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June 10, 2005

3670.02

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

Attention: Mr. Mark Verhey, CEG

Subject: Groundwater Monitoring Report; Second Quarter 2005
Former Henderson Center Cab Corporation (City Ambulance)
135 W. Seventh Street, Eureka, California, 95501
LOP No. 12382; CRWQCB Case No. 1THU382

Dear Mr. Verhey:

LACO ASSOCIATES (LACO) is pleased to present to the Humboldt County Division of Environmental Health (HCDEH) results of groundwater monitoring for the second quarter of 2005 at the former Henderson Center Cab Corporation (City Ambulance) in Eureka, California.

The attached report details this groundwater monitoring event. Please call or email if you have any questions or concerns.

Sincerely,
LACO ASSOCIATES

Wilson J. Martinez
Assistant Engineer

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

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

WJM:cs

Attachments

cc: Fred Sundquist

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www.lacoassociates.us

GROUNDWATER MONITORING REPORT
SECOND QUARTER 2005

Former Henderson Center Cab Corporation (City Ambulance)
135 W. Seventh Street, Eureka, California, 95501
LOP No. 12382; CRWQCB Case No. 1THU382

INTRODUCTION

This report presents the current and cumulative results of groundwater monitoring conducted at the Former Henderson Center Cab Corporation (City Ambulance) site (hereafter referred to as the "site") since 1991. Field activities associated with the second quarter 2005 groundwater monitoring event were conducted on April 6, 2005. Please refer to Table A (refer below) for details regarding monitoring activities performed during the second quarter of 2005. Monitoring well sampling protocol is included in LACO's *Standard Operating Procedures* on file at your office. A location and site map are provided as Figures 1 and 2, respectively.

Table A: Field Sampling Data - April 6, 2005

Monitoring Well ID	Screened Interval (feet)	DTW (feet bgs)	Purge Method	Water Quality Parameters	Analyticals		Sampling schedule
					Organics	Inorganics	
MW-1	5 - 15	4.8	Measured only	---	---	---	---
MW-3	5 - 15	6.14	Measured only	---	---	---	---
MW-4	5 - 15	6.48	DHP	ORP and DO	TPHg, TPHd, BTEX, MTBE	---	Quarterly
MW-5	5 - 15	7.72	DHP			---	

A key to this table is included as Attachment 1.

SITE CHRONOLOGY

- December 1987: One 500-gallon and one 1000-gallon gasoline underground storage tank (UST) was removed from the site by Beacom.
- August 1991: One 5000-gallon UST was removed from the site.
- January 1992: Two soil borings (B-1 and B-2) were installed.
- August 1994: Three 2-inch diameter monitoring wells (MW-1 through MW-3) were installed.
- September 1999: Nine 2-inch temporary soil borings were installed (B-1 through B-9).
- October 2001: The gasoline UST excavation was over-excavated to remove contaminated soil.
- November 2001: Monitoring well MW-2 was destroyed.
- April 2002: Monitoring well MW-4 was installed to replace monitoring well MW-2.
- September 2002: LACO conducted a sensitive receptor survey (SRS).

- October 2003: Monitoring well MW-5 was installed.
- June 2005: A Site Summary and Request for Closure report was prepared and submitted.

HYDRAULIC GRADIENT AND HYDROGEOLOGY

The site is located in the City of Eureka on a portion of an emergent, Late-Pleistocene marine terrace. Surrounding terrain is generally flat to gently sloping toward the northwest at less than 10 percent. Approximate elevation of the site is 15 feet NAVD-88 (USGS Eureka, California. 7.5' quadrangle).

The hydraulic gradient and direction for this sampling event were calculated by the three-point method using monitoring wells MW-1, MW-3, and MW-5. The calculated hydraulic gradient and potentiometric surface contours are presented in Figure 3. Current and historical hydraulic head data are presented in Table 1 and copies of the field sampling data sheets are included as Attachment 2.

The hydraulic gradient for the March 28, 2005, sampling event was 1.5 percent in a N27°W direction and is consistent with previous results. Please refer to Table 2 for historic gradient data.

LABORATORY RESULTS

Laboratory analytical results from the April 6, 2005, quarterly sampling event are included below in Table B. Current and historical groundwater analytical data are included in Table 1, and copies of the laboratory analytical reports for this reporting period are included as Attachment 3.

Table B: Analytical Results for April 6, 2005, Quarterly Sampling Event

WELL/ Sample Date	TPHg (µg/L)	TPHd (µg/L)	TPHmo (ug/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
MW-1	---	---	---	---	---	---	---
MW-3	---	---	---	---	---	---	---
MW-4	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-5	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50

DISCUSSION OF GROUNDWATER RESULTS

For the current sampling event, concentrations of all analytes at monitoring wells MW-4 and MW-5 are reported as non-detect (ND).

RECOMMENDATION

Based on the analyte trend analyses for monitoring well MW-4 submitted in the previous quarterly report to your office, and the lack of analyte detections in monitoring well MW-5, LACO requests closure of the Former Henderson Center Cab Corporation (City Ambulance) site. Please refer to the Site Summary Report and Request for Closure, dated June 2005 for additional details.

LIST OF FIGURES, TABLES, AND ATTACHMENTS

Figure 1: Location Map
Figure 2: Site Map
Figure 3: Hydraulic Gradient Map, April 6, 2005

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

Attachment 1: Key to Abbreviations
Attachment 2: Groundwater Sampling: Field Data Sheets
Attachment 3: Laboratory Analytical Reports

