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93 NOV -1 AM 11:55

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1592 Union Street
Suite 167
San Francisco, CA 94123

October 29, 1993

Please Reply To
OAKLAND

Barney Chan
Alameda County Health
Care Services Agency
Dept. of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Re: Hausauer v. Robertson
Our File No.: 1023-0031

Dear Mr. Chan:

This office represents Ruben Hausauer in the above-entitled action arising from a dispute concerning an underground storage tank located at 3927 East 14th Street, Oakland, California.

Pursuant to our representation of Mr. Hausauer, please find enclosed an environmental report dated October 25, 1993, prepared by John P. Cummings and Associates. This report concerns the UST at the above location.

After your review of the enclosed, please call me with any questions or comments you may have. Thank you for your time in this matter.

KING, SHAPIRO, MITTELMAN & BUCHMAN


ARTHUR E. FISHER

AEF:rj
Enclosure
cc: James D. Mayol, Esq. (w/enclosure)
Ruben Hausauer (w/o enclosure)

John P. Cummings & Associates

Environmental Consultants

Ph. (510) 505-0722
Fax (510) 791-3306

93 NOV -1 AM 11:55

P.O. Box 2847
Fremont, CA 94536-2847

PERSONAL & CONFIDENTIAL

File No 0293002.00
September 30, 1993 (2nd Draft 10/25/93)

Mr. Ruben Hausauer
6017 14th Street
Oakland CA 94601

Subject; Report on the
Tank Site Investigation
3927 E. 14th Street, Oakland CA

Dear Mr. Hausauer,

John P. Cummings and Associates (JPCA) is pleased to present this report of an investigation of an Underground Storage Tank (UST) at the site located at 3927 E. 14th Street in Oakland, CA. This letter contains a description of the field work, soil sample analysis, conclusions and recommendations.

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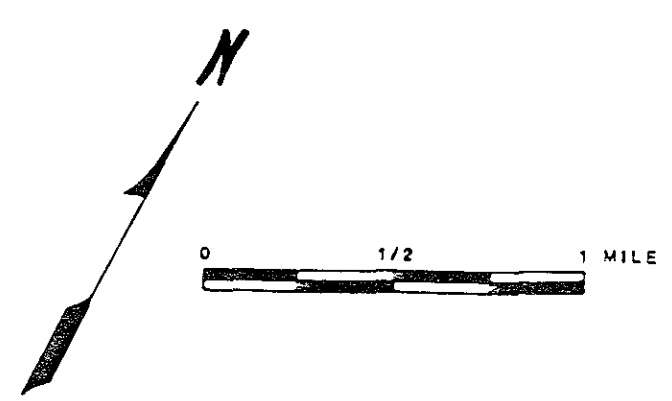
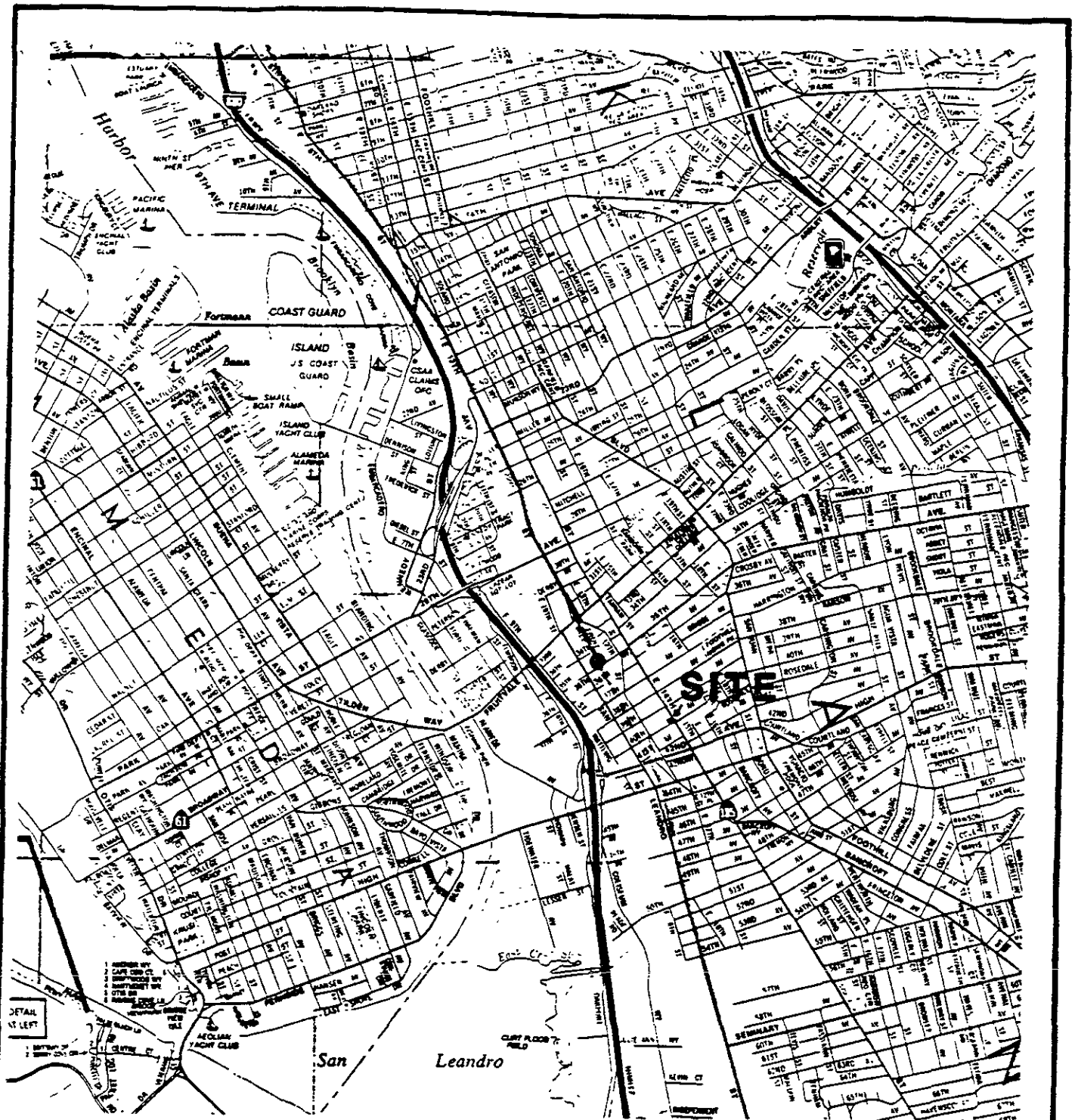
INTRODUCTION

