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95 OCT -3 PM 4:06

September 27, 1995

Susan Hugo, Senior Hazardous Materials Specialist
Alameda County Health Care Services
Department of Environmental Health
Hazardous Materials Division
1131 Harbor Bay Parkway
Alameda, California 94502-6577

RE: Third Quarter 1995 Groundwater Monitoring Report
United States Postal Service (USPS)
Emeryville Branch, 1505 62nd Avenue
Emeryville, California 94608

Dear Ms. Hugo:

In accordance with the regulations of Alameda County, we are pleased to present the attached Third Quarter 1995 Monitoring Report for the USPS Emeryville Branch, located at 1505 62nd Avenue in Emeryville, California.

After review of this report, we hope that you will find that the data presented satisfactorily addresses your requirements.

Please do not hesitate to contact me at (415) 794-6156 or Charles Wren, Project Manager at (415) 986-1373 if there are any questions or concerns.

Sincerely,

Kayode Kadara
Environmental Programs
USPS Contracting Officer

cc: Clair Kenaston, P.E., USPS
Rich Hiatt, RWQCB, 2101 Webster Street, Suite 500, Oakland, CA 94612
Charles W. Wren, DMJM

ENVIRONMENTAL
PROTECTION

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THIRD QUARTER 1995
GROUND WATER MONITORING REPORT
EMERYVILLE POST OFFICE
EMERYVILLE, CALIFORNIA

LOWNEY ASSOCIATES
Environmental/Geotechnical/Engineering Services

August 29, 1995
864-17B, MV082502

Mr. Charles Wren
UNITED STATES POSTAL SERVICE
c/o DANIEL, MANN, JOHNSON & MENDENHALL
153 Kearny Street, Suite 600
San Francisco, California 94108

**RE: THIRD QUARTER 1995 GROUND
WATER MONITORING REPORT
EMERYVILLE POST OFFICE
EMERYVILLE, CALIFORNIA**

Dear Mr. Wren:

The attached report summarizes the results of our ground water quality evaluation performed at 1505 62nd Street in Emeryville, California. This work was performed per our December 14, 1993 agreement with you.

We refer you to the text of the report for details regarding our findings. If you have any questions, please call.

Very truly yours,

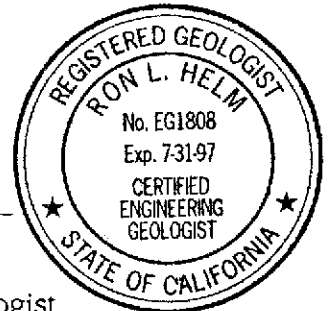
LOWNEY ASSOCIATES



Stason I. Foster, P.E.
Associate
Environmental Engineer



Ron L. Helm, C.E.G.
Principal
Environmental Geologist



RLH:SIF:THM:tjc

Copies: Addressee (4)
United States Postal Service (1)
Attn: Mr. Kayode Kadara

THIRD QUARTER 1995 GROUND WATER MONITORING REPORT

For

EMERYVILLE POST OFFICE
Emeryville, California

To

UNITED STATES POSTAL SERVICE
c/o DANIEL, MANN, JOHNSON & MENDENHALL
153 Kearny Street, Suite 600
San Francisco, California 94108

August 1995

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THIRD QUARTER 1995 GROUND WATER MONITORING REPORT
EMERYVILLE POST OFFICE
EMERYVILLE, CALIFORNIA

1.0 INTRODUCTION

In this report, we present the results of the third quarter 1995 ground water monitoring at 1505 62nd Street in Emeryville, California (Figures 1 and 2). The purpose of this investigation was to evaluate the presence of petroleum fuel compounds and PCBs in ground water beneath the site and the adjacent Emery Bay Market Place property.

The scope of work included the following:

- ▼ Measurement of ground water elevations and evaluation of flow direction.
- ▼ Collection of ground water from five on-site monitoring wells and four off-site monitoring wells.
- ▼ Laboratory analysis of the ground water samples for total petroleum hydrocarbons in the gasoline range (TPHg) with a scan to distinguish benzene, toluene, ethylbenzene, and xylenes (BTEX) (EPA Test Method 8015/8020); total petroleum hydrocarbons in the diesel range (TPHd) (EPA Test Method 8015M); total oil and grease (TOG) (Standard Method 5520EF); and polychlorinated biphenyls (PCBs) (EPA Test Method 8080).

1.1 Purpose

1.2 Scope of Work

2.0 GROUND WATER MONITORING

To evaluate the ground water flow direction at the site, the ground water elevations in on- and off-site wells were measured on July 13, 1995. The measured elevations, recorded to the nearest hundredth of a foot, are presented in Table 1.

As shown on Figure 2, the recorded ground water elevations do not indicate a consistent gradient; however, a general westward flow direction can be interpreted. Variations in the measured elevations are likely due to shallow ground water depths and perched conditions.

The western flow direction corresponds with regional flow (towards the San Francisco Bay) as well as data previously obtained from the adjacent Westinghouse property to the south.

2.1 Ground Water Flow Direction

TABLE 1. Ground Water and Top of Casing Elevations

Well Number	Date	Top of Casing Elevation (ft.)*	Depth to Ground Water (ft. below top of casing)	Ground Water Elevation (ft.)
MW-1	10/04/94	12.47	6.15	6.32
	01/11/95		5.09	7.38
	04/06/95		5.68	6.79
	07/13/95		5.92	6.55
MW-1A	10/04/94	12.77	6.49	6.28
	01/11/95		5.82	6.95
	04/06/95		6.18	6.59
	07/13/95		6.32	6.45
MW-2	10/04/94	11.85	4.37	7.48
	01/11/95		2.51	9.04
	04/06/95		2.90	8.95
	07/13/95		3.31	8.54

continued

TABLE 1. Ground Water and Top of Casing Elevations
(continued)

Well Number	Date	Top of Casing Elevation (ft.)*	Depth to Ground Water (ft. below top of casing)	Ground Water Elevation (ft.)
MW-3	10/04/94	9.98	3.58	6.40
	01/12/95		2.84	7.14
	04/06/95		3.17	6.81
	07/13/95		3.38	6.60
MW-4	10/04/94	12.76	6.37	6.39
	01/11/95		4.80	7.96
	04/06/95		5.68	7.08
	07/13/95		6.01	6.75
W-1	10/04/94	11.47	5.94	5.53
	01/11/95		4.93	6.54
	04/06/95		5.02	6.45
	07/13/95		5.52	5.95
W-5	10/04/94	11.41	5.20	7.35†
	01/11/95		2.65	9.53†
	04/06/95		3.12	8.29
	07/13/95		5.01	6.53†
W-7	10/04/94	9.05	5.83	3.22
	01/11/95		5.44	3.61
	04/06/95		5.79	3.26
	07/13/95		3.75	5.30
W-8	10/04/94	10.43	3.62	6.81
	01/11/95		2.69	7.74
	04/06/95		2.42	8.01
	07/13/95		3.20	7.23
W-13	10/04/94	8.15	4.37	3.78
	01/11/95		2.73	5.42
	04/06/95		3.60	4.55
	07/13/95		3.56	4.59
W-14	10/04/94	7.97	4.97	3.00
	01/11/95		4.66	3.31
	04/06/95		4.13	3.84
	07/13/95		4.36	3.61
W-15	10/04/94	11.53	2.90	8.63
	01/11/95		2.84	8.69
	04/06/95		2.62	8.91
	07/13/95		2.67	6.66
W-17	10/04/94	12.14	6.77	5.37
	01/11/95		NA	NA
	04/06/95		2.64	9.50
	07/13/95		5.29	6.85
W-18	10/04/94	11.34	5.28	6.06
	01/11/95		4.55	6.79
	04/06/95		4.02	7.32
	07/13/95		4.95	6.39

continued

TABLE 1. Ground Water and Top of Casing Elevations
(continued)

Well Number	Date	Top of Casing Elevation (ft.)*	Depth to Ground Water (ft. below top of casing)	Ground Water Elevation (ft.)
W-19	10/04/94	10.27	5.03	5.27†
	01/11/95		4.79	5.48†
	04/06/95		4.89	5.38
	07/13/95		4.99	5.30†
W-20	10/04/94	6.82	3.76	3.06
	01/11/95		2.76	4.06
	04/06/95		3.56	3.26
	07/13/95		3.09	3.73
W-21	10/04/94	9.48	5.08	4.40
	01/11/95		4.73	4.75
	04/06/95		4.92	4.56
	07/13/95		5.11	4.37
W-22	10/04/94	11.67	6.66	5.01
	01/11/95		4.67	7.00
	04/06/95		6.16	5.51
	07/13/95		6.29	5.38
W-23	10/04/94	9.16	2.39	6.77
	01/11/95		0.49	8.67
	04/06/95		0.86	8.30
	07/13/95		1.38	7.78
W-24	10/04/94	8.72	4.69	4.03
	01/11/95		2.63	6.09
	04/06/95		4.44	4.28
	07/13/95		4.04	4.68

* Top of casing elevations of on-site wells surveyed relative to Emery Bay Market Place monitoring well W-22.

† Free product measured in off-site wells W-5 and W-19.

NA Not available

Ground water samples were collected on July 13, 1995. The analytical results are presented in Table 2. Previous sampling results for the on-site wells are included for comparison. A discussion of sampling protocol and copies of monitoring well sampling records are presented in Appendix A. Copies of all laboratory reports are attached in Appendix B.

