LACO ASSOCIATES
CONSULTING ENGINEERS

LEONARD M. OSBORNE • CE 38573
DAVID R. GERVAN • CE 57282
DAVID N. LINDBERG • RG 5581/CEG 1895
FRANK R. BICKNER • RG 7428
RONALD C. CHANEY, Ph.D • GE 000934

October 13, 2005

3888.01

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

Attention: Mr. Mark Verhey

Subject: Groundwater Monitoring Report; Third Quarter 2005
Blue Lake Market; 410 Railroad Avenue, Blue Lake, California
LOP No. 12229

Dear Mr. Verhey:

LACO ASSOCIATES (LACO) presents to the Humboldt County Division of Environmental Health (HCDEH) the results of groundwater monitoring for the third quarter of 2005, on behalf of Pat Folkins.

Please call if you have any questions or concerns.

Sincerely,
LACO ASSOCIATES

Caroline Levenda
Staff Geologist

Timothy D. Nelson
PG 7579, Exp. 5/31/07

PROFESSIONAL GEOLOGIST
TIMOTHY DOUGLAS NELSON
No. 7579
Exp. 05/31/07
STATE OF CALIFORNIA

CJL:jg

Attachments

cc: Pat Folkins, Blue Lake Market

P:\3000\3888 Folkins Blue Lake\Submittals\GMRs\2005\3Q05\3Q05 GMR.doc

GROUNDWATER MONITORING REPORT; THIRD QUARTER 2005

Former Blue Lake Market; 410 Railroad Avenue, Blue Lake, California

LOP No. 12229; LACO Project No. 3888.01

INTRODUCTION

Field activities at this site were conducted in accordance with generally accepted practices at this or similar locations on September 1, 2005, and concurrently with the sampling event at the Blue Lake Belting and Leather site (BLBL), conducted by SHN Consulting and Engineering (SHN) of Eureka, California. Please refer to Table A below for the current groundwater monitoring regime and to 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. A key to abbreviations is provided in Attachment 1. Groundwater monitoring data and laboratory analytical results from the concurrent sampling with the Blue Lake Market monitoring wells at BLBL was provided by SHN and is included as Attachment 2.

SITE CHRONOLOGY

- **1990:** One 550-gallon underground storage tank (UST) was removed from the site.
- **December 1994:** Three monitoring wells (MW1 through MW3) and five temporary borings (B1 through B5) were installed.
- **July 2001:** Five temporary soil borings (B6 through B10) were installed.
- **September 2005:** Four temporary borings (B11 through B14) and two monitoring wells (MW4 and MW5) were installed.
- **1994 to present:** Groundwater monitoring was conducted.

Table A: Sampling Event for June 1, 2005

MONITORING WELL ID	SCREENED INTERVAL (feet)	DTW (feet)	PURGE METHOD	WATER QUALITY PARAMETERS	ANALYTICALS		SAMPLING SCHEDULE
					ORGANICS	INORGANICS	
MW1	5-15	10.91	DHP	pH, T, ECw, ORP, DO	TPHg, BTEX, MTBE	NA	Quarterly
MW2	4-14	12.33					
MW3	5-15	12.92	NA	NA	NA	NA	DTW Only

HYDRAULIC GRADIENT AND HYDROGEOLOGY

The hydrogeology of the site has been characterized by the presence of interbedded silty sands and silty gravels. The local hydraulic gradient has historically been in the southern direction.

For the current period, the hydraulic gradient, using monitoring wells MW1, MW2, and MW3, was determined to have a S15°E trend and a 1.17 percent slope. The hydraulic gradient is consistent with historical gradient data, which generally trends in the southern direction.

The potentiometric surface generated using the hydraulic heads of the LACO and SHN monitoring wells, and the groundwater gradient calculated for this sampling event, are illustrated in Figure 3. Current and historic hydraulic gradient are presented in Table 1, current and historic hydraulic head data are presented in Table 2, and a copy of the field sampling data sheets is included as Attachment 3.

LABORATORY RESULTS

Laboratory analytical results from the September 1, 2005, quarterly sampling event are included below in Table B. Current and historical groundwater analytical data are included in Table 2, and copies of the laboratory analytical reports for this reporting period are included as Attachment 4.

Table B: Analytical Results for September 1, 2005, Quarterly Sampling Event

WELL	TPHg	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)
MW1	1,700	24	ND<25	ND<10	ND<10	ND<60
MW2	3,200	19	57	130	410	ND<30
MW3 (sample collected by SHN)	6,700	68	160	110	208	NA

DISCUSSION OF GROUNDWATER RESULTS

Current laboratory analytical data is compared to data of similar hydrologic conditions:

- *MW1* - Concentrations of total petroleum hydrocarbons as gasoline (TPHg) have remained consistent since sampling initiated at the site. Benzene concentrations have decreased one order of magnitude since the sampling event of September 2002. Toluene has been non-detect (ND) since September 2002. Methyl tertiary butyl ether (MTBE) has been ND since August 1999.
- *MW 2* - Concentrations of TPHg have decreased since the sampling event of September 2004. BTEX concentrations remain within one order of magnitude of

the sampling event of September 2004. MTBE has been ND since August 1999.

- *MW3* - Concentrations of TPHg are within the same order of magnitude of the sampling event of September 2004. BTEX concentrations remain within the same order of magnitude since sampling was initiated in 1994. MTBE has been ND since August 1999.

The analytical results for the September 1, 2005, quarterly sampling event indicate the presence of TPHg in groundwater samples taken from monitoring wells MW1, MW2, and MW3 at concentrations above the California Regional Water Quality Control Board (CRWQCB) water quality objective (WQO) of 50 μg/L.

Benzene was detected in the groundwater sample collected from monitoring well MW1 at a concentration above the WQO of 1 μg/L. Benzene, toluene, ethylbenzene, and xylenes (BTEX) were detected in groundwater samples taken from monitoring well MW2 at concentrations above the WQO's. Analyte concentrations in groundwater for the third quarter sampling event are included in Figure 4.

The laboratory noted that the gasoline components for the groundwater sample collected from monitoring well MW1 included peaks in the gasoline range. The laboratory also noted that the groundwater sampled collected from monitoring well MW2 appears to be similar to gasoline but is not of fresh gasoline standard. Results from monitoring well MW1 do not exhibit significant toluene, ethylbenzene, and xylene concentrations, indicating older petroleum hydrocarbons.

The groundwater sample from monitoring well MW3 was collected by SHN. BTEX was detected in the groundwater sample from monitoring well MW3 above the WQOs for each component of BTEX. Based on laboratory results for monitoring well MW3, it appears that the contamination detected at BLBL is migrating onto the Blue Lake Market site. The laboratory also noted that the groundwater sample taken from monitoring well MW3 appears to be similar to gasoline, but certain peaks are not of the fresh gasoline standard. These comments indicate that the site contains older fuel range material that is weathered and degraded. Additional laboratory notes are included in the case narrative of the laboratory analytical results found in Attachment 4.

CONCLUSIONS

Groundwater parameters including laboratory analytical results, groundwater elevations, and hydraulic gradient are consistent with that of previous monitoring events.

RECOMMENDATIONS

- The next quarterly groundwater monitoring event is scheduled for December 2005.
- A Report of Findings for the recent boring and monitoring well installation will be submitted in October 2005.

LIMITATIONS

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

LIST OF FIGURES, TABLES, AND ATTACHMENTS

Figure 1: Location Map
Figure 2: Site Map
Figure 3: Hydraulic Gradient Map (September 1, 2005)
Figure 4: Analyte Concentrations in Groundwater (September 1, 2005)

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

LIST OF FIGURES, TABLES, AND ATTACHMENTS (continued)

