

ALAMEDA COUNTY  
HEALTH CARE SERVICES  
AGENCY

ALEX BRISCOE, Director



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

September 2, 2014

Mr. John Protopappas  
P&D 23<sup>rd</sup> Avenue Associates LLC  
P.O. Box 687  
Oakland, CA 94604  
(Sent via E-mail to: [John@MPFCorp.com](mailto:John@MPFCorp.com))

Subject: Case Closure for Fuel Leak Case No. RO0000294 and GeoTracker Global ID T0600177455,  
23<sup>rd</sup> Avenue Partners, 1125 Miller Avenue, Oakland, CA 94601

Dear Mr. Protopappas:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25296.10[g]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Health (ACEH) is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed. This case closure letter and the case closure summary can also be viewed on the State Water Resources Control Board's Geotracker website (<http://geotracker.swrcb.ca.gov>) and the Alameda County Environmental Health website (<http://www.acgov.org/aceh/index.htm>).

Due to residual contamination, the site was closed with Site Management Requirements that require future review by ACEH if the site is to be redeveloped. Site Management Requirements are further described in section IV of the attached Case Closure Summary.

If you have any questions, please call Jerry Wickham at (510) 567-6791. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Dilan Roe".

Dilan Roe, P.E.  
LOP and SCP Program Manager

Enclosures: 1. Remedial Action Completion Certification  
2. Case Closure Summary

Responsible Parties  
RO0000294  
September 2, 2014  
Page 2

Cc w/enc.:

Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland, CA 94612-2032 2032 (*Sent via E-mail to: [lgriffin@oaklandnet.com](mailto:lgriffin@oaklandnet.com)*)

Olivia Jacobs, Clearwater Group, 229 Tewksbury Avenue, Pt. Richmond, CA 94801 (*Sent via E-mail to: [ojacobs@clearwatergroup.com](mailto:ojacobs@clearwatergroup.com)*)

James Jacobs, Clearwater Group, 229 Tewksbury Avenue, Pt. Richmond, CA 94801 (*Sent via E-mail to: [geojimj@gmail.com](mailto:geojimj@gmail.com)*)

Jerry Wickham, ACEH (*Sent via E-mail to: [jerry.wickham@acgov.org](mailto:jerry.wickham@acgov.org)*)

GeoTracker, File

GeoTracker  
eFile (w/orig enc)

ALAMEDA COUNTY  
**HEALTH CARE SERVICES  
AGENCY**

ALEX BRISCOE, Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH  
OFFICE OF THE DIRECTOR  
1131 HARBOR BAY PARKWAY  
ALAMEDA, CA 94502  
(510) 567-6777  
FAX (510) 337-9135

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**REMEDIAL ACTION COMPLETION CERTIFICATION**

September 2, 2014

Mr. John Protopappas  
P&D 23<sup>rd</sup> Avenue Associates LLC  
P.O. Box 687  
Oakland, CA 94604  
(Sent via E-mail to: [John@MPFCorp.com](mailto:John@MPFCorp.com))

Subject: Case Closure for Fuel Leak Case No. RO0000294 and GeoTracker Global ID T0600177455, 23<sup>rd</sup> Avenue Partners, 1125 Miller Avenue, Oakland, CA 94601

Dear Mr. Protopappas:

This letter confirms the completion of a site investigation and remedial action for the underground storage tanks 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:

- 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 365-day 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,

  
Ariu Levi  
Director

**CASE CLOSURE SUMMARY**  
**LEAKING UNDERGROUND FUEL STORAGE TANK - LOCAL OVERSIGHT PROGRAM**

**I. AGENCY INFORMATION**

Date: May 15, 2014

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6791
Responsible Staff Person: Jerry Wickham	Title: Senior Hazardous Materials Specialist

**II. CASE INFORMATION**

Site Facility Name: 23 <sup>rd</sup> Avenue Partners		
Site Facility Address: 1125 Miller Avenue, Oakland, CA 94601		
RB Case No.: ----	STID No. 1445	LOP Case No.: RO0000294
GeoTracker ID: T0600177455		APN: 19-100-2-1 (Site occupies the southern portion of parcel south of Miller Place)
Current Land Use: Commercial and Residential		
Responsible Parties	Addresses	Phone Numbers
John Protopappas P&D 23 <sup>rd</sup> Avenue Associates LLC	P.O. Box 687 Oakland, CA 94604	No phone number

This Case Closure Summary along with the Case Closure Transmittal letter and the Remedial Action Completion Certification provides documentation of the case closure. This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions. Additional information on the case can be viewed in the online case file. The entire case file can be viewed over the Internet on the Alameda County Environmental Health (ACEH) website (<http://www.acgov.org/aceh/lop/ust.htm>) or the State of California Water Resources Control Board GeoTracker website (<http://geotracker.waterboards.ca.gov>). Not all historic documents for the fuel leak case may be available on GeoTracker. A more complete historic case file for this site is located on the ACEH website.

### III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Release from underground storage tank (UST) system		
Primary constituents of concern: Diesel, Gasoline, and Tetrachloroethene (PCE)		
Remediation attempted or completed: Approximately 100 cubic yards of soil was excavated and transported off-site during removal of the USTs in 1999. A minor hand excavation removed soil to a depth of approximately 2.5 feet inside a storage area in the western corner of the on-site building. The storage area in the western corner of the building formerly contained a fuel dispenser.		
Number of monitoring wells installed: 3	Number of monitoring wells destroyed: 0	Number of monitoring wells remaining: 3
Highest Groundwater Depth Below Ground Surface: 9.37 feet bgs	Lowest Depth: 12.27 feet bgs	Flow Direction: Southwest to southeast
Most Sensitive Current Groundwater Use: Potential drinking water source		

Summary of Production Wells in Vicinity: No water supply wells were identified within 1,000 feet of the site.	
Are drinking water wells affected? No	Aquifer Name: East Bay Plain
Is surface water affected? No	Nearest Surface Water Name: Oakland Inner harbor is approximately 1,900 feet west of the site

**LTCP GROUNDWATER SPECIFIC CRITERIA**

LTCP Groundwater Specific Scenario under which case was closed: Scenario 2

Site Data		LTCP Scenario 1 Criteria (ppb)	LTCP Scenario 2 Criteria (ppb)	LTCP Scenario 3 Criteria (ppb)	LTCP Scenario 4 Criteria (ppb)
Plume Length	Estimated <250 feet	<100 feet	<250 feet	<250 feet	<1,000 feet
Free Product	No free product	No free product	No free product	Removed to maximum extent practicable	No free product
Plume Stable or Decreasing	Stable	Stable or decreasing	Stable or decreasing	Stable or decreasing for minimum of 5 Years	Stable or decreasing
Distance to Nearest Water Supply Well	> 1,000 feet	>250 feet	>1,000 feet	>1,000 feet	>1,000 feet
Distance to Nearest Surface Water and Direction	1,900 feet downgradient	>250 feet	>1,000 feet	>1,000 feet	>1,000 feet
Property Owner Willing to Accept a Land Use Restriction?	Not applicable for groundwater specific criteria	Not applicable	Not applicable	Yes	Not applicable

**GROUNDWATER CONCENTRATIONS**

Constituent	Historic Site Maximum (ppb)	Current Site Maximum (ppb)	LTCP Scenario 1 Criteria (ppb)	LTCP Scenario 2 Criteria (ppb)	LTCP Scenario 3 Criteria (ppb)	LTCP Scenario 4 Criteria (ppb)
Benzene	7.8	2.2	No criteria	3,000	No criteria	1,000
MTBE	<0.5	<0.5	No criteria	1,000	No criteria	1,000

Scenario 5: If the site does not meet scenarios 1 through 4, has a determination been made that under current and reasonably expected future scenarios, the contaminant plume poses a low threat to human health and safety and to the environment and water quality objectives will be achieved within a reasonable time frame?

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**LTCP VAPOR SPECIFIC CRITERIA**

LTCP Vapor Specific Scenario under which case was closed: A determination has been made that petroleum vapors from soil or groundwater 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 controls.

Active Fueling Station    No

Site Data		LTCP Scenario 1 Criteria	LTCP Scenario 2 Criteria	LTCP Scenario 3A Criteria	LTCP Scenario 3B Criteria	LTCP Scenario 3C Criteria	LTCP Scenario 4 Criteria
Unweathered NAPL	No NAPL	LNAPL in groundwater	LNAPL in soil	No NAPL	No NAPL	No NAPL	No criteria
Thickness of Bioattenuation Zone Beneath Foundation	<2 feet in dispenser area to 9 feet elsewhere	≥30 feet	≥30 feet	≥5 feet	≥10 feet	≥5 feet	≥5 feet
Total TPH in Bioattenuation Zone	Up to 14,000 ppm in dispenser area	<100 ppm	<100 ppm	<100 ppm	<100 ppm	<100 ppm	<100 ppm
Maximum Current Benzene Concentration in Groundwater	2.2 ppb	No criteria	No criteria	<100 ppb	≥100 and <1,000 ppb	<1,000 ppb	No criteria
Oxygen Data within Bioattenuation Zone	No oxygen data	No criteria	No criteria	No oxygen data or <4%	No oxygen data or <4%	≥4% at lower end of zone	≥4% at lower end of zone
Depth of soil vapor measurement beneath foundation	1	No criteria	No criteria	No criteria	No criteria	No criteria	≥5 feet

**SCENARIO 4 DIRECT MEASUREMENT OF SOIL VAPOR CONCENTRATIONS**

Site Soil Vapor Data			No Bioattenuation Zone		Bioattenuation Zone	
Constituent	Historic Maximum (µg/m <sup>3</sup> )	Current Maximum (µg/m <sup>3</sup> )	Residential	Commercial	Residential	Commercial
Benzene	42	42	<85	<280	<85,000	<280,000
Ethylbenzene	2,000	37	<1,100	<3,600	<1,100,000	<3,600,000
Naphthalene	10	3.7	<93	<310	<93,000	<310,000

If the site does not meet scenarios 1 through 4, does a site-specific risk assessment for the vapor intrusion pathway demonstrate that human health is protected?

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If the site does not meet scenarios 1 through 4, has a determination been made that petroleum vapors from soil or groundwater 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 controls?

Yes

**LTCP DIRECT CONTACT AND OUTDOOR AIR EXPOSURE CRITERIA**

LTCP Direct Contact and Outdoor Air Exposure Specific Scenario under which case was closed: Maximum concentrations of petroleum hydrocarbons are less than or equal to those in Table 1 below.

Are maximum concentrations less than those in Table 1 below?

Yes

Constituent		Residential		Commercial/Industrial		Utility Worker
		0 to 5 feet bgs (ppm)	Volatilization to outdoor air (5 to 10 feet bgs) ppm	0 to 5 feet bgs (ppm)	Volatilization to outdoor air (5 to 10 feet bgs) ppm	0 to 10 feet bgs (ppm)
Site Maximum	Benzene	<0.005	0.042	<0.005	0.042	0.042
LTCP Criteria	Benzene	≤1.9	≤2.8	≤8.2	≤12	≤14
Site Maximum	Ethylbenzene	<0.005	<0.025	<0.005	<0.025	<0.025
LTCP Criteria	Ethylbenzene	≤21	≤32	≤89	≤134	≤314
Site Maximum	Naphthalene	0.042	0.042	0.042	0.042	0.042
LTCP Criteria	Naphthalene	≤9.7	≤9.7	≤45	≤45	≤219
Site Maximum	PAHs	----	----	----	----	----
LTCP Criteria	PAHs	≤0.063	NA	≤0.68	NA	≤4.5

If maximum concentrations are greater than those in Table 1, are they less than levels from a site-specific risk assessment?

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If maximum concentrations are greater than those in Table 1, has a determination been made that the 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 controls?

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#### IV. CLOSURE

Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, closure of this site appears to be consistent with the policies established by the State Water Resources Control Board Low-Threat Underground Storage Tank Closure Policy which became effective on August 17, 2012.

**Site Management Requirements:**

This fuel leak case has been evaluated for closure consistent with the State Water Resource Control Board Low-Threat Underground Storage Tank Closure Policy (LTCP). Case closure is granted for the current building configuration with mixed commercial and residential land use. The site occupies the southern portion of APN 19-100-2-1 south of Miller Place. If the site is redeveloped, Alameda County Environmental Health (ACEH) must be notified as required by Government Code Section 65850.2.2. Due to the residual contamination detected beneath portions of the site, ACEH will re-evaluate the case upon receipt of approved development/construction plans.

Excavation or construction activities in areas of residual contamination require planning and implementation of appropriate health and safety procedures by the responsible party prior to and during excavation and construction activities.

This site is to be entered into the City of Oakland Permit Tracking System due to the residual contamination on site.

Should corrective action be reviewed if land use changes? Yes

Was a deed restriction or deed notification filed? No

Date Recorded: ----

**V. ADDITIONAL COMMENTS AND CONCLUSION**

**Additional Comments:**

The diesel plume was not fully delineated to the west. TPH as diesel (TPHd) was detected in off-site grab groundwater sample S12 at a concentration of 1,200 ppb. Boring S12 is on the west side of Calcot Place, approximately 60 feet west of the former USTs. No groundwater samples were collected west of S12 to complete the delineation. Several soil borings advanced in the immediate area of the former USTs indicate that the contaminant source is generally limited to the western corner of the property. Based on the limited size of the source and distance to potential receptors, further investigation does not appear to be warranted.

A storage area within the western end of the building formerly contained a fuel dispenser. Hand excavation was conducted to a depth of approximately 2.5 feet bgs beneath a portion of the storage area. Five confirmation soil samples collected from the excavation contained TPH as diesel at concentrations ranging from 730 to 14,000 ppm. Due to the elevated concentrations of TPHd remaining beneath the former dispenser area, a vapor barrier was installed beneath the concrete slab covering the excavation. A vapor sealant coating was also applied to the surface of the concrete in the storage area.

Tetrachloroethene (PCE) was detected in sub-slab vapor samples at concentrations up to 240 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) beneath the portion of the building used for commercial purposes. However, PCE was not detected in soil or groundwater samples at concentrations above the reporting limits. The source of the PCE in soil vapor was not identified. The maximum detected concentration of  $240 \mu\text{g}/\text{m}^3$  is less than the Environmental Screening Level for commercial land use, which is  $2,100 \mu\text{g}/\text{m}^3$ .