JPCA understands that the site was at one time used as an automobile dealership. The building has tenants currently who are in the auto repair business, however the present tenant does not use nor has he ever reportedly used the UST. The site location is identified in Figure 1. A 550 gal capacity UST has been identified as present on this site. The integrity of the tank is unknown. The UST was reportedly filled with concrete over 12 years ago. Based on discussions with Alameda County, the following investigation was proposed, approved and carried out.

Two soil borings were slant drilled by a properly licensed driller into the soil approximately 5 feet from each end of the UST. These borings were extended approximately 11 feet, on a diagonal, into the ground and approximately 2 feet into the native soil below the UST. The borings did not extend into groundwater. Soil samples were collected at depths of approximately 4 and 7 feet.

FIELD WORK

On September 9, 1993, John N. Alt and John P. Cummings of JPCA were on site. A permit to conduct the drilling of the borings had been received from the Zone 7 Water Agency. A copy of the permit is contained in Appendix A. Clearance was received telephonically from U S Alert a week earlier. The utilities had been marked. The location of the borings identified as B-1 and B-2 are shown in Figure 2. The UST location is also clearly identified in Figure 2.



JOHN P. CUMMINGS & ASSOCIATES	PROJECT # 0293002.00 NEW GENICO OAKLAND, CALIF.
----------------------------------	---

Fig. 1 **SITE LOCATION MAP**

East 14th Street

different building

3927

East

14th Street

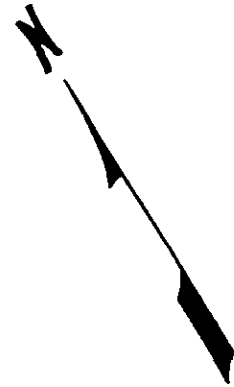
Roll-up Door

B-1



Tank Area

B-2



40th Avenue



JOHN P. CUMMINGS
& ASSOCIATES

PROJECT #
3927 E. 14th St.
Oakland, California

Fig. 2

PARTIAL SITE PLAN
& BORING LOCATIONS

GREAT SIERRA EXPLORATION was the driller for these two borings. The borings were slant drilled at approximately 45 degrees to enable JPCA to collect the soil samples from each of the borings in the native soil beneath the UST. The Boring Logs were prepared by the Certified Engineering Geologist on site during the drilling. The Boring Logs are Contained in Appendix A. Figure 3. depicts the slant drilled borings and approximate location of the samples collected.

