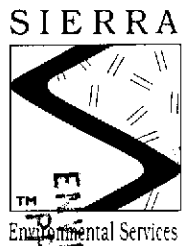


STID 3/60

May 15, 1996

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

96 MAY 20 PM 1:17



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

Dear Mr. Legallet:

Sierra Environmental Services (SES) is pleased to submit this report summarizing the results of the ground water sampling at Telegraph Business Park, located at 5427 Telegraph Avenue in Oakland, California (Figure 1, Appendix A).

On April 26, 1996, 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 26, 1996 in accordance with SES Standard Operating Procedure - Ground Water Sampling (Appendix C). All analyses were performed by Superior Analytical Laboratory, of Martinez, California. Analytic results for ground water are presented in Tables 2 (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.

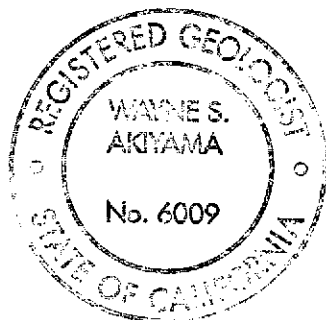


Jon Legallet
May 15, 1996
SES Project #4-719-04

Page 2

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

Sincerely,
Sierra Environmental Services



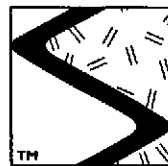
David M. Beardsley
David M. Beardsley
Senior Environmental Technician

Wayne S. Akiyama
Wayne S. Akiyama R.G. R.E.A.
Senior Hydrogeologist #6009

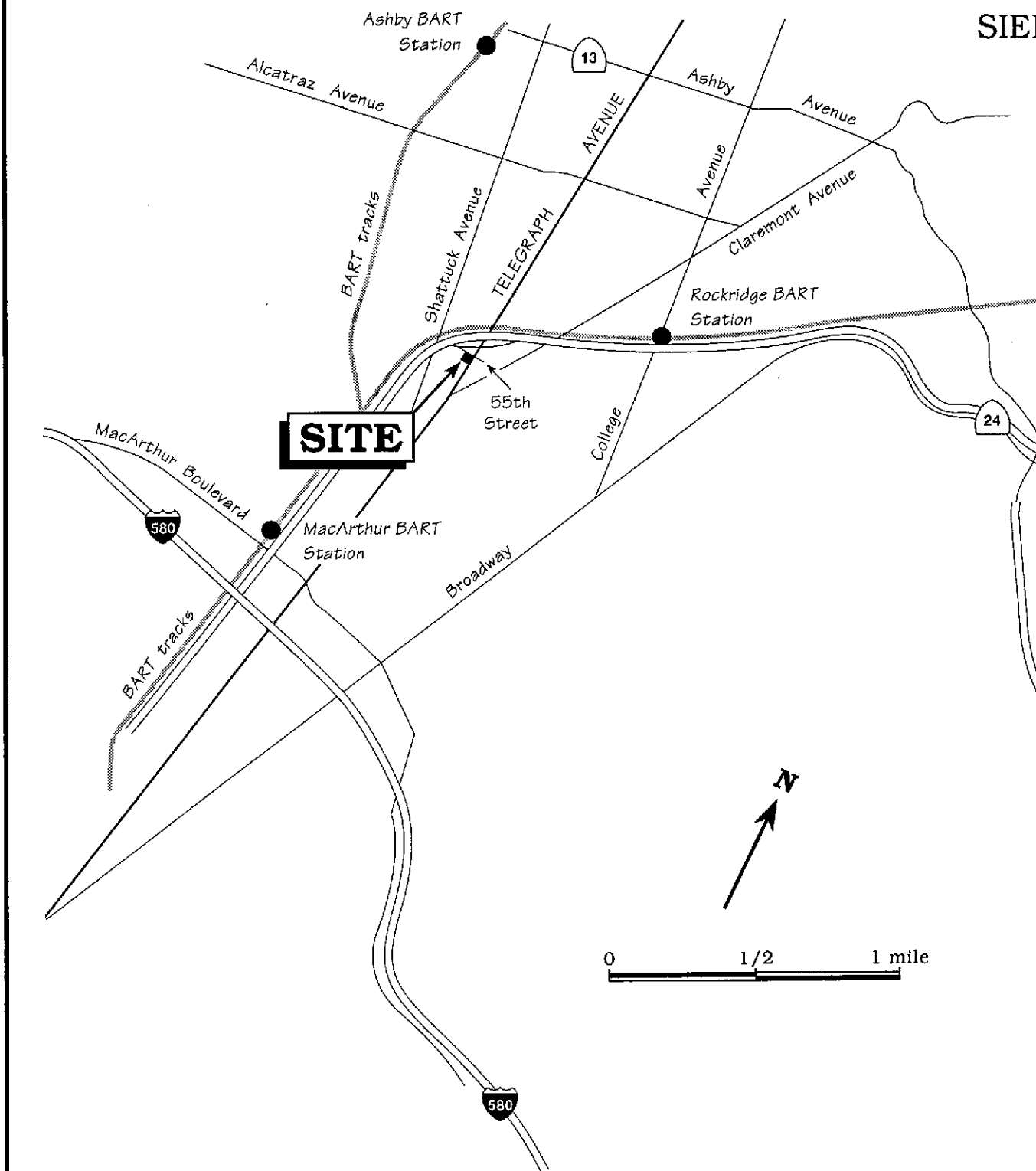
Attachments: Figures
Tables
SES Standard Operating Procedure
Chain of Custody Document and Laboratory Analytic Reports
Water Sampling Forms

