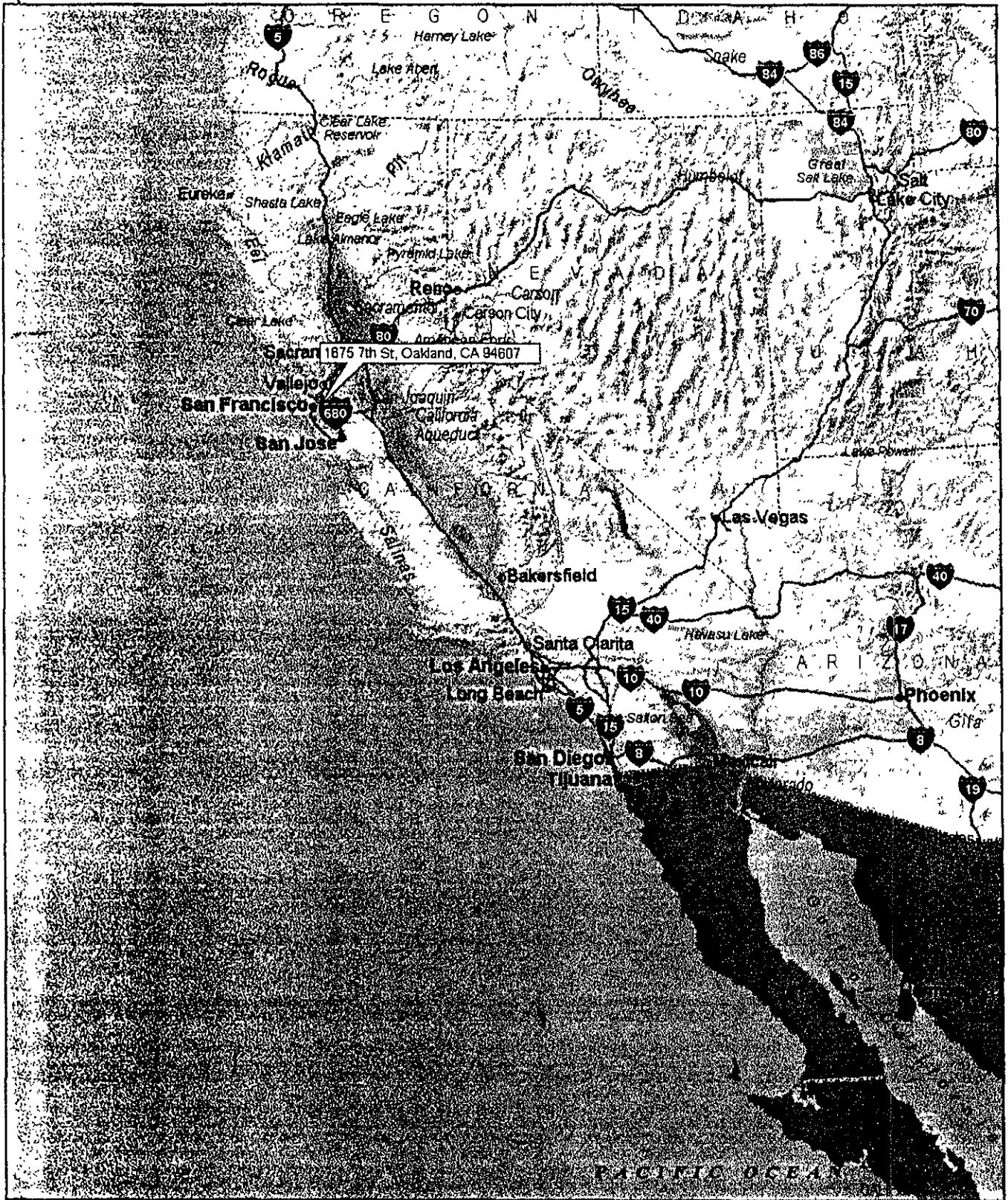


STIP 3795

rev 11-23-98

*hydraulic lift removal*  
**Soil Sampling and Characterization  
Of Contaminated Soil  
At  
Oakland Post Office  
1675 7<sup>th</sup> Street Oakland, Ca 94615**

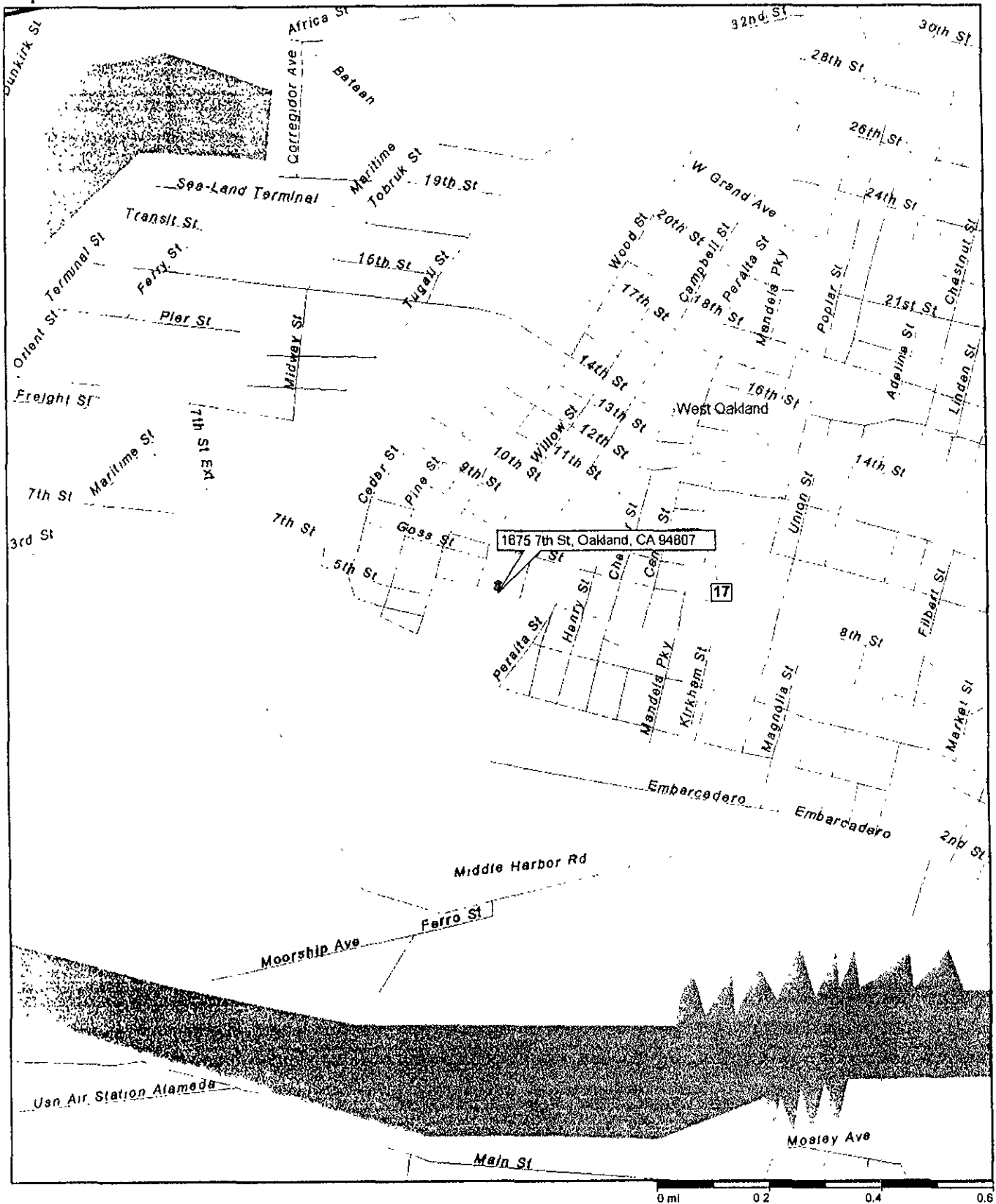
**Prepared By: JB Environmental  
8238 Hardester Drive  
Sacramento, Ca 95828**



