## ALAMEDA COUNTY **HEALTH CARE SERVICES**

AGENCY



DAVID J. KEARS. Agency Director

ENVIRONMENTAL HEALTH SERVICES **ENVIRONMENTAL PROTECTION** 1131 Harbor Bay Parkway Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

R00000111

June 14, 2001

Mr. Bob Trent BJ Gem Investment Co. P.O. Box 4187 Oakland, CA 94614

Ms. Carolyn Ratliff 3298 Sweet Drive Lafavette, CA 94608

Re: Fuel Leak Site Case Closure for 9131 San Leandro Street, Oakland, CA

Dear Mr. Trent and Ms. Ratliff:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Protection Division is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

### SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- up to 220ppm TPH as gasoline and 2.0ppm benzene exists in soil beneath the site, and
- up to 339ppb TPHq, 18000ppb TPH as hydraulic oil, 22ppb benzene, 160ppb chlorobenzene, and 39ppb 1,4-Dichlorobenzene exists in groundwater beneath the site.

If you have any questions, please contact me at (510) 567-6762.

eva chu

Hazardous Materials Specialist

enlosures: 1. Case Closure Letter 2 Case Closure Summary

c: Leroy Griffin, OFD files (amtract-12)

## ALAMEDA COUNTY

## **HEALTH CARE SERVICES**





DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway. Surte 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

## REMEDIAL ACTION COMPLETION CERTIFICATION

RO-111/StID 867 - 9131 San Leandro Street, Oakland, CA (1-1000 gallon tank removed on June 29, 1988)

June 14, 2001

Mr. Bob Trent BJ Gem Investment Co. P.O. Box 4187 Oakland, CA 94614 Ms. Carolyn Ratliff 3298 Sweet Drive Lafayette, CA 94608

Dear Mr. Trent and Ms. Ratliff:

This letter confirms the completion of site investigation and corrective action for the underground storage tank formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tanks are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank site is in compliance with the requirements of subdivisions (a) and (b) of Section 25299.37 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.77 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25299.37 of the Health and Safety Code. Please contact our office if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung, Director

cc: Chuck Headlee, RWQCB Dave Deaner, SWRCB Leroy Griffin, OFD 'files-ec (amtract-11)

## CASE CLOSURE SUMMARY Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Date: June 12, 2000

Agency name: Alameda County-HazMat

Address: 1131 Harbor Bay Pkwy Phone: (510) 567-6700

City/State/Zip: Alameda, CA 94502 Responsible staff person: Eva Chu

Title: Hazardous Materials Spec.

II. CASE INFORMATION

Site facility name: American Tractor Equipment

Site facility address: 9131 San Leandro Street, Oakland, CA 94603

RB LUSTIS Case No: N/A Local Case No./LOP Case No.: 867

URF filing date: 7/11/88 SWEEPS No: N/A

Responsible Parties: Addresses: Phone Numbers:

B J Gem Investment Co John DeClercq Moses Libitzki Carolyn Ratliff 3298 Sweet Dr **Bob Trent** TAEI II **Orbit Property** 1475 Powell, #201 P.O. Box 4187 Lafavette, CA 2065 Kittredge, #A 94608 Oakland, Ca 94614 Berkeley, CA 94704 Emeryville, CA 94608

Tank Size in Contents: Closed in-place Date:

No: gal.: or removed?:

1 1.000 Gasoline Removed 6/29/88

## III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: Unknown Site characterization complete? YES

Date approved by oversight agency: 4/22/98

Monitoring Wells installed? Yes Number: 6

Proper screened interval? Yes, 6' to 18' bgs in well MW-2

Highest GW depth below ground surface: 5.65' Lowest depth: 8.8' in well MW-2

Flow direction: SW

Most sensitive current use: Commercial/Industrial

Are drinking water wells affected? No Aquifer name: Unknown
Is surface water affected? No Nearest affected SW name: Unknown

Off-site beneficial use impacts (addresses/locations): Unknown

Report(s) on file? YES Where is report(s) filed? Alameda County Oakland Fire Dept

1131 Harbor Bay Pkwy and 1605 MLK Jr. Wy Alameda, CA 94502 Oakland, CA 94612

## Treatment and Disposal of Affected Material:

<u>Material</u>	Amount (include units)	Action (Treatment or Disposal w/destination)	<u>Date</u>
Tank	1 UST	Disposed by H & H, San Francisco	6/29/88
Free Product	50 gallons	Disposed by H & H, San Francisco	6/29/88
Soil	446 cy	Disposed at Chem Waste, Kettleman City	Mar 1990

Maximum Documented Conta Contaminant	aminant Co    Soil			lefore and After Cleanup Water (ppb)		
	Before <sup>1</sup>	After <sup>2</sup>	Before <sup>3</sup>	After⁴		
TPH (Gas)	2,000	220	2,100	339		
TPH (hydraulic oil) TPH (kerosene)	300	NA	74,000 1,500	18,000 540		
Benzene	18	2.0	140	22.3		
Toluene	100	5.8	21	ND		
Ethylbenzene	44	2.0	34	4.0		
Xylenes	160	13	580	28.1		
MtBE	NA	NA	NA	22		
Oil & Grease		1,200	170,000	7,200		
Other Chlorobenzene	.36	.36	1,300	160		
1,4-Dichlorobenzene		.17	95	39		
PCB AroChlor 54		.0685	NA	NA		

NOTE 1 soil sample collected from UST excavation, 6/88

2 soil sample collected after overexcavation of 6 areas identified to have contamination, 3/90

3 maximum groundwater concentration detected in monitoring wells

4 most recent groundwater results, 8/99

NA Not Analyzed

## IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan?

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan?

Does corrective action protect public health for current land use? YES

Site management requirements: A site safety plan must be prepared for construction workers in the event excavation/trenching is proposed in the vicinity of residual soil and groundwater contamination.

Should corrective action be reviewed if land use changes? YES

Monitoring wells Decommissioned: No, pending site closure
Number Decommissioned: 0 Number Retained: 6

List enforcement actions taken: None List enforcement actions rescinded: NA

#### LOCAL AGENCY REPRESENTATIVE DATA ٧.

Barney Cha-

Name: Eva Chu

Title: Haz Mat Specialist

Signature:

Date: 7/28/00

Reviewed by

Name: **Barney Chan** 

Title: Haz Mat Specialist

Signature:

6-19-00 Date:

Name: Thomas Peacock/

Title: Supervisor

Signature:

VI. **RWQCB NOTIFICATION** 

Date Submitted to RB:

7/28/00

RB Response: Communication

RWQCB Staff Name: Chuck Headlee

Title: AEG

Signature: Church Hear

Date: 2/7/0/

## VII. ADDITIONAL COMMENTS, DATA, ETC.

The property is a 3.64-acre site bounded by San Leandro Street to the northeast, the Paco Pump factory to the southeast, a main railroad line to the southwest and a railroad spur to the northwest. The American Tractor Equipment Company formerly occupied the site. The factory produced tractor parts, such as plows, blades, hydraulic cylinders, etc. The manufacturing processes include heat tempering, honing, machining, welding, and painting. An auto repair shop was also located on the site.

Five buildings are located at the site, an auto shop, paint shop, main plant, office building and the heat tempering building. All of the buildings are constructed of corrugated steel. The entire site is covered with a concrete slab. The slab thickness varies from four inches to one foot. (See Figs 1 and 2)

Subsurface sediments beneath the site consists of two to three feet of medium to coarse grained sandy clay over a thick layer of very fine grained organic black Bay Mud. Regionally, the mud is between twenty and fifty feet thick. Groundwater flows predominately to the southwest (see Fig 2B).

In June 1988 a 1,000-gallon gasoline UST was removed. The tank appeared intact with no obvious holes. Soil in the pit appeared stained and emitted a strong hydrocarbon odor. Groundwater was encountered at ~9' bgs. Two soil samples, SS2 and SS3, were collected from the north and south ends of the pit bottom at ~10.5' and 9' bgs, respectively. And one soil sample, SS-1, was collected from the product piping trench. The samples were analyzed for TPHg and BTEX. (See Fig 3, Table 1)

Elevated hydrocarbon was noted in soil sample SS-3. The excavation was re-sampled in September 1988. Soil samples, also named SS-1 and SS-2, were collected from the north and south wall, respectively, at "8' bgs. A maximum of 570 ppm TPHg, and 0.23, 4.8, 4.8, and 21 ppm BTEX, respectively, were detected in the soil samples. (See Table 2)

At this same general time frame (May-June 1988) for divestment purposes, environmental soil sampling was conducted at the site. Six areas of concern were identified (see Fig 4, Table 3). Each of the six sites was excavated, removing contaminated soil. Confirmatory soil samples were collected from the sidewalls as well as pit bottom. Residual soil contamination that appeared elevated remains in the auto shop, the paint shop, and in the former UST excavation. The six areas of concern are listed as:

- 1. site/excavation #1 is in the auto shop where soil is contaminated with hydraulic oil from an auto lift (see Fig 5, 6, Table 4);
- 2. site/excavation #2 is in the paint shop where soil beneath an old honing machine is contaminated with 300ppm TFH as kerosene (see Fig 5, 7, Table 5);
- 3. site/excavation #3 is also in the paint shop where solvent (BTEX) contaminated soil was found near a paint booth (see Fig 5, 8, Table 6);
- 4. site/excavation #4 is in the main plant where soil is contaminated with cutting oil from an old machine tool (see Fig 5, 8, Table 7);
- 5. site/excavation #5 is in the heat treatment building where soil is contaminated with lubricating oil from an old air compressor (see Fig 5, 9, and Table 8); and,
- 6. site/excavation #6 is in the parking area located between the paint shop and the auto shop. This is the location of the two former gasoline USTs. The removal of the north tank was not documented and had occurred some years ago. The southern tank was the one removed in June 1988 and discussed above. (See Fig 5, 10, Table 9)

