CONDITION							GOOD		GOOD	
WASTE DRUMS	(1) DOT DRUM ONSITE									

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FAX 707.443.0553

Project Name: Bulk Plant - HPI (UST)
Project No.: 4629.03
Date: 9-29-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD/RLD
Mob/Demob time: .50
Travel time: .25
Time on site: 7:45
Time off site: 4:30
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)	11.52									
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH	UK	13.50								
TEMP (°C)	19.7	20.2								
Ecw (µmohs)	691	612								
ORP (mV)	-81	-71								
DO (mg/L)	0.81	0.43								
OTHER (units)	—									
PURGE: TIME	12:53	1:01								
METHOD (DHP/CB/B)	DHP									
RATE (Lpm)	0.13									
VOLUME (L)	1.0									
COLOR	GREY TURBID	CLEAR								
ODOR	MED SULFUR									
INTAKE DEPTH (FEET)	13.5									
SAMPLE: TIME	1:03									
METHOD (DHP/CB/B)	DHP									
ANALYTES	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC; Diss. Cr6, Se, Va, Mo; Bromate		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC	
TOTAL DRAWDOWN (FEET)	1.26									
REMARKS	—									
WELL CONDITION	GOOD									
WASTE DRUMS	(1) DOT DRUM ONSITE									

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

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Project Name: Bulk Plant - HPI (UST)
Project No.: 4629.03
Date: 9-29-05
Golbal ID No.: T0602300107
PM: CJW

Tech: SJD/RLD
Mob/Demob time: .50
Travel time: .25
Time on site: 7:45
Time off site: 4:30
Mileage: 26

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)										
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH										
FIELD INTRINSICS: TEMP (°C)										
FIELD INTRINSICS: Ecw (µmohs)										
FIELD INTRINSICS: ORP (mV)										
FIELD INTRINSICS: DO (mg/L)										
FIELD INTRINSICS: OTHER (units)										
PURGE: TIME										
PURGE: METHOD (DHP/CB/B)										
PURGE: RATE (Lpm)										
PURGE: VOLUME (L)										
PURGE: COLOR										
PURGE: ODOR										
PURGE: INTAKE DEPTH (FEET)										
SAMPLE: TIME										
SAMPLE: METHOD (DHP/CB/B)										
SAMPLE: ANALYTES	TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC		TPHg/BTEX; TPHd w/SGC; Diss. Cr6, Se, Va, Mo; Bromate		TPHg/BTEX; TPHd w/SGC; Diss. Cr6, Se, Va, Mo; Bromate			
SAMPLE: TOTAL DRAWDOWN (FEET)										
SAMPLE: REMARKS										
WELL CONDITION										
WASTE DRUMS										

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

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21 West Fourth Street, Eureka, CA 95501
TEL 707.443.5054
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Project Name: BULK PLANT-HPT (UST)
Project No.: 4629.03

Tech: RLD
Date: 9-29-05

METER ACCURACY RANGE

WELL ID: MW35	+/- 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)
12:29	ur	19.0	687	-81	1.05
12:31	ur	17.8	698	-77	0.74
12:33	ur	17.8	689	-72	0.72
12:35	ur	17.9	677	-67	0.69
12:37	ur	18.0	675	-65	0.67

WELL ID: MW36

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
12:55	ur	19.6	638	-87	0.71
12:57	14.55	19.8	627	-84	0.53
12:59	13.65	20.2	613	-73	0.45
1:01	13.50	20.2	612	-71	0.43

WELL ID: MW34

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
1:37	3.55	19.5	428	-77	0.85
1:39	3.16	19.2	425	-77	0.78
1:41	2.82	19.3	408	-77	0.66
1:43	2.72	19.4	406	-77	0.62

WELL ID: MW1A

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
2:49	12.84	21.3	852	-61	1.30
2:51	12.15	21.5	846	-67	1.00
2:53	11.57	21.7	844	-71	0.88
2:55	11.22	21.9	846	-78	0.78
2:57	10.98	22.0	842	-86	0.71
2:59	10.96	22.1	842	-88	0.68

WELL ID: MW25

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
3:21	11.79	21.8	855	-80	0.94
3:23	11.53	22.0	851	-82	0.77
3:25	11.26	22.6	847	-85	0.61
3:27	11.16	22.8	847	-87	0.59

WELL ID:

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

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21 West Fourth Street, Eureka, CA 95501
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FAX 707.443.0553

Project Name: BULK PLANT 4D2 (UST)

Project No.: 11629.03

Tech: RLD

Date: 9-29-05

WELL ID: MW1A		WELL ID: MW15		WELL ID: MW16		WELL ID: MW19		WELL ID: MW20		WELL ID: MW23	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
2:00	7.14	PLUGGED		9:00	14.40	10:30	17.98	9:10	16.78	1:50	9.25
2:43	7.14			9:20	14.40	10:40	17.98	9:30	16.78	DRY @ —	

WELL ID: MW24		WELL ID: MW25		WELL ID: MW27		WELL ID: MW28		WELL ID: MW29		WELL ID: MW30	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
12:10	9.51	3:06	7.94								
DRY @ —		3:14	7.99								

WELL ID: MW33		WELL ID: MW34		WELL ID: MW35		WELL ID: MW36		WELL ID: MW37		WELL ID: MW38	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
		1:10	12.12	12:12	11.00	12:14	11.52				
		1:29	12.12	12:21	11.00	12:47	11.52				
								WELL ID:	MW39	WELL ID	MW40

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

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 3027

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	TPHg/BTEX	TPHd w/SGC	Dissolved Cr6, Se, Va, Mo	Bromate	SAMPLE CONDITION/SPECIAL INSTRUCTIONS
					PRESERVATIVE: b	------	------	------	
					CONTAINER: 9	7	2	2	
	4629-MW1A-W	9-29-05	AM	GW	3	1			GEOTRACKER
	4629-MW15-W				3	1			
	4629-MW16-W				3	1			
	4629-MW19-W				3	1			
	4629-MW20-W				3	1			
	4629-MW25-W				3	1			
	4629-MW27-W				3	1	1	1	
	4629-MW28-W		PM		3	1	1	1	LIMITED VOLUME FOR TPHd w/SGC

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

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

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

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

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

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707-822-4649 Fax 707-822-6831

Chain of Custody

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 3027

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	TPHg/BTEX (ANALYSIS)	TPHd w/SGC (ANALYSIS)	Dissolved Cr6, Se, Va, Mo (ANALYSIS)	Bromate (ANALYSIS)	CONTAINER	PRESERVATIVE	SAMPLE CONDITION/SPECIAL INSTRUCTIONS
	4629-MW29-W	9-29-05	AM	GW	3	1			9	b	GEOTRACKER
	4629-MW30-W				3	1	1	1	7	---	
	4629-MW33-W				3	1					
	4629-MW34-W				3	1	1	1	2	---	
	4629-MW35-W				3	1					
	4629-MW36-W				3	1					
	4629-MW37-W				3	1					
	4629-MW38-W				3	1	1	1	2	---	
	4629-MW39-W				3	1					
	4629-MW40-W		PM		3	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

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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 3027

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	TPHg/BTEX	TPHd w/SGC	Dissolved Cr6, Se, Va, Mo	Bromate	SAMPLE CONDITION/SPECIAL INSTRUCTIONS
	4629-MW41-W	9-29-05	AM	GW	3	1			GEOTRACKER
	4629-MW42-W	↓	↓	↓	3	1			
	4629-MW43-W	↓	↓	↓	3	1	1	1	
	4629-MW44-W	↓	↓	↓	3	1	1	1	LIMITED VOLUME FOR TPHd w/SGC
	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

Attachment 4

NORTH COAST LABORATORIES LTD.

JUN 1 0 2005
BY: Met

June 08, 2005

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

DRG
FRB
CJW

Attn: Accounts Payable

Order No.: 0505572
Invoice No.: 50592
PO No.: TASK 3023
ELAP No. 1247-Expires July 2006

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: 0505572

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 4629-34-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 surrogate recovery for sample 4629-MW44-W was outside of the acceptance limits. The surrogate recoveries for the quality control samples were within acceptance limits. This indicates that the low surrogate recovery may be due to matrix effects from the sample.

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 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-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 sample 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 slightly below the lower acceptance limit for sample 4629-MW34-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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CASE NARRATIVE

The surrogate recovery was slightly above the upper acceptance limit for sample 4629-MW27-W. The reported results may be slightly higher than the actual amounts present in the sample.

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Date: 08-Jun-05
WorkOrder: 0505572

ANALYTICAL REPORT

Client Sample ID: 4629-MW27-W **Received:** 5/26/05 **Collected:** 5/24/05 0:00
Lab ID: 0505572-01A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	15	µg/L	1.0		6/2/05
Benzene	280	50	µg/L	100		6/2/05
Toluene	4.9	0.50	µg/L	1.0		6/2/05
Ethylbenzene	6.1	0.50	µg/L	1.0		6/2/05
m,p-Xylene	1.4	0.50	µg/L	1.0		6/2/05
o-Xylene	0.66	0.50	µg/L	1.0		6/2/05
Surrogate: Cis-1,2-Dichloroethylene	120	85-115	% Rec	1.0		6/2/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	820	50	µg/L	1.0		6/2/05

Client Sample ID: 4629-MW27-W **Received:** 5/26/05 **Collected:** 5/24/05 0:00
Lab ID: 0505572-01D **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)	85	50	µg/L	1.0	6/4/05	6/6/05
Surrogate: N-Tricosane	74.9	70-130	% Rec	1.0	6/4/05	6/6/05

Client Sample ID: 4629-MW28-W **Received:** 5/26/05 **Collected:** 5/24/05 0:00
Lab ID: 0505572-02A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	16	µg/L	1.0		6/2/05
Benzene	93	25	µg/L	50		6/2/05
Toluene	3.4	0.50	µg/L	1.0		6/2/05
Ethylbenzene	8.6	0.50	µg/L	1.0		6/2/05
m,p-Xylene	1.3	0.50	µg/L	1.0		6/2/05
o-Xylene	1.0	0.50	µg/L	1.0		6/2/05
Surrogate: Cis-1,2-Dichloroethylene	102	85-115	% Rec	50		6/2/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	570	50	µg/L	1.0		6/2/05

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WorkOrder: 0505572

ANALYTICAL REPORT

Client Sample ID: 4629-MW28-W **Received:** 5/26/05 **Collected:** 5/24/05 0:00
Lab ID: 0505572-02D **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)	76	50	µg/L	1.0	6/4/05	6/6/05
Surrogate: N-Tricosane	77.0	70-130	% Rec	1.0	6/4/05	6/6/05

Client Sample ID: 4629-MW30-W **Received:** 5/26/05 **Collected:** 5/24/05 0:00
Lab ID: 0505572-03A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	300	µg/L	100		6/2/05
Benzene	3,100	500	µg/L	1,000		6/2/05
Toluene	150	50	µg/L	100		6/2/05
Ethylbenzene	530	50	µg/L	100		6/2/05
m,p-Xylene	330	50	µg/L	100		6/2/05
o-Xylene	70	50	µg/L	100		6/2/05
Surrogate: Cis-1,2-Dichloroethylene	88.4	85-115	% Rec	100		6/2/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	12,000	5,000	µg/L	100		6/2/05

Client Sample ID: 4629-MW30-W **Received:** 5/26/05 **Collected:** 5/24/05 0:00
Lab ID: 0505572-03D **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)	830	50	µg/L	1.0	6/4/05	6/6/05
Surrogate: N-Tricosane	85.0	70-130	% Rec	1.0	6/4/05	6/6/05

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Date: 08-Jun-05
WorkOrder: 0505572

ANALYTICAL REPORT

Client Sample ID: 4629-MW34-W **Received:** 5/26/05 **Collected:** 5/24/05 0:00
Lab ID: 0505572-04A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	180	µg/L	10		6/2/05
Benzene	82	5.0	µg/L	10		6/2/05
Toluene	52	5.0	µg/L	10		6/2/05
Ethylbenzene	150	50	µg/L	100		6/2/05
m,p-Xylene	190	5.0	µg/L	10		6/2/05
o-Xylene	51	5.0	µg/L	10		6/2/05
Surrogate: Cis-1,2-Dichloroethylene	83.1	85-115	% Rec	100		6/2/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	5,000	500	µg/L	10		6/2/05

Client Sample ID: 4629-MW34-W **Received:** 5/26/05 **Collected:** 5/24/05 0:00
Lab ID: 0505572-04D **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)	450	50	µg/L	1.0	6/4/05	6/6/05
Surrogate: N-Tricosane	84.6	70-130	% Rec	1.0	6/4/05	6/6/05

Client Sample ID: 4629-MW38-W **Received:** 5/26/05 **Collected:** 5/24/05 0:00
Lab ID: 0505572-05A **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		6/2/05
Benzene	16	5.0	µg/L	10		6/2/05
Toluene	0.87	0.50	µg/L	1.0		6/2/05
Ethylbenzene	0.80	0.50	µg/L	1.0		6/2/05
m,p-Xylene	0.57	0.50	µg/L	1.0		6/2/05
o-Xylene	ND	0.50	µg/L	1.0		6/2/05
Surrogate: Cis-1,2-Dichloroethylene	100	85-115	% Rec	1.0		6/2/05

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		6/2/05

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WorkOrder: 0505572

ANALYTICAL REPORT

Client Sample ID: 4629-MW38-W **Received:** 5/26/05 **Collected:** 5/24/05 0:00
Lab ID: 0505572-05D **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	6/4/05	6/6/05
Surrogate: N-Tricosane	83.9	70-130	% Rec	1.0	6/4/05	6/6/05

Client Sample ID: 4629-MW43-W **Received:** 5/26/05 **Collected:** 5/24/05 0:00
Lab ID: 0505572-06A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	60	µg/L	1.0		6/2/05
Benzene	490	25	µg/L	50		6/2/05
Toluene	1.4	0.50	µg/L	1.0		6/2/05
Ethylbenzene	4.2	0.50	µg/L	1.0		6/2/05
m,p-Xylene	0.65	0.50	µg/L	1.0		6/2/05
o-Xylene	1.7	0.50	µg/L	1.0		6/2/05
Surrogate: Cis-1,2-Dichloroethylene	87.9	85-115	% Rec	50		6/2/05

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		6/2/05

Client Sample ID: 4629-MW43-W **Received:** 5/26/05 **Collected:** 5/24/05 0:00
Lab ID: 0505572-06D **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	6/4/05	6/6/05
Surrogate: N-Tricosane	87.6	70-130	% Rec	1.0	6/4/05	6/6/05

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WorkOrder: 0505572

ANALYTICAL REPORT

Client Sample ID: 4629-MW44-W **Received:** 5/26/05 **Collected:** 5/24/05 0:00
Lab ID: 0505572-07A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	60	µg/L	1.0		6/2/05
Benzene	2,900	500	µg/L	1,000		6/2/05
Toluene	13	5.0	µg/L	10		6/2/05
Ethylbenzene	13	5.0	µg/L	10		6/2/05
m,p-Xylene	6.3	0.50	µg/L	1.0		6/2/05
o-Xylene	4.3	0.50	µg/L	1.0		6/2/05
Surrogate: Cis-1,2-Dichloroethylene	94.6	85-115	% Rec	1,000		6/2/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	4,800	500	µg/L	10		6/2/05

Client Sample ID: 4629-MW44-W **Received:** 5/26/05 **Collected:** 5/24/05 0:00
Lab ID: 0505572-07D **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	6/4/05	6/6/05
Surrogate: N-Tricosane	56.8	70-130	% Rec	1.0	6/4/05	6/6/05

Client Sample ID: 4629-QCTB-W **Received:** 5/26/05 **Collected:** 5/24/05 0:00
Lab ID: 0505572-08A **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		6/2/05
Benzene	ND	0.50	µg/L	1.0		6/2/05
Toluene	ND	0.50	µg/L	1.0		6/2/05
Ethylbenzene	ND	0.50	µg/L	1.0		6/2/05
m,p-Xylene	ND	0.50	µg/L	1.0		6/2/05
o-Xylene	ND	0.50	µg/L	1.0		6/2/05
Surrogate: Cis-1,2-Dichloroethylene	90.9	85-115	% Rec	1.0		6/2/05

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		6/2/05

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North Coast Laboratories, Ltd.

