

ENVIRONMENTAL  
PROTECTION

05 MAR 16 PM 1:02

February 23, 1995

Jon Legallet  
Telegraph Business Properties  
1401 Griffith Street  
San Francisco, CA 94124

Re: Telegraph Business Park  
5427 Telegraph Avenue  
Oakland, California  
SES Project #4-719-04

Dear Mr. Legallet:

This report presents the results of quarterly ground water sampling at Telegraph Business Park, located at 5427 Telegraph Avenue in Oakland, California (Figure 1, Appendix A).

On January 20, 1995, SES personnel visited the site. Water levels were measured in all wells and all wells were checked for the presence of free-phase hydrocarbons. Free-phase hydrocarbons were not present in any of the site wells. Water level data are shown in Table 1 (Appendix B) and ground water elevation contours are included on Figure 2 (Appendix A).

Ground water samples were collected from MW-1, MW-2 and MW-3 on January 20, 1995 in accordance with SES Standard Operating Procedure - Ground Water Sampling (Appendix C). All analyses were performed by Precision Analytical Laboratory, Inc. of Richmond, California. Analytic results for ground water are presented in Tables 2 and 3 (Appendix B). The chain of custody document and laboratory analytic reports are presented in Appendix D. SES is not responsible for laboratory omissions or errors.

Thank you for allowing us to provide services to Telegraph Business Properties. Please call if you have any questions.



Sincerely,  
Sierra Environmental Services

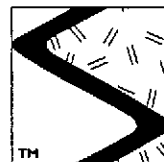
Richard E. Hilton  
Staff Environmental Scientist

Chris J. Bramer  
Professional Engineer #C48846

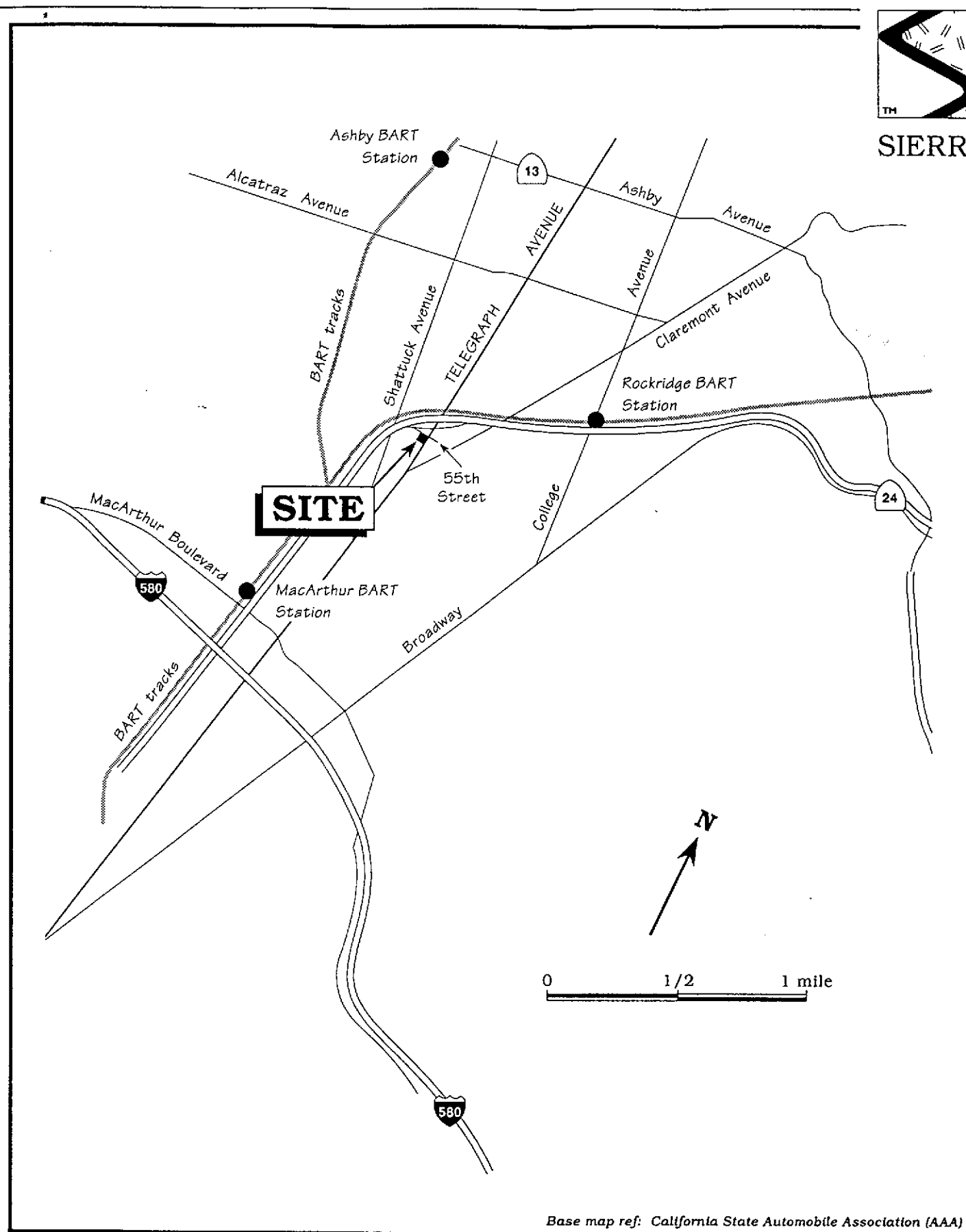
REH/CJB/lmo  
71904QM.FE5

Appendices A - Figures  
B - Tables  
C - SES Standard Operating Procedure  
D - Chain of Custody Document and Laboratory Analytic Reports

cc: Susan Hugo - Alameda County Health Care Services Agency



SIERRA



Base map ref: California State Automobile Association (AAA)

