FOURTH QUARTER 1994
GROUND WATER MONITORING REPORT
EMERYVILLE POST OFFICE
EMERYVILLE, CALIFORNIA

LOWNEY ASSOCIATES
Environmental / Geotechnical / Engineering Services

LOWNEY ASSOCIATES
Environmental / Geotechnical / Engineering Services

January 19, 1995
864-17B, MV011801

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

RE: FOURTH QUARTER 1994
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

Todd H. McNair
Environmental Scientist

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

REGISTERED PROFESSIONAL ENGINEER
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FOURTH QUARTER 1994 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

January 1995

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FOURTH QUARTER 1994 GROUND WATER MONITORING REPORT

EMERYVILLE POST OFFICE

EMERYVILLE, CALIFORNIA

1.0 INTRODUCTION

1.1 Purpose

In this report, we present the results of the fourth quarter 1994 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.

1.2 Scope of Work

The scope of work included the following:

- Measurement of ground water elevation 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 (TPH) as gasoline with a scan to distinguish benzene, toluene, ethylbenzene, and xylenes (BTEX) (EPA Test Method 8015/8020), TPH as diesel (EPA Test Method 8015M), total oil and grease (TOG) (Standard Method 5520EF), and polychlorinated biphenyls (PCBs) (EPA Test Method 8080).

2.0 GROUND WATER MONITORING

2.1 Ground Water Flow Direction

To evaluate ground water flow direction at the site, the top of casing elevations of the on-site monitoring wells were surveyed using a Leitz level and an engineer's graduated rod. The top of casing elevations of the on-site monitoring wells were surveyed relative to an existing Emery Bay Market Place monitoring well (W-22), located on Overland Avenue. The surveyed 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 the very 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 southerly adjacent Westinghouse property.

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	10/4/94	12.47	6.15	6.32
MW-1A	10/4/94	12.77	6.49	6.28
MW-2	10/4/94	11.85	4.37	7.48
MW-3	10/4/94	9.98	3.58	6.40
MW-4	10/4/94	12.76	6.37	6.39
W-1	10/4/94	11.47	5.94	5.53
W-4	10/4/94	9.96	NA	NA
W-5	10/4/94	11.41	5.20	7.35†
W-7	10/4/94	9.05	5.83	3.22

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-8	10/4/94	10.43	3.62	6.81
W-13	10/4/94	8.15	4.37	3.78
W-14	10/4/94	7.97	4.97	3.00
W-15	10/4/94	11.53	2.90	8.63
W-16	10/4/94	10.94	NA	NA
W-17	10/4/94	12.14	6.77	5.37
W-18	10/4/94	11.34	5.28	6.06
W-19	10/4/94	10.27	5.03	5.27†
W-20	10/4/94	6.82	3.76	3.06
W-21	10/4/94	9.48	5.08	4.40
W-22	10/4/94	11.67	6.66	5.01
W-23	10/4/94	9.16	2.39	6.77
W-24	10/4/94	8.72	4.69	4.03

* Top of casing elevations of on-site wells surveyed relative to Emery Bay Market Place monitoring well W-22.
† Free product measured in wells W-5 and W-19.

2.2 Ground Water Quality

Ground water samples were collected on October 4 and 10, 1994. The analytical results are presented in Table 2. Emery Bay Market Place monitoring well W-4 was not sampled because it had been covered by construction activities in the Southern Pacific right of way. 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.

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

Well Number	Date	TOG†	TPH as diesel	TPH as gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	PCBs
MW-1	6/11/93	<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
MW-1A	6/11/93	8.0	4,900	<50	<0.50	<0.50	7.7	<0.50	NA
	10/4/94	17	10,000	6,500	<1.0	<1.0	<1.0	<1.0	ND

continued

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

Well Number	Date	TOG†	TPH as diesel	TPH as gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	PCBs
MW-2	6/11/93	<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*
MW-3	6/11/93	<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
MW-4	6/11/93	<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
W-8	10/4/94	5.1	17,000	780	<2.5	<2.5	<2.5	<2.5	ND
W-13	10/4/94	<5.0	<50	<50	<0.50	<0.50	<0.50	<0.50	ND
W-14	10/4/94	<5.0	66	<50	<0.50	<0.50	<0.50	<0.50	ND
W-23	10/4/94	<5.0	4,200	650	<2.5	<2.5	<2.5	<2.5	ND
Primary Drinking Water Standards[1]		NE	NE	NE	1.0	1,000	680	1,750	0.5

† TOG concentrations in ppm
NA Not Analyzed
ND Not Detected above laboratory detection limits
NE Not Established
[1] Taken from Environmental Protection Agency Drinking Water Standards and Health Advisory Table, August 1991.
* 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 slightly higher than the previous sampling event; however, no BTEX compounds were detected, representing a decrease compared to the previous results. Since the source has been removed, a decrease in concentrations is expected due to natural degradation and attenuation processes. Continued monitoring, as planned, will be

useful in evaluating changes over time in petroleum hydrocarbon concentrations.

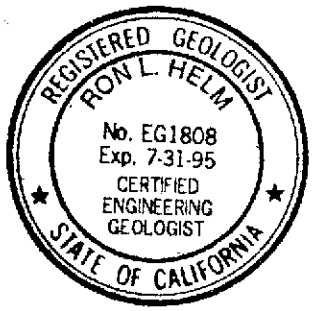
In addition to continued quarterly sampling, we understand that the Postal Service is currently negotiating for access to Southern Pacific Railroad property to enable the collection of a ground water grab sample between the Postal Service and Emery Bay Market Place Properties.

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.