2.2 Ground Water Quality

TABLE 2. Laboratory Analysis of Ground Water Samples
(concentrations in ppb)

Well Number	Date	TOG†	TPHd	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	PCBs
MW-1	06/11/93	<5.0	<50	<50	<0.50	<0.50	<0.50	<0.50	ND
	10/10/94	<5.0	120	<50	<0.50	<0.50	<0.50	<0.50	ND
	01/12/95	<5.0	160	<50	<0.50	<0.50	<0.50	<0.50	ND
	04/10/95	<5.0	<50	<50	<0.50	<0.50	<0.50	<0.50	ND
	07/13/95	<5.0	140	<50	<0.50	<0.50	<0.50	<0.50	ND
MW-1A	06/11/93	8.0	4,900	<50	<0.50	<0.50	7.7	<0.50	NA
	10/04/94	17	10,000	6,500	<1.0	<1.0	<1.0	<1.0	ND
	01/11/95	<5.0	1,300	870	<1.0	<1.0	<1.0	<1.0	ND
	04/10/95	5.7	1,800	720	1.1	0.76	1.1	11	ND
	07/13/95	<5.0	2,500	690	<0.50	2.1	<0.50	<0.50	ND
MW-2	06/11/93	<5.0	240	1,500	3.2	4.7	<0.50	<0.50	NA
	10/10/94	<5.0	1,100	2,900	<10	<10	<10	<10	140*
	01/12/95	<5.0	2,100	3,400	<10	<10	<10	<10	89*
	04/10/95	<5.0	670	1,900	7.5	<0.50	9.6	8.1	22*
	07/13/95	<5.0	820	3,100	<0.50	<0.50	<0.50	<0.50	33*
MW-3	06/11/93	<5.0	530	180	<0.50	3.6	0.98	3.4	ND
	10/10/94	<5.0	1,100	260	<0.50	<0.50	<0.50	<0.50	ND
	01/12/95	<5.0	1,500	270	<0.50	0.87	<0.50	<0.50	ND
	04/10/95	<5.0	250	150	<0.50	0.51	<0.50	8.7	ND
	07/13/95	<5.0	1,100	210	<0.50	<0.50	<0.50	<0.50	ND
MW-4	06/11/93	<5.0	730	1,200	<0.50	4.0	16	1.5	NA
	10/10/94	<5.0	1,800	970	<2.5	<2.5	<2.5	<2.5	ND
	01/12/95	<5.0	1,900	1,200	<2.5	<2.5	<2.5	<2.5	ND
	04/10/95	<5.0	670	780	<0.50	<0.50	3.1	18	ND
	07/13/95	<5.0	1,600	1,300	<2.0	<2.0	<2.0	<2.0	ND
W-8	10/04/94	5.1	17,000	780	<2.5	<2.5	<2.5	<2.5	ND
	01/11/95	<5.0	17,000	520	<2.0	<2.0	<2.0	<2.0	ND
	04/06/95	<5.0	16,000	950	0.50	<0.50	1.4	4.7	ND
	07/13/95	7.8	51,000	940	<2.5	<2.5	<2.5	<2.5	ND
W-13	10/04/94	<5.0	<50	<50	<0.50	<0.50	<0.50	<0.50	ND
	01/11/95	<5.0	73	<50	<0.50	<0.50	<0.50	<0.50	ND
	04/06/95	<5.0	<50	<50	<0.50	<0.50	<0.50	<0.50	ND
	07/13/95	<5.0	160	<50	<0.50	<0.50	<0.50	<0.50	ND
W-14	10/04/94	<5.0	66	<50	<0.50	<0.50	<0.50	<0.50	ND
	01/11/95	<5.0	63	<50	<0.50	<0.50	<0.50	<0.50	ND
	04/06/95	<5.0	<50	<50	<0.50	<0.50	<0.50	<0.50	ND
	07/13/95	<5.0	160	<50	<0.50	<0.50	<0.50	<0.50	ND

continued

TABLE 2. Laboratory Analysis of Ground Water Samples
(concentrations in ppb)

Well Number	Date	TOG†	TPHd	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	PCBs
MW-1	06/11/93	<5.0	<50	<50	<0.50	<0.50	<0.50	<0.50	ND
	10/10/94	<5.0	120	<50	<0.50	<0.50	<0.50	<0.50	ND
	01/12/95	<5.0	160	<50	<0.50	<0.50	<0.50	<0.50	ND
	04/10/95	<5.0	<50	<50	<0.50	<0.50	<0.50	<0.50	ND
	07/13/95	<5.0	140	<50	<0.50	<0.50	<0.50	<0.50	ND
MW-1A	06/11/93	8.0	4,900	<50	<0.50	<0.50	7.7	<0.50	NA
	10/04/94	17	10,000	6,500	<1.0	<1.0	<1.0	<1.0	ND
	01/11/95	<5.0	1,300	870	<1.0	<1.0	<1.0	<1.0	ND
	04/10/95	5.7	1,800	720	1.1	0.76	1.1	11	ND
	07/13/95	<5.0	2,500	690	<0.50	2.1	<0.50	<0.50	ND
MW-2	06/11/93	<5.0	240	1,500	3.2	4.7	<0.50	<0.50	NA
	10/10/94	<5.0	1,100	2,900	<10	<10	<10	<10	140*
	01/12/95	<5.0	2,100	3,400	<10	<10	<10	<10	89*
	04/10/95	<5.0	670	1,900	7.5	<0.50	9.6	8.1	22*
	07/13/95	<5.0	820	3,100	<10	<10	<10	<10	33*
MW-3	06/11/93	<5.0	530	180	<0.50	3.6	0.98	3.4	ND
	10/10/94	<5.0	1,100	260	<0.50	<0.50	<0.50	<0.50	ND
	01/12/95	<5.0	1,500	270	<0.50	0.87	<0.50	<0.50	ND
	04/10/95	<5.0	250	150	<0.50	0.51	<0.50	8.7	ND
	07/13/95	<5.0	1,100	210	<0.50	<0.50	<0.50	<0.50	ND
MW-4	06/11/93	<5.0	730	1,200	<0.50	4.0	16	1.5	NA
	10/10/94	<5.0	1,800	970	<2.5	<2.5	<2.5	<2.5	ND
	01/12/95	<5.0	1,900	1,200	<2.5	<2.5	<2.5	<2.5	ND
	04/10/95	<5.0	670	780	<0.50	<0.50	3.1	18	ND
	07/13/95	<5.0	1,600	1,300	<2.0	<2.0	<2.0	<2.0	ND
W-8	10/04/94	5.1	17,000	780	<2.5	<2.5	<2.5	<2.5	ND
	01/11/95	<5.0	17,000	520	<2.0	<2.0	<2.0	<2.0	ND
	04/06/95	<5.0	16,000	950	0.50	<0.50	1.4	4.7	ND
	07/13/95	7.8	51,000	940	<2.5	<2.5	<2.5	<2.5	ND
W-13	10/04/94	<5.0	<50	<50	<0.50	<0.50	<0.50	<0.50	ND
	01/11/95	<5.0	73	<50	<0.50	<0.50	<0.50	<0.50	ND
	04/06/95	<5.0	<50	<50	<0.50	<0.50	<0.50	<0.50	ND
	07/13/95	<5.0	160	<50	<0.50	<0.50	<0.50	<0.50	ND
W-14	10/04/94	<5.0	66	<50	<0.50	<0.50	<0.50	<0.50	ND
	01/11/95	<5.0	63	<50	<0.50	<0.50	<0.50	<0.50	ND
	04/06/95	<5.0	<50	<50	<0.50	<0.50	<0.50	<0.50	ND
	07/13/95	<5.0	160	<50	<0.50	<0.50	<0.50	<0.50	ND
W-23	10/04/94	<5.0	4,200	650	<2.5	<2.5	<2.5	<2.5	ND
	01/11/95	<5.0	2,400	450	<1.2	<1.2	<1.2	<1.2	ND
	04/06/95	<5.0	1,200	490	2.2	<0.50	<0.50	0.86	ND
	07/13/95	<5.0	5,000	760	0.91	<0.50	<0.50	0.79	ND
Primary Drinking Water Standards ¹		NE	NE	NE	1.0	1,000	680	1,750	0.5

¹ Taken from Environmental Protection Agency Drinking Water Standards and Health Advisory Table, August 1991.

† TOG concentrations in ppm

NA Not Analyzed

ND Not Detected above laboratory detection limits

NE Not Established

* Detected concentration of PCB-1260.

TABLE 2. Laboratory Analysis of Ground Water Samples
(concentrations in ppb)
(continued)

Well Number	Date	TOG†	TPHd	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	PCBs
W-23	10/04/94	<5.0	4,200	650	<2.5	<2.5	<2.5	<2.5	ND
	01/11/95	<5.0	2,400	450	<1.2	<1.2	<1.2	<1.2	ND
	04/06/95	<5.0	1,200	490	2.2	<0.50	<0.50	0.86	ND
	07/13/95	<5.0	5,000	760	0.91	<0.50	<0.50	0.79	ND
Primary Drinking Water Standards ¹		NE	NE	NE	1.0	1,000	680	1,750	0.5

¹ Taken from Environmental Protection Agency Drinking Water Standards and Health Advisory Table, August 1991.

† TOG concentrations in ppm

NA Not Analyzed

ND Not Detected above laboratory detection limits

NE Not Established

* Detected concentration of PCB-1260.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Analysis of the ground water samples collected detected predominantly high molecular weight diesel range petroleum hydrocarbons. The concentrations detected during this quarter were generally higher than those detected during the second quarter sampling event; however, remain generally similar to previous sampling events over the past year.