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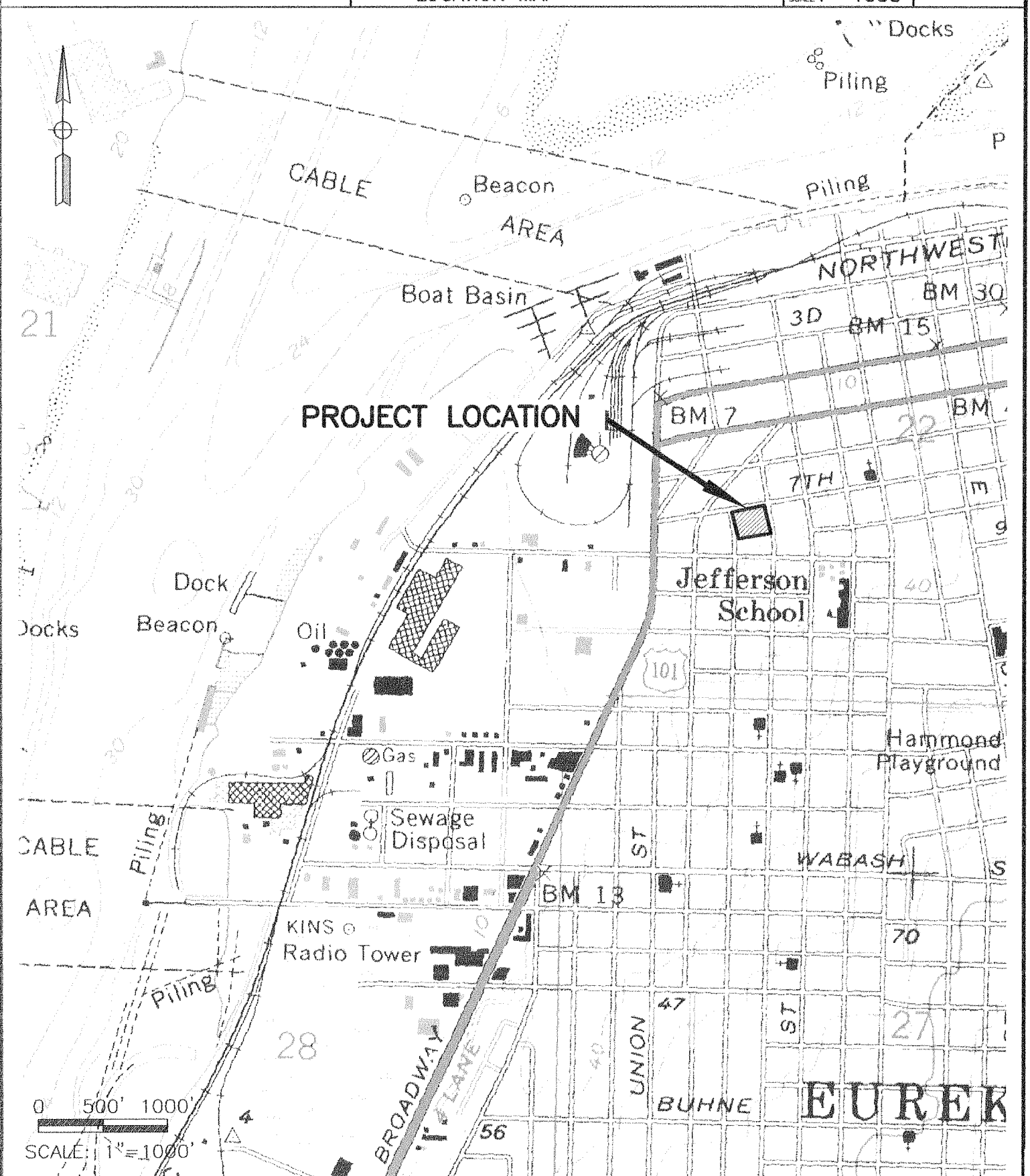
LACO ASSOCIATES CONSULTING ENGINEERS 21 W 4TH ST. EUREKA, CA 95501 (707)443-5054	PROJECT GROUNDWATER MONITORING REPORT	BY RJM	FIGURE 1
	CLIENT CITY AMBULANCE OF EUREKA, INC	DATE 6/06/05	
	LOCATION 135 W. 7TH STREET	CHECK	JOB NO. 3670.02
	LOCATION MAP	SCALE 1"=1000'	



