First Quarter 2005 Groundwater Monitoring and Remediation System O&M Report

Blue Lake Belting and Leather Works
Case No. 12012

Prepared for:

Blue Lake Belting and Leather Works

SHN Consulting Engineers & Geologists, Inc.
812 W. Wabash Ave.
Eureka, CA 95501-2138
707 / 441-8855

April 2005
097309

CONSULTING ENGINEERS & GEOLOGISTS, INC.
812 W. Wabash • Eureka, CA 95501-2138 • 707-441-8855 • Fax 707-441-8877 • info@shn-eureka.com

Reference: 097309

April 4, 2005

Ms. Leanne Schroyer
Humboldt County Division of Environmental Health
100 H Street, Suite 100
Eureka, CA 95501

Subject: First Quarter 2005 Groundwater Monitoring and Remediation System O&M Report, Blue Lake Belting and Leather Works, 411 Railroad Avenue, Blue Lake, California; Case No. 12012

Dear Ms. Schroyer:

The attached report presents the results of groundwater monitoring and remediation system operation and maintenance activities conducted during the first quarter 2005, at the Blue Lake Belting and Leather Works. Quarterly monitoring of wells MW-101 through MW-106, and LACO Associates well MW-3, occurred at the site on March 1, 2005. SHN Consulting Engineers & Geologists, Inc. (SHN) performed this work on behalf of Blue Lake Belting and Leather Works. Site monitoring activities coincide with site monitoring at the Blue Lake Market, conducted by LACO Associates during the first quarter 2005.

Please call me at 707-441-8855 if you have any questions.

Sincerely,

SHN Consulting Engineers & Geologists, Inc.

Mike Foget, P.E.
Senior Project Engineer

MKF/RMR:ap:med
Enclosure: 1st Quarter 2005 Monitoring Report

copy w/encl: Chuck Huntzinger, BLB&LW

Reference: 097309

First Quarter 2005 Groundwater Monitoring and Remediation System O&M Report

Blue Lake Belting and Leather Works
Case No. 12012

Prepared for:

Blue Lake Belting and Leather Works

Consulting Engineers & Geologists, Inc.
812 West Wabash Avenue
Eureka, CA 95501-2138
707-441-8855

April 2005

QA/QC: MKF___

G:\1997\097309 BLB&LW\rpt\1stQ05GWM&O&M-rpt.doc

Table of Contents

Page

1.0 Introduction 1
- 1.1 Background 1
- 1.2 Previous Site Activities 1

2.0 Field Activities 2
- 2.1 Monitoring Well Sampling 2
- 2.2 Laboratory Analysis 2
- 2.3 Equipment Decontamination Procedures 2
- 2.4 Investigation-Derived Waste Management 3

3.0 Groundwater Monitoring Results 3
- 3.1 Hydrogeology 3
- 3.2 Groundwater Analytical Results 3
- 3.3 Natural Attenuation Parameters 4

4.0 Remediation System Operation & Maintenance 5

5.0 Discussion and Recommendations 5

6.0 References Cited 6

Appendices
- A. Field Notes
- B. Historic Monitoring Data
- C. Laboratory Analytical Reports

List of Illustrations

Figures — Follows Page

1. Site Location Map 1
2. Site Plan 1
3. Groundwater Contours, March 1, 2005 3
4. Groundwater Analytical Results, March 1, 2005 4

Tables — Page

1. Groundwater Elevations, March 1, 2005 3
2. Groundwater Analytical Results, March 1, 2005 4
3. DO, DCO_2, and ORP Measurement Results, March 1, 2005 5

Abbreviations and Acronyms

<	denotes a value that is “less than” the method detection limit
kWhr	kilowatt hour
mg/L	milligrams per Liter
mg/L CaCO3	milligrams per Liter of Calcium Carbonate
mV	millivolts
min	minute
ppm	parts per million
psi	pounds per square inch
scfh	standard cubic feet per hour
ug/L	micrograms per Liter

BLB&LW	Blue Lake Belting and Leather Works
BTEX	Benzene, Toluene, Ethylbenzene, and total Xylenes
DCO_2	Dissolved Carbon Dioxide
DIPE	Diisopropyl Ether
DO	Dissolved Oxygen
EC	Electrical Conductivity
EPA	U.S. Environmental Protection Agency
ETBE	Ethyl Tertiary-Butyl Ether
HCDEH	Humboldt County Division of Environmental Health
LACO	LACO Associates
MTBE	Methyl Tertiary-Butyl Ether
MW-#	Monitoring Well-#
NA	Not Analyzed/Not Applicable/Not Available
NM	Not Measured
NS	Not Sampled
ORP	Oxidation-Reduction Potential
RAIR	Remedial Action Initiation Report
SHN	SHN Consulting Engineers & Geologists, Inc.
TAME	Tertiary-Amyl Methyl Ether
TBA	Tertiary-Butyl Alcohol
TOC	Top of Casing
TPHG	Total Petroleum Hydrocarbons as Gasoline
UST	Underground Storage Tank

1.0 Introduction

This report presents the results of groundwater monitoring activities completed during the first quarter of 2005 at the Blue Lake Belting and Leather Works (BLB&LW). The site is located at 411 Railroad Avenue in Blue Lake, California (Figure 1). SHN Consulting Engineers & Geologists, Inc. (SHN) conducted the quarterly groundwater-monitoring event on March 1, 2005.

1.1 Background

The BLB&LW parcel (Figure 2) was previously utilized as an automobile service station with three underground fuel storage tanks located on site:

- One 650-gallon gasoline Underground Storage Tank (UST) is located beneath the floor of what is presently the BLB&LW shop area.
- One 1,000-gallon UST was located in the sidewalk along G Street.
- A 750-gallon UST was previously located along the fueling island (Subsurface Investigation Work Plan, Blue Lake Market, LACO, April 1992).

The 650-gallon UST passed a pressure test conducted by Precision Tank Testing Company, and, under approval from the Humboldt County Division of Environmental Health (HCDEH), was abandoned in place and subsequently filled with concrete. This tank has since received regulatory closure and is not a part of the current site investigation.

1.2 Previous Site Activities

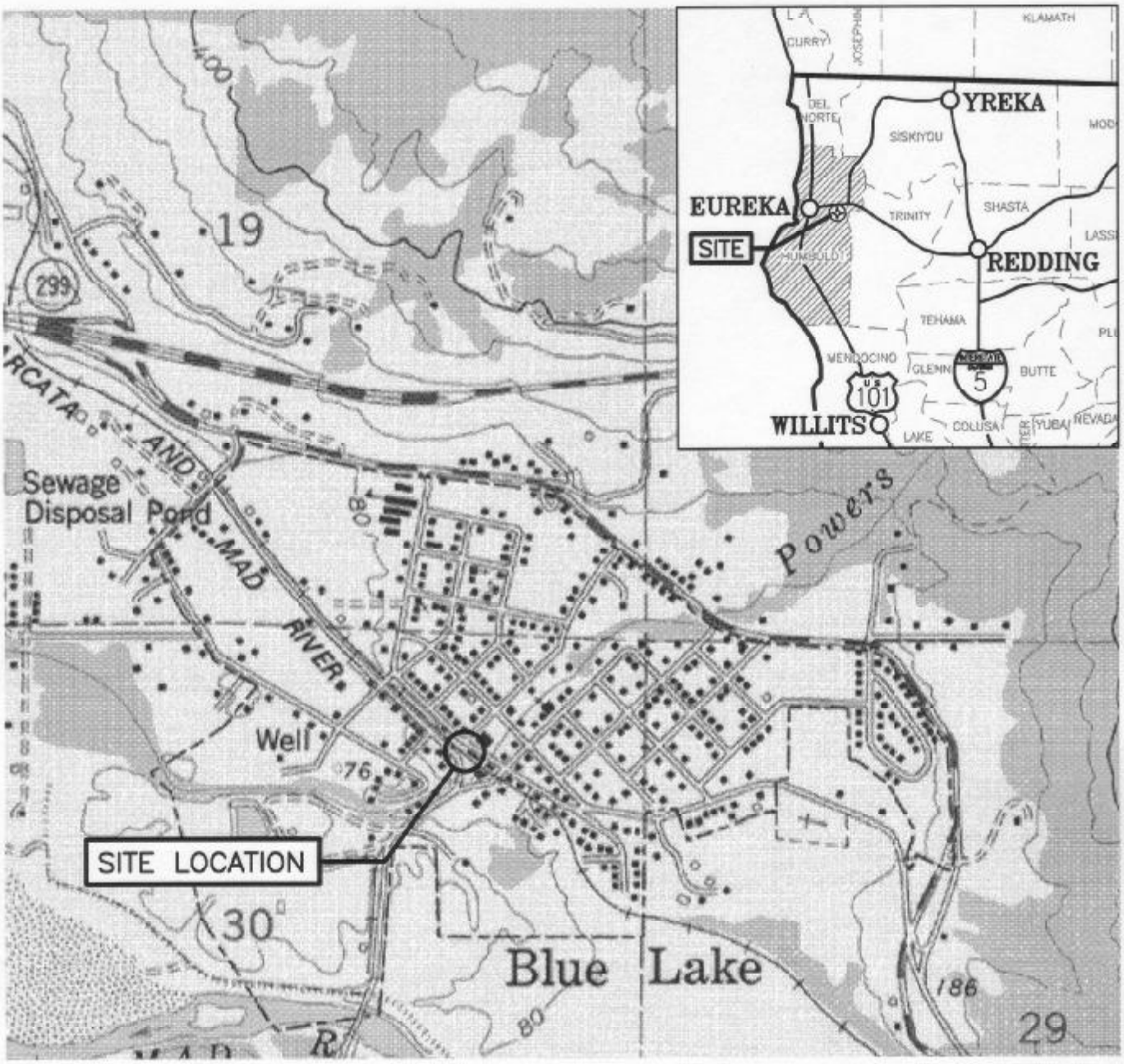
In January 1995, soil samples collected adjacent to the location of the former USTs indicated the presence of petroleum hydrocarbon constituents in soil. Subsequent site investigations and quarterly groundwater monitoring conducted at BLB&LW indicated that elevated levels of petroleum hydrocarbons were present in soil and groundwater in the vicinity of monitoring wells MW-103, MW-104, and MW-105 (SHN, 2000).

Since groundwater monitoring commenced in 1999, Methyl Tertiary-Butyl Ether (MTBE) has not been detected in any of the groundwater samples submitted for laboratory analysis. In addition, the former USTs were taken out of service prior to the time at which MTBE was commonly utilized in motor fuel. As such, laboratory analysis for this constituent was discontinued after the third quarter 2003 groundwater-monitoring event was completed.

In August 2003, SHN conducted an air sparge pilot test at the site. Based on the results of the pilot test, SHN recommended that an ozone sparge system be installed to remediate petroleum hydrocarbons in groundwater at the site (SHN, 2003).

In July 2004, SHN installed nine ozone sparge wells, and the construction of the system has been completed. The ozone sparge system became operational on December 21, 2004.

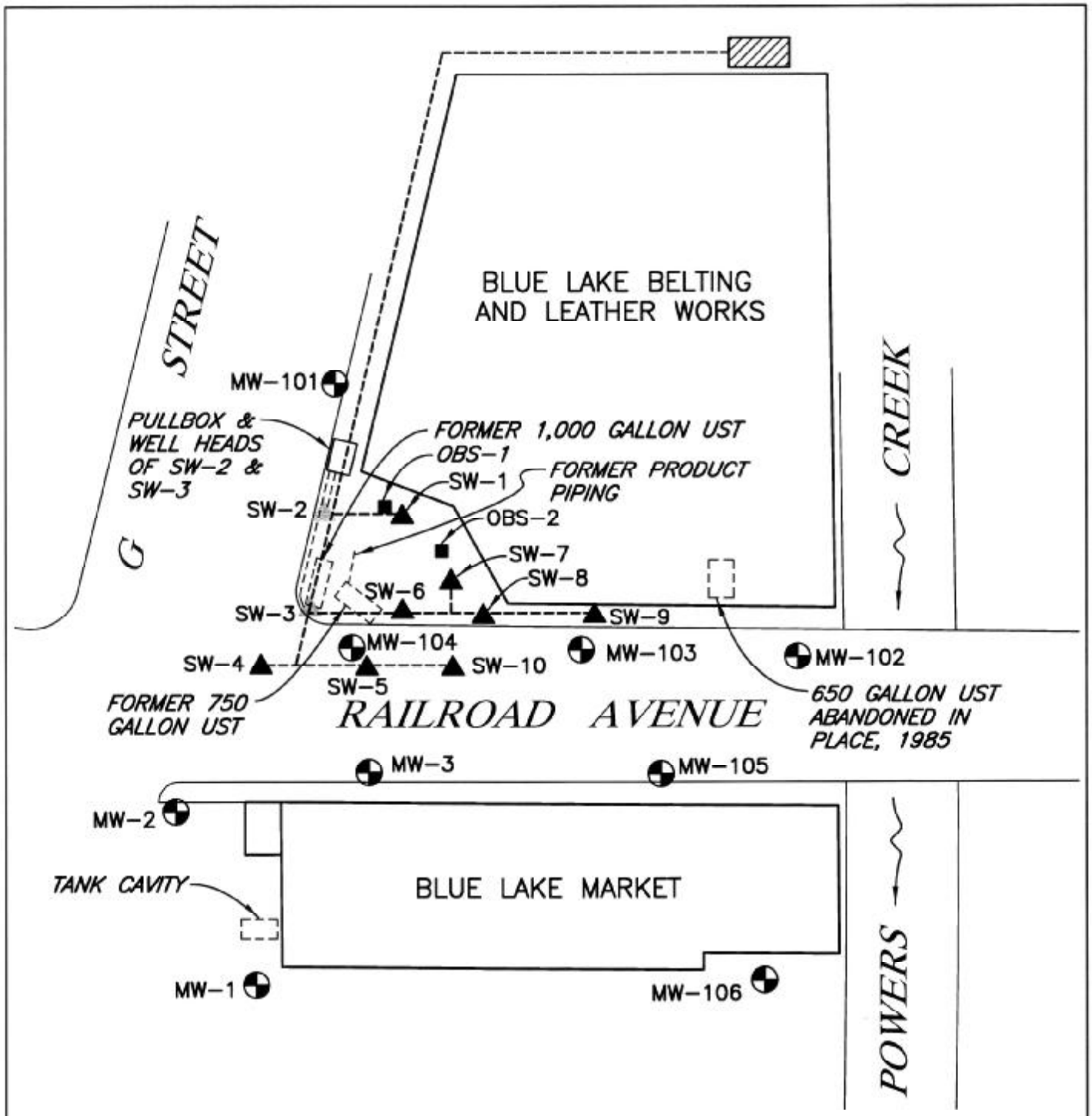
SHN is continuing quarterly groundwater monitoring in wells MW-101 through MW-106. Additionally, since the first quarter of 2005, SHN has assumed quarterly groundwater monitoring



SOURCE: BLUE LAKE USGS 7.5 MINUTE QUADRANGLE

1"=1000'±

SHN Consulting Engineers & Geologists, Inc.	Blue Lake Belting and Leather Works Blue Lake, California	Site Location Map SHN 097309
	JUNE 2003	097309-LOCATION	Figure 1



EXPLANATION

MW-101 MONITORING WELL LOCATION AND DESIGNATION

SW-1 SPARGE WELL LOCATION AND DESIGNATION

OBS-1 OBSERVATION WELL LOCATION AND DESIGNATION

FORMER UST LOCATION

OZONE SPARGE TRAILER

OZONE SPARGE PIPING

1"=30'

SHN Consulting Engineers & Geologists, Inc.	Blue Lake Belting and Leather Works Blue Lake, California	Site Plan SHN 097309
	December, 2004	097309-SPARGE	Figure 2

for LACO well MW-3. These wells are monitored for Total Petroleum Hydrocarbons as Gasoline (TPHG), Benzene, Toluene, Ethylbenzene and Xylenes (BTEX), and select field measured indicators of bioremediation.

