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Alameda County  
Environmental Health

January 5, 2009

Barbara Jakub  
Hazardous Materials Specialist  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, 2<sup>nd</sup> Floor  
Alameda, CA 94502

Subject: Certification Letter  
Additional Soil and Groundwater Information  
SLIC Site RO0002621, Emeryville Industrial Court  
5885 Hollis Street  
Emeryville, California

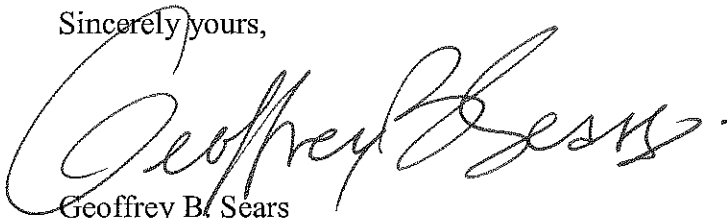
Dear Ms. Jakub:

Per your request and in accordance with our meeting on November 13, 2008, the attached Additional Soil and Groundwater Information letter dated December 22, 2008 from Leong Environmental provides a written response to your request for information regarding cross section information for residual chemicals in soil and groundwater for SLIC Case RO0002621 located at 5885 Hollis Street, Emeryville, California (the Site). The attached letter has been prepared on behalf of the current property owner, ES East Associates.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

If you have any questions, please call me at (415) 457-4964.

Sincerely yours,



Geoffrey B. Sears  
WAREHAM PROPERTY GROUP  
On Behalf of ES East Associates

December 22, 2008  
Project 103-002

Barbara Jakub  
Hazardous Materials Specialist  
Alameda County Environmental Health Services  
1131 Harbor Bay Parkway, 2nd Floor  
Alameda, CA 94502

Subject: Additional Soil and Groundwater Information  
SLIC Site RO0002621, Emeryville Industrial Court  
5885 Hollis Street  
Emeryville, California

Dear Ms. Jakub:

As a follow-up to our meeting on November 13, 2008 regarding the former Emeryville Industrial Court Site at 5885 Hollis Street, Emeryville, California, this letter has been prepared to address the request by you regarding additional soil and groundwater information related to total petroleum hydrocarbons (TPH) and potential former solvent use at the Site. As discussed in the meeting, soil and groundwater samples were collected prior to and during construction activities at the Site and figures and cross sections have been prepared to illustrate the available data.

Figure 1 presents TPH concentrations for soil samples collected before excavation activities and Figure 2 presents TPH concentrations in soil confirmation samples collected during excavation activities. The soil confirmation samples were collected in accordance with the approach outlined in the Site Management Plan dated July 14, 2005 (with clarifications on October 21, 2005 and November 20, 2005), which was approved by Alameda County Environmental Health Services on December 8, 2005. Figure 3 presents cross section locations, and Figures 4 through 6 present the idealized cross sections of the soil samples, including soil type, approximate excavation limits, and the results of laboratory analyses for TPH. Tables from previous reports summarizing soil and groundwater data are also attached for your reference.

In addition to the petroleum hydrocarbons, soil and groundwater samples were analyzed for chlorinated solvents using either U.S. EPA Methods 8010 or 8260. The results of chlorinated volatile organic compounds (VOC) analyses for soil and groundwater samples do not indicate a problem at the Site.

In soil, areas that may have used chlorinated VOCs were specifically targeted, and included sampling in 3 former businesses along the eastern side of the property where paints, thinners, inks, solvent, and adhesives are noted on Figure 7. Analytes from U.S. EPA Method 8010 and/or 8260 were not detected except for acetone at three locations along the south side of the site and methylene chloride in four samples (at four locations).

Relatively low concentrations of acetone (up to 42 micrograms per kilogram [ $\mu\text{g}/\text{kg}$ ]) were reported in four samples at three locations; three of the samples were in the southwestern portion of the site (TR-23 and TR-24); acetone was also reported at a relatively low concentration in groundwater at one of these locations (TR-24 at 35 micrograms per liter [ $\mu\text{g}/\text{L}$ ]). However, acetone was not reported in nearby groundwater samples from dewatering well DW-14 and post-excavation groundwater sample TR-GW that were analyzed for VOCs using U.S. EPA Method 8260. The other soil sample with acetone was reported in the northeast corner of the site (TR-27) but was not reported in a groundwater sample from nearby dewatering well DW-11 that was analyzed for a full suite of VOCs using U.S. EPA Method 8260. The soil with reported acetone concentrations at all of these locations has been excavated and the groundwater dewatered.

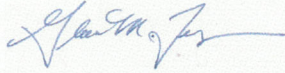
Although methylene chloride was not reported in laboratory blanks, methylene chloride is a common laboratory contaminant and was only reported in one set of samples collected during the same time interval (confirmation samples collected at the base of the excavation: TR-39, -40, -41, and -44). If methylene chloride was truly in the soil samples, it appears to be localized. Methylene chloride was not reported in a groundwater sample that is likely downgradient of this area (TR-31), or in the groundwater sample collected at TR-6 that may be generally down- and crossgradient. The fourth sample is on the other side of the site (TR-44), and methylene chloride was not detected in any other soil or groundwater samples in the vicinity.

In groundwater, only fuel-related VOCs (and acetone in one sample that also contained fuel-related VOCs) were reported (Figure 8). Higher concentrations of fuel-related VOCs were reported in the southwest corner of the site, where high TPHg concentrations were also detected in samples collected prior to excavation and dewatering. Trace concentrations of fuel-related VOCs in groundwater samples collected prior to Site redevelopment were reported in the center of the site, where (prior to excavation) TPHg in soil was not detected and TPHd concentrations were less than 1 milligram per kilogram (mg/kg). Locations in the center of the Site where these soil concentrations were found have all since been excavated during redevelopment activities.

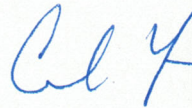
In summary, there is good sample coverage across the Site of soil samples analyzed for chlorinated VOCs. Soil containing acetone was excavated and was not reported in more recent groundwater samples collected from dewatering wells DW-11 and -14 or from the post-excavation groundwater sample TR-GW. The detection of methylene chloride in only one set of samples is likely due to laboratory contamination. Because methylene chloride was not reported in any other soil samples or in groundwater samples that are generally (or directly) downgradient from three of the locations, the methylene chloride (if truly present) is localized.



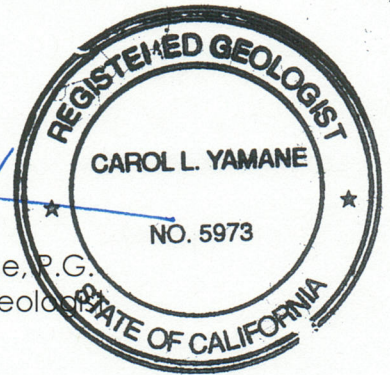
If you have any questions regarding this information, please contact Glenn Leong at 415-272-6986 or at [glenn@leongenv.com](mailto:glenn@leongenv.com).