These heavy hydrocarbons typically exhibit a low mobility potential and low toxicity. In addition, based on the low yield observed during purging of the selected monitoring wells, the shallow water-bearing zone does not appear capable of transmitting water in significant quantities. Due to these characteristics and the absence of significant BTEX concentrations, the compounds detected do not appear to pose a significant threat to human health or the environment, in our opinion. Since the source has been removed, a decrease in concentrations is expected due to natural degradation and attenuation processes.

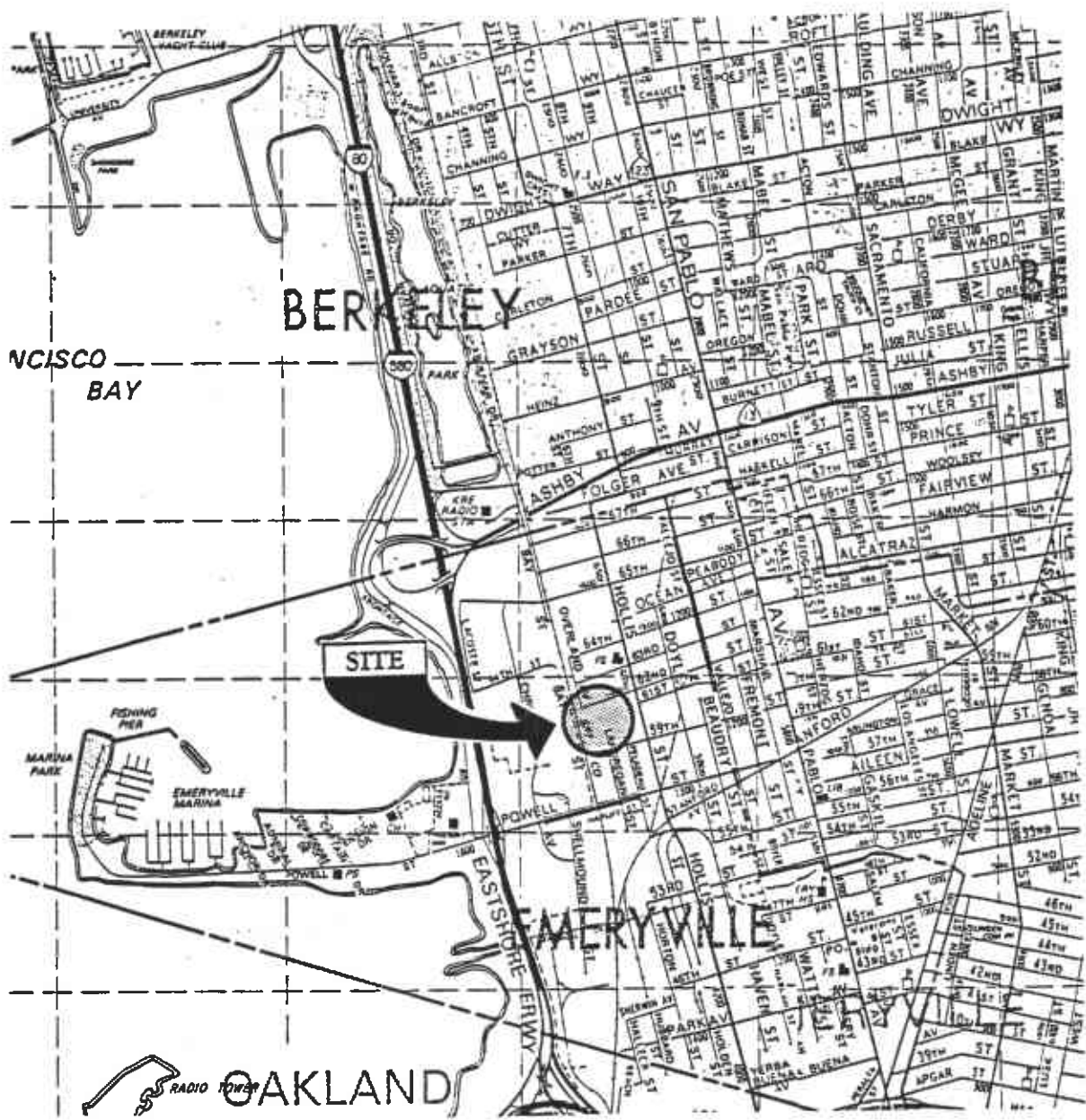
We recommend that a copy of this report be sent to the California Regional Water Quality Control Board and the Alameda County Department of Environmental Health for their review.

4.0 LIMITATIONS

This report was prepared for the use of the United States Postal Service in evaluating ground water quality at the referenced site at the time of this study. We make no warranty, expressed or implied, except that our services have been performed in accordance

with environmental principles generally accepted at this time and location. The chemical and other data presented in this report can change over time and are applicable only to the time this study was performed.

* * * * *



"Reproduced with permission granted by THOMAS BROS. MAPS."

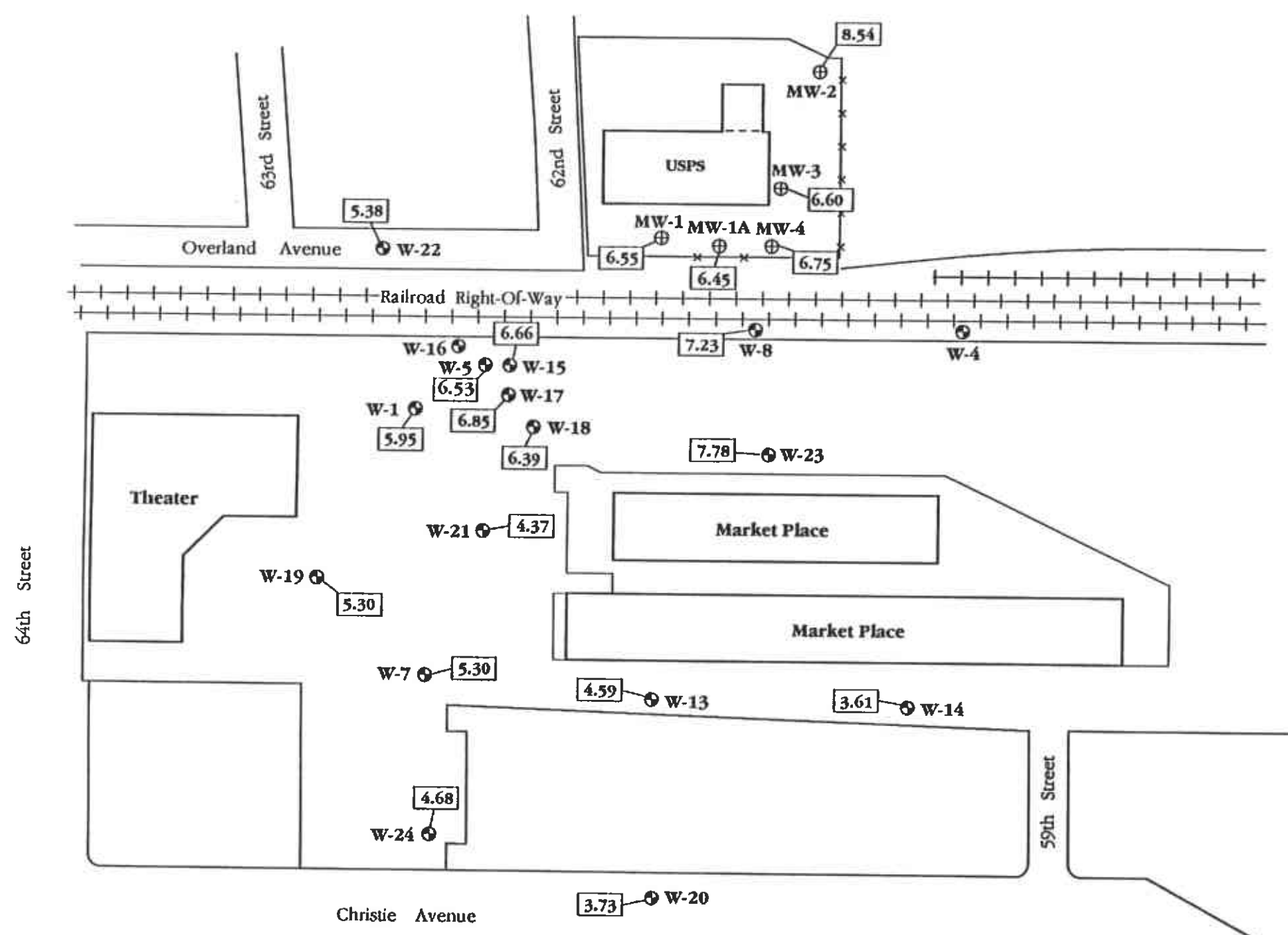
864-17B, '96"EB

VICINITY MAP

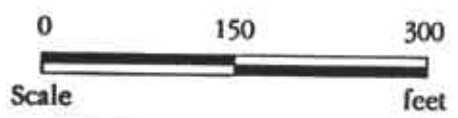
EMERYVILLE POST OFFICE
Emeryville, California