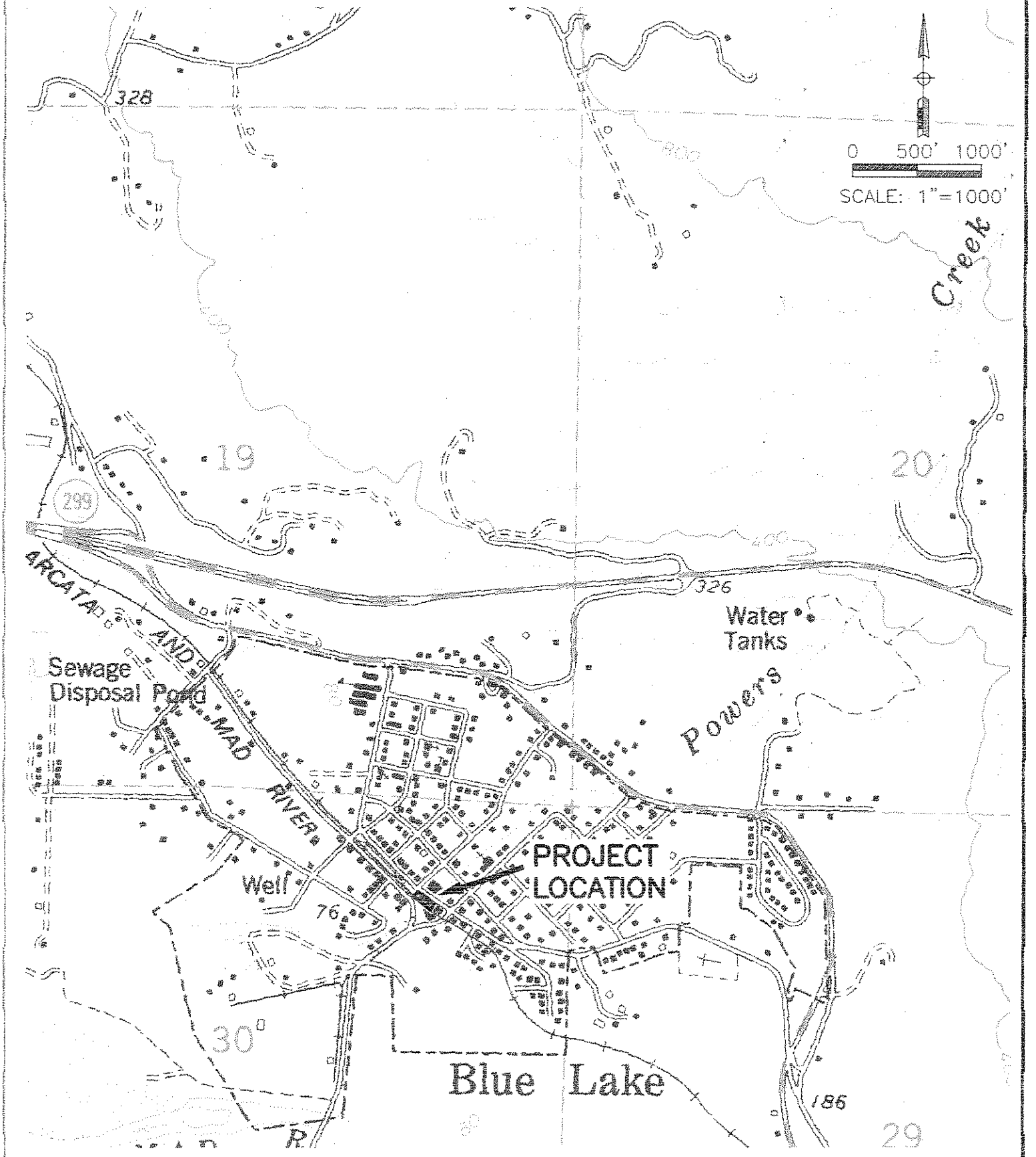
Attachment 1: Key to Abbreviations

Attachment 2: SHN Field Data Sheets and Laboratory Report

Attachment 3: Groundwater Sampling: Field Data Sheets

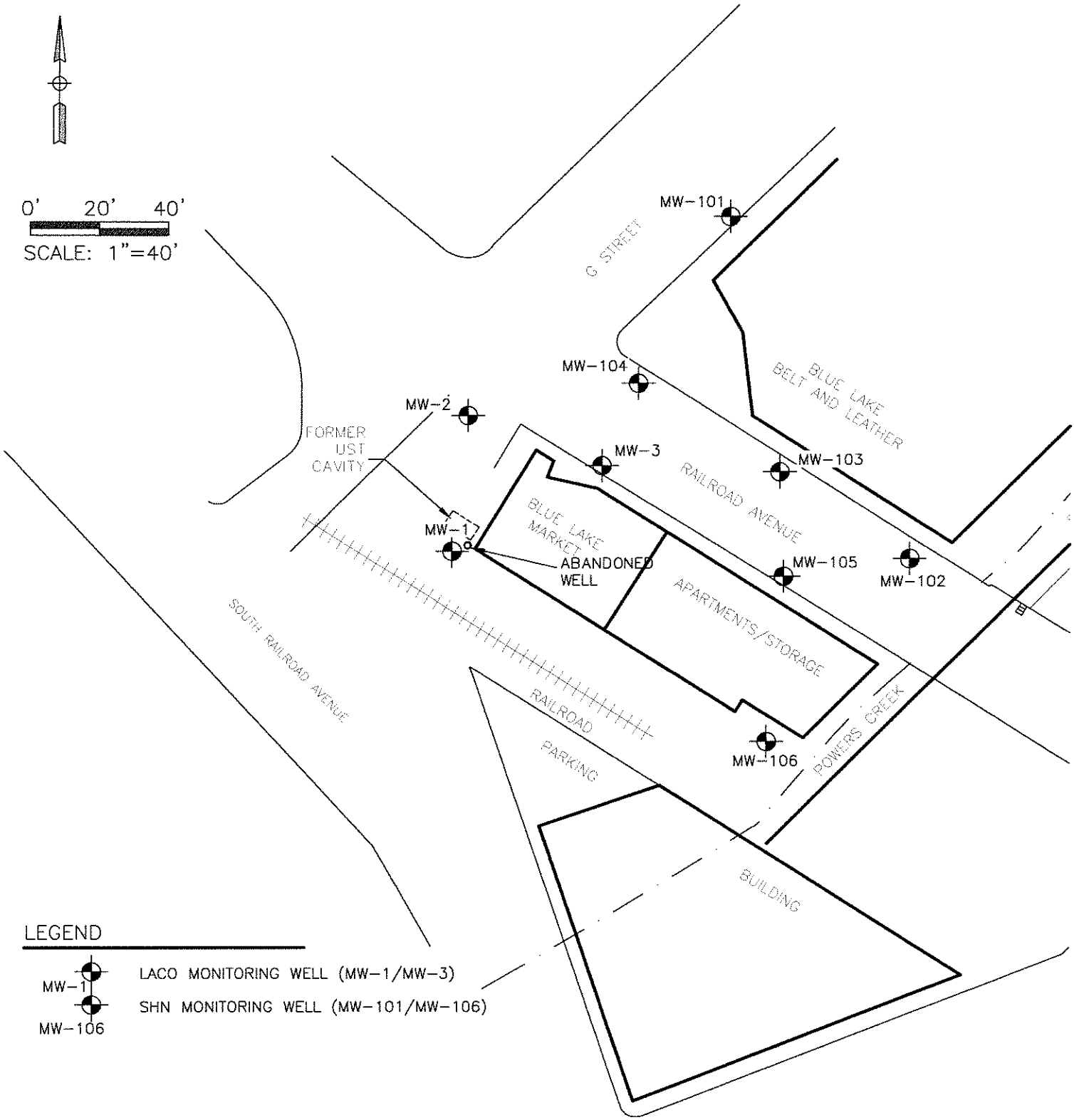
Attachment 4: Laboratory Analytical Report

LACO ASSOCIATES CONSULTING ENGINEERS 21 W 4TH ST. EUREKA, CA 95501 (707)443-5054	PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE
	CLIENT	PAT FOLKINS	DATE	9/23/05	1
	LOCATION	BLUE LAKE MARKET	CHECK		JOB NO.
		LOCATION MAP	SCALE	1"=1000'	3888.01



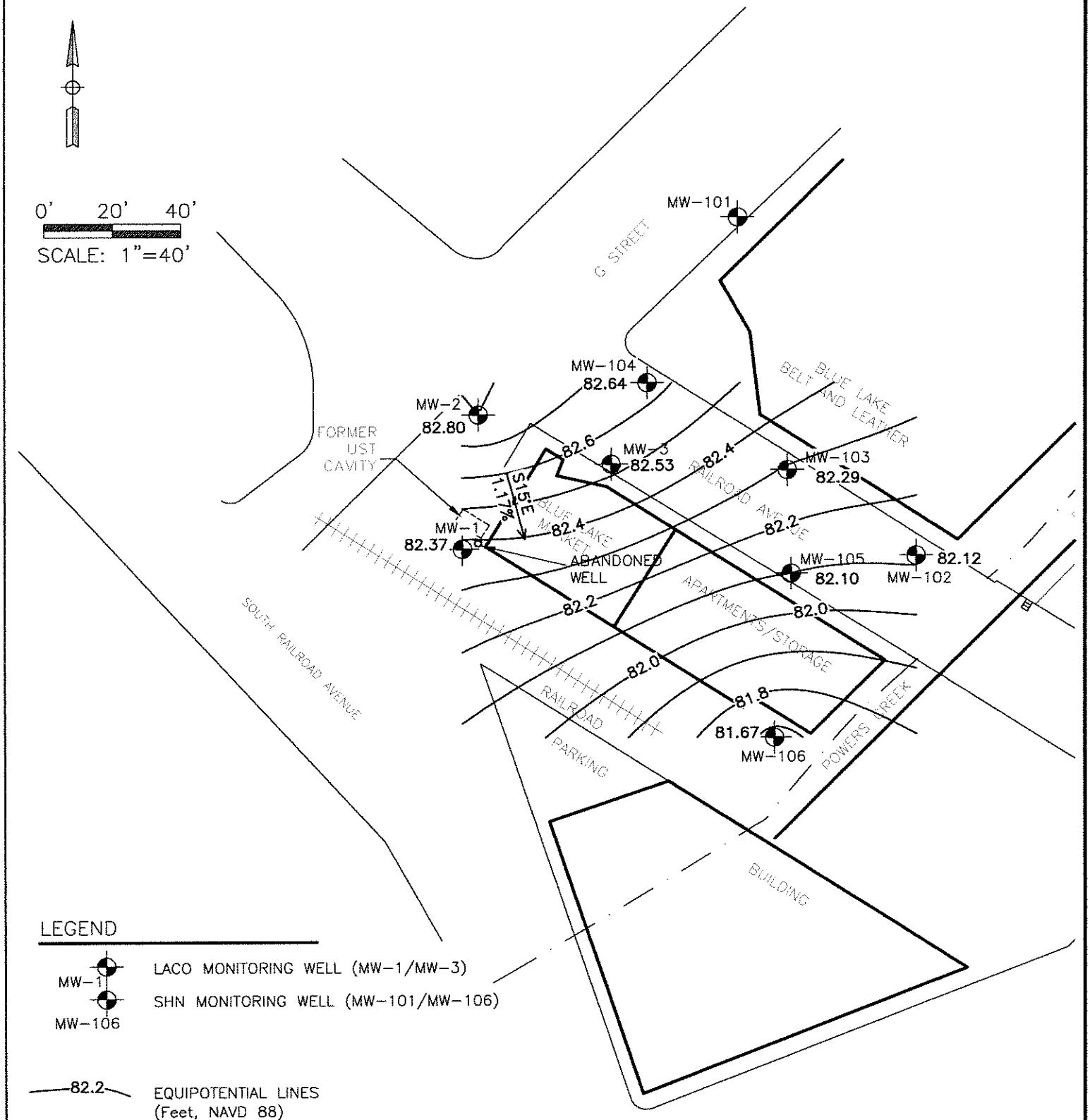
Sep 23,2005 - 3:31pm
T:\CADFILES\3500\3888 Folkins Blue Lake\dwg\ 3888-ENV-DMR-30-05-LOC.dwg

LACO ASSOCIATES CONSULTING ENGINEERS 21 W 4TH ST. EUREKA, CA 95501 (707)443-5054	PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE
	CLIENT	PAT FOLKINS	DATE	9.30/05	2
	LOCATION	BLUE LAKE MARKET	CHECK		JOB NO.
		SITE MAP	SCALE	1"=40'	3888.01



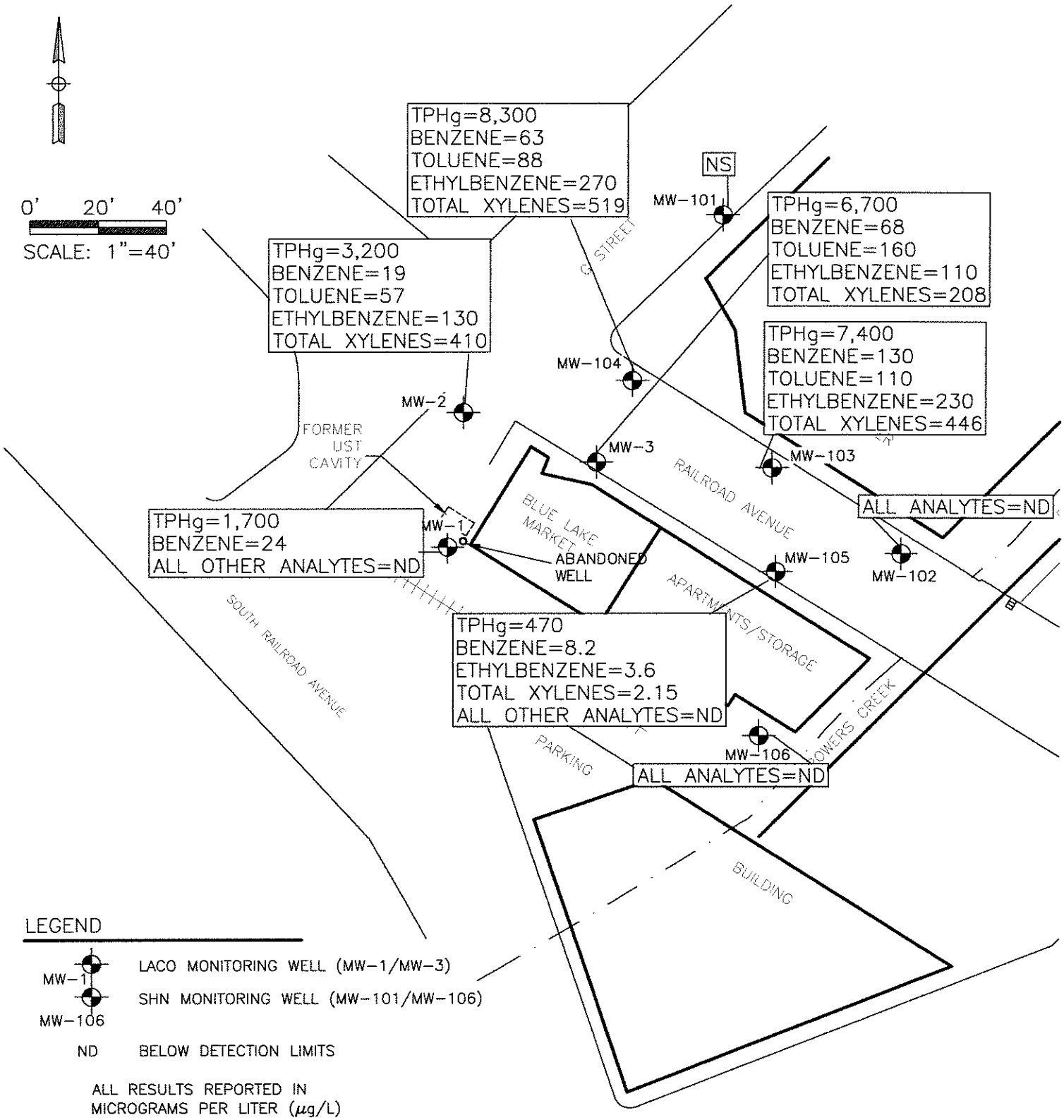
Sep 30,2005-1:27pm
T:\CADFILES\3500\3888 Folkins Blue Lake\dwg\ 3888-ENV-GMR-30-05-SITE.dwg

