FACSIMILE COVER SHEET

SIERRA

To: Susan Hugo FAX No. 510 337-9335

From: Jim Green FAX No. (510) 370-7959

Job No./Re: 4-719-12 Date: 10/10/96

This transmission is 20 pages long (including this page).

Remarks: Telegraph Business Park Results

Susan: I've excluded QA/QC Data for your convenience - Please call if you'd like to see it.

P.O. Box 2546 • Martinez, California 94553 • (510) 370-1280

Environmental Services

October 10, 1996

Susan Hugo
Alameda County Dept. of Environmental Health
Alameda, CA

Re: Telegraph Business Park
5427 Telegraph Ave.

Dear Ms. Hugo:

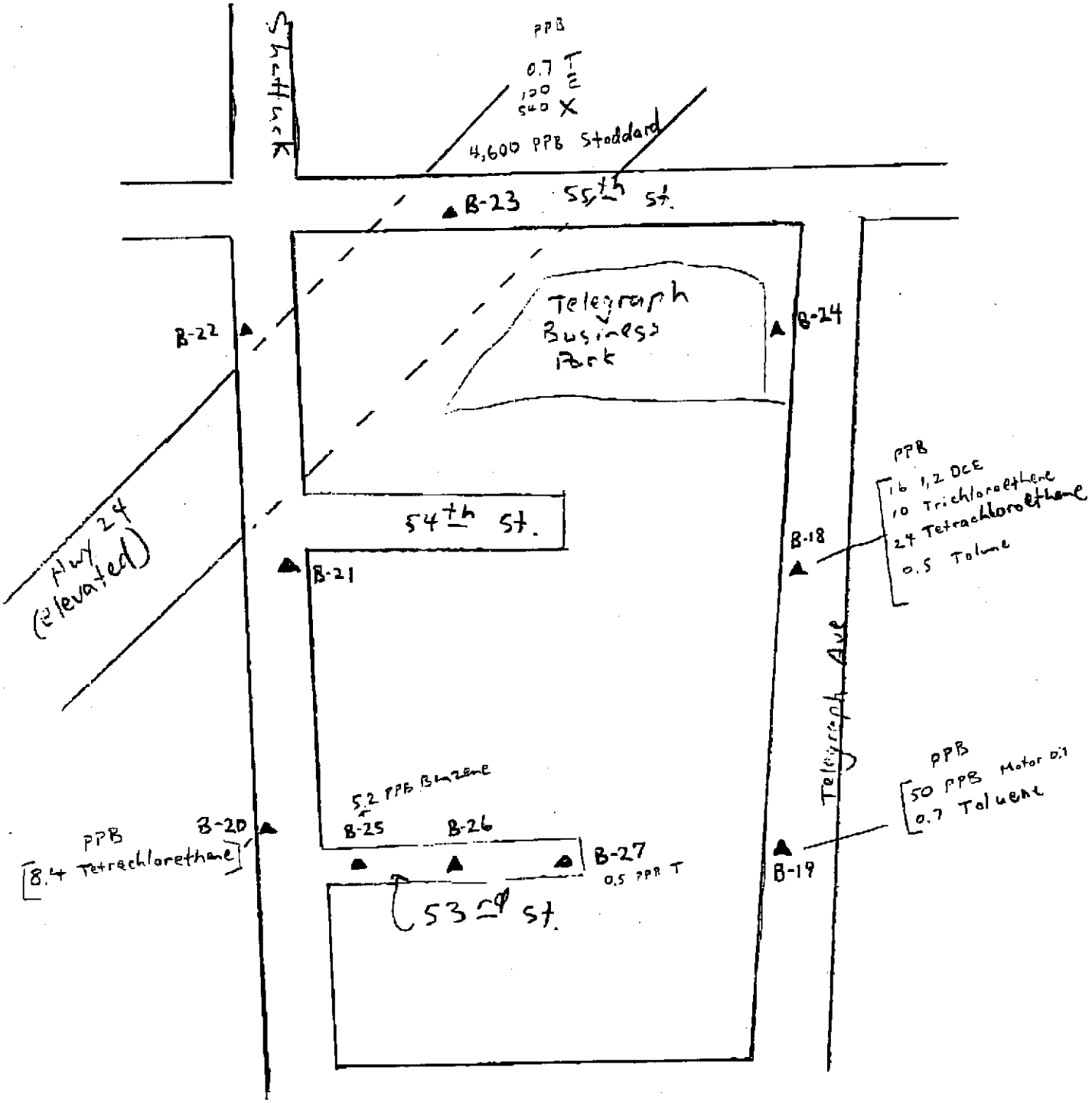
As we discussed this morning, I'm faxing you the raw analytic data for the recent investigation at the above-referenced site.