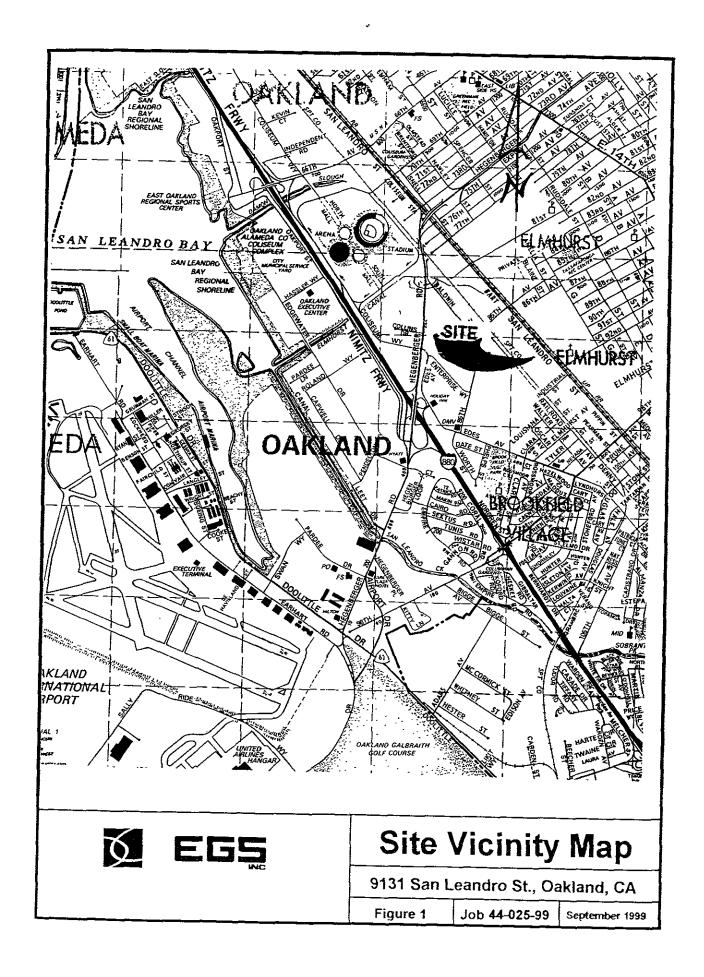
Six groundwater monitoring wells (MW-1 through MW-6) were installed at the site. Wells MW-1 though MW-4 are located in the areas of elevated residual soil contamination. Groundwater monitoring has identified elevated levels of TPH as kerosene, benzene, hydraulic oil, chlorobenzene, and 1,4-dichlorobenzene in well MW-2. This well is located inside the former auto shop and is downgradient of the former hydraulic lift and the former gasoline USTs. (See Fig 11, Tables 10, 11, 12, and 13)

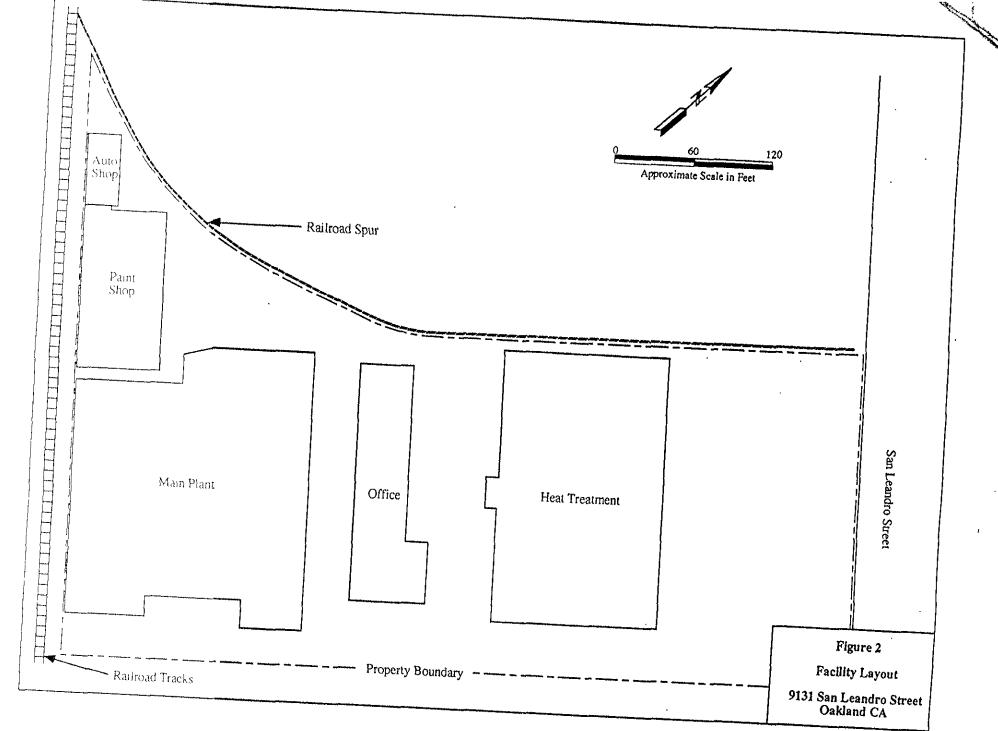
In March 1993 free product (probably hydraulic oil) was noted in well MW-2. A passive recovery system was installed in this well in April 1993. By October 1994 manual bailing on a weekly basis (if not more frequent) was initiated in an attempt to remove the free product and reduce the HVOC levels.

The most recent sampling event (Aug 1999) identified 22 ppb benzene, 22 ppb MTBE (using Method 8020), 339 ppb TPHg, 7,200 ppb TOG, 176 ppb chlorobenzene, and 34.4 ppb 1,4-dichlorobenzene in groundwater from well MW-2. Residual chlorobenzene and di-chlorobenzene concentrations in groundwater have stabilized. The chlorobenzene concentrations are below the Oakland RBCA Tier 1 risk numbers. And the dichlorobenzene concentrations are only 10 times the MCLs for drinking water. The shallow groundwater contamination is unlikely to migrate through the Bay Mud and impact deeper aquifers. Residual contaminants do not appear to pose a risk to human health or the environment. Continued monitoring is not warranted.

In summary, case closure is recommended because:

- the leak and ongoing sources have been removed;
- the site has been adequately characterized;
- · the dissolved plume is not migrating;
- no water wells, surface water, or other sensitive receptors are likely to be impacted; and,
- the site presents no significant risk to human health or the environment. The most significant release to soil and groundwater is from hydraulic oil in the area of excavation 1, the hydraulic lift/auto shop. The RWQCB has determined that hydraulic oil does not pose a significant health threat and has exempted hydraulic lift tanks from regulations pertaining to cleanup of releases from underground storage tanks.





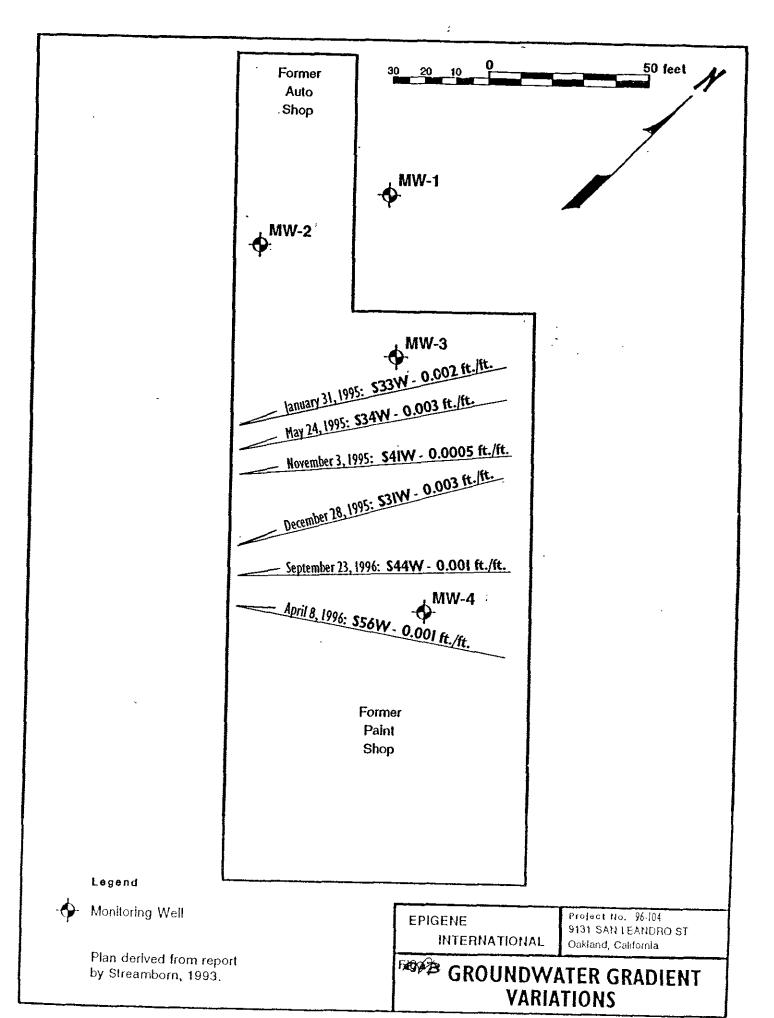
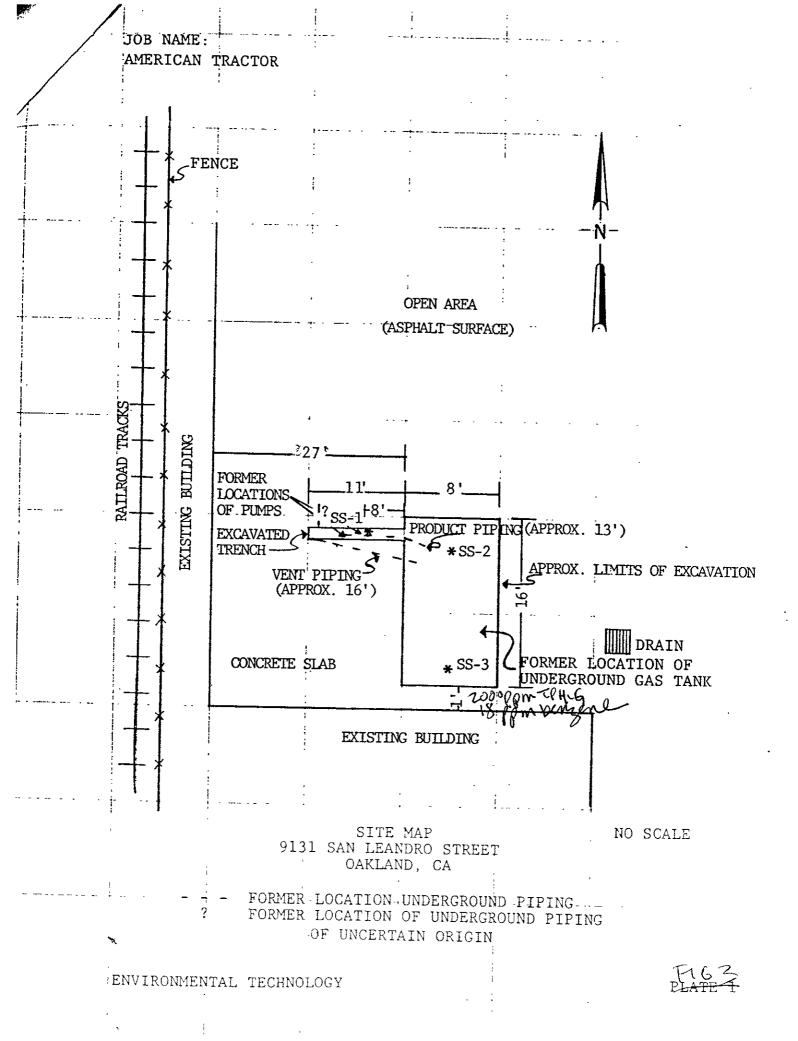