cc: Susan Hugo - Alameda County Health Care Services Agency

DMB/WSA/db
71904QM.AP6

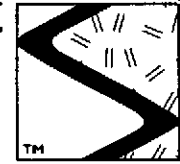


SIERRA



Base map ref: California State Automobile Association (AAA)

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



SIERRA

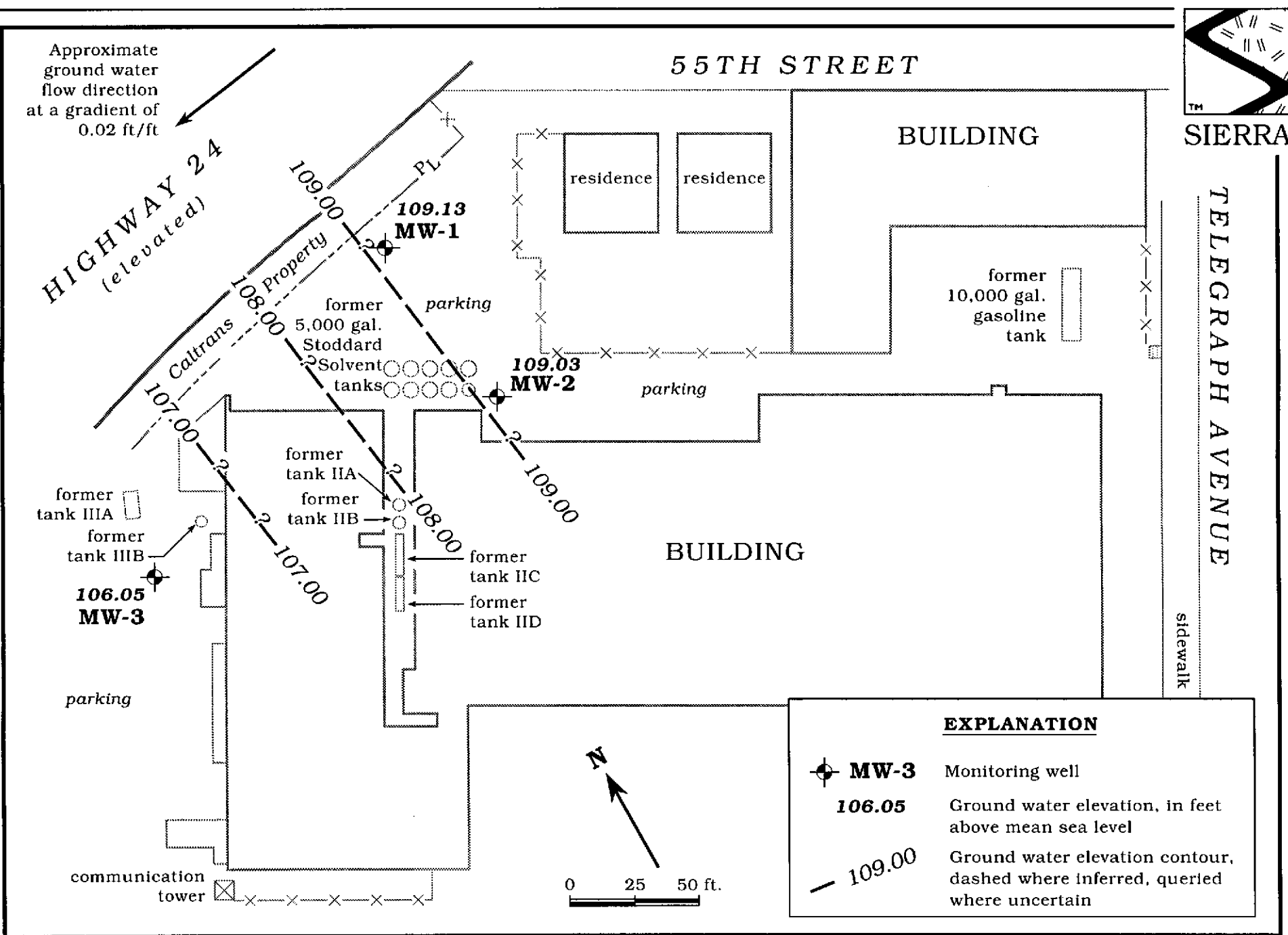
TELEGRAPH AVENUE

sidewalk

55TH STREET

Approximate ground water flow direction at a gradient of 0.02 ft/ft

HIGHWAY 24 (elevated)