The soil encountered in Boring 1 (B-1) was a plastic, stiff, moist black clay at the surface and became stiffer as the boring was advanced. The color changed from black to blue-grey to blue and green as the boring was advanced. A strong hydrocarbon odor was encountered at approximately 6 feet.

The soil encountered in Boring 2 (B-2) was a plastic, stiff, moist brown clay at the surface and became stiffer as the boring was advanced. The color changed from brown to blue-grey to green-grey as the boring was advanced. A strong hydrocarbon odor was encountered at approximately 6 feet.

Two soil samples were acquired from each boring, one at approximately 4 feet and the second beneath the UST in the native soil at approximately 7 feet below grade. The samples collected from Boring 1 (B-1) at 4 and 7 feet were identified as B-1-1 and B-1-2 respectively. The samples collected from Boring 2 (B-2) at 4 and 7 feet were identified as B-2-1 and B-2-2 respectively. The samples were collected in clean brass tubes, capped and sealed, labeled, held in a cooler at approximately 4 degrees Centigrade, until analysis by a State Certified laboratory and transported under Chain-of-Custody documentation.

After the soil samples were collected the borings were slurry filled with cement.

The soil cuttings from the borings were stored on site in a 55-gallon DOT drum.

ANALYTICAL RESULTS

The 4 soil samples were analyzed for Total Petroleum Hydrocarbons as gasoline (TPHG) and diesel (TPHD) using EPA Method 8015; for Benzene, Toluene, Ethylbenzene and Xylene (BTEX) using Method 8020; Total Oil and Grease (TOG) using Method 5520 D&F; for Halogenated Hydrocarbons EPA Method 8240; for the metals Cadmium, Chromium, Lead, Nickel and Zinc (CAM 5) using Inductively Coupled Argon Plasma (ICAP) or Atomic Absorption (AA).

TPHD was not detected in any of the soil samples collected.

Halogenated Hydrocarbons were not detected in any of the soil samples collected.

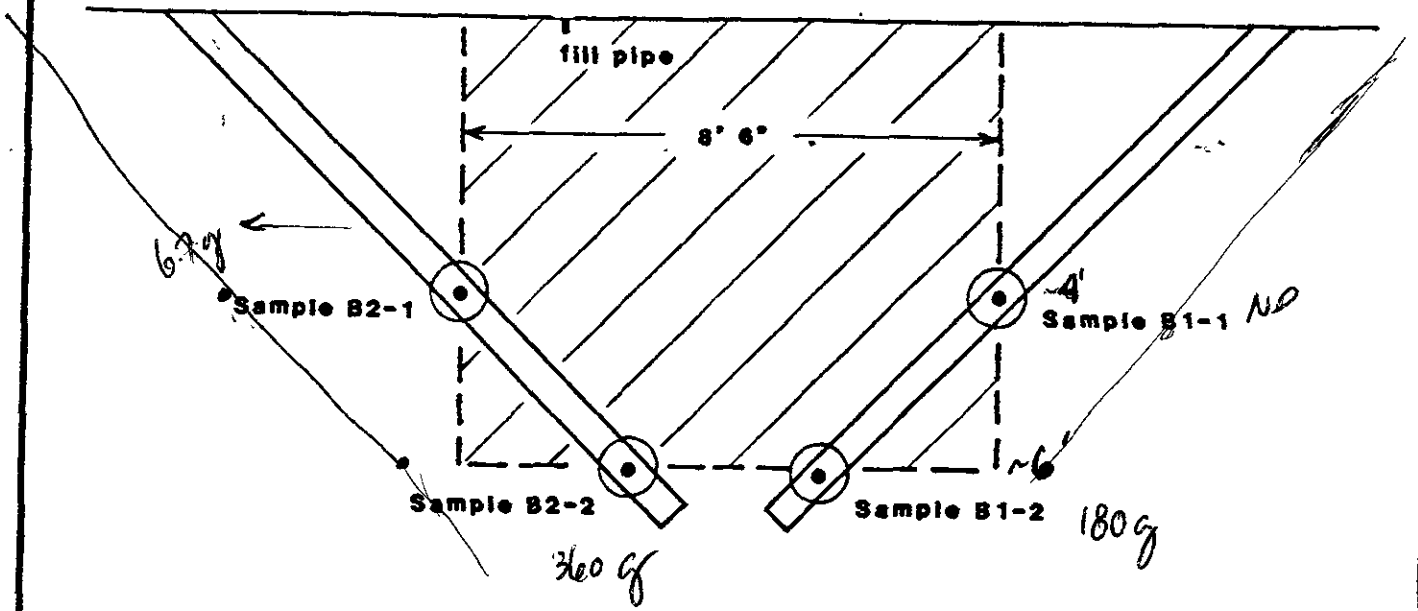
West

40th Avenue

East

B-2

B-1



-Horizontal distance measured.