FIG 2B





Environmental Technology 260 Cristich Lane Campbell, CA 95008

Attn: Michael Princeville

Date Sampled: 06/29/88 Date Received: 07/01/88 Date Analyzed: 07/06/88 Date Reported: 07/07/88

Project: American Tractor

## TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTEX DISTINCTION

Sample Number	Sample <u>Description</u> Soil	Low to Medium Boiling Point Hydrocarbons ppm	Benzene ppm	<u>Toluene</u> ppm	Ethyl Benzene ppm	<u>Xylenes</u> ppm
8070030						
0070030	SS-1	7.6	0.051	0.11	N.D.	N.D.
8070031	SS-2	17	0.20	0.70	0.14	0.50
8070032	SS-3	2000	18	100	44	160

Detection Limits: 1.0 0.05 0.1 0.1 0.1

Method of Analysis: EPA 5030 or 3810/8015/8020

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton Laboratory Director

Table 1

Environmental Technology 260 Cristich Lane Campbell, CA 95008 Attn: Connie Kuhman

Date Sampled: 09/22/88
Date Received: 09/26/88
Date Analyzed: 10/03/88
Date Reported: 10/04/88

Project: American Tractor

# TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTEX DISTINCTION

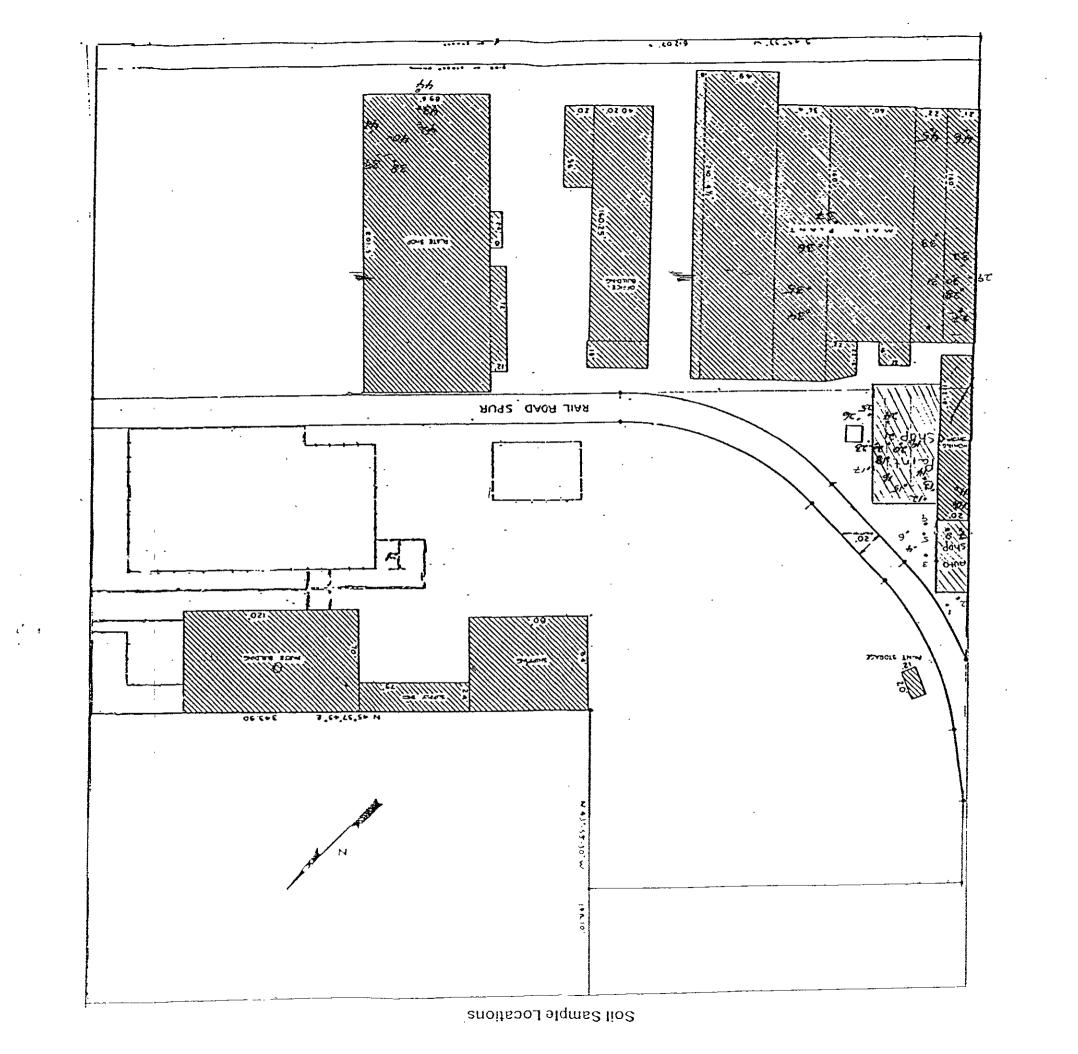
Sample Number	Sample Descript Soil		Low to Medium Boiling Point Hydrocarbons ppm	Benzene ppm	Toluene ppm	Ethyl Benzene ppm	Xylenes ppm
8092417	ss-1	Nort	W(8') 570	N.D.	4.8	4.8	29
8092418	SS-2	Sout Wall	(8 <sup>1</sup> ) 210	0.23	2.5	1.9	8.0

Detection Limits: 1.0 0.05 0.1 0.1 0.1 Method of Analysis: EPA 5030 or 3810/8015/8020

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton Laboratory Director

Table 2



4 pA

## SOIL SAMPLE RESULTS

Hole #	Sample #(s)	Depth	Test	Pagulta (mar (1-1)
1.	9599	3 † 3 #	Pet IR	Results(mg/kg)
2.	Not Sampled		rec IK	<50
2				
3.	9600	4 1 2 11	TFH	<10
4.	Gravel no sa	mple		
5.	9621	31311	TFH BTX	TFH = 12 B = 0.8* T = <0.3*
6.	9601	51811	TFH	X = 0.8* 290
7.	Rock no samp	le		
8.	9625 9626 9627	2'1" 5' 5'4"	Pet IR Pet IR	5220 kg 240 kg
9.	9602	416"	Pet IR TFH	400 kg
10.	Not Sampled			<10
11.	9607	31	Pet IR	<50
12.	Not Sampled			
13.	9606	3 *	THF	300
14.	9628 9629 9630	2 † 6 † 5 † 2 † 6 † 5 † .	TFH TFH TFH	Detected (<6) 9.0 kg 38.2
15.	9631 9632	1'8" 3'4"	8020 8020	Detected (<6) B = 8.6* T = 58.1* X = 35.4*
	9633	4 * 8 11	8020	Gasoline 120 B = 1.4* T = 1.7*
-	9634	51911	TFH	X = 5.6 Detected (<6)

16.	9635	3'2"	8020	B = 2.2* $T = 1.6*$ $X = 7.0$
17.	9603	3 1 7 11	8240	Non Detected
18.	9622	1'9"	8020	B = .04* T = .05
	9623	31311	8020	X = .02 B = 3.2* T = 2.2* X = 1.7* E = 1.3*
19.	9636	217"	8020	B = .09* T = .09* X = .18*
20.	9609	2'6"	8240	Non Detected
21.	9608	2'	8240	E = 120* $T = 78*$
22.	9624	1'10"	8020	B = .04* T = .02* X = 19* E = 2.3*
23.	9404	2 * 2 H	8240	Non Detected
24.	9637	214"	8020	B = <.02* T = .09* X = 1.3*
25.	Not Sampled			
26.	9605	4 ' 6 "	8240	Non Detected
27.	9638	4 1 4 11	Fuel IR	<30
28.	9639	4 1 4 11	Fuel IR	60
29.	9610	3 7 6 11	Pet IR	110
30.	9640	4 * 5 **	Pet IR	<30
31.	9611	2 † 2 !!	Pet IR	<50
32.	9641	4 10 11	Pet IR	<50