Date: 08-Jun-05

CLIENT: LACO Associates
Work Order: 0505572
Project: 4629.03, FORMER SHELL BULK PLANT-PFP

QC SUMMARY REPORT

Method Blank

Sample ID: **MB-6/1/05** Batch ID: **R35152** Test Code: **BTXEW** Units: **µg/L** Analysis Date: **6/1/05 11:32:02 PM** Prep Date:
Client ID: Run ID: **ORGC8_050601B** SeqNo: **508342**

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	0.934	0.10	1.00	0	93.4%	85	115	0			

Sample ID: **MB-13604** Batch ID: **13604** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date: **6/6/05 2:05:06 PM** Prep Date: **6/4/05**
Client ID: Run ID: **ORGC5_050606A** SeqNo: **509160**

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	38.0	0.10	50.0	0	76.1%	70	130	0			

Sample ID: **MB-6/1/05** Batch ID: **R35151** Test Code: **TPHCGW** Units: **µg/L** Analysis Date: **6/1/05 11:32:02 PM** Prep Date:
Client ID: Run ID: **ORGC8_050601A** SeqNo: **508329**

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-Jun-05

CLIENT: LACO Associates
Work Order: 0505572
Project: 4629.03, FORMER SHELL BULK PLANT-PFP

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **LCS-05358** Batch ID: **R35152** Test Code: **BTXEW** Units: **µg/L** Analysis Date: **6/1/05 8:36:38 PM** Prep Date:
Client ID: Run ID: **ORGC8_050601B** SeqNo: **508340**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	42.65	3.0	40.0	0	107%	85	115	0			
Benzene	5.367	0.50	5.00	0	107%	85	115	0			
Toluene	5.448	0.50	5.00	0	109%	85	115	0			
Ethylbenzene	5.446	0.50	5.00	0	109%	85	115	0			
m,p-Xylene	10.93	0.50	10.0	0	109%	85	115	0			
o-Xylene	5.373	0.50	5.00	0	107%	85	115	0			
Cis-1,2-Dichloroethylene	1.05	0.10	1.00	0	105%	85	115	0			

Sample ID: **LCSD-05358** Batch ID: **R35152** Test Code: **BTXEW** Units: **µg/L** Analysis Date: **6/1/05 9:11:47 PM** Prep Date:
Client ID: Run ID: **ORGC8_050601B** SeqNo: **508341**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	42.52	3.0	40.0	0	106%	85	115	42.6	0.315%	15	
Benzene	5.320	0.50	5.00	0	106%	85	115	5.37	0.877%	15	
Toluene	5.412	0.50	5.00	0	108%	85	115	5.45	0.658%	15	
Ethylbenzene	5.435	0.50	5.00	0	109%	85	115	5.45	0.197%	15	
m,p-Xylene	10.91	0.50	10.0	0	109%	85	115	10.9	0.211%	15	
o-Xylene	5.292	0.50	5.00	0	106%	85	115	5.37	1.53%	15	
Cis-1,2-Dichloroethylene	1.14	0.10	1.00	0	114%	85	115	1.05	8.05%	15	

Sample ID: **LCS-13604** Batch ID: **13604** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date: **6/6/05 12:10:06 PM** Prep Date: **6/4/05**
Client ID: Run ID: **ORGC5_050606A** SeqNo: **509158**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	373.9	50	500	0	74.8%	40	107	0			
N-Tricosane	47.1	0.10	50.0	0	94.2%	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: 0505572
Project: 4629.03, FORMER SHELL BULK PLANT-PFP

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID: **LCSD-13604** Batch ID: **13604** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date: **6/6/05 12:39:10 PM** Prep Date: **6/4/05**
Client ID: Run ID: **ORGC5_050606A** SeqNo: **509159**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	402.5	50	500	0	80.5%	40	107	374	7.37%	15	
N-Tricosane	47.1	0.10	50.0	0	94.1%	70	130	47.1	0.100%	15	

Sample ID: **LCS-05359** Batch ID: **R35151** Test Code: **TPHCGW** Units: **µg/L** Analysis Date: **6/1/05 9:46:55 PM** Prep Date:
Client ID: Run ID: **ORGC8_050601A** SeqNo: **508327**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	520.7	50	500	0	104%	81	126	0			

Sample ID: **LCSD-05359** Batch ID: **R35151** Test Code: **TPHCGW** Units: **µg/L** Analysis Date: **6/1/05 10:21:59 PM** Prep Date:
Client ID: Run ID: **ORGC8_050601A** SeqNo: **508328**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	507.5	50	500	0	101%	81	126	521	2.58%	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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707-822-4649 Fax 707-822-6831

Chain of Custody

LABORATORY NUMBER: 0505572

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 Steve

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 3023

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS	CONTAINER	PRESERVATIVE
	4629-MW27-W	5-24-05	pm	GW	TPHg/BTEX	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					1	
					TPHd w/SGC	7	----

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

GEOTRACKER

Cold intact

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
Steve STEVE DAVIS	5-26-05 4:04 pm	K. Thompson	5/26/05 1604

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.

July 05, 2005

RECEIVED
LACO ASSOCIATES
JUL 11 2005
BY: met

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

Order No.: 0506527
Invoice No.: 51161
PO No.: TASK 3023
ELAP No. 1247-Expires July 2006

DRG
CJW

Attn: Accounts Payable

RE: 4629.03, HPI-Bulk Plant-UST

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	4629-MW1A-W
01D	4629-MW1A-W
02A	4629-MW19-W
02D	4629-MW19-W
03A	4629-MW20-W
03D	4629-MW20-W
04A	4629-MW23-W
04D	4629-MW23-W
05A	4629-MW24-W
05D	4629-MW24-W
06A	4629-MW25-W
06D	4629-MW25-W
07A	4629-MW27-W
07D	4629-MW27-W
08A	4629-MW28-W
08D	4629-MW28-W
09A	4629-MW29-W
09D	4629-MW29-W
10A	4629-MW30-W
10D	4629-MW30-W
11A	4629-MW33-W
11D	4629-MW33-W
12A	4629-MW34-W
12D	4629-MW34-W
13A	4629-MW35-W
13D	4629-MW35-W
14A	4629-MW36-W
14D	4629-MW36-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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July 05, 2005

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

Order No.: 0506527
Invoice No.: 51161
PO No.: TASK 3023
ELAP No. 1247-Expires July 2006

Attn: Accounts Payable

RE: 4629.03, HPI-Bulk Plant-UST

SAMPLE IDENTIFICATION

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

CLIENT: LACO Associates
Project: 4629.03, HPI-Bulk Plant-UST
Lab Order: 0506527

CASE NARRATIVE

TPH as Diesel with Silica Gel Cleanup:
Samples 4629-MW28-W, 4629-MW30-W, 4629-MW34-W, 4629-MW41-W and 4629-MW42-W contain some material lighter than diesel. However, some of this material extends into the diesel range of molecular weights.

Samples 4629-MW28-W, 4629-MW30-W, 4629-MW34-W, 4629-MW38-W, 4629-MW40-W, 4629-MW41-W, 4629-MW42-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 were below the lower acceptance limit for samples 4629-MW25-W, 4629-MW27-W, 4629-MW30-W, 4629-MW38-W, 4629-MW39-W, 4629-MW40-W, 4629-MW41-W, 4629-MW42-W, 4629-MW43-W, 4629-MW44-W, the method blank analyzed on 7/3/05 and the laboratory control sample (LCS) analyzed on 6/30/05. The LCS/laboratory control sample duplicate (LCSD) recoveries for diesel were within the acceptance limits; therefore, the data were accepted.

The relative percent difference (RPD) for the laboratory control samples analyzed on 6/30/05 was above the upper acceptance limit for diesel. This indicates that the results for the associated samples could be variable.

TPH as Diesel:
The surrogate recoveries were below the lower acceptance limit for samples 4629-MW1A-W, 4629-MW19-W, 4629-MW20-W, 4629-MW33-W, 4629-MW35-W, 4629-MW36-W, 4629-MW37-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.

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.

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CASE NARRATIVE

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.

BTEX:
Some reporting limits were raised for samples 4629-MW25-W, 4629-MW27-W, 4629-MW28-W, 4629-MW42-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 results for 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.

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

The surrogate recoveries were above the upper acceptance limit for samples 4629-MW37-W, 4629-MW39-W, 4629-MW40-W, 4629-MW41-W and the LCS analyzed on 6/28/05. The LCS/LCSD recoveries were within the acceptance limits for all of the analytes; therefore, the data were accepted.

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Date: 05-Jul-05
WorkOrder: 0506527

ANALYTICAL REPORT

Client Sample ID: 4629-MW1A-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-01A **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		6/28/05
Benzene	0.98	0.50	µg/L	1.0		6/28/05
Toluene	ND	0.50	µg/L	1.0		6/28/05
Ethylbenzene	ND	0.50	µg/L	1.0		6/28/05
m,p-Xylene	ND	0.50	µg/L	1.0		6/28/05
o-Xylene	ND	0.50	µg/L	1.0		6/28/05
Surrogate: Cis-1,2-Dichloroethylene	99.0	85-115	% Rec	1.0		6/28/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	72	50	µg/L	1.0		6/28/05

Client Sample ID: 4629-MW1A-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-01D **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	6/23/05	6/25/05
Surrogate: N-Tricosane	59.6	70-130	% Rec	1.0	6/23/05	6/25/05

Client Sample ID: 4629-MW19-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-02A **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		6/27/05
Benzene	ND	0.50	µg/L	1.0		6/27/05
Toluene	ND	0.50	µg/L	1.0		6/27/05
Ethylbenzene	ND	0.50	µg/L	1.0		6/27/05
m,p-Xylene	ND	0.50	µg/L	1.0		6/27/05
o-Xylene	ND	0.50	µg/L	1.0		6/27/05
Surrogate: Cis-1,2-Dichloroethylene	110	85-115	% Rec	1.0		6/27/05

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		6/27/05

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Date: 05-Jul-05
WorkOrder: 0506527

ANALYTICAL REPORT

Client Sample ID: 4629-MW19-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-02D **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	6/23/05	6/25/05
Surrogate: N-Tricosane	45.8	70-130	% Rec	1.0	6/23/05	6/25/05

Client Sample ID: 4629-MW20-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-03A **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		6/27/05
Benzene	ND	0.50	µg/L	1.0		6/27/05
Toluene	ND	0.50	µg/L	1.0		6/27/05
Ethylbenzene	ND	0.50	µg/L	1.0		6/27/05
m,p-Xylene	ND	0.50	µg/L	1.0		6/27/05
o-Xylene	ND	0.50	µg/L	1.0		6/27/05
Surrogate: Cis-1,2-Dichloroethylene	101	85-115	% Rec	1.0		6/27/05

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		6/27/05

Client Sample ID: 4629-MW20-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-03D **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	6/23/05	6/25/05
Surrogate: N-Tricosane	59.2	70-130	% Rec	1.0	6/23/05	6/25/05

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WorkOrder: 0506527

ANALYTICAL REPORT

Client Sample ID: 4629-MW23-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-04A **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		6/27/05
Benzene	ND	0.50	µg/L	1.0		6/27/05
Toluene	ND	0.50	µg/L	1.0		6/27/05
Ethylbenzene	ND	0.50	µg/L	1.0		6/27/05
m,p-Xylene	ND	0.50	µg/L	1.0		6/27/05
o-Xylene	ND	0.50	µg/L	1.0		6/27/05
Surrogate: Cis-1,2-Dichloroethylene	106	85-115	% Rec	1.0		6/27/05

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		6/27/05

Client Sample ID: 4629-MW23-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-04D **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	6/23/05	6/25/05
Surrogate: N-Tricosane	77.1	70-130	% Rec	1.0	6/23/05	6/25/05

Client Sample ID: 4629-MW24-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-05A **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		6/27/05
Benzene	ND	0.50	µg/L	1.0		6/27/05
Toluene	ND	0.50	µg/L	1.0		6/27/05
Ethylbenzene	ND	0.50	µg/L	1.0		6/27/05
m,p-Xylene	ND	0.50	µg/L	1.0		6/27/05
o-Xylene	ND	0.50	µg/L	1.0		6/27/05
Surrogate: Cis-1,2-Dichloroethylene	92.4	85-115	% Rec	1.0		6/27/05

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		6/27/05

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Date: 05-Jul-05
WorkOrder: 0506527

ANALYTICAL REPORT

Client Sample ID: 4629-MW24-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-05D **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	6/23/05	6/25/05
Surrogate: N-Tricosane	76.7	70-130	% Rec	1.0	6/23/05	6/25/05

Client Sample ID: 4629-MW25-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-06A **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		6/28/05
Benzene	ND	1.0	µg/L	1.0		6/28/05
Toluene	ND	4.0	µg/L	1.0		6/28/05
Ethylbenzene	ND	0.50	µg/L	1.0		6/28/05
m,p-Xylene	ND	0.50	µg/L	1.0		6/28/05
o-Xylene	ND	0.50	µg/L	1.0		6/28/05
Surrogate: Cis-1,2-Dichloroethylene	100	85-115	% Rec	1.0		6/28/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	160	50	µg/L	1.0		6/28/05

Client Sample ID: 4629-MW25-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-06D **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	6/26/05	6/30/05
Surrogate: N-Tricosane	62.8	70-130	% Rec	1.0	6/26/05	6/30/05

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Client Sample ID: 4629-MW27-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-07A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	7.0	µg/L	1.0		6/28/05
Benzene	56	50	µg/L	100		6/28/05
Toluene	ND	5.0	µg/L	1.0		6/28/05
Ethylbenzene	2.6	0.50	µg/L	1.0		6/28/05
m,p-Xylene	1.4	0.50	µg/L	1.0		6/28/05
o-Xylene	0.98	0.50	µg/L	1.0		6/28/05
Surrogate: Cis-1,2-Dichloroethylene	105	85-115	% Rec	100		6/28/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	500	50	µg/L	1.0		6/28/05

Client Sample ID: 4629-MW27-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-07D **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	6/26/05	6/30/05
Surrogate: N-Tricosane	67.0	70-130	% Rec	1.0	6/26/05	6/30/05

Client Sample ID: 4629-MW28-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-08A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	8.0	µg/L	1.0		6/28/05
Benzene	48	10	µg/L	20		6/28/05
Toluene	ND	3.0	µg/L	1.0		6/28/05
Ethylbenzene	4.2	0.50	µg/L	1.0		6/28/05
m,p-Xylene	ND	2.0	µg/L	1.0		6/28/05
o-Xylene	ND	2.0	µg/L	1.0		6/28/05
Surrogate: Cis-1,2-Dichloroethylene	101	85-115	% Rec	20		6/28/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	430	50	µg/L	1.0		6/28/05

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Client Sample ID: 4629-MW28-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-08D **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)	100	50	µg/L	1.0	6/26/05	6/30/05
Surrogate: N-Tricosane	73.7	70-130	% Rec	1.0	6/26/05	6/30/05