LOVNEY ASSOCIATES
Environmental/Geotechnical/Engineering Services

FIGURE 1
864-17B

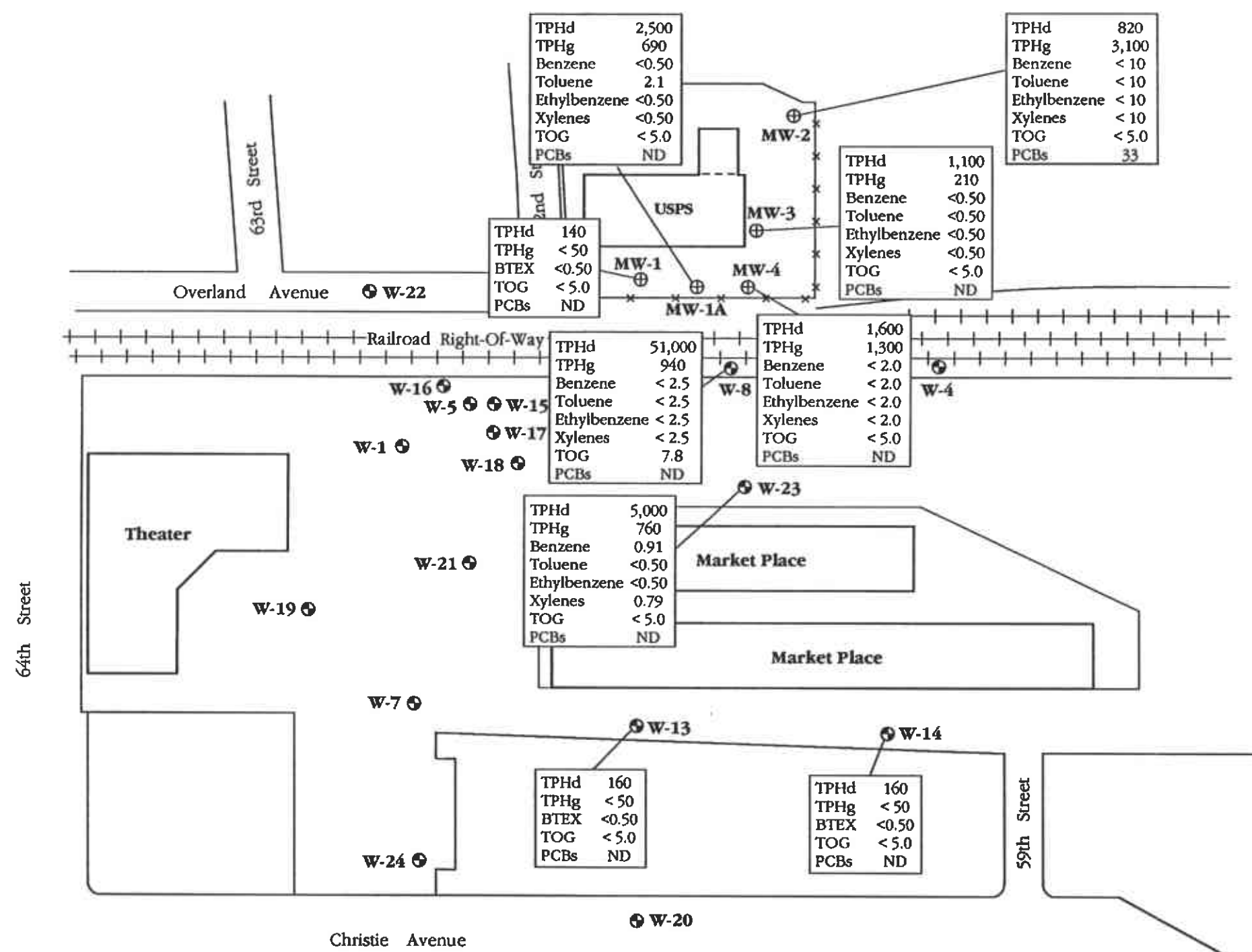


LEGEND
⊕ - Approximate location of USPS monitoring well
⊙ - Approximate location of Market Place monitoring well
3.73 - Ground water elevation



SITE PLAN/GROUND WATER ELEVATION MAP
EMERYVILLE POST OFFICE
Emeryville, California

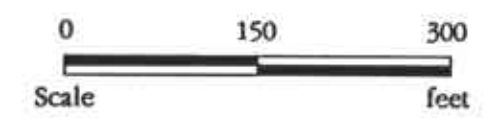
LOWNEY ASSOCIATES
Environmental / Geotechnical / Engineering Services



LEGEND

- ⊕ - Approximate location of USPS monitoring well
- ⊙ - Approximate location of Market Place monitoring well

TPHd - Total petroleum hydrocarbon as diesel (ppb)
 TPHg - Total petroleum hydrocarbon as gasoline (ppb)
 BTEX - Benzene, toluene, ethylbenzene, xylenes (ppb)
 TOG - Total oil and grease (ppm)
 PCBs - Polychlorinated biphenyls (ppb)
 ND - Not detected above laboratory detection limit



PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER

EMERYVILLE POST OFFICE
 Emeryville, California

LOWNEY ASSOCIATES
 Environmental / Geotechnical / Engineering Services

FIGURE 3
 864-17B

APPENDIX A
WELL SAMPLING RECORDS

Prior to ground water sampling, the static water level was measured using an electronic water level measurement device. A submersible sampling pump or a Teflon bailer was used to purge a minimum of three well casing volumes of water; after each well volume pH, conductivity, and temperature were recorded. These measurements generally stabilize after three to four well volumes. Ground water was then collected in appropriate sample bottles, labeled, and immediately placed in an ice-cooled chest for delivery to an analytical laboratory certified by the California Department of Health Services for chemical analysis of drinking water and hazardous waste. Carried along with the ground water samples was a chain of custody form that was maintained for all well samples.

All well developing and sampling equipment was cleaned with an aqueous tri-sodium phosphate solution and distilled water or steam cleaned prior to use at each well. A well development record for each well was maintained by Lowney Associates. A copy of this record is attached.

Project Number 564-17B
 Project Name EMERYVILLE POST OFFICE
 Field Geologist/Engineer GRW
 Well Number MW-1A Boring Diameter _____ (inches)
 Well Total Depth (completed) 18 (feet) Casing Diameter 2.0 (inches)
 Development Date _____ Method _____ Volume Produced _____ (liter/gal)

WELL VOLUME CONVERSION FACTORS

2-INCH CASING DIAMETER

VOL (GALLONS) = FEET OF WATER x 0.17
 VOL (LITERS) = FEET OF WATER x 0.62

4-INCH CASING DIAMETER

VOL (GALLONS) = FEET OF WATER x 0.66
 VOL (LITERS) = FEET OF WATER x 2.5

Sampling Date 7/13/95 Time 4:48 pm Method Bailer
 Static Water Level Prior to Purging 6.32 (ft) Water Level After Recovery 6.56 (ft)
 (Measured from top of casing) 4 + H₂O = 11.68 8.56
 80 Percent Recharged Yes No

Well Volume 7.24 (liter/gal)
 Three Well Volumes 21.7 (liter/gal)
 Total Produced _____ (liter/gal)
 Number of Well Volumes _____
 Production Time _____ (min)
 Production Rate _____ (/min)

Well Volumes	ph	Conductivity $\mu\text{S} \times 10$	Temp °F
1	7.6	55	70
2	7.1	59	69
3	7.0	61	71
4			
5			
6			
7			
8			
9			
10			

Sample Description _____
 Laboratory _____
 Deliver Pick-Up Date _____

Comments Slight show to H₂O

LOVNEY ASSOCIATES

RECORD OF WELL DEVELOPMENT/SAMPLING

Project Number 864-17B
Project Name Emergingville P.O.
Field Geologist/Engineer THM

Well Number MW-2 Boring Diameter _____ (inches)
Well Total Depth (completed) 11.65 (feet) Casing Diameter 4 (inches)

Development Date _____ Method _____ Volume Produced _____ (liter/gal)

WELL VOLUME CONVERSION FACTORS

2-INCH CASING DIAMETER

VOL (GALLONS) = FEET OF WATER x 0.17
VOL (LITERS) = FEET OF WATER x 0.62

4-INCH CASING DIAMETER

VOL (GALLONS) = FEET OF WATER x 0.66
VOL (LITERS) = FEET OF WATER x 2.5

Sampling Date 7-13-95 Time 16:25 Method gundfos

Static Water Level Prior to Purging 3.31 (ft)
(Measured from top of casing) h=8.34

Water Level After Recovery 4.98 (ft)

80 Percent Recharged Yes No
4.98

Well Volume 5.50 (liter/gal)
Three Well Volumes 16.50 (liter/gal)
Total Produced 17.0 (liter/gal)
Number of Well Volumes _____
Production Time _____ (min)
Production Rate _____ (/min)

Well Volumes	ph	Conductivity $\mu S \times 10$	Temp F
1	8.3	06	70
2	8.3	06	68
3	8.0	07	67
4			
5			
6			
7			
8			
9			
10			

Sample Description MW-2
Laboratory Sequoia
Deliver Pick-Up Date _____

Comments _____

Project Number 864-17B
Project Name Emoryville P.O.
Field Geologist/Engineer THM

Well Number MW-3 Boring Diameter _____ (inches)
Well Total Depth (completed) 8.9 (feet) Casing Diameter 4 (inches)
Development Date _____ Method _____ Volume Produced _____ (liter/gal)

WELL VOLUME CONVERSION FACTORS

2-INCH CASING DIAMETER

VOL (GALLONS) = FEET OF WATER x 0.17
VOL (LITERS) = FEET OF WATER x 0.62

4-INCH CASING DIAMETER

VOL (GALLONS) = FEET OF WATER x 0.66
VOL (LITERS) = FEET OF WATER x 2.5

Sampling Date 7-13-95 Time 1400 Method groundfos

Static Water Level Prior to Purging 3.38 (ft)
(Measured from top of casing) $h = 5.52$

Water Level After Recovery 4.48 (ft)

80 Percent Recharged Yes No
7.78

Well Volume 3.64 (liter/gal)
Three Well Volumes 10.92 (liter/gal)
Total Produced 12 (liter/gal)
Number of Well Volumes 3.3
Production Time _____ (min)
Production Rate _____ (l/min)