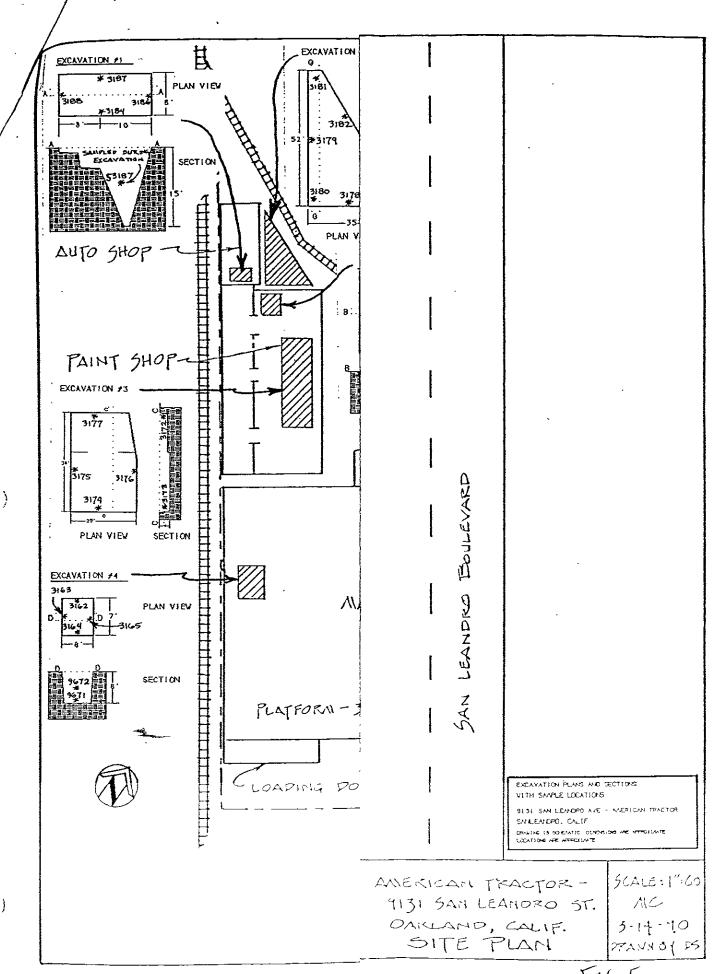
33.	9612	3 † 6 n	Pet IR	<50
34.	9617	2'6"	Pet IR	<50
35.	9616	3 1	Pet IR	<50
36.	9615	21611	Pet IR	<50
37.	9614	4'8"	Pet IR	<50
38.	9619	2'6"	Pet IR	<50
39.	Hit Pipe No Sa	mple		
40.	9649	4 *	Pet IR	<30
41.	9618	9 1	Pet IR	<50
42.	9642 9643	2 ' 8 " 4 ' 10 "	Pet IR Pet IR	1080 <30
43.	9620	1'6"	Pet IR	180
44.	9644 9645	2 1 2 11 3 1 0 11	Pet IR Pet IR	71 111
45.	Rocks No Sampl	e		
46.	9613	2'1"	Pet IR	<50

<sup>\*</sup> B = Benzene

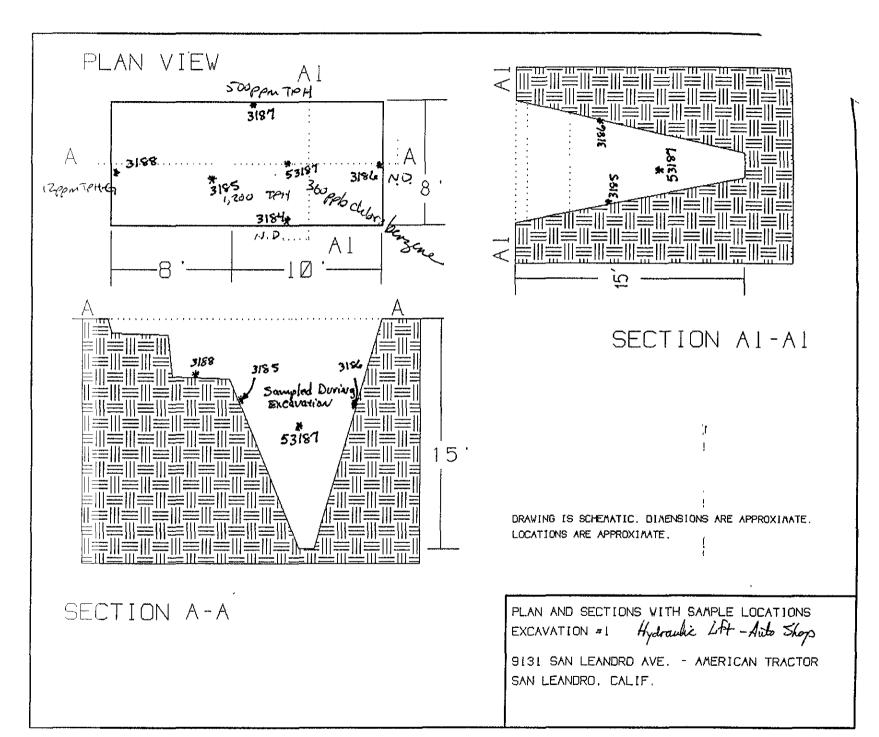
PAIR = TPH NO/ TO 6 THE tryder the fluid

<sup>\*</sup> T = Toluene

<sup>\*</sup> X = Xylene \* E = Ethylbenzene



F145



Excavation # 1: Hydraulic Lift - Auto Shop

Five samples: EPA Method 8240/5020/8015/8020 for base and EPA Method 418.1 for walls.

Sample # 3188: Method 8015/8020/5020 12 mg/kg-Gasoline 0.2 mg/kg-Xylene

Sample #3187: Method 418.1 500 mg/kg-TPH

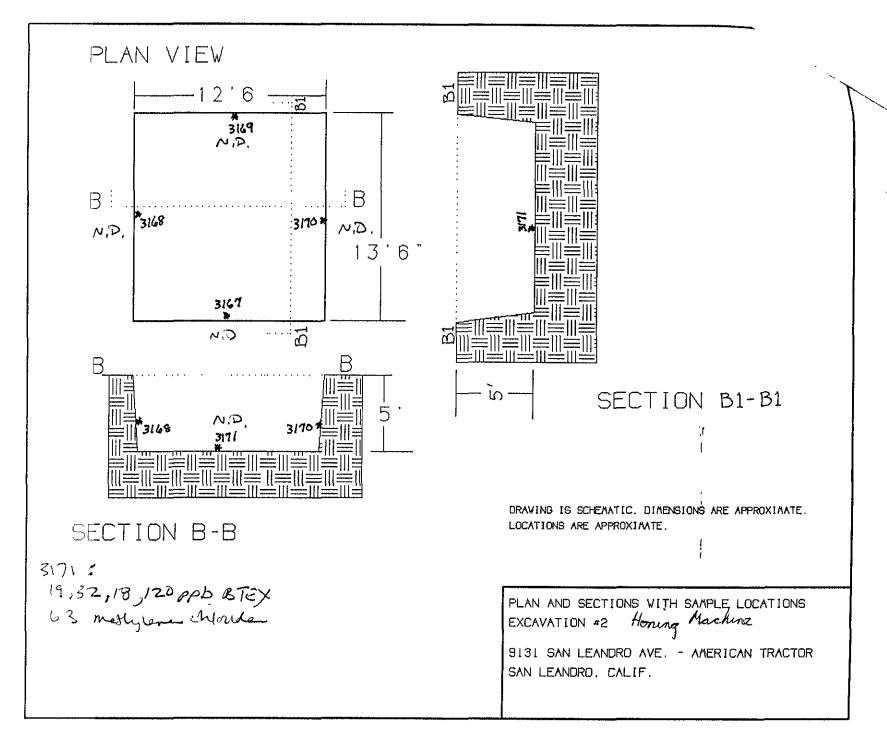
Sample # 3186: Method 418.1 None-Detected

Sample # 3185: Method 418.1 1,200 mg/kg-TPH

Sample # 3184: Method 418.1 None-Detected

\*\*

Sample # 53187: Method 8240
None-Detected-Benzene
360 ug/kg-Chlorobenzene
170 ug/kg-1,4-Dichlorobenzene
285 ug/kg-Ethylbenzene
16 ug/kg-Xylenes



31°

Excavation 2: Honing Machine - Paint Shop

Five samples: EPA Method 8240 for base and EPA Method 418.1 Total Petroleum Hydrocarbons (TPH) for walls.

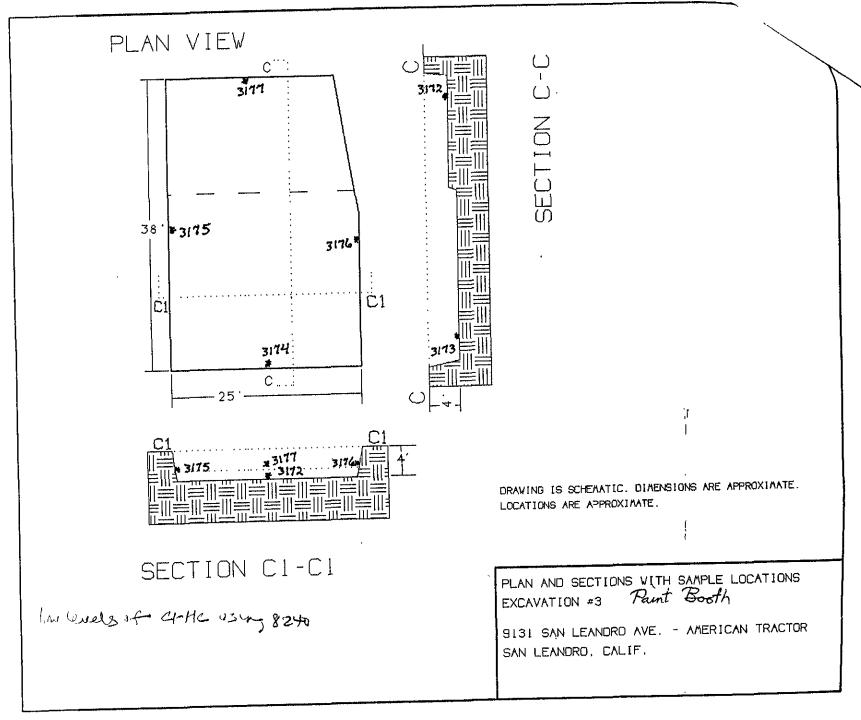
Sample # 3167: Method 418.1 TPH None-Detected

Sample # 3168: Method 418.1 TPH None-Detected

Sample # 3169: Method 418.1 TPH None-Detected

Sample # 3170: Method 418.1 TPH None-Detected

Sample # 3171: Method 8240 None-Detected



Excavation 3: Water Cascade Paint Booth - Paint Shop

Six samples: EPA Method 8240 for base and walls

Sample # 3172: Method 8240 40 ug/kg-Benzene 117 ug/kg-Ethylbenzene 520 ug/kg-Xylenes

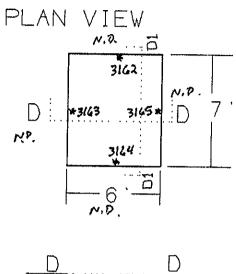
Sample # 3173: Method 8240 None-Detected

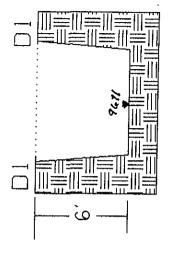
Sample # 3174: Method 8240
190 ug/kg-Acetone —
8.7 ug/kg-Ethylbenzene
10 ug/kg-Methylene Chloride
53 ug/kg-Xylenes

Sample # 3175: Method 8240
8.0 ug/kg-Benzene
3.6 ug/kg-1,2-Dichlorobenzene
8.2 ug/kg-Ethylbenzene
7.6 ug/mg-Methylene Chloride
2.4 ug/kg-Toluene
15 ug/kg-Xylenes
170 ug/kg-Acetone

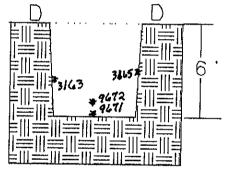
Sample # 3176: Method 8240 140 ug/kg-Benzene 32 ug/kg-Ethylbenzene 18 ug/kg-Methylene Chloride 41 ug/kg-Toluene 18 ug/kg-Xylenes

Sample # 3177: Method 8240 265 ug/kg-Benzene 300 ug/kg-Toluene 190 ug/kg-Xylenes





SECTION DI-D1



SECTION D-D

DRAWING IS SCHEMATIC. DIMENSIONS ARE APPROXIMATE. LOCATIONS ARE APPROXIMATE.