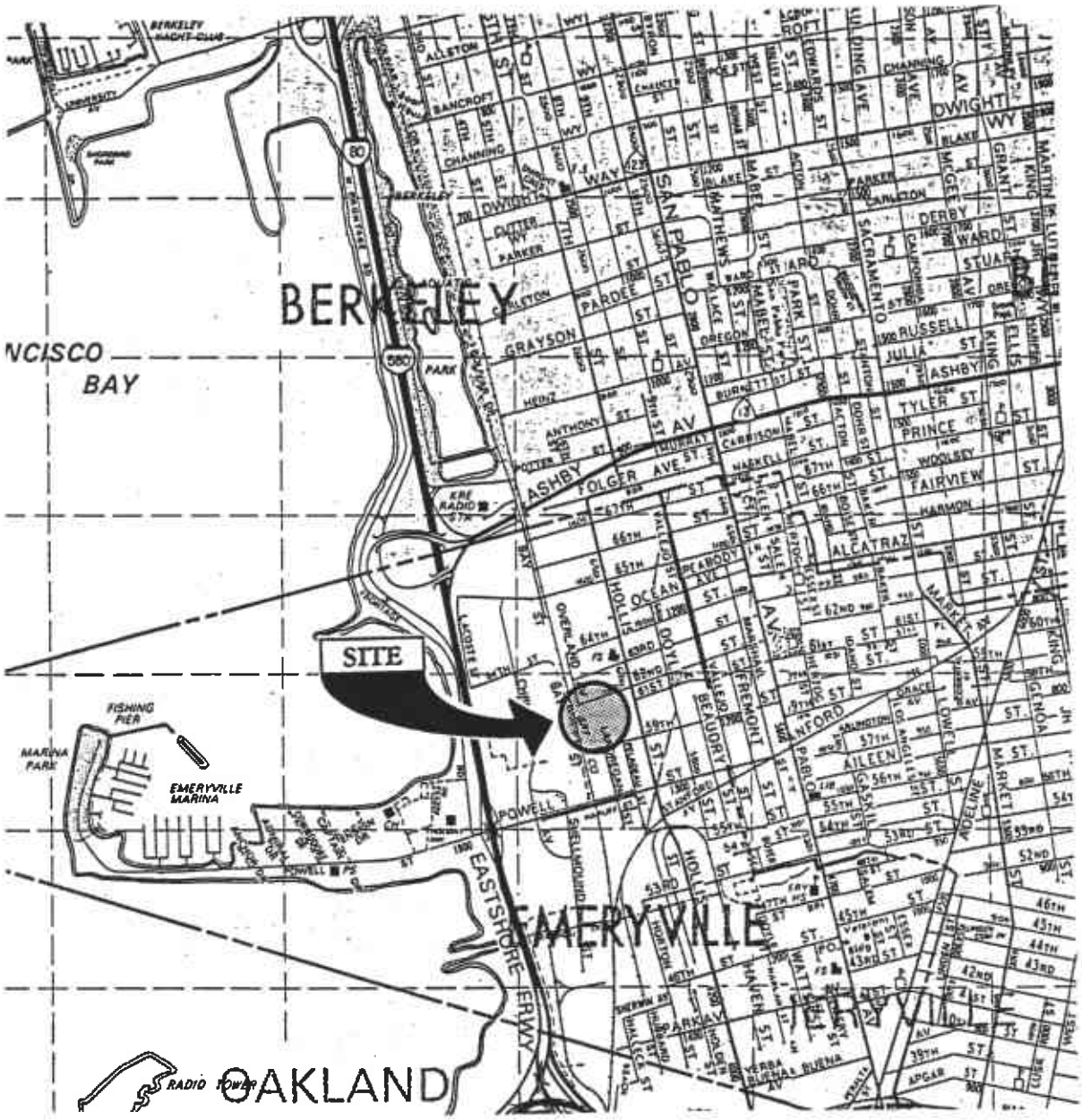
4.0 LIMITATIONS

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.