Jun 10,2005-1:32pm
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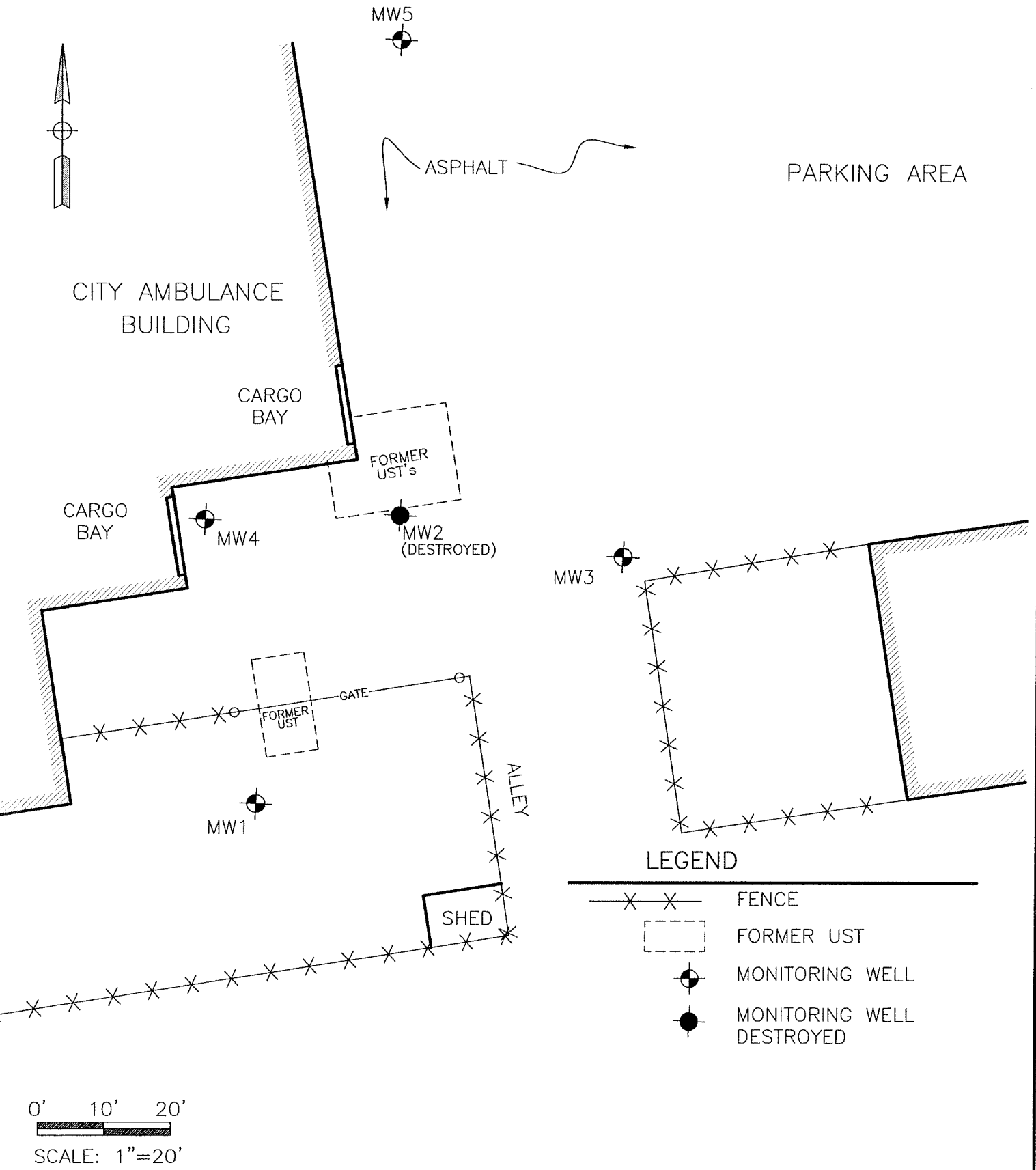
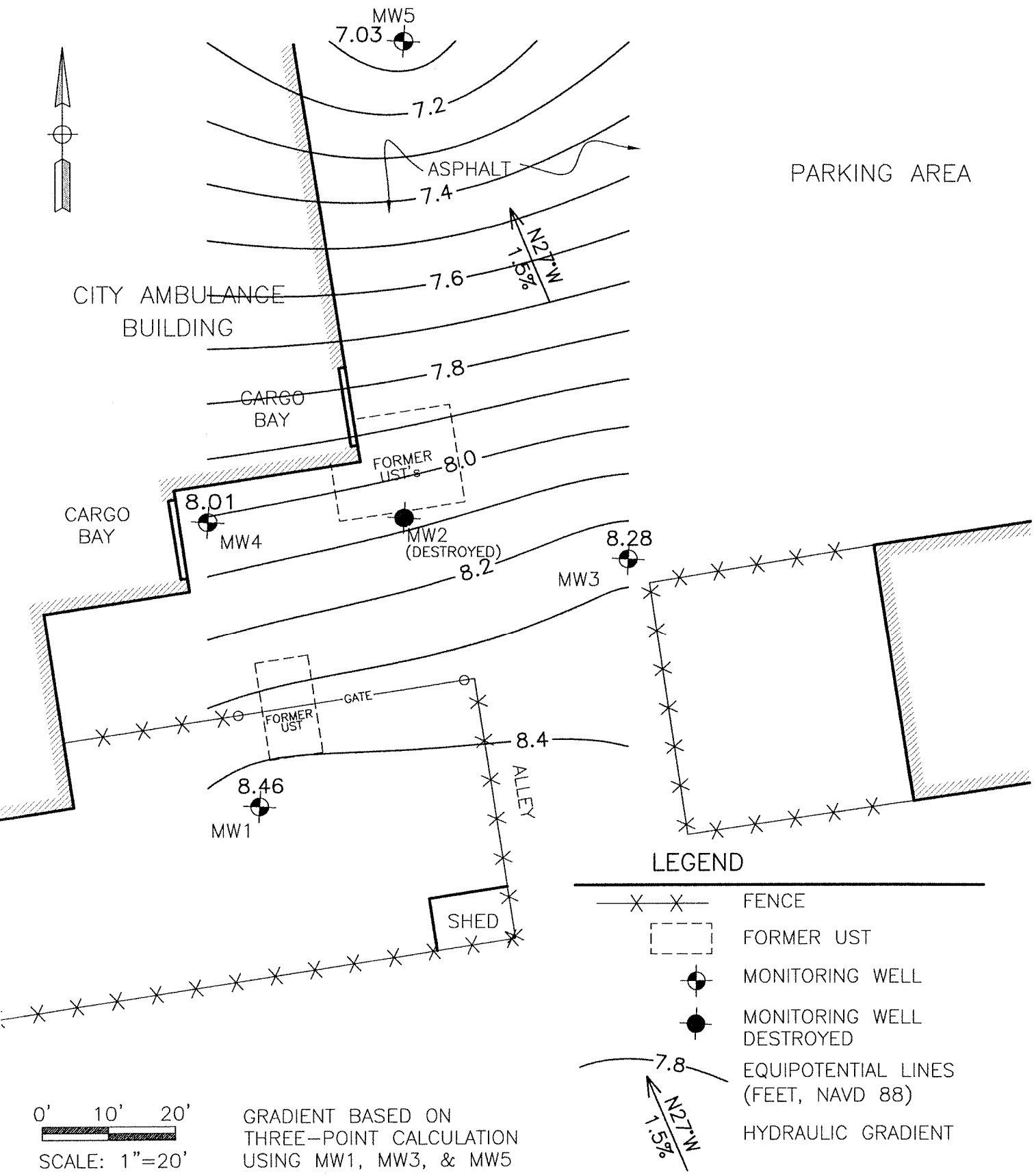
LACO ASSOCIATES CONSULTING ENGINEERS 21 W 4TH ST. EUREKA, CA 95501 (707)443-5054	PROJECT GROUNDWATER MONITORING REPORT	BY RJM	2
	CLIENT CITY AMBULANCE OF EUREKA, INC	DATE 6/06/05	
	LOCATION 135 W. 7TH STREET, EUREKA	CHECK	JOB NO. 3670.02
	SITE MAP	SCALE 1"=20'	



un 06,2005-4:43pm
:\CADFILES\3500\3670 City Ambulance\dwg\3670-GMR-2Q-june05\ 3670-SITE MAP.dwg

LACO ASSOCIATES CONSULTING ENGINEERS 21 W 4TH ST. EUREKA, CA 95501 (707)443-5054	PROJECT GROUNDWATER MONITORING REPORT	BY RGM	3
	CLIENT JOYCE STARTARE – CITY AMBULANCE	DATE 6/07/05	
	LOCATION 135 W. 7TH STREET, EUREKA	CHECK	JOB NO. 3670.02
	HYDRAULIC GRADIENT MAP (4/06/05)	SCALE 1"=20'	



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I:\CADFILES\3500\3670 City Ambulance\dwg\3670-GMR-2Q-june05\ 3670-baseMap_Jan04.dwg

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
City Ambulance; LOP No. 12382
135 West Seventh Street, Eureka
Project No. 3670.02