PLAN AND SECTIONS WITH SAMPLE LOCATIONS EXCAVATION #4 Machine Tool - Main Plant

9131 SAN LEANDRO AVE. - AMERICAN TRACTOR SAN LEANDRO, CALIF.

Excavation 4: Machine Tool - Main Plant

Five samples: EPA Method 8240/5020/8020/8080 for base and EPA Method 418.1 Total Petroleum Hydrocarbons (TPH) for walls

Sample # 3162: Method 418.1 TPH None-Detected

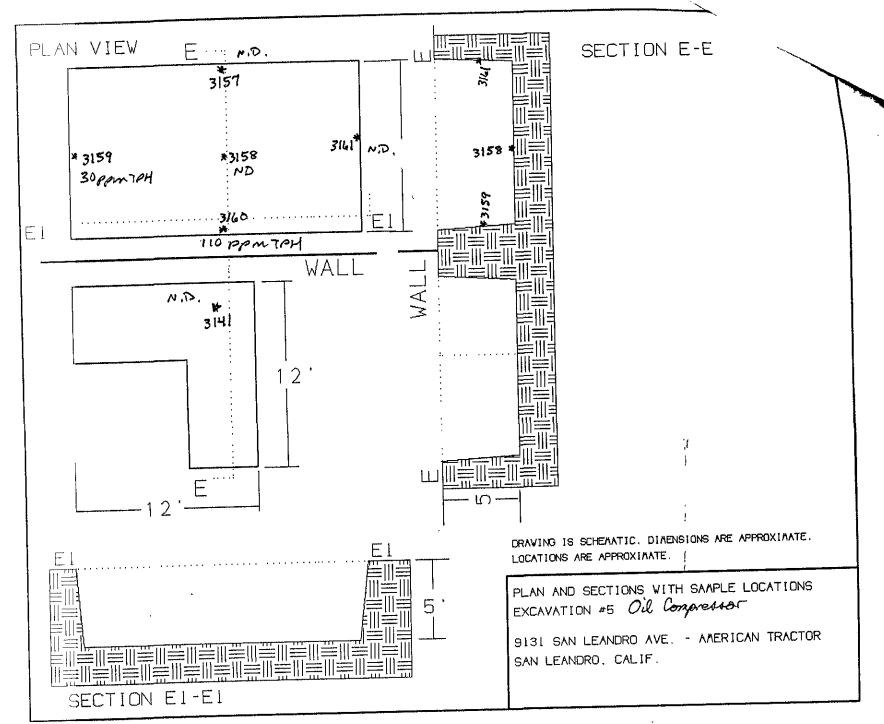
Sample # 3163: Method 418.1 TPH None-Detected

Sample # 3164: Method 418.1 TPH None-Detected

Sample # 3165: Method 418.1 TPH None-Detected

Sample # 9671: Method 8240 and 5020/8020/8080 None-Detected

Sample # 9672: Method 8080 .0685 ug/gm ARO54



F19 10

Excavation 5: Oil Compressor - Heat Treatment Building

Five samples: EPA Method 8240 for base and EPA Method 418.1 Total Petroleum Hydrocarbons (TPH) for walls

Sample # 3158: Method 8240 None-Detected

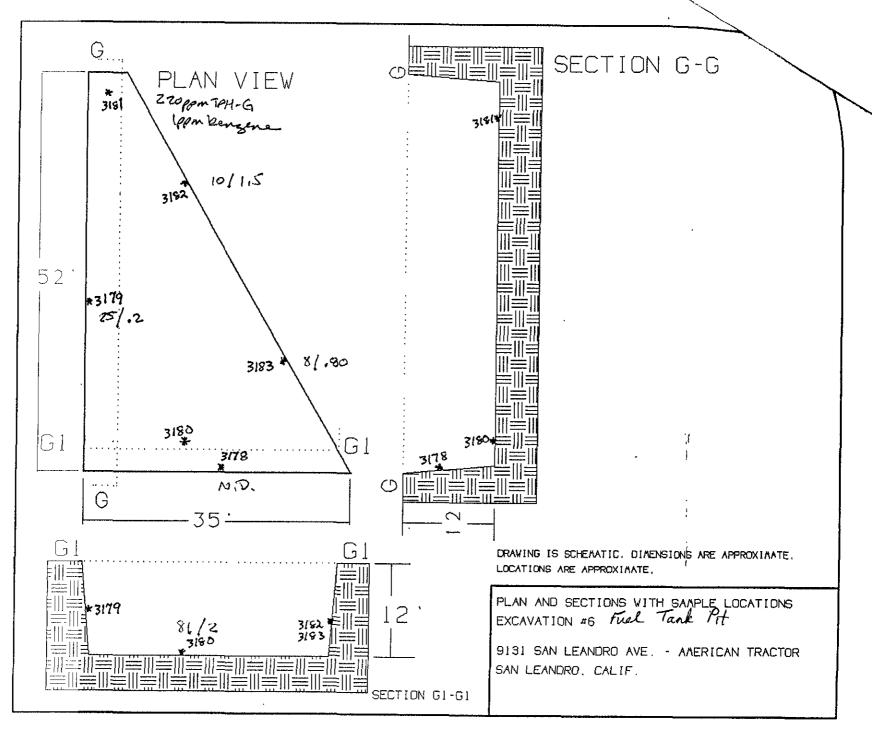
Sample # 3157: Method 418.1 TPH None-Detected

Sample # 3159: Method 418.1 TPH 30 mg/kg-TPH

Sample # 3160: Method 418.1 TPH 110 mg/kg-TPH

Sample # 3161: Method 418.1 TPH None-Detected

Sample # 3141: Method 418.1 TPH None-Detected



F16 11

Excavation 6: Fuel Tank Pit - Parking Area Between Paint Shop and Auto Shop

Six samples: EPA Method 8240/8015/8020/418.1 for base and

walls

Sample # 3178: Method 5020/8015/8020

None-Detected

Sample # 3179: Method 5020/8015/8020

25 mg/kg-Gasoline 0.2 mg/kg-Benzene 0.35 mg/kg-Toluene 39 mg/kg-Ethylbenzene 1.5 mg/kg-Xylene

Sample # 3180: Method 5020/8015/8020/8240

81 mg/kg-Gasoline 2.0 mg/kg-Benzene 5.8 mg/kg-Toluene 1.0 mg/kg-Ethylbenzene 13.0 mg/kg-Xylene

Sample # 3181: Method 5020/8015/8020

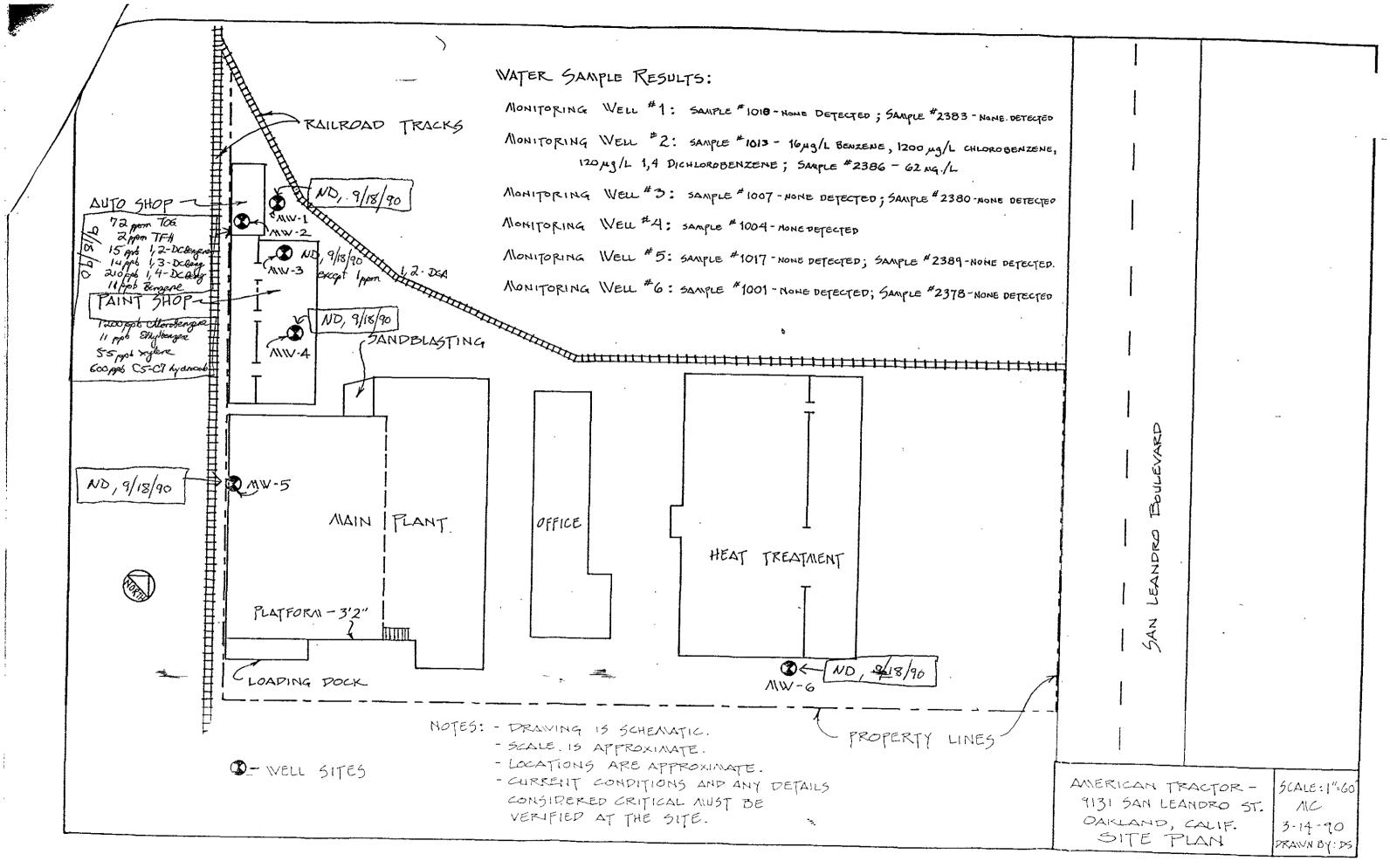
220 mg/kg-Gasoline 1.0 mg/kg-Benzene 5.0 mg/k-Toluene 2.0 mg/kg-Ethylbenzene 12.0 mg/kg-Xylene