* * * * * * * * *



Ron L. Helm
Principal, Environmental Geologist
Quality Assurance Reviewer



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864-17B, 1/16 JRD*EB

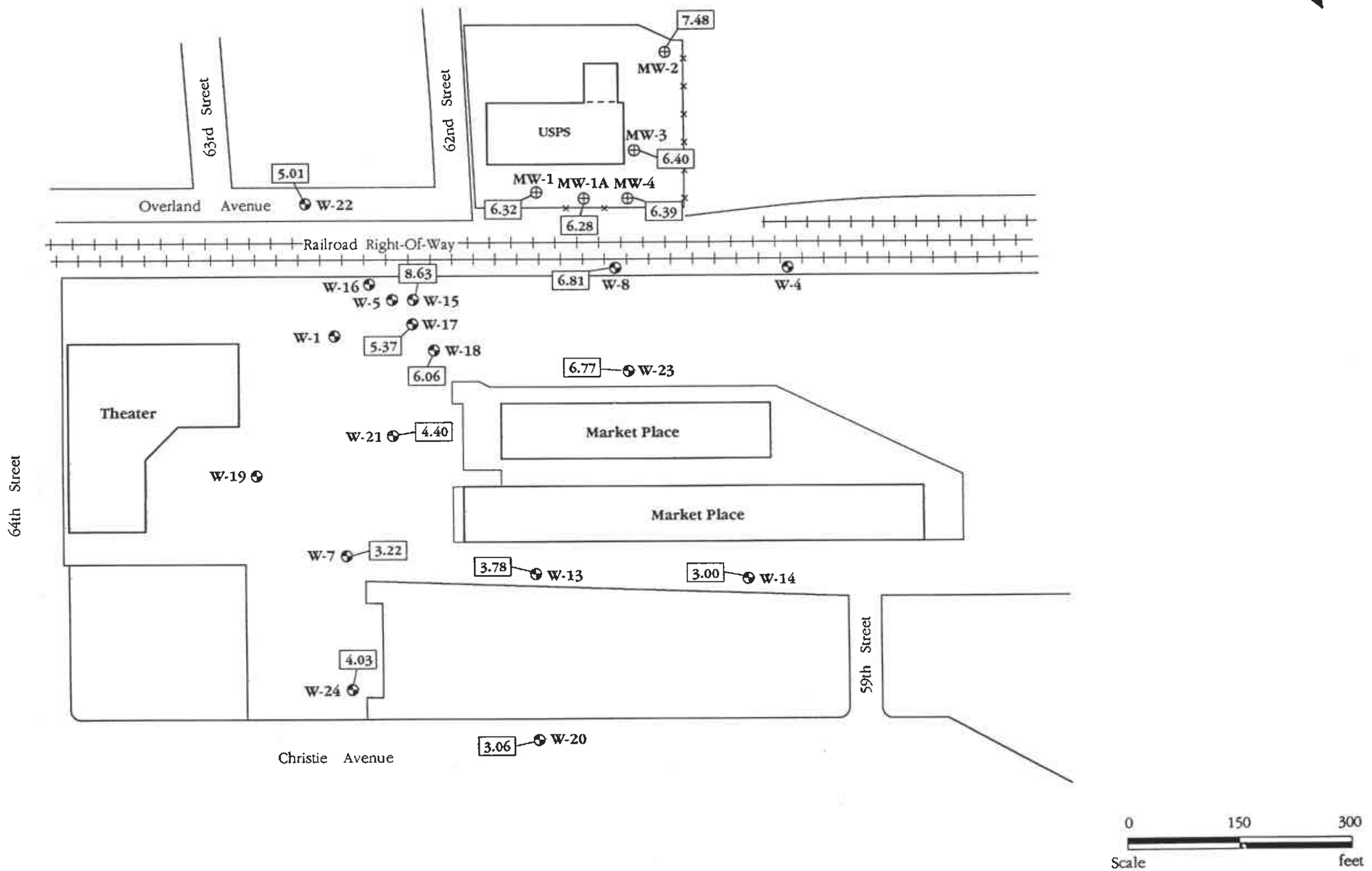
VICINITY MAP

EMERYVILLE POST OFFICE
Emeryville, California

LOWNEY ASSOCIATES
Environmental/Geotechnical/Engineering Services

FIGURE 1
864-17B, January 1995

Approximate Direction of Ground Water Flow



LEGEND

⊕ - Approximate location of USPS monitoring well

⊕ - Approximate location of Market Place monitoring well

3.06 - Ground water elevation

SITE PLAN/GROUND WATER ELEVATION MAP

EMERYVILLE POST OFFICE
Emeryville, California

LOWNEY ASSOCIATES
Environmental / Geotechnical / Engineering Services

FIGURE 2

864-17B, January 1995

Approximate Direction of Ground Water Flow

N

63rd Street

64th Street

59th Street

Overland Avenue

Railroad Right-Of-Way

Theater

Market Place

Market Place

Christie Avenue

	MW-1	MW-2	MW-3	MW-4	MW-1A
TPHd	120	10,000	1,100	1,100	1,800
TPHg	< 50	6,500	2,900	260	970
BTEX	ND	ND	ND	ND	ND
TOG	< 5.0	17	< 5.0	< 5.0	< 5.0
PCBs	ND	ND	140	ND	ND

	W-1	W-4	W-5	W-7	W-8	W-13	W-14	W-15	W-16	W-17	W-18	W-19	W-20	W-21	W-22	W-23	W-24
TPHd	17,000					< 50	66									4,200	
TPHg	780					< 50	< 50									650	
BTEX	ND					ND	ND									ND	
TOG	5.1					< 5.0	< 5.0									< 5.0	
PCBs	ND					ND	ND									ND	

0 150 300

Scale feet

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)

PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER

EMERYVILLE POST OFFICE
Emeryville, California

LOWNEY ASSOCIATES
Environmental / Geotechnical / Engineering Services

FIGURE 3
864-17B, January 1995

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.

LOVNEY ASSOCIATES — RECORD OF WELL DEVELOPMENT/SAMPLING

Project Number 864-178

Project Name Emeryville Post Office

Field Geologist/Engineer TMM/BAP

Well Number MW-1 Boring Diameter _____ (inches)

Well Total Depth (completed) 13.95 (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

7.84
.66
5.1744

4-INCH CASING DIAMETER

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

Sampling Date 10/10/94 Time 3:00 Method Teflon Bailer

Static Water Level Prior to Purging (Measured from top of casing) 6.11 (ft)
$H_T - H_2O = 7.84$

Water Level After Recovery _____ (ft)

80 Percent Recharged Yes ☐ No ☐

Well Volume 5.2 (liter/gal)

Three Well Volumes 15.6 (liter/gal)

Total Produced 13 (liter/gal)

Number of Well Volumes _____

Production Time _____ (min)

Production Rate _____ (_ /min)

Well Volumes	pH	Conductivity µS x 10	Temp °F
1	7.6	96	75
2	7.6	103	72
3	7.7	99	72
4			
5			
6			
7			
8			
9			
10			

Sample Description _____

Laboratory _____

Deliver ☐ Pick-Up ☐ Date _____

Comments

LOWNEY ASSOCIATES RECORD OF WELL DEVELOPMENT/SAMPLING

Project Number: 94-178

Project Name: Emeryville Post Office

Field Geologist/Engineer: TM

Well Number: MW-1A

Boring Diameter: ______ (inches)

Well Total Depth (completed): 18.0 (feet)

Casing Diameter: 2 (inches)

Development Date: — Method: — Volume Produced: — (liter/gal)

WELL VOLUME CONVERSION FACTORS

h = 11.51 (.8) = 9.21

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: 10/4/94 Time: 1500 Method: bailer

Static Water Level Prior to Purging (Measured from top of casing): 6.49 (ft)

Water Level After Recovery: 6.78 (ft)

80 Percent Recharged: Yes ☑ No ☐

8.79

Well Volume: 7.14 (liter/gal)

Three Well Volumes: 21.4 (liter/gal)

Total Produced: ______ (liter/gal)

Number of Well Volumes: ______

Production Time: ______ (min)

Production Rate: ______ (_ /min)

Well Volumes	pH	Conductivity µSx10	Temp °F
1	7.3	78	73
2	7.2	74	73
3	7.2	76	72
4			
5			
6			
7			
8			
9			
10			

Sample Description: MW-1A

Laboratory: Sequoia

Deliver ☐ Pick-Up ☐ Date ______

Comments: Sheen noted on water

LOVNEY ASSOCIATES — RECORD OF WELL DEVELOPMENT/SAMPLING

Project Number 814-173

Project Name Emeryville Post Office

Field Geologist/Engineer TM/BAF

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

7.65
.66

4-INCH CASING DIAMETER

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

Sampling Date 10/10/94 Time 5:30 Method Teflon Bailer

Static Water Level Prior to Purging (Measured from top of casing) 4.00 (ft)
$H_T - H_2O = 7.65$

Water Level After Recovery _____ (ft)

80 Percent Recharged Yes ☐ No ☐
(5.53)

Well Volume 5.0 (liter/gal)

Three Well Volumes 15 (liter/gal)

Total Produced _____ (liter/gal)

Number of Well Volumes _____

Production Time _____ (min)

Production Rate _____ (_ /min)

Well Volumes	pH	Conductivity µSx10	Temp °F
1	7.9	85	72
2	7.7	88	72
3	7.6	95	70
4			
5			
6			
7			
8			
9			
10			

Sample Description _____

Laboratory _____

Deliver ☐ Pick-Up ☐ Date _____

Comments Oil from paving leaked into the well, Oil line going down the inside of the well.