0 mi 100 200 300

MICROSOFT MAP  
**Streets Plus**

Oakland Post Office  
Oakland, California



MICROSOFT  Streets Plus

Oakland Post Office  
Oakland, Ca 94615

- 1.0 **Introduction:** Herbst Engineering was removing 5 hydraulic lifts located in the in the motor pool of the Oakland Post Office 1675 7<sup>th</sup> street. During the removal of the lifts, soil contamination was encountered. Herbst Engineering hired JB environmental to characterize the soil contamination and determine the proper disposal of the soil.
- 2.0 **Plan:** Soil samples were collected from areas where contamination was evident. Four sets of samples were taken from three soil piles and two drums. Two of the soil piles were consolidated to from one. This soil pile was designated Csoil #1 located on the southeast corner of the building. The second soil pile located in the northwest corner of the building was designated Csoil #2. Two drums were sample. These drums were designated Drum1 and Csand. The Drum1 contained sludge and sand from the bottom of the lift and Csand contained sand that surrounded the lift cyclender.
- 3.0 **Sampling Procedures:** Samples were collected packed in ice and shipped to Sparger Analytical lab for analysis. Sparger is a certified testing lab (certification No. 1614)
- 3.0.1 Each sample was collected in a 6" brass tube. The ends were sealed.
- 3.0.2 The tubes were labeled and logged onto a chain of custody and placed in an ice chest with a block of ice and transported to the lab.
- 3.1 **Analytical Methods:** The soil samples were analyzed for all constituents of waste oil and gasoline. The methods are outlined in the underground storage tank regulation. Even thou these soils are not regulated by underground tank regulations; these methods were used as a guide to characterize the soil.
- EPA 8010
  - EPA 8020
  - EPA 8015
  - EPA 8080
  - CAM 17 Metals
- 3.2 **Sample Results:** The results are located in Appendix A. The results are also tabulated in table A1,B1,C1
- 4.0 **Discussion:** All four samples were contaminated with motor oil . Two of the samples Csoil #1 and Drum showed traces of chlorinated hydrocarbons. The chlorinated hydrocarbons are list waste by the EPA. However if the contamination is not directly related to the operation. It can be determine that the contamination is incidental to the waste stream. Therefore the waste can be disposed of as California regulated waste.

The determination of the chlorinated hydrocarbon contamination must be made by the owner of the process.

**5.0 Recommendation:** The soil from all three soil piles can be transported and disposed as California regulated waste. The Drums can be disposed of a California regulated waste as long as the owner and management certify that the chlorinate hydrocarbon contamination is *only incidental*. In the low levels that are present, this should not be problem. If the contamination is not deemed incidental, then the waste must be disposed of as RCRA hazardous.

Oakland Post Office Oakland, Ca 94615

Sampled: August 4, 1997

	97-00001-02 Drum	97-0006-07 CSand	97-0021-22 Csoil 1	97-0011-12 Csoil 2				
EPA 8020	mg/kg	mg/kg	mg/kg	mg/kg				
Benzene	ND	ND	ND	ND				
Toluene	ND	ND	ND	ND				
Ethlybenzene	ND	0.0069	ND	ND				
M,P-Xylene	ND	ND	ND	ND				
O-Xylene	2.4	0.074	ND	ND				
MTBE	-----	-----	-----	-----				
EP2A 741	mg/kg	mg/kg	mg/kg	mg/kg				
Total Lead	-----	-----	-----	-----				
EPA 5220	mg/kg	mg/kg	mg/kg	mg/kg				
Total Oil & Grease	-----	-----	-----	-----				
ND	mg/kg	mg/kg	mg/kg	mg/kg				
TPH diesel	6900 motor oil	12000 motor oil	53 motor oil	380 motor oil				
EPA 8020	mg/kg	mg/kg	mg/kg	mg/kg				
TPH gas	ND	ND	ND	ND				
EPA 8262	mg/kg							
MTBE	-----	-----	-----					

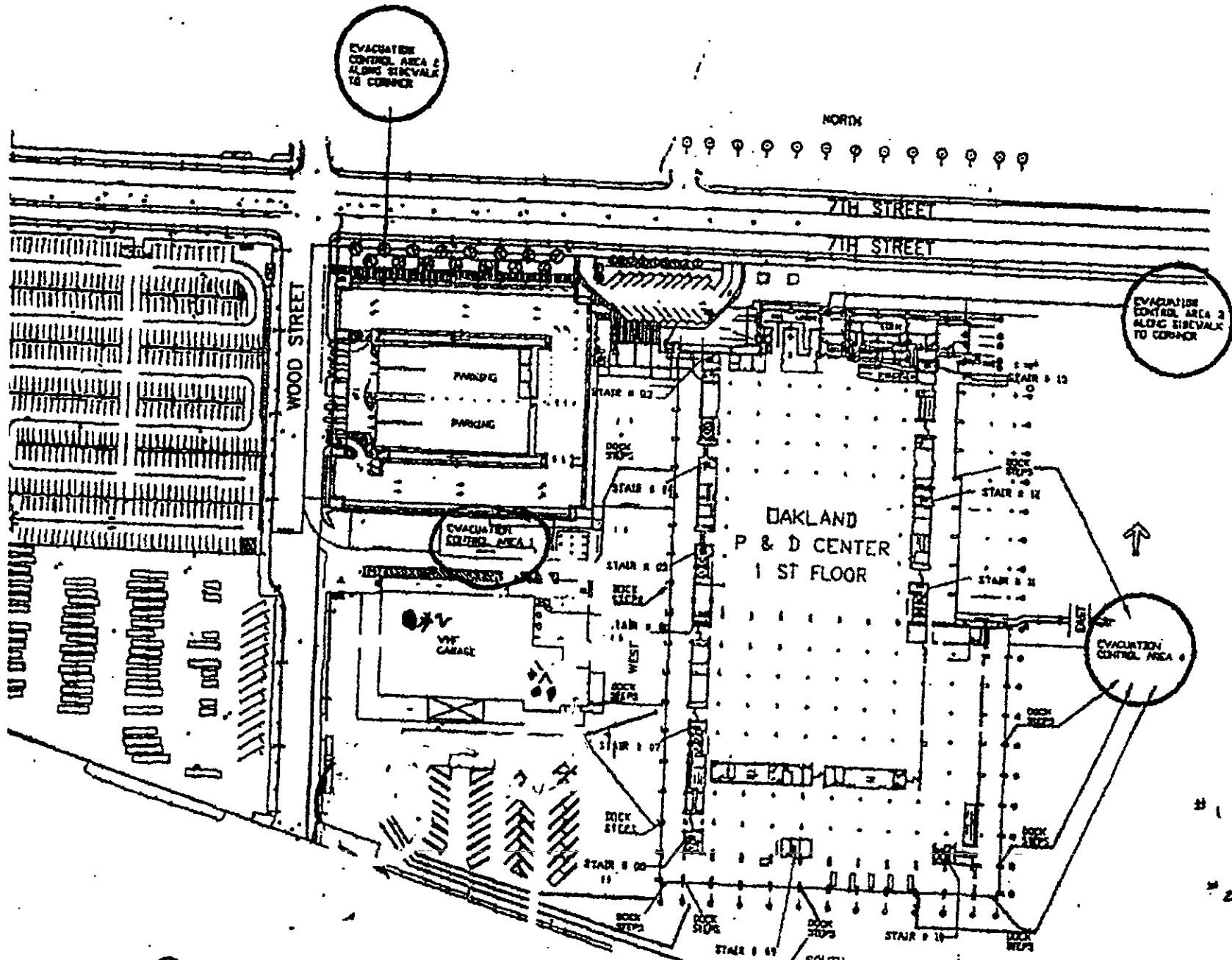
ppm=parts per million=mg/kg=micrograms per kilogram  
 ND= Not Detected