2.0 Field Activities

As part of the groundwater-monitoring program, monitoring wells MW-101 through MW-106 and LACO well MW-3 were purged and sampled at the BLB&LW site. All work was conducted in accordance with the approved work plan and site safety plan developed for this project. Monitoring activities at the site are coordinated in conjunction with the current groundwater investigation at the nearby Blue Lake Market site, performed by LACO Associates (LACO; wells MW-1 and MW-2, Figure 2). LACO performed groundwater monitoring at the Blue Lake Market in conjunction with the current investigation at the BLB&LW during the first quarter 2005, and that information is included in this report.

2.1 Monitoring Well Sampling

On March 1, 2005, SHN conducted quarterly groundwater monitoring of wells MW-101 through MW-106 and LACO well MW-3. Prior to purging, each groundwater monitoring well was measured for depth to water, checked for the presence of floating product, and monitored for Dissolved Oxygen (DO), Oxidation-Reduction Potential (ORP), and Dissolved Carbon Dioxide (DCO_2). DO and ORP were measured using portable instrumentation, and DCO_2 was measured using a field test kit.

Purging operations included bailing three casing volumes of water from each monitoring well. During purging, each well was monitored for Electrical Conductivity (EC), temperature, and pH using portable instrumentation. Each groundwater sample was collected using disposable polyethylene bailers and transferred into laboratory-supplied containers. The water samples were then labeled, stored in an iced cooler, and transported to the laboratory under proper chain-of-custody documentation. Field notes from the March 2005 groundwater-monitoring event are included in Appendix A.

2.2 Laboratory Analysis

All of the groundwater samples collected by SHN during the first quarter 2005 monitoring event were analyzed for the following:

- TPHG in accordance with U.S. Environmental Protection Agency (EPA) Method No. 3510/GCFID.
- BTEX in accordance with EPA Method No. 8021B/5030.

North Coast Laboratories Ltd., a State of California-certified laboratory located in Arcata, California, conducted all analyses.

2.3 Equipment Decontamination Procedures

All monitoring and sampling equipment was cleaned prior to being transported to the site and prior to purging each well. All small equipment was cleaned using the triple wash system. The equipment was initially washed in a water solution containing Liquinox® cleaner, followed by a water rinse, then by a distilled water rinse.

2.4 Investigation-Derived Waste Management

All rinse water used for decontaminating field sampling equipment and well purge water was contained in 50-gallon plastic drums. The water was then transported to the SHN purge water storage tank located at 812 West Wabash Avenue in Eureka, California, for temporary storage. Approximately 74 gallons of water were generated during the March 1, 2005, monitoring event, and will be discharged, under permit, to the City of Eureka Municipal Sewer System. A discharge receipt for water generated during the fourth quarter 2004 monitoring event is included in Appendix A.

3.0 Groundwater Monitoring Results

3.1 Hydrogeology

SHN collected depth to water measurements in the BLB&LW monitoring wells on March 1, 2005. These measurements are shown in Table 1. On the same day, LACO collected depth to water measurements from Blue Lake Market wells MW-1 and MW-2, which are located adjacent to BLB&LW site. The Top of Casing (TOC) elevation for each well was surveyed relative to the TOC elevation for Blue Lake Market well MW-1. During this monitoring event, groundwater flow beneath the BLB&LW site was to the south with an approximate gradient of 0.009. The groundwater elevation contours on March 1, 2005 are shown on Figure 3. Historic groundwater elevation data are presented in Appendix B, Table B-1.

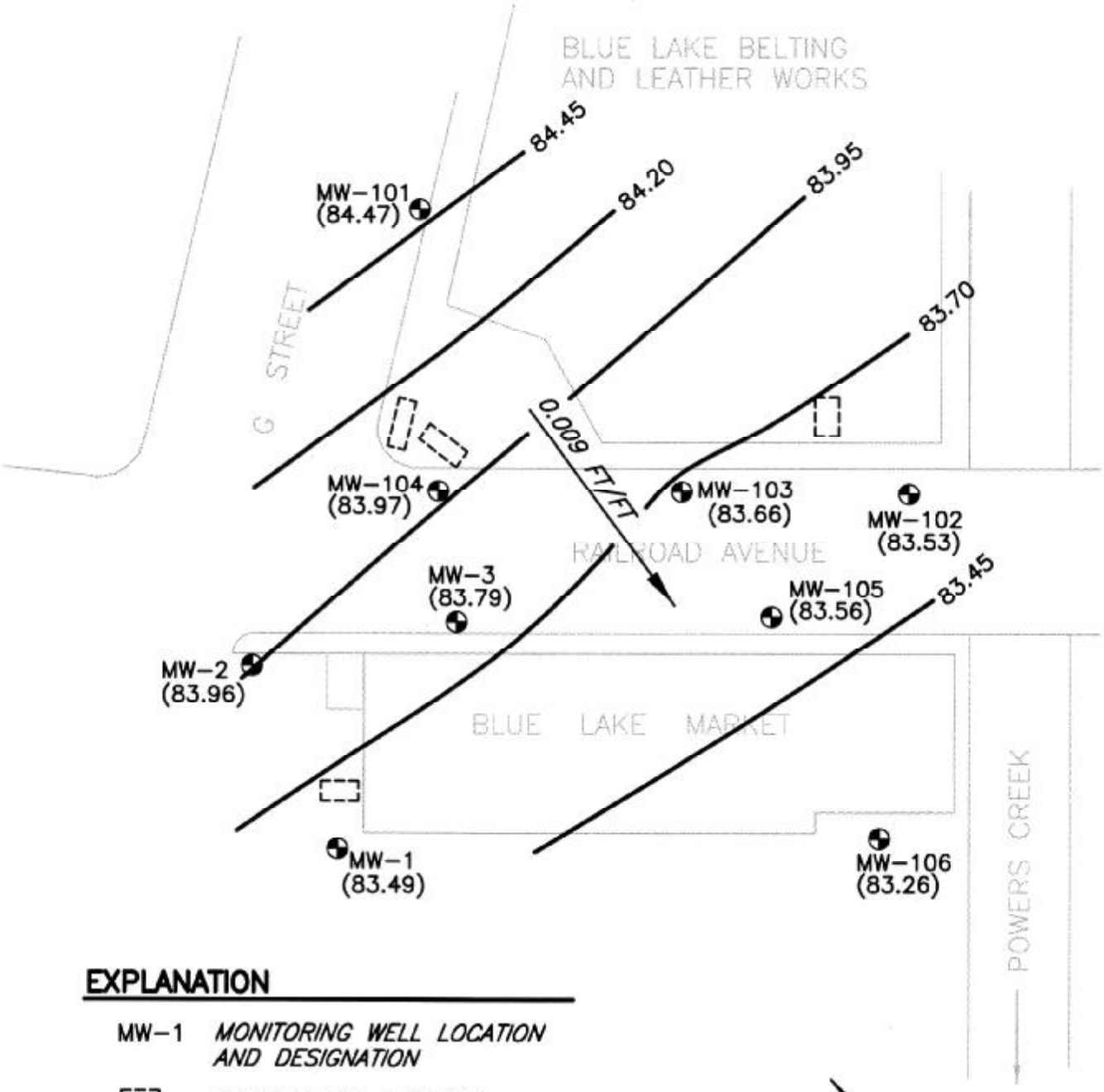
Table 1
Groundwater Elevations, March 1, 2005
Blue Lake Belting & Leather Works, Blue Lake, California

Sample Location	Top of Casing Elevation[1] (feet)	Depth to Water[2] (feet)	Groundwater Elevation[1] (feet)
MW-101	92.27	7.80	84.47
MW-102	91.19	7.66	83.53
MW-103	91.57	7.91	83.66
MW-104	91.48	7.51	83.97
MW-105	91.32	7.76	83.56
MW-106	88.88	5.62	83.26
MW-1	89.45	5.96	83.49
MW-2	91.29	7.33	83.96
MW-3	91.63	7.84	83.79

1. All wells referenced to relative top of casing of Blue Lake Market well MW-1.
2. Below top of casing
3. Blue Lake Market Wells MW-1 and MW-2 were gauged by LACO.

3.2 Groundwater Analytical Results

The laboratory analytical results from the groundwater samples collected on March 1, 2005, from the BLB&LW groundwater monitoring wells and Blue Lake Market wells are summarized in Table 2. TPHG was detected in the groundwater samples from monitoring wells MW-103, MW-104,



EXPLANATION

MW-1	*MONITORING WELL LOCATION AND DESIGNATION*
[ ]	*FORMER UST LOCATION*
(83.97)	*GROUNDWATER ELEVATION IN FEET ABOVE MSL*
—83.70—	*GROUNDWATER CONTOUR*
→	*APPROXIMATE GROUNDWATER FLOW DIRECTION*

SHN Consulting Engineers & Geologists, Inc.	Blue Lake Belting and Leather Works Blue Lake, California		Groundwater Contours March 1, 2005 SHN 097309
	March, 2005	097309-GWC-mar-05	Figure 3

MW-105, MW-1, MW-2, and MW-3 at concentrations ranging from 680 micrograms per Liter (ug/L) to 17,000 ug/L. Petroleum hydrocarbons were not detected in monitoring wells MW-101, MW-102, and MW-106.

Table 2
Groundwater Analytical Results, March 1, 2005
Blue Lake Belting & Leather Works, Blue Lake, California
(in ug/L)[1]

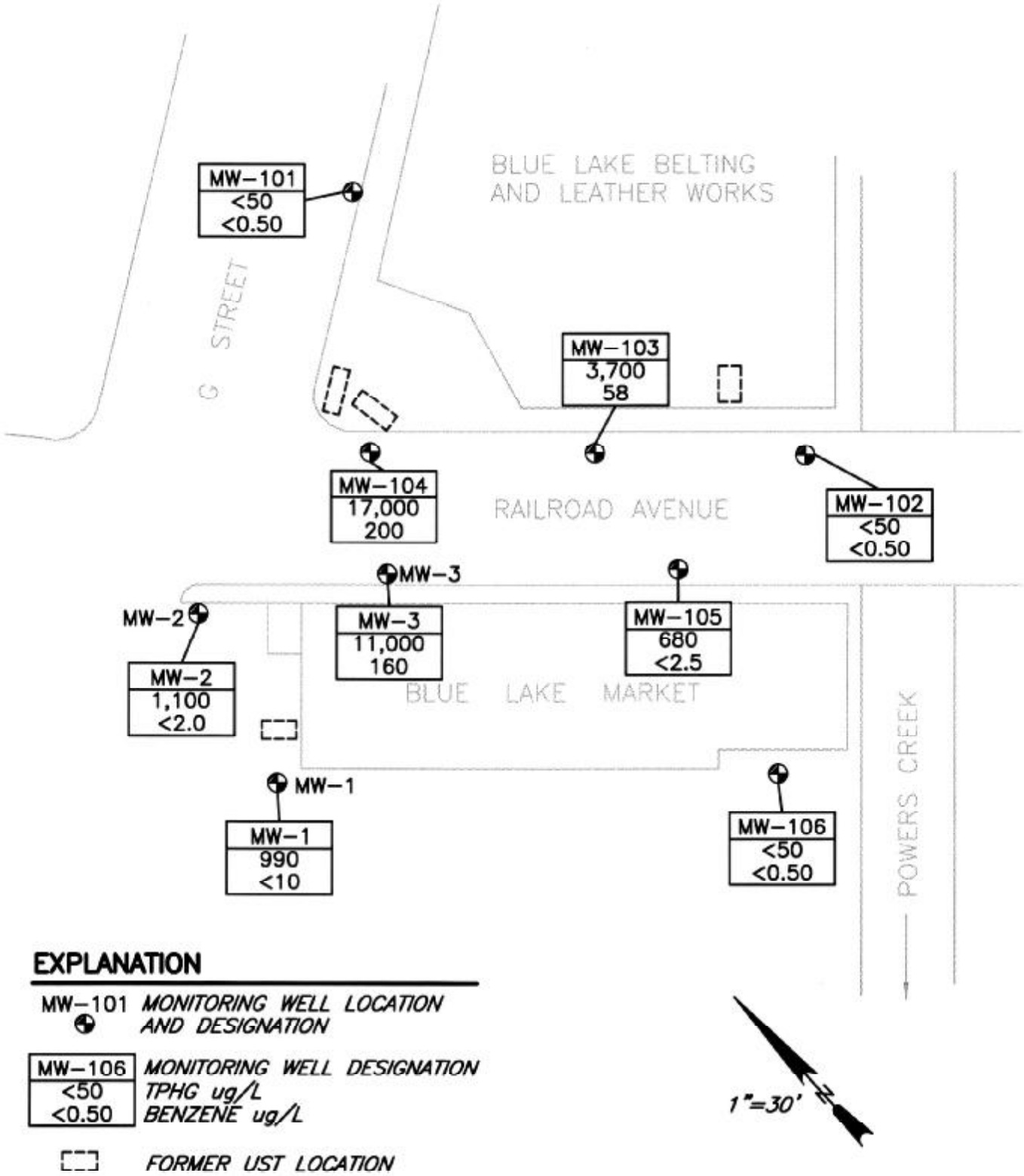
Sample Location	TPHG[2]	Benzene	Toluene	Ethylbenzene	m,p-xylene	o-xylene
MW-101	<50[3]	<0.50	<0.50	<0.50	<0.50	<0.50
MW-102	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-103	3,700[4]	58	82	67	92	33
MW-104	17,000[4]	200	350	590	1,100	180
MW-105	680[5]	<2.5	<30	<2.0	<1.5	<1.0
MW-106	<50	<0.50	<0.50	<0.50	<0.50	<0.50
Blue Lake Market Wells [6]						
MW-1	990[5]	<10	<15	<15	<7.0	<3.0
MW-2	1,100[4]	<2.0	10	19	48	7.9
MW-3	11,000[4]	160	690	370	790	220

1. ug/L: micrograms per Liter
2. TPHG: Total Petroleum Hydrocarbons as Gasoline
3. <: Denotes a value that is "less than" the method detection limit.
4. Sample appears 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.
5. Sample does not present a peak pattern consistent with that of gasoline. The reported results represent the amount of material in the gasoline range.
6. Data from MW-1 and MW-2 provided by LACO.

The concentrations of TPHG and benzene present in the groundwater monitoring wells on March 1, 2005 are shown on Figure 4. The complete laboratory analytical reports and corresponding chain-of-custody documentation are included in Appendix C. Historic groundwater analytical data are located in Appendix B, Table B-2.

3.3 Natural Attenuation Parameters

Three indicators of bioremediation (DO, DCO_2, and ORP) were measured using field instrumentation in groundwater monitoring wells MW-101 through MW-106 and MW-3 prior to sampling, and are summarized in Table 3. Historic natural attenuation parameters are located in Appendix B, Table B-3.