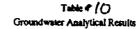
Sample # 3182: Method 5020/8015/8020

10 mg/kg-Gasoline 1.5 mg/kg-Benzene 0.1 mg/kg-Toluene 0.07 mg/kg-Ethylbenzene 0.04 mg/kg-Xylene

Sample # 3183: Method 5020/8015/8020

8 mg/kg-Gasoline 0.80 mg/kg-Benzene 0.4 mg/kg-Toluene 0.4 mg/kg-Ethylbenzene 2.0 mg/kg-Xylene





Location	Sample Date	Sampled By	Sample Type	Oil & Grease (mg/L)	Total Petroleum Hydrocarbons (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethyl- benzene (mg/L)	Total Xylenes (mg/L)	Chloro- benzene (mg/L)	1,4-Dichloro- benzene (mg/L)	1,2-Dichloro- benzene (mg/L)	1,3-Dichloro- benzene (mg/L)	Other Organic Compounds (mg/L)	Total Suspended Solids (mg/L)	Total Dissolved Solids (mg/L)
MW-I	28 Dec 1989	Robert Gils & Associates	Grab (bailer)	Not Measured	4	₹0,001	<0.001	<0.001	<0.001	<0.001	<b>≮</b> 0.001	€0.001	<0.001	Not Detected	2,800	Not Measured
	18 Sep 1990	Robert Gils & Associates	Grab (bailer)	Not Measured	<1	≈0.001	<0.01	⊀0.00 £	<0.001	₹0,001	*0.001	<0.001	<0.001	Not Detected	Not Measured	Not Measured
	31 Mar 1993	Streamborn	Grab (bailer)	Not Measured	Not Measured	<0.0005	<0.0005	KO 0005	<b>≠</b> 0.0005	<0.0005	<0.0005	<0.0005	<0.0005	Not Detected	Not Measured	Not Measured
	15 July 1993	Streamborn	Grab (bailer)	Not Measured	Not Measured	<0.0005	×0.0005	<0.0005	<0.0005	K0.0005	<0.0005	₹0,0005	<0.0005	<0.0005	Not Measured	Not Measured
MW-2	28 Dec 1989	Robert Gils & Associates	Grab (bailer)	Not Measured	62 (as Oil)	0.016	₹0.01	<b>₹0,01</b>	<0.01	1.2	0.12	<0.001	<b>₹0.001</b>	Not Detected	9,700	Not Measured
ļ	18 Sep 1990	Robert Gils & Associates	Grab (bailer)	72	(Not Characterized)	0.011	<0.001	0.011	0.055	1.2	0.21	0.015	0.014	C5 · C7 = 0 6 Others = ND	Not Measured	1,600
	15 July 1993	Streamborn	Grab (bailer)	Not Measured	Kerosene = 4.7 Motor Oil = 27 Diesel < 0.05	<0.0025	0.0047	<0.0025	0.38	0.45	0.20	0.007	0.012	<0.0005	Not Measured	Not Measured
	26 Oct 1993	Streamborn	Grab (bailer)	Not Measured	Kerosene = 1.2 Motor Oil = 15 Diesel < 0.05	0.0045	<0.0005	<0.0005.	0.052	0.57	0.180	0.0076	0.015	Not Detected	Not Measured	Not Measured
MW-3	28 Dec 1989	Robert Gils & Associates	Grab (bailer)	Not Measured	<b>&lt;</b> I	₹0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	₹0.001	Not Detected	14,000	Not Measured
	18 Sep 1990	Robert Gils & Associates	Grab (bailer)	ť	<b>-1</b>	<0.00t	.<0.00£	<b>≺0.001</b>	<0.001	<b>4</b> 0.001	<b>₹0.001</b>	<b>&lt;0.001</b>	<0.001	1,2-Dichloro- ethane = 0 001 Others = ND	Not Measured	610
	31 Mar 1993	Streamborn	Grab (bailer)	Not Measured	Not Measured	0.074	0.014	0.0073	0.04	<0.0005	<0.0005	<0.0005	<0.0005	Not Detected	Not Measured	Not Measured
	15 July 1993	Streamborn	Grab (bailer)	Not Measured	Not Measured	0.0099	0.0019	0.0025	0.003	<0.0005	k0,0005	<0.0005	<0.0005	<0.0005	Not Measured	Not Measured
	76 Oct 1993	Streamborn	Grab (bailer)	Not Measured	Kerosene = <0.05 Motor Gil ⇒ <0.5 Diesel < 0.05	0,005	<0.0005	0.0034	0.0039	Not Measured	Not Measured	Not Measured	Not Measured	Not Measured	Not Measured	Not Measured
MW-4	28 Dec 1989	Robert Gils & Associates	Grab (bailer)	Not Measured	Not Measured	<0.001	<0.00)	≺0,00£	<b>∠0.001</b> 0	<0.001	<0.001	<b>&lt;0.001</b>	<0.001	Not Detected	13,000	Not Measured
	18 Sep 1990	Robert Gils & Associates	Grab (bailer)	Not Measured	Υı	<0.001	<0.00E	<b>≮0.001</b>	≥0.001	<0.001	≮0.001	<0.001	<0.001	Not Detected	Not Measured	Not Measured
PA Maxim Contaminan				Not Promuigated	Not Promulgated	0.005	1	0.7	10	0.1	0.075	0.6	0.6	Not Promulgated	Not Promui- gated	500

### General Notes

- (a) ND = not detected. Detection limit varied according to compound, as is normal. Non-detected concentrations are indicated by shaded areas.
- (b) C5 C7 = Hydrocarbons containing 5 to 7 carbon atoms, semi-quantified results.
- (c) Other Organic Compounds = compounds of interest per EPA Method 8240 (GC/MS) or EPA Method 8010 (GC).
- (d) Samples collected by Robert Gils & Associates (Emeryville CA) analyzed by BC Analytical, Emeryville CA.
- (e) Samples collected by Streamborn (Berkeley CA) analyzed by Chromalab, San Ramon CA.