The result which most surprised us was the 4,600 ppb for stoddard solvent in Boring B-23. We have maps from the 1930s which indicate that site buildings originally extended further in that direction, into the area of present Highway 24, but not as far as B-23. The result is probably due to some past site configuration/activity of which we are not aware.

I'd like to discuss these results with you. I can be reached at 510-370-1280. Thank you for your attention to this site.

Sincerely,
Sierra Environmental Services

Jim Green
Staff Scientist



Boring Locations (Geoprobe)
Subsurface Investigation
Telegraph Business park
Oakland CA

Sierra Environmental Services
September 11, 1996

▲ Boring Locations

Historic Ground water flow direction

Analytical Laboratory

Sierra Environmental - Martinez
Attn: JIM GREEN

Project 4-719-12
Reported on October 1, 1996

EPA SW-846 Method 8240 Volatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
21918-01	B-18	Water	1.0	-
21918-02	B-19	Water	1.0	-
21918-03	B-20	Water	1.0	-
21918-04	B-23	Water	1.0	-

RESULTS OF ANALYSIS

Compound	21918-01 Conc. ug/L	RL	21918-02 Conc. ug/L	RL	21918-03 Conc. ug/L	RL	21918-04 Conc. ug/L	RL
Chloromethane	ND	10	ND	10	ND	10	ND	10
Bromomethane	ND	10	ND	10	ND	10	ND	10
Vinyl Chloride	ND	10	ND	10	ND	10	ND	10
Chloroethane	ND	10	ND	10	ND	10	ND	10
Dichloromethane	ND	10	ND	10	ND	10	ND	10
Acetone	ND	40	ND	40	ND	40	ND	40
Carbon Disulfide	ND	3	ND	3	ND	3	ND	3
Trichlorofluoromethane	ND	3	ND	3	ND	3	ND	3
1,1-Dichloroethene	ND	3	ND	3	ND	3	ND	3
1,1-Dichloroethane	ND	3	ND	3	ND	3	ND	3
t-1,2-Dichloroethene	ND	3	ND	3	ND	3	ND	3
Chloroform	ND	3	ND	3	ND	3	ND	3
1,2-Dichloroethane	ND	1	ND	1	ND	1	ND	1
2-Butanone	ND	20	ND	20	ND	20	ND	20
1,1,1-Trichloroethane	ND	3	ND	3	ND	3	ND	3
Carbon tetrachloride	ND	3	ND	3	ND	3	ND	3
Vinyl Acetate	ND	10	ND	10	ND	10	ND	10
Bromodichloromethane	ND	3	ND	3	ND	3	ND	3
1,2-Dichloropropane	ND	3	ND	3	ND	3	ND	3
c-1,2-Dichloroethene	16	3	ND	3	ND	3	ND	3
c-1,3-Dichloropropene	ND	3	ND	3	ND	3	ND	3
Trichloroethene	10	3	ND	3	ND	3	ND	3
Dibromochloromethane	ND	3	ND	3	ND	3	ND	3
1,1,2-Trichloroethane	ND	3	ND	3	ND	3	ND	3
Benzene	ND	1	ND	1	ND	1	ND	1
t-1,3-Dichloropropene	ND	3	ND	3	ND	3	ND	3
Bromoform	ND	3	ND	3	ND	3	ND	3
4-methyl-2-Pentanone	ND	10	ND	10	ND	10	ND	10
2-Hexanone	ND	10	ND	10	ND	10	ND	10
Tetrachloroethene	24	3	ND	3	8.4	3	ND	3
1,1,2,2-Tetrachloroethane	ND	3	ND	3	ND	3	ND	3

Analytical Laboratory

Sierra Environmental - Martinez
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Project 4-719-12
Reported on October 1, 1996