SHN Consulting Engineers & Geologists, Inc.	Blue Lake Belting and Leather Works Blue Lake, California	Groundwater Analytical Results March 1, 2005 SHN 097309	
	March, 2005	097309-GAR-MAR-05	Figure 4

Table 3 DO, DCO_2, and ORP Measurement Results, March 1, 2005 Blue Lake Belting & Leather Works, Blue Lake, California			
Sample Location	DO[1] (ppm)[2]	DCO_2[3] (ppm)	ORP[4] (millivolts)
MW-101	6.08	25	132
MW-102	4.51	25	158
MW-103	2.74	40	105
MW-104	8.12	20	90
MW-105	0.88	35	165
MW-106	1.43	30	68
MW-3	0.74	45	27

1. DO: Dissolved Oxygen, measured with field instrumentation
2. ppm: parts per million
3. DCO_2: Dissolved Carbon Dioxide, measured with field instrumentation
4. ORP: Oxidation-Reduction Potential, measured with field instrumentation
5. NM: Not Measured

4.0 Remediation System Operation & Maintenance

The ozone sparge system was started up on December 21, 2004 and has operated on a continual basis. During the initial month of operation, the ozone sparge system was monitored weekly to assure proper operation and adjustments were made as needed. After the initial one-month break-in period, site visits were conducted monthly. Ozone system operation and maintenance site visits will be conducted monthly for the remainder of the system's operation. Standard operation consists of monitoring the flows and pressures of various system components, checking the condition of wellheads, checking for leaks and wear on the ozone system, changing areas of ozone sparging based on groundwater monitoring results, and recording the system operating parameters. Standard maintenance consists of replacing air filters as needed and rebuilding air compressors as needed.

During the first quarter of 2005, site visits were conducted. The field notes are included in Appendix A. Historic ozone system monitoring results are presented in Appendix B, Table B-4. The ozone sparge wells closest to the building were not brought on-line until the concrete slab of the building was completely sealed to prevent any fugitive gas emissions into the building. Once the building slab was sealed, the wells nearest the building were brought on-line.

On February 11, 2005, a monitoring well vault was removed and replaced due to damage sustained to the vault that prevented the lid from being secured.

5.0 Discussion and Recommendations

Information collected during this and previous site investigations continues to indicate that petroleum hydrocarbons are present in groundwater in the vicinity of site wells MW-101, MW-103, MW-104, and MW-105. The groundwater sample collected from well MW-104 had the highest concentrations of petroleum hydrocarbons.

Based on the results of the air sparge pilot test completed in August 2003, SHN recommended the installation of an ozone sparge system to remediate the petroleum hydrocarbons in the groundwater at the site. SHN has completed installation of the ozone sparge system and it was placed on-line on December 21, 2004. System installation, background vapor monitoring, and system startup activities are included in a Remedial Action Initiation Report (RAIR), which was submitted on February 18, 2005.

SHN recommends that quarterly monitoring be continued in conjunction with the operation of the ozone sparge system. Information collected during this monitoring event and the ongoing monitoring program will be used to assess the effectiveness of the remediation system. The next sampling event at the site is scheduled for June 2005. SHN will continue to coordinate with LACO for groundwater monitoring activities.

6.0 References Cited

LACO Associates. (April 1992). ***Subsurface Work Plan, Blue Lake Market***. Eureka: LACO.

SHN Consulting Engineers & Geologists, Inc. (September 8, 2000). ***Corrective Action Plan, Blue Lake Belting And Leather Works, 411 Railroad Avenue, Blue Lake; California, LOP # 12012.*** Eureka: SHN.

---. (November 24, 2003). ***Remedial Action Pilot Study Report of Findings, Blue Lake Belting And Leather Works, Case No. 12012.*** Eureka: SHN.

Appendix A

Field Notes

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

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 Huntzinger	DATE: 3-1-05	DAY OF WEEK: Tuesday
TYPE OF WORK: Quarterly Sampling	WEATHER: Partially clear to Rainy overcast	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

0811 arrived at site, Removed lids and caps on 9 wells, 8 of ours and 1 of LACO's LACO mw-3 and mw-103 had water in flush mount, bailed out, mw-105 has a car parked over it, but was able to remove lid and cap.

0901 I started taking water levels decoming the sounder after each well by scrubbing it with liquinox and Rinsing it with DI water.

0930 I started taking D O Readings, LACO sampler on site, secured wells OBS-1 and OBS-2 with caps and lids.

1025 I started purging mw-106 with a disposable bailer, purge water was caught in a graduated 4 gal. bucket.

1050 I sampled mw-106, secured well with cap and lid.

1059 I started purging mw-101 with a disposable bailer, purge water was caught in a graduated 4 gal. bucket.

1120 I sampled mw-101, secured well with cap and lid.

1121 LACO OFF SITE

1130 I started purging mw-102 with a disposable bailer, purge water was caught in a graduated 4 gal. bucket.

1155 I sampled mw-102, secured well with cap and lid.

1203 I started purging mw-105 with a disposable bailer, purge water was caught in a graduated 4 gal. bucket.

1230 I sampled mw-105, secured well with cap and lid.

1244 I started purging mw-103 with a disposable bailer, purge water was caught in 5 gal. buckets.

1310 I sampled mw-103, secured well with cap and lid.

1316 I started purging mw-104 with a disposable bailer, purge water was caught in 5 gal. buckets.

1345 I sampled mw-104, secured well with cap and lid.

1359 I started purging LACO mw-3 with a disposable bailer, purge water was caught in a graduated 4 gal. bucket.

1425 I sampled LACO mw-3, secured well with cap and lid.

1436 OFF SITE

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: 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

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: 3-1-05	DAY OF WEEK: Tuesday
TYPE OF WORK: Quarterly Sampling	WEATHER: Raining overcast	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 2-50 gal. plastic drums that I brought in the truck then transported to SHN's 1,000 gal. PWST located at 812 W. Wabash Avenue Eureka, CA 74 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: Blue Lake Belting & Leather Works Date: 3-1-05

Location: Blue Lake, California Weather: Partially clear

Sample Location	Time of Reading	Top of Casing Elevation (feet)	Depth To Water (feet)	Water Surface Elevation (feet)
MW-101	0904	92.27	7.80	84.47
MW-102	0906	91.19	7.66	83.53
MW-103	0916	91.57	7.91	83.66
MW-104	0918	91.48	7.51	83.97
MW-105	0913	91.32	7.76	83.56
MW-106	0901	88.88	5.62	83.26
OBS-1	0922	89.45	7.71	81.74
OBS-2	0924	91.29	7.97	83.32
LACO MW-3	0920	91.63	7.84	83.79

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: 3-1-05

Equipment: ☒ pH & EC ☐ PID ☐ $GTCO_2$ ☐ GTLEL
☐ Turbidity ☒ Other Dissolved Oxygen Meter YS195

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.

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: 3-1-05
Project No.: 097309
Sampler Name: David R. Paine
Location: Blue Lake, CA
Sample Type: Ground water
Well #: MW-101
Weather: Partially clear to overcast
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)
~~12.85~~ 13.00	-	7.80	=	5.20	x	0.163	=	0.85

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
0942	6.08						0 gal.	
1059	↓	25	132				0.25 gal.	
1105	↓			115	55.5°	6.14	1 gal.	
1110	No Flow			114	55.7°	6.14	2 gal.	
1113	than cell			115	55.7°	6.13	3 gal.	
1120	Sample Time							

Purge Method: Hand bail
Total Volume Removed: 3.00 (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:
Recharged to 7.81 at sampling Time

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:	3-1-05
Project No.:	097309	Sampler Name:	David R. Paine
Location:	Blue Lake, CA	Sample Type:	Ground water
Well #:	MW-102	Weather	Partially clear to overcast
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	-	7.66	=	11.84	x	0.163	=	1.93

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
0949	4.51						0 gal.	
1130	↓	25	158				0.25 gal.	
1138	↓			112	55.4°	6.24	2 gal.	
1143	No Flow			110	55.1°	6.22	4 gal.	
1148	thru cell			110	55.1°	6.25	6 gal.	
1155	Sample Time							

Purge Method: Hand bail

Total Volume Removed: 6.00 (gal)

Laboratory Information

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

Well Condition: Good

Remarks:

Recharged to 7.66 at sampling Time

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 Bolting and Leather	Date/Time:	3-1-05
Project No.:	097309	Sampler Name:	David R. Paine
Location:	Blue Lake, CA	Sample Type:	Ground water
Well #:	MW-103	Weather	Partially clear to overcast
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	-	7.91	=	10.74	x	0.653	=	7.01

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1003	2.74						0 gal.	
1244	↓	40	105				[illegible] gal.	
1252	↓			138	58.9°	6.25	8 gal.	
1257	No Flow			138	59.2°	6.27	16 gal.	
1304	than cell			138	59°	6.24	22 gal.	
1310	Sample Time							

Purge Method: Hand bail

Total Volume Removed: 22.00 (gal)

Laboratory Information

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

Well Condition: Good

Remarks:

Recharged to 8.02 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 Betting and Leather
Date/Time: 3-1-05
Project No.: 097309
Sampler Name: David R. Paine
Location: Blue Lake, CA
Sample Type: Ground water
Well #: MW-104
Weather: Partially 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	-	7.51	=	9.04	x	0.653	=	5.90

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1010	8.12						0 gal.	
1316	↓	20	90				1.25 gal.	
1325	↓			121	59.1°	6.16	6.50 gal.	
1329	No Flow			125	59.5°	6.15	12 gal.	
1335	thru cell			125	59.4°	6.16	19 gal.	
1345	Sample Time							

Purge Method: Hand bail
Total Volume Removed: 19.00 (gal)

Laboratory Information

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

Well Condition: Good

Remarks:
Recharged to 7.68 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
Project No.: 097309
Location: Blue Lake, CA
Well #: MW-105
Hydrocarbon Thickness/Depth (feet): NA
Date/Time: 3-1-05
Sampler Name: David R. Paine
Sample Type: Ground water
Weather: Partially clear to overcast
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	-	7.76	=	7.34	x	0.163	=	1.20

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
0956	0.88						0 gal.	
1203	↓	35	165				0.25 gal.	
1211				134	57.1°	6.19	1.25 gal.	
1215	No Flow			155	57.2°	6.27	2.50 gal.	
1219	than still			165	57.2°	6.28	3.25 gal.	
1222				165	57.2°	6.33	5 gal	
1230	Sample Time							

Purge Method: Hand bail

Total Volume Removed: 5.00 (gal)

Laboratory Information

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

Well Condition: Good

Remarks:

Recharged to 7.80 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: 3-1-05
Project No.: 097309
Sampler Name: David R. Paine
Location: Blue Lake, CA
Sample Type: Ground water
Well #: MW-106
Weather: Partially clear to overcast
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	-	5.62	=	9.38	x	0.163	=	1.53

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
0935	1.43						0 gal.	
1025		30	68				0.25 gal.	
1033				128	56.3°	6.08	1.75 gal.	
1038	No Flow			128	56.5°	6.06	3.25 gal.	
1043	than cell			126	56.3°	6.11	4.75 gal.	
1050	Sample Time							

Purge Method: Hand bail
Total Volume Removed: 4.75 (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 5.69 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:	3-1-05
Project No.:	097309	Sampler Name:	David R. Paine
cation:	Blue Lake, CA	Sample Type:	Ground water
Well #:	LACO MW-3	Weather	Partially 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	-	7.84	=	6.86	x	0.163	=	1.12

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1016	0.74						0 gal.	
1359		45	27				0.25 gal.	
1407				138	57.4°	6.22	1.25 gal.	
1410	No Flow			145	57.6°	6.26	2.25 gal.	
1414	then call			142	58°	6.28	3.50 gal.	
1425	sample	time						

Purge Method: Hand Bail

Total Volume Removed: 3.50 (gal)

Laboratory Information

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

Well Condition: Good

Remarks:

Recharged to 7.94 at sampling time

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: 3-1-05
Golbal ID No.: T0602300170
PM: LDB

Tech: SJD
Mob/Demob time: .15/.25
Travel time: 1.0
Time on site: 9:05
Time off site: 11:00
Mileage: 32

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)	5.96		7.33		7.84					
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING — FIELD INTRINSICS: pH										
TEMP (°C)										
Ecw (umohs)										
ORP (mV)	-24	-30	-39	-17						
DO (mg/L)	1.07	0.47	2.26	0.49						
OTHER (units)	—		—							
PURGE: TIME	9:41	9:51	10:22	10:32						
METHOD (DHP/CB/B)	DHP		DHP							
RATE (Lpm)	0.19		0.18							
VOLUME (L)	1.90		1.80							
COLOR	CLEAR	CLEAR	CLEAR	CLEAR						
ODOR	MED. FUEL		MED. FUEL / LIGHT RUBBER							
INTAKE DEPTH (FEET)	10.0		10.0							
SAMPLE: TIME	9:52		10:33							
METHOD (DHP/CB/B)	DHP		DHP							
ANALYTES	TPHg/BTEX		TPHg/BTEX		MEASURE ONLY					
TOTAL DRAWDOWN (FEET)	0.68		0.32							
REMARKS	—		FD-MB							
WELL CONDITION	TWO BOLT HOLES STRIPPED		good		good					
WASTE DRUMS										

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

REVISED 2/27/2005

CONSULTING ENGINEERS

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

Project Name: BLUE LAKE MARKET

Project No.: 3838.01

Tech: SJD

Date: 3-1-05

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)
9:43	~	~	~	-3	0.97
9:45	~	~	~	-2	0.61
9:47	~	~	~	-22	0.55
9:49	~	~	~	-29	0.55
9:51	~	~	~	-30	0.47

WELL ID: MW2					
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
10:24	~	~	~	-34	1.83
10:26	~	~	~	-26	0.95
10:28	~	~	~	-20	0.71
10:30	~	~	~	-18	0.56
10:32	~	~	~	-17	0.49

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

Tech: SJD
Date: 3-1-05

Project Name: BLUE LAKE MARKET
Project No.: 3888.01

WELL ID: MW1		WELL ID: MW2		WELL ID: MW3		WELL ID:		WELL ID:		WELL ID:	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
9:21	5.96	9:23	7.33	9:25	7.84						
9:31	5.96	9:33	7.33	9:35	7.84						

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)

REVISED:M16/01

Client Name: **BLUE LAKE BELTING AND LEATHER**

The water from your site: **411 RAILROAD AVENUE BLUE LAKE, CA LOP # 12012**

SHN ref # **097309** Collected On: **12/1/04**

Has been tested and certified as acceptable to be discharged into the City of Eureka municipal sewer system.

Amount Discharged: **53 GALLONS**

Date Discharged: **1/24/05**

Certified by: **DAVID R. PAINE**

SHN CONSULTING ENGINEERS & GEOLOGISTS, INC.

City of Eureka Wastewater Discharge Permit #65

Blue Lake Belting & Leather Works
097309
Ozone System Monitoring Form

Technician: Dustin Tibbets	Date: 12/31/04
Weather: Rain	Time Onsite: 1300 Offsite:
Electric Meter: 397	

- ☐ Inspect overall system for leaks, wear, etc.
- ☐ Complete system readings.

