

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



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

June 23, 1998
StID # 5495

REMEDIAL ACTION COMPLETION CERTIFICATION

Mr. Alex Gulyas
Golden Gate Facility Sector
5125 Central Ave.
Fremont CA 94536

Mr. Dale Klettke
Port of Oakland
530 Water St.
Oakland CA 94607

RE: FAA, Building M104, MOIA, Oakland 94621

Dear Mssrs. Gulyas and Klettke:

This letter confirms the completion of site investigation and remedial action for the one (1) approximately 1000 gallon diesel fuel underground tank removed from 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 tank is greatly appreciated.

Based upon the available information and with provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank releases is required.

This notice is issued pursuant to a regulation contained in Title 23, Division 3, Chapter 16, Section 2721 (e) of the California Code of Regulations.

Please contact Barney Chan at (510) 567-6765 if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung
Director, Environmental Health

c: B. Chan, Hazardous Materials Division-files
Chuck Headlee, RWQCB
Mr. Dave Deaner, SWRCB Cleanup Fund
Mr. Leroy Griffin, City of Oakland OES, 505 14th St., Suite
702, Oakland CA 94612

RACCM104

ALAMEDA COUNTY
HEALTH CARE SERVICES



AGENCY
DAVID J. KEARS, Agency Director

June 24, 1998
StID# 5495

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION (LOP)
1131 Harbor Bay Parkway, Suite 250

Mr. Alex Gulyas
Golden Gate Facility Sector
5125 Central Ave.
Fremont, CA 94536

Mr. Dale Klettke
Port of Oakland
530 Water St.
Oakland CA 94607

Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

**RE: Fuel Leak Site Case Closure- FAA, Building M104, MOIA
Oakland CA 94621**

Dear Mssrs. Gulyas and Klettke:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with the Health and Safety Code, 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 Health Services, Local Oversight Program (LOP) is required to use this case closure letter. We are also enclosing the case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site.

Site Investigation and Cleanup Summary:

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

- * 169 parts per million (ppm) Total Petroleum Hydrocarbons as diesel (TPHD), remain in the soil at the site.
- * 130 parts per billion (ppb) TPHd remain in groundwater at the site.

This site should be included in the City's permit tracking system. Please contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

enclosures: Case Closure Letter, Case Closure Summary

c: Mr. L. Griffin, City of Oakland OES, 505 14th St., Suite
702, Oakland CA 94612

B. Chan, files (letter only) tr1tm104

JUN 16 1998

ENVIRONMENTAL PROTECTION

RB Site # 01-2330

QUALITY CONTROL BOARD CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

JUN 18 PM 2:40

I. AGENCY INFORMATION

Date: June 9, 1998

Agency name: Alameda County-HazMat Address: 1131 Harbor Bay Parkway
Rm 250, Alameda CA 94502

City/State/Zip: Alameda Phone: (510) 567-6700

Responsible staff person: Barney Chan Title: Hazardous Materials Spec.

II. CASE INFORMATION

Site facility name: FAA, Building M104, MOIA

Site facility address: 51 John Glenn Drive, Oakland CA 94614

RB LUSTIS Case No: N/A Local Case No./LOP Case No.: 5495

ULR filing date: 1/19/98 SWEEPS No: N/A

<u>Responsible Parties:</u>	<u>Addresses:</u>	<u>Phone Numbers:</u>
Golden Gate Facility Sector c/o Mr. Alex Gulyas	5125 Central Ave. Fremont, CA 94536	510-745-3473
Port of Oakland c/o Mr. Dale Klettke	530 Water St. Oakland CA 94607	510/272-1118

<u>Tank No:</u>	<u>Size in gal.:</u>	<u>Contents:</u>	<u>Closed in-place or removed?:</u>	<u>Date:</u>
1	1,000	diesel	Removed	1/8/98

III RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: possible leak in piping run

Site characterization complete? Yes

Date approved by oversight agency:

Monitoring Wells installed? Yes Number: used MW-9, 1 of the 9 wells installed by neighboring site (1 Airport Drive)

Proper screened interval? Yes, 3-13' bgs

Leaking Underground Fuel Storage Program

Highest GW depth: 4.2' bgs Lowest depth: 5.5' bgs (from MW-9)