EPA SW-846 Method 8240 Volatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
21918-01	B-18	Water	1.0	-
21918-02	B-19	Water	1.0	-
21918-03	B-20	Water	1.0	-
21918-04	B-23	Water	1.0	-

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

Compound	21918-01 Conc. ug/L	RL	21918-02 Conc. ug/L	RL	21918-03 Conc. ug/L	RL	21918-04 Conc. ug/L	RL
Toluene	ND	3	ND	3	ND	3	ND	3
Chlorobenzene	ND	3	ND	3	ND	3	ND	3
Ethyl Benzene	ND	3	ND	3	ND	3	ND	3
Styrene	ND	3	ND	3	ND	3	ND	3
Xylenes	ND	3	ND	3	ND	3	ND	3
1,3-Dichlorobenzene	ND	3	ND	3	ND	3	ND	3
1,4-Dichlorobenzene	ND	3	ND	3	ND	3	ND	3
1,2-Dichlorobenzene	ND	3	ND	3	ND	3	ND	3
> Surrogate Recoveries (%) <<								
1,2-Dichloroethane-d4	97		94		96		96	
Toluene-d8	95		94		96		94	
Bromofluorobenzene	100		97		100		107	

Analytical Laboratory

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Project 4-719-12
Reported on October 1, 1996

EPA SW-846 Method 8240 Volatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
21918-05	B-26	Water	1.0	-
21918-06	B-27	Water	1.0	-

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

Compound	21918-05 Conc. ug/L	RL	21918-06 Conc. ug/L	RL
Chloromethane	ND	10	ND	10
Bromomethane	ND	10	ND	10
Vinyl Chloride	ND	10	ND	10
Chloroethane	ND	10	ND	10
Dichloromethane	ND	10	ND	10
Acetone	ND	40	ND	40
Carbon Disulfide	ND	3	ND	3
Trichlorofluoromethane	ND	3	ND	3
1,1-Dichloroethene	ND	3	ND	3
1,1-Dichloroethane	ND	3	ND	3
t-1,2-Dichloroethene	ND	3	ND	3
Chloroform	ND	3	ND	3
1,2-Dichloroethane	ND	1	ND	1
2-Butanone	ND	20	ND	20
1,1,1-Trichloroethane	ND	3	ND	3
Carbon tetrachloride	ND	3	ND	3
Vinyl Acetate	ND	10	ND	10
Bromodichloromethane	ND	3	ND	3
1,2-Dichloropropane	ND	3	ND	3
c-1,2-Dichloroethene	ND	3	ND	3
c-1,3-Dichloropropene	ND	3	ND	3
Trichloroethene	ND	3	ND	3
Dibromochloromethane	ND	3	ND	3
1,1,2-Trichloroethane	ND	3	ND	3
Benzene	ND	1	ND	1
t-1,3-Dichloropropene	ND	3	ND	3
Bromoform	ND	3	ND	3
4-methyl-2-Pentanone	ND	10	ND	10
2-Hexanone	ND	10	ND	10
Tetrachloroethene	ND	3	ND	3
1,1,2,2-Tetrachloroethane	ND	3	ND	3

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Project 4-719-12
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EPA SW-846 Method 8240 Volatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
21918-05	B-26	Water	1.0	-
21918-06	B-27	Water	1.0	-

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

Compound	21918-05 Conc. ug/L	RL	21918-06 Conc. ug/L	RL
Toluene	ND	3	ND	3
Chlorobenzene	ND	3	ND	3
Ethyl Benzene	ND	3	ND	3
Styrene	ND	3	ND	3
Xylenes	ND	3	ND	3
1,3-Dichlorobenzene	ND	3	ND	3
1,4-Dichlorobenzene	ND	3	ND	3
1,2-Dichlorobenzene	ND	3	ND	3
>> Surrogate Recoveries (%) <<				
1,2-Dichloroethane-d4	101		96	
Toluene-d8	96		97	
Bromofluorobenzene	103		98	

Analytical Laboratory

Sierra Environmental - Martinez
Attn: JIM GREEN

Project 4-719-12
Reported on October 2, 1996

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

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
21918-01	B-18	Water	1.0	-
21918-02	B-19	Water	1.0	-
21918-03	B-20	Water	1.0	-
21918-04	B-23	Water	5.0	-