LACO ASSOCIATES CONSULTING ENGINEERS 21 W 4TH ST. EUREKA, CA 95501 (707)443-5054	PROJECT GROUNDWATER MONITORING REPORT	BY RJM	FIGURE 3
	CLIENT PAT FOLKINS	DATE 9/23/05	
	LOCATION BLUE LAKE MARKET	CHECK	JOB NO. 3888.01
	HYDRAULIC GRADIENT MAP (9/01/05)	SCALE 1"=40'	



Sep 30,2005-1:28pm
I:\CADFILES\3500\3888 Folkins Blue Lake\dwg\ 3888-ENV-GMR-3Q-05-SITE.dwg

LACO ASSOCIATES CONSULTING ENGINEERS 21 W 4TH ST. EUREKA, CA 95501 (707)443-5054	PROJECT GROUNDWATER MONITORING REPORT	BY RJM	FIGURE 4
	CLIENT PAT FOLKINS	DATE 9/30/05	
	LOCATION BLUE LAKE MARKET	CHECK	JOB NO. 3888.01
	ANALYTE CONCENTRATIONS IN GROUNDWATER (9/01/05)	SCALE 1"=40'	



Sep 30,2005-2:18pm
T:\CADFILES\3500\3888 Folkins Blue Lake\dwg\ 3888-ENV-GMR-30-05-SITE.dwg

TABLE 1: HISTORIC HYDRAULIC GRADIENT DATA
Blue Lake Market
410 Railroad Avenue, Blue Lake
LOP No. 12229; LACO Project No. 3888.01

Date	Flow Direction	Gradient Slope
12/29/1994	SSE	1.90%
1/12/1995	SSE	9.50%
2/27/1995	SW	3.40%
3/22/1995	SW	3.50%
4/12/1995	S	1.90%
5/8/1995	SSW	2.00%
6/6/1995	SSW	2.10%
8/11/1995	SSE	3.10%
10/31/1995	SSE	3.50%
12/14/1995	SSE	2.10%
1/15/1996	SSE	1.00%
4/5/1996	SSW	1.90%
8/2/1996	SSE	2.20%
5/2/1997	S	1.90%
8/15/1997	S	0.80%
5/13/1998	S	1.90%
5/14/1999	SSW	1.60%
8/10/1999	SSE	0.90%
12/2/1999	SSW	1.90%
3/1/2000	S	1.52%
6/1/2000	SSW	1.59%
9/14/2000	S	3.07%
12/01/00	SE	8.30%
03/01/01	SW	1.20%
06/04/01	SW	2.10%
09/07/01	SW	2.50%
12/03/01	S	2.00%
03/13/02	SW	1.60%
06/05/02	SW	1.70%
09/03/02	SE	2.61%
01/02/03	SE	2.30%
03/03/03	---	---
06/02/03	S3E	1.80%
09/11/03	S14E	1.80%
12/01/03	S42E	1.29%
12/01/03	S22E	1.20%
03/03/04	S11E	1.45%
06/09/04	S17E	1.69%
09/02/04	N52W	1.19%
12/01/04	S2W	1.58%
03/01/05	S1E	1.27%
06/01/05	S12W	2.37%
09/01/05	S15E	1.2%

TABLE 2: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Blue Lake Market
410 Railroad Avenue, Blue Lake, CA
LOP No. 12229; LACO Project No. 3888.01

	Groundwater Measurements			Analytical Results						
WELL/ Sample Date	Well Head Elevation (feet msl)	Hydraulic Head (feet msl)	Depth to Water (feet)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	FOOT NOTES
MW-1										
12/29/1994	89.45	84.44	5.01	---	---	---	---	---	---	
1/12/1995		85.35	4.10	2,000	53	16	42	49	---	
2/27/1995		83.22	6.23	---	---	---	---	---	---	
3/22/1995		82.97	6.48	---	---	---	---	---	---	
4/12/1995		83.59	5.86	1,100	40	25	49	59	---	
5/8/1995		83.11	6.34	---	---	---	---	---	---	
6/6/1995		82.60	6.85	---	---	---	---	---	---	
8/11/1995		78.99	10.46	---	---	---	---	---	---	
10/31/1995		77.30	12.15	4,100	280	37	63	46	---	
12/14/1995		84.69	4.76	---	---	---	---	---	---	
1/15/1996		84.97	4.48	---	---	---	---	---	---	
4/5/1996		83.79	5.66	4,200	180	180	230	370	ND <100	2
8/2/1996		78.54	10.91	---	---	---	---	---	---	
5/2/1997		83.39	6.06	3,900	170	50	120	105	ND <100	1,2
8/15/1997		78.20	11.25	4,700	610	75	88	81	ND <100	1,2
5/13/1998		82.71	6.74	810	25	5	33	16	ND <25	1,2
5/14/1999		82.81	6.64	2,400	220	38	96	57	97	1
8/10/1999		78.45	11.00	6,800	850	110	470	298	ND <200	1,2
12/2/1999		84.40	5.05	320	41	4.2	15	4.9	ND<40	2
3/1/2000		84.34	5.11	5,200	270	28	45	36	ND <80	1,2
6/1/2000		82.81	6.64	5,300	330	85	250	183	ND <200	1,2,4
9/13/2000		77.31	12.14	4,600	690	37	110	25	ND <140	1,2
12/1/2000		82.00	7.45	7,900	410	53	210	79	ND<200	1,3
3/1/2001		83.05	6.40	970	88	12	41	20	ND<50	1,2
6/4/2001		80.39	9.06	3,700	210	17	160	49	ND<1.3	2
9/7/2001		77.35	12.10	3,100	690	30	53	37	ND<1.0	1
12/3/2001		84.96	4.49	71	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	1,4
3/13/2002		84.52	4.93	420	11	ND<5.0	5.4	3.8	ND<27	1,2
6/5/2002		81.00	8.45	2,400	63	32	49	39	ND<70	1,2
	93.28			Monitoring well top of casings resurveyed 7/29/02						
9/3/2002		81.27	12.01	3,800	210	ND<70	29	ND<25	ND<110	1,2
1/2/2003		88.72	4.56	400	ND<2.0	ND<4.0	ND<2.0	ND<0.50	ND<10	
3/3/2003		---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	
6/2/2003		86.63	6.65	1,300	43	ND<30	29	9.6	ND<30	2, 5, 6
9/11/2003		81.80	11.48	1,400	69	ND<14	ND<15	ND<8.0	ND<50	2
12/1/2003		87.74	5.54	1,500	38	ND<20	19	14	ND<80	2, 5, 6
3/3/2004		87.60	5.68	160	ND<0.50	ND<0.50	0.54	ND<0.50	ND<1.0	8
6/9/2004		84.78	8.50	1,500	21	ND<28	33	11	ND<60	5, 6
9/2/2004		81.55	11.73	1,000	37	ND<18	ND<5.0	ND<3.0	ND<40	2, 11
12/1/2004		86.70	6.58	330	4.9	ND<4.0	1.7	0.91	ND<14	2, 11
3/1/2005		87.32	5.96	990	ND<10	ND<15	ND<15	ND<7.0	ND<35	
6/1/2005		86.81	6.47	2,600	27	ND<30	18	10	ND<80	3,6,11
9/1/2005		82.37	10.91	1,700	24	ND<25	ND<10	ND<10	ND<60	2, 6, 11
MW-2										
12/29/1994	91.27	85.14	6.13	---	---	---	---	---	---	
1/12/1995		86.19	5.08	10,000	14	290	250	1,670	---	
2/27/1995		83.77	7.50	---	---	---	---	---	---	
3/22/1995		83.69	7.58	---	---	---	---	---	---	
4/12/1995		84.27	7.00	1,400	1.0	36	24	310	---	
5/8/1995		83.82	7.45	---	---	---	---	---	---	
6/6/1995		83.33	7.94	---	---	---	---	---	---	
8/11/1995		79.71	11.56	---	---	---	---	---	---	
10/31/1995		78.39	12.88	---	---	---	---	---	---	
12/14/1995		85.32	5.95	---	---	---	---	---	---	
1/15/1996		85.29	5.98	---	---	---	---	---	---	
4/5/1996		84.45	6.82	5,500	7.3	85	92	720	ND <5.0	
8/2/1996		79.22	12.05	---	---	---	---	---	---	
5/2/1997		84.00	7.27	5,800	12	95	170	860	ND <50	2
8/15/1997		78.45	12.82	---	---	---	---	---	---	
5/13/1998		83.39	7.88	3,700	5.8	28	100	510	ND <25	1,2
5/14/1999		83.46	7.81	9,800	21	210	380	1,910	13	1
8/10/1999		78.73	12.54	2,400	15	40	67	306	ND <25	1,2
12/2/1999		85.07	6.20	14,000	33	110	560	2,290	ND<50	
3/1/2000		84.84	6.43	7,000	8.6	86	160	820	ND<30	1,3
6/1/2000		83.45	7.82	12,000	19	200	290	1,630	ND<30	1,3
9/13/2000		78.46	12.81	---	---	---	---	---	---	
12/1/2000		85.23	6.04	9,800	19	120	220	1,010	ND<30	1,2
3/1/2001		83.73	7.54	3,000	9	43	100	502	ND<30	3
6/4/2001		81.22	10.05	2,300	5	8.4	35	229.3	ND<1.3	2
9/7/2001		78.42	12.85	---	---	---	---	---	---	
12/3/2001		85.48	5.79	4,700	7.3	43	110	650	ND<1.0	1
3/13/2002		84.83	6.44	15,000	29	290	640	2,600	ND<70	1,2
6/5/2002		81.95	9.32	3,400	9.8	21	87	253	ND<11	1,2
	95.13			Monitoring well top of casings resurveyed 7/29/02						
9/3/2002		82.23	12.90	Insufficient water in the well to obtain a sample						
1/2/2003		89.35	5.78	12,000	ND<25	97	470	1,910	ND<150	
3/3/2003		87.76	7.37	270	ND<0.50	ND<5.5	2.4	12.3	ND<3.0	
6/2/2003			7.81	860	0.76	6.6	28.0	75.0	ND<3.0	5
9/11/2003		82.47	12.66	3,900	28	53	190	468	ND<35	2, 5
12/1/2003		88.02	7.11	6,700	14	62	330	1,130	ND<30	3, 5
3/3/2004		88.18	6.95	2,200	1.2	2.4	50	161	ND<1.0	5
6/9/2004		85.70	9.43	970	ND<3.0	ND<10	22	58	ND<3.0	2, 3, 5
9/2/2004		81.32	13.81	2,600	16	26	92	258	ND<30	3, 10
12/1/2004		87.25	7.88	2,200	5	15	110	291	ND<30	3, 5
3/1/2005		87.80	7.33	1,100	ND<2.0	10	19	55.9	ND<3.0	
6/1/2005		87.51	7.62	970	1.1	ND<15	9.0	21.1	ND<3.0	2,11
9/1/2005		82.80	12.33	3,200	19	57	130	410	ND<30	3, 5