WELL/ Sample Date	Groundwater Measurements: Well Head Elevation (feet, NAVD 88)	Ground-water Elevation (feet msl)	Depth to Water (feet)	Analytical Results: TPHg (µg/L)	TPHd (µg/L)	TPHmo (ug/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
MW-1	13.26										
9/19/1994		5.68	7.58	ND	ND	---	ND	ND	ND	ND	---
10/14/1994		5.45	7.81	---	---	---	---	---	---	---	---
11/14/1994		6.26	7.00	---	---	---	---	---	---	---	---
12/20/1994		7.84	5.42	ND	ND	---	ND	ND	ND	ND	---
12/29/1994		8.41	4.85	---	---	---	---	---	---	---	---
1/17/1995		9.44	3.82	---	---	---	---	---	---	---	---
2/28/1995		7.68	5.58	---	---	---	---	---	---	---	---
3/30/1995		8.75	4.51	ND	ND	---	ND	ND	ND	ND	---
4/21/1995		8.84	4.42	---	---	---	---	---	---	---	---
5/26/1995		7.57	5.69	---	---	---	---	---	---	---	---
6/28/1995		5.19	8.07	ND	ND	---	ND	ND	ND	ND	---
7/26/1995		6.82	6.44	---	---	---	---	---	---	---	---
8/28/1995		6.33	6.93	---	---	---	---	---	---	---	---
7/18/1996		6.76	6.50	---	---	---	---	---	---	---	---
8/14/1996		6.36	6.90	ND	ND	---	ND	ND	ND	ND	73
9/27/1996		6.16	7.10	---	---	---	---	---	---	---	---
10/23/1996		6.15	7.11	---	---	---	---	---	---	---	---
11/26/1996		7.44	5.82	---	---	---	---	---	---	---	---
2/27/1997		8.08	5.18	---	---	---	---	---	---	---	---
3/25/1997		7.64	5.62	ND	ND	---	ND	ND	ND	ND	ND
4/10/1997		7.45	5.81	---	---	---	---	---	---	---	---
7/8/1997		6.71	6.55	---	---	---	---	---	---	---	---
8/13/1997		6.23	7.03	---	---	---	---	---	---	---	---
9/18/1997		6.40	6.86	---	---	---	---	---	---	---	---
10/21/1997		6.43	6.83	---	---	---	---	---	---	---	---
11/19/1997		7.27	5.99	---	---	---	---	---	---	---	---
12/26/1997		8.06	5.20			---					
1/13/1998		9.15	4.11	ND	ND	---	ND	ND	ND	ND	6.2
3/3/1998		9.10	4.16	---	---	---	---	---	---	---	---
3/24/1998		9.83	3.43	---	---	---	---	---	---	---	---
4/28/1998		7.86	5.4	---	---	---	---	---	---	---	---
6/1/1998		7.62	5.64	---	---	---	---	---	---	---	---
6/11/1998		7.41	5.85	---	---	---	---	---	---	---	---
7/23/1998		6.81	6.45	ND	ND	---	ND	ND	ND	ND	ND
8/10/1998		6.38	6.88	---	---	---	---	---	---	---	---
9/9/1998		6.22	7.04	---	---	---	---	---	---	---	---
10/12/1998		5.92	7.34	---	---	---	---	---	---	---	---
11/13/1998		6.86	6.40	---	---	---	---	---	---	---	---
12/7/1998		9.34	3.92	---	---	---	---	---	---	---	---
1/19/1999		8.27	4.99	ND	ND	---	ND	ND	ND	ND	ND
7/20/1999		6.88	6.38	ND	NA	---	ND	ND	ND	ND	ND
1/13/2000		7.88	5.38	ND	NA	---	ND	ND	ND	ND	ND
8/1/2000		6.44	6.82	ND	NA	---	ND	ND	ND	ND	ND
1/10/2001		6.74	6.52	ND	NA	---	ND	ND	ND	ND	ND
8/2/2001		5.91	7.35	NT	NT	---	NT	NT	NT	NT	NT
10/17/2001		5.36	7.90	---	---	---	---	---	---	---	---
1/16/2002		8.24	5.02	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
5/13/2002		7.80	5.46	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
7/2/2002		6.71	6.55	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
1/17/2003		8.97	4.29	---	---	---	---	---	---	---	---
7/10/2003		7.05	6.21	---	---	---	---	---	---	---	---
1/7/2004		8.87	4.39	---	---	---	---	---	---	---	---
4/16/2004		7.48	5.78	---	---	---	---	---	---	---	---
7/7/2004		6.59	6.67	---	---	---	---	---	---	---	---
10/11/2004		5.85	7.41	---	---	---	---	---	---	---	---
1/6/2005		8.37	4.89	---	---	---	---	---	---	---	---
4/6/2005		8.46	4.80	---	---	---	---	---	---	---	---

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
City Ambulance; LOP No. 12382
135 West Seventh Street, Eureka
Project No. 3670.02

	Groundwater Measurements			Analytical Results							
WELL/ Sample Date	Well Head Elevation (feet, NAVD 88)	Ground-water Elevation (feet msl)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (ug/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
MW-2	13.99										
9/19/1994		5.92	8.07	**19,000**	ND	---	**620**	ND	**620**	**449**	---
10/14/1994		5.69	8.30	---	---	---	---	---	---	---	---
11/14/1994		6.35	7.64	---	---	---	---	---	---	---	---
12/20/1994		7.80	6.19	---	---	---	---	---	---	---	---
12/29/1994		8.17	5.82	**17,000**	**370**	---	**940**	**60**	**590**	**245**	---
1/17/1995		9.19	4.80	---	---	---	---	---	---	---	---
2/28/1995		7.83	6.16	---	---	---	---	---	---	---	---
3/30/1995		8.75	5.24	**7,700**	**180**	---	**220**	ND	**230**	**99**	---
4/21/1995		8.79	5.20	---	---	---	---	---	---	---	---
5/26/1995		7.71	6.28	---	---	---	---	---	---	---	---
6/28/1995		7.39	6.60	**7,100**	**85**	---	**290**	**22**	**220**	**91**	---
7/26/1995		7.03	6.96	---	---	---	---	---	---	---	---
8/28/1995		6.54	7.45	---	---	---	---	---	---	---	---
7/18/1996		6.99	7.00	---	---	---	---	---	---	---	---
8/14/1996		6.61	7.38	**7,800**	**96**	---	**460**	**35**	**410**	**178**	---
9/27/1996		6.45	7.54	---	---	---	---	---	---	---	---
10/23/1996		6.39	7.60	---	---	---	---	---	---	---	---
11/26/1996		7.45	6.54	---	---	---	---	---	---	---	---
2/27/1997		8.13	5.86	---	---	---	---	---	---	---	---
3/25/1997		7.79	6.20	**6,700**	**58**	---	**150**	ND	**190**	**67**	ND
4/10/1997		7.66	6.33	---	---	---	---	---	---	---	---
7/8/1997		6.89	7.10	---	---	---	---	---	---	---	---
8/13/1997		6.50	7.49	---	---	---	---	---	---	---	---
9/18/1997		6.57	7.42	---	---	---	---	---	---	---	---
10/21/1997		6.65	7.34	---	---	---	---	---	---	---	---
11/19/1997		7.18	6.81	---	---	---	---	---	---	---	---
12/26/1997		8.05	5.94	---	---	---	---	---	---	---	---
1/13/1998		8.72	5.27	**7,700**	**350**	---	**250**	ND	**300**	**86**	ND
3/3/1998		9.03	4.96	---	---	---	---	---	---	---	---
3/24/1998		9.32	4.67	---	---	---	---	---	---	---	---
4/28/1998		8.02	5.97	---	---	---	---	---	---	---	---
6/1/1998		8.37	5.62	---	---	---	---	---	---	---	---
6/11/1998		7.59	6.40	---	---	---	---	---	---	---	---
7/23/1998		7.06	6.93	**7,400**	**160**	---	**300**	ND	**380**	**130**	**53**
8/10/1998		6.86	7.13	---	---	---	---	---	---	---	---
9/9/1998		6.51	7.48	---	---	---	---	---	---	---	---
10/12/1998		6.18	7.81	---	---	---	---	---	---	---	---
11/13/1998		6.98	7.01	---	---	---	---	---	---	---	---
12/7/1998		9.13	4.86	---	---	---	---	---	---	---	---
1/19/1999		8.06	5.93	---	---	---	---	---	---	---	---
7/20/1999		7.10	6.89	---	---	---	---	---	---	---	---
1/13/2000		7.74	6.25	**8,800**	**510**	---	**210**	ND	**65**	**32**	ND
8/1/2000		6.65	7.34	**9,300**	**500**	---	**230**	**54**	**120**	**77**	ND
1/10/2001		6.84	7.15	---	---	---	---	---	---	---	---
8/2/2001		6.06	7.93	**14,000**	**960**	---	**310**	**82**	**220**	**171**	ND
10/17/2001		5.56	8.43	---	---	---	---	---	---	---	---
11/1/2001		----well destroyed----		---	---	---	---	---	---	---	---