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

Compound	21918-01 Conc. ug/L	RL	21918-02 Conc. ug/L	RL	21918-03 Conc. ug/L	RL	21918-04 Conc. ug/L	RL
Stoddard	ND	50	ND	50	ND	50	4600	250
Unknown Hydrocarbons			50**	50				
>> Surrogate Recoveries (%) <<								
Tetracosane	96		63		90		220H	

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Sierra Environmental - Martinez
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Project 4-719-12
Reported on October 2, 1996

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

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
21918-05	B-26	Water	1.0	-
21918-06	B-27	Water	1.0	-

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

Compound	21918-05 Conc. ug/L	RL	21918-06 Conc. ug/L	RL
Stoddard Unknown Hydrocarbons	ND	50	ND	50
> Surrogate Recoveries (%) <<				
Tetracosane	57		85	

Superior Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 21918

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L) CI301.21 02 / 03 - Laboratory Control Spikes						
Diesel:		1000	1200/1200	120/120	50-150	0
>> Surrogate Recoveries (%) <<						
Tetracosane				100/98	50-150	

* - Heavy hydrocarbons were found in the range of diesel, but do not resemble a diesel fingerprint. Possible motor oil.
- Accurate quanitiation of the surrogate was not possible due to the extent of sample dilution.

efinitions:
D = Not Detected
L = Reporting Limit
A = Not Analysed
PD = Relative Percent Difference
g/L = parts per billion (ppb)
g/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

SAL Analytical Laboratory

ierra Environmental - Martinez
ttn: JIM GREEN

Project 4-719-12
Reported on October 1, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
21918-01	B-18	Water	1.0	-
21918-02	B-19	Water	1.0	-
21918-03	B-20	Water	1.0	-
21918-04	B-23	Water	1.0	-

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

Compound	21918-01 Conc. ug/L	RL	21918-02 Conc. ug/L	RL	21918-03 Conc. ug/L	RL	21918-04 Conc. ug/L	RL
Benzene	ND	0.5	ND	0.5	ND	0.5	ND	0.5
Toluene	0.5	0.5	0.7	0.5	ND	0.5	0.7	0.5
Ethyl Benzene	ND	0.5	ND	0.5	ND	0.5	100	0.5
Xylenes	ND	0.5	0.7	0.5	ND	0.5	540	0.5
> Surrogate Recoveries (%) <<								
Trifluorotoluene (SS)	78		76		74		75	

Analytical Laboratory

Sierra Environmental - Martinez
Attn: JIM GREEN

Project 4-719-12
Reported on October 1, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
21918-05	B-26	Water	1.0	-
21918-06	B-27	Water	1.0	-
21918-07	TB	Water	1.0	-

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

Compound	21918-05 Conc. ug/L	RL	21918-06 Conc. ug/L	RL	21918-07 Conc. ug/L	RL
Benzene	ND	0.5	ND	0.5	ND	0.5
Toluene	ND	0.5	0.5	0.5	ND	0.5
Ethyl Benzene	ND	0.5	ND	0.5	ND	0.5
Xylenes	ND	0.5	ND	0.5	ND	0.5
-> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)	69		78		65	

Analytical Laboratory

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Quality Assurance and Control Data

Laboratory Number: 21918
Method Blank(s)

	CI301.05-03		CI271.05-04	
	Conc. ug/L	RL	Conc. ug/L	RL
Benzene	ND	0.5	ND	0.5
Toluene	ND	0.5	ND	0.5
Ethyl Benzene	ND	0.5	ND	0.5
Xylenes	ND	0.5	ND	0.5
> Surrogate Recoveries (%) <<				
Trifluorotoluene (SS)	83		83	

Analytical Laboratory

Sierra Environmental - Martinez
Attn: JIM GREEN

Project 4-719-12
Reported on October 3, 1996

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

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
21922-01	B-21 @ 16'	Soil	1.0	-
21922-02	B-22 @ 15.5'	Soil	1.0	-
21922-03	B-23 @ 10.5'	Soil	1.0	-
21922-05	B-24 @ 16'	Soil	1.0	-