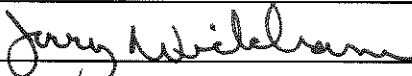

Potential contamination from former industrial uses was not investigated as part of this fuel leak case. Industrial debris in the subsurface was described in boring logs from the western portion of the site.

Total petroleum hydrocarbons as gasoline (TPHg) was detected in soil, soil vapor, and groundwater samples. However, the UST system was reportedly used for storage and dispensing of diesel. It is possible that gasoline may have been stored in the UST system at one time or an additional unidentified on-site or off-site source for gasoline may exist.

**Conclusion:**

Alameda County Environmental Health staff believe that the site meets the conditions for case closure under the State Water Resources Control Board Low-Threat Underground Storage Tank Closure Policy. Based upon the information available in our files to date, no further investigation or cleanup for the fuel leak case is necessary at this time. However, as specified in the Site Management Requirements, re-evaluation of this case is required if any redevelopment occurs.

**VI. LOCAL AGENCY REPRESENTATIVE DATA**

Prepared by: Jerry Wickham	Title: Senior Hazardous Materials Specialist
Signature: 	Date: 05/15/2014
Approved by: Dilan Roe	Title: LOP and SCP Program Manager
Signature: 	Date: 5/15/2014

**VII. REGIONAL BOARD AND PUBLIC NOTIFICATION**

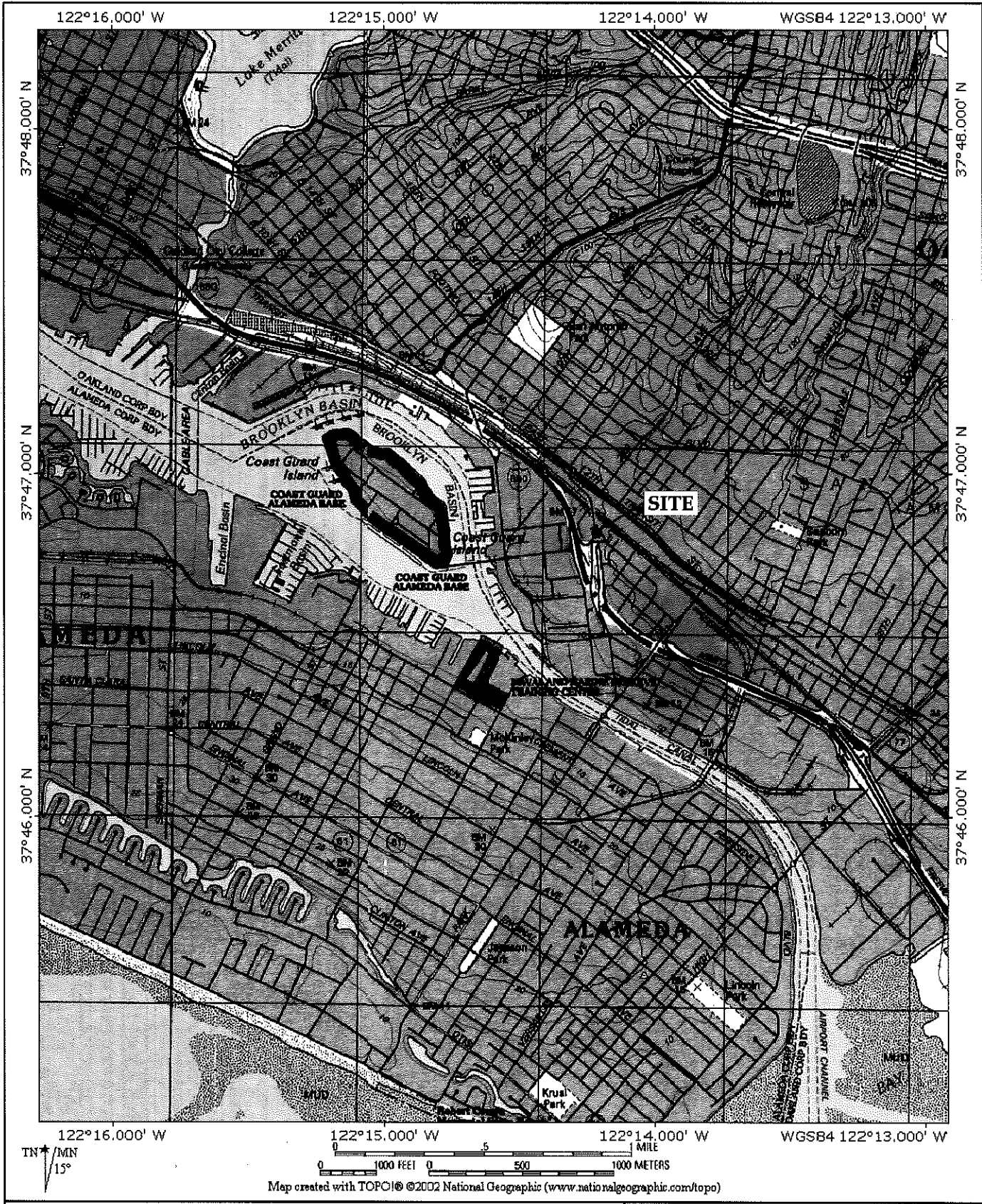
Regional Board Staff Name: Cherie McCaulou	Title: Engineering Geologist
Regional Board Notification Date: 05/20/2014	
Public Notification Date: 05/20/2014	

**VIII. MONITORING WELL DESTRUCTION**

Date Requested by ACEH: 07/22/14	Date of Well Decommissioning Report: 08/23/14	
All Monitoring Wells Destroyed: Yes	Number Destroyed: 3	Number Retained: 0
Reason Wells Retained: NA		
Additional requirements for submittal of groundwater data from retained wells: None		
ACEH Concurrence - Signature: <i>Jerry Williams</i>		Date: 09/02/14

**Attachments:**

1. Site Vicinity Map (1 p)
2. Site Plans and Cross Sections (4 pp)
3. Groundwater Contour and Chemical Concentration Maps (2 pp)
4. Soil Analytical Data (4 pp)
5. Soil Vapor Analytical Data (6 pp)
6. Groundwater Analytical Data (1 p)



**Site Vicinity Map**  
 1125 Miller Avenue  
 Oakland, California

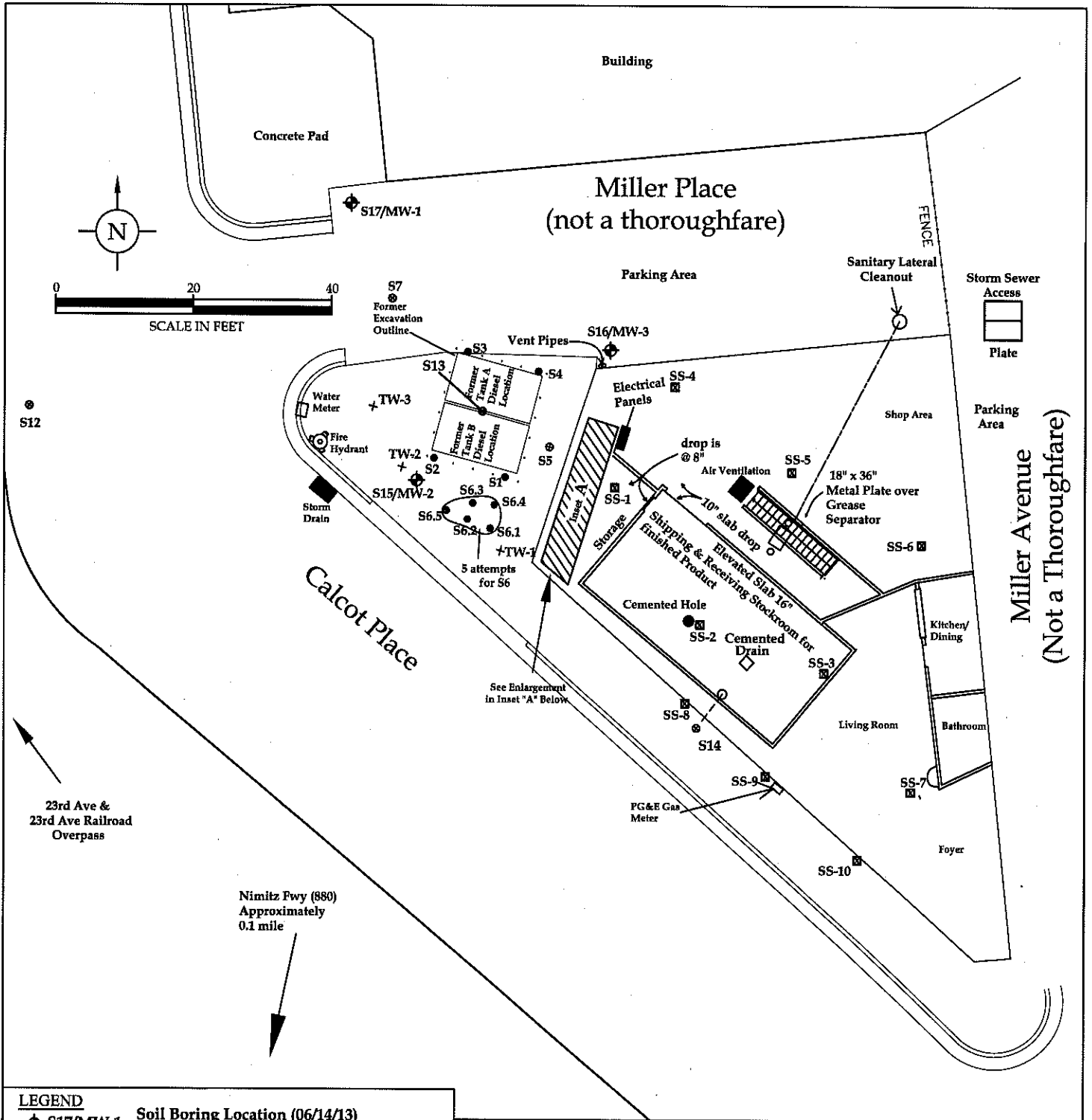
**CLEARWATER GROUP**

Project No.  
**CB018**

Figure Date  
**05/13**

Figure  
**1**

**ATTACHMENT 1**

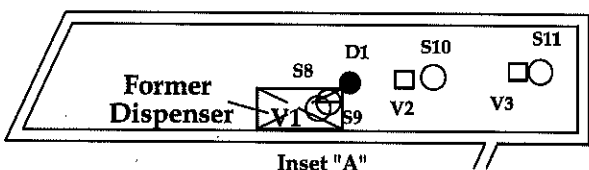


**Miller Place  
(not a thoroughfare)**

**Miller Avenue  
(Not a Thoroughfare)**

**LEGEND**

- ◆ S17/MW-1 Soil Boring Location (06/14/13)
- ⊕ S12-S13 Groundwater Monitoring Well
- ⊗ S12-S13 Soil Boring Locations (11/28/11)
- ⊗-○ S14 Slanted Soil Boring Location (11/28/11)
- ▣ SS-1-SS-10 Sub-slab Vapor Location (06/17/10, 11/04/10) and 11/10/11)
- ⊕ S1-S4 Soil Boring Location (12/2/98)
- ⊕ S5-S8 Soil Boring Location (11/16/05)
- D1 Soil Boring Location (10/24/00)
- + TW-3 Temporary Well (10/24/00)
- S9-S11 Soil Boring Location (11/15/06)
- V1-V3 Soil Vapor Location (11/15/06)
- Excavation Outline