Client Sample ID: 4629-MW29-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-09A **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		6/28/05
Benzene	21	5.0	µg/L	10		6/28/05
Toluene	ND	0.50	µg/L	1.0		6/28/05
Ethylbenzene	ND	0.50	µg/L	1.0		6/28/05
m,p-Xylene	ND	0.50	µg/L	1.0		6/28/05
o-Xylene	ND	0.50	µg/L	1.0		6/28/05
Surrogate: Cis-1,2-Dichloroethylene	97.6	85-115	% Rec	1.0		6/28/05

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		6/28/05

Client Sample ID: 4629-MW29-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-09D **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)	910	50	µg/L	1.0	6/26/05	6/30/05
Surrogate: N-Tricosane	77.8	70-130	% Rec	1.0	6/26/05	6/30/05

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Client Sample ID: 4629-MW30-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-10A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	150	µg/L	50		6/28/05
Benzene	3,900	500	µg/L	1,000		6/28/05
Toluene	150	25	µg/L	50		6/28/05
Ethylbenzene	570	500	µg/L	1,000		6/28/05
m,p-Xylene	380	25	µg/L	50		6/28/05
o-Xylene	83	25	µg/L	50		6/28/05
Surrogate: Cis-1,2-Dichloroethylene	91.0	85-115	% Rec	1,000		6/28/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	14,000	2,500	µg/L	50		6/28/05

Client Sample ID: 4629-MW30-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-10D **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)	560	50	µg/L	1.0	6/26/05	6/30/05
Surrogate: N-Tricosane	68.9	70-130	% Rec	1.0	6/26/05	6/30/05

Client Sample ID: 4629-MW33-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-11A **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		6/28/05
Benzene	ND	0.50	µg/L	1.0		6/28/05
Toluene	ND	0.50	µg/L	1.0		6/28/05
Ethylbenzene	ND	0.50	µg/L	1.0		6/28/05
m,p-Xylene	ND	0.50	µg/L	1.0		6/28/05
o-Xylene	ND	0.50	µg/L	1.0		6/28/05
Surrogate: Cis-1,2-Dichloroethylene	89.3	85-115	% Rec	1.0		6/28/05

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		6/28/05

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Client Sample ID: 4629-MW33-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-11D **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	6/23/05	6/25/05
Surrogate: N-Tricosane	63.0	70-130	% Rec	1.0	6/23/05	6/25/05

Client Sample ID: 4629-MW34-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-12A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	150	µg/L	10		6/28/05
Benzene	59	5.0	µg/L	10		6/28/05
Toluene	64	5.0	µg/L	10		6/28/05
Ethylbenzene	130	50	µg/L	100		6/28/05
m,p-Xylene	290	50	µg/L	100		6/28/05
o-Xylene	76	5.0	µg/L	10		6/28/05
Surrogate: Cis-1,2-Dichloroethylene	110	85-115	% Rec	100		6/28/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	8,500	500	µg/L	10		6/28/05

Client Sample ID: 4629-MW34-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-12D **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)	570	50	µg/L	1.0	6/26/05	6/30/05
Surrogate: N-Tricosane	74.0	70-130	% Rec	1.0	6/26/05	6/30/05

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Client Sample ID: 4629-MW35-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-13A **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		6/28/05
Benzene	ND	0.50	µg/L	1.0		6/28/05
Toluene	ND	0.50	µg/L	1.0		6/28/05
Ethylbenzene	ND	0.50	µg/L	1.0		6/28/05
m,p-Xylene	ND	0.50	µg/L	1.0		6/28/05
o-Xylene	ND	0.50	µg/L	1.0		6/28/05
Surrogate: Cis-1,2-Dichloroethylene	107	85-115	% Rec	1.0		6/28/05

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		6/28/05

Client Sample ID: 4629-MW35-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-13D **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	6/23/05	6/25/05
Surrogate: N-Tricosane	60.7	70-130	% Rec	1.0	6/23/05	6/25/05

Client Sample ID: 4629-MW36-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-14A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	6.2	3.0	µg/L	1.0		6/28/05
Benzene	ND	0.50	µg/L	1.0		6/28/05
Toluene	ND	0.50	µg/L	1.0		6/28/05
Ethylbenzene	ND	0.50	µg/L	1.0		6/28/05
m,p-Xylene	ND	0.50	µg/L	1.0		6/28/05
o-Xylene	ND	0.50	µg/L	1.0		6/28/05
Surrogate: Cis-1,2-Dichloroethylene	105	85-115	% Rec	1.0		6/28/05

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		6/28/05

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Client Sample ID: 4629-MW36-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-14D **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	6/23/05	6/25/05
Surrogate: N-Tricosane	69.1	70-130	% Rec	1.0	6/23/05	6/25/05

Client Sample ID: 4629-MW37-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-15A **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		6/28/05
Benzene	1.0	0.50	µg/L	1.0		6/28/05
Toluene	ND	0.50	µg/L	1.0		6/28/05
Ethylbenzene	ND	0.50	µg/L	1.0		6/28/05
m,p-Xylene	ND	0.50	µg/L	1.0		6/28/05
o-Xylene	ND	0.50	µg/L	1.0		6/28/05
Surrogate: Cis-1,2-Dichloroethylene	126	85-115	% Rec	1.0		6/28/05

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		6/28/05

Client Sample ID: 4629-MW37-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-15D **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	6/23/05	6/25/05
Surrogate: N-Tricosane	67.0	70-130	% Rec	1.0	6/23/05	6/25/05

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Client Sample ID: 4629-MW38-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-16A **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		6/28/05
Benzene	12	5.0	µg/L	10		6/28/05
Toluene	0.65	0.50	µg/L	1.0		6/28/05
Ethylbenzene	0.56	0.50	µg/L	1.0		6/28/05
m,p-Xylene	ND	0.50	µg/L	1.0		6/28/05
o-Xylene	ND	0.50	µg/L	1.0		6/28/05
Surrogate: Cis-1,2-Dichloroethylene	101	85-115	% Rec	1.0		6/28/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	84	50	µg/L	1.0		6/28/05

Client Sample ID: 4629-MW38-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-16D **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)	65	50	µg/L	1.0	6/26/05	6/30/05
Surrogate: N-Tricosane	69.3	70-130	% Rec	1.0	6/26/05	6/30/05

Client Sample ID: 4629-MW39-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-17A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	13	3.0	µg/L	1.0		6/28/05
Benzene	0.88	0.50	µg/L	1.0		6/28/05
Toluene	ND	0.50	µg/L	1.0		6/28/05
Ethylbenzene	ND	0.50	µg/L	1.0		6/28/05
m,p-Xylene	ND	0.50	µg/L	1.0		6/28/05
o-Xylene	ND	0.50	µg/L	1.0		6/28/05
Surrogate: Cis-1,2-Dichloroethylene	120	85-115	% Rec	1.0		6/28/05

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		6/28/05

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Client Sample ID: 4629-MW39-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-17D **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	6/26/05	6/30/05
Surrogate: N-Tricosane	66.8	70-130	% Rec	1.0	6/26/05	6/30/05

Client Sample ID: 4629-MW40-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-18A **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		6/28/05
Benzene	ND	0.50	µg/L	1.0		6/28/05
Toluene	ND	0.50	µg/L	1.0		6/28/05
Ethylbenzene	ND	0.50	µg/L	1.0		6/28/05
m,p-Xylene	ND	0.50	µg/L	1.0		6/28/05
o-Xylene	ND	0.50	µg/L	1.0		6/28/05
Surrogate: Cis-1,2-Dichloroethylene	116	85-115	% Rec	1.0		6/28/05

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		6/28/05

Client Sample ID: 4629-MW40-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-18D **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)	51	50	µg/L	1.0	6/29/05	7/3/05
Surrogate: N-Tricosane	56.4	70-130	% Rec	1.0	6/29/05	7/3/05

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Client Sample ID: 4629-MW41-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-19A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	6.2	3.0	µg/L	1.0		6/28/05
Benzene	0.54	0.50	µg/L	1.0		6/28/05
Toluene	ND	0.50	µg/L	1.0		6/28/05
Ethylbenzene	ND	0.50	µg/L	1.0		6/28/05
m,p-Xylene	ND	0.50	µg/L	1.0		6/28/05
o-Xylene	ND	0.50	µg/L	1.0		6/28/05
Surrogate: Cis-1,2-Dichloroethylene	125	85-115	% Rec	1.0		6/28/05

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		6/28/05

Client Sample ID: 4629-MW41-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-19D **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)	60	50	µg/L	1.0	6/29/05	7/3/05
Surrogate: N-Tricosane	60.6	70-130	% Rec	1.0	6/29/05	7/3/05

Client Sample ID: 4629-MW42-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-20A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	7.6	3.0	µg/L	1.0		6/28/05
Benzene	1.8	0.50	µg/L	1.0		6/28/05
Toluene	ND	1.5	µg/L	1.0		6/28/05
Ethylbenzene	ND	0.50	µg/L	1.0		6/28/05
m,p-Xylene	ND	1.0	µg/L	1.0		6/28/05
o-Xylene	ND	0.50	µg/L	1.0		6/28/05
Surrogate: Cis-1,2-Dichloroethylene	114	85-115	% Rec	1.0		6/28/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	95	50	µg/L	1.0		6/28/05

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ANALYTICAL REPORT

Client Sample ID: 4629-MW42-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-20D **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)	62	50	µg/L	1.0	6/29/05	7/3/05
Surrogate: N-Tricosane	64.5	70-130	% Rec	1.0	6/29/05	7/3/05

Client Sample ID: 4629-MW43-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-21A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	70	µg/L	1.0		6/29/05
Benzene	980	50	µg/L	100		6/29/05
Toluene	ND	3.0	µg/L	1.0		6/29/05
Ethylbenzene	7.0	0.50	µg/L	1.0		6/29/05
m,p-Xylene	1.2	0.50	µg/L	1.0		6/29/05
o-Xylene	2.2	0.50	µg/L	1.0		6/29/05
Surrogate: Cis-1,2-Dichloroethylene	92.5	85-115	% Rec	100		6/29/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	1,800	50	µg/L	1.0		6/29/05

Client Sample ID: 4629-MW43-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-21D **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)	59	50	µg/L	1.0	6/29/05	7/3/05
Surrogate: N-Tricosane	66.1	70-130	% Rec	1.0	6/29/05	7/3/05

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ANALYTICAL REPORT

Client Sample ID: 4629-MW44-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-22A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	50	µg/L	1.0		6/29/05
Benzene	3,900	500	µg/L	1,000		6/29/05
Toluene	15	5.0	µg/L	10		6/29/05
Ethylbenzene	12	5.0	µg/L	10		6/29/05
m,p-Xylene	6.8	0.50	µg/L	1.0		6/29/05
o-Xylene	4.6	0.50	µg/L	1.0		6/29/05
Surrogate: Cis-1,2-Dichloroethylene	109	85-115	% Rec	10		6/29/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	6,800	500	µg/L	10		6/29/05

Client Sample ID: 4629-MW44-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-22D **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)	71	50	µg/L	1.0	6/29/05	7/3/05
Surrogate: N-Tricosane	69.9	70-130	% Rec	1.0	6/29/05	7/3/05

Client Sample ID: 4629-QCTB-W **Received:** 6/21/05 **Collected:** 6/20/05 0:00
Lab ID: 0506527-23A **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		6/28/05
Benzene	ND	0.50	µg/L	1.0		6/28/05
Toluene	ND	0.50	µg/L	1.0		6/28/05
Ethylbenzene	ND	0.50	µg/L	1.0		6/28/05
m,p-Xylene	ND	0.50	µg/L	1.0		6/28/05
o-Xylene	ND	0.50	µg/L	1.0		6/28/05
Surrogate: Cis-1,2-Dichloroethylene	91.7	85-115	% Rec	1.0		6/28/05

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		6/28/05

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CLIENT: LACO Associates
Work Order: 0506527
Project: 4629.03, HPI-Bulk Plant-UST

QC SUMMARY REPORT

Method Blank

Sample ID: **MB-6/27/05** Batch ID: **R35609** Test Code: **BTXEW** Units: **µg/L** Analysis Date: **6/27/05 9:03:11 PM** Prep Date:
Client ID: Run ID: **ORGC8_050627B** SeqNo: **513716**

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	0.965	0.10	1.00	0	96.5%	85	115	0			

Sample ID: **MB-6/28/05** Batch ID: **R35611** Test Code: **BTXEW** Units: **µg/L** Analysis Date: **6/28/05 5:48:02 PM** Prep Date:
Client ID: Run ID: **ORGC8_050628B** SeqNo: **513759**

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	0.949	0.10	1.00	0	94.9%	85	115	0			

Sample ID: **MB-13728** Batch ID: **13728** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date: **6/30/05 3:19:53 PM** Prep Date: **6/26/05**
Client ID: Run ID: **ORGC5_050630A** SeqNo: **514148**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	32.73	50									J
N-Tricosane	37.7	0.10	50.0	0	75.4%	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: 0506527
Project: 4629.03, HPI-Bulk Plant-UST

QC SUMMARY REPORT

Method Blank

Sample ID: **MB-13750** Batch ID: **13750** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date: **7/3/05 2:48:08 PM** Prep Date: **6/29/05**
Client ID: Run ID: **ORGC5_050703A** SeqNo: **514167**

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	33.9	0.10	50.0	0	67.8%	70	130	0			S

Sample ID: **MB-6/27/05** Batch ID: **R35608** Test Code: **TPHCGW** Units: **µg/L** Analysis Date: **6/27/05 9:03:11 PM** Prep Date:
Client ID: Run ID: **ORGC8_050627A** SeqNo: **513695**

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-6/28/05** Batch ID: **R35610** Test Code: **TPHCGW** Units: **µg/L** Analysis Date: **6/28/05 5:48:02 PM** Prep Date:
Client ID: Run ID: **ORGC8_050628A** SeqNo: **513741**

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-13721** Batch ID: **13721** Test Code: **TPHDIW** Units: **µg/L** Analysis Date: **6/25/05 12:34:15 AM** Prep Date: **6/23/05**
Client ID: Run ID: **ORGC7_050624B** SeqNo: **513421**

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	33.3	0.10	50.0	0	66.6%	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: 05-Jul-05

CLIENT: LACO Associates
Work Order: 0506527
Project: 4629.03, HPI-Bulk Plant-UST

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **LCS-05417** Batch ID: **R35609** Test Code: **BTXEW** Units: **µg/L** Analysis Date: **6/27/05 4:51:09 PM** Prep Date:

Client ID: Run ID: **ORGC8_050627B** SeqNo: **513713**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	37.05	3.0	40.0	0	92.6%	85	115	0			
Benzene	4.618	0.50	5.00	0	92.4%	85	115	0			
Toluene	4.545	0.50	5.00	0	90.9%	85	115	0			
Ethylbenzene	4.568	0.50	5.00	0	91.4%	85	115	0			
m,p-Xylene	9.150	0.50	10.0	0	91.5%	85	115	0			
o-Xylene	4.585	0.50	5.00	0	91.7%	85	115	0			
Cis-1,2-Dichloroethylene	1.09	0.10	1.00	0	109%	85	115	0			

Sample ID: **LCSD-05417** Batch ID: **R35609** Test Code: **BTXEW** Units: **µg/L** Analysis Date: **6/27/05 5:27:28 PM** Prep Date:

Client ID: Run ID: **ORGC8_050627B** SeqNo: **513714**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	40.82	3.0	40.0	0	102%	85	115	37.0	9.69%	15	
Benzene	4.964	0.50	5.00	0	99.3%	85	115	4.62	7.20%	15	
Toluene	4.848	0.50	5.00	0	97.0%	85	115	4.54	6.46%	15	
Ethylbenzene	4.850	0.50	5.00	0	97.0%	85	115	4.57	5.99%	15	
m,p-Xylene	9.720	0.50	10.0	0	97.2%	85	115	9.15	6.04%	15	
o-Xylene	4.859	0.50	5.00	0	97.2%	85	115	4.58	5.81%	15	
Cis-1,2-Dichloroethylene	1.13	0.10	1.00	0	113%	85	115	1.09	4.39%	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: 0506527
Project: 4629.03, HPI-Bulk Plant-UST

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **LCS-05419** Batch ID: **R35611** Test Code: **BTXEW** Units: **µg/L** Analysis Date: **6/28/05 3:58:45 PM** Prep Date:
Client ID: Run ID: **ORGC8_050628B** SeqNo: **513758**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	41.20	3.0	40.0	0	103%	85	115	0			
Benzene	5.038	0.50	5.00	0	101%	85	115	0			
Toluene	4.897	0.50	5.00	0	97.9%	85	115	0			
Ethylbenzene	4.898	0.50	5.00	0	98.0%	85	115	0			
m,p-Xylene	9.782	0.50	10.0	0	97.8%	85	115	0			
o-Xylene	4.882	0.50	5.00	0	97.6%	85	115	0			
Cis-1,2-Dichloroethylene	1.16	0.10	1.00	0	116%	85	115	0			S

Sample ID: **LCSD-05419** Batch ID: **R35611** Test Code: **BTXEW** Units: **µg/L** Analysis Date: **6/29/05 12:21:41 AM** Prep Date:
Client ID: Run ID: **ORGC8_050628B** SeqNo: **513770**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	38.98	3.0	40.0	0	97.5%	85	115	41.2	5.52%	15	
Benzene	4.839	0.50	5.00	0	96.8%	85	115	5.04	4.03%	15	
Toluene	4.747	0.50	5.00	0	94.9%	85	115	4.90	3.10%	15	
Ethylbenzene	4.764	0.50	5.00	0	95.3%	85	115	4.90	2.76%	15	
m,p-Xylene	9.461	0.50	10.0	0	94.6%	85	115	9.78	3.34%	15	
o-Xylene	4.768	0.50	5.00	0	95.4%	85	115	4.88	2.36%	15	
Cis-1,2-Dichloroethylene	1.12	0.10	1.00	0	112%	85	115	1.16	4.00%	15	

Sample ID: **LCS-13728** Batch ID: **13728** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date: **6/30/05 1:19:08 PM** Prep Date: **6/26/05**
Client ID: Run ID: **ORGC5_050630A** SeqNo: **514146**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	279.5	50	500	0	55.9%	40	107	0			
N-Tricosane	35.0	0.10	50.0	0	70.0%	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

CLIENT: LACO Associates
Work Order: 0506527
Project: 4629.03, HPI-Bulk Plant-UST

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID: **LCSD-13728** Batch ID: **13728** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date: **6/30/05 1:49:32 PM** Prep Date: **6/26/05**
Client ID: Run ID: **ORGC5_050630A** SeqNo: **514147**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	363.2	50	500	0	72.6%	40	107	280	26.1%	15	R
N-Tricosane	40.2	0.10	50.0	0	80.4%	70	130	35.0	13.9%	15	

Sample ID: **LCS-13750** Batch ID: **13750** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date: **7/3/05 12:49:45 PM** Prep Date: **6/29/05**
Client ID: Run ID: **ORGC5_050703A** SeqNo: **514165**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	308.6	50	500	0	61.7%	40	107	0			
N-Tricosane	37.4	0.10	50.0	0	74.8%	70	130	0			

Sample ID: **LCSD-13750** Batch ID: **13750** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date: **7/3/05 1:19:26 PM** Prep Date: **6/29/05**
Client ID: Run ID: **ORGC5_050703A** SeqNo: **514166**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	287.2	50	500	0	57.4%	40	107	309	7.19%	15	
N-Tricosane	38.8	0.10	50.0	0	77.6%	70	130	37.4	3.65%	15	

Sample ID: **LCS-05418** Batch ID: **R35608** Test Code: **TPHCGW** Units: **µg/L** Analysis Date: **6/27/05 6:39:40 PM** Prep Date:
Client ID: Run ID: **ORGC8_050627A** SeqNo: **513692**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	504.3	50	500	0	101%	81	126	0			

Sample ID: **LCSD-05418** Batch ID: **R35608** Test Code: **TPHCGW** Units: **µg/L** Analysis Date: **6/27/05 7:15:41 PM** Prep Date:
Client ID: Run ID: **ORGC8_050627A** SeqNo: **513693**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	492.2	50	500	0	98.4%	81	126	504	2.43%	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: 0506527
Project: 4629.03, HPI-Bulk Plant-UST

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **LCS-05420** Batch ID: **R35610** Test Code: **TPHCGW** Units: **µg/L** Analysis Date: **6/28/05 4:35:14 PM** Prep Date:
Client ID: Run ID: **ORGC8_050628A** SeqNo: **513740**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	490.9	50	500	0	98.2%	81	126	0			

Sample ID: **LCSD-05420** Batch ID: **R35610** Test Code: **TPHCGW** Units: **µg/L** Analysis Date: **6/29/05 12:57:07 AM** Prep Date:
Client ID: Run ID: **ORGC8_050628A** SeqNo: **513751**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	491.3	50	500	0	98.3%	81	126	491	0.0955%	15	

Sample ID: **LCS-13721** Batch ID: **13721** Test Code: **TPHDIW** Units: **µg/L** Analysis Date: **6/24/05 10:52:08 PM** Prep Date: **6/23/05**
Client ID: Run ID: **ORGC7_050624B** SeqNo: **513418**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	498.8	50	500	0	99.8%	67	120	0			
N-Tricosane	41.5	0.10	50.0	0	83.0%	70	130	0			

Sample ID: **LCSD-13721** Batch ID: **13721** Test Code: **TPHDIW** Units: **µg/L** Analysis Date: **6/24/05 11:12:42 PM** Prep Date: **6/23/05**
Client ID: Run ID: **ORGC7_050624B** SeqNo: **513419**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	463.6	50	500	0	92.7%	67	120	499	7.33%	15	
N-Tricosane	42.2	0.10	50.0	0	84.4%	70	130	41.5	1.71%	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: 0506527

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	6-20-05	AM	GW	3	1
	~~4629-MW15-W~~	↓	↓	↓	~~3~~	~~1~~
	~~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

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
STEVE DAVIS	4:50 pm	1655	6-21-05
	6-21-05		

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: 0506527

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 —)	SAMPLE CONDITION/SPECIAL INSTRUCTIONS
	4629-MW29-W	6-20-05	Am	GW	3	1	GEOTRACKER
	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	6-21-05 4:50 pm	1655	6-21-05

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.

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707-822-4649 Fax 707-822-6831

Chain of Custody

0506527

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	6-20-05	Am	GW	3	1
	4629-MW42-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	6-21-05 4:50 pm	Ellen Hawkins 1655	6-21-05

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.

RECEIVED
LACO ASSOCIATES
OCT 19 2005
BY: JR

October 17, 2005

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

Order No.: 0510005
Invoice No.: 53595
PO No.: TASK 3027
ELAP No. 1247-Expires July 2006

Attn: Accounts Payable

RE: 4629.03, HPI-Bulk Plant-UST

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	4629-MW1A-W
01D	4629-MW1A-W
04A	4629-MW19-W
04D	4629-MW19-W
05A	4629-MW20-W
05D	4629-MW20-W
06A	4629-MW25-W
06D	4629-MW25-W
07A	4629-MW27-W
07D	4629-MW27-W
08A	4629-MW28-W
08D	4629-MW28-W
09A	4629-MW29-W
09D	4629-MW29-W
10A	4629-MW30-W
10D	4629-MW30-W
11A	4629-MW33-W
11D	4629-MW33-W
12A	4629-MW34-W
12D	4629-MW34-W
13A	4629-MW35-W
13D	4629-MW35-W
14A	4629-MW36-W
14D	4629-MW36-W
15A	4629-MW37-W
15D	4629-MW37-W
16A	4629-MW38-W
16D	4629-MW38-W

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

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

LMO
DRG
DNL
GH
GEO
HPI
CJW

File
Project #

REPORT CERTIFIED BY

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

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Printed on Recycled Paper

October 17, 2005

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

Order No.: 0510005
Invoice No.: 53595
PO TASK 3027
ELAP No. 1247-Expires July 2006

Attn: Accounts Payable

RE: 4629.03, HPI-Bulk Plant-UST

SAMPLE IDENTIFICATION

17A	4629-MW39-W
17D	4629-MW39-W
18A	4629-MW40-W
18D	4629-MW40-W
19A	4629-MW41-W
19D	4629-MW41-W
20A	4629-MW42-W
20D	4629-MW42-W
21A	4629-MW43-W
21D	4629-MW43-W
22A	4629-MW44-W
22D	4629-MW44-W
23A	4629-QCTB-W

CLIENT: LACO Associates
Project: 4629.03, HPI-Bulk Plant-UST
Lab Order: 0510005

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

Samples 4629-MW27-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.

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

Samples 4629-MW1A-W, 4629-MW27-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-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.

The gasoline values for samples 4629-MW1A-W, 4629-MW27-W, 4629-MW28-W, 4629-MW29-W, 4629-MW30-W, 4629-MW34-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, 4629-MW39-W and 4629-MW42-W include the reported gasoline components and additives in addition to other peaks in the gasoline range.

BTEX:
Some reporting limits were raised for samples 4629-MW1A-W, 4629-MW25-W, 4629-MW27-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.

Suggest the confirmation of the positive MTBE results for samples 4629-MW20-W, 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.

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

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CASE NARRATIVE

The surrogate recoveries were below the lower acceptance limit for sample 4629-MW43-W and the method blank. 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.

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Date: 17-Oct-05
WorkOrder: 0510005

ANALYTICAL REPORT

Client Sample ID: 4629-MW1A-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-01A **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		10/12/05
Benzene	2.6	0.50	µg/L	1.0		10/12/05
Toluene	ND	3.0	µg/L	1.0		10/12/05
Ethylbenzene	ND	0.50	µg/L	1.0		10/12/05
m,p-Xylene	0.88	0.50	µg/L	1.0		10/12/05
o-Xylene	ND	0.50	µg/L	1.0		10/12/05
Surrogate: Cis-1,2-Dichloroethylene	96.1	85-115	% Rec	1.0		10/12/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	280	50	µg/L	1.0		10/12/05

Client Sample ID: 4629-MW1A-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-01D **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)	51	50	µg/L	1.0	10/12/05	10/17/05
Surrogate: N-Tricosane	42.6	38-129	% Rec	1.0	10/12/05	10/17/05

Client Sample ID: 4629-MW19-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-04A **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		10/11/05
Benzene	ND	0.50	µg/L	1.0		10/11/05
Toluene	ND	0.50	µg/L	1.0		10/11/05
Ethylbenzene	ND	0.50	µg/L	1.0		10/11/05
m,p-Xylene	ND	0.50	µg/L	1.0		10/11/05
o-Xylene	ND	0.50	µg/L	1.0		10/11/05
Surrogate: Cis-1,2-Dichloroethylene	98.5	85-115	% Rec	1.0		10/11/05

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		10/11/05

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Date: 17-Oct-05
WorkOrder: 0510005

ANALYTICAL REPORT

Client Sample ID: 4629-MW19-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-04D **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	10/4/05	10/5/05
Surrogate: N-Tricosane	91.5	70-130	% Rec	1.0	10/4/05	10/5/05

Client Sample ID: 4629-MW20-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-05A **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		10/11/05
Benzene	ND	0.50	µg/L	1.0		10/11/05
Toluene	ND	0.50	µg/L	1.0		10/11/05
Ethylbenzene	ND	0.50	µg/L	1.0		10/11/05
m,p-Xylene	ND	0.50	µg/L	1.0		10/11/05
o-Xylene	ND	0.50	µg/L	1.0		10/11/05
Surrogate: Cis-1,2-Dichloroethylene	91.8	85-115	% Rec	1.0		10/11/05

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		10/11/05

Client Sample ID: 4629-MW20-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-05D **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	10/4/05	10/5/05
Surrogate: N-Tricosane	104	70-130	% Rec	1.0	10/4/05	10/5/05

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Date: 17-Oct-05
WorkOrder: 0510005

ANALYTICAL REPORT

Client Sample ID: 4629-MW25-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-06A **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		10/12/05
Benzene	ND	0.50	µg/L	1.0		10/12/05
Toluene	ND	2.0	µg/L	1.0		10/12/05
Ethylbenzene	ND	0.50	µg/L	1.0		10/12/05
m,p-Xylene	ND	0.50	µg/L	1.0		10/12/05
o-Xylene	ND	0.50	µg/L	1.0		10/12/05
Surrogate: Cis-1,2-Dichloroethylene	94.3	85-115	% Rec	1.0		10/12/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	88	50	µg/L	1.0		10/12/05

Client Sample ID: 4629-MW25-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-06D **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	10/12/05	10/16/05
Surrogate: N-Tricosane	42.1	38-129	% Rec	1.0	10/12/05	10/16/05

Client Sample ID: 4629-MW27-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-07A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	10	µg/L	1.0		10/12/05
Benzene	12	5.0	µg/L	10		10/12/05
Toluene	ND	10	µg/L	10		10/12/05
Ethylbenzene	8.3	5.0	µg/L	10		10/12/05
m,p-Xylene	ND	4.5	µg/L	1.0		10/12/05
o-Xylene	ND	1.5	µg/L	1.0		10/12/05
Surrogate: Cis-1,2-Dichloroethylene	89.4	85-115	% Rec	10		10/12/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	880	50	µg/L	1.0		10/12/05

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WorkOrder: 0510005

ANALYTICAL REPORT

Client Sample ID: 4629-MW27-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-07D **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)	110	50	µg/L	1.0	10/12/05	10/17/05
Surrogate: N-Tricosane	54.8	38-129	% Rec	1.0	10/12/05	10/17/05

Client Sample ID: 4629-MW28-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-08A **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		10/12/05
Benzene	23	5.0	µg/L	10		10/12/05
Toluene	0.74	0.50	µg/L	1.0		10/12/05
Ethylbenzene	1.4	0.50	µg/L	1.0		10/12/05
m,p-Xylene	0.62	0.50	µg/L	1.0		10/12/05
o-Xylene	ND	0.50	µg/L	1.0		10/12/05
Surrogate: Cis-1,2-Dichloroethylene	88.6	85-115	% Rec	1.0		10/12/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	210	50	µg/L	1.0		10/12/05

Client Sample ID: 4629-MW28-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-08D **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)	ND	50	µg/L	1.0	10/12/05	10/17/05
Surrogate: N-Tricosane	63.0	38-129	% Rec	1.0	10/12/05	10/17/05

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Date: 17-Oct-05
WorkOrder: 0510005

ANALYTICAL REPORT

Client Sample ID: 4629-MW29-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-09A **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		10/11/05
Benzene	100	25	µg/L	50		10/12/05
Toluene	1.9	0.50	µg/L	1.0		10/11/05
Ethylbenzene	1.7	0.50	µg/L	1.0		10/11/05
m,p-Xylene	0.89	0.50	µg/L	1.0		10/11/05
o-Xylene	ND	0.50	µg/L	1.0		10/11/05
Surrogate: Cis-1,2-Dichloroethylene	90.2	85-115	% Rec	1.0		10/11/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	450	50	µg/L	1.0		10/11/05