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

Compound	21922-01 Conc. mg/kg	RL	21922-02 Conc. mg/kg	RL	21922-03 Conc. mg/kg	RL	21922-05 Conc. mg/kg	RL
Stoddard	ND	10	ND	10	ND	10	ND	10
>> Surrogate Recoveries (%) <<								
Tetracosane	91		100		96		94	

SAL Analytical Laboratory

Sierra Environmental - Martinez
Attn: JIM GREEN

Project 4-719-12
Reported on October 3, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
21922-01	B-21 @ 16'	Soil	1.0	-
21922-02	B-22 @ 15.5'	Soil	1.0	-
21922-03	B-23 @ 10.5'	Soil	1.0	-
21922-05	B-24 @ 16'	Soil	1.0	-

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

Compound	21922-01 Conc. mg/kg	RL	21922-02 Conc. mg/kg	RL	21922-03 Conc. mg/kg	RL	21922-05 Conc. mg/kg	RL
Benzene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Toluene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Ethyl Benzene	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Xylenes	ND	0.005	ND	0.005	0.044	0.005	ND	0.005
>> Surrogate Recoveries (%) <<								
Trifluorotoluene (SS)	81		87		85		85	

Analytical Laboratory

Sierra Environmental - Martinez
Attn: JIM GREEN

Project 4-719-12
Reported on October 1, 1996

EPA SW-846 Method 8240 Volatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
21922-01	B-21 @ 16'	Soil	1.0	-
21922-02	B-22 @ 15.5'	Soil	1.0	-
21922-03	B-23 @ 10.5'	Soil	1.0	-
21922-05	B-24 @ 16'	Soil	1.0	-

RESULTS OF ANALYSIS

Compound	21922-01 Conc. ug/kg	RL	21922-02 Conc. ug/kg	RL	21922-03 Conc. ug/kg	RL	21922-05 Conc. ug/kg	RL
Chloromethane	ND	50	ND	50	ND	50	ND	50
Bromomethane	ND	50	ND	50	ND	50	ND	50
Vinyl Chloride	ND	50	ND	50	ND	50	ND	50
Chloroethane	ND	50	ND	50	ND	50	ND	50
Dichloromethane	ND	50	ND	50	ND	50	ND	50
Acetone	ND	200	ND	200	ND	200	ND	200
Carbon Disulfide	ND	15	ND	15	ND	15	ND	15
Trichlorofluoromethane	ND	15	ND	15	ND	15	ND	15
1,1-Dichloroethene	ND	15	ND	15	ND	15	ND	15
1,1-Dichloroethane	ND	15	ND	15	ND	15	ND	15
t-1,2-Dichloroethene	ND	15	ND	15	ND	15	ND	15
Chloroform	ND	15	ND	15	ND	15	ND	15
1,2-Dichloroethane	ND	5	ND	5	ND	5	ND	5
2-Butanone	ND	100	ND	100	ND	100	ND	100
1,1,1-Trichloroethane	ND	15	ND	15	ND	15	ND	15
Carbon tetrachloride	ND	15	ND	15	ND	15	ND	15
Vinyl Acetate	ND	50	ND	50	ND	50	ND	50
Bromodichloromethane	ND	15	ND	15	ND	15	ND	15
1,2-Dichloropropane	ND	15	ND	15	ND	15	ND	15
c-1,2-Dichloroethene	ND	15	ND	15	ND	15	ND	15
c-1,3-Dichloropropene	ND	15	ND	15	ND	15	ND	15
Trichloroethene	ND	15	ND	15	ND	15	ND	15
Dibromochloromethane	ND	15	ND	15	ND	15	ND	15
1,1,2-Trichloroethane	ND	15	ND	15	ND	15	ND	15
Benzene	ND	5	ND	5	ND	5	ND	5
t-1,3-Dichloropropene	ND	15	ND	15	ND	15	ND	15
Bromoform	ND	15	ND	15	ND	15	ND	15
4-methyl-2-Pentanone	ND	50	ND	50	ND	50	ND	50
2-Hexanone	ND	50	ND	50	ND	50	ND	50
Tetrachloroethene	ND	15	ND	15	ND	15	ND	15
1,1,2,2-Tetrachloroethane	ND	15	ND	15	ND	15	ND	15