TABLE 2: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Blue Lake Market
410 Railroad Avenue, Blue Lake, CA
LOP No. 12229; LACO Project No. 3888.01

	Groundwater Measurements			Analytical Results						
WELL/ Sample Date	Well Head Elevation	Hydraulic Head	Depth to Water	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	FOOT NOTES
	(feet msl)	(feet msl)	(feet)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
MW-3										
12/29/1994	91.61	84.66	6.95	---	---	---	---	---	---	
1/12/1995		85.38	6.23	21,000	130	590	170	770	---	
2/27/1995		84.63	6.98	---	---	---	---	---	---	
3/22/1995		84.53	7.08	---	---	---	---	---	---	
4/12/1995		83.98	7.63	14,000	130	430	360	2,080	---	
5/8/1995		83.61	8.00	---	---	---	---	---	---	
6/6/1995		83.09	8.52	---	---	---	---	---	---	
8/11/1995		79.18	12.43	---	---	---	---	---	---	
10/31/1995		77.59	14.02	---	---	---	---	---	---	
12/14/1995		84.89	6.72	---	---	---	---	---	---	
1/15/1996		85.09	6.52	---	---	---	---	---	---	
4/5/1996		84.31	7.30	11,000	120	330	260	980	ND <500	2
8/2/1996		78.73	12.88	---	---	---	---	---	---	
5/2/1997		83.64	7.97	7,600	46	110	79	459	ND <100	2
8/15/1997		78.18	13.43	7,600	160	440	160	630	ND <100	2
5/13/1998		83.16	8.45	9,100	76	280	280	1,390	ND <500	2
5/14/1999		83.25	8.36	5,200	74	160	180	640	140	
8/10/1999		78.42	13.19	14,000	130	310	130	510	ND <200	1,2
12/2/1999		84.32	7.29	6,400	87	340	200	810	ND <300	2
12/2/1999		Duplicate		5,200	80	260	210	710	ND <400	2
3/1/2000		84.36	7.25	7,200	64	390	180	730	ND <150	1,3
6/1/2000		83.25	8.36	7,100	73	330	170	630	ND <140	2
9/13/2000		77.68	13.93	---	---	---	---	---	---	
12/1/2000		83.54	8.07	13,000	79	290	230	720	ND<150	1,3
3/1/2001		83.43	8.18	8,500	78	330	200	680	ND<150	3
6/4/2001		80.70	10.91	4,800	14	14	68	103.4	ND<0.5	2
9/7/2001		77.41	14.20	---	---	---	---	---	---	
12/3/2001		84.83	6.78	9,900	24	52	210	454	ND<1.0	1
	(feet msl)	(feet msl)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
3/13/2002		84.28	7.33	---	---	---	---	---	---	
6/5/2002		81.38	10.23	8,100	28	ND<140	69	147	ND<250	1,2
	95.45			Monitoring well top of casings resurveyed 7/29/02						
9/3/2002		81.57	13.88	Insufficient water in the well to obtain a sample						
1/2/2003		88.50	6.95	23,000	390	2,700	810	4,000	ND<150	
3/3/2003		87.50	7.95	7,500	32	ND<180	62	415	ND<200	
6/2/2003		87.03	8.42	5,600	36	ND<110	86	180	ND<170	5, 6, 7
9/11/2003		82.04	13.41	9,900	230	210	120	680	ND<270	5, 6
12/1/2003		87.62	7.83	10,000	77	120	200	594	ND<400	5, 6
3/3/2004		87.84	7.61	4,500	7.5	12	48	286	ND<1.0	5
6/9/2004		85.06	10.39	4,800	ND<50	ND<100	55	89	ND<120	5, 6
9/2/2004		81.77	13.68	4,500	59	50	73	109	ND<140	5, 6
12/1/2004		87.06	8.39	7,500	120	340	180	554	ND<300	3, 4, 5
3/1/2005		87.61	7.84	11,000	160	690	370	1,010	---	5
6/1/2005		87.36	8.09	--	--	--	--	--	--	--
6/1/2005 (SHN Results)		87.38	8.07	10,000	120	480	340	820	--	--
9/1/2005		82.53	12.92	Not sampled						
9/1/05 (SHN Results)		82.53	12.92	6,700	68	160	110	208	--	5
MW-101										
3/1/2001	91.89	84.30	7.59	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
6/4/2001		82.19	9.70	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
9/4/2001		78.25	13.64	---	---	---	---	---	---	
12/3/2001		86.05	5.84	160	ND<0.5	ND<4.0	ND<0.5	ND<0.5	ND<3.0	1,2
3/1/2002		84.71	7.18	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
6/5/2002		82.76	9.13	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
				Monitoring well top of casings resurveyed 7/29/02						
9/3/2002	95.70	82.04	13.66	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
12/2/2002		82.54	13.16	64	ND<0.5	ND<2.8	ND<0.5	ND<0.5	ND<3.0	
3/3/2003		88.32	7.38	ND<50	ND<0.5	ND<2.8	ND<0.5	ND<0.5	ND<3.0	
6/2/2003		87.89	7.81	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	
9/11/2003		---	---	---	---	---	---	---	---	
12/1/2003		88.39	7.31	50	ND<0.50	ND<1.4	ND<0.50	ND<0.50	---	2, 8, 9
3/3/2004		89.10	6.60	ND<50	ND<0.50	ND<1.4	ND<0.50	ND<0.50	---	
6/1/2004		87.76	7.94	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	
9/2/2004		82.30	13.40	90	ND<0.50	ND<3.0	ND<0.50	ND<0.50	---	2, 8
12/1/2004		87.74	7.96	No sample collected						
3/1/2005		87.90	7.80	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	12
6/1/2005		87.69	8.01	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	--
9/1/2005		--	DRY	No sample collected						
MW-102										
3/1/2001	91.19	83.27	7.92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
6/4/2001		80.76	10.43	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
9/4/2001		77.51	13.68	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
12/3/2001		84.36	6.83	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
3/1/2002		83.63	7.56	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
6/5/2002		81.32	9.87	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
				Monitoring well top of casings resurveyed 7/29/02						
9/3/2002	94.99	81.26	13.73	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
12/2/2002		81.78	13.21	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
3/3/2003		87.37	7.62	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
6/2/2003		86.97	8.02	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	
9/11/2003		---	---	---	---	---	---	---	---	
12/1/2003		87.34	7.65	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	9
3/3/2004		87.76	7.23	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	
6/1/2004		86.70	8.29	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	
9/2/2004		81.56	13.43	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	
12/1/2004		86.97	8.02	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	
3/1/2005		87.33	7.66	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	12
6/1/2005		87.19	7.80	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--
9/1/2005		82.12	12.87	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--

TABLE 2: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
Blue Lake Market
410 Railroad Avenue, Blue Lake, CA
LOP No. 12229; LACO Project No. 3888.01