-Depth of tank pit assumed.

JOHN P. CUMMINGS & ASSOCIATES	PROJECT # 3927 East 14th St. Oakland, California
Fig. 3 CROSS SECTION THROUGH TANK AREA	

The results, in parts per million (ppm), for TPHG and BTEX are shown in Table 1. below. The laboratory data sheets with detection limits and COC documentation are contained in Appendix B.

TABLE 1.

Sample ID	ppm				
	TPHG	B	T	E	X
B-1-1	ND	ND	ND	ND	1.2
B-1-2	180	ND	0.22	0.43	3.5
B-2-1	6.7	ND	ND	0.24	0.82
B-2-2	360	ND	0.58	2.8	9.9

ND=Not Detected

The results, in ppm, for Total Hydrocarbons and TOG are shown in Table 2. below. The laboratory data sheets with detection limits and COC documentation are contained in Appendix B.

TABLE 2.

Sample ID	ppm	
	Total Oil and Grease	Hydrocarbons
B-1-1	150	220
B-1-2	ND	200
B-2-1	ND	28
B-2-2	ND	130

ND=Not Detected

The results, in ppm, for 5 California Action Metals (CAM 5) are shown in Table 3. below. The laboratory data sheets with detection limits and COC documentation are contained in Appendix B.

TABLE 3.

Sample ID	ppm				
	Cadmium	Chromium	Lead	Nickel	Zinc
B-1-1	ND	59	27	93	39
B-1-2	ND	83	66	170	58
B-2-1	ND	54	42	72	35
B-2-2	ND	87	540	170	160

ND=Not Detected

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Based on the soil samples collected and analyzed, it is highly probable a release of hydrocarbons occurred. An Unauthorized Leak Form must be completed and forwarded to the proper regulatory agencies.

No Benzene, Diesel or Halogenated Hydrocarbons were detected in the soil samples.

The UST was most likely a waste oil tank because the Cam 5 metals, TOG, TPHG and Hydrocarbons are consistent with a waste oil tank.

According to the analytical report the contaminants showed "weathering", which indicates the contaminants have been in the soil for a very long time.


The Hydrocarbons, Gasoline and Metals Contaminant concentrations are sufficiently high that JPCA suggests that one monitoring well be placed on the westerly side of the UST to determine if groundwater has been impacted. The lead agency, the Alameda Health Services Department, will require at least this one monitoring well.


If the groundwater from the monitoring well has no detectable contaminants, JPCA will request file closure for this site.

A proposal to place a single monitoring well with the estimated cost shall be sent as a separate document.

If you have any questions, please contact us at (510) 505-0722.

Sincerely,


John P. Cummings
Principal


John N. Alt, CEG

cc: Robert W. Shapiro, Esq.
Art Fisher, Esq.

APPENDIX A



ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE

PLEASANTON, CALIFORNIA 94588

VOICE (510) 484-2600

FAX (510) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 3927 East 14th Street,
Oakland; sidewalk area

PERMIT NUMBER 93497

LOCATION NUMBER _____

CLIENT

Name Mr. Rubin Hauser

Address 6017 East 14th St. Voice (510) 638-7501

City Oakland, CA Zip 94601

PERMIT CONDITIONS

Circled Permit Requirements Apply

APPLICANT

Name John N. Alt / Epigene International

38750 Paseo Padre Pkwy Fax (510) 791-3306

Address Suite B-4 Voice 791-1986

City Fremont, CA Zip 94536

A. GENERAL

1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER WELLS, INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

- C. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

D. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

E. WELL DESTRUCTION. See attached.

TYPE OF PROJECT

Well Construction	Geotechnical Investigation
Cathodic Protection	General
Water Supply	Contamination <u>X</u>
Monitoring	Well Destruction

PROPOSED WATER SUPPLY WELL USE

Domestic	Industrial	NA	Other
Municipal	Irrigation		

DRILLING METHOD:

Mud Rotary	Air Rotary	Auger	<u>X</u>
Cable	Other		

DRILLER'S LICENSE NO. Great Sierra / 057 # 610487

WELL PROJECTS

Drill Hole Diameter	in.	Maximum	
Casing Diameter	in.	Depth	ft.
Surface Seal Depth	ft	Number	

GEOTECHNICAL PROJECTS

Number of Borings	<u>2</u>	Maximum	
Hole Diameter	<u>3</u>	Depth	ft.