August 4, 1997	Oakland Post Office 1675 7 <sup>th</sup> Street Oakland, Ca 94615						
	970008- CSAND	970013- Csoil #1	970023- Csoil #2	970003- Drum			
	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg			
dichlorodifluoromethane	ND	ND	ND	0.70			
Chloromethane	ND	ND	ND	ND			
Vinyl Chloride	ND	ND	ND	ND			
Bromomethane	ND	ND	ND	ND			
Chloroethane	ND	ND	ND	ND			
Trichlorofluoromethane	ND	ND	ND	ND			
1,1-Dichloroethane	ND	ND	ND	ND			
Dichloromethane	ND	ND	ND	ND			
Trans-1,2-Dichloroethane	ND	ND	ND	ND			
1,1-Dichloroethane	ND	ND	ND	0.60			
Cis 1,2-Dichloroethane	ND	ND	ND	ND			
Chloroform	ND	ND	ND	ND			
1,1,1-Trichloroethane	ND	2.8	ND	26			
Carbon Tetrachloride	ND	ND	ND	ND			
1,2-Dichloroethane	ND	ND	ND	ND			
Trichloroethane	ND	ND	ND	ND			
1,2-Dichloropropane	ND	ND	ND	ND			
Bromodichloromethane	ND	ND	ND	ND			
Cis-1,3Dichloropropane	ND	ND	ND	ND			
Tran-1,3-Dichloropropene	ND	ND	ND	ND			
1,1,2-Trichloroethane	ND	ND	ND	ND			
Teterachloroethene	ND	ND	ND	5.8			
Dibromochloromethane	ND	ND	ND	ND			
Chlorobenzene	ND	ND	ND	ND			
Bromoform	ND	ND	ND	ND			
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND			
1,3-Dichlorobenzene	ND	ND	ND	ND			
1,4-Dichlorobenzene	ND	ND	ND	ND			
1,2-Dichlorobenzene	ND	ND	ND	ND			



# EMERGENCY EVACUATION PLAN



- # 1 Comp of two Soil piles
- # 2 Comp of one pile

**EVACUATION CONTROL AREA #5**

**EPA Method 8015 Modified Analysis Report**

Attention:	Mr. Gene Bever JB Environmental 8238 Hardester Drive Sacramento, CA 95828	Date Sampled:	Aug 4, 1997
		Date Received:	Aug 4, 1997
		Date Analyzed:	Aug 17, 1997
		Invoice #:	8172
Project #:		Project Name:	Oakland Post Office
Client ID:	97-0002-Drum	LAB ID:	8172-002A
Matrix:	Soil	Dilution:	1 : 1

Name	Amount	Reporting Limit	Units
TPHdiesel	ND	1.0	mg/kg
TPHmotor oil	6900	50	mg/kg
TPHkerosene	ND	1.0	mg/kg

Surrogate % Recovery of Pentacosane = \*

ppb = parts per billion = ug/kg = micrograms per kilogram

ppm = parts per million = mg/kg = milligrams per kilogram

ND = Not Detected Compound(s) may be present at concentrations below the detection limit

\* Surrogate recovery was lost due to sample matrix.



R. L. James, Principal Chemist

Aug 20, 1997

Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA  
DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
(Certification No 1614)

8015002

**EPA Method 8015 Modified Analysis Report**

Attention:	Mr. Gene Bever JB Environmental 8238 Hardester Drive Sacramento, CA 95828	Date Sampled:	Aug 4, 1997
		Date Received:	Aug 4, 1997
		Date Analyzed:	Aug 18, 1997
		Invoice #:	8172
Project #:		Project Name:	Oakland Post Office
Client ID:	97-0007-CSand	LAB ID:	8172-007A
Matrix:	Soil	Dilution:	1 : 10

Name	Amount	Reporting Limit	Units
TPHdiesel	ND	10	mg/kg
TPHmotor oil	<u>12000</u>	500	mg/kg
TPHkerosene	ND	10	mg/kg

Surrogate % Recovery of Pentacosane = \*

ppb = parts per billion = ug/kg = micrograms per kilogram

ppm = parts per million = mg/kg = milligrams per kilogram

ND = Not Detected Compound(s) may be present at concentrations below the detection limit.

\* Surrogate recovery was lost due to dilution.



R. L. James, Principal Chemist

Aug 20, 1997

Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA  
DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
(Certification No 1614)

8015007

### EPA Method 8015 Modified Analysis Report

Attention:	Mr. Gene Bever JB Environmental 8238 Hardester Drive Sacramento, CA 95828	Date Sampled:	Aug 4, 1997
		Date Received:	Aug 4, 1997
		Date Analyzed:	Aug 16, 1997
		Invoice #:	8172
Project #:		Project Name:	Oakland Post Office
Client ID:	97-0022-CS#1	LAB ID:	8172-017A
Matrix:	Soil	Dilution:	1 1

Name	Amount	Reporting Limit	Units
TPHdiesel	ND	1.0	mg/kg
TPHmotor oil	53	50	mg/kg
TPHkerosene	ND	1.0	mg/kg

Surrogate % Recovery of Pentacosane = 130%

ppb = parts per billion = ug/kg = micrograms per kilogram  
ppm = parts per million = mg/kg = milligrams per kilogram  
ND = Not Detected Compound(s) may be present at concentrations below the detection limit.

  
\_\_\_\_\_  
R. L. James, Principal Chemist

Aug 20, 1997  
\_\_\_\_\_  
Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC IS CERTIFIED BY THE STATE OF CALIFORNIA  
DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
(Certification No 1614)

8015017

**EPA Method 8015 Modified Analysis Report**

Attention:	Mr. Gene Bever JB Environmental 8238 Hardester Drive Sacramento, CA 95828	Date Sampled:	Aug 4, 1997
		Date Received:	Aug 4, 1997
		Date Analyzed:	Aug 16, 1997
		Invoice #:	8172
Project #:		Project Name:	Oakland Post Office
Client ID:	97-0012-CSoil#2	LAB ID:	8172-012A
Matrix:	Soil	Dilution:	1 : 1

Name	Amount	Reporting Limit	Units
TPHdiesel	ND	1.0	mg/kg
TPHmotor oil	380	50	mg/kg
TPHkerosene	ND	1.0	mg/kg

Surrogate % Recovery of Pentacosane = 200%\*

ppb = parts per billion = ug/kg = micrograms per kilogram

ppm = parts per million = mg/kg = milligrams per kilogram

ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

\* Surrogate recovery was high due to sample matrix.



R. L. James, Principal Chemist

Aug 20, 1997

Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC IS CERTIFIED BY THE STATE OF CALIFORNIA  
DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
(Certification No 1514)

8015012

**EPA Method 6010/7471  
 Metals, CAM 17**

Attention: Mr. Gene Bever  
 JB Environmental  
 8238 Hardestar Drive  
 Sacramento, CA 95828

Date Sampled: Aug 4, 1997  
 Date Received: Aug 4, 1997  
 Date Analyzed: Aug 6, 1997 ICP  
 Date Analyzed: Aug 5, 1997 Mercury  
 Invoice# : 8172

Project #:

Project Name: Oakland Post Office

Client ID: 97-0005-Drum

LAB ID: 8172-005A

Matrix: Soil

Dilution 1 1

Name	Concentration	Reporting Limit	Units
Antimony (Sb)	ND	6.0	mg/kg
Arsenic (As)	ND	10	mg/kg
Barium (Ba)	239	2.0	mg/kg
Beryllium (Be)	ND	0.30	mg/kg
Cadmium (Cd)	3.1	0.50	mg/kg
Chromium (Cr)	184	1.0	mg/kg
Cobalt (Co)	6.2	5.0	mg/kg
Copper (Cu)	52	2.0	mg/kg
Lead (Pb)	142	1.0	mg/kg
Mercury (Hg)	0.016	0.010	mg/kg
Molybdenum (Mo)	79	5.0	mg/kg
Nickel (Ni)	40	4.0	mg/kg
Selenium (Se)	ND	10	mg/kg
Silver (Ag)	ND	1.0	mg/kg
Thallium (Tl)	ND	10	mg/kg
Vanadium (V)	40	5.0	mg/kg
Zinc (Zn)	446	15	mg/kg

ppm = parts per million = mg/kg = milligram per kilogram

ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

*Leonora Abellanosa*  
 Abellanosa, Inorganics Supervisor

Aug 8, 1997  
 Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA  
 DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
 (Certificate No. 1614)