Client Sample ID: 4629-MW29-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-09D **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)	180	50	µg/L	1.0	10/12/05	10/17/05
Surrogate: N-Tricosane	58.2	38-129	% Rec	1.0	10/12/05	10/17/05

Client Sample ID: 4629-MW30-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-10A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	30	µg/L	10		10/13/05
Benzene	1,900	500	µg/L	1,000		10/12/05
Toluene	31	5.0	µg/L	10		10/13/05
Ethylbenzene	51	5.0	µg/L	10		10/13/05
m,p-Xylene	34	5.0	µg/L	10		10/13/05
o-Xylene	11	5.0	µg/L	10		10/13/05
Surrogate: Cis-1,2-Dichloroethylene	97.9	85-115	% Rec	10		10/13/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	4,700	500	µg/L	10		10/13/05

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Client Sample ID: 4629-MW30-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-10D **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)	270	50	µg/L	1.0	10/12/05	10/17/05
Surrogate: N-Tricosane	50.1	38-129	% Rec	1.0	10/12/05	10/17/05

Client Sample ID: 4629-MW33-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-11A **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		10/11/05
Benzene	2.3	0.50	µg/L	1.0		10/11/05
Toluene	ND	0.50	µg/L	1.0		10/11/05
Ethylbenzene	ND	0.50	µg/L	1.0		10/11/05
m,p-Xylene	ND	0.50	µg/L	1.0		10/11/05
o-Xylene	ND	0.50	µg/L	1.0		10/11/05
Surrogate: Cis-1,2-Dichloroethylene	85.6	85-115	% Rec	1.0		10/11/05

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		10/11/05

Client Sample ID: 4629-MW33-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-11D **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	10/4/05	10/5/05
Surrogate: N-Tricosane	98.7	70-130	% Rec	1.0	10/4/05	10/5/05

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Client Sample ID: 4629-MW34-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-12A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	100	µg/L	10		10/12/05
Benzene	61	5.0	µg/L	10		10/12/05
Toluene	20	5.0	µg/L	10		10/12/05
Ethylbenzene	50	5.0	µg/L	10		10/12/05
m,p-Xylene	31	5.0	µg/L	10		10/12/05
o-Xylene	6.6	5.0	µg/L	10		10/12/05
Surrogate: Cis-1,2-Dichloroethylene	114	85-115	% Rec	10		10/12/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	4,700	500	µg/L	10		10/12/05

Client Sample ID: 4629-MW34-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-12D **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)	300	50	µg/L	1.0	10/12/05	10/17/05
Surrogate: N-Tricosane	55.3	38-129	% Rec	1.0	10/12/05	10/17/05

Client Sample ID: 4629-MW35-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-13A **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		10/11/05
Benzene	ND	0.50	µg/L	1.0		10/11/05
Toluene	ND	0.50	µg/L	1.0		10/11/05
Ethylbenzene	ND	0.50	µg/L	1.0		10/11/05
m,p-Xylene	ND	0.50	µg/L	1.0		10/11/05
o-Xylene	ND	0.50	µg/L	1.0		10/11/05
Surrogate: Cis-1,2-Dichloroethylene	98.3	85-115	% Rec	1.0		10/11/05

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		10/11/05

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Client Sample ID: 4629-MW35-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-13D **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	10/4/05	10/5/05
Surrogate: N-Tricosane	103	70-130	% Rec	1.0	10/4/05	10/5/05

Client Sample ID: 4629-MW36-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-14A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	8.9	3.0	µg/L	1.0		10/11/05
Benzene	ND	0.50	µg/L	1.0		10/11/05
Toluene	ND	0.50	µg/L	1.0		10/11/05
Ethylbenzene	ND	0.50	µg/L	1.0		10/11/05
m,p-Xylene	ND	0.50	µg/L	1.0		10/11/05
o-Xylene	ND	0.50	µg/L	1.0		10/11/05
Surrogate: Cis-1,2-Dichloroethylene	92.0	85-115	% Rec	1.0		10/11/05

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		10/11/05

Client Sample ID: 4629-MW36-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-14D **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	10/4/05	10/6/05
Surrogate: N-Tricosane	80.8	70-130	% Rec	1.0	10/4/05	10/6/05

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Client Sample ID: 4629-MW37-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-15A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	4.5	3.0	µg/L	1.0		10/12/05
Benzene	11	5.0	µg/L	10		10/12/05
Toluene	ND	0.50	µg/L	1.0		10/12/05
Ethylbenzene	1.0	0.50	µg/L	1.0		10/12/05
m,p-Xylene	0.85	0.50	µg/L	1.0		10/12/05
o-Xylene	ND	0.50	µg/L	1.0		10/12/05
Surrogate: Cis-1,2-Dichloroethylene	94.4	85-115	% Rec	1.0		10/12/05

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		10/12/05

Client Sample ID: 4629-MW37-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-15D **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	10/4/05	10/5/05
Surrogate: N-Tricosane	103	70-130	% Rec	1.0	10/4/05	10/5/05

Client Sample ID: 4629-MW38-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-16A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	8.5	3.0	µg/L	1.0		10/12/05
Benzene	10	0.50	µg/L	1.0		10/12/05
Toluene	ND	0.50	µg/L	1.0		10/12/05
Ethylbenzene	ND	0.50	µg/L	1.0		10/12/05
m,p-Xylene	ND	0.50	µg/L	1.0		10/12/05
o-Xylene	ND	0.50	µg/L	1.0		10/12/05
Surrogate: Cis-1,2-Dichloroethylene	96.5	85-115	% Rec	1.0		10/12/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	64	50	µg/L	1.0		10/12/05

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Client Sample ID: 4629-MW38-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-16D **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	10/12/05	10/17/05
Surrogate: N-Tricosane	58.7	38-129	% Rec	1.0	10/12/05	10/17/05

Client Sample ID: 4629-MW39-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-17A **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		10/12/05
Benzene	9.6	0.50	µg/L	1.0		10/12/05
Toluene	ND	0.50	µg/L	1.0		10/12/05
Ethylbenzene	1.1	0.50	µg/L	1.0		10/12/05
m,p-Xylene	0.91	0.50	µg/L	1.0		10/12/05
o-Xylene	ND	0.50	µg/L	1.0		10/12/05
Surrogate: Cis-1,2-Dichloroethylene	103	85-115	% Rec	1.0		10/12/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	52	50	µg/L	1.0		10/12/05

Client Sample ID: 4629-MW39-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-17D **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	10/12/05	10/17/05
Surrogate: N-Tricosane	55.1	38-129	% Rec	1.0	10/12/05	10/17/05

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Client Sample ID: 4629-MW40-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-18A **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		10/12/05
Benzene	4.2	0.50	µg/L	1.0		10/12/05
Toluene	ND	0.50	µg/L	1.0		10/12/05
Ethylbenzene	0.59	0.50	µg/L	1.0		10/12/05
m,p-Xylene	0.55	0.50	µg/L	1.0		10/12/05
o-Xylene	ND	0.50	µg/L	1.0		10/12/05
Surrogate: Cis-1,2-Dichloroethylene	99.8	85-115	% Rec	1.0		10/12/05

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		10/12/05

Client Sample ID: 4629-MW40-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-18D **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)	ND	50	µg/L	1.0	10/12/05	10/17/05
Surrogate: N-Tricosane	61.7	38-129	% Rec	1.0	10/12/05	10/17/05

Client Sample ID: 4629-MW41-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-19A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	4.4	3.0	µg/L	1.0		10/12/05
Benzene	1.0	0.50	µg/L	1.0		10/12/05
Toluene	ND	0.50	µg/L	1.0		10/12/05
Ethylbenzene	0.65	0.50	µg/L	1.0		10/12/05
m,p-Xylene	0.79	0.50	µg/L	1.0		10/12/05
o-Xylene	ND	0.50	µg/L	1.0		10/12/05
Surrogate: Cis-1,2-Dichloroethylene	98.6	85-115	% Rec	1.0		10/12/05

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		10/12/05

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Client Sample ID: 4629-MW41-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-19D **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	10/12/05	10/17/05
Surrogate: N-Tricosane	55.0	38-129	% Rec	1.0	10/12/05	10/17/05

Client Sample ID: 4629-MW42-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-20A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	5.1	3.0	µg/L	1.0		10/12/05
Benzene	1.9	0.50	µg/L	1.0		10/12/05
Toluene	0.62	0.50	µg/L	1.0		10/12/05
Ethylbenzene	1.2	0.50	µg/L	1.0		10/12/05
m,p-Xylene	1.9	0.50	µg/L	1.0		10/12/05
o-Xylene	ND	0.50	µg/L	1.0		10/12/05
Surrogate: Cis-1,2-Dichloroethylene	90.8	85-115	% Rec	1.0		10/12/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	71	50	µg/L	1.0		10/12/05

Client Sample ID: 4629-MW42-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-20D **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	10/12/05	10/17/05
Surrogate: N-Tricosane	53.5	38-129	% Rec	1.0	10/12/05	10/17/05

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ANALYTICAL REPORT

Client Sample ID: 4629-MW43-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-21A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	50	µg/L	1.0		10/12/05
Benzene	840	100	µg/L	200		10/12/05
Toluene	1.4	0.50	µg/L	1.0		10/12/05
Ethylbenzene	6.8	0.50	µg/L	1.0		10/12/05
m,p-Xylene	0.90	0.50	µg/L	1.0		10/12/05
o-Xylene	2.1	0.50	µg/L	1.0		10/12/05
Surrogate: Cis-1,2-Dichloroethylene	81.6	85-115	% Rec	200		10/12/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	1,600	50	µg/L	1.0		10/12/05

Client Sample ID: 4629-MW43-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-21D **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	10/12/05	10/17/05
Surrogate: N-Tricosane	74.8	38-129	% Rec	1.0	10/12/05	10/17/05

Client Sample ID: 4629-MW44-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-22A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	50	µg/L	1.0		10/12/05
Benzene	2,800	500	µg/L	1,000		10/12/05
Toluene	14	5.0	µg/L	10		10/12/05
Ethylbenzene	24	5.0	µg/L	10		10/12/05
m,p-Xylene	7.2	0.50	µg/L	1.0		10/12/05
o-Xylene	5.3	0.50	µg/L	1.0		10/12/05
Surrogate: Cis-1,2-Dichloroethylene	106	85-115	% Rec	10		10/12/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	5,600	500	µg/L	10		10/12/05

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Client Sample ID: 4629-MW44-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-22D **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)	73	50	µg/L	1.0	10/12/05	10/17/05
Surrogate: N-Tricosane	58.7	38-129	% Rec	1.0	10/12/05	10/17/05

Client Sample ID: 4629-QCTB-W **Received:** 10/3/05 **Collected:** 9/29/05 0:00
Lab ID: 0510005-23A **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		10/11/05
Benzene	ND	0.50	µg/L	1.0		10/11/05
Toluene	ND	0.50	µg/L	1.0		10/11/05
Ethylbenzene	ND	0.50	µg/L	1.0		10/11/05
m,p-Xylene	ND	0.50	µg/L	1.0		10/11/05
o-Xylene	ND	0.50	µg/L	1.0		10/11/05
Surrogate: Cis-1,2-Dichloroethylene	87.0	85-115	% Rec	1.0		10/11/05

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		10/11/05

NORTH COAST LABORATORIES
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North Coast Laboratories, Ltd.

Date: 17-Oct-05

CLIENT: LACO Associates
Work Order: 0510005
Project: 4629.03, HPI-Bulk Plant-UST

QC SUMMARY REPORT

Method Blank

Sample ID **MB-10/11/05** Batch ID: **R37408** Test Code: **BTXEW** Units: **µg/L** Analysis Date **10/11/05 7:42:55 PM** Prep Date
Client ID: Run ID: **ORGC8_051011B** SeqNo: **538476**

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	0.821	0.10	1.00	0	82.1%	85	115	0			S

Sample ID **MB-14411** Batch ID: **14411** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date **10/16/05 11:13:14 PM** Prep Date **10/12/05**
Client ID: Run ID: **ORGC5_051016A** SeqNo: **538856**

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	64.5%	38	129	0			

Sample ID **MB-10/11/05** Batch ID: **R37405** Test Code: **TPHCGW** Units: **µg/L** Analysis Date **10/11/05 7:42:55 PM** Prep Date
Client ID: Run ID: **ORGC8_051011A** SeqNo: **538393**

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-14345** Batch ID: **14345** Test Code: **TPHDIW** Units: **µg/L** Analysis Date **10/5/05 12:15:42 PM** Prep Date **10/4/05**
Client ID: Run ID: **ORGC7_051005A** SeqNo: **536721**

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	53.4	0.10	50.0	0	107%	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

North Coast Laboratories, Ltd.

Date: 17-Oct-05

CLIENT: LACO Associates
Work Order: 0510005
Project: 4629.03, HPI-Bulk Plant-UST

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID **LCS-05650** Batch ID: **R37408** Test Code: **BTXEW** Units: **µg/L** Analysis Date **10/11/05 4:43:50 PM** Prep Date
Client ID: Run ID: **ORGC8_051011B** SeqNo: **538474**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	38.54	3.0	40.0	0	96.3%	85	115	0			
Benzene	4.686	0.50	5.00	0	93.7%	85	115	0			
Toluene	4.716	0.50	5.00	0	94.3%	85	115	0			
Ethylbenzene	4.705	0.50	5.00	0	94.1%	85	115	0			
m,p-Xylene	9.396	0.50	10.0	0	94.0%	85	115	0			
o-Xylene	4.681	0.50	5.00	0	93.6%	85	115	0			
Cis-1,2-Dichloroethylene	1.02	0.10	1.00	0	102%	85	115	0			

Sample ID **LCSD-05650** Batch ID: **R37408** Test Code: **BTXEW** Units: **µg/L** Analysis Date **10/12/05 2:42:31 AM** Prep Date
Client ID: Run ID: **ORGC8_051011B** SeqNo: **538487**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	36.21	3.0	40.0	0	90.5%	85	115	38.5	6.23%	15	
Benzene	4.527	0.50	5.00	0	90.5%	85	115	4.69	3.47%	15	
Toluene	4.548	0.50	5.00	0	91.0%	85	115	4.72	3.61%	15	
Ethylbenzene	4.566	0.50	5.00	0	91.3%	85	115	4.70	3.00%	15	
m,p-Xylene	9.055	0.50	10.0	0	90.5%	85	115	9.40	3.69%	15	
o-Xylene	4.491	0.50	5.00	0	89.8%	85	115	4.68	4.14%	15	
Cis-1,2-Dichloroethylene	0.969	0.10	1.00	0	96.9%	85	115	1.02	5.33%	15	

Sample ID **LCS-14411** Batch ID: **14411** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date **10/16/05 9:16:35 PM** Prep Date **10/12/05**
Client ID: Run ID: **ORGC5_051016A** SeqNo: **538854**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	409.0	50	500	0	81.8%	41	96	0			
N-Tricosane	40.3	0.10	50.0	0	80.6%	38	129	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: 0510005
Project: 4629.03, HPI-Bulk Plant-UST

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID **LCSD-14411** Batch ID: **14411** Test Code: **SGTPHDW** Units: **µg/L** Analysis Date **10/16/05 9:45:53 PM** Prep Date **10/12/05**
Client ID: Run ID: **ORGC5_051016A** SeqNo: **538855**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	350.8	50	500	0	70.2%	41	96	409	15.3%	15	R
N-Tricosane	34.5	0.10	50.0	0	69.1%	38	129	40.3	15.3%	15	R