Well Volumes	ph	Conductivity $\mu S \times 10$	Temp F
1	—	09	72
2	—	10	68
3	—	10	68
4			
5			
6			
7			
8			
9			
10			

Sample Description MW-3
Laboratory Sequoia
Deliver Pick-Up Date _____

Comments pH meter not working

LOWNEY ASSOCIATES

RECORD OF WELL DEVELOPMENT/SAMPLING

Project Number 864-17B
Project Name Cameryville P.O.
Field Geologist/Engineer THM

Well Number MW-4 Boring Diameter _____ (inches)
Well Total Depth (completed) 12.4 (feet) Casing Diameter 4 (inches)
Development Date _____ Method _____ Volume Produced _____ (liter/gal)

WELL VOLUME CONVERSION FACTORS

2-INCH CASING DIAMETER

VOL (GALLONS) = FEET OF WATER x 0.17
VOL (LITERS) = FEET OF WATER x 0.62

4-INCH CASING DIAMETER

VOL (GALLONS) = FEET OF WATER x 0.66
VOL (LITERS) = FEET OF WATER x 2.5

Sampling Date 7.13-95 Time 1515 Method grab

Static Water Level Prior to Purging 6.01 (ft)
(Measured from top of casing) h: 6.39

Water Level After Recovery 7.29 (ft)

80 Percent Recharged Yes No
7.29

Well Volume 4.22 (liter/gal)
Three Well Volumes 12.66 (liter/gal)
Total Produced _____ (liter/gal)
Number of Well Volumes _____
Production Time _____ (min)
Production Rate _____ (l/min)

Well Volumes	ph	Conductivity $\mu\text{S} \times 10$	Temp $^{\circ}\text{F}$
1	8.5	05	73
2	7.9	05	70
3	7.7	06	69
4			
5			
6			
7			
8			
9			
10			

Sample Description MW-4
Laboratory Sequia
Deliver Pick-Up Date _____

Comments

LOVNEY ASSOCIATES

RECORD OF WELL DEVELOPMENT/SAMPLING

Project Number 33-1-78
 Project Name EMERALD OIL DRILL
 Field Geologist/Engineer (21)

Well Number W-8 Boring Diameter _____ (inches)
 Well Total Depth (completed) 11.79 (feet) Casing Diameter 7.0 (inches)
 Development Date _____ Method _____ Volume Produced _____ (liter/gal)

WELL VOLUME CONVERSION FACTORS

2-INCH CASING DIAMETER

VOL (GALLONS) = FEET OF WATER x 0.17
 VOL (LITERS) = FEET OF WATER x 0.62

4-INCH CASING DIAMETER

VOL (GALLONS) = FEET OF WATER x 0.66
 VOL (LITERS) = FEET OF WATER x 2.5

Sampling Date 7/13/95 Time 12.20 Method Bailer

Static Water Level Prior to Purging 2.99 (ft)
 (Measured from top of casing) 11.79 - 2.99 = 8.80

Water Level After Recovery 3.30 (ft)

80 Percent Recharged Yes No

Well Volume 5.46 (liter/gal)
 Three Well Volumes 16.4 (liter/gal)
 Total Produced 17 (liter/gal)
 Number of Well Volumes 3.11
 Production Time _____ (min)
 Production Rate _____ (./min)

Well Volumes	ph	Conductivity $\mu\text{S} \times 10$	Temp $^{\circ}\text{F}$
1	6.6	106	74
2	7.2	105	71
3	7.7	102	70
4			
5			
6			
7			
8			
9			
10			

Sample Description W-8
 Laboratory Serovia
 Deliver Pick-Up Date 7/14/95

Comments @ 3.30 bailer down + shov

Project Number 864-12B
 Project Name ENERGY 126 200' OF-12F
 Field Geologist/Engineer (Signature)

Well Number W-13 Boring Diameter _____ (inches)
 Well Total Depth (completed) 10 02 (feet) Casing Diameter 2 0 (inches)
 Development Date _____ Method _____ Volume Produced _____ (liter/gal)

WELL VOLUME CONVERSION FACTORS

2-INCH CASING DIAMETER

VOL (GALLONS) = FEET OF WATER x 0.17
 VOL (LITERS) = FEET OF WATER x 0.62

4-INCH CASING DIAMETER

VOL (GALLONS) = FEET OF WATER x 0.66
 VOL (LITERS) = FEET OF WATER x 2.5

Sampling Date 7/13/95 Time 10:30 Method Bailer

Static Water Level Prior to Purging 3.56 (ft) n = 6.46
 Water Level After Recovery 3.94 (ft)

80 Percent Recharged Yes No

Well Volume 4.01 (liter/gal)
 Three Well Volumes 12.03 (liter/gal)
 Total Produced 10 (liter/gal)
 Number of Well Volumes 2.49
 Production Time _____ (min)
 Production Rate _____ (l/min)

Well Volumes	ph	Conductivity $\mu S \times 10$	Temp F
1	7.6	70	68
2	7.8	57	68
3			
4			
5			
6			
7			
8			
9			
10			

Sample Description W-13
 Laboratory Sussex
 Deliver Pick-Up Date 7/14/95

Comments well bailed dry after 10 liters

Project Number 864-17B
 Project Name Emeryville Post Office
 Field Geologist/Engineer GRW

Well Number W-14 Boring Diameter _____ (inches)
 Well Total Depth (completed) 7.89 (feet) Casing Diameter 2.0 (inches)
 Development Date _____ Method _____ Volume Produced _____ (liter/gal)

WELL VOLUME CONVERSION FACTORS

2-INCH CASING DIAMETER

VOL (GALLONS) = FEET OF WATER x 0.17
 VOL (LITERS) = FEET OF WATER x 0.62

4-INCH CASING DIAMETER

VOL (GALLONS) = FEET OF WATER x 0.66
 VOL (LITERS) = FEET OF WATER x 2.5

Sampling Date 7/13/95 Time 9:31 Method Primer

Static Water Level Prior to Purging 4.36 (ft)
 (Measured from top of casing) 1.5' H₂O = 6.53'

Water Level After Recovery 4.8 (ft)

80 Percent Recharged Yes No
4.424/5.46 - d.

Well Volume 3.23 (liter/gal)
 Three Well Volumes 10.29 (liter/gal)
 Total Produced 4.5 (liter/gal)
 Number of Well Volumes 1.31
 Production Time 10 (min)
 Production Rate _____ (l/min)

Well Volumes	ph	Conductivity $\mu S \times 10$	Temp F
1	8.0	105	69
2			
3			
4			
5			
6			
7			
8			
9			
10			

Sample Description W-14
 Laboratory Corinnia
 Deliver Pick-Up Date 7/14/95

Comments Well bailed due to approx 4.5 liters.

LOVNEY ASSOCIATES

RECORD OF WELL DEVELOPMENT/SAMPLING

Project Number 864-17B
 Project Name SHIMMER WEST OFFSET
 Field Geologist/Engineer G.P.H.
 Well Number W-23 Boring Diameter _____ (inches)
 Well Total Depth (completed) 9.00 (feet) Casing Diameter 2.0 (inches)
 Development Date _____ Method _____ Volume Produced _____ (liter/gal)

WELL VOLUME CONVERSION FACTORS

2-INCH CASING DIAMETER

VOL (GALLONS) = FEET OF WATER x 0.17
 VOL (LITERS) = FEET OF WATER x 0.62

4-INCH CASING DIAMETER

VOL (GALLONS) = FEET OF WATER x 0.66
 VOL (LITERS) = FEET OF WATER x 2.5

Sampling Date 7/13/95 Time 11:30 Method Boiler

Static Water Level Prior to Purging 1.31 (ft) Water Level After Recovery 5.27 (ft)
 (Measured from top of casing) 414.0 769 → 2.55'

80 Percent Recharged Yes No

Well Volume 4.77 (liter/gal)
 Three Well Volumes 14.3 (liter/gal)
 Total Produced 13.0 (liter/gal)
 Number of Well Volumes 2.7
 Production Time _____ (min)
 Production Rate _____ (/min)

Well Volumes	ph	Conductivity $\mu S \times 10$	Temp F
1	7.2	168	73
2	7.3	190	71
3			
4			
5			
6			
7			
8			
9			
10			

Sample Description W-23
 Laboratory Searaid
 Deliver Pick-Up Date 7/14/95

Comments @ 13.0 liters used used by
Slight Shown in notes
Samplers taken @ 5.27' → 48.5% recovery
initial take 4 hrs to reach 80%

APPENDIX B
ANALYTICAL RESULTS

The refrigerated ground water samples were delivered to Sequoia Analytical of Redwood City, California. Chain of custody documentation was maintained for all samples. Attached are copies of the analytical results and the chain of custody forms. Sequoia Analytical is certified by the State of California as a Hazardous Waste Testing Laboratory and as an Approved Water and Wastewater Laboratory.



Sequoia
Analytical

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FAX (916) 921-0100

Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043
Attention: Todd McNair

Client Proj. ID: 864-17B

Lab Proj. ID: 9507876

Received: 07/14/95

Reported: 07/28/95

LABORATORY NARRATIVE

Please Note:

Q = Surrogate recovery is out of control limits due to sample dilution.

PCB Note: The recovery for our primary surrogate, DBC, on sample 9507876-05 and 07 is low due to matrix effects. The recovery of our secondary surrogate, TMX, was acceptable for both samples and validates the data. TMX for 05 = 79%; TMX for 07 = 73%.