Cam17005

**EPA Method 6010/7471  
 Metals, CAM 17**

Attention: Mr. Gene Bever  
 JB Environmental  
 8238 Hardaster Drive  
 Sacramento, CA 95828

Date Sampled: Aug 4, 1997  
 Date Received: Aug 4, 1997  
 Date Analyzed: Aug 6, 1997  
 Invoice#: 8172

Project #:

Project Name: Oakland Post Office

Client ID: 97-0010-CS1

LAB ID: 8172-010A

Matrix: Soil

Dilution 1: 1

Name	Concentration	Reporting Limit	Units
Antimony (Sb)	ND	6.0	mg/kg
Arsenic (As)	ND	10	mg/kg
Barium (Ba)	9.8	2.0	mg/kg
Beryllium (Be)	ND	0.30	mg/kg
Cadmium (Cd)	ND	0.50	mg/kg
Chromium (Cr)	21	1.0	mg/kg
Cobalt (Co)	5.7	5.0	mg/kg
Copper (Cu)	5.4	2.0	mg/kg
Lead (Pb)	8.1	1.0	mg/kg
Mercury (Hg)	ND	0.010	mg/kg
Molybdenum (Mo)	ND	5.0	mg/kg
Nickel (Ni)	23	4.0	mg/kg
Selenium (Se)	ND	10	mg/kg
Silver (Ag)	ND	1.0	mg/kg
Thallium (Tl)	ND	10	mg/kg
Vanadium (V)	16	5.0	mg/kg
Zinc (Zn)	36	1.5	mg/kg

ppm = parts per million = mg/kg = milligrams per kilogram

ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

*Leonora Abellanosa*  
 L. Abellanosa, Inorganics Supervisor

Aug 6, 1997  
 Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA  
 DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
 (Certificate No. 7614)

Cam17010

**EPA Method 6010/7471  
 Metals, CAM 17**

Attention: Mr. Gene Bever  
 JB Environmental  
 8238 Hardester Drive  
 Sacramento, CA 95828

Date Sampled: Aug 4, 1997  
 Date Received: Aug 4, 1997  
 Date Analyzed: Aug 6, 1997 ICP  
 Date Analyzed: Aug 5, 1997 Mercury  
 Invoice#: 8172

Project #: Project Name: Oakland Post Office

Client ID: 97-0015-CSoil#2 LAB ID: 8172-015A

Matrix: Soil Dilution 1: 1

Name	Concentration	Reporting Limit	Units
Antimony (Sb)	ND	6.0	mg/kg
Arsenic (As)	ND	10	mg/kg
Barium (Ba)	59	2.0	mg/kg
Beryllium (Be)	ND	0.30	mg/kg
Cadmium (Cd)	ND	0.50	mg/kg
Chromium (Cr)	26	1.0	mg/kg
Cobalt (Co)	5.1	5.0	mg/kg
Copper (Cu)	15	2.0	mg/kg
Lead (Pb)	39	1.0	mg/kg
Mercury (Hg)	0.036	0.010	mg/kg
Molybdenum (Mo)	ND	5.0	mg/kg
Nickel (Ni)	22	4.0	mg/kg
Selenium (Se)	ND	10	mg/kg
Silver (Ag)	ND	1.0	mg/kg
Thallium (Tl)	ND	10	mg/kg
Vanadium (V)	21	5.0	mg/kg
Zinc (Zn)	52	1.5	mg/kg

ppm = parts per million = mg/kg = milligram per kilogram  
 ND = Not Detected. Compound(s) may be present at concentrations below the detection limit

*L. Abellanos*  
 L. Abellanos, Inorganics Supervisor

Aug 8, 1997  
 Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC IS CERTIFIED BY THE STATE OF CALIFORNIA  
 DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
 (Certification No. 1814)

Cam17015



**EPA Method 6010/7471  
 Metals, CAM 17**

Attention: Mr. Gene Bever  
 JB Environmental  
 8238 Hardester Drive  
 Sacramento, CA 95828

Date Sampled: Aug 4, 1997  
 Date Received: Aug 4, 1997  
 Date Analyzed: Aug 6, 1997  
 Invoice#: 8172

Project #: Project Name: Oakland Post Office

Client ID: 97-0025-CS#1 LAB ID: 8172-020A

Matrix: Soil Dilution 1: 1

Name	Concentration	Reporting Limit	Units
Antimony (Sb)	ND	6.0	mg/kg
Arsenic (As)	ND	10	mg/kg
Barium (Ba)	36	2.0	mg/kg
Beryllium (Be)	ND	0.30	mg/kg
Cadmium (Cd)	ND	0.50	mg/kg
Chromium (Cr)	17	1.0	mg/kg
Cobalt (Co)	ND	5.0	mg/kg
Copper (Cu)	6.1	2.0	mg/kg
Lead (Pb)	18	1.0	mg/kg
Mercury (Hg)	ND	0.010	mg/kg
Molybdenum (Mo)	ND	5.0	mg/kg
Nickel (Ni)	18	4.0	mg/kg
Selenium (Se)	ND	10	mg/kg
Silver (Ag)	ND	1.0	mg/kg
Thallium (Tl)	ND	10	mg/kg
Vanadium (V)	14	5.0	mg/kg
Zinc (Zn)	150	1.5	mg/kg

ppm = parts per million = mg/kg = milligram per kilogram

ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

*L. Abeñanosa*  
 L. Abeñanosa, Inorganics Supervisor

Aug 8, 1997  
 Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC IS CERTIFIED BY THE STATE OF CALIFORNIA  
 DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
 (Certification No. 1614)

Cam17020

**EPA Method 6010/7471  
 Metals, CAM 17  
 LCS / LCSD Recoveries**

Attention: Mr. Gene Bever  
 JB Environmental  
 8238 Hardester Drive  
 Sacramento, CA 95828

Date Sampled: Aug 4, 1997  
 Date Received: Aug 4, 1997  
 Date Analyzed: Aug 6, 1997 ICP  
 Date Analyzed: Aug 5, 1997 Mercury  
 Invoice #: 8172

Project #:

Project Name: Oakland Post Office

Client ID: LCS/LCSD

LAB ID: 970805A

Matrix: Soil

Units: (mg/kg)

Element	Spike Conc.	LCS	LCS % Recovery	LCSD	LCSD % Recovery	% RSD
Antimony (Sb)	50.0	50.0	100%	45.7	91.4%	9.0%
Arsenic (As)	50.0	45.9	91.8%	45.6	91.2%	0.66%
Barium (Ba)	50.0	52.1	104%	45.9	91.8%	13%
Beryllium (Be)	10.0	10.7	107%	8.67	86.7%	21%
Cadmium (Cd)	20.0	19.4	97.0%	17.6	88.0%	9.7%
Chromium (Cr)	50.0	50.0	100%	41.9	83.8%	18%
Cobalt (Co)	20.0	20.5	103%	17.3	86.5%	17%
Copper (Cu)	50.0	53.5	107%	48.9	97.8%	9.0%
Lead (Pb)	50.0	48.3	96.6%	43.0	86.0%	12%
Mercury (Hg)	0.0500	0.0506	101%	0.0486	97.2%	4.0%
Molybdenum (Mo)	20.0	19.7	98.5%	20.0	100%	1.5%
Nickel (Ni)	50.0	50.7	101%	42.1	84.2%	19%
Selenium (Se)	50.0	41.2	82.4%	48.6	97.2%	16%
Silver (Ag)	5.00	5.20	104%	4.24	84.8%	20%
Thallium (Tl)	50.0	46.8	93.6%	45.0	90.0%	3.9%
Vanadium (V)	20.0	20.6	103%	18.5	92.5%	11%
Zinc (Zn)	50.0	51.2	102%	43.3	86.6%	17%

ppm = parts per million = mg/kg = milligram per kilogram

ND = Not Detected. Compound(s) may be present at concentrations below the detection limit