Sample ID **LCS-05651** Batch ID: **R37405** Test Code: **TPHCGW** Units: **µg/L** Analysis Date **10/11/05 5:55:54 PM** Prep Date
Client ID: Run ID: **ORGC8_051011A** SeqNo: **538391**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	494.1	50	500	0	98.8%	85	115	0			

Sample ID **LCSD-05651** Batch ID: **R37405** Test Code: **TPHCGW** Units: **µg/L** Analysis Date **10/12/05 3:17:18 AM** Prep Date
Client ID: Run ID: **ORGC8_051011A** SeqNo: **538404**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	481.2	50	500	0	96.2%	85	115	494	2.64%	15	

Sample ID **LCS-14345** Batch ID: **14345** Test Code: **TPHDIW** Units: **µg/L** Analysis Date **10/5/05 10:15:16 AM** Prep Date **10/4/05**
Client ID: Run ID: **ORGC7_051005A** SeqNo: **536718**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	504.4	50	500	0	101%	67	120	0			
N-Tricosane	58.6	0.10	50.0	0	117%	70	130	0			

Sample ID **LCSD-14345** Batch ID: **14345** Test Code: **TPHDIW** Units: **µg/L** Analysis Date **10/5/05 10:35:12 AM** Prep Date **10/4/05**
Client ID: Run ID: **ORGC7_051005A** SeqNo: **536719**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	572.7	50	500	0	115%	67	120	504	12.7%	15	
N-Tricosane	62.8	0.10	50.0	0	126%	70	130	58.6	6.88%	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.
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Chain of Custody

LABORATORY NUMBER: 050005

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 3027

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	TPHg/BTEX (CONTAINER 9, PRESERVATIVE b)	TPHd w/SGC (CONTAINER 7)	~~Dissolved Cr6, Se, Va, Mo~~ (CONTAINER 2)	Bromate (CONTAINER 2)
	4629-MW1A-W	9-29-05	Am	GW	3	1		
	~~4629-MW15-W~~ *				~~3~~	~~1~~		
	~~4629-MW16-W~~ *				~~3~~	~~1~~		
	4629-MW19-W				3	1		
	4629-MW20-W				3	1		
	4629-MW25-W				3	1		
	4629-MW27-W				3	1	1	1
	4629-MW28-W		PM		3	1	1	1

*cancelled per Jamison 10/3/05 BSO

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

GEOTRACKER

evidence of cooling

* DID NOT Receive — Notified Chris E - voice mail 10/4 0930-14

LIMITED VOLUME FOR TPHd w/SGC

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
Tamion Short	10/3/05 1220		10/3/05 1220

SAMPLE DISPOSAL
[✓] NCL Disposal of Non-Contaminated
[ ] Return [ ] Pickup

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

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

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

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

Chain of Custody

LABORATORY NUMBER: 0510005

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 3027

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	TPHg/BTEX (CONTAINER 9, PRESERVATIVE b)	TPHd w/SGC (CONTAINER 7, PRESERVATIVE ---)	Dissolved Cr6, Se, Va, Mo (CONTAINER 2, PRESERVATIVE ---)	Bromate (CONTAINER 2, PRESERVATIVE ---)
	4629-MW29-W	9-29-05	AM	GW	3	1		
	4629-MW30-W				3	1	1	1
	4629-MW33-W				3	1		
	4629-MW34-W				3	1	1	1
	4629-MW35-W				3	1		
	4629-MW36-W				3	1		
	4629-MW37-W				3	1		
	4629-MW38-W				3	1	1	1
	4629-MW39-W				3	1		
	4629-MW40-W		PM		3	1		

SAMPLE CONDITION/SPECIAL INSTRUCTIONS
GEOTRACKER
evidence of cooling

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
Tamion Short	10/3/05 1220	009	10/3/05 1200

SAMPLE DISPOSAL
[✓] NCL Disposal of Non-Contaminated
[ ] Return [ ] Pickup

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

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

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

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

Chain of Custody

LABORATORY NUMBER: 0510005

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 3027

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	TPHg/BTEX (9)	TPHd w/SGC (7)	Dissolved Cr6, Se, Ve, Mo (2)	Bromate (2)	SAMPLE CONDITION/SPECIAL INSTRUCTIONS
	4629-MW41-W	9-29-05	AM	GW	3	1			GEOTRACKER
	4629-MW42-W	↓	↓	↓	3	1			
	4629-MW43-W				3	1	1	1	
	4629-MW44-W				3	1	1	1	LIMITED VOLUME FOR TPHd w/SGC
	4629-QCTB-W	↓	PM	↓	1				
									Evidence of cooling

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
			10/3/05
			1220

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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6100 Quail Valley Court Riverside, CA 92507-0704
P.O. Box 432 Riverside, CA 92502-0432
PH (951) 653-3351 FAX (951) 653-1662
www.babcocklabs.com

RECEIVED
OCT 27 2005
BY:

Client Name: North Coast Labs
Contact: Laura Miller
Address: 5680 West End Road
Arcata, CA 95521

Report Date: 19-Oct-2005

Analytical Report: Page 1 of 10
Project Name: No Project
Project Number: No Project

Work Order Number: A5J0301

Received on Ice (Y/N): Yes Temp: 6 °C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise.

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department at the phone number above.

Sample Identification

Lab Sample #	Client Sample ID		Matrix	Date Sampled	By	Date Submitted	By
A5J0301-01	0510051-1A	4629-MW27-W	Liquid	09/29/05 00:00		10/05/05 09:38	UPS
A5J0301-02	0510051-2A	4629-MW28-W	Liquid	09/29/05 00:00		10/05/05 09:38	UPS
A5J0301-03	0510051-3A	4629-MW30-W	Liquid	09/29/05 00:00		10/05/05 09:38	UPS
A5J0301-04	0510051-4A	4629-MW34-W	Liquid	09/29/05 00:00		10/05/05 09:38	UPS
A5J0301-05	0510051-5A	4629-MW38-W	Liquid	09/29/05 00:00		10/05/05 09:38	UPS
A5J0301-06	0510051-6A	4629-MW43-W	Liquid	09/29/05 00:00		10/05/05 09:38	UPS
A5J0301-07	0510051-7A	4629-MW44-W	Liquid	09/29/05 00:00		10/05/05 09:38	UPS

LMO
DRG
DNL
GH
GEO
HPI
CJW

File

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P.O. Box 432 Riverside, CA 92502-0432
PH (951) 653-3351 FAX (951) 653-1662
www.babcocklabs.com

Client Name: North Coast Labs
Contact: Laura Miller
Address: 5680 West End Road
Arcata, CA 95521

Report Date: 19-Oct-2005

Project Name: No Project
Project Number: No Project

Work Order Number: A5J0301

Received on Ice (Y/N): Yes Temp: 6 °C

Laboratory Reference Number

A5J0301-01

Sample Description	Matrix	Sampled Date/Time	Received Date/Time
0510051-1A 4629-MW27-W	Liquid	09/29/05 00:00	10/05/05 9:38

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Oxyhalides							
Bromate	ND	25	ug/L	EPA 300.0	10/14/05 08:10	KO	N_RLm

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P.O. Box 432 Riverside, CA 92502-0432
PH (951) 653-3351 FAX (951) 653-1662
www.babcocklabs.com

Client Name: North Coast Labs
Contact: Laura Miller
Address: 5680 West End Road
Arcata, CA 95521

Report Date: 19-Oct-2005

Project Name: No Project
Project Number: No Project

Work Order Number: A5J0301

Received on Ice (Y/N): Yes Temp: 6 °C

Laboratory Reference Number
A5J0301-02

Sample Description	Matrix	Sampled Date/Time	Received Date/Time
0510051-2A 4629-MW28-W	Liquid	09/29/05 00:00	10/05/05 9:38

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Oxyhalides							
Bromate	ND	25	ug/L	EPA 300.0	10/14/05 09:04	KO	N_RLm

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P.O. Box 432 Riverside, CA 92502-0432
PH (951) 653-3351 FAX (951) 653-1662
www.babcocklabs.com

Client Name: North Coast Labs
Contact: Laura Miller
Address: 5680 West End Road
Arcata, CA 95521

Report Date: 19-Oct-2005

Project Name: No Project
Project Number: No Project

Work Order Number: A5J0301

Received on Ice (Y/N): Yes Temp: 6 °C

Laboratory Reference Number

A5J0301-03

Sample Description	Matrix	Sampled Date/Time	Received Date/Time
0510051-3A 4629-MW30-W	Liquid	09/29/05 00:00	10/05/05 9:38

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Oxyhalides							
Bromate	ND	25	ug/L	EPA 300.0	10/14/05 09:58	KO	N_RLm

ACCREDITED IN ACCORDANCE WITH
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E.S. BABCOCK & SONS, INC.
Established 1906

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6100 Quail Valley Court Riverside, CA 92507-0704
P.O. Box 432 Riverside, CA 92502-0432
PH (951) 653-3351 FAX (951) 653-1662
www.babcocklabs.com

Client Name: North Coast Labs
Contact: Laura Miller
Address: 5680 West End Road
Arcata, CA 95521

Report Date: 19-Oct-2005

Project Name: No Project
Project Number: No Project

Work Order Number: A5J0301

Received on Ice (Y/N): Yes Temp: 6 °C

Laboratory Reference Number

A5J0301-04

Sample Description	Matrix	Sampled Date/Time	Received Date/Time
0510051-4A 4629-MW34-W	Liquid	09/29/05 00:00	10/05/05 9:38

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Oxyhalides							
Bromate	ND	25	ug/L	EPA 300.0	10/14/05 10:54	KO	N_RLm

CREDITED IN ACCORDANCE WI
nelac

E.S. BABCOCK & SONS, INC.
Established 1906

NELAP #02101CA ELAP#1156
6100 Quail Valley Court Riverside, CA 92507-0704
P.O. Box 432 Riverside, CA 92502-0432
PH (951) 653-3351 FAX (951) 653-1662
www.babcocklabs.com

Client Name: North Coast Labs
Contact: Laura Miller
Address: 5680 West End Road
Arcata, CA 95521

Report Date: 19-Oct-2005

Project Name: No Project
Project Number: No Project

Work Order Number: A5J0301

Received on Ice (Y/N): Yes Temp: 6 °C

Laboratory Reference Number

A5J0301-05

Sample Description	Matrix	Sampled Date/Time	Received Date/Time
0510051-5A 4629-MW38-W	Liquid	09/29/05 00:00	10/05/05 9:38

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Oxyhalides							
Bromate	ND	25	ug/L	EPA 300.0	10/14/05 12:45	KO	N_RLm

ACCREDITED IN ACCORDANCE WITH
nelac

E.S. BABCOCK & SONS, INC.
Established 1906

NELAP #02101CA ELAP#1156
6100 Quail Valley Court Riverside, CA 92507-0704
P.O. Box 432 Riverside, CA 92502-0432
PH (951) 653-3351 FAX (951) 653-1662
www.babcocklabs.com

Client Name: North Coast Labs
Contact: Laura Miller
Address: 5680 West End Road
Arcata, CA 95521

Report Date: 19-Oct-2005

Project Name: No Project
Project Number: No Project

Work Order Number: A5J0301

Received on Ice (Y/N): Yes Temp: 6 °C

Laboratory Reference Number

A5J0301-06

Sample Description	Matrix	Sampled Date/Time	Received Date/Time
0510051-6A 4629-MW43-W	Liquid	09/29/05 00:00	10/05/05 9:38

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Oxyhalides							
Bromate	ND	25	ug/L	EPA 300.0	10/14/05 16:11	KO	N_RLm

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6100 Quail Valley Court Riverside, CA 92507-0704
P.O. Box 432 Riverside, CA 92502-0432
PH (951) 653-3351 FAX (951) 653-1662
www.babcocklabs.com

Client Name: North Coast Labs
Contact: Laura Miller
Address: 5680 West End Road
Arcata, CA 95521

Report Date: 19-Oct-2005

Project Name: No Project
Project Number: No Project

Work Order Number: A5J0301

Received on Ice (Y/N): Yes Temp: 6 °C

Laboratory Reference Number
A5J0301-07

Sample Description	Matrix	Sampled Date/Time	Received Date/Time
0510051-7A 4629-MW44-W	Liquid	09/29/05 00:00	10/05/05 9:38

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Oxyhalides							
Bromate	ND	25	ug/L	EPA 300.0	10/14/05 17:59	KO	N_RLm

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Established 1906

NELAP #02101CA ELAP#1156
6100 Quail Valley Court Riverside, CA 92507-0704
P.O. Box 432 Riverside, CA 92502-0432
PH (951) 653-3351 FAX (951) 653-1662
www.babcocklabs.com

Client Name: North Coast Labs
Contact: Laura Miller
Address: 5680 West End Road
Arcata, CA 95521

Report Date: 19-Oct-2005

Project Name: No Project
Project Number: No Project

Work Order Number: A5J0301

Received on Ice (Y/N): Yes Temp: 6 °C

Oxyhalides - Batch Quality Control

Analyte(s)	Result	RDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 5J07033 - Analyzed as received										
Blank (5J07033-BLK1)				Prepared: 10/07/05		Analyzed: 10/14/05				
Bromate	ND	5.0	ug/L							
LCS (5J07033-BS1)				Prepared: 10/07/05		Analyzed: 10/14/05				
Bromate	14.1	5.0	ug/L	15.0		94.0	90-110			
Duplicate (5J07033-DUP1)		**Source: A5J0301-05**		Prepared: 10/07/05		Analyzed: 10/17/05				
Bromate	ND	25	ug/L		ND				10	
Matrix Spike (5J07033-MS1)		**Source: A5J0301-05**		Prepared: 10/07/05		Analyzed: 10/17/05				
Bromate	69.6	25	ug/L	74.8	ND	93.0	80-120			
Matrix Spike Dup (5J07033-MSD1)		**Source: A5J0301-05**		Prepared: 10/07/05		Analyzed: 10/17/05				
Bromate	71.4	25	ug/L	74.8	ND	95.5	80-120	2.55	20	

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P.O. Box 432 Riverside, CA 92502-0432
PH (951) 653-3351 FAX (951) 653-1662
www.babcocklabs.com

Client Name: North Coast Labs
Contact: Laura Miller
Address: 5680 West End Road
Arcata, CA 95521

Report Date: 19-Oct-2005

Project Name: No Project
Project Number: No Project

Work Order Number: A5J0301

Received on Ice (Y/N): Yes Temp: 6 °C

Notes and Definitions

N_RLm Due to sample matrix, the reporting limit for this analyte has been raised.

ND Analyte NOT DETECTED at or above the reporting limit (RDL)

NR Not Reported

RDL = Reportable Detection Limit MDL = Method Detection Limit

Approval

Enclosed are the analytical results for the submitted sample(s). Babcock Laboratories certify the data presented as part of this report meet the minimum quality standards in the referenced analytical methods. Any exceptions have been noted. Babcock Laboratories and its officers and employees assume no responsibility and make no warranty, express or implied, for uses or interpretations made by any recipients, intended or unintended, of this report.