SEQUOIA ANALYTICAL

Vytas Ankaitis
Project Manager





Sequoia Analytical

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Client Proj. ID: 864-17B

Lab Proj. ID: 9507876

Sampled: 07/13/95
Received: 07/14/95
Analyzed: see below

Attention: Todd McNair

Reported: 07/28/95

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9507876-01 Sample Desc: LIQUID,MW-1				
TRPH (SM 5520 B&F Mod)	mg/L	07/26/95	5.0	N.D.
Lab No: 9507876-02 Sample Desc: LIQUID,MW-1A				
TRPH (SM 5520 B&F Mod)	mg/L	07/26/95	5.0	N.D.
Lab No: 9507876-03 Sample Desc: LIQUID,MW-2				
TRPH (SM 5520 B&F Mod)	mg/L	07/26/95	5.0	N.D.
Lab No: 9507876-04 Sample Desc: LIQUID,MW-3				
TRPH (SM 5520 B&F Mod)	mg/L	07/26/95	5.0	N.D.
Lab No: 9507876-05 Sample Desc: LIQUID,MW-4				
TRPH (SM 5520 B&F Mod)	mg/L	07/26/95	5.0	N.D.
Lab No: 9507876-06 Sample Desc: LIQUID,W-8				
TRPH (SM 5520 B&F Mod)	mg/L	07/26/95	5.0	7.8
Lab No: 9507876-07 Sample Desc: LIQUID,W-13				
TRPH (SM 5520 B&F Mod)	mg/L	07/26/95	5.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Todd McNair
Vyatas Ankaitis
Project Manager

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Client Proj. ID: 864-17B
Lab Proj. ID: 9507876

Sampled: 07/13/95
Received: 07/14/95
Analyzed: see below

Attention: Todd McNair

Reported: 07/28/95

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9507876-08 Sample Desc: LIQUID,W-14				
TRPH (SM 5520 B&F Mod)	mg/L	07/26/95	5.0	N.D.
Lab No: 9507876-09 Sample Desc: LIQUID,W-23				
TRPH (SM 5520 B&F Mod)	mg/L	07/26/95	5.0	N.D.

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

[Handwritten Signature]
Vyta Ankaitis
Project Manager

AUG 2 1995
Page: 2





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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Client Proj. ID: 864-17B
Sample Descript: MW-1
Matrix: LIQUID
Analysis Method: EPA 8080
Lab Number: 9507876-01

Sampled: 07/13/95
Received: 07/14/95
Extracted: 07/19/95
Analyzed: 07/26/95
Reported: 07/28/95

QC Batch Number: GC0719950PCBEXZ
Instrument ID: GCHP12

Polychlorinated Biphenyls (EPA 8080)

Analyte	Detection Limit ug/L	Sample Results ug/L
PCB-1016	0.50	N.D.
PCB-1221	2.0	N.D.
PCB-1232	0.50	N.D.
PCB-1242	0.50	N.D.
PCB-1248	0.50	N.D.
PCB-1254	0.50	N.D.
PCB-1260	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Dibutylchloroendate	50 150	76

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Milla Ankaitis
Milla Ankaitis
Project Manager

LOWNEY ASSOC.
Page: 3
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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Client Proj. ID: 864-17B
Sample Descript: MW-1
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9507876-01

Sampled: 07/13/95
Received: 07/14/95
Extracted: 07/21/95
Analyzed: 07/24/95
Reported: 07/28/95

QC Batch Number: GC0721950HBPEXZ
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	140
Chromatogram Pattern: Unidentified HC		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	115

Analyses reported as N.D. were not present above the stated limit of detection.

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Melanie Fox

Melanie Fox
Project Manager

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Lowney Associates 405 Clyde Avenue Mountain View, CA 94043 Attention: Todd McNair	Client Proj. ID: 864-17B Sample Descript: MW-1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9507876-01	Sampled: 07/13/95 Received: 07/14/95 Analyzed: 07/18/95 Reported: 07/28/95
--	--	---

GC Batch Number: GC071895BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	91

Analytes reported as N.D. were not present above the stated limit of detection.

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Melissa Anhalt
Melissa Anhalt
Project Manager

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Client Proj. ID: 864-17B
Sample Descript: MW-1A
Matrix: LIQUID
Analysis Method: EPA 8080
Lab Number: 9507876-02

Sampled: 07/13/95
Received: 07/14/95
Extracted: 07/19/95
Analyzed: 07/27/95
Reported: 07/28/95

QC Batch Number: GC0719950PCBEXZ
Instrument ID: GCHP12

Polychlorinated Biphenyls (EPA 8080)

Analyte	Detection Limit ug/L	Sample Results ug/L
PCB-1016	0.50	N.D.
PCB-1221	2.0	N.D.
PCB-1232	0.50	N.D.
PCB-1242	0.50	N.D.
PCB-1248	0.50	N.D.
PCB-1254	0.50	N.D.
PCB-1260	0.50	N.D.

Surrogates	Control Limits %	% Recovery
Dibutylchloroendate	50 150	95

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

[Signature]
Mytas Ankaftis
Project Manager

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Client Proj. ID: 864-17B
Sample Descript: MW-1A
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9507876-02

Sampled: 07/13/95
Received: 07/14/95
Extracted: 07/21/95
Analyzed: 07/26/95
Reported: 07/28/95

Attention: Todd McNair

QC Batch Number: GC0721950HBPEXZ
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	100	2500 C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	147

Analytes reported as N.D. were not present above the stated limit of detection.

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William Anhalt

William Anhalt
Project Manager

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**Sequoia
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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Client Proj. ID: 864-17B
Sample Descript: MW-1A
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9507876-02

Sampled: 07/13/95
Received: 07/14/95
Analyzed: 07/18/95
Reported: 07/28/95

QC Batch Number: GC071895BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	690
Benzene	0.50	N.D.
Toluene	0.50	2.1
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern: Unidentified HC		>C7
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	104

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Vytas Ankaitis

Vytas Ankaitis
Project Manager

LOWNEY ASSOC.
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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043
Attention: Todd McNair

Client Proj. ID: 864-17B
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: EPA 8080
Lab Number: 9507876-03

Sampled: 07/13/95
Received: 07/14/95
Extracted: 07/19/95
Analyzed: 07/27/95
Reported: 07/28/95

QC Batch Number: GC0719950PCBEXZ
Instrument ID: GCHP12

Polychlorinated Biphenyls (EPA 8080)

Analyte	Detection Limit ug/L	Sample Results ug/L
PCB-1016	5.0	N.D.
PCB-1221	20	N.D.
PCB-1232	5.0	N.D.
PCB-1242	5.0	N.D.
PCB-1248	5.0	N.D.
PCB-1254	5.0	N.D.
PCB-1260	5.0	33

Surrogates	Control Limits %	% Recovery
Dibutylchloroendate	50 150	76

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

William R. Thompson

Vytas Ankaitis
Project Manager

AU Page: 2

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Todd McNair

Client Proj. ID: 864-17B
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9507876-03

Sampled: 07/13/95
Received: 07/14/95
Extracted: 07/21/95
Analyzed: 07/25/95
Reported: 07/28/95

QC Batch Number: GC0721950HBPEXZ
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC Discrete Peaks	50	820 C9-C24 ...
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 113

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Melle Anthony For

Vytas Ankaitis
Project Manager

LOWNEY ASSOC.

Page: 2 of 19





Lowney Associates
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Client Proj. ID: 864-17B
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9507876-03

Sampled: 07/13/95
Received: 07/14/95
Analyzed: 07/18/95
Reported: 07/28/95

QC Batch Number: GC071895BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	3100
Benzene	10	N.D.
Toluene	10	N.D.
Ethyl Benzene	10	N.D.
Xylenes (Total)	10	N.D.
Chromatogram Pattern: Discrete Peaks		C6-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	96

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

M. Ankaitis FOR

Mytas Ankaitis
Project Manager

L. ANKAITIS ASSOC.

Page: 2 11
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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Todd McNair

Client Proj. ID: 864-17B
Sample Descript: MW-3
Matrix: LIQUID
Analysis Method: EPA 8080
Lab Number: 9507876-04

Sampled: 07/13/95
Received: 07/14/95
Extracted: 07/19/95
Analyzed: 07/26/95
Reported: 07/28/95

QC Batch Number: GC0719950PCBEXZ
Instrument ID: GCHP12

Polychlorinated Biphenyls (EPA 8080)

Analyte	Detection Limit ug/L	Sample Results ug/L
PCB-1016	0.50	N.D.
PCB-1221	2.0	N.D.
PCB-1232	0.50	N.D.
PCB-1242	0.50	N.D.
PCB-1248	0.50	N.D.
PCB-1254	0.50	N.D.
PCB-1260	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Dibutylchloroendate	50 150	58

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Vytas Ankaitis
Vytas Ankaitis
Project Manager





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Mountain View, CA 94043

Client Proj. ID: 864-17B
Sample Descript: MW-3
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9507876-04

Sampled: 07/13/95
Received: 07/14/95
Extracted: 07/21/95
Analyzed: 07/25/95
Reported: 07/28/95

QC Batch Number: GC0721950HBPEXZ
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	1100
Chromatogram Pattern: Unidentified HC		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	123

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

William Anthony Per

ytas Ankaitis
Project Manager

LOWNEY ASSOC.

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Client Proj. ID: 864-17B
Sample Descript: MW-3
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9507876-04

Sampled: 07/13/95
Received: 07/14/95
Analyzed: 07/19/95
Reported: 07/28/95

Attention: Todd McNair

QC Batch Number: GC071995BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	210
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		Gas

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	101

Analyses reported as N.D. were not present above the stated limit of detection.

