

January 14, 1994
SCI 886.001

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Mr. Tzu Ming Chen
c/o Mr. Jonathan Redding
Fitzgerald, Abbott & Beardsley
1221 Broadway, 21st Floor
Oakland, California 94612

Progress Report
Environmental Engineering Services
208 Jackson Street
Oakland, California

Dear Sirs:

Subsurface Consultants, Inc. (SCI) is performing environmental services at the referenced site, in accordance with our proposal dated October 20, 1993. The site is located on the block bounded by Third, Second, Jackson and Madison Streets as shown on the Site Plan, Plate 1. This letter is a progress report of our activities performed to date.

SCI's services have included reviewing the project file at the Alameda County Health Care Services Agency (ACHCSA) with Ms. Jennifer Eberle, the ACHCSA Hazardous Material Specialist responsible for this site. A summary of permit information is presented in Table 1. In addition, we have conducted a site reconnaissance and groundwater sampling event.

Task 1 - Records Review

In brief, the following information was obtained by reviewing a report prepared by Geo-Environmental Technology (GET) dated August 8, 1990. Four underground fuel storage tanks, the locations of which are shown on Plate 1, were removed from the site on March 20, 1990. A summary of the tank contents and capacities are presented in Table 2.

A permit was obtained from ACHCSA, and an inspector from the ACHCSA was present during tank removal. Geo-Environmental Technology (GET) obtained soil and groundwater samples from the tank excavations and presented the test results in a report dated August 8, 1990. Two soil samples were taken from each of the tank excavations. Test results indicated diesel contamination up to 2,500 mg/kg and benzene, toluene, ethylbenzene and xylene (BTEX) concentrations up to 42,000 ug/kg in the soil from the excavation for Tank 1. The

up to 6 ppm
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other tank excavations had relatively low concentrations of gasoline, diesel and BTEX. The ACHCSA inspector directed the overexcavation of an additional 125 cubic yards of soil in the vicinity of Tank 1. A tested sample of soil from the base of this overexcavation indicated diesel, toluene and ethylbenzene below detection limits and benzene and xylene concentrations of 13 and 6.3 ug/kg, respectively. *ppb* *data in GET report*

Groundwater samples were obtained and tested from the excavations for Tanks 2 and 3. Water from the excavation for Tank 2 indicated 0.9 mg/l of gasoline and BTEX concentrations ranging from 3.8 to 82 ug/l. Water from the excavation for Tank 3 indicated 8.2 mg/l diesel and BTEX concentrations ranging from 1.4 to 18 ug/l. *82 ppb benzene* *18 ppb benz.*

Three test borings were drilled on May 5, 1990 at the approximate locations shown on Plate 1. Groundwater monitoring wells were installed in these borings. Soil samples from the borings were tested for diesel; diesel was detected only in Boring 1 at a concentration of 6.9 mg/kg at a depth of 3 feet. Samples of groundwater from the wells were also tested for gasoline, diesel and BTEX. Test results indicate gasoline present only in MW-1 at a concentrations of 25 mg/l. Diesel was present only in well MW-1 at a concentration of 5.5 mg/l. BTEX were present only in Well MW-1 at concentrations ranging from 330 to 650 ug/l. Gasoline, diesel and BTEX were not present in water samples from MW-2 and MW-3 above detection limits. The analytical test data in the ACHCSA files is presented in Tables 3 through 6. *Report?* *w/400 ppb benz.*

GET presented a proposal to East Bay Packing Co. on November 1, 1990 to 1) excavate an area surrounding Monitoring Well 1, 2) pump groundwater from the excavation until testing indicated that the contaminants were below detection limits, 3) re-install the groundwater monitoring well, and 4) provide on-going quarterly monitoring of groundwater. There was no indication in the file that this work was performed. In addition, no quarterly groundwater monitoring results were found in the ACHCSA files. ✓

Task 2 - Site Reconnaissance/Sample Existing Wells

SCI performed a site reconnaissance to observe existing site conditions. The excavations for Tanks 2 and 4 have apparently been backfilled, but the concrete has not been replaced. The excavation for Tanks 1 and 3 appear to be continuous; the excavation for Tank 3 has been backfilled, and the concrete was not replaced. The excavation for Tank 1 has not been backfilled; the excavation remains open, with timber shoring present along the south wall of the excavation and groundwater present in the excavation. The

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excavation for Tanks 1 and 3 are overgrown with weeds and small trees. Wells MW-2 and MW-3 were found; MW-1 was not found. A stockpile of soil is present at the northeast corner of the property; this may be soil overexcavated from the Tank 1 location.