System Readings	
Ozone Generator Flow (scfh)	5
Ozone Generator Pressure (psi)	13
Ozone Output (%)	100%
Auto Drain Valve	On: 1 (sec) Off: 45 (min)
System Run Time (hr:min)	22 hr. 30 min

Well	Flow (scfm)	Pressure (psi)	Total Run Time (hr:min)	Well	Flow (scfm)	Pressure (psi)	Total Run Time (hr:min)
SP-1	1	20	39 min	SP-11	N/A		
SP-2	.80	25	19 min	SP-12			
SP-3	1.30	20	44hr 15min	SP-13			
SP-4	1.10	20	44hr. 6m	SP-14			
SP-5	1.20	20	43hr 56m	SP-15			
SP-6	1.20	20	43hr 42m	SP-16			
SP-7	.85	22	9m	SP-17			
SP-8	.80	23	16m	SP-18			
SP-9	1.20	20	12m	SP-19			
SP-10	1.20	20	43hr. 59m	SP-20			

Comments:

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

DAILY FIELD REPORT

Job No. 097309

Page of

Project Name	Client/Owner	Daily Field Report Sequence No	
General Location Of Work	Owner/Client Representative	Date 1/7/05	Day Of Week Fri.
General Contractor	Grading Contractor	Project Engineer Mike Foget	
Type Of Work Otm	Grading Contractor, Superintendent, Or Foreman	Supervisor	
Source & Description Of Fill Material	Weather Rain	Technician Dustin Tibbets	
	Key Persons Contacted (Civil Engr, Architect, Developer, Etc)		

Describe Equipment Used For Hauling, Spreading, Watering, Conditioning, & Compacting

1300 On site. Taking readings.
1350 off site.

Copy given to:

Reported By: Dustin Tibbets

G:\FORMS\DAILY FIELD REPORT.doc

Blue Lake Belting & Leather Works
097309
Ozone System Monitoring Form

Technician:	DCT	Date:	1/7/05
Weather:	Rain	Time Onsite: 1300	Offsite: 1350
Electric Meter:	520		

- ☐ Inspect overall system for leaks, wear, etc.
- ☐ Complete system readings.

System Readings	
Ozone Generator Flow (scfh)	5
Ozone Generator Pressure (psi)	12.5
Ozone Output (%)	100%
Auto Drain Valve	On: 1 (sec) Off: 45 (min)
System Run Time (hr:min)	389:25 min.

Well	Flow (scfm)	Pressure (psi)	Total Run Time (hr:min)	Well	Flow (scfm)	Pressure (psi)	Total Run Time (hr:min)
SP-1	8.5	22	40 min	SP-11	N/A		
SP-2	7	30	20 min	SP-12			
SP-3	11	19	77 hr 55 min	SP-13			
SP-4	11	19	77 hr 37 min	SP-14			
SP-5	11	19	77 hr. 27 min	SP-15			
SP-6	11	19	77 hr. 18 min	SP-16			
SP-7	8	21	10 min	SP-17			
SP-8	8	21	17 min	SP-18			
SP-9	12	15	13 min	SP-19			
SP-10	12	15	77 hr. 30 min	SP-20			

Comments:

H:\cfisher\1997\097309-BlueLakeB&LW\OzoneSystemMonitoring.doc

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

DAILY FIELD REPORT

Job No. 097309
Page of

Project Name: Blue Lake Belting & Leather	Client/Owner	Daily Field Report Sequence No	
General Location Of Work	Owner/Client Representative	Date: 1/12/05	Day Of Week: Mon
General Contractor	Grading Contractor	Project Engineer: Mike Foget	
Type Of Work: O&M	Grading Contractor, Superintendent, Or Foreman	Supervisor	
Source & Description Of Fill Material	Weather: Over Cast	Technician: Dustin Tibbets	
	Key Persons Contacted (Civil Engr, Architect, Developer, Etc)		

Describe Equipment Used For Hauling, Spreading, Watering, Conditioning, & Compacting

1415 On site. Put grip tape on ramp (back door) and put up signs
1438 Taking readings

Copy given to:

Reported By: Dustin Tibbets

G:\FORMS\DAILY FIELD REPORT.doc

Blue Lake Belting & Leather Works
097309
Ozone System Monitoring Form

Technician: Dustin Tibbets	Date: 1/17/05
Weather: Over cast	Time Onsite: 1415 Offsite:
Electric Meter: 830	

- ☐ Inspect overall system for leaks, wear, etc.
- ☐ Complete system readings.

System Readings	
Ozone Generator Flow (scfh)	~~12.5~~ 5
Ozone Generator Pressure (psi)	12.5
Ozone Output (%)	100
Auto Drain Valve	On: 1 (sec) Off: 45 (min)
System Run Time (hr:min)	84hr. 50min.

Well	Flow (scfm)	Pressure (psi)	Total Run Time (hr:min)	Well	Flow (scfm)	Pressure (psi)	Total Run Time (hr:min)
SP-1	~~.85~~ .9	16	41m	SP-11			
SP-2	.85	~~20~~ 15	21m	SP-12			
SP-3	~~1.1~~ 1.1	~~8~~ 7	126hr 10m	SP-13			
SP-4	1.1	8	125 hr. 59m	SP-14			
SP-5	1.1	8	125hr. 48m	SP-15			
SP-6	1.1	8	125 hr. 35m	SP-16			
SP-7	.85	15	11m	SP-17			
SP-8	.8	16	18m	SP-18			
SP-9	1.1	~~8~~ 6	14m	SP-19			
SP-10	1.1	6	125hr ~~44~~ 41m	SP-20			

Comments:

H:\cfisher\1997\097309-BlueLakeB&LW\OzoneSystemMonitoring.doc

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

DAILY FIELD REPORT

Job No. 097309
Page of

Project Name: Blue Lake Belting & Leather	Client/Owner	Daily Field Report Sequence No	
General Location Of Work	Owner/Client Representative	Date: 1/21/05	Day Of Week: Fri.
General Contractor	Grading Contractor	Project Engineer: Mike Foget	
Type Of Work: O&M	Grading Contractor, Superintendent, Or Foreman	Supervisor	
Source & Description Of Fill Material	Weather: Over Cast	Technician: Dustin Tibbets	
	Key Persons Contacted (Civil Engr, Architect, Developer, Etc)		

Describe Equipment Used For Hauling, Spreading, Watering, Conditioning, & Compacting

1310 On site.
1313 Taking readings.
1325 Put flexable pipe over injection tubing under trailer.
1345 Off site.

Copy given to:

Reported By: Dustin Tibbets

G:\FORMS\DAILY FIELD REPORT.doc

Blue Lake Belting & Leather Works
097309
Ozone System Monitoring Form

Technician: DCT	Date: 1/21/05
Weather: Over Cast	Time Onsite: 1310 Offsite: 1345
Electric Meter:	

- ☐ Inspect overall system for leaks, wear, etc.
- ☐ Complete system readings.

System Readings	
Ozone Generator Flow (scfh) 5	
Ozone Generator Pressure (psi) 13	
Ozone Output (%) 100	
Auto Drain Valve	On: 1 (sec) Off: 45 (min)
System Run Time (hr:min)	179 hr. 23 min.

Well	Flow (scfm)	Pressure (psi)	Total Run Time (hr:min)	Well	Flow (scfm)	Pressure (psi)	Total Run Time (hr:min)
SP-1	.85	10	43 m	SP-11			
SP-2	.85	11	23 m	SP-12			
SP-3	1.1	5	145 hr. 6 m	SP-13			
SP-4	1.1	7	144 hr. 51 m	SP-14			
SP-5	1.1	9	144 hr. 39 m	SP-15			
SP-6	1.1	8	144 hr. 30 m	SP-16			
SP-7	.9	16	12 m	SP-17			
SP-8	.85	16	19 m	SP-18			
SP-9	1.1	6	15 m	SP-19			
SP-10	1.1	6	144 hr. 32 m	SP-20			

Comments: Put flexable pipe over injection tubing under trailer

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

DAILY FIELD REPORT

Job No. 097309
Page of

Project Name: Blue Lake Belting & Leather	Client/Owner	Daily Field Report Sequence No	
General Location Of Work	Owner/Client Representative	Date: 11/28/05	Day Of Week: Fri.
General Contractor	Grading Contractor	Project Engineer: Mike Foget	
Type Of Work: O&M	Grading Contractor, Superintendent, Or Foreman	Supervisor	
Source & Description Of Fill Material	Weather: Rain	Technician: Dustin Tibbets	
	Key Persons Contacted (Civil Engr, Architect, Developer, Etc)		

Describe Equipment Used For Hauling, Spreading, Watering, Conditioning, & Compacting

1250 On site. Taking readings.
1335 Off site.

Copy given to:

Reported By: Dustin Tibbets

C:\FORMS\DAILY FIELD REPORT.doc

Blue Lake Belting & Leather Works
097309
Ozone System Monitoring Form

Technician: Dustin Tibbets	Date: 1/28/05
Weather: Rain	Time Onsite: 1250 Offsite: 1335
Electric Meter: 1286	

- ☐ Inspect overall system for leaks, wear, etc.
- ☐ Complete system readings.

System Readings	
Ozone Generator Flow (scfh)	5
Ozone Generator Pressure (psi)	13.5
Ozone Output (%)	100
Auto Drain Valve	On: 1 (sec) Off: 45 (min)
System Run Time (hr:min)	347 hr. 3 min.

Well	Flow (scfm)	Pressure (psi)	Total Run Time (hr:min)	Well	Flow (scfm)	Pressure (psi)	Total Run Time (hr:min)
SP-1	1.1	7	44	SP-11			
SP-2	0.75	12	24	SP-12			
SP-3	1.1	8	178hr 40m	SP-13			
SP-4	1.1	8	178hr 22m	SP-14			
SP-5	1.1	9	178hr. 10m	SP-15			
SP-6	1.1	9	178hr. 1m	SP-16			
SP-7	0.85	15	13m	SP-17			
SP-8	1.05	10.25	20m	SP-18			
SP-9	1.15	7	16m	SP-19			
SP-10	1.1	6	178hr. 1m	SP-20			

Comments:

Blue Lake Belting & Leather Works
097309
Ozone System Monitoring Form

Technician: C. Fisher	Date: 3rd Feb '05
Weather: Sunny	Time Onsite: 1600 Offsite: 17:15
Electric Meter: 01381	

- ☐ Inspect overall system for leaks, wear, etc.
- ☐ Complete system readings.

Inspect well vaults, Clean or Replace Air fittings

System Readings	
Ozone Generator Flow (scfh)	9.5
Ozone Generator Pressure (psi)	9.5
Ozone Output (%)	100
Auto Drain Valve	On: 2 (sec) Off: 45 (min)
System Run Time (hr:min)	494 hr 41 min ?

Well	Flow (scfm)	Pressure (psi)	Total Run Time (hr:min)	Programmed Run Time (minutes)	Observations
SP-1	1.1	7	0:49	5	
SP-2	0.8	17	0:26	5	
SP-3	1.1	7	208:32	10	
SP-4	1.1	7	207:47	10	
SP-5	1.1	9	207:31	10	
SP-6	1.1	9	207:22	10	
SP-7	0.9	17	0:15	5	
SP-8	1.0	14	0:22	5	
SP-9	1.0	6	0:18	5	
SP-10	1.1	8	207:26	10	

Comments: - Brought SW-1,2,7,8,9 on-line
- Replaced PC Board for O_3 ~~Sensor~~ Sensor.
- Suspect System Run Time Total is inaccurate
- Pressure tested SW-3 well head (working pressure) ← Soapy soln & O_3 meter
- Ozone Exposure Badge - Negative

H:\cfisher\1997\097309-BlueLakeB&LW\OzoneSystemMonitoring.doc

DAILY FIELD REPORT

Job No. 097309

Page 1 of 1

Project Name: Blue Lake Belting	Client/Owner	Daily Field Report Sequence No	
General Location Of Work: Blue Lake, CA	Owner/Client Representative	Date: 4-11-05	Day Of Week: Friday
General Contractor	Grading Contractor: —	Project Engineer: M. Fogel	
Type Of Work: Well Box replacement	Grading Contractor, Superintendent, Or Foreman: —	Supervisor: C. Fisher	
Source & Description Of Fill Material	Weather: SUNNY	Technician: A. Melody	
	Key Persons Contacted (Civil Engr, Architect, Developer, Etc)		

Describe Equipment Used For Hauling, Spreading, Watering, Conditioning, & Compacting

10:30 arrived and met with facility operator to inform him of what work we were doing

10:40 used orange cones for safety work area within existing roadway

10:45 Aaron commenced jack hammering to remove damaged well box. Steve Dilco on-site to remove well box covers to photograph each well

12:00 Finished removing well covers and photographing wells Aaron continuing with jack hammer to remove old well box

12:30-12:50 old well box removed, new well box installed and cemented with Quik rete

1:00 well box installed and filled

2:05 off site

Copy given to: C. Fisher

Reported By: A. Melody

G:\FORMS\ENVIRO FORMS\daily field report.doc

Blue Lake Belting & Leather Works
097309
Ozone System Monitoring Form

Technician: C. Fisher	Date: 1st Mar 05
Weather: Rain	Time Onsite: 1600 Offsite: 1700
Electric Meter: 02185	Ozone Badge: Positive -or- Negative

- ☑ Don ozone badge and activate,
- ☑ Inspect overall system for leaks, wear, etc.
- ☐ Inspect vaults of monitoring wells, observation wells, sparge wells, and pull box,
- ☑ Inspect air filters (clean or replace),
- ☑ Complete system readings,
- ☑ Inspect ozone badge for positive or negative exposure.

System Readings	
Ozone Generator Flow (scfh)	9
Ozone Generator Pressure (psi)	8½
Ozone Output (%)	100%
Auto Drain Valve	On: 1 (sec) Off: 45 (min)
System Run Time (hr:min)	17:41 ? incorrect

Well	Flow (scfm)	Pressure (psi)	Total Run Time (hr:min)	Programmed Run Time (minutes)	Observations
SP-1	1.2	6½	41:54	5	
SP-2	1.1	12	41:28	5	
SP-3	1.2	9	290:31	10	
SP-4	1.1	9	289:38	10	
SP-5	1.1	10	289:34	10	
SP-6	1.1	11	289:22	10	
SP-7	1.0	14	41:16	5	
SP-8	1.0	13	41:23	5	
SP-9	1.2	8	41:18	5	
SP-10	1.1	12	289:29	10	

Comments: - Need to wire thermostat to exhaust fan.