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
City Ambulance; LOP No. 12382
135 West Seventh Street, Eureka
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	Groundwater Measurements			Analytical Results							
WELL/ Sample Date	Well Head Elevation (feet, NAVD 88)	Ground-water Elevation (feet msl)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (ug/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
MW-3	14.66										
9/19/1994		6.22	8.44	ND	ND	---	ND	ND	ND	ND	---
10/14/1994		5.92	8.74	---	---	---	---	---	---	---	---
11/14/1994		6.44	8.22	---	---	---	---	---	---	---	---
12/20/1994		7.64	7.02	ND	ND	---	ND	ND	ND	ND	---
12/29/1994		8.03	6.63	---	---	---	---	---	---	---	---
1/17/1995		9.22	5.44	---	---	---	---	---	---	---	---
2/28/1995		7.78	6.88	---	---	---	---	---	---	---	---
3/30/1995		8.72	5.94	ND	ND	---	ND	ND	ND	ND	---
4/21/1995		8.76	5.90	---	---	---	---	---	---	---	---
5/26/1995		7.67	6.99	---	---	---	---	---	---	---	---
6/28/1995		7.31	7.35	ND	ND	---	ND	ND	ND	ND	---
7/26/1995		7.00	7.66	---	---	---	---	---	---	---	---
8/28/1995		6.64	8.02	---	---	---	---	---	---	---	---
7/18/1996		6.98	7.68	---	---	---	---	---	---	---	---
8/14/1996		6.68	7.98	ND	ND	---	ND	ND	ND	ND	---
9/27/1996		6.52	8.14	---	---	---	---	---	---	---	---
10/23/1996		6.49	8.17	---	---	---	---	---	---	---	---
11/26/1996		7.20	7.46	---	---	---	---	---	---	---	---
2/27/1997		8.11	6.55	---	---	---	---	---	---	---	---
3/25/1997		7.84	6.82	ND	ND	---	ND	ND	ND	ND	ND
4/10/1997		7.59	7.07	---	---	---	---	---	---	---	---
7/8/1997		6.92	7.74	---	---	---	---	---	---	---	---
8/13/1997		6.59	8.07	---	---	---	---	---	---	---	---
9/18/1997		6.68	7.98	---	---	---	---	---	---	---	---
10/21/1997		6.68	7.98	---	---	---	---	---	---	---	---
11/19/1997		7.25	7.41	---	---	---	---	---	---	---	---
12/26/1997		8.05	6.61	---	---	---	---	---	---	---	---
1/13/1998		8.82	5.84	ND	ND	---	ND	ND	ND	ND	---
3/3/1998		9.09	5.57	---	---	---	---	---	---	---	---
3/24/1998		9.49	5.17	---	---	---	---	---	---	---	---
4/28/1998		8.03	6.63	---	---	---	---	---	---	---	---
6/1/1998		7.78	6.88	---	---	---	---	---	---	---	---
6/11/1998		7.61	7.05	---	---	---	---	---	---	---	---
7/23/1998		7.11	7.55	ND	ND	---	ND	ND	ND	ND	ND
8/10/1998		6.89	7.77	---	---	---	---	---	---	---	---
9/9/1998		6.65	8.01	---	---	---	---	---	---	---	---
10/12/1998		6.49	8.17	---	---	---	---	---	---	---	---
11/13/1998		7.03	7.63	---	---	---	---	---	---	---	---
12/7/1998		9.29	5.37	---	---	---	---	---	---	---	---
1/19/1999		8.16	6.50	ND	ND	---	ND	ND	ND	ND	ND
7/20/1999		7.12	7.54	ND	NA	---	ND	ND	ND	ND	ND
1/13/2000		8.16	6.50	ND	NA	---	ND	ND	ND	ND	ND
8/1/2000		6.72	7.94	ND	NA	---	ND	ND	ND	ND	ND
1/10/2001		6.91	7.75	ND	NA	---	ND	ND	ND	ND	ND
8/2/2001		6.28	8.38	NT	NT	---	NT	NT	NT	NT	NT
10/17/2001		5.95	8.71	---	---	---	---	---	---	---	---
1/16/2002		8.27	6.39	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
5/13/2002	14.42	7.24	7.18	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
7/2/2002		6.71	7.71	ND<50	---	---	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
1/17/2003		8.73	5.69	---	---	---	---	---	---	---	---
7/10/2003		6.99	7.43	---	---	---	---	---	---	---	---
1/7/2004		8.60	5.82	---	---	---	---	---	---	---	---
4/16/2004		7.34	7.08	---	---	---	---	---	---	---	---
7/7/2004		6.62	7.80	---	---	---	---	---	---	---	---
10/11/2004		6.04	8.38	---	---	---	---	---	---	---	---
1/6/2005		8.22	6.20	---	---	---	---	---	---	---	---
4/6/2005		8.28	6.14	---	---	---	---	---	---	---	---

TABLE 1: WELL DATA AND GROUNDWATER ANALYTICAL RESULTS
City Ambulance; LOP No. 12382
135 West Seventh Street, Eureka
Project No. 3670.02