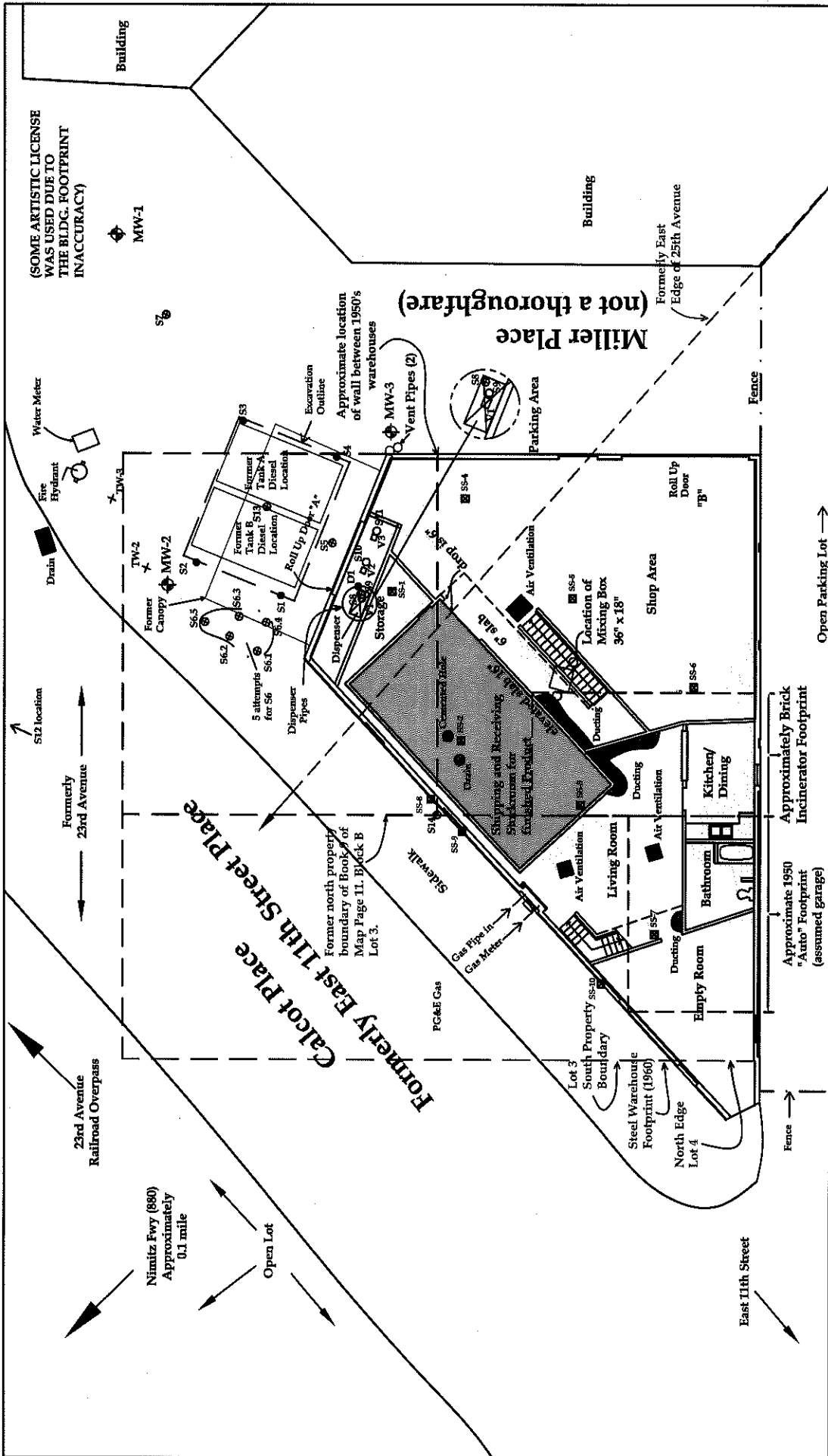


**Site Plan**

1125 Miller Avenue  
Oakland, California

**CLEARWATER GROUP**

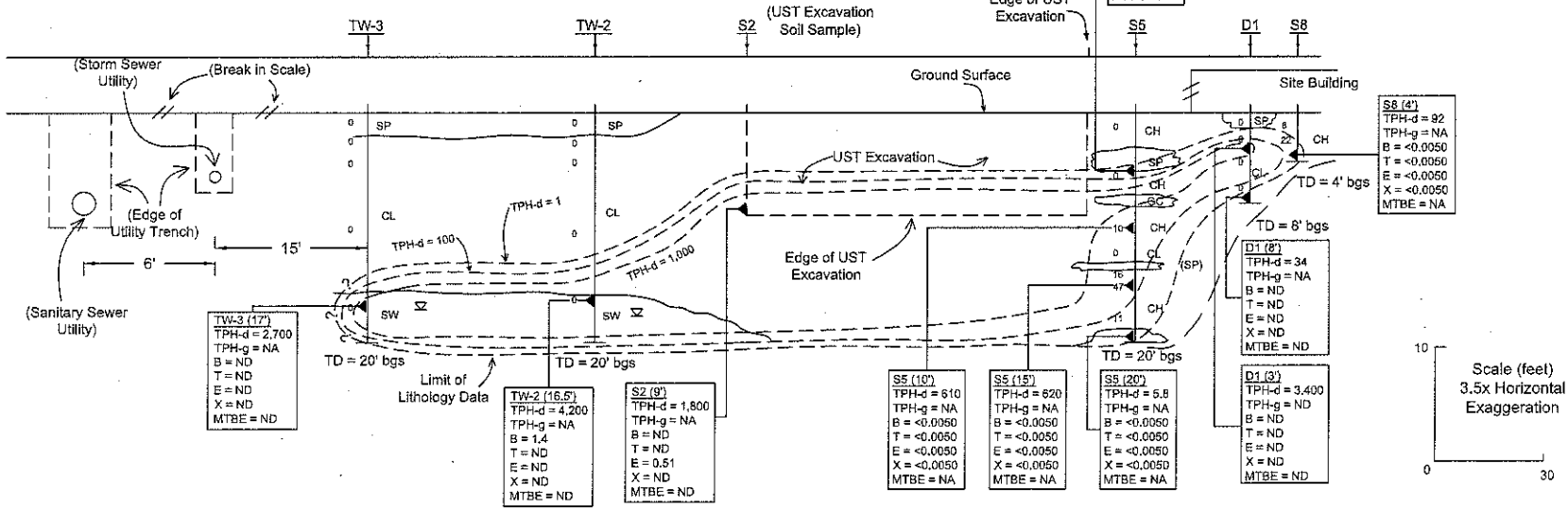
**ATTACHMENT 2**



<p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li>☒ Floor Pad Elevation Relative to Roll Up Door "A" +8"</li> <li>☒ Floor Pad Elevation Relative to Roll Up Door "A" +18"</li> <li>☒ SS-1-SS-10 Sub-Slab Vapor Location (06/17/10, 11/04/10, and 11/10/11)</li> <li>⊗ S1-S14 Soil Boring Location (12/2/98, 11/16/05, and 11/28/11)</li> <li>● D1 Soil Boring Location (10/24/00)</li> <li>+ TW-3 Temporary Well (10/24/00)</li> <li>○ S9-S11 Soil Boring Location (11/15/06)</li> <li>□ V1-V3 Soil Vapor Location (11/15/06)</li> <li>⊕ MW-1 Groundwater Monitoring Well</li> </ul> <p>*Note: Five attempts to bore S6 met refusal at 4'-6" due to subsurface debris.</p> <p>Air Ventilation and Ducting are all in Ceiling</p>		<p><b>Floor Plan with Historic Overlay - Floor Plan with Incinerator Footprint, Former Property Line Footprints, Former Street Footprint and Concrete Floor Slabs Indicated</b></p> <p>1125 Miller Avenue Oakland, California</p>		<p><b>Project No.</b> CB018</p>	<p><b>Figure Date</b> 04/14</p>	<p><b>Figure</b> A</p>
<p><b>CLEARWATER GROUP</b></p>						

**A**  
Northwest

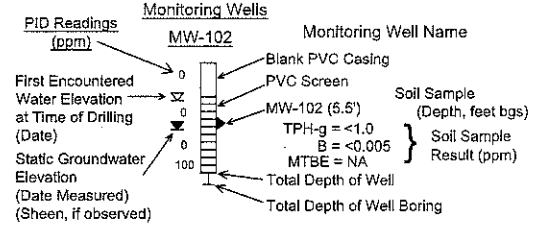
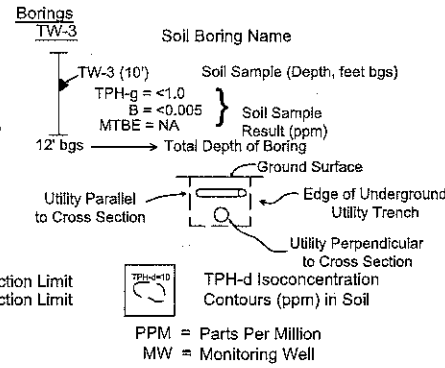
**A'**  
Southeast



**LEGEND**

- CL, CH = Clay, Flat Clay
- GC/CL = Clayey Sandy Gravel, Gravelly Silty Clay
- CL/SC = Sandy Clay/Clayey Sand
- Fill = Clayey Gravel Fill with Wood Fragments, Metal Fragments
- SP, SW = Poorly Graded Sand, Well Graded Sand
- SC/SM = Clayey Sand/Silty Sand
- TPH-g = Total Petroleum Hydrocarbons in Gasoline Range
- TPH-d = Total Petroleum Hydrocarbons in Diesel Range
- B = Benzene
- T = Toluene
- E = Ethylbenzene
- X = Xylenes
- MTBE = Methyl tertiary Butyl Ether
- Soil Sample Results Reported in Parts Per Million (ppm)
- bgs = Below Ground Surface
- TD = Total Depth

- ML = Silt
- CH = Fat Clay
- SP/SC = Poorly Graded Sand with Clay
- GP = Poorly Graded Gravel with Sand
- GW = Well Graded Gravel with Sand
- GW/GC = Well Graded Gravel with Sand and Clay
- SW/SC = Well Graded Sand with Clay
- PID = Photo Ionization Detector
- AMSL = Above Mean Sea Level
- PVC = Poly Vinyl Casing
- VCP = Verified Clay Pipe
- UST = Underground Storage Tank
- NA = Not Analyzed
- < 1 = Not Detected At or Above Method Detection Limit
- ND = Not Detected At or Above Method Detection Limit

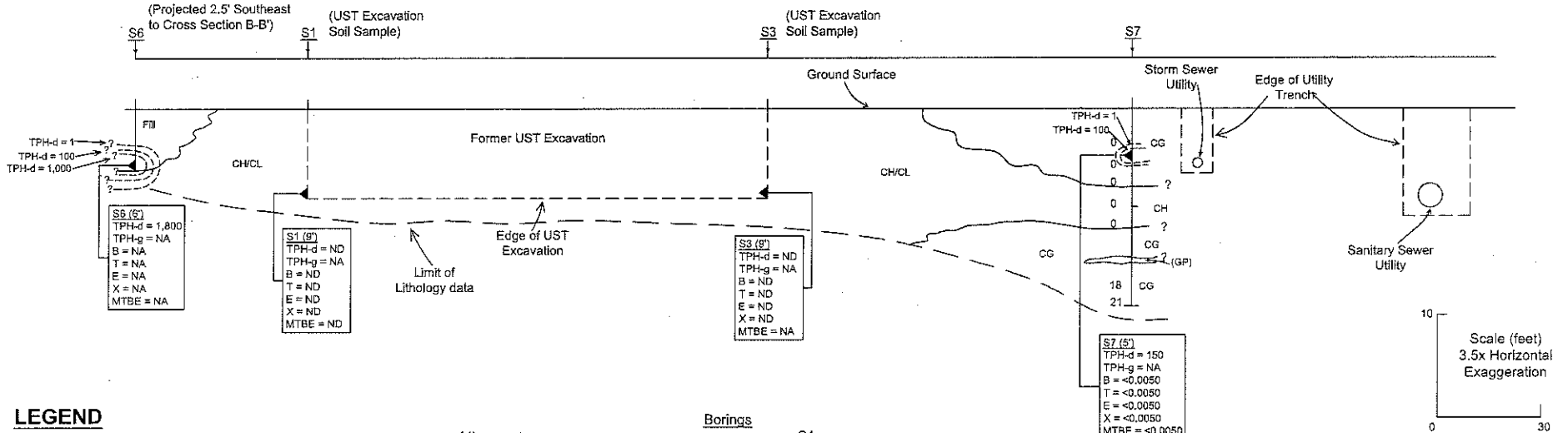


**Cross Section A-A'**  
1125 Miller Avenue  
Oakland, California

CLEARWATER GROUP		
Project No. CB018	Figure Date 11/70	Figure X

**B**  
Southwest

**B'**  
Southwest

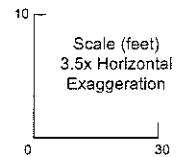
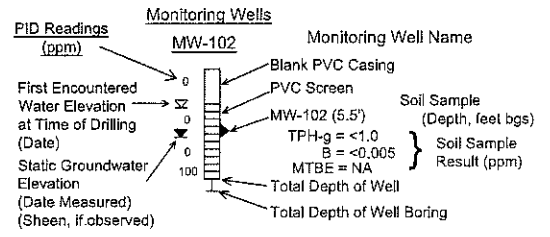
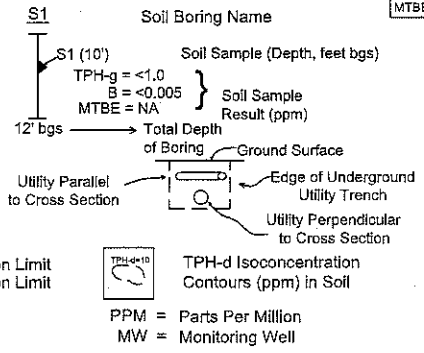


**LEGEND**

- CL, CH = Clay, Flat Clay
- GC/CL = Clayey Sandy Gravel, Gravelly Silty Clay
- CL/SC = Sandy Clay/Clayey Sand
- Fill = Clayey Gravel Fill with Wood Fragments, Metal Fragments
- SP, SW = Poorly Graded Sand, Well Graded Sand
- SC/SM = Clayey Sand/Silty Sand
- TPH-g = Total Petroleum Hydrocarbons in Gasoline Range
- TPH-d = Total Petroleum Hydrocarbons in Diesel Range
- B = Benzene
- T = Toluene
- E = Ethylbenzene
- X = Xylenes
- MTBE = Methyl tertiary Butyl Ether
- Soil Sample Results Reported in Parts Per Million (ppm)
- bgs = Below Ground Surface
- TD = Total Depth

- ML = Silt
- CH = Fat Clay
- SP/SC = Poorly Graded Sand with Clay
- GP = Poorly Graded Gravel with Sand
- GW = Well Graded Gravel with Sand
- GW/GC = Well Graded Gravel with Sand and Clay
- SW/SC = Well Graded Sand with Clay
- PID = Photo Ionization Detector
- AMSL = Above Mean Sea Level
- PVC = Poly Vinyl Casing
- VCP = Verified Clay Pipe
- UST = Underground Storage Tank
- NA = Not Analyzed
- < 1 = Not Detected At or Above Method Detection Limit
- ND = Not Detected At or Above Method Detection Limit