Appendix B

Historic Monitoring Data

Table B-1 Historic Groundwater Elevations Blue Lake Belting & Leather Works, Blue Lake, California				
Location	Date	Top of Casing Elevation (feet)[1]	Depth to Water (feet)[2]	Groundwater Elevation (feet)[3]
MW-101	12/01/99	91.89	6.24	85.65
	03/01/00		6.49	85.40
	06/01/00		7.89	84.00
	09/01/00		13.57	78.32
	12/01/00		7.57	84.32
	03/01/01		7.59	84.30
	06/01/01		9.70	82.19
	09/04/01		13.64	78.25
	12/03/01		5.84	86.05
	03/01/02		7.18	84.71
	06/03/02		9.13	82.76
	09/03/02		13.66	78.23
	12/02/02		13.16	78.73
	03/03/03		7.38	84.51
	06/02/03		7.81	84.08
	09/02/03		13.50	78.39
	12/01/03		7.31	84.58
	03/01/04		6.60	85.29
	06/01/04		7.94	83.95
	09/02/04		13.40	78.49
	12/01/04		7.96	83.93
	03/01/05	92.27	7.80	84.47
MW-102	12/01/99	91.19	7.23	83.96
	03/01/00		7.23	83.96
	06/01/00		8.12	83.07
	09/01/00		13.48	77.71
	12/01/00		7.83	83.36
	03/01/01		7.92	83.27
	06/01/01		10.43	80.76
	09/04/01		13.68	77.51
	12/03/01		6.83	84.36
	03/01/02		7.56	83.63
	06/03/02		9.87	81.32
	09/03/02		13.73	77.46
	12/02/02		13.21	77.98
	03/03/03		7.62	83.57
	06/02/03		8.02	83.17

Table B-1 Historic Groundwater Elevations Blue Lake Belting & Leather Works, Blue Lake, California				
Location	Date	Top of Casing Elevation (feet)[1]	Depth to Water (feet)[2]	Groundwater Elevation (feet)[3]
MW-102 (cont'd)	09/02/03		13.40	77.79
	12/01/03		7.65	83.54
	03/01/04		7.23	83.96
	06/01/04		8.29	82.90
	09/02/04		13.43	77.76
	12/01/04		8.02	83.17
	03/01/05		7.66	83.53
MW-103	12/01/99	91.57	7.41	84.16
	03/01/00		7.48	84.09
	06/01/00		8.44	83.13
	09/01/00		13.77	77.80
	12/01/00		8.09	83.48
	03/01/01		8.21	83.36
	06/01/01		10.71	80.86
	09/04/01		13.99	77.58
	12/03/01		6.99	84.58
	03/01/02		7.89	83.68
	06/03/02		10.23	81.34
	09/03/02		14.06	77.51
	12/02/02		13.50	78.07
	03/03/03		7.97	83.60
	06/02/03		8.38	83.19
	09/02/03		13.65	77.92
	12/01/03		7.93	83.64
	03/01/04		7.54	84.03
	06/01/04		8.60	82.97
	09/02/04		13.73	77.84
	12/01/04		8.32	83.25
	03/01/05		7.91	83.66
MW-104	12/01/99	91.48	6.58	84.90
	03/01/00		6.76	84.72
	06/01/00		8.03	83.45
	09/01/00		13.48	78.00
	12/01/00		7.63	83.85
	03/01/01		7.74	83.74
	06/01/01		9.94	81.54
	09/04/01		13.67	77.81

Table B-1 Historic Groundwater Elevations Blue Lake Belting & Leather Works, Blue Lake, California				
Location	Date	Top of Casing Elevation (feet)[1]	Depth to Water (feet)[2]	Groundwater Elevation (feet)[3]
MW-104 (cont'd)	12/03/01		6.15	85.33
	03/01/02		7.35	84.13
	06/03/02		9.40	82.08
	09/03/02		13.80	77.68
	12/02/02		13.01	78.47
	03/03/03		7.51	83.97
	06/02/03		7.93	83.55
	09/02/03		13.30	78.18
	12/01/03		7.36	84.12
	03/01/04		6.76	84.72
	06/01/04		8.05	83.43
	09/02/04		13.29	78.19
	12/01/04		8.01	83.47
	03/01/05		7.51	83.97
MW-105	12/01/99	91.32	7.25	84.07
	03/01/00		7.30	84.02
	06/01/00		8.25	83.07
	09/01/00		13.64	77.68
	12/01/00		7.91	83.41
	03/01/01		8.04	83.28
	06/01/01		10.57	80.75
	09/04/01		13.85	77.47
	12/03/01		6.84	84.48
	03/01/02		7.69	83.63
	06/03/02		10.01	81.31
	09/03/02		13.91	77.41
	12/02/02		13.39	77.93
	03/03/03		7.75	83.57
	06/02/03		8.17	83.15
	09/02/03		13.58	77.74
	12/01/03		7.76	83.56
	03/01/04		7.35	85.97
	06/01/04		8.44	82.88
	09/02/04		13.61	77.71
	12/01/04		8.15	83.17
	03/01/05		7.76	83.56

Table B-1 Historic Groundwater Elevations Blue Lake Belting & Leather Works, Blue Lake, California				
Location	Date	Top of Casing Elevation (feet)[1]	Depth to Water (feet)[2]	Groundwater Elevation (feet)[3]
MW-106	12/01/99	88.88	5.30	83.58
	03/01/00		5.22	83.66
	06/01/00		6.09	82.79
	09/01/00		11.68	77.20
	12/01/00		5.81	83.07
	03/01/01		5.91	82.97
	06/01/01		8.45	80.43
	09/04/01		11.92	76.96
	12/03/01		4.96	83.92
	03/01/02		5.59	83.29
	06/03/02		7.91	80.97
	09/03/02		11.99	76.89
	12/02/02		11.43	77.45
	03/03/03		5.64	83.24
	06/02/03		6.04	82.84
	09/02/03		11.58	77.30
	12/01/03		5.71	83.17
	03/01/04		5.24	83.64
	06/01/04		6.27	82.61
	09/02/04		11.65	77.23
	12/01/04		5.98	82.90
	03/01/05		5.62	83.26
MW-1	12/01/99	89.45 [4]	5.05	84.40
	03/01/00		5.11	84.34
	06/01/00		6.64	82.81
	09/01/00		NA[5]	NA
	12/01/00		7.45	82.00
	03/01/01		6.40	83.05
	12/03/01		4.47	84.98
	03/01/02		4.93	84.52
	06/05/02		8.45	81.00
	09/03/02		12.01	77.44
	01/02/03		4.56	84.89
	03/03/03		NA	NA
	06/02/03		6.65	82.80
	09/11/03		NA	NA

Table B-1 Historic Groundwater Elevations Blue Lake Belting & Leather Works, Blue Lake, California				
Location	Date	Top of Casing Elevation (feet)[1]	Depth to Water (feet)[2]	Groundwater Elevation (feet)[3]
MW-1 (cont'd)	12/01/03		5.54	83.91
	03/01/04		5.68	83.77
	09/02/04		11.73	77.72
	12/01/04		6.58	82.87
	03/01/05		5.96	83.49
MW-2	12/01/99	91.29 [4]	6.25	85.04
	03/01/00		6.43	84.86
	06/01/00		7.82	83.47
	09/01/00		NA	NA
	12/01/00		6.09	85.20
	03/01/01		7.54	83.75
	12/03/01		5.74	85.55
	03/01/02		6.44	84.85
	06/05/02		9.32	81.97
	09/03/02		12.90	78.39
	01/02/03		5.78	85.51
	03/03/03		7.37	83.92
	06/02/03		7.81	83.48
	09/11/03		NA	NA
	12/01/03		7.01	84.28
	03/01/04		6.95	84.34
	09/02/04		13.81	77.48
	12/01/04		7.88	83.41
	03/01/05		7.33	83.96
MW-3	12/01/99	91.63 [4]	7.29	84.34
	03/01/00		7.25	84.38
	06/01/00		8.36	83.27
	09/01/00		NA	NA
	12/01/00		8.07	83.56
	03/01/01		8.36	83.27
	12/03/01		6.78	84.85
	03/01/02		7.33	84.30
	06/05/02		10.23	81.40
	09/03/02		13.88	77.75
	01/02/03		6.95	84.68

Table B-1
Historic Groundwater Elevations
Blue Lake Belting & Leather Works, Blue Lake, California

Location	Date	Top of Casing Elevation (feet)[1]	Depth to Water (feet)[2]	Groundwater Elevation (feet)[3]
MW-3 (cont'd)	03/03/03		7.95	83.68
	06/02/03		8.42	83.21
	09/11/03		NA	NA
	12/01/03		7.83	83.80
	03/01/04		7.61	84.02
	09/02/04		13.68	77.95
	12/01/04		8.39	83.24
	03/01/05		7.84	83.79

1. Referenced to top of casing elevation of Blue Lake Market well MW-1
2. Below top of casing
3. In feet, relative to Blue Lake Market well MW-1 top of casing elevation
4. Blue Lake Market well MW-1 top of casing elevation surveyed relative mean sea level
5. Not Available

Table B-2
Historic Groundwater Contaminant Levels
Blue Lake Belting & Leather Works, Blue Lake, California
(in ug/L)[1]

Well Location	Sampling Date	TPHG[2]	Benzene	Toluene	Ethyl-Benzene	m,p-Xylene	o-Xylene	Dissolved Lead	MTBE[3]	TBA[3]	DIPE[3]	ETBE[3]	TAME[3]
MW-101	12/1/99	<50[4]	<0.50	<0.50	<0.50	<0.50	<0.50	NA[5]	<0.50	<10	<1.0	<1.0	<1.0
	3/1/00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	6/1/00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50	NA	NA	NA	NA
	9/1/00	NS[6]	NS	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS
	12/1/00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	3/1/01	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	6/1/01	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	9/4/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/3/01	160	<0.50	<4.0	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	3/1/02	<50	<0.50	<4.0	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	6/3/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	9/3/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	12/2/02	64	<0.50	<2.8	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	3/3/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	6/2/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	9/2/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/1/03	<50	<0.50	<1.4	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	3/1/04	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	6/1/04	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	9/2/04	90	<0.50	<3.0	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	12/1/04	Not Sampled											
	3/1/05	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
MW-102	12/1/99	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<10	<1.0	<1.0	<1.0
	3/1/00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	6/1/00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50	NA	NA	NA	NA
	9/1/00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<0.50	NA	NA	NA	NA
	12/1/00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	3/1/01	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA

Table B-2
Historic Groundwater Contaminant Levels
Blue Lake Belting & Leather Works, Blue Lake, California
(in ug/L)[1]

Well Location	Sampling Date	TPHG[2]	Benzene	Toluene	Ethyl-Benzene	m,p-Xylene	o-Xylene	Dissolved Lead	MTBE[3]	TBA[3]	DIPE[3]	ETBE[3]	TAME[3]
MW-102	6/1/01	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
(cont'd)	9/4/01	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	12/3/01	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	3/1/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	6/3/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	9/3/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	12/2/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	3/3/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	<3.0	NA	NA	NA
	6/2/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	9/2/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<3.0	NA	NA	NA	NA
	12/1/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	3/1/04	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	6/1/04	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	9/2/04	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	12/1/04	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	3/1/05	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
MW-103	12/1/99	2,200	27	14	26	47	11	NA	<1.0	<20	<2.0	<2.0	<2.0
	3/1/00	3,200 [7]	47	93	55	130	47	NA	<30	NA	NA	NA	NA
	6/1/00	2,200	12	7.3	24	30	12	<20	<0.50	NA	NA	NA	NA
	9/1/00	2,300	23	2.8	18	12	1.2	NA	<0.50	NA	NA	NA	NA
	12/1/00	4,900	43	48	50	73	14	<80	NA	NA	NA	NA	NA
	3/1/01	2,900	27	37	35	49	14	NA	<60	NA	NA	NA	NA
	6/1/01	3,200	42	<80	16	21	9.4	NA	<30	NA	NA	NA	NA
	9/4/01	1,300	18	<40	7.9	5.4	<3.0	NA	<32	NA	NA	NA	NA
	12/3/01	5,700	150	160	95	180	39	NA	<150	NA	NA	NA	NA
	3/1/02	5,700	100	170	83	260	120	NA	<150	NA	NA	NA	NA
	6/3/02	13,900	25	<110	35	33	17	NA	<3.0	NA	NA	NA	NA
	9/3/02	1,600	21	<35	11	7	<5.0	NA	<30	NA	NA	NA	NA

Table B-2
Historic Groundwater Contaminant Levels
Blue Lake Belting & Leather Works, Blue Lake, California
(in ug/L)[1]

Well Location	Sampling Date	TPHG[2]	Benzene	Toluene	Ethyl-Benzene	m,p-Xylene	o-Xylene	Dissolved Lead	MTBE[3]	TBA[3]	DIPE[3]	ETBE[3]	TAME[3]
MW-103 (cont'd)	12/2/02	5,700	280	110	190	300	36	NA	<120	NA	NA	NA	NA
	3/3/03	4,400	47	<200	74	170	59	NA	NA	NA	NA	NA	NA
	6/2/03	2,400	14	<70	15	12	5.3	NA	<30	NA	NA	NA	NA
	9/2/03	1,500	18	<45	13	9.5	<5.0	<10	<30	NA	NA	NA	NA
	12/1/03	3,500	49	<90	48	49	9.6	NA	NA	NA	NA	NA	NA
	3/1/04	5,800	100	160	130	260	83	NA	NA	NA	NA	NA	NA
	6/1/04	2,100	15	<110	32	26	14	NA	NA	NA	NA	NA	NA
	9/2/04	3,700	55	49	140	150	18	NA	NA	NA	NA	NA	NA
	12/1/04	2,400	42	40	41	39	8.4	NA	NA	NA	NA	NA	NA
	3/1/05	3,700	58	82	67	92	33	NA	NA	NA	NA	NA	NA
MW-104	12/1/99	33,000	520	590	1,500	4,300	350	NA	<25.0	<500	<50.0	<50.0	<50.0
	3/1/00	15,000 [7]	330	460	770	2,100	210	NA	<300	NA	NA	NA	NA
	6/1/00	16,000	260	490	770	1,900	200	<20	<10	NA	NA	NA	NA
	9/1/00	6,600	43	45	190	260	19	NA	<1.0	NA	NA	NA	NA
	12/1/00	34,000	550	440	1,300	3,400	200	<300	NA	NA	NA	NA	NA
	3/1/01	18,000	350	440	740	1,700	170	NA	<600	NA	NA	NA	NA
	6/1/01	17,000	260	320	540	1,400	110	NA	<300	NA	NA	NA	NA
	9/4/01	9,800	120	<200	330	510	36	NA	<400	NA	NA	NA	NA
	12/3/01	33,000	870	520	1600	4,400	250	NA	<900	NA	NA	NA	NA
	3/1/02	20,000	400	450	930	2,300	180	NA	<650	NA	NA	NA	NA
	6/3/02	21,000	370	880	890	2,300	310	NA	<80	NA	NA	NA	NA
	9/3/02	7,400	100	<200	270	320	41	NA	<150	NA	NA	NA	N
	12/2/02	13,000	260	210	630	1,100	91	NA	<320	NA	NA	NA	NA
	3/3/03	20,000	430	560	950	2,100	230	NA	NA	NA	NA	NA	NA
	6/2/03	26,000	540	1,100	1,300	3,100	530	NA	<600	NA	NA	NA	NA
	9/2/03	6,100	100	110	260	420	59	<10	<300	NA	NA	NA	NA
	12/1/03	25,000	760	520	1,300	2,500	200	NA	NA	NA	NA	NA	NA
	3/1/04	21,000	400	460	1,000	1,800	210	NA	NA	NA	NA	NA	NA

Table B-2
Historic Groundwater Contaminant Levels
Blue Lake Belting & Leather Works, Blue Lake, California
(in ug/L)[1]

Well Location	Sampling Date	TPHG[2]	Benzene	Toluene	Ethyl-Benzene	m,p-Xylene	o-Xylene	Dissolved Lead	MTBE[3]	TBA[3]	DIPE[3]	ETBE[3]	TAME[3]
MW-104 (cont'd)	6/1/04	26,000	500	680	1,200	2,100	320	NA	NA	NA	NA	NA	NA
	12/1/04	16,000	430	460	990	1,900	190	NA	NA	NA	NA	NA	NA
	3/1/05	17,000	200	350	590	1,100	180	NA	NA	NA	NA	NA	NA
MW-105	12/1/99	2,000	4.0	1.7	12	2.1	<0.50	NA	<0.50	<10	<1.0	<1.0	<1.0
	3/1/00	610 [7]	<3.0	<15	<3.0	<2.0	<1.0	NA	<3.0	NA	NA	NA	NA
	6/1/00	460	<0.50	<0.50	0.65	<0.50	<0.50	<20	<0.50	NA	NA	NA	NA
	9/1/00	830	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<0.50	NA	NA	NA	NA
	12/1/00	3100 [7]	<12	<25	8.0	3.0	0.71	<20	NA	NA	NA	NA	NA
	3/1/01	890	<3.0	<10[8]	2.0	<2.0[8]	<0.50	NA	<20	NA	NA	NA	NA
	6/1/01	430	<0.50	<7.0	<1.2	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	9/4/01	650	<4.0	<9.0	<1.5	<1.2	<1.0	NA	<13	NA	NA	NA	NA
	12/3/01	4,700	11	<40	18	6.3	1.8	NA	<100	NA	NA	NA	NA
	3/1/02	260	1.7	<6.0	<0.50	<0.50	<0.50	NA	<6.0	NA	NA	NA	NA
	6/3/02	140 [7]	<0.50	<3.0[9]	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	9/3/02	360 [7]	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	12/2/02	680	6.0	<11	2.1	0.82	<2.0	NA	<13	NA	NA	NA	NA
	3/3/03	280	<1.5	<5.5	<1.0	<1.0	<0.50	NA	NA	NA	NA	NA	NA
	6/2/03	210	<0.50	<5.5	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	9/2/03	250	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<3.0	NA	NA	NA	NA
	12/1/03	1,500	<5.0	<40	3.8	1.6	<1.5	NA	NA	NA	NA	NA	NA
	3/1/04	390	<2.0	<17	0.93	0.53	<0.5	NA	NA	NA	NA	NA	NA
	6/1/04	210	<0.50	<12	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	9/2/04	210	<0.50	<9	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	12/1/04	590	<2.0	<18	1.3	0.73	<1.0	NA	NA	NA	NA	NA	NA
	3/1/05	680	<2.5	<30	<2.0	<1.5	<1.0	NA	NA	NA	NA	NA	NA
MW-106	12/1/99	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<0.50	<10	<1.0	<1.0	<1.0
	3/1/00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	6/1/00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50	NA	NA	NA	NA