LOVNEY ASSOCIATES — RECORD OF WELL DEVELOPMENT/SAMPLING

Project Number: 864-17B

Project Name: Emeryville Post Office

Field Geologist/Engineer: TM/BAF

Well Number: MW-3

Well Total Depth (completed): 8.9 (feet)

Boring Diameter: _____ (inches)

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

5.38
.606

4-INCH CASING DIAMETER

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

Sampling Date: 10/10/94 Time: 4:30 Method: Teflon Bailer

Static Water Level Prior to Purging (Measured from top of casing): 3.52 (ft)
$H_T - H_{20} = 5.38$

Water Level After Recovery: _____ (ft)

80 Percent Recharged: Yes ☐ No ☐

Well Volume: 3.6 (liter/gal) (4.6)

Three Well Volumes: 10.8 (liter/gal)

Total Produced: 11 (liter/gal)

Number of Well Volumes: 3

Production Time: _____ (min)

Production Rate: _____ (_ /min)

Well Volumes	pH	Conductivity µS x10	Temp °F
1	7.3	104	73
2	7.2	105	72
3	7.2	109	72
4			
5			
6			
7			
8			
9			
10			

Sample Description: _____

Laboratory: _____

Deliver ☐ Pick-Up ☐ Date: _____

Comments: _____

LOVNEY ASSOCIATES — RECORD OF WELL DEVELOPMENT/SAMPLING

Project Number: 864-17B

Project Name: Emeryville Post Office

Field Geologist/Engineer: THM / BAF

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

6.09
.66

4-INCH CASING DIAMETER

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

Sampling Date: 10/10/94 Time: 3:30 Method: Teflon Bailer

Static Water Level Prior to Purging (Measured from top of casing): 6.31 (ft)
$H_1 - H_2O = 6.09$

Water Level After Recovery: _____ (ft)

80 Percent Recharged: Yes ☐ No ☐

Well Volume: 4.0 (liter/gal)

Three Well Volumes: 12 (liter/gal)

Total Produced: 12 (liter/gal)

Number of Well Volumes: 3

Production Time: _____ (min)

Production Rate: _____ (_ /min)

Well Volumes	pH	Conductivity µSx10	Temp °F
1	7.4	77	74
2	7.3	75	71
3	7.4	83	73
4			
5			
6			
7			
8			
9			
10			

Sample Description: MW-4

Laboratory: Sequoia

Deliver ☑ Pick-Up ☐ Date: _____

Comments

LOVNEY ASSOCIATES — RECORD OF WELL DEVELOPMENT/SAMPLING

Project Number: 864-178

Project Name: Emeryville Post Office

Field Geologist/Engineer: TM

Well Number: W-8

Boring Diameter: _____ (inches)

Well Total Depth (completed): 11.8 (feet)

Casing Diameter: 2 (inches)

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

WELL VOLUME CONVERSION FACTORS

2-INCH CASING DIAMETER h = 8.17 x .8 = 6.54

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: 10/4/94 Time: 13:15 Method: bailer

Static Water Level Prior to Purging (Measured from top of casing): 3.63 (ft)

Water Level After Recovery: 5.26 (ft)

80 Percent Recharged: Yes ☑ No ☐

5.26

Well Volume: 5.01 (liter/gal)

Three Well Volumes: 15.03 (liter/gal)

Total Produced: 16 (liter/gal)

Number of Well Volumes: 31

Production Time: _____ (min)

Production Rate: _____ (_ /min)

Well Volumes	pH	Conductivity µS x 10	Temp °F
1	6.8	140	73
2	6.8	152	74
3	6.86	159	73
4			
5			
6			
7			
8			
9			
10			

Sample Description: W-8

Laboratory: Sequoia

Deliver ☐ Pick-Up ☐ Date: _____

Comments: Sheen noted on purged water and samples, Petroleum odor noted.

LOVNEY ASSOCIATES — RECORD OF WELL DEVELOPMENT/SAMPLING

Project Number: 864-17B

Project Name: Emeryville Post Office

Field Geologist/Engineer: TM

Well Number: W-13

Boring Diameter: _____ (inches)

Well Total Depth (completed): 10.04 (feet)

Casing Diameter: 2 (inches)

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

WELL VOLUME CONVERSION FACTORS

h = 5.67

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: 10/4/94 Time: 10:30 Method: bailer

Static Water Level Prior to Purging (Measured from top of casing): 4.37 (ft)

Water Level After Recovery: 5.51 (ft)

80 Percent Recharged: Yes ☑ No ☐

5.51

Well Volume: 3.52 (liter/gal)

Three Well Volumes: 10.56 (liter/gal)

Total Produced: 8.0 (liter/gal)

Number of Well Volumes: _____

Production Time: _____ (min)

Production Rate: _____ (_ /min)

Well Volumes	pH	Conductivity µS x10	Temp °F
1	8.2	135	69
2	8.3	111	69
3			
4			
5			
6			
7			
8			
9			
10			

Sample Description: W-13

Laboratory: Sequoia

Deliver ☐ Pick-Up ☐ Date: _____

Comments: bailed dry @ 8.0 l. split w/ PES

LOVNEY ASSOCIATES — RECORD OF WELL DEVELOPMENT/SAMPLING

Project Number: 864-17B

Project Name: Emeryville Post Office

Field Geologist/Engineer: TM

Well Number: W-14

Boring Diameter: _____ (inches)

Well Total Depth (completed): 9.91 (feet)

Casing Diameter: 2 (inches)

Development Date: — Method: — Volume Produced: — (liter/gal)

WELL VOLUME CONVERSION FACTORS

h = 4.94

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: 10/4/94 Time: 9:25 Method: bailer

Static Water Level Prior to Purging (Measured from top of casing): 4.97 (ft)

Water Level After Recovery: 5.96 (ft)

80 Percent Recharged Yes ☒ No ☐

5.96

Well Volume: 3.06 (liter/gal)

Three Well Volumes: 9.18 (liter/gal)

Total Produced: 4.5 (liter/gal)

Number of Well Volumes: 1.5

Production Time: _____ (min)

Production Rate: _____ (_ /min)

Well Volumes	pH	Conductivity µS x10	Temp °F
1	8.1	>190	70
2			
3			
4			
5			
6			
7			
8			
9			
10			

Sample Description: W-14

Laboratory: Sequoia

Deliver ☐ Pick-Up ☐ Date: _____

Comments - Split samples w/ PES. Well bailed dry @ 1.5 volumes

LOVNEY ASSOCIATES — RECORD OF WELL DEVELOPMENT/SAMPLING

Project Number: 864-17B

Project Name: Emeryville Post Office

Field Geologist/Engineer: TM

Well Number: W-23

Boring Diameter: _____ (inches)

Well Total Depth (completed): 8.90 (feet)

Casing Diameter: 2 (inches)

Development Date: — Method: — Volume Produced: — (liter/gal)

WELL VOLUME CONVERSION FACTORS

h = 6.81 - 8.5.21

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: 10/4/94 Time: 11:30 Method: bailer

Static Water Level Prior to Purging (Measured from top of casing): 2.39 (ft)

Water Level After Recovery: 6.8 (ft)

80 Percent Recharged: Yes ☐ No ☑ (3.69)

Well Volume: 4.04 (liter/gal)

Three Well Volumes: 12.12 (liter/gal)

Total Produced: 12.5 (liter/gal)

Number of Well Volumes: 3+

Production Time: _____ (min)

Production Rate: _____ (_ /min)