NR = Not Requested

*Leonor Abellanosa*  
 Abellanosa, Inorganics Supervisor

Aug 8, 1997  
 Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA  
 DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
 (Certification No. 1614)

Cam17lcs

**EPA Method 6010/7471  
Metals, CAM 17  
Method Blank**

Attention: Mr. Gene Bever  
JB Environmental  
8238 Hardester Drive  
Sacramento, CA 95828

Date Sampled: Aug 4, 1997  
Date Received: Aug 4, 1997  
Date Analyzed: Aug 6, 1997  
Invoice#: 8172

Project #:

Project Name: Oakland Post Office

Client ID: Method Blank

LAB ID: MB970805A

Matrix: Soil

Dilution 1: 1

Name	Concentration	Reporting Limit	Units
Antimony (Sb)	ND	6.0	mg/kg
Arsenic (As)	ND	10	mg/kg
Barium (Ba)	ND	2.0	mg/kg
Beryllium (Be)	ND	0.30	mg/kg
Cadmium (Cd)	ND	0.50	mg/kg
Chromium (Cr)	ND	1.0	mg/kg
Cobalt (Co)	ND	5.0	mg/kg
Copper (Cu)	ND	2.0	mg/kg
Lead (Pb)	ND	1.0	mg/kg
Mercury (Hg)	ND	0.010	mg/kg
Molybdenum (Mo)	ND	5.0	mg/kg
Nickel (Ni)	ND	4.0	mg/kg
Selenium (Se)	ND	10	mg/kg
Silver (Ag)	ND	1.0	mg/kg
Thallium (Tl)	ND	10	mg/kg
Vanadium (V)	ND	5.0	mg/kg
Zinc (Zn)	ND	1.5	mg/kg

ppm = parts per million = mg/kg = milligram per kilogram

ND = Not Detected. Compound(s) may be present at concentrations below the detection limit

*L. Abellanosa*  
L. Abellanosa, Inorganics Supervisor

Aug 8, 1997  
Date Reporting

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA  
DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
(Certification No. 1614)

Cam17mbs

**EPA Method 6010/7471  
 Metals, CAM 17  
 MS / MSD Recoveries**

Attention: Mr Gene Bever  
 JB Environmental  
 8238 Hardester Drive  
 Sacramento, CA 95828

Date Sampled: Aug 4, 1997  
 Date Received: Aug 4, 1997  
 Date Analyzed: Aug 6, 1997 ICP  
 Date Analyzed: Aug 5, 1997 Mercury  
 Invoice #: 8172

Project #:

Project Name: Oakland Post Office

Client ID: MS/MSD

LAB ID: 8176-006A

Matrix: Soil

Units: mg/kg

Element	Sample Conc.	Spike Conc.	MS	MS % Recovery	MSD	MSD % Recovery	% RSD
Antimony (Sb)	ND	50.0	28.9	57.8%	30.3	60.6%	4.7%
Arsenic (As)	ND	50.0	47.4	94.8%	45.4	90.8%	4.3%
Barium (Ba)	27.1	50.0	75.9	97.6%	77.1	100%	2.4%
Beryllium (Be)	ND	10.0	9.14	91.4%	9.46	94.6%	3.4%
Cadmium (Cd)	ND	20.0	17.0	85.0%	16.6	83.0%	2.4%
Chromium (Cr)	12.8	50.0	60.8	95.6%	57.0	88.4%	7.8%
Cobalt (Co)	4.52	20.0	22.5	89.9%	21.6	85.4%	5.1%
Copper (Cu)	7.35	50.0	57.5	100%	59.6	105%	4.1%
Lead (Pb)	6.47	50.0	48.2	83.5%	47.3	81.7%	2.2%
Mercury (Hg)	0.0157	0.0500	0.0422	53.0%	0.0458	60.2%	13%
Molybdenum (Mo)	ND	20.0	19.4	97.0%	19.2	96.0%	1.0%
Nickel (Ni)	24.5	50.0	69.5	90.0%	65.8	82.6%	8.6%
Selenium (Se)	ND	50.0	49.1	98.2%	47.8	95.6%	2.7%
Silver (Ag)	ND	5.00	4.75	95.0%	3.70	74.0%	25%
Thallium (Tl)	ND	50.0	37.3	74.6%	36.4	72.8%	2.4%
Vanadium (V)	26.7	20.0	47.2	103%	48.4	98.5%	4.0%
Zinc (Zn)	37.4	50.0	85.4	96.0%	83.2	91.6%	4.7%

ppm = parts per million = mg/kg = milligram per kilogram

ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

Note: If sample concentration is lower than spike concentration, recoveries may be either high or low due to matrix interference.

*Leonora Abellanosa*

L. Abellanosa, Inorganics Supervisor

Aug 8, 1997

Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA  
 DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
 (Certification No. 1614)

Cam17mss

**EPA Method 8020  
 Modified Analysis Report**

Attention:	Mr. Gene Bever JB Environmental 8238 Harvester Drive Sacramento, CA 95828	Date Sampled:	Aug 4, 1997
		Date Received:	Aug 4, 1997
		Date Analyzed:	Aug 12, 1997
		Invoice #:	8172
Project #:		Project Name:	Oakland Post Office
Client ID:	97-0001-Drum	LAB ID:	8172-001A
Matrix:	Soil	Dilution:	1: 20

Name	Amount	Reporting Limit	Units
Methyl-tert-butyl-ether (MTBE)	ND	1.0	mg/kg
Benzene	ND	1.0	mg/kg
Toluene	ND	1.0	mg/kg
Ethylbenzene	ND	1.0	mg/kg
Xylenes	2.4	1.0	mg/kg

Surrogate % Recovery of Trifluorotoluene =

ppb = parts per billion = ug/kg = micrograms per kilogram

ppm = parts per million = mg/kg = milligrams per kilogram

ND = Not Detected. Compound(s) may be present at concentrations below the detection limit

\* Loss of surrogate recovery due to sample matrix effect.

Rina Maharia  
 R. L. James, Principal Chemist

Aug 14, 1997  
 Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA  
 DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
 (Certification No. 1614)

8020001

**EPA Method 8020  
Modified Analysis Report**

Attention:	Mr. Gene Bever JB Environmental 8238 Hardester Drive Sacramento, CA 95828	Date Sampled:	Aug 4, 1997
		Date Received:	Aug 4, 1997
		Date Re-analyzed:	Aug 14, 1997
		Invoice #:	8172
Project #:		Project Name:	Oakland Post Office
Client ID:	97-0006-CSand	LAB ID:	8172-006A
Matrix:	Soil	Dilution: 1:	1

Name	Amount	Reporting Limit	Units
Methyl-tert-butyl-ether (MTBE)	ND	0.0050	mg/kg
Benzene	ND	0.0050	mg/kg
Toluene	ND	0.0050	mg/kg
Ethylbenzene	0.0069	0.0050	mg/kg
Xylenes	0.074	0.0050	mg/kg
<b>Surrogate % Recovery of Trifluorotoluene =</b>		<b>94%</b>	

ppb = parts per billion = ug/lq = micrograms per kilogram

ppm = parts per million = mg/kg = milligrams per kilogram

ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

**Note: Sample was originally run on 8/12/97.**

*Rena Malabarica*  
R. L. James, Principal Chemist

Aug 14, 1997  
Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA  
DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
(Certification No. 1614)

8020006

**EPA Method 8020  
Modified Analysis Report**

<b>Attention:</b>	Mr. Gene Bever JB Environmental 8238 Hardester Drive Sacramento, CA 95828	<b>Date Sampled:</b>	Aug 4, 1997
		<b>Date Received:</b>	Aug 4, 1997
		<b>Date Analyzed:</b>	Aug 12, 1997
		<b>Invoice #:</b>	8172
<b>Project #:</b>		<b>Project Name:</b>	Oakland Post Office
<b>Client ID:</b>	97-0021-CS#1	<b>LAB ID:</b>	8172-016A
<b>Matrix:</b>	Soil	<b>Dilution:</b>	1: 1

Name	Amount	Reporting Limit	Units
Methyl-tert-butyl-ether (MTBE)	ND	0.0050	mg/kg
Benzene	ND	0.0050	mg/kg
Toluene	ND	0.0050	mg/kg
Ethylbenzene	ND	0.0050	mg/kg
Xylenes	ND	0.0050	mg/kg
<b>Surrogate % Recovery of Trifluorotoluene =</b>		<b>28%*</b>	

ppb = parts per billion = ug/kg = micrograms per kilogram

ppm = parts per million = mg/kg = milligrams per kilogram

ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

\* Low surrogate recovery due to sample matrix effect.