Figure 1. Site Location Map - Telegraph Business Park, 5427 Telegraph Avenue, Oakland, California

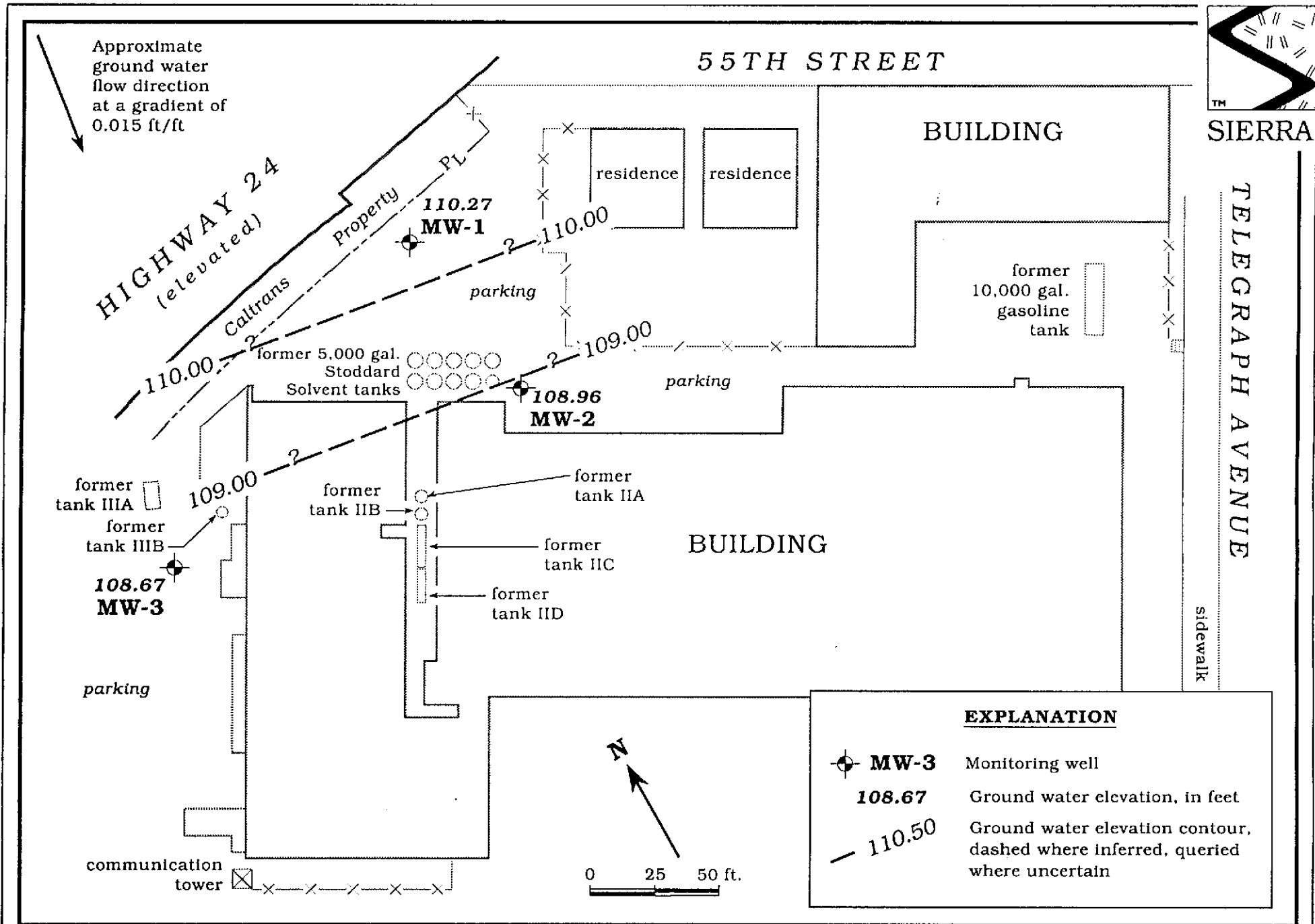
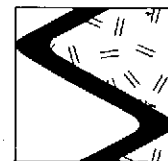


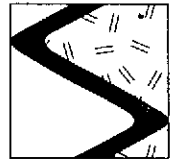
Figure 2. Monitoring Well Location and Ground Water Elevation Contour Map - January 20, 1995 - Telegraph Business Park, 5427 Telegraph Avenue, Oakland, California



SIERRA

Table 1. Water Level Data and Well Construction Details - Telegraph Business Park, 5427 Telegraph Avenue, Oakland, California

Well ID	Date Measured	DTW (ft)	TOC (ft)	GWE (msl)	Product Thickness* (ft)	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval	
									-----feet below grade----->
MW-1	1/5/94	6.40	115.05	108.65	0	5 - 20	4 - 20	0 - 4	
	2/1/94	5.93		109.12	0				
	3/2/94	5.09		109.96	0				
	4/6/94	5.85		109.20	0				
	5/4/94	6.37		108.68					
	6/3/94	6.95		108.10					
	7/7/94	7.00		108.05					
	8/3/94	7.30		107.75					
	9/7/94	7.70		107.35					
	10/11/94	7.62		107.43					
	<b>1/20/95</b>	<b>4.78</b>		<b>110.27</b>					
MW-2	1/5/94	9.42	117.60	108.18	0	7 - 27	6 - 27	0 - 6	
	2/1/94	9.15		108.45	0				
	3/2/94	9.55		108.05	0				
	4/6/94	9.09		108.51	0				
	5/4/94	9.18		108.42					
	6/3/94	9.44		108.16					
	7/7/94	10.21		107.39					
	8/3/94	10.96		106.64					
	9/7/94	10.20		107.40					
	10/11/94	10.18		107.42					
	<b>1/20/95</b>	<b>8.64</b>		<b>108.96</b>	<b>0</b>				
MW-3	1/5/94	10.14	115.33	105.19	0	5 - 20	4 - 20	0 - 4	
	2/1/94	8.92		106.41	0				
	3/2/94	7.56		115.14 <sup>1</sup>	107.58				0
	4/6/94	10.24		104.90	0				
	5/4/94	9.67		105.47					
	6/3/94	10.38		104.76					
	7/7/94	11.55		103.59					
	8/3/94	11.76		103.38	0				
	9/7/94	12.20		102.94	0				
	10/11/94	12.02		103.12					
	<b>1/20/95</b>	<b>6.47</b>		<b>108.67</b>	<b>0</b>				