Well Volumes	pH	Conductivity µS x10	Temp °F
1	7.8	>1	72
2	7.7	>1	72
3	7.7	>1	70
4			
5			
6			
7			
8			
9			
10			

Sample Description: W-23

Laboratory: Sequoia

Deliver ☐ Pick-Up ☐ Date: _____

Comments: sheen noted on purged water
was recharging @ approx 1 ft/hour

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

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B

Lab Proj. ID: 9410157

Sampled: 10/04/94
Received: 10/04/94
Analyzed: see below

Reported: 10/26/94

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9410157-01 Sample Desc : **LIQUID,W-14-Water**				
TRPH (SM 5520 B&F)	mg/L	10/13/94	5.0	N.D.
Lab No: 9410157-02 Sample Desc : **LIQUID,W-13-Water**				
TRPH (SM 5520 B&F)	mg/L	10/13/94	5.0	N.D.
Lab No: 9410157-03 Sample Desc : **LIQUID,W-23-Water**				
TRPH (SM 5520 B&F)	mg/L	10/13/94	5.0	N.D.
Lab No: 9410157-04 Sample Desc : **LIQUID,W-8-Water**				
TRPH (SM 5520 B&F)	**mg/L**	**10/13/94**	**5.0**	**5.1**
Lab No: 9410157-05 Sample Desc : **LIQUID,MW-1A-Water**				
TRPH (SM 5520 B&F)	**mg/L**	**10/13/94**	**5.0**	**17**

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

SEQUOIA ANALYTICAL - ELAP #1210

Andrea Fulcher
Project Manager

Sequoia Analytical

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: W-14-Water
Matrix: LIQUID
Analysis Method: EPA 8080
Lab Number: 9410157-01

Sampled: 10/04/94
Received: 10/04/94
Extracted: 10/11/94
Analyzed: 10/14/94
Reported: 10/26/94

QC Batch Number: GC1011940PCBEXZ
nstrument ID: GCHP10

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	26 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

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Project Manager

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: W-14-Water
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9410157-01

Sampled: 10/04/94
Received: 10/04/94
Extracted: 10/11/94
Analyzed: 10/13/94
Reported: 10/26/94

Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	66
Chromatogram Pattern:		C10-C22

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	94

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

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: W-14-Water
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9410157-01

Sampled: 10/04/94
Received: 10/04/94

Analyzed: 10/12/94
Reported: 10/26/94

Instrument ID: GCHP-17

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	82

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

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: W-13-Water
Matrix: LIQUID
Analysis Method: EPA 8080
Lab Number: 9410157-02

Sampled: 10/04/94
Received: 10/04/94
Extracted: 10/11/94
Analyzed: 10/14/94
Reported: 10/26/94

QC Batch Number: GC1011940PCBEXZ
Instrument ID: GCHP10

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	34 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Andrea Pulcher
Project Manager

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: W-13-Water
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9410157-02

Sampled: 10/04/94
Received: 10/04/94
Extracted: 10/11/94
Analyzed: 10/13/94
Reported: 10/26/94

Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	86

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

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Project Manager

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Lowney Associates	Client Proj. ID: 864-17B	Sampled: 10/04/94
405 Clyde Avenue	Sample Descript: W-13-Water	Received: 10/04/94
Mountain View, CA 94043	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 10/12/94
Attention: Peter Langtry	Lab Number: 9410157-02	Reported: 10/26/94

Instrument ID: GCHP-17

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

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Project Manager

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: W-23-Water
Matrix: LIQUID
Analysis Method: EPA 8080
Lab Number: 9410157-03

Sampled: 10/04/94
Received: 10/04/94
Extracted: 10/11/94
Analyzed: 10/14/94
Reported: 10/26/94

QC Batch Number: GC1011940PCBEXZ
Instrument ID: GCHP10

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	44 Q

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

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: W-23-Water
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9410157-03

Sampled: 10/04/94
Received: 10/04/94
Extracted: 10/11/94
Analyzed: 10/14/94
Reported: 10/26/94

Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	500	4200
Chromatogram Pattern:		W-DIESEL

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	500 Q

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

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Project Manager

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: W-23-Water
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9410157-03

Sampled: 10/04/94
Received: 10/04/94

Analyzed: 10/13/94
Reported: 10/26/94

Instrument ID: GCHP-17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**250**	**650**
Benzene	2.5	N.D.
Toluene	2.5	N.D.
Ethyl Benzene	2.5	N.D.
Xylenes (Total)	2.5	N.D.
Chromatogram Pattern:		
Weathered Gas		**C8-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	79

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

SEQUOIA ANALYTICAL - ELAP #1210

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: W-8-Water
Matrix: LIQUID
Analysis Method: EPA 8080
Lab Number: 9410157-04

Sampled: 10/04/94
Received: 10/04/94
Extracted: 10/11/94
Analyzed: 10/14/94
Reported: 10/26/94

QC Batch Number: GC1011940PCBEXZ
Instrument ID: GCHP10

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	18 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

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Project Manager

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: W-8-Water
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9410157-04

Sampled: 10/04/94
Received: 10/04/94
Extracted: 10/11/94
Analyzed: 10/17/94
Reported: 10/26/94

Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	2500	17000
Chromatogram Pattern:		DIESEL

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	0 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: W-8-Water
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9410157-04

Sampled: 10/04/94
Received: 10/04/94

Analyzed: 10/11/94
Reported: 10/26/94

nstrument ID: GCHP-17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**250**	**780**
Benzene	2.5	N.D.
Toluene	2.5	N.D.
Ethyl Benzene	2.5	N.D.
Xylenes (Total)	2.5	N.D.
Chromatogram Pattern:		**>C8**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	83

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

SEQUOIA ANALYTICAL - ELAP #1210

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Project Manager

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: MW-1A-Water
Matrix: LIQUID
Analysis Method: EPA 8080
Lab Number: 9410157-05

Sampled: 10/04/94
Received: 10/04/94
Extracted: 10/11/94
Analyzed: 10/14/94
Reported: 10/26/94

QC Batch Number: GC1011940PCBEXZ
Instrument ID: GCHP10

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	21 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

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Project Manager

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: MW-1A-Water
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9410157-05

Sampled: 10/04/94
Received: 10/04/94
Extracted: 10/11/94
Analyzed: 10/13/94
Reported: 10/26/94

Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	500	10000
Chromatogram Pattern:		>C22

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	550 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Andrea Pulcher
Project Manager

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Lowney Associates	Client Proj. ID: 864-17B	Sampled: 10/04/94
405 Clyde Avenue	Sample Descript: MW-1A-Water	Received: 10/04/94
Mountain View, CA 94043	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 10/13/94
Attention: Peter Langtry	Lab Number: 9410157-05	Reported: 10/26/94

Instrument ID: GCHP-17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**100**	**6500**
Benzene	1.0	N.D.
Toluene	1.0	N.D.
Ethyl Benzene	1.0	N.D.
Xylenes (Total)	1.0	N.D.
Chromatogram Pattern:		**>C8**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	123

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

SEQUOIA ANALYTICAL - ELAP #1210

Andrea Fulcher
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043
Attention: Peter Langtry

Client Proj. ID: 864-17B

Lab Proj. ID: 9410157

Received: 10/04/94

Reported: 11/21/94

LABORATORY NARRATIVE

Please Note:

1. The EPA 8080 analysis on Sample ID #W014-Water, W-23-Water, W-8-Water, MW-1A-Water have low surrogate recoveries due to matrix interference.