ESTIMATED STARTING DATE September 9, 1993

ESTIMATED COMPLETION DATE September 9, 1993

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

Approved

Wyman Hong
Wyman Hong

Date 9 Sep 93

APPLICANT'S SIGNATURE

John N. Alt Date 9/3/93

BORING LOCATION	see sketch map	ELEVATION AND DATUM	
DRILLING CONTRACTOR	Great Sierra	DRILLER	Mat/Paul
DRILLING EQUIPMENT	Simzo 2400 SK 1	DATE STARTED	Sept. 9, 1993
DIAMETER OF BORING	6 inches	DATE FINISHED	Sept. 9, 1993
PURPOSE OF BORING	soil contamination	COMPLETION DEPTH (FT)	---
SAMPLING EQUIPMENT	grab from auger	NO. OF UNDIST. SAMPLES	---
COMMENTS	east of tank at 45°±	WATER FIRST DEPTH (FT)	---
		LOGGED BY:	J. Alt
		CHECKED BY:	

DEPTH (FEET)	DESCRIPTION	GRAPHIC LOG	SAMPLES				REMARKS
			LITHOLOGY	NO.	TYPE	BLOW COUNT	
5	dark brown to black CLAY, moist, plastic.					11:25 PM	no odor
	blue-gray CLAY, moist, very stiff.						strong hydrocarbon odor
10	color change to blueish-green CLAY						
	base of hole on diagonal						
15							
20							
25							
30							

Project 3927 E. 14th St., Oakland
Project No.

BORING LOCATION	see sketch map	ELEVATION AND DATUM	
DRILLING CONTRACTOR	Great Sierra	DRILLER	Mat/Paul
DRILLING EQUIPMENT	Simzo 2400 SK 1	DATE STARTED	Sept. 9, 1993
DIAMETER OF BORING	6 inches	DATE FINISHED	Sept. 9, 1993
PURPOSE OF BORING	soil contamination	COMPLETION DEPTH (FT)	---
SAMPLING EQUIPMENT	grab from auger	ROCK DEPTH (FT)	---
COMMENTS	west of tank at 45°±	NO. OF UNDIST. SAMPLES	---
		WATER FIRST DEPTH (FT)	---
		LOGGED BY:	J. Alt
		CHECKED BY:	

DEPTH (FEET)	DESCRIPTION	GRAPHIC LOG	LITHOLOGY	SAMPLES				REMARKS
				NO.	TYPE	BLOW COUNT	DRILLING RATE / TIME	
	on diagonal							
	dark brown to black CLAY, moist, stiff, plastic.						1:00 PM	
5	blueish to greenish gray CLAY, moist, very stiff, plastic.							strong hydrocarbon odors
10	----- base of hole on diagonal							
15								
20								
25								
30								

Project 3927 E. 14th St., Oakland.
Project No.

APPENDIX B

John P. Cummings & Associates

Environmental Consultants

CHAIN OF CUSTODY

Ph. (510) 505-0722
Fax (510) 791-3306

2418

P.O. Box 2847
Fremont, CA 94536 2847

Laboratory: *Sparger Technology Inc*
3050 Fite Circle Suite 112
Sacramento CA 95827

Contact: *Ray James.*

Contact: *J.P. Cummings* | Sampler: *AZ 7*
 Project Name: *NewGenics* | No. *0293002.00*
 Date: *9/9/93*

Sample I.D.	Date/Time Sampled	Matrix Desc.	Container		Lab. #	Analyses Requested						Comments	
			No. of	Type		TPH/Gasoline	BTEX	TPH/Diesel	601/8010	602/8020	TOTAL TOG		HYDROCARBONS
1. B-1-1	9/9/93 11:00	Soil	1	Bus		X	X	X		X	X	X	
2. B-1-2	11:30	↓	↓	↓		↓	↓	↓		↓	↓	↓	
3. B2-1	13:05	↓	↓	↓		↓	↓	↓		↓	↓	↓	
4. B2-2	13:45	↓	↓	↓		↓	↓	↓		↓	↓	↓	
5.													
6.													
7.													
8.													
9.													
10.													