SIERRA

Table 1. Water Level Data and Well Construction Details - Telegraph Business Park, 5427 Telegraph Avenue, Oakland, California (continued)

---

EXPLANATION:

DTW = Depth to water  
TOC = Top of casing elevation  
GWE = Ground water elevation  
msl = Measurements referenced relative to mean sea level

NOTES:

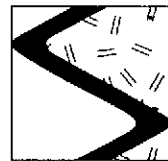
All top of casing elevations were surveyed by Ronald C. Miller, Professional Engineer #15816 on January 13, 1994.

\* Product thickness was measured with an MMC flexi-dip interface probe.

† Well resurveyed March 4, 1994 by Ronald C. Miller, Professional Engineer #15816.

---

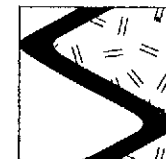
71904T.WL



SIERRA

Table 2. Analytic Results for Ground Water - Petroleum Hydrocarbons - Telegraph Business Park, 5427 Telegraph Avenue, Oakland, California

Sample ID	Date Sampled	Analytic Method	TPH(D)	Stoddard Solvent	O&G	ppb			
						B	T	E	X
B-1	12/13/93	LUFT	1,200	93,000	---	---	---	---	---
B-2	12/13/93	LUFT	4,000	1,400,000	---	---	---	---	---
B-3	12/13/93	LUFT	3,700	780,000	---	---	---	---	---
B-4	12/13/93	LUFT	90	15,000	---	---	---	---	---
B-5	12/14/93	LUFT	100	1,600	---	---	---	---	---
B-6	12/14/93	LUFT	460	9,000	---	---	---	---	---
B-7	12/14/93	LUFT	390	18,000	---	---	---	---	---
B-8	12/14/93	LUFT	<50	<50	---	---	---	---	---
B-9	12/14/93	LUFT	<50	60	---	---	---	---	---
MW-1	1/5/94	LUFT/602	500	1,000	6,300*	3.3	1.6	<0.3	6.0
	4/6/94	LUFT/602/5520	800	1,400	<5,000	5.6	4.5	<0.3	11
	7/7/94	LUFT/602/5520	400	1,200	8,300*	1.5	0.80	<0.3	1.9
	10/11/94	LUFT/602/5520/8240	<5.0	700	<5,000	<0.3/<2 <sup>1</sup>	<0.3/<2 <sup>1</sup>	<0.3/<3 <sup>1</sup>	<0.3/<4 <sup>1</sup>
	1/20/95	602/5030/8240	---	1,500	---	3.9/4 <sup>1</sup>	2.0/<1 <sup>1</sup>	<0.3/<3 <sup>1</sup>	3.9/<4 <sup>1</sup>
MW-2	1/5/94	LUFT/602	200	35,000	<5,000	12	38	<3.0	150
	4/6/94	LUFT/602/5520	2,200	94,000	15,600	21	22	<6.0	110
	7/7/94	602	---	---	---	16	16	<1.5	1,510
	7/11/94	LUFT/5520	800	43,000	14,500*	---	---	---	---
	10/11/94	LUFT/5520/8240	<5.0	31,000	<5,000	17/15 <sup>1</sup>	13/9 <sup>1</sup>	14/21 <sup>1</sup>	0.3/<4 <sup>1</sup>
	1/20/95	602/5030/8240	---	26,000	---	18/20 <sup>1</sup>	13/17 <sup>1</sup>	12/27 <sup>1</sup>	50/44 <sup>1</sup>
MW-3	1/5/94	LUFT/602	70	1,100	<5,000	180	20	85	10
	4/6/94	LUFT/602/5520	<50	1,000	<5,000	140	13	60	<12
	7/7/94	602	---	---	---	120	7.5	8.0	<3.0
	7/11/94	LUFT/5520	270	1,000	<5,000*	---	---	---	---
	10/11/94	LUFT/5520/8240	<5.0	1,100	<5,000	200/190 <sup>1</sup>	11/3 <sup>1</sup>	23/27 <sup>1</sup>	<0.3/<4 <sup>1</sup>
	1/20/95	602/5030/8240	---	2,100	---	36/41 <sup>1</sup>	3.5/2 <sup>1</sup>	4.8/5 <sup>1</sup>	<0.3/<4 <sup>1</sup>



SIERRA

Table 2. Analytic Results for Ground Water - Petroleum Hydrocarbons - Telegraph Business Park, 5427 Telegraph Avenue, Oakland, California (continued)