9131 Sanleandro St. Oaldand

Sampl Date	В	_		 			į.	1	l f
į.	ppb	T   ppb	E ppb	X ppb	TPHg ppb	Chloro benz ppb	1,4-di chloro benz ppb	TPH ho. ppb	TOG ppm
10/97	31	10	3 4	79	590	160	39	18000	NA
3/97	1.3	0.84	0.84	30	400	160	40	74000	NA
9/96	2.6	0.51	1.5	4.8	NA	150	46	NA	NΑ
4/96	140	21	21	59	1100	260	5.3	8300	35
12/95	4.4	1.7	3.6	110	1700	590	95	NA	9.4
9/95	8.2	4.2	4.3	210	2100	310	82	62000	450
5/95	100	14	27	130	NA	790	81	250	3.5
1/95	150	21	27	130	NA	770	83	760	12
7/94	2.0	0.53	ND	32	540	470	36	NA	ND
3/94	16	1.2	3.0	580	NA	1300	NĐ	NA	170
						!			
	-				-				
10/97	140	5.2	21	37	570	NA	NA	NA	NA
3/97	28	1.4	5.8	7.8	130	NA	NA	NA	NA
9/96	55	2.0	8.0	13	NA	ND	ND	NA	NA
4/96	41	4.6	9.8	17	210	ND	ND	550	ND
12/95	120	15	23	43	600	ND	ND	NA	ND
9/95	24	1.9	5.1	11	1400	1088	ND	78	ND
5/95	22	3.6	4.8	22	NA	ND	ND	ND	ND
1/94	140	30	25	44	NA	ИD	ND	ИD	ФИ
7/94	17	2.7	2.9	7.0	68	ND	ND	NA	ND
3/94	12	2.5	2.2	3.2	NA	ND	ND	NA	ND
Ì									
	3/97 9/96 4/96 12/95 9/95 5/95 1/95 7/94 3/97 9/96 4/96 12/95 9/95 5/95 1/94 7/94	3/97 1.3 9/96 2.6 4/96 140 12/95 4.4 9/95 8.2 5/95 100 1/95 150 7/94 2.0 3/94 16  10/97 140 3/97 28 9/96 41 12/95 120 9/95 24 5/95 22 1/94 140 7/94 17	3/97       1.3       0.84         9/96       2.6       0.51         4/96       140       21         12/95       4.4       1.7         9/95       8.2       4.2         5/95       100       14         1/95       150       21         7/94       2.0       0.53         3/94       16       1.2         10/97       140       5.2         3/97       28       1.4         9/96       55       2.0         4/96       41       4.6         12/95       120       15         9/95       24       1.9         5/95       22       3.6         1/94       140       30         7/94       17       2.7	3/97       1.3       0.84       0.84         9/96       2.6       0.51       1.5         4/96       140       21       21         12/95       4.4       1.7       3.6         9/95       8.2       4.2       4.3         5/95       100       14       27         1/95       150       21       27         7/94       2.0       0.53       ND         3/94       16       1.2       3.0         10/97       140       5.2       21         3/97       28       1.4       5.8         9/96       55       2.0       8.0         4/96       41       4.6       9.8         12/95       120       15       23         9/95       24       1.9       5.1         5/95       22       3.6       4.8         1/94       140       30       25         7/94       17       2.7       2.9	3/97       1.3       0.84       0.84       30         9/96       2.6       0.51       1.5       4.8         4/96       140       21       21       59         12/95       4.4       1.7       3.6       110         9/95       8.2       4.2       4.3       210         5/95       100       14       27       130         1/95       150       21       27       130         7/94       2.0       0.53       ND       32         3/94       16       1.2       3.0       580         10/97       140       5.2       21       37         3/97       28       1.4       5.8       7.8         9/96       55       2.0       8.0       13         4/96       41       4.6       9.8       17         12/95       120       15       23       43         9/95       24       1.9       5.1       11         5/95       22       3.6       4.8       22         1/94       140       30       25       44         7/94       17       2.7       2.9       7.0 </td <td>3/97       1.3       0.84       0.84       30       400         9/96       2.6       0.51       1.5       4.8       NA         4/96       140       21       21       59       1100         12/95       4.4       1.7       3.6       110       1700         9/95       8.2       4.2       4.3       210       2100         5/95       100       14       27       130       NA         1/95       150       21       27       130       NA         7/94       2.0       0.53       ND       32       540         3/94       16       1.2       3.0       580       NA         10/97       140       5.2       21       37       570         3/97       28       1.4       5.8       7.8       130         9/96       55       2.0       8.0       13       NA         4/96       41       4.6       9.8       17       210         12/95       120       15       23       43       600         9/95       24       1.9       5.1       11       1400         5/95       22</td> <td>3/97       1.3       0.84       0.84       30       400       160         9/96       2.6       0.51       1.5       4.8       NA       150         4/96       140       21       21       59       1100       260         12/95       4.4       1.7       3.6       110       1700       590         9/95       8.2       4.2       4.3       210       2100       310         5/95       100       14       27       130       NA       790         1/95       150       21       27       130       NA       770         7/94       2.0       0.53       ND       32       540       470         3/94       16       1.2       3.0       580       NA       1300         10/97       140       5.2       21       37       570       NA         3/97       28       1.4       5.8       7.8       130       NA       ND         4/96       41       4.6       9.8       17       210       ND         12/95       120       15       23       43       600       ND         9/95       24<!--</td--><td>10/97         31         1 0         3 4         79         590         160         39           3/97         1.3         0.84         0.84         30         400         160         40           9/96         2.6         0.51         1.5         4.8         NA         150         46           4/96         140         21         21         59         1100         260         5.3           12/95         4.4         1.7         3.6         110         1700         590         95           9/95         8.2         4.2         4.3         210         2100         310         82           5/95         100         14         27         130         NA         790         81           1/95         150         21         27         130         NA         770         83           7/94         2.0         0.53         ND         32         540         470         36           3/97         140         5.2         21         37         570         NA         NA           10/97         140         5.2         21         37         570         NA         NA     <td>10/97 31 1 0 3 4 79 590 160 39 18000 3/97 1.3 0.84 0.84 30 400 160 40 74000 9/96 2.6 0.51 1.5 4.8 NA 150 46 NA 4/96 140 21 21 59 1100 260 5.3 8300 12/95 4.4 1.7 3.6 110 1700 590 95 NA 9/95 8.2 4.2 4.3 210 2100 310 82 62000 5/95 100 14 27 130 NA 790 81 250 1/95 150 21 27 130 NA 770 83 760 7/94 2.0 0.53 ND 32 540 470 36 NA 3/94 16 1.2 3.0 580 NA 1300 ND ND 10/97 140 5.2 21 37 570 NA NA NA 3/97 28 1.4 5.8 7.8 130 NA NA NA 9/96 55 2.0 8.0 13 NA ND ND NA 4/96 41 4.6 9.8 17 210 ND ND NA 4/96 41 4.6 9.8 17 210 ND ND S50 12/95 120 15 23 43 600 ND ND NA 9/95 24 1.9 5.1 11 1400 1088 ND 78 5/95 22 3.6 4.8 22 NA ND ND ND ND 1/94 140 30 25 44 NA ND ND ND ND 1/94 140 30 25 44 NA ND ND ND ND 1/94 140 30 25 44 NA ND ND ND ND</td></td></td>	3/97       1.3       0.84       0.84       30       400         9/96       2.6       0.51       1.5       4.8       NA         4/96       140       21       21       59       1100         12/95       4.4       1.7       3.6       110       1700         9/95       8.2       4.2       4.3       210       2100         5/95       100       14       27       130       NA         1/95       150       21       27       130       NA         7/94       2.0       0.53       ND       32       540         3/94       16       1.2       3.0       580       NA         10/97       140       5.2       21       37       570         3/97       28       1.4       5.8       7.8       130         9/96       55       2.0       8.0       13       NA         4/96       41       4.6       9.8       17       210         12/95       120       15       23       43       600         9/95       24       1.9       5.1       11       1400         5/95       22	3/97       1.3       0.84       0.84       30       400       160         9/96       2.6       0.51       1.5       4.8       NA       150         4/96       140       21       21       59       1100       260         12/95       4.4       1.7       3.6       110       1700       590         9/95       8.2       4.2       4.3       210       2100       310         5/95       100       14       27       130       NA       790         1/95       150       21       27       130       NA       770         7/94       2.0       0.53       ND       32       540       470         3/94       16       1.2       3.0       580       NA       1300         10/97       140       5.2       21       37       570       NA         3/97       28       1.4       5.8       7.8       130       NA       ND         4/96       41       4.6       9.8       17       210       ND         12/95       120       15       23       43       600       ND         9/95       24 </td <td>10/97         31         1 0         3 4         79         590         160         39           3/97         1.3         0.84         0.84         30         400         160         40           9/96         2.6         0.51         1.5         4.8         NA         150         46           4/96         140         21         21         59         1100         260         5.3           12/95         4.4         1.7         3.6         110         1700         590         95           9/95         8.2         4.2         4.3         210         2100         310         82           5/95         100         14         27         130         NA         790         81           1/95         150         21         27         130         NA         770         83           7/94         2.0         0.53         ND         32         540         470         36           3/97         140         5.2         21         37         570         NA         NA           10/97         140         5.2         21         37         570         NA         NA     <td>10/97 31 1 0 3 4 79 590 160 39 18000 3/97 1.3 0.84 0.84 30 400 160 40 74000 9/96 2.6 0.51 1.5 4.8 NA 150 46 NA 4/96 140 21 21 59 1100 260 5.3 8300 12/95 4.4 1.7 3.6 110 1700 590 95 NA 9/95 8.2 4.2 4.3 210 2100 310 82 62000 5/95 100 14 27 130 NA 790 81 250 1/95 150 21 27 130 NA 770 83 760 7/94 2.0 0.53 ND 32 540 470 36 NA 3/94 16 1.2 3.0 580 NA 1300 ND ND 10/97 140 5.2 21 37 570 NA NA NA 3/97 28 1.4 5.8 7.8 130 NA NA NA 9/96 55 2.0 8.0 13 NA ND ND NA 4/96 41 4.6 9.8 17 210 ND ND NA 4/96 41 4.6 9.8 17 210 ND ND S50 12/95 120 15 23 43 600 ND ND NA 9/95 24 1.9 5.1 11 1400 1088 ND 78 5/95 22 3.6 4.8 22 NA ND ND ND ND 1/94 140 30 25 44 NA ND ND ND ND 1/94 140 30 25 44 NA ND ND ND ND 1/94 140 30 25 44 NA ND ND ND ND</td></td>	10/97         31         1 0         3 4         79         590         160         39           3/97         1.3         0.84         0.84         30         400         160         40           9/96         2.6         0.51         1.5         4.8         NA         150         46           4/96         140         21         21         59         1100         260         5.3           12/95         4.4         1.7         3.6         110         1700         590         95           9/95         8.2         4.2         4.3         210         2100         310         82           5/95         100         14         27         130         NA         790         81           1/95         150         21         27         130         NA         770         83           7/94         2.0         0.53         ND         32         540         470         36           3/97         140         5.2         21         37         570         NA         NA           10/97         140         5.2         21         37         570         NA         NA <td>10/97 31 1 0 3 4 79 590 160 39 18000 3/97 1.3 0.84 0.84 30 400 160 40 74000 9/96 2.6 0.51 1.5 4.8 NA 150 46 NA 4/96 140 21 21 59 1100 260 5.3 8300 12/95 4.4 1.7 3.6 110 1700 590 95 NA 9/95 8.2 4.2 4.3 210 2100 310 82 62000 5/95 100 14 27 130 NA 790 81 250 1/95 150 21 27 130 NA 770 83 760 7/94 2.0 0.53 ND 32 540 470 36 NA 3/94 16 1.2 3.0 580 NA 1300 ND ND 10/97 140 5.2 21 37 570 NA NA NA 3/97 28 1.4 5.8 7.8 130 NA NA NA 9/96 55 2.0 8.0 13 NA ND ND NA 4/96 41 4.6 9.8 17 210 ND ND NA 4/96 41 4.6 9.8 17 210 ND ND S50 12/95 120 15 23 43 600 ND ND NA 9/95 24 1.9 5.1 11 1400 1088 ND 78 5/95 22 3.6 4.8 22 NA ND ND ND ND 1/94 140 30 25 44 NA ND ND ND ND 1/94 140 30 25 44 NA ND ND ND ND 1/94 140 30 25 44 NA ND ND ND ND</td>	10/97 31 1 0 3 4 79 590 160 39 18000 3/97 1.3 0.84 0.84 30 400 160 40 74000 9/96 2.6 0.51 1.5 4.8 NA 150 46 NA 4/96 140 21 21 59 1100 260 5.3 8300 12/95 4.4 1.7 3.6 110 1700 590 95 NA 9/95 8.2 4.2 4.3 210 2100 310 82 62000 5/95 100 14 27 130 NA 790 81 250 1/95 150 21 27 130 NA 770 83 760 7/94 2.0 0.53 ND 32 540 470 36 NA 3/94 16 1.2 3.0 580 NA 1300 ND ND 10/97 140 5.2 21 37 570 NA NA NA 3/97 28 1.4 5.8 7.8 130 NA NA NA 9/96 55 2.0 8.0 13 NA ND ND NA 4/96 41 4.6 9.8 17 210 ND ND NA 4/96 41 4.6 9.8 17 210 ND ND S50 12/95 120 15 23 43 600 ND ND NA 9/95 24 1.9 5.1 11 1400 1088 ND 78 5/95 22 3.6 4.8 22 NA ND ND ND ND 1/94 140 30 25 44 NA ND ND ND ND 1/94 140 30 25 44 NA ND ND ND ND 1/94 140 30 25 44 NA ND ND ND ND