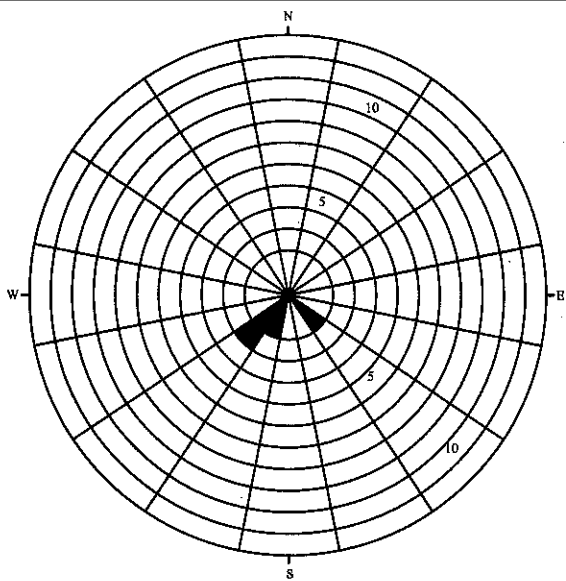
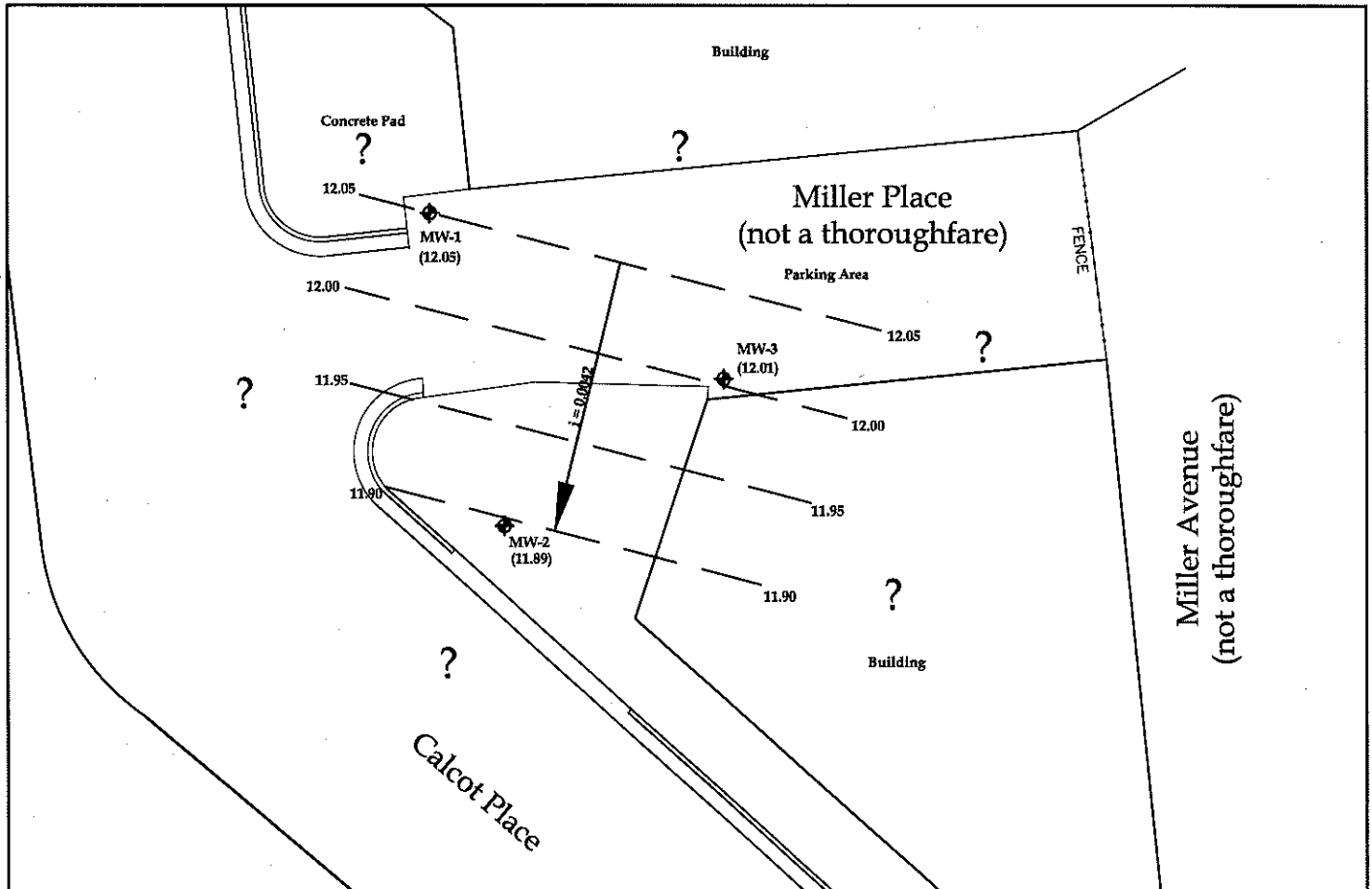
**Borings**



Cross Section B-B'  
1125 Miller Avenue  
Oakland, California

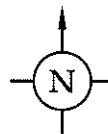
CLEARWATER GROUP		
Project No. CB018	Figure Date 11/10	Figure X





Each individual, shaded segment (between adjacent concentric circles) represents one groundwater monitoring event, with groundwater flow in the direction indicated (for example, south, south-southeast, southeast).

The direction reflects predominant flow direction, incorporating elevation data from all site wells.



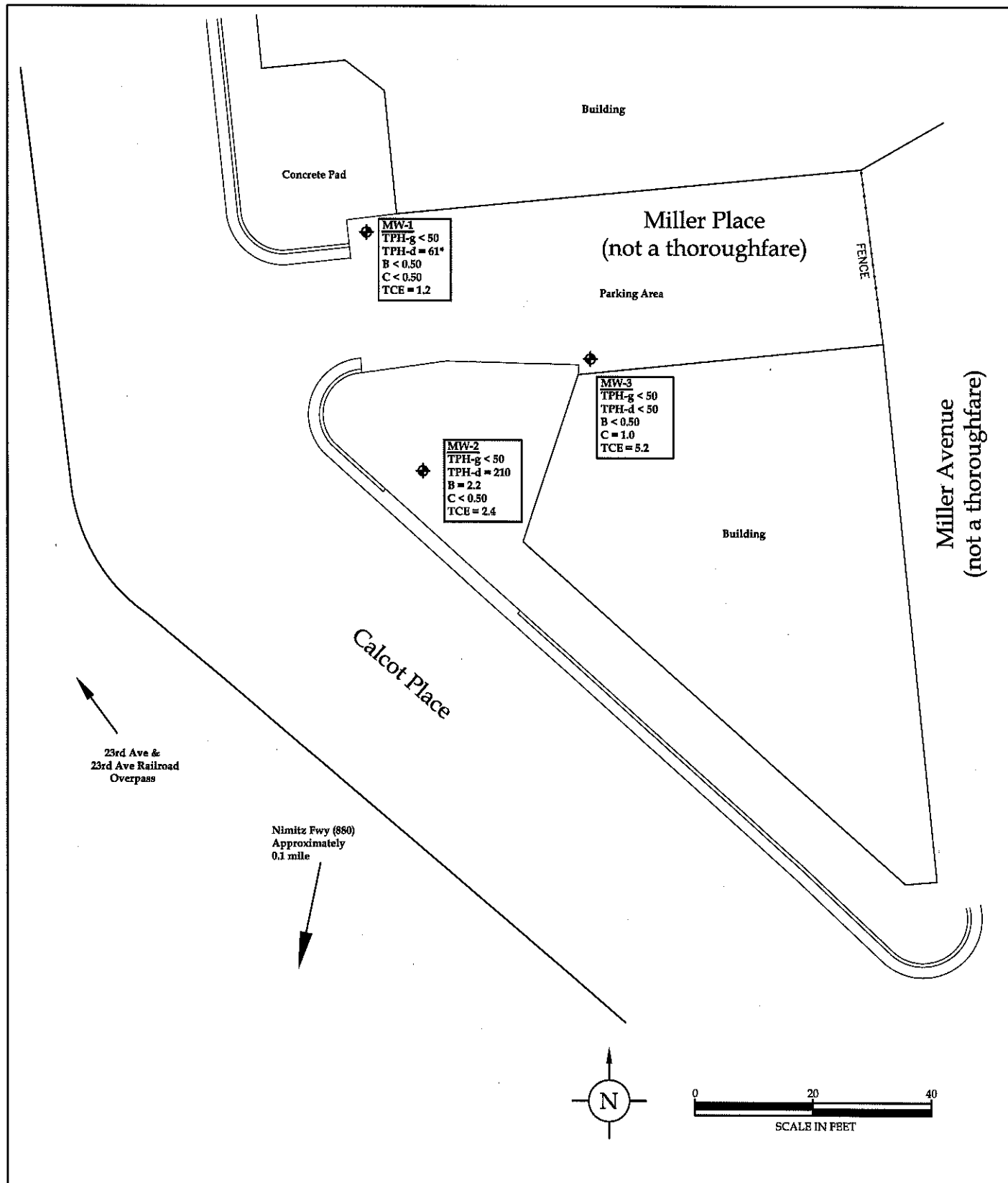
**LEGEND**

- ◆ MW-1 (11.78) Groundwater Monitoring Well
- Groundwater Elevation in feet above mean sea level
- ← 0.003 Approximate Groundwater Flow Direction and Gradient
- 11.70 - - - - Groundwater Elevation Contour in feet above mean sea level

**Groundwater Elevation and Contour Map and Groundwater Flow Rose Diagram**  
**March 17, 2014**  
 1125 Miller Avenue  
 Oakland, California

CLEARWATER GROUP

**ATTACHMENT 3**



**LEGEND**

◆ MW-1  
 MW-1  
 TPH-g < 50  
 TPH-d < 50  
 B < 0.50  
 C < 0.50  
 TCE = 0.93

**Groundwater Monitoring Well**  
 Concentrations of:  
 Total Petroleum Hydrocarbons as Diesel (TPH-d),  
 Total Petroleum Hydrocarbons as Gasoline (TPH-g),  
 Benzene (B),  
 Chloroform (C), and  
 Tetrachloroethene (TCE).  
 All concentrations reported in micrograms per  
 liter (µg/L).

\* Laboratory Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.

**Dissolved-Phase Analytical  
 Concentrations  
 March 17, 2014**

1125 Miller Avenue  
 Oakland, California

**CLEARWATER GROUP**

Project No. <b>CB018S</b>	Figure Date <b>04/14</b>	Figure <b>4</b>
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**TABLE 4A**  
**Cumulative Hydrocarbon Soil Sample Analytical Results**  
P & D 23rd Avenue Associates LLC  
1125 Miller Avenue  
Oakland, California  
Clearwater Project No. CB018

Soil Boring ID	Sample ID	Collection Depth (feet)	Sampling Date	TPH-d (mg/kg)	TPH-g (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	MTBE (mg/kg)
Shallow Soil ESL <sup>1</sup> for Commercial Use				500	500	0.044	2.9	3.3	2.3	0.023
Deep Soil ESL <sup>1</sup> for Commercial Use				580	530	0.044	2.9	3.3	2.3	0.023
<b>Low Threat Closure Thresholds - Commercial<sup>A,B</sup></b>		<b>0-5 feet bgs</b>		--	--	<b>8.2</b>	--	<b>89</b>	--	--
		<b>5-10 feet bgs</b>		--	--	<b>12</b>	--	<b>134</b>	--	--
S1	S1-9	9	12/01/1998	ND	NA	ND	ND	ND	ND	ND
S2	S2-9	9	12/01/1998	1,800	NA	ND	ND	ND	0.51	ND
S3	S3-9	9	12/01/1998	ND	NA	ND	ND	ND	ND	ND
S4	S4-9	9	12/01/1998	ND	NA	ND	ND	ND	ND	ND
TW2	TW2 -16.5	16.5	10/24/2000	4,200	NA	1.4	ND	ND	ND	ND
TW3	TW3-17	17	10/24/2000	2,700	NA	ND	ND	ND	ND	ND
D1	D1-3	3	10/24/2000	3,400	NA	ND	ND	ND	ND	ND
D1	D1-8	8	10/24/2000	34	NA	ND	ND	ND	ND	ND
S5	S5-5	5	11/16/2005	14 <sup>F</sup>	NA	<0.0050	<0.0050	<0.0050	<0.0050	NA <sup>D</sup>
S5	S5-10	10	11/16/2005	610	NA	<0.0050	<0.0050	<0.0050	<0.0050	NA <sup>D</sup>
S5	S5-15	15	11/16/2005	620	NA	<0.0050	<0.0050	<0.0050	<0.0050	NA <sup>D</sup>
S5	S5-20	20	11/16/2005	5.8	NA	<0.0050	<0.0050	<0.0050	<0.0050	NA <sup>D</sup>
S6	S6-6	6	11/16/2005	1,800 <sup>F</sup>	NA	NA <sup>C</sup>	NA <sup>C</sup>	NA <sup>C</sup>	NA <sup>C</sup>	NA <sup>D</sup>
S7	S7-5	5	11/16/2005	150 <sup>F</sup>	NA	<0.0050	<0.0050	<0.0050	<0.0050	NA <sup>D</sup>
S7	S7-10	10	11/16/2005	32 <sup>F</sup>	NA	<0.0050	<0.0050	<0.0050	<0.0050	NA <sup>D</sup>
S7	S7-15	15	11/16/2005	1,200	NA	<0.0050	<0.0050	<0.0050	<0.0050	NA <sup>D</sup>
S7	S7-20	20	11/16/2005	300	NA	<0.0050	<0.0050	<0.0050	<0.0050	NA <sup>D</sup>
S8	S8-4	4	11/16/2005	92	NA	<0.0050	<0.0050	<0.0050	<0.0050	NA <sup>D</sup>
S9	S9.4.0	4	11/15/2006	7,500	NA	<0.0050	<0.0050	<0.0050	<0.0050	NA <sup>D</sup>
S10	S10.4.0	4	11/15/2006	930	NA	<0.0050	<0.0050	<0.0050	<0.0050	NA <sup>D</sup>
S11	S11.4.0	4	11/15/2006	21	NA	<0.0050	<0.0050	<0.0050	<0.0050	NA <sup>D</sup>
S12	B12-18	18	11/28/2011	8.6 <sup>E</sup>	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA <sup>D</sup>
S13	B13-11	11	11/28/2011	740	7.0	<0.0050	<0.0050	<0.0050	<0.0050	NA <sup>D</sup>
S13	B13-14	14	11/28/2011	1,900	65	<0.025	<0.025	<0.025	<0.025	NA <sup>D</sup>
S13	B13-19	19	11/28/2011	4.4 <sup>E</sup>	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA <sup>D</sup>
S13	B13-23.5	23.5	11/28/2011	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA <sup>D</sup>
S14	B14-19	19	11/28/2011	1.0 <sup>E</sup>	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA <sup>D</sup>
CS-1	CS-1	2.5	10/16/2012	730 <sup>F</sup>	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
CS-2	CS-2	2	10/16/2012	14,000 <sup>F</sup>	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
CS-3	CS-3	1	10/16/2012	7,600 <sup>F</sup>	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
CS-4	CS-4	0.5	10/16/2012	9,800 <sup>F</sup>	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
CS-5	CS-5	0.5	10/16/2012	8,000 <sup>F</sup>	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
CS-6	CS-6-Comp 3 Drums	0 <sup>G</sup>	10/16/2012	7,400 <sup>F</sup>	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S15	S15-8.0'	8	06/14/2013	4,000 <sup>H</sup>	4.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S15	S15-10.0'	10	06/14/2013	3,400 <sup>H</sup>	76	0.042	0.034	<0.025	0.090	<0.025
S15	S15-15.0'	15	06/14/2013	10,000	600	0.98	0.11	0.24	0.73	<0.050
S15	S15-17.0'	17	06/14/2013	5,800	21	0.11	0.0078	0.010	0.024	<0.0050
S15	S15-19.0'	19	06/14/2013	8,400 <sup>H</sup>	43	0.37	0.024	0.0057	0.083	<0.0050
S15	S15-24.5'	24.5	06/14/2013	8.4 <sup>H</sup>	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S16	S16-7'grab hand auger	7	06/14/2013	7.7 <sup>H</sup>	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S16	S16-10'grab	10	06/14/2013	11	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

**TABLE 4A**  
**Cumulative Hydrocarbon Soil Sample Analytical Results**  
P & D 23rd Avenue Associates LLC  
1125 Miller Avenue  
Oakland, California  
Clearwater Project No. CB018

Soil Boring ID	Sample ID	Collection Depth (feet)	Sampling Date	TPH-d (mg/kg)	TPH-g (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	MTBE (mg/kg)
Shallow Soil ESL <sup>1</sup> for Commercial Use				500	500	0.044	2.9	3.3	2.3	0.023
Deep Soil ESL <sup>1</sup> for Commercial Use				580	530	0.044	2.9	3.3	2.3	0.023
<b>Low Threat Closure Thresholds - Commercial<sup>A, B</sup></b>		<b>0-5 feet bgs</b>		--	--	<b>8.2</b>	--	<b>89</b>	--	--
		<b>5-10 feet bgs</b>		--	--	<b>12</b>	--	<b>134</b>	--	--
S16	S16-15'grab	15	06/14/2013	5.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S16	S16-17'grab	17	06/14/2013	1.9 <sup>E,H</sup>	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S16	S16-20'grab	20	06/14/2013	3.0 <sup>H</sup>	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S16	S16-25'grab	25	06/14/2013	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S17	S17-7.0'	7	06/14/2013	1.6 <sup>H</sup>	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S17	S17-10.0'	10	06/14/2013	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S17	S17-17.0'	17	06/14/2013	3.0 <sup>E,H</sup>	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S17	S17-21.0'	21	06/14/2013	5.9 <sup>E,H</sup>	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S17	S17-24.5'	24.5	06/14/2013	1.6 <sup>E,H</sup>	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

**Notes:**

- TPH-d Total petroleum hydrocarbons as diesel using EPA Method 8015/8020 (modified)
  - TPH-g Total petroleum hydrocarbons as gasoline using EPA Method 8260B
  - BTEX Benzene, Toluene, Ethylbenzene, Xylenes using EPA Method 8015/8020 (modified)
  - MTBE Methyl tertiary-butyl ether using EPA Method 8260
  - mg/kg Milligrams per kilogram (approximately equal to parts per million)
  - ND Not detected above laboratory reporting limits
  - NA Not analyzed
  - <0.0050 Not detected in concentrations exceeding the indicated laboratory reporting limit
  - bgs Below ground surface
  - bold** Contamination in the sample exceeded Low Threat Closure thresholds.
  - Thresholds not listed in Low Threat Closure guidelines.
  - Footnote A Low Threat Closure Thresholds are commercial values from Table 1 (page 8) of *Water Quality Control Policy for Low-Threat Underground Storage Tank Case Closure*, August 17, 2012.
  - Footnote B In order to qualify for Low Threat Closure, a site must meet all of the following requirements: a. The unauthorized release is located within the service area of a public water system; b. The unauthorized release consists only of petroleum; c. The unauthorized ("primary") release from the UST system has been stopped; d. Free product has been removed to the maximum extent practicable; e. A conceptual site model that assesses the nature, extent, and mobility of the release has been developed; f. Secondary source has been removed to the extent practicable; g. Soil or groundwater has been tested for methyl tert-butyl ether (MTBE) and results reported in accordance with Health and Safety Code section 25296.15; and h. Nuisance as defined by Water Code section 13050 does not exist at the site.
  - Footnote C Analysis not performed due to lack of sample volume.
  - Footnote D Analysis of MTBE not required by ACEH.
  - Footnote E Laboratory Notes: Discrete peaks in Diesel range, atypical for Diesel Fuel.
  - Footnote F Laboratory Note: Concentration reported is atypical for diesel, these hydrocarbons have a higher boiling point
  - Footnote G Composite sample collected from disposal materials.
  - Footnote H Laboratory Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.
  - Footnote I Environmental Screening Levels (ESL), from Summary Tables A and C, available from [http://www.waterboards.ca.gov/rwqcb2/water\\_issues/programs/ESL/Lookup\\_Tables\\_Summary\\_May\\_2013.pdf](http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/ESL/Lookup_Tables_Summary_May_2013.pdf)
- Analytical results reported in italics are from the December 31, 2001 *Subsurface Exploration Report* prepared by Environmental Bio-Systems.

**TABLE 4B**  
**Cumulative Volatile Organic Compound Soil Sample Analytical Results**  
P & D 23rd Avenue Associates LLC  
1125 Miller Avenue  
Oakland, California  
Clearwater Project No. CB018

Soil Boring ID	Sample ID	Collection Depth (feet)	Sampling Date	PCE (mg/kg)	TCE (mg/kg)	1,2,4-TMB (mg/kg)	Naphthalene (mg/kg)	Isopropyl			
								benzene (mg/kg)	n-Propylbenzene (mg/kg)	sec-Butylbenzene (mg/kg)	n-Butylbenzene (mg/kg)
<b>Low Threat Closure Thresholds - Commercial<sup>A,B</sup></b>				0.7	0.46	--	1.2	--	--	--	--
0-5 feet bgs				--	--	--	45	--	--	--	--
5-10 feet bgs				--	--	--	45	--	--	--	--
S1	S1-9	9 - grab	12/01/1998	NA	NA	NA	NA	NA	NA	NA	NA
S2	S2-9	9 - grab	12/01/1998	NA	NA	NA	NA	NA	NA	NA	NA
S3	S3-9	9 - grab	12/01/1998	NA	NA	NA	NA	NA	NA	NA	NA
S4	S4-9	9 - grab	12/01/1998	NA	NA	NA	NA	NA	NA	NA	NA
TW2	TW2 -16.5	16.5 - grab	10/24/2000	NA	NA	NA	NA	NA	NA	NA	NA
TW3	TW3-17	17 - grab	10/24/2000	NA	NA	NA	NA	NA	NA	NA	NA
D1	D1-3	3 - grab	10/24/2000	NA	NA	NA	NA	NA	NA	NA	NA
D1	D1-8	8 - grab	10/24/2000	NA	NA	NA	NA	NA	NA	NA	NA
S5	S5-5	5	11/16/2005	NA	NA	NA	NA	NA	NA	NA	NA
S5	S5-10	10	11/16/2005	NA	NA	NA	NA	NA	NA	NA	NA
S5	S5-15	15	11/16/2005	NA	NA	NA	NA	NA	NA	NA	NA
S5	S5-20	20	11/16/2005	NA	NA	NA	NA	NA	NA	NA	NA
S6	S6-6	6	11/16/2005	NA	NA	NA	NA	NA	NA	NA	NA
S7	S7-5	5	11/16/2005	NA	NA	NA	NA	NA	NA	NA	NA
S7	S7-10	10	11/16/2005	NA	NA	NA	NA	NA	NA	NA	NA
S7	S7-15	15	11/16/2005	NA	NA	NA	NA	NA	NA	NA	NA
S7	S7-20	20	11/16/2005	NA	NA	NA	NA	NA	NA	NA	NA
S8	S8-4	4	11/16/2005	NA	NA	NA	NA	NA	NA	NA	NA
S9	S9.4.0	4	11/15/2006	NA	NA	NA	NA	NA	NA	NA	NA
S10	S10.4.0	4	11/15/2006	NA	NA	NA	NA	NA	NA	NA	NA
S11	S11.4.0	4	11/15/2006	NA	NA	NA	NA	NA	NA	NA	NA
S12	B12-18	18	11/28/2011	NA	NA	NA	NA	NA	NA	NA	NA
S13	B13-11	11	11/28/2011	NA	NA	NA	NA	NA	NA	NA	NA
S13	B13-14	14	11/28/2011	NA	NA	NA	NA	NA	NA	NA	NA
S13	B13-19	19	11/28/2011	NA	NA	NA	NA	NA	NA	NA	NA
S13	B13-23.5	23.5	11/28/2011	NA	NA	NA	NA	NA	NA	NA	NA
S14	B14-19	19	11/28/2011	NA	NA	NA	NA	NA	NA	NA	NA
CS-1	CS-1	2.5	10/16/2012	<0.0050	<0.0050	0.015 <sup>D</sup>	0.072 <sup>C</sup>	NA	NA	NA	NA
CS-2	CS-2	2	10/16/2012	<0.0050	<0.0050	<0.0050 <sup>D</sup>	<0.0050 <sup>C</sup>	NA	NA	NA	NA
CS-3	CS-3	1	10/16/2012	<0.0050	<0.0050	0.0067 <sup>D</sup>	0.042 <sup>C</sup>	NA	NA	NA	NA
CS-4	CS-4	0.5	10/16/2012	<0.0050	<0.0050	<0.0050 <sup>D</sup>	<0.0050 <sup>C</sup>	NA	NA	NA	NA
CS-5	CS-5	0.5	10/16/2012	<0.0050	<0.0050	<0.0050 <sup>D</sup>	<0.0050 <sup>C</sup>	NA	NA	NA	NA
CS-6	CS-6-Comp 3 Drums	0 <sup>E</sup>	10/16/2012	<0.0050	<0.0050	<0.0050 <sup>D</sup>	0.0074 <sup>C</sup>	NA	NA	NA	NA
S15	S15-8.0'	8	06/14/2013	<0.0050	<0.0050	<0.0050	<0.0050	0.0096	0.028	0.021	0.063
S15	S15-10.0'	10	06/14/2013	<0.025	<0.025	<0.025	<0.080 <sup>F</sup>	0.33	1.3	0.30	0.94
S15	S15-15.0'	15	06/14/2013	<0.050	<0.050	<0.050	<0.50 <sup>F</sup>	3.0	11	1.8	5.8
S15	S15-17.0'	17	06/14/2013	<0.0050	<0.0050	<0.0050	<0.010 <sup>F</sup>	0.12	0.37	0.052	0.15
S15	S15-19.0'	19	06/14/2013	<0.0050	<0.0050	0.0091	<0.020 <sup>F</sup>	0.089	0.20	0.090	0.24
S15	S15-24.5'	24.5	06/14/2013	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S16	S16-7'grab hand auger	7	06/14/2013	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S16	S16-10'grab	10	06/14/2013	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S16	S16-15'grab	15	06/14/2013	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S16	S16-17'grab	17	06/14/2013	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S16	S16-20'grab	20	06/14/2013	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S16	S16-25'grab	25	06/14/2013	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S17	S17-7.0'	7	06/14/2013	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S17	S17-10.0'	10	06/14/2013	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S17	S17-17.0'	17	06/14/2013	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S17	S17-21.0'	21	06/14/2013	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
S17	S17-24.5'	24.5	06/14/2013	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

**TABLE 1**  
**Soil Vapor Sample Analytical Results**  
P & D 23rd Avenue Associates LLC  
1125 Miller Avenue, Oakland, CA  
Clearwater Project No. CB018H

Sample (ID)	Sampling Date	Analytical Method	TPH-d (µg/m <sup>3</sup> )	Naphthalene (µg/m <sup>3</sup> )	1-Methyl naphthalene (µg/m <sup>3</sup> )	2-Methyl naphthalene (µg/m <sup>3</sup> )	TPH-g (µg/m <sup>3</sup> )	B (µg/m <sup>3</sup> )	T (µg/m <sup>3</sup> )	E (µg/m <sup>3</sup> )	X <sup>E</sup> (µg/m <sup>3</sup> )	MTBE (µg/m <sup>3</sup> )	TBA (µg/m <sup>3</sup> )	ETBE TAME DIPE (µg/m <sup>3</sup> )	2-Propanol (µg/m <sup>3</sup> )	Propane
<b>CHHSLs, Commercial<sup>f</sup></b>			NE	32	NE	NE	NE	36	140,000	420	320,000	4	NE	NE	NE	NE
<b>ESLs, Lowest Residential<sup>A</sup></b>			<b>10,000</b>	<b>72</b>	<b>NE</b>	<b>NE</b>	<b>10,000</b>	<b>84</b>	<b>63,000</b>	<b>980</b>	<b>21,000</b>	<b>9,400</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>
V2.2 Suma	11/15/2006	TO-15	—	—	—	—	—	41	43	<7.9	28.4	—	—	—	—	—
V2.2 Suma Duplicate	11/15/2006	TO-15	—	—	—	—	—	42	46	<7.9	29.8	—	—	—	—	—
V2.4 Suma	11/15/2006	TO-15	—	—	—	—	—	<21	<28	<24	<28	—	—	—	—	—
V1.4 1L	11/15/2006	TO-17	>150,000 <sup>F</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—
V1.4 4L	11/15/2006	NIOSH 1550	580,000	—	—	—	—	—	—	—	—	—	—	—	—	—
V1.4 4L Duplicate	11/15/2006	NIOSH 1550	600,000	—	—	—	—	—	—	—	—	—	—	—	—	—
V2.2 1L	11/15/2006	NIOSH 1550	710,000	—	—	—	—	—	—	—	—	—	—	—	—	—
V2.2 4L	11/15/2006	NIOSH 1550	180,000	—	—	—	—	—	—	—	—	—	—	—	—	—
V2.4 1L	11/15/2006	NIOSH 1550	280,000	—	—	—	—	—	—	—	—	—	—	—	—	—
V2.4 4L	11/15/2006	NIOSH 1550	700,000	—	—	—	—	—	—	—	—	—	—	—	—	—
V3.4 1L	11/15/2006	NIOSH 1550	7,300,000	—	—	—	—	—	—	—	—	—	—	—	—	—
V3.4 4L	11/15/2006	NIOSH 1550	570,000	—	—	—	—	—	—	—	—	—	—	—	—	—
SS-1	06/17/2010	8260B/ 8015M <sup>C</sup>	<50,000	<100	—	—	<10,000	<100	<200	<100	<200	<100	<1,000	<100	—	—
SS-1	11/04/2010	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	<240	<3.8	<4.5	<5.1	<5.1	<4.3	<14	<20 <sup>D</sup>	<12	—
SS-1	04/01/2011	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	540	<3.7	<4.4	<5.0	<5.0	<4.2	<14	<19 <sup>D</sup>	<11	—
SS-1	12/09/2011	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	<160	<2.5	<2.9	<3.4	<3.4	<2.8	<9.4	<13	<7.6	—
SS-2	06/17/2010	8260B/ 8015M <sup>C</sup>	<50,000	<100	—	—	<10,000	<100	<200	<100	<200	<100	<1,000	<100	—	—
SS-2	11/04/2010	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	<240	<3.8	<4.5	<5.2	5.3	<4.3	<14	<20 <sup>D</sup>	<12	—
SS-2	04/01/2011	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	530	<3.7	<4.4	<5.0	<5.0	<4.2	<14	<19 <sup>D</sup>	<11	—
SS-2	12/09/2011	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	<160	<2.5	<3.0	<3.4	<3.4	<2.8	<9.6	<13	<7.8	—
SS-3	06/17/2010	8260B/ 8015M <sup>C</sup>	<50,000	<100	—	—	37,000	<100	2,600	2,000	6,050	<100	<1,000	<100	—	—
SS-3 Duplicate	06/17/2010	8260B/ 8015M <sup>C</sup>	<50,000	<100	—	—	30,000	<100	2,100	1,600	4,990	<100	<1,000	<100	—	—
SS-3	11/04/2010	TO-17/TO-15 <sup>B</sup> Modified ASTM	5,800	8.0	24	36	13,000	<8.2	60	560	2,940	<9.2	<31	<43 <sup>D</sup>	<25	—
SS-3	11/04/2010	D-1945	—	—	—	—	—	—	—	—	—	—	—	—	—	<0.0051%
SS-3	04/01/2011	TO-17/TO-15 <sup>B</sup>	8,200	4.2	7.0	<2.5	8,600	3.8	16	110	650	<3.8	<13	<18 <sup>D</sup>	<10	—
SS-3	12/08/2011	TO-17/TO-15 <sup>B</sup> Modified ASTM	<5,000	3.7	8.0	<2.5	12,000	<2.5	3.8	19	119	<2.8	<9.6	<13	<7.8	—
SS-3	12/08/2011	D-1945	—	—	—	—	—	—	—	—	—	—	—	—	—	<0.0016%
SS-4	06/17/2010	8260B/ 8015M <sup>C</sup>	<50,000	<100	—	—	<10,000	<100	<200	<100	<200	<100	<1,000	<100	—	—
SS-4	11/04/2010	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	<240	<3.8	<4.5	<5.2	<5.2	<4.3	<14	<20 <sup>D</sup>	<12	—
SS-4	04/01/2011	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	520	<3.7	<4.4	<5.0	<5.0	<4.2	<14	<19 <sup>D</sup>	<11	—
SS-4	12/08/2011	TO-17/TO-15 <sup>B</sup>	9,500 <sup>G</sup>	<2.5	<2.5	<2.5	<160	<2.5	<2.9	<3.4	<3.4	<2.8	<9.4	<13	<7.6	—
SS-5	06/17/2010	8260B/ 8015M <sup>C</sup>	<50,000	<100	—	—	<10,000	<100	<200	<100	<200	<100	<1,000	<100	—	—
SS-5	11/04/2010	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	<260	<4.0	<4.7	<5.5	<5.5	<4.5	<15	<21 <sup>D</sup>	<12	—
SS-5 (IPA)	11/04/2010	Modified TO-15 GC/MS	—	—	—	—	—	—	—	—	—	—	—	—	81,000	—

**TABLE 1**  
**Soil Vapor Sample Analytical Results**  
P & D 23rd Avenue Associates LLC  
1125 Miller Avenue, Oakland, CA  
Clearwater Project No. CB018H

Sample (ID)	Sampling Date	Analytical Method	TPH-d (µg/m <sup>3</sup> )	Naphthalene (µg/m <sup>3</sup> )	1-Methyl naphthalene (µg/m <sup>3</sup> )	2-Methyl naphthalene (µg/m <sup>3</sup> )	TPH-g (µg/m <sup>3</sup> )	B (µg/m <sup>3</sup> )	T (µg/m <sup>3</sup> )	E (µg/m <sup>3</sup> )	X <sup>E</sup> (µg/m <sup>3</sup> )	MTBE (µg/m <sup>3</sup> )	TBA (µg/m <sup>3</sup> )	ETBE TAME DIPE (µg/m <sup>3</sup> )	2-Propanol (µg/m <sup>3</sup> )	Propane
<b>CHHSLs, Commercial<sup>1</sup></b>			NE	32	NE	NE	NE	36	140,000	420	320,000	4	NE	NE	NE	NE
<b>ESLs, Lowest Residential<sup>A</sup></b>			<b>10,000</b>	<b>72</b>	NE	NE	<b>10,000</b>	<b>84</b>	<b>63,000</b>	<b>980</b>	<b>21,000</b>	<b>9,400</b>	NE	NE	NE	NE
SS-5	04/01/2011	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	880	<3.7	8.2	<5.0	<5.0	<4.2	<14	<19 <sup>D</sup>	<11	—
SS-5	12/08/2011	TO-15	<5,000	<2.5	<2.5	<2.5	<160	<2.5	<2.9	<3.4	<3.4	<2.8	<9.4	<13	<7.6	—
SS-6	06/17/2010	8260B/ 8015M <sup>C</sup>	<50,000	<100	—	—	<10,000	<100	<200	<100	<200	<100	<1,000	<100	—	—
SS-6	11/04/2010	TO-17/TO-15 <sup>A</sup>	<5,000	4.6	<2.5	4.3	<250	<3.9	<4.6	<5.3	<5.3	<4.4	<15	<20 <sup>D</sup>	<12	—
SS-6	04/01/2011	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	400	<3.8	<4.5	<5.2	<5.2	<4.3	<14	<20 <sup>D</sup>	<12	—
SS-6	12/09/2011	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	<160	<2.5	<3.0	<3.4	<3.4	<2.8	<9.6	<13	<7.8	—
SS-7	04/01/2011	TO-17/TO-15 <sup>B</sup>	<5,000	10	9.0	10	690	<3.8	5.9	<5.2	<5.2	<4.3	<14	<20 <sup>D</sup>	85	—
SS-7 (IPA)	04/01/2011	TO-15	—	—	—	—	—	—	—	—	—	—	—	—	93,000	—
SS-7	12/09/2011	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	520 <sup>F</sup>	<2.5	<2.9	<3.4	<3.4	<2.8	<9.4	<13	<7.6	—
SS-7 (IPA)	12/09/2011	TO-15	—	—	—	—	—	—	—	—	—	—	—	—	20,000 <sup>H</sup>	—
SS-8	12/08/2011	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	340	<2.6	<3.1	<3.6	<3.6	<3.0	<9.9	<14	<8.1	—
SS-9	12/08/2011	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	310	<2.6	<3.0	<3.5	<3.5	<2.9	<9.8	<13	<7.9	—
SS-10	12/08/2011	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	1,900	37	160	37	208	<2.7	<9.2	<13	<7.5	—

**Notes:**

- ESL Environmental Screening Limit
- (µg/m<sup>3</sup>) Micrograms per cubic meter
- TO-15 Samples analyzed using modified EPA method TO-15 for soil vapor collected in specially prepared canisters and analyzed by gas chromatography/mass spectrometry (GC/MS).
- TO-17 Samples analyzed using modified EPA method TO-17 for soil vapor samples collected using multi-bed sorbent tubes and analyzed by GC/MS.
- NIOSH 1550 Alternative analytical method used for saturated sorbent tubes using chemical extraction (carbon disulfide) and analyzed using gas chromatography/ flame ionization detector
- ASTM D-1945 Sample analyzed using modified ASTM D-1945
- TPH-d Total petroleum hydrocarbons detected within the diesel range of C10-C28
- TPH-g Total petroleum hydrocarbons detected within the gasoline range of C6-C12
- B Benzene
- T Toluene
- E Ethylbenzene
- X Total
- MTBE Methyl-t-butyl ether
- ETBE Ethyl-t-
- TAME Tert-amyl methyl ether
- DIPE Diisopropyl ether
- TBA tert-Butanol
- 2-Propanol 2-Propanol is also known as Isopropyl alcohol (IPA)
- Not Analyzed
- <# Contamination in the sample was below method reporting limits
- bold Contamination in the sample exceeded environmental screening limits
- NE Standard Not Established
- (ID) Identification
- CHHSL California Human Health Screening Level

**TABLE 1**  
**Soil Vapor Sample Analytical Results**  
P & D 23rd Avenue Associates LLC  
1125 Miller Avenue, Oakland, CA  
Clearwater Project No. CB018H

Sample (ID)	Sampling Date	Analytical Method	TPH-d ( $\mu\text{g}/\text{m}^3$ )	Naphthalene ( $\mu\text{g}/\text{m}^3$ )	1-Methyl naphthalene ( $\mu\text{g}/\text{m}^3$ )	2-Methyl naphthalene ( $\mu\text{g}/\text{m}^3$ )	TPH-g ( $\mu\text{g}/\text{m}^3$ )	B ( $\mu\text{g}/\text{m}^3$ )	T ( $\mu\text{g}/\text{m}^3$ )	E ( $\mu\text{g}/\text{m}^3$ )	X <sup>E</sup> ( $\mu\text{g}/\text{m}^3$ )	MTBE ( $\mu\text{g}/\text{m}^3$ )	TBA ( $\mu\text{g}/\text{m}^3$ )	ETBE TAME DIPE ( $\mu\text{g}/\text{m}^3$ )	2-Propanol ( $\mu\text{g}/\text{m}^3$ )	Propane ( $\mu\text{g}/\text{m}^3$ )
CHHSLs, Commercial <sup>†</sup>			NE	32	NE	NE	NE	36	140,000	420	320,000	4	NE	NE	NE	NE
ESLs, Lowest Residential <sup>A</sup>			10,000	72	NE	NE	10,000	84	63,000	980	21,000	9,400	NE	NE	NE	NE

Footnote A Environmental Screening Levels (ESLs), Lowest Residential, from *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Revised by May 2008*, Table E-2 Shallow Soil Gas Screening Levels for Evaluation of Potential Vapor Intrusion concerns available from [www.waterboards.ca.gov/sanfranciscobay/water\\_issues/available\\_documents/ESL\\_May\\_2008.pdf](http://www.waterboards.ca.gov/sanfranciscobay/water_issues/available_documents/ESL_May_2008.pdf)

Footnote B TPH-d, Naphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene by Modified TO-17 VI; TPH-g, B, T, E, X, MTBE, TBA, ETBE, TAME, DIPE by Modified TO-15.

Footnote C BTEX, Naphthalene, Oxygenates and TPH-g by EPA method 8260B; TPH-d by EPA method 8015n

Footnote D Analyte is listed as isopropyl ether, not diisopropyl ether

Footnote E Xylene is reported as the sum of m,p-Xylene and o-Xylene

Footnote F Laboratory notes: TPH gasoline was detected at a concentration less than 5 times the reporting limit. Because the preceding sample contained high concentration of TPH-g, the result for TPH-g in this sample may be biased high for possible carry-over. A re-analysis of this sample was not possible due to insufficient sample volume.

Footnote G Laboratory Notes: The TPH pattern did not resemble that of diesel fuel. The hydrocarbons were distributed in the lighter carbon range of diesel.

Footnote H Laboratory Notes: Dilution was performed on this sample due to the presence of high level target species

Footnote I CHHSLs - *California Human Health Screening Levels, Revised September 2010*. Table 3 Soil Gas Screening Numbers for Volatile Chemicals Below Buildings Constructed Without Engineered Fill Below Sub-Slab Gravel

V2.2 Summa (200 mL/min\*30 min) Vapor sample collected at 2 feet below ground surface using 6-liter Summa canister at a flow rate of 200 mL per minute for 30 minutes.

V2.4 Summa (200 mL/min\*30 min) Vapor sample collected at 4 feet below ground surface using 6-liter Summa canister at a flow rate of 200 mL per minute for 30 minutes.

VI.4 1L Vapor sample collected at 4 feet below ground surface using TO-17 Carbotrap 300 tube at a flow rate of 66.7 mL per minute for 15 minutes. Sample was analyzed using modified EPA method TO-17.

VI.4 4L Vapor sample collected at 4 feet below ground surface using TO-17 Carbotrap 300 tube at a flow rate of 133.3 mL per minute for 30 minutes.

> ## (S) Sample results are flagged as greater than saturated peak for analyte.

1L Sample flow rate equal to 66.7 milliliters per minute for 15 minutes.

4L Sample flow rate equal to 133.3 milliliters per minute for 30 minutes.



**TABLE 5A**  
**Cumulative Soil Vapor Sample Analytical Results - Commercial**  
**P & D 23rd Avenue Associates LLC**  
**1125 Miller Avenue, Oakland, CA**  
**Clearwater Project No. CB018**

Sample ID	Sampling Date	Analytical Method	TPH-d	Naphthalene	1-Methyl naphthalene	2-Methyl naphthalene	TPH-g	B	T	E	X <sup>1</sup>	MTBE	TBA	ETBE TAME DIPE	2-Propenol	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	Propylbenzene	4-Ethyltoluene	Ethanol	Tetrahydrofuran	Tetra-chloroethene	Methylene Chloride	Hexane	Cyclohexane	Cumene	Acetone	Chloroform	Freon 11	Freon 12	Freon 113				
Unit of Measurement			(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )				
Low-Threat Soil Gas Criteria - No Bioremediation			NE	310	NE	NE	NE	280	NE	3,600	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE			
Zone - Commercial <sup>1</sup>			NE	110	NE	NE	NE	120	380,000	1,400	880,000	13,000	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE			
CHSIA, Commercial <sup>1</sup>			NE	110	NE	NE	NE	120	380,000	1,400	880,000	13,000	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE		
ESL, Commercial <sup>1</sup>			570,000	360	NE	NE	1,200,000	420	1,300,000	4,900	440,000	47,000	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE		
V2.2 Sama	11/15/2006	TO-15	--	--	--	--	41	43	<7.9	28.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Duplicate	11/15/2006	TO-15	--	--	--	--	42	46	<7.9	29.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
V2.4 Sama	11/15/2006	TO-15	--	--	--	--	<21	<28	<24	<28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
V1.4 1L	11/15/2006	TO-17	>150,000 <sup>2</sup>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
V1.4 4L	11/15/2006	NIOSH 1550	580,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Duplicate	11/15/2006	NIOSH 1550	680,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
V2.2 1L	11/15/2006	NIOSH 1550	710,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
V2.2 4L	11/15/2006	NIOSH 1550	180,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
V2.4 1L	11/15/2006	NIOSH 1550	230,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
V2.4 4L	11/15/2006	NIOSH 1550	780,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
V3.4 1L	11/15/2006	NIOSH 1550	7,300,400	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
V3.4 4L	11/15/2006	NIOSH 1550	570,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SS-1	06/17/2010	8260B/8015M <sup>C</sup>	<50,000	<100	--	--	<10,000	<100	<200	<100	<200	<100	<1,000	<100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SS-1	11/04/2010	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	<240	<3.8	<4.5	<5.1	<5.1	<4.3	<14	<20 <sup>D</sup>	<12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SS-1	04/01/2011	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	540	<3.7	<4.4	<5.0	<5.0	<4.2	<14	<19 <sup>D</sup>	<11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SS-1	12/09/2011	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	<160	<2.5	<2.9	<3.4	<3.4	<2.8	<9.4	<13	<7.6	<3.8	<3.8	<3.8	<3.8	<5.8	<2.3	<5.2	<2.7	<2.7	<2.7	<3.8	<18	<3.8	<4.4	<3.8	<3.8	<5.9			
SS-2	06/17/2010	8260B/8015M <sup>C</sup>	<50,000	<100	--	--	<10,000	<100	<200	<100	<200	<100	<1,000	<100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SS-2	11/04/2010	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	<240	<3.8	<4.5	<5.2	5.3	<4.3	<14	<20 <sup>D</sup>	<12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SS-2	04/01/2011	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	530	<3.7	<4.4	<5.0	<5.0	<4.2	<14	<19 <sup>D</sup>	<11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SS-2	12/09/2011	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	<160	<2.5	<3.0	<3.4	<3.4	<2.8	<9.6	<13	<7.8	<3.9	<3.9	<3.9	<3.9	<6.0	<2.3	<5.4	<2.7	<2.8	<2.7	<3.9	19	5.5	<4.4	<3.9	<6.0				
SS-3	06/17/2010	8260B/8015M <sup>C</sup>	<50,000	<100	--	--	37,000	<100	2,600	2,000	6,030	<100	<1,000	<100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SS-3 Duplicate	06/17/2010	8260B/8015M <sup>C</sup>	<50,000	<100	--	--	30,000	<100	2,100	1,600	4,990	<100	<1,000	<100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SS-3	11/04/2010	TO-17/TO-15 <sup>B</sup>	5,800	8.0	24	36	12,000	<8.2	60	560	2,940	<9.2	<31	<43 <sup>D</sup>	<25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SS-3	11/04/2010	Modified ASTM D-1945	--	--	--	--	--	--	--	--	--	--	--	--	<0.0051%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SS-3	04/01/2011	TO-17/TO-15 <sup>B</sup>	8,200	4.2	7.0	<2.5	8,600	3.8	16	110	650	<3.8	<13	<18 <sup>D</sup>	<10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SS-3	12/08/2011	Modified ASTM D-1945	<5,000	3.7	8.0	<2.5	11,000	<2.5	3.8	19	119	<3.8	<9.6	<13	<7.8	8.3	13	<3.9	16	10	2.4	<5.4	67	3.1	160	3.9	270	<3.8	<4.4	<3.9	<6.0				
SS-3	12/08/2011	Modified ASTM D-1945	--	--	--	--	--	--	--	--	--	--	--	--	<0.0016%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SS-4	06/17/2010	8260B/8015M <sup>C</sup>	<50,000	<100	--	--	<10,000	<100	<200	<100	<200	<100	<1,000	<100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SS-4	11/04/2010	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	<240	<3.8	<4.5	<5.2	<5.2	<4.3	<14	<20 <sup>D</sup>	<12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SS-4	04/01/2011	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	520	<3.7	<4.4	<5.0	<5.0	<4.2	<14	<19 <sup>D</sup>	<11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SS-4	12/08/2011	TO-17/TO-15 <sup>B</sup>	9,500 <sup>6</sup>	<2.5	<2.5	<2.5	<160	<2.5	<2.9	<3.4	<3.4	<2.8	<9.4	<13	<7.6	<3.8	<3.8	<3.8	<3.8	<5.8	<2.5	150	<2.7	<2.7	<2.7	<3.8	<18	<3.8	<4.4	<3.8	<5.9				
SS-5	06/17/2010	8260B/8015M <sup>C</sup>	<50,000	<100	--	--	<10,000	<100	<200	<100	<200	<100	<1,000	<100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SS-5	11/04/2010	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	<260	<4.0	<4.7	<5.5	<5.5	<4.5	<15	<21 <sup>D</sup>	<12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SS-5 (IPA)	11/04/2010	Modified TO-15 GC/MS	--	--	--	--	--	--	--	--	--	--	--	--	81,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SS-5	04/01/2011	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	880	<3.7	8.2	<5.0	<5.0	<4.2	<14	<19 <sup>D</sup>	<11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SS-5	12/08/2011	TO-15	<5,000	<2.5	<2.5	<2.5	<160	<2.5	<2.9	<3.4	<3.4	<2.8	<9.4	<13	<7.6	<3.8	<3.8	<3.8	<3.8	<5.8	<2.3	2													

**TABLE SA**  
**Cumulative Soil Vapor Sample Analytical Results - Commercial**  
P & D 23rd Avenue Associates LLC  
1125 Miller Avenue, Oakland, CA  
Clearwater Project No. CB018

Sample ID	Sampling Date	Analytical Method	TPH-d	Naphthalene	1-Methyl naphthalene	2-Methyl naphthalene	TPH-g	B	T	E	X <sup>E</sup>	MTBE	TBA	ETBE	TAME	DBPE	2-Propanol	Propose	1,2,5-Triethylbenzene	1,2,4-Triethylbenzene	Propyl benzene	4-Ethyl toluene	Ethanol	Tetrahydrofuran	Tetrachloroethene	Methylene Chloride	Hexane	Cyclohexane	Cumene	Acetone	Chloroform	Freon 11	Freon 12	Freon 113			
			(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )			
Unit of Measurement																																					
Low Threat Soil Gas Criteria - No Bioattenuation																																					
Zone - Commercial <sup>1</sup>			NE	310	NE	NE	NE	280	NE	3,600	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	
CHHSLs, Commercial <sup>1</sup>			NE	110	NE	NE	NE	120	300,000	1,400	880,000	13,000	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	600	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE

**Notes:**

- ESL Environmental Screening Limit
- (µg/m<sup>3</sup>) Micrograms per cubic meter
- TO-15 Samples analyzed using modified EPA method TO-15 for soil vapor collected in specially prepared canisters and analyzed by gas chromatography/mass spectrometry (GC/MS).
- TO-17 Samples analyzed using modified EPA method TO-17 for soil vapor samples collected using multi-bed sorbent tubes and analyzed by GC/MS.
- NIOSH 1550 Alternative analytical method used for saturated sorbent tubes using chemical extraction (carbon disulfide) and analyzed using gas chromatography/flame ionization detector (GC/FID).
- ASTM D-1945 Sample analyzed using modified ASTM D-1945
- TPH-d Total petroleum hydrocarbons detected within the diesel range of C10-C28
- TPH-g Total petroleum hydrocarbons detected within the gasoline range of C6-C12
- B Benzene
- T Toluene
- E Ethylbenzene
- X Total Xylenes
- MTBE Methyl-tert-butyl ether
- ETBE Ethyl-tert-butyl ether
- TAME Tert-amyl methyl ether
- DBPE Diisopropyl ether
- TBA tert-Butanol
- 2-Propanol 2-Propanol is also known as Isopropyl alcohol (IPA)
- Not Analyzed
- <# Contamination in the sample was below method reporting limits.
- bold Contamination in the sample exceeded Low Threat Soil Gas Criteria or if no Low Threat values were established, it exceeded other environmental screening limits. For contaminants for which a standard has not been established (shown as NE), no bolding was used.
- NE Standard Not Established
- (ID) Identification
- CHHSL California Human Health Screening Level - Shallow Soil Gas Human Health Screening Levels

Footnote A Environmental Screening Levels (ESL), from Summary Table E. Environmental Screening Levels (ESLs) Indoor Air and Soil Gas (Soil Gas values shown), available from [http://www.waterboards.ca.gov/water\\_issues/programs/ESL/lookup\\_tables/summary\\_may\\_2013.pdf](http://www.waterboards.ca.gov/water_issues/programs/ESL/lookup_tables/summary_may_2013.pdf)

Footnote B TPH-d, Naphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene by Modified TO-17 VI, TPH-g, B, T, E, X, MTBE, TBA, ETBE, TAME, DBPE by Modified TO-15.

Footnote C BTEX, Naphthalene, Oxygenates and TPH-g by EPA method 8260B; TPH-d by EPA method 8015a

Footnote D Analyte is listed as Isopropyl ether, not diisopropyl ether.

Footnote E Xylene is reported as the sum of m,p-Xylene and o-Xylene

Footnote F Laboratory Notes: TPH gasoline was detected at a concentration less than 5 times the reporting limit. Because the preceding sample contained high concentration of TPH-g, the result for TPH-g in this sample may be biased high for possible carry-over. A re-analysis of this sample was not possible due to insufficient sample volume.

Footnote G Laboratory Notes: The TPH pattern did not resemble that of diesel fuel. The hydrocarbons were distributed in the lighter carbon range of diesel.

Footnote H Laboratory Notes: Dilution was performed on this sample due to the presence of high level target species.

Footnote I CHHSLs - California Human Health Screening Levels, Revised September 2010. Table 3 Soil Gas Screening Numbers for Volatile Chemicals Below Buildings Constructed Without Engineered Fill Below Sub-Slab Or

Footnote J Bio-attenuation zone as defined by the Water Control Policy for the Low-Threat Underground Storage Tank Closure.

V2.2 Summa Vapor sample collected at 2 feet below ground surface using 6-liter Summa canister at a flow rate of 200 mL per minute for 30 minutes.

V2.4 Summa Vapor sample collected at 4 feet below ground surface using 6-liter Summa canister at a flow rate of 200 mL per minute for 30 minutes.

V1.4 1L Vapor sample collected at 4 feet below ground surface using TO-17 Carbotrap 300 tube at a flow rate of 66.7 mL per minute for 15 minutes. Sample was analyzed using modified EPA method TO-17.

V1.4 4L Vapor sample collected at 4 feet below ground surface using TO-17 Carbotrap 300 tube at a flow rate of 133.3 mL per minute for 30 minutes.

> # (S) Sample results are flagged as greater than saturated peak for analysis.

1L Sample flow rate equal to 66.7 milliliters per minute for 15 minutes.

4L Sample flow rate equal to 133.3 milliliters per minute for 30 minutes.

**TABLE 5B**  
**Cumulative Soil Vapor Sample Analytical Results - Residential**  
 P & D 23rd Avenue Associates LLC  
 1125 Miller Avenue, Oakland, CA  
 Clearwater Project No. CB018

Sample ID	Sampling Date	Analytical Method	TPH-d (µg/m³)	Naphthalene (µg/m³)	1-Methyl naphthalene (µg/m³)	2-Methyl naphthalene (µg/m³)	TPH-g (µg/m³)	B (µg/m³)	T (µg/m³)	E (µg/m³)	X <sup>2</sup> (µg/m³)	MTBE (µg/m³)	TBA (µg/m³)	ETBE TAME DPE (µg/m³)	2-Propanol (µg/m³)	Propane (µg/m³)	1,3,5-Trimethylbenzene (µg/m³)	1,2,4-Trimethylbenzene (µg/m³)	Propyl benzene (µg/m³)	4-Ethyl toluene (µg/m³)	Ethanol (µg/m³)	Tetrahydrofuran (µg/m³)	Tetra-chloro-ethene (µg/m³)	Methylene Chloride (µg/m³)	Hexane (µg/m³)	Cyclohexane (µg/m³)	Cumene (µg/m³)	Acetone (µg/m³)	Chloroform (µg/m³)	Freon 11 (µg/m³)	Freon 12 (µg/m³)	Freon 113 (µg/m³)
Unit of Measurement			(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)
Low-Threat Soil Criteria - No Blowdown			NE	93	NE	NE	85	NE	1,109	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
CHESLA, Residential <sup>1</sup>			NE	32	NE	NE	NE	36	140,000	420	320,000	4,000	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
ESL, Residential <sup>2</sup>			68,000	36	NE	NE	150,000	42	180,000	490	52,000	4,700	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
SS-7	04/01/2011	TO-17/TO-15 <sup>B</sup>	<5,000	10	9.0	10	690	<3.8	5.9	<5.2	<4.3	<14	<20 <sup>D</sup>	85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
SS-7 (PA)	04/01/2011	TO-15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
SS-7	12/09/2011	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	530 <sup>F</sup>	<2.5	<1.9	<3.4	<3.4	<2.8	<9.4	<13	<7.6	—	<3.8	8.8	<3.8	9.4	<5.8	<2.3	<5.2	<2.7	<2.7	5.2	<3.8	20	<3.8	5.4	4.5	12
SS-7 (PA)	12/09/2011	TO-15	—	—	—	—	—	—	—	—	—	—	—	28,000 <sup>H</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
SS-9	12/08/2011	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	310	<2.6	<3.0	<3.5	<3.5	<2.9	<9.8	<13	<7.9	—	<4.0	<4.0	<4.0	<4.0	<6.1	2.6	<2.5	<2.8	<2.8	<4.0	<19	<3.9	<4.5	<4.0	<6.2	
SS-10	12/08/2011	TO-17/TO-15 <sup>B</sup>	<5,000	<2.5	<2.5	<2.5	1,900	37	180	37	208	<2.7	<9.2	<13	<7.5	—	16	47	12	45	7.1	<2.2	<5.2	<2.6	<2.7	<2.6	<3.7	<18	<3.7	<4.3	<3.8	<5.8