Sample ID	Date Sampled	Analytic Method	TPH(D)	Stoddard Solvent	O&G	ppb			
						B	T	E	X
Trip Blank									
TB-LB	1/5/94	602	---	---	---	<0.3	<0.3	<0.3	<0.3
	4/6/94	602	---	---	---	<0.3	<0.3	<0.3	<0.6
	7/7/94	602	---	---	---	<0.3	<0.3	<0.3	<0.3
	10/11/94	602	---	---	---	<0.3	<0.3	<0.3	<0.3
	1/20/95	602/5030	---	<50	---	<0.3	<0.3	<0.3	<0.3
Bailer Blank									
BB	1/5/94	602	---	---	---	<0.3	<0.3	<0.3	<0.3
	4/6/94	602	---	---	---	<0.3	0.8	<0.3	<0.6
	7/11/94	602	---	---	---	<0.3	<0.3	<0.3	<0.3
	1/20/95	602/5030	---	<50	---	<0.3	<0.3	<0.3	<0.3

EXPLANATION:

TPH(D) = Total Petroleum Hydrocarbons as Diesel  
 O&G = Oil and Grease  
 HC = Hydrocarbons  
 B = Benzene  
 T = Toluene  
 E = Ethylbenzene  
 X = Xylenes  
 HVOCs = Halogenated Volatile Organic Compounds  
 LUFT = Leaking Underground Fuel Tanks  
 ppb = Parts per billion  
 --- = Not analyzed/Not applicable

ANALYTIC LABORATORY:

All samples analyzed by Precision Analytical Laboratory, Inc. of Richmond, California.

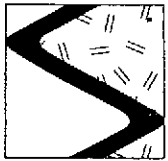
ANALYTIC METHODS:

LUFT = Department of Health Services LUFT Manual Method for TPH(D), Stoddard Solvent, and O&G  
 602 = EPA Method 602 for BTEX  
 5520 = Standard Methods Method 5520 F for total hydrocarbons analysis (non-polar).  
 5030 = EPA Method 5030 for Stoddard Solvent.  
 8240 = EPA Method 8240 for Volatile Organic Compounds

NOTES:

\* This result represents both naturally occurring organics and petroleum hydrocarbons due to its analysis by Standard Methods Method 5520B.

<sup>1</sup> BTEX was analyzed by EPA Methods 602 and 8240. First value is result by Method 602. Second value is result by Method 8240.

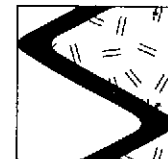


SIERRA

Table 3. Analytic Results for Ground Water - Organic Compounds - Telegraph Business Park, 5427 Telegraph Avenue, Oakland, California

Sample ID	Date Sampled	Analytic Method	1,1-	t-1,2-	c-1,2-	C	1,2-	TCE	1,2-	Other HVOCs	Other VOCs
			DCA	DCE	DCE		DCA		DCB		
-----ppb-----											
MW-1	1/5/94	8010	<0.3	<0.2	0.44	0.35	<0.2	<0.3	0.36	ND <sup>1</sup>	---
	4/6/94	8010	<0.3	<0.2	0.32	<0.2	<0.2	<0.3	0.21	ND <sup>4</sup>	---
	7/7/94	8010	<0.2	<0.2	<0.2	<0.1	<0.5	<0.2	<0.2	ND <sup>7</sup>	---
	10/11/94	8240	<3	<3	<3	<3	<2	<3	<4	---	ND <sup>10</sup>
	1/26/95	8240	<3	<3	<3	<3	<2	<3	<1	---	ND <sup>11</sup>
MW-2	1/5/94	8010	10	1.1	130	5.6	2.7	2.6	0.90	ND <sup>2</sup>	---
	4/6/94	8010	0.40	<0.2	4.3	<0.2	<0.2	<0.3	0.80	ND <sup>5</sup>	---
	7/7/94	8010	3.4	<0.2	15	<0.1	0.60	0.60	0.40	ND <sup>8</sup>	---
	10/11/94	8240	<3	<3	31	<3	<2	<3	<4	---	ND <sup>10</sup>
	1/20/95	8240	5	<3	14	<3	<2	<3	<1	---	ND <sup>11</sup>
MW-3	1/5/94	8010	0.70	<0.2	5.2	1.3	0.20	<0.3	1.5	ND <sup>3</sup>	---
	4/6/94	8010	0.40	<0.2	4.2	<0.2	<0.2	<0.3	0.80	ND <sup>6</sup>	---
	7/7/94	8010	0.30	<0.2	2.9	<0.1	<0.5	<0.2	1.3	ND <sup>9</sup>	---
	10/11/94	8240	<3	<3	<3	<3	<2	<3	<4	---	ND <sup>10</sup>
	1/20/95	8240	<3	<3	6	<3	<2	<3	1	---	ND <sup>11</sup>





SIERRA

Table 3. Analytic Results for Ground Water - Organic Compounds - Telegraph Business Park, 5427 Telegraph Avenue, Oakland, California  
(continued)

EXPLANATION:

1,1-DCA = 1,1-Dichloroethane  
t-1,2-DCE = trans-1,2-Dichloroethene  
c-1,2-DCE = cis-1,2-Dichloroethene  
C = Chloroform  
1,2-DCA = 1,2-Dichloroethane  
TCE = Trichloroethene  
1,2-DCB = 1,2-Dichlorobenzene  
HVOCs = Halogenated Volatile Organic Compounds  
VOCs = Volatile Organic Compounds  
ppb = Parts per billion  
ND = Not detected

ANALYTIC LAB:

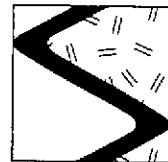
All samples analyzed by Precision Analytic Laboratory, Inc. of Richmond, California.