Relinquished by: <i>John Ost</i>	Date: <i>9/9/93</i>	Time: <i>15:05</i>	Received by: <i>Jeffrey</i>	Date: <i>9/9/93</i>	Time: <i>15:07</i>
Relinquished by: <i>Jeffrey</i>	Date: <i>9/9/93</i>	Time: <i>16:30</i>	Received by: <i>Samuel</i>	Date: <i>9/10/93</i>	Time: <i>11:30 am</i>
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Turnaround Time: *Normal Turn 5 days*

Additional Comments: *TOG Hydrocarbons, Halogenated Hc 82410*

Page 1 of 1

8020/8015 Modified Analysis Report

Attention: Mr. John P. Cummings
 John P. Cummings & Associates
 P.O. Box 2847
 Fremont, CA 94536-2847

Date Sampled: Sep. 9, 1993
 Date Received: Sep. 10, 1993
 Date Analyzed: Sep. 17, 1993

Project #: 293002.00

Project Name: New Genico

Client ID: B-1-1

LAB ID: ST93-09-363A

Matrix: Soil

Dilution: 1:2

Name	Amount	Detection Limit	Units
Benzene	ND**	0.01	ug/g
Toluene	ND**	0.01	ug/g
Ethylbenzene	ND**	0.01	ug/g
Xylenes	ND**	0.01	ug/g
TPHgas	ND***	2.0	ug/g

Surrogate % Recovery of Trifluorotoluene = *

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.

NR = Analysis not requested.

* Matrix Interference

** Peaks Weathered

*** Unknown (C8-C32) Hydrocarbon Contamination Present



R. L. James, Principal Chemist

Sep 17, 1993

Date

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

DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY

Certification No. 16141

8020/8015 Modified Analysis Report

Attention: Mr. John P. Cummings
 John P. Cummings & Associates
 P.O. Box 2847
 Fremont, CA 94536-2847

Date Sampled: Sep. 9, 1993
 Date Received: Sep. 10, 1993
 Date Analyzed: Sep. 17, 1993

Project #: 293002.00
 Project Name: New Genico

Client ID: B-1-2
 LAB ID: ST93-09-370A

Matrix: Soil
 Dilution: 1:20

Name	Amount	Detection Limit	Units
Benzene	ND**	0.1	ug/g
Toluene	0.22	0.1	ug/g
Ethylbenzene	0.43	0.1	ug/g
Xylenes	3.50	0.1	ug/g
TPHgas	180	20	ug/g

Surrogate % Recovery of Trifluorotoluene = *

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.

NR = Analysis not requested.

* Matrix Interference

** Peaks Weathered

R. L. James

R. L. James, Principal Chemist

Sep 17, 1993
 Date

8020/8015 Modified Analysis Report

Attention: Mr. John P. Cummings
 John P. Cummings & Associates
 P.O. Box 2847
 Fremont, CA 94536-2847

Date Sampled: Sep. 9, 1993
 Date Received: Sep. 10, 1993
 Date Analyzed: Sep. 17, 1993

Project #: 293002.00
 Project Name: New Genico

Client ID: B-2-1
 LAB ID: ST93-09-377A

Matrix: Soil
 Dilution: 1:5 BTEX

Name	Amount	Detection Limit	Units
Benzene	ND	0.025	ug/g
Toluene	ND	0.025	ug/g
Ethylbenzene	0.031	0.025	ug/g
Xylenes	0.12	0.025	ug/g
TPHgas	6.7	1.0	ug/g
Surrogate % Recovery of Trifluorotoluene =		117%	

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.

NR = Analysis not requested.



R. L. James, Principal Chemist

Sep 17, 1993

Date

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)

8020/8015 Modified Analysis Report

Attention: Mr. John P. Cummings
 John P. Cummings & Associates
 P.O. Box 2847
 Fremont, CA 94536-2847

Date Sampled: Sep. 9, 1993
 Date Received: Sep. 10, 1993
 Date Analyzed: Sep. 17, 1993

Project #: 293002.00
 Project Name: New Genico

Client ID: B-2-2
 LAB ID: ST93-09-384A

Matrix: Soil
 Dilution: 1:100

Name	Amount	Detection Limit	Units
Benzene	ND**	0.5	ug/g
Toluene	1.3	0.5	ug/g
Ethylbenzene	2.8	0.5	ug/g
Xylenes	9.9	0.5	ug/g
TPHgas	<u>360</u> ppm	100	ug/g
<u>Surrogate % Recovery of Trifluorotoluene =</u>			

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.
 NR = Analysis not requested.