	Groundwater Measurements			Analytical Results							
WELL/ Sample Date	Well Head Elevation (feet, NAVD 88)	Ground-water Elevation (feet msl)	Depth to Water (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (ug/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
MW-4	14.49										
5/13/2002		7.15	7.34	**72**	---	---	**1.0**	ND<0.50	ND<0.50	ND<0.50	ND<3.0
7/2/2002		6.57	7.92	ND<50	ND<50	---	**0.71**	ND<1.1	ND<0.50	ND<0.50	ND<3.0
1/17/2003		8.43	6.06	**110**	ND<50	---	**1.2**	ND<2.5	ND<0.50	ND<0.50	ND<3.0
7/10/2003		6.89	7.60	ND<50	ND<50	---	ND<0.50	ND<2.0	ND<0.50	ND<0.50	ND<3.0
1/7/2004		8.32	6.17	ND<50	ND<50	ND<170	**4.2**	ND<1.0	ND<0.50	**0.51**	ND<3.0
4/16/2004		7.23	7.26	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
7/7/2004		6.43	8.06	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
10/11/2004		5.68	8.81	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
1/6/2005		7.90	6.59	ND<50	ND<50	ND<170	**1.3**	**0.77**	ND<0.50	ND<0.50	ND<3.0
4/6/2005		8.01	6.48	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
MW-5	14.75										
1/7/2004		7.13	7.62	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
4/16/2004		6.54	8.21	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
7/7/2004		5.92	8.83	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
10/11/2004		5.01	9.74	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
1/6/2005		6.83	7.92	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
4/6/2005		7.03	7.72	ND<50	ND<50	ND<170	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0

NOTES:
msl - mean sea level
TPHg - total petroleum hydrocarbons as gasoline
TPHd - total petroleum hydrocarbons as diesel
MTBE - methyl tertiary butyl ehter
ND- non-detect at reporting limits shown
NA - non applicable
NT - sample not taken
Bold results indicate analyte detection

TABLE 2: HISTORIC GRADIENT DATA
City Ambulance; LOP No. 12382
135 West Seventh Street, Eureka
Project No. 3670.02

Well/ Sample Date	Gradient Bearing	Gradient Slope
9/19/1994	S85°W	0.78%
10/14/1994	S80°W	0.65%
11/14/1994	S80°W	0.25%
12/20/1994	S78°E	0.35%
12/29/1994	N68°E	0.51%
1/17/1995	N24°E	0.41%
2/28/1995	S07°W	0.22%
3/30/1995	S68°E	0.06%
4/21/1995	N69°E	0.11%
5/26/1995	S11°W	0.21%
6/28/1995	S31°W	3.23%
7/26/1995	S22°W	0.30%
8/28/1995	S63°W	0.40%
7/18/1996	S31°W	0.34%
8/14/1996	S53°W	0.43%
9/27/1996	S51°W	0.48%
10/23/1996	S61°W	0.45%
11/26/1996	S67°E	0.52%
2/27/1997	S02°W	0.08%
3/25/1997	S56°W	0.27%
4/10/1997	S7°W	0.32%
7/8/1997	S46°W	0.29%
8/13/1997	S56°W	0.48%
9/18/1997	S71°W	0.37%
10/21/1997	S44°W	0.35%
11/19/1997	S20°W	0.18%
12/26/1997	N43°E	0.15%
1/13/1998	N15°E	0.63%
3/3/1998	N24°W	0.14%
3/24/1998	N07°E	0.76%
4/28/1998	S39°W	0.24%
6/1/1998	S20°E	1.45%
6/11/1998	S42°W	0.30%
7/23/1998	S20°W	0.52%
8/10/1998	S38°W	0.73%
9/9/1998	S64°W	0.57%
10/12/1998	N87°W	0.81%
11/13/1998	S60°W	0.22%
12/7/1998	N20°W	0.40%
1/19/1999	N04°W	0.33%
7/20/1999	S41°W	0.34%

Well/ Sample Date	Gradient Bearing	Gradient Slope
1/13/2000	S41°W	0.34%
8/1/2000	S56°W	0.37%
1/10/2001	S72°W	0.02%
8/2/2001	S87°W	0.50%
10/17/2001	N89°W	1.1%
1/16/2002	---	---
5/13/2002	N2°W	1.4%
7/2/2002	N37°W	0.29%
1/17/2003	N19°W	1.20%
7/10/2003	N22°W	0.3%
1/7/2004	N22°W	1.42%
4/16/2004	N21°W	0.9%
7/7/2004	N23°W	0.38%
10/11/2004	N46°W	1.3%
1/6/2005	N27°W	1.7%
4/6/2005	N23°W	1.5%

Attachment 1

Key to Tables 1 and 2: Abbreviations and Laboratory Notations
Redcrest Grocery
56452 Hwy 254, Redcrest CA 95569
LACO No.4651.01; LOP No. 12681

Groundwater elevation calculated by: Well elevation - Depth to groundwater.
ND = Not detected at or above the method detection limit shown.
--- = Not analyzed or available.
ug/l = micrograms per liter
mg/l = milligrams per liter, = 1,000 µg/l
µmohs = micromohs, a measure of electrical resistance
mV = millivolts
TPHg = total petroleum hydrocarbons as gasoline
TPHd = total petroleum hydrocarbons as diesel
TPHmo = total petroleum hydrocarbons as motor oil
Oxygenates (fuel additives): methyl tertiary butyl ether (MTBE), di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME) and tert-butanol (TBA).
CAM5 Metals: cadmium, chromium, lead, nickel and zinc.
mcl = primary maximum contaminant levels, an enforceable California drinking water standard.
al = action limit; a non-enforceable California drinking water standard; shown in parentheses.
tot = taste and odor threshold, a non-enforceable California drinking water standard.

[1] Sample contains some material lighter than diesel.
However, some of this material extends into the diesel range of molecular weights.

[2] Sample contains material in the diesel range of molecular weights and beyond.
This suggests the presence of an oil heavier than diesel.
All diesel results reported represent the amount of material in th ediesel range of molecular weights.

[3] Laboratory suggests congfirmation of the positive MTBE result.

[4] Sample does not have the typical pattern of gfresh gasoline.

[5] Sample contains material similar to degraded or weathered gasoline.
All gasoline results reported represent the amount of material in the gasoline range of molecular weights only.