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Vytas Ankaitis
Project Manager

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Lowney Associates 405 Clyde Avenue Mountain View, CA 94043 Attention: Todd McNair	Client Proj. ID: 864-17B Sample Descript: MW-4 Matrix: LIQUID Analysis Method: EPA 8080 Lab Number: 9507876-05	Sampled: 07/13/95 Received: 07/14/95 Extracted: 07/19/95 Analyzed: 07/26/95 Reported: 07/28/95
--	--	--

GC Batch Number: GC0719950PCBEXZ
Instrument ID: GCHP12

Polychlorinated Biphenyls (EPA 8080)

Analyte	Detection Limit ug/L	Sample Results ug/L
PCB-1016	0.50	N.D.
PCB-1221	2.0	N.D.
PCB-1232	0.50	N.D.
PCB-1242	0.50	N.D.
PCB-1248	0.50	N.D.
PCB-1254	0.50	N.D.
PCB-1260	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Dibutylchlorendate	50 150	43 Q

analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

[Handwritten Signature]
Project Manager

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Client Proj. ID: 864-17B
 Sample Descript: MW-4
 Matrix: LIQUID
 Analysis Method: EPA 8015 Mod
 Lab Number: 9507876-05

Sampled: 07/13/95
 Received: 07/14/95
 Extracted: 07/21/95
 Analyzed: 07/25/95
 Reported: 07/28/95

GC Batch Number: GC0721950HBPEXZ
 Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	1600
Chromatogram Pattern: Unidentified HC		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	119

Analytes reported as N.D. were not present above the stated limit of detection.

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Will Anshup FCR

Mytas Ankaitis
 Project Manager

LOWNEY ASSOC.

Page: 2 16

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Client Proj. ID: 864-17B
Sample Descript: MW-4
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9507876-05

Sampled: 07/13/95
Received: 07/14/95
Analyzed: 07/19/95
Reported: 07/28/95

QC Batch Number: GC071995BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	200	1300
Benzene	2.0	N.D.
Toluene	2.0	N.D.
Ethyl Benzene	2.0	N.D.
Xylenes (Total)	2.0	N.D.
Chromatogram Pattern:		Gas

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	84

Analyses reported as N.D. were not present above the stated limit of detection.

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Willie Annshup for

ytas Ankaitis
Project Manager

LOWNEY ASSOC.
Page: 17





Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Todd McNair

Client Proj. ID: 864-17B
Sample Descript: W-8
Matrix: LIQUID
Analysis Method: EPA 8080
Lab Number: 9507876-06

Sampled: 07/13/95
Received: 07/14/95
Extracted: 07/19/95
Analyzed: 07/26/95
Reported: 07/28/95

QC Batch Number: GC0719950PCBEXZ
Instrument ID: GCHP12

Polychlorinated Biphenyls (EPA 8080)

Analyte	Detection Limit ug/L	Sample Results ug/L
PCB-1016	5.0	N.D.
PCB-1221	20	N.D.
PCB-1232	5.0	N.D.
PCB-1242	5.0	N.D.
PCB-1248	5.0	N.D.
PCB-1254	5.0	N.D.
PCB-1260	5.0	N.D.
Surrogates	Control Limits %	% Recovery
Dibutylchloroendate	50 150	69

analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

M. U. Ankaitep FOR

Mytas Ankaitep
Project Manager

Page: 18
AUG 1 2005





Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043
Attention: Todd McNair

Client Proj. ID: 864-17B
Sample Descript: W-8
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9507876-06

Sampled: 07/13/95
Received: 07/14/95
Extracted: 07/21/95
Analyzed: 07/26/95
Reported: 07/28/95

QC Batch Number: GC0721950HBPEXZ
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	2000	51000 C9-C24
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery Q

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

M. Anthony Fox

Vytas Ankaitis
Project Manager

AUG 1995
Page: 19





Lowney Associates
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Client Proj. ID: 864-17B
 Sample Descript: W-8
 Matrix: LIQUID
 Analysis Method: 8015Mod/8020
 Lab Number: 9507876-06

Sampled: 07/13/95
 Received: 07/14/95
 Analyzed: 07/19/95
 Reported: 07/28/95

QC Batch Number: GC071995BTEX17A
 Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	250	940
Benzene	2.5	N.D.
Toluene	2.5	N.D.
Ethyl Benzene	2.5	N.D.
Xylenes (Total)	2.5	N.D.
Chromatogram Pattern: Unidentified HC		>C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	80

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Vytas Ankaitis

Vytas Ankaitis
 Project Manager

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Client Proj. ID: 864-17B
Sample Descript: W-13
Matrix: LIQUID
Analysis Method: EPA 8080
Lab Number: 9507876-07

Sampled: 07/13/95
Received: 07/14/95
Extracted: 07/19/95
Analyzed: 07/26/95
Reported: 07/28/95

QC Batch Number: GC0719950PCBEXZ
Instrument ID: GCHP12

Polychlorinated Biphenyls (EPA 8080)

Analyte

Detection Limit
ug/L

Sample Results
ug/L

PCB-1016
PCB-1221
PCB-1232
PCB-1242
PCB-1248
PCB-1254
PCB-1260

0.50
2.0
0.50
0.50
0.50
0.50
0.50

N.D.
N.D.
N.D.
N.D.
N.D.
N.D.
N.D.

Surrogates
Dibutylchloroendate

Control Limits %
50 150

% Recovery
37 Q

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Vytas Ankaitis

Vytas Ankaitis
Project Manager

LOWNEY ASSOC.
AUG Page 21
2000





Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Client Proj. ID: 864-17B
Sample Descript: W-13
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9507876-07

Sampled: 07/13/95
Received: 07/14/95
Extracted: 07/21/95
Analyzed: 07/25/95
Reported: 07/28/95

Attention: Todd McNair

QC Batch Number: GC0721950HBPEXZ
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	160
Chromatogram Pattern: Unidentified HC		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	109

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Todd McNair

Vytas Ankaitis
Project Manager

07/28/95 15:00





Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Client Proj. ID: 864-17B
Sample Descript: W-13
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9507876-07

Sampled: 07/13/95
Received: 07/14/95
Analyzed: 07/18/95
Reported: 07/28/95

QC Batch Number: GC071895BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	92

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Melanie Ann Kelly for
Vytautas Ankaitis
Project Manager

LOWNEY ASSOC
AUG Page: 2 23





Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Client Proj. ID: 864-17B
Sample Descript: W-14
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9507876-08

Sampled: 07/13/95
Received: 07/14/95
Analyzed: 07/18/95
Reported: 07/28/95

QC Batch Number: GC071895BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	91

analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

[Handwritten signature]

ytas Ankaitis
Project Manager

LONEY ASSOC.
Page: 24





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Client Proj. ID: 864-17B
Sample Descript: W-14
Matrix: LIQUID
Analysis Method: EPA 8080
Lab Number: 9507876-08

Sampled: 07/13/95
Received: 07/14/95
Extracted: 07/19/95
Analyzed: 07/26/95
Reported: 07/28/95

Attention: Todd McNair

QC Batch Number: GC0719950PCBEXZ
Instrument ID: GCHP12

Polychlorinated Biphenyls (EPA 8080)

Analyte	Detection Limit ug/L	Sample Results ug/L
PCB-1016	0.50	N.D.
PCB-1221	2.0	N.D.
PCB-1232	0.50	N.D.
PCB-1242	0.50	N.D.
PCB-1248	0.50	N.D.
PCB-1254	0.50	N.D.
PCB-1260	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Dibutylchlorendate	50 150	59

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Milly Ann... For

Vytas Ankaitis
Project Manager

LOWNEY ASSOC.

Page: 25
AUG 2 1995





Lowney Associates
 405 Clyde Avenue
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Client Proj. ID: 864-17B
 Sample Descript: W-14
 Matrix: LIQUID
 Analysis Method: EPA 8015 Mod
 Lab Number: 9507876-08

Sampled: 07/13/95
 Received: 07/14/95
 Extracted: 07/21/95
 Analyzed: 07/25/95
 Reported: 07/28/95

QC Batch Number: GC0721950HBPEXZ
 Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	50	160 C9-C24
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 95

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Maria A. Northrup for

Vytas Ankaitis
 Project Manager

10/28/95 10:00





Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Client Proj. ID: 864-17B
Sample Descript: W-23
Matrix: LIQUID
Analysis Method: EPA 8080
Lab Number: 9507876-09

Sampled: 07/13/95
Received: 07/14/95
Extracted: 07/19/95
Analyzed: 07/26/95
Reported: 07/28/95

QC Batch Number: GC0719950PCBEXZ
Instrument ID: GCHP12

Polychlorinated Biphenyls (EPA 8080)

Analyte	Detection Limit ug/L	Sample Results ug/L
PCB-1016	0.50	N.D.
PCB-1221	2.0	N.D.
PCB-1232	0.50	N.D.
PCB-1242	0.50	N.D.
PCB-1248	0.50	N.D.
PCB-1254	0.50	N.D.
PCB-1260	0.50	N.D.
Surrogates	Control Limits %	% Recovery
Dibutylchlorendate	50 150	62

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

M. Ankaitis

Vytas Ankaitis
Project Manager

LOWNEY ASSOC.
Page: 27





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Client Proj. ID: 864-17B
Sample Descript: W-23
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9507876-09

Sampled: 07/13/95
Received: 07/14/95
Extracted: 07/21/95
Analyzed: 07/25/95
Reported: 07/28/95

Attention: Todd McNair

GC Batch Number: GC0721950HBPEXZ
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	250	5000
Chromatogram Pattern: Unidentified HC		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	Q