2. The Total Extractable Petroleum Hydrocarbons analysis on Sample ID# W-13-Water, W-23-Water, W-8-Water, MW-1A-Water have low/high surrogates due to matrix interference.

SEQUOIA ANALYTICAL

Andrea Fulcher
Project Manager

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043
Attention: Peter Langtry

Client Project ID: 864-17B
Matrix: Liquid
QC Sample Group: 9410157 -01-5

Reported: Nov 9, 1994

QUALITY CONTROL DATA REPORT

ANALYTE Total Oil & Grease

Method: SM 5520 BF
Analyst: A. Pina

MS/MSD Batch#: OP1011945520EXA

Date Prepared: 10/11/94
Date Analyzed: 10/13/94
Instrument I.D.#: N/A
Conc. Spiked: 30 mg/L

Matrix Spike % Recovery: 83

Matrix Spike Duplicate % Recovery: 80

Relative % Difference: 4.1

LCS Batch#: BLK101194

Date Prepared: 10/11/94
Date Analyzed: 10/13/94
Instrument I.D.#: N/A

LCS % Recovery: 83

% Recovery Control Limits: 70-110

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Andrea Fulcher
Project Manager

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Lowney Associates	Client Project ID:	864-17B	
405 Clyde Avenue	Matrix:	Liquid	
Mountain View, CA 94043			
Attention: Peter Langtry	Work Order #:	9410157-01-2, 4	Reported: Nov 9, 1994

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC101194BTEX17A	GC101194BTEX17A	GC101194BTEX17A	GC101194BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	N/A	N/A	N/A	N/A
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	941011902	941011902	941011902	941011902
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	N/A	N/A	N/A	N/A
Analyzed Date:	10/11/94	10/11/94	10/11/94	10/11/94
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.7	9.6	10	29
MS % Recovery:	97	96	100	97
Dup. Result:	9.8	10	9.8	29
MSD % Recov.:	98	100	98	97
RPD:	1.0	4.1	2.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	Not applicable
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

Andrea Fulcher
Project Manager

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

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043
Attention: Peter Langtry

Client Project ID: 864-17B
Matrix: Liquid
Work Order #: 9410157-03

Reported: Nov 9, 1994

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC101294BTEX17A	GC101294BTEX17A	GC101294BTEX17A	GC101294BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	N/A	N/A	N/A	N/A
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	941011902	941011902	941011902	941011902
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	N/A	N/A	N/A	N/A
Analyzed Date:	10/12/94	10/12/94	10/12/94	10/12/94
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.5	9.7	9.7	29
MS % Recovery:	95	97	97	97
Dup. Result:	9.0	8.6	8.9	27
MSD % Recov.:	90	86	89	90
RPD:	5.4	12	8.6	7.1
RPD Limit:	0-50	0-50	0-50	0-50

LCS #: Not applicable

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

Andrea Fulcher
Project Manager

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043
Attention: Peter Langtry

Client Project ID: 864-17B
Matrix: Liquid
Work Order #: 9410157-05

Reported: Nov 9, 1994

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC101394BTEX17A	GC101394BTEX17A	GC101394BTEX17A	GC101394BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	N/A	N/A	N/A	N/A
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	941048801	941048801	941048801	941048801
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	N/A	N/A	N/A	N/A
Analyzed Date:	10/13/94	10/13/94	10/13/94	10/13/94
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	10	10	31
MS % Recovery:	100	100	100	103
Dup. Result:	10	11	11	31
MSD % Recov.:	100	110	110	103
RPD:	0.0	9.5	9.5	0.0
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	BLK101394	BLK101394	BLK101394	BLK101394
Prepared Date:	N/A	N/A	N/A	N/A
Analyzed Date:	10/13/94	10/13/94	10/13/94	10/13/94
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.9	10	10	10
LCS % Recov.:	99	100	100	100

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

SEQUOIA ANALYTICAL

Andrea Fulcher
Project Manager

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043
Attention: Peter Langtry

Client Project ID: 864-17B
Matrix: Liquid
Work Order #: 9410157-01-5

Reported: Nov 9, 1994

QUALITY CONTROL DATA REPORT

Analyte:	Diesel	PCB 1260
QC Batch#:	GC1011940HBPEXZ	GC1011940PCBEXZ
Analy. Method:	EPA 8015 Mod	EPA 8080
Prep. Method:	EPA 3520	EPA 3520
Analyst:	B. Ali	A. Savva
MS/MSD #:	941048602	941025905
Sample Conc.:	170	N.D.
Prepared Date:	10/11/94	10/11/94
Analyzed Date:	10/13/94	10/14/94
Instrument I.D.#:	GCHP4	GCHP10
Conc. Spiked:	600 µg/L	2500 µg/L
Result:	470	1650
MS % Recovery:	50	66
Dup. Result:	460	1700
MSD % Recov.:	48	68
RPD:	22	3.0
RPD Limit:		0-50

LCS #:	Not applicable
Prepared Date:	
Analyzed Date:	
Instrument I.D.#:	
Conc. Spiked:	
LCS Result:	
LCS % Recov.:	

MS/MSD LCS Control Limits	38-122	8-127

SEQUOIA ANALYTICAL

Andrea Fulcher
Project Manager

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

LOWNEYASSOCIATES
CHAIN OF CUSTODY RECORD

JOB NO.: 364173

PROJECT NAME/LOCATION: Emeryville Post Office

SAMPLER (S): (Signature) [signature]

SHIP TO:
LOWNEY ASSOCIATES
405 Clyde Avenue
Mountain View, CA 94043
415-967-2365
415-967-2785 (FAX)

ANALYSIS REQUIRED: TPHg/BTEX (5030/8020); TPH diesel (3510/[illegible]); TOC (standard 5310); PCBs (8080)