	Groundwater Measurements			Analytical Results						
WELL/ Sample Date	Well Head Elevation (feet msl)	Hydraulic Head (feet msl)	Depth to Water (feet)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	FOOT NOTES
MW-103										
3/1/2001	91.57	83.36	8.21	2,900	27	37	35	63	ND<60	1,2
6/4/2001		80.86	10.71	3,200	42	ND<80	16	30.4	ND<30	1,2
9/4/2001		77.58	13.99	1,300	18	ND<40	8	5.4	ND<32	1, 2
12/3/2001		84.58	6.99	5,700	150	160	95	219	ND<150	1,2
3/1/2002		83.68	7.89	5,700	100	170	83	380	ND<150	2
6/5/2002		81.36	10.21	3,900	25	ND<110	35	50	ND<80	1,2
				Monitoring well top of casings resurveyed 7/29/02						
9/3/2002	95.41	81.35	14.06	1,600	21	ND<35	11	7.0	ND<30	1,2
12/2/2002		81.91	13.50	5,700	280	110	190	336	ND<120	
3/3/2003		87.44	7.97	4,400	47	ND<200	74	229	---	
6/2/2003		87.03	8.38	2,400	14	ND<70	15	17.3	ND<30	3, 5, 6
9/11/2003		---	---	---	---	---	---	---	---	
12/1/2003		87.48	7.93	3,500	49	ND<90	48	58.6	---	8
3/3/2004		87.87	7.54	5,800	100	160	130	343	---	
6/1/2004		86.81	8.60	2,100	15	ND<110	32	40	---	
9/2/2004		81.68	13.73	1,800	36	18	24	28.8	---	5
12/1/2004		87.09	8.32	2,400	42	40	41	47.4	---	5
3/1/2005		87.50	7.91	3,700	58	82	67	125	---	5
6/1/2005		87.32	8.09	2,700	33	47	46	79	--	--
9/1/2005		82.29	13.12	7,400	130	110	230	446	--	5
MW-104										
6/4/2001	91.48	81.54	9.94	17,000	260	320	40	1,510	ND<300	2
9/4/2001		77.81	13.67	9,800	120	ND<200	330	546	ND<400	2
12/3/2001		85.33	6.15	33,000	870	520	1,600	4,650	ND<900	1,2
3/1/2002		84.13	7.35	20,000	400	450	930	2,480	ND<650	2
6/5/2002		82.08	9.40	21,000	370	880	890	2,610	ND<600	2
				Monitoring well top of casings resurveyed 7/29/02						
9/3/2002	95.32	81.52	13.80	7,400	100	ND<200	270	361	ND<150	1,2
12/2/2002		82.31	13.01	13,000	260	210	630	1,191	ND<320	
3/3/2003		87.81	7.51	20,000	430	560	950	2,330	---	
6/2/2003		87.39	7.93	26,000	540	1,100	1,300	3,630	ND<600	6
9/11/2003		---	---	---	---	---	---	---	---	
12/1/2003		87.96	7.36	25,000	760	520	1,300	2,700	---	5
3/3/2004		88.56	6.76	21,000	400	460	1,000	2,010	---	
6/1/2004		87.27	8.05	26,000	500	680	1,200	2,420	---	
9/2/2004		82.03	13.29	3,700	55	49	140	168	---	5
12/1/2004		87.31	8.01	16,000	430	480	990	2,090	---	4, 5
3/1/2005		87.81	7.51	17,000	200	350	590	1,280	---	5
6/1/2005		87.60	7.72	13,000	130	230	490	1,010	--	--
9/1/2005		82.64	12.68	8,300	63	88	270	519	--	5
MW-105										
6/4/2001	91.32	80.57	10.57	430	ND<0.5	ND<7.0	ND<1.2	ND<0.5	ND<3.0	1,2
9/4/2001		77.47	13.85	650	ND<4.0	ND<9.0	ND<1.5	ND<1.2	ND<13	1,2
12/3/2001		84.48	6.84	4,700	11	ND<40	18	9	ND<100	1,2,4
3/1/2002		83.63	7.69	260	1.7	ND<6.0	ND<0.50	ND<0.50	ND<6.0	1,2
6/5/2002		81.31	10.01	140	ND<0.50	ND<3.0	ND<0.50	ND<0.50	ND<3.0	1,2
				Monitoring well top of casings resurveyed 7/29/02						
9/3/2002	95.15	81.24	13.91	360	ND<0.50	ND<10	ND<1.0	ND<1.0	ND<3.0	1,2
12/2/2002		81.76	13.39	680	6.0	ND<11	2.1	0.82	ND<13	
3/3/2003		87.40	7.75	280	ND<1.5	ND<5.5	ND<1.0	ND<1.0	---	
6/2/2003		86.98	8.17	210	ND<0.50	ND<5.5	ND<0.50	ND<0.50	ND<3.0	2, 5
9/11/2003		---	---	---	---	---	---	---	---	
12/1/2003		87.39	7.76	1,500	ND<5.0	ND<40	3.8	1.60	---	2, 8
3/3/2004		87.80	7.35	390	ND<2.0	ND<17	0.93	0.53	---	
6/1/2004		86.71	8.44	210	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	
9/2/2004		81.54	13.61	210	ND<0.50	ND<9.0	ND<0.50	ND<0.50	---	2, 8
12/1/2004		87.00	8.15	590	ND<2.0	ND<18	1.3	0.73	---	2, 6, 8
3/1/2005		87.39	7.76	680	ND<2.5	ND<30	ND<2.0	ND<1.5	---	2, 6, 8
6/1/2005		87.21	7.94	510	1.7	9.8	0.50	0.57	--	--
9/1/2005		82.10	13.05	470	8.2	ND<15	3.6	2.15	--	6,11
MW-106										
3/1/2001	88.88	82.97	5.91	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
6/4/2001		80.43	8.45	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
9/4/2001		76.96	11.92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
12/3/2001		83.92	4.96	ND<50	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<3.0	2
3/1/2002		83.29	5.59	ND<50	0.74	ND<0.50	ND<0.50	ND<0.50	ND<3.0	
6/5/2002		80.97	7.91	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
				Monitoring well top of casings resurveyed 7/29/02						
9/3/2002	92.70	80.71	11.99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
12/2/2002		81.27	11.43	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
3/3/2003		87.06	5.64	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
6/2/2003		86.66	6.04	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	
9/11/2003		---	---	---	---	---	---	---	---	
12/1/2003		86.99	5.71	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	9
3/3/2004		87.46	5.24	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	
6/1/2004		86.43	6.27	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	
9/2/2004		81.05	11.65	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	
12/1/2004		86.72	5.98	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	
3/1/2005		87.08	5.62	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	12
6/1/2005		86.91	5.79	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--
9/1/2005		81.67	11.03	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--

Reference NAVD 88. Elevations established 7/29/02 by R. Smith, LS using Caltrans HPGN monument "D CA 01 RB" North Arcata at Giuntoli & Hwy 101
Hydraulic head data and laboratory analytical results from monitoring wells MW-101 through MW-106 are provided by SHN.

Attachment 1

KEY: LABORATORY ABBREVIATIONS AND NOTATIONS - MONITORING WELL DATA
Blue Lake Market
410 Railroad Avenue, Blue Lake
LOP No. 17779; LACO Project No. 3888.01

KEY TO ABBREVIATIONS		
AL	--	action limit; a non-enforceable California drinking water standard; shown in parentheses.
BTEX	--	Benzene; Toluene; Ethylbenzene; m,p- and o- Xylenes
CO_2	--	Carbon dioxide
COC	--	Chain of custody
CRWQCB	--	California Regional Water Quality Control Board
DHP	--	Down-hole-pump (submersible pump)
DIPE	--	Di-isopropyl Ether
DO	--	Dissolved Oxygen
DTW	--	Depth-to-Water
ECw	--	Electrical Conductivity in water
ETBE	--	Ethyl Tertiary Butyl Ether
FP	--	Free Product
MCL	--	Maximum contaminant level, an enforceable California drinking water standard.
MTBE	--	Methyl Tertiary Butyl Ether
ND<50	--	non-detect at reporting limits shown
NOT ACTIVE	--	Sample not analyzed for parameter during current sampling event
ORP	--	Oxidation Reduction Potential
PCE	--	Perchloroethene same as tetrachloroethene
pH	--	Potential of hydrogen
SGC	--	Silica gel cleanup
T	--	Temperature
TAME	--	Tertiary Amyl Methyl Ether
TBA	--	Tetiary Butyl Alcohol
TBF	--	Tertiary Butyl Formate
Tot	--	Taste and odor threshold, a non-enforceable California drinking water standard.
TPHg	--	Total Petroleum Hydrocarbons as Gasoline
µg/L	--	Micro grams per liter (parts per billion)
---	--	Not analyzed or not available

Note: Not all abbreviations in this key are used in this report.

[1] The laboratory noted that the sample did not have typical pattern of fresh gasoline.
All gasoline results reported represent the amount of material in the gasoline range of molecular weights only.

[2] The laboratory noted that some reporting limits was raised due to matrix interference.

[3] The laboratory noted that some results were reported ND with a dilution due to matrix interference.

[4] The laboratory noted that the surrogate for the sample was above the upper acceptance limit due to matrix interference.

[5] The laboratory noted that the sample is 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.

[6] The laboratory noted that the sample was diluted and the reporting limits were raised additionally due to matrix interference.

[7] The laboratory noted that the surrogate for the sample could not be quantified due to a large amount of early eluting material.

[8] The laboratory noted that the sample did not present a peak pattern consistent with that of gasoline.
The reported results represent the amount of meterial in the gasoline range.

[9] The laboratory noted that the surrogate for the sample was reported as not quantifiable (NQ) due to an auto-injector malfunction.

[10] The laboratory noted that the sample was initially analyzed within the 14 day holding time, and additional dilutions for some analtyes were required and were analyzed 1 day outside of the holding time.

[11] The laboratory noted that the sample includes the reported gasoline components in addition to other peaks in the gasoline range.

[12] The laboratory noted that the surrogate recoveries were below the lower acceptance limits for the sample.
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.

Attachment 2

CONSULTING ENGINEERS & GEOLOGISTS, INC.
480 Hemsted Drive * Redding, CA 96002* Tel: 530.221.5424 * FAX: 530.221.0135 *E-mail: shninfo@shn-redding.com
812 W. Wabash * Eureka, CA 95501 * Tel: 707.441.8855 * FAX: 707.441.8877 *E-mail: shninfo@shn-engr.com

DAILY FIELD REPORT

JOB NO 097309
Page 1 of 12

PROJECT NAME: Blue Lake Belting and Leather	CLIENT/OWNER: Blue Lake Belting and Leather	DAILY FIELD REPORT SEQUENCE NO: 1
GENERAL LOCATION OF WORK: Blue Lake, CA.	OWNER/CLIENT REPRESENTATIVE: Charles Hantzinger	DATE: 9-1-05 / DAY OF WEEK: Thursday
TYPE OF WORK: Quarterly Sampling	WEATHER: Clear to Hazy	PROJECT ENGINEER/ SUPERVISOR: Mike Foget
SOURCE & DESCRIPTION OF FILL MATERIAL	KEY PERSONS CONTACTED	TECHNICIAN: David R. Paine

DESCRIBE EQUIPMENT USED FOR HAULING, SPREADING, WATERING, CONDITIONING, & COMPACTING

0936 arrived at site, Removed lids and caps on all 9 wells, MW-3 had water in flush mount bailed out.
0907 I started taking water level Readings decaying the sounder after each well by scrubbing it with liquinex then Rinsing it with DI water.
0933 I started taking DO Readings, secured OBS-1 and OBS 2 with caps and lids, secured MW-1 with cap and lid.
0939 LACO on site.
1019 I started purging MW-106 with a disposable bailer, purge water was caught in a graduated 1 gal. bucket.
1042 I started purging MW-102 with a disposable bailer, purge water was caught in a graduated 3 gal. bucket.
1105 I sampled MW-106, secured well with cap and lid. LACO off site.
1112 I started purging MW-105 with a disposable bailer, purge water was caught in a graduated 1 gal. bucket.
1130 I sampled MW-102, secured well with cap and lid.
1139 I started purging MW-3 with a disposable bailer, purge water was caught in a graduated 1 gal. bucket.
1200 I sampled MW-105, secured well with cap and lid.
1210 I started purging MW-103 with a disposable bailer purge water was caught in a graduated 5 gal. bucket, well went dry.
1230 I sampled MW-3, secured well with cap and lid.
1247 I started purging MW-104 with a disposable bailer, purge water was caught in a graduated 5 gal. bucket.
1315 I sampled MW-103 secured well with cap and lid.
1325 I sampled MW-104, secured well with cap and lid.
1342 OFF SITE

LACO was on site today.

COPY GIVEN TO:

REPORTED BY: David R. Paine

CONSULTING ENGINEERS & GEOLOGISTS, INC.
480 Hemsted Drive • Redding, CA 96002 • Tel: 530.221.5424 • FAX: 530.221.0135 • E-mail: shrinfo@shn-redding.com
812 W. Wabash • Eureka, CA 95501 • Tel: 707.441.8855 • FAX: 707.441.8877 • E-mail: shrinfo@shn-engr.com

DAILY FIELD REPORT

JOB NO 097309

Page 2 of 12

PROJECT NAME: Blue Lake Belting and Leather	CLIENT/OWNER: Blue Lake Belting and Leather	DAILY FIELD REPORT SEQUENCE NO:
GENERAL LOCATION OF WORK: Blue Lake, CA.	OWNER/CLIENT REPRESENTATIVE: Charles Hantzinger	DATE: 9-1-05 / DAY OF WEEK: Thursday
TYPE OF WORK: Quarterly Sampling	WEATHER: Hazy clear	PROJECT ENGINEER/ SUPERVISOR: Mike Foget
SOURCE & DESCRIPTION OF FILL MATERIAL	KEY PERSONS CONTACTED	TECHNICIAN: David R. Paine

DESCRIBE EQUIPMENT USED FOR HAULING, SPREADING, WATERING, CONDITIONING, & COMPACTING

Note: All decon water and purge water was caught then poured into a 50 gal plastic drum that I brought in the truck then transported to SHN's 1,000 gal PWST located at 812 W. Wabash Avenue, Eureka, CA 32 gallons total.