Attachment 2

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

Project Name: City Ambulance
Project No.: 3670.02
Date: 4-6-05
Golbal ID No.: T0602300288
PM: TDN

Tech: SJD
Mob/Demob time: .25/.25
Travel time: .15
Time on site: 12:30
Time off site: 2:40
Mileage: —

WELL No.:	MW1		MW3		MW4		MW5			
DIAMETER (in)	2.00		2.00		2.00		1.50			
SCREENED INTERVAL (ft)	5-15		5-15		5-15		5-15			
DEPTH TO WATER (ft)	4.80		6.14		6.48		7.72			
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
FIELD INTRINSICS: pH										
TEMP (°C)										
Ecw (µmohs)										
ORP (mV)					-43	-45	44	84		
DO (mg/L)					1.16	0.63	2.45	0.86		
OTHER (units)										
PURGE: TIME					1:30	1:38	2:00	2:12		
METHOD (DHP/CB/B)					DHP		DHP			
RATE (Lpm)					0.21		0.17			
VOLUME (L)					1.75		2.0			
COLOR					CLEAR	CLEAR W/YELLOW TINT	CLEAR	LT. ORANGE TINT		
ODOR					MED. SULFUR		NONE			
INTAKE DEPTH (FEET)					10.0		10.0			
SAMPLE: TIME					1:39		2:14			
METHOD (DHP/CB/B)					DHP		DHP			
ANALYTES	Measure Only		Measure Only		TPHg/BTEX; TPHd/mo w/SGC		TPHg/BTEX; TPHd/mo w/SGC			
TOTAL DRAWDOWN (FEET)					0.67		0.81			
REMARKS										
WELL CONDITION	good		good		good		good			
WASTE DRUMS										

DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING

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

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

Project Name: CITY AMBULANCE
Project No.: 3670.02
Tech: SJD
Date: 4-6-05

WELL ID:	METER ACCURACY RANGE				
MW4	+/- 0.2 pH	+/- 0.5 °C	+/- 20 µmohs	+/- 2 mv	+/- 0.3 mg/L
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
1:32	~	~	~	-41	0.95
1:34	~	~	~	-42	0.63
1:36	~	~	~	-44	0.58
1:38	~	~	~	-45	0.63

WELL ID:					
TIME	pH	TEMP (°C)	Ecw (µmohs)	ORP (mV)	DO (mg/L)
2:02	~	~	~	59	1.16
2:04	~	~	~	70	0.94
2:06	~	~	~	75	0.85
2:08	~	~	~	79	0.85
2:10	~	~	~	84	0.90
2:12	~	~	~	84	0.86

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)

CONSULTING.ENGINEERS.
TEL 707.443.5054
FAX 707.443.0553

Project Name: CITY AMBULANCE
Project No.: 3670.02
Tech: SJD
Date: 4-6-05

WELL ID: MW1		WELL ID: MW3		WELL ID: MW4		WELL ID: MW5		WELL ID:		WELL ID:	
TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)	TIME	DTW (ft)
12:54	4.80	12:56	6.14	12:59	6.48	1:02	7.72				
1:04	4.80	1:08	6.14	1:12	6.48	1:15	7.72				

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

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

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

Chain of Custody

LABORATORY NUMBER:

Attention: Tim Nelson
Results & Invoice to: LACO Associates
Address: 21 W 4th St., Eureka, CA 95501

Phone: (707) 443-5054
Copies of Report to:

Sampler (Sign & Print): SJD

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

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

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

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

PROJECT INFORMATION

Project Number: 3670.02
Project Name: City Ambulance
Purchase Order Number: TASK 3025

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS: TPHg/BTEX (CONTAINER 9, PRESERVATIVE b)	ANALYSIS: TPHd/mo w/SGC (CONTAINER 7, PRESERVATIVE ----)	SAMPLE CONDITION/SPECIAL INSTRUCTIONS
	3670-MW4-W	4-6-05	PM	GW	3	1	GEOTRACKER
	3670-MW5-W	↓	↓	↓	3	1	
	3670-QCTB				1		

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

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

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

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

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

Attachment 3

NORTH COAST LABORATORIES LTD.

RECEIVED
LACO ASSOCIATES
APR 25 2005
BY: JG

April 21, 2005

DRG
DNL 6.0405
TDN 4-27-05

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

Attn: Tim Nelson

Order No.: 0504215
Invoice No.: 49535
PO No.: TASK 3025
ELAP No. 1247-Expires July 2006

RE: 3670.02, City Ambulance

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	3670-MW4-W
01D	3670-MW4-W
02A	3670-MW5-W
02D	3670-MW5-W
03A	3670-QCTB-W

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

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

REPORT CERTIFIED BY

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

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

Printed on Recycled Paper

CLIENT: LACO Associates
Project: 3670.02, City Ambulance
Lab Order: 0504215

CASE NARRATIVE

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

BTEX:
The surrogate recovery for sample 3670-MW5-W was below the lower acceptance limit. The response of the reporting limit standard was such that the analytes would have been detected even with the low recovery; therefore, the data were accepted.

NORTH COAST LABORATORIES
5680 West End Road • Arcata, California 95521-9202 • 707-822-4649 • FAX 707-822-6831
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Date: 21-Apr-05
WorkOrder: 0504215

ANALYTICAL REPORT

Client Sample ID: 3670-MW4-W **Received:** 4/8/05 **Collected:** 4/6/05 0:00
Lab ID: 0504215-01A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		4/19/05
Benzene	ND	0.50	µg/L	1.0		4/19/05
Toluene	ND	0.50	µg/L	1.0		4/19/05
Ethylbenzene	ND	0.50	µg/L	1.0		4/19/05
m,p-Xylene	ND	0.50	µg/L	1.0		4/19/05
o-Xylene	ND	0.50	µg/L	1.0		4/19/05
Surrogate: Cis-1,2-Dichloroethylene	90.7	85-115	% Rec	1.0		4/19/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		4/19/05

Client Sample ID: 3670-MW4-W **Received:** 4/8/05 **Collected:** 4/6/05 0:00
Lab ID: 0504215-01D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	4/12/05	4/13/05
TPHC Motor Oil	ND	170	µg/L	1.0	4/12/05	4/13/05

Client Sample ID: 3670-MW5-W **Received:** 4/8/05 **Collected:** 4/6/05 0:00
Lab ID: 0504215-02A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		4/19/05
Benzene	ND	0.50	µg/L	1.0		4/19/05
Toluene	ND	0.50	µg/L	1.0		4/19/05
Ethylbenzene	ND	0.50	µg/L	1.0		4/19/05
m,p-Xylene	ND	0.50	µg/L	1.0		4/19/05
o-Xylene	ND	0.50	µg/L	1.0		4/19/05
Surrogate: Cis-1,2-Dichloroethylene	84.6	85-115	% Rec	1.0		4/19/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		4/19/05

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

Date: 21-Apr-05
WorkOrder: 0504215

ANALYTICAL REPORT

Client Sample ID: 3670-MW5-W **Received:** 4/8/05 **Collected:** 4/6/05 0:00
Lab ID: 0504215-02D **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	4/12/05	4/13/05
TPHC Motor Oil	ND	170	µg/L	1.0	4/12/05	4/13/05

Client Sample ID: 3670-QCTB-W **Received:** 4/8/05 **Collected:** 4/6/05 0:00
Lab ID: 0504215-03A **Matrix:** Groundwater