SCI performed a level survey to determine top of casing (TOC) elevations. TOC elevations were referenced to a local benchmark. Groundwater levels are presented on Table 7. ✓

we'll need msl

Since only two wells currently exist we are unable to confirm the groundwater gradient at the site. However, groundwater is suspected to flow toward the south or southwest as shown on Plate 1. ✓

One groundwater sample from wells MW-2 and MW-3 and from the water in the excavation near the former location of MW-1 was submitted to Curtis & Tompkins, a State of California Department of Health Services certified laboratory for analytical testing. Prior to sampling, the wells were developed by bailing or pumping until the water is relatively clear, and temperature, pH and conductivity had stabilized. Well development water was stored on-site in 55 gallon drums. Water samples will be retained in containers pre-cleaned by the supplier in accordance with EPA protocol. Water samples remained under refrigeration until delivery to the analytical laboratory. Sample handling was recorded using Chain-of-Custody documents. The samples were analyzed for the following:

follow up

1. Benzene, toluene, ethylbenzene and xylenes (BTEX), EPA 8020,
2. Total volatile hydrocarbons, EPA 5030/8015, and
3. Total extractable hydrocarbons, EPA 3550/8015.

Test results are summarized in Table 8. Copies of the analytical test reports are attached. ✓

Review of the analytical test results indicate that groundwater near Tank 1 remains impacted by diesel. Gasoline constituents were not detected in the excavation water.

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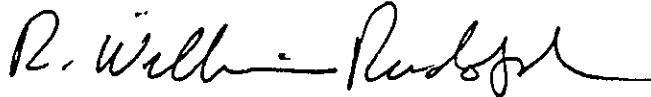
Recommendations

In order to assess the impacts to groundwater downgradient of the former tanks, we recommend that two additional monitoring wells be installed at the locations shown on Plate 1. Groundwater monitoring should be performed in the new and existing wells in accordance with ACHCSA requirements.

If you have any questions, please call.

Yours very truly,

Subsurface Consultants, Inc.



R. William Rudolph
Geotechnical Engineer 741 (expires 12/31/96)

SML:RWR:sld





- Attachments:
- Plate 1 - Site Plan
 - Analytical Test Reports
 - Table 1 - Summary of Underground Storage Tank Permits
 - Table 2 - Underground Tanks Data
 - Table 3 - Hydrocarbon Concentrations in Soil
 - Table 4 - Contaminant Concentrations in Groundwater from Tank Excavations
 - Table 5 - Contaminant Concentrations in Soil Sample from Borings
 - Table 6 - Contaminant Concentrations in Groundwater from Monitoring Wells
 - Table 7 - Groundwater Level Measurements
 - Table 8 - Hydrocarbon Concentrations in Groundwater

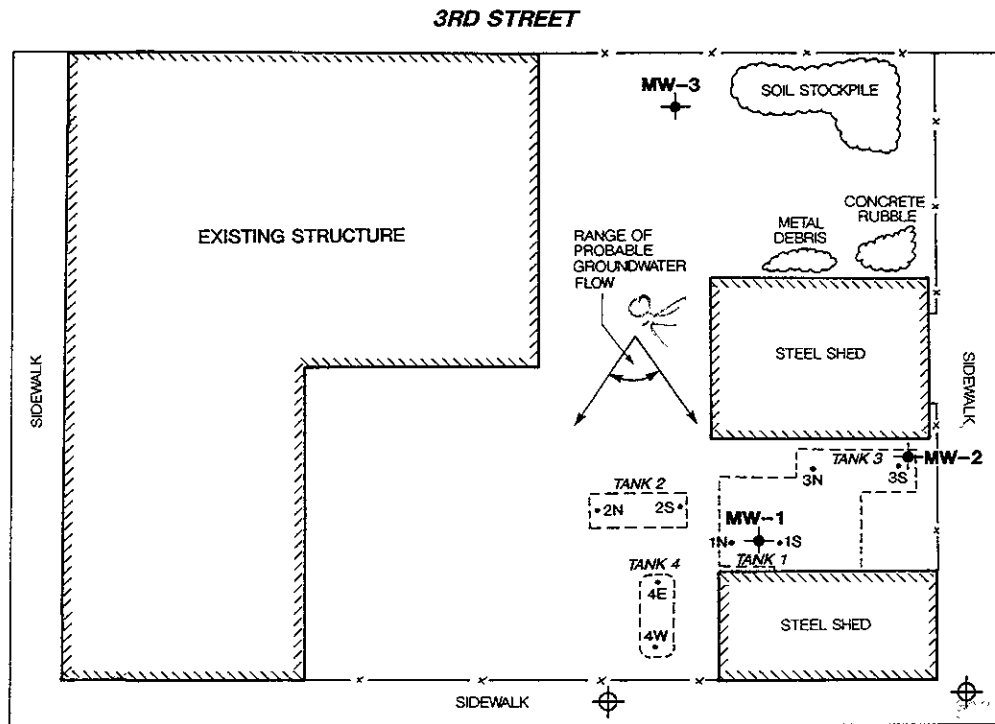
5 copies Mr. Jonathan Redding
Fitzgerald, Abbott & Beardsley
1221 Broadway, 21st Floor
Oakland, California 94612

agreed



VICINITY MAP

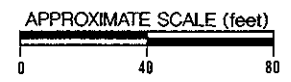
-  APPROXIMATE LOCATION OF MONITORING WELLS INSTALLED BY OTHERS (NOTE: WELL MW-1 WAS NOT LOCATED)
-  APPROXIMATE LOCATION OF SOIL SAMPLE RECOVERED DURING TANK REMOVAL
-  LOCATION OF REMOVED CONCRETE PAVEMENT
-  PROPOSED LOCATION OF ADDITIONAL GROUNDWATER MONITORING WELLS



2ND STREET

JACKSON STREET

MADISON STREET



SITE PLAN			PLATE 1
208 JACKSON STREET - OAKLAND, CA			
JOB NUMBER	DATE	APPROVED	
886.001	1/5/94	SL	

Subsurface Consultants



LABORATORY NUMBER: 113877
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 886.001

DATE SAMPLED: 01/06/94
DATE RECEIVED: 01/06/94
DATE EXTRACTED: 01/10/94
DATE ANALYZED: 01/12/94
DATE REPORTED: 01/13/94

Extractable Petroleum Hydrocarbons in Aqueous Solutions
California DOHS Method
LUFT Manual October 1989

LAB ID	CLIENT ID	KEROSENE RANGE (ug/L)	DIESEL RANGE (ug/L)	REPORTING LIMIT* (ug/L)
113877-001	MW-2	ND	ND	50
113877-002	MW-3	ND	ND	50
113877-003	TEW-1	**	3,700	50

ND = Not detected at or above reporting limit.

* Reporting limit applies to all analytes.

** Kerosene range not reported due to overlap of hydrocarbon ranges.

QA/QC SUMMARY: BS/BSD

RPD, %	1
RECOVERY, %	90



LABORATORY NUMBER: 113877
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 886.001

DATE SAMPLED: 01/06/94
 DATE RECEIVED: 01/06/94
 DATE ANALYZED: 01/13/94
 DATE REPORTED: 01/13/94

Total Volatile Hydrocarbons with BTXE in Aqueous Solutions
 TVH by California DOHS Method/LUFT Manual October 1989
 BTXE by EPA 5030/9020

LAB ID	SAMPLE ID	TVH AS GASOLINE (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL BENZENE (ug/L)	TOTAL XYLENES (ug/L)
113877-001	MW-2	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
113877-002	MW-3	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
113877-003	TEW-1	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	1.1

ND = Not detected at or above reporting limit; Reporting limit indicated in parentheses.

TABLE 1.
SUMMARY OF UNDERGROUND STORAGE TANK PERMITS

<u>DATE</u>	<u>TANK NUMBER</u>	<u>AGENCY</u>	<u>COMMENTS</u>
05/25/79	3 ?	City	<p>Purpose: Installation of 1-10,000 gallon tank</p> <p>Owner: East Bay Packing</p> <p>Applicant: Robert J. Miller Co., Oakland, CA</p> <p>Present Storage: 1-2,000 gallon tank 1-8,000 gallon tank</p>
01/03/80	2 ?	City	<p>Purpose: Installation of 1-10,000 gallon tank</p> <p>Owner: East Bay Packing</p> <p>Applicant: D.L. Stevens Co., Oakland</p> <p>Present Storage: 2-10,000 gallon tanks 1-2,000 gallon tank</p>
06/01/87	1	SWRCB	<p>Purpose: Tank Reg.</p> <p>Facility/Owner: East Bay Packing Co.</p> <p>Conflicting information on permit; contents listed as both Waste and Diesel</p>
03/09/90	All 4 tanks	SWRCB	<p>Purpose: UST Site Reg.</p> <p>Facility: East Bay Packing Co.</p> <p>Owner: Kretshmar, Inc. St. Louis, MO</p>

TABLE 1.
SUMMARY OF UNDERGROUND STORAGE TANK PERMITS
(continued)

03/09/90	1	SWRCB	Purpose: Tank Removal Contents listed as Unleaded
03/09/90	2	SWRCB	Purpose: Tank Removal Contents Listed as Unleaded
03/09/90	3	SWRCB	Purpose: Tank Removal Contents listed as Diesel
03/09/90	4	SWRCB	Purpose: Tank Removal Contents listed as Diesel
03/14/90	All 4 tanks	City	Purpose: Tank Removal Owner: Kretshmar, Inc. Applicant: East Bay Packing Co.

Table 2.
Underground Tanks Data

<u>Tank Number</u>	<u>Product</u>	<u>Capacity, gallons</u>
1	Diesel	2,000 ✓
2	Gasoline	10,000 ✓
3	Diesel	10,000 ✓
4	Gasoline	8,000 ✓

GET

Table 3.
Hydrocarbon Concentrations in Soil

*tank removal
3-20-90*

<u>Sample</u>	<u>TVH¹ (mg/kg)⁴</u>	<u>TEH² (mg/kg)</u>	<u>B³ (ug/kg)⁵</u>	<u>T³ (ug/kg)</u>	<u>E³ (ug/kg)</u>	<u>X³ (ug/kg)</u>
1N	--	2,500	4,500	3,800	25,000	42,000
1S	--	82	6,100	19,500	15,000	24,000
2N	<2.5 ⁶	--	<5	<5	<5	<5
2S	<2.5	--	<5	<5	67	18
3N	--	140	<5	<5	<5	<5
3S	--	5	<5	<5	<5	<5
4E	<2.5	--	<5	<5	<5	<5
4W	11	--	17	<5	12	5.6

¹ Total volatile hydrocarbons, as gasoline
² Total extractable hydrocarbons, as diesel
³ Benzene, toluene, xylene, ethylbenzene
⁴ mg/kg = milligrams per kilogram
⁵ ug/kg = micrograms per kilogram
⁶ <5 = chemical not detected at a concentration in excess of detection limit shown.

Table 4.
Contaminant Concentration in Groundwater
from Tank Excavations

<u>Sample</u>	<u>Gasoline (mg/l)</u>	<u>Diesel (mg/l)</u>	<u>Benzene (ug/l)</u>	<u>Toluene (ug/l)</u>	<u>Ethyl- benzene (ug/l)</u>	<u>Total Xylenes (ug/l)</u>
2W	0.9	--	82	6.3	3.8	15
3W	--	8.2	18	<1.0	1.4	4.3

Table 5.
Contaminant Concentrations in Soil *5-7-90*
Samples from Borings *(for MWs)*

<u>Sample No.</u>	<u>Depth (Feet)</u>	<u>Diesel (mg/kg)</u>
MW 1-1	3.0	6.9
MW 1-2	5.0	<5.0
MW 2-1	3.0	<5.0
MW 3-1	3.0	<5.0
MW 3-2	6.0	<5.0

Table 6.
Contaminant Concentration in Groundwater *5-21-90*
from Monitoring Wells

<u>Sample</u>	<u>Gasoline (mg/l)</u>	<u>Diesel (mg/l)</u>	<u>Benzene (ug/l)</u>	<u>Toluene (ug/l)</u>	<u>Ethyl- benzene (ug/l)</u>	<u>Total Xylenes (ug/l)</u>
MW-1	25	5.5	400	440	330	650
MW-2	<0.5	<0.5	<1.0	<1.0	<1.0	<1.0
MW-3	<0.5	<0.5	<1.0	<1.0	<1.0	<1.0

mg/l = milligrams per liter

ug/l = micrograms per liter

<1.0 = Chemical not detected at a concentration in excess of detection limit shown

Table 7.
Groundwater Level Measurements

<u>Well Number</u>	<u>TOC Elevation (feet)</u>	<u>Date</u>	<u>Groundwater Depth (feet)</u>	<u>Groundwater Elevation (feet)</u>
MW-2	97.86	1/06/94	4.63	93.23
MW-3	98.94	1/06/94	5.40	93.54

Table 8.
Hydrocarbon Concentrations in Groundwater
(Sampled 1/6/94)

<u>Sample</u>	<u>TVH¹ (ug/l)⁴</u>	<u>TEH² (ug/l)</u>	<u>B³ (ug/l)⁵</u>	<u>T³ (ug/l)</u>	<u>E³ (ug/l)</u>	<u>X³ (ug/l)</u>
near MW-1 <u>TEW-1</u>	<50 ✓	3,700 ✓	<0.5 /	<0.5 /	<0.5 /	1.1 /
MW-2	<50 ✓	<50 ✓	<0.5 /	<0.5 /	<0.5 /	<0.5 /
MW-3	<50 /	<50 ✓	<0.5 /	<0.5 /	<0.5 /	<0.5 /

¹ Total volatile hydrocarbons, as gasoline

² Total extractable hydrocarbons, as diesel

³ Benzene, toluene, xylene, ethylbenzene

⁴ ug/l = micrograms per liter

⁵ <50 = chemical not detected at a concentration in excess of detection limit shown.

⁶ TEW-1 Tank 1 Excavation Water Sample