ANALYTIC METHODS:

8010 = EPA Method 8010 for HVOCs  
8240 = EPA Method 8240 for VOCs

NOTES:

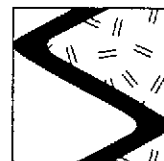
- <sup>1</sup> 1,4-Dichlorobenzene was detected at 0.34 ppb. Other HVOCs not detected at detection limits of 0.2 to 2.0 ppb.
- <sup>2</sup> 1,2-Dichloropropene, T-1,3-Dichloropropene, and 1,4-Dichlorobenzene were detected at 18, 1.0 and 1.0 ppb, respectively. Other HVOCs not detected at detection limits of 0.2 to 2.0 ppb.
- <sup>3</sup> Chlorobenzene and 1,4-Dichlorobenzene were detected at 0.70 and 0.30 ppb, respectively. Other HVOCs not detected at detection limits of 0.2 to 2.0 ppb.
- <sup>4</sup> 1,4-Dichlorobenzene was detected at 0.21 ppb. Other HVOCs not detected at detection limits of 0.2 to 2.2 ppb.
- <sup>5</sup> Chlorobenzene was detected at 1.7 ppb. Other HVOCs not detected at detection limits of 0.2 to 2.2 ppb.
- <sup>6</sup> Chlorobenzene was detected at 1.6 ppb. Other HVOCs not detected at detection limits of 0.2 to 2.2 ppb.
- <sup>7</sup> 1,4-Dichlorobenzene was detected at 0.26 ppb. Other HVOCs not detected at detection limits of 0.2 to 2.0 ppb.
- <sup>8</sup> 1,2-Dichloropropene, tetrachloroethene and 1,4-Dichlorobenzene were detected at 6.5, 1.4 and 0.34 ppb, respectively. Other HVOCs not detected at detection limits of 0.2 to 2.0 ppb.
- <sup>9</sup> Other HVOCs not detected at detection limits of 0.2 to 2.0 ppb.
- <sup>10</sup> Benzene, toluene, ethylbenzene and xylene results are included on Table 2. Other VOCs not detected at detection limits of 2 to 50 ppb.
- <sup>11</sup> Benzene, toluene, ethylbenzene and xylene results are included on Table 2. Other VOCs not detected at detection limits of 1 to 7 ppb.



SIERRA

APPENDIX C  
SIERRA ENVIRONMENTAL SERVICES  
STANDARD OPERATING PROCEDURES

## SES STANDARD OPERATING PROCEDURE GROUND WATER SAMPLING



SIERRA

The following describes sampling procedures used by SES field personnel to collect and handle ground water samples. Before samples are collected, careful consideration is given to the type of analysis to be performed so that precautions are taken to prevent loss of volatile components or contamination of the sample, and to preserve the sample for subsequent analysis. Wells will be sampled no less than 24 hours after well development. Collection methods specific to ground water sampling are presented below.

Prior to sampling, each well is checked for the presence of free-phase hydrocarbons using an MMC flexi-dip interface probe. Product thickness (measured to the nearest 0.01 foot) is noted on the sampling form. Water level measurements are also made using either a water level meter or the interface probe. The water level measurements are also noted on the sampling form.

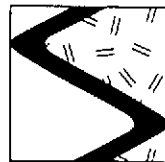
Prior to sampling, each well is purged of a minimum of four well casing volumes of water using a steam-cleaned PVC bailer, or a pre-cleaned pump. Temperature, pH and electrical conductivity are measured at least three times during purging. Purging is continued until these parameters have stabilized (i.e., changes in temperature, pH or conductivity do not exceed  $\pm 0.5^{\circ}\text{F}$ , 0.1 or 5%, respectively).

The purge water is stored temporarily on-site in 55-gallon Department of Transportation-approved drums pending analytic results. The drums are labeled with the date, contents, the SES field personnel initials and SES phone number.

Ground water samples are collected from the wells with steam-cleaned Teflon bailers. The water samples are decanted into the appropriate container for the analysis to be performed. Pre-preserved sample containers may be used or the analytic laboratory may add preservative to the sample upon arrival. Duplicate samples are collected from each well as a back-up sample and/or to provide quality control. The samples are labeled to include the project number, sample ID, date, preservative, and the field person's initials. The samples are placed in polyethylene bags and in an ice chest (maintained at  $4^{\circ}\text{C}$  with blue ice or ice) for transport under chain-of-custody to the laboratory.

The chain-of-custody form includes the project number, analysis requested, sample ID, date analysis and the SES field person's name. The form is signed and dated (with the transfer time) by each person who yields or receives the samples beginning with the field personnel and ending with the laboratory personnel.

A trip blank and bailer blank accompanies each sampling set, or 5% trip blanks and 5% bailer blanks are included for sets of greater than 20 samples. The bailer blank is prepared by pouring previously boiled water into a steam-cleaned Teflon bailer prior to sampling a well. The trip and bailer blanks are analyzed for some or all of the same compounds as the ground water samples.



SIERRA

**APPENDIX D**  
CHAIN OF CUSTODY DOCUMENT AND  
LABORATORY ANALYTIC REPORTS



Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: Ed Morales  
Sierra Environmental Services  
P.O. Box 2546  
Martinez, CA 94553

Date Received: 01/23/95  
Date Analyzed: 02/03/95  
Date Reported: 02/07/95  
Job #: 76596

Project: #4-719-04  
Matrix: Water

EPA METHOD 624  
PURGEABLE ORGANICS  
µg/L

Lab I.D.: 76596-1  
Client I.D.: TB-LB

<u>Compound</u>	<u>Concentration</u>	<u>Limit of Detection</u>
Chloromethane	ND<2	2
Bromomethane	ND<2	2
Vinyl chloride	ND<2	2
Chloroethane	ND<4	4
Methylene chloride	ND<7	7
Trichlorofluoromethane	ND<3	3
1,1-dichloroethene	ND<3	3
1,1-dichloroethane	ND<3	3
Trans-1,2-dichloroethene	ND<3	3
Cis-1,2-dichloroethene	ND<3	3
Chloroform	ND<3	3
1,2-dichloroethane	ND<2	2
1,1,1-trichloroethane	ND<3	3
Carbon tetrachloride	ND<2	2
Bromodichloromethane	ND<3	3
1,2-dichloropropene	ND<2	2
Cis-1,3-dichloropropene	ND<3	3
Trichloroethene	ND<3	3
Benzene	ND<2	2
Dibromochloromethane	ND<4	4
1,1,2-trichloroethane	ND<3	3