Flow direction: southwesterly

Most sensitive current use: site is located at the Metropolitan Oakland International Airport

Are drinking water wells affected? No Aquifer name: NA

Is surface water affected? No Nearest affected SW name: NA

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

Report(s) on file? **Yes** Where is report(s)? Alameda County
 1131 Harbor Bay Parkway,
 Room 250, Alameda CA 94502-6577

Treatment and Disposal of Affected Material:

<u>Material</u>	<u>Amount (include units)</u>	<u>Action (Treatment of Disposal w/destination)</u>	<u>Date</u>
Tanks & Piping	1-1,000 gallon	Disposed, Erickson, Richmond	1/8/98
Sludge	1- 55 gallon drum	Disposed, Demeno Kerdoon	1/12/98
Soil	~24 cubic yards	Disposed, Altamont Landfill	1/29/98

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	1Before	After 2	3Before	After4
TPH (Diesel)	160	160	2600	130
Benzene	ND	ND	0.54	ND
Toluene	ND	ND	2.3	ND
Ethylbenzene	ND	ND	0.71	ND
Xylenes	ND	ND	4.6	ND

Comments (Depth of Remediation, etc.):
 1 soil sample beneath piping run
 2 no over-excavation performed
 3 grab groundwater sample from tank pit
 4 groundwater monitoring results, 2/14/97, MW-9

Leaking Underground Fuel Storage Tank Program

IV. CLOSURE

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

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

Site management requirements: site should be included in the City of Oakland Permit Tracking System.

Should corrective action be reviewed if land use changes? Yes

Monitoring wells Decommissioned: No

Number Decommissioned: 0, well belongs to neighboring site
Number Retained: N/A

List enforcement actions taken: none

List enforcement actions rescinded: NA

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Barney M. Chan Title: Hazardous Materials Specialist

Signature: *Barney M. Chan* Date: 6/9/98

Reviewed by

Name: Tom Peacock Title: Manager

Signature: *Tom Peacock* Date: 6-5-98

Name: Eva Chu Title: Hazardous Materials Specialist

Signature: *Eva Chu* Date: 6/2/98

VI. RWQCB NOTIFICATION

Date Submitted to RB: RB Response:

RWQCB Staff Name: C. Headlee Title: EG Date:
Cheryl Headlee 6/15/98

Leaking Underground Fuel Storage Tank Program

VII. ADDITIONAL COMMENTS, DATA, ETC.

The 1000 gallon underground diesel tank, owned by the FAA and used to fuel a generator at the south Air Traffic Control Tower (ATCT) was located just south of Building M104. This location is approximately 50' southwest and down gradient of the Hertz Rental Car facility, located at 1 Airport Drive. The address of the Port of Oakland's Building M104, 51 John Glenn Drive, is used for this site. See **Figure 1** for the location of this site.

On **January 8, 1998**, in the presence of employees from the FAA, their contractor Kvaerner Aronson, the subcontractor, Army Corp of Engineers, the Port of Oakland, the City of Oakland Fire Services and Alameda County Environmental Health, the 1000 gallon diesel UST was removed. The Port of Oakland is the property owner and also maintains a 8000 gallon diesel tank approximately 20' north of this tank. See **Figure 2** for a site plan indicating the tank, tank samples and neighboring site with wells.

Shoring was placed around the tank to prevent caving of the sidewalls. Groundwater, as anticipated, was encountered during the removal. The neighboring site, Hertz Rental, has an ongoing investigation and has installed nine monitoring wells. Groundwater gradient at that site is southwesterly and encountered at 3-5' bgs. Beneath the UST, at approximately 6' depth, was a concrete deadman. The UST had an approximately 30' piping run leading to the generator inside Building M104. Four soil sample were taken from the sidewalls at a depth of 6', just above groundwater. These samples were identified as Pit Wall N, Pit Wall S, Pit Wall E and Pit Wall W. These samples were sandy soil, typical of the native soils. A grab groundwater sample from the tank pit and a piping run sample, midway below the shallow piping run, were also taken.