COPY GIVEN TO:

REPORTED BY: David R. Paine

SHN CONSULTING ENGINEERS & GEOLOGISTS, INC.
812 W. Wabash • Eureka, CA 95501-2138 • 707/441-8855 • FAX: 707/441-8877 • shninfo@shn-engr.com

Groundwater Elevations

Job No.: 097309 Name: David R. Paine

Client: CHARLES HUNTZINGER Date: 9-1-05

Location: BLUE LAKE, CA Weather: Clear

Sample Location	Time of Reading	Top of Casing Elevation (feet)	Depth To Water (feet)	Water Surface Elevation (feet)
MW101	0910	92.27	Dry	—
MW-102	0913	91.19	12.87	78.32
MW-103	0918	91.57	13.12	78.45
MW-104	0922	91.48	12.68	78.80
MW-105	0916	91.32	13.05	78.27
MW-106	0907	88.88	11.03	77.85
MW-3	0920	91.63	12.92	78.71
OBS-1	0924	89.45	Dry	—
OBS-2	0925	91.29	8.52	82.77

SHN CONSULTING ENGINEERS & GEOLOGISTS, INC.
812 W. Wabash • Eureka, CA 95501-2138 • 707/441-8855 • FAX: 707/441-8877 • shninfo@shn-engr.com

EQUIPMENT CALIBRATION SHEET

Name: David R. Paine

Project Name: Blue Lake Belting and Leather

Reference No.: 097309

Date: 9-1-05

Equipment: ☒ pH & EC ☐ PID ☐ $GTCO_2$ ☐ GTLEL
☐ Turbidity ☒ Other Dissolved Oxygen Meter YSI 95

Description of Calibration Procedure and Results:

pH & EC meter is calibrated using a 2 buffer method with 7.01 and 4.01, the EC (conductivity) is set at 1413 µS.

DO meter is self calibrating with the Altimeter set at 1.

SHN CONSULTING ENGINEERS & GEOLOGISTS, INC.
812 W. Wabash • Eureka, CA 95501-2138 • 707/441-8855 • FAX: 707/441-8877 • shninfo@shn-engr.com

Water Sampling Data Sheet

Project Name: Blue Lake Belting and Leather
Date/Time: 9-1-05
Project No.: 097309
Sampler Name: David R. Paine
Location: Blue Lake, CA
Sample Type: Ground water
Well #: MW-101
Weather: Clear
Hydrocarbon Thickness/Depth (feet): NA
Key Needed: YES Dolphin

Total Well Depth (feet)	-	Initial Depth to Water (feet)	=	Height of Water Column (feet)	x	0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well)	=	1 Casing Volume (gal)
13.00	-	DRY	=		x	0.163	=	

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
							0 gal.	
							0. gal.	
							gal.	
	No Flow	No		Sample			gal.	
	thru cell						gal.	
	Sample Time							

Purge Method: Hand bail
Total Volume Removed: 0.00 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
~~MW-101~~	~~3 - 40ml VOA's~~	~~YES / HCL~~	~~NCL~~	~~TPHG / BTEX~~

Well Condition: Good
Remarks: Dry, no sample
Recharged to at sampling Time

SHN CONSULTING ENGINEERS & GEOLOGISTS, INC.
812 W. Wabash • Eureka, CA 95501-2138 • 707/441-8855 • FAX: 707/441-8877 • shninfo@shn-engr.com

Water Sampling Data Sheet

Project Name: Blue Lake Belting and Leather
Date/Time: 9-1-05
Project No.: 097309
Sampler Name: David R. Paine
Location: Blue Lake, CA
Sample Type: Ground water
Well #: MW-106
Weather: Clear
Hydrocarbon Thickness/Depth (feet): NA
Key Needed: YES Dolphin

Total Well Depth (feet)	-	Initial Depth to Water (feet)	=	Height of Water Column (feet)	x	0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well)	=	1 Casing Volume (gal)
15.00	-	11.03	=	3.97	x	0.163	=	0.65

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
0938	0.92						0 gal.	
1019	↓	20	167				0.25 gal.	
1027	↓			116	59.5°	5.90	0.75 gal.	
1031	No Flow			107	59.4°	5.91	1.50 gal.	
1035	than cell			106	59.6°	5.96	2 gal.	
1105	Sample Time							

Purge Method: Hand bail
Total Volume Removed: 2.00 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-106	3 - 40ml VOA's	YES / HCL	NCL	TPHG / BTEX

Well Condition: Good

Remarks:

Recharged to 11.04 at sampling Time

SHN CONSULTING ENGINEERS & GEOLOGISTS, INC.
812 W. Wabash • Eureka, CA 95501-2138 • 707/441-8855 • FAX: 707/441-8877 • shninfo@shn-engr.com

Water Sampling Data Sheet

Project Name: Blue Lake Belting and Leather
Date/Time: 9-1-05
Project No.: 097309
Sampler Name: David R. Paine
Location: Blue Lake, CA
Sample Type: Ground water
Well #: MW-102
Weather: Clear
Hydrocarbon Thickness/Depth (feet): NA
Key Needed: YES Dolphin

Total Well Depth (feet)	-	Initial Depth to Water (feet)	=	Height of Water Column (feet)	x	0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well)	=	1 Casing Volume (gal)
19.50	-	12.87	=	6.63	x	0.163	=	1.08

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
0946	1.61						0 gal.	
1042	↓	20	181				0.25 gal.	
1050	↓			105	58.8°	5.98	1.25 gal.	
1054	No Flow			107	58.7°	6.02	2.25 gal.	
1058	thru cell			104	58.8°	6.01	3.25 gal.	
1130	Sample Time							

Purge Method: Hand bail
Total Volume Removed: 3.25 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-102	3 - 40ml VOA's	YES / HCL	NCL	TPHG / BTEX

Well Condition: Good
Remarks:
Recharged to 12.87 at sampling Time

SHN CONSULTING ENGINEERS & GEOLOGISTS, INC.
812 W. Wabash • Eureka, CA 95501-2138 • 707/441-8855 • FAX: 707/441-8877 • shninfo@shn-engr.com

Water Sampling Data Sheet

Project Name: Blue Lake Belting and Leather
Date/Time: 9-1-05
Project No.: 097309
Sampler Name: David R. Paine
Location: Blue Lake, CA
Sample Type: Ground water
Well #: MW-105
Weather: Clear
Hydrocarbon Thickness/Depth (feet): NA
Key Needed: YES Dolphin

Total Well Depth (feet)	-	Initial Depth to Water (feet)	=	Height of Water Column (feet)	x	0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well)	=	1 Casing Volume (gal)
15.10	-	13.05	=	2.05	x	0.163	=	0.33

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
0952	0.79						0 gal.	
1112	↓	30	-19				0.15 gal.	
1120				128	62.2°	6.11	0.45 gal.	
1123	No Flow			116	62°	6.14	0.80 gal.	
1126	than cell			115	61.9°	6.12	1.05 gal.	
1200	Sample Time							

Purge Method: Hand bail
Total Volume Removed: 1.05 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-105	3 - 40ml VOA's	YES / HCL	NCL	TPHG / BTEX

Well Condition: Good

Remarks:

Recharged to 13.06 at sampling Time

SHN CONSULTING ENGINEERS & GEOLOGISTS, INC.
512 W. Wabash • Eureka, CA 95501-2138 • 707/441-8855 • FAX: 707/441-8877 • shninfo@shn-engr.com

Water Sampling Data Sheet

Project Name: Blue Lake Belting and Leather
Date/Time: 9-1-05
Project No.: 097309
Sampler Name: David R. Paine
Location: Blue Lake, CA
Sample Type: Ground water
Well #: MW-3
Weather: Clear
Hydrocarbon Thickness/Depth (feet): NA
Key Needed: yes Dolphin

Total Well Depth (feet)	-	Initial Depth to Water (feet)	=	Height of Water Column (feet)	x	0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well)	=	1 Casing Volume (gal)
14.70	-	12.92	=	1.78	x	0.163	=	0.29

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1004	0.75						0 gal.	
1139		40	-48				0.15 gal.	
1146				122	63.1°	6.01	0.35 gal.	
1150	No Flow			127	63°	6.09	0.65 gal.	
1153	thru cell			129	62.9°	6.14	1 gal.	
1156				127	62.9°	6.15	1.20 gal.	
1230	sample	Time						

Purge Method: Hand Bail
Total Volume Removed: 1.20 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-3	3 - 40ml VOAs	yes HCL	NCL	TPHG/BTEX

Well Condition: Good
Remarks: Purge water has an odor.
Recharged to 12.92 at sample time

SHN CONSULTING ENGINEERS & GEOLOGISTS, INC.
812 W. Wabash • Eureka, CA 95501-2138 • 707/441-8855 • FAX: 707/441-8877 •shninfo@shn-engr.com

Water Sampling Data Sheet

Project Name: Blue Lake Belting and Leather
Date/Time: 9-1-05
Project No.: 097309
Sampler Name: David R. Paine
Location: Blue Lake, CA
Sample Type: Ground water
Well #: MW-103
Weather: Clear
Hydrocarbon Thickness/Depth (feet): NA
Key Needed: YES Dolphin

Total Well Depth (feet)	-	Initial Depth to Water (feet)	=	Height of Water Column (feet)	x	0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well)	=	1 Casing Volume (gal)
18.65	-	13.12	=	5.53	x	0.653	=	3.61

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
0958	0.76						0 gal.	
1210	↓	40	-11				1.25 gal.	
1218	↓			157	63.7°	6.10	4 gal.	
1223	No Flow			135	63.9°	6.12	7.50 gal.	Dry
1241	than still			126	63.6°	6.11	12 gal.	Dry
1315	Sample Time							

Purge Method: Hand bail
Total Volume Removed: 12.00 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-103	3 - 40ml Vom's	YES / HCL	NCL	TPHG / BTEX

Well Condition: Good
Remarks: Purge water has an odor
Recharged to 13.11 at sampling Time

SHN CONSULTING ENGINEERS & GEOLOGISTS, INC.
612 W. Wabash • Eureka, CA 95501-2138 • 707/441-8855 • FAX: 707/441-8877 •shninfo@shn-engr.com

Water Sampling Data Sheet

Project Name: Blue Lake Belting and Leather
Date/Time: 9-1-05
Project No.: 097309
Sampler Name: David R. Paine
Location: Blue Lake, CA
Sample Type: Ground water
Well #: MW-104
Weather: Clear
Hydrocarbon Thickness/Depth (feet): NA
Key Needed: YES Dolphin

Total Well Depth (feet)	-	Initial Depth to Water (feet)	=	Height of Water Column (feet)	x	0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well)	=	1 Casing Volume (gal)
16.55	-	12.68	=	3.87	x	0.653	=	2.53

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1011	0.76						0 gal.	
1247	↓	20	-68				1.25 gal.	
1256	↓			138	66.2°	6.30	3.25 gal.	
1300	No Flow			123	66°	6.33	5.25 gal.	
1303	than cell			125	65.9°	6.40	8 gal.	
1325	Sample Time							

Purge Method: Hand bail
Total Volume Removed: 8.00 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-104	3 - 40ml VOA's	YES / HCL	NCL	TPHG / BTEX

Well Condition: Good
Remarks: Purge water has an odor
Recovered to 12.90 at sampling Time.