ND = Not Detected

Suminder Sidhu (For)  
Jaime Chow  
Laboratory Director

JC/dwc



Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

STATE LICENSE NO. 1150

Attn: Ed Morales  
Sierra Environmental Services  
P.O. Box 2546  
Martinez, CA 94553

Date Received: 01/23/95  
Date Analyzed: 02/03/95  
Date Reported: 02/07/95  
Job #: 76596

Project: #4-719-04  
Matrix: Water

EPA METHOD 624  
PURGEABLE ORGANICS  
µg/L

Lab I.D.: 76596-1  
Client I.D.: TB-LB

<u>Compound</u>	<u>Concentration</u>	<u>Limit of Detection</u>
Trans-1,3-dichloropropene	ND<3	3
2-chloroethyl vinyl ether	ND<3	3
Bromoform	ND<3	3
1,1,2,2-tetrachloroethane	ND<7	7
Tetrachloroethene	ND<3	3
Toluene	ND<1	1
Chlorobenzene	ND<2	2
Ethylbenzene	ND<3	3
1,3-Dichlorobenzene	ND<4	4
1,2-Dichlorobenzene	ND<1	1
1,4-Dichlorobenzene	ND<4	4
Freon 113	ND<3	3
M + P Xylene	ND<6	6
o-Xylene	ND<4	4

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: Ed Morales  
Sierra Environmental Services  
P.O. Box 2546  
Martinez, CA 94553

Date Received: 01/23/95  
Date Analyzed: 02/03/95  
Date Reported: 02/07/95  
Job #: 76596

Project: #4-719-04  
Matrix: Water

EPA METHOD 624  
PURGEABLE ORGANICS  
µg/L

Lab I.D.: 76596-2  
Client I.D.: BB

<u>Compound</u>	<u>Concentration</u>	<u>Limit of Detection</u>
Chloromethane	ND<2	2
Bromomethane	ND<2	2
Vinyl chloride	ND<2	2
Chloroethane	ND<4	4
Methylene chloride	ND<7	7
Trichlorofluoromethane	ND<3	3
1,1-dichloroethene	ND<3	3
1,1-dichloroethane	ND<3	3
Trans-1,2-dichloroethene	ND<3	3
Cis-1,2-dichloroethene	ND<3	3
Chloroform	ND<3	3
1,2-dichloroethane	ND<2	2
1,1,1-trichloroethane	ND<3	3
Carbon tetrachloride	ND<2	2
Bromodichloromethane	ND<3	3
1,2-dichloropropene	ND<2	2
Cis-1,3-dichloropropene	ND<3	3
Trichloroethene	ND<3	3
Benzene	ND<2	2
Dibromochloromethane	ND<4	4
1,1,2-trichloroethane	ND<3	3

ND = Not Detected

Swinder Sidhu (for)

Jaime Chow  
Laboratory Director

JC/dwc



Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

STATE LICENSE NO. 1150

Attn: Ed Morales  
Sierra Environmental Services  
P.O. Box 2546  
Martinez, CA 94553

Date Received: 01/23/95  
Date Analyzed: 02/03/95  
Date Reported: 02/07/95  
Job #: 76596

Project: #4-719-04  
Matrix: Water

EPA METHOD 624  
PURGEABLE ORGANICS  
µg/L

Lab I.D.: 76596-2  
Client I.D.: BB

<u>Compound</u>	<u>Concentration</u>	<u>Limit of Detection</u>
Trans-1,3-dichloropropene	ND<3	3
2-chloroethyl vinyl ether	ND<3	3
Bromoform	ND<3	3
1,1,2,2-tetrachloroethane	ND<7	7
Tetrachloroethene	ND<3	3
Toluene	ND<1	1
Chlorobenzene	ND<2	2
Ethylbenzene	ND<3	3
1,3-Dichlorobenzene	ND<4	4
1,2-Dichlorobenzene	ND<1	1
1,4-Dichlorobenzene	ND<4	4
Freon 113	ND<3	3
M + P Xylene	ND<6	6
o-Xylene	ND<4	4



Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: Ed Morales
Sierra Environmental Services
P.O. Box 2546
Martinez, CA 94553

Date Received: 01/23/95
Date Analyzed: 02/03/95
Date Reported: 02/07/95
Job #: 76596

Project: #4-719-04
Matrix: Water

EPA METHOD 624
PURGEABLE ORGANICS
µg/L

Lab I.D.: 76596-3
Client I.D.: MW-3

Table with 3 columns: Compound, Concentration, Limit of Detection. Lists various organic compounds and their detection levels.