## TABLE 12

## SUMMARY GROUND WATER ANALYSES RESULTS MONITORING WELLS MW-2 AND MW-3 1995, 1996, 1997, and 1999 9131 SAN LEANDRO STREET OAKLAND, CALIFORNIA

WELL Number	DATE SAMPLED	TPHG (\alpha g/l)	Benzene (\ag/l)	Toluene (291)	ETHYLBENZENE (LIGH)	Xylenes (A9/I)	TOG (mg/l)	CHLOROBENZENE (~9/1)	1,4- DICHLOROBENZENE (49/1)
MW-2	<b>8/99</b> 10/97 3/97 9/96 4/96 12/95	339 590 400 NA NA NA	ND 31 1.3 2.6 140 4.4	ND 1.0 0.84 0.51 21 1.7	1.25 3.4 0.84 1.5 21 3.6	28.1 79 30 4.8 59 110	7.2 NA NA NA 35 9.4	176 160 160 150 260 590	34.4 39 40 46 53 95
MW-3	<b>8/99</b> 10/97 3/97 9/96 4/96 12/95	77.7 570 130 NA NA NA	<b>22.3</b> 140 28 5.5 41 120	ND 5.2 1.4 2.0 4.6 15	4.09 21 5.8 8.0 9.8 23	ND 37 7.8 13 17 43	ND NA NA NA ND ND	ND NA NA ND ND ND	ND NA NA ND ND

TPHG - Total Petroleum Hydrocarbons as gasoline TOG - Total Oil and Grease

(μg/l)-parts per billion

(mg/l)-parts per million NA - Not Analyzed ND - Not Detected

Historical data from Epigene International report of November 10, 1997

2700

MCL

9131sanleandro

EGS inc.

110 Second Avenue South, #D7, Pacheco, CA 94553 Lelephone 510-798-1620 Fax 510-798-1622 http://www.mccampbell.com/E-mail/main@mccampbell.com/

Epigene International	Chent Project ID #97-104, BJ GEM	Date Sampled 10'20-97		
38750 Paseo Padie Pkwy, #A-11		Date Received, 10 21/97		
Fremont, CA 94536	Client Contact John Alt	Date Extracted 10/21-10/22/97		
,	Client P O	Date Analyzed 10/21-10 22/97		

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline\*, with Methyl tert-Butyl Ether\* & BTEX\*

EPA metho	ods 5030, modifie	d 801 <i>5</i> , and	8020 or 602; Ca	lifornia RW(	QCB (SF Bay	Region) met	hod GCFID(50)	30)	" & DIEA"
Lab ID	Client ID	Matrix	TPH(g) <sup>†</sup>	МТВЕ	Benzene	Toluene	Ethylben- zene	Xylenes	% Recovery Surrogate
82077	MW-2	W	590,a,h	ND	31	1.0	3.4	79	102
82078	MW-3	W	570,a	ND	140	5.2	21	37	105
									_
				-					
									<del></del>
			-					· 	
		1							
Reporting	Limit unless								
Reporting Limit unless otherwise stated; ND means not detected above		w s	50 ug/L	5.0	0.5	0.5	0.5	0.5	
	the reporting limit		1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

<sup>\*</sup> water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/L

<sup>\*</sup> cluttered chromatogram; sample peak coelutes with surrogate peak

<sup>\*</sup>The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

	<del>-</del>		<del></del>		<del></del>	HOLE	- 10	MIN	
PROJECT: American Tractor	DATE: 12-13-89				HOLE NO. MW-				
DAILL RIG: CHE 458	HOLE DIA: 7.5 in				SAMPLER -				
GROU'DWATER DEPTH INITIAL: 11.0 ft	FINAL B ft HOLE ELEV: ft						t	<del></del>	
DESCRIPTION	GAAPHIC LOG		SOIL TYPE DEPTH SAMPLE		  -	WELL CONSTRUCTION DETAIL			
Concrete Pad= 4-6"			<b>↓</b> 0 -					<del></del>	
Approximate elevation of ground water - measured 7-18-90. Note: Cone of def will be required to determine accurate measurement of  CLAY: brown, slight odor - (could be methane from bay muds:) worm tubes;		CH.	-10 -12 -13 -14 -15 -16 -17 -18			2. Sch. 40 Threaded PVC 0.020 Slat Size Blank PVC		Bentonite Sel-	
Bottom of Drill Hole @ 20.0".		-	-19 <u>-</u> 20						
PROJECT #: 245-1.1 Beta As.	sociat	<i>es,</i> .	Inc.			į ا	PAGE 1	OF 1	
EXPLORATION	DRI	LL I	HOLI	E	LO	3			

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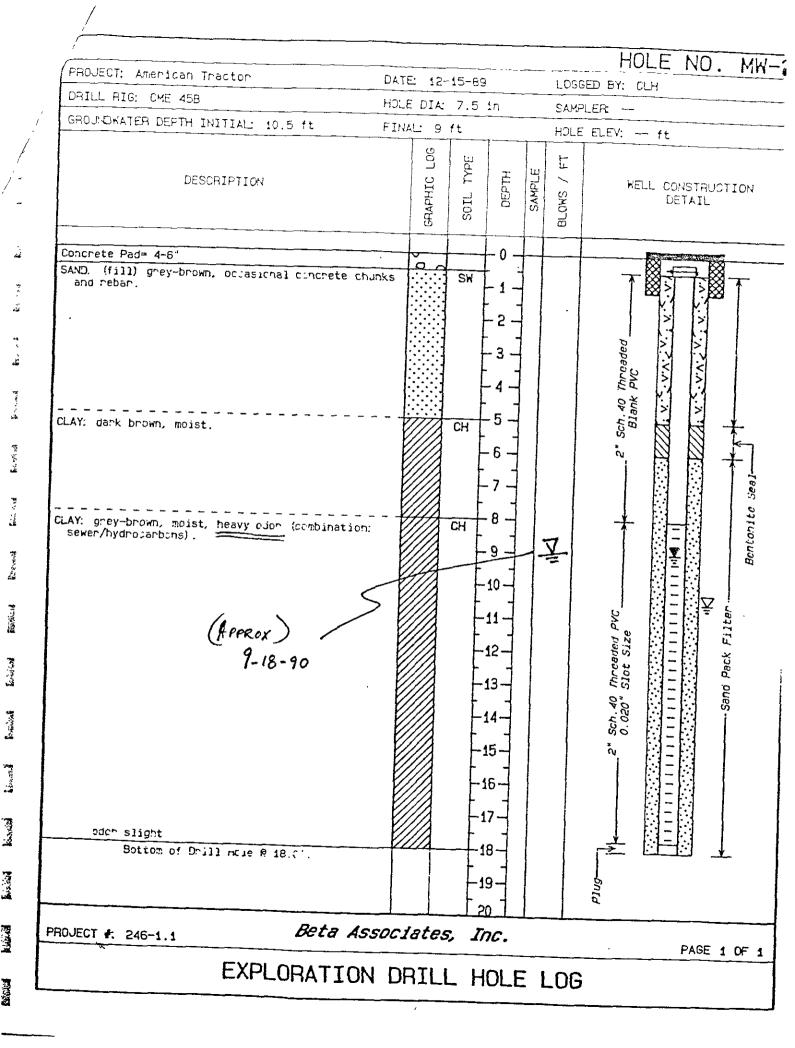
T. Control broaded formation fractions

Acres.

**斯氏公司** 

W. S. S. S. S.

KWIND.



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Charlet I

Fried.

Evision.

EXPLORATION DRILL HOLE LOG

PROJECT: American Tractor				HC	DLE NO. MW-	
DRILL RIG: CME 458	DATE: 12-1		LOG	GED BY: K		
	HOLE DIA:		SAM	PLER -		
GROWN WATER DEPTH INITIAL: 11.0 ft	FINAL: B f	t	HOLE	E ELEV: -	- ft	
DESCRIPTION	GRAPHIC LOG	SOIL TYPE DEPTH	SAMPLE BLOWS / FT	WE	LL CONSTRUCTION DETAIL	
Concrete Pad= 4-6"						
SAND FILL: grey-brown.		SW 1-		hreaded	.V.A. V.	
CLAYEY SAND: grey-green; brown, medium sands with occasional clay lenses; slight moderate solvent odors; moist-wet.		5 - 6 - SC - 7 - 8		2" Sch. 40 Threaded Blank PVC	*	
"Cone of Deprossion"  (see MW-1)  Wet		-10 - -11 -		- +	KA Seas	
decreasing clay		-12 - -13 - -14 - -15 - -16 -		2" Sch. 40 Threaden PVC 0.020" Slot Size		
BAVEL: grey-green; with sand & silt; slight oder; wet.  Bottom of Drill Hole 8 20.01.	GM	-17 - -18 - -19 - -20				
ROJECT #: 246-1.1 Beta As.	sociates,	Inc.	_	Pzug	0.22	
EXPLORATION DRILL HOLE LOG						

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500 -07		<del> </del>		HULE	NO.	- MW-
PROJECT: American Tractor	DATE: 12-14	-89	LOGG	ED BY: CLH		
DRILL RIG: CME 45B	HOLE DIA: 8	in	SAMP	LER:		
GROUNDWATER DEPTH INITIAL: ft	FINAL: 12.5	ft	HOLE	ELEV: — ft		
DESCRIPTION		SULL IYPE	SAMPLE BLOWS / FT	WELL C	OHSTRUCI DETAIL	TION
Concrete Pag= 6"				ANI CALL		
SAND FILL: grey—brown, damp to moist.	C	3 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 8 8		Blank Pvc Blank Vvc  Sign Victor Vict		
drilling easier @ 12.  9-26-90  G.W. level = approx	C-	-10 -11 -12 -13 -14		Size	Sand Dark #1312	Bentonite Seal-
AYEY SILT: light brown, wet; sandy.  Bottom of Drill Hole @ 10.3	MH	上45		2" Sch. Ao Threaded F 0.020" Slat Size		
ROJECT #: 246-1.1 Beta AS	ssociates,	Inc.			-·· <u>····</u>	
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EXPLORATION DRILL HOLE LOG