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

P. 1 of 1

Chain of Custody

LABORATORY NUMBER:

Attention: Mike Foget
Results & Invoice to: SHN
Address: 812 West Wabash Avenue
Eureka, CA 95501
Phone: 441-8855
Copies of Report to:

Sampler (Sign & Print): [illegible] David R. Paine

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: [illegible]
Project Name: [illegible]
Purchase Order Number:

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS: TPH / BTEX	CONTAINER	PRESERVATIVE
	[illegible]	9/1/05	1105	GW	X		
	[illegible]		1130		X		
	[illegible]		1200		X		
	[illegible]		1230		X		
	[illegible]		1315		X		
	[illegible]		1325		X		

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

EDF

Global ID # T060 [illegible]

No MTBE on report

[illegible]

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
[illegible] David R. Paine	9/1/05	[illegible]	[illegible]

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.

September 15, 2005

SHN Consulting Engineers and Geologists
812 West Wabash Avenue
Eureka, CA 95501

Order No.: 0509032
Invoice No.: 52771
PO No.:
ELAP No. 1247-Expires July 2006

Attn: Mike Foget

RE: 097309, Blue Lake Belting and Leather

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	MW-106
02A	MW-102
03A	MW-105
04A	MW-3
05A	MW-103
06A	MW-104

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 | Lab Manager

Jesse G. Chaney, Jr.
Laboratory Director

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

Printed on Recycled Paper

CLIENT: SHN Consulting Engineers and Geologists
Project: 097309, Blue Lake Belting and Leather
Lab Order: 0509032

CASE NARRATIVE

TPH as Gasoline:
Samples MW-3, MW-103 and MW-104 appear to be similar to gasoline but certain peak ratios are not that of a fresh gasoline standard. The reported results represent the amount of material in the gasoline range.

The gasoline value for sample MW-105 includes the reported gasoline components in addition to other peaks in the gasoline range.

Sample MW-105 was diluted and the reporting limits raised additionally due to matrix interference.

NORTH COAST LABORATORIES
5680 West End Road • Arcata, California 95521-9202 • 707-822-4649 • FAX 707-822-6831
Printed on Recycled Paper

Date: 15-Sep-05
WorkOrder: 0509032

ANALYTICAL REPORT

Client Sample ID: MW-106 **Received:** 9/1/05 **Collected:** 9/1/05 11:05
Lab ID: 0509032-01A

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Benzene	ND	0.50	µg/L	1.0		9/13/05
Toluene	ND	0.50	µg/L	1.0		9/13/05
Ethylbenzene	ND	0.50	µg/L	1.0		9/13/05
m,p-Xylene	ND	0.50	µg/L	1.0		9/13/05
o-Xylene	ND	0.50	µg/L	1.0		9/13/05
Surrogate: Cis-1,2-Dichloroethylene	95.5	85-115	% Rec	1.0		9/13/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		9/13/05

Client Sample ID: MW-102 **Received:** 9/1/05 **Collected:** 9/1/05 11:30
Lab ID: 0509032-02A

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Benzene	ND	0.50	µg/L	1.0		9/13/05
Toluene	ND	0.50	µg/L	1.0		9/13/05
Ethylbenzene	ND	0.50	µg/L	1.0		9/13/05
m,p-Xylene	ND	0.50	µg/L	1.0		9/13/05
o-Xylene	ND	0.50	µg/L	1.0		9/13/05
Surrogate: Cis-1,2-Dichloroethylene	93.5	85-115	% Rec	1.0		9/13/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		9/13/05

NORTH COAST LABORATORIES
5680 West End Road • Arcata, California 95521-9202 • 707-822-4649 • FAX 707-822-6831
Printed on Recycled Paper

Date: 15-Sep-05
WorkOrder: 0509032

ANALYTICAL REPORT

Client Sample ID: MW-105 **Received:** 9/1/05 **Collected:** 9/1/05 12:00
Lab ID: 0509032-03A

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Benzene	8.2	5.0	µg/L	10		9/13/05
Toluene	ND	15	µg/L	10		9/13/05
Ethylbenzene	3.6	0.50	µg/L	1.0		9/13/05
m,p-Xylene	0.95	0.50	µg/L	1.0		9/13/05
o-Xylene	1.2	0.50	µg/L	1.0		9/13/05
Surrogate: Cis-1,2-Dichloroethylene	95.2	85-115	% Rec	10		9/13/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	470	50	µg/L	1.0		9/13/05

Client Sample ID: MW-3 **Received:** 9/1/05 **Collected:** 9/1/05 12:30
Lab ID: 0509032-04A

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Benzene	68	5.0	µg/L	10		9/13/05
Toluene	160	50	µg/L	100		9/13/05
Ethylbenzene	110	50	µg/L	100		9/13/05
m,p-Xylene	180	5.0	µg/L	10		9/13/05
o-Xylene	28	5.0	µg/L	10		9/13/05
Surrogate: Cis-1,2-Dichloroethylene	95.3	85-115	% Rec	100		9/13/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	6,700	5,000	µg/L	100		9/13/05

NORTH COAST LABORATORIES
5680 West End Road • Arcata, California 95521-9202 • 707-822-4649 • FAX 707-822-6831
Printed on Recycled Paper

Date: 15-Sep-05
WorkOrder: 0509032

ANALYTICAL REPORT

Client Sample ID: MW-103 **Received:** 9/1/05 **Collected:** 9/1/05 13:15
Lab ID: 0509032-05A

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Benzene	130	50	µg/L	100		9/13/05
Toluene	110	50	µg/L	100		9/13/05
Ethylbenzene	230	50	µg/L	100		9/13/05
m,p-Xylene	410	50	µg/L	100		9/13/05
o-Xylene	36	5.0	µg/L	10		9/13/05
Surrogate: Cis-1,2-Dichloroethylene	98.7	85-115	% Rec	100		9/13/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	7,400	500	µg/L	10		9/13/05

Client Sample ID: MW-104 **Received:** 9/1/05 **Collected:** 9/1/05 13:25
Lab ID: 0509032-06A

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Benzene	63	5.0	µg/L	10		9/13/05
Toluene	88	5.0	µg/L	10		9/13/05
Ethylbenzene	270	50	µg/L	100		9/13/05
m,p-Xylene	480	50	µg/L	100		9/13/05
o-Xylene	39	5.0	µg/L	10		9/13/05
Surrogate: Cis-1,2-Dichloroethylene	99.3	85-115	% Rec	100		9/13/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	8,300	5,000	µg/L	100		9/13/05

NORTH COAST LABORATORIES
5680 West End Road • Arcata, California 95521-9202 • 707-822-4649 • FAX 707-822-6831
Printed on Recycled Paper

North Coast Laboratories, Ltd.

Date: 15-Sep-05

CLIENT: SHN Consulting Engineers and Geologists
Work Order: 0509032
Project: 097309, Blue Lake Belting and Leather

QC SUMMARY REPORT

Method Blank

Sample ID **MB-9/12/05** Batch ID: **R36893** Test Code: **BTXEW** Units: **µg/L** Analysis Date **9/12/05 11:12:55 PM** Prep Date
Client ID: Run ID: **ORGC8_050912B** SeqNo: **530934**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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	0.928	0.10	1.00	0	92.8%	85	115	0			

Sample ID **MB-9/12/05** Batch ID: **R36889** Test Code: **TPHCGW** Units: **µg/L** Analysis Date **9/12/05 11:12:55 PM** Prep Date
Client ID: Run ID: **ORGC8_050912A** SeqNo: **530893**

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: 15-Sep-05

CLIENT: SHN Consulting Engineers and Geologists
Work Order: 0509032
Project: 097309, Blue Lake Belting and Leather

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID **LCS-05578** Batch ID: **R36893** Test Code: **BTXEW** Units: **µg/L** Analysis Date **9/12/05 7:07:31 PM** Prep Date
Client ID: Run ID: **ORGC8_050912B** SeqNo: **530931**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	5.181	0.50	5.00	0	104%	85	115	0			
Toluene	5.270	0.50	5.00	0	105%	85	115	0			
Ethylbenzene	5.221	0.50	5.00	0	104%	85	115	0			
m,p-Xylene	10.28	0.50	10.0	0	103%	85	115	0			
o-Xylene	5.082	0.50	5.00	0	102%	85	115	0			
Cis-1,2-Dichloroethylene	1.11	0.10	1.00	0	111%	85	115	0			

Sample ID **LCSD-05578** Batch ID: **R36893** Test Code: **BTXEW** Units: **µg/L** Analysis Date **9/12/05 7:42:44 PM** Prep Date
Client ID: Run ID: **ORGC8_050912B** SeqNo: **530932**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	5.158	0.50	5.00	0	103%	85	115	5.18	0.438%	15	
Toluene	5.168	0.50	5.00	0	103%	85	115	5.27	1.95%	15	
Ethylbenzene	5.208	0.50	5.00	0	104%	85	115	5.22	0.239%	15	
m,p-Xylene	10.24	0.50	10.0	0	102%	85	115	10.3	0.351%	15	
o-Xylene	5.048	0.50	5.00	0	101%	85	115	5.08	0.681%	15	
Cis-1,2-Dichloroethylene	1.09	0.10	1.00	0	109%	85	115	1.11	1.83%	15	

Sample ID **LCS-05579** Batch ID: **R36889** Test Code: **TPHCGW** Units: **µg/L** Analysis Date **9/12/05 8:52:57 PM** Prep Date
Client ID: Run ID: **ORGC8_050912A** SeqNo: **530890**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	539.9	50	500	0	108%	85	115	0			

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

CLIENT: SHN Consulting Engineers and Geologists
Work Order: 0509032
Project: 097309, Blue Lake Belting and Leather

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID **LCSD-05579** Batch ID: **R36889** Test Code: **TPHCGW** Units: **µg/L** Analysis Date **9/12/05 9:27:57 PM** Prep Date

Client ID: Run ID: **ORGC8_050912A** SeqNo: **530891**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	545.3	50	500	0	109%	85	115	540	0.991%	15	

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

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

Chain of Custody

0509032

LABORATORY NUMBER:

Attention: Mike Foget
Results & Invoice to: SHN
Address: 812 West Wabash Avenue
Eureka, CA 95501
Phone: 441-8855
Copies of Report to:

Sampler (Sign & Print): David R. Paine David R. Paine

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: 097309
Project Name: Blue Lake Belting and Leather
Purchase Order Number:

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS: TPH-G / BTEX	CONTAINER: 9	PRESERVATIVE: b
	MW-106	9/1/05	1105	GW	X		
	MW-102	↓	1130	↓	X		
	MW-105	↓	1200	↓	X		
	MW-3	↓	1230	↓	X		
	MW-103	↓	1315	↓	X		
	MW-104	↓	1325	↓	X		

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

EDF

Global ID# T0602300012

No MTBE on report

Cooler temp = 11.2C

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
David R. Paine David R. Paine	9/1/05 1300	[signature]	9/1/05 1355

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

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

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

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

Attachment 3

LACO ASSOCIATES
CONSULTING ENGINEERS

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

Project Name: BLUE LAKE MARKET
Project No.: 3888.01
Date: 9-1-05
Golbal ID No.: T0602300170
PM: TDN

Tech: RLD
Mob/Demob time: .25/.25
Travel time: .75
Time on site: 9:30
Time off site: 11:00
Mileage: 34

WELL No.:		MW1		MW2		MW3					
DIAMETER (in)		2.0		2.0		2.0					
SCREENED INTERVAL (ft)		5-15		4-14		5-15					
DEPTH TO WATER (ft)		10.91		12.33		12.92					
		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)	59	42	-6	-5						
	DO (mg/L)	0.50	0.89	0.71	0.77						
	OTHER (units)	—		—							
PURGE	TIME	10:07	10:13	10:35	10:43						
	METHOD (DHP/CB/B)	DHP		DHP							
	RATE (Lpm)	0.17		0.19							
	VOLUME (L)	1.0		1.5							
	COLOR	CLEAR	CLEAR	LIGHT GREY	LIGHT GREY						
	ODOR	LIGHT SULFUR [illegible]		LIGHT FUEL							
	INTAKE DEPTH (FEET)	13.0		13.5							
SAMPLE	TIME	10:15		10:45							
	METHOD (DHP/CB/B)	DHP		DHP							
	ANALYTES	TPHg/BTEX		TPHg/BTEX		MEASURE ONLY					
	TOTAL DRAWDOWN (FEET)	0.31		0.12							
	REMARKS	—		—							
WELL CONDITION		ALL 3 THREE BOLTS STRIPPED		GOOD		GOOD					
WASTE DRUMS		1 DOT ONSITE									

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: BLUE LAKE MARKET
Project No.: 3888.01

Tech: RLD
Date: 9-1-05

WELL ID:	METER ACCURACY RANGE				
MW1	+/- 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)
10:09	—	—	—	50	0.89
10:41	—	—	—	44	0.89
10:13	—	—	—	42	0.89

WELL ID: MW2

TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:37	—	—	—	-2	1.26
10:39	—	—	—	-4	0.85
10:41	—	—	—	-5	0.77
10:43	—	—	—	-5	0.77

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)

Attachment 4

NORTH COAST LABORATORIES LTD.

RECEIVED
LACO ASSOCIATES
SEP 16 2005
BY: JG

September 15, 2005

Pvt. cust. paying on pickup

,

Attn: Pat Folkins

DRG
FDN

RE: 3888.01, BLUE LAKE MARKET

Order No.: 0509025
Invoice No.: 52770
PO No.: TASK
ELAP No. 1247-Expires July 2006

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	3888-MW1-W
02A	3888-MW2-W
03A	3888-QCTB-W

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

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

REPORT CERTIFIED BY

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

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

Printed on Recycled Paper

North Coast Laboratories, Ltd. **Date:** *15-Sep-05*

CLIENT: Pvt. cust. paying on pickup
Project: 3888.01, BLUE LAKE MARKET
Lab Order: 0509025

CASE NARRATIVE

TPH as Gasoline:
Sample 3888-MW2-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 3888-MW1-W includes the reported gasoline components in addition to other peaks in the gasoline range.

BTEX:
Some reporting limits were raised for sample 3888-MW1-W due to matrix interference.

Sample 3888-MW1-W was diluted and the reporting limits raised additionally due to matrix interference.

Sample 3888-MW2-W was reported as ND with a dilution due to matrix interference.

NORTH COAST LABORATORIES
5680 West End Road • Arcata, California 95521-9202 • 707-822-4649 • FAX 707-822-6831
Printed on Recycled Paper

Date: 15-Sep-05
WorkOrder: 0509025

ANALYTICAL REPORT

Client Sample ID: 3888-MW1-W **Received:** 9/1/05 **Collected:** 9/1/05 0:00
Lab ID: 0509025-01A

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	60	µg/L	1.0		9/13/05
Benzene	24	5.0	µg/L	10		9/13/05
Toluene	ND	25	µg/L	10		9/13/05
Ethylbenzene	ND	10	µg/L	1.0		9/13/05
m,p-Xylene	ND	10	µg/L	1.0		9/13/05
o-Xylene	ND	10	µg/L	1.0		9/13/05
Surrogate: Cis-1,2-Dichloroethylene	104	85-115	% Rec	10		9/13/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	1,700	50	µg/L	1.0		9/13/05

Client Sample ID: 3888-MW2-W **Received:** 9/1/05 **Collected:** 9/1/05 0:00
Lab ID: 0509025-02A

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	30	µg/L	10		9/13/05
Benzene	19	5.0	µg/L	10		9/13/05
Toluene	57	5.0	µg/L	10		9/13/05
Ethylbenzene	130	50	µg/L	100		9/13/05
m,p-Xylene	380	50	µg/L	100		9/13/05
o-Xylene	30	5.0	µg/L	10		9/13/05
Surrogate: Cis-1,2-Dichloroethylene	98.9	85-115	% Rec	10		9/13/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	3,200	500	µg/L	10		9/13/05

NORTH COAST LABORATORIES
5680 West End Road • Arcata, California 95521-9202 • 707-822-4649 • FAX 707-822-6831
Printed on Recycled Paper

Date: 15-Sep-05
WorkOrder: 0509025

ANALYTICAL REPORT

Client Sample ID: 3888-QCTB-W **Received:** 9/1/05 **Collected:** 9/1/05 0:00
Lab ID: 0509025-03A

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		9/12/05
Benzene	ND	0.50	µg/L	1.0		9/12/05
Toluene	ND	0.50	µg/L	1.0		9/12/05
Ethylbenzene	ND	0.50	µg/L	1.0		9/12/05
m,p-Xylene	ND	0.50	µg/L	1.0		9/12/05
o-Xylene	ND	0.50	µg/L	1.0		9/12/05
Surrogate: Cis-1,2-Dichloroethylene	91.3	85-115	% Rec	1.0		9/12/05

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		9/12/05

NORTH COAST LABORATORIES
5680 West End Road • Arcata, California 95521-9202 • 707-822-4649 • FAX 707-822-6831
Printed on Recycled Paper

North Coast Laboratories, Ltd.

Date: 15-Sep-05

CLIENT: Pvt. cust. paying on pickup
Work Order: 0509025
Project: 3888.01, BLUE LAKE MARKET

QC SUMMARY REPORT

Method Blank

Sample ID **MB-9/12/05** Batch ID: **R36893** Test Code: **BTXEW** Units: **µg/L** Analysis Date **9/12/05 11:12:55 PM** Prep Date
Client ID: Run ID: **ORGC8_050912B** SeqNo: **530934**

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	0.928	0.10	1.00	0	92.8%	85	115	0			

Sample ID **MB-9/12/05** Batch ID: **R36889** Test Code: **TPHCGW** Units: **µg/L** Analysis Date **9/12/05 11:12:55 PM** Prep Date
Client ID: Run ID: **ORGC8_050912A** SeqNo: **530893**

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: 15-Sep-05

CLIENT: Pvt. cust. paying on pickup
Work Order: 0509025
Project: 3888.01, BLUE LAKE MARKET

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID **LCS-05578** Batch ID: **R36893** Test Code: **BTXEW** Units: **µg/L** Analysis Date **9/12/05 7:07:31 PM** Prep Date
Client ID: Run ID: **ORGC8_050912B** SeqNo: **530931**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	40.32	3.0	40.0	0	101%	85	115	0			
Benzene	5.181	0.50	5.00	0	104%	85	115	0			
Toluene	5.270	0.50	5.00	0	105%	85	115	0			
Ethylbenzene	5.221	0.50	5.00	0	104%	85	115	0			
m,p-Xylene	10.28	0.50	10.0	0	103%	85	115	0			
o-Xylene	5.082	0.50	5.00	0	102%	85	115	0			
Cis-1,2-Dichloroethylene	1.11	0.10	1.00	0	111%	85	115	0			

Sample ID **LCSD-05578** Batch ID: **R36893** Test Code: **BTXEW** Units: **µg/L** Analysis Date **9/12/05 7:42:44 PM** Prep Date
Client ID: Run ID: **ORGC8_050912B** SeqNo: **530932**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	40.43	3.0	40.0	0	101%	85	115	40.3	0.277%	15	
Benzene	5.158	0.50	5.00	0	103%	85	115	5.18	0.438%	15	
Toluene	5.168	0.50	5.00	0	103%	85	115	5.27	1.95%	15	
Ethylbenzene	5.208	0.50	5.00	0	104%	85	115	5.22	0.239%	15	
m,p-Xylene	10.24	0.50	10.0	0	102%	85	115	10.3	0.351%	15	
o-Xylene	5.048	0.50	5.00	0	101%	85	115	5.08	0.681%	15	
Cis-1,2-Dichloroethylene	1.09	0.10	1.00	0	109%	85	115	1.11	1.83%	15	

Sample ID **LCS-05579** Batch ID: **R36889** Test Code: **TPHCGW** Units: **µg/L** Analysis Date **9/12/05 8:52:57 PM** Prep Date
Client ID: Run ID: **ORGC8_050912A** SeqNo: **530890**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	539.9	50	500	0	108%	85	115	0			

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

CLIENT: Pvt. cust. paying on pickup
Work Order: 0509025
Project: 3888.01, BLUE LAKE MARKET

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID **LCSD-05579** Batch ID: **R36889** Test Code: **TPHCGW** Units: **µg/L** Analysis Date **9/12/05 9:27:57 PM** Prep Date

Client ID: Run ID: **ORGC8_050912A** SeqNo: **530891**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	545.3	50	500	0	109%	85	115	540	0.991%	15	

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

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

Chain of Custody

LABORATORY NUMBER: 0509025

Attention: PAT FOLKINS
Results & Invoice to:
Address: 2020 ARDAGH COURT
EUREKA, CA 95503
Phone:
Copies of Report to: Tim Nelson-LACO
Sampler (Sign & Print): RLD

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: 3888.01
Project Name: BLUE LAKE MARKET
Purchase Order Number: task

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	PRESERVATIVE	CONTAINER	ANALYSIS: TPHg/BTEX
	3888-MW1-W	9-1-05	AM	GW	b	9	3
	3888-MW2-W	↓	↓	↓			3
	3888-QCTB-W						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
Cooler temp=5.1°C

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
STEVE DAVIS	9-1-05 2:18pm	Jennifer Martel	9-1-05 1420

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