ND = Not Detected

Signature of Jaime Chow

Jaime Chow
Laboratory Director

JC/dwc

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

STATE LICENSE NO. 1150

Attn: Ed Morales  
Sierra Environmental Services  
P.O. Box 2546  
Martinez, CA 94553

Date Received: 01/23/95  
Date Analyzed: 02/03/95  
Date Reported: 02/07/95  
Job #: 76596

Project: #4-719-04  
Matrix: Water

EPA METHOD 624  
PURGEABLE ORGANICS  
µg/L

Lab I.D.: 76596-3  
Client I.D.: MW-3

<u>Compound</u>	<u>Concentration</u>	<u>Limit of Detection</u>
Trans-1,3-dichloropropene	ND<3	3
2-chloroethyl vinyl ether	ND<3	3
Bromoform	ND<3	3
1,1,2,2-tetrachloroethane	ND<7	7
Tetrachloroethene	ND<3	3
Toluene	2	1
Chlorobenzene	ND<2	2
Ethylbenzene	5	3
1,3-Dichlorobenzene	ND<4	4
1,2-Dichlorobenzene	1	1
1,4-Dichlorobenzene	ND<4	4
Freon 113	ND<3	3
M + P Xylene	ND<6	6
o-Xylene	ND<4	4

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: Ed Morales  
Sierra Environmental Services  
P.O. Box 2546  
Martinez, CA 94553

Date Received: 01/23/95  
Date Analyzed: 02/03/95  
Date Reported: 02/07/95  
Job #: 76596

Project: #4-719-04  
Matrix: Water

EPA METHOD 624  
PURGEABLE ORGANICS  
µg/L

Lab I.D.: 76596-4  
Client I.D.: MW-1

<u>Compound</u>	<u>Concentration</u>	<u>Limit of Detection</u>
Chloromethane	ND<2	2
Bromomethane	ND<2	2
Vinyl chloride	ND<2	2
Chloroethane	ND<4	4
Methylene chloride	ND<7	7
Trichlorofluoromethane	ND<3	3
1,1-dichloroethene	ND<3	3
1,1-dichloroethane	ND<3	3
Trans-1,2-dichloroethene	ND<3	3
Cis-1,2-dichloroethene	ND<3	3
Chloroform	ND<3	3
1,2-dichloroethane	ND<2	2
1,1,1-trichloroethane	ND<3	3
Carbon tetrachloride	ND<2	2
Bromodichloromethane	ND<3	3
1,2-dichloropropene	ND<2	2
Cis-1,3-dichloropropene	ND<3	3
Trichloroethene	ND<3	3
Benzene	4	2
Dibromochloromethane	ND<4	4
1,1,2-trichloroethane	ND<3	3

ND = Not Detected

Suinder Sidhu (for)

Jaime Chow  
Laboratory Director

JC/dwc

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

STATE LICENSE NO. 1150

Attn: Ed Morales  
Sierra Environmental Services  
P.O. Box 2546  
Martinez, CA 94553

Date Received: 01/23/95  
Date Analyzed: 02/03/95  
Date Reported: 02/07/95  
Job #: 76596

Project: #4-719-04  
Matrix: Water

EPA METHOD 624  
PURGEABLE ORGANICS  
µg/L

Lab I.D.: 76596-4  
Client I.D.: MW-1

<u>Compound</u>	<u>Concentration</u>	<u>Limit of Detection</u>
Trans-1,3-dichloropropene	ND<3	3
2-chloroethyl vinyl ether	ND<3	3
Bromoform	ND<3	3
1,1,2,2-tetrachloroethane	ND<7	7
Tetrachloroethene	ND<3	3
Toluene	ND<1	1
Chlorobenzene	ND<2	2
Ethylbenzene	ND<3	3
1,3-Dichlorobenzene	ND<4	4
1,2-Dichlorobenzene	ND<1	1
1,4-Dichlorobenzene	ND<4	4
Freon 113	ND<3	3
M + P Xylene	ND<6	6
o-Xylene	ND<4	4

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: Ed Morales  
Sierra Environmental Services  
P.O. Box 2546  
Martinez, CA 94553

Date Received: 01/23/95  
Date Analyzed: 02/03/95  
Date Reported: 02/07/95  
Job #: 76596

Project: #4-719-04  
Matrix: Water

EPA METHOD 624  
PURGEABLE ORGANICS  
µg/L

Lab I.D.: 76596-5  
Client I.D.: MW-2

<u>Compound</u>	<u>Concentration</u>	<u>Limit of Detection</u>
Chloromethane	ND<2	2
Bromomethane	ND<2	2
Vinyl chloride	ND<2	2
Chloroethane	ND<4	4
Methylene chloride	ND<7	7
Trichlorofluoromethane	ND<3	3
1,1-dichloroethene	ND<3	3
1,1-dichloroethane	5	3
Trans-1,2-dichloroethene	ND<3	3
Cis-1,2-dichloroethene	14	3
Chloroform	ND<3	3
1,2-dichloroethane	ND<2	2
1,1,1-trichloroethane	ND<3	3
Carbon tetrachloride	ND<2	2
Bromodichloromethane	ND<3	3
1,2-dichloropropene	ND<2	2
Cis-1,3-dichloropropene	ND<3	3
Trichloroethene	ND<3	3
Benzene	20	2
Dibromochloromethane	ND<4	4
1,1,2-trichloroethane	ND<3	3

ND = Not Detected

Suminder Sidhu (Frr)  
Jaime Chow  
Laboratory Director

JC/dwc

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

STATE LICENSE NO. 1150

Attn: Ed Morales  
Sierra Environmental Services  
P.O. Box 2546  
Martinez, CA 94553

Date Received: 01/23/95  
Date Analyzed: 02/03/95  
Date Reported: 02/07/95  
Job #: 76596

Project: #4-719-04  
Matrix: Water

EPA METHOD 624  
PURGEABLE ORGANICS  
µg/L

Lab I.D.: 76596-5  
Client I.D.: MW-2

<u>Compound</u>	<u>Concentration</u>	<u>Limit of Detection</u>
Trans-1,3-dichloropropene	ND<3	3
2-chloroethyl vinyl ether	ND<3	3
Bromoform	ND<3	3
1,1,2,2-tetrachloroethane	ND<7	7
Tetrachloroethene	ND<3	3
Toluene	17	1
Chlorobenzene	ND<2	2
Ethylbenzene	27	3
1,3-Dichlorobenzene	ND<4	4
1,2-Dichlorobenzene	ND<1	1
1,4-Dichlorobenzene	ND<4	4
Freon 113	ND<3	3
M + P Xylene	44	6
o-Xylene	ND<4	4

