# ALAMEDA COUNTY HEALTH CARE SERVICES



COLLEEN CHAWLA, Agency Director



DEPARTMENT OF ENVIRONMENTAL HEALTH LOCAL OVERSIGHT PROGRAM (LOP) FOR HAZARDOUS MATERIALS RELEASES 1131 HARBOR BAY PARKWAY ALAMEDA, CA 94502 (510) 567-6700 FAX (510) 337-9335

Richard L & Linda M Weinstein Trust et al.

October 3, 2018

1607 2<sup>nd</sup> Ave. LLC 425 7<sup>th</sup> Street, Suite A Oakland, CA 94607-3911

Attn.: Harry Tung

(Sent via electronic mail to: harryttung@hotmail.com)

RGG LLC et al 360 17<sup>th</sup> Street, #204

Oakland, CA 94612

Latwuania S Rogers 360 17th Street, #204

Oakland, CA 94612

Usen Ime et al Prince Solomon
PO Box 16241 30279 Oakbrook Rd.

Oakland, CA 94610 Hayward, CA 94544

Chinazam Igweka PO Box 16241 Oakland, CA 94610

Prince Solomon & Marcel Uzegbu Rd. 1607 2<sup>nd</sup> Avenue Oakland, CA 94606

360 17th Street, #204

Oakland, CA 94612

Attn.: Richard Weinstein

Cecilia E. Smock 250 Montecito Ave.

Oakland, CA 94610

2666 Gill Dr. Concord, CA 94520 1607 2<sup>nd</sup> Ave, LLC

c/o Pacific Sales & Mgmt. 425 7th St., Ste A

Oakland, CA 94607

Marcel Uzegbu

Elizabeth Epstein & Hannah & Abe Glesser Estate

1607 2<sup>nd</sup> Avenue

Oakland, CA 94606 John & Darlene Delucchi

5725 Harbord Dr. Oakland, CA 94612

Elizabeth & S B Epstein & Hannah & Abe Glesser 1607 2<sup>nd</sup> Avenue Oakland, CA 94606

Subject:

Closure for Fuel Leak Case RO0003170 and GeoTracker Global ID T10000006756,

Second Avenue UST, 1607 2nd Avenue, Oakland, CA 94606

#### Dear Ladies and Gentlemen:

This letter transmits the enclosed Remedial Action Completion Certificate and Case Closure Summary for the subject leaking underground fuel tank case. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. This Remedial Action Completion Certificate and the case closure summary can also be viewed on the State Water Resources Control Board's GeoTracker website (<a href="http://geotracker.waterboards.ca.gov">http://geotracker.waterboards.ca.gov</a>) and the Alameda County Environmental Health website (<a href="http://www.acgov.org/aceh/index.htm">http://www.acgov.org/aceh/index.htm</a>).

If you have any questions, please call the Caseworker, Keith Nowell, at (510) 567-6764. Thank you.

Sincerely,

Paresh Khatri

Program Manager- Local Oversight Program

Enclosures:

- 1. Remedial Action Completion Certification
- 2. Case Closure Summary

Ladies and Gentlemen RO0000179 October 3, 2018, Page 2

Jan Schutze, Schutze & Associates, Inc., 44358 South Grimmer Boulevard, Fremont, CA 94538 (Sent via electronic mail to: js@schutze-inc.com)

Dilan Roe, ACDEH, (Sent via electronic mail to: <a href="mailto:dilan.roe@acgov.org">dilan.roe@acgov.org</a>)
Paresh Khatri, ACDEH, (Sent via electronic mail to: <a href="mailto:paresh.khatri@acgov.org">paresh.khatri@acgov.org</a>)
Keith Nowell, ACDEH (Sent via electronic mail to: <a href="mailto:keith.nowell@acgov.org">keith.nowell@acgov.org</a>)

GeoTracker, File

## ALAMEDA COUNTY HEALTH CARE SERVICES

**AGENCY** 

COLLEEN CHAWLA, Agency Director



DEPARTMENT OF ENVIRONMENTAL HEALTH LOCAL OVERSIGHT PROGRAM (LOP) FOR HAZARDOUS MATERIALS RELEASES 1131 HARBOR BAY PARKWAY ALAMEDA, CA 94502 (510) 567-6700 FAX (510) 337-9335

Richard L & Linda M Weinstein Trust et al

Prince Solomon & Marcel Uzegbu

## REMEDIAL ACTION COMPLETION CERTIFICATION

October 3, 2018

1607 2<sup>nd</sup> Ave. LLC 425 7<sup>th</sup> Street, Suite A Oakland, CA 94607-3911

Attn.: Harry Tung

(Sent via electronic mail to:

harryttung@hotmail.com)

Usen Ime et al PO Box 16241 Oakland, CA 94610

Marcel Uzegbu 2666 Gill Dr. Concord, CA 94520

1607 2<sup>nd</sup> Ave, LLC c/o Pacific Sales & Mgmt. 425 7<sup>th</sup> St., Ste A

Oakland, CA 94607

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360 17<sup>th</sup> Street, #204 Oakland, CA 94612

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Oakland, CA 94612

Prince Solomon 30279 Oakbrook Rd.

Hayward, CA 94544

Chinazam Igweka PO Box 16241

Oakland, CA 94610

Elizabeth Epstein & Hannah & Abe Glesser Estate

1607 2<sup>nd</sup> Avenue

Oakland, CA 94606 John & Darlene Delucchi

5725 Harbord Dr. Oakland, CA 94612

360 17th Street, #204

Attn.: Richard Weinstein

Oakland, CA 94612

1607 2<sup>nd</sup> Avenue

Cecilia E. Smock

250 Montecito Ave.

Oakland, CA 94610

Oakland, CA 94606

Elizabeth & S B Epstein & Hannah & Abe Glesser 1607 2<sup>nd</sup> Avenue Oakland, CA 94606

Subject:

Case Closure for Fuel Leak Case RO0003170 and GeoTracker Global ID T10000006756,

Second Avenue UST, 1607 2nd Avenue, Oakland, CA 94606

#### Dear Responsible Parties:

This letter confirms the completion of a site investigation and remedial 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 tank(s) 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(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

Please be aware that claims for reimbursement of corrective action costs submitted to the Underground Storage Tank Cleanup Fund more than 365 days after the date of this letter or issuance or activation of the Fund's Letter of Commitment, whichever occurs later, will not be reimbursed unless one of the following exceptions applies:

Ladies and Gentlemen RO0003170 October 3, 2018, Page 2

- Claims are submitted pursuant to Section 25299.57, subdivision (k) (reopened UST case); or
- Submission within the timeframe was beyond the claimant's reasonable control, ongoing work is required for closure that will result in the submission of claims beyond that time period, or that under the circumstances of the case, it would be unreasonable or inequitable to impose the 365day time period.

This notice is issued pursuant to subdivision (g) of Section 25296.10 of the Health and Safety Code. Please contact our office if you have any questions regarding this matter.

Sincerely,

Ronald Browder Director

Sonal Browster

# ALAMEDA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH LEAKING UNDERGROUND STORAGE TANK CLEANUP SITE CASE CLOSURE SUMMARY FORM

Second Avenue UST, 1607 2<sup>nd</sup> Avenue, Oakland, CA Case No. RO0003170, Geotracker ID T10000006756

#### **OCTOBER 3, 2018**

This Case Closure Summary Form was prepared by Alameda County Department of Environmental Health (ACDEH) for the case identified above. This form provides a summary of information on the case and the basis for case closure. ACDEH's closure determination was based upon information in the case file and a case closure evaluation conducted in accordance with the State Water Resources Control Board's Low-Threat Underground Storage Tank Closure Policy (LTCP) for petroleum related contaminants. Based on this evaluation, and with the provision that the information provided to this agency is accurate and representative of site conditions, ACDEH has determined that there is a low threat to human health and safety and the environment at and in the vicinity of the site from residual subsurface contamination associated with the unauthorized release of petroleum related constituents from underground storage tank systems at the site.

Information in this Case Closure Summary Form is organized as follows:

- **Section 1 Case Information**: Facility/site address, case identification numbers, lead regulatory oversight agency information, and responsible party information;
- **Section 2 Property Information**: Assessor parcel numbers, historic land use and operations, environmental cases associated with the property, and land use at time of case closure;
- Section 3 Case Summary: Reason the case was opened, investigation and cleanup activities, and the basis for the case closure determination;
- **Section 4 Residual Contamination**: Constituents evaluated during site investigation activities and residual contamination remaining at closure;
- Section 5 Engineering and Institutional Controls: Engineering and institutional controls established for the property; and
- Section 6 Completion of Closure Activities: Status of monitoring and remediation wells and probes and disposal of investigation and remediation derived waste, and stakeholder notification of the proposed case closure.

Supporting documentation is provided in the following attachments:

- Attachment A LTCP Evaluation: Geotracker LTCP checklist, site conceptual model summary, and LTCP media specific evaluation for groundwater, vapor intrusion and direct contact/outdoor air exposure;
- Attachment B Site Investigation Data: Preferential pathways and sensitive receptor survey data, boring logs and media specific data;
- Attachment C Responsible Party & Property Information: Responsible party identification, assessor's office property information, site configuration at time of case closure, and institutional controls (if applicable);
- Attachment D Case Closure Public Notification Information: Public notification fact sheet and distribution list;
- Attachment E: List of attachment subcategories, and acronyms and symbols used in the Closure Summary Form.

Additional information on this case can be viewed in the online case file over the Internet on the ACDEH website (<a href="http://www.acgov.org/aceh/lop/ust.htm">http://www.acgov.org/aceh/lop/ust.htm</a>) or the State of California Water Resources Control Board GeoTracker website (<a href="http://geotracker.waterboards.ca.gov">http://geotracker.waterboards.ca.gov</a>). Both databases should be reviewed to obtain a complete history.

#### **SECTION 1 - CASE INFORMATION**

## A. Facility/Site Address (Case Name & Address)

Project Name	Address
Second Avenue UST	1607 2 <sup>nd</sup> Avenue, Oakland, CA 94606

## **B.** Case Identification Numbers

Cleanup Oversight Agencies	Case/ID No
Alameda County Local Oversight Program (LOP) - Lead Agency	RO0003170
San Francisco Bay Regional Water Quality Control Board (Region 2)	None
State Water Resources Control Board GeoTracker Global ID	T10000006756

## C. Lead Agency Information

Agency Name:	Agency Address:	Agency Phone:
Alameda County Department of Environmental Health (ACDEH)	1131 Harbor Bay Parkway, Alameda, CA 94502-6577	(510) 567-6700
Case Worker:	LOP Supervisor:	Land Water Division Chief:
Keith Nowell, PG 8145, CHG 899	Paresh Khatri	Dilan Roe, PE C73703

## D. Responsible Party Information

Responsible Parties:	Address:
1607 2 <sup>nd</sup> Ave. LLC c/o Pacific Sales & Mgmt.	425 7 <sup>th</sup> Street, Suite A, Oakland, CA 94607-3911
Richard L & Linda M Weinstein Trs EtAl c/o Mr. Richard Weinstein	360 17 <sup>th</sup> St., #204, Oakland, CA 94612-3340
RGG LLC ETAL	360 17 <sup>th</sup> St., #204, Oakland, CA 94612-3340
Latwuania S Rogers	360 17 <sup>th</sup> St., #204, Oakland, CA 94612
Ime Usen ETAL	P.O. Box 16241, Oakland, CA 94610
Prince Solomon	30279 Oakbrook Rd., Hayward, CA 94544-6669
Prince Solomon & Marcel Uzegbu	1607 2 <sup>nd</sup> Avenue, Oakland, CA 94606
Marcel Uzegbu	2666 Gill Dr, Concord, CA 94520-2234
Chinazam Igweka	PO Box 16241, Oakland, CA 94610-6241

Cecelia E Smock	250 Montecito Ave, Oakaland, CA 94610-4376
John S & Darlene C Delucchi	5725 Harbord Dr, Oakland, CA 94611-3162
Elizabeth C Epstein & Hannah & Abe Glesser Estate	1607 2 <sup>nd</sup> Ave, Oakland, CA 94606-1713
S B + Elizabeth C Epstein + A +Hannah Glesser	1607 2 <sup>nd</sup> Ave, Oakland, CA 94606-1713

## **SECTON 2 - PROPERTY INFORMATION**

## A. Assessor Parcel Numbers (APNs) & Associated Addresses

	APN(s)	Addresses
Current	20-182-3	1607 2 <sup>nd</sup> Avenue
Historic	N/A	None Identified

## **B. Identified Historic Land Use & Operations**

Туре	Description
Apartment Building	The property is located on the northern corner of intersection formed by 2 <sup>nd</sup> Avenue and East 16 <sup>th</sup> Street in Oakland, CA. The Site consists of an approximate lotline-to-lotline two story apartment building with four commercial suites fronting 2 <sup>nd</sup> Avenue and 18 residential units accessed via 16 <sup>th</sup> Street. The residential units have address of 134 E 16 <sup>th</sup> Street, Units #1 through #18, and the commercial units are addressed as 1601, 1603, 1605 and 1607 2 <sup>nd</sup> Avenue.
Hotel	A structure has occupied the property since at least 1962. Prior to the current use of the building as apartments, the property may have operated as a hotel. The hotel operated from at least 1992 through approximately 1997.
Other Site Uses	Unknown

## C. Environmental Cases Associated with Property

Case Type	Lead Agency	LOP Case No; Geotracker ID	Case Name	Associated Historic Land Use	Primary PCOCs	Year Case Opened/Closed
		Case Ass	ociated with this	Case Closure Sumn	nary Form	
LUST <sup>1</sup>	ACDEH	RO0003170; T10000006756	Second Avenue UST	Apartment Building	Heating oil UST: TPH d and oil, BTEX, VOCs	2015/2018
		Ot	her Cases Associ	ated with the Prope	erty	
None					*****	

#### **SECTON 3 – CASE SUMMARY**

#### A. Known UST Systems & Service Station Infrastructure

UST System Component	Size/Quantity	Material Stored	Status	URF Filing Date
UST	1,500 gallon	Heating oil	Removed	11/19/2014

#### B. Unauthorized Release Description & Reason Case Opened

One underground storage tank (UST) containing heating oil was discovered beneath the sidewalk along the East 16<sup>th</sup> Street frontage of the property. The tank was 10 feet in length by 5 feet in diameter and constructed of single wall bare steel. A fuel line between the UST and the apartment building was removed and capped at the building entrance. The age of the tank is unknown and the owner had no prior knowledge of the tank nor is there any indication of previous site investigation activities. The tank was found to be in poor condition with visible holes. Soil discoloration and hydrocarbon odors were observed in the tank overburden soil and/or in the soil beneath the tank.

#### SECTON 3 – CASE SUMMARY (CONTINUED)

#### C. Site Investigations

Site investigation associated with the UST release has been conducted from 2014 to 2017.

On November 2014, after tank removal one four-point composite soil sample from the stockpiled overburden and two discrete soil samples from the base of the tank excavation were collected.

On February 2016, a soil and groundwater investigation was conducted by Schutze & Associates and soil bores B2 through B5 were installed to investigate the lateral and vertical extent of potential hydrocarbon contamination in the soil and groundwater beneath the subject site.

On November 2016, four soil gas probes in the vicinity of the former waste oil UST and inside the on-site building's utility room; however, due to a high ambient air leak greater than 5%, the soil gas sampling event was requested to be repeated.

On January 2017, a soil vapor investigation was conducted at the site consisting of the collection of 3 soil vapor samples. One sub-slab vapor probe, SV-1-3, and one soil bore, SV-1-5, were advanced to 3 and 5 ft below the depth of the apartment building's concrete slab within the interior of the utility room of the apartment building. Bore SV-2 was advanced adjacent to the building through the sidewalk at the location where the heating oil feed pipe entered the building. Soil vapor sample SV-2-5 was collected at a depth of 5 feet bgs.

#### D. Remediation

Approximately 22 tons of soil excavated from the tank pit was profiled and disposed after elevated concentration of TPH was detected. The pit was backfilled with clean import material.

#### E. Closure Evaluation

This LUST case was evaluated for closure consistent with the State Water Resource Control Board's Low-Threat Underground Storage Tank Closure Policy (LTCP) for petroleum related contaminants. ACDEH determined that the site met all the LTCP General Criteria and two of the Media Specific Criteria. ACDEH has made the determination that the site poses a low risk to human health and safety and the environment. The determination was based on receptors and environmental conditions identified at and in the vicinity of the site at the time of closure and reasonably anticipated near-term future scenarios.

## **SECTON 4 - RESIDUAL CONTAMINATION**

## A. Constituents Evaluated & Residual Contamination Remaining at Closure

Material Stored/Dispensed	Analystas	Sampled,				Media			
in UST System	Analytes	Residual	S	GW	SW	SV	SS	IA	OA
Engine Fuels	TPH-g <sup>1</sup>	Sampled							
☐ Gasoline Fuel	TF11-g	Residual							
{1, 2, 9, 10, 11, 12, 13, 14}	TPH-d <sup>2</sup>	Sampled	×	×					
☐ Diesel Fuel	1111-4	Residual	×						
(2, 9, 10)	TPH-mo <sup>3</sup>	Sampled	×	×					
☐ Jet Fuel	(soil only)	Residual	×						
(1, 2, 4, 9, 10)	   TPH-jf <sup>4</sup>	Sampled							
		Residual							
Unknown Fuel (1, 2, 4, 9, 10, 11, 12, 13, 14)	TPH-k⁵	Sampled							
	I IPH-K	Residual							
Heating Oils	TPH-ss <sup>6</sup>	Sampled							
□ Kerosene	1PH-55°	Residual							
(2, 5, 9, 10)	TPH-bo <sup>7</sup>	Sampled							
☑ Residential Heating Oils	IPH-DO	Residual							
(2, 3, 9, 10)	TD11 1-8	Sampled	×	×					
☐ Commercial & Industrial	TPH- ho <sup>8</sup>	Residual	×						
Heating Oils	DTF1/9	Sampled	×	×		×	×		
(1, 2, 3, 7, 9, 10, 15, 16)	BTEX <sup>9</sup>	Residual				×	×		
Other Oils	10	Sampled	×	×		×	×		
☐ Waste (Used) Oil	Naphthalene <sup>10</sup>	Residual	×						
(1, 2, 3, 9, 10, 15, 16, 17, 18)		Sampled	X	×		×	×		
□ 11 - 1 12 - 02 - 02 - 02 - 02 - 02	MTBE/TBA <sup>11</sup>	Residual							
☐ Hydraulic Oil	(1)	Sampled	×	×		×	×		
	EDB/EDC <sup>12</sup>	Residual							
Dielectric Oil (2, 3, 10, 16, 17)	Organic Lead <sup>13</sup>	Sampled							
(2) 0) 20, 20, 27,	(TML, TEL)	Residual							
Unknown Oil (1, 2, 3, 9, 10, 11, 12, 13, 14, 15, 16, 17,	Fuel Oxygenates <sup>14</sup>	Sampled							
18)	(DIPE, TAME, EtOH, ETBE)	Residual							
	VOCs <sup>15</sup>	Sampled				×			
Solvents	(full scan)	Residual		$\boxtimes$		×			
☐ Hydrocarbon Solvents	45	Sampled		×					
(2, 3, 6, 9, 10)	SVOCs <sup>16</sup>	Residual	×						
☐ Chlorinated Solvents	47	Sampled							
(15)	PCBs <sup>17</sup>	Residual							
	Metals <sup>18</sup>	Sampled		⊠					
	☑ (Cd, Cr, Pb, Ni, Zn) ☐ (CAM 17)	Residual	×	×					

S = Soil, GW = Groundwater, SW = Surface Water, SV = Soil Vapor, SS = Sub-Slab Vapor, IA = Indoor Air, OA = Outdoor Air

#### **SECTON 5 – ENGINEERING AND INSTITUTIONAL CONTROLS**

## A. Land Use & Operations at Time of LUST Case Closure

At the time of closure the subject site consists of an occupied apartment building having four commercial ground floor units and 18 residential units. The commercial units are at grade and the first floor apartment units and common area have a raised floor over a three-to four-foot crawl space. Small, grade-level utility rooms accessed by a stair case are located to the rear of the building, as viewed from 2<sup>nd</sup> Avenue.

## B. Engineering and Institutional Controls

Engineering Controls			
Not Applicable			
Institutional Controls			
Not Applicable			

#### **SECTION 6 - COMPLETION OF CLOSURE ACTIVITIES**

As a condition of case closure all monitoring and remediation wells and probes must be properly destroyed (unless the owner of the property on which the monitoring point is located certifies that the monitoring point will be maintained); all remediation systems must be decommissioned; all investigation and remediation derived waste must be properly disposed of; and all stakeholders notified of the proposed case closure.

#### A. Well Status (Groundwater)

No. of Wells Installed: 0 (None)	No. of Wells Lost: Not Applicable
No. of Wells Destroyed: Not Applicable	No. of Wells Retained: Not Applicable

## **B.** Vapor Probe Status

1	No. of Soil Vapor Probes (VP) Installed: No permanent probes installed  No. of Sub-Slab Probes Installed: No permanent probes installed.	No. of VPs Lost: Not Applicable
	No. of VPs Destroyed: Not Applicable	No. of VPs Retained: Not Applicable

## C. Remediation System Decommissioning

Type of System	None installed
Remediation System Components Removed	Not Applicable

#### D. Investigation and Remediation Derived Waste Removal Status

All investigation and remediation derived waste associated with the UST releases was removed from the site.

#### E. Public Comment

A 60 day public notification period was completed on August 10, 2018. One comment was received.

**Geotracker LTCP Evaluation Checklist** 

COND AVENUE UST (T10000006756) - MAP THIS SITE	PUBLIC PAGE
107 2ND AVENUE PERTINENT INFORMATION:  AKLAND, CA 94606  CUF Claim #: 20287 CUF Priority Assigned: C CUF Amount Paid: \$19.343  AMEDIA COUNTY  ST CLEANUP SITE (INFO)  ATUS: COMPLETED - CASE CLOSED	
Activities Report (2) Documents / Data	
LOSURE POLICY THIS VERSION IS FINAL AS QP <sub>3</sub> 5/20/2015 CHEMISTERINING ON 6/20215 QL	OSURE POLICY HISTORY
Seneral Criteria - The site satisfies the policy general criteria - CLEAR SECTION ANSWERS  YE	S
n. Is the unauthorized release located within the service area of a public water system?  Name of Water System:  East. Bay MUD	⊕ YES O NO
o. The unauthorized release consists only of petroleum (info).	● YES O NO
r. The unauthorized ("primary") release from the UST system has been stopped.	● YES O NO
f. Free product has been removed to the maximum extent practicable (info).	ered O YES O NO
e. A conceptual site model that assesses the nature, extent, and mobility of the release has been developed (info)	● YES O NO
. Secondary source has been removed to the extent practicable (info).	● YES O NO
s Soil or groundwater has been tested for MTBE and results reported in accordance with Health and Safety Code Section 25296.15.	uired O YES O NO
n. Does a nuisance exist, as defined by <u>Water Code section 13050</u> .	O YES   NO
Media-Specific Criteria: Groundwater - The contaminant plume that exceeds water quality objectives is stable or decreasing in areal extent neets all of the additional characteristics of one of the five classes of sites listed below - CLEAR SECTION ANSWERS	t, and YES
EXEMPTION - Soil Only Case (Release has <u>not</u> Affected Groundwater - <u>Info</u> )	● YES O NO
2. Media Specific Criteria: Petroleum Vapor Intrusion to Indoor Air - The site is considered low-threat for the vapor-intrusion-to-air pathway if specific conditions satisfy items 2a, 2b, or 2c - CLEAR SECTION ANSWERS	f site NO
EXEMPTION - Active Commercial Petroleum Fueling Facility	O YES   NO
Does the site meet any of the Petroleum Vapor Intrusion to Indoor Air specific criteria scenarios?	O YES ® NO
Exposure Type:  Residential O Commercial	
<ul> <li></li></ul>	
<ul> <li>Residential ○ Commercial</li> <li>Free Product:         <ul> <li>In Groundwater ○ In Soil ○ Unknown</li> </ul> </li> <li>TPH In the Bloattenuation Zone:             <ul> <li>≥ 100 mg/kg ○ Unknown ○ Soil samples not taken at two depths within 5 ft. zone (only for Scenario 4 with BioZone)</li> <li>Bioattenuation Zone Thickness:                     <ul></ul></li></ul></li></ul>	O Unknown
<ul> <li>Residential ○ Commercial</li> <li>Free Product:         <ul> <li>O In Groundwater ○ In Soil ○ Unknown</li> </ul> </li> <li>TPH In the Bloattenuation Zone:             <ul> <li>○ ≥ 100 mg/kg ○ Unknown ○ Soil samples not taken at two depths within 5 ft. zone (only for Scenario 4 with BioZone)</li> <li>Bioattenuation Zone Thickness:                     <ul> <li>○ &lt; 5 Feet (No BioZone) ○ ≥ 5 Feet and &lt; 10 Feet ○ ≥ 10 Feet and &lt; 30 Feet ○ ≥ 30 Feet ○ 30ft BioZone Compromised TPH &gt; 100mg/kg ○ Unclosed and Bioattenuation Zone:</li></ul></li></ul></li></ul>	O Unknown  oswe if it YES
<ul> <li>Residential ○ Commercial</li> <li>Free Product:         <ul> <li>O In Groundwater ○ In Soil ○ Unknown</li> </ul> </li> <li>TPH in the Bloattenuation Zone:             <ul> <li>○ ≥ 100 mg/kg ○ Unknown ○ Soil samples not taken at two depths within 5 ft. zone (only for Scenario 4 with BioZone)</li> <li>Bioattenuation Zone Thickness:                     <ul> <li>○ &lt; 5 Feet (No BioZone) ○ ≥ 5 Feet and &lt; 10 Feet ○ ≥ 10 Feet and &lt; 30 Feet ○ ≥ 30 Feet ○ 30ft BioZone Compromised TPH &gt; 100mg/kg ○ Unit of the composition of the compo</li></ul></li></ul></li></ul>	O Unknown  Osure if it YES  O YES  NO
<ul> <li>Residential ○ Commercial</li> <li>Free Product:         <ul> <li>O In Groundwater ○ In Soil ○ Unknown</li> </ul> </li> <li>TPH In the Bloattenuation Zone:             <ul> <li>○ ≥ 100 mg/kg ○ Unknown ○ Soil samples not taken at two depths within 5 ft. zone (only for Scenario 4 with BioZone)</li> <li>Bioattenuation Zone Thickness:                     <ul> <li>○ &lt; 5 Feet (No BioZone) ○ ≥ 5 Feet and &lt; 10 Feet ○ ≥ 10 Feet and &lt; 30 Feet ○ ≥ 30 Feet ○ 30ft BioZone Compromised TPH &gt; 100mg/kg ○ Unclosed and Bioattenuation Zone:</li></ul></li></ul></li></ul>	O Unknown  oswe if it YES
Presidential Ocommercial  Free Product:     O In Groundwater O In Soil O Unknown  TPH In the Bloattenuation Zone:     ② ≥ 100 mg/kg O Unknown O Soil samples not taken at two depths within 5 ft. zone (only for Scenario 4 with BioZone)  Bloattenuation Zone Thickness:     O < 5 Feet (No BioZone) ② ≥ 5 Feet and < 10 Feet O ≥ 10 Feet and < 30 Feet O ≥ 30 Feet O 30ft BioZone Compromised TPH > 100mg/kg O Unc O 2 Data in Bloattenuation Zone:     O No Q 2 Data O Q ≥ 4 % Benzene in Groundwater:     O ≥ 100 μg/l and < 1,000 μg/l O ≥ 1,000 μg/l O Unknown  Soil Gas Benzene:     ○ ≥ 85 μg/m³ and < 280 μg/m³ O ≥ 280 μg/m³ and < 85,000 μg/m³ O ≥ 85,000 μg/m³ and < 280,000 μg/m³ O ≥ 280,000 μg/m³ O ≥ 3,600 μg/m³ and < 1,100,000 μg/m³ O ≥ 1,100 μg/m³ and < 3,600,000 μg/m³ O ≥ 3,600,000 μg/m³	O Unknown  O VES NO  YES NO
Presidential Ocommercial Free Product: O In Groundwater O In Soil O Unknown  TPH in the Bloattenuation Zone:  ② ≥ 100 mg/kg O Unknown O Soil samples not taken at two depths within 5 ft. zone (only for Scenario 4 with BioZone)  Bloattenuation Zone Thickness: O < 5 Feet (No BioZone) ② ≥ 5 Feet and < 10 Feet O ≥ 10 Feet and < 30 Feet O 30ft BioZone Compromised TPH > 100mg/kg O Unknown  Soil Data in Bloattenuation Zone: O ≥ 0.0 pata O 0 ≥ 4 % ② 0 ≥ 4 %  Benzene In Groundwater: O ≥ 100 μg/l and < 1,000 μg/l O ≥ 1,000 μg/l O unknown  Soil Gas Benzene: O ≥ 85 μg/m³ and < 280 μg/m³ O ≥ 280 μg/m³ and < 85,000 μg/m³ O ≥ 85,000 μg/m³ and < 280,000 μg/m³ O ≥ 280,000 μg/m³ O ≥ 3,600 μg/m³ and < 3,600 μg/m³ and < 3,600 μg/m³ O ≥ 3,600 μg/m³ O ≥ 3,600 μg/m³ O ≥ 3,000 μg/m³ O ≥ 1,100,000 μg/m³ O ≥ 310 μg/m³ and < 3,600,000 μg/m³ O ≥ 310 μg/m³ and < 93,000 μg/m³ O ≥ 93,000 μg/m³ and < 310,000 μg/m³ O ≥ 310,000 μg/m³ O ≥ 10,000 μg/m³ O ≥ 310,000 μg/m³ O ≥ 10,000 μg/m³ O ≥ 10,0	O Unknown  O VES NO  YES NO
Presidential Ocommercial  Free Product:     O In Groundwater O In Soil O Unknown  TPH In the Bloattenuation Zone:     ② ≥ 100 mg/kg O Unknown O Soil samples not taken at two depths within 5 ft. zone (only for Scenario 4 with BioZone)  Bloattenuation Zone Thickness:     O < 5 Feet (No BioZone) ② ≥ 5 Feet and < 10 Feet O ≥ 10 Feet and < 30 Feet O ≥ 30 Feet O 30ft BioZone Compromised TPH > 100mg/kg O Unc O 2 Data in Bloattenuation Zone:     O No Q 2 Data O Q ≥ 4 % Benzene in Groundwater:     O ≥ 100 μg/l and < 1,000 μg/l O ≥ 1,000 μg/l O Unknown  Soil Gas Benzene:     ○ ≥ 85 μg/m³ and < 280 μg/m³ O ≥ 280 μg/m³ and < 85,000 μg/m³ O ≥ 85,000 μg/m³ and < 280,000 μg/m³ O ≥ 280,000 μg/m³ O ≥ 3,600 μg/m³ and < 1,100,000 μg/m³ O ≥ 1,100 μg/m³ and < 3,600,000 μg/m³ O ≥ 3,600,000 μg/m³	O Unknown  O VES NO  YES NO
Pree Product:  O In Groundwater O In Soil O Unknown  TPH In the Bloattenuation Zone:  ② ≥ 100 mg/kg O Unknown O Soil samples not taken at two depths within 5 ft. zone (only for Scenario 4 with BioZone)  Bioattenuation Zone Thickness:  ○ < 5 Feet (No BioZone) ③ ≥ 5 Feet and < 10 Feet ○ ≥ 10 Feet and < 30 Feet ○ ≥ 30 Feet ○ 30ft BioZone Compromised TPH > 100mg/kg ○ Unchnown  O 2 Data in Bloattenuation Zone:  ○ No O₂ Data ○ O₂ < 4% ④ O₂ ≥ 4%  Benzene in Groundwater:  ○ ≥ 100 μg/l and < 1,000 μg/l ○ ≥ 1,000 μg/l ○ Unknown  Soil Gas Benzene:  ○ ≥ 85 μg/m³ and < 280 μg/m³ ○ ≥ 280 μg/m³ and < 85,000 μg/m³ ○ ≥ 85,000 μg/m³ and < 280,000 μg/m³ ○ ≥ 280,000 μg/m³ ○ Unknown  Soil Gas EthylBenzene:  ○ ≥ 1,100 μg/m³ and < 3,600 μg/m³ ○ ≥ 3,600 μg/m³ and < 1,100,000 μg/m³ ○ ≥ 1,100,000 μg/m³ and < 3,600,000 μg/m³ ○ ≥ 30 lid Sas haphthalene:  ○ ≥ 93 μg/m³ and < 310 μg/m³ ○ ≥ 310 μg/m³ and < 93,000 μg/m³ ○ ≥ 93,000 μg/m³ and < 310,000 μg/m³ ○ ≥ 310,000 μg/m³ ○ Unknown  I. Media Specific Criteria: Direct Contact and Outdoor Air Exposure - The site is considered low-threat for direct contact and outdoor air expenses 1, 2, or 3 below GLAR SECTION ANSWERS  EXEMPTION - The upper 10 feet of soil is free of petroleum contamination  Does the site meet any of the Direct Contact and Outdoor Air Exposure criteria scenarios?  ((a) - Maximum concentrations of petroleum constituents in soil are less than or equal to those listed in the following table (LINK) for the specified depth elow ground surface.  Additional Information  Should this case be closed in spite of NOT meeting policy criteria?  Explain:  [3011] 3ns samples sot collected 5 feet below the depth of the foundation. The 5-foot and 3-foot soil vapor sample analyses	Ounknown  Oswe if it YES  O YES  NO  YES  NO  YES  NO

GEOTRACKER

**Site Conceptual Model Summary** 

#### SITE CONCEPTUAL MODEL SUMMARY

#### A. Site Geology & Hydrogeology

The geologic and hydrogeologic characteristics of the site were evaluated using data from boring logs and groundwater observations made during the site investigations. Soil beneath the site consists of fine grained soil (clays, silty clays and clayey silts) between the ground surface to approximately 22 feet bgs, the maximum depth explored. Well graded gravelly sand lenses, typically less than 2-feet-thick were observed below 10 feet bgs. A surficial gravelly sand layer approximately 7.5-feet-thick in the vicinity of the tank pit was logged thinning and descending to the east, with the top of the layer at Boring B4 at approximately 5-feet-bgs and thinning to 3 feet thick.

Boring logs indicate groundwater is semiconfined. Two of three gravelly sand layers below 10 feet bgs are identified as 'wet (aquifer)' and the surficial gravelly sand layer was also described as wet, though above the dtw. The dtw was measured at approximately 11.5 to 12-feet bgs in three of the four bores and at a depth of 18 feet bgs in one bore. The bores may not have been opened a sufficient time to allow for the water level to stabilize. Groundwater flow has been interpretted to flow to the northwest toward Lake Merritt.

#### B. Dissolved Phase Contaminant Plume

Grab groundwater samples were collected from three soil bores. The analytical laboratory report documented all petroleum hydrocarbon constituent concentrations at levels below the laboratory reporting limits. Therefore, the release does not appear to have significantly impacted groundwater and is considered a soil-only case. The VOC chloroform and the metal nickel have been reported in two GGW samples at concentrations up to 13 ug/L and 1.8 ug/L, respectively. The samples exhibiting the highest concentrations are from the sample B-5-15-W.

#### SITE CONCEPTUAL MODEL SUMMARY (CONTINUED)

#### C. Non Aqueous Phase Liquid (NAPL)

LNAPL and sheen have not been observed in water samples collected at the site.

#### D. Soil Impacts

Soil samples collected as part of the investigations include two tank pit excavation (9464-W11 and 9464-E11) and eight samples collected from the four soil bores (B-2-8 & B-2-10; B-3-2.5, B-3-7.5 & B-3-10; B-4-7.5; B-5-2.5 & B-5-5). The samples appear to adequately characterize the unsaturated soil at the site.

- Two tank pit excavation samples were collected following the UST removal. Each sample was recovered from 2 feet below an end of the UST. The maximum concentrations of TPHd and and naphthalene were reported at 2.14 mg/kg and 0.0087 mg/kg, respectively. BTEX compound concentrations were reported at levels below the laboratory reporting limits. Additionally a four-point composite stockpile soil sample was collected for disposal profiling. The stockpile sample, 9464-SP, was documented to contain 307 mg/kg TPHd, 0.345 mg/kg naphthalene and 5.7 mg/kg lead.
- Of the eight soil bore samples recovered for analysis, two were documented to contain petroleum hydrocarbon concentrations above the laboratory reporting limit. Sample B-2-8, collected at a depth of 8 feet, was reported to contain TPHd, TPHmo and TPHho at concentrations of 15 mg/kg, 34 mg/kg and 6.0 mg/kg, respectively. Sample B-3-7.5, collected at a depth of 7.5 feet, was reported to contain TPHd, TPHmo and TPHho at concentrations of 2,700 mg/kg, 1,300 mg/kg and 1,500 mg/kg, respectively. Sample B-3-7.5 also contained the VOCs naphthalene at a concentration of 6.5 mg/kg and 1,2,4-Trimethylbenzene at 1.0 mg/kg, and the PAHs 1-methylnaphthalene, 2-methylnaphthalene, phenanthrene and pyrene at concentrations of 13 mg/kg, 10 mg/kg, 8.6 mg/kg and 5.5 mg/kg, respectively. Concentrations of TPHd, TPHmo and TPHho were below the laboratory reporting limit for the other six soil samples. BTEX, MTBE, naphthalene, and PAHs were analyzed in four samples (B-2-8, B-3-7.5 & B-3-10; and B-5-5). With the exception sample B-3-7.5 discussed previously, BTEX, MTBE, naphthalene, VOC and PAH concentrations were below their respective laboratory reporting limits.

#### E. Preferential Pathways

As the release has been determined not to have impacted groundwater, a preferential pathway survey was not conducted to evaluate the potential for contaminant migration via preferential utility lines, utility vaults, and trenches within the site vicinity.

#### F. Sensitive Receptors & Exposure Pathways

As the release has been determined not to have impacted groundwater, a sensitive receptor survey was not conducted. The site is occupied by a lotline-to-lotline commercial/residential building, tenants, customers and commercial workers are not likely to contact potentially impacted shallow soil. The ingestion, dermal contact, and inhalation of outdoor particulates from excavated soil exposure pathways are considered potentially complete for on-site construction workers only. These pathways are considered incomplete for tenants, customers and commercial workers, as excavation work is unlikely. The groundwater emission pathway (inhalation of indoor and outdoor air) is considered incomplete for all on-site and off-site human receptors as groundwater has not been significantly contaminated by the UST release. The soil gas emission pathway (inhalation of indoor and outdoor air) is considered potentially complete for all on-site human receptors. One on-site shallow (less than 10 feet bgs) soil sample collected to-date exhibited detections of total petroleum hydrocarbons as diesel (TPHd) and naphthalene above soil ESLs. A vapor intrusion evaluation was conducted at the site in 2017, Three soil vapor samples were collected from two bores- SV-1 and SV-2. The SV-1 bore samples were collected from beneath the utility room at depths of 3 feet (sub-slab) and at 5 feet, and SV-2-5 was collected at a depth of 5 feet in the vicinity of soil bore B3. One of the 3 soil vapor samples was reported to contain concentrations above the respective ESL. The ESL exceedance

occurred for one analyte- benzene. The SV-1-5 benzene concentration of 73 ug/m3 exceeds the ESL of 48 ug/m3; however, the sub-slab sample, SV-1-3, contained a benzene concentration of 5.0 ug/m3, indicating attenuation within the upper 5-feet of the soil was effectively reducing the benzene concentration to below the ESL. Soil vapor sample SV-2-5 was collected beneath the sidewalk in the vicinity of soil bore B3, the bore containing the most elevated soil contaminant concentrations identified from the UST release. The contaminant concentrations reported in the soil vapor sample were report below their respective ESL.

Vapor intrusion risk off site is unlikely due to the limited extents of the soil source area and lack of dissolved-phase contaminants in groundwater.