Table B-2
Historic Groundwater Contaminant Levels
Blue Lake Belting & Leather Works, Blue Lake, California
(in ug/L)[1]

Well Location	Sampling Date	TPHG[2]	Benzene	Toluene	Ethyl-Benzene	m,p-Xylene	o-Xylene	Dissolved Lead	MTBE[3]	TBA[3]	DIPE[3]	ETBE[3]	TAME[3]
MW-106	9/1/00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<0.50	NA	NA	NA	NA
(cont'd)	12/1/00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	3/1/01	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	6/1/01	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	9/4/01	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	12/3/01	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	3/1/02	<50	0.74	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	6/3/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	9/3/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	12/2/02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	3/3/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	6/2/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	9/2/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<3.0	NA	NA	NA	NA
	12/1/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	3/1/04	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	6/1/04	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	9/2/04	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	12/1/04	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
	3/1/05	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA
MW-1[10]	12/3/01	71	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<1.0	NA	NA	NA	NA
	3/1/02	420	11	<0.50	5.4	3.8	<0.50	NA	<27	NA	NA	NA	NA
	6/3/02	2400 [7]	63	32	49	30	9	NA	<70	NA	NA	NA	NA
	9/3/02	3800 [7]	210	<70	29	<25	<12	NA	<110	NA	NA	NA	NA
	1/2/03	400	<2.0	<4.0		<0.50	<1.0	NA	<10	NA	NA	NA	NA
	3/3/03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<3.0	NA	NA	NA	NA
	6/2/03	1,300	43	<30	29	9.6	<8.0	NA	<30	NA	NA	NA	NA
	9/11/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/1/03	1,500	38	<20	19	14	<4.0	NA	<80	NA	NA	NA	NA

Table B-2
Historic Groundwater Contaminant Levels
Blue Lake Belting & Leather Works, Blue Lake, California
(in ug/L)[1]

Well Location	Sampling Date	TPHG[2]	Benzene	Toluene	Ethyl-Benzene	m,p-Xylene	o-Xylene	Dissolved Lead	MTBE[3]	TBA[3]	DIPE[3]	ETBE[3]	TAME[3]
MW-1[10] (cont'd)	3/1/04	Data Not Available											
	6/7/04	Data Not Available											
	9/2/04	1,000	37	<19	<5.0	<3.0 [11]	<3.0 [11]	NA	<40	NA	NA	NA	NA
	12/1/04	330	4.8	<4.0	1.7	0.91	<1.0	NA	NA	NA	NA	NA	NA
	3/1/05	990	<10	<15	<15	<7.0	<3.0	NA	<35	NA	NA	NA	NA
MW-2[10]	12/3/01	4,700	7.3	42	110	500	150	NA	<1.0	NA	NA	NA	NA
	3/1/02	15,000	29	290	640	2,000	600	NA	<70	NA	NA	NA	NA
	6/3/02	3400 [7]	9.8	21	87	190	63	NA	<11	NA	NA	NA	NA
	9/3/02	NS	NS	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS
	1/2/03	12,000	<25	97	470	1,700	210	NA	<150	NA	NA	NA	NA
	3/3/03	270	<0.50	<5.5	2.4	8.1	4.2	NA	<3.0	NA	NA	NA	NA
	6/2/03	860	0.75	6.6	28	63	12	NA	<3.0	NA	NA	NA	NA
	9/11/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/1/03	6,700	14	52	330	970	160	NA	<30	NA	NA	NA	NA
	3/1/04	Data Not Available											
	6/7/04	Data Not Available											
	9/2/04	2,600	16	26	92	258 [11]	258 [11]	NA	<3.0	NA	NA	NA	NA
	12/1/04	2,200	5.2	15	110	270	21	NA	NA	NA	NA	NA	NA
	3/1/05	1,100	<2.0	10	19	48	7.9	NA	<3.0	NA	NA	NA	NA
MW-3[10]	12/3/01	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<1.0	NA	NA	NA	NA
	3/1/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/3/02		28	<140	69	130	17	NA	<250	NA	NA	NA	NA
	9/3/02	NS	NS	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS
	1/2/03	23,000	390	2,700	810	3,000	1,000	NA	<150	NA	NA	NA	NA
	3/3/03	7,500	32	<180	62	360	55	NA	<200	NA	NA	NA	NA
	6/2/03	5,600	36	<110	86	160	20	NA	<170	NA	NA	NA	NA
	9/11/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/1/03	10,000	77	120	200	540	54	NA	<400	NA	NA	NA	NA

Table B-2
Historic Groundwater Contaminant Levels
Blue Lake Belting & Leather Works, Blue Lake, California
(in ug/L)[1]

Well Location	Sampling Date	TPHG[2]	Benzene	Toluene	Ethyl-Benzene	m,p-Xylene	o-Xylene	Dissolved Lead	MTBE[3]	TBA[3]	DIPE[3]	ETBE[3]	TAME[3]
MW-3[10] (cont'd)	3/1/04	Data Not Available											
	6/7/04	Data Not Available											
	9/2/04	4,500	59	50	73	109 [11]	109 [11]	NA	<140	NA	NA	NA	NA
	12/1/04	7,500	120	340	180	470	84	NA	NA	NA	NA	NA	NA
	3/1/05	11,000	160	690	370	790	220	NA	NA	NA	NA	NA	NA

1. ug/L: micrograms per Liter
2. TPHG: Total Petroleum Hydrocarbons as Gasoline
3. MTBE: Methyl Tertiary-Butyl Ether; TBA: Tertiary-Butyl Alcohol; DIPE: Diisopropyl Ether; ETBE: Ethyl Tertiary-Butyl Ether; TAME: Tertiary-Amyl Methyl Ether
4. <: Denotes a value that is "less than" the method detection limit.
5. NA: Not Applicable/Analyzed/Available
6. NS: Not Sampled
7. Samples do not have the typical pattern of fresh gasoline. However, the results represent the amount of material in the gasoline range.
8. Results for samples are reported ND with a dilution due to matrix interference.
9. Reporting limits raised due to matrix interference.
10. Well sampled by LACO Associates for Blue Lake Market.
11. Analytical result represents total xylenes.

Table B-3
Historic Natural Attenuation Parameters
Blue Lake Belting & Leather Works, Blue Lake, California

Well Location	Sampling Date	DO[1] (ppm)[2]	DCO_2[3] (ppm)	ORP[4] (mV)[5]	Alkalinity (mg/L $CaCO_3$) [6]	Dissolved Methane (ug/L)[7]	Dissolved Iron (ug/L)	Sulfate (mg/L)[8]	Nitrate (mg/L)	Dissolved Manganese (ug/L)
MW-101	12/01/99	1.98	40	0	NA[9]	27.1	380	15	0.97	NA
	03/01/00	3.67	40	280	55	<7.89[10]	<100	13	1.5	28
	06/01/00	1.15	40	235	45	<7.89	<100	10	1.3	16
	09/01/00	0.55	NA	NA	NA	NA	NA	NA	NA	NA
	12/01/00	0.83	40	165	NA	NA	NA	NA	NA	NA
	03/01/01	1.35	25	97	NA	NA	NA	NA	NA	NA
	06/01/01	0.38	30	112	NA	NA	NA	NA	NA	NA
	09/04/01	0.49	NA	90	NA	NA	NA	NA	NA	NA
	12/03/01	0.74	30	106	NA	NA	NA	NA	NA	NA
	03/01/02	1.23	30	172	NA	NA	NA	NA	NA	NA
	06/03/02	0.86	30	117	NA	NA	NA	NA	NA	NA
	09/03/02	1.34	NA	164	NA	NA	NA	NA	NA	NA
	12/02/02	0.73	50	175	NA	NA	NA	NA	NA	NA
	03/03/03	1.21	25	242	NA	NA	NA	NA	NA	NA
	06/02/03	1.52	40	240	NA	NA	NA	NA	NA	NA
	09/02/03	1.47	45	203	NA	NA	NA	NA	NA	NA
	12/01/03	1.75	30	251	NA	NA	NA	NA	NA	NA
	03/01/04	2.39	15	270	NA	NA	NA	NA	NA	NA
	06/01/04	0.98	30	191	NA	NA	NA	NA	NA	NA
	09/02/04	1.12	35	117	NA	NA	NA	NA	NA	NA
	12/01/04	1.95	NA	NA	NA	NA	NA	NA	NA	NA
	03/01/05	6.08	25	132	NA	NA	NA	NA	NA	NA
MW-102	12/01/99	3.40	30	13	NA	<7.89	<100	11	1.3	NA
	03/01/00	4.16	20	305	32	<7.89	<100	7.5	1.4	<2.0
	06/01/00	3.20	20	245	31	<7.89	<100	7	0.74	<2.0

Table B-3
Historic Natural Attenuation Parameters
Blue Lake Belting & Leather Works, Blue Lake, California

Well Location	Sampling Date	DO[1] (ppm)[2]	DCO_2[3] (ppm)	ORP[4] (mV)[5]	Alkalinity (mg/L $CaCO_3$) [6]	Dissolved Methane (ug/L)[7]	Dissolved Iron (ug/L)	Sulfate (mg/L)[8]	Nitrate (mg/L)	Dissolved Manganese (ug/L)
MW-102 (cont'd)	09/01/00	1.72	30	155	NA	<7.89	<15	5.8	0.77	NA
	12/01/00	4.08	30	165	NA	NA	NA	NA	NA	NA
	03/01/01	3.08	20	55	NA	NA	NA	NA	NA	NA
	06/01/01	2.96	30	158	NA	NA	NA	NA	NA	NA
	09/04/01	1.63	20	97	NA	NA	NA	NA	NA	NA
	12/03/01	3.18	20	NA	NA	NA	NA	NA	NA	NA
	03/01/02	3.84	20	159	NA	NA	NA	NA	NA	NA
	06/03/02	3.49	25	130	NA	NA	NA	NA	NA	NA
	09/03/02	1.64	15	162	NA	NA	NA	NA	NA	NA
	12/02/02	1.35	25	180	NA	NA	NA	NA	NA	NA
	03/03/03	4.10	20	249	NA	NA	NA	NA	NA	NA
	06/02/03	3.91	30	231	NA	NA	NA	NA	NA	NA
	09/02/03	2.04	15	231	NA	NA	NA	NA	NA	NA
	12/01/03	3.37	25	254	NA	NA	NA	NA	NA	NA
	03/01/04	3.46	15	278	NA	NA	NA	NA	NA	NA
	06/01/04	3.18	30	185	NA	NA	NA	NA	NA	NA
	09/02/04	1.46	20	102	NA	NA	NA	NA	NA	NA
	12/01/04	4.64	20	158	NA	NA	NA	NA	NA	NA
	03/01/05	4.51	25	158	NA	NA	NA	NA	NA	NA
MW-103	12/01/99	0.74	40	3	NA	396	2,900	3.8	<0.10	NA
	03/01/00	1.18	30	10	55	377	3,200	3.5	<0.10	390
	06/01/00	0.48	40	15	45	137	2,700	3.2	<0.50	320
	09/01/00	0.47	80	5	NA	133	1,900	2.4	<0.10	NA
	12/01/00	0.71	70	-35	NA	NA	NA	NA	NA	NA
	03/01/01	0.28	30	73	NA	NA	NA	NA	NA	NA

Table B-3
Historic Natural Attenuation Parameters
Blue Lake Belting & Leather Works, Blue Lake, California

Well Location	Sampling Date	DO[1] (ppm)[2]	DCO_2[3] (ppm)	ORP[4] (mV)[5]	Alkalinity (mg/L $CaCO_3$) [6]	Dissolved Methane (ug/L)[7]	Dissolved Iron (ug/L)	Sulfate (mg/L)[8]	Nitrate (mg/L)	Dissolved Manganese (ug/L)
MW-103 (cont'd)	06/01/01	0.12	40	165	NA	NA	NA	NA	NA	NA
	09/04/01	0.15	80	80	NA	NA	NA	NA	NA	NA
	12/03/01	0.34	35	112	NA	NA	NA	NA	NA	NA
	03/01/02	0.72	40	156	NA	NA	NA	NA	NA	NA
	06/03/02	0.35	35	150	NA	NA	NA	NA	NA	NA
	09/03/02	0.23	65	146	NA	NA	NA	NA	NA	NA
	12/02/02	0.49	60	198	NA	NA	NA	NA	NA	NA
	03/03/03	0.78	30	252	NA	NA	NA	NA	NA	NA
	06/02/03	1.30	125	208	NA	NA	NA	NA	NA	NA
	09/02/03	1.09	60	239	NA	NA	NA	NA	NA	NA
	12/01/03	0.98	35	274	NA	NA	NA	NA	NA	NA
	03/01/04	0.72	35	275	NA	NA	NA	NA	NA	NA
	06/01/04	0.55	70	54	NA	NA	NA	NA	NA	NA
	09/02/04	0.54	70	21	NA	NA	NA	NA	NA	NA
	12/01/04	1.43	35	73	NA	NA	NA	NA	NA	NA
	03/01/05	2.74	40	105	NA	NA	NA	NA	NA	NA
MW-104	12/01/99	0.80	60	10	NA	2740	3,600	4.4	<0.10	NA
	03/01/00	0.61	25	215	66	4756	4,700	3.9	<0.10	990
	06/01/00	0.44	30	115	64	1958	4,100	3	<0.50	930
	09/01/00	0.52	40	75	NA	758	3,000	1.8	<0.10	NA
	12/01/00	1.00	60	25	NA	NA	NA	NA	NA	NA
	03/01/01	0.50	40	57	NA	NA	NA	NA	NA	NA
	06/01/01	0.23	40	170	NA	NA	NA	NA	NA	NA
	09/04/01	0.24	50	65	NA	NA	NA	NA	NA	NA
	12/03/01	0.23	50	124	NA	NA	NA	NA	NA	NA

Table B-3
Historic Natural Attenuation Parameters
Blue Lake Belting & Leather Works, Blue Lake, California