*Rita Manheila for*  
R. L. James, Principal Chemist

Aug 14, 1997  
Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA  
DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
(Certification No. 1614)

8020016

**EPA Method 8020  
Modified Analysis Report**

Attention:	Mr. Gene Bever JB Environmental 8238 Hardester Drive Sacramento, CA 95828	Date Sampled:	Aug 4, 1997
		Date Received:	Aug 4, 1997
		Date Analyzed:	Aug 12, 1997
		Invoice #:	8172
Project #:		Project Name:	Oakland Post Office
Client ID:	97-0011-CSoil#2	LAB ID:	8172-011A
Matrix:	Soil	Dilution:	1: 1

Name	Amount	Reporting Limit	Units
Methyl-tert-butyl-ether (MTBE)	ND	0.0050	mg/kg
Benzene	ND	0.0050	mg/kg
Toluene	ND	0.0050	mg/kg
Ethylbenzene	ND	0.0050	mg/kg
Xylenes	ND	0.0050	mg/kg
Surrogate % Recovery of Trifluorotoluene =		84%	

ppb = parts per billion = ug/kg = micrograms per kilogram

ppm = parts per million = mg/kg = milligrams per kilogram

ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

Rina M. Williams  
R. L. James, Principal Chemist

Aug 14, 1997  
Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA  
DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
(Certification No. 1614)

8020011



**EPA Method 8020  
Modified Matrix Spike (MS) & Matrix Spike Duplicate (MSD)  
BTEX Analysis Report**

Attention: Mr. Gene Bever  
JB Environmental  
8238 Harvester Drive  
Sacramento, CA 95828

Date Sampled: Aug 4, 1997  
Date Received: Aug 4, 1997  
Date Analyzed: Aug 13, 1997  
Invoice #: 8172

Project ID:

Project Name: Oakland Post Office

Client ID: MS/MSD (Batch)

LAB ID: 8209-060MS  
8209-060MSD

Matrix: Soil

Dilution 1: 1

Name	Spike Added	Sample Conc.	MS Result	MSD Result	Units	MS % Recovery	MSD % Recovery	% RPD Recovery	QC Limits RPD	%Rec
Benzene	30	ND	29	30	ug/kg	97%	100%	3%	20	65-135
Toluene	30	ND	29	32	ug/kg	97%	107%	10%	20	65-135
Ethylbenzene	30	ND	29	31	ug/kg	97%	103%	7%	20	65-135
m,p-Xylenes	60	ND	58	62	ug/kg	97%	103%	7%	20	65-135
o-Xylenes	30	ND	30	32	ug/kg	100%	107%	6%	20	65-135

Surrogate % Recovery of Trifluorotoluene =

90% MS

93% MSD

ppb = parts per billion = ug/kg = micrograms per kilogram  
ppm = parts per million = ug/g = micrograms per gram  
ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

*Rina Mankaria for*  
R. L. James, Principal Chemist

Aug 14, 1997  
Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC IS CERTIFIED BY THE STATE OF CALIFORNIA  
DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
(Certification No. 1614)

8020mss1

**EPA Method 8020  
Modified Matrix Spike (MS) & Matrix Spike Duplicate (MSD)  
BTEX Analysis Report**

Attention: Mr. Gene Bever  
JB Environmental  
8238 Harvester Drive  
Sacramento, CA 95828

Date Sampled: Aug 4, 1997  
Date Received: Aug 4, 1997  
Date Analyzed: Aug 12, 1997  
Invoice #: 8172

Project ID:

Project Name: Oakland Post Office

Client ID: MS/MSD (Batch)

LAB ID: 8162-001MS  
8162-001MSD

Matrix: Soil

Dilution 1. 1

Name	Spike Added	Sample Conc.	MS Result	MSD Result	Units	MS % Recovery	MSD % Recovery	% RPD Recovery	QC Limits RPD	QC Limits %Rec
Benzene	30	ND	31	31	ug/kg	103%	103%	0%	20	65-135
Toluene	30	ND	34	32	ug/kg	113%	107%	6%	20	65-135
Ethylbenzene	30	ND	34	39	ug/kg	113%	130%	14%	20	65-135
m,p-Xylenes	60	ND	63	68	ug/kg	105%	113%	8%	20	65-135
o-Xylenes	30	ND	35	35	ug/kg	117%	117%	0%	20	65-135

Surrogate % Recovery of Trifluorotoluene =

96% MS

95% MSD

ppb = parts per billion = ug/kg = micrograms per kilogram  
ppmv = parts per million = ug/g = micrograms per gram  
ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

*Rita Manthani*  
R. L. James, Principal Chemist

Aug 14, 1997  
Data Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC IS CERTIFIED BY THE STATE OF CALIFORNIA  
DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
(Certification No. 1814)

8020mss

**EPA Method 8020  
 Modified Laboratory Control Spike (LCS) &  
 Laboratory Control Spike Duplicate (LCSD) BTEX Analysis Report**

Attention: Mr. Gene Bever  
 JB Environmental  
 8238 Hardester Drive  
 Sacramento, CA 95828

Date Sampled: Aug 4, 1997  
 Date Received: Aug 4, 1997  
 Date Analyzed: Aug 13, 1997  
 Invoice #: 8172

Project ID: Project Name: Oakland Post Office  
 Client ID: LCS/LCSD LAB ID: 8172-LCS  
 8172-LCSD  
 Matrix: Soil Dilution 1: 1

Name	Spike Added	Sample Conc.	LCS Result	LCSD Result	Units	LCS % Recovery	LCSD % Recovery	% RPD Recovery	QC Limits RPD	%Rec
Benzene	30	ND	27	30	ug/kg	90%	100%	11%	20	65-135
Toluene	30	ND	27	30	ug/kg	90%	100%	11%	20	65-135
Ethylbenzene	30	ND	27	30	ug/kg	90%	100%	11%	20	65-135
m,p-Xylenes	60	ND	55	60	ug/kg	92%	100%	9%	20	65-135
o-Xylenes	30	ND	29	32	ug/kg	97%	107%	10%	20	65-135

Surrogate % Recovery of Trifluorotoluene = 86% LCS 127% LCSD

ppb = parts per billion = ug/kg = micrograms per kilogram  
 ppm = parts per million = ug/g = micrograms per gram  
 ND = Not Detected Compound(s) may be present at concentrations below the detection limit

*R. L. James*  
 R. L. James, Principal Chemist

Aug 14, 1997  
 Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC IS CERTIFIED BY THE STATE OF CALIFORNIA  
 DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
 (Certification No. 1514)

8020LCSS1

**EPA Method 8020  
 Modified Laboratory Control Spike (LCS) &  
 Laboratory Control Spike Duplicate (LCSD) BTEX Analysis Report**

Attention: Mr. Gene Bever  
 JB Environmental  
 8238 Hardester Drive  
 Sacramento, CA 95828

Date Sampled: Aug 4, 1997  
 Date Received: Aug 4, 1997  
 Date Analyzed: Aug 12, 1997  
 Invoice #: 8172

Project ID: Project Name: Oakland Post Office

Client ID: LCS/LCSD LAB ID: 8172-LCS  
 8172-LCSD

Matrix: Soil Dilution 1: 1

Name	Spike Added	Sample Conc.	LCS Result	LCSD Result	Units	LCS % Recovery	LCSD % Recovery	% RPD Recovery	QC Limits RPD	%Rec
Benzene	30	ND	32	30	ug/kg	107%	100%	6%	20	65-135
Toluene	30	ND	37	35	ug/kg	123%	117%	6%	20	65-135
Ethylbenzene	30	ND	39	37	ug/kg	130%	123%	5%	20	65-135
m,p-Xylenes	60	ND	75	69	ug/kg	125%	115%	8%	20	65-135
o-Xylenes	30	ND	41	38	ug/kg	137%	127%	8%	20	65-135