LTCP Media Specific Evaluation for Groundwater

LTCP Media Specific Evaluation - Groundwater						
Closure Scenario						
☑ Exemption - Site has not affected groundwater;						
☐ Scenario 1 – Short stabilized contaminant plume;						
☐ Scenario 2, ☐ Scenario 3 – Moderate stabilized contaminant plumes;						
☐ Scenario 4 – Long stabilized contaminant plumes;						
☐ Scenario 5 — Site specific conditions demonstrate that the contaminant plume poses a low threat to the human health and the environment						
		Evaluation C	riteria			
Key: Shadi	ng = site specific data; l	☑ = type of data or	criteria met; hatche	d box indicates no c	riteria	
					Long Plume Scenario 4	
Plume Length (feet)- Not Applicable	□ <100 □ <250 □ <1,000 □ ≥1,000	□ <100 ·	□ <250	□ <250	□ <1,000	
Free Product	<ul><li>☑ No FP</li><li>☐ FP Onsite</li><li>☐ FP Offsite</li><li>☐ Removed to Max</li><li>Extent</li></ul>	⊠ No FP	□ No FP	☐ Removed to max extent onsite; ☐ Does not extend offsite	□ No FP	
Plume Stability- Not Applicable	☐ Extent Undefined☐ Stable☐ Decreasing☐ ≥5 Years	☐ Stable or decreasing	☐ Stable or decreasing	☐ Stable or decreasing for ≥ 5 years	☐ Stable or decreasing	
Distance to Nearest Water Supply Well from Plume Boundary (feet)	□ <250 ☑ >250 ☑ >1,000	⊠ >250	⊠ >1,000 ⊠ >1,000		⊠ >1,000	
Distance to Nearest Surface Water Body from Plume Boundary (feet)	Ce Water Body   ⊠ >250   ⊠ >1,000   ⊠ >1,000   ⊠ >1,000		⊠ >1,000	⊠ >1,000		
Maximum Benzene Concentrations @ Closure (µg/I)	⊠ < 1,000 ⊠ < 3,000 □ > 3,000		⊠ <3,000		⊠ <1,000	
Maximum MTBE Concentrations @ Closure (μg/l)	⊠ < 1,000 □ > 1,000		⊠ <1,000		⊠ <1,000	
Land Use Restriction	☑ Not Required ☐ Recorded			☐ Recorded		

LTCP Media Specific Evaluation - Groundwater					
Element	Analysis				
Plume Length	Grab groundwater samples were collected from three soil bores. The analytical laboratory report documented all petroleum hydrocarbon constituent concentrations at levels below the laboratory reporting limits. Therefore, the release does not appear to have significantly impacted groundwater This case is considered to be soil-only				
Free Product	Free product has not been observed at the site.				
Plume Stability	Groundwater has not been affected by the UST release.				
Benzene Concentrations	Benzene has not been detected in groundwater at concentrations above the laboratory reporting limit.				
MTBE Concentrations	MTBE has not been detected in groundwater at concentrations above the laboratory reporting limit.				
Water Supply Wells	The results from the GeoTracker Groundwater Ambient Monitoring Assessment (GAMA) website indicates there are no DWR water supply wells, no California Department of Public Health wells, and no Department of Pesticide Regulation wells located within a 2,000 foot radius of the site.  A review of well search files for Department of Water Resources and the Alameda County Public Works Agency was conducted for adjacent sites. The well search conducted for R00003216, located at 1244 2 <sup>nd</sup> Avenue in Oakland and dated October 20, 2016, found no supply wells within 250 feet of the site.				
Surface Water Bodies	The closest surface water body is Lake Merritt located approximately 280 feet to the north-northwest in the anticipated down-gradient direction from the site. Lake Merritt, a tidally influenced lake, is connected to the Oakland estuary on San Francisco Bay by a 3,300-foot-long channel.  Park Avenue Creek, flowing south-southwesterly in an underground culvert, enters Lake Merritt 470 feet north of the site.  The Clinton Basin, the closest point on the Oakland estuary of San Francisco Bay to the site, is at a distance of approximately 3,700 feet south-southwest from the site.				

LTCP Media Specific Evaluation for Vapor Intrusion

	LTCP Media Specific Evaluation – Vapor Intrusion						
The state of the s							
Closure Scenario							
Exemption (Onsite) - Active fueling station exempt from vapor specific criteria;							
□ Scenario 1 – Unweathered free phase LNAPL on groundwater; □ Scenario 2 – Unweathered residual LNAPL in soil;							
□ Scenario 3a, □ Scenario 3b, □ Scenario 3c − Dissolved phase benzene concentrations in groundwater;							
☐ Scenario 4a - S	☐ Scenario 4a - Soil vapor concentrations without bioattenuation zone;						
☐ Scenario 4b - S	oil vapor concentrations with b	ioattenuation zone;					
☐ Site specific ris	k assessment demonstrates hu	man health is prote	cted;				
☐ Exposure contr	olled through use of mitigation	measures or institu	itional or engine	eering controls			
			luation Criteria				
	Key: Shading = site specific	c data; ⊠ = type o	f data or crite	ria met; hatch	ed box indicat	es no criteria	
		High	E				
		Concentration		Low		Soi	l Vapor
Element	Cibo Smarifia	Source		ncentration Sou		Scena	rios 4a, 4b
Evaluated	Site Specific Data	Scenarios 1, 2	30	cenarios 3a, 3b,	эt		
Evaluated	Data	Unweathered	Maxii	mum Dissolved	Phase	Without	With
		NAPL		zene Concentra		Bio. Zone	Bio. Zone
			in Gr	oundwater @ 0	losure	mmmm	
Groundwater ⊠ WT	Max Benzene Concentration:						
⊠ sc	(μg/L):		⊠ <100	□ ≥100 &	⊠ <1,000		
□ CF	Historic = ND <0.50		M <100	<1,000	A <1,000		
_ 0.	@ Closure = ND <0.50						
NAPL	No. 1511				1		
⊠ No NAPL	<ul> <li>☑ Direct Evidence</li> <li>☑ Indirect Evidence</li> </ul>	□ UW in Soil or	☑ No UW in S	Soil or GW			
☐ NAPL in Soil	⊠ w; ⊠ uw	☑ UW on GW					
□ NAPL on GW  Foundations							
□ None	⊠ Slab on Grade						
⊠ Existing							
☐ Proposed							
	Highest Historic Water Level (ft bgs): ≥ 11.5	□ ≥30	⊠ ≥5	⊠ ≥10	⊠ ≥5	□ <5 or ⊠ ≥ 5	⊠ ≥ 5
Bioattenuation	TPH(g+d) Concentration (mg/kg): 2,700	□ <100	□ <100	□ <100	□ <100	□ <100 ⊠ ≥100	☐ <100 (at 2 depths)
Zone	Bio Zone Thickness (ft):						
	□ <5;  \( \geq \geq 5; \)	□ ≥30	⊠ ≥5	□≥10	⊠ ≥5	□ <5 or	⊠ ≥ 5
:	□ ≥10; □ ≥30					⊠ ≥ 5	
	Oxygen Conc (%): 16- 17		☐ No data	☐ No data	⊠ ≥4	□<4	⊠ ≥4
	□ <4; ⊠ ≥4; □ No data		□ <4, ⊠ ≥4	□<4, ⊠ ≥4	△ 24	⊠ ≥4	(at bottom)
	Sample Depth (ft bgs)					⊠ <5 or	
Soil Vapor	<ul><li>Subslab = Not Applicable</li><li>Soil Gas = 3.0</li></ul>					□ ≥5	□ ≥5
(Current	Benzene Concentration					⊠ R< 85	⊠ C<85,000
Conditions)	(μg/m³): =5.0					⊠ C<280	⊠ C<280,000
☐ No Samples	Ethylbenzene Concentration (µg/m³): =4.8  Naphthalene Concentration					⊠ R<1,100	⊠ R<1,100,000
Collected						⊠ C<3,600	⊠ C<3,600,000
						⊠ R<93	⊠ R<93,000
	(μg/m³): <3.0					⊠ R<310	⊠ C<310,000

	LTCP Media Specific Evaluation – Vapor Intrusion					
Location	Analysis					
Onsite	The site was evaluated for vapor intrusion risk based on the current site configuration as an apartment building with a portion of the first floor space occupied by commercial establishments.  The site does not meet any of the LTCP Vapor intrusion scenarios as the soil vapor samples were not collected at appropriate depths designated in the policy. Based on the reported concentrations of petroleum hydrocarbon compounds in soil vapor, ACDEH has determined the residual soil vapor concentrations do not pose a significant vapor intrusion to indoor air health risk to building occupants.					
Offsite	Offsite soil vapor intrusion risk was evalutated under the LTCP low groundwater concentration source scenarios. Soil vapor concentrations for benzene, ethylbenzene and naphthalene were not detected at concentrations exceeding the residential threshold concentrations presented in the LTCP. Based on the depth to water greater than 10 feet, the lack of TPH in groundwater, and an oxygen concentration greater than 4%, it is unlikely that a significant vapor intrusion risk from petroleum hydrodrocarbon and related fuel constituents exists to the nearby residential and commercial properties.					

ALAMEDA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH (OCTOBER 3, 2018)	R00003170/T10000006756
LTCP Media Specific Evaluation for Direct Contact & Outdoor A	Air Exposure
ATTACHMENT A-5	

#### LTCP Media Specific Evaluation – Direct Contact & Outdoor Air **Closure Scenario** ☐ Exemption (no petroleum hydrocarbons in upper 10 feet); Maximum concentrations of petroleum hydrocarbons are less than or equal to those in Table 1 below; ☐ Maximum concentrations of petroleum constituents are less than levels that a site specific risk assessment demonstrates will have no significant risk of adversely affecting human health; ☐ Concentrations of petroleum in soil will have no significant risk of adversely affecting human health as a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls; ☑ This case should be closed in spite of not meeting the direct contact and outdoor air specific media criteria **Evaluation Criteria** Residential Commercial/Industrial **All Scenarios** Direct Volatilization Volatilization to Construction or Direct Constituent Contact to Outdoor Air Contact **Outdoor Air Utility Worker** (LTCP Criteria & Site Maximum) 0 to 5 ft bgs 5 to 10 ft bgs 0 to 5 ft bgs 5 to 10 ft bgs 0 to 10 ft bgs (mg/kg) (mg/kg) (mg/kg) (mg/kg) (mg/kg) **Analysis Required For All USTs** Current ND<0.33 ND<0.0050 ND<0.33 ND<0.0050 ND<0.33 Site Max Benzene LTCP Criteria **⊠** ≤1.9 ⊠ ≤8.2 ⊠ ≤12 ⊠ ≤14 Current ND<0.0050 ND<0.33 ND<0.0050 ND<0.33 ND<0.33 Site Max Ethylbenzene LTCP Criteria ⊠ ≤21 ⊠ ≤32 **⊠** ≤89 **⊠** ≤134 **⊠** ≤314 Current ND<0.0050 6.5 ND<0.0050 6.5 6.5 Site Max Naphthalene LTCP Criteria **⊠** ≤9.7 **⊠** ≤9.7 **⊠** ≤45 **⊠** ≤45 **⊠** ≤219 Analysis Required For USTs with Waste Oil, Bunker C Fuel or Unknown Contents Current ND<0.0050 ND<0.0050 ND<2.0 Site Max PAHs1 LTCP Criteria ⊠ ≤0.063 ⊠ ≤0.68 ⊠ ≤4.5

NR = Not Required

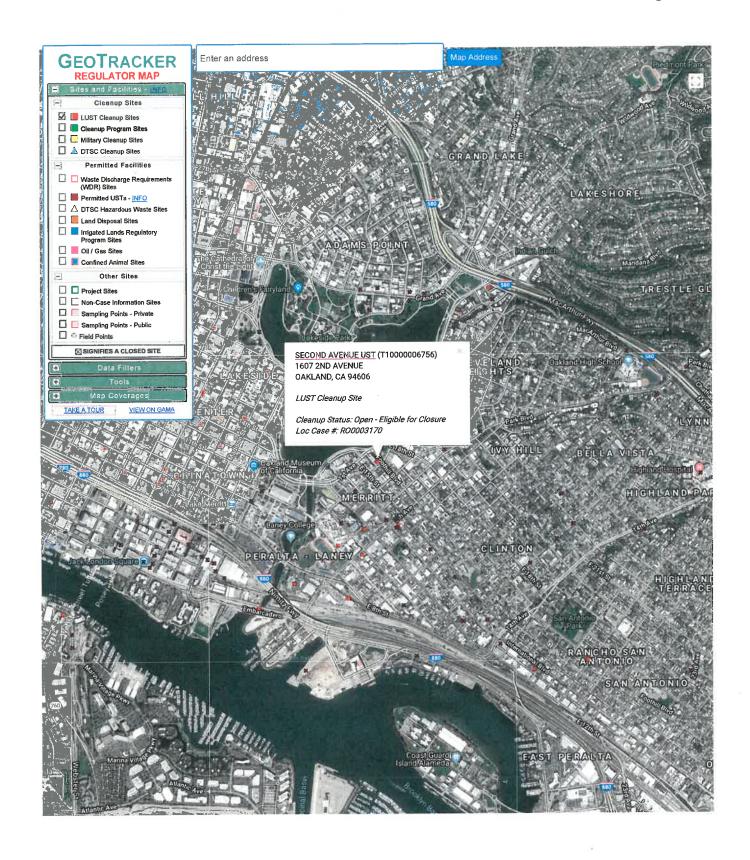
NA = Not Analyzed

#### Notes:

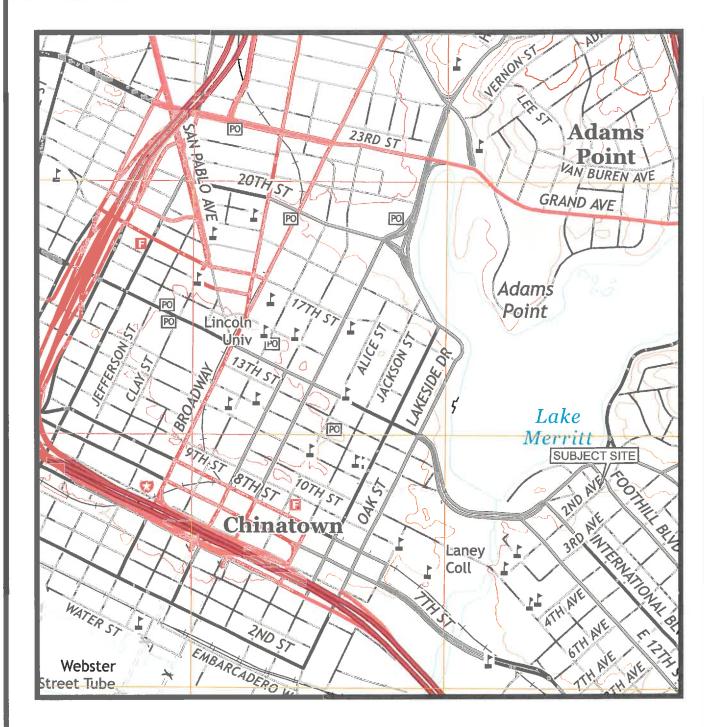
- 1. Based on the seven carcinogenic poly-aromatic hydrocarbons (PAHs) as benzo(a)pyrene toxicity equivalent (BaPe).
- 2. The area of impacted soil where a particular exposure occurs is ≤ 82 by 82 feet

LTCP Media Specific Evaluation – Direct Contact & Outdoor Air					
Location	Analysis				
Onsite	The current maximum concentrations of hydrocarbons in soil within the 0 to 10 foot interval are less than the concentrations in Table 1 for residential, commercial and construction worker exposure. Sampling and analysis for PAHs is only required at a site with a waste oil or bunker C oil release. Therefore, no onsite soil samples were analyzed for PAHs				
Offsite	Off-site PAH analysis of soil was conducted for soil bores B-3 and B-5. The petroleum hydrocarbon soil contamination is limited to the the area in the immediate vicinity of the tank pit. BaPe concentrations for the the LTCP evaluation were not detected at levels above their respective laboratory reporting limit.				

**Site Vicinity & Site Maps with Sampling Locations** 



Map data @2018 Google Imagery @2018 , CNES / Airbus, DigitalGlo 200 m \_\_\_\_\_\_\_ Survey, USDA Fr Report a map error



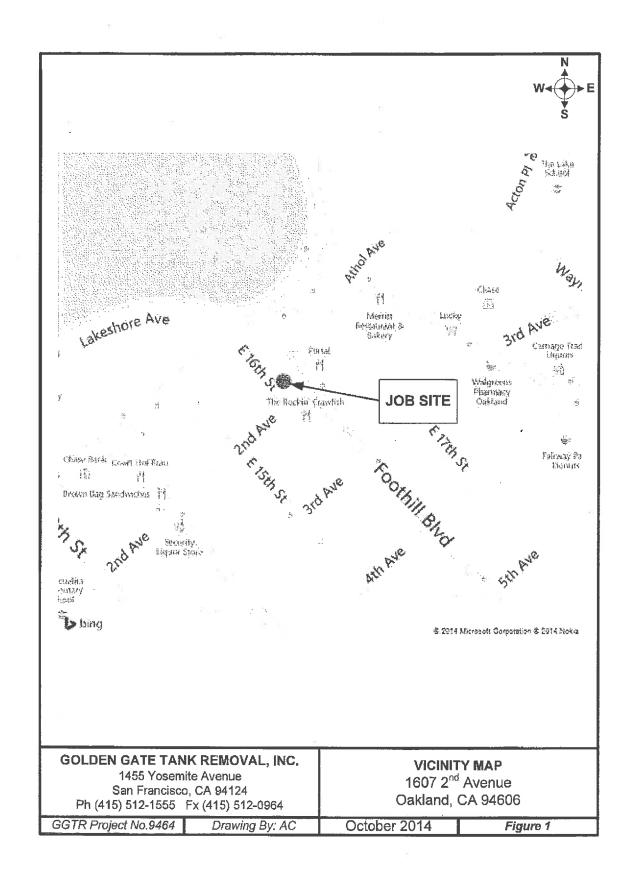
SITE VICINITY MAP 1607 2nd Avenue Oakland, California

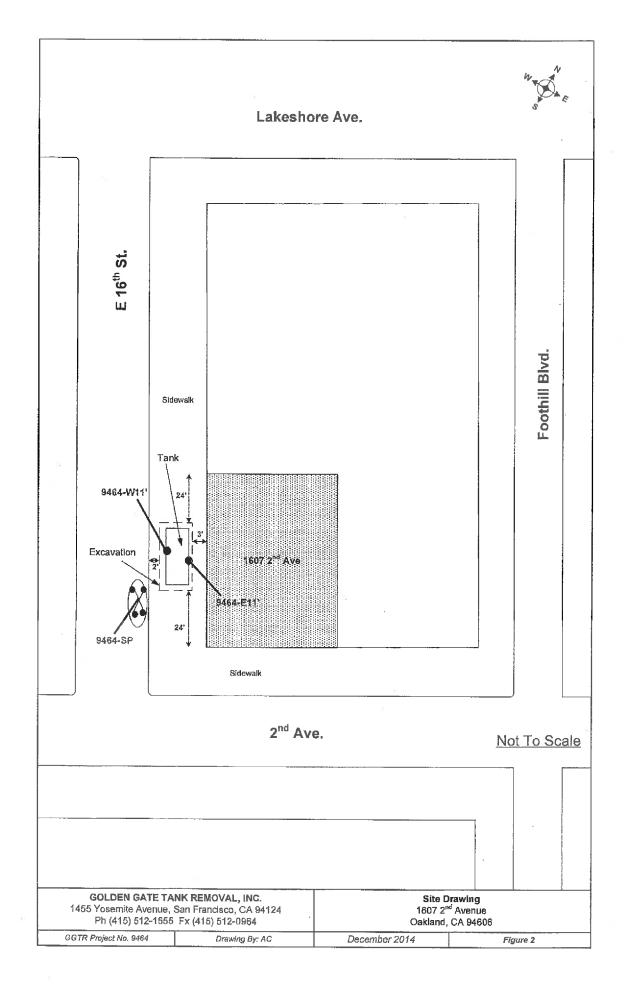




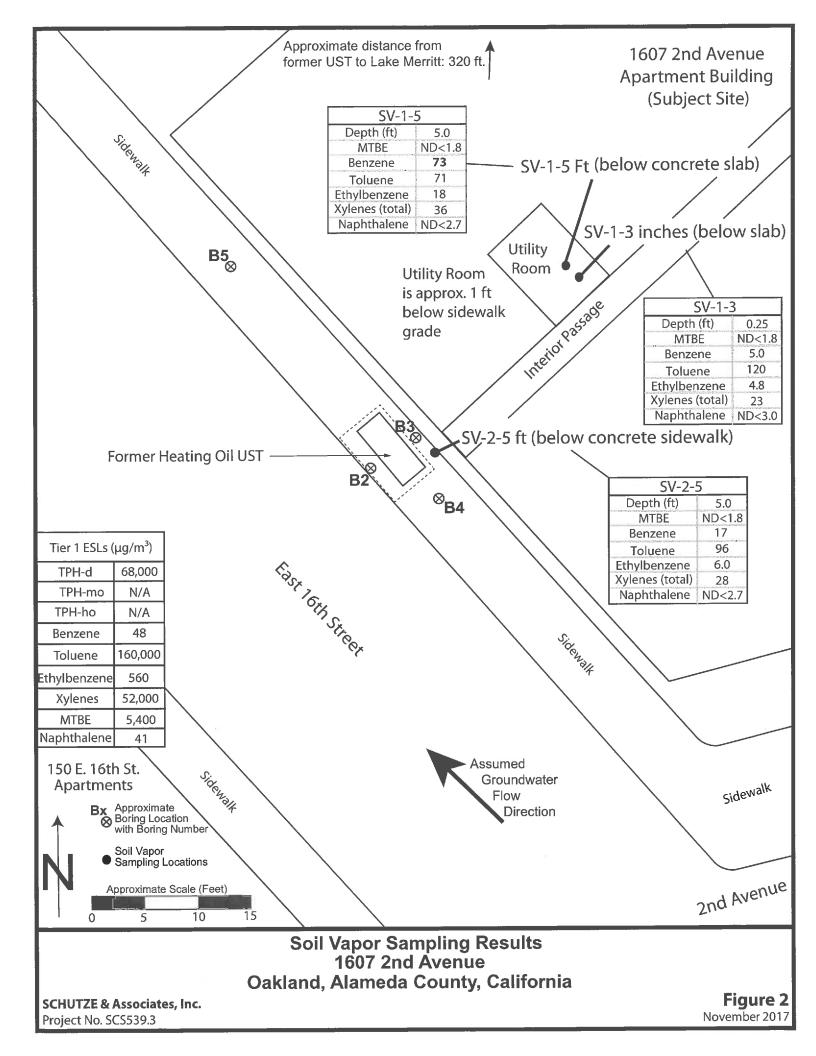
SCHUTZE & Associates, Inc. Project No. SCS539.3 November 2016 Source: USGS Oakland West 7.5 Quad 2015 (scale 1:24,000)

Figure 1





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**Preferential Pathways & Sensitive Receptor Survey Data** 



1244 2nd Avenue Oakland, California



Well Survey Map

**Boring Logs** 

	& Associates				Drillin	g Contractor: ECA	Boring F	Diameter: 1.5"	Boring Number: B2			
١.						g Method: Geoprob			Logged By: KL			
	Sampl	e Inforr	natio	n								
Depth feet	Lab Sample	Sample Name	PID ppm	USCS Symbol	Lithology Symbol		Descri	iption of Lithology	/			
ŀ						No recovery						
<b>-</b> 5		D 3 a	0.0	SW		Pea-gravel and sa	nd fill (fron	n previous over-e	excavation)			
10	× ×	B-2-8 B-2-10				Gravely sand with	silt and cla	y, medium stiff				
$\Gamma_{f v}$		B-2-12		CL		Sandy clay with some gravel, stiff, (10YR 5/3)  Silty sand, wet (aquifer), (5Y 5/4)  Clayey sand, stiff, moist						
			0.0	SM								
			0.0	SC								
15	:					Boring terminated	d at 14 ft bo	gs	P <sup>*</sup>			
- 25 Cor		on Note	s:				Site:					
		emie gr ater Tab			Portlan	d cement		' 2nd Avenue and, Alameda Co	unty, California			
	-	ezomet			rface		Project N	o. SCS539.1	Page 1/4			

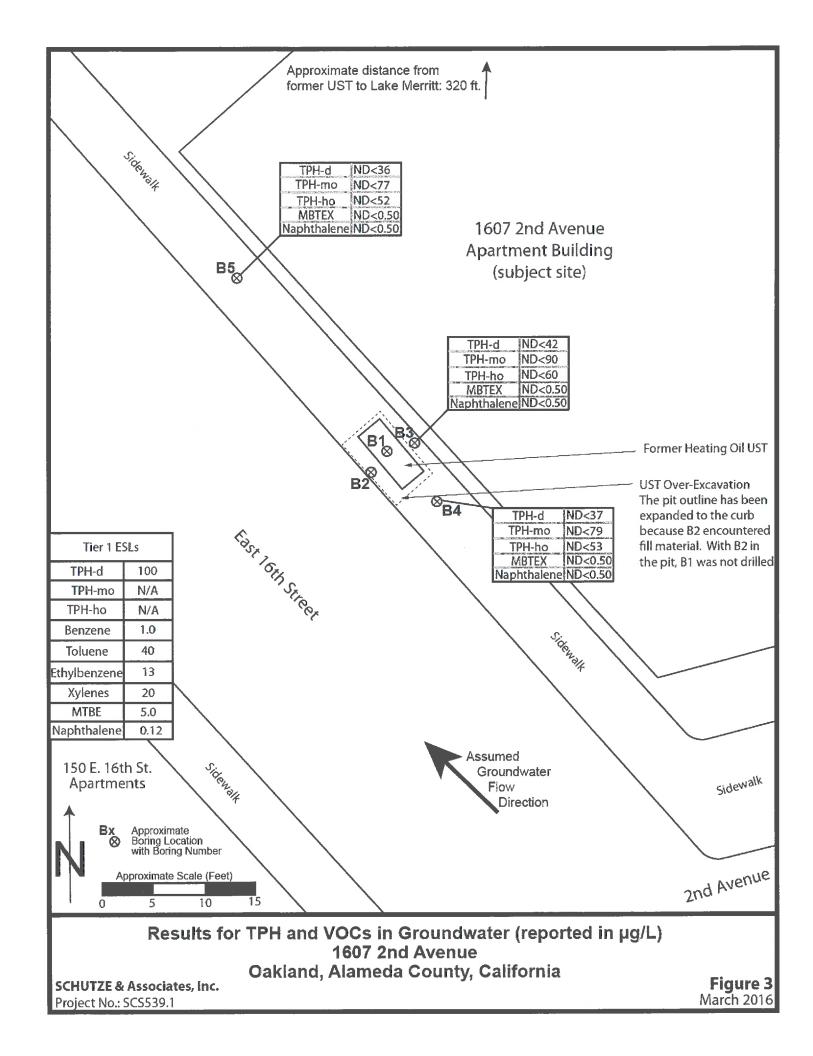
	& Associates					~ Control to w FCA	Daving Diameter 1 F#	Paring Number, P3					
						g Contractor: ECA	Boring Diameter: 1.5"  Date Drilled: 2/12/2016	Boring Number: B3					
	Sampl	e Inforr	natio	n		y Methou, Geopropi	E Toate Dillieu: 2/12/2016	Logged By: KL					
Depth feet		Sample Name	PID ppm	USCS Symbol	Lithology Symbol		Description of Litholog	у					
			P	5)112501		No recovery							
-	$\bowtie$	B-3-2.5	0.0		\^\^\ \^\^\	Gravely sand, moist, weak cementation, (5Y 6/2)							
5	$\geq$	B-3-5	0.0	SW									
	$\geq$	B-3-7.5	103		<u>^^</u>	Hydrocarbon odoi	and black staining from 7	7.0 to 7.5 ft bgs					
			2.1	SC		Clayey sand with gravel, moist, weak cementation, (2.5Y 4/3),							
10	> <	B-3-10	8.0		<del></del>	TIO VISIBLE STAILING	no visible staining and no odor						
			0.2	CL		Sandy clay, moist,	very stiff, (2.5Y 4/2)						
-			0.2	SW		Gravely sand with silt and clay, (5Y 4/4)  Silty clay with sand, increase in moisture, soft, (5Y 4/2)							
15	$\times$	B-3-14.5	0.4										
-			0.0	CL		Sandy clay, moist, v	Sandy clay, moist, very stiff, (2.5Y 3/2)						
20	$>\!\!<$	B-3-20	0.0	SMi		Silty Sand, moist, so	oft. (2.5Y 4/2)						
<u> </u>			0.0	CL	$\dot{/}\dot{/}$	Sandy clay, moist, v							
25						Boring terminated	at 21.5 ft bgs						
Cor	npletio	n Note:	5:				Site:						
_	Tre		outec		Portlan	d cement	1607 2nd Avenue Oakland, Alameda County, California						
Ž	•	zometi			rface	ŀ	Project No. SCS539.1	Page 2/4					
							,	3					

	& Associates					DOI (II VO EOO					
	& <i>P</i>	SSOC	ate	S	Drillin	g Contractor: ECA	Boring Diameter: 1.5"	Boring Number: B4			
_						g Method: Geoprobe	Date Drilled: 2/12/2016	Logged By: KL			
		le Inforr			Lithology Symbol		Description of Litholog	11/			
epth eet	Lab Sample	Sample Name	PID ppm	USCS Symbol	Litho Sym		Description of Etholog				
1	<b>&gt;</b> <	B-4-2.5	0.0	CL		Silty clay, stiff, (5Y 4	4/3)				
<b>5</b>						No recovery					
1	×	B-4-7.5	0.0	SW	\^,^, \^,^,	Gravely sand with	silt, wet, (2.5Y 5/6)				
! !			0.0			Cile de la constal	1 diam sice (53/ 4/2)				
<b>-</b> 10	$\times$	B-4-10	0.0			Silty clay with sand	l, medium stiff, (5Y 4/3)				
			0.0	CL							
<b>1</b> 5	$\times$	B-4-15.5	0.0			Sandy clay with sil	t, moist, soft, (5Y 4/3)				
V V			0.0								
<b>=</b> 20			0.0	SM		Silty sand, wet (aq	uifer), (5Y 4/3)				
I			0.0	CL		Sandy clay, moist,	stiff, (5Y 4/2)				
						Boring terminated	at 22 ft bgs				
25		an Alex				<u> </u>	Site:				
CO	Tr	on Note remie gr /ater Tab	outed		Portlan	d cement	1607 2nd Avenue Oakland, Alameda Co	ounty, California			
7	_	ezomet			ırface	-	Project No. SCS539.1	Page 3/4			

Drilling Method: Geoprobe   Date Drilled: 2/12/2016   Logged By: KL		& A	iate	s										
Sample Information    Sample   Information   Single   Sample   Sample   Sample   Name   Park   Sample   Name   Park   Sample   Name   Park   P									1		Boring Number: B5			
B-5-2.5 0.0 ML Clayey silt with some sand, moist, very stiff, (2.5Y 4/3)  B-5-7.5 0.0 SC ———————————————————————————————————		Camer	ام اسف	- 14-	,			j wietnod: Geoprobe	Date Dril	ied: 2/12/2016	Logged By: KL			
B-5-2.5 0.0 ML Clayey silt with some sand, moist, very stiff, (2.5Y 4/3)  B-5-7.5 0.0 SC ———————————————————————————————————	Depth	Lab		PID		itholog			Descri	otion of Lithology	y			
B-5-2.5 0.0 ML Clayey silt with some sand, moist, very stiff, (2.5Y 4/3)  B-5-7.5 0.0 SC ———————————————————————————————————	feet	Sample	Name	ppm		\ \ \	+	Gravely cand fill						
Clayey silt with some sand, moist, very stiff, (2.5Y 4/3)  B-5-7.5 0.0 SC ———— Clayey sand with gravel, soft, moist, (2.5Y 5/2)  SM Silty sand, weak cementation, moist, (5Y 5/3)  SW A Gravely sand, wet (aquifer), (5Y 5/3)  Sandy silt with clay, stiff, moist  Boring terminated at 15 ft bgs  Completion Notes:  Tremie grouted with Portland cement  Site:  1607 2nd Avenue Oakland, Alameda County, California	-				3//	Ĥ	뀨	Glavely Salia IIII						
B-5-7.5 0.0 SC — Clayey sand with gravel, soft, moist, (2.5Y 5/2)  B-5-7.5 0.0 SM		$\times$	B-5-2.5	0.0	ML			Clavey silt with som	ome sand moist very stiff (2.5Y 4/3)					
Silty sand, weak cementation, moist, (5Y 5/3)  Solity sand, wet (aquifer), (5Y 5/3)  Solity sand, wet (aquif	<b>-</b> 5	$\times$	B-5-5	0.0				, ,		, ,				
Sw A Gravely sand, wet (aquifer), (5Y 5/3)  Sandy silt with clay, stiff, moist  Boring terminated at 15 ft bgs  Site:  Tremie grouted with Portland cement  Site:  1607 2nd Avenue Oakland, Alameda County, California		$\times$	B-5-7.5	0.0	SC		<del>-</del> -	Clayey sand with g	ravel, soft,	moist, (2.5Y 5/2	?)			
Completion Notes: Tremie grouted with Portland cement  We are Table Surface  Sw A Gravely sand, wet (aquifer), (5Y 5/3)  Sandy silt with clay, stiff, moist  Boring terminated at 15 ft bgs  Site:  1607 2nd Avenue Oakland, Alameda County, California	- - - 10	$\times$	B-5-10	0.0	SM			Silty sand, weak cer	c cementation, moist, (5Y 5/3)					
Sandy silt with clay, stiff, moist  Boring terminated at 15 ft bgs  Boring terminated at 15 ft bgs  Site:  Tremie grouted with Portland cement  W = Water Table Surface	<b>_</b> ¥			0.0	CVAL		4	Crossels and wat to writer 150 5 (2)						
Boring terminated at 15 ft bgs  25  Completion Notes:  Tremie grouted with Portland cement  We are Table Surface  Water Table Surface  Site:  1607 2nd Avenue  Oakland, Alameda County, California	-			0.0	244	<u> </u>	뀨	Gravely sand, wet (a	aquirer), (:	OY 5/3)	·			
20 25 Completion Notes: Tremie grouted with Portland cement  We also a surface  Boring terminated at 15 ft bgs  Site: 1607 2nd Avenue Oakland, Alameda County, California	■ ■ 15	$\geq$	B-5-15	0.0	ML			Sandy silt with clay, stiff, moist						
Nicona and Manager County	20	npletio	on Note:	5:	l with	Portla		S	ite: 1607	2nd Avenue	unty, California			
— Project No. 3C3339.1 Page 4/4	<b>▼</b>					face			Project No	SCS530 1	Page 4/4			
							_	l r	TOJECT NO	. 1(1)137.1	raye 4/4			

**ATTACHMENT B-4** 

**Groundwater Data** 



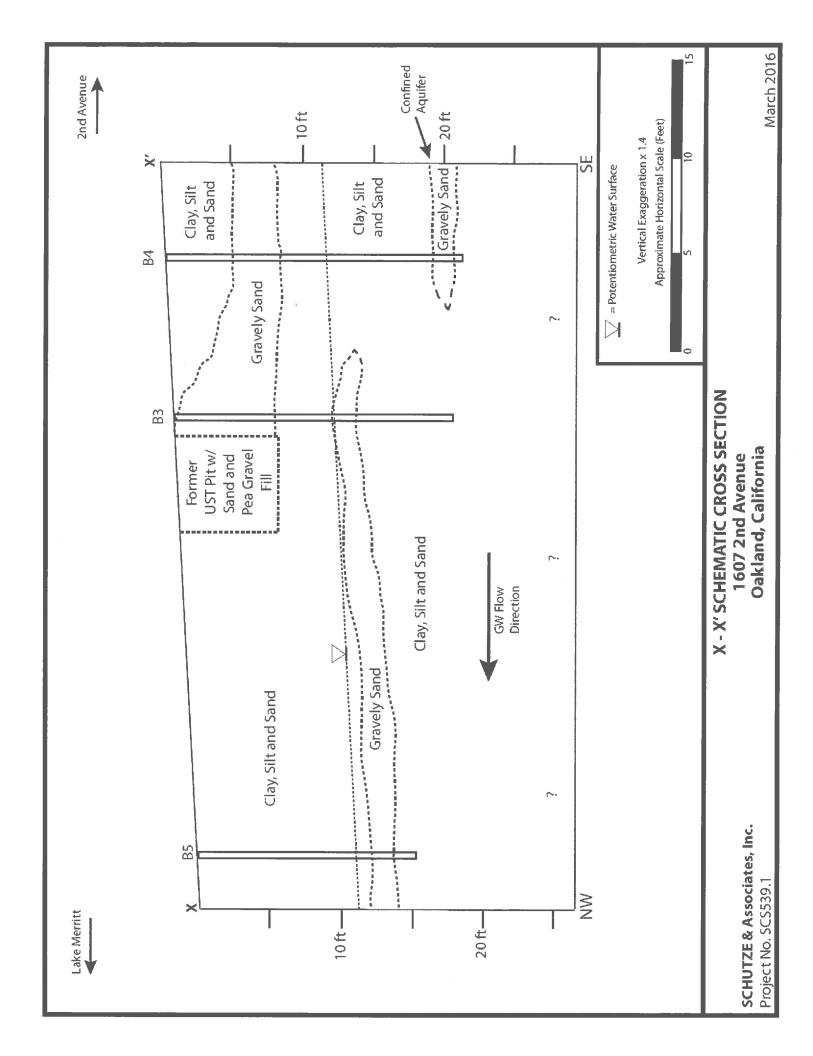


TABLE 5
Selected Analytical Results for TPH and VOCs in Groundwater (reported in μg/L)
1607 2nd Avenue, Oakland, CA

Sample	Sample TPH (1)				VOCs							
ID	Depth (ft bgs)	TPH-d	TPH-mo	TPH-ho	MTBE	Benzene	Ethylbenzene	Toluene	Xylenes	Naphthalene		
B-3-21.5-W	21.5	ND<42	ND<90	ND<60	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50 <sup>(2)</sup>		
B-4-22-W	22	ND<37	ND<79	ND<53	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		
B-5-15-W	15	ND<36	ND<77	ND<52	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		
DUP	15			_	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		
	ESLs											
Tier 1 E	SL	100	(3)	N/A	5.0	1.0	13	40	20	0.12		
Tier 2 E	3L	100	50,000	N/A	5.0	1.0	16	40	20	0.12		

µg/L = micrograms per liter; ft bgs = feet below ground surface; TPH -d, -mo and -ho = total petroleum hydrocarbons in the diesel, motor oil and heating oil ranges; VOCs = volatile organic compounds; MTBE = methyl tert-butyl ether; ND<1.0 = not detected with a reporting limit of 1.0; DUP = duplicate sample; — = not analyzed; N/A = ESL not listed.

ESLs = San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (February 22, 2016). Tier 1 ESLs based on: groundwater is a current or potential drinking water resource; Tier 2 ESLs (Table T2-1) based on: (1) groundwater is a current or potential drinking water resource; (2) groundwater depth is greater than or equal to 10 ft bgs; (3) the soil type is sandy, and (4) the soil depth for direct exposure is shallow (less than or equal to 10 ft bgs).

- (1) TPH samples were extracted one day outside of the 7-day holding period. McCampbell Analytical, Inc. has confirmed that the TPH data are still valid.
- (2) The new 2016 ESLs do not include values for TPH-mo in groundwater because motor oil is considered to not be soluble. The detected values shown likely represent petroleum degradates.
- (3) This table shows analyses for naphthalene by EPA Method 8260B. Naphthalene was also analyzed for using EPA Method 8310 (see discussion of results for PAHs in Section C.7 of this report). The reporting limits using 8310 were at  $0.050 \,\mu\text{g/L}$ , which is below the Tier 1 and Tier 2 ESLs of  $0.12 \,\mu\text{g/L}$ .

Numbers in **bold** indicate concentrations exceeding ESLs. TPH analyzed by EPA Methods 8015B; VOCs analyzed by EPA Method 8260B. DUP sample collected at B5.