EXPLANATION

MW-3

Monitoring well

106.05

Ground water elevation, in feet above mean sea level

109.00

Ground water elevation contour, dashed where inferred, queried where uncertain

Figure 2. Monitoring Well Location and Ground Water Elevation Contour Map - April 26, 1996 - 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			
	7/26/95	7.19		107.86	0			
	10/25/95	7.74		107.31	0			
	1/29/96	4.67		110.38	0			
	4/26/96	5.92		109.13	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			
	7/26/95	10.55		107.05	0			
	10/25/95	10.15		107.45	0			
	1/29/96	9.35		108.25	0			
	4/26/96	8.57		109.03	0			



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

Well ID	Date Measured	DTW (ft)	TOC (ft)	GWE (msl)	Product Thickness* (ft)	Screen Interval <i><-----feet below grade-----></i>	Sand Pack Interval	Bentonite/Grout Interval
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 ¹	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			
	7/26/95	11.33		103.81	0			
	10/25/95	12.29		102.85	0			
	1/29/96	6.28		108.86	0			
	4/26/96	9.09		106.05				

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.

¹ Well resurveyed March 4, 1994 by Ronald C. Miller, Professional Engineer #15816.



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	-----ppb-----				
					O&G	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



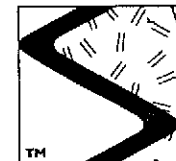
Table 2. Analytic Results for Ground Water - Petroleum Hydrocarbons - Telegraph Business Park, 5427 Telegraph Avenue, Oakland, California (continued)

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
	7/26/95 ^{2,3}	8015/8020	---	1,500	---	3.1	3.2	12	16
	10/25/95	8015/8020	---	660	---	0.6	1.4	20	14
	1/29/96	5030/8015/8020	<5.0	2,500	---	1.8	0.7	8.0	13
	4/26/96	5030/8015/8020	---	4,600	---	<2.5	<2.5	9.5	21
	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
7/26/95		8015/8020	---	21,000	---	17	<0.5	26	94
10/25/95		8015/8020	---	38,000	---	63	70	440	1100
1/29/96		5030/8015/8020	<5.0	74,000	---	7.4	8.6	66	330
4/26/96		5030/8015/8020	---	81,000	---	<250	<250	3,100	15,000
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
	7/26/95 ³	8015/8020	---	1,200	---	98	3.2	12	16
	10/25/95	8015/8020	---	2,300	---	32	3.4	4.7	9.6
	1/29/96	5030/8015/8020	<5.0	1100	---	22	1.2	6.4	12
	4/26/96	5030/8015/8020	---	1,300	---	5.6	0.6	4.6	14
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



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
	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
	7/26/95	8020	---	---	---	<0.5	<0.5	<0.5	<0.5
	10/25/95	8020	---	---	---	<0.5	<0.5	<0.5	<0.5
	1/29/96	8020	---	---	---	<0.5	<0.5	<0.5	<0.5
	4/26/96	8020	---	---	---	<0.5	<0.5	<0.5	<0.5
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
	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
	7/26/95	8020	---	---	---	<0.5	<0.5	<0.5	<0.5
	10/25/95	8020	---	---	---	<0.5	<0.5	<0.5	<0.5
	1/29/96	---	---	---	---	---	---	---	---
	4/26/96	8020	---	---	---	<0.5	<0.5	<0.5	<0.5



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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	B	T	E	X
-----------	--------------	-----------------	--------	------------------	-----	---	---	---	---

-----ppb----->

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:

Samples were analyzed by Percision Analytical Laboratory, of Richmond, California, prior to July 1995.

Samples were analyzed by Chromolab Environmental Services, of Pleasanton, California July 26, 1995.

Samples were analyzed by Superior Analytical Laboratory of Martinez, California from October, 1995 to present.

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

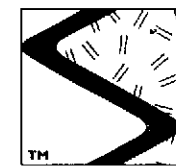
NOTES:

* 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.

² Unknown hydrocarbons in the diesel range were observed in sample.

³ Unknown compounds in the motor oil range were observed in sample.



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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	---
	7/26/95	8010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND ¹⁴	---
	10/25/95	8010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---
	1/29/96	8010	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND
4/26/96	8010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND
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 ³	---
	7/7/94	8010	<1	3.4	<0.2	15	<0.1	0.60	0.60	<2	0.40	ND ⁸	---
	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}	---
	7/26/95	8010	8.1	5.1	<0.5	20	<0.5	<0.5	<0.5	1.6	<0.5	ND ¹⁴	---