Surrogate % Recovery of Trifluorotoluene = 105% LCS 92% LCSD

ppb = parts per billion = ug/kg = micrograms per kilogram  
 ppm = parts per million = ug/g = micrograms per gram  
 ND = Not Detected. Compound(s) may be present at concentrations below the detection limit

*Rina Wauhan*  
 R. L. James, Principal Chemist

Aug 14, 1997  
 Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC IS CERTIFIED BY THE STATE OF CALIFORNIA  
 DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
 (Certification No. 7814)

8020lcsc

## EPA Method 8010 Halogenated Volatile Organics Analysis Report

Attention:	Mr. Gene Bever JB Environmental 8238 Hardester Drive Sacramento, CA 95828	Date Sampled: Aug 4, 1997 Date Received: Aug 4, 1997 Date Analyzed: Aug 12, 1997 Invoice #: 8172
Project #:		Project Name: Oakland Post Office
Client ID:	97-0003-Drum	LAB ID: 8172-003A
Matrix:	Soil	Dilution: 1 : 1

Name	Amount	Reporting Limit	Units
1. Dichlorodifluoromethane	0.70	0.50	ug/kg
2. Chloromethane	ND	0.50	ug/kg
3. Vinyl Chloride	ND	0.50	ug/kg
4. Bromomethane	ND	0.50	ug/kg
5. Chloroethane	ND	0.50	ug/kg
6. Trichlorofluoromethane	ND	0.50	ug/kg
7. 1,1-Dichloroethene	ND	0.50	ug/kg
8. Dichloromethane	ND	0.50	ug/kg
9. Trans-1,2-Dichloroethene	ND	0.50	ug/kg
10. 1,1-Dichloroethane	0.60	0.50	ug/kg
11. Cis 1,2-Dichloroethene	ND	0.50	ug/kg
12. Chloroform	ND	0.50	ug/kg
13. 1,1,1-Trichloroethane	26	0.50	ug/kg
14. Carbon tetrachloride	ND	0.50	ug/kg
15. 1,2-Dichloroethane	ND	0.50	ug/kg
16. Trichloroethene	ND	0.50	ug/kg
17. 1,2-Dichloropropane	ND	0.50	ug/kg
18. Bromodichloromethane	ND	0.50	ug/kg
19. Cis-1,3 Dichloropropene	ND	0.50	ug/kg
20. Trans-1,3-Dichloropropene	ND	0.50	ug/kg
21. 1,1,2-Trichloroethane	ND	0.50	ug/kg

ppb = parts per billion = ug/kg = micrograms per kilogram  
 ppm = parts per million = ug/ml = micrograms per milliliter  
 ND = Not Detected Compound(s) may be present at concentrations below the reporting limit

8010003

## EPA Method 8010 Halogenated Volatile Organics Analysis Report

Attention:	Mr. Gene Bever JB Environmental 8238 Hardester Drive Sacramento, CA 95828	Date Sampled: Aug 4, 1997 Date Received: Aug 4, 1997 Date Analyzed: Aug 12, 1997 Invoice #: 8172
Project #:		Project Name: Oakland Post Office
Client ID:	97-0003-Drum	LAB ID: 8172-003A
Matrix:	Soil	Dilution: 1 : 1

Name	Amount	Reporting Limit	Units
22. Tetrachloroethene	5.8	0.50	ug/kg
23. Dibromochloromethane	ND	0.50	ug/kg
24. Chlorobenzene	ND	0.50	ug/kg
25. Bromoform	ND	0.50	ug/kg
26. 1,1,2,2-Tetrachloroethane	ND	0.50	ug/kg
27. 1,3-Dichlorobenzene	ND	0.50	ug/kg
28. 1,4-Dichlorobenzene	ND	0.50	ug/kg
29. 1,2-Dichlorobenzene	ND	0.50	ug/kg

Surrogate % Recovery 2-Bromo-1-chloropropane = \*

Surrogate % Recovery 1,4-Dichlorobutane = \*

ppb = parts per billion = ug/kg = micrograms per kilogram  
ppm = parts per million = ug/ml = micrograms per milliliter  
ND = Not Detected Compound(s) may be present at concentrations below the reporting limit.  
**\* Loss of surrogate recovery due to soil matrix effect.**

  
\_\_\_\_\_  
R. L. James, Principal Chemist

Aug 22, 1997  
\_\_\_\_\_  
Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC IS CERTIFIED BY THE STATE OF CALIFORNIA  
DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
(Certification No. 1614)

8010003

## EPA Method 8010 Halogenated Volatile Organics Analysis Report

Attention:	Mr. Gene Bever JB Environmental 8238 Hardester Drive Sacramento, CA 95828	Date Sampled: Aug 4, 1997 Date Received: Aug 4, 1997 Date Analyzed: Aug 12, 1997 Invoice #: 8172
Project #:		Project Name: Oakland Post Office
Client ID:	97-0013-CSoil#2	LAB ID: 8172-013A
Matrix:	Soil	Dilution: 1 : 1

Name	Amount	Reporting Limit	Units
22. Tetrachloroethene	ND	0.50	ug/kg
23. Dibromochloromethane	ND	0.50	ug/kg
24. Chlorobenzene	ND	0.50	ug/kg
25. Bromoform	ND	0.50	ug/kg
26. 1,1,2,2-Tetrachloroethane	ND	0.50	ug/kg
27. 1,3-Dichlorobenzene	ND	0.50	ug/kg
28. 1,4-Dichlorobenzene	ND	0.50	ug/kg
29. 1,2-Dichlorobenzene	ND	0.50	ug/kg

Surrogate % Recovery 2-Bromo-1-chloropropane = 87%  
Surrogate % Recovery 1,4-Dichlorobutane = 82%

ppb = parts per billion = ug/kg = micrograms per kilogram  
ppm = parts per million = ug/ml = micrograms per milliliter  
ND = Not Detected. Compound(s) may be present at concentrations below the reporting limit



R. L. James, Principal Chemist

Aug 22, 1997  
Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA  
DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
(Certification No. 1614)

8010013

## EPA Method 8010 Halogenated Volatile Organics Analysis Report

Attention: Mr. Gene Bever  
JB Environmental  
8238 Hardester Drive  
Sacramento, CA 95828

Date Sampled: Aug 4, 1997  
Date Received: Aug 4, 1997  
Date Analyzed: Aug 12, 1997  
Invoice #: 8172

Project #:

Project Name: Oakland Post Office

Client ID: 97-0013-CSoil#2

LAB ID: 8172-013A

Matrix: Soil

Dilution: 1 : 1

Name	Amount	Reporting Limit	Units
1. Dichlorodifluoromethane	ND	0.50	ug/kg
2. Chloromethane	ND	0.50	ug/kg
3. Vinyl Chloride	ND	0.50	ug/kg
4. Bromomethane	ND	0.50	ug/kg
5. Chloroethane	ND	0.50	ug/kg
6. Trichlorofluoromethane	ND	0.50	ug/kg
7. 1,1-Dichloroethene	ND	0.50	ug/kg
8. Dichloromethane	ND	0.50	ug/kg
9. Trans-1,2-Dichloroethene	ND	0.50	ug/kg
10. 1,1-Dichloroethane	ND	0.50	ug/kg
11. Cis 1,2-Dichloroethene	ND	0.50	ug/kg
12. Chloroform	ND	0.50	ug/kg
13. 1,1,1-Trichloroethane	ND	0.50	ug/kg
14. Carbon tetrachloride	ND	0.50	ug/kg
15. 1,2-Dichloroethane	ND	0.50	ug/kg
16. Trichloroethene	ND	0.50	ug/kg
17. 1,2-Dichloropropane	ND	0.50	ug/kg
18. Bromodichloromethane	ND	0.50	ug/kg
19. Cis-1,3 Dichloropropene	ND	0.50	ug/kg
20. Trans-1,3-Dichloropropene	ND	0.50	ug/kg
21. 1,1,2-Trichloroethane	ND	0.50	ug/kg

ppb = parts per billion = ug/kg = micrograms per kilogram

ppm = parts per million = ug/ml = micrograms per milliliter

ND = Not Detected. Compound(s) may be present at concentrations below the reporting limit.