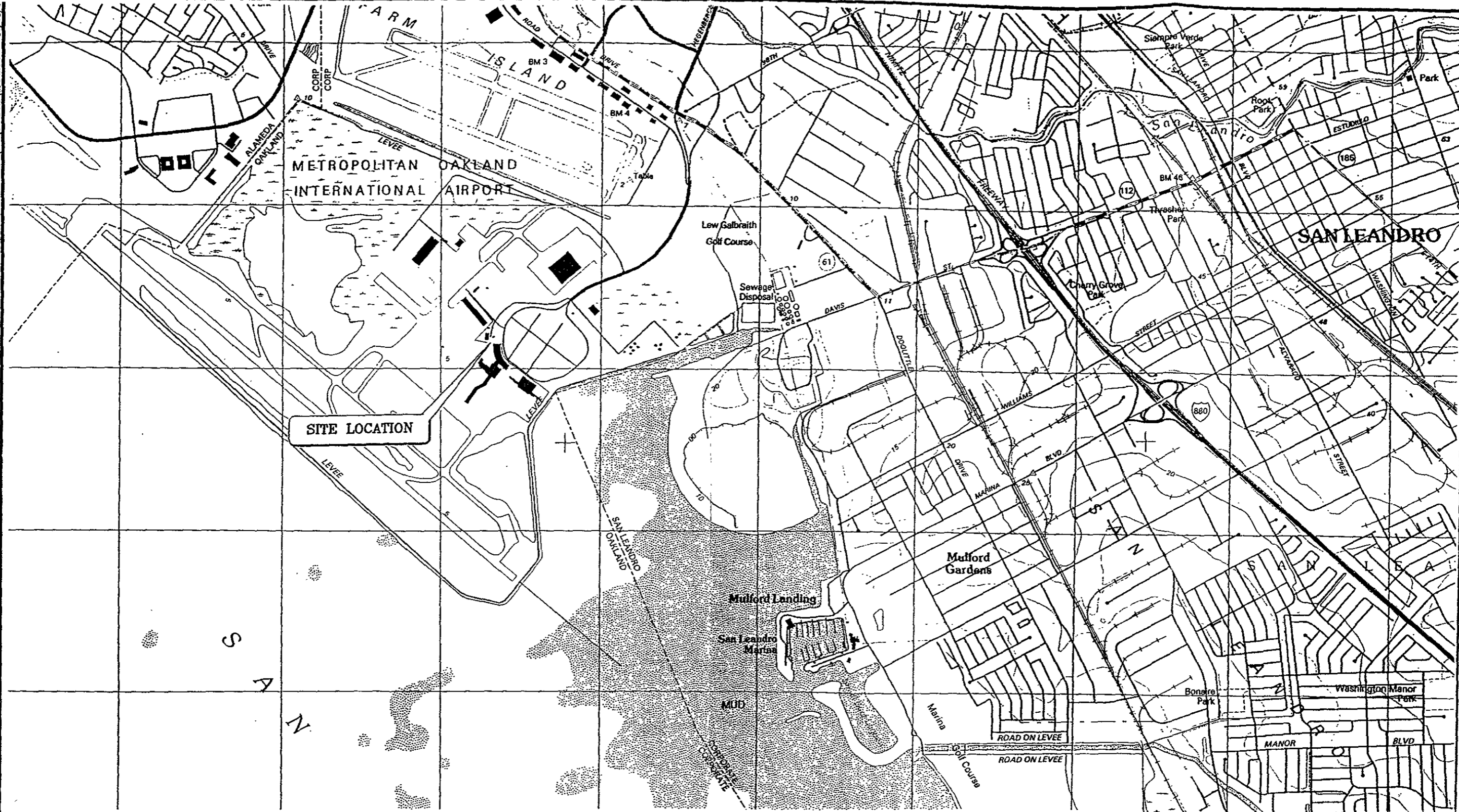
All sidewall samples were ND for TPHd and BTEX. The piping run sample exhibited 160 ppm TPHd (characterized as aged diesel) and ND for BTEX. The groundwater sample exhibited 2.6 mg/l TPHd and 0.54, 2.2, 0.68 and 4.6 ppb BTEX, respectively. See **Tables 1 and 2** for a summary of analytical results. It appears that the TPHd release from the piping run impacted groundwater. The TPHg release from the nearby Hertz site has likely impacted this site because BTEX was found in the grab groundwater sample. This is reasonable since there is a significant release near MW-4 on the Hertz site, which is up-gradient to this former tank pit. **Enclosed are the recent groundwater monitoring results and gradient map for the Hertz facility.** The historical monitoring of MW-9 for the Hertz site demonstrates that TPHd is not a significant problem in groundwater. The grab groundwater sample result is not representative of actual groundwater conditions.

Leaking Underground Fuel Storage Tank Program

This site is recommended for closure as a low risk soil and groundwater case. The following supports this decision:

- The underground tank has been removed.
- Soil contamination seems to have been confined to the piping run.
- Based upon long term monitoring, the levels of TPHd and BTEX are not of human health or environmental concern and the plume is not moving.
- The site has been adequately characterized.

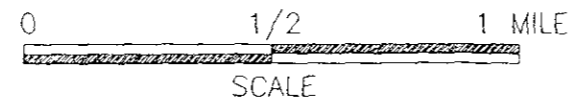
H154 (041) OAKLAND LOCATION 01/13/93



OAKLAND SOUTH TOWER UST REMOVAL
OAKLAND INTERNATIONAL AIRPORT - 51 JOHN GLENN DRIVE
OAKLAND, CALIFORNIA



SITE LOCATION MAP



USGS 7.5 MIN. QUADRANGLE, SAN LEANDRO, CALIFORNIA

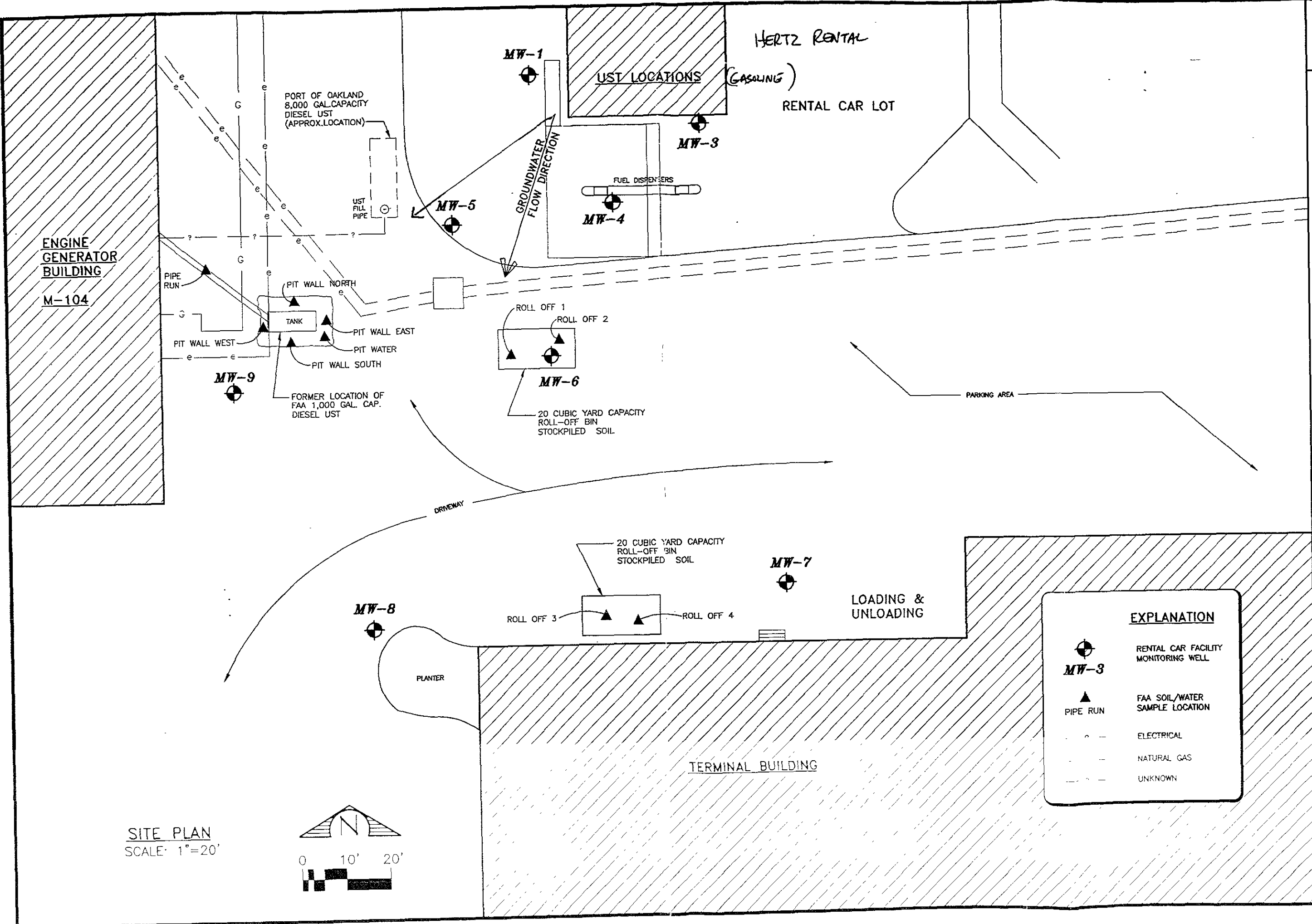
CONTOUR INTERVAL: 20 FEET
DATED: 1993

T3S
R3W
SEC 32



Date: 01/13/93
Drawn: NPR
Checked:

FIGURE 1
H154-



OAKLAND SOUTH TOWER UST REMOVAL
 OAKLAND INTERNATIONAL AIRPORT - 51 JOHN GLENN DRIVE
 OAKLAND, CALIFORNIA

1746 Cole Boulevard Bldg. 21
 Oakland, California 94612
 Suite 300

RESEARCH MANAGEMENT CONSULTANTS, INC.

Date: 01/12/98
 Drawn By: NPR
 Checked:

FIGURE
2

Table 2 - Analytical Results .
Groundwater Samples

Sample ID	BETX (ug/l)	TPH as Diesel (mg/l)	Fuel Fingerprint (% weight)	Fuel Fingerprint (mg/l)
Pit Water VOA 1	B=0.54 T=2.2 E= 0.68 X=4.6	NA	NA	NA
Pit Water VOA 2	B=0.52 T=2.3 E=0.71 X=4.6	NA	NA	NA
Pit Water 1 Liter	NA	2.6	<C10=ND C10-C12=0.8 C13-C15=10.7 C16-C22=64.1 C23-C32=22.2 >C32=2.2	<C10=ND C10-C12=0.02 C13-C15=0.28 C16-C22=1.68 C23-C32=0.58 >C32=0.06
Detection Limit	0.5	0.2	Not Applicable	<C10=1.0 C10-C12=0.05 C13-C15=0.05 C16-C22=0.2 C23-C32=0.2 >C32=0.2

} gasoline
← diesel
→ diesel

ND = Not detected

NA = Not analyzed

Table 1
GROUNDWATER ELEVATIONS AND ANALYTICAL RESULTS

Hertz Service Center
1 Airport Drive
Oakland, California

MW-No.	Date	TOC (feet)	DTW (feet)	GWE (feet)	TPHg (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TPHd (ppb)
MW-3	2/3/93	7.66	3.63	4.03	ND	ND	ND	ND	ND	--	--
	5/27/93	7.66	3.82	3.84	ND	ND	ND	ND	ND	--	55
	12/2/93	7.66	4.06	3.60	ND	ND	ND	ND	ND	--	ND
	9/17/96	7.66	3.76	3.90	--	--	--	--	--	--	--
	11/27/96	7.66	3.58	4.08	--	--	--	--	--	--	--
	2/14/97	7.66	3.01	4.65	--	--	--	--	--	--	--
	12/3/97	7.66	3.31	4.35	--	--	--	--	--	--	--
MW-4	2/18/92	7.11	3.68	3.43	6,600	910	1,900	280	1,700	--	ND
	5/13/92	7.11	3.54	3.57	62,000	3,400	5,200	990	5,200	--	--
	9/1/92	7.11	3.97	3.14	120,000	8,800	14,000	2,100	11,000	--	--
	11/5/92	7.11	5.23	1.88	24,000	2,600	3,300	510	2,100	--	--
	2/3/93	7.11	4.22	2.89	50,000	4,700	5,000	1,500	6,600	--	--
	5/27/93	7.11	4.33	2.78	48,000	6,300	7,200	1,600	6,800	--	4,900
	12/2/93	7.11	4.72	2.39	21,000	3,500	3,800	640	2,000	--	770
	9/17/96	7.11	4.38	2.73	16,000	4,300	1,900	750	1,900	100	220
	11/27/96	7.11	4.20	2.91	14,000	5,100	2,600	1,300	2,500	ND<300	ND<200
	2/14/97 (b,c)	7.11	3.58	3.53	19,000	3,300	3,100	980	2,600	150	210
12/3/97	7.11	3.92	3.19	6,400	1,500	0,640	520	0,890	160	--	
MW-5	11/5/92	7.76	4.76	3.00	ND	ND	ND	ND	ND	--	170
	2/3/93	7.76	--	--	--	--	--	--	--	--	--
	5/27/93	7.76	3.88	3.88	ND	ND	ND	ND	ND	--	75
	12/2/93	7.76	4.36	3.40	ND	ND	ND	ND	ND	--	60
	9/17/96	7.76	3.99	3.77	--	--	--	--	--	--	--
	11/27/96	7.76	3.80	3.96	--	--	--	--	--	--	--
	2/14/97 (b)	7.76	3.16	4.60	100	1.2	ND<0.5	0.8	ND<2	95	860
12/3/97	7.76	--	--	--	--	--	--	--	--	--	
MW-6	11/5/92	7.17	5.28	1.89	820	250	ND	5.9	ND	--	--
	2/3/93	7.17	4.27	2.90	330	120	2.8	19	5.3	--	--
	5/27/93	7.17	4.35	2.82	1,300	370	ND	87	19	--	960
	12/2/93	7.17	4.81	2.36	280	11	1.0	65	3.0	--	700
	9/17/96	7.17	4.39	2.78	ND<50	1.0	0.5	ND<0.5	ND<2.0	ND<5	270

Table 1
GROUNDWATER ELEVATIONS AND ANALYTICAL RESULTS

Hertz Service Center
1 Airport Drive
Oakland, California

MW-No.	Date	TOC (feet)	DTW (feet)	GWE (feet)	TPHg (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TPHd (ppb)
MW-6	11/27/96	7.17	4.23	2.94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<2.0	7	ND<50
	2/14/97 (b)	7.17	3.57	3.60	50	0.9	ND<0.5	ND<0.5	ND<2.0	9	600
	12/3/97	7.17	3.92	3.25	ND<50	0.6	ND<0.5	ND<0.5	ND<2.0	ND<5	--
MW-7	5/27/93	6.93	4.58	2.35	ND	ND	ND	ND	ND	--	76
	12/2/93	6.93	4.78	2.15	ND	ND	ND	ND	ND	--	ND
	9/17/96	6.93	4.52	2.41	--	--	--	--	--	--	--
	11/27/96	6.93	4.35	2.58	--	--	--	--	--	--	--
	2/14/97 (b)	6.93	3.70	3.23	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<5	140
	12/3/97	6.93	4.04	2.89	--	--	--	--	--	--	--
MW-8	5/27/93	6.75	4.84	1.91	ND	ND	ND	ND	ND	--	91
	12/2/93	6.75	5.44	1.31	ND	ND	ND	ND	ND	--	54
	9/17/96 (a)	6.75	--	--	--	--	--	--	--	--	--
	11/27/96 (a)	6.75	--	--	--	--	--	--	--	--	--
	2/14/97 (a)	6.75	--	--	--	--	--	--	--	--	--
	Not Located										
MW-9	5/27/93	6.55	4.97	1.58	ND	ND	ND	ND	ND	--	72
	12/2/93	6.55	5.53	1.02	ND	ND	ND	ND	ND	--	72
	9/17/96	6.55	4.95	1.60	--	--	--	--	--	--	--
	11/27/96	6.55	--	--	--	--	--	--	--	--	--
	2/14/97 (b)	6.55	4.16	2.39	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<5	130
	12/3/97	6.55	4.40	2.15	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<5	--

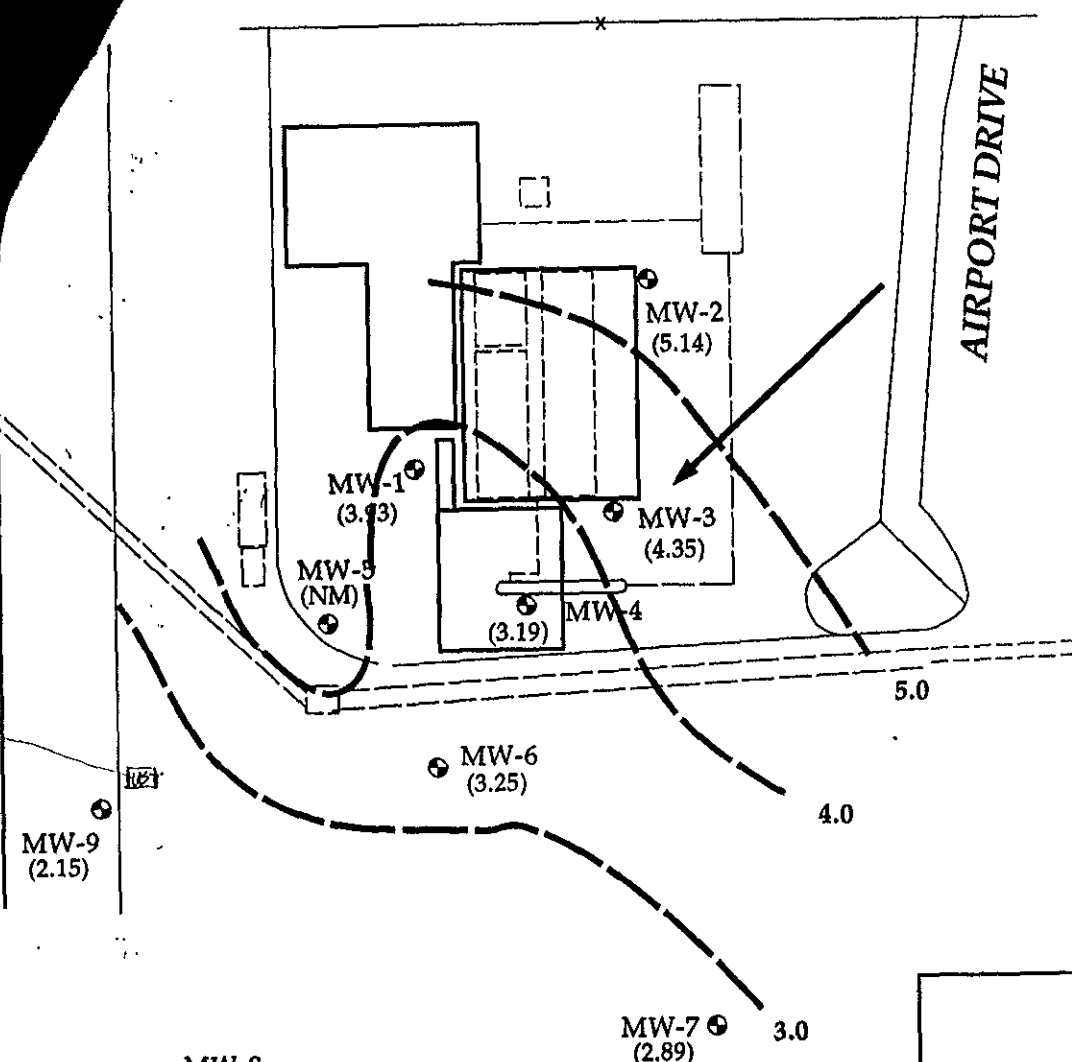
Notes:

TOC
DTW
GWE
TPHg
TPHd
BTEX
MTBE
ppb

Elevation at the north side of the top of the well casing referenced to mean sea level (wells were surveyed by others)
Depth to water
Groundwater elevation
Total petroleum hydrocarbons as gasoline using EPA Method 8015 (modified)
Total petroleum hydrocarbons as diesel fuel using EPA Method 8015 (modified)
Benzene, toluene, ethylbenzene and total xylenes using EPA Method 8020 (modified)
Methyl tert butyl ether using EPA Method 8020 (modified)
Parts per billion (micrograms per liter)

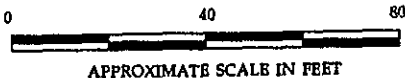
ALAN SHEPARD WAY

AIRPORT DRIVE



EXPLANATION

- ⊕ GROUNDWATER MONITORING WELL
- MW-2 (2.15) GROUNDWATER ELEVATION (IN FEET) - REFERENCED TO MEAN SEA LEVEL
- NM GROUNDWATER ELEVATION NOT MEASURED
- 4.0 --- GROUNDWATER ELEVATION CONTOUR - CONTOUR INTERVAL 1.0 FEET
- ↙ APPROXIMATE DIRECTION OF GROUNDWATER FLOW GRADIENT = 0.02 FT/FT



SITE PLAN BASED ON MAP BY ESE, INC.
JANUARY 4, 1994

GROUNDWATER CONTOUR MAP- 12/03/97

Hertz Service Center,
1 Airport Drive,
Oakland, California

CLEARWATER GROUP, INC.

Project No. C-156	Figure Date 12/97	Figure 3
----------------------	----------------------	-------------



**Environmental
Science &
Engineering, Inc.**

**BORING LOG AND
WELL COMPLETION SUMMARY**

MW-9

WELL COMPLETION

Completion Depth: 13 Feet

Size/Type	From	To
Casing: 2" Diam. Sched. 40 PVC	0 Feet	3 Feet
Screen: 2" Diam. Sched. 40 Slotted (0.02") PVC	3 Feet	13 Feet
Filter: #3 Monterey Sand	2 Feet	13 Feet
Seal: Bentonite Pellets	1.5 Feet	2 Feet
Cement Grout	0 Feet	1.5 Feet

Well Cap or Box: 8" Universal Traffic-rated Flush-Mounted Well Box

Project Name: Hertz - Oakland
Location: 1 Airport Drive
Oakland, CA

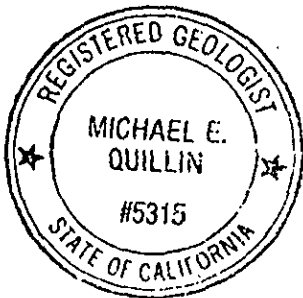
Project No: 6-91-5228

Driller: Soils Exploration Services, Inc.
Method: Hollow Stem Auger
Hole Diameter: 10" Total Depth: 13 Feet
Ref. Elevations:
Logged By: Chris Vaicheff

Page 1 of 1

Dates:
Start: 5-24-93
Finish: 5-24-93

Depth (ft)	Lithologic Description	USC	Graphic Log			Vapor	Remarks Water, drilling/completion, summary, sample type
			Sample/Blows	Lithology	Well Installation		
0	ASPHALT						
0-1	SAND, light brown, dense, damp, fine to medium grained, no odor.	SP					
1-2	GRAVELLY SILTY SAND, red, dense, fine to medium grained, 10-20% silts, no odor.	SM					
2-3	SAND, dark brown, dense, medium grained, moist, no odor.	SP					
3-6	Same as above, wet.						Ground Water @ 4.5 FEET
6-7	Same as above, grey.						Sample @ 5 FEET
7-13	Same as above.						TOTAL DEPTH = 13 FEET



3.0 DATA PRESENTATION

3.1 SOIL SAMPLES

The soil samples were submitted to Advanced Technology Laboratories for analysis by EPA Test Method 8015 Modified for diesel and by EPA Test Method 8020 for benzene, toluene, ethylbenzene, and xylenes (BTEX). Selected samples were analyzed for a fuel fingerprint in the carbon range C6 through C36. The analytical results are summarized below in Table 1.

Table 1 - Analytical Results
Soil Samples

Sample ID	BTEX (ug/kg)	TPH as Diesel (mg/kg)	Fuel Fingerprint (mg/kg)
Pit Wall N	ND	ND	ND
Pit Wall S	ND	ND	ND
Pit Wall E	ND	ND	ND
Pit Wall W	ND	ND	ND
Pipe Run	ND	160*	NA
Roll Off Composite	ND	ND	NA
Detection Limit	5	10	<C10-C15=1.0 C16->C32=10

ND = Not detected NA = Not analyzed

*Sample contains hydrocarbons heavier than diesel