Well Location	Sampling Date	DO[1] (ppm)[2]	DCO_2[3] (ppm)	ORP[4] (mV)[5]	Alkalinity (mg/L $CaCO_3$) [6]	Dissolved Methane (ug/L)[7]	Dissolved Iron (ug/L)	Sulfate (mg/L)[8]	Nitrate (mg/L)	Dissolved Manganese (ug/L)
MW-104 (cont'd)	03/01/02	0.35	35	167	NA	NA	NA	NA	NA	NA
	06/03/02	0.51	30	141	NA	NA	NA	NA	NA	NA
	09/03/02	0.26	40	143	NA	NA	NA	NA	NA	NA
	12/02/02	0.48	40	187	NA	NA	NA	NA	NA	NA
	03/03/03	0.75	30	241	NA	NA	NA	NA	NA	NA
	06/02/03	1.25	55	265	NA	NA	NA	NA	NA	NA
	09/02/03	1.13	65	238	NA	NA	NA	NA	NA	NA
	12/01/03	0.56	40	278	NA	NA	NA	NA	NA	NA
	03/01/04	0.79	30	272	NA	NA	NA	NA	NA	NA
	06/01/04	0.62	110	51	NA	NA	NA	NA	NA	NA
	09/02/04	0.58	20	34	NA	NA	NA	NA	NA	NA
	12/01/04	1.60	30	75	NA	NA	NA	NA	NA	NA
	03/01/05	8.12	20	90	NA	NA	NA	NA	NA	NA
MW-105	12/01/99	0.77	70	5	NA	122	2,100	4.3	<0.10	NA
	03/01/00	1.76	20	320	59	11.2	420	6.6	0.88	470
	06/01/00	1.45	20	265	36	18.9	440	5.9	0.59	160
	09/01/00	0.48	NA	30	NA	43.1	530	3.7	0.25	NA
	12/01/00	0.98	70	-15	NA	NA	NA	NA	NA	NA
	03/01/01	0.77	20	99	NA	NA	NA	NA	NA	NA
	06/01/01	0.94	30	140	NA	NA	NA	NA	NA	NA
	09/04/01	0.21	70	103	NA	NA	NA	NA	NA	NA
	12/03/01	0.42	50	124	NA	NA	NA	NA	NA	NA
	03/01/02	0.95	20	179	NA	NA	NA	NA	NA	NA
	06/03/02	1.19	25	145	NA	NA	NA	NA	NA	NA
	09/03/02	0.28	100	165	NA	NA	NA	NA	NA	NA

Table B-3
Historic Natural Attenuation Parameters
Blue Lake Belting & Leather Works, Blue Lake, California

Well Location	Sampling Date	DO[1] (ppm)[2]	DCO_2[3] (ppm)	ORP[4] (mV)[5]	Alkalinity (mg/L $CaCO_3$) [6]	Dissolved Methane (ug/L)[7]	Dissolved Iron (ug/L)	Sulfate (mg/L)[8]	Nitrate (mg/L)	Dissolved Manganese (ug/L)
MW-105 (cont'd)	12/02/02	0.58	50	202	NA	NA	NA	NA	NA	NA
	03/03/03	1.40	20	252	NA	NA	NA	NA	NA	NA
	06/02/03	1.64	45	254	NA	NA	NA	NA	NA	NA
	09/02/03	1.10	40	232	NA	NA	NA	NA	NA	NA
	12/01/03	3.80	35	273	NA	NA	NA	NA	NA	NA
	03/01/04	0.72	15	278	NA	NA	NA	NA	NA	NA
	06/01/04	1.23	20	183	NA	NA	NA	NA	NA	NA
	09/02/04	0.64	50	75	NA	NA	NA	NA	NA	NA
	12/01/04	1.78	45	45	NA	NA	NA	NA	NA	NA
	03/01/05	0.88	35	165	NA	NA	NA	NA	NA	NA
MW-106	12/01/99	0.72	40	2	NA	<7.89	<100	7.9	0.61	NA
	03/01/00	0.77	30	105	48	<7.89	1,100	7.5	0.59	960
	06/01/00	0.55	30	215	36	<7.89	<100	7.3	0.58	270
	09/01/00	0.65	NA	160	NA	<7.89	<15	6.2	0.37	NA
	12/01/00	1.45	60	140	NA	NA	NA	NA	NA	NA
	03/01/01	1.28	30	125	NA	NA	NA	NA	NA	NA
	06/01/01	0.96	30	49	NA	NA	NA	NA	NA	NA
	09/04/01	0.30	25	40	NA	NA	NA	NA	NA	NA
	12/03/01	0.47	35	67	NA	NA	NA	NA	NA	NA
	03/01/02	0.55	30	152	NA	NA	NA	NA	NA	NA
	06/03/02	0.84	30	79	NA	NA	NA	NA	NA	NA
	09/03/02	0.47	35	94	NA	NA	NA	NA	NA	NA
	12/02/02	2.37	35	141	NA	NA	NA	NA	NA	NA
	03/03/03	0.80	30	218	NA	NA	NA	NA	NA	NA
	06/02/03	1.76	35	219	NA	NA	NA	NA	NA	NA

Table B-3
Historic Natural Attenuation Parameters
Blue Lake Belting & Leather Works, Blue Lake, California

Well Location	Sampling Date	DO[1] (ppm)[2]	DCO_2[3] (ppm)	ORP[4] (mV)[5]	Alkalinity (mg/L $CaCO_3$) [6]	Dissolved Methane (ug/L)[7]	Dissolved Iron (ug/L)	Sulfate (mg/L)[8]	Nitrate (mg/L)	Dissolved Manganese (ug/L)
MW-106 (cont'd)	09/02/03	1.91	30	145	NA	NA	NA	NA	NA	NA
	12/01/03	0.90	30	232	NA	NA	NA	NA	NA	NA
	03/01/04	1.46	15	254	NA	NA	NA	NA	NA	NA
	06/01/04	1.42	60	138	NA	NA	NA	NA	NA	NA
	09/02/04	1.25	25	113	NA	NA	NA	NA	NA	NA
	12/01/04	2.23	45	176	NA	NA	NA	NA	NA	NA
	03/01/05	1.43	30	68	NA	NA	NA	NA	NA	NA
MW-3	03/01/05	0.74	45	27	NA	NA	NA	NA	NA	NA

1. DO: Dissolved Oxygen, field measured using portable instrumentation.
2. ppm: Measurement concentration, in parts per million
3. DCO_2: Dissolved Carbon Dioxide, field measured using a field test kit
4. ORP: Oxidation-Reduction Potential measured using portable instrumentation
5. mV: millivolts
6. mg/L $CaCO_3$: milligrams per Liter of Calcium Carbonate
7. ug/L: micrograms per Liter
8. mg/L: milligrams per Liter
9. NA: Not Measured or Not Available
10. <: Denotes a value that is "less than" the method detection limit

Table B-4
Ozone System Monitoring
Blue Lake Belting & Leather Works, Blue Lake, California

Date	Total System Run Time (hours:minutes)	Ozone Flow (scfh)[1]	Ozone Pressure (psi)[2]	Electric Meter (kWhr)[3]	SW-1 Flow (scfh)	SW-1 Pressure (psi)	SW-1 Total Run Time (hours:minutes)	SW-1 Programmed Run Time (hours:minutes)	SW-2 Flow (scfh)	SW-2 Pressure (psi)	SW-2 Total Run Time (hours:minutes)
12/21/04	2:52	8	9	0	1.3	8	0:39	0:00	1.0	16	0:19
12/31/04	221:33	5	13	397	1.0	20	0:39	0:00	0.8	25	0:19
01/07/05	389:27	5	12.5	520	NM	22	0:40	0:00	NM	30	0:20
01/17/05	630:58	5	12.5	830	0.9	16	0:41	0:00	0.9	15	0:21
01/21/05	725:30	5	13	NM	0.9	10	0:43	0:00	0.9	11	0:23
01/28/05	893:11	5	13.5	1286	1.1	7	0:44	0:00	0.8	17	0:24
02/03/05	1040:48	9.5	9.5	1381	1.1	7	0:49	0:05	0.8	17	0:26
03/01/05	1655:53	9	8.5	2185	1.2	6.5	41:54	0:05	1.1	12	41:28

Table B-4
Ozone System Monitoring
Blue Lake Belting & Leather Works, Blue Lake, California

		SW-3				SW-4				SW-5	
Programmed Run Time (hours:minutes)	Date	Flow (scfh)	Pressure (psi)	Total Run Time (hours:minutes)	Programmed Run Time (hours:minutes)	Flow (scfh)	Pressure (psi)	Total Run Time (hours:minutes)	Programmed Run Time (hours:minutes)	Flow (scfh)	Pressure (psi)
0:00	12/21/04	1.1	14	0:15	0:05	1.1	12	0:16	0:05	1.1	14
0:00	12/31/04	1.3	20	44:15	0:05	1.1	20	44:06	0:05	1.2	20
0:00	01/07/05	NM	19	77:55	0:05	NM	19	77:37	0:05	NM	19
0:00	01/17/05	1.1	7	126:10	0:05	1.1	8	125:59	0:05	1.1	8
0:00	01/21/05	1.1	5	145:06	0:05	1.1	7	144:51	0:05	1.1	9
0:00	01/28/05	1.1	8	178:40	0:05	1.1	8	178:22	0:05	1.1	9
0:05	02/03/05	1.1	7	208:32	0:10	1.1	7	207:47	0:10	1.1	9
0:05	03/01/05	1.2	9	290:31	0:10	1.1	9	289:38	0:10	1.1	10

Table B-4
Ozone System Monitoring
Blue Lake Belting & Leather Works, Blue Lake, California

			SW-6				SW-7				SW-8
Total Run Time (hours:minutes)	Programmed Run Time (hours:minutes)	Date	Flow (scfh)	Pressure (psi)	Total Run Time (hours:minutes)	Programmed Run Time (hours:minutes)	Flow (scfh)	Pressure (psi)	Total Run Time (hours:minutes)	Programmed Run Time (hours:minutes)	Flow (scfh)
0:14	0:05	12/21/04	1.0	16	0:11	0:05	0.9	18	0:09	0:00	1.1
43:56	0:05	12/31/04	1.2	20	43:42	0:05	0.9	22	0:09	0:00	0.8
77:27	0:05	1/7/05	NM	19	77:18	0:05	NM	21	0:10	0:00	NM
125:48	0:05	1/17/05	1.1	8	125:35	0:05	0.9	15	0:11	0:00	0.8
144:39	0:05	1/21/05	1.1	8	144:30	0:05	0.9	16	0:12	0:00	0.9
178:10	0:05	1/28/05	1.1	9	178:01	0:05	0.9	15	0:13	0:00	1.1
207:31	0:10	2/3/05	1.1	9	207:22	0:10	0.9	17	0:15	0:05	1.0
289:34	0:10	3/1/05	1.1	11	289:22	0:10	1.0	14	41:16	0:05	1.0

Table B-4
Ozone System Monitoring
Blue Lake Belting & leather works, Blue Lake, California

				SW-9				SW-10			
Pressure (psi)	Total Run Time (hours:minutes)	Programmed Run Time (hours:minutes)	Date	Flow (scfh)	Pressure (psi)	Total Run Time (hours:minutes)	Programmed Run Time (hours:minutes)	Flow (scfh)	Pressure (psi)	Total Run Time (hours:minutes)	Programmed Run Time (hours:minutes)
15	0:16	0:00	12/21/04	1.3	7	0:12	0:00	1.1	15	0:21	0:05
23	0:16	0:00	12/31/04	1.2	20	0:12	0:00	1.2	20	43:59	0:05
21	0:17	0:00	01/07/05	NM	15	0:13	0:00	NM	15	77:30	0:05
16	0:18	0:00	01/17/05	1.1	6	0:14	0:00	1.1	6	125:41	0:05
16	0:19	0:00	01/21/05	1.1	6	0:15	0:00	1.1	6	144:32	0:05
10	0:20	0:00	01/28/05	1.2	7	0:16	0:00	1.1	6	178:01	0:05
14	0:22	0:05	02/03/05	1.0	6	0:18	0:05	1.1	8	207:26	0:10
13	41:23	0:05	03/01/05	1.2	8	41:18	0:05	1.1	12	289:29	0:10

1. scfh: standard cubic feet per hour 2. psi: pounds per square inch 3. kWhr: kilowatt hour

Appendix C

Laboratory Analytical Reports

NORTH COAST LABORATORIES LTD.

March 08, 2005

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

Attn: Mike Foget

RE: 097309, Blue Lake Belting and Leather

Order No.: 0503044
Invoice No.: 48595
PO No.:
ELAP No. 1247-Expires July 2006

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	MW-106
02A	MW-101
03A	MW-102
04A	MW-105
05A	MW-103
06A	MW-104
07A	LACO MW-3

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: *09-Mar-05*

CLIENT:	SHN Consulting Engineers and Geologists
Project:	097309, Blue Lake Belting and Leather
Lab Order:	0503044

CASE NARRATIVE

TPH as Gasoline:
Sample MW-105 does not present a peak pattern consistent with that of gasoline. The reported result represents the amount of material in the gasoline range.

Samples MW-103, MW-104 and LACO MW-3 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.

BTEX:
Some reporting limits were raised for sample MW-105 due to matrix interference.

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

The surrogate recoveries were below the lower acceptance limits for samples MW-106, MW-101 and MW-102. 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.

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

Date: 08-Mar-05
WorkOrder: 0503044

ANALYTICAL REPORT

Client Sample ID: MW-106 **Received:** 3/1/05 **Collected:** 3/1/05 10:50
Lab ID: 0503044-01A

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Benzene	ND	0.50	µg/L	1.0		3/6/05
Toluene	ND	0.50	µg/L	1.0		3/6/05
Ethylbenzene	ND	0.50	µg/L	1.0		3/6/05
m,p-Xylene	ND	0.50	µg/L	1.0		3/6/05
o-Xylene	ND	0.50	µg/L	1.0		3/6/05
Surrogate: Cis-1,2-Dichloroethylene	84.0	85-115	% Rec	1.0		3/6/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		3/6/05

Client Sample ID: MW-101 **Received:** 3/1/05 **Collected:** 3/1/05 11:20
Lab ID: 0503044-02A

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Benzene	ND	0.50	µg/L	1.0		3/6/05
Toluene	ND	0.50	µg/L	1.0		3/6/05
Ethylbenzene	ND	0.50	µg/L	1.0		3/6/05
m,p-Xylene	ND	0.50	µg/L	1.0		3/6/05
o-Xylene	ND	0.50	µg/L	1.0		3/6/05
Surrogate: Cis-1,2-Dichloroethylene	77.5	85-115	% Rec	1.0		3/6/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		3/6/05

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

Date: 08-Mar-05
WorkOrder: 0503044

ANALYTICAL REPORT

Client Sample ID: MW-102 **Received:** 3/1/05 **Collected:** 3/1/05 11:55
Lab ID: 0503044-03A

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Benzene	ND	0.50	µg/L	1.0		3/6/05
Toluene	ND	0.50	µg/L	1.0		3/6/05
Ethylbenzene	ND	0.50	µg/L	1.0		3/6/05
m,p-Xylene	ND	0.50	µg/L	1.0		3/6/05
o-Xylene	ND	0.50	µg/L	1.0		3/6/05
Surrogate: Cis-1,2-Dichloroethylene	80.4	85-115	% Rec	1.0		3/6/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		3/6/05

Client Sample ID: MW-105 **Received:** 3/1/05 **Collected:** 3/1/05 12:30
Lab ID: 0503044-04A

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Benzene	ND	2.5	µg/L	1.0		3/6/05
Toluene	ND	30	µg/L	10		3/7/05
Ethylbenzene	ND	2.0	µg/L	1.0		3/6/05
m,p-Xylene	ND	1.5	µg/L	1.0		3/6/05
o-Xylene	ND	1.0	µg/L	1.0		3/6/05
Surrogate: Cis-1,2-Dichloroethylene	90.0	85-115	% Rec	1.0		3/6/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	680	50	µg/L	1.0		3/6/05