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		4/19/05
Benzene	ND	0.50	µg/L	1.0		4/19/05
Toluene	ND	0.50	µg/L	1.0		4/19/05
Ethylbenzene	ND	0.50	µg/L	1.0		4/19/05
m,p-Xylene	ND	0.50	µg/L	1.0		4/19/05
o-Xylene	ND	0.50	µg/L	1.0		4/19/05
Surrogate: Cis-1,2-Dichloroethylene	91.5	85-115	% Rec	1.0		4/19/05

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

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		4/19/05

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: 21-Apr-05

CLIENT: LACO Associates
Work Order: 0504215
Project: 3670.02, City Ambulance

QC SUMMARY REPORT

Method Blank

Sample ID: **MB-4/19/05** Batch ID: **R34468** Test Code: **BTXEW** Units: **µg/L** Analysis Date: **4/19/05 6:58:06 PM** Prep Date:
Client ID: Run ID: **ORGC8_050419B** SeqNo: **499761**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	ND	3.0									
Benzene	ND	0.50									
Toluene	ND	0.50									
Ethylbenzene	ND	0.50									
m,p-Xylene	ND	0.50									
o-Xylene	ND	0.50									
Cis-1,2-Dichloroethylene	0.897	0.10	1.00	0	89.7%	85	115	0			

Sample ID: **MB-4/19/05** Batch ID: **R34467** Test Code: **TPHCGW** Units: **µg/L** Analysis Date: **4/19/05 6:58:06 PM** Prep Date:
Client ID: Run ID: **ORGC8_050419A** SeqNo: **499738**

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

Sample ID: **MB-13320** Batch ID: **13320** Test Code: **TPHDMW** Units: **µg/L** Analysis Date: **4/13/05 1:36:44 PM** Prep Date: **4/12/05**
Client ID: Run ID: **ORGC7_050413A** SeqNo: **498187**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	ND	50									
TPHC Motor Oil	ND	170									

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: 21-Apr-05

CLIENT: LACO Associates
Work Order: 0504215
Project: 3670.02, City Ambulance

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: **LCS-05265** Batch ID: **R34468** Test Code: **BTXEW** Units: **µg/L** Analysis Date: **4/19/05 2:47:27 PM** Prep Date:
Client ID: Run ID: **ORGC8_050419B** SeqNo: **499758**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	43.56	3.0	40.0	0	109%	85	115	0			
Benzene	4.895	0.50	5.00	0	97.9%	85	115	0			
Toluene	4.775	0.50	5.00	0	95.5%	85	115	0			
Ethylbenzene	4.755	0.50	5.00	0	95.1%	85	115	0			
m,p-Xylene	9.537	0.50	10.0	0	95.4%	85	115	0			
o-Xylene	4.792	0.50	5.00	0	95.8%	85	115	0			
Cis-1,2-Dichloroethylene	1.08	0.10	1.00	0	108%	85	115	0			

Sample ID: **LCSD-05265** Batch ID: **R34468** Test Code: **BTXEW** Units: **µg/L** Analysis Date: **4/19/05 3:23:45 PM** Prep Date:
Client ID: Run ID: **ORGC8_050419B** SeqNo: **499759**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	45.52	3.0	40.0	0	114%	85	115	43.6	4.39%	15	
Benzene	4.870	0.50	5.00	0	97.4%	85	115	4.89	0.510%	15	
Toluene	4.748	0.50	5.00	0	95.0%	85	115	4.78	0.571%	15	
Ethylbenzene	4.724	0.50	5.00	0	94.5%	85	115	4.76	0.658%	15	
m,p-Xylene	9.487	0.50	10.0	0	94.9%	85	115	9.54	0.525%	15	
o-Xylene	4.776	0.50	5.00	0	95.5%	85	115	4.79	0.325%	15	
Cis-1,2-Dichloroethylene	1.02	0.10	1.00	0	102%	85	115	1.08	4.95%	15	

Sample ID: **LCS-05266** Batch ID: **R34467** Test Code: **TPHCGW** Units: **µg/L** Analysis Date: **4/19/05 4:35:46 PM** Prep Date:
Client ID: Run ID: **ORGC8_050419A** SeqNo: **499735**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	562.4	50	500	0	112%	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: LACO Associates
Work Order: 0504215
Project: 3670.02, City Ambulance

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID: **LCSD-05266** Batch ID: **R34467** Test Code: **TPHCGW** Units: **µg/L** Analysis Date: **4/19/05 5:11:23 PM** Prep Date:
Client ID: Run ID: **ORGC8_050419A** SeqNo: **499756**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	562.9	50	500	0	113%	81	126	562	0.0852%	15	

Sample ID: **LCS-13320** Batch ID: **13320** Test Code: **TPHDMW** Units: **µg/L** Analysis Date: **4/13/05 11:45:59 AM** Prep Date: **4/12/05**
Client ID: Run ID: **ORGC7_050413A** SeqNo: **498184**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	436.7	50	500	0	87.3%	72	124	0			
TPHC Motor Oil	919.4	170	1,000	0	91.9%	71	139	0			

Sample ID: **LCSD-13320** Batch ID: **13320** Test Code: **TPHDMW** Units: **µg/L** Analysis Date: **4/13/05 12:04:23 PM** Prep Date: **4/12/05**
Client ID: Run ID: **ORGC7_050413A** SeqNo: **498185**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Diesel (C12-C22)	436.3	50	500	0	87.3%	72	124	437	0.0838%	15	
TPHC Motor Oil	951.2	170	1,000	0	95.1%	71	139	919	3.41%	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: 0504215

Attention: Tim Nelson
Results & Invoice to: LACO Associates
Address: 21 W 4th St., Eureka, CA 95501

Phone: (707) 443-5054
Copies of Report to:

Sampler (Sign & Print): SJD

TAT: [ ] 24 Hr [ ] 48 Hr [ ] 5 Day [ ] 5–7 Day
[✓] STD (2–3 Wk) [ ] Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms [ ]
Preliminary: FAX [✓] Verbal [ ] By:
Final Report: FAX [ ] Verbal [ ] By:

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

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

PROJECT INFORMATION

Project Number: 3670.02
Project Name: City Ambulance
Purchase Order Number: TASK 3025

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS: TPHg/BTEX (CONTAINER 9, PRESERVATIVE b)	ANALYSIS: TPHd/mo w/SGC (CONTAINER 7, PRESERVATIVE ------)
	3670-MW4-W	4-6-05	PM	GW	3	1
	3670-MW5-W	↓	↓	↓	3	1
	3670-QCTB				1	

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

GEOTRACKER
4/14/05
-Did not receive / Notified Tim/Laco
4/11/05
2.6° / 3.5°

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
	4-8-05 12:15	4-8-05	12:15

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