* Matrix Interference
 ** Peaks Weathered

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

Sep 17, 1993
 Date

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

Attention: Mr. John P. Cummings
John P. Cummings & Associates
P.O. Box 2847
Fremont, CA 94536-2847

Date Sampled: Sep. 9, 1993
Date Received: Sep. 10, 1993

Project ID: 293002.00
Project Name: New Genico

Client ID: LCS/LCSD
LAB ID: ST93-09-017 LCS
ST93-09-017 LCSD

Matrix: Soil
Dilution:

Name	Conc. Spike Added	Sample Result	LCS Result	LCSD Result	Units	LCS % Recovery	LCSD % Recovery	% RPD Recovery
Benzene	30 ppb	ND	30	29	ug/kg	100%	97%	3%
Toluene	30 ppb	ND	30	29	ug/kg	100%	97%	3%
Ethylbenzene	30 ppb	ND	30	29	ug/kg	100%	97%	3%
Xylenes	30 ppb	ND	30	29	ug/kg	100%	97%	3%

Surrogate % Recovery of Trifluorotoluene = 103% LCS 97% 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

Sep 17, 1993
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. 514)

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

Attention: Mr. John P. Cummings
John P. Cummings & Associates
P.O. Box 2847
Fremont, CA 94536-2847

Date Sampled: Sep. 9, 1993
Date Received: Sep. 10, 1993

Project ID: 293002.00 Project Name: New Genico

Client ID: MS/MSD LAB ID: ST93-09-017 MS
ST93-09-017 MSD

Matrix: Soil Dilution:

Name	Conc. Spike Added	Sample Result	MS Result	MSD Result	Units	MS % Recovery	MSD % Recovery	% RPD Recovery
Benzene	30 ppb	ND	30	30	ug/kg	100%	100%	0%
Toluene	30 ppb	ND	31	30	ug/kg	103%	100%	3%
Ethylbenzene	30 ppb	ND	30	30	ug/kg	100%	100%	0%
Xylenes	30 ppb	ND	30	30	ug/kg	100%	100%	0%

Surrogate % Recovery of Trifluorotoluene = 103% MS 103% 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.



R. L. James, Principal Chemist

Sep 17, 1993

DATE

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA
DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY
Certification No. 16143

8240 GCMS Analysis Report

Attention: Mr. John P. Cummings
John P. Cummings & Associates
P.O. Box 2847
Fremont, CA 94536-2847

Date Sampled: Sep. 9, 1993
Date Received: Sep. 10, 1993
Date Analyzed: Sep. 15, 1993

Project #: 293002.00
Project Name: New Genico

Client ID: B-1-1
LAB ID: ST93-09-369A

Matrix: Soil
Dilution: 1:25

Name	Amount	Reporting Limit	Units
1,1 - Dichloroethane	ND	125	ug/kg
1,1 - Dichloroethene	ND	125	ug/kg
1,1,1 - Trichloroethane	ND	125	ug/kg
1,1,2 - Trichloroethane	ND	125	ug/kg
1,1,2,2 - Tetrachloroethane	ND	125	ug/kg
1,2 - Dichloroethane	ND	125	ug/kg
1,2 - Dichloroethene	ND	125	ug/kg
1,2 - Dichloropropane	ND	125	ug/kg
2 - Butanone	ND	125	ug/kg
2 - Hexanone	ND	250	ug/kg
4 - Methyl - 2 - pentanone	ND	250	ug/kg
Acetone	ND	625	ug/kg
Benzene	ND	125	ug/kg
Bromodichloromethane	ND	125	ug/kg
Bromoform	ND	125	ug/kg
Bromomethane	ND	125	ug/kg
Carbon disulfide	ND	125	ug/kg
Carbon tetrachloride	ND	125	ug/kg
Chlorobenzene	ND	125	ug/kg
Chloroethane	ND	125	ug/kg
Chloroform	ND	125	ug/kg
Chloromethane	ND	125	ug/kg
cis - 1,3 - Dichloropropene	ND	125	ug/kg
Dibromochloromethane	ND	125	ug/kg

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 reporting limit.