SCHUTZE & Associates, Inc. / March 2016

#### **Total Petroleum Hydrocarbons**

TPH-d, -mo and -ho were not detected in any of the groundwater samples above the laboratory RLs, which ranged from 36 to 90 micrograms per liter (µg/L).

#### **VOCs**

VOCs, including MTBE, benzene, ethylbenzene, toluene and xylenes, were not detected above the RLs  $(0.50 \mu g/L)$  in any of the groundwater samples.

Naphthalene, a polynuclear aromatic hydrocarbon (PAH) which can be analyzed for using EPA Method 8260, was not detected above the RL in any of the groundwater samples; however, the ESL for naphthalene of 0.12  $\mu$ g/L is below the 0.50  $\mu$ g/L RL (the analytical results for naphthalene using EPA Method 8310 are discussed in the following section).

No chlorinated solvents were detected in any sample above the RLs with the exception of chloroform, which was detected above the Tier 1 ESL of 2.3  $\mu$ g/L in two of the samples (13  $\mu$ g/L). It is possible that chloroform was introduced to the samples during extraction in the laboratory.

#### **PAHs**

There was not enough groundwater recharge into the borings to collect sufficient samples for PAHs to be analyzed using EPA Method 8310 except in boring B5, located down-gradient from the former UST pit, where a second sample for PAH analysis was able to be collected (this sample also served as a duplicate). No PAHs were detected above the RLs, which ranged from 0.025 to 0.050 µg/L, in sample DUP. The reporting limit for naphthalene was 0.050 µg/L, which is below the Tier 1 and 2 ESL of 0.12 µg/L.

TABLE 6
Selected Analytical Results for LUFT 5 Metals in Groundwater (reported in μg/L)
1607 2nd Avenue, Oakland, CA

Samp	ile		Metals							
ID	Depth (ft bgs)	Cadmium	Chromium	Lead	Nickei	Zinc				
B-3-21.5-W	21.5	ND<0.25	ND<0.50	ND<0.50	0.56	ND<15				
B-4-22-W	22	ND<0.25	ND<0.50	ND<0.50	ND<0.50	ND<15				
B-5-15-W	15	ND<0.25	ND<0.50	ND<0.50	1.7	ND<15				
DUP	15	ND<0.25	ND<0.50	ND<0.50	1.8	ND<15				
ESLs										
Tier 1 E	ESL	0.25	50	2.5	8.2	81				
Tier 2 E	ESL	0.25	50	2.5	8.2	81				

µg/L = micrograms per liter, ft bgs = feet below ground surface; ND<1.0 = not detected with a reporting limit of 1.0. ESLs = San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (February 22, 2016). Tier 1 ESLs based on: groundwater is a current or potential drinking water resource; Tier 2 ESLs (Table T2-1) based on: (1) groundwater is a current or potential drinking water resource; (2) groundwater depth is greater than or equal to 10 ft bgs; (3) the soil type is sandy; and (4) the soil depth for direct exposure is shallow (less than or equal to 10 ft bgs). Numbers in **bold** indicate concentrations exceeding ESLs. LUFT 5 metals analyzed by EPA Method 6020. DUP sample collected at 85

SCHUTZE & Associates, Inc. / March 2016

#### **Metals**

Cadmium, chromium, lead and zinc were not detected above the RLs in any of the groundwater samples. Nickel was detected in three of the four samples, with a maximum concentration of 1.8  $\mu$ g/L, which is below the Tier 1 and 2 ESL of 8.2  $\mu$ g/L.

#### C.8 Summary of Analytical Results

Based on the analytical results for soil and groundwater, SCHUTZE & Associates, Inc. concludes the following:

#### Soil

TPH-d and -ho were detected in soil in boring B3 at 7.5 ft bgs at concentrations of 2,700 and 1,500 mg/kg, respectively, exceeding the ESLs. The laboratory identified the fuel contamination detected as "unmodified or weakly modified diesel" and "oil range



### **Analytical Report**

Client:

Schutze & Associates, Inc.

Date Received: 2/16/16 18:20

Date Prepared: 2/19/16

Project:

539; Tung

WorkOrder:

1602578

Extraction Method: SW5030B

Analytical Method: SW8260B

Unit:

 $\mu g/L$ 

#### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
Dup	1602578-001B	Water	02/12/2016 10:45 GC28	116877
Analytes	Result		RL DF	Date Analyzed
Acetone	ND		10 1	02/19/2016 01:03
tert-Amyl methyl ether (TAME)	ND		0.50 1	02/19/2016 01:03
Benzene	· ND		0.50 1	02/19/2016 01:03
Bromobenzene	ND		0.50 1	02/19/2016 01:03
Bromochloromethane	ND		0.50 1	02/19/2016 01:03
Bromodichloromethane	ND		0.50 1	02/19/2016 01:03
Bromoform	ND		0.50 1	02/19/2016 01:03
Bromomethane	ND		0.50 1	02/19/2016 01:03
2-Butanone (MEK)	ND		2.0 1	02/19/2016 01:03
t-Butyl alcohol (TBA)	ND		2.0 1	02/19/2016 01:03
n-Butyl benzene	ND		0.50 1	02/19/2016 01:03
sec-Butyl benzene	ND		0.50 1	02/19/2016 01:03
tert-Butyl benzene	ND	<u></u>	0.50 1	02/19/2016 01:03
Carbon Disulfide	ND		0.50 1	02/19/2016 01:03
Carbon Tetrachloride	ND		0.50 1	02/19/2016 01:03
Chlorobenzene	ND		0.50 1.	02/19/2016 01:03
Chloroethane	ND		0.50 1	02/19/2016 01:03
Chloroform	13		0.50 1	02/19/2016 01:03
Chloromethane	ND		0.50 1	02/19/2016 01:03
2-Chlorotoluene	ND		0.50 1	02/19/2016 01:03
4-Chlorotoluene	ND		0.50 1	02/19/2016 01:03
Dibromochloromethane	ND		0.50 1	02/19/2016 01:03
1,2-Dibromo-3-chloropropane	ND		0.20 1	02/19/2016 01:03
1,2-Dibromoethane (EDB)	ND	· · · · · · · · · · · · · · · · · · ·	0.50 1	02/19/2016 01:03
Dibromomethane	ND		0.50 1	02/19/2016 01:03
1,2-Dichlorobenzene	ND		0.50 1	02/19/2016 01:03
1,3-Dichlorobenzene	ND		0.50 1	02/19/2016 01:03
1,4-Dichlorobenzene	ND		0.50 1	02/19/2016 01:03
Dichlorodifluoromethane	ND		0.50 1	02/19/2016 01:03
1,1-Dichloroethane	ND		0.50 1	02/19/2016 01:03
1,2-Dichloroethane (1,2-DCA)	ND		0.50 1	02/19/2016 01:03
1,1-Dichloroethene	ND		0.50 1	02/19/2016 01:03
cis-1,2-Dichloroethene	ND		0.50 1	02/19/2016 01:03
trans-1,2-Dichloroethene	ND		0.50 1	02/19/2016 01:03
1,2-Dichloropropane	ND		0.50 1	02/19/2016 01:03
1,3-Dichloropropane	ND		0.50 1	02/19/2016 01:03
2,2-Dichloropropane	ND		0.50 1	02/19/2016 01:03

(Cont.)

Angela Rydelius, Lab Manager

### **Analytical Report**

Client:

Schutze & Associates, Inc.

**Date Received: 2/16/16 18:20** 

Project:

Date Prepared: 2/19/16

539; Tung

WorkOrder:

1602578

Extraction Method: SW5030B

Analytical Method: SW8260B

Unit:  $\mu g/L$ 

Client ID	Lab ID	Matrix	Date Co	llected Instrument	Batch ID
Dup	1602578-001B	Water	02/12/201	6 10:45 GC28	116877
Analytes	Result		RL	<u>DF</u>	Date Analyzed
1,1-Dichloropropene	ND		0.50	1	02/19/2016 01:03
cis-1,3-Dichloropropene	ND		0.50	1	02/19/2016 01:03
trans-1,3-Dichloropropene	ND		0.50	1	02/19/2016 01:03
Diisopropyl ether (DIPE)	ND		0.50	1	02/19/2016 01:03
Ethylbenzene	ND		0.50	1	02/19/2016 01:03
Ethyl tert-butyl ether (ETBE)	ND		0.50	1	02/19/2016 01:03
Freon 113	ND		0.50	1	02/19/2016 01:03
Hexachlorobutadiene	ND		0.50	. 1	02/19/2016 01:03
Hexachloroethane	ND		0.50	1	02/19/2016 01:03
2-Hexanone	ND		0.50	1	02/19/2016 01:03
Isopropylbenzene	ND		0.50	1	02/19/2016 01:03
4-Isopropyl toluene	ND	-	0.50	1	02/19/2016 01:03
Methyl-t-butyl ether (MTBE)	ND	-	0.50	1	02/19/2016 01:03
Methylene chloride	ND		0.50	1	02/19/2016 01:03
4-Methyl-2-pentanone (MIBK)	ND		0.50	1	02/19/2016 01:03
Naphthalene	ND		0.50	1	02/19/2016 01:03
n-Propyl benzene	ND		0.50	1	02/19/2016 01:03
Styrene	ND		0.50	1	02/19/2016 01:03
1,1,1,2-Tetrachloroethane	ND		0.50	1	02/19/2016 01:03
1,1,2,2-Tetrachloroethane	ND		0.50	1	02/19/2016 01:03
Tetrachloroethene	ND		0.50	1	02/19/2016 01:03
Toluene	ND		0.50	1	02/19/2016 01:03
1,2,3-Trichlorobenzene	ND		0.50	1	02/19/2016 01:03
1,2,4-Trichlorobenzene	ND		0.50	1	02/19/2016 01:03
1,1,1-Trichloroethane	ND		0.50	1	02/19/2016 01:03
1,1,2-Trichloroethane	ND		0.50	1	02/19/2016 01:03
Trichloroethene	ND		0.50	1	02/19/2016 01:03
Trichlorofluoromethane	ND		0.50	1	02/19/2016 01:03
1,2,3-Trichloropropane	ND		0.50	1	02/19/2016 01:03
1,2,4-Trimethylbenzene	ND		0.50	1	02/19/2016 01:03
1,3,5-Trimethylbenzene	ND		0.50	1	02/19/2016 01:03
Vinyl Chloride	ND		0.50	1	02/19/2016 01:03
Xylenes, Total	ND		0.50	1	02/19/2016 01:03

# **Analytical Report**

Client:

Schutze & Associates, Inc.

Date Received: 2/16/16 18:20

Date Prepared: 2/19/16

Project:

539; Tung

WorkOrder:

1602578

**Extraction Method: SW5030B** 

Analytical Method: SW8260B

Unit:

μg/L

Volatile Organics by P&T and GC/MS (Basic Target List)								
Lab ID N	<b>Aatrix</b>	Date Collected	Instrument	Batch ID				
1602578-001B V	Vater	02/12/2016 10:45	GC28	116877				
Result		<u>RL</u> <u>DF</u>		Date Analyzed				
REC (%)		<u>Limits</u>						
117		70-130		02/19/2016 01:03				
116		70-130		02/19/2016 01:03				
84		70-130	177.77.78.8	02/19/2016 01:03				
	Lab ID N 1602578-001B V Result  REC (%) 117 116	Lab ID Matrix 1602578-001B Water  Result  REC (%) 117 118	Lab ID         Matrix         Date Collected           1602578-001B         Water         02/12/2016 10:45           Result         RL         DF           REC (%)         Limits           117         70-130           116         70-130	Lab ID         Matrix         Date Collected Instrument           1602578-001B         Water         02/12/2016 10:45 GC28           Result         RL         DF           REC (%)         Limits           117         70-130           116         70-130				

# **Analytical Report**

Client:

Schutze & Associates, Inc.

Date Received: 2/16/16 18:20

Date Prepared: 2/19/16

Project:

539; Tung

WorkOrder:

1602578

Extraction Method: SW5030B

Analytical Method: SW8260B

Unit:

 $\mu g/L$ 

#### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix Date Collected Ins	trument Batch ID
B-5-15-W	1602578-002B V	Vater 02/12/2016 10:45 GC:	28 116877
Analytes	Result	<u>RL</u> <u>DF</u>	Date Analyzed
Acetone	ND	10 1	02/19/2016 01:41
tert-Amyl methyl ether (TAME)	ND	0.50 1	02/19/2016 01:41
Benzene	ND	0.50 1	02/19/2016 01:41
Bromobenzene	ND	0.50 1	02/19/2016 01:41
Bromochloromethane	ND	0.50 1	02/19/2016 01:41
Bromodichloromethane	ND	0.50 1	02/19/2016 01:41
Bromoform	ND	0.50 1	02/19/2016 01:41
Bromomethane	ND	0.50 1	02/19/2016 01:41
2-Butanone (MEK)	ND	2.0 1	02/19/2016 01:41
t-Butyl alcohol (TBA)	ND	2.0 1	02/19/2016 01:41
n-Butyl benzene	ND	0.50 1	02/19/2016 01:41
sec-Butyl benzene	ND	0.50 1	02/19/2016 01:41
tert-Butyl benzene	ND	0.50 1	02/19/2016 01:41
Carbon Disulfide	ND	0.50 1	02/19/2016 01:41
Carbon Tetrachloride	ND	0.50 1	02/19/2016 01:41
Chlorobenzene	ND	0.50 1	02/19/2016 01:41
Chloroethane	ND	0.50 1	02/19/2016 01:41
Chloroform	13	0.50 1	02/19/2016 01:41
Chloromethane	ND	0.50 1	02/19/2016 01:41
2-Chlorotoluene	ND	0.50 1	02/19/2016 01:41
4-Chiorotoluene	ND	0.50 1	02/19/2016 01:41
Dibromochloromethane	ND	0.50 1	02/19/2016 01:41
1,2-Dibromo-3-chloropropane	ND	0.20 1	02/19/2016 01:41
1,2-Dibromoethane (EDB)	ND	0.50 1	02/19/2016 01:41
Dibromomethane	ND	0.50 1	02/19/2016 01:41
1,2-Dichlorobenzene	ND	0.50 1	02/19/2016 01:41
1,3-Dichlorobenzene	ND	0.50 1	02/19/2016 01:41
1,4-Dichlorobenzene	ND	0.50 1	02/19/2016 01:41
Dichlorodifluoromethane	ND	0.50 1	02/19/2016 01:41
1,1-Dichloroethane	ND	0.50 1	02/19/2016 01:41
1,2-Dichloroethane (1,2-DCA)	ND	0.50 1	02/19/2016 01:41
1,1-Dichloroethene	ND	0.50 1	02/19/2016 01:41
cis-1,2-Dichloroethene	ND	0.50 1	02/19/2016 01:41
trans-1,2-Dichloroethene	ND	0.50 1	02/19/2016 01:41
1,2-Dichloropropane	ND	0.50 1	02/19/2016 01:41
1,3-Dichloropropane	ND	0.50 1	02/19/2016 01:41
2,2-Dichloropropane	NĐ	0.50 1	02/19/2016 01:41

(Cont.)

Angela Rydelius, Lab Manager

# **Analytical Report**

Client:

Schutze & Associates, Inc.

Date Received: 2/16/16 18:20

Date Prepared: 2/19/16

Project:

539; Tung

WorkOrder:

1602578

Extraction Method: SW5030B

Analytical Method: SW8260B

Unit:

μg/L

Client ID	Lab ID	Matrix	Date Collec	ted Instrument	Batch ID
B-5-15-W	1602578-002B	Water	02/12/2016 1	0:45 GC28	116877
Analytes	Result		<u>RL</u> D	<u>F</u>	Date Analyzed
1,1-Dichloropropene	NĐ		0.50	l	02/19/2016 01:41
cis-1,3-Dichloropropene	ND	· -	0.50 1		02/19/2016 01:41
trans-1,3-Dichloropropene	ND		0.50 1		02/19/2016 01:41
Diisopropyl ether (DIPE)	ND		0.50 1		02/19/2016 01:41
Ethylbenzene	ND		0.50		02/19/2016 01:41
Ethyl tert-butyl ether (ETBE)	ND		0.50		02/19/2016 01:41
Freon 113	ND		0.50 1		02/19/2016 01:41
Hexachlorobutadiene	ND		0.50	l	02/19/2016 01:41
Hexachloroethane	ND		0.50	ĺ	02/19/2016 01:41
2-Hexanone	ND		0.50		02/19/2016 01:41
Isopropylbenzene	ND	-	0.50		02/19/2016 01:41
4-Isopropyl toluene	ND		0.50		02/19/2016 01:41
Methyl-t-butyl ether (MTBE)	ND		0.50	1	02/19/2016 01:41
Methylene chloride	ND		0.50	l	02/19/2016 01:41
4-Methyl-2-pentanone (MIBK)	ND		0.50	1	02/19/2016 01:41
Naphthalene	ND	-	0.50	1	02/19/2016 01:41
n-Propyl benzene	ND		0.50	1	02/19/2016 01:41
Styrene	ND		0.50	I	02/19/2016 01:41
1,1,1,2-Tetrachloroethane	ND		0.50	1	02/19/2016 01:41
1,1,2,2-Tetrachloroethane	ND		0.50	1	02/19/2016 01:41
Tetrachloroethene	ND		0.50	1	02/19/2016 01:41
Toluene	ND		0.50	1	02/19/2016 01:41
1,2,3-Trichlorobenzene	ND		0.50	1	02/19/2016 01:41
1,2,4-Trichlorobenzene	ND		0.50	1	02/19/2016 01:41
1,1,1-Trichloroethane	ND		0.50	1	02/19/2016 01:41
1,1,2-Trichloroethane	ND		0.50	1	02/19/2016 01:41
Trichloroethene	ND		0.50	1	02/19/2016 01:41
Trichlorofluoromethane	ND		0.50	1	02/19/2016 01:41
1,2,3-Trichloropropane	ND		0.50	1	02/19/2016 01:41
1,2,4-Trimethylbenzene	ND		0.50	1	02/19/2016 01:41
1,3,5-Trimethylbenzene	ND		0.50	1	02/19/2016 01:41
Vinyl Chloride	ND		0.50	1	02/19/2016 01:41
Xylenes, Total	ND		0.50	1	02/19/2016 01:41

# **Analytical Report**

Client:

Schutze & Associates. Inc.

**Date Received:** 2/16/16 18:20

Date Prepared: 2/19/16

Project:

539: Tung

WorkOrder:

1602578

**Extraction Method: SW5030B** 

Analytical Method: SW8260B

Unit:

 $\mu g/L$ 

Volatile Organics by P&T and GC/MS (Basic Target List)								
Client ID	Lab ID	Matrix	Date (	Collected Instrument	Batch ID			
B-5-15-W	1602578-002B	Water	02/12/2	2016 10:45 GC28	116877			
Analytes	Result		RL	<u>DE</u>	Date Analyzed			
Surrogates	REC (%)		Limits					

<u>Analytes</u>	Result	<u>RL DF</u>	Date Analyzeu
Surrogates	REC (%)	<u>Limits</u>	
Dibromofluoromethane	117	70-130	02/19/2016 01:41
Toluene-d8	116	70-130	02/19/2016 01:41
4-BFB	85	70-130	02/19/2016 01:41
Analyst(s): AK		Analytical Comments: b1	

Dagg 0 of 21

# **Analytical Report**

Client: Schutze & Associates. Inc.

**Date Received:** 2/16/16 18:20

Date Prepared: 2/19/16

Project: 539: Tung

WorkOrder:

1602578

Extraction Method: SW5030B

Analytical Method: SW8260B

Unit:

 $\mu$ g/L

### Volatile Organics by P&T and GC/MS (Basic Target List)

tert-Arnyl methyl ether (TAME)         ND         0.50         1         02/19/2016 02:19           Benzene         ND         0.50         1         02/19/2016 02:19           Bromobenzene         ND         0.50         1         02/19/2016 02:19           Bromobelkoromethane         ND         0.50         1         02/19/2016 02:19           Bromodichloromethane         ND         0.50         1         02/19/2016 02:19           Broth Clark Clark         ND         0.50         1         02/19/2016 02:19           Bettyl Jenzene         ND         0.50	Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Acetone	B-4-22-W	1602578-003B V	Water	02/12/2016 13:15	GC28	116877
tert-Arnyl methyl ether (TAME)         ND         0.50         1         02/19/2016 02:19           Benzene         ND         0.50         1         02/19/2016 02:19           Bromobenzene         ND         0.50         1         02/19/2016 02:19           Bromochioromethane         ND         0.50         1         02/19/2016 02:19           Bromodichloromethane         ND         0.50         1         02/19/2016 02:19           Bromofichloromethane         ND         0.50         1         02/19/2016 02:19           Brothyl benzene         ND         0.50         1         02/19/2016 02:19           Carbon Disuffice         ND         0.50	Analytes	Result		RL DE		Date Analyzed
Bernzene   ND	Acetone	ND		10 1		02/19/2016 02:19
Bromobenzene   ND	tert-Amyl methyl ether (TAME)	ND		0.50 1		02/19/2016 02:19
Bromochioromethane	Benzene	ND		0.50 1		02/19/2016 02:19
Bromodichloromethane   ND	Bromobenzene	ND	-	0.50 1		02/19/2016 02:19
Bromoform   ND   0.50   1   02/19/2016 02:19	Bromochloromethane	ND		0.50 1		02/19/2016 02:19
Bromomethane   ND   0.50   1   02/19/2016 02:19	Bromodichloromethane	ND		0.50 1		02/19/2016 02:19
2-Butanone (MEK) ND 2.0 1 02/19/2016 02:19 1-Butyl alcohol (TBA) ND 2.0 1 02/19/2016 02:19 1-Butyl benzene ND 0.50 1 02/19/2016 02:19 tert-Butyl benzene ND 0.50 1 02/19/2016 02:19 tert-Butyl benzene ND 0.50 1 02/19/2016 02:19 tert-Butyl benzene ND 0.50 1 02/19/2016 02:19 Carbon Disulfide ND 0.50 1 02/19/2016 02:19 Carbon Disulfide ND 0.50 1 02/19/2016 02:19 Carbon Tetrachloride ND 0.50 1 02/19/2016 02:19 Chiorobenzene ND 0.50 1 02/19/2016 02:19 Chiorobenzene ND 0.50 1 02/19/2016 02:19 Chiorotethane ND 0.50 1 02/19/2016 02:19 Dibromochloromethane ND 0.50 1 02/19/2016 02:19 Dibromochloromethane ND 0.50 1 02/19/2016 02:19 L;2-Dibromo-3-chloropropane ND 0.50 1 02/19/2016 02:19 L;2-Dibromochlane (EDB) ND 0.50 1 02/19/2016 02:19 Dibromochlane ND 0.50 1 02/19/2016 02:19 L;2-Dichlorobenzene ND	Bromoform	ND		0.50 1		02/19/2016 02:19
t-Butyl alcohol (TBA) ND 2.0 1 02/19/2016 02:19 n-Butyl benzene ND 0.50 1 02/19/2016 02:19 sec-Butyl benzene ND 0.50 1 02/19/2016 02:19 sec-Butyl benzene ND 0.50 1 02/19/2016 02:19 tert-Butyl benzene ND 0.50 1 02/19/2016 02:19 Carbon Disulfide ND 0.50 1 02/19/2016 02:19 Carbon Disulfide ND 0.50 1 02/19/2016 02:19 Carbon Tetrachloride ND 0.50 1 02/19/2016 02:19 Chlorobenzene ND 0.50 1 02/19/2016 02:19 Chlorobenzene ND 0.50 1 02/19/2016 02:19 Chlorobethane ND 0.50 1 02/19/2016 02:19 Chlorothane ND 0.50 1 02/19/2016 02:19 Chlorothane ND 0.50 1 02/19/2016 02:19 Chlorothane ND 0.50 1 02/19/2016 02:19 Chlorotoluene ND 0.50 1 02/19/2016 02:19 C-Chlorotoluene ND 0.50 1	Bromomethane	ND		0.50 1		02/19/2016 02:19
n-Butyl benzene         ND         0.50         1         02/19/2016 02:19           sec-Butyl benzene         ND         0.50         1         02/19/2016 02:19           tert-Butyl benzene         ND         0.50         1         02/19/2016 02:19           Carbon Disulfide         ND         0.50         1         02/19/2016 02:19           Carbon Disulfide         ND         0.50         1         02/19/2016 02:19           Chiorobenzene         ND         0.50         1         02/19/2016 02:19           Chioroberaene         ND         0.50         1         02/19/2016 02:19           2-Chiorobiuene         ND         0.50         1         02/19/2016 02:19           4-Chiorobiuene         ND         0.50         1         02/19/2016 02:19           Dibromochloromethane         ND         0.50         1         02/19/2016 02:19 <td>2-Butanone (MEK)</td> <td>ND</td> <td></td> <td>2.0 1</td> <td></td> <td>02/19/2016 02:19</td>	2-Butanone (MEK)	ND		2.0 1		02/19/2016 02:19
see-Bulyl benzene         ND         0.50         1         02/19/2016 02:19           tert-Bulyl benzene         ND         0.50         1         02/19/2016 02:19           Carbon Disulfide         ND         0.50         1         02/19/2016 02:19           Carbon Tetrachloride         ND         0.50         1         02/19/2016 02:19           Chlorobenzene         ND         0.50         1         02/19/2016 02:19           Chlorotena         ND         0.50         1         02/19/2016 02:19           Chloroteriane         ND         0.50         1         02/19/2016 02:19           Chloroteriane         ND         0.50         1         02/19/2016 02:19           Chloroteriuene         ND         0.50         1         02/19/2016 02:19           4-Chlorotoluene         ND         0.50         1         02/19/2016 02:19 <td>t-Butyl alcohol (TBA)</td> <td>ND</td> <td></td> <td>2.0 1</td> <td></td> <td>02/19/2016 02:19</td>	t-Butyl alcohol (TBA)	ND		2.0 1		02/19/2016 02:19
tert-Butyl benzene         ND         0.50         1         02/19/2016 02:19           Carbon Disulfide         ND         0.50         1         02/19/2016 02:19           Carbon Tetrachloride         ND         0.50         1         02/19/2016 02:19           Chlorobenzene         ND         0.50         1         02/19/2016 02:19           Chlorobetane         ND         0.50         1         02/19/2016 02:19           Chlorotofrom         ND         0.50         1         02/19/2016 02:19           Chlorotofuene         ND         0.50         1         02/19/2016 02:19           Chlorotofuene         ND         0.50         1         02/19/2016 02:19           2-Chlorotofuene         ND         0.50         1         02/19/2016 02:19           4-Chlorotofuene         ND         0.50         1         02/19/2016 02:19           2-Chlorotofuene         ND         0.50         1         02/19/2016 02:19           Dibromochloromethane         ND         0.50         1         02/19/2016 02:19           1,2-Dibromo-3-chloropropane         ND         0.50         1         02/19/2016 02:19           1,2-Dibromoethane (EDB)         ND         0.50         1	n-Butyl benzene	ND		0.50 1	*	02/19/2016 02:19
Carbon Disulfide         ND         0.50         1         02/19/2016 02:19           Carbon Tetrachloride         ND         0.50         1         02/19/2016 02:19           Chlorobenzene         ND         0.50         1         02/19/2016 02:19           Chloroethane         ND         0.50         1         02/19/2016 02:19           Chloroform         ND         0.50         1         02/19/2016 02:19           Chloroethane         ND         0.50         1         02/19/2016 02:19           Chloroethane         ND         0.50         1         02/19/2016 02:19           2-Chlorotoluene         ND         0.50         1         02/19/2016 02:19           4-Chlorotoluene         ND         0.50         1         02/19/2016 02:19           4-Chlorotoluene         ND         0.50         1         02/19/2016 02:19           4-Chlorotoluene         ND         0.50         1         02/19/2016 02:19           1,2-Dibromoethane         ND         0.50         1         02/19/2016 02:19           1,2-Dibromoethane (EDB)         ND         0.50         1         02/19/2016 02:19           1,2-Dichlorobenzene         ND         0.50         1         02/19/2016 02:	sec-Butyl benzene	ND		0.50 1		02/19/2016 02:19
Carbon Tetrachloride         ND         0.50         1         02/19/2016 02:19           Chlorobenzene         ND         0.50         1         02/19/2016 02:19           Chloroethane         ND         0.50         1         02/19/2016 02:19           Chloroform         ND         0.50         1         02/19/2016 02:19           Chlorotoluene         ND         0.50         1         02/19/2016 02:19           2-Chlorotoluene         ND         0.50         1         02/19/2016 02:19           4-Chlorotoluene         ND         0.50         1         02/19/2016 02:19           2-Chlorotoluene         ND         0.50         1         02/19/2016 02:19           Dibromochloromethane         ND         0.50         1         02/19/2016 02:19           1,2-Dibromo-3-chloropropane         ND         0.50         1         02/19/2016 02:19           1,2-Dibromoethane (EDB)         ND         0.50         1         02/19/2016 02:19           1,2-Dibromoethane (EDB)         ND         0.50         1         02/19/2016 02:19           1,2-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           1,3-Dichlorobenzene         ND         0.50         1 </td <td>tert-Butyl benzene</td> <td>ND</td> <td></td> <td>0.50 1</td> <td></td> <td>02/19/2016 02:19</td>	tert-Butyl benzene	ND		0.50 1		02/19/2016 02:19
Chlorobenzene ND 0.50 1 02/19/2016 02:19 Chloroethane ND 0.50 1 02/19/2016 02:19 Chloroform ND 0.50 1 02/19/2016 02:19 Chloroform ND 0.50 1 02/19/2016 02:19 Chlorothane ND 0.50 1 02/19/2016 02:19 Chlorotothane ND 0.50 1 02/19/2016 02:19 2-Chlorotoluene ND 0.50 1 02/19/2016 02:19 4-Chlorotoluene ND 0.50 1 02/19/2016 02:19 Dibromochloromethane ND 0.50 1 02/19/2016 02:19 Dibromochloromethane ND 0.50 1 02/19/2016 02:19 1,2-Dibromo-3-chloropropane ND 0.20 1 02/19/2016 02:19 1,2-Dibromoethane (EDB) ND 0.50 1 02/19/2016 02:19 Dibromomethane (EDB) ND 0.50 1 02/19/2016 02:19 1,2-Dibriomoethane (EDB) ND 0.50 1 02/19/2016 02:19 1,3-Dichlorobenzene ND 0.50 1 02/19/2016 02:19 1,4-Dichlorobenzene ND 0.50 1 02/19/2016 02:19 1,4-Dichlorobenzene ND 0.50 1 02/19/2016 02:19 1,1-Dichloroethane ND 0.50 1 02/19/2016 02:19 1,2-Dichloroethane ND 0.50 1 02/19/2016 02:19 1,3-Dichloroethane ND 0.50 1 02/19/2016 02:19 1,3-Dichloropopane ND 0.50 1 02/19/2016 02:19	Carbon Disulfide	ND		0.50 1		02/19/2016 02:19
Chloroethane         ND         0.50         1         02/19/2016 02:19           Chloroform         ND         0.50         1         02/19/2016 02:19           Chloromethane         ND         0.50         1         02/19/2016 02:19           2-Chlorotoluene         ND         0.50         1         02/19/2016 02:19           4-Chlorotoluene         ND         0.50         1         02/19/2016 02:19           4-Chlorotoluene         ND         0.50         1         02/19/2016 02:19           4-Chlorotoluene         ND         0.50         1         02/19/2016 02:19           Dibromochloromethane         ND         0.50         1         02/19/2016 02:19           1,2-Dibromo-3-chloropropane         ND         0.50         1         02/19/2016 02:19           1,2-Dibromoethane (EDB)         ND         0.50         1         02/19/2016 02:19           1,2-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           1,3-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           1,4-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethane         ND         0.50         1	Carbon Tetrachloride	ND		0.50 1		02/19/2016 02:19
Chloroform         ND         0,50         1         02/19/2016 02:19           Chloromethane         ND         0,50         1         02/19/2016 02:19           2-Chlorotoluene         ND         0,50         1         02/19/2016 02:19           4-Chlorotoluene         ND         0,50         1         02/19/2016 02:19           4-Chlorotoluene         ND         0,50         1         02/19/2016 02:19           Dibromochloromethane         ND         0,50         1         02/19/2016 02:19           1,2-Dibromo-3-chloropropane         ND         0,50         1         02/19/2016 02:19           1,2-Dibromoethane (EDB)         ND         0,50         1         02/19/2016 02:19           1,2-Dichlorobenzene         ND         0,50         1         02/19/2016 02:19           1,2-Dichlorobenzene         ND         0,50         1         02/19/2016 02:19           1,4-Dichlorobenzene         ND         0,50         1         02/19/2016 02:19           1,4-Dichlorobenzene         ND         0,50         1         02/19/2016 02:19           1,1-Dichlorodifluoromethane         ND         0,50         1         02/19/2016 02:19           1,2-Dichlorodethane         ND         0,50	Chlorobenzene	ND		0.50 1		02/19/2016 02:19
Chloromethane ND 0.50 1 02/19/2016 02:19 2-Chlorotoluene ND 0.50 1 02/19/2016 02:19 4-Chlorotoluene ND 0.50 1 02/19/2016 02:19 4-Chlorotoluene ND 0.50 1 02/19/2016 02:19 Dibromochloromethane ND 0.50 1 02/19/2016 02:19 1,2-Dibromo-3-chloropropane ND 0.20 1 02/19/2016 02:19 1,2-Dibromoethane (EDB) ND 0.50 1 02/19/2016 02:19 Dibromoethane (EDB) ND 0.50 1 02/19/2016 02:19 1,2-Dichlorobenzene ND 0.50 1 02/19/2016 02:19 1,3-Dichlorobenzene ND 0.50 1 02/19/2016 02:19 1,3-Dichlorobenzene ND 0.50 1 02/19/2016 02:19 1,4-Dichlorobenzene ND 0.50 1 02/19/2016 02:19 1,1-Dichlorobenzene ND 0.50 1 02/19/2016 02:19 1,1-Dichloroethane ND 0.50 1 02/19/2016 02:19 1,2-Dichloroethane ND 0.50 1 02/19/2016 02:19 1,2-Dichloroethane ND 0.50 1 02/19/2016 02:19 1,3-Dichloropropane ND 0.50 1 02/19/2016 02:19	Chloroethane	ND		0.50 1		02/19/2016 02:19
2-Chlorotoluene ND 0.50 1 02/19/2016 02:19 4-Chlorotoluene ND 0.50 1 02/19/2016 02:19 Dibromochloromethane ND 0.50 1 02/19/2016 02:19 1,2-Dibromo-3-chloropropane ND 0.20 1 02/19/2016 02:19 1,2-Dibromoethane (EDB) ND 0.50 1 02/19/2016 02:19 Dibromoethane (EDB) ND 0.50 1 02/19/2016 02:19 1,2-Dichlorobenzene ND 0.50 1 02/19/2016 02:19 1,2-Dichlorobenzene ND 0.50 1 02/19/2016 02:19 1,3-Dichlorobenzene ND 0.50 1 02/19/2016 02:19 1,4-Dichlorobenzene ND 0.50 1 02/19/2016 02:19 1,4-Dichlorobenzene ND 0.50 1 02/19/2016 02:19 Dichlorodifluoromethane ND 0.50 1 02/19/2016 02:19 1,1-Dichloroethane ND 0.50 1 02/19/2016 02:19 1,1-Dichloroethane (1,2-DCA) ND 0.50 1 02/19/2016 02:19 1,1-Dichloroethane ND 0.50 1 02/19/2016 02:19 1,1-Dichloroethene ND 0.50 1 02/19/2016 02:19 1,2-Dichloroethene ND 0.50 1 02/19/2016 02:19 1,3-Dichloropropane ND 0.50 1 02/19/2016 02:19	Chloroform	ND		0.50 1		02/19/2016 02:19
4-Chlorotoluene         ND         0.50         1         02/19/2016 02:19           Dibromochloromethane         ND         0.50         1         02/19/2016 02:19           1,2-Dibromo-3-chloropropane         ND         0.20         1         02/19/2016 02:19           1,2-Dibromoethane (EDB)         ND         0.50         1         02/19/2016 02:19           Dibromomethane         ND         0.50         1         02/19/2016 02:19           1,2-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           1,3-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           1,4-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           1,4-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethanee         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethane (1,2-DCA)         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethane         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethane         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethane         ND	Chloromethane	ND		0.50 1		02/19/2016 02:19
Dibromochloromethane         ND         0.50         1         02/19/2016 02:19           1,2-Dibromo-3-chloropropane         ND         0.20         1         02/19/2016 02:19           1,2-Dibromoethane (EDB)         ND         0.50         1         02/19/2016 02:19           Dibromomethane         ND         0.50         1         02/19/2016 02:19           1,2-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           1,3-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           1,4-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           1,4-Dichlorothane         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethane         ND         0.50         1         02/19/2016 02:19           1,2-Dichloroethane (1,2-DCA)         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethane         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethane         ND         0.50         1         02/19/2016 02:19           1,2-Dichloroethane         ND         0.50         1         02/19/2016 02:19           trans-1,2-Dichloroethane         ND	2-Chlorotoluene	ND		0.50 1		02/19/2016 02:19
1,2-Dibromo-3-chloropropane         ND         0.20         1         02/19/2016 02:19           1,2-Dibromoethane (EDB)         ND         0.50         1         02/19/2016 02:19           Dibromomethane         ND         0.50         1         02/19/2016 02:19           1,2-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           1,3-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           1,4-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethane         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethane         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethane         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethene         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethene         ND         0.50         1         02/19/2016 02:19           1,2-Dichloroethene         ND         0.50         1         02/19/2016 02:19           1,2-Dichloroptopane         ND         0.50         1         02/19/2016 02:19           1,3-Dichloropropane         ND         0.	4-Chlorotoluene	ND		0.50 1		02/19/2016 02:19
1,2-Dibromoethane (EDB)         ND         0.50         1         02/19/2016 02:19           Dibromomethane         ND         0.59         1         02/19/2016 02:19           1,2-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           1,3-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           1,4-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           Dichlorodifluoromethane         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethane         ND         0.50         1         02/19/2016 02:19           1,2-Dichloroethane (1,2-DCA)         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethene         ND         0.50         1         02/19/2016 02:19           cis-1,2-Dichloroethene         ND         0.50         1         02/19/2016 02:19           trans-1,2-Dichloroethene         ND         0.50         1         02/19/2016 02:19           1,2-Dichloropropane         ND         0.50         1         02/19/2016 02:19           1,3-Dichloropropane         ND         0.50         1         02/19/2016 02:19	Dibromochloromethane	ND		0.50 1		02/19/2016 02:19
Dibromomethane         ND         0.50         1         02/19/2016 02:19           1,2-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           1,3-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           1,4-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           Dichlorodifluoromethane         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethane         ND         0.50         1         02/19/2016 02:19           1,2-Dichloroethane (1,2-DCA)         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethene         ND         0.50         1         02/19/2016 02:19           cis-1,2-Dichloroethene         ND         0.50         1         02/19/2016 02:19           trans-1,2-Dichloroethene         ND         0.50         1         02/19/2016 02:19           1,2-Dichloropropane         ND         0.50         1         02/19/2016 02:19           1,3-Dichloropropane         ND         0.50         1         02/19/2016 02:19	1,2-Dibromo-3-chloropropane	ND		0.20 1		02/19/2016 02:19
1,2-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           1,3-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           1,4-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           Dichlorodifluoromethane         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethane         ND         0.50         1         02/19/2016 02:19           1,2-Dichloroethane (1,2-DCA)         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethane         ND         0.50         1         02/19/2016 02:19           cis-1,2-Dichloroethane         ND         0.50         1         02/19/2016 02:19           trans-1,2-Dichloroethane         ND         0.50         1         02/19/2016 02:19           1,2-Dichloropropane         ND         0.50         1         02/19/2016 02:19           1,3-Dichloropropane         ND         0.50         1         02/19/2016 02:19           1,3-Dichloropropane         ND         0.50         1         02/19/2016 02:19	1,2-Dibromoethane (EDB)	ND		0.50 1		02/19/2016 02:19
1,3-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           1,4-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           Dichlorodifluoromethane         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethane         ND         0.50         1         02/19/2016 02:19           1,2-Dichloroethane (1,2-DCA)         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethene         ND         0.50         1         02/19/2016 02:19           cis-1,2-Dichloroethene         ND         0.50         1         02/19/2016 02:19           trans-1,2-Dichloroethene         ND         0.50         1         02/19/2016 02:19           1,2-Dichloropropane         ND         0.50         1         02/19/2016 02:19           1,3-Dichloropropane         ND         0.50         1         02/19/2016 02:19	Dibromomethane	ND		0.50 1		02/19/2016 02:19
1,4-Dichlorobenzene         ND         0.50         1         02/19/2016 02:19           Dichlorodifluoromethane         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethane         ND         0.50         1         02/19/2016 02:19           1,2-Dichloroethane (1,2-DCA)         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethene         ND         0.50         1         02/19/2016 02:19           cis-1,2-Dichloroethene         ND         0.50         1         02/19/2016 02:19           trans-1,2-Dichloroethene         ND         0.50         1         02/19/2016 02:19           1,2-Dichloropropane         ND         0.50         1         02/19/2016 02:19           1,3-Dichloropropane         ND         0.50         1         02/19/2016 02:19	1,2-Dichlorobenzene	ND		0.50 1		02/19/2016 02:19
Dichlorodifluoromethane         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethane         ND         0.50         1         02/19/2016 02:19           1,2-Dichloroethane (1,2-DCA)         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethene         ND         0.50         1         02/19/2016 02:19           cis-1,2-Dichloroethene         ND         0.50         1         02/19/2016 02:19           trans-1,2-Dichloroethene         ND         0.50         1         02/19/2016 02:19           1,2-Dichloropropane         ND         0.50         1         02/19/2016 02:19           1,3-Dichloropropane         ND         0.50         1         02/19/2016 02:19	1,3-Dichlorobenzene	ND		0.50 1		02/19/2016 02:19
1,1-Dichloroethane         ND         0.50         1         02/19/2016 02:19           1,2-Dichloroethane (1,2-DCA)         ND         0.50         1         02/19/2016 02:19           1,1-Dichloroethene         ND         0.50         1         02/19/2016 02:19           cis-1,2-Dichloroethene         ND         0.50         1         02/19/2016 02:19           trans-1,2-Dichloroethene         ND         0.50         1         02/19/2016 02:19           1,2-Dichloropropane         ND         0.50         1         02/19/2016 02:19           1,3-Dichloropropane         ND         0.50         1         02/19/2016 02:19	1,4-Dichlorobenzene	ND		0.50 1		02/19/2016 02:19
1,2-Dichloroethane (1,2-DCA)     ND     0.50     1     02/19/2016 02:19       1,1-Dichloroethane     ND     0.50     1     02/19/2016 02:19       cis-1,2-Dichloroethane     ND     0.50     1     02/19/2016 02:19       trans-1,2-Dichloroethane     ND     0.50     1     02/19/2016 02:19       1,2-Dichloropropane     ND     0.50     1     02/19/2016 02:19       1,3-Dichloropropane     ND     0.50     1     02/19/2016 02:19       1,3-Dichloropropane     ND     0.50     1     02/19/2016 02:19	Dichlorodifluoromethane	ND	<del></del>	0.50 1		02/19/2016 02:19
1,1-Dichloroethene         ND         0.50         1         02/19/2016 02:19           cis-1,2-Dichloroethene         ND         0.50         1         02/19/2016 02:19           trans-1,2-Dichloroethene         ND         0.50         1         02/19/2016 02:19           1,2-Dichloropropane         ND         0.50         1         02/19/2016 02:19           1,3-Dichloropropane         ND         0.50         1         02/19/2016 02:19	1,1-Dichloroethane	ND		0.50 1		02/19/2016 02:19
cis-1,2-Dichloroethene         ND         0.50         1         02/19/2016 02:19           trans-1,2-Dichloroethene         ND         0.50         1         02/19/2016 02:19           1,2-Dichloropropane         ND         0.50         1         02/19/2016 02:19           1,3-Dichloropropane         ND         0.50         1         02/19/2016 02:19           1,3-Dichloropropane         ND         0.50         1         02/19/2016 02:19	1,2-Dichloroethane (1,2-DCA)	ND		0.50 1		02/19/2016 02:19
trans-1,2-Dichloroethene         ND         0.50         1         02/19/2016 02:19           1,2-Dichloropropane         ND         0.50         1         02/19/2016 02:19           1,3-Dichloropropane         ND         0.50         1         02/19/2016 02:19           1,3-Dichloropropane         ND         0.50         1         02/19/2016 02:19		ND		0.50 1		02/19/2016 02:19
1,2-Dichloropropane         ND         0.50         1         02/19/2016 02:19           1,3-Dichloropropane         ND         0.50         1         02/19/2016 02:19	cis-1,2-Dichioroethene	ND		0.50 1		02/19/2016 02:19
1,3-Dichloropropane ND 0.50 1 02/19/2016 02:19	trans-1,2-Dichloroethene	ND		0.50 1		02/19/2016 02:19
	1,2-Dichloropropane	ND		0.50 1		02/19/2016 02:19
2,2-Dichloropropane ND 0.50 1 02/19/2016 02:19	1,3-Dichloropropane	ND		0.50 1		02/19/2016 02:19
	2,2-Dichloropropane	ND		0.50 1		02/19/2016 02:19

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### **Analytical Report**

Client:

Schutze & Associates, Inc.