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: Ed Morales  
Sierra Environmental Services  
P.O. Box 2546  
Martinez, CA 94553

Date Received: 01/23/95  
Date Analyzed: 02/03/95  
Date Reported: 02/07/95  
Job #: 76596

Project: #4-719-04  
Matrix: Water

EPA METHOD 624  
PURGEABLE ORGANICS  
µg/L

Lab I.D.: 76596-MB  
Client I.D.: METHOD BLANK

<u>Compound</u>	<u>Concentration</u>	<u>Limit of Detection</u>
Chloromethane	ND<2	2
Bromomethane	ND<2	2
Vinyl chloride	ND<2	2
Chloroethane	ND<4	4
Methylene chloride	ND<7	7
Trichlorofluoromethane	ND<3	3
1,1-dichloroethene	ND<3	3
1,1-dichloroethane	ND<3	3
Trans-1,2-dichloroethene	ND<3	3
Cis-1,2-dichloroethene	ND<3	3
Chloroform	ND<3	3
1,2-dichloroethane	ND<2	2
1,1,1-trichloroethane	ND<3	3
Carbon tetrachloride	ND<2	2
Bromodichloromethane	ND<3	3
1,2-dichloropropene	ND<2	2
Cis-1,3-dichloropropene	ND<3	3
Trichloroethene	ND<3	3
Benzene	ND<2	2
Dibromochloromethane	ND<4	4
1,1,2-trichloroethane	ND<3	3

ND = Not Detected

Swinder Sidhu (For)

Jaime Chow  
Laboratory Director





Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

STATE LICENSE NO. 1150

Attn: Ed Morales  
Sierra Environmental Services  
P.O. Box 2546  
Martinez, CA 94553

Date Received: 01/23/95  
Date Analyzed: 02/03/95  
Date Reported: 02/07/95  
Job #: 76596

Project: #4-719-04  
Matrix: Water

EPA METHOD 624  
PURGEABLE ORGANICS  
 $\mu\text{g/L}$

Lab I.D.: 76596-MB  
Client I.D.: METHOD BLANK

<u>Compound</u>	<u>Concentration</u>	<u>Limit of Detection</u>
Trans-1,3-dichloropropene	ND<3	3
2-chloroethyl vinyl ether	ND<3	3
Bromoform	ND<3	3
1,1,2,2-tetrachloroethane	ND<7	7
Tetrachloroethene	ND<3	3
Toluene	ND<1	1
Chlorobenzene	ND<2	2
Ethylbenzene	ND<3	3
1,3-Dichlorobenzene	ND<4	4
1,2-Dichlorobenzene	ND<1	1
1,4-Dichlorobenzene	ND<4	4
Freon 113	ND<3	3
M + P Xylene	ND<6	6
o-Xylene	ND<4	4

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: Ed Morales  
Sierra Environmental Services  
P.O. Box 2546  
Martinez, CA 94553

Date Received: 01/23/95  
Date Analyzed: 01/23/95  
Date Reported: 02/07/95  
Job #: 76596

Project: #4-719-04  
Matrix: Water

Aromatic Volatile Hydrocarbon Analysis  
EPA Method 602  
µg/L

Lab I.D.	Client I.D.	Benzene	MDL	Toluene	MDL
76596-1	TB-LB	ND<0.3	0.3	ND<0.3	0.3
76596-2	BB	ND<0.3	0.3	ND<0.3	0.3
76596-3	MW-3	36	3.0	3.5	3.0
76596-4	MW-1	3.9	0.3	2.0	0.3
76596-5	MW-2	18	0.3	13	0.3

Lab I.D.	Client I.D.	Ethyl- benzene	MDL	Xylenes	MDL
76596-1	TB-LB	ND<0.3	0.3	ND<0.3	0.3
76596-2	BB	ND<0.3	0.3	ND<0.3	0.3
76596-3	MW-3	4.8	3.0	ND<3.0	3.0
76596-4	MW-1	ND<0.3	0.3	3.9	0.3
76596-5	MW-2	12	0.3	50	0.3

QA/QC: Matrix Spike Recovery for Benzene: 92%  
Matrix Spike Recovery for Toluene: 96%  
Matrix Spike Recovery for Chlorobenzene: 99%

Matrix Spike Duplicate Recovery for Benzene: 99%  
Matrix Spike Duplicate Recovery for Toluene: 107%  
Matrix Spike Duplicate Recovery for Chlorobenzene: 112%

MDL: Method Detection Limit. Compound below this level would not be detected.

Suminder Sidhu (For)  
Jaime Chow  
Laboratory Director

JC/dwc

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: Ed Morales  
Sierra Environmental Services  
P.O. Box 2546  
Martinez, CA 94553

Date Received: 01/23/95  
Date Analyzed: 02/03/95  
Date Reported: 02/07/95  
Job #: 76596

Project: #4-719-04  
Matrix: Water

Total Petroleum Hydrocarbon Analysis  
EPA Method 5030  
µg/L

<u>Lab I.D.</u>	<u>Client I.D.</u>	<u>Stoddard Gas Range</u>	<u>MDL</u>
76596-1	TB-LB	ND<50	50
76596-2	BB	ND<50	50
76596-3	MW-3	2,100	500
76596-4	MW-1	1,500	500
76596-5	MW-2	26,000	1,250

QA/QC: Matrix Spike Recovery for Stoddard: 99%  
Matrix Spike Duplicate Recovery for Stoddard: 80%

MDL: Method Detection Limit. Compound below this level would not be detected.

Jaime Chow  
Jaime Chow  
Laboratory Director

JC/dwc