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

Sample ID	Date Sampled	Analytic Method	←-----ppb-----→										
			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
MW-2	10/25/95	8010	17	5.4	<0.5	40	<0.5	<0.5	1.7	9.4	<0.5	ND ¹⁶	---
	1/29/96	8010	4.2	4.1	<0.5	27	<0.5	<0.5	1.3	0.9	0.7	ND	ND ¹⁸
	4/26/96	8010	3.3	0.8	<0.5	4.4	<0.5	<0.5	<0.5	<0.5	1.0	¹⁹	ND
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}	---
	7/26/95	8010	9.6	<0.5	<0.5	6.3	<0.5	<0.5	<0.5	<0.5	<0.5	ND ¹⁵	---
	10/25/95	8010	4.2	<0.5	<0.5	4.1	<0.5	<0.5	<0.5	<0.5	1.6	ND ¹⁷	---
	1/29/96	8010	2.0	<0.5	<0.5	2.8	<0.5	<0.5	<0.5	<0.5	1.5	¹⁶	¹⁸
4/26/96	8010	3.6	<0.5	<0.5	3.4	<0.5	<0.5	<0.5	<0.5	2.7	²⁰	ND	

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 Chromolab Environmental Services, of Pleasanton, California.

ANALYTIC METHODS:

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

NOTES:

- 1,4-Dichlorobenzene was detected at 0.34 ppb. Other HVOCs not detected at detection limits of 0.2 to 2.0 ppb.
- 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.



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

NOTES:

- 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.
- ¹⁵ Chlorobenzene was detected at 4.0 ppb.
- ¹⁶ 1,2 Dichloropropane was detected at 9.0 ppb.
- ¹⁷ Chlorobenzene was detected at 1.7 ppb.
- ¹⁸ Benzene, toluene, ethylbenzene and xylene results included in Table 1.
- ¹⁹ 1,2-Dichloropropane was detected at 2.0 ppb.
- ²⁰ Chlorobenzene was detected at 6.1 ppb.
-



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 three well casing volumes of water using a steam-cleaned PVC bailer, or a pre-cleaned pump. Temperature, Ph and electrical conductivity are measured during purging. Purging is continued until these parameters have stabilized for consecutive readings.

Ground water samples are collected from the wells with pre-cleaned Disposable bailers or Teflon bailers. The Teflon bailers are first cleaned with a Liquinox solution, then double rinsed to remove any residuals. 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 of 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-QMP2.SOP

Bill DIRECTLY TO JON LEGALLET

NORMANDY ASSOC.

21257

Chain-of-Custody Record

Facility No. _____
 Facility Address 5427 TELEGRAPH, OAK.
 Consultant Project Number 4-719-04
 Consultant Name SIERRA ENVIRONMENTAL SERVICES
 Address P.O. Box 2546, Martinez, CA 94553
 Project Contact (Name) WAYNE AKIYAMA
 (Phone) (510) 370-1280
 (FAX Number) (510) 370-7959
 Client Contact (Name) JON LEGALLET
 (Company) NORMANDY ASSOC.
 (Phone) _____
 Laboratory Name SAL
 Samples Collected by (Name) JOE CARTER DAVID BORDA
 Collection Date 4-26-95
 Signature Joe Carter

Laboratory Number	Sample Identification	# - size of Container(s)	Matrix S = Soil W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (yes or no)	ANALYSIS TO BE PERFORMED										Remarks
								BTEX + TPH Gas (802/8020 + 8015/5030)	TPH Diesel (8015/3550/3510)	Oil and Grease (Non-polar) (5520 B/E/F)	Halogenated Hydrocarbons (801/8010)	Volatile Organic Compounds (624/8240)	Total Lead (AA)	Metals: Cd, Cr, Ni, Pb, Zn (ICAP or AA)	Organic lead (DHS LUFT)	TPH STORED		
	TB-LB	2 VOA	W	G	-	HCL	Y	✓										ANALYZE IN ORDER SHOWN
	MW-3	6 VOA			1140	↓		✓				✓						
	MW-3	2 LTR			1140	NONE												
	MW-1	6 VOA			1020	HCL		✓				✓						
	↓	2 LTR			1020	NONE												
	MW-2	6 VOA			1115	HCL		✓										
	↓	2 LTR			1115	NONE												
	BS	3 VOA	↓	↓	-	HCL	↓	✓										

Relinquished By (Signature) <u>Joe Carter</u>	Organization <u>SAL</u>	Date/Time _____	Received By (Signature) _____	Organization _____	Date/Time _____	Turn Around Time (Circle One) 24 hours 48 hours <u>5 days</u> 10 days As Contracted
Relinquished By (Signature) <u>[Signature]</u>	Organization <u>SAL</u>	Date/Time <u>4-26-95/1440</u>	Received By (Signature) _____	Organization _____	Date/Time _____	
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received for Laboratory by (Signature) <u>R. B...</u>	Organization <u>SAL</u>	Date/Time <u>4/26/95 1441</u>	



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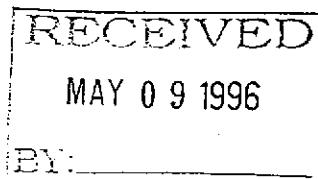
Analytical Laboratory

Sierra Environmental - Martinez
P.O. Box 2546
Martinez, CA 94553

Attn: WAYNE AKIYAMA

Laboratory Number : 21257

Date: May 5, 1996



Project Number/Name : 4-719-04
Facility/Site : 5427 TELEGRAPH, OAK.