Date Received: 2/16/16 18:20

Project:

Date Prepared: 2/19/16 539: Tung WorkOrder:

1602578

**Extraction Method: SW5030B** 

Analytical Method: SW8260B

Unit:

 $\mu g/L$ 

Client ID	Lab ID	Matrix	Date C	ollected Instrume	nt Batch ID
B-4-22-W	1602578-003B	Water	02/12/20	16 13:15 GC28	116877
Analytes	Result		RL	DF	Date Analyzed
1,1-Dichloropropene	ND		0.50	1	02/19/2016 02:19
cis-1,3-Dichloropropene	ND		0.50	1	02/19/2016 02:19
trans-1,3-Dichloropropene	ND		0.50	1	02/19/2016 02:19
Diisopropyl ether (DIPE)	ND		0.50	1	02/19/2016 02:19
Ethylbenzene	ND		0.50	1	02/19/2016 02:19
Ethyl tert-butyl ether (ETBE)	ND		0.50	1	02/19/2016 02:19
Freon 113	ND		0.50	1	02/19/2016 02:19
Hexachlorobutadiene	ND		0.50	1	02/19/2016 02:19
Hexachloroethane	ND		0.50	1	02/19/2016 02:19
2-Hexanone	ND		0.50	1	02/19/2016 02:19
Isopropylbenzene	ND		0.50	1	02/19/2016 02:19
4-Isopropyl toluene	ND		0.50	1	02/19/2016 02:19
Methyl-t-butyl ether (MTBE)	ND		0.50	1	02/19/2016 02:19
Methylene chloride	ND		0.50	1	02/19/2016 02:19
4-Methyl-2-pentanone (MIBK)	ND		0.50	1	02/19/2016 02:19
Naphthalene	ND		0.50	1	02/19/2016 02:19
n-Propyl benzene	ND		0.50	1	02/19/2016 02:19
Styrene	ND		0.50	1	02/19/2016 02:19
1,1,1,2-Tetrachloroethane	ND		0.50	1	02/19/2016 02:19
1,1,2,2-Tetrachioroethane	ND		0.50	1	02/19/2016 02:19
Tetrachloroethene	ND		0.50	1	02/19/2016 02:19
Toluene	ND		0.50	1	02/19/2016 02:19
1,2,3-Trichlorobenzene	ND		0.50	1	02/19/2016 02:19
1,2,4-Trichlorobenzene	ND		0.50	1	02/19/2016 02:19
1,1,1-Trichloroethane	ND		0.50	1	02/19/2016 02:19
1,1,2-Trichloroethane	ND		0.50	1	02/19/2016 02:19
Trichloroethene	ND		0.50	1	02/19/2016 02:19
Trichlorofluoromethane	ND		0.50	1	02/19/2016 02:19
1,2,3-Trichloropropane	ND		0.50	1	02/19/2016 02:19
1,2,4-Trimethylbenzene	ND		0.50	1	02/19/2016 02:19
1,3,5-Trimethylbenzene	ND		0.50	1	02/19/2016 02:19
Vinyl Chloride	ND		0.50	1	02/19/2016 02:19
Xylenes, Total	ND		0.50	1	02/19/2016 02:19

# **Analytical Report**

Client:

Schutze & Associates, Inc.

Date Received: 2/16/16 18:20

Project:

Date Prepared: 2/19/16 539: Tung WorkOrder:

1602578

Extraction Method: SW5030B

Analytical Method: SW8260B

Unit:

 $\mu g/L$ 

Client ID	Lab ID	Matrix	Date Collec	cted Instrument	Batch ID
B-4-22-W	1602578-003B	Water	116877		
Analytes	Result		<u>RL</u> <u>D</u>	<u>)F</u>	Date Analyzed
Surrogates	REC (%)		<u>Limits</u>		
Dibromofluoromethane	117		70-130		02/19/2016 02:19
Toluene-d8	115		70-130		02/19/2016 02:19
4-BFB	85		70-130		02/19/2016 02:19
Analyst(s): AK			Analytical Comment	ts: b1	



# **Analytical Report**

Client: Schutze & Associates, Inc.

**Date Received:** 2/16/16 18:20

Date Prepared: 2/19/16

539: Tung Project:

WorkOrder:

1602578

Extraction Method: SW5030B

Analytical Method: SW8260B

 $\mu g/L$ 

Volatile Organics by P&T and GC/MS (Basic Target List)

Unit:

Client ID	Lab ID Matrix	Date Collected Instrument	Batch ID
B-3-21.5-W	1602578-004B Water	02/12/2016 14:00 GC10	116877
Analytes	Result	RL DE	Date Analyzed
Acetone	ND	10 1	02/19/2016 13:56
tert-Amyl methyl ether (TAME)	ND	0.50 1	02/19/2016 13:56
Benzene	ND	0.50 1	02/19/2016 13:56
Bromobenzene	ND	0.50 1	02/19/2016 13:56
Bromochloromethane	ND	0.50 1	02/19/2016 13:56
Bromodichloromethane	ND	0.50 1	02/19/2016 13:56
Bromoform	ND	0.50 1	02/19/2016 13:56
Bromomethane	ND	0.50 1	02/19/2016 13:56
2-Butanone (MEK)	ND	2.0 1	02/19/2016 13:56
t-Butyl alcohol (TBA)	ND	2.0 1	02/19/2016 13:56
n-Butyl benzene	ND	0.50 1	02/19/2016 13:56
sec-Butyl benzene	ND	0.50 1	02/19/2016 13:56
tert-Butyl benzene	ND	0.50 1	02/19/2016 13:56
Carbon Disulfide	ND	0.50 1	02/19/2016 13:56
Carbon Tetrachloride	ND	0.50 1	02/19/2016 13:56
Chlorobenzene	ND	0.50 1	02/19/2016 13:56
Chloroethane	ND	0.50 1	02/19/2016 13:56
Chloroform	ND	0.50 1	02/19/2016 13:56
Chloromethane	ND	0.50 1	02/19/2016 13:56
2-Chlorotoluene	ND	0.50 1	02/19/2016 13:56
4-Chlorotoluene	ND	0.50 1	02/19/2016 13:56
Dibromochloromethane	ND	0.50 1	02/19/2016 13:56
1,2-Dibromo-3-chloropropane	ND	0.20 1	02/19/2016 13:56
1,2-Dibromoethane (EDB)	ND	0.50 1	02/19/2016 13:56
Dibromomethane	ND	0.50 1	02/19/2016 13:56
1,2-Dichterobenzene	ND	0.50 1	02/19/2016 13:56
1,3-Dichiorobenzene	ND	0.50 1	02/19/2016 13:56
1,4-Dichlorobenzene	ND	0.50 1	02/19/2016 13:56
Dichlorodifluoromethane	ND	0.50 1	02/19/2016 13:56
1,1-Dichloroethane	ND	0.50 1	02/19/2016 13:56
1,2-Dichloroethane (1,2-DCA)	ND	0.50 1	02/19/2016 13:56
1,1-Dichloroethene	NÐ	0.50 1	02/19/2016 13:56
cis-1,2-Dichloroethene	ND	0.50 1	02/19/2016 13:56
trans-1,2-Dichloroethene	ND	0.50 1	02/19/2016 13:56
1,2-Dichloropropane	ND	0.50 1	02/19/2016 13:56
1,3-Dichloropropane	ND	0.50 1	02/19/2016 13:56
2,2-Dichloropropane	ND	0.50 1	02/19/2016 13:56

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### **Analytical Report**

Client: Schutze & Associates, Inc.

**Date Received:** 2/16/16 18:20

Date Prepared: 2/19/16

Project: 539: Tung WorkOrder:

1602578

Extraction Method: SW5030B

Analytical Method: SW8260B

Unit:

μg/L

Client ID	Lab ID	Matrix	Date Co	ollected Instrument	Batch ID
B-3-21.5-W	1602578-004B	Water	02/12/20	16 14:00 GC10	116877
<u>Analytes</u>	Result		RL	DF	Date Analyzed
1,1-Dichloropropene	ND		0.50	1	02/19/2016 13:56
cis-1,3-Dichloropropene	ND		0.50	1	02/19/2016 13:56
trans-1,3-Dichloropropene	ND		0.50	1	02/19/2016 13:56
Diisopropyl ether (DIPE)	ND		0.50	1	02/19/2016 13:56
Ethylbenzene	ND		0.50	1	02/19/2016 13:56
Ethyl tert-butyl ether (ETBE)	ND		0.50	1	02/19/2016 13:56
Freon 113	ND		0.50	1	02/19/2016 13:56
Hexachlorobutadiene	ND		0.50	1	02/19/2016 13:56
Hexachloroethane	ND		0.50	1	02/19/2016 13:56
2-Hexanone	ND		0.50	1	02/19/2016 13:56
Isopropylbenzene	ND		0.50	1	02/19/2016 13:56
4-Isopropyl toluene	ND		0.50	1	02/19/2016 13:56
Methyl-t-butyl ether (MTBE)	ND		0.50	1	02/19/2016 13:56
Methylene chloride	ND		0.50	1	02/19/2016 13:56
4-Methyi-2-pentanone (MIBK)	ND		0.50	1	02/19/2016 13:56
Naphthalene	ND		0.50	1	02/19/2016 13:56
n-Propyl benzene	ND		0.50	1	02/19/2016 13:56
Styrene	ND		0.50	1	02/19/2016 13:56
1,1,1,2-Tetrachloroethane	ND		0.50	1º	02/19/2016 13:56
1,1,2,2-Tetrachloroethane	ND		0.50	1	02/19/2016 13:56
Tetrachloroethene	ND		0.50	1	02/19/2016 13:56
Toluene	ND		0.50	1	02/19/2016 13:56
1,2,3-Trichlorobenzene	ND		0.50	1	02/19/2016 13:56
1,2,4-Trichlorobenzene	ND		0.50	1	02/19/2016 13:56
1,1,1-Trichloroethane	ND		0.50	1	02/19/2016 13:56
1,1,2-Trichloroethane	ND		0.50	1	02/19/2016 13:56
Trichloroethene	ND		0.50	1	02/19/2016 13:56
Trichlorofluoromethane	ND		0.50	1	02/19/2016 13:56
1,2,3-Trichloropropane	ND	-	0.50	1	02/19/2016 13:56
1,2,4-Trimethylbenzene	ND		0.50	1	02/19/2016 13:56
1,3,5-Trimethylbenzene	ND		0.50	1	02/19/2016 13:56
Vinyl Chloride	ND		0.50	1	02/19/2016 13:56
Xylenes, Total	ND		0.50	1	02/19/2016 13:56

# **Analytical Report**

Client:

Schutze & Associates, Inc.

Date Received: 2/16/16 18:20

Date Prepared: 2/19/16

Project:

539; Tung

WorkOrder:

1602578

**Extraction Method: SW5030B** 

Analytical Method: SW8260B

Unit:

 $\mu g/L$ 

	Volatile Organics by	Volatile Organics by P&T and GC/MS (Basic Target List)							
Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID					
B-3-21.5-W	1602578-004B	Water	02/12/2016 14:00 GC10	116877					
Analytes	Result		<u>RL</u> <u>DF</u>	Date Analyzed					
Surrogates	REC (%)		<u>Limits</u>						
Dibromofluoromethane	107		70-130	02/19/2016 13:56					
Toluene-d8	112		70-130	02/19/2016 13:56					
4-BFB	82		70-130	02/19/2016 13:56					
Analyst(s): AK			Analytical Comments: b1						

# **Analytical Report**

Client: Schutze & Associates, Inc.

**Date Received:** 2/16/16 18:20

Date Prepared: 2/17/16

Project: 539: Tung

Analyst(s): JC

WorkOrder:

1602578

Extraction Method: SW3510C

Analytical Method: SW8310

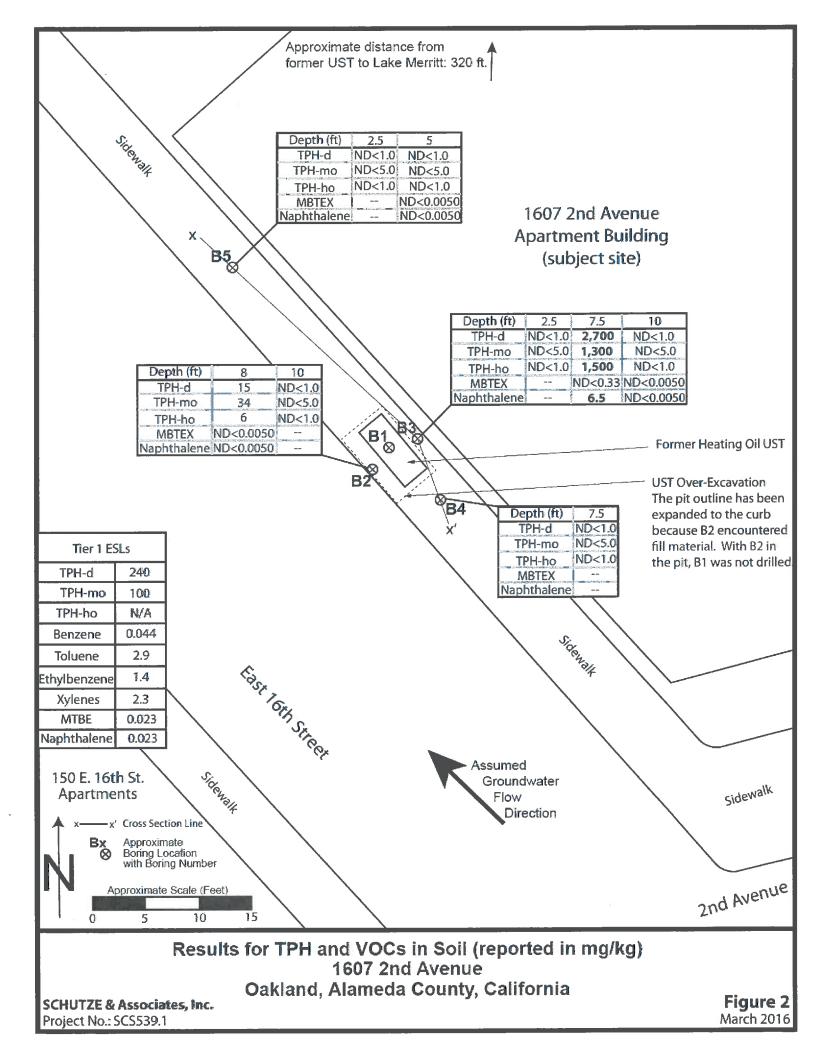
Unit:

μg/L

	Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) by HPLC								
Client ID	Lab ID	Matrix	Date Co	llected Instrument	Batch ID				
Dup	1602578-001A	Water	02/12/201	16 10:45 HPLC4	116799				
Analytes	Result		RL	DF	Date Analyzed				
Acenaphthene	ND		0.0500	1	02/18/2016 16:14				
Acenaphthylene	ND	·- · · · ·	0.0500	1	02/18/2016 16:14				
Anthracene	ND		0.0500	1	02/18/2016 16:14				
Benzo (a) anthracene	ND		0.0250	1	02/18/2016 16:14				
Benzo (a) pyrene	ND	-	0.0500	1	02/18/2016 16:14				
Benzo (b) fluoranthene	ND		0.0250	1	02/18/2016 16:14				
Benzo (k) fluoranthene	ND		0.0250	1	02/18/2016 16:14				
Benzo (g,h,i) perylene	ND		0.0500	1	02/18/2016 16:14				
Chrysene	ND		0.0500	1	02/18/2016 16:14				
Dibenzo (a,h) anthracene	ND		0.0500	1	02/18/2016 16:14				
Fluoranthene	ND		0.0500	1	02/18/2016 16:14				
Fluorene	ND		0.0500	1	02/18/2016 16:14				
Indeno (1,2,3-cd) pyrene	ND		0.0250	1	02/18/2016 16:14				
1-Methylnaphthalene	ND		0.0500	1	02/18/2016 16:14				
2-Methylnaphthalene	ND		0.0500	1	02/18/2016 16:14				
Naphthalene	ND	-	0.0500	1	02/18/2016 16:14				
Phenanthrene	ND		0.0500	1	02/18/2016 16:14				
Pyrene	ND		0.0500	1	02/18/2016 16:14				
<u>Surrogates</u>	REC (%)		Limits						
Decafluorobiphenyl	111		70-130		02/18/2016 16:14				
4,4-Dichlorobiphenyl	116		70-130		02/18/2016 16:14				

### **ATTACHMENT B-5**

**Soil Data** 



laboratory reports are included as Appendix C.

The soil analytical results were compared to the San Francisco Bay Regional Water Quality Control Board (Water Board) Environmental Screening Levels (ESLs) issued February 22, 2016. The Tier 1 ESLs used are based on: groundwater is a current or potential drinking water resource; the Tier 2 ESLs used (Table T2-1) are based on: (1) groundwater is a current or potential drinking water resource; (2) groundwater depth is greater than or equal to 10 ft bgs; (3) the soil type is sandy; and (4) the soil depth for direct exposure is shallow (less than or equal to 10 ft bgs).

TABLE 2
Selected Analytical Results for TPH and VOCs in Soil (reported in mg/kg)
1607 2nd Avenue, Oakland, CA

Samp	ile		TPH				V	OCs		
HD	Depth (ft bgs)	трн-ч	TPH-mo	TPH-ho	MTBE	Benzene	Ethylbenzene	Toluene	Xylenes	Naphthalene
B-2-8	8	15	34	6.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050
B-2-10	10	ND<1.0	ND<5.0	ND<1.0		_	_	_	Series.	
B-3-2.5	2.5	ND<1.0	ND<5.0	ND<1.0	-		_	_		
B-3-7.5	7.5	2,700	1,300	1,500	ND<0.33	ND<0.33	ND<0.33	ND<0.33	ND<0.33	6.5
B-3-10	10	ND<1.0	ND<5.0	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050
B-4-7.5	7.5	ND<1.0	ND<5.0	ND<1.0	**	-	-	· <del></del>	_	
B-5-2.5	2.5	ND<1.0	ND<5.0	ND<1.0		_		-	_	
B-5-5	5	ND<1.0	ND<5.0	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050
						ESLs				
Tier 1	ESL	240	100	N/A	0.023	0.044	1.4	2.9	2.3	0.023
Tier 2 I	ESL	100	100	N/A	0.023	0.044	1.4	2.9	2.3	0.023

mg/kg = milligrams per kilograms; ft bgs = feet below ground surface; TPH-d, -mo and -ho = total petroleum hydrocarbons in the diesel, motor oil and heating oil ranges; VOCs = volatile organic compounds; MTBE = methyl tert-butyl ether; ND<1.0 = not detected with a reporting limit of 1.0; -= not analyzed; N/A = ESL not listed.

ESLs = San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (February 22, 2016). Tier 1 ESLs based on: groundwater is a current or potential drinking water resource; Tier 2 ESLs (Table T2-1) based on: (1) groundwater is a current or potential drinking water resource; (2) groundwater depth is greater than or equal to 10 ft bgs; (3) the soil type is sandy; and (4) the soil depth for direct exposure is shallow (less than or equal to 10 ft bgs).

Numbers in **bold** indicate concentrations exceeding ESLs. TPH analyzed by EPA Method 8015B(m); VOCs analyzed by EPA Method 8260B.

SCHUTZE & Associates, Inc. / March 2016

#### **Total Petroleum Hydrocarbons**

TPH-d was detected in boring B2 at 8 ft bgs and in boring B3 at 7.5 ft bgs at concentrations of, respectively, 15 mg/kg (below the ESLs) and 2,700 mg/kg (above both the Tier 1 and Tier 2 ESLs). TPH-d was not detected above the laboratory reporting limit (RL) of 1.0 mg/kg in any other samples.

TPH-ho was detected in boring B2 at 8 ft bgs and boring B3 at 7.5 ft bgs at concentrations of 6 mg/kg and 1,500 mg/kg, respectively (there are no corresponding ESLs for TPH-ho). TPH-ho was not detected above the laboratory RL of 1.0 mg/kg in

#### any other samples.

TPH-mo was detected in boring B2 at 8 ft bgs and in boring B3 at 7.5 ft bgs at concentrations of, respectively, 34 mg/kg (below the ESLs) and 1,300 mg/kg (above both the Tier 1 and Tier 2 ESLs). TPH-mo was not detected above the RL of 5.0 mg/kg in any other samples.

It should be noted that the laboratory identified the fuel contamination detected as "unmodified or weakly modified diesel" and "oil range compounds", which indicates that the on-site tank could have contained mixtures of diesel and/or heating oil. The detections of TPH-mo are not likely to have been caused by actual motor oil, but instead suggest the presence of diesel and heating oil decay compounds.

#### **VOCs**

VOCs, including MTBE<sup>11</sup>, benzene, ethylbenzene, toluene and xylenes, were below the laboratory RLs in the analyzed soil samples; however, the RLs for MTBE and benzene for sample B-3-7.5 were slightly above the Tier 1 and 2 ESL of 0.023 mg/kg. Naphthalene was detected in boring B3 at 7.5 ft bgs at a concentration of 6.5 mg/kg, which exceeds the Tier 1 and 2 ESL of 0.023 mg/kg. Naphthalene was below the laboratory RL of 0.0050 mg/kg in the other analyzed samples. No chlorinated solvents were detected in any sample above the RLs.

.TABLE 3
Selected Analytical Results for PAHs in Soil (reported in mg/kg)
1607 2nd Avenue, Oakland, CA

Sam	ple	PAHs					
ED)	Depth (ft bgs)	1-Methyinaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Румпе	
B-5-5	5	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	
B-2-8	8	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	
B-3-7.5	7.5	13	10	4.1	8.6	5.5	
B-3-10	10	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	
ESLs							
Tier 1	ESL	N/A	0.25	0.23	11	85	
Tier 2 ESL		N/A	0.25	0.23	11	85	

mg/kg = milligrams per kilograms; ft bgs = feet below ground surface; PAHs= polynuclear aromatic hydrocarbons; ND<1.0 = not detected with a reporting limit of 1.0; N/A = ESL not listed.

ESLs = San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (February 22, 2016). Tier 1 ESLs based on: groundwater is a current or potential drinking water resource; Tier 2 ESLs (Table T2-1) based on: (1) groundwater is a current or potential drinking water resource; (2) groundwater depth is greater than or equal to 10 ft bgs; (3) the soil type is sandy; and (4) the soil depth for direct exposure is shallow (less than or equal to 10 ft bgs).

Numbers in bold indicate concentrations exceeding ESLs. PAHs analyzed by EPA Method 8310.

SCHUTZE & Associates, Inc. / March 2016

<sup>11</sup> Methyl tert-butyl ether

#### Polynuclear Aromatic Hydrocarbons (PAHs)

Naphthalene and 2-methylnaphthalene were detected in boring B3 at 7.5 ft bgs at concentrations of 4.1 mg/kg and 10 mg/kg, respectively, which exceed the respective Tier 1 and 2 ESLs of 0.23 mg/kg and 0.25 mg/kg. In addition, 1-methylnaphthalene was detected in boring B3 at 7.5 ft bgs at a concentration of 13 mg/kg (there are no corresponding ESLs). Phenanthrene and pyrene were detected in boring B3 at 7.5 ft bgs at concentrations of 8.6 mg/kg and 5.5 mg/kg, respectively, which are below the ESLs. No PAHs were detected above the laboratory RLs (0.0050 mg/kg) in any other soil sample.

TABLE 4
Selected Analytical Results for LUFT 5 Metals in Soil (reported in mg/kg)
1607 2nd Avenue, Oakland, CA

San	npie	Metals					
ID	Depth (ft bgs)	Cadmium	Chromium	Chromium VI	Lead	Nickel	Zinc
B-5-5	5	ND<0.25	83	ND<4.0	9.2	73	68
B-2-8	8	ND<0.25	66	ND<4.0	5.5	63	41
B-3-7.5	7.5	0.26	53	ND<4.0	7.8	43	53
B-3-10	10	0.36	66	ND<4.0	9.8	110	65
				ESLs			
Tier 1	ESL	0.00006	N/A	1.3	80	83	23,000
Tier 2	ESL	0.014	N/A	1.3	80	820	23,000

mg/kg = milligrams per kilograms; ft bgs = feet below ground surface; ND<1.0 = not detected with a reporting limit of 1.0; N/A = ESL not listed.

ESLs = San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (February 22, 2016). Tier 1 ESLs based on: groundwater is a current or potential drinking water resource; Tier 2 ESLs (Table T2-1) based on: (1) groundwater is a current or potential drinking water resource; (2) groundwater depth is greater than or equal to 10 ft bgs; (3) the soil type is sandy; and (4) the soil depth for direct exposure is shallow (less than or equal to 10 ft bgs).

Numbers in **bold** indicate concentrations exceeding ESLs. LUFT 5 metals analyzed by EPA Method 6020.

SCHUTZE & Associates, Inc. / March 2016

#### Metals

Lead and zinc were detected in all analyzed samples at concentrations below the corresponding ESLs.

Cadmium was detected above the RL of 0.25 mg/kg in two of the analyzed samples. The detected concentrations of 0.26 and 0.36 mg/kg (boring B3) exceeded the Tier 1 and Tier 2 ESLs of 0.00006 and 0.014 mg/kg, respectively. These values may have been listed incorrectly in the newly published ESLs; previous December 2013 ESLs were between 12 and 78 mg/kg for cadmium. Naturally occurring cadmium concentrations in the Oakland area have been found to be between 0.25 and 2.9

<sup>&</sup>lt;sup>12</sup> San Francisco Bay Water Board ESLs, Tables A-1 and C-1, December 2013

# **Analytical Report**

Client: Schutze & Associates, Inc.

Date Received: 2/16/16 20:36

Date Prepared: 2/16/16

SCS539: Tung Project:

WorkOrder:

1602592

Extraction Method: SW5030B

Analytical Method: SW8260B

Unit:

mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

tert-Arnyl methyl ether (TAME)         ND         0.0050         1         02/19/2016 162           Benzene         ND         0.0050         1         02/19/2016 162           Bromobenzene         ND         0.0050         1         02/19/2016 162           Bromobenzene         ND         0.0050         1         02/19/2016 162           Bromodribloromethane         ND         0.0050         1         02/19/2016 162           Bromoform         ND         0.0050         1         02/19/2016 162           Browly Jack Promore         ND         0.0050         1         02/19/2016 162           Beatyl Jack Promore         ND         0.0050         1         02/19/2016 162	Client ID	Lab ID Matı	ix Date Collected Instrument	Batch ID
Acetane   ND	B-5-5	1602592-002A Soil	02/12/2016 10:00 GC18	116749
tert-Arnyl methyl ether (TAME)         ND         0.0050         1         02/19/2016 162           Benzene         ND         0.0050         1         02/19/2016 162           Bromobenzene         ND         0.0050         1         02/19/2016 162           Bromochloromethane         ND         0.0050         1         02/19/2016 162           Bromodichloromethane         ND         0.0050         1         02/19/2016 162           Bromoform         ND         0.0050         1         02/19/2016 162           Brought Separate         ND         0.0050         1         02/19/2016 162	Analytes	Result	RL DE	Date Analyzed
Berzene   ND	Acetone	ND	0.10 1	02/19/2016 16:22
Bromobenzene   ND	tert-Amyl methyl ether (TAME)	ND	0.0050 1	02/19/2016 16:22
Bromochloromethane   ND	Benzene	ND	0.0050 1	02/19/2016 16:22
Bromodichloromethane   ND	Bromobenzene	ND	0.0050 1	02/19/2016 16:22
Bromotorm	Bromochloromethane	ND	0.0050 1	02/19/2016 16:22
Bromomethane   ND	Bromodichloromethane	ND	0.0050 1	02/19/2016 16:22
2-Butanone (MEK) ND 0.020 1 02/19/2016 16:2 1-Butyl alcohol (TBA) ND 0.050 1 02/19/2016 16:2 1-Butyl benzene ND 0.0050 1 02/19/2016 16:2 tert-Butyl benzene ND 0.0050 1 02/19/2016 16:2 tert-Butyl benzene ND 0.0050 1 02/19/2016 16:2 Carbon Disulfide ND 0.0050 1 02/19/2016 16:2 Carbon Disulfide ND 0.0050 1 02/19/2016 16:2 Carbon Tetrachloride ND 0.0050 1 02/19/2016 16:2 Chlorobenzene ND 0.0050 1 02/19/2016 16:2 Chlorobenzene ND 0.0050 1 02/19/2016 16:2 Chlorotenane ND 0.0050 1 02/19/2016 16:2 Dibromochloromethane ND 0.0050 1 02/19/2016 16:2 Dibromochlorone ND 0.0050 1 02/19/2016 16:2 Dibromochlane (EDB) ND 0.0050 1 02/19/2016 16:2 Dichlorotenane ND 0.0050 1 02/19/2016 16:2	Bromoform	ND	0.0050 1	02/19/2016 16:22
t-Butyl alcohol (TBA) ND 0.050 1 02/19/2016 16:2 n-Butyl benzene ND 0.0050 1 02/19/2016 16:2 sec-Butyl benzene ND 0.0050 1 02/19/2016 16:2 sec-Butyl benzene ND 0.0050 1 02/19/2016 16:2 Carbon Disulfide ND 0.0050 1 02/19/2016 16:2 Carbon Disulfide ND 0.0050 1 02/19/2016 16:2 Carbon Disulfide ND 0.0050 1 02/19/2016 16:2 Carbon Tetrachloride ND 0.0050 1 02/19/2016 16:2 Chlorobenzene ND 0.0050 1 02/19/2016 16:2 Chlorobenzene ND 0.0050 1 02/19/2016 16:2 Chlorothane ND 0.0050 1 02/19/2016 16:2 C-Chlorotoluene ND 0.0050 1 02/19/2016 16:2 C-Chlorothorothoromethane ND 0.0050 1 02/19/2016 16:2 C-Chlorothorothorothoromethane ND 0.0050 1 02/19/2016 16:2 C-Chlorothorothorothoromethane ND 0.0050 1 02/19/2016 16:2 C-Chlorothorothorothorothorothorothorothoro	Bromomethane	ND	0.0050 1	02/19/2016 16:22
n-Butyl benzene         ND         0.0050         1         02/19/2016 16:2           sec-Butyl benzene         ND         0.0050         1         02/19/2016 16:2           Lert-Butyl benzene         ND         0.0050         1         02/19/2016 16:2           Carbon Disulfide         ND         0.0050         1         02/19/2016 16:2           Carbon Disulfide         ND         0.0050         1         02/19/2016 16:2           Chiorobenzene         ND         0.0050         1         02/19/2016 16:2           Chiorobenzene         ND         0.0050         1         02/19/2016 16:2           Chioroethane         ND         0.0050         1         02/19/2016 16:2           Chloromethane         ND         0.0050         1         02/19/2016 16:2           C-Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           2-Chlorotoluene         ND         0.0050         1         02/19	2-Butanone (MEK)	ND	0.020 1	02/19/2016 16:22
sec-Butyl benzene         ND         0.0050         1         02/19/2016 16:2           tert-Butyl benzene         ND         0.0050         1         02/19/2016 16:2           Carbon Disulfide         ND         0.0050         1         02/19/2016 16:2           Carbon Tetrachloride         ND         0.0050         1         02/19/2016 16:2           Chlorobenzene         ND         0.0050         1         02/19/2016 16:2           Chloroferm         ND         0.0050         1         02/19/2016 16:2           Chloroform         ND         0.0050         1         02/19/2016 16:2           Chlorofoluene         ND         0.0050         1         02/19/2016 16:2           Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           C-Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           4-Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           4-Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           4-Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           1,2-Dibromochloromethane         ND         0.0050         1 <th< td=""><td>t-Butyl alcohol (TBA)</td><td>ND</td><td>0.050 1</td><td>02/19/2016 16:22</td></th<>	t-Butyl alcohol (TBA)	ND	0.050 1	02/19/2016 16:22
tert-Butyl benzene         ND         0.0050         1         02/19/2016 16:2           Carbon Disulfide         ND         0.0050         1         02/19/2016 16:2           Carbon Tetrachloride         ND         0.0050         1         02/19/2016 16:2           Chiorobenzene         ND         0.0050         1         02/19/2016 16:2           Chlorotethane         ND         0.0050         1         02/19/2016 16:2           Chlorotom         ND         0.0050         1         02/19/2016 16:2           Chlorotomethane         ND         0.0050         1         02/19/2016 16:2           Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           2-Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           1/2-Dibromo-3-chloropropane         ND         0.0050         1         02/19/2016 16:2           1/2-Dibromo-3-chloropropane         ND         0.0040         1	n-Butyl benzene	ND	0.0050 1	02/19/2016 16:22
Carbon Disulfide         ND         0.0050         1         02/19/2016 16:2           Carbon Tetrachloride         ND         0.0050         1         02/19/2016 16:2           Chlorobenzene         ND         0.0050         1         02/19/2016 16:2           Chloroethane         ND         0.0050         1         02/19/2016 16:2           Chloroform         ND         0.0050         1         02/19/2016 16:2           Chloromethane         ND         0.0050         1         02/19/2016 16:2           2-Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           2-Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           4-Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           4-Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           4-Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           1/2-Dibromoethane         ND         0.0050         1         02/19/2016 16:2           1/2-Dibromoethane         ND         0.0040         1         02/19/2016 16:2           1/2-Dichlorobenzene         ND         0.0050         1         0	sec-Butyl benzene	ND	0.0050 1	02/19/2016 16:22
Carbon Tetrachloride         ND         0.0050         1         02/19/2016 16:2           Chlorobenzene         ND         0.0050         1         02/19/2016 16:2           Chloroethane         ND         0.0050         1         02/19/2016 16:2           Chloroform         ND         0.0050         1         02/19/2016 16:2           Chloromethane         ND         0.0050         1         02/19/2016 16:2           2-Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           2-Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           4-Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           Dibromochloromethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dibromo-3-chloropropane         ND         0.0050         1         02/19/2016 16:2           1,2-Dibromoethane (EDB)         ND         0.0040         1         02/19/2016 16:2           1,2-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,3-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,4-Dichlorobenzene         ND         0.0050	tert-Butyl benzene	ND	0.0050 1	02/19/2016 16:22
Chlorobenzene ND 0.0050 1 02/19/2016 16:2 Chloroethane ND 0.0050 1 02/19/2016 16:2 Chloroform ND 0.0050 1 02/19/2016 16:2 Chloromethane ND 0.0050 1 02/19/2016 16:2 2-Chlorotoluene ND 0.0050 1 02/19/2016 16:2 2-Chlorotoluene ND 0.0050 1 02/19/2016 16:2 Dibromochloromethane ND 0.0050 1 02/19/2016 16:2 Dibromomethane (EDB) ND 0.0040 1 02/19/2016 16:2 Dibromomethane ND 0.0050 1 02/19/2016 16:2 Dibromomethane ND 0.0050 1 02/19/2016 16:2 1,2-Dichlorobenzene ND 0.0050 1 02/19/2016 16:2 1,3-Dichlorobenzene ND 0.0050 1 02/19/2016 16:2 1,4-Dichlorobenzene ND 0.0050 1 02/19/2016 16:2 1,4-Dichlorobenzene ND 0.0050 1 02/19/2016 16:2 1,1-Dichloroethane ND 0.0050 1 02/19/2016 16:2 1,2-Dichloroethane ND 0.0050 1 02/19/2016 16:2 1,3-Dichloroethane ND 0.0050 1 02/19/2016 16:2 1,3-Dichloroethane ND 0.0050 1 02/19/2016 16:2	Carbon Disulfide	ND	0.0050 1	02/19/2016 16:22
Chloroethane         ND         0.0050         1         02/19/2016 16:2           Chloroform         ND         0.0050         1         02/19/2016 16:2           Chloromethane         ND         0.0050         1         02/19/2016 16:2           2-Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           4-Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           4-Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           4-Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           Dibromochloromethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dibromoethane (EDB)         ND         0.0040         1         02/19/2016 16:2           1,2-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,3-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,4-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,1-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,1-Dichloroethane         ND         0.0050         1	Carbon Tetrachloride	ND	0.0050 1	02/19/2016 16:22
Chloroform   ND   0.0050   1   02/19/2016 16:2	Chlorobenzene	ND	0.0050 1	02/19/2016 16:22
Chloromethane	Chloroethane	ND	0.0050 1	02/19/2016 16:22
2-Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           4-Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           Dibromochloromethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dibromo-3-chloropropane         ND         0.0040         1         02/19/2016 16:2           1,2-Dibromoethane (EDB)         ND         0.0040         1         02/19/2016 16:2           1,2-Dibriomoethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,3-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,4-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,4-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,1-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,1-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           1,1-Dichloroethene         ND	Chloroform	ND	0.0050 1	02/19/2016 16:22
4-Chlorotoluene         ND         0.0050         1         02/19/2016 16:2           Dibromochloromethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dibromo-3-chloroproparie         ND         0.0040         1         02/19/2016 16:2           1,2-Dibromoethane (EDB)         ND         0.0040         1         02/19/2016 16:2           Dibromomethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,3-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,4-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           Dichlorodiflucromethane         ND         0.0050         1         02/19/2016 16:2           1,1-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloroethane (1,2-DCA)         ND         0.0040         1         02/19/2016 16:2           1,1-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           trans-1,2-Dichloroethene	Chloromethane	ND	0.0050 1	02/19/2016 16:22
Dibromochloromethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dibromo-3-chloropropane         ND         0.0040         1         02/19/2016 16:2           1,2-Dibromoethane (EDB)         ND         0.0040         1         02/19/2016 16:2           1,2-Dibromomethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,3-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,4-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,1-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloroethane (1,2-DCA)         ND         0.0050         1         02/19/2016 16:2           1,1-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,1-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloroethane	2-Chlorotoluene	ND	0.0050 1	02/19/2016 16:22
1,2-Dibromo-3-chloropropane         ND         0.0040         1         02/19/2016 16:2           1,2-Dibromoethane (EDB)         ND         0.0040         1         02/19/2016 16:2           Dibromomethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,3-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,4-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           Dichlorodiflucromethane         ND         0.0050         1         02/19/2016 16:2           1,1-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,1-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           1,1-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloropropane         ND <td>4-Chlorotoluene</td> <td>ND</td> <td>0.0050 1</td> <td>02/19/2016 16:22</td>	4-Chlorotoluene	ND	0.0050 1	02/19/2016 16:22
1,2-Dibromoethane (EDB)         ND         0.0040         1         02/19/2016 16:2           Dibromomethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,3-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,4-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           Dichlorodifluoromethane         ND         0.0050         1         02/19/2016 16:2           1,1-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloroethane (1,2-DCA)         ND         0.0040         1         02/19/2016 16:2           1,1-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           cis-1,2-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           trans-1,2-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloropropane         ND         0.0050         1         02/19/2016 16:2           1,3-Dichloropropane         ND         0.0050         1         02/19/2016 16:2	Dibromochloromethane	ND	0.0050 1	02/19/2016 16:22
Dibromomethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,3-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,4-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           Dichlorodifluoromethane         ND         0.0050         1         02/19/2016 16:2           1,1-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloroethane (1,2-DCA)         ND         0.0040         1         02/19/2016 16:2           1,1-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,1-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,1-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           trans-1,2-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloropropane         ND         0.0050         1         02/19/2016 16:2           1,3-Dichloropropane         ND	1,2-Dibromo-3-chloroproparte	ND	0.0040 1	02/19/2016 16:22
1,2-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,3-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,4-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           Dichlorodifluoromethane         ND         0.0050         1         02/19/2016 16:2           1,1-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloroethane (1,2-DCA)         ND         0.0040         1         02/19/2016 16:2           1,1-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           cis-1,2-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           trans-1,2-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           trans-1,2-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloropropane         ND         0.0050         1         02/19/2016 16:2           1,3-Dichloropropane         ND         0.0050         1         02/19/2016 16:2	1,2-Dibromoethane (EDB)	ND	0.0040 1	02/19/2016 16:22
1,3-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           1,4-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           Dichlorodifluoromethane         ND         0.0050         1         02/19/2016 16:2           1,1-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloroethane (1,2-DCA)         ND         0.0040         1         02/19/2016 16:2           1,1-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           cis-1,2-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           trans-1,2-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloropropane         ND         0.0050         1         02/19/2016 16:2           1,3-Dichloropropane         ND         0.0050         1         02/19/2016 16:2	Dibromomethane	ND	0.0050 1	02/19/2016 16:22
1,4-Dichlorobenzene         ND         0.0050         1         02/19/2016 16:2           Dichlorodifluoromethane         ND         0.0050         1         02/19/2016 16:2           1,1-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloroethane (1,2-DCA)         ND         0.0040         1         02/19/2016 16:2           1,1-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           cis-1,2-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           trans-1,2-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloropropane         ND         0.0050         1         02/19/2016 16:2           1,3-Dichloropropane         ND         0.0050         1         02/19/2016 16:2	1,2-Dichlorobenzene	ND	0.0050 1	02/19/2016 16:22
Dichlorodifluoromethane         ND         0.0050         1         02/19/2016 16:2           1,1-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloroethane (1,2-DCA)         ND         0.0040         1         02/19/2016 16:2           1,1-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           cis-1,2-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           trans-1,2-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloropropane         ND         0.0050         1         02/19/2016 16:2           1,3-Dichloropropane         ND         0.0050         1         02/19/2016 16:2	1,3-Dichlorobenzene	ND	0.0050 1	02/19/2016 16:22
1,1-Dichloroethane         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloroethane (1,2-DCA)         ND         0.0040         1         02/19/2016 16:2           1,1-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           cis-1,2-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           trans-1,2-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloropropane         ND         0.0050         1         02/19/2016 16:2           1,3-Dichloropropane         ND         0.0050         1         02/19/2016 16:2	1,4-Dichiorobenzene	ND	0.0050 1	02/19/2016 16:22
1,2-Dichloroethane (1,2-DCA)       ND       0.0040       1       02/19/2016 16:2         1,1-Dichloroethene       ND       0.0050       1       02/19/2016 16:2         cis-1,2-Dichloroethene       ND       0.0050       1       02/19/2016 16:2         trans-1,2-Dichloroethene       ND       0.0050       1       02/19/2016 16:2         1,2-Dichloropropane       ND       0.0050       1       02/19/2016 16:2         1,3-Dichloropropane       ND       0.0050       1       02/19/2016 16:2	Dichlorodifluoromethane	ND	0.0050 1	02/19/2016 16:22
1,1-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           cis-1,2-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           trans-1,2-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloropropane         ND         0.0050         1         02/19/2016 16:2           1,3-Dichloropropane         ND         0.0050         1         02/19/2016 16:2	1,1-Dichloroethane	ND	0.0050 1	02/19/2016 16:22
1,1-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           cis-1,2-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           trans-1,2-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloropropane         ND         0.0050         1         02/19/2016 16:2           1,3-Dichloropropane         ND         0.0050         1         02/19/2016 16:2	1,2-Dichioroethane (1,2-DCA)	ND	0.0040 1	02/19/2016 16:22
trans-1,2-Dichloroethene         ND         0.0050         1         02/19/2016 16:2           1,2-Dichloropropane         ND         0.0050         1         02/19/2016 16:2           1,3-Dichloropropane         ND         0.0050         1         02/19/2016 16:2		ND	0.0050 1	02/19/2016 16:22
1,2-Dichloropropane         ND         0.0050         1         02/19/2016 16:2           1,3-Dichloropropane         ND         0.0050         1         02/19/2016 16:2	cis-1,2-Dichloroethene	ND	0.0050 1	02/19/2016 16:22
1,3-Dichloropropane ND 0.0050 1 02/19/2016 16:2	trans-1,2-Dichloroethene	ND	0.0050 1	02/19/2016 16:22
1,5	1,2-Dichloropropane	ND	0.0050 1	02/19/2016 16:22
2,2-Dichloropropane ND 0.0050 1 02/19/2016 16:2	1,3-Dichloropropane	ND	0.0050 1	02/19/2016 16:22
	2,2-Dichloropropane	ND	0.0050 1	02/19/2016 16:22

(Cont.)

Angela Rydelius, Lab Manager

### **Analytical Report**

Client:

Schutze & Associates, Inc.

**Date Received:** 2/16/16 20:36

Date Prepared: 2/16/16

Project:

SCS539; Tung

WorkOrder:

1602592

Extraction Method: SW5030B

Analytical Method: SW8260B

Unit:

mg/kg

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5-5	1602592-002A	Soil	02/12/2016 10:00	GC18	116749
Analytes	Result	<u>-</u> -	RL DF		Date Analyzed
1,1-Dichloropropene	ND		0.0050 1		02/19/2016 16:22
cis-1,3-Dichlогоргореле	ND		0.0050 1		02/19/2016 16:22
trans-1,3-Dichloropropene	ND		0.0050 1		02/19/2016 16:22
Diisopropyl ether (DIPE)	ND		0.0050 1		02/19/2016 16:22
Ethylbenzene	ND		0.0050 1		02/19/2016 16:22
Ethyl tert-butyl ether (ETBE)	ND		0.0050 1		02/19/2016 16:22
Freon 113	ND		0.0050 1		02/19/2016 16:22
Hexachlorobutadiene	ND		0.0050 1		02/19/2016 16:22
Hexachloroethane	ND		0.0050 1		02/19/2016 16:22
2-Hexanone	ND		0.0050 1		02/19/2016 16:22
isopropylbenzene	ND		0.0050 1		02/19/2016 16:22
4-isopropyl toluene	ND		0.0050 1		02/19/2016 16:22
Methyl-t-butyl ether (MTBE)	ND		0.0050 1		02/19/2016 16:22
Methylene chloride	ND		0.0050 1		02/19/2016 16:22
4-Methyl-2-pentanone (MIBK)	ND		0.0050 1		02/19/2016 16:22
Naphthalene	ND		0.0050 1		02/19/2016 16:22
n-Propyl benzene	ND		0.0050 1		02/19/2016 16:22
Styrene	ND		0.0050 1		02/19/2016 16:22
1,1,1,2-Tetrachloroethane	ND		0.0050 1		02/19/2016 16:22
1,1,2,2-Tetrachloroethane	ND		0.0050 1		02/19/2016 16:22
Tetrachloroethene	ND		0.0050 1		02/19/2016 16:22
Toluene	ND		0.0050 1		02/19/2016 16:22
1,2,3-Trichlorobenzene	ND		0.0050 1		02/19/2016 16:22
1,2,4-Trichiorobenzene	ND		0.0050 1		02/19/2016 16:22
1,1,1-Trichioroethane	ND		0.0050 1		02/19/2016 16:22
1,1,2-Trichloroethane	ND		0.0050 1		02/19/2016 16:22
Trichloroethene	ND		0.0050 1		02/19/2016 16:22
Trichlorofluoromethane	ND		0.0050 1		02/19/2016 16:22
1,2,3-Trichloropropane	ND		0.0050 1		02/19/2016 16:22
1,2,4-Trimethylbenzene	ND		0.0050 1		02/19/2016 16:22
1,3,5-Trimethylbenzene	ND		0.0050 1		02/19/2016 16:22
Vinyl Chloride	ND		0.0050 1		02/19/2016 16:22
Xylenes, Total	ND		0.0050 1	-	02/19/2016 16:22



### **Analytical Report**

Client:

Schutze & Associates, Inc.

**Date Received: 2/16/16 20:36** 

Date Prepared: 2/16/16

**Project:** 

SCS539; Tung

WorkOrder:

1602592

**Extraction Method: SW5030B** 

Analytical Method: SW8260B

Unit:

mg/kg

Client ID	Lab ID Matrix	Date Collected Instrument	Batch ID
B-5-5	1602592-002A Soil	02/12/2016 10:00 GC18	116749
<u>Analytes</u>	Result	RL DF	Date Analyzed
Surrogates	REC (%)	Limits	
Dibromofluoromethane	117	70-130	02/19/2016 16:22
Toluene-d8	113	70-130	02/19/2016 16:22
4-BFB	88	70-130	02/19/2016 16:22
Benzene-d6	121	60-140	02/19/2016 16:22
Ethylbenzene-d10	108	60-140	02/19/2016 16:22
1,2-DCB-d4	109	60-140	02/19/2016 16:22
Analyst(s): AK			

# **Analytical Report**

Client:

Schutze & Associates, Inc.

Date Received: 2/16/16 20:36

Date Prepared: 2/16/16

Project:

SCS539; Tung

WorkOrder:

1602592

Extraction Method: SW5030B

Analytical Method: SW8260B

Unit:

mg/kg

#### Volatile Organics by P&T and GC/MS (Basic Target List)

Analytes         Result         RL         DF         Date Analytes           Acetone         ND         6.7         67         02/20/2016           tert-Amyl methyl ether (TAME)         ND         0.33         67         02/20/2016           Benzene         ND         0.33         67         02/20/2016           Bromobenzene         ND         0.33         67         02/20/2016           Bromochloromethane         ND         0.33         67         02/20/2016           Bromoform         ND         0.33         67         02/20/2016           Bromomethane         ND         0.33         67         02/20/2016           2-Butanone (MEK)         ND         1.3         67         02/20/2016           2-Butanone (MEK)         ND         3.3         67         02/20/2016           t-Butyl alcohol (TBA)         ND         3.3         67         02/20/2016           t-Butyl benzene         ND         0.33         67         02/20/2016           tert-Butyl benzene         ND         0.33         67         02/20/2016           Carbon Disulfide         ND         0.33         67         02/20/2016           Carbon Tetrachloride         ND	tch ID
Acetone         ND         6.7         67         02/20/2016           tert-Arnyl methyl ether (TAME)         ND         0.33         67         02/20/2016           Benzene         ND         0.33         67         02/20/2016           Bromobenzene         ND         0.33         67         02/20/2016           Bromochloromethane         ND         0.33         67         02/20/2016           Bromoform         ND         0.33         67         02/20/2016           Bromomethane         ND         0.33         67         02/20/2016           2-Butanone (MEK)         ND         1.3         67         02/20/2016           t-Butyl alcohol (TBA)         ND         3.3         67         02/20/2016           t-Butyl benzene         ND         0.33         67         02/20/2016           sec-Butyl benzene         ND         0.33         67         02/20/2016           tert-Butyl benzene         ND         0.33         67         02/20/2016           Carbon Disulfide         ND         0.33         67         02/20/2016           Carbon Tetrachloride         ND         0.33         67         02/20/2016           Chlorobenzene <td< th=""><th>6749</th></td<>	6749
tert-Amyl methyl ether (TAME)         ND         0.33         67         02/20/2010           Benzene         ND         0.33         67         02/20/2010           Bromobenzene         ND         0.33         67         02/20/2010           Bromochloromethane         ND         0.33         67         02/20/2010           Bromoform         ND         0.33         67         02/20/2010           Bromomethane         ND         0.33         67         02/20/2010           2-Butanone (MEK)         ND         1.3         67         02/20/2010           t-Butyl alcohol (TBA)         ND         3.3         67         02/20/2010           t-Butyl benzene         ND         0.33         67         02/20/2010           sec-Butyl benzene         ND         0.33         67         02/20/2010           tert-Butyl benzene         ND         0.33         67         02/20/2010           Carbon Disulfide         ND         0.33         67         02/20/2010           Carbon Tetrachloride         ND         0.33         67         02/20/2010           Chlorobenzene         ND         0.33         67         02/20/2010           Chloroform	/zed
Benzene         ND         0.33         67         02/20/2016           Bromobenzene         ND         0.33         67         02/20/2016           Bromochloromethane         ND         0.33         67         02/20/2016           Bromoform         ND         0.33         67         02/20/2016           Bromomethane         ND         0.33         67         02/20/2016           Bromomethane         ND         0.33         67         02/20/2016           2-Butanone (MEK)         ND         1.3         67         02/20/2016           1-Butyl alcohol (TBA)         ND         3.3         67         02/20/2016           1-Butyl benzene         ND         0.33         67         02/20/2016           1-Butyl benzene         ND         <	3 13:01
Bromobenzene         ND         0.33         67         02/20/2016           Bromochloromethane         ND         0.33         67         02/20/2016           Bromodichloromethane         ND         0.33         67         02/20/2016           Bromoform         ND         0.33         67         02/20/2016           Bromomethane         ND         0.33         67         02/20/2016           2-Butanone (MEK)         ND         1.3         67         02/20/2016           1-Butyl alcohol (TBA)         ND         3.3         67         02/20/2016           n-Butyl benzene         ND         0.33         67         02/20/2016           sec-Butyl benzene         ND         0.33         67         02/20/2016           tert-Butyl benzene         ND         0.33         67         02/20/2016           Carbon Disulfide         ND         0.33         67         02/20/2016           Carbon Tetrachloride         ND         0.33         67         02/20/2016           Chlorobenzene         ND         0.33         67         02/20/2016           Chloroform         ND         0.33         67         02/20/2016	3 13:01
Bromochloromethane         ND         0.33         67         02/20/2016           Bromodichloromethane         ND         0.33         67         02/20/2016           Bromoform         ND         0.33         67         02/20/2016           Bromomethane         ND         0.33         67         02/20/2016           2-Butanone (MEK)         ND         1.3         67         02/20/2016           t-Butyl alcohol (TBA)         ND         3.3         67         02/20/2016           n-Butyl benzene         ND         0.33         67         02/20/2016           sec-Butyl benzene         ND         0.33         67         02/20/2016           tert-Butyl benzene         ND         0.33         67         02/20/2016           Carbon Disulfide         ND         0.33         67         02/20/2016           Carbon Tetrachloride         ND         0.33         67         02/20/2016           Chlorobenzene         ND         0.33         67         02/20/2016           Chloroethane         ND         0.33         67         02/20/2016           Chloroform         ND         0.33         67         02/20/2016	3 13:01
Bromodichloromethane         ND         0.33         67         02/20/2016           Bromoform         ND         0.33         67         02/20/2016           Bromomethane         ND         0.33         67         02/20/2016           2-Butanone (MEK)         ND         1.3         67         02/20/2016           t-Butyl alcohol (TBA)         ND         3.3         67         02/20/2016           n-Butyl benzene         ND         0.33         67         02/20/2016           sec-Butyl benzene         ND         0.33         67         02/20/2016           tert-Butyl benzene         ND         0.33         67         02/20/2016           Carbon Disulfide         ND         0.33         67         02/20/2016           Carbon Tetrachloride         ND         0.33         67         02/20/2016           Chlorobenzene         ND         0.33         67         02/20/2016           Chloroethane         ND         0.33         67         02/20/2016           Chloroform         ND         0.33         67         02/20/2016	3 13:01
Bromoform         ND         0.33         67         02/20/2016           Bromomethane         ND         0.33         67         02/20/2016           2-Butanone (MEK)         ND         1.3         67         02/20/2016           t-Butyl alcohol (TBA)         ND         3.3         67         02/20/2016           n-Butyl benzene         ND         0.33         67         02/20/2016           sec-Butyl benzene         ND         0.33         67         02/20/2016           tert-Butyl benzene         ND         0.33         67         02/20/2016           Carbon Disulfide         ND         0.33         67         02/20/2016           Carbon Tetrachloride         ND         0.33         67         02/20/2016           Chlorobenzene         ND         0.33         67         02/20/2016           Chloroform         ND         0.33         67         02/20/2016           Chloroform         ND         0.33         67         02/20/2016	3 13:01
Bromomethane         ND         0.33         67         02/20/2016           2-Butanone (MEK)         ND         1.3         67         02/20/2016           t-Butyl alcohol (TBA)         ND         3.3         67         02/20/2016           n-Butyl benzene         ND         0.33         67         02/20/2016           sec-Butyl benzene         ND         0.33         67         02/20/2016           tert-Butyl benzene         ND         0.33         67         02/20/2016           Carbon Disulfide         ND         0.33         67         02/20/2016           Carbon Tetrachloride         ND         0.33         67         02/20/2016           Chlorobenzene         ND         0.33         67         02/20/2016           Chloroethane         ND         0.33         67         02/20/2016           Chloroform         ND         0.33         67         02/20/2016	3 13:01
2-Butanone (MEK)         ND         1.3         67         02/20/2010           t-Butyl alcohol (TBA)         ND         3.3         67         02/20/2010           n-Butyl benzene         ND         0.33         67         02/20/2010           sec-Butyl benzene         ND         0.33         67         02/20/2010           tert-Butyl benzene         ND         0.33         67         02/20/2010           Carbon Disulfide         ND         0.33         67         02/20/2010           Carbon Tetrachloride         ND         0.33         67         02/20/2010           Chlorobenzene         ND         0.33         67         02/20/2010           Chloroethane         ND         0.33         67         02/20/2010           Chloroform         ND         0.33         67         02/20/2010	3 13:01
t-Butyl alcohol (TBA) ND 3.3 67 02/20/2016 n-Butyl benzene ND 0.33 67 02/20/2016 sec-Butyl benzene ND 0.33 67 02/20/2016 tert-Butyl benzene ND 0.33 67 02/20/2016 Carbon Disulfide ND 0.33 67 02/20/2016 Carbon Tetrachloride ND 0.33 67 02/20/2016 Chloroethane ND 0.33 67 02/20/2016 Chloroform ND 0.33 67 02/20/2016 Chloroform ND 0.33 67 02/20/2016	3 13:01
n-Butyl benzene         ND         0.33         67         02/20/2016           sec-Butyl benzene         ND         0.33         67         02/20/2016           tert-Butyl benzene         ND         0.33         67         02/20/2016           Carbon Disulfide         ND         0.33         67         02/20/2016           Carbon Tetrachloride         ND         0.33         67         02/20/2016           Chlorobenzene         ND         0.33         67         02/20/2016           Chloroethane         ND         0.33         67         02/20/2016           Chloroform         ND         0.33         67         02/20/2016	3 13:01
sec-Butyl benzene         ND         0.33         67         02/20/2016           tert-Butyl benzene         ND         0.33         67         02/20/2016           Carbon Disulfide         ND         0.33         67         02/20/2016           Carbon Tetrachloride         ND         0.33         67         02/20/2016           Chlorobenzene         ND         0.33         67         02/20/2016           Chloroethane         ND         0.33         67         02/20/2016           Chloroform         ND         0.33         67         02/20/2016	3 13:01
tert-Butyl benzene         ND         0.33         67         02/20/2016           Carbon Disulfide         ND         0.33         67         02/20/2016           Carbon Tetrachloride         ND         0.33         67         02/20/2016           Chlorobenzene         ND         0.33         67         02/20/2016           Chloroethane         ND         0.33         67         02/20/2016           Chloroform         ND         0.33         67         02/20/2016           Chloroform         ND         0.33         67         02/20/2016	3 13:01
Carbon Disulfide         ND         0.33         67         02/20/2016           Carbon Tetrachloride         ND         0.33         67         02/20/2016           Chlorobenzene         ND         0.33         67         02/20/2016           Chloroethane         ND         0.33         67         02/20/2016           Chloroform         ND         0.33         67         02/20/2016	3 13:01
Carbon Tetrachloride         ND         0.33         67         02/20/2010           Chlorobenzene         ND         0.33         67         02/20/2010           Chloroethane         ND         0.33         67         02/20/2010           Chloroform         ND         0.33         67         02/20/2010           Chloroform         ND         0.33         67         02/20/2010	3 13:01
Chlorobenzene         ND         0.33         67         02/20/2016           Chloroethane         ND         0.33         67         02/20/2016           Chloroform         ND         0.33         67         02/20/2016           Chloroform         ND         0.33         67         02/20/2016	3 13:01
Chloroethane         ND         0.33         67         02/20/2010           Chloroform         ND         0.33         67         02/20/2010	3 13:01
Chloroform         ND         0.33         67         02/20/2016	3 13:01
CINCIONII 10	3 13:01
	3 13:01
Chloromethane ND 0.33 67 02/20/2010	3 13:01
2-Chiorotoluene ND 0.33 67 02/20/2010	3 13:01
<b>4-Chlorotoluene</b> ND 0.33 67 02/20/2010	3 13:01
Dibromochloromethane ND 0.33 67 02/20/2010	3 13:01
1,2-Dibromo-3-chloropropane ND 0.27 67 02/20/2010	3 13:01
1,2-Dibromoethane (EDB) ND 0.27 67 02/20/2010	3 13:01
Dibromomethane ND 0.33 67 02/20/2010	3 13:01
1,2-Dichlorobenzene ND 0.33 67 02/20/2010	3 13:01
1,3-Dichlorobenzene ND 0.33 67 02/20/2010	3 13:01
1,4-Dichlorobenzene ND 0.33 67 02/20/2010	3 13:01
Dichlorodifluoromethane ND 0.33 67 02/20/2010	3 13:01
1,1-Dichloroethane ND 0.33 67 02/20/2010	3 13:01
1,2-Dichloroethane (1,2-DCA) ND 0.27 67 02/20/2010	3 13:01
1,1-Dichloroethene ND 0.33 67 02/20/2010	3 13:01
cis-1,2-Dichloroethene ND 0.33 67 02/20/2010	3 13:01
trans-1,2-Dichloroethene ND 0.33 67 02/20/201	3 13:01
1,2-Dichloropropane ND 0.33 67 02/20/201	3 13:01
1,3-Dichloropropane ND 0.33 67 02/20/2010	3 13:01
2,2-Dichloropropane ND 0.33 67 02/20/2010	3 13:01

(Cont.)

Angela Rydelius, Lab Manager

# **Analytical Report**

**Client:** Schutze & Associates, Inc.

**Date Received:** 2/16/16 20:36

Date Prepared: 2/16/16

Project:

SCS539: Tung

WorkOrder:

1602592

Extraction Method: SW5030B

Analytical Method: SW8260B

Unit:

mg/kg

Client ID	Lab ID	Matrix	Date Co	ollected Instrument	Batch ID
B-3-7.5	1602592-008A	Soil	02/12/20	16 08:30 GC10	116749
Analytes	Result		RL	DF	Date Analyzed
1,1-Dichloropropene	ND		0.33	67	02/20/2016 13:01
cis-1,3-Dichloropropene	ND		0.33	67	02/20/2016 13:01
trans-1,3-Dichloropropene	ND		0.33	67	02/20/2016 13:01
Diisopropyl ether (DIPE)	ND		0.33	67	02/20/2016 13:01
Ethylbenzene	ND		0.33	67	02/20/2016 13:01
Ethyl tert-butyl ether (ETBE)	ND	-	0.33	67	02/20/2016 13:01
Freon 113	ND		0.33	67	02/20/2016 13:01
Hexachiorobutadiene	ND		0.33	67	02/20/2016 13:01
Hexachloroethane	ND		0.33	67	02/20/2016 13:01
2-Hexanone	ND		0.33	67	02/20/2016 13:01
Isopropylbenzene	ND		0.33	67	02/20/2016 13:01
4-Isopropyl toluene	ND		0.33	67	02/20/2016 13:0
Methyl-t-butyl ether (MTBE)	ND		0.33	67	02/20/2016 13:0
Methylene chloride	ND	-	0.33	67	02/20/2016 13:0
4-Methyl-2-pentanone (MIBK)	ND		0.33	67	02/20/2016 13:01
Naphthalene	6.5		0.33	67	02/20/2016 13:0
n-Propyl benzene	ND		0.33	67	02/20/2016 13:0
Styrene	ND		0.33	67	02/20/2016 13:0
1,1,1,2-Tetrachloroethane	ND		0.33	67	02/20/2016 13:0
1,1,2,2-Tetrachloroethane	ND		0.33	67	02/20/2016 13:0
Tetrachloroethene	ND		0.33	67	02/20/2016 13:0
Toluene	ND		0.33	67	02/20/2016 13:0
1,2,3-Trichlorobenzene	ND		0.33	67	02/20/2016 13:0
1,2,4-Trichlorobenzene	ND		0.33	67	02/20/2016 13:0
1,1,1-Trichloroethane	ND	_	0.33	67	02/20/2016 13:0
1,1,2-Trichloroethane	ND		0.33	67	02/20/2016 13:0
Trichloroethene	ND		0.33	67	02/20/2016 13:0
Trichlorofluoromethane	ND		0.33	67	02/20/2016 13:0
1,2,3-Trichloropropane	ND		0.33	67	02/20/2016 13:0
1,2,4-Trimethylbenzene	1.0		0.33	67	02/20/2016 13:0
1,3,5-Trimethylbenzene	ND		0.33	67	02/20/2016 13:0
Vinyl Chloride	ND		0.33	67	02/20/2016 13:0
Xylenes, Total	ND	177	0.33	67	02/20/2016 13:0

# **Analytical Report**

Client:

Schutze & Associates, Inc.

Date Received: 2/16/16 20:36

Date Prepared: 2/16/16

Project:

SCS539: Tung

WorkOrder:

1602592

**Extraction Method: SW5030B** 

Analytical Method: SW8260B

Unit:

mg/kg

	Volatile Organics by P&T and GC/MS (Basic Target List)						
Client ID	Lab ID M	Iatrix Date Co	llected Instrument	Batch ID			
B-3-7.5	1602592-008A S	oil <b>02/12/20</b> 1	6 08:30 GC10	116749			
<u>Analytes</u>	Result	RL	DE	Date Analyzed			
Surrogates	REC (%)	Limits					
Dibromofluoromethane	108	70-130		02/20/2016 13:01			
Toluene-d8	111	70-130		02/20/2016 13:01			
4-BFB	87	70-130		02/20/2016 13:01			
Benzene-d6	95	60-140	-	02/20/2016 13:01			
Ethylbenzene-d10	94	60-140		02/20/2016 13:01			
1,2-DCB-d4	96	60-140		02/20/2016 13:01			

# **Analytical Report**

Client: Schutze & Associates, Inc.

Date Received: 2/16/16 20:36

Date Prepared: 2/16/16

SCS539: Tung Project:

WorkOrder:

1602592

Extraction Method: SW5030B

Analytical Method: SW8260B

Unit:

mg/kg

#### Volatile Organics by P&T and GC/MS (Basic Target List)

B-3-10	440740
Acetone	116749
tert-Amyl methyl either (TAME)         ND         0.0050         1           Benzene         ND         0.0050         1           Bromobenzene         ND         0.0050         1           Bromochloromethane         ND         0.0050         1           Bromodichloromethane         ND         0.0050         1           Bromoform         ND         0.0050         1           Bromomethane         ND         0.0050         1           -Butyl denzene         ND         0.0050         1           -Butyl denzene         ND         0.0050         1           tert-Butyl benzene         ND         0.0050         1           tert-Butyl benzene         ND         0.0050         1           Carbon Disulfide         ND         0.0050         1           Carbon Tetrachtoride         ND         0.0050	Date Analyzed
Benzene   ND	02/19/2016 17:01
Benzene	02/19/2016 17:01
Bromochloromethane   ND   0.0050   1	02/19/2016 17:01
Bromoform   ND   0.0050   1	02/19/2016 17:01
Bromoform   ND   0.0050   1	02/19/2016 17:01
Biomomethane   ND   0.0050   1	02/19/2016 17:01
2-Butanone (MEK) ND 0.020 1 1-Butyl alcohol (TBA) ND 0.050 1 1-Butyl benzene ND 0.0050 1 sec-Butyl benzene ND 0.0050 1 tert-Butyl benzene ND 0.0050 1 carbon Disulfide ND 0.0050 1 Carbon Tetrachloride ND 0.0050 1 Chlorotenzene ND 0.0050 1 Chlorotenzene ND 0.0050 1 Chlorotentane ND 0.0050 1 Chlorotoluene ND 0.0050 1 1 2-Chiorotoluene ND 0.0050 1 1 2-Chiorotoluene ND 0.0050 1 1 2-Chiorotoluene ND 0.0050 1 1 3-Chiorotoluene ND 0.0050 1 1 1,2-Dibromo-3-chloropropane ND 0.0040 1 1,2-Dibromoethane (EDB) ND 0.0050 1 1,2-Dichlorobenzene ND 0.0050 1 1,2-Dichlorobenzene ND 0.0050 1 1,3-Dichlorobenzene ND 0.0050 1 1,3-Dichlorobenzene ND 0.0050 1 1,4-Dichlorobenzene ND 0.0050 1 1,4-Dichlorobenzene ND 0.0050 1	02/19/2016 17:01
Telestry   Accepted   Accepted	02/19/2016 17:01
NB	02/19/2016 17:01
Sec-Butyl benzene   ND   0.0050   1	02/19/2016 17:01
tert-Butyl benzene ND 0.0050 1  Carbon Disulfide ND 0.0050 1  Carbon Tetrachloride ND 0.0050 1  Chlorobenzene ND 0.0050 1  Chlorothane ND 0.0050 1  Chlorotethane ND 0.0050 1  Chlorotethane ND 0.0050 1  Chlorototoluene ND 0.0050 1  2-Chiorotoluene ND 0.0050 1  4-Chlorotoluene ND 0.0050 1  1,2-Dibromochloromethane ND 0.0050 1  1,2-Dibromo-3-chloropropane ND 0.0040 1  1,2-Dibromoethane (EDB) ND 0.0040 1  Dibromomethane ND 0.0050 1  1,2-Dichlorobenzene ND 0.0050 1  1,2-Dichlorobenzene ND 0.0050 1  1,3-Dichlorobenzene ND 0.0050 1  1,3-Dichlorobenzene ND 0.0050 1  1,4-Dichlorobenzene ND 0.0050 1  1,4-Dichlorobenzene ND 0.0050 1  Dichlorodifluoromethane ND 0.0050 1	02/19/2016 17:01
Carbon Disulfide         ND         0.0050         1           Carbon Tetrachloride         ND         0.0050         1           Chlorobenzene         ND         0.0050         1           Chloroethane         ND         0.0050         1           Chloroferm         ND         0.0050         1           Chloromethane         ND         0.0050         1           2-Chlorotoluene         ND         0.0050         1           4-Chlorotoluene         ND         0.0050         1           Dibromochloromethane         ND         0.0050         1           1,2-Dibromo-3-chloropropane         ND         0.0040         1           1,2-Dibromoethane (EDB)         ND         0.0040         1           Dibromomethane         ND         0.0050         1           1,2-Dichlorobenzene         ND         0.0050         1           1,3-Dichlorobenzene         ND         0.0050         1           1,4-Dichlorobenzene         ND         0.0050         1           Dichlorodifluoromethane         ND         0.0050         1	02/19/2016 17:01
Carbon Tetrachloride         ND         0.0050         1           Chlorobenzene         ND         0.0050         1           Chloroethane         ND         0.0050         1           Chloroform         ND         0.0050         1           Chloromethane         ND         0.0050         1           2-Chiorotoluene         ND         0.0050         1           4-Chlorotoluene         ND         0.0050         1           Dibromochloromethane         ND         0.0050         1           1,2-Dibromo-3-chloropropane         ND         0.0040         1           1,2-Dibromoethane (EDB)         ND         0.0040         1           Dibromomethane         ND         0.0050         1           1,2-Dichlorobenzene         ND         0.0050         1           1,3-Dichlorobenzene         ND         0.0050         1           1,4-Dichlorobenzene         ND         0.0050         1           Dichlorodifluoromethane         ND         0.0050         1	02/19/2016 17:01
Chlorobenzene         ND         0.0050         1           Chloroethane         ND         0.0050         1           Chloroferm         ND         0.0050         1           Chloromethane         ND         0.0050         1           2-Chiorotoluene         ND         0.0050         1           4-Chlorotoluene         ND         0.0050         1           Dibromochloromethane         ND         0.0050         1           1,2-Dibromo-3-chloropropane         ND         0.0040         1           1,2-Dibromoethane (EDB)         ND         0.0040         1           Dibromomethane         ND         0.0050         1           1,2-Dichlorobenzene         ND         0.0050         1           1,3-Dichlorobenzene         ND         0.0050         1           1,4-Dichlorobenzene         ND         0.0050         1           Dichlorodifluoromethane         ND         0.0050         1	02/19/2016 17:01
Chloroethane         ND         0.0050         1           Chloroform         ND         0.0050         1           Chloromethane         ND         0.0050         1           2-Chiorotoluene         ND         0.0050         1           4-Chlorotoluene         ND         0.0050         1           Dibromochloromethane         ND         0.0050         1           1,2-Dibromo-3-chloropropane         ND         0.0040         1           1,2-Dibromoethane (EDB)         ND         0.0040         1           Dibromomethane         ND         0.0050         1           1,2-Dichlorobenzene         ND         0.0050         1           1,3-Dichlorobenzene         ND         0.0050         1           1,4-Dichlorobenzene         ND         0.0050         1           Dichlorodifluoromethane         ND         0.0050         1	02/19/2016 17:01
Chloroform         ND         0.0050         1           Chloromethane         ND         0.0050         1           2-Chiorotoluene         ND         0.0050         1           4-Chlorotoluene         ND         0.0050         1           Dibromochloromethane         ND         0.0050         1           1,2-Dibromo-3-chloropropane         ND         0.0040         1           1,2-Dibromoethane (EDB)         ND         0.0040         1           Dibromomethane         ND         0.0050         1           1,2-Dichlorobenzene         ND         0.0050         1           1,3-Dichlorobenzene         ND         0.0050         1           1,4-Dichlorobenzene         ND         0.0050         1           Dichlorodifluoromethane         ND         0.0050         1	02/19/2016 17:01
Chloromethane         ND         0.0050         1           2-Chiorotoluene         ND         0.0050         1           4-Chlorotoluene         ND         0.0050         1           Dibromochloromethane         ND         0.0050         1           1,2-Dibromo-3-chloropropane         ND         0.0040         1           1,2-Dibromoethane (EDB)         ND         0.0040         1           Dibromomethane         ND         0.0050         1           1,2-Dichlorobenzene         ND         0.0050         1           1,3-Dichlorobenzene         ND         0.0050         1           1,4-Dichlorobenzene         ND         0.0050         1           Dichlorodifluoromethane         ND         0.0050         1	02/19/2016 17:01
2-Chiorotoluene         ND         0.0050         1           4-Chlorotoluene         ND         0.0050         1           Dibromochloromethane         ND         0.0050         1           1,2-Dibromo-3-chloropropane         ND         0.0040         1           1,2-Dibromoethane (EDB)         ND         0.0040         1           Dibromomethane         ND         0.0050         1           1,2-Dichlorobenzene         ND         0.0050         1           1,3-Dichlorobenzene         ND         0.0050         1           1,4-Dichlorobenzene         ND         0.0050         1           Dichlorodifluoromethane         ND         0.0050         1	02/19/2016 17:01
4-Chlorotoluene         ND         0.0050         1           Dibromochloromethane         ND         0.0050         1           1,2-Dibromo-3-chloropropane         ND         0.0040         1           1,2-Dibromoethane (EDB)         ND         0.0040         1           Dibromomethane         ND         0.0050         1           1,2-Dichlorobenzene         ND         0.0050         1           1,3-Dichlorobenzene         ND         0.0050         1           1,4-Dichlorobenzene         ND         0.0050         1           Dichlorodifluoromethane         ND         0.0050         1	02/19/2016 17:01
Dibromochloromethane         ND         0.0050         1           1,2-Dibromo-3-chloropropane         ND         0.0040         1           1,2-Dibromoethane (EDB)         ND         0.0040         1           Dibromomethane         ND         0.0050         1           1,2-Dichlorobenzene         ND         0.0050         1           1,3-Dichlorobenzene         ND         0.0050         1           1,4-Dichlorobenzene         ND         0.0050         1           Dichlorodifluoromethane         ND         0.0050         1	02/19/2016 17:01
1,2-Dibromo-3-chloropropane         ND         0.0040         1           1,2-Dibromoethane (EDB)         ND         0.0040         1           Dibromomethane         ND         0.0050         1           1,2-Dichlorobenzene         ND         0.0050         1           1,3-Dichlorobenzene         ND         0.0050         1           1,4-Dichlorobenzene         ND         0.0050         1           Dichlorodifluoromethane         ND         0.0050         1	02/19/2016 17:01
1,2-Dibromoethane (EDB)         ND         0.0040         1           Dibromomethane         ND         0.0050         1           1,2-Dichlorobenzene         ND         0.0050         1           1,3-Dichlorobenzene         ND         0.0050         1           1,4-Dichlorobenzene         ND         0.0050         1           Dichlorodifluoromethane         ND         0.0050         1	02/19/2016 17:01
Dibromomethane         ND         0.0050         1           1,2-Dichlorobenzene         ND         0.0050         1           1,3-Dichlorobenzene         ND         0.0050         1           1,4-Dichlorobenzene         ND         0.0050         1           Dichlorodifluoromethane         ND         0.0050         1	02/19/2016 17:01
1,2-Dichlorobenzene         ND         0.0050         1           1,3-Dichlorobenzene         ND         0.0050         1           1,4-Dichlorobenzene         ND         0.0050         1           Dichlorodifluoromethane         ND         0.0050         1	02/19/2016 17:01
1,3-Dichlorobenzene         ND         0.0050         1           1,4-Dichlorobenzene         ND         0.0050         1           Dichlorodifluoromethane         ND         0.0050         1	02/19/2016 17:01
1,4-Dichlorobenzene         ND         0.0050         1           Dichlorodifluoromethane         ND         0.0050         1	02/19/2016 17:01
Dichlorodifluoromethane ND 0.0050 1	02/19/2016 17:01
Dictional distriction	02/19/2016 17:01
1,1-Dichloroethane ND 0.0050 1	02/19/2016 17:01
	02/19/2016 17:01
1,2-Dichloroethane (1,2-DCA) ND 0.0040 1	02/19/2016 17:01
1,1-Dichloroethene ND 0.0050 1	02/19/2016 17:01
cis-1,2-Dichloroethene ND 0.0050 1	02/19/2016 17:01
trans-1,2-Dichloroethene ND 0.0050 1	02/19/2016 17:01
1,2-Dichloropropane ND 0.0050 1	02/19/2016 17:01
1,3-Dichloropropane ND 0.0050 1	02/19/2016 17:01
2,2-Dichloropropane         ND         0.0050         1	02/19/2016 17:01

(Cont.)

Angela Rydelius, Lab Manager

### **Analytical Report**

Client:

Schutze & Associates. Inc.

Date Received: 2/16/16 20:36

Date Prepared: 2/16/16

Project:

SCS539: Tung

WorkOrder:

1602592

Extraction Method: SW5030B

Analytical Method: SW8260B

Unit:

mg/kg

Client ID	Lab ID	Matrix	Date Col	llected Instrumen	t Batch ID
B-3-10	1602592-009A	Soil	02/12/201	6 08:30 GC18	116749
Analytes	Result		<u>RL</u>	DF	Date Analyzed
1,1-Dichloropropene	ND		0.0050	1	02/19/2016 17:01
cis-1,3-Dichloropropene	ND		0.0050	1	02/19/2016 17:01
trans-1,3-Dichloropropene	ND		0.0050	1	02/19/2016 17:01
Diisopropyl ether (DIPE)	ND		0.0050	1	02/19/2016 17:01
Ethylbenzene	ND		0.0050	1	02/19/2016 17:01
Ethyl tert-butyl ether (ETBE)	ND		0.0050	1	02/19/2016 17:01
Freon 113	ND		0.0050	1	02/19/2016 17:01
Hexachlorobutadiene	ND		0.0050	1	02/19/2016 17:01
Hexachloroethane	ND	"	0.0050	1	02/19/2016 17:01
2-Hexanone	ND		0.0050	1	02/19/2016 17:01
Isopropylbenzene	ND		0.0050	1	02/19/2016 17:01
4-Isopropyl toluene	ND		0.0050	1	02/19/2016 17:01
Methyl-t-butyl ether (MTBE)	ND		0.0050	1	02/19/2016 17:01
Methylene chloride	ND		0.0050	1	02/19/2016 17:01
4-Methyl-2-pentanone (MIBK)	ND		0.0050	1	02/19/2016 17:01
Naphthalene	ND		0.0050	1	02/19/2016 17:01
n-Propyl benzene	ND		0.0050	1	02/19/2016 17:01
Styrene	ND		0.0050	1	02/19/2016 17:01
1,1,1,2-Tetrachloroethane	ND		0.0050	1	02/19/2016 17:01
1,1,2,2-Tetrachloroethane	ND		0.0050	1	02/19/2016 17:01
Tetrachloroethene	ND	-	0.0050	1	02/19/2016 17:01
Toluene	ND		0.0050	1	02/19/2016 17:01
1,2,3-Trichlorobenzene	ND		0.0050	1	02/19/2016 17:01
1,2,4-Trichlorobenzene	ND		0.0050	1	02/19/2016 17:01
1,1,1-Trichloroethane	ND		0.0050	1	02/19/2016 17:01
1,1,2-Trichloroethane	ND		0.0050	1	02/19/2016 17:01
Trichloroethene	ND		0.0050	1	02/19/2016 17:01
Trichlorofluoromethane	ND		0.0050	1	02/19/2016 17:01
1,2,3-Trichloropropane	ND		0.0050	1	02/19/2016 17:01
1,2,4-Trimethylbenzene	ND		0.0050	1	02/19/2016 17:01
1,3,5-Trimethylbenzene	ND		0.0050	1	02/19/2016 17:01
Vinyl Chloride	ND		0.0050	1	02/19/2016 17:01
Xylenes, Total	ND		0.0050	1	02/19/2016 17:01

# **Analytical Report**

Client:

Schutze & Associates, Inc.

Date Received: 2/16/16 20:36

Date Prepared: 2/16/16

Project:

SCS539; Tung

WorkOrder:

1602592

Extraction Method: SW5030B

Analytical Method: SW8260B

Unit:

mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)						
Client ID	Lab ID	Matrix	Date Coll	ected Instrument	Batch ID	
B-3-10	1602592-009A	Soil	02/12/2016	08:30 GC18	116749	
Analytes	Result		RL	<u>DE</u>	Date Analyzed	
Surrogates	REC (%)		Limits			
Dibromofluoromethane	117		<b>70</b> -130		02/19/2016 17:01	
Toluene-d8	112		70-130		02/19/2016 17:01	
4-BFB	85		70-130		02/19/2016 17:01	
Benzene-d6	117		60-140		02/19/2016 17:01	
Ethylbenzene-d10	105		60-140		02/19/2016 17:01	
1,2-DCB-d4	104		60-140		02/19/2016 17:01	
Analyst(s): AK						

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# **Analytical Report**

Client:

Schutze & Associates, Inc.

**Date Received:** 2/16/16 20:36

SCS539; Tung

Project:

Date Prepared: 2/16/16

WorkOrder:

1602592

Extraction Method: SW5030B

Analytical Method: SW8260B

Unit:

mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
B-2-8	1602592-016A	Soil	02/12/2016 12:15 GC18	116749
Analytes	Result		<u>RL</u> <u>DF</u>	Date Analyzed
Acetone	ND		0.10 1	02/19/2016 17:39
tert-Amyl methyl ether (TAME)	ND		0.0050 1	02/19/2016 17:39
Benzene	ND		0.0050 1	02/19/2016 17:39
Bromobenzene	ND		0.0050 1	02/19/2016 17:39
Bromochloromethane	ND		0.0050 1	02/19/2016 17:39
Bromodichloromethane	ND		0.0050 1	02/19/2016 17:39
Bromoform	ND		0.0050 1	02/19/2016 17:39
Bromomethane	ND		0.0050 1	02/19/2016 17:39
2-Butanone (MEK)	ND		0.020 1	02/19/2016 17:39
t-Butyl alcohol (TBA)	ND		0.050 1	02/19/2016 17:39
n-Butyl benzene	ND		0.0050 1	02/19/2016 17:39
sec-Butyl benzene	ND		0.0050 1	02/19/2016 17:39
tert-Butyl benzene	ND		0.0050 1	02/19/2016 17:39
Carbon Disulfide	ND		0.0050 1	02/19/2016 17:39
Carbon Tetrachloride	ND		0.0050 1	02/19/2016 17:39
Chlorobenzene	ND		0.0050 1	02/19/2016 17:39
Chloroethane	ND	·	0.0050 1	02/19/2016 17:39
Chloroform	ND		0.0050 1	02/19/2016 17:39
Chloromethane	ND		0.0050 1	02/19/2016 17:39
2-Chlorotoluene	ND		0.0050 1	02/19/2016 17:39
4-Chiorotoluene	ND		0.0050 1	02/19/2016 17:39
Dibromochloromethane	ND		0.0050 1	02/19/2016 17:39
1,2-Dibromo-3-chloropropane	ND		0.0040 1	02/19/2016 17:39
1,2-Dibromoethane (EDB)	ND		0.0040 1	02/19/2016 17:39
Dibromomethane	ND		0.0050 1	02/19/2016 17:39
1,2-Dichlorobenzene	ND		0.0050 1	02/19/2016 17:39
1,3-Dichlorobenzene	ND		0.0050 1	02/19/2016 17:39
1,4-Dichlorobenzene	ND		0.0050 1	02/19/2016 17:39
Dichlorodifluoromethane	ND		0.0050 1	02/19/2016 17:39
1,1-Dichloroethane	ND		0.0050 1	02/19/2016 17:39
1,2-Dichloroethane (1,2-DCA)	ND		0.0040 1	02/19/2016 17:39
1,1-Dichloroethene	ND		0.0050 1	02/19/2016 17:39
cis-1,2-Dichloroethene	ND		0.0050 1	02/19/2016 17:39
trans-1,2-Dichloroethene	ND		0.0050 1	02/19/2016 17:39
1,2-Dichloropropane	ND		0.0050 1	02/19/2016 17:39
1,3-Dichloropropane	ND		0.0050 1	02/19/2016 17:39
2,2-Dichloropropane	ND		0.0050 1	02/19/2016 17:39

(Cont.)

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# **Analytical Report**

Client: Schutze & Associates, Inc.

Date Received: 2/16/16 20:36

Date Prepared: 2/16/16

Project: SCS539; Tung

WorkOrder:

1602592

Extraction Method: SW5030B

Analytical Method: SW8260B

Unit:

mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected I	nstrument Batch
B-2-8	1602592-016A	Soil	02/12/2016 12:15	C18 116749
Analytes	Result		<u>RL</u> <u>DF</u>	Date Analyzed
1,1-Dichloropropene	ND		0.0050 1	02/19/2016 17
cis-1,3-Dichloropropene	ND		0.0050 1	02/19/2016 17
trans-1,3-Dichloropropene	ND	-	0.0050 1	02/19/2016 17
Diisopropyl ether (DIPE)	ND		0.0050 1	02/19/2016 17
Ethylbenzene	ND		0.0050 1	02/19/2016 17
Ethyl tert-butyl ether (ETBE)	ND		0.0050 1	02/19/2016 17
Freon 113	ND		0.0050 1	02/19/2016 17
Hexachlorobutadiene	ND		0.0050 1	02/19/2016 17
Hexachloroethane	ND		0.0050 1	02/19/2016 17
2-Hexanone	ND		0.0050 1	02/19/2016 17
Isopropylbenzene	ND		0.0050 1	02/19/2016 17
4-Isopropyl toluene	ND		0.0050 1	02/19/2016 17
Methyl-t-butyl ether (MTBE)	ND		0.0050 1	02/19/2016 17
Methylene chloride	ND	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.0050 1	02/19/2016 17
4-Methyl-2-pentanone (MIBK)	ND	-	0.0050 1	02/19/2016 17
Naphthalene	ND		0.0050 1	02/19/2016 17
n-Propyl benzene	ND		0.0050 1	02/19/2016 17
Styrene	ND		0.0050 1	02/19/2016 17
1,1,1,2-Tetrachloroethane	ND		0.0050 1	02/19/2016 17
1,1,2,2-Tetrachloroethane	ND		0.0050 1	02/19/2016 17
Tetrachloroethene	ND		0.0050 1	02/19/2016 17
Toluene	ND		0.0050 1	02/19/2016 17
1,2,3-Trichlorobenzene	ND		0.0050 1	02/19/2016 17
1,2,4-Trichlorobenzene	ND		0.0050 1	02/19/2016 17
1,1,1-Trichloroethane	ND		0.0050 1	02/19/2016 17
1,1,2-Trichloroethane	ND		0.0050 1	02/19/2016 17
Trichloroethene	ND		0.0050 1	02/19/2016 17
Trichlorofluoromethane	ND		0.0050 1	02/19/2016 17
1,2,3-Trichloropropane	ND		0.0050 1	02/19/2016 17
1,2,4-Trimethylbenzene	ND		0.0050 1	02/19/2016 17
1,3,5-Trimethylbenzene	ND		0.0050 1	02/19/2016 17
Vinyl Chloride	ND		0.0050 1	02/19/2016 17
Xylenes, Total	ND		0.0050 1	02/19/2016 17

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# **Analytical Report**

Client:

Schutze & Associates, Inc.

**Date Received:** 2/16/16 20:36

Date Prepared: 2/16/16

Project:

SCS539: Tung

WorkOrder:

1602592

Extraction Method: SW5030B

Analytical Method: SW8260B

Unit:

mg/kg

	7 1 773	3.5.4.3	D-4- C	- 15 - 4 - 3 - T 4 4	Botols ID
Client ID	Lab ID	Matrix	Date Co	ollected Instrument	Batch ID
B-2-8	1602592-016A	Soil	02/12/20	16 12:15 GC18	116749
<u>Analytes</u>	Result		RL	<u>DF</u>	Date Analyzed
Surrogates	REC (%)		<u>Limits</u>		
Dibromofluoromethane	115		70-130		02/19/2016 17:39
Toluene-d8	113		70-130		02/19/2016 17:39
4-BFB	89		70-130		02/19/2016 17:39
Benzene-d6	123		60-140		02/19/2016 17:39
Ethylbenzene-d10	112		60-140		02/19/2016 17:39
1,2-DCB-d4	112		60-140		02/19/2016 17:39



# **Analytical Report**

Client:

Schutze & Associates, Inc.

Date Received: 2/16/16 20:36

Date Prepared: 2/17/16

Project:

SCS539; Tung

WorkOrder:

1602592

Extraction Method: SW3550C

Analytical Method: SW8310

Unit:

mg/kg

Client ID	Lab ID	Matrix	Date Collected Instrum	ent Batch ID
B-5-5	1602592-002A	Soil	02/12/2016 10:00 HPLC4	116810
<u>Analytes</u>	Result		RL DF	Date Analyzed
Acenaphthene	ND		0.0050 1	02/17/2016 17:48
Acenaphthylene	ND		0.0050 1	02/17/2016 17:48
Anthracene	ND		0.0050 1	02/17/2016 17:48
Benzo (a) anthracene	ND		0.0050 1	02/17/2016 17:48
Benzo (a) pyrene	ND		0.0050 1	02/17/2016 17:48
Benzo (b) fluoranthene	ND		0.0050 1	02/17/2016 17:48
Benzo (g,h,i) perylene	ND		0.0050 1	02/17/2016 17:48
Benzo (k) fluoranthene	ND		0.0050 1	02/17/2016 17:48
Chrysene	ND		0.0050 1	02/17/2016 17:48
Dibenzo (a,h) anthracene	ND		0.0050 1	02/17/2016 17:48
Fluoranthene	ND		0.0050 1	02/17/2016 17:48
Fluorene	ND		0.0050 1	02/17/2016 17:48
Indeno (1,2,3-cd) pyrene	ND		0.0050 1	02/17/2016 17:48
1-Methylnaphthalene	ND		0.0050 1	02/17/2016 17:48
2-Methylnaphthalene	ND		0.0050 1	02/17/2016 17:48
Naphthalene	ND		0.0050 1	02/17/2016 17:48
Phenanthrene	ND		0.0050 1	02/17/2016 17:48
Pyrene	ND		0.0050 1	02/17/2016 17:48
Surrogates	REC (%)		<u>Limits</u>	
Decafluorobiphenyl	74		70-130	02/17/2016 17:48
4,4-Dichlorobiphenyl	93		70-130	02/17/2016 17:48
Analyst(s): JC				

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# **Analytical Report**

Client:

Schutze & Associates, Inc.

Date Received: 2/16/16 20:36

Project:

Date Prepared: 2/17/16

SCS539; Tung

WorkOrder:

1602592

Extraction Method: SW3550C

Analytical Method: SW8310

Unit:

mg/kg

Client ID	Lab ID	Matrix	Date Co	llected	Instrument	Batch ID
B-3-7.5	1602592-908/	A Soll	02/12/201	6 08:30	HPLC4	116810
Analytes	Result		RL	<u>DF</u>		Date Analyzed
Acenaphthene	ND		2.0	400		02/18/2016 21:54
Acenaphthylene	ND		2.0	400		02/18/2016 21:54
Anthracene	ND		2.0	400		02/18/2016 21:54
Benzo (a) anthracene	ND		2.0	400		02/18/2016 21:54
Benzo (a) pyrene	ND		2.0	400		02/18/2016 21:54
Benzo (b) fluoranthene	ND	-	2.0	400	<u>.</u>	02/18/2016 21:54
Benzo (g,h,i) perylene	ND		2.0	400		02/18/2016 21:54
Benzo (k) fluoranthene	ND		2.0	400		02/18/2016 21:54
Chrysene	ND		2.0	400		02/18/2016 21:54
Dibenzo (a,h) anthracene	ND		2.0	400		02/18/2016 21:54
Fluoranthene	ND		2.0	400		02/18/2016 21:54
Fluorene	ND		2.0	400		02/18/2016 21:54
Indeno (1,2,3-cd) pyrene	ND		2.0	400		02/18/2016 21:54
1-Methylnaphthalene	13		2.0	400		02/18/2016 21:54
2-Methylnaphthalene	10		2.0	400		02/18/2016 21:54
Naphthalene	4.1		2.0	400		02/18/2016 21:54
Phenanthrene	8.6		2.0	400		02/18/2016 21:54
Pyrene	5.5		2.0	400		02/18/2016 21:54
<u>Surrogates</u>	REC (%)	<u>Qualifiers</u>	<u>Limits</u>			
Decafiuorobiphenyl	0	S	70-130			02/18/2016 21:54
4,4-Dichlorobiphenyl	0	S	70-130			02/18/2016 21:54
Analyst(s): JC			Analytical Comm	nents: C	1	

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# **Analytical Report**

Client:

Schutze & Associates, Inc.

Date Received: 2/16/16 20:36

Project:

Date Prepared: 2/17/16 SCS539: Tung WorkOrder:

1602592

**Extraction Method: SW3550C** 

Analytical Method: SW8310

Unit:

mg/kg

Client ID	Lab ID	Matrix	Date Col	lected Instrument	Batch ID
B-3-10	1602592-009A	Soil	02/12/2016	5 08:30 HPLC4	116810
Analytes	Result		RL	DE	<u>Date Analyzed</u>
Acenaphthene	ND		0.0050	1	02/18/2016 19:04
Acenaphthylene	ND		0.0050	1	02/18/2016 19:04
Anthracene	ND		0.0050	1	02/18/2016 19:04
Benzo (a) anthracene	ND		0.0050	1	02/18/2016 19:04
Benzo (a) pyrene	ND		0.0050	1	02/18/2016 19:04
Benzo (b) fluoranthene	ND		0.0050	1	02/18/2016 19:04
Benzo (g,h,i) perylene	ND		0.0050	1	02/18/2016 19:04
Benzo (k) fluoranthene	ND		0.0050	1	02/18/2016 19:04
Chrysene	ND		0.0050	1	02/18/2016 19:04
Dibenzo (a,h) anthracene	ND		0.0050	1	02/18/2016 19:04
Fluoranthene	ND		0.0050	1	02/18/2016 19:04
Fluorene	ND		0.0050	1	02/18/2016 19:04
Indeno (1,2,3-cd) pyrene	ND		0.0050	1	02/18/2016 19:04
1-Methylnaphthalene	ND		0.0050	1	02/18/2016 19:04
2-Methylnaphthalene	ND		0.0050	1	02/18/2016 19:04
Naphthalene	ND		0.0050	1	02/18/2016 19:04
Phenanthrene	ND		0.0050	1	02/18/2016 19:04
Pyrene	ND		0.0050	1	02/18/2016 19:04
Surrogates	REC (%)		<u>Limits</u>		
Decafluorobiphenyl	80		70-130		02/18/2016 19:04
4,4-Dichlorobiphenyl	104	···	70-130		02/18/2016 19:04
Analyst(s): JC					

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# **Analytical Report**

Client: Schutze & Associates, Inc.

Date Received: 2/16/16 20:36

Date Prepared: 2/17/16

Project:

SCS539; Tung

WorkOrder:

1602592

Extraction Method: SW3550C

Analytical Method: SW8310

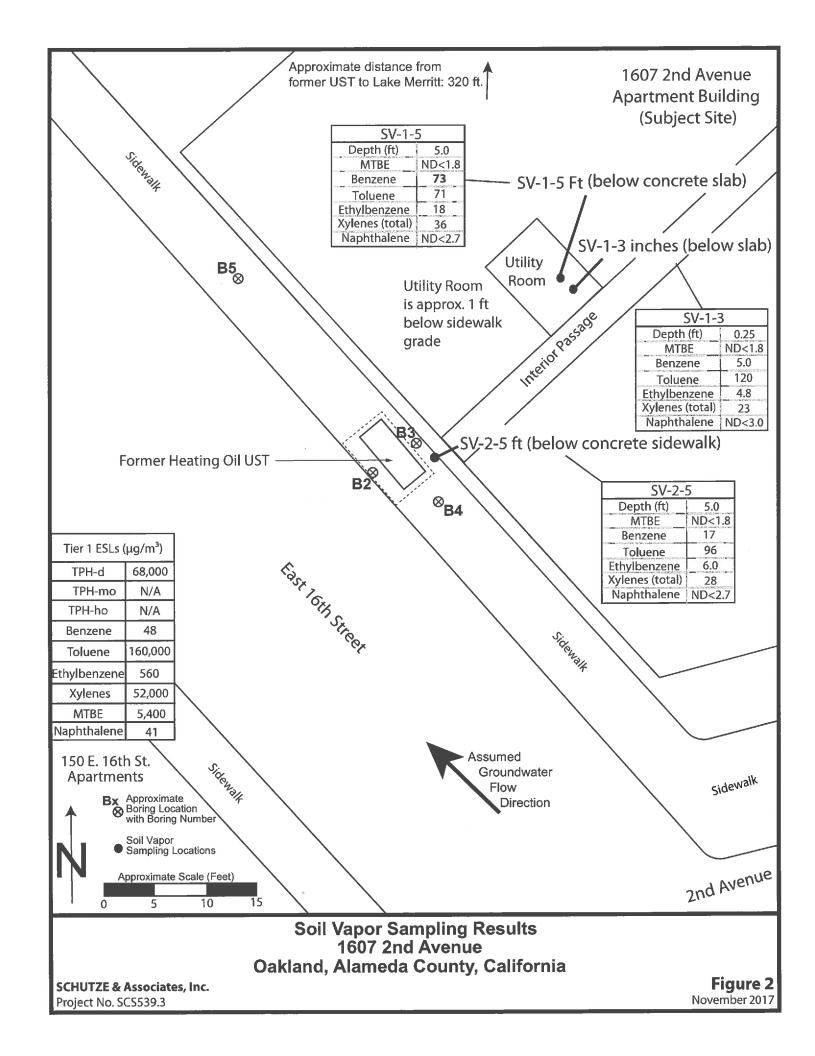
Unit:

mg/kg

Client ID	Lab <b>ID</b>	Matrix	Date Collected Instrume	ent Batch ID
B-2-8	1602592-016A	Soil	02/12/2016 12:15 HPLC4	116810
Analytes	Result		RL DF	Date Analyzed
Acenaphthene	ND		0.0050 1	02/19/2016 14:49
Acenaphthylene	ND		0.0050 1	02/19/2016 14:49
Anthracene	ND		0.0050 1	02/19/2016 14:49
Benzo (a) anthracene	ND		0.0050 1	02/19/2016 14:49
Benzo (a) pyrene	ND		0.0050 1	02/19/2016 14:49
Benzo (b) fluoranthene	ND		0.0050 1	02/19/2016 14:49
Benzo (g,h,i) perylene	ND		0.0050 1	02/19/2016 14:49
Benzo (k) fluoranthene	ND		0.0050 1	02/19/2016 14:49
Chrysene	ND		0.0050 1	02/19/2016 14:49
Dibenzo (a,h) anthracene	ND		0.0050 1	02/19/2016 14:49
Fluoranthene	ND		0.0050 1	02/19/2016 14:49
Fluorene	ND		0.0050 1	02/19/2016 14:49
Indeno (1,2,3-cd) pyrene	ND		0.0050 1	02/19/2016 14:49
1-Methylnaphthalene	ND		0.0050 1	02/19/2016 14:49
2-Methylnaphthalene	ND		0.0050 1	02/19/2016 14:49
Naphthalene	ND		0.0050 1	02/19/2016 14:49
Phenanthrene	ND		0.0050 1	02/19/2016 14:49
Pyrene	ND		0.0050 1	02/19/2016 14:49
Surrogates	REC (%)		Limits	
Decafluorobiphenyl	111		70-130	02/19/2016 14:49
4,4-Dichlorobiphenyl	123		70-130	02/19/2016 14:49
Analyst(s): JC				

## **ATTACHMENT B-6**

**Soil Vapor Data** 



naphthalene confirmation by Test Method TO-17, which assists in indicating aerobic/anaerobic conditions.

### D. ANALYTICAL RESULTS FOR SOIL VAPOR

Selected analytical results for the soil vapor samples are shown in Table 1 and depicted on Figure 2. The complete laboratory report is attached as Appendix A. The soil vapor analytical results were compared to the San Francisco Bay Regional Water Quality Control Board (Water Board) Tier 1 Environmental Screening Levels (ESLs), February 2016 (Rev. 3).

TABLE 1
Selected Analytical Results for Soil Vapor
1607 2nd Avenue, Oakland, California

	Sample			Units in %		Units in µg/m³						
Sample ID	Depth (feet below slab)	Date Collected	Sample Location	Methane	Oxygen	Carbon Dioxide	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Naphthalene
SV-1-3	Sub-slab			0.00028	17	0.015	ND<1.8	5.0	120	4.8	23	ND<3.0
SV-1-5	5.0	1/13/2017	Utility Room	0.00068	17	0.067	ND<1.8	73	71	18	36	ND<2.7
SV-2-5	5.0		Sidewalk	0.00069	16	0.033	ND<1.8	17	96	6.0	28	ND<2.7
Res	idential (Ta	able SG-1) E	SLs	N/A	N/A	N/A	5,400	48	160,000	560	52,000	41
Con	nmercial (T	able SG-1) E	SLs	N/A	N/A	N/A	47,000	420	1,300,000	4,900	440,000	360

μg/m³ = micrograms per cubic meter; MTBE = methyl tert-butyl ether; ND<1.0 = not detected with a reporting limit of 1.0; N/A = not available.
ESLs = San Francisco Bay Regional Water Quality Control Board environmental screening levels (February 2016, Revision 3; Table SG-1, Subslab/Soil Gas Vapor Intrusion: Human Health Risk Levels). **Bold** indicates results that exceed or are equal to ESLs.

Volatile organic compounds, methane, oxygen and carbon dioxide were analyzed by EPA Method TO15; naphthalene was analyzed by EPA Method TO17.

SCHUTZE & Associates, Inc.

#### D.1 VOCs

- MTBE was not detected above the laboratory reporting limit (RL) in the soil vapor samples.
- Benzene was detected in soil vapor above the residential Tier 1 ESL of 48 μg/m³ with a concentration of 73 μg/m³ at SV-1-5. Benzene was also detected at concentrations below the residential Tier 1 ESL at SV-1-3 (5.0 μg/m³) and SV-2-5 (17 μg/m³).
- Toluene was detected in soil vapor below the residential Tier 1 ESL of 160,000 μg/m³ with a maximum concentration of 120 μg/m³ at SV-1-3.
- Ethylbenzene was detected in soil vapor below the residential Tier 1 ESL of 560 µg/m³ with a maximum concentration of 18 µg/m³ at SV-1-5.
- Xylenes was detected in soil vapor below the residential Tier 1 ESL of 52,000 μg/m<sup>3</sup> with a maximum concentration of 36 μg/m<sup>3</sup> at SV-1-5.



# **Analytical Report**

Client: Schutze & Associates, Inc.

 Date Received:
 1/17/17 15:30

 Date Prepared:
 1/23/17-1/24/17

 Project:
 Tung/SCS539

WorkOrder: 1701626

Extraction Method: TO15
Analytical Method: TO15

Unit:  $\mu g/m^3$ 

	Volati	le Organic (	Compounds			
Client ID	Lab ID	Matrix	Date Collected	Instru	ment	Batch ID
SV-1-5	1701626-001A	SoilGas	01/13/2017 12:00	GC29		133045
Initial Pressure (psia)	Final Pressure	e (psia)				Analyst(s)
12.11	24.13					AK
Analytes		Result		RL	DF	Date Analyzed
Acetone		180		60	1	01/24/2017 00:11
Acrolein		ND		5.8	1	01/24/2017 00:11
Acrylonitrile		ND		1.1	1	01/24/2017 00:11
tert-Amyl methyl ether (TAME)		ND		2.1	1	01/24/2017 00:11
Benzene	<del>-</del> -	73		1.6	1	01/24/2017 00:11
Benzyl chloride		ND		2.6	1	01/24/2017 00:11
Bromodichloromethane		ND		3.5	1	01/24/2017 00:11
Bromoform	· ·	ND		5.2	1	01/24/2017 00:11
Bromomethane		ND		2.0	1	01/24/2017 00:11
1.3-Butadiene		ND		1.1	1	01/24/2017 00:11
2-Butanone (MEK)		120		75	1	01/24/2017 00:11
t-Butyl alcohol (TBA)		ND		31	1	01/24/2017 00:11
Carbon Disulfide		15		1.6	1	01/24/2017 00:11
Carbon Tetrachloride		ND		3.2	1	01/24/2017 00:11
Chlorobenzene		ND		2.4	1	01/24/2017 00:11
Chloroethane		ND		1.3	1	01/24/2017 00:11
Chloroform		ND		2.4	1	01/24/2017 00:11
Chloromethane		ND		1.0	1	01/24/2017 00:11
Cyclohexane		30	·	18	1	01/24/2017 00:11
Dibromochloromethane		ND		4.4	1	01/24/2017 00:11
1,2-Dibromo-3-chloropropane		ND		0.12	1	01/24/2017 00:11
1,2-Dibromoethane (EDB)		ND		3.9	1	01/24/2017 00:11
1,2-Dichlorobenzene	·	ND		3.0	1	01/24/2017 00:11
1,3-Dichlorobenzene		ND		3.0	1	01/24/2017 00:11
1.4-Dichlorobenzene		ND	<u> </u>	3.0	1	01/24/2017 00:11
Dichlorodifluoromethane		2.7		2.5	1	01/24/2017 00:11
1,1-Dichloroethane	<del></del>	ND		2.0	1	01/24/2017 00:11
1,2-Dichloroethane (1,2-DCA)		ND	<del></del>	2.0	1	01/24/2017 00:11
1,1-Dichloroethene		ND	<del> </del>	2.0	1	01/24/2017 00:11
cis-1,2-Dichloroethene		ND		2.0	1	01/24/2017 00:11
trans-1,2-Dichloroethene		ND		2.0	1	01/24/2017 00:11
1,2-Dichloropropane		ND		2.4	1	01/24/2017 00:11
cis-1,3-Dichloropropene	·	ND		2.3	1	01/24/2017 00:11
trans-1,3-Dichloropropene		ND		2.3	1	01/24/2017 00:11

(Cont.)

Angela Rydelius, Lab Manager

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# **Analytical Report**

Client: Schutze & Associates, Inc.

Date Received: 1/17/17 15:30

Date Prepared: 1/23/17-1/24/17

President: Type/SCS530

Project: Tung/SCS539

WorkOrder: 1701626

**Extraction Method:** TO15 **Analytical Method:** TO15

Unit: μg/m³

Volatile	Organic	Compounds
1 OIMUIO	OIEMINE	Compounds

		7/1.4.1.	Data Callegted Instrument	Batch ID
Client ID	Lab ID	Matrix	Date Collected Instrument	Daten id
SV-1-5	1701626-001A	SoilGas	01/13/2017 12:00 GC29	133045

Initial Pressure (psia)	Final Pressure (psia)			Analyst(s)
12.11	24.13			AK
Analytes	Result	<u>RL</u>	<u>DF</u>	Date Analyzed
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	3.6	1	01/24/2017 00:11
Diisopropyl ether (DIPE)	ND	2.1	1	01/24/2017 00:11
1,4-Dioxane	ND	1.8	1	01/24/2017 00:11
Ethanol	ND	96	1	01/24/2017 00:11
Ethyl acetate	ND	1.8	1	01/24/2017 00:11
Ethyl tert-butyl ether (ETBE)	ND	2.1	1	01/24/2017 00:11
Ethylbenzene	18	2.2	1	01/24/2017 00:11
4-Ethyltoluene	4.8	2.5	1	01/24/2017 00:11
Freon 113	ND	3.9	1	01/24/2017 00:11
Heptane	34	21	1	01/24/2017 00:11
Hexachlorobutadiene	ND	5.4	1	01/24/2017 00:11
Hexane	57	18	1	01/24/2017 00:11
2-Hexanone	11	2.1	1	01/24/2017 00:11
4-Methyl-2-pentanone (MIBK)	10	2.1	1	01/24/2017 00:11
Methyl-t-butyl ether (MTBE)	ND	1.8	1	01/24/2017 00:11
Methylene chloride	ND	8.8	1	01/24/2017 00:11
Methyl methacrylate	ND	2.1	1	01/24/2017 00:11
Naphthalene	ND	5.3	1	01/24/2017 00:11
Propene	ND	880	10	01/23/2017 18:58
Styrene	14	2.2	1	01/24/2017 00:11
1,1,1,2-Tetrachloroethane	ND	3.5	1	01/24/2017 00:11
1,1,2,2-Tetrachloroethane	ND	3.5	1	01/24/2017 00:11
Tetrachloroethene	ND	3.4	1	01/24/2017 00:11
Tetrahydrofuran	ND	3.0	1	01/24/2017 00:11
Toluene	71	1.9	1	01/24/2017 00:11
1,2,4-Trichlorobenzene	ND	3.8	1	01/24/2017 00:11
1,1,1-Trichloroethane	ND	2.8	1	01/24/2017 00:11
1,1,2-Trichloroethane	ND	2.8	1	01/24/2017 00:11
Trichloroethene	ND	2.8	1	01/24/2017 00:1
Trichlorofluoromethane	ND	2.8	1	01/24/2017 00:11
1,2,4-Trimethylbenzene	7.1	2.5	1	01/24/2017 00:1
1,3,5-Trimethylbenzene	ND	2.5	1	01/24/2017 00:1
Vinyl Acetate	ND	18	1	01/24/2017 00:11
Vinyl Chloride	ND	1.3	1	01/24/2017 00:11

(Cont.)

Angela Rydelius, Lab Manager

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# **Analytical Report**

Client: Schutze & Associates, Inc.

 Date Received:
 1/17/17 15:30

 Date Prepared:
 1/23/17-1/24/17

 Project:
 Tung/SCS539

WorkOrder: 1701626

**Extraction Method:** TO15 **Analytical Method:** TO15

Unit: μg/m<sup>3</sup>

Volatile Organic Compounds									
Client ID	Lab ID	Matrix	Date Collected	Instrui	ment	Batch II			
SV-1-5	1701626-001A	SoilGas	01/13/2017 12:00	GC29		133045			
Initial Pressure (psia)	Final Pressure (psia)					Analyst(s)			
12.11	24.13					AK			
<u>Analytes</u>		Result		RL	DF	Date Analyzed			
Xylenes, Total		36		6.6	1	01/24/2017 00:11			
Surrogates		REC (%)		<u>Limits</u>					
1,2-DCA-d4		106		70-130		01/24/2017 00:11			
Toluene-d8		107		70-130		01/24/2017 00:11			
4-BFB		101		70-130		01/24/2017 00:11			



# **Analytical Report**

Client: Schutze & Associates, Inc.

 Date Received:
 1/17/17 15:30

 Date Prepared:
 1/23/17-1/24/17

 Project:
 Tung/SCS539

WorkOrder: 1701626

Extraction Method: TO15
Analytical Method: TO15

Unit: µg/m³

Volatile	Organic	Compounds	
			_

Client ID	Lab ID	Matrix	<b>Date Collected</b>	Instrument		Batch ID
SV-1-3	1701626-002A	SoilGas	01/13/2017 12:00	GC29		133045
Initial Pressure (psia)	Final Pressure	e (psia)				Analyst(s)
12.73	25.40					AK
Analytes		Result		RL	DE	Date Analyzed
Acetone		ND		60	1	01/24/2017 00:57
Acrolein		ND		5.8	1	01/24/2017 00:57
Acrylonitrile		ND		1.1	1	01/24/2017 00:57
tert-Amyl methyl ether (TAME)		ND		2.1	1	01/24/2017 00:57
Вепzепе		5.0		1.6	1	01/24/2017 00:57
Benzyl chloride		ND		2.6	· 1	01/24/2017 00:57
Bromodichloromethane		19		3.5	1	01/24/2017 00:57
Bromoform		ND		5.2	1	01/24/2017 00:57
Bromomethane	<u> </u>	ND		2.0	1	01/24/2017 00:57
1,3-Butadiene		ND		1.1	1	01/24/2017 00:57
2-Butanone (MEK)		ND		75	1	01/24/2017 00:57
t-Butyl alcohol (TBA)		ND		31	1	01/24/2017 00:57
Carbon Disulfide		10	· · · · · · · · · · · · · · · · · · ·	1.6	1	01/24/2017 00:57
Carbon Tetrachloride		ND		3.2	1	01/24/2017 00:57
Chlorobenzene		ND		2.4	1	01/24/2017 00:57
Chloroethane		ND		1.3	1	01/24/2017 00:57
Chloroform		150		2.4	1	01/24/2017 00:57
Chloromethane	•	ND		1.0	1	01/24/2017 00:57
Cyclohexane		ND		18	1	01/24/2017 00:57
Dibromochloromethane		ND		4.4	1	01/24/2017 00:57
1,2-Dibromo-3-chloropropane		ND		0.12	1	01/24/2017 00:57
1,2-Dibromoethane (EDB)		ND		3.9	1	01/24/2017 00:57
1,2-Dichlorobenzene		ND		3.0	1	01/24/2017 00:57
1,3-Dichlorobenzene		ND		3.0	1	01/24/2017 00:57
1,4-Dichlorobenzene		ND		3.0	1	01/24/2017 00:57
Dichlorodifluoromethane		2.6		2.5	1	01/24/2017 00:57
1,1-Dichloroethane		ND		2.0	1	01/24/2017 00:57
1,2-Dichloroethane (1,2-DCA)		ND		2.0	1	01/24/2017 00:57
1,1-Dichloroethene		ND		2.0	1	01/24/2017 00:57
cis-1,2-Dichloroethene		ND		2.0	1	01/24/2017 00:57
trans-1,2-Dichloroethene		ND		2.0	1	01/24/2017 00:57
1,2-Dichloropropane		ND		2.4	1	01/24/2017 00:57
cis-1,3-Dichloropropene		ND		2.3	1	01/24/2017 00:57
trans-1,3-Dichloropropene		ND		2.3	1	01/24/2017 00:57

(Cont.)

Angela Rydelius, Lab Manager



## **Analytical Report**

Client: Schutze & Associates, Inc.

Date Received: 1/17/17 15:30 Date Prepared: 1/23/17-1/24/17 **Project:** Tung/SCS539

WorkOrder: 1701626

**Extraction Method: TO15** Analytical Method: TO15

Unit:  $\mu g/m^3$ 

	Volati	le Organic (	Compounds			
Client ID	Lab ID	Matrix	Date Collected	Instru	ment	Batch II
SV-1-3	1701626-002A	SoilGas	01/13/2017 12:00	GC29		133045
Initial Pressure (psia)	Final Pressure	e (psia)				Analyst(s)
12.73	25.40					AK
Analytes		Result		RL	DF	Date Analyzed
1,2-Dichloro-1,1,2,2-tetrafluoroethane		ND		3.6	1	01/24/2017 00:5
Diisopropyl ether (DIPE)		ND		2.1	1	01/24/2017 00:5
1,4-Dioxane	· · ·	ND		1.8	1	01/24/2017 00:5
Ethanol		ND		96	1	01/24/2017 00:5
Ethyl acetate		ND		1.8	1	01/24/2017 00:5
Ethyl tert-butyl ether (ETBE)		ND		2.1	1	01/24/2017 00:5
Ethylbenzene		4.8		2.2	1	01/24/2017 00:5
4-Ethyltoluene		ND		2.5	1	01/24/2017 00:5
Freon 113		ND		3.9	1	01/24/2017 00:5
Heptane		25		21	1	01/24/2017 00:5
Hexachlorobutadiene		ND		5.4	1	01/24/2017 00:5
Hexane		33		18	1	01/24/2017 00:5
2-Hexanone		ND		2.1	1	01/24/2017 00:5
4-Methyl-2-pentanone (MIBK)		ND		2.1	1	01/24/2017 00:5
Methyl-t-butyl ether (MTBE)	-	ND	_	1.8	1	01/24/2017 00:5
Methylene chloride		ND		8.8	1	01/24/2017 00:5
Methyl methacrylate		ND		2.1	1	01/24/2017 00:5
Naphthalene		ND		5.3	1	01/24/2017 00:5
Propene		ND		88	1	01/24/2017 00:5
Styrene		2.7		2.2	1	01/24/2017 00:5
1,1,1,2-Tetrachloroethane	·	ND		3.5	1	01/24/2017 00:5
1,1,2,2-Tetrachloroethane		ND		3.5	1	01/24/2017 00:5
Tetrachloroethene		ND		3.4	1	01/24/2017 00:5
Tetrahydrofuran		ND		3.0	1	01/24/2017 00:5
Toluene		120		1.9	1	01/24/2017 00:5
1,2,4-Trichlorobenzene		ND		3.8	1	01/24/2017 00:5
1,1,1-Trichloroethane		ND		2.8	1	01/24/2017 00:5
1.1.2-Trichloroethane		ND	<u> </u>	2.8	1	01/24/2017 00:5
Trichloroethene		ND		2.8	1	01/24/2017 00:5

ND

ND

ND

ND

3.6

(Cont.)

Vinyl Acetate

Vinyl Chloride

Trichlorofluoromethane

1,2,4-Trimethylbenzene

1,3,5-Trimethylbenzene

2.8

2.5

2.5

18

1.3

1

01/24/2017 00:57

01/24/2017 00:57

01/24/2017 00:57

01/24/2017 00:57

01/24/2017 00:57

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# **Analytical Report**

Client:

Schutze & Associates, Inc.

Date Received: 1/17/17 15:30 **Date Prepared:** 1/23/17-1/24/17

Project:

Tung/SCS539

WorkOrder:

1701626

**Extraction Method: TO15** 

Analytical Method: TO15

Unit:

 $\mu g/m^3$ 

Volatile Organic Compounds									
Client ID	Lab ID	Matrix	Date Collected	Instru	ment	Batch II			
SV-1-3	1701626-002A	SoilGas	01/13/2017 12:00	GC29	133045				
Initial Pressure (psia)	Final Pressure	e (psia)				Analyst(s)			
12.73	25.40					AK			
Analytes		Result		<u>RL</u>	DF	Date Analyzed			
Xylenes, Total		23		6.6	1	01/24/2017 00:57			
Surrogates		REC (%)		<u>Limits</u>					
1,2-DCA-d4		95		70-130		01/24/2017 00:57			
Toluene-d8		103		70-130		01/24/2017 00:57			
4-BFB		99		70-130		01/24/2017 00:57			



# **Analytical Report**

Client: Schutze & Associates, Inc.

Date Received: 1/17/17 15:30 Date Prepared: 1/23/17-1/24/17

Project:

Tung/SCS539

WorkOrder:

1701626

**Extraction Method:** TO15 **Analytical Method:** TO15

Unit:

ug/m³

	Volati	le Organic (	Compounds			
Client ID	Lab ID	Matrix	Date Collected	Instru	ment	Batch ID
SV-2-5	1701626-003A	SoilGas	01/13/2017 12:00	GC29		133045
Initial Pressure (psia)	Final Pressure	e (psia)				Analyst(s)
12.13	24.22					AK
Analytes		Result		RL	DF	Date Analyzed
Acetone		ND		60	1	01/24/2017 01:43
Acrolein		ND		5.8	1	01/24/2017 01:43
Acrylonitrile		ND		1.1	1	01/24/2017 01:43
tert-Amyl methyl ether (TAME)		ND		2.1	1	01/24/2017 01:43
Benzene		17		1.6	1	01/24/2017 01:43
Benzyl chloride		ND		2.6	1	01/24/2017 01:43
Bromodichloromethane		ND		3.5	1	01/24/2017 01:43
Bromoform		ND		5.2	1	01/24/2017 01:43
Bromomethane		ND	-	2.0	1	01/24/2017 01:43
1,3-Butadiene		ND		1.1	1	01/24/2017 01:43
2-Butanone (MEK)		ND		75	1	01/24/2017 01:43
t-Butyl alcohol (TBA)	- W	ND	· ,	31	1	01/24/2017 01:43
Carbon Disulfide		200		1.6	1	01/24/2017 01:43
Carbon Tetrachloride	***	ND		3.2	1	01/24/2017 01:43
Chlorobenzene		ND		2.4	1	01/24/2017 01:43
Chloroethane		ND		1.3	1	01/24/2017 01:43
Chloroform		31		2.4	1	01/24/2017 01:43
Chloromethane		ND		1.0	1	01/24/2017 01:43
Cyclohexane		35	· .	18	1	01/24/2017 01:43
Dibromochloromethane		ND		4.4	1	01/24/2017 01:43
1,2-Dibromo-3-chloropropane		ND		0.12	1	01/24/2017 01:43
1,2-Dibromoethane (EDB)		ND	<del></del>	3.9	1	01/24/2017 01:43
1,2-Dichlorobenzene		ND		3.0	1	01/24/2017 01:43
1,3-Dichlorobenzene		ND .		3.0	1	01/24/2017 01:43
1,4-Dichlorobenzene		ND		3.0	1	01/24/2017 01:43
Dichlorodifluoromethane		2.9		2.5	1	01/24/2017 01:43
1,1-Dichloroethane		ND		2.0	1	01/24/2017 01:43
1,2-Dichloroethane (1,2-DCA)		ND		2.0	1	01/24/2017 01:43
1,1-Dichloroethene		ND		2.0	1	01/24/2017 01:43
cis-1,2-Dichloroethene		ND		2.0	 1	01/24/2017 01:43
trans-1,2-Dichloroethene		ND		2.0	<u>·</u> 1	01/24/2017 01:43
1,2-Dichloropropane		ND		2.4	1	01/24/2017 01:43
cis-1,3-Dichloropropene		ND	-	2.3	<u>'</u> 1	01/24/2017 01:43
trans-1,3-Dichloropropene	·	ND		2.3	1	01/24/2017 01:43

(Cont.)

Angela Rydelius, Lab Manager



# **Analytical Report**

Client: Schutze & Associates, Inc.

Date Received: 1/17/17 15:30 Date Prepared: 1/23/17-1/24/17 Project:

Tung/SCS539

WorkOrder:

1701626

**Extraction Method: TO15** 

Analytical Method: TO15

Unit:

 $\mu g/m^3$ 

	Volati	le Organic (	Compounds			
Client ID	Lab ID	Matrix	Date Collected	Instru	ment	Batch ID
SV-2-5	1701626-003A	SoilGas	01/13/2017 12:00	GC29		133045
Initial Pressure (psia)	Final Pressur	e (psia)				Analyst(s)
12.13	24.22					AK
Analytes		Result		RL	<u>DF</u>	Date Analyzed
1,2-Dichloro-1,1,2,2-tetrafluoroethane		ND		3.6	1	01/24/2017 01:43
Diisopropyl ether (DIPE)		ND		2.1	1	01/24/2017 01:43
1,4-Dioxane		ND		1.8	1	01/24/2017 01:43
Ethanol		ND		96	1	01/24/2017 01:43
Ethyl acetate		ND		1.8	1	01/24/2017 01:43
Ethyl tert-butyl ether (ETBE)		ND		2.1	1	01/24/2017 01:43
Ethylbenzene		6.0		2.2	1	01/24/2017 01:43
4-Ethyltoluene		3.0		2.5	1	01/24/2017 01:43
Freon 113		ND		3.9	1	01/24/2017 01:43
Heptane		45		21	1	01/24/2017 01:43
Hexachlorobutadiene		ND		5.4	1	01/24/2017 01:43
Hexane		430	<del></del>	18	1	01/24/2017 01:43
2-Hexanone		ND	· · · · · · · · · · · · · · · · · · ·	2.1	1	01/24/2017 01:43
4-Methyl-2-pentanone (MIBK)		24		2.1	1	01/24/2017 01:43
Methyl-t-butyl ether (MTBE)		ND		1.8	1	01/24/2017 01:43
Methylene chloride		ND		8.8	1	01/24/2017 01:43
Methyl methacrylate		ND		2.1	1	01/24/2017 01:43
Naphthalene		ND		5.3	1	01/24/2017 01:43
Propene		210		88	1	01/24/2017 01:43
Styrene		3.4		2.2	1	01/24/2017 01:43
1,1,1,2-Tetrachloroethane		ND		3.5	1	01/24/2017 01:43
1,1,2,2-Tetrachloroethane		ND		3.5	1	01/24/2017 01:43
Tetrachloroethene		ND		3.4	· 1	01/24/2017 01:43
Tetrahydrofuran		4.8		3.0	1	01/24/2017 01:43
Toluene		96		1.9	1	01/24/2017 01:43
1,2,4-Trichlorobenzene		ND		3.8	1	01/24/2017 01:43
1,1,1-Trichloroethane		ND `		2.8	1	01/24/2017 01:43
1,1,2-Trichloroethane		ND		2.8	1	01/24/2017 01:43
Trichloroethene		ND		2.8	1	01/24/2017 01:43
Trichlorofluoromethane		ND		2.8	1	01/24/2017 01:43
1,2,4-Trimethylbenzene		7.7		2.5	1	01/24/2017 01:43
1,3,5-Trimethylbenzene		2.6		2.5	1	01/24/2017 01:43
Vinyl Acetate		ND		18	1	01/24/2017 01:43
Vinyl Chloride		ND		1.3	1	01/24/2017 01:43

(Cont.)

Angela Rydelius, Lab Manager

1534 Willow Pass Road, Pittsburg, CA 94565-1701 Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269 http://www.mccampbell.com / E-mail: main@mccampbell.com

# **Analytical Report**

Client:

Schutze & Associates, Inc.

Date Received: 1/17/17 15:30

**Project:** 

Date Prepared: 1/23/17-1/24/17 Tung/SCS539

WorkOrder:

1701626

**Extraction Method: TO15** 

Analytical Method: TO15

Unit:

 $\mu g/m^3$ 

Volatile Organic Compounds								
Client ID	Lab ID	Matrix	Date Collected	Instrui	ment	Batch II		
SV-2-5	1701626-003A	SoilGas	01/13/2017 12:00	GC29		133045		
Initial Pressure (psia)	Final Pressure	e (psia)				Analyst(s)		
12.13	24.22					AK		
<u>Analytes</u>		Result		RL	<u>DF</u>	Date Analyzed		
Xylenes, Total		28		6.6	1	01/24/2017 01:43		
Surrogates		REC (%)		Limits				
1,2-DCA-d4		99		70-130		01/24/2017 01:43		
Toluene-d8		101		70-130		01/24/2017 01:43		
4-BFB		99		70-130		01/24/2017 01:43		

## **ATTACHMENT C-1**

Responsible Party & Assessor's Office Information



ALEX BRISCOE, Agency Director



ENVIRONMENTAL HEALTH DEPARTMENT OFFICE OF THE DIRECTOR 1131 HARBOR BAY PARKWAY ALAMEDA, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

Certified Mail #: 7011 3500 0003 1848 1394

May 11, 2015

#### **NOTICE OF RESPONSIBILITY**

Site Name & Address:

SECOND AVENUE UST **1607 2ND AVENUE** OAKLAND, CA 94606

Local ID:

RO0003170

Related ID:

RWQCB ID:

NA

Global 1D:

T10000006756

Responsible Party:

ROGERS LATWUANIA S 360 17TH ST #204 OAKLAND, CA 94612-3340 Date First Reported:

11/19/2014

Substance:

12 - Heater Fuel

Funding for Oversight: LOPS - LOP State Fund

Multiple RPs?: Yes

Pursuant to sections 25297.1 and 25297.15 of the Health and Safety Code, you are hereby notified that the above site has been placed in the Local Oversight Program and the individual(s) or entity(ies) shown above, or on the attached list, has (have) been identified as the party(ies) responsible for investigation and cleanup of the above site. Section 25297.15 further requires the primary or active Responsible Party to notify all current record owners of fee title before the local agency considers cleanup or site closure proposals or issues a closure letter. For purposes of implementing section 25297.15, this agency has identified ROGERS LATWUANIA S as the primary or active Responsible Party. It is the responsibility of the primary or active Responsible Party to submit a letter to this agency, within 20 calendar days of receipt of this notice that identifies all current record owners of fee title. It is also the responsibility of the primary or active Responsible Party to certify to the local agency that the required notifications have been made at the time a cleanup or site closure proposal is made or before the local agency makes a determination that no further action is required. If property ownership changes in the future, you must notify this local agency within 20 calendar days from when you are informed of the change.

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Pursuant to section 25296.10(c)(6) of the Health and Safety Code, a responsible party may request the designation of an administering agency when required to conduct corrective action. Please contact this office for further information about the designation process.

Please contact your caseworker MATTHEW SOBY at this office at (510) 567-6725 if you have questions regarding your site.

RONALD BROWDER, Acting Director

Contract Project Director

ADD Action:

ADD

Reason:

Attachment A: Responsible Parties Data Sheet

cc: Clindy Davis, SWRCB (email: clindy.davis@waterboards.ca.gov) | Dilan Roe (email: dilan.roe@acgov.org), File



ALEX BRISCOE, Agency Director



ENVIRONMENTAL HEALTH DEPARTMENT OFFICE OF THE DIRECTOR 1131 HARBOR BAY PARKWAY ALAMEDA, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

Certified Mail #: 7011 3500 0003 1848 1387

May 11, 2015

#### **NOTICE OF RESPONSIBILITY**

Site Name & Address:

SECOND AVENUE UST 1607 2ND AVENUE OAKLAND, CA 94606

Local ID:

RO0003170

Related ID:

NA

RWQC8 ID:

NA

Global ID:

T1000D006756

Responsible Party:

RGG LLC ET AL. 360 17TH ST #204 OAKLAND, CA 94612-3340 Date First Reported:

11/19/2014

Substance:

12 - Heater Fuel

Funding for Oversight: LOPS - LOP State Fund

Multiple RPs7: Yes

Pursuant to sections 25297.1 and 25297.15 of the Health and Safety Code, you are hereby notified that the above site has been placed in the Local Oversight Program and the individual(s) or entity(les) shown above, or on the attached list, has (have) been identified as the party(ies) responsible for investigation and cleanup of the above site. Section 25297.15 further requires the primary or active Responsible Party to notify all current record owners of fee title before the local agency considers cleanup or site closure proposals or issues a closure letter. For purposes of implementing section 25297.15, this agency has identified RGG LLC ET Al., as the primary or active Responsible Party. It is the responsibility of the primary or active Responsible Party to submit a letter to this agency, within 20 calendar days of receipt of this notice that identifies all current record owners of fee title. It is also the responsibility of the primary or active Responsible Party to certify to the local agency that the required notifications have been made at the time a cleanup or site closure proposal is made or before the local agency makes a determination that no further action is required. If property ownership changes in the future, you must notify this local agency within 20 calendar days from when you are informed of the change.

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RONALD BROWDER, Acting Director

Contract Project Director

Date: 05-11-2015

Action: ADD

Attachment A: Responsible Parties Data Sheet

cc: Cindy Davis, SWRCB (email: cindy.davis@waterboards.ca.gov) | Dilan Roe (email: dilan.roe@acgov.org), File



ALEX BRISCOE, Agency Director



ENVIRONMENTAL HEALTH DEPARTMENT OFFICE OF THE DIRECTOR 1131 HARBOR BAY PARKWAY ALAMEDA, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

Certified Mail #: 7009 2820 0001 4359 6293

May 11, 2015

#### **NOTICE OF RESPONSIBILITY**

Site Name & Address:

SECOND AVENUE UST 1607 2ND AVENUE OAKLAND, CA 94606

RO0003170

Local ID: Related (D:

NA

RWQCB ID:

NA

Global ID:

T10000006756

Responsible Party:

1607 2ND AVE LLC **4096 PIEDMONT AVE # 150** OAKLAND, CA 94611-5221

Date First Reported:

11/19/2014

Substance:

12 - Heater Fuel

Funding for Oversight: LOPS - LOP State Fund

Multiple RPs?: Yes

Pursuant to sections 25297.1 and 25297.15 of the Health and Safety Code, you are hereby notified that the above site has been placed in the Local Oversight Program and the individual(s) or entity(ies) shown above, or on the attached list, has (have) been identified as the party(ies) responsible for investigation and cleanup of the above site. Section 25297.15 further requires the primary or active Responsible Party to notify all current record owners of fee title before the local agency considers cleanup or site closure proposals or issues a closure letter. For purposes of implementing section 25297.15, this agency has identified 1607 2ND AVE LLC as the primary or active Responsible Party. It is the responsibility of the primary or active Responsible Party to submit a letter to this agency, within 20 calendar days of receipt of this notice that identifies all current record owners of fee title. It is also the responsibility of the primary or active Responsible Party to certify to the local agency that the required notifications have been made at the time a cleanup or site closure proposal is made or before the local agency makes a determination that no further action is required. If properly ownership changes in the future, you must notify this local agency within 20 calendar days from when you are informed of the change.

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RONALD BROWDER, Acting Director

Contract Project Director

Action: ADD

Reason:

Attachment A: Responsible Parties Data Sheet

cc: Cindy Davis, SWRCB (email: cindy.davis@waterboards.ca.gov) † Dilan Roe (email: dilun.roe@acgov.org), File



ALEX BRISCOE, Agency Director



ENVIRONMENTAL HEALTH DEPARTMENT OFFICE OF THE DIRECTOR 1131 HARBOR BAY PARKWAY ALAMEDA, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

THE RESERVE THE PARTY OF THE PA

1

Certified Mail #: 7011 3500 0003 1848 1370

May 11, 2015

### NOTICE OF RESPONSIBILITY

Site Name & Address:

**SECOND AVENUE UST** 1607 2ND AVENUE OAKLAND, CA 94606

RO0003170

Local ID: Related ID:

NA

RWQCB ID:

NA

Global ID:

T10000006756

Responsible Party:

WEINSTEIN RICHARD L & LINDA M TRUST ET AL. C/O: WEINSTEIN RICHARD 360 17TH ST #204 OAKLAND, CA 94612-3340

Date First Reported:

11/19/2014

Substance:

12 - Heater Fuel

Funding for Oversight: LOPS - LOP State Fund

Multiple RPs?: Yes

Pursuant to sections 25297.1 and 25297.15 of the Health and Safety Code, you are hereby notified that the above site has been placed in the Local Oversight Program and the individual(s) or entity(ies) shown above, or on the attached list, has (have) been identified as the party(ies) responsible for investigation and cleanup of the above site. Section 25297.15 further requires the primary or active Responsible Party to notify all current record owners of fee title before the local agency considers cleanup or site closure proposals or issues a closure letter. For purposes of implementing section 25297.15, this agency has identified WEINSTEIN RICHARD L & LINDA M TRUST ET AL. as the primary or active Responsible Party. It is the responsibility of the primary or active Responsible Party to submit a letter to this agency, within 20 calendar days of receipt of this notice that identifies all current record owners of fee title. It is also the responsibility of the primary or active Responsible Party to certify to the local agency that the required notifications have been made at the time a cleanup or site closure proposal is made or before the local agency makes a determination that no further action is required. If property ownership changes in the future, you must notify this local agency within 20 calendar days from when you are informed of the change.

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Please contact your caseworker MATTHEW SOBY at this office at (510) 567-6725 if you have questions regarding your site.

RONALD BROWDER, Acting Director

Contract Project Director

Action: ADD

Reason: ADD

Attachment A: Responsible Parties Data Sheet

cc: Cindy Davis, SWRCB (email: cindy.davis@waterboards.ca.gov) | Difan Roe (email: dilan.roe@acgov.org), File



ALEX BRISCOE, Agency Director



**ENVIRONMENTAL HEALTH DEPARTMENT** OFFICE OF THE DIRECTOR 1131 HARBOR BAY PARKWAY ALAMEDA, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

Certified Mail #:

May 11, 2015

#### NOTICE OF RESPONSIBILITY

Site Name & Address:

**SECOND AVENUE UST** 1607 2ND AVENUE OAKLAND, CA 94606

RO0003170

Local ID: Related ID:

NA

RWQCB ID:

Global ID:

T10000006756

Responsible Party:

USEN IME ET AL. ADDRESS UNKNOWN Date First Reported:

11/19/2014

Substance:

12 - Heater Fuel

Funding for Oversight: LOPS - LOP State Fund

Multiple RPs7: Yes

Pursuant to sections 25297.1 and 25297.15 of the Health and Safety Code, you are hereby notified that the above site has been placed in the Local Oversight Program and the individual(s) or entity(ies) shown above, or on the attached list, has (have) been identified as the party(ies) responsible for investigation and cleanup of the above site. Section 25297.15 further requires the primary or active Responsible Party to notify all current record owners of fee title before the local agency considers cleanup or site closure proposals or issues a closure letter. For purposes of implementing section 25297.15, this agency has identified USEN IMF ET AL. as the primary or active Responsible Party. It is the responsibility of the primary or active Responsible Party to submit a letter to this agency, within 20 calendar days of receipt of this notice that identifies all current record owners of fee title. It is also the responsibility of the primary or active Responsible Party to certify to the local agency that the required notifications have been made at the time a cleanup or site closure proposal is made or before the local agency makes a determination that no further action is required. If property ownership changes in the future, you must notify this local agency within 20 calendar days from when you are informed of the change.

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Please contact your caseworker MATTHEW SOBY at this office at (510) 567-6725 if you have questions regarding your site.

RONALD BROWDER, Acting Director

Contract Project Director

Action:

ADD

ADD

Reason:

Attachment A: Responsible Parties Data Sheet

co: Cindy Davis, SWRCB (email: cindy.davis@waterboards.ca.gov) [ Dilan Roe (email: dilan.roe@acgov.org), File

Wate: 05-11-2015



**ENVIRONMENTAL HEALTH DEPARTMENT** OFFICE OF THE DIRECTOR 1131 HARBOR BAY PARKWAY ALAMEDA, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

#### **AGENCY**

ALEX BRISCOF, Agency Director

Certified Mail #:

May 11, 2015

#### NOTICE OF RESPONSIBILITY

Site Name & Address:

**SECOND AVENUE UST 1607 2ND AVENUE** OAKLAND, CA 94606

RO0003170

Local ID: Related ID:

NA

RWQCB ID:

NA

Global ID:

T10000006756

Responsible Party:

**SOLOMON PRINCE** ADDRESS UNKNOWN Date First Reported:

11/19/2014

Substance:

12 - Heater Fuel

Funding for Oversight: LOPS - LOP State Fund

Multiple RPs?: Yes

Pursuant to sections 25297.1 and 25297.15 of the Health and Safety Code, you are hereby notified that the above site has been placed in the Local Oversight Program and the individual(s) or entity(ies) shown above, or on the attached list, has (have) been identified as the party(ies) responsible for investigation and cleanup of the above site. Section 25297.15 further requires the primary or active Responsible Party to notify all current record owners of fee title before the local agency considers cleanup or site closure proposals or issues a closure letter. For purposes of implementing section 25297.15, this agency has identified SOLOMON PRINCE as the primary or active Responsible Party. It is the responsibility of the primary or active Responsible Party to submit a letter to this agency, within 20 calendar days of receipt of this notice that identifies all current record owners of fee title. It is also the responsibility of the primary or active Responsible Party to certify to the local agency that the required notifications have been made at the time a cleanup or site closure proposal is made or before the local agency makes a determination that no further action is required. If property ownership changes in the future, you must notify this local agency within 20 calendar days from when you are informed of the change.

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Please contact your caseworker MATTHEW SOBY at this office at (510) 567-6725 if you have questions regarding your site.

RONALD BROWDER, Acting Director

Contract Project Director

Action:

Reason:

ADD

Moate:



ENVIRONMENTAL HEALTH DEPARTMENT OFFICE OF THE DIRECTOR 1131 HARBOR BAY PARKWAY ALAMEDA, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

AGENCY

ALEX BRISCOE, Agency Director

Certified Mail #:

May 11, 2015

### **NOTICE OF RESPONSIBILITY**

Site Name & Address: **SECOND AVENUE UST 1607 2ND AVENUE** OAKLAND, CA 94606

Local ID: RO0003170

Related ID: NA RWQCB ID: NA

Global ID: T10000006756

Responsible Party:

Date First Reported:

11/19/2014

Substance:

12 - Heater Fuel

**UZEGBU MARCEL** ADDRESS UNKNOWN

Funding for Oversight: LOPS - LOP State Fund

Multiple RPs?: Yes

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Please contact your caseworker MATTHEW SOBY at this office at (510) 567-6725 if you have questions regarding your site.

RONALD BROWDFR, Acting Director

Contract Project Director

Action: ADD

ADD Reason:

Attachment A: Responsible Parties Data Sheet

cc: Cindy Davis, SWRCB (email: cindy.davis@waterboards.ca.gov) | Dilan Roe (email: dilan.roe@acgov.org), Flic



ENVIRONMENTAL HEALTH DEPARTMENT OFFICE OF THE DIRECTOR 1131 HARBOR BAY PARKWAY ALAMEDA, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

**AGENCY** 

ALEX BRISCOE, Agency Director

Certified Mail #:

May 11, 2015

### NOTICE OF RESPONSIBILITY

Site Name & Address: **SECOND AVENUE UST** 1607 2ND AVENUE

OAKLAND, CA 94606

RO0003170

Local ID: Related ID:

NA

RWQCB ID:

NA

Global ID:

T10000006756

Responsible Party:

**IGWEKA CHINAZAM ADDRESS UNKNOWN**  **Date First Reported:** 

11/19/2014

Substance:

12 ·· Heater Fuel

Funding for Oversight: LOPS - LOP State Fund

Multiple RPs?: Yes

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Please contact your caseworker MATTHEW SOBY at this office at (510) 567-6725 if you have questions regarding your site.

WDate: OS-11-2015

RONALD BROWDER, Acting Director

Contract Project Director

Action: ADD

Reason:

ADD

Attachment A: Responsible Parties Data Sheet

cr: Cindy Davis, SWRCB (email: cindy.davis@waterboards.cz.gov) | Dilan Roe (email: dilan.roe@acgov.org), File



ENVIRONMENTAL HEALTH DEPARTMENT OFFICE OF THE DIRECTOR 1131 HARBOR BAY PARKWAY ALAMEDA, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

#### **AGENCY**

ALEX BRISCOE, Agency Director

Certified Mail #:

May 11, 2015

#### **NOTICE OF RESPONSIBILITY**

Site Name & Address:

**SECOND AVENUE UST 1607 2ND AVENUE** OAKLAND, CA 94606

RO0003170

Local ID: Related ID:

NA

RWOCB ID:

NA

Global ID:

T10000006756

Responsible Party:

SMOCK CECILIA E ADDRESS UNKNOWN Date First Reported:

11/19/2014

Substance:

12 - Heater Fuel

Funding for Oversight: LOPS - LOP State Fund

Multiple RPs?: Yes

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RONALD BROWDER, Acting Director

Contract Project Director

Action: ADD

Reason:

ADD

Attachment A: Responsible Parties Data Sheet

oc: Clody Davis, SWRCB (email: pindy.davis@waterboards.ca.gov) | Dilan Koc (email: dilanaroe@acgov.org), File



**FNVIRONMENTAL HEALTH DEPARTMENT** OFFICE OF THE DIRECTOR 1131 HARBOR BAY PARKWAY ALAMEDA, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

AGENCY

ALEX BRISCOE, Agency Director

Certified Mail #:

May 11, 2015

#### NOTICE OF RESPONSIBILITY

Site Name & Address:

SECOND AVENUE UST 1607 2ND AVENUE OAKLAND, CA 94606

RO0003170

Local ID: Related ID:

NA

RWQCB ID:

NA

Global ID:

T10000006756

Responsible Party:

**DELUCCHI JOHN S & DARLENE C** ADDRESS UNKNOWN

Date First Reported:

11/19/2014

Substance:

12 - Heater Fuel

Funding for Oversight: LOPS - LOP State Fund

Multiple RPs?: Yes

Pursuant to sections 25297.1 and 25297.15 of the Health and Safety Code, you are hereby notified that the above site has been placed in the Local Oversight Program and the individual(s) or entity(ies) shown above, or on the attached list, has (have) been identified as the party(ies) responsible for investigation and cleanup of the above site. Section 25297.15 further requires the primary or active Responsible Party to notify all current record owners of fee title before the local agency considers cleanup or site closure proposals or issues a closure letter. For purposes of implementing section 25297.15, this agency has identified DELUCCHI JOHN S & DARLENE C as the primary or active Responsible Party. It is the responsibility of the primary or active Responsible Party to submit a letter to this agency, within 20 calendar days of receipt of this notice that identifies all current record owners of fee title. It is also the responsibility of the primary or active Responsible Party to certify to the local agency that the required notifications have been made at the time a cleanup or site closure proposal is made or before the local agency makes a determination that no further action is required. If properly ownership changes in the future, you must notify this local agency within 20 calendar days from when you are informed of the change.

Any action or inaction by this local agency associated with corrective action, including responsible party identification, is subject to petition to the State Water Resources Control Board. Petitions must be filed within 30 days from the date of the action/inaction. To obtain petition procedures, please FAX your request to the State Water Board at (916) 341-5808 or telephone (916) 341-5752.

Pursuant to section 25296.10(c)(6) of the Health and Safety Code, a responsible party may request the designation of an administering agency when required to conduct corrective action. Please contact this office for further information about the designation process.

Please contact your caseworker MATTHEW SOBY at this office at (510) 567-6725 if you have questions regarding your site.

RONALD BROWDER, Acting Director

Contract Project Director

Action: ADD

Reason:

ADD

Attachment A: Responsible Parties Data Sheet

sc: Cindy Davis, SWRCB (email: cindy davis@waterboards.ca.gov) | Dilan Roe (சாலி: dilan.roe@acgov.org), File



ENVIRONMENTAL HEALTH DEPARTMENT OFFICE OF THE DIRECTOR 1131 HARBOR BAY PARKWAY ALAMEDA, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

. A. C. P. Berrie

AGENCY

ALEX BRISCOE, Agency Director

Certified Mail #:

May 11, 2015

#### **NOTICE OF RESPONSIBILITY**

Site Name & Address:

SECOND AVENUE UST **1607 2ND AVENUE** OAKLAND, CA 94606

RO0003170

Local ID: Related ID:

NA

RWQCB ID:

NA

Global ID:

T10000006756

Responsible Party:

**EPSTEIN ELIZABETH C &** GLESSER HANNAH & ABE ESTATE ADDRESS UNKNOWN

Date First Reported:

11/19/2014

Substance:

12 - Heater Fuel

Funding for Oversight: LOPS - LOP State Fund

Multiple RPs?: Yes

Pursuant to sections 25297.1 and 25297.15 of the Health and Safety Code, you are hereby notified that the above site has been placed in the Local Oversight Program and the individual(s) or entity(ies) shown above, or on the attached list, has (have) been identified as the party(ies) responsible for investigation and cleanup of the above site. Section 25297.15 further requires the primary or active Responsible Party to notify all current record owners of fee title before the local agency considers cleanup or site closure proposals or issues a closure letter. For purposes of implementing section 25297.15, this agency has identified EPSTEIN ELIZABETH C & GLESSER HANNAH & ABE ESTATE as the primary or active Responsible Party. It is the responsibility of the primary or active Responsible Party to submit a letter to this agency, within 20 calendar days of receipt of this notice that identifies all current record owners of fee title. It is also the responsibility of the primary or active Responsible Party to certify to the local agency that the required notifications have been made at the time a cleanup or site closure proposal is made or before the local agency makes a determination that no further action is required. If property ownership changes in the future, you must notify this local agency within 20 calendar days from when you are informed of the change.

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Please contact your caseworker MATTHLW SOBY at this office at (510) 567-6725 if you have questions regarding your site.

) Date: 05-11-2015

RONALD BROWDER, Acting Director

Contract Project Director

Action: ADD

Reason:

ADD

Attachment A: Responsible Parties Data Sheet

cc: Cindy Davis, SWRCB (email: cindy.davis@waterboards.ca.gov) | Dilan Rue (email: dilan.roe@acgov.org), File



**ENVIRONMENTAL HEALTH DEPARTMENT** OFFICE OF THE DIRECTOR 1131 HARBOR BAY PARKWAY ALAMEDA, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

#### AGENCY

ALEX BRISCOE, Agency Director

Certified Mail #:

May 11, 2015

#### **NOTICE OF RESPONSIBILITY**

Site Name & Address:

SECOND AVENUE UST 1607 2ND AVENUE OAKLAND, CA 94606

ROD003170

Local ID: Related ID:

NA

RWQCB ID:

NA

Global ID:

T10000006756

Responsible Party:

**EPSTEIN S B + ELIZABETH C +** GLESSER A + HANNAH ADDRESS UNKNOWN

Date First Reported:

11/19/2014

Substance:

12 - Heater fuel

Funding for Oversight: LOPS - LOP State Fund

Multiple RPs?: Yes

Pursuant to sections 25297.1 and 25297.15 of the Health and Safety Code, you are hereby notified that the above site has been placed in the Local Oversight Program and the individual(s) or entity(ies) shown above, or on the attached list, has (have) been identified as the party(les) responsible for investigation and cleanup of the above site. Section 25297.15 further requires the primary or active Responsible Party to notify all current record owners of fee title before the local agency considers cleanup or site closure proposals or issues a closure letter. For purposes of Implementing section 25297.15, this agency has identified EPSTEIN S B + ELIZABETH C + GLESSER A + HANNAH as the primary or active Responsible Party. It is the responsibility of the primary or active Responsible Party to submit a letter to this agency, within 20 calendar days of receipt of this notice that identifies all current record owners of fee title. It is also the responsibility of the primary or active Responsible Party to certify to the local agency that the required notifications have been made at the time a cleanup or site closure proposal is made or before the local agency makes a determination that no further action is required. If property ownership changes in the future, you must notify this local agency within 20 calendar days from when you are informed of the change.

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Please contact your caseworker MATTHEW SOBY at this office at (510) 567-6725 if you have questions regarding your site.

RONALD BROWDER, Acting Director

Contract Project Director

Action: ADD

ADD

Reason:

Attachment A: Responsible Parties Data Sheet

cc: Clindy Davis, SWRCB (email: cindy.davis@waterboards.ca.gov) | Ditan Roe (email: ditan.roe@acgov.org), File

#### ALAMEDA COUNTY ENVIRONMENTAL HEALTH LUFT LOCAL OVERSIGHT PROGRAM

### ATTACHMENT A - RESPONSIBLE PARTIES DATA SHEET

May 11, 2015

Site Name & Address:

SECOND AVENUE UST 1607 2ND AVENUE OAKLAND, CA 94606 Local ID: RO0003170 Related ID: NA

RWQCBID: NA

Global ID: T10000006756

All Responsible Parties RP has been named a Primary RP - 1607 2ND AVE LLC 4096 PIEDMONT AVE # 150 | OAKLAND, CA 94611-5221 | Phone (510) 928-1026 RP has been named a Primary RP - WEINSTEIN RICHARD L & LINDA M TRUST ET AL. C/O: WEINSTEIN RICHARD 360 17<sup>34</sup> ST #204 | OAKLAND, CA 94612-3340 | No Phone Number Listed RP has been named a Primary RP - RGG LLC ET AL. 360 17<sup>T6</sup> ST #204 | OAKLAND, CA 94612-3340 | No Phone Number Listed RP has been named a Primary RP - ROGERS LATWUANIA S 350 17<sup>TR</sup> ST #204 | OAKLAND, CA 94612-3340 | No Phone Number Listed RP has been named a Primary RP - USEN IME ET AL. ADDRESS UNKNOWN | No Phone Number Listed RP has been named a Primary RP - SOLOMON PRINCE ADDRESS UNKNOWN | No Phone Number Listed RP has been named a Primary RP - UZEGBU MARCEL ADDRESS UNKNOWN | No Phone Number Listed RP has been named a Primary RP - IGWEKA CHINAZAM ADDRESS UNKNOWN | No Phone Number Listed RP has been named a Primary RP - SMOCK CECILIA E ADDRESS UNKNOWN | No Phone Number Listed RP has been named a Primary RP - DELUCCHI JOHN S & DARLENE C ADDRESS UNKNOWN | No Phone Number Listed RP has been named a Primary RP - EPSTEIN ELIZABETH C & GLESSER HANNAH & ABE ESTATE ADDRESS UNKNOWN | No Phone Number Listed RP has been named a Primary RP - EPSTEIN S B + ELIZABETH C + GLESSER A + HANNAH ADDRESS UNKNOWN | No Phone Number Listed

# ALAMEDA COUNTY ENVIRONMENTAL HEALTH LUFT LOCAL OVERSIGHT PROGRAM

### ATTACHMENT A - RESPONSIBLE PARTIES DATA SHEET

May 11, 2015

### Responsible Party Identification Background

Alameda County Environmental Health (ACEH) names a "Responsible Party," as defined under 23 C.C.R Sec. 2720. Section 2720 defines a responsible party 4 ways. An RP can be:

- 1. "Any person who owns or operates an underground storage tank used for the storage of any hazardous substance."
- 2. "In the case of any underground storage tank no longer in use, any person who owned or operated the underground storage tank immediately before the discontinuation of its use."
- 3. "Any owner of property where an unauthorized release of a hazardous substance from an underground storage tank has occurred."
- 4: "Any person who had or has control over an underground storage tank at the time of or following an unauthorized release of a hazardous substance."

#### ALAMEDA COUNTY ENVIRONMENTAL HEALTH LUFT LOCAL OVERSIGHT PROGRAM

### ATTACHMENT A - RESPONSIBLE PARTIES DATA SHEET

May 11, 2015

#### Existence of Unauthorized Release

One approximately 1,500 gallon underground storage tank (UST) and related subsurface product piping containing heating oil was excavated and removed from the site during November 2014. The UST was found to be in poor condition with visible holes. Soll discoloration and hydrocarbon odors were observed in the UST overburden soil and/or beneath the UST. Maximum petroleum hydrocarbon concentrations of 2.14 mg/kg total petroleum hydrocarbons as diesel (TPH-d), and 8.7 micrograms per kilogram ( $\mu$ g/kg) naphthalene were detected in the excavation samples collected during UST removal. A concentration of 307 mg/kg TPH-d and 345  $\mu$ g/kg naphthalene was documented in the 4-point stockpile soil sample. These concentrations indicate an unauthorized release has occurred from the UST system at this site.

#### Responsible Party Identification

1607 2<sup>nd</sup> AVENUE LLC (now known as 1607 2<sup>nd</sup> AVE LLC), acquired title of the property in July 2012. 1607 2<sup>nd</sup> AVE LLC meets the definition of a responsible party for the site because it is the current owner of property where an unauthorized release of a hazardous substance from an underground storage tank has occurred (Definition 3).

WEINSTEIN RICHARD I. & LINDA M TRUST ET AL., acquired title of the property in December 2011. WEINSTEIN RICHARD I. & LINDA M TRUST ET AL. meets the definition of a responsible party for the site because they were owners of property where an unauthorized release of a hazardous substance from an underground storage tank has occurred (Definition 3).

RGG ITC ET AL., acquired title of the property in August 2005. RGG LLC ET AL. meets the definition of a responsible party for the site because they were owners of property where an unauthorized release of a hazardous substance from an underground storage tank has occurred (Definition 3).

ROGERS LATWUANIA S, acquired title of the property in August 2005. ROGERS LATWUANIA S meets the definition of a responsible party for the site because they were owners of property where an unauthorized release of a hazardous substance from an underground storage tank has occurred (Definition 3).

USEN IME (now known as USEN IME ET AL.), acquired title of the property in July 2005. USEN IME ET AL. meets the definition of a responsible party for the site because they were owners of property where an unauthorized release of a hazardous substance from an underground storage tank has occurred (Definition 3).

SOLOMON PRINCE acquired title of the property in April 2003. SOLOMON PRINCE meets the definition of a responsible party for the site because they were owners of property where an unauthorized release of a hazardous substance from an underground storage tank has occurred (Definition 3).

UZEGBU MARCEL acquired title of the property in September 2001. UZEGBU MARCEL meets the definition of a responsible party for the site because they were owners of property where an unauthorized release of a hazardous substance from an underground storage tank has occurred (Definition 3).

IGWEKA CHINAZAM acquired title of the property in June 2000. IGWEKA CHINAZAM meets the definition of a responsible party for the site because they were owners of property where an unauthorized release of a hazardous substance from an underground storage tank has occurred (Definition 3).

SMOCK CECILIA E acquired title of the property in September 1997. SMOCK CECILIA E meets the definition of a responsible party for the site because they were owners of property where an unauthorized release of a hazardous substance from an underground storage tank has occurred (Definition 3).

DELUCCHI JOHN S & DARLENE C (individually or jointly) acquired title of the property in December 1980. DELUCCHI JOHN S & DARLENE C (individually or together) meets the definition of a responsible party for the site because they were owners of property where an unauthorized release of a hazardous substance from an underground storage tank has occurred (Definition 3).

EPSTFIN ELIZABETH C & GLESSER HANNAH & ABE ESTATE acquired title of the property in November 1971. FPSTEIN ELIZABETH C & GLESSER HANNAH & ABE ESTATE meets the definition of a responsible party for the site because they were owners of property where an unauthorized release of a hazardous substance from an underground storage tank has occurred (Definition 3).

EPSTEIN S B + ELIZABETH C + GLESSER A + HANNAI I acquired title of the property in February 1962. FPSTEIN S B + ELIZABETH C + GLESSER A + HANNAH meets the definition of a responsible party for the site because they were owners of property where an unauthorized release of a hazardous substance from an underground storage tank has occurred (Definition 3).

**New Query** 

# **Property Value System**

History Value Transfer Map Glossary

Parcel Number: 20-182-3 Inactive: N Lien Date: 01/01/2018 Owner: 1607 2ND AVE LLC

Property Address: 1607 2ND AVE, OAKLAND, CA 94606-1713

Current Mailing Address as of 04/21/2016: 1607 2ND AVE LLC, c/o PACIFIC SALES & MGMT., 425 7TH ST STE A, OAKLAND, CA 94607-3911

Mailing Name			Document Date	Documen Number		Parcel Count	
1607 2ND AVE LLC	<u>List</u> <u>Owners</u>	4096 PIEDMONT AVE # 150, OAKLAND, CA 94611- 5221		2015- 15702		1	<u>3200</u>
1607 2ND AVE LLC	<u>List</u> <u>Owners</u>	4096 PIEDMONT AVE # 150, OAKLAND, CA 94611- 5221	01/01/2013	3TRAN- 281450		1	<u>3200</u>
1607 2ND AVENUE LLC	<u>List</u> <u>Owners</u>	4096 PIEDMONT AVE # 150, OAKLAND, CA 94611- 5221		22012- 227132	\$1,168,000	1	<u>3200</u>
WEINSTEIN RICHARD L & LINDA M TRS ETAL c/o WEINSTEIN RICHARD	<u>Owners</u>	360 17TH ST # 204, OAKLAND, CA 94612-3340	12/09/2011 )	2011- 359932		1	3200
RGG LLC ETAL	List	360 17TH ST # 204, OAKLAND, CA 94612-3340	12/24/2009 )	2009- 395161		1	3200
RGG LLC ETAL	List	360 17TH ST # 204, OAKLAND, CA 94612-3340	12/24/2009	2009- 395160		1	<u>3200</u>
RGG LLC ETAL	List	360 17TH ST # 204, OAKLAND, CA 94612-3340	12/24/2009	2009- 395159		.1	<u>3200</u>
RGG LLC ETAL	<u>List</u>	360 17TH ST # 204, OAKLAND, CA 94612-3340	12/24/2009	2009- 395158		1	3200
RGG LLC ETAL	List Owners	360 17TH ST # 204, OAKLAND, CA 94612-3340	12/24/2009 )	32009- 395157		1	<u>3200</u>
RGG LLC ETAL	<u>List</u> Owners	360 17TH ST # 204, OAKLAND, CA 94612-3340	12/24/2009 )	395152		1	3200
RGG LLC ETAL	<u>List</u> Owners	360 17TH ST # 204, OAKLAND, CA 94612-3340	08/29/2005 )	369770		1	3200
ROGERS LATWUANIA S & RGG LLC		360 17TH ST # 204, OAKLAND, CA 94612	08/29/2005	369769		1	3200
USEN IME ETAL	<u>List</u> <u>Owners</u>	PO BOX 16241 , OAKLAND, CA 94610	07/26/2005	317188		1	<u>3200</u>
USEN IME	<u>List</u> Owners	PO BOX 16241 , OAKLAND, CA 94610	07/25/2008	315287		1	3200
SOLOMON PRINCE	<u>List</u> <u>Owners</u>	30279 OAKBROOK RD , HAYWARD, CA 94544- 6669	09/02/2003	3 2003- 518520		1	<u>3200</u>
			04/16/2003	3		1	3200

SOLOMON PRINCE & UZEGBU MARCEL	<u>List</u> <u>Owners</u>	1607 2ND AVE , OAKLAND, CA 94606-1713		2003- 222523			
UZEGBU MARCEL	<u>List</u> <u>Owners</u>	2666 GILL DR , CONCORD, CA 94520- 2234	09/11/2001	2001- 345520	\$827,700	1	3200
IGWEKA CHINAZAM		PO BOX 16241 , OAKLAND, CA 94610-6241				1	3200
SMOCK CECILIA E	<u>List</u> <u>Owners</u>	250 MONTECITO AVE , OAKLAND, CA 94610-4376	09/29/1997	1997- 25 <b>42</b> 91		1	3200
DELUCCHI JOHN S & DARLENE C	<u>List</u> <u>Owners</u>	5725 HARBORD DR , OAKLAND, CA 94611-3162	09/22/1988	1988- 240108	5.	1	3200
		678 14TH ST , OAKLAND, CA 94612-1243		1980- 217594		1	3200
		1607 2ND AVE , OAKLAND, CA 94606-1713				2	3200
EPSTEIN S B + ELIZABETH C + GLESSER A + HANNAH	<u>List</u> <u>Owners</u>	1607 2ND AVE , OAKLAND, CA 94606-1713	02/06/1962	AT-16460		1	3200

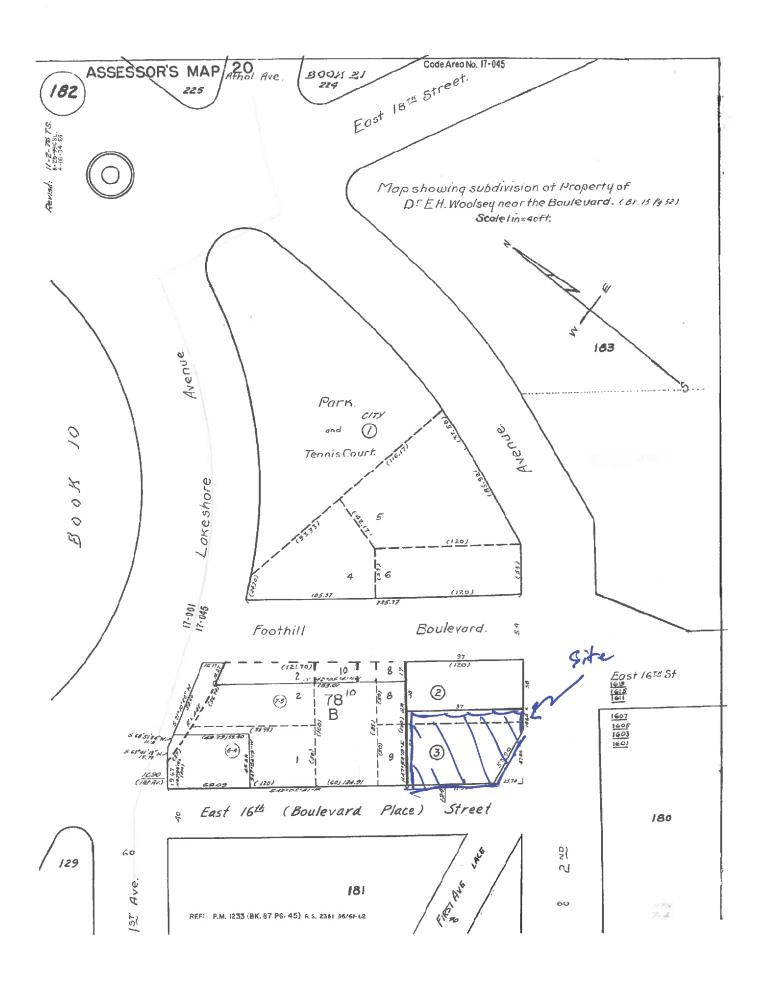
All information on this site is to be assumed accurate for property assessment purposes only, and is based upon the

Assessor's knowledge of each property. Caution is advised for use other than its intended purpose.

The Alameda County Intranet site is best viewed in Internet Explorer Version 5.5 or later.

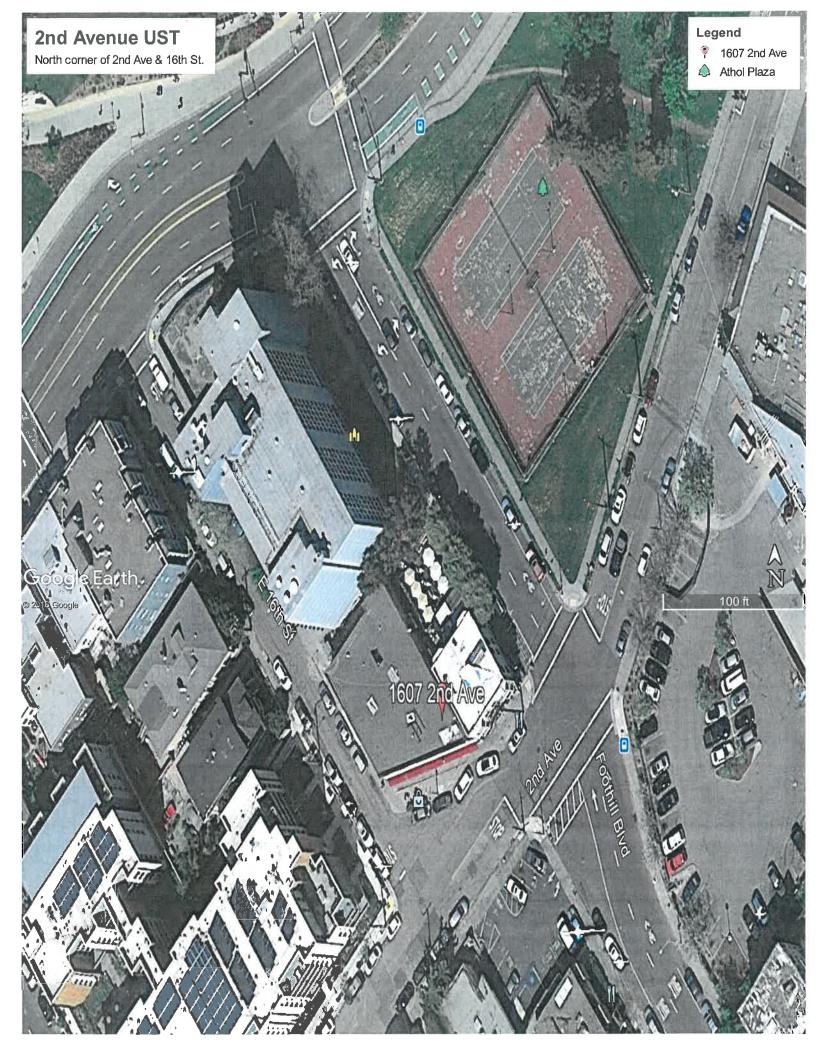
Click <a href="https://example.com/here-picture/best-site-pictur

Copyright © 2001 Alameda County



## **ATTACHMENT C-2**

**Site Configuration at Time of Closure** 



## **ATTACHMENT D-1**

**Public Notification Fact Sheet & Distribution List** 

# ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY

C

DEPARTMENT OF ENVIRONMENTAL HEALTH LOCAL OVERSIGHT PROGRAM (LOP) FOR HAZARDOUS MATERIALS RELEASES 1131 HARBOR BAY PARKWAY ALAMEDA, CA 94502 (510) 567-6700 FAX (510) 337-9335

COLLEEN CHAWLA, Agency Director

### <u>INVITATION TO COMMENT – POTENTIAL CASE CLOSURE</u>

#### SECOND AVENUE UST 1607 2<sup>ND</sup> AVENUE, OAKLAND, CALIFORNIA FUEL LEAK CASE RO0003170 GEOTRACKER GLOBAL ID T10000006756

April 28, 2018

The above referenced site is a fuel leak case that is under the regulatory oversight of the Alameda County Department of Environmental Health (ACDEH) Local Oversight Program for the investigation and cleanup of a release of petroleum hydrocarbons from an underground storage tank system. Site investigation and cleanup activities have been completed and the site has been evaluated in accordance with the State Water Resources Control Board Low-Threat Closure Policy. The site appears to meet all of the criteria in the Low-Threat Closure Policy. Therefore, ACDEH is considering closure of the fuel leak case.

The public is invited to review and comment on the potential closure of the fuel leak case. This notice is being sent to the current occupants and landowners of the site and adjacent properties and other known interested parties. The entire case file can be viewed over the Internet on the ACDEH website (<a href="http://www.acgov.org/aceh/lop/ust.htm">http://www.acgov.org/aceh/lop/ust.htm</a>) or the State of California Water Resources Control Board GeoTracker website (<a href="http://geotracker.waterboards.ca.gov">http://geotracker.waterboards.ca.gov</a>). Please send written comments to Keith Nowell at the address below; all comments will be forwarded to the responsible parties. Comments received by June 26, 2018 will be considered and responded to prior to a final determination on the proposed case closure.

If you have comments or questions regarding this site, please contact the ACDEH caseworker, Keith Nowell at 510-567-6746 or by email at <a href="mailto:keith.nowell@acgov.org">keith.nowell@acgov.org</a>. Please refer to ACDEH case RO0003170 in any correspondence.

Harry T. Tung 1607 2<sup>nd</sup> Ave., LLC 4096 Piedmont Ave. #150 Oakland, CA 94611

6/22/2018

Keith Nowell Department of Environmental Health 1131 Harbor Bay Parkway Alameda, CA 94502

Dear Keith,

This letter serves as the confirmation of distribution of the notice titled "INVITATION TO COMMENT – POTENTIAL CASE CLOSURE" to the recipients listed in the Public Notification Distribution List attached. Letters were mailed out by USPS on June 9, 2018, to all recipients except the two senior care facilities.

To ensure that the letters and instructions reached management of the senior care facilities, I hand delivered the letters to each facility. For Lakeside Senior Apartments (1507 2<sup>nd</sup> Ave.), I spoke with Moncena Campbell (property manager), who personally agreed to either post the letter on the community bulletin board or deliver a copy to each mailbox, whichever the upper management would approve. For Rose of Sharon Senior Homes, I spoke with Rose Marie Jackson (property manager), who also agreed to either post on the community bulletin board or deliver a copy to each mailbox depending on what their upper management decided. I let both managers know that our preference was for each tenant to receive a copy, which they acknowledged.

Attached is the list that was used to generate the mailing labels. The return address was your name and address at 1131 Harbor Bay Parkway.

Please let me know if you require anything further at this time. We look forward to case closure soon. Thank you for your assistance with this process, Keith.

Regards,

Harry T. Tung

1607 2<sup>nd</sup> Ave., LLC

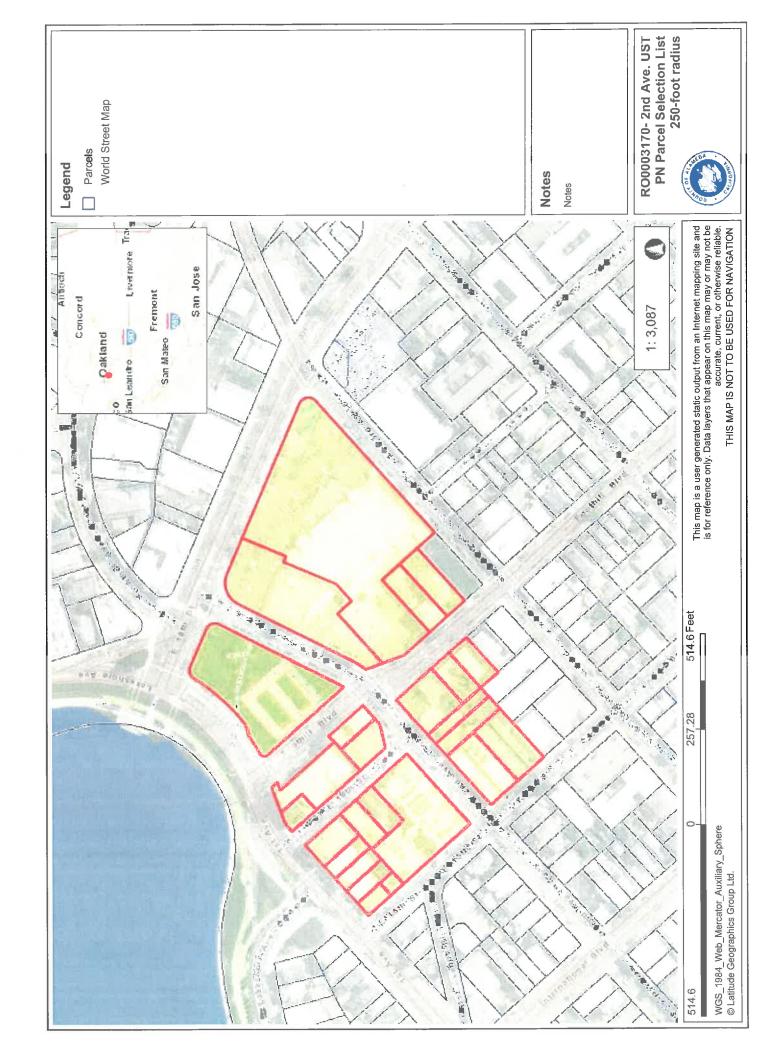
510-388-4817 direct

Parcel_APN	Name	Address	Unit	City	Zip	Zip_4
20-180-1	OCCUPANT	211 FOOTHILL BLVD	#A	OAKLAND CA	94606	
20-180-1	OCCUPANT	211 FOOTHILL BLVD	#B	OAKLAND CA	94606	
20-180-1	OCCUPANT	211 FOOTHILL BLVD	#C	OAKLAND CA	94606	
20-180-1	CHOW WAN K TR	989 WEBSTER ST	#349	OAKLAND CA	94607	4285
20-180-10-1	OCCUPANT	220 E 15TH ST	#1	OAKLAND CA	94606	
20-180-10-1	OCCUPANT	220 E 15TH ST	#2	OAKLAND CA	94606	
20-180-10-1	OCCUPANT	220 E 15TH ST	#3	OAKLAND CA	94606	
20-180-10-1	OCCUPANT	220 E 15TH ST	#4	OAKLAND CA	94606	
20-180-10-1	OCCUPANT	220 E 15TH ST	#5	OAKLAND CA	94606	
20-180-10-1	OCCUPANT	220 E 15TH ST	#6	OAKLAND CA	94606	
20-180-10-1	OCCUPANT	220 E 15TH ST	#7	OAKLAND CA	94606	
20-180-10-1	OCCUPANT	220 E 15TH ST	#8	OAKLAND CA	94606	
20-180-10-1	OCCUPANT	220 E 15TH ST	#9	OAKLAND CA	94606	
20-180-10-1	OCCUPANT	220 E 15TH ST	#10	OAKLAND CA	94606	
20-180-10-1	OCCUPANT	220 E 15TH ST	#11	OAKLAND CA	94606	
20-180-10-1	OCCUPANT	220 E 15TH ST	#12	OAKLAND CA	94606	
20-180-10-1	OCCUPANT	220 E 15TH ST	#13	OAKLAND CA	94606	
20-180-10-1	OCCUPANT	220 E 15TH ST	#14	OAKLAND CA	94606	
20-180-10-1	OCCUPANT	220 E 15TH ST	#15	OAKLAND CA	94606	
20-180-10-1	OCCUPANT	220 E 15TH ST	#16	OAKLAND CA	94606	
20-180-10-1	OCCUPANT	220 E 15TH ST	#17	OAKLAND CA	94606	
20-180-10-1	OCCUPANT	220 E 15TH ST	#18	OAKLAND CA	94606	
20-180-10-1	OCCUPANT	220 E 15TH ST	#19	OAKLAND CA	94606	
20-180-10-1	OCCUPANT	220 E 15TH ST	#20	OAKLAND CA	94606	
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20-180-10-1	OCCUPANT	220 E 15TH ST	#22	OAKLAND CA	94606	
20-180-10-1	OCCUPANT	220 E 15TH ST	#23	OAKLAND CA	94606	
20-180-10-1	OCCUPANT	220 E 15TH ST	#24	OAKLAND CA	94606	
20-180-10-1	2ND AVENUE	2572 21ST ST		SACRAMENTO CA	95818	2523
20-180-10-2	OCCUPANT	200 E 15TH ST	#1	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#2	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#3	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#4	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#5	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#6	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#7	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#8	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#9	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#10	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#11	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#12	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#13	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#14	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#15	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#16	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#17	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#18	OAKLAND CA	94606	

20-180-10-2	OCCUPANT	200 E 15TH ST	#19	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#20	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#21	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#22	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#23	OAKLAND CA	94606	
20-180-10-2	OCCUPANT	200 E 15TH ST	#24	OAKLAND CA	94606	
20-180-11	OCCUPANT	1530 2ND AVE		OAKLAND CA	94606	
20-180-11	OCCUPANT	1532 2ND AVE		OAKLAND CA	94606	
20-180-11	COLIN MARK R &	5201 MASONIC AVE		OAKLAND CA	94618	2631
20-180-12	BARBARA A TRS OCCUPANT	1534 2ND AVE		OAKLAND CA	94606	
20-180-12	OCCUPANT	1536 2ND AVE		OAKLAND CA	94606	
20-180-12	BENEVEDES EILEEN L	2074 DALTON WAY		UNION CITY CA	94587	
20-180-2	OCCUPANT	217 FOOTHILL BLVD		OAKLAND CA	94606	
20-180-2	OCCUPANT	219 FOOTHILL BLVD		OAKLAND CA	94606	
20-180-2	OCCUPANT	221 FOOTHILL BLVD		OAKLAND CA	94606	
20-180-2	OCCUPANT	223 FOOTHILL BLVD		OAKLAND CA	94606	
20-180-2	LAGIOS MARKOS J &	505 WESTFIELD WAY		OAKLAND CA	94619	2341
20-180-3	OCCUPANT	231 FOOTHILL BLVD	#A	OAKLAND CA	94606	
20-180-3	OCCUPANT	231 FOOTHILL BLVD	#B	OAKLAND CA	94606	
20-180-3	OCCUPANT	231 FOOTHILL BLVD	#C	OAKLAND CA	94606	
20-180-3	OCCUPANT	231 FOOTHILL BLVD	#D	OAKLAND CA	94606	
20-180-3	AUBURN PACIFIC GROUP	PO BOX 471795		SANFRANCISCO CA	94147	1795
20-181-1	OCCUPANT	105 E 16TH ST		OAKLAND CA	94606	
20-181-1	FIRST & 16 LP	2240 BLAKE ST	99	BERKELEY CA	94704	2754
20-181-12	TON VANSON & JULIE M	1520 1 ST AVE		OAKLAND CA	94606	1694
20-181-12	OCCUPANT	1520 1 ST AVE	#1	OAKLAND CA	94606	
20-181-12	OCCUPANT	1520 1 ST AVE	#2	OAKLAND CA	94606	
20-181-12	OCCUPANT	1520 1 ST AVE	#3	OAKLAND CA	94606	
20-181-12	OCCUPANT	1520 1 ST AVE	#4	OAKLAND CA	94606	
20-181-12	OCCUPANT	1520 1 ST AVE	#5	OAKLAND CA	94606	
20-181-12	OCCUPANT	1520 1 ST AVE	#6	OAKLAND CA	94606	
20-181-12	OCCUPANT	1520 1 ST AVE	#7	OAKLAND CA	94606	
20-181-12	OCCUPANT	1520 1 ST AVE	#8	OAKLAND CA	94606	
20-181-14	KACHADOURIAN KEVIN	1508 1 ST AVE		OAKLAND CA	94606	1667
20-181-14	OCCUPANT	1508 1 ST AVE	#1	OAKLAND CA	94606	
20-181-14	OCCUPANT	1508 1 ST AVE	#2	OAKLAND CA	94606	
20-181-14	OCCUPANT	1508 1 ST AVE	#3	OAKLAND CA	94606	
20-181-14	OCCUPANT	1508 1 ST AVE	#4	OAKLAND CA	94606	
20-181-15	E B HOUSES LLC	105 STEPHANIE CT		ALAMO CA	94507	1227
20-181-15	OCCUPANT	1516 1ST AVE	#1	OAKLAND CA	94606	
20-181-15	OCCUPANT	1516 1ST AVE	#2	OAKLAND CA	94606	
20-181-15	OCCUPANT	1516 1ST AVE	#3	OAKLAND CA	94606	
20-181-15	OCCUPANT	1516 1ST AVE	#4	OAKLAND CA	94606	
20-181-15	OCCUPANT	1516 1ST AVE	#5	OAKLAND CA	94606	
20-181-15	OCCUPANT	1516 1ST AVE	#6	OAKLAND CA	94606	
20-181-15	OCCUPANT	1516 1ST AVE	#7	OAKLAND CA	94606	
20-181-15	OCCUPANT	1516 1ST AVE	#8	OAKLAND CA	94606	
20-181-15	OCCUPANT	1516 1ST AVE	#9	OAKLAND CA	94606	

20-181-15	OCCUPANT	1516 1ST AVE	#10	OAKLAND CA	94606		
20-181-15	OCCUPANT	1516 1ST AVE	#11	OAKLAND CA	94606		
20-181-15	OCCUPANT	1516 1ST AVE	#12	OAKLAND CA	94606		
20-181-16-1	Lakeside Senior Apartmer	1507 2ND AVE		OAKLAND CA	94606		Att: Moncena Campbell
20-181-16-1	CITY OF OAKLAND	1801 HARRISON ST	2ND	OAKLAND CA	94612	3465	
20-181-17	HOUSING OCCUPANT	100 E 15TH ST	#A	OAKLAND CA	94606		
20-181-17	OCCUPANT	100 E 15TH ST	#B	OAKLAND CA	94606		
20-181-17	OCCUPANT	100 E 15TH ST	#C	OAKLAND CA	94606		
20-181-17	OCCUPANT	100 E 15TH ST	#D	OAKLAND CA	94606		
20-181-17	CHI ANTHONY & ROSE	6131 ARLINGTON BLVD		RICHMOND CA	94805	1203	
20-181-18	WU STEVEN &LILY FTRS	112 E 15TH ST		OAKLAND CA	94606	1717	
20-181-18	OCCUPANT	114 E 15TH ST		OAKLAND CA	94606		
20-181-2	OCCUPANT	115 E 16TH ST		OAKLAND CA	94606		1241
20-181-2	OCCUPANT	117 E 16TH ST		OAKLAND CA	94606		
20-181-2	OCCUPANT	119 E 16TH ST		OAKLAND CA	94606		
20-181-2	OCCUPANT	121 E 16TH ST		OAKLAND CA	94606		
20-181-2	ASHCO	385 GRAND AVE	200	OAKLAND CA	94610	4816	
20-181-3	PEPER DAVE & MARK	125 E 16TH ST	Α	OAKLAND CA	94606	1720	
20-181-3	OCCUPANT	127 E 16TH ST		OAKLAND CA	94606		
20-182-1	CITY OF OAKLAND	250 FRANK H OGAWA PLZ	4	OAKLAND CA	94612	20 10	
20-182-2	OCCUPANT	1615 2ND AVE	#1	OAKLAND CA	94606		
20-182-2	OCCUPANT	1615 2ND AVE	#2	OAKLAND CA	94606		
20-182-2	OCCUPANT	1615 2ND AVE	#3	OAKLAND CA	94606		
20-182-2	OCCUPANT	1615 2ND AVE	#4	OAKLAND CA	94606		
20-182-2	OCCUPANT	1615 2ND AVE	#5	OAKLAND CA	94606		
20-182-2	OCCUPANT	1615 2ND AVE	#6	OAKLAND CA	94606		
20-182-2	OCCUPANT	1615 2ND AVE	#7	OAKLAND CA	94606		
20-182-2	OCCUPANT	1615 2ND AVE	#8	OAKLAND CA	94606		
20-182-2	PARK DENNY TR	7 JORDAN E		IRVINE CA	92612	2332	
20-182-3	OCCUPANT	1601 2ND AVE		OAKLAND CA	94606		
20-182-3	OCCUPANT	1603 2ND AVE		OAKLAND CA	94606		it.
20-182-3	OCCUPANT	1605 2ND AVE		OAKLAND CA	94606		
20-182-3	OCCUPANT	1607 2ND AVE		OAKLAND CA	94606		
20-182-3	1607 2ND AVE LLC	425 7TH ST	Α	OAKLAND CA	94607	3911	
20-182-64	OCCUPANT	1630 LAKESHORE AVE		OAKLAND CA	94606		
20-182-6-4	ROSE OF SHARON SENIOR	1600 LAKESHORE AVE		OAKLAND CA	94606	1664	Attn: Rose Marie Jackson
20-182-7-5	OCCUPANT	118 E 16THST		OAKLAND CA	94606		
20-182-7-5	ROSE SHARON PARTNERS	1350 COLUMBIA ST	802	SAN DIEGO CA	92101	3456	
20-183-3	I P LE KEVIN	238 FOOTHILL BLVD		OAKLAND CA	94606	1723	
20-1834	OCCUPANT	232 FOOTHILL BLVD	#1	OAKLAND CA	94606		
20-1834	OCCUPANT	232 FOOTHILL BLVD	#2	OAKLAND CA	94606		
20-1834	OCCUPANT	232 FOOTHILL BLVD	#3	OAKLAND CA	94606		
20-1834	OCCUPANT	232 FOOTHILL BLVD	#4	OAKLAND CA	94606		
20-1834	OCCUPANT	232 FOOTHILL BLVD	#5	OAKLAND CA	94606		
20-1834	OCCUPANT	232 FOOTHILL BLVD	#6	OAKLAND CA	94606		
20-1834	CHEUNG MICHAEL &	3 LA SALLE AVE		PIEDMONT CA	94611	3530	
20-183-6-3	HFI FN TRS Lucky's Supermarket	247 E 18TH ST		OAKLAND CA	94606		
	ALAMEDIÀ COUNTY CERT	I 1131 HARBOR BAY PARKV	VAY	ALAMEDA CA	94502	ATTN: SUSAN HUGO	susan.hugo@acgov.org

	SF BAY REGIONAL WATER	R 1515 CLAY ST	STE 1	4 OAKLAND CA	94612	ATTN: LAURENT MEILLIER	laurent.meillier@waterboards.ca.gov
	OAKLAND PUBLIC WORKS	S 250 FRANK H OGAWA PLZ	#5301	L OAKLAND CA	94612	ATTN: Mark Arniola	marniola@oaklandnet.om
	EAST BAY MUNICIPAL UT	II PO BOX 24055	MS 70	); OAKLAND CA	94623	ATTN: CHANDRA JOHANNES	Sciohanne@ebmud.com
	OCCUPANT	1611 2ND AVE		OAKLAND CA	94606		
	OCCUPANT	134 E16TH ST.	#1	OAKLAND CA	94606		
	OCCUPANT	134 E16TH ST.	#2	OAKLAND CA	94606		
	OCCUPANT	134 E16TH ST.	#3	OAKLAND CA	94606		
	OCCUPANT	134 E16TH ST.	#4	OAKLAND CA	94606		
	OCCUPANT	134 E16TH ST.	#5	OAKLAND CA	94606		
	OCCUPANT	134 E16TH ST.	#6	OAKLAND CA	94606		
	OCCUPANT	134 E16TH ST.	#7	OAKLAND CA	94606		
	OCCUPANT	134 E16TH ST.	#8	OAKLAND CA	94606		
	OCCUPANT	134 E16TH ST.	#9	OAKLAND CA	94606		
	OCCUPANT	134 E16TH ST.	#10	OAKLAND CA	94606		
	OCCUPANT	134 E16TH ST.	#11	OAKLAND CA	94606		
	OCCUPANT	134 E16TH ST.	#12	OAKLAND CA	94606	*	
	OCCUPANT	134 E16TH ST.	#14	OAKLAND CA	94606		
	OCCUPANT	134 E16TH ST.	#15	OAKLAND CA	94606		
	OCCUPANT	134 E16TH ST.	#16	OAKLAND CA	94606		
	OCCUPANT	134 E16TH ST.	#17	OAKLAND CA	94606		
	OCCUPANT	134 E16TH ST.	#18	OAKLAND CA	94606		
	OCCUPANT	1524 1ST AVE	#201	OAKLAND CA	94606		
	OCCUPANT	1524 1ST AVE	#202	OAKLAND CA	94606		
	OCCUPANT	1524 1ST AVE	#203	OAKLAND CA	94606		
	OCCUPANT	1524 1ST AVE	#204	OAKLAND CA	94606		
	OCCUPANT	1524 1ST AVE	#301	OAKLAND CA	94606		
	OCCUPANT	1524 1ST AVE	#302	OAKLAND CA	94606		
	OCCUPANT	1524 1ST AVE	#303	OAKLAND CA	94606		
	OCCUPANT	1524 1ST AVE	#304	OAKLAND CA	94606		
	OCCUPANT	1524 1ST AVE	#401	OAKLAND CA	94606		
	OCCUPANT	1524 1ST AVE	#402	OAKLAND CA	94606		
	OCCUPANT	1524 1ST AVE	#403	OAKLAND CA	94606		
	OCCUPANT	1524 1ST AVE	#404	OAKLAND CA	94606		
	OCCUPANT	1524 1ST AVE	#501	OAKLAND CA	94606		
	OCCUPANT	1524 1ST AVE	#502	OAKLAND CA	94606		
	OCCUPANT	1524 15T AVE	#503	OAKLAND CA	94606		
	OCCUPANT	1524 1ST AVE	#504	OAKLAND CA	94606		
20-183-6-2	MERRITT STREET LLC	480 3RD ST		OAKLAND CA	94607	3834	



## **ATTACHMENT E**

**Attachment E-1: List of Attachments** 

**Attachment E-2: List of Acronyms & Symbols** 

#### **ATTACHMENT E-1**

#### **LIST OF ATTACHMENTS**

Α	LTCP Evaluation
A-1	Geotracker LTCP Evaluation Checklist
A-2	Site Conceptual Model Summary
A-3	LTCP Media Specific Evaluation for Groundwater
A-4	LTCP Media Specific Evaluation for Vapor Intrusion
A-5	LTCP Media Specific Evaluation for Direct Contact and Outdoor Air Exposure
В	Site Investigation Data
B-1	Site Vicinity & Site Maps with Sampling Locations,
B-2	Preferential Pathways & Sensitive Receptor Survey Data
B-3	Boring Logs
B-4	Groundwater Data
B-5	Soil Data
В-6	Soil Vapor Data
С	Responsible Party and Property Information
C-1	Responsible Party & Assessor's Office Property Information, Site Configuration at Time of Case Closure
C-2	Site Configuration at Time of Case Closure
D	Case Closure Public Notification Information
D-1	Public Notification Fact Sheet & Distribution List
Е	Closure Form Keys
E-1	List of Attachments
E-2	List of Acronyms & Symbols

#### **ATTACHMENT E-2**

Acronym or Symbol	Description
ACDEH	Alameda County Department of Environmental Health
APN	Assessor Parcel Number
BaPe	benzo(a)pyrene toxicity equivalent
BTEX	benzene, toluene, ethylbenzene, xylenes
EDB	ethylene dibromide or 1,2-dichloroethane (1,2-DCA)
EDC	ethylene dichloride
CEG	Certified Engineering Geologist
Cd	cadmium
Cr	chromium
c/o	care of
DIPE	di-isopropyl ether
DTSC	California Department of Toxic Substances Control
dtw	Depth to water
ECs	engineering controls
EPA	Environmental Protection Agency
ETBE	ethyl tert butyl ether
EtOC	ethanol
ft bgs	feet below ground surface
GW	groundwater
IA	indoor air
ICs	institutional controls
ID	Identification
K	1,000
LOP	Local Oversight Program
LTCP	State Water Resources Control Board's Low Threat Closure Policy
LUST	Leaking Underground Storage Tank
MTBE/TBA	methyl tert butyl either/t-butyl alcohol
N	napthalene
Ni	nickel
NA	not analyzed
NR	not required
OA	outdoor air

#### **ATTACHMENT E-2**

## LIST OF ACRONYMS & SYMBOLS (CONTINUED)

Acronym or Symbol	Description
Pb	lead
PCBs	polychlorinated biphenyls
PE	California Professional Engineer
PG	California Professional Geologist
S	soil
SCP	Site Cleanup Program
SS	sub-slab vapor
SV	soil vapor
SVOCs	semi volatile organic compounds
SW	surface water
TAME	tert amyl methyl ether
TPHbo	total petroleum hydrocarbons as bunker oil
TPHd	total petroleum hydrocarbons as diesel
TPHg	total petroleum hydrocarbons as gasoline
TPHho	total petroleum hydrocarbons as hydraulic oil
TPHjf	total petroleum hydrocarbons as jet fuel
TPHk	total petroleum hydrocarbons as kerosene
TPHmo	total petroleum hydrocarbons as motor oil
TPHss	total petroleum hydrocarbons as stoddard solvent
UST	underground storage tank
VOCs	volatile organic compounds
Zn	zinc
mg/kg	milligrams per kilogram
ug/L	microgram per liter
ug/m3	microgram per cubic meter
>, <, ≥	greater than, less than, or greater than or equal to
%	percent