Analyses reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Todd McNair

Vytas Ankaitis
Project Manager

LOWNEY ASSOCIATES

Page 2 of 2

RESIST





Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Client Proj. ID: 864-17B
Sample Descript: W-23
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9507876-09

Sampled: 07/13/95
Received: 07/14/95
Analyzed: 07/18/95
Reported: 07/28/95

QC Batch Number: GC071895BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	760
Benzene	0.50	0.91
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	0.79
Chromatogram Pattern: Unidentified HC		>C7
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	105

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

M. L. Anthony FOR

Vytas Ankaitis
Project Manager



Sequoia Analytical

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043
Attention: Todd McNair

Client Project ID: 864-17B
Matrix: Liquid

Work Order #: 9507876 -01-09

Reported: Aug 1, 1995

QUALITY CONTROL DATA REPORT

Analyte:	PCB 1260	Total Recoverable Petroleum Hydrocarbons	Diesel
QC Batch#:	GC0719950PCBEXZ	OP0725955520EXC	GC0721950HBPEXZ
Analy. Method:	EPA 8080	SM 5520BF MOD	EPA 8015M
Prep. Method:	EPA 3520	SPE	EPA 3520

Analyst:	A. Savva	C. Garde	T. Olive
MS/MSD #:	950781705	BLK072595	950798501
Sample Conc.:	0.094	N.D.	330000
Prepared Date:	7/19/95	7/25/95	7/21/95
Analyzed Date:	7/21/95	7/26/95	7/25/95
Instrument I.D.#:	GCHP23	MANUAL	GCHP5B
Conc. Spiked:	0.10 µg/L	10 mg/L	1000 µg/L
Result:	0.0	8.3	200000 *
MS % Recovery:	0.0	83	0.0
Dup. Result:	0.17	7.6	140000 *
MSD % Recov.:	76	76	0.0
RPD:	200	8.8	0.0
RPD Limit:	0-50	0-50	0-50

LCS #:	BLK071995	BLK072195
Prepared Date:	7/19/95	7/21/95
Analyzed Date:	7/20/95	7/24/95
Instrument I.D.#:	GCHP23	GCHP5B
Conc. Spiked:	0.10 µg/L	1000 µg/L
LCS Result:	0.087	1200
LCS % Recov.:	87	120

MS/MSD LCS Control Limits	50-150	70-110	38-122
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* MS/MSD was diluted out

SEQUOIA ANALYTICAL

Vytas Ankaitis
Project Manager

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** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9507876.JVL <1>





**Sequoia
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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043
Attention: Todd McNair

Client Project ID: 864-17B
Matrix: Liquid

Work Order #: 9507876-01, 02, 07- 09

Reported: Aug 1, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC071895BTEX02A	GC071895BTEX02A	GC071895BTEX02A	GC071895BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950714003	950714003	950714003	950714003
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/18/95	7/18/95	7/18/95	7/18/95
Analyzed Date:	7/18/95	7/18/95	7/18/95	7/18/95
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	10	10	30
MS % Recovery:	100	100	100	100
Dup. Result:	11	11	12	35
MSD % Recov.:	110	110	120	117
RPD:	9.5	9.5	18	15
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

Prepared Date:
Analyzed Date:
Instrument I.D.#:
Conc. Spiked:

LCS Result:
LCS % Recov.:

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120
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SEQUOIA ANALYTICAL

[Signature]
Vytautas Ankaitis
Project Manager

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9507876.JVL <2>





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Lowney Associates Client Project ID: 864-17B
 405 Clyde Avenue Matrix: Liquid
 Mountain View, CA 94043
 Attention: Todd McNair Work Order #: 9507876-03 Reported: Aug 1, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC071895BTEX20A	GC071895BTEX20A	GC071895BTEX20A	GC071895BTEX20A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950714002	950714002	950714002	950714002
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/18/95	7/18/95	7/18/95	7/18/95
Analyzed Date:	7/18/95	7/18/95	7/18/95	7/18/95
Instrument I.D.#:	GCHP20	GCHP20	GCHP20	GCHP20
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.9	11	12	33
MS % Recovery:	99	110	120	110
Dup. Result:	7.4	8.5	8.5	25
MSD % Recov.:	74	85	85	83
RPD:	29	26	34	28
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:
 Prepared Date:
 Analyzed Date:
 Instrument I.D.#:
 Conc. Spiked:
 LCS Result:
 LCS % Recov.:

MS/MSD				
LCS	71-133	72-128	72-130	71-120
Control Limits				

SEQUOIA ANALYTICAL

 Vytautas Ankaitis
 Project Manager

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043
Attention: Todd McNair

Client Project ID: 864-17B
Matrix: Liquid
Work Order #: 9507876-04, 05

Reported: Aug 1, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC071995BTEX21A	GC071995BTEX21A	GC071995BTEX21A	GC071995BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950724301	950724301	950724301	950724301
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/19/95	7/19/95	7/19/95	7/19/95
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	5.6	5.6	5.0	15
MS % Recovery:	56	56	50	50
Dup. Result:	6.6	7.0	6.9	21
MSD % Recov.:	66	70	69	70
RPD:	16	22	32	33
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	BLK071995	BLK071995	BLK071995	BLK071995
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/19/95	7/19/95	7/19/95	7/19/95
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	8.9	9.0	8.9	27
LCS % Recov.:	89	90	89	90

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120
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SEQUOIA ANALYTICAL

Vytas Ankaitis
Vytas Ankaitis
Project Manager

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9507876.JVL-45 **RECEIVED**





Sequoia Analytical

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Lowney Associates 405 Clyde Avenue Mountain View, CA 94043 Attention: Todd McNair	Client Project ID: 864-17B Matrix: Liquid Work Order #: 9507876-06	Reported: Aug 1, 1995
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QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC071995BTEX17A	GC071995BTEX17A	GC071995BTEX17A	GC071995BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950781801	950781801	950781801	950781801
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/19/95	7/19/95	7/19/95	7/19/95
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.0	9.3	9.3	28
MS % Recovery:	90	93	93	93
Dup. Result:	10	11	11	31
MSD % Recov.:	100	110	110	103
RPD:	11	17	17	10
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

Prepared Date:
Analyzed Date:
Instrument I.D.#:
Conc. Spiked:

LCS Result:
LCS % Recov.:

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL

Vytas Ankaitis
Project Manager

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9507876.JVL <5>



LOVNEY ASSOCIATES

CHAIN OF CUSTODY RECORD

SEND RESULTS TO:

Mountain View Office
405 Clyde Ave
Mountain View, Ca 94043
415-967-2365

Walnut Creek Office
1600 S. Main St, Suite 125
Walnut Creek, Ca 94596
510-938-9356

FAX COPY: 415-967-2785 (FAX)

FAX COPY: 510-938-9359 (FAX)

Project Name: <i>Emeryville Post Office</i>				Turnaround Requirements: <input checked="" type="checkbox"/> 10 Working days <input type="checkbox"/> 5 Working days <input type="checkbox"/> 3 Working days <input type="checkbox"/> 48 Hours <input type="checkbox"/> 24 Hours <input type="checkbox"/> 2-3 Hours (RUSH)		ANALYSIS REQUESTED 9507876									
Job No.: <i>864-17B</i>						<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHgas/BTEX (8015/8020)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPH as diesel (8015M)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TRPH (5520) ER/BP</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Halogenated VOCs (8010)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Purgeable Organics (8240)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Extractable Organics (8270)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">PCBS (8080)</div> </div>									
Report To: <i>Todd McNair</i>															
Sampler (print): <i>Todd McNair</i>															
Sampler (signature): <i>Todd McNair</i>															
QC Requirements: <input checked="" type="checkbox"/> Level A (standard) <input type="checkbox"/> Level B <input type="checkbox"/> Level C <input type="checkbox"/> Level D															
Sample I.D.	Date	Time	Lab I.D.	Sample Matrix	No. of Cont.	TPHgas/BTEX (8015/8020)	TPH as diesel (8015M)	TRPH (5520) ER/BP	Halogenated VOCs (8010)	Purgeable Organics (8240)	Extractable Organics (8270)	PCBS (8080)	Remarks		
<i>MW-1</i>	<i>7/13</i>	<i>12:45</i>	<i>01 A-F</i>	<i>water</i>	<i>6</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>			
<i>MW-1A</i>		<i>16:48</i>	<i>02</i>		<i>6</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>			
<i>MW-2</i>		<i>16:25</i>	<i>03</i>		<i>6</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>			
<i>MW-3</i>		<i>14:00</i>	<i>04</i>		<i>6</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>			
<i>MW-4</i>		<i>15:15</i>	<i>05</i>		<i>6</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>			
<i>W-8</i>		<i>12:20</i>	<i>06</i>		<i>6</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>			
<i>W-13</i>		<i>10:45</i>	<i>07</i>		<i>6</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>			
<i>W-14</i>		<i>9:31</i>	<i>08 A-E</i>		<i>6</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>			
<i>W-23</i>	<i>↓</i>	<i>11:30</i>	<i>09 A-F</i>	<i>↓</i>	<i>6</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>			
Relinquished By: <i>Todd McNair</i>				Date: <i>7/14/95</i> Time:		Received By: <i>[Signature]</i>				Date: <i>7/14/95</i> Time: <i>2:30</i>		PM Initial:			
Relinquished By: <i>[Signature]</i>				Date: <i>7/14/95</i> Time:		Received By: _____				Date: _____ Time: _____		Temperature:			
Relinquished By: _____				Date: _____ Time:		Lab Of Record: <i>SEDURG ANALYTICAL</i>				Received By Lab: <i>[Signature]</i>		Date: <i>7-14-95</i> Time: <i>1521</i>			