This report has been reviewed and
approved for release.


Project Manager

Customer Service: (800) 521-6109 • Laboratory: (510) 313-0850 • Facsimile: (510) 229-0916
Post Office Box 2648 • 835 Arnold Drive • Suite #106 • Martinez, California 94553
1555 Burke Street • Suite A • San Francisco, California 94124



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Analytical Laboratory

Sierra Environmental - Martinez
Attn: WAYNE AKIYAMA

Project 4-719-04
Reported on May 2, 1996

Halogenated Volatile Organics by EPA SW-846 Methods 5030/8010

Chronology

Laboratory Number 21257

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
MW-3	04/26/96	04/26/96	05/01/96	05/01/96	CD301.07	02
MW-1	04/26/96	04/26/96	05/01/96	05/01/96	CE011.07	03
MW-2	04/26/96	04/26/96	05/01/96	05/01/96	CD301.07	04

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CD301.07-01	Method Blank	MB	Water	04/30/96	04/30/96
CD301.07-02	Laboratory Spike	LS	Water	04/30/96	04/30/96
CD301.07-03	R18 851N	MS 21260-01	Water	04/30/96	04/30/96
CD301.07-04	R18 851N	MSD 21260-01	Water	04/30/96	04/30/96
CE011.07-01	Method Blank	MB	Water	05/01/96	05/01/96
CE011.07-02	Laboratory Spike	LS	Water	05/01/96	05/01/96
CE011.07-03	MW-2	MS 21257-04	Water	05/01/96	05/01/96
CE011.07-04	MW-2	MSD 21257-04	Water	05/01/96	05/01/96



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Sierra Environmental - Martinez
Attn: WAYNE AKIYAMA

Project 4-719-04
Reported on May 2, 1996

Halogenated Volatile Organics by EPA SW-846 Methods 5030/8010

LAB ID	Sample ID	Matrix	Dil. Factor	Moisture
21257-02	MW-3	Water	1.0	-
21257-03	MW-1	Water	1.0	-
21257-04	MW-2	Water	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	21257-02		21257-03		21257-04	
	Conc.	RL	Conc.	RL	Conc.	RL
	ug/L		ug/L		ug/L	
Chloromethane	ND	0.5	ND	0.5	ND	0.5
Vinyl Chloride	3.6	0.5	ND	0.5	3.3	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	ND	0.5	0.8	0.5
c-1,2-Dichloroethene	3.4	0.5	ND	0.5	4.4	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	ND	0.5	ND	0.5	ND	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	ND	0.5	2.0	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	ND	0.5	ND	0.5
Dibromochloromethane	ND	0.5	ND	0.5	ND	0.5
Chlorobenzene	6.1	0.5	ND	0.5	ND	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	2.7	0.5	ND	0.5	1.0	0.5
1,4-Dichlorobenzene	ND	0.5	ND	0.5	ND	0.5

>> Surrogate Recoveries (%) <<

Bromochloromethane	86	67	71
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Analytical Laboratory

Halogenated Volatile Organics by EPA SW-846 Methods 5030/8010

Quality Assurance and Control Data

Laboratory Number: 21257

Method Blank(s)

CD301.07-01	CE011.07-01
Conc. RL	Conc. RL
ug/L	ug/L

	CD301.07-01	CE011.07-01
	Conc. RL	Conc. RL
	ug/L	ug/L
Chloromethane	ND 0.5	ND 0.5
Vinyl Chloride	ND 0.5	ND 0.5
Bromomethane	ND 0.5	ND 0.5
Chloroethane	ND 0.5	ND 0.5
Trichlorofluoromethane	ND 0.5	ND 0.5
1,1-Dichloroethene	ND 0.5	ND 0.5
Dichloromethane	ND 0.5	ND 0.5
t-1,2-Dichloroethene	ND 0.5	ND 0.5
1,1-Dichloroethane	ND 0.5	ND 0.5
c-1,2-Dichloroethene	ND 0.5	ND 0.5
Chloroform	ND 0.5	ND 0.5
1,1,1-Trichloroethane	ND 0.5	ND 0.5
Carbon tetrachloride	ND 0.5	ND 0.5
1,2-Dichloroethane	ND 0.5	ND 0.5
Trichloroethene	ND 0.5	ND 0.5
c-1,3-Dichloropropene	ND 0.5	ND 0.5
1,2-Dichloropropane	ND 0.5	ND 0.5
t-1,3-Dichloropropene	ND 0.5	ND 0.5
Bromodichloromethane	ND 0.5	ND 0.5
1,1,2-Trichloroethane	ND 0.5	ND 0.5
Tetrachloroethene	ND 0.5	ND 0.5
Dibromochloromethane	ND 0.5	ND 0.5
Chlorobenzene	ND 0.5	ND 0.5
Bromoform	ND 0.5	ND 0.5
1,1,2,2-Tetrachloroethane	ND 0.5	ND 0.5
1,3-Dichlorobenzene	ND 0.5	ND 0.5
1,2-Dichlorobenzene	ND 0.5	ND 0.5
1,4-Dichlorobenzene	ND 0.5	ND 0.5