DATE	TIME	SAMPLE DESCRIPTION	NO. OF CONTAINERS	TPHg/BTEX	TPH diesel	TOC	PCBs					REMARKS
10/4/94	—	W-14 - water	6	X	X	X	X	0	1	A	F	941C157
10/4/94	—	W-13 - water	6	X	X	X	X	02		|		2 week response
10/4/94	—	W-23 - water	6	X	X	X	X	03		|		
10/4/94	—	W-8 - water	6	X	X	X	X	04		|		
10/4/94	—	MW-1A - water	6	X	X	X	X	05		|		

7°C

Relinquished by: (Signature)	Date	Time	Received By: (Signature)
[signature]	10/4/94	19:27	

Relinquished by: (Signature)	Date	Time	Received By: (Signature)

Laboratory of Record:	Date	Time	Received for Laboratory By: (Signature)	Date	Time	Remarks:
			[signature]	10/4/94	1927	

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B

Lab Proj. ID: 9410793

Sampled: 10/10/94
Received: 10/11/94
Analyzed: see below

Reported: 10/26/94

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9410793-01 Sample Desc : **LIQUID,MW-1**				
TRPH (SM 5520 B&F)	mg/L	10/17/94	5.0	N.D.
Lab No: 9410793-02 Sample Desc : **LIQUID,MW-2**				
TRPH (SM 5520 B&F)	mg/L	10/17/94	5.0	N.D.
Lab No: 9410793-03 Sample Desc : **LIQUID,MW-3**				
TRPH (SM 5520 B&F)	mg/L	10/17/94	5.0	N.D.
Lab No: 9410793-04 Sample Desc : **LIQUID,MW-4**				
TRPH (SM 5520 B&F)	mg/L	10/17/94	5.0	N.D.

LOWNEY ASSOC.
NOV 16 1994
RECEIVED

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

SEQUOIA ANALYTICAL - ELAP #1210

Andrea Fulcher
Project Manager

Sequoia Analytical

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: MW-1
Matrix: LIQUID
Analysis Method: EPA 8080
Lab Number: 9410793-01

Sampled: 10/10/94
Received: 10/11/94
Extracted: 10/17/94
Analyzed: 10/19/94
Reported: 10/26/94

QC Batch Number: GC1017940PCBEXY
Instrument ID: GCHP10

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	64

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

SEQUOIA ANALYTICAL - ELAP #1210

Andrea Fulcher
Project Manager

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: MW-1
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9410793-01

Sampled: 10/10/94
Received: 10/11/94
Extracted: 10/18/94
Analyzed: 10/20/94
Reported: 10/26/94

Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	120
Chromatogram Pattern:		> C14

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	87

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

SEQUOIA ANALYTICAL - ELAP #1210

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: MW-1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9410793-01

Sampled: 10/10/94
Received: 10/11/94

Analyzed: 10/15/94
Reported: 10/26/94

Instrument ID: GCHP-03

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	74

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

SEQUOIA ANALYTICAL - ELAP #1210

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: EPA 8080
Lab Number: 9410793-02

Sampled: 10/10/94
Received: 10/11/94
Extracted: 10/17/94
Analyzed: 10/20/94
Reported: 10/26/94

QC Batch Number: GC1017940PCBEXY
Instrument ID: GCHP10

Polychlorinated Biphenyls (EPA 8080)

Analyte	Detection Limit ug/L	Sample Results ug/L
PCB-1016	25	N.D.
PCB-1221	100	N.D.
PCB-1232	25	N.D.
PCB-1242	25	N.D.
PCB-1248	25	N.D.
PCB-1254	25	N.D.
PCB-1260	**25**	**140**

Surrogates	Control Limits %		% Recovery
Dibutylchlorendate	50	150	- Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Andrea Fulcher
Project Manager

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Lowney Associates	Client Proj. ID: 864-17B	Sampled: 10/10/94
405 Clyde Avenue	Sample Descript: MW-2	Received: 10/11/94
Mountain View, CA 94043	Matrix: LIQUID	Extracted: 10/18/94
	Analysis Method: EPA 8015 Mod	Analyzed: 10/20/94
Attention: Peter Langtry	Lab Number: 9410793-02	Reported: 10/26/94

nstrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	1100
Chromatogram Pattern:		
Discrete Peaks		> C9

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	83

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

EQUOIA ANALYTICAL - ELAP #1210

ndrea Fulcher
roject Manager

Sequoia Analytical

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9410793-02

Sampled: 10/10/94
Received: 10/11/94

Analyzed: 10/17/94
Reported: 10/26/94

Instrument ID: GCHP-17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**1000**	**2900**
Benzene	10	N.D.
Toluene	10	N.D.
Ethyl Benzene	10	N.D.
Xylenes (Total)	10	N.D.
Chromatogram Pattern:		
Discrete Peaks		**C8-C10**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	86

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

SEQUOIA ANALYTICAL - ELAP #1210

Andrea Fulcher
Project Manager

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: MW-3
Matrix: LIQUID
Analysis Method: EPA 8080
Lab Number: 9410793-03

Sampled: 10/10/94
Received: 10/11/94
Extracted: 10/17/94
Analyzed: 10/19/94
Reported: 10/26/94

QC Batch Number: GC1017940PCBEXY
Instrument ID: GCHP10

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	26 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Andrea Fulcher
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: MW-3
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9410793-03

Sampled: 10/10/94
Received: 10/11/94
Extracted: 10/18/94
Analyzed: 10/20/94
Reported: 10/26/94

Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	1100
Chromatogram Pattern:		>C14

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	131

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

SEQUOIA ANALYTICAL - ELAP #1210

Andrea Fulcher
Project Manager

Sequoia Analytical

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: MW-3
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9410793-03

Sampled: 10/10/94
Received: 10/11/94

Analyzed: 10/17/94
Reported: 10/26/94

Instrument ID: GCHP-17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**260**
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Weathered Gas		**C7-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	94

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

SEQUOIA ANALYTICAL - ELAP #1210

Andrea Fulcher
Project Manager

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: MW-4
Matrix: LIQUID
Analysis Method: EPA 8080
Lab Number: 9410793-04

Sampled: 10/10/94
Received: 10/11/94
Extracted: 10/17/94
Analyzed: 10/19/94
Reported: 10/26/94

QC Batch Number: GC1017940PCBEXY
Instrument ID: GCHP10

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	31 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

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Project Manager

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: MW-4
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9410793-04

Sampled: 10/10/94
Received: 10/11/94
Extracted: 10/18/94
Analyzed: 10/20/94
Reported: 10/26/94

Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	1800
Chromatogram Pattern:		>C9

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	102

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

SEQUOIA ANALYTICAL - ELAP #1210

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Lowney Associates
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Mountain View, CA 94043