**Notes:**  
 ESL Environmental Screening Limit  
 (µg/m³) Micrograms per cubic meter  
 TO-15 Samples analyzed using modified EPA method TO-15 for soil vapor collected in specially prepared canisters and analyzed by gas chromatography/mass spectrometry (GC/MS).  
 TO-17 Samples analyzed using modified EPA method TO-17 for soil vapor samples collected using multi-bed sorbent tubes and analyzed by GC/MS.  
 NIOSH 1550 Alternative analytical method used for untreated sorbent tubes using chemical extraction (carbon dioxide) and analyzed using gas chromatography/flame ionization detector (GC/FID).  
 ASTM-D-1945 Sample analyzed using modified ASTM D-1945  
 TPH-d Total petroleum hydrocarbons detected within the diesel range of C10-C28  
 TPH-g Total petroleum hydrocarbons detected within the gasoline range of C6-C12  
 B Benzene  
 T Toluene  
 E Ethylbenzene  
 X Total Xylenes  
 MTBE Methyl-tert-butyl ether  
 ETBE Ethyl-tert-butyl ether  
 TAME Tert-amyl methyl ether  
 DPE Diisopropyl ether  
 TBA tert-Butanol  
 2-Propanol 2-Propanol is also known as Isopropyl alcohol (IPA)  
 — Not Analyzed  
 <M Contamination in the sample was below method reporting limits.  
 bnd Contamination in the sample exceeded Low Threat Soil Gas Criteria or if no Low Threat values were established, it exceeded other environmental screening limits. For contaminants for which a standard has not been established (shown as NE), no holding was used.  
 NE Standard Not Established  
 (ID) Identification  
 CHESLA California Human Health Screening Level - Shallow Soil Gas Human Health Screening Levels

Footnote A Environmental Screening Levels (ESL), from Summary Table E, Environmental Screening Levels (ESLs) Indoor Air and Soil Gas (Soil Gas values shown), available from [http://www.waterboards.ca.gov/wqscb2/water\\_issues/programs/ESL/lookup\\_tables\\_summary\\_may\\_2013.pdf](http://www.waterboards.ca.gov/wqscb2/water_issues/programs/ESL/lookup_tables_summary_may_2013.pdf)  
 Footnote B TPH-d, Naphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene by Modified TO-17 V1; TPH-g, B, T, E, X, MTBE, TBA, ETBE, TAME, DPE by Modified TO-15.  
 Footnote C MTBE, Naphthalene, Xylenes and TPH-g by EPA method 8260B; TPH-d by EPA method 801.5m  
 Footnote D Analyte is listed as isopropyl ether, not diisopropyl ether.  
 Footnote E Xylene is reported as the sum of m,p-Xylene and o-Xylene  
 Footnote F Laboratory Notes: TPH gasoline was detected at a concentration less than 5 times the reporting limit. Because the preceding sample contained high concentration of TPH-g, the result for TPH-g in this sample may be biased high for possible carry-over. A re-analysis of this sample was not possible due to insufficient sample volume.  
 Footnote G Laboratory Notes: The TPH pattern did not resemble that of diesel fuel. The hydrocarbons were distributed in the lighter carbon range of diesel.  
 Footnote H Laboratory Notes: Dilution was performed on this sample due to the presence of high level target species.  
 Footnote I CHESLA - California Human Health Screening Levels, Revised September 2010. Table 3 Soil Gas Screening Numbers for Volatile Chemicals Below Buildings Constructed Without Engineered Fill Below Sub-Slab Grave  
 Footnote J Bio-attenuation zone as defined by the Water Control Policy for the Low-Threat Underground Storage Tank Closure.

V2.7 Summa Vapor sample collected at 2 feet below ground surface using 6-liter Summa canister at a flow rate of 200 mL per minute for 30 minutes.  
 V2.8 Summa Vapor sample collected at 4 feet below ground surface using 6-liter Summa canister at a flow rate of 200 mL per minute for 30 minutes.  
 V1.4 1L Vapor sample collected at 4 feet below ground surface using TO-17 Carbotrap 300 tube at a flow rate of 66.7 mL per minute for 15 minutes. Sample was analyzed using modified EPA method TO-17.  
 V1.4 4L Vapor sample collected at 4 feet below ground surface using TO-17 Carbotrap 300 tube at a flow rate of 133.3 mL per minute for 30 minutes.  
 >M (S) Sample results are flagged as greater than saturated peak for analyte.  
 IL Sample flow rate equal to 66.7 milliliters per minute for 15 minutes.  
 4L Sample flow rate equal to 133.3 milliliters per minute for 30 minutes.

**TABLE 4B**  
**Cumulative Volatile Organic Compound Soil Sample Analytical Results**  
P & D 23rd Avenue Associates LLC  
1125 Miller Avenue  
Oakland, California  
Clearwater Project No. CB018

Soil Boring ID	Sample ID	Collection Depth (feet)	Sampling Date	PCE (mg/kg)	TCE (mg/kg)	1,2,4-TMB (mg/kg)	Naphthalene (mg/kg)	Isopropyl benzene (mg/kg)	n-Propylbenzene (mg/kg)	sec-Butylbenzene (mg/kg)	n-Butylbenzene (mg/kg)
<b>Soil ESL<sup>g</sup> for Commercial Use</b>				0.7	0.46	--	1.2	--	--	--	--
<b>Low Threat Closure Thresholds - Commercial<sup>A, B</sup></b>		0-5 feet bgs		--	--	--	45	--	--	--	--
		5-10 feet bgs		--	--	--	45	--	--	--	--

**Notes:**

- PCE Tetrachloroethene using EPA Method 826f
  - TCE Trichloroethene using EPA Method 826f
  - 1,2,4-TMB 1,2,4-Trimethylbenzene using EPA Method 826f
  - mg/kg Milligrams per kilogram (approximately equal to parts per million)
  - NA Not analyzed
  - <0.0050 Not detected in concentrations exceeding the indicated laboratory reporting limit
  - bgs Below ground surface
  - bold Contamination in the sample exceeded Low Threat Closure threshold
  - Thresholds not listed in Low Threat Closure guidelines
  - Footnote A Low Threat Closure Thresholds are commercial values from Table 1 (page 8) of *Water Quality Control Policy for Low-Threat Underground Storage Tank Case Closure*, August 17, 2012.
  - Footnote B In order to qualify for Low Threat Closure, a site must meet all of the following requirements: a. The unauthorized release is located within the service area of a public water system; b. The unauthorized release consists only of petroleum; c. The unauthorized ("primary") release from the UST system has been stopped; d. Free product has been removed to the maximum extent practicable; e. A conceptual site model that assesses the nature, extent, and mobility of the release has been developed; f. Secondary source has been removed to the extent practicable; g. Soil or groundwater has been tested for methyl tert-butyl ether (MTBE) and results reported in accordance with Health and Safety Code section 25296.15; and h. Nuisance as defined by Water Code section 13050 does not exist at the site.
  - Footnote C Laboratory Note: Matrix Spike/Matrix Spike Duplicate results were affected by the analyte concentrations already present in the un-spiked sample
  - Footnote D Laboratory Note: Matrix Spike/Matrix Spike Duplicate results were outside of control limits. This may indicate a bias for the sample that was spiked. Since LCS recoveries were within control limits, no data are flagged
  - Footnote E Composite sample collected from disposal materials
  - Footnote F The Method Reporting Limit has been increased due to the presence of an interfering compound
  - Footnote G Environmental Screening Levels (ESL), from Summary Tables A and C, available from [http://www.waterboards.ca.gov/rwqcb2/water\\_issues/programs/ESL/Lookup\\_Tables\\_Summary\\_May\\_2013.ppt](http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/ESL/Lookup_Tables_Summary_May_2013.ppt)
- Analytical results reported in *italics* are from the December 31, 2001 *Subsurface Exploration Report* prepared by Environmental Bio-Systems

**Table 3**  
**Cumulative Groundwater Elevation and Analytical Results**  
P & D 23rd Avenue Associates LLC  
1125 Miller Avenue  
Oakland, California  
Clearwater Project No. CB018

Sample Point Location	Sample ID	Sampling Date	Depth (feet bgs)	TOC (feet)	DTW (feet)	GWE (feet)	TPH-d (µg/L)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	Chloroform (µg/L)	TCE (µg/L)	
Environmental Screening Levels in µg/L <sup>o</sup>							100	100	1.0	40	30	20	5.0	70	5.0	
Low Threat Closure Threshold <sup>A,B</sup>			Criterion 1 <sup>C</sup>				No limits defined in policy for Criterion 1									
TW2	TW2	10/24/2000	16	-	-	-	660	-	65	2.4	<0.5	3.2	<2.5	-	-	
TW3	TW3	10/24/2000	17	-	-	-	800	-	0.9	<0.5	<0.5	<1.5	<2.5	-	-	
S5	S5	11/16/2005	17	-	-	-	890	-	<0.50	<0.50	<0.50	<0.50	-	-	-	
S12	S-12	11/28/2011	11-15	-	-	-	1,300 <sup>D</sup>	<50	<0.50	<0.50	<0.50	<0.50	-	-	-	
S13	S-13	11/28/2011	11-15	-	-	-	36,000	200	<0.50	<0.50	<0.50	<0.50	-	-	-	
S14	S-14	11/28/2011	11-15	-	-	-	290 <sup>D</sup>	<50	<0.50	<0.50	<0.50	<0.50	-	-	-	
MW-1	MW-1	06/26/2013	-	21.42	9.64	11.78	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.93	
		09/06/2013	-	21.42	10.29	11.13	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.4	
		12/18/2013	-	21.42	10.25	11.17	51 <sup>E</sup>	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.3	
		03/17/2014	-	21.42	9.37	12.05	61 <sup>F</sup>	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	
MW-2	MW-2	06/26/2013	-	21.57	9.87	11.70	2,500	55	7.8	<0.50	<0.50	<0.50	<0.50	<0.50	1.6	
		09/06/2013	-	21.57	10.56	11.01	350	<50	3.8	<0.50	<0.50	<0.50	<0.50	0.54	2.6	
		12/18/2013	-	21.57	10.51	11.06	110	<50	0.75	<0.50	<0.50	<0.50	<0.50	<0.50	2.4	
		03/17/2014	-	21.57	9.68	11.89	210	<50	2.2	<0.50	<0.50	<0.50	<0.50	<0.50	2.4	
MW-3	MW-3	06/26/2013	-	23.40	11.71	11.69	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.99	4.3	
		09/06/2013	-	23.40	12.27	11.13	150 <sup>E</sup>	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	5.2	
		12/18/2013	-	23.40	12.25	11.15	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	5.3	
		03/17/2014	-	23.40	11.39	12.01	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.0	5.2	

**Notes:**

- TPH-d Total petroleum hydrocarbons as diesel using EPA Method 8015/8020 (modified)
- TPH-g Total petroleum hydrocarbons as gasoline using EPA Method 8260B
- B Benzene using EPA Method 8020/8260B
- T Toluene using EPA Method 8020/8260B
- E Ethylene using EPA Method 8020/8260B
- X Xylenes using EPA Method 8020/8260B
- MTBE Methyl tertiary-butyl ether using EPA Method 8260B
- TCE Trichloroethene using EPA Method 8260B
- Chloroform Chloroform using EPA Method 8260B
- µg/L Micrograms per liter (approximately equal to parts per billion: ppb)
- Not analyzed, not available, or not applicable
- <### Not detected in concentrations exceeding the indicated laboratory reporting limit
- bgs Below Ground Surface
- TOC Top-of-casing elevation surveyed by Morrow Surveying on June 20, 2013
- DTW Depth-to-water measurement collected on northern side of the TOC
- GWE Static groundwater elevation (TOC-DTW = GWE)

Footnote A Low Threat Closure Thresholds are from *Water Quality Control Policy for Low-Threat Underground Storage Tank Case Closure*, August 17, 2012.  
Footnote B In order to qualify for Low Threat Closure, a site must meet all of the following General Criteria: a. The unauthorized release is located within the service area of a public water system; b. The unauthorized release consists only of petroleum; c. The unauthorized ("primary") release from the UST system has been stopped; d. Free product has been removed to the maximum extent practicable; e. A conceptual site model that assesses the nature, extent, and mobility of the release has been developed; f. Secondary source has been removed to the extent practicable; g. Soil or groundwater has been tested for methyl tert-butyl ether (MTBE) and results reported in accordance with Health and Safety Code section 25296.15; and h. Nuisance as defined by Water Code section 13050 does not exist at the site.  
Footnote C Low Threat Closure, Criterion 1: a) The contaminant plume that exceeds water quality objectives is less than 100 feet in length, b) There is no free product, c) The nearest existing water supply well or surface water body is greater than 250 feet from the defined plume boundary.  
Footnote D Laboratory note: Discrete peaks, higher boiling hydrocarbons present, atypical for Diesel Fuel.  
Footnote E Laboratory note: Discrete peaks in Diesel range, atypical for Diesel Fuel.  
Footnote F Laboratory note: Hydrocarbons are higher-boiling than typical Diesel Fuel.  
Footnote G Environmental Screening Levels (ESL), from Summary Tables A and C, available from [http://www.waterboards.ca.gov/rwqcb2/water\\_issues/programs/ESL/lookup\\_Tables\\_Dec\\_2013\\_Summary.pdf](http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/ESL/lookup_Tables_Dec_2013_Summary.pdf)

Analytical results reported in *italics* are from the December 31, 2001 *Subsurface Exploration Report* prepared by Environmental Bio-Systems.