>> Surrogate Recoveries (%) <<

Bromochloromethane	93	96
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Halogenated Volatile Organics by EPA SW-846 Methods 5030/8010

Quality Assurance and Control Data

Laboratory Number: 21257

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
CD301.07 02 / - Laboratory Control Spikes						
1,1-Dichloroethene		20	22	110	50-189	
Trichloroethene		20	21	105	53-161	
Chlorobenzene		20	22	110	57-171	
>> Surrogate Recoveries (%) <<						
Bromochloromethane				87	50-125	
For Water Matrix (ug/L)						
CE011.07 02 / - Laboratory Control Spikes						
1,1-Dichloroethene		20	22	110	50-189	
Trichloroethene		20	21	105	53-161	
Chlorobenzene		20	22	110	57-171	
>> Surrogate Recoveries (%) <<						
Bromochloromethane				80	50-125	
For Water Matrix (ug/L)						
CD301.07 03 / 04 - Sample Spiked: 21260 - 01						
1,1-Dichloroethene	ND	20	20/21	100/105	50-189	5
Trichloroethene	ND	20	20/21	100/105	53-161	5
Chlorobenzene	ND	20	22/22	110/110	57-171	0
>> Surrogate Recoveries (%) <<						
Bromochloromethane				97/88	50-125	
For Water Matrix (ug/L)						
CE011.07 03 / 04 - Sample Spiked: 21257 - 04						
1,1-Dichloroethene	ND	20	21/21	105/105	50-189	0



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Halogenated Volatile Organics by EPA SW-846 Methods 5030/8010

Quality Assurance and Control Data

Laboratory Number: 21257

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
Trichloroethene	ND	20	20/21	100/105	53-161	5
Chlorobenzene	ND	20	21/21	105/105	57-171	0
>> Surrogate Recoveries (%) <<						
Bromochloromethane				80/75	50-125	

Definitions:

ND = Not Detected

RL = Reporting Limit

NA = Not Analysed

RPD = Relative Percent Difference

ug/L = parts per billion (ppb)

mg/L = parts per million (ppm)

ug/kg = parts per billion (ppb)

mg/kg = parts per million (ppm)



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Sierra Environmental - Martinez
Attn: WAYNE AKIYAMA

Project 4-719-04
Reported on April 29, 1996

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Chronology

Laboratory Number 21257

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
MW-3	04/26/96	04/26/96	04/26/96	04/27/96	CD262.21	02
MW-1	04/26/96	04/26/96	04/26/96	04/27/96	CD262.21	03
MW-2	04/26/96	04/26/96	04/26/96	04/27/96	CD262.21	04

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CD262.21-01	Method Blank	MB	Water	04/26/96	04/26/96
CD262.21-02	Laboratory Spike	LS	Water	04/26/96	04/26/96
CD262.21-03	Laboratory Spike Duplicate	LSD	Water	04/26/96	04/26/96



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Project 4-719-04
Reported on April 29, 1996

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
21257-02	MW-3	Water	1.0	-
21257-03	MW-1	Water	5.0	-
21257-04	MW-2	Water	20.0	-

R E S U L T S O F A N A L Y S I S

Compound	21257-02		21257-03		21257-04	
	Conc.	RL	Conc.	RL	Conc.	RL
	ug/L		ug/L		ug/L	
Stoddard	1300	50	4600	250	81000	1000

>> Surrogate Recoveries (%) <<
Tetracosane

84 83 68



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Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number: 21257
Method Blank(s)

CD262.21-01
Conc. RL
ug/L

Stoddard	ND	50
Diesel:	ND	50

>> Surrogate Recoveries (%) <<
Tetracosane 111



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Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number: 21257

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
----------	-----------------	-----------	------------	---------------	-------------	----------

For Water Matrix (ug/L)
CD262.21 02 / 03 - Laboratory Control Spikes

Diesel:		1000	700/800	70/80	50-150	13
>> Surrogate Recoveries (%) <<						
Tetracosane				107/104	50-150	

Definitions:

ND = Not Detected

RL = Reporting Limit

NA = Not Analysed

RPD = Relative Percent Difference

ug/L = parts per billion (ppb)

mg/L = parts per million (ppm)

ug/kg = parts per billion (ppb)

mg/kg = parts per million (ppm)



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Sierra Environmental - Martinez
Attn: WAYNE AKIYAMA

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MAY 09 1996

Project 4-719-04
Reported on May 5, 1996
Revised on May 8, 1996

~~BY:~~
Volatile Aromatic Hydrocarbons by EPA SW-846 5030/8020

Chronology

Laboratory Number 21257

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
TB-LB	04/26/96	04/26/96	04/29/96	04/29/96	CD291.37	01
MW-3	04/26/96	04/26/96	04/29/96	04/29/96	CD291.37	02
MW-1	04/26/96	04/26/96	04/30/96	04/30/96	CD301.37	03
MW-2	04/26/96	04/26/96	05/01/96	05/01/96	CD301.37	04
BB	04/26/96	04/26/96	04/29/96	04/29/96	CD291.37	05

QC Samples

QC Batch #	QC Sample ID	Type	Ref.	Matrix	Extract.	Analyzed
CD291.37-02	Laboratory Spike	LS		Water	04/29/96	04/29/96
CD291.37-05	R18 851N	MS	21260-01	Water	04/29/96	04/29/96
CD291.37-06	R18 851N	MSD	21260-01	Water	04/29/96	04/29/96
CD301.37-02	Laboratory Spike	LS		Water	04/30/96	04/30/96
CD301.37-12	HZS 794N	MS	21262-01	Water	04/30/96	04/30/96
CD301.37-13	HZS 794N	MSD	21262-01	Water	04/30/96	04/30/96
CD291.37-01	Method Blank	MB		Water	04/29/96	04/29/96
CD301.37-01	Method Blank	MB		Water	04/30/96	04/30/96



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Analytical Laboratory

Sierra Environmental - Martinez
Attn: WAYNE AKIYAMA

Project 4-719-04
Reported on May 5, 1996
Revised on May 8, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 5030/8020

LAB ID	Sample ID	Matrix	Dil. Factor	Moisture
21257-01	TB-LB	Water	1.0	-
21257-02	MW-3	Water	1.0	-
21257-03	MW-1	Water	5.0	-
21257-04	MW-2	Water	500.0	-

RESULTS OF ANALYSIS

Compound	21257-01		21257-02		21257-03		21257-04	
	Conc.	RL	Conc.	RL	Conc.	RL	Conc.	RL
	ug/L		ug/L		ug/L		ug/L	
Benzene	ND	0.5	5.6	0.5	ND	2.5	ND	250
Toluene	ND	0.5	0.6	0.5	ND	2.5	ND	250
Ethyl Benzene	ND	0.5	4.6	0.5	9.5	2.5	3100	250
Total Xylenes	ND	0.5	14	0.5	21	2.5	15000	250
>> Surrogate Recoveries (%) <<								
Trifluorotoluene (SS)	101		74		100		40K	



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Sierra Environmental - Martinez
Attn: WAYNE AKIYAMA

Project 4-719-04
Reported on May 5, 1996
Revised on May 8, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 5030/8020

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
21257-05	BB	Water	1.0	-

R E S U L T S O F A N A L Y S I S

Compound 21257-05
 Conc. RL
 ug/L

Benzene	ND	0.5
Toluene	ND	0.5
Ethyl Benzene	ND	0.5
Total Xylenes	ND	0.5

>> Surrogate Recoveries (%) <<
Trifluorotoluene (SS) 105



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Analytical Laboratory

Volatile Aromatic Hydrocarbons by EPA SW-846 5030/8020

Quality Assurance and Control Data

Laboratory Number: 21257

Method Blank(s)

CD291.37-01		CD301.37-01	
Conc.	RL	Conc.	RL
ug/L		ug/L	

Benzene	ND	0.5	ND	0.5
Toluene	ND	0.5	ND	0.5
Ethyl Benzene	ND	0.5	ND	0.5
Total Xylenes	ND	0.5	ND	0.5

>> Surrogate Recoveries (%) <<

Trifluorotoluene (SS)	104	102
-----------------------	-----	-----



Volatile Aromatic Hydrocarbons by EPA SW-846 5030/8020

Quality Assurance and Control Data

Laboratory Number: 21257

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
CD291.37 02 / - Laboratory Control Spikes						
Benzene		20	17	85	65-125	
Toluene		20	18	90	65-125	
Ethyl Benzene		20	19	95	65-125	
Total Xylenes		60	52	87	65-125	
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				100	50-150	
For Water Matrix (ug/L)						
CD301.37 02 / - Laboratory Control Spikes						
Benzene		20	18	90	65-125	
Toluene		20	19	95	65-125	
Ethyl Benzene		20	20	100	65-125	
Total Xylenes		60	55	92	65-125	
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				102	50-150	
For Water Matrix (ug/L)						
CD291.37 05 / 06 - Sample Spiked: 21260 - 01						
Benzene	ND	20	18/17	90/85	65-125	6
Toluene	ND	20	19/19	95/95	65-125	0
Ethyl Benzene	ND	20	20/19	100/95	65-125	5
Total Xylenes	1.7	60	56/55	91/89	65-125	2
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				98/100	50-150	



Superior

Analytical Laboratory

Volatile Aromatic Hydrocarbons by EPA SW-846 5030/8020

Quality Assurance and Control Data

Laboratory Number: 21257

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
CD301.37 12 / 13 - Sample Spiked: 21262 - 01						
Benzene	ND	20	17/17	85/85	65-125	0
Toluene	ND	20	19/19	95/95	65-125	0
Ethyl Benzene	ND	20	19/19	95/95	65-125	0
Total Xylenes	ND	60	54/54	90/90	65-125	0
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				100/99	50-150	



Narrative:

K - The surrogate recovery was low due to matrix effects. The analysis was repeated with similar effects.

Definitions:

ND = Not Detected

RL = Reporting Limit

NA = Not Analysed

RPD = Relative Percent Difference

ug/L = parts per billion (ppb)

mg/L = parts per million (ppm)

ug/kg = parts per billion (ppb)

mg/kg = parts per million (ppm)

Tele PLANK



WATER SAMPLING DATA

Job Name TELEGRAPH BRIDGE Job Number 4-119-4
 Well Number 2-13 Date 4/1/85 Sampler CC
 Sample Point Location/Description _____ Well Diameter _____
 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
 $V_{1/2}$ casing = 0.163 gal/ft
 $V_{1/3}$ casing = 0.367 gal/ft
 $V_{2/3}$ casing = 0.653 gal/ft
 $V_{3/4}$ casing = 0.826 gal/ft
 $V_{3/8}$ casing = 1.47 gal/ft
 $V_{1/4}$ 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
773	2	1	—	HCl	Y	SAC	5/18/85

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/polycarbonate cap (specify size);
 5 = Other _____; 6 = Other _____; 7 = Other _____; 8 = Other _____

EAKER Z/Am



WATER SAMPLING DATA

Job Name TELEGRAPH BUSINESS Job Number 2-712-01
 Well Number 210 Date 4/1/96 Sampler J.C.
 Sample Point Location/Description _____ Well Diameter _____
 Depth to Water (static) _____ Well Depth (sounded) _____
 Initial height of water in casing _____ Volume _____ gallons
 Volume to be purged _____ gallons
 Purged With _____ Sampled With Teflon
 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
 $V_{1/2}$ casing = 0.163 gal/ft
 $V_{1/3}$ casing = 0.367 gal/ft
 $V_{2/3}$ casing = 0.653 gal/ft
 $V_{3/4}$ casing = 0.826 gal/ft
 $V_{1/2}$ casing = 1.47 gal/ft
 $V_{3/4}$ 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 (Inst)	Analysts Requested
	3	1		HCL	Y		J.C.

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 TELEGRAPH - 3rd well Job Number 4079-04
 Well Number MW-2 Date 4/25/96
 Sample Point Location/Description NORTH SIDE OF BLD
 Depth to Water (static) 8.57 Well Depth (sounded) —
 Initial height of water in casing 17.43 Volume 7.84 gallons
 Volume to be purged 9.5 gallons
 Purged With SUB PUMP Sampled With —
 Pumped or Bailed Dry? Yes No Time — After — gallons
 Water level at sampling — Percent Recovery —

Sampler J.C.
 Well Diameter 2"
 Well Depth (spec.) 26

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
 $V_{1/2}$ casing = 0.163 gal/ft
 $V_{1/4}$ casing = 0.367 gal/ft
 $V_{3/8}$ casing = 0.653 gal/ft
 $V_{1/2}$ casing = 0.826 gal/ft
 $V_{3/4}$ casing = 1.47 gal/ft
 V_{1} 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
10:39							
	10:44	3	3	6.30	65	1260	
	10:50	6	3	6.60	65	1310	
	10:56	9	3	6.51	65	1300	

SAMPLES COLLECTED Time 11:15 Total volume purged (gal.) 9
 Water color CLEAR GREY Odor HYDROCARBON
 Description of sediments or material in sample: V. LIGHT SEDIMENT
 Additional Comments: —

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Inst)	Analysis Requested
MW-2	1						
	2	2	✓	NONE	✓		

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 TELEGRAPH RD Job Number 4-719-04
 Well Number MW-3 Date 2/24/96
 Sampler J.C.
 Sample Point Location/Description WEST SIDE OF RD
 Well Diameter 2"
 Depth to Water (static) 9.09 Well Depth (sounded) _____
 Initial height of water in casing 16.91 Volume 1.77 gallons
 Volume to be purged 5.33 gallons
 Purged With 100 ppm 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_1 casing = 0.163 gal/ft
 V_2 casing = 0.367 gal/ft
 V_3 casing = 0.653 gal/ft
 V_4 casing = 0.826 gal/ft
 V_5 casing = 1.47 gal/ft
 V_6 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
11:20							
	11:24	2	2	6.59	65	0510	
	11:27	4	2	6.65	65	0540	
	11:31	6	2	6.69	65	0550	

SAMPLES COLLECTED Time 11:40
 Water color CLOUDY CLEAR Total volume purged (gal.) 6
 Odor HYDROCARBON
 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
1	3	1	—	HCL	↓	SAL	ARTEX
↓	2	2	↓	NONE	↓	↓	UDDO
					↓	↓	SIERRA

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 _____