Attention: Peter Langtry

Client Proj. ID: 864-17B
Sample Descript: MW-4
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9410793-04

Sampled: 10/10/94
Received: 10/11/94

Analyzed: 10/18/94
Reported: 10/26/94

Instrument ID: GCHP-17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**250**	**970**
Benzene	2.5	N.D.
Toluene	2.5	N.D.
Ethyl Benzene	2.5	N.D.
Xylenes (Total)	2.5	N.D.
Chromatogram Pattern:		
Weathered Gas		**C7-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	97

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

SEQUOIA ANALYTICAL - ELAP #1210

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043
Attention: Peter Langtry

Client Proj. ID: 864-17B

Lab Proj. ID: 9410793

Received: 10/11/94

Reported: 10/26/94

LABORATORY NARRATIVE

1. The surrogate recoveries for EPA 8080 analysis on Sample ID #MW-3 and MW-4 are low due to matrix interference.

SEQUOIA ANALYTICAL

Andrea Fulcher
Project Manager

Sequoia Analytical

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043
Attention: Peter Langtry

Client Project ID: 864-17B
Matrix: Liquid
Work Order #: 9410793 01-04

Reported: Nov 10, 1994

QUALITY CONTROL DATA REPORT

Analyte:	Total Recoverable Petroleum Hyd.	PCB 1260
QC Batch#:	OP1011945520EXA	GC1017940PCBEXY
Analy. Method:	SM 5520 BF	EPA 8080
Prep. Method:	-	EPA 3520
Analyst:	A. Pina	L. Haar
MS/MSD #:	BLK101194	BLK101794
Sample Conc.:	N.D.	N.D.
Prepared Date:	10/11/94	10/17/94
Analyzed Date:	10/13/94	10/19
Instrument I.D.#:	-	GCHP10
Conc. Spiked:	30 mg/L	500 µg/L
Result:	25	350
MS % Recovery:	83	70
Dup. Result:	24	370
MSD % Recov.:	80	74
RPD:	4.1	5.6
RPD Limit:	0-10	0-50

LCS #:	Not Applicable	Not Applicable
Prepared Date:		
Analyzed Date:		
Instrument I.D.#:		
Conc. Spiked:		
LCS Result:		
LCS % Recov.:		

MS/MSD LCS Control Limits	70-110	8-127

SEQUOIA ANALYTICAL

Andrea Pulcher
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

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

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Lowney Associates	Client Project ID:	864-17B	
405 Clyde Avenue	Matrix:	Liquid	
Mountain View, CA 94043			
Attention: Peter Langtry	Work Order #:	9410793 01-04	Reported: Nov 10, 1994

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC1018940HBPEXZ
Analy. Method:	EPA 8015 Mod
Prep. Method:	EPA 3520
Analyst:	B. Ali
MS/MSD #:	941092102
Sample Conc.:	310
Prepared Date:	10/18/94
Analyzed Date:	10/20/94
Instrument I.D.#:	GCHP5A
Conc. Spiked:	600 µg/L
Result:	860
MS % Recovery:	92
Dup. Result:	840
MSD % Recov.:	88
RPD:	2.4
RPD Limit:	

LCS #:	Not Applicable
Prepared Date:	
Analyzed Date:	
Instrument I.D.#:	
Conc. Spiked:	
LCS Result:	
LCS % Recov.:	

MS/MSD LCS Control Limits	38-122

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SEQUOIA ANALYTICAL

Andrea Pulcher
Project Manager

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043
Attention: Peter Langtry

Client Project ID: 864-17B
Matrix: Liquid
Work Order #: 9410793 01

Reported: Nov 10, 1994

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC101494BTEX03A	GC101494BTEX03A	GC101494BTEX03A	GC101494BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	N.A.	N.A.	N.A.	N.A.
Analyst:	R. Vincent	R. Vincent	R. Vincent	R. Vincent
MS/MSD #:	941036901	941036901	941036901	941036901
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	N.A.	N.A.	N.A.	N.A.
Analyzed Date:	10/14/94	10/14/94	10/14/94	10/14/94
Instrument I.D.#:	GCHP-03	GCHP-03	GCHP-03	GCHP-03
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	10	9.7	29
MS % Recovery:	100	100	97	97
Dup. Result:	9.9	9.7	9.4	28
MSD % Recov.:	99	97	94	93
RPD:	1.0	3.0	3.1	3.5
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	Not Applicable
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

Andrea Fulcher
Project Manager

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Lowney Associates
405 Clyde Avenue
Mountain View, CA 94043
Attention: Peter Langtry

Client Project ID: 864-17B
Matrix: Liquid
Work Order #: 9410793 02-04

Reported: Nov 10, 1994

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC101794BTEX17A	GC101794BTEX17A	GC101794BTEX17A	GC101794BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	N.A.	N.A.	N.A.	N.A.
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	941033802	941033802	941033802	941033802
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	N.A.	N.A.	N.A.	N.A.
Analyzed Date:	10/17/94	10/17/94	10/17/94	10/17/94
Instrument I.D.#:	GCHP-17	GCHP-17	GCHP-17	GCHP-17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	10	9.9	30
MS % Recovery:	100	100	99	100
Dup. Result:	9.7	9.5	9.8	29
MSD % Recov.:	97	95	98	97
RPD:	3.0	5.1	1.0	3.4
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	Not Applicable
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

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Project Manager

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LOWNEY ASSOCIATES
CHAIN OF CUSTODY RECORD

9410793

JOB NO.	PROJECT NAME/LOCATION
864-17B	Emeryville Post Office

SAMPLER (S): (Signature) Todd H. McNair

DATE	TIME	SAMPLE DESCRIPTION	NO. OF CONTAINERS	TPH gas/BTEX (8015/8020)	TPH diesel (8015 M)	Pb (Standard 5520 B)	PCBs (8080)
10/10/94	15:00	MW-1 01 A-F	6	X	X	X	X
10/10/94	17:30	MW-2 02	6	X	X	X	X
10/10/94	16:30	MW-3 03	6	X	X	X	X
10/10/94	16:00	MW-4 04	6	X	X	X	X

ANALYSIS REQUIRED

SHIP TO:

LOWNEY ASSOCIATES
405 Clyde Avenue
Mountain View, CA 94043
415-967-2365
415-967-2785 (FAX)

REMARKS

2-week laboratory response time

Report to Todd McNair

4 00

Relinquished By: (Signature)	Date	Time	Received By: (Signature)
Todd H. McNair	10/11/94	10:00	1:56
Relinquished By: (Signature)	Date	Time	Received By: (Signature)
	10/11/94	9:55	
Laboratory of Record: SEQUOIA	Date	Time	Received for Laboratory By: (Signature)
			Remarks: