



ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
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November 18, 2015

Mr. Martin Musonge
Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612
(Sent via E-mail to:
Martin.Musonge@waterboards.ca.gov)

Subject: Fuel Leak Case No. RO0000203 and GeoTracker Global ID T0600101471, Unocal #0746, 3943
Broadway, Oakland, CA 94611

Dear Mr. Musonge:

The information contained in this letter summarizes Alameda County Environmental Health's (ACEH) Low Threat Underground Storage Tank Case Closure Policy (LTCP) of the case file with regard to the waste oil tank at the subject site.

Documents review by ACEH staff included the *Soil Sampling Report (SWI)*, dated August 30, 1989, which was prepared by Kaprealian Engineering, Inc. (KEI) for the subject site. The SWI includes documentation regarding the recovery of 12 soil samples following the removal of two 10,000-gallon underground storage tanks (USTs) used for the storage of gasoline motor vehicle fuel and one 280-gallon UST used for the storage of waste oil (WOT). A summary of our review is provided below.

- The SWI states the following: "KEI's field work was conducted on August 16, 1989 when two underground fuel storage tanks and one 280 gallon waste oil tank were removed from the site. The fuel tanks consisted of one 10,000 gallon super unleaded tank, and one 10,000 gallon regular unleaded gasoline tank. The tanks were made of steel and no apparent holes or cracks were observed in the tanks. Tank removal and soil sampling were performed in the presence of Mr. Gil Wistar of the Alameda County Health Agency."
- The WOT investigation consisted of the recovery of one soil sample from native soil beneath the tank at a depth of 8 feet below the ground surface (bgs). Groundwater was not encountered in the WOT pit. The soil sample, identified as WO1, was analyzed for total petroleum hydrocarbons as gasoline (TPHg) - referred to as low to medium boiling point hydrocarbons in the laboratory analysis report, total petroleum hydrocarbons as diesel (TPHd) - referred to as high boiling point hydrocarbons in the laboratory analysis report, benzene, toluene, ethylbenzene, and xylenes (BTEX), total oil and grease (TOG), and halogenated volatile organics (HVOs).
- TPHg and TPHd were analyzed by EPA Test Method 8015, BTEX by EPA Test Method 8020, TOG by Test Method SM 503 D&G (gravimetric), and the HVOs by EPA Test Method 8010. A review of the analytical test results revealed 1.6 milligrams per kilogram (mg/kg) TPHg and 1.3 mg/kg toluene in soil beneath the WOT. Concentrations of TPHd, BTX, TOG, and the 28 compounds included in the HVO analysis, which includes tetrachloroethene (PCE) and trichloroethene (TCE), were below their respective laboratory reporting limit.

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Based on our review of the WOT investigation, ACEH is of the opinion the WOT does not appear to have experienced a release, and that the low concentrations of TPHg and toluene may be the result of contamination from the release(s) associated with the site's fuel dispensing system. Due to the limited impacts to soil beneath the WOT, no further action for the WOT is deemed necessary.

Thank you for your cooperation. Should you have any questions or concerns regarding this correspondence or your case, please call me at (510) 567 - 6764 or send me an electronic mail message at keith.nowell@acgov.org.

Sincerely,

Keith Nowell, P.G., C.HG
Hazardous Materials Specialist

Enclosures: Attachment 1 - Site Figure Showing Waste Oil Tank Location

Attachment 2 – Waste Oil Tank Analytical Analysis Results

cc: Laurent Meillier, San Francisco Bay Region, Regional Water Quality Control Board, 1515 Clay Street, Suite 1400, Oakland, CA 94612 (Sent via E-mail to: Laurent.Meillier@waterboards.ca.gov)

Dilan Roe, ACEH (Sent via E-mail to: dilan.roe@acgov.org)

Keith Nowell, ACEH (Sent via E-mail to: keith.nowell@acgov.org)

GeoTracker, file

ATTACHMENT 1



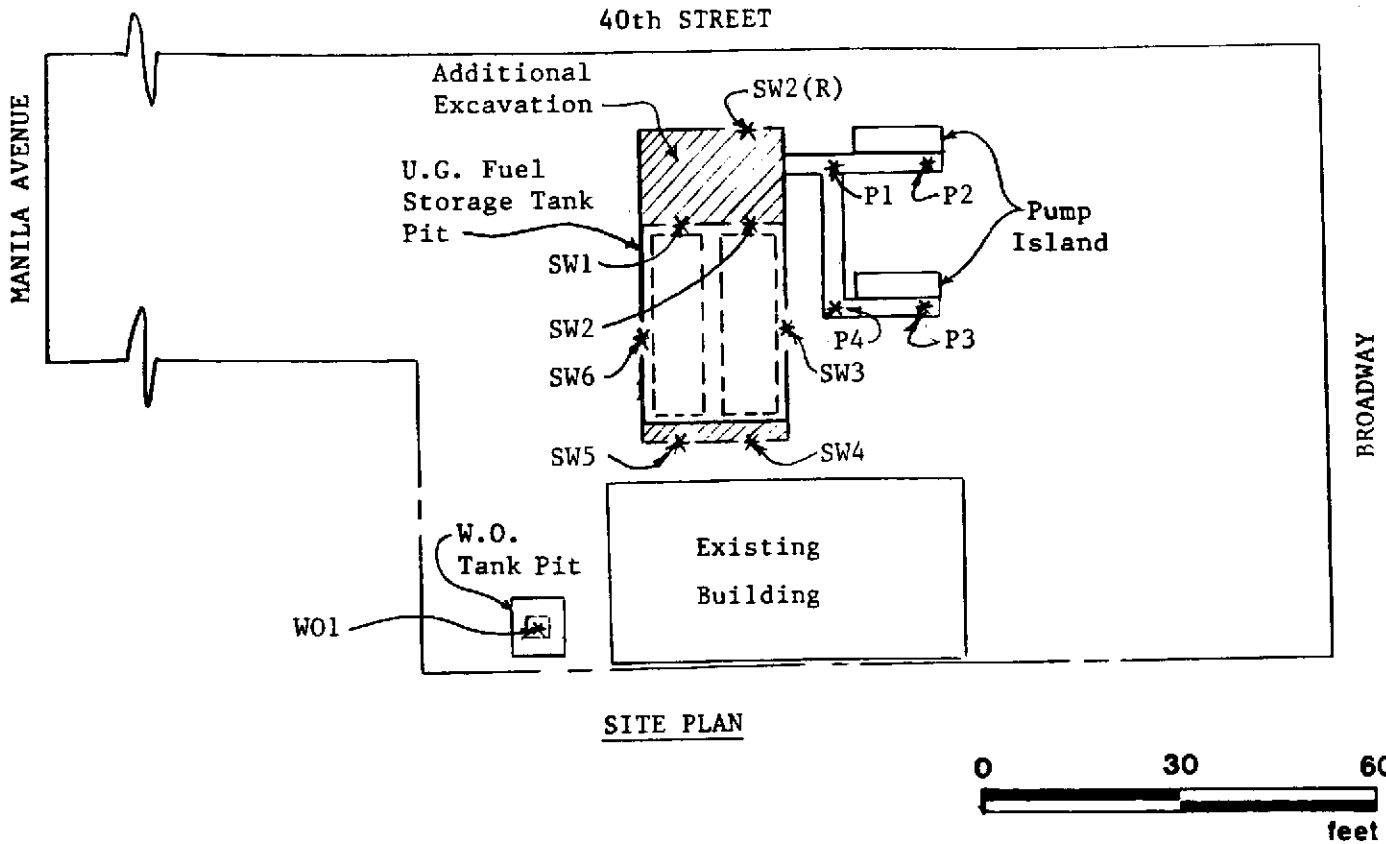
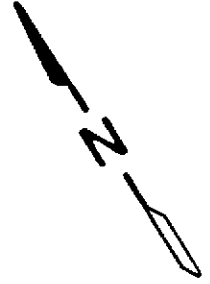
KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P. O. BOX 913

BENICIA, CA 94510

(707) 746-6915



* Sample Point Location

Unocal Service Station #0746
3943 Broadway Street
Oakland, California

ATTACHMENT 2

KEI-J89-0805.R1
August 30, 1989

TABLE 1

SUMMARY OF LABORATORY ANALYSES
SOIL
(Results in ppm)
(Samples collected on August 16, 17, 18 & 24, 1989)

<u>Sample #</u>	<u>Depth (feet)</u>	<u>TPH as Gasoline</u>	<u>TPH as Diesel</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethyl- benzene</u>
SW1	9.5	13	---	ND	0.13	0.39	0.15
SW2	9.5	290	---	0.82	8.7	44	7.6
SW2 (R)	9.5	ND	---	ND	ND	ND	ND
SW3	9.5	ND	---	ND	ND	ND	ND
SW4	9.5	ND	---	ND	ND	ND	ND
SW5	9.5	ND	---	ND	ND	ND	ND
SW6	9.5	ND	---	ND	ND	ND	ND
P1	6.5	6.1	---	ND	ND	ND	ND
P2	6.5	36	---	0.52	4.4	8.0	1.4
P3	5	20	---	0.30	2.5	5.6	1.1
P4	5	3.8	---	0.11	0.19	0.23	0.1
WO1*	8	1.6	ND	ND	1.3	ND	ND
Detection Limits		1.0	1.0	0.05	0.1	0.1	0.1

* TOG and EPA 8010 constituents for this sample were non-detectable.

ND = Non-detectable.



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Kaprealian Engineering, Inc.	Client Project ID: Unocal, Oakland, 3943 Broadway/40th St.	Sampled: Aug 16, 1989
P.O. Box 913	Sample Descript.: Soil, WO1	Received: Aug 16, 1989
Benicia, CA 94510	Analysis Method: EPA 5030/8015/8020	Analyzed: Aug 23, 1989
Attention: Mardo Kaprealian, P.E.	Lab Number: 908-1752	Reported: Aug 25, 1989

TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTEX DISTINCTION (EPA 8015/8020)

Analyte	Detection Limit mg/kg (ppm)	Sample Results mg/kg (ppm)
Low to Medium Boiling Point Hydrocarbons	1.0	1.6
Benzene	0.05	N.D.
Toluene	0.1	1.3
Ethyl Benzene	0.1	N.D.
Xylenes	0.1	N.D.

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Arthur G. Burton
Laboratory Director



SEQUOIA ANALYTICAL

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Kapreallan Engineering, Inc. P.O. Box 913 Benicia, CA 94510 Attention: Mardo Kapreallan, P.E.	Client Project ID: Unocal, Oakland, 3943 Broadway/40th St. Matrix Descript: Soil Analysis Method: EPA 3550/8015 First Sample #: 908-1752	Sampled: Aug 16, 1989 Received: Aug 16, 1989 Extracted: Aug 22, 1989 Analyzed: Aug 23, 1989 Reported: Aug 25, 1989
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TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
908-1752	WO1	N.D.

Detection Limits:

2.0

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

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Arthur G. Burton
Laboratory Director

9081752.KEI <2>



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Kapreallan Engineering, Inc. P.O. Box 913 Benicia, CA 94510 Attention: Mardo Kapreallan, P.E.	Client Project ID: Unocal, Oakland, 3943 Broadway/40th St. Matrix Descript: Soil Analysis Method: SM 503 D&E (Gravimetric) First Sample #: 908-1752	Sampled: Aug 16, 1989 Received: Aug 18, 1989 Extracted: Aug 22, 1989 Analyzed: Aug 24, 1989 Reported: Aug 25, 1989
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TOTAL RECOVERABLE OIL & GREASE

Sample Number	Sample Description	Oil & Grease mg/kg (ppm)
908-1752	WO1	N.D.

Detection Limits:

30.0

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


Arthur G. Burton
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9081752.KEI <3>



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Kaprealian Engineering, Inc.
P.O. Box 913
Benicia, CA 94510
Attention: Mardo Kaprealian, P.E.

Client Project ID: Unocal, Oakland, 3943 Broadway/40th St.
Sample Descript: Soil, WO1
Analysis Method: EPA 5030/8010
Lab Number: 908-1752

Sampled: Aug 16, 1989
Received: Aug 16, 1989
Analyzed: Aug 24, 1989
Reported: Aug 25, 1989

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane.....	5.0	N.D.
Bromoform.....	5.0	N.D.
Bromomethane.....	5.0	N.D.
Carbon tetrachloride.....	5.0	N.D.
Chlorobenzene.....	5.0	N.D.
Chloroethane.....	25.0	N.D.
2-Chloroethylvinyl ether.....	5.0	N.D.
Chloroform.....	5.0	N.D.
Chloromethane.....	5.0	N.D.
Dibromochloromethane.....	5.0	N.D.
1,2-Dichlorobenzene.....	10.0	N.D.
1,3-Dichlorobenzene.....	10.0	N.D.
1,4-Dichlorobenzene.....	10.0	N.D.
1,1-Dichloroethane.....	5.0	N.D.
1,2-Dichloroethane.....	5.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.
Total 1,2-Dichloroethene.....	5.0	N.D.
1,2-Dichloropropane.....	5.0	N.D.
cis-1,3-Dichloropropene.....	5.0	N.D.
trans-1,3-Dichloropropene.....	5.0	N.D.
Methylene chloride.....	10.0	N.D.
1,1,2,2-Tetrachloroethane.....	5.0	N.D.
Tetrachloroethene.....	5.0	N.D.
1,1,1-Trichloroethane.....	5.0	N.D.
1,1,2-Trichloroethane.....	5.0	N.D.
Trichloroethene.....	5.0	N.D.
Trichlorofluoromethane.....	5.0	N.D.
Vinyl chloride.....	10.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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BENICIA CA 94510

(415) 676-9100 (707) 746-6915

CHAIN OF CUSTODY

SAMPLER: HAGOP DATE/TIME OF COLLECTION: 8-16-89 TURN AROUND TIME: Five Days
 (Signature)

SAMPLE DESCRIPTION AND PROJECT NUMBER: UNOCAL - OAKLAND - 3943 Broadway / 40th St.

<u>SAMPLE #</u>	<u>ANALYSES</u>	<u>GRAB OR COMP.</u>	<u>NUMBER OF CONTAINERS</u>	<u>SOIL/ WATER</u>
<u>W01</u>	<u>TPH-G/BTXE/TPH-D/ TOG/8010</u>	<u>G</u>	<u>1</u>	<u>S</u>

<u>RELINQUISHED BY*</u>	<u>TIME/DATE</u>	<u>RECEIVED BY*</u>	<u>TIME/DATE</u>
<u>Hagop Kework</u>	<u>17:00 8-16-89</u>	<u>Eric #23</u>	<u>8/16/89 / 1700</u>
<u>Eric #23</u>	<u>8/16/89</u>	<u>Paul Pearson</u>	<u>18:52 8-16-89</u>
<u>3.</u>			

* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS: _____

NOTE: IF REGULAR TURNAROUND, SOIL ANALYSES MUST BE COMPLETED WITHIN 14 CALENDAR DAYS OF SAMPLE COLLECTION. WATER ANALYSES MUST BE COMPLETED WITHIN 7 CALENDAR DAYS FOR BTX&E (UNLESS SAMPLE HAS BEEN PRESERVED), AND 14 CALENDAR DAYS FOR TPH AS GASOLINE; EXTRACT TPH AS DIESEL WITHIN 14 CALENDAR DAYS.