8240 GCMS Analysis Report

Attention: Mr. John P. Cummings
John P. Cummings & Associates
P.O. Box 2847
Fremont, CA 94536-2847

Date Sampled: Sep. 9, 1993
Date Received: Sep. 10, 1993
Date Analyzed: Sep. 15, 1993

Project #: 293002.00
Project Name: New Genico

Client ID: B-1-1
LAB ID: ST93-09-369A

Matrix: Soil
Dilution: 1:25

Name	Amount	Reporting Limit	Units
Ethyl benzene	ND	125	ug/kg
Methylene chloride	ND	250	ug/kg
Styrene	ND	125	ug/kg
Tetrachloroethene	ND	125	ug/kg
Toluene	ND	125	ug/kg
Total xylenes	1200	125	ug/kg
trans - 1,3 - Dichloropropene	ND	125	ug/kg
Trichloroethene	ND	125	ug/kg
Vinyl acetate	ND	125	ug/kg
Vinyl chloride	ND	125	ug/kg

Surrogate % Recovery 1,2 - Dichloroethane d-4 = 120%
Surrogate % Recovery Toluene d-8 = 100%
Surrogate % Recovery 4 - Bromofluorobenzene = 110%

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 reporting limit.



R. L. James, Principal Chemist

Sep 15, 1993

Date Reported

8240 GCMS Analysis Report

Attention: Mr. John P. Cummings
John P. Cummings & Associates
P.O. Box 2847
Fremont, CA 94536-2847

Date Sampled: Sep. 9, 1993
Date Received: Sep. 10, 1993
Date Analyzed: Sep. 15, 1993

Project #: 293002.00
Project Name: New Genico

Client ID: B-1-2
LAB ID: ST93-09-376A

Matrix: Soil
Dilution: 1:25

Name	Amount	Reporting Limit	Units
1,1 - Dichloroethane	ND	125	ug/kg
1,1 - Dichloroethene	ND	125	ug/kg
1,1,1 - Trichloroethane	ND	125	ug/kg
1,1,2 - Trichloroethane	ND	125	ug/kg
1,1,2,2 - Tetrachloroethane	ND	125	ug/kg
1,2 - Dichloroethane	ND	125	ug/kg
1,2 - Dichloroethene	ND	125	ug/kg
1,2 - Dichloropropane	ND	125	ug/kg
2 - Butanone	ND	125	ug/kg
2 - Hexanone	ND	250	ug/kg
4 - Methyl - 2 - pentanone	ND	250	ug/kg
Acetone	ND	625	ug/kg
Benzene	ND	125	ug/kg
Bromodichloromethane	ND	125	ug/kg
Bromoform	ND	125	ug/kg
Bromomethane	ND	125	ug/kg
Carbon disulfide	ND	125	ug/kg
Carbon tetrachloride	ND	125	ug/kg
Chlorobenzene	ND	125	ug/kg
Chloroethane	ND	125	ug/kg
Chloroform	ND	125	ug/kg
Chloromethane	ND	125	ug/kg
cis - 1,3 - Dichloropropene	ND	125	ug/kg
Dibromochloromethane	ND	125	ug/kg

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

bpm - parts per million = ug/g = micrograms per gram

ND - Not Detected - Compound may be present at concentrations below the reporting limit

8240 GCMS Analysis Report

Attention: Mr. John P. Cummings
 John P. Cummings & Associates
 P.O. Box 2847
 Fremont, CA 94536-2847

Date Sampled: Sep. 9, 1993
 Date Received: Sep. 10, 1993
 Date Analyzed: Sep. 15, 1993

Project #: 293002.00
 Client ID: B-1-2
 Matrix: Soil

Project Name: New Genico
 LAB ID: ST93-09-376A
 Dilution: 1:25

Name	Amount	Reporting Limit	Units
Ethyl benzene	ND	125	ug/kg
Methylene chloride	ND	250	ug/kg
Styrene	ND	125	ug/kg
Tetrachloroethene	ND	125	ug/kg
Toluene	ND	125	ug/kg
Total xylenes	ND	125	ug/kg
trans - 1,3 - Dichloropropene	ND	125	ug/kg
Trichloroethene	ND	125	ug/kg
Vinyl acetate	ND	125	ug/kg
Vinyl chloride	ND	125	ug/kg

Surrogate % Recovery 1,2 - Dichloroethane d-4 = *

Surrogate % Recovery Toluene d-8 = 99%

Surrogate % Recovery 4 - Bromofluorobenzene = 100%

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 reporting limit.
 * = Matrix Effect



R. L. James, Principal Chemist

Sep 15, 1993

Date Reported