☒ James K. Babcock, President
☐ Allison Mackenzie, General Manager
☐ Lawrence J. Chrystal, Laboratory Director

cc:

Standard ESB Report

ACCREDITED IN ACCORDANCE WI
nelac

NORTH COAST LABORATORIES LTD

Sub-Contract
Chain of Custody Record

Date Shipped: 10/4/05 Carrier: ups

Air Bill #: _____ Cooler #: _____

Subcontractor: E.S. Babcock & Sons, Inc
6100 Quail Valley Ct
Riverside, CA 92507

Phone: 909-653-3351
Attention Line: Sample Control

Send Results to: North Coast Labs
5680 West End Road
Arcata, CA 95521
Attn: Laura Miller
(707) 822-4649

Relinquished By: (signature)	Date/Time	Received By: (signature)	Date/Time
UPS.	10/4/05 1500		
UPS.	10-5-05 9:38		10-5-05 9:38
Relinquished By: (signature)	Date/Time	Received By: (signature)	Date/Time
Relinquished By: (signature)	Date/Time	Received By: (signature)	Date/Time

Analysis Request

NCL Sample #:	Sample ID:	Date Sampled:	Analysis / Matrix:
0510051-1A	4629-MW27-W	9/29/05	Bromate/Groundwater
0510051-2A	4630-MW28-W	9/29/05	Bromate/Groundwater
0510051-3A	4629-MW30-W	9/29/05	Bromate/Groundwater
0510051-4A	4629-MW34-W	9/29/05	Bromate/Groundwater
0510051-5A	4629-MW38-W	9/29/05	Bromate/Groundwater
0510051-6A	4629-MW43-W	9/29/05	Bromate/Groundwater
0510051-7A	4629-MW44-W	9/29/05	Bromate/Groundwater

T=6°C.

Special Instructions: Please include QC Data

A550301
MS 10/5/05

Date Due: 10/19/05 Rush Charges Authorized: NO Preservative: None

Return Chain of Custody to NCL

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

Chain of Custody

LABORATORY NUMBER: 0510051 ~~050005~~

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 3027

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	TPHg/BTEX (CONTAINER 9, PRESERVATIVE b)	TPHd w/SGC (CONTAINER 7, PRESERVATIVE ------)	~~Dissolved Cr6, Se, V, Mo~~ (CONTAINER 2, PRESERVATIVE ------)	Bromate (CONTAINER 2, PRESERVATIVE ------)
	4629-MW1A-W	9-29-05	Am	GW	3	1		
	4629-MW15-W				3	1		
	4629-MW16-W				3	1		
	4629-MW19-W				3	1		
	4629-MW20-W				3	1		
	4629-MW25-W				3	1		
	4629-MW27-W				3	1	1	1
	4629-MW28-W		Pm		3	1	1	1

*cancelled per Jamison 10/3/05 1330

SAMPLE CONDITION/SPECIAL INSTRUCTIONS
GEOTRACKER
evidence of cooling
LIMITED VOLUME FOR TPHd w/SGC

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
Jamison Short	10/5/5 1220		10/3/05 1220

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

0510051
~~0510005~~

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 3027

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	TPHg/BTEX	TPHd w/SGC	~~Dissolved Cr6, Se, Va, Mo~~	Bromate
					CONTAINER			
					PRESERVATIVE			
					9	7	2	2
					b	---	---	---
	4629-MW29-W	9-29-05	AM	GW	3	1		
	4629-MW30-W				3	1	1	1
	4629-MW33-W				3	1		
	4629-MW34-W				3	1	1	1
	4629-MW35-W				3	1		
	4629-MW36-W				3	1		
	4629-MW37-W				3	1		
	4629-MW38-W				3	1	1	1
	4629-MW39-W				3	1		
	4629-MW40-W		PM		3	1		

SAMPLE CONDITION/SPECIAL INSTRUCTIONS
GEOTRACKER
evidence of cooling

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
Tamion Short	10/31/05 1220	009 10/4/05	10/31/05 1220

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

0510051
~~0510005~~

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 3027

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	TPHg/BTEX (CONTAINER 9, PRESERVATIVE b)	TPHd w/SGC (CONTAINER 7, PRESERVATIVE ----)	Dissolved Cr6, Se, Va, Mo (CONTAINER 2, PRESERVATIVE ----)	Bromate (CONTAINER 2, PRESERVATIVE ----)	SAMPLE CONDITION/SPECIAL INSTRUCTIONS
	4629-MW41-W	9-29-05	Am	GW	3	1			GEOTRACKER
	4629-MW42-W				3	1			
	4629-MW43-W				3	1	1	1	
	4629-MW44-W				3	1	1	1	LIMITED VOLUME FOR TPHd w/SGC
	4629-QCTB-W		Pm		1				
									Evidence of cooling

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
		[signature]	10/3/05
			1220

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 5

LACO ASSOCIATES
CONSULTING ENGINEERS

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

Project Name:	Brook Plant	Tech:	BWN
Project No.:	4629.03	Mobe/Demobe time:	.5/.25
Task:	4.3	Travel time:	.5/.5
Date:	5/11/2005	Time on site:	1430
PM:	CSW	Time off site:	1515
		Mileage:	40

SYSTEM READINGS

UNIT: OXYGEN CONCENTRATOR #5		UNIT:	
Master Panel Runtime (Hrs):	N/A	Master Panel Runtime (Hrs):	
O_2 Concentrator Runtime (Hrs):	N/A	O_2 Concentrator Runtime (Hrs):	
System Clock Time:	N/A	System Clock Time:	

STATION	MANIFOLD PRESSURE (psi)	SPARGE POINT	WELL HEAD PRESSURE (psi)	STATION	MANIFOLD PRESSURE (psi)	SPARGE POINT	WELL HEAD PRESSURE (psi)
1	5.5	SP1U1		1			
2	6	SP2U1		2			
3	6	SP3U1		3			
4	6	SP4U1		4			
5	5.5	SP6U1		5			
6	5.5	SP7U1		6			
7		ALL ~ 7-8 Lpm		7			
8				8			
9				9			
10				10			
11				11			
12				12			

ANCILLARY INFORMATION

Power Meter (Kwh):	8793	Max. Temperature (°F):	135°F HEAD / 96.1°F SHED
Max. Humidity (%RH):	HI	Ventilation Fan(s):	ON / OFF
Surge Suppression:	ON / OFF	Controller Battery Voltage (volts):	OK

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	N/A YES / NO

STATION	RUN TIME				SPARGE POINT	WELL BOX OZONE CONC. (ppm)
	A	B	C	HOURS/DAY		
1		NO	CHANGE			
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
TOTAL:						

START TIMES	A	B	C	REPAIRS
1				
2				
3				
4				
5				
6				

MODIFICATIONS

OZONE SYSTEM NOT TURNED ON.

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

gw

Project Name: BULK PLANT
Project No.: 4629.03
Task: 4.13
Date: 5/25/05
PM: CJW

Tech: BWN
Mobe/Demobe time: 5/.25
Travel time: 5/.5
Time on site: 1400
Time off site: 1500
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		
2	5.5		
3	6		
4	6		
5	5.5		
6	5.5		
7	ALL @ 7-8 LPM		
8			
9			
10			
11			
12			

UNIT: C-SPARGER

Master Panel Runtime (Hrs): OFF
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): 09955
Max. Temperature (°F): 107.4°F / OVER RANGE
Max. Humidity (%RH): Hi
Ventilation Fan(s): ON / OFF
Surge Suppression: ON / OFF
Controller Battery Voltage (volts): OK

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

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: 6/9/2005
PM: CJN

Tech: BWN
Mobe/Demobe time: .25 / .25
Travel time: .5 / .5
Time on site: 1330
Time off site: 1430
Mileage: 40

SYSTEM READINGS

UNIT: OxYG				UNIT:			
Master Panel Runtime (Hrs): N/A				Master Panel Runtime (Hrs):			
O_2 Concentrator Runtime (Hrs): N/A				O_2 Concentrator Runtime (Hrs):			
System Clock Time: N/A				System Clock Time:			
STATION	MANIFOLD PRESSURE (psi)	SPARGE POINT	WELL HEAD PRESSURE (psi)	STATION	MANIFOLD PRESSURE (psi)	SPARGE POINT	WELL HEAD PRESSURE (psi)
1	5.5			1			
2	5.5			2			
3	5.5			3			
4	5			4			
5	5.5			5			
6	5.5			6			
7	ALL 7-8 Lpm			7			
8				8			
9				9			
10				10			
11				11			
12				12			

ANCILLARY INFORMATION

Power Meter (Kwh):	10254	Max. Temperature (°F):	Hi / 107 °F
Max. Humidity (%RH):	Hi	Ventilation Fan(s):	(ON) / OFF
Surge Suppression:	(ON) / OFF	Controller Battery Voltage (volts):	N/A

TROUBLESHOOTING

Ozone Detector Fault: N/A	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 N/A	YES / NO

LACO ASSOCIATES
CONSULTING ENGINEERS
21 W. 4th Street
Eureka, California 95502
707-443-5054

PROJECT Bulk Plant	BY BWW	SHEET NO. 1/1
LOCATION Fortuna	DATE 7/6/05	
CLIENT HPI	CHECKED	JOB NO. 4629.03
	DATE	

BWW - GROUT SEALED 12 WELL BOXES

SP1 U1 (ALL ROADWAY BOXES)
SP1 U2
SP1 U3
SP2 U1
SP2 U2
SP2 U3
SP3 U1
SP3 U2
SP3 U3
SP4 U1
SP4 U2
SP4 U3

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

Project Name: BULK PLANT HPI / PFP
Project No.: 4629.03
Task: 413
Date: 7/08/2005
PM: CJW

Tech: BWN & TBB
Mobe/Demobe time: .5 / .5
Travel time: .5 / .5
Time on site: 1130
Time off site: 1730
Mileage: 40

SYSTEM READINGS

UNIT: C-SPARGER #5

Master Panel Runtime (Hrs): 389.21

O_2 Concentrator Runtime (Hrs): 2008.26

System Clock Time: ——

STATION	MANIFOLD PRESSURE (psi)	SPARGE POINT	WELL HEAD PRESSURE (psi)
1	SEE TBB	SP1V2,3	
2	DATA TABLE	SP2V2,3	
3		SP3V3	
4		SP3V2	
5		SP4V3	
6		SP4V2	
7		SP5V3	
8		SP5V2	
9		SP7V2,3	
10		SP8V2,3	
11		SP10	
12			

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)~~ FLOW	SPARGE POINT	WELL HEAD PRESSURE (psi)
1	7L/MIN	SP1V1	
2		SP2V1	
3		SP3V1	
4		SP4V1	
5		SP5V1	
6		SP7V1	
7			
8			
9			
10			
11			
12			

ANCILLARY INFORMATION

Power Meter (Kwh): ——
Max. Temperature (°F): ——
Max. Humidity (%RH): ——
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 (YES) / NO
Reset Temperature/Humidity YES / (NO)
Compressor Filter (YES) / NO
Check Peroxide Level N/A YES / NO

STATION	A	B	C	HOURS/DAY	SPARGE POINT	WELL BOX OZONE CONC. (ppm)
1	1	1	1		SP1V2,3	
2	1	1	1		SP2V2,3	
3	2	2	2		SP3V3	
4	2	2	2		SP3V2	
5	3	3	3		SP4V3	
6	3	3	3		SP4V2	
7	4	4	4		SP5V3	
8	4	4	4		SP5V2	
9	3	3	3		SP6V3	
10	1	1	1		SP7V2,3	
11	2	2	2		SP8V2,3	
12	1	0	0		SP10	
13						
TOTAL:						

START TIMES	A	B	C
1	1200	800	1600
2	120	920	1720
3	240	1040	1840
4	400	1200	2000
5	520	1320	2120
6	640	1440	2240

REPAIRS

MODIFICATIONS

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: 7/11/2005
PM: CSW

Tech: BWN
Mobe/Demobe time: .25/.25
Travel time: .5/.5
Time on site: 0745
Time off site: 1015
Mileage: 40

SYSTEM READINGS

UNIT: C-SPARGER #5

Master Panel Runtime (Hrs): 499.47

O_2 Concentrator Runtime (Hrs): 2190.06

System Clock Time: ——

STATION	MANIFOLD PRESSURE (psi)	SPARGE POINT	WELL HEAD PRESSURE (psi)
1	16	SP1U2,3	
2	16.5	SP2U2,3	
3	17	SP3U2,3	
4	16.5	SP4U2,3	
5	15	SP5U2,3	
6	17	SP6U2,3	
7	18	SP7U2,3	
8	24	SP8U2,3	
9			
10			
11			
12			

UNIT: OXYGEN CONCENTRATOR #5

Master Panel Runtime (Hrs): ——

O_2 Concentrator Runtime (Hrs): ——

System Clock Time: ——

STATION	MANIFOLD ~~PRESSURE (psi)~~ Flow	SPARGE POINT	WELL HEAD PRESSURE (psi)
1	7 L/min	SP1U1	
2	7	SP2U1	
3	7	SP3U1	
4	7	SP4U1	
5	7	SP5U1	
6	7	SP7U1	
7			
8			
9			
10			
11			
12			

ANCILLARY INFORMATION

Power Meter (Kwh): ——

Max. Humidity (%RH): ——

Surge Suppression: (ON) / OFF

Max. Temperature (°F): ——

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: YES / (NO)

STATION	RUN TIME A	RUN TIME B	RUN TIME C	HOURS/DAY	SPARGE POINT	WELL BOX OZONE CONC. (ppm)
1	✓	✓	✓		SP1U2,3	
2	✓	✓	✓		SP2U2,3	
3	✓	✓	✓		SP3U2,3	
4	✓	✓	✓		SP4U2,3	
5	✓	✓	✓		SP5U2,3	
6	✓	✓	✓		SP6U2,3	
7	✓	✓	✓		SP7U2,3	
8	✓	✓	✓		SP8U2,3	
9						
10						
11						
12						
13						
TOTAL:						

START TIMES	A	B	C	REPAIRS
1	1200	800	1600	
2	120	920	1720	
3	240	1040	1840	
4	400	1200	2000	
5	520	1320	2120	
6	640	1440	2240	

MODIFICATIONS

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

Project Name: BULK PLANT HPI / PFP
Project No.: 4629.03
Task: 413
Date: 7/12/2005
PM: CJW

Tech: BWN
Mobe/Demobe time: .25 / .75
Travel time: .5 / .5
Time on site: 0800
Time off site: 1045
Mileage: 40

SYSTEM READINGS

UNIT: C - SPARGER #5

Master Panel Runtime (Hrs): 504.25
O_2 Concentrator Runtime (Hrs): 2194.84
System Clock Time: 920e 1015

STATION	MANIFOLD PRESSURE (psi)	SPARGE POINT	WELL HEAD PRESSURE (psi)
1	18	SP5U2,3	
2	21	SP1U2,3	
3	26	SP7U2,3	
4	21	SP2U2,3	
5	23	SP6U2,3	
6	25	SP3U2,3	
7	27	SP8U2,3	
8	19	SP4U2,3	
9	24	SP9	
10	24	SP10	
11	18	SP5U1 ; SP6U1	
12			

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)~~ FLOW	SPARGE POINT	WELL HEAD PRESSURE (psi)
1	7 L/min	SP1U1	
2	7	SP2U1	
3	7	SP3U1	
4	7	SP4U1	
5	7	SP4U1	
6	7	SP7U1	
7			
8			
9			
10			
11			
12			

ANCILLARY INFORMATION

Power Meter (Kwh): 12803
Max. Temperature (°F): 102°F SHED / 154°F HEAD
Max. Humidity (%RH): Hi
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 (YES) / NO
Reset Temperature/Humidity (YES) / NO
Compressor Filter (YES) / NO
Check Peroxide Level N/A YES / NO

STATION	RUN TIME A	RUN TIME B	RUN TIME C	HOURS/DAY	SPARGE POINT	WELL BOX OZONE CONC. (ppm)
1	2	2	2		SP5V2,3	
2	2	2	2		SP1V2,3	
3	2	2	2		SP7V2,3	
4	2	2	2		SP2V2,3	
5	2	2	2		SP6V2,3	
6	2	2	2		SP3V2,3	
7	2	2	2		SP8V2,3	
8	2	2	2		SP4V2,3	
9	2	2	2		SP9	
10	2	2	2		SP10	
11	2	2	2		SP5V1;SP6V1	
12						
13						
TOTAL:						

START TIMES	A	B	C	REPAIRS
1	1200	800	1600	
2	120	920	1720	
3	240	1040	1840	
4	400	1200	2000	
5	520	1320	2120	
6	640	1440	2240	

MODIFICATIONS

REORGANIZED SPARGE POINT ORDER. REPROGRAMMED CONTROLLER RESTRICTED INFLOW TO COMPRESSOR.