8010013



## EPA Method 8010 Halogenated Volatile Organics Analysis Report

Attention: Mr. Gene Bever  
JB Environmental  
8238 Harvester Drive  
Sacramento, CA 95828

Date Sampled: Aug 4, 1997  
Date Received: Aug 4, 1997  
Date Analyzed: Aug 12, 1997  
Invoice #: 8172

Project #:

Project Name: Oakland Post Office

Client ID: 97-0023-CS#1

LAB ID: 8172-018A

Matrix: Soil

Dilution: 1 : 1

Name	Amount	Reporting Limit	Units
22. Tetrachloroethene	ND	0.50	ug/kg
23. Dibromochloromethane	ND	0.50	ug/kg
24. Chlorobenzene	ND	0.50	ug/kg
25. Bromoform	ND	0.50	ug/kg
26. 1,1,2,2-Tetrachloroethane	ND	0.50	ug/kg
27. 1,3-Dichlorobenzene	ND	0.50	ug/kg
28. 1,4-Dichlorobenzene	ND	0.50	ug/kg
29. 1,2-Dichlorobenzene	ND	0.50	ug/kg

Surrogate % Recovery 2-Bromo-1-chloropropane = \*

Surrogate % Recovery 1,4-Dichlorobutane = \*

ppb = parts per billion = ug/kg = micrograms per kilogram

ppm = parts per million = ug/ml = micrograms per milliliter

ND = Not Detected. Compound(s) may be present at concentrations below the reporting limit

\* Loss of surrogate recovery due to soil matrix effect.



R. L. James, Principal Chemist

Aug 22, 1997

Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA

DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY

(Certification No. 1614)

8010018

## EPA Method 8010 Halogenated Volatile Organics Analysis Report

Attention: Mr. Gene Bever JB Environmental 8238 Hardester Drive Sacramento, CA 95828	Date Sampled: Aug 4, 1997 Date Received: Aug 4, 1997 Date Analyzed: Aug 12, 1997 Invoice #: 8172	
Project #:	Project Name: Oakland Post Office	
Client ID: 97-0023-CS#1	LAB ID: 8172-018A	
Matrix: Soil	Dilution: 1 : 1	

Name	Amount	Reporting Limit	Units
1. Dichlorodifluoromethane	ND	0.50	ug/kg
2. Chloromethane	ND	0.50	ug/kg
3. Vinyl Chloride	ND	0.50	ug/kg
4. Bromomethane	ND	0.50	ug/kg
5. Chloroethane	ND	0.50	ug/kg
6. Trichlorofluoromethane	ND	0.50	ug/kg
7. 1,1-Dichloroethene	ND	0.50	ug/kg
8. Dichloromethane	ND	0.50	ug/kg
9. Trans-1,2-Dichloroethene	ND	0.50	ug/kg
10. 1,1-Dichloroethane	ND	0.50	ug/kg
11. Cis 1,2-Dichloroethene	ND	0.50	ug/kg
12. Chloroform	ND	0.50	ug/kg
13. 1,1,1-Trichloroethane	2.8	0.50	ug/kg
14. Carbon tetrachloride	ND	0.50	ug/kg
15. 1,2-Dichloroethane	ND	0.50	ug/kg
16. Trichloroethene	ND	0.50	ug/kg
17. 1,2-Dichloropropane	ND	0.50	ug/kg
18. Bromodichloromethane	ND	0.50	ug/kg
19. Cis-1,3 Dichloropropene	ND	0.50	ug/kg
20. Trans-1,3-Dichloropropene	ND	0.50	ug/kg
21. 1,1,2-Trichloroethane	ND	0.50	ug/kg

ppb = parts per billion = ug/kg = micrograms per kilogram  
 ppm = parts per million = ug/ml = micrograms per milliliter  
 ND = Not Detected Compound(s) may be present at concentrations below the reporting limit.

8010018

**EPA Method 8010  
Halogenated Volatile Organics Analysis Report**

Attention:	Mr. Gene Bever JB Environmental 8238 Hardester Drive Sacramento, CA 95828	Date Sampled:	Aug 4, 1997
		Date Received:	Aug 4, 1997
		Date Analyzed:	Aug 12, 1997
		Invoice #.	8172
Project #:		Project Name:	Oakland Post Office
Client ID:	97-0008-CSand	LAB ID:	8172-008A
Matrix:	Soil	Dilution:	1 : 1

Name	Amount	Reporting Limit	Units
22. Tetrachloroethene	ND	0.50	ug/kg
23. Dibromochloromethane	ND	0.50	ug/kg
24. Chlorobenzene	ND	0.50	ug/kg
25. Bromoform	ND	0.50	ug/kg
26. 1,1,1,2-Tetrachloroethane	ND	0.50	ug/kg
27. 1,3-Dichlorobenzene	ND	0.50	ug/kg
28. 1,4-Dichlorobenzene	ND	0.50	ug/kg
29. 1,2-Dichlorobenzene	ND	0.50	ug/kg

Surrogate % Recovery 2-Bromo-1-chloropropane = 52%\*  
Surrogate % Recovery 1,4-Dichlorobutane = 45%\*

ppb = parts per billion = ug/kg = micrograms per kilogram  
ppm = parts per million = ug/ml = micrograms per milliliter  
ND = Not Detected. Compound(s) may be present at concentrations below the reporting limit.

\* Low surrogate recovery due to soil matrix effect.

  
R. L. James, Principal Chemist

Aug 22, 1997  
Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC IS CERTIFIED BY THE STATE OF CALIFORNIA  
DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY  
(Certification No 1614)

8010008

**EPA Method 8010  
Halogenated Volatile Organics Analysis Report**

Attention: Mr. Gene Bever  
JB Environmental  
8238 Hardester Drive  
Sacramento, CA 95828

Date Sampled: Aug 4, 1997  
Date Received: Aug 4, 1997  
Date Analyzed: Aug 12, 1997  
Invoice #: 8172

Project #:

Project Name: Oakland Post Office

Client ID: 97-0008-CSand

LAB ID: 8172-008A

Matrix: Soil

Dilution: 1 : 1

Name	Amount	Reporting Limit	Units
1. Dichlorodifluoromethane	ND	0.50	ug/kg
2. Chloromethane	ND	0.50	ug/kg
3. Vinyl Chloride	ND	0.50	ug/kg
4. Bromomethane	ND	0.50	ug/kg
5. Chloroethane	ND	0.50	ug/kg
6. Trichlorofluoromethane	ND	0.50	ug/kg
7. 1,1-Dichloroethene	ND	0.50	ug/kg
8. Dichloromethane	ND	0.50	ug/kg
9. Trans-1,2-Dichloroethene	ND	0.50	ug/kg
10. 1,1-Dichloroethane	ND	0.50	ug/kg
11. Cis 1,2-Dichloroethene	ND	0.50	ug/kg
12. Chloroform	ND	0.50	ug/kg
13. 1,1,1-Trichloroethane	ND	0.50	ug/kg
14. Carbon tetrachloride	ND	0.50	ug/kg
15. 1,2-Dichloroethane	ND	0.50	ug/kg
16. Trichloroethene	ND	0.50	ug/kg
17. 1,2-Dichloropropane	ND	0.50	ug/kg
18. Bromodichloromethane	ND	0.50	ug/kg
19. Cis-1,3 Dichloropropene	ND	0.50	ug/kg
20. Trans-1,3-Dichloropropene	ND	0.50	ug/kg
21. 1,1,2-Trichloroethane	ND	0.50	ug/kg

ppb = parts per billion = ug/kg = micrograms per kilogram

ppm = parts per million = ug/ml = micrograms per milliliter

ND = Not Detected Compound(s) may be present at concentrations below the reporting limit.

8010008



