



STID 3166

April 28, 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:

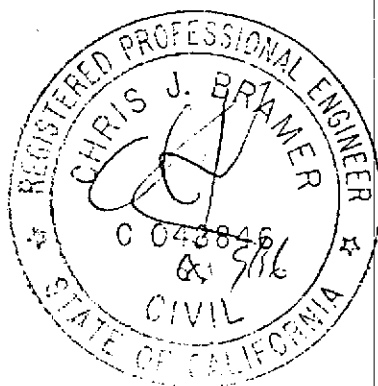
This report presents the results of quarterly ground water sampling at Telegraph Business Park, located at 5427 Telegraph Avenue in Oakland, California (Figure 1, Appendix A).

On April 7, 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 April 7, 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.

ENVIRONMENTAL
PROFESSIONAL
95 MAY -8 PM 3:33



Sincerely,
Sierra Environmental Services

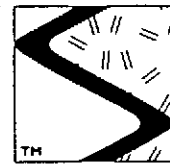
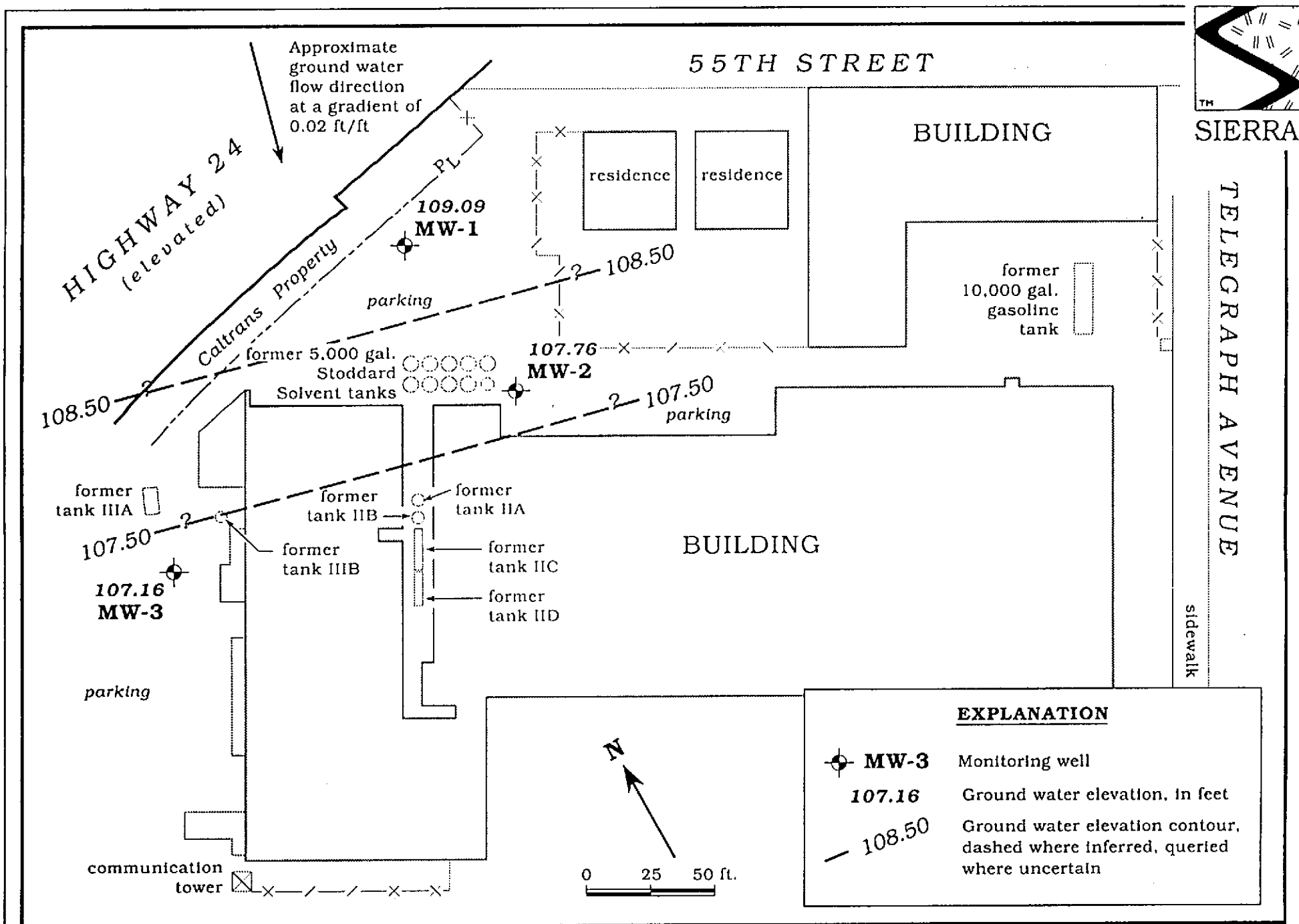
David M. Beardsley for
David M. Beardsley
Senior Environmental Technician

Chris J. Bramer
Professional Engineer #C48846

DMB/CJB/lmo
71904QM.AP5

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

cc: Susan Hugo - Alameda County Health Care Services Agency



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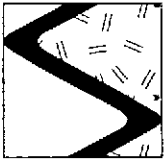
TELEGRAPH AVENUE

Figure 2. Monitoring Well Location and Ground Water Elevation Contour Map - April 7, 1995 - Telegraph Business Park, 5427 Telegraph Avenue, Oakland, California



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	0				
	6/3/94	6.95		108.10	0				
	7/7/94	7.00		108.05	0				
	8/3/94	7.30		107.75	0				
	9/7/94	7.70		107.35	0				
	10/11/94	7.62		107.43	0				
	1/20/95	4.78		110.27	0				
	4/7/95	5.96	109.09	0					
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	0				
	6/3/94	9.44		108.16	0				
	7/7/94	10.21		107.39	0				
	8/3/94	10.96		106.64	0				
	9/7/94	10.20		107.40	0				
	10/11/94	10.18		107.42	0				
	1/20/95	8.64		108.96	0				
	4/7/95	9.84	107.76	0					
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 [†]	107.58				0
	4/6/94	10.24		104.90	0				
	5/4/94	9.67		105.47	0				
	6/3/94	10.38		104.76	0				
	7/7/94	11.55		103.59	0				
	8/3/94	11.76		103.38	0				
	9/7/94	12.20		102.94	0				
	10/11/94	12.02		103.12	0				
	1/20/95	6.47		108.67	0				
	4/7/95	7.98	107.16	0					



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

EXPLANATION:

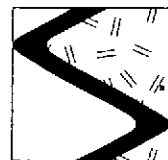
DTW = Depth to water
TOC = Top of casing elevation
GWE = Ground water elevation
msl = Measurements referenced relative to mean sea level

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.

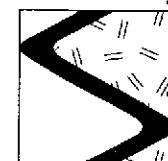
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Table 2. Analytic Results for Ground Water - Petroleum Hydrocarbons - Telegraph Business Park, 5427 Telegraph Avenue, Oakland, California

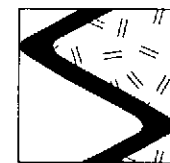
Sample ID	Date Sampled	Analytic Method	TPH(D)	Stoddard Solvent	O&G	ppb			
						B	T	E	X
B-1	12/13/93	LUFT	1,200	93,000	---	---	---	---	---
B-2	12/13/93	LUFT	4,000	1,400,000	---	---	---	---	---
B-3	12/13/93	LUFT	3,700	780,000	---	---	---	---	---
B-4	12/13/93	LUFT	90	15,000	---	---	---	---	---
B-5	12/14/93	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	---	---	---	---	---
B-10	11/30/94	LUFT/5520/602	---	120,000	<10,000	<0.3	<0.3	<0.3	<0.3
B-11	11/30/94	LUFT/5520/602	---	210	<10,000	<0.3	<0.3	<0.3	<0.3
B-12	11/30/94	LUFT/5520/602	---	150	<10,000	<0.3	<0.3	<0.3	<0.3
B-13	11/30/94	LUFT/5520/602	---	220	<10,000	2.3	0.80	<0.3	4
B-14	11/30/94	LUFT/5520/602	---	150	<10,000	<0.3	<0.3	<0.3	0.80
B-15	1/23/95	LUFT/5520/602	---	9,100	<10,000	40	<3.0	60	<3.0
B-16	1/23/95	LUFT/5520/602	---	52 ¹	<13,000	<0.3	<0.3	<0.3	1.3
B-17	1/23/95	LUFT/5520/602	---	<50	<10,000	<0.3	<0.3	<0.3	<0.3



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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
MW-1	1/5/94	LUFT/602	500	1,000	6,300*	3.3	1.6	<0.3	6
	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	<5.0	700	<5,000	<0.3	<0.3	<0.3	<0.3
	1/20/95	LUFT/602	---	1,500	---	3.9	2	<0.3	3.9
	4/7/95	602/5030	2,500	500	---	3.2	1.1	<0.3	1.7
	MW-2	1/5/94	LUFT/602	200	35,000	<5,000	12	38	<3.0
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/5520/602	<5.0	31,000	<5,000	17	13	14	0.3
1/20/95		LUFT/602	---	26,000	---	18	13	12	50
4/7/95		602/5030	900	70,000	---	17.5	11	<0.6	74.6
MW-3	1/5/94	LUFT/5520/602	70	1,100	<5,000	180	20	85	10
	4/6/94	LUFT/5520/602	<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/5520/602	<5.0	1,100	<5,000	200	11	23	<0.3
	1/20/95	LUFT/602	---	2,100	---	36	3.5	4.8	<0.3
	4/7/95	602/5030	90	600	---	32.7	1.7	4.7	1.9
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
	11/30/94	602	---	---	---	<0.3	<0.3	<0.3	<0.3
	1/20/95	LUFT/602	---	<50	---	<0.3	<0.3	<0.3	<0.3
	1/23/95	LUFT/602	---	<50	---	<0.3	<0.3	<0.3	<0.3
	4/7/95	602	---	---	---	<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
	11/30/94	602	---	---	---	<0.3	<0.3	<0.3	<0.3



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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
BB	1/20/95	LUFT/602	---	<50	---	<0.3	<0.3	<0.3	<0.3
(cont)	1/23/95	LUFT/602	---	<50	---	<0.3	<0.3	<0.3	<0.3
	4/7/95	602	---	---	---	<0.3	<0.3	<0.3	<0.3

EXPLANATION:

TPH(D) = Total Petroleum Hydrocarbons as Diesel
 O&G = Oil and Grease
 B = Benzene
 T = Toluene
 E = Ethylbenzene
 X = Xylenes
 ppb = Parts per billion
 --- = Not analyzed/Not applicable

ANALYTIC LABORATORY:

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

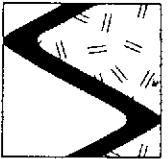
ANALYTIC METHODS:

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 non-polar O&G

NOTES:

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

¹ Stoddard gas range hydrocarbon does not match with stoddard gas standard.



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

Sample ID	Date Sampled	Analytic Method	VC	1,1-DCA	t-1,2-DCE	c-1,2-DCE	C	1,2-DCA	TCE	PCE	1,2-DCB	Other HVOCs	Other VOCs
B-10	11/30/94	8240	<2	<3	<3	<3	<3	<2	<3	<2	<4	---	ND ¹⁰
B-11	11/30/94	8240	<2	<3	<3	<3	<3	<2	<3	<2	<4	---	ND ¹⁰
B-12	11/30/94	8240	<2	<3	<3	<3	<3	<2	<3	<2	<4	---	ND ¹⁰
B-13	11/30/94	8240	430	32	7.9	810	<3	<2	340	360	<4	---	ND ¹⁰
B-14	11/30/94	8240	<2	12	<3	35	<3	<2	21	59	<4	---	ND ¹⁰
B-15	1/23/95	8240	<2	<3	<3	<3	<3	<2	<3	<2	<4	---	ND ¹⁰
B-16	1/23/95	8240	<2	<3	<3	<3	<3	<2	8	290	<4	---	ND ¹⁰
B-17	1/23/95	8240	<2	<3	<3	14	<3	<2	13	53	<4	---	ND ¹⁰
MW-1	1/5/94	8010	<1	<0.3	<0.2	0.44	0.35	<0.2	<0.3	<2	0.36	ND ¹	---
	4/6/94	8010	<1	<0.3	<0.2	0.32	<0.2	<0.2	<0.3	<2	0.21	ND ⁴	---
	7/7/94	8010	<1	<0.2	<0.2	<0.2	<0.1	<0.5	<0.2	<2	<0.2	ND ⁷	---
	10/11/94	8240	<2	<3	<3	<3	<3	<2	<3	<2	<4	---	ND ¹⁰
	1/20/95	8240	<2	<3	<3	<3	<3	<2	<3	<2	<1	---	ND ¹¹
	4/7/95	8010	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	ND ¹⁴	---
MW-2	1/5/94	8010	<1	10	1.1	130	5.6	2.7	2.6	<2	0.90	ND ²	---
	4/6/94	8010	<1	0.40	<0.2	4.3	<0.2	<0.2	<0.3	<2	0.80	ND ⁵	---
	7/7/94	8010	<1	3.4	<0.2	15	<0.1	0.60	0.60	<2	0.40	ND ⁶	---
	10/11/94	8240	<2	<3	<3	31	<3	<2	<3	<2	<4	---	ND ¹⁰
	1/20/95	8240	<2	5	<3	14	<3	<2	<3	<2	<1	---	ND ¹¹
	4/7/95	8010	4.9	4.3	<0.5	18	<0.5	1.4	<0.5	0.8	<0.5	ND ^{12,14}	---
MW-3	1/5/94	8010	<1	0.70	<0.2	5.2	1.3	0.20	<0.3	<2	1.5	ND ³	---
	4/6/94	8010	<1	0.40	<0.2	4.2	<0.2	<0.2	<0.3	<2	0.80	ND ⁶	---
	7/7/94	8010	<1	0.30	<0.2	2.9	<0.1	<0.5	<0.2	<2	1.3	ND ⁹	---
	10/11/94	8240	<2	<3	<3	<3	<3	<2	<3	<2	<4	---	ND ¹⁰
	1/20/95	8240	<2	<3	<3	6	<3	<2	<3	<2	1	---	ND ¹¹
	4/7/95	8010	8.8	<0.5	<0.5	13	<0.5	0.7	<0.5	<0.5	2	ND ^{13,14}	---



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

EXPLANATION:

VC = Vinyl Chloride
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
PCE = Tetrachloroethene
1,2-DCB = 1,2-Dichlorobenzene
HVOCs = Halogenated Volatile Organic Compounds
VOCs = Volatile Organic Compounds
ppb = Parts per billion
ND = Not detected

ANALYTIC LAB:

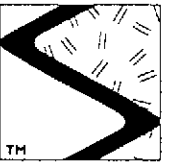
All samples analyzed by Precision Analytic Laboratory, Inc. of Richmond, California.

ANALYTIC METHODS:

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

NOTES:

- ¹ 1,4-Dichlorobenzene was detected at 0.34 ppb. Other HVOCs not detected at detection limits of 0.2 to 2.0 ppb.
- ² 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.
- ³ 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.
- ⁴ 1,4-Dichlorobenzene was detected at 0.21 ppb. Other HVOCs not detected at detection limits of 0.2 to 2.2 ppb.
- ⁵ Chlorobenzene was detected at 1.7 ppb. Other HVOCs not detected at detection limits of 0.2 to 2.2 ppb.
- ⁶ Chlorobenzene was detected at 1.6 ppb. Other HVOCs not detected at detection limits of 0.2 to 2.2 ppb.
- ⁷ 1,4-Dichlorobenzene was detected at 0.26 ppb. Other HVOCs not detected at detection limits of 0.2 to 2.0 ppb.
- ⁸ 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.
- ⁹ Other HVOCs not detected at detection limits of 0.2 to 2.0 ppb.
- ¹⁰ Benzene, toluene, ethylbenzene and xylene results are included on Table 1. Other VOCs not detected at detection limits of 2 to 50 ppb.
- ¹¹ Benzene, toluene, ethylbenzene and xylene results are included on Table 1. Other VOCs not detected at detection limits of 1 to 7 ppb.
- ¹² 1,2-dichloropropane was detected at 8.0 ppb.
- ¹³ Chlorobenzene was detected at 7.3 ppb.
- ¹⁴ Other HVOCs were not detected at a detection limit of 0.5 ppb.



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APPENDIX C
SIERRA ENVIRONMENTAL SERVICES
STANDARD OPERATING PROCEDURES



SES STANDARD OPERATING PROCEDURE GROUND WATER SAMPLING - QUARTERLY MONITORING

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).

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°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.

GWS-QMP.SOP



APPENDIX D
CHAIN OF CUSTODY DOCUMENT AND
LABORATORY ANALYTIC REPORTS

Direct bill Jon Legallet

Chain-of-Custody Record

Facility No. _____ Facility Address <u>5427 Telegraph, Oakland</u> Consultant Project Number <u>4-719-04</u> Consultant Name <u>SIERRA ENVIRONMENTAL SERVICES</u> Address <u>P.O. Box 2546, Martinez, CA 94553</u> Project Contact (Name) <u>Ed Morales</u> (Phone) <u>(510) 370-1280</u> (FAX Number) <u>(510) 370-7959</u>	Client Contact (Name) <u>Mr Jon Legallet</u> (Company) <u>Telegraph Business Properties</u> (Phone) <u>(415) 822-8255</u> Laboratory Name <u>Precision Analytical Labs</u> Samples Collected by (Name) <u>I. Lewis</u> Collection Date <u>04/07/95</u> Signature <u>[Signature]</u>
---	---

Laboratory Number	Sample Identification	# - size of Container(s)	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (yes or no)	ANALYSIS TO BE PERFORMED										Remarks			
								BTEX + TPHs (602/8020 + 8015/5030)	TPHs (8015/8650/9540) 5030	Oil and Grease (Non-polar) (5520 B/E/F)	Halogenated Hydrocarbons (6017/8010)	Volatile Organic Compounds (624/8240)	Total Lead (AA)	Metals: Cd, Cr, Ni, Pb, Zn (ICAP or AA)	Organic lead (DHS LUFT)						
	TB/LD	2000's	W	G	-	HCl	Y	X													Analyze ↓ EC residue in MW.2
	BB	2000's			1455	HCl		X													
	MW-1	6000's			1349	HCl		X		X											
	↓	1 l			1349	NONE			X												
	MW-3	6000's			1425	HCl		X		X											
	↓	1 l			1425	NONE			X												
	MW-2	6000's			1519	HCl		X		X											
	↓	1 l	↓	↓	1519	NONE	↓		X												

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>SES</u>	Date/Time <u>4/11/95 1545</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>Precision</u>	Date/Time <u>4/11/95 1545 PM</u>	Turn Around Time (Circle One) 24 hours 48 hours 5 days <u>10 days</u> As Contracted
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received for Laboratory by (Signature)		Date/Time	

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: 04/11/95
Date Extracted: 04/18/95
Date Analyzed: 04/18/95
Date Reported: 04/21/95
Job #: 76811

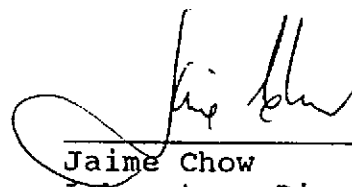
Project: #4-719-04
Matrix: Water

Total Petroleum Hydrocarbon Analysis
DHS Extraction Method (LUFT)
mg/L

<u>Lab I.D.</u>	<u>Client I.D.</u>	<u>Stoddard</u>	<u>MDL</u>
76811-1	MW-1	0.50	0.05
76811-2	MW-2	70	0.50
76811-3	MW-3	0.60	0.05

QA/QC: Method Spike Recovery for Stoddard: 70%
Method Spike Duplicate Recovery for Stoddard: 76%

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



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: 04/11/95
Date Analyzed: 04/17/95
Date Reported: 04/21/95
Job #: 76811

Project: #4-719-04
Matrix: Water

Aromatic Volatile Hydrocarbon Analysis
EPA Method 602
µg/L

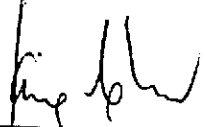
<u>Lab I.D.</u>	<u>Client I.D.</u>	<u>Benzene</u>	<u>MDL</u>	<u>Toluene</u>	<u>MDL</u>
76811-1	MW-1	3.2	0.3	1.1	0.3
76811-2	MW-2	17.5	0.6	11	0.6
76811-3	MW-3	32.7	0.3	1.7	0.3
76811-4	TB/LB	ND<0.3	0.3	ND<0.3	0.3
76811-5	BB	ND<0.3	0.3	ND<0.3	0.3

<u>Lab I.D.</u>	<u>Client I.D.</u>	<u>Ethyl- benzene</u>	<u>MDL</u>	<u>Xylenes</u>	<u>MDL</u>
76811-1	MW-1	ND<0.3	0.3	1.7	0.3
76811-2	MW-2	ND<0.6	0.6	74.6	0.6
76811-3	MW-3	4.7	0.3	1.9	0.3
76811-4	TB/LB	ND<0.3	0.3	ND<0.3	0.3
76811-5	BB	ND<0.3	0.3	ND<0.3	0.3

QA/QC: Matrix Spike Recovery for Benzene: 92%
Matrix Spike Recovery for Toluene: 96%
Matrix Spike Recovery for Chlorobenzene: 113%

Matrix Spike Duplicate Recovery for Benzene: 91%
Matrix Spike Duplicate Recovery for Toluene: 94%
Matrix Spike Duplicate Recovery for Chlorobenzene: 112%

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


Jaime Chow
Laboratory Director

JC/dwc

OUTSTANDING QUALITY AND SERVICE
CALIFORNIA STATE CERTIFIED LABORATORY

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: 04/11/95
Date Extracted: 04/18/95
Date Analyzed: 04/18/95
Date Reported: 04/21/95
Job #: 76811

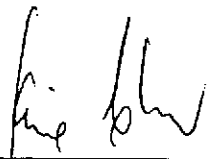
Project: #4-719-04
Matrix: Water

Total Petroleum Hydrocarbon Analysis
DHS Extraction Method (LUFT)
mg/L

<u>Lab I.D.</u>	<u>Client I.D.</u>	<u>Diesel Range</u>	<u>MDL</u>
76811-1	MW-1	2.5	0.05
76811-2	MW-2	0.90	0.05
76811-3	MW-3	0.090	0.05

QA/QC: Matrix Spike Recovery for Diesel: 123%
Matrix Spike Duplicate Recovery for Diesel: 128%

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



Jaime Chow
Laboratory Director

JC/dwc

81177

CHAIN OF CUSTODY

TO (LAB): Superior

REPORT TO: PRECISION ANALYTICAL LAB, INC.
 4136 LAKESIDE DRIVE, RICHMOND, CA 94806
 PH: (510)222-3002 FAX: (510)222-1251

ATTN: JAIME CHOW

INVOICE TO: Telegraph Business Pro.
5427 Telegraph
Oakland, CA.
 Attn: Accounts Payable (Mrs. Don-Bequette)

ANALYSIS REQUESTED

REMARKS

(PLEASE USE
ON REPORT
& INVOICE)
LAB I. D. #

LAB I. D. #	DATE	TIME	MATRIX		CLIENT IDENTIFICATION	CALIFORNIA SCREEN BICASSAY (TITLE 22)	AMMONIA-350.3	ALKALINITY-310.1	CALCIUM EPA 601	NITRATE-300.0	ORGANIC LEAD	RESIDUAL CHLORINE-330.2	SETTLABLE SOLIDS	T.K.N.-331.4	T. O. C.-415.1	REMARKS	
			S	W													
76811-1	4/11/95	1349		✓	MW-1												
76811-2	4/11/95	1519		✓	MW-2			X									
76811-3	4/11/95	1445		✓	MW-3			X									
								X									

PREPARED BY: (Signature) [Signature] DATE/TIME 4-12-95 11:30 AM

RECEIVED BY: (Signature) [Signature] DATE/TIME 4/11/95 11:30 AM

PREPARED BY: (Signature) _____ DATE/TIME _____

RECEIVED BY: (Signature) _____ DATE/TIME _____

PREPARED BY: (Signature) _____ DATE/TIME _____

RECEIVED BY: (Signature) _____ DATE/TIME _____

TURN AROUND TIME: *24 HRS _____ *48 HRS _____ *72 HRS _____ *5 DAYS _____ *10 DAYS X * (SURCHARGE APPLIES)

SPECIAL NOTATIONS: Samples preserved with HCl



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

PRECISION ANALYTICAL LAB, INC.
4136 LAKESIDE DRIVE
RICHMOND, CA 94806

Date: April 14, 1995

Attn: JAIME CHOW

Laboratory Number : 81177

Project Number/Name : 76811

This report has been reviewed and
approved for release.

Christine Horn for
Senior Chemist
Account Manager

Certified Laboratories

825 Arnold Dr., Suite 114
Martinez, California 94553
(510) 229-1512 / fax (510) 229-1526

1555 Burke St., Unit 1
San Francisco, California 94124
(415) 647-2081 / fax (415) 821-7123

309 S. Cloverdale St., Suite B-24
Seattle, Washington 98108
(206) 763-2992 / fax (206) 763-8429



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

PRECISION ANALYTICAL LAB, INC.
Attn: JAIME CHOW

Project 76811
Reported on April 15, 1995

Halogenated Volatile Organics by EPA 601

Chronology

Laboratory Number 81177

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
76811-1	04/11/95	04/12/95	04/12/95	04/12/95	BD121.08	01
76811-2	04/11/95	04/12/95	04/12/95	04/12/95	BD121.08	02
76811-3	04/11/95	04/12/95	04/12/95	04/12/95	BD121.08	03

QC Samples

QC Batch #	QC Sample ID	Type	Ref.	Matrix	Extract.	Analyzed
BD121.08-01	Method Blank	MB		Water	04/12/95	04/12/95
BD121.08-02	Laboratory Spike	LS		Water	04/12/95	04/12/95
BD121.08-03	W-4	MS	81148-06	Water	04/12/95	04/12/95
BD121.08-04	W-4	MSD	81148-06	Water	04/12/95	04/12/95

Certified Laboratories

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Martinez, California 94553
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309 S. Cloverdale St., Suite B-24
Seattle, Washington 98108
(206) 763-2992 / fax (206) 763-8429



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

PRECISION ANALYTICAL LAB, INC.
Attn: JAIME CHOW

Project 76811
Reported on April 15, 1995

Halogenated Volatile Organics by EPA 601

LAB ID	Sample ID	Matrix	Dil. Factor	Moisture
81177-01	76811-1	Water	1.0	-
81177-02	76811-2	Water	1.0	-
81177-03	76811-3	Water	1.0	-

RESULTS OF ANALYSIS

Compound	81177-01		81177-02		81177-03	
	Conc.	RL	Conc.	RL	Conc.	RL
	ug/L		ug/L		ug/L	
Chloromethane	ND	0.5	ND	0.5	ND	0.5
Vinyl Chloride	ND	0.5	4.9	0.5	8.8	0.5
Bromomethane	ND	0.5	ND	0.5	ND	0.5
Chloroethane	ND	0.5	ND	0.5	ND	0.5
Trichlorofluoromethane	ND	0.5	ND	0.5	ND	0.5
1,1-Dichloroethene	ND	0.5	ND	0.5	ND	0.5
Dichloromethane	ND	0.5	ND	0.5	ND	0.5
t-1,2-Dichloroethene	ND	0.5	ND	0.5	ND	0.5
1,1-Dichloroethane	ND	0.5	4.3	0.5	ND	0.5
c-1,2-Dichloroethene	ND	0.5	18	0.5	13	0.5
Chloroform	ND	0.5	ND	0.5	ND	0.5
1,1,1-Trichloroethane	ND	0.5	ND	0.5	ND	0.5
Carbon tetrachloride	ND	0.5	ND	0.5	ND	0.5
1,2-Dichloroethane	0.5	0.5	1.4	0.5	0.7	0.5
Trichloroethene	ND	0.5	ND	0.5	ND	0.5
c-1,3-Dichloropropene	ND	0.5	ND	0.5	ND	0.5
1,2-Dichloropropane	ND	0.5	8.0	0.5	ND	0.5
t-1,3-Dichloropropene	ND	0.5	ND	0.5	ND	0.5
Bromodichloromethane	ND	0.5	ND	0.5	ND	0.5
1,1,2-Trichloroethane	ND	0.5	ND	0.5	ND	0.5
Tetrachloroethene	ND	0.5	0.8	0.5	ND	0.5
Dibromochloromethane	ND	0.5	ND	0.5	ND	0.5
Chlorobenzene	ND	0.5	ND	0.5	7.3	0.5
Bromoform	ND	0.5	ND	0.5	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5	ND	0.5	ND	0.5
1,3-Dichlorobenzene	ND	0.5	ND	0.5	ND	0.5
1,2-Dichlorobenzene	ND	0.5	ND	0.5	2.0	0.5
1,4-Dichlorobenzene	ND	0.5	ND	0.5	ND	0.5

>> Surrogate Recoveries (%) <<

4-Bromofluorobenzene	96	101	97
----------------------	----	-----	----



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

Halogenated Volatile Organics by EPA 601

Quality Assurance and Control Data

Laboratory Number: 81177

Method Blank(s)

BD121.08-01

Conc. RL

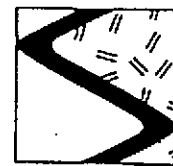
ug/L

Chloromethane	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	0.5
Chloroethane	ND	0.5
Trichlorofluoromethane	ND	0.5
1,1-Dichloroethene	ND	0.5
Dichloromethane	ND	0.5
t-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
c-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
c-1,3-Dichloropropene	ND	0.5
1,2-Dichloropropane	ND	0.5
t-1,3-Dichloropropene	ND	0.5
Bromodichloromethane	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5

>> Surrogate Recoveries (%) <<

4-Bromofluorobenzene 89

WATER LEVEL & PRODUCT MEASUREMENTS



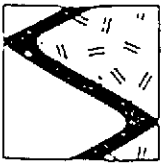
SIERRA

PROJECT NAME & NUMBER: 4-719.04
5427 Telegraph, Oakland

Date: 4/7/95
By: T. Lewis

Well ID	Time Measured	Depth to Product (ft)	Depth to Water (ft)	Total Depth	Comments: (well condition, odor, etc.)
mw-1	1305	—	5.96	19	9/16 2" J pipe good cond.
mw-3	1307	—	7.98	20	1/2" 2" J pipe Good cond.
mw-2	1309	—	9.84	26	9/16 2" J pipe Good cond.

~~_____~~



SIERRA

WATER SAMPLING DATA

Job Name Tele. Business Park Job Number 4-719-04 Sampler T-1
 Well Number TB/LD Date 04/07/95 Well Diameter 2"
 Sample Point Location/Description _____ Well Depth (spec.) _____
 Depth to Water (static) _____ Well Depth (sounded) _____
 Initial height of water in casing _____ Volume _____ gallons
 Volume to be purged _____ gallons
 Purged With _____ Sampled With _____
 Pumped or Bailed Dry? Yes No Time _____ After _____ gallons
 Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
 r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 7.48 gal/ft³
~~V₁ casing = 0.163 gal/ft~~
 V₁ casing = 0.367 gal/ft
 V₂ casing = 0.653 gal/ft
 V₃ casing = 0.826 gal/ft
 V₄ casing = 1.47 gal/ft
 V₅ casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm

SAMPLES COLLECTED Time _____ Total volume purged (gal.) _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
TB/LD	3	1	—	HCl	Y	PAL	BTEX
	3	1	—	HCl	Y	PAL	SD10
	1	2-2	—	NONE	Y	PAL	STODARD

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
 5 = Other _____; 6 = Other _____



WATER SAMPLING DATA

Job Name Tele. Business Park Job Number 4-719-04 Sampler T-2
 Well Number BB Date 04/07/95 Well Diameter 2"
 Sample Point Location/Description _____ Well Depth (spec.) _____
 Depth to Water (static) _____ Well Depth (sounded) _____
 Initial height of water in casing _____ Volume _____ gallons
 Volume to-be-purged _____ gallons
 Purged With _____ Sampled With _____
 Pumped or Bailed Dry? Yes No Time _____ After _____ gallons
 Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
 r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 7.48 gal/ft^3
 ~~$V_{casing} = 0.163 \text{ gal/ft}$~~
 $V_{3"} \text{ casing} = 0.367 \text{ gal/ft}$
 $V_{4"} \text{ casing} = 0.653 \text{ gal/ft}$
 $V_{4.5"} \text{ casing} = 0.826 \text{ gal/ft}$
 $V_{6"} \text{ casing} = 1.47 \text{ gal/ft}$
 $V_{8"} \text{ casing} = 2.61 \text{ gal/ft}$

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm

SAMPLES COLLECTED Time 1455 Total volume purged (gal.) _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
<u>BB</u>	<u>3</u>	<u>1</u>	<u>—</u>	<u>HCl</u>	<u>Y</u>	<u>PAL</u>	<u>BTEX</u>
	3	1	—	HCl	Y	PAL	SD10
	1	2	—	NONE	Y	PAL	STODART

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
 5 = Other _____; 6 = Other _____



WATER SAMPLING DATA

Job Name Tec. Business Park Job Number 4-719-04 Sampler T-2
 Well Number MW-1 Date 04/07/95 Well Diameter 2"
 Sample Point Location/Description N side Parking area Well Depth (spec.) 19
 Depth to Water (static) 5.96 Well Depth (sounded) _____
 Initial height of water in casing 13.04 Volume 2.1 gallons
 Volume to be purged 8.5 gallons
 Purged With Pump Sampled With Teflon bailer
 Pumped or Bailed Dry? Yes No Time _____ After _____ gallons
 Water level at sampling 7.55 Percent Recovery _____

Formulas/Conversions
 r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 $V_{2.5" \text{ casing}} = 0.163 \text{ gal/ft}$
 $V_{3" \text{ casing}} = 0.367 \text{ gal/ft}$
 $V_{4" \text{ casing}} = 0.653 \text{ gal/ft}$
 $V_{4.5" \text{ casing}} = 0.826 \text{ gal/ft}$
 $V_{5" \text{ casing}} = 1.47 \text{ gal/ft}$
 $V_{6" \text{ casing}} = 2.61 \text{ gal/ft}$

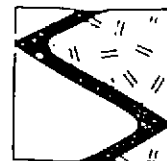
CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°F)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
1327	1329	3	3	7.10	67	510	
	1330	3	6	6.62	67	950	
	1332	3	9	6.69	67	1000	

SAMPLES COLLECTED Time 1349 Total volume purged (gal.) 9
 Water color clear Odor none
 Description of sediments or material in sample: light tan
 Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
MW-1	3	1	—	HCl	Y	PAL	BTEX
MW-	3	1	—	HCl	Y	PAL	8010
MW-1	1	2e	—	NONE	Y	PAL	STODPAR210

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
 5 = Other _____; 6 = Other _____



SIERRA

WATER SAMPLING DATA

Job Name Tele. Business Park Job Number 4-719-04 Sampler T-2
 Well Number MW-2 Date 04/07/95 Well Diameter 2"
 Sample Point Location/Description NE side of building Well Depth (spec.) 26
 Depth to Water (static) 9.84' Well Depth (sounded) _____
 Initial height of water in casing 16.16 Volume 2.6 gallons
 Volume to be purged 10.5 gallons
 Purged With Pump Sampled With teflon bailer
 Pumped or Bailed Dry? Yes No Time _____ After _____ gallons
 Water level at sampling 12.82 Percent Recovery _____

Formulas/Conversions
 r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 7.48 gal/ft^3
 $V_{2"} \text{ casing} = 0.163 \text{ gal/ft}$
 $V_{3"} \text{ casing} = 0.367 \text{ gal/ft}$
 $V_{4"} \text{ casing} = 0.653 \text{ gal/ft}$
 $V_{4.5"} \text{ casing} = 0.826 \text{ gal/ft}$
 $V_{5"} \text{ casing} = 1.47 \text{ gal/ft}$
 $V_{6"} \text{ casing} = 2.61 \text{ gal/ft}$

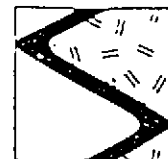
CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
1444	1446	4	4	6.71	67	1660	
	1448	4	8	6.72	67	1700	
	1450	3	11	6.76	67	1680	

SAMPLES COLLECTED Time 1519 Total volume purged (gal.) (11)
 Water color cloudy Odor very strong dry cleaning solvent odor
 Description of sediments or material in sample: light, tan
 Additional Comments: Heavy Efferves. NOC

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
mw-2	3	1	—	HCl	Y	PAL	BTEX
mw-2	3	1	—	HCl	Y	PAL	8010
mw-2	1	2e	—	NONE	Y	PAL	STOOPARU

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
 5 = Other _____; 6 = Other _____



SIERRA

WATER SAMPLING DATA

Job Name Tele. Business Park Job Number 4-719-04 Sampler T-2
 Well Number MW-3 Date 04/07/95 Well Diameter 2"
 Sample Point Location/Description nw side of building Well Depth (spec.) 20
 Depth to Water (static) 7.98 Well Depth (sounded) _____
 Initial height of water in casing 12.02 Volume 1.95 gallons
 Volume to be purged 7.8 gallons
 Purged With DWA Sampled With teflon bucket
 Pumped or Bailed Dry? Yes No Time _____ After _____ gallons
 Water level at sampling 8.15 Percent Recovery _____

Formulas/Conversions
 r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 7.48 gal/ft^3
 $V_{2"} \text{ casing} = 0.163 \text{ gal/ft}$
 $V_{3"} \text{ casing} = 0.367 \text{ gal/ft}$
 $V_{4"} \text{ casing} = 0.653 \text{ gal/ft}$
 $V_{4.5"} \text{ casing} = 0.826 \text{ gal/ft}$
 $V_{6"} \text{ casing} = 1.47 \text{ gal/ft}$
 $V_{8"} \text{ casing} = 2.61 \text{ gal/ft}$

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
1400	1402	3	3	6.91	67	640	
	1403	2.5	5.5	6.90	67	610	
	1405	2.5	8	6.90	67	610	

SAMPLES COLLECTED Time 1405 Total volume purged (gal.) 8
 Water color clear Odor light hydrogen
 Description of sediments or material in sample: none
 Additional Comments: _____

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (init)	Analysis Requested
MW-3	3	1	—	HCl	Y	PAL	BTEX
MW-3	3	1	—	HCl	Y	PAL	8010
MW-3	1	2e	—	NONE	Y	PAL	STODPARIS

Container Type Codes: 1 = 40 ml clear VOA/teflon septa; 2 = Brown glass/teflon lined cap (specify size);
 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
 5 = Other _____; 6 = Other _____