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

Date: 08-Mar-05
WorkOrder: 0503044

ANALYTICAL REPORT

Client Sample ID: MW-103 **Received:** 3/1/05 **Collected:** 3/1/05 13:10
Lab ID: 0503044-05A

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Benzene	58	5.0	µg/L	10		3/7/05
Toluene	82	5.0	µg/L	10		3/7/05
Ethylbenzene	67	5.0	µg/L	10		3/7/05
m,p-Xylene	92	5.0	µg/L	10		3/7/05
o-Xylene	33	5.0	µg/L	10		3/7/05
Surrogate: Cis-1,2-Dichloroethylene	102	85-115	% Rec	10		3/7/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	3,700	500	µg/L	10		3/7/05

Client Sample ID: MW-104 **Received:** 3/1/05 **Collected:** 3/1/05 13:45
Lab ID: 0503044-06A

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Benzene	200	25	µg/L	50		3/7/05
Toluene	350	25	µg/L	50		3/7/05
Ethylbenzene	590	250	µg/L	500		3/7/05
m,p-Xylene	1,100	250	µg/L	500		3/7/05
o-Xylene	180	25	µg/L	50		3/7/05
Surrogate: Cis-1,2-Dichloroethylene	88.1	85-115	% Rec	500		3/7/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	17,000	2,500	µg/L	50		3/7/05

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

Date: 08-Mar-05
WorkOrder: 0503044

ANALYTICAL REPORT

Client Sample ID: LACO MW-3 **Received:** 3/1/05 **Collected:** 3/1/05 14:25
Lab ID: 0503044-07A

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Benzene	160	50	µg/L	100		3/7/05
Toluene	690	50	µg/L	100		3/7/05
Ethylbenzene	370	50	µg/L	100		3/7/05
m,p-Xylene	790	50	µg/L	100		3/7/05
o-Xylene	220	50	µg/L	100		3/7/05
Surrogate: Cis-1,2-Dichloroethylene	94.6	85-115	% Rec	100		3/7/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	11,000	1,000	µg/L	20		3/7/05

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: 08-Mar-05

CLIENT: SHN Consulting Engineers and Geologists
Work Order: 0503044
Project: 097309, Blue Lake Belting and Leather

QC SUMMARY REPORT

Method Blank

Sample ID MB-3/6/05 | Batch ID: R33720 | Test Code: BTXEW | Units: µg/L | Analysis Date 3/6/05 4:01:18 PM | Prep Date
Client ID: | Run ID: ORGC8_050306B | SeqNo: 488174

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	0.968	0.10	1.00	0	96.8%	85	115	0			

Sample ID MB-3/6/05 | Batch ID: R33712 | Test Code: TPHCGW | Units: µg/L | Analysis Date 3/6/05 4:01:18 PM | Prep Date
Client ID: | Run ID: ORGC8_050306A | SeqNo: 488030

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

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

North Coast Laboratories, Ltd.

Date: 08-Mar-05

CLIENT: SHN Consulting Engineers and Geologists
Work Order: 0503044
Project: 097309, Blue Lake Belting and Leather

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID **LCS-05159** Batch ID: **R33720** Test Code: **BTXEW** Units: **µg/L** Analysis Date **3/6/05 12:33:51 PM** Prep Date

Client ID: Run ID: **ORGC8_050306B** SeqNo: **488169**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	5.193	0.50	5.00	0	104%	85	115	0			
Toluene	5.201	0.50	5.00	0	104%	85	115	0			
Ethylbenzene	4.998	0.50	5.00	0	100%	85	115	0			
m,p-Xylene	10.06	0.50	10.0	0	101%	85	115	0			
o-Xylene	4.939	0.50	5.00	0	98.8%	85	115	0			
Cis-1,2-Dichloroethylene	0.906	0.10	1.00	0	90.7%	85	115	0			

Sample ID **LCSD-05159** Batch ID: **R33720** Test Code: **BTXEW** Units: **µg/L** Analysis Date **3/6/05 10:55:11 PM** Prep Date

Client ID: Run ID: **ORGC8_050306B** SeqNo: **488185**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	5.316	0.50	5.00	0	106%	85	115	5.19	2.34%	15	
Toluene	5.399	0.50	5.00	0	108%	85	115	5.20	3.72%	15	
Ethylbenzene	5.095	0.50	5.00	0	102%	85	115	5.00	1.91%	15	
m,p-Xylene	10.20	0.50	10.0	0	102%	85	115	10.1	1.40%	15	
o-Xylene	5.018	0.50	5.00	0	100%	85	115	4.94	1.58%	15	
Cis-1,2-Dichloroethylene	0.912	0.10	1.00	0	91.3%	85	115	0.906	0.661%	15	

Sample ID **LCS-05160** Batch ID: **R33712** Test Code: **TPHCGW** Units: **µg/L** Analysis Date **3/6/05 2:17:14 PM** Prep Date

Client ID: Run ID: **ORGC8_050306A** SeqNo: **488028**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	554.0	50	500	0	111%	81	126	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: 0503044
Project: 097309, Blue Lake Belting and Leather

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID LCSD-05160 | Batch ID: R33712 | Test Code: TPHCGW | Units: µg/L | Analysis Date 3/6/05 11:29:37 PM | Prep Date
Client ID: | Run ID: ORGC8_050306A | SeqNo: 488041

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	543.0	50	500	0	109%	81	126	554	2.02%	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: 0503044

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 P. 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*	PRESERVATIVE	CONTAINER	ANALYSIS: TPHG/BTEX
	MW1-106	3/1/05	1050	GW	b	g	X
	MW1-101		1120				X
	MW-102		1155				X
	MW-105		1230				X
	MW-103		1310				X
	MW-104		1345				X
	LARO MW-3		1425				X

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

EDF

Global ID# T0602000012

No MTBE on Report

Cooler temp=11.7C

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
David P. Paine David P. Paine	1125 3/1/05	[illegible]	3/1/05 1452

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

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

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

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

NORTH COAST LABORATORIES LTD.

March 08, 2005

Pvt. cust. paying on pickup

,

Attn: PAT FOLKINS

RE: 3888.01, BLUE LAKE MARKET

Order No.: 0503030
Invoice No.: 48553
PO No.: TASK 3020
ELAP No. 1247-Expires July 2006

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	3888-MW1-W
02A	3888-MW2-W
03A	3888-QCTB-W
04A	3888-QCFD-W
05A	3888-QCMB-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

North Coast Laboratories. Ltd. Date: *08-Mar-05*

CLIENT: Pvt cust paying on pickup
Project: 3888.01, BLUE LAKE MARKET
Lab Order: 0503030

CASE NARRATIVE

TPH as Gasoline:
Sample 3888-MW1-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 3888-MW2-W and 3888-QCFD-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.

BTEX:
Some reporting limits were raised for samples 3888-MW1-W, 3888-MW2-W and 3888-QCFD-W due to matrix interference.

The surrogate recovery for sample 3888-MW1-W could not be quantified due to a large amount of early eluting material.

The laboratory control sample (LCS) recovery was above the upper acceptance limit for the surrogate. All of the analyte recoveries were within the acceptance limits; therefore, the data were accepted.

The relative percent difference (RPD) for the laboratory control samples was above the upper acceptance limit for the surrogate. The RPD's for all of the analytes were within the acceptance limits; therefore, the data were accepted.

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

Date: 08-Mar-05
WorkOrder: 0503030

ANALYTICAL REPORT

Client Sample ID: 3888-MW1-W **Received:** 3/1/05 **Collected:** 3/1/05 0:00
Lab ID: 0503030-01A

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	35	µg/L	1.0		3/4/05
Benzene	ND	10	µg/L	1.0		3/4/05
Toluene	ND	15	µg/L	1.0		3/4/05
Ethylbenzene	ND	15	µg/L	1.0		3/4/05
m,p-Xylene	ND	7.0	µg/L	1.0		3/4/05
o-Xylene	ND	3.0	µg/L	1.0		3/4/05
Surrogate: Cis-1,2-Dichloroethylene	NQ	85-115	% Rec	1.0		3/4/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	990	50	µg/L	1.0		3/4/05

Client Sample ID: 3888-MW2-W **Received:** 3/1/05 **Collected:** 3/1/05 0:00
Lab ID: 0503030-02A

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		3/5/05
Benzene	ND	2.0	µg/L	1.0		3/5/05
Toluene	10	0.50	µg/L	1.0		3/5/05
Ethylbenzene	19	5.0	µg/L	10		3/5/05
m,p-Xylene	48	5.0	µg/L	10		3/5/05
o-Xylene	7.9	5.0	µg/L	10		3/5/05
Surrogate: Cis-1,2-Dichloroethylene	92.5	85-115	% Rec	1.0		3/5/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	1,100	50	µg/L	1.0		3/5/05

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

Date: 08-Mar-05
WorkOrder: 0503030

ANALYTICAL REPORT

Client Sample ID: 3888-QCTB-W **Received:** 3/1/05 **Collected:** 3/1/05 0:00
Lab ID: 0503030-03A

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		3/4/05
Benzene	ND	0.50	µg/L	1.0		3/4/05
Toluene	ND	0.50	µg/L	1.0		3/4/05
Ethylbenzene	ND	0.50	µg/L	1.0		3/4/05
m,p-Xylene	ND	0.50	µg/L	1.0		3/4/05
o-Xylene	ND	0.50	µg/L	1.0		3/4/05
Surrogate: Cis-1,2-Dichloroethylene	90.2	85-115	% Rec	1.0		3/4/05

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		3/4/05

Client Sample ID: 3888-QCFD-W **Received:** 3/1/05 **Collected:** 3/1/05 0:00
Lab ID: 0503030-04A

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		3/5/05
Benzene	ND	1.5	µg/L	1.0		3/5/05
Toluene	8.5	0.50	µg/L	1.0		3/5/05
Ethylbenzene	18	5.0	µg/L	10		3/5/05
m,p-Xylene	45	5.0	µg/L	10		3/5/05
o-Xylene	7.4	5.0	µg/L	10		3/5/05
Surrogate: Cis-1,2-Dichloroethylene	93.3	85-115	% Rec	1.0		3/5/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	970	50	µg/L	1.0		3/5/05

NORTH COAST LABORATORIES
5680 West End Road · Arcata, California 95521-9202 · 707-822-4649 · FAX 707-822-6831

Date: 08-Mar-05
WorkOrder: 0503030

ANALYTICAL REPORT

Client Sample ID: 3888-QCMB-W
Lab ID: 0503030-05A

Received: 3/1/05 Collected: 3/1/05 0:00

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		3/4/05
Benzene	ND	0.50	µg/L	1.0		3/4/05
Toluene	ND	0.50	µg/L	1.0		3/4/05
Ethylbenzene	ND	0.50	µg/L	1.0		3/4/05
m,p-Xylene	ND	0.50	µg/L	1.0		3/4/05
o-Xylene	ND	0.50	µg/L	1.0		3/4/05
Surrogate: Cis-1,2-Dichloroethylene	90.2	85-115	% Rec	1.0		3/4/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C8-C14)	ND	50	µg/L	1.0		3/4/05

NORTH COAST LABORATORIES
5680 West End Road · Arcata, California 95521-9202 · 707-822-4649 · FAX 707-822-6831

North Coast Laboratories, Ltd.

Date: 08-Mar-05

CLIENT: Pvt. cust. paying on pickup
Work Order: 0503030
Project: 3888 01, BLUE LAKE MARKET

QC SUMMARY REPORT

Method Blank

Sample ID: MB-3/4/05 Batch ID: R33694 Test Code: BTXEW Units: µg/L Analysis Date: 3/4/05 9:54:26 PM Prep Date:
Client ID: Run ID: ORGC8_050304B SeqNo: 487706

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	1.278	3.0									J
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	0.870	0.10	1.00	0	87.0%	85	115	0			

Sample ID: MB-3/4/05 Batch ID: R33880 Test Code: TPHCGW Units: µg/L Analysis Date: 3/4/05 9:54:26 PM Prep Date:
Client ID: Run ID: ORGC8_050304A SeqNo: 487642

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

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

North Coast Laboratories, Ltd.

Date: 08-Mar-05

CLIENT: Pvt. cust. paying on pickup
Work Order: 0503030
Project: 1888.01, BLUE LAKE MARKET

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: LCS-05157 Batch ID: R33694 Test Code: BTXEW Units: µg/L Analysis Date: 3/4/05 5:52:15 PM Prep Date:
Client ID Run ID: ORGC8_050304B SeqNo: 487703

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	42.57	3.0	40.0	0	106%	85	115	0			
Benzene	5.616	0.50	5.00	0	112%	85	115	0			
Toluene	5.723	0.50	5.00	0	114%	85	115	0			
Ethylbenzene	5.400	0.50	5.00	0	108%	85	115	0			
m,p-Xylene	10.77	0.50	10.0	0	108%	85	115	0			
o-Xylene	5.325	0.50	5.00	0	107%	85	115	0			
Cis-1,2-Dichloroethylene	1.31	0.10	1.00	0	131%	85	115	0			S

Sample ID: LCSD-05157 Batch ID: R33694 Test Code: BTXEW Units: µg/L Analysis Date: 3/4/05 6:27:06 PM Prep Date:
Client ID: Run ID: ORGC8_050304B SeqNo: 487704

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	41.90	3.0	40.0	0	104%	85	115	42.6	2.53%	15	
Benzene	5.462	0.50	5.00	0	109%	85	115	5.62	2.78%	15	
Toluene	5.562	0.50	5.00	0	111%	85	115	5.72	2.34%	15	
Ethylbenzene	5.298	0.50	5.00	0	106%	85	115	5.40	1.91%	15	
m,p-Xylene	10.58	0.50	10.0	0	106%	85	115	10.8	1.74%	15	
o-Xylene	5.230	0.50	5.00	0	105%	85	115	5.32	1.81%	15	
Cis-1,2-Dichloroethylene	1.03	0.10	1.00	0	103%	85	115	1.31	22.7%	15	R

Sample ID: LCS-05158 Batch ID: R33690 Test Code: TPHCGW Units: µg/L Analysis Date: 3/4/05 7:36:25 PM Prep Date:
Client ID: Run ID: ORGC8_050304A SeqNo: 487639

Analyte	Result	Limit	SPK value	SPK RefVal	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	542.8	50	500	0	109%	81	126	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: Pvt. cust. paying on pickup
Work Order: 0503030
Project: 3888.01, BLUE LAKE MARKET

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID: LCSD-05158 Batch ID: R33690 Test Code: TPHCGW Units: µg/L Analysis Date: 3/4/05 8:11:04 PM Prep Date:
Client ID: Run ID: DRGC8_050344A SeqNo: 487640

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	558.0	50	500	0	112%	81	126	543	2.76%	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

P. 1 of 1

0503030

LABORATORY NUMBER:

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

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—$C_6H_8O_7Cl$; g—other

PROJECT INFORMATION

Project Number: 3888.01
Project Name: BLUE LAKE MARKET
Purchase Order Number: task 3020

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	CONTAINER	PRESERVATIVE	TPH/BTEX
	3888-MW1-W	3-1-05	4pm	GW	9	b	3
	3888-MW2-W	↓	↓	↓			3
	3888-QCTB-W						1
	3888-QCFD-W						3
	3888-QCMB-W						3

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

GEOTRACKER
intact/on ice

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
STEVE DAVIS	3-1-05 12:20 pm	Laura Miller	3/1/05 1222

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