SAL Analytical Laboratory

Sierra Environmental - Martinez
Attn: JIM GREEN

Project 4-719-12
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EPA SW-846 Method 8240 Volatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
21922-01	B-21 @ 16'	Soil	1.0	-
21922-02	B-22 @ 15.5'	Soil	1.0	-
21922-03	B-23 @ 10.5'	Soil	1.0	-
21922-05	B-24 @ 16'	Soil	1.0	-

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

Compound	21922-01 Conc. ug/kg	RL	21922-02 Conc. ug/kg	RL	21922-03 Conc. ug/kg	RL	21922-05 Conc. ug/kg	RL
Toluene	ND	15	ND	15	ND	15	ND	15
Chlorobenzene	ND	15	ND	15	ND	15	ND	15
Ethyl Benzene	ND	15	ND	15	ND	15	ND	15
Styrene	ND	15	ND	15	ND	15	ND	15
Xylenes	ND	15	ND	15	ND	15	ND	15
1,3-Dichlorobenzene	ND	15	ND	15	ND	15	ND	15
1,4-Dichlorobenzene	ND	15	ND	15	ND	15	ND	15
1,2-Dichlorobenzene	ND	15	ND	15	ND	15	ND	15
>> Surrogate Recoveries (%) <<								
1,2-Dichloroethane-d4	95		97		94		99	
Toluene-d8	97		98		99		97	
Bromofluorobenzene	95		96		97		98	

ca Environmental - Martinez
: JIM GREEN

Project 4-719-12
Reported on October 2, 1996

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

; ID	Sample ID	Matrix	Dil.Factor	Moisture
927-01	B-25 @ 16'	Soil	1.0	-

RESULTS OF ANALYSIS

pound	21927-01 Conc. mg/kg	RL
zene	ND	0.005
uene	ND	0.005
yl Benzene	ND	0.005
enes	ND	0.005
urrogate Recoveries (%) <<		
fluorotoluene (SS)	85	

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
21927-01	B-25 @ 16'	Soil	1.0	-

RESULTS OF ANALYSIS

Compound	21927-01 Conc. ug/kg	RL
Chloromethane	ND	50
Bromomethane	ND	50
Vinyl Chloride	ND	50
Chloroethane	ND	50
Dichloromethane	ND	50
Acetone	ND	200
Carbon Disulfide	ND	15
Trichlorofluoromethane	ND	15
1,1-Dichloroethene	ND	15
1,1-Dichloroethane	ND	15
t-1,2-Dichloroethene	ND	15
Chloroform	ND	15
1,2-Dichloroethane	ND	5
2-Butanone	ND	100
1,1,1-Trichloroethane	ND	15
Carbon tetrachloride	ND	15
Vinyl Acetate	ND	50
Bromodichloromethane	ND	15
1,2-Dichloropropane	ND	15
c-1,2-Dichloroethene	ND	15
c-1,3-Dichloropropene	ND	15
Trichloroethene	ND	15
Dibromochloromethane	ND	15
1,1,2-Trichloroethane	ND	15
Benzene	5.2	5
t-1,3-Dichloropropene	ND	15
Bromoform	ND	15
4-methyl-2-Pentanone	ND	50
2-Hexanone	ND	50
Tetrachloroethene	ND	15
1,1,2,2-Tetrachloroethane	ND	15

Sierra Environmental - Martinez
Attn: JIM GREEN

Project 4-719-12
Reported on October 1, 1996

EPA SW-846 Method 8240 Volatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
21927-01	B-25 @ 16'	Soil	1.0	-

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

Compound	21927-01 Conc. ug/kg	RL
Toluene	ND	15
Chlorobenzene	ND	15
Ethyl Benzene	ND	15
Styrene	ND	15
Xylenes	ND	15
1,3-Dichlorobenzene	ND	15
1,4-Dichlorobenzene	ND	15
1,2-Dichlorobenzene	ND	15
>> Surrogate Recoveries (%) <<		
1,2-Dichloroethane-d4	93	
Toluene-d8	95	
Bromofluorobenzene	97	

Sierra Environmental - Martinez
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Project 4-719-12
Reported on October 1, 1996

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

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
21927-01	B-25 @ 16'	Soil	1.0	-

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

Compound	21927-01 Conc.	RL mg/kg
Stoddard	ND	10
>> Surrogate Recoveries (%) <<		
Tetracosane	94	