CONSULTING ENGINEERS

TEL 707.443.5054
FAX 707.443.0553

Project Name:	BULK PLANT HPI / PFP	Tech:	BRIAN
Project No.:	4629.03	Mobe/Demobe time:	.25 / .25
Task:	4.3	Travel time:	.5 / .5
Date:	7/18/05	Time on site:	1400
PM:	CSW	Time off site:	1445
		Mileage:	40

SYSTEM READINGS

UNIT: C-SPARGER #5

Master Panel Runtime (Hrs):	00544.00
O_2 Concentrator Runtime (Hrs):	2235.62
System Clock Time:	1445 @ 1445

STATION	MANIFOLD PRESSURE (psi)	SPARGE POINT	~~WELL HEAD PRESSURE (psi)~~ FLOW
1	21	SP5V2,3	3.2 SCFM
2	24	SP1V2,3	3.2
3	24	SP7V2,3	3.2
4	21	SP2V2,3	3.2
5	24	SP6V2,3	3.2
6	25	SP3V2,3	3.0
7	31	SP8V2,3	3.0
8	20	SP4V2,3	3.2
9	24	SP9	3.0
10	24	SP10	3.0
11	17	SP5V1/SP6V1	3.2
12			

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)~~ FLOW L/min
1	6	SP1V1	7
2	6	SP2V1	7
3	6	SP3V1	7
4	6	SP4V1	7
5	6	SP4V1	7
6	6	SP7V1	7
7			
8			
9			
10			
11			
12			

ANCILLARY INFORMATION

Power Meter (Kwh):	13366	Max. Temperature (°F):	103° SHED
Max. Humidity (%RH):	Hi	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: CHANGE	(YES) / NO
Tubing: ✓		Wires: ✓	

MAINTENANCE

O_2 Concentrator Filter	(YES) / NO	Reset Temperature/Humidity	(YES) / NO
Compressor Filter	(YES) / NO	Check Peroxide Level N/A	YES / NO

TATION	A	B	C	HOURS/DAY	POINT	OZONE CONC. (ppm)
1	5	5	5	PROGRAM	SP5U2, 3	
2	5	5	5	CHANGE	SP1U2, 3	
3	5	5	5	←	SP7U2, 3	
4	5	5	5		SP2U2, 3	
5	5	5	5		SP6U2, 3	
6	5	5	5		SP3U2, 3	
7	5	5	5		SP8U2, 3	
8	5	5	5		SP4U2, 3	
9	5	5	5		SP9.	
10	5	5	5		SP10	
11	5	5	5		SP5U1 & SP6U1	
12						
13						
TOTAL:						

START TIMES	A	B	C	REPAIRS
1	1200	800	1600	
2	120	920	1720	
3	240	1040	1840	
4	400	1200	2000	
5	520	1320	2120	
6	640	1440	2240	

MODIFICATIONS

FLOW RATE MEASUREMENTS TAKEN B/T COMPRESSOR & MANIFOLD

LACO ASSOCIATES
CONSULTING ENGINEERS
TEL 707.443.5054
FAX 707.443.0553

2

Project Name: BULK PLANT
Project No.: 4629.03
Task: 413
Date: 8/9/2005
PM: GSW

Tech: Brad
Mobe/Demobe time: .25/.25
Travel time: .5/.5
Time on site: 1030
Time off site: 1130
Mileage: 40

SYSTEM READINGS

UNIT: C-SPARGER #5				UNIT: OXYGEN CONCENTRATOR #5			
Master Panel Runtime (Hrs): 0783.52				Master Panel Runtime (Hrs): N/A			
O_2 Concentrator Runtime (Hrs): 2590.66				O_2 Concentrator Runtime (Hrs): N/A			
System Clock Time: 1130 @ 1130				System Clock Time: N/A			
STATION	MANIFOLD PRESSURE (psi)	SPARGE POINT	WELL HEAD PRESSURE (psi)	STATION	MANIFOLD PRESSURE (psi)	SPARGE POINT	WELL HEAD PRESSURE (psi)
1	18			1	6		
2	26			2	6		
3	23			3	6		
4	23			4	6		
5	27			5	6		
6	25			6	6		
7	31			7			
8	18			8			
9	25			9			
10	28			10			
11	18			11			
12				12			

ANCILLARY INFORMATION

Power Meter (Kwh): 15465
Max. Temperature (°F): 155°F HEAD / 103°F SHED
Max. Humidity (%RH): Hi
Ventilation Fan(s): (ON) / OFF
Surge Suppression: (ON) / OFF
Controller Battery Voltage (volts): OK

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: N/A YES / NO

STATION	RUN TIME				SPARGE POINT	WELL BOX OZONE CONC. (ppm)
	A	B	C	HOURS/DAY		
1		NO CHANGE				
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
TOTAL:						

START TIMES	A	B	C
1			
2			
3			
4			
5			
6			

REPAIRS

KERFOOT PANEL'S LAZ-20 SWITCH FAILURE FUSED OPEN, FEED WIRE FRIED TOO. REPLACED W C60N SUPPLEMENTARY PROTECTOR (SQUARE-D CAT # MG 24434 INSTALLED NEW WIRE

MODIFICATIONS

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: 8/16/2005
PM: CJW

Tech: BWN
Mobe/Demobe time: .25
Travel time: .5/.5
Time on site: 1030
Time off site: 1100
Mileage: 40

SYSTEM READINGS

UNIT: C-SPARGER #5

Master Panel Runtime (Hrs): 885.62

O_2 Concentrator Runtime (Hrs): 2692.74

System Clock Time: 1048 @ 1050

STATION	MANIFOLD PRESSURE (psi)	SPARGE POINT	WELL HEAD PRESSURE (psi)
1	18		
2	29		
3	23		
4	23		
5	26		
6	25		
7	30		
8	18		
9	26		
10	29		
11	17		
12			

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	6		
2	6		
3	6		
4	6		
5	6		
6	6		
7			
8			
9			
10			
11			
12			

ANCILLARY INFORMATION

Power Meter (Kwh): 16086 KWH

Max. Temperature (°F): 108.2°F

Max. Humidity (%RH): 87%

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: OK 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 N/A YES / NO

STATION	RUN TIME				SPARGE POINT	WELL BOX OZONE CONC. (ppm)
	A	B	C	HOURS/DAY		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
TOTAL:						

START TIMES	A	B	C	REPAIRS
1				Tightened Small leak C/T Garlock
2				B/T compressor & manifold
3				
4				
5				
6				

MODIFICATIONS

LACO ASSOCIATES
CONSULTING ENGINEERS
21 W. 4th Street
Eureka, California 95502
707-443-5054

PROJECT Bulk Plant	BY	SHEET NO. 1/1
LOCATION Fortuna	DATE	
CLIENT HPI	CHECKED	JOB NO. 4629.03
	DATE 8/22/05	

8/22/05

	HRS
SF2	33.63
TC1	23.05
BP1	26.70
TC1	19.71
BP2	24.36

		Point	O_3 Concentration		
1050	Station 1:	SP4U2	50% O_3	20 psi	1.25 SCFM
	15 min Run	SP4U3		20 psi	1.75 SCFM
1105	Station 2:	SP5U2	50% O_3	20 psi	1.40
		SP5U3		20 psi	1.80
1120	Station 3:	SP6U2	50% O_3	20 psi	0.80
		SP6U3		20 psi	1.40
1135	Station 4:	SP7U2	50% O_3	20 psi	1.20
		SP7U3		20 psi	1.40
1150	Station 1:	SP4U2	75.0% O_3	20 psi	1.25
		SP4U3		20 psi	1.75
1205	Station 2:	SP5U2	75% O_3	20 psi	1.40
		SP5U3		20 psi	1.80
1220	Station 3:	SP6U2	75% O_3	20 psi	0.80
		SP6U3		20 psi	1.40
1235	Station 4	SP7U2	75% O_3	20 psi	1.20
		SP7U3		20 psi	1.40

1250 → 1500 Repeat 1-4 x 2

SF2	36.09
TC1	27.23
BP1	26.79
TC1	23.89
BP2	28.74

LACO ASSOCIATES
CONSULTING ENGINEERS
21 W. 4th Street
Eureka, California 95502
707-443-5054

PROJECT 4629.03	BY RLD	SHEET NO. 1	
LOCATION FORTUNA BULK PLANT	DATE 8-23-05		
CLIENT	CHECKED gr	JOB NO. 4629.03	
	DATE 8/24/05		

WELL #	TIME	TEMP	DO	O_3	P.I.D.	SP
MW44	11:35	19.4	0.32	—	0.0000	—
MW43	11:55	18.9	0.14	—	0.0000	—
MW41	12:00	21.1	0.99	—	0.0000	—
MW42	12:06	20.4	0.32	—	0.0000	—
MW40	12:14	19.7	0.52	—	0.0000	—

NOTE:

1. O_3 METER WAS BEING USED IN MOBILE
2. PID SHOWED A MINIMAL READING TOWARDS END OF SPARGING FROM MW44
3. DO METER SHOWED A SUDDEN SPIKE AT BEGINING OF SPARGING

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

3 9

Project Name: FORTUNA BULK PLANT
Project No.: 4029.03
Task:
Date: 8/23/05
PM:

Tech: RLD
Mobe/Demobe time: .25/.25
Travel time: 20 min
Time on site: 3:30
Time off site: 4:27
Mileage: 45

SYSTEM READINGS

UNIT:				UNIT:			
Master Panel Runtime (Hrs): 00983/20				Master Panel Runtime (Hrs):			
O_2 Concentrator Runtime (Hrs): 02790/14				O_2 Concentrator Runtime (Hrs):			
System Clock Time: 4:18 @ 4:17				System Clock Time:			
STATION	MANIFOLD PRESSURE (psi)	SPARGE POINT	WELL HEAD PRESSURE (psi)	STATION	MANIFOLD PRESSURE (psi)	SPARGE POINT	WELL HEAD PRESSURE (psi)
1	17 PSI	1	—	1			
2	20 PSI	2	—	2			
3	21 PSI	3	—	3			
4	25 PSI	4	—	4			
5	24 PSI	5	—	5			
6	25 PSI	6	—	6			
7	26 PSI	7	—	7			
8	19 PSI	8	—	8			
9	25 PSI	9	—	9			
10	23 PSI	10	—	10			
11	17 PSI	11	—	11			
12	—		—	12			

ANCILLARY INFORMATION

Power Meter (Kwh): 16714		Max. Temperature (°F): 79.5 F	
Max. Humidity (%RH): 69%		Ventilation Fan(s):	ON / OFF
Surge Suppression:	ON / OFF	Controller Battery Voltage (volts): DNA	

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:	GOOD
Solenoid Malfunction:	1 2 3 4 5 6 7 8 9 10 11 ~~12~~ DNA	Correct Controller Program:	YES / NO
Tubing:	GOOD	Wires:	GOOD ✓

MAINTENANCE

O_2 Concentrator Filter	DNA	YES / NO	Reset Temperature/Humidity		YES / NO
Compressor Filter	GOOD	YES / NO	Check Peroxide Level	DNA	YES / NO

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

2

Project Name: BULK PLANT
Project No.: 4629.03
Tech: RLD/SJD
Date: 8-23-05

WELL ID:	METER ACCURACY RANGE				
MW43	+/- 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	—	21.2	—	—	0.41
2:37	—	20.2	—	—	0.14
2:39	—	19.7	—	—	0.17
2:41	—	19.6	—	—	0.50
2:43	—	19.4	—	—	0.21
2:45	—	19.4	—	—	0.14
2:47	—	19.3	—	—	0.27
2:49	—	19.3	—	—	0.25
2:51	—	19.3	—	—	0.21

WELL ID: MW 44 — P.I.D.

TIME	~~pH~~	~~TEMP (°C)~~	~~Ecw (µmohs)~~	~~ORP (mV)~~	~~DO (mg/L)~~
P.I.D					
MAX	PPM	0.0002	— MW44		—
2:51	TURNED	OFF	SP4		

~~WELL ID:~~ MW 43 CONT.

TIME	~~pH~~	TEMP (°C)	~~Ecw (µmohs)~~	~~ORP (mV)~~	DO (mg/L)
2:53	—	19.3	—	—	0.19
2:55	—	19.2	—	—	0.16
2:57	—	19.2	—	—	0.12
2:59	—	19.2	—	—	0.12

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 W. 4th Street
Eureka, California 95502
707-443-5054

PROJECT Bulk Plant	BY	SHEET NO.	
LOCATION Fortuna	DATE 8/24	41	
CLIENT HPI	CHECKED	JOB NO.	
	DATE 8/23/05	4629.03	

8/23/05

SP2	36.09
TC1	27.23
BP1	26.79
TC2	23.89
BP2	28.74

		Points	O_3 Concentration	PSI	Flow
0900	Station 1:	SP4U2	75%	23	1.75
		SP4U3		23	1.75
	Station 2:	SP5U2	75%	19	1.75
		SP5U3		20	1.75
	Station 3:	SP6U2	75%	25	1.0
		SP6U3		20	1.75
	Station 4:	SP7U2	75%	27	1.4
		SP7U3		28	1.5

1000-1430 Cycle points 15 minute intervals O_3 @ 100%

SP2	40.50
TC1	32.96
BP1	32.72
TC2	29.62
BP2	34.69

5.93 Hours total treatment

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: 9-7-05
PM: CJW

Tech: SJD
Mobe/Demobe time: .15/
Travel time: 1.0
Time on site: 9:40
Time off site: 11:00
Mileage: 36

SYSTEM READINGS

UNIT: C-SPARGER #5

Master Panel Runtime (Hrs): 1012.80
O_2 Concentrator Runtime (Hrs): 2819.61
System Clock Time: 9:57 AM @ 9:55 AM

STATION	MANIFOLD PRESSURE (psi)	SPARGE POINT	WELL HEAD PRESSURE (psi)
1	18		
2	22		
3	25		
4	27		
5	26		
6	25		
7	25		
8	18		
9	24		
10	23		
11	18		
12	—		

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	7		
2	8		
3	8		
4	8		
5	8		
6	8		
7			
8			
9			
10			
11			
12			

ANCILLARY INFORMATION

Power Meter (Kwh): 17904
Max. Humidity (%RH): 60 %
Surge Suppression: (ON) / OFF

Max. Temperature (°F): 99.7°
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: OK 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

STATION	RUN TIME				SPARGE POINT	WELL BOX OZONE CONC. (ppm)
	A	B	C	HOURS/DAY		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
TOTAL:						

START TIMES	A	B	C	REPAIRS
1				TIGHTEN LEAKS @ O_2 CONCENTRATOR COMPRESSOR COPPER TUBING FITTINGS @ COMPRESSOR + FILTER
2				
3				
4				
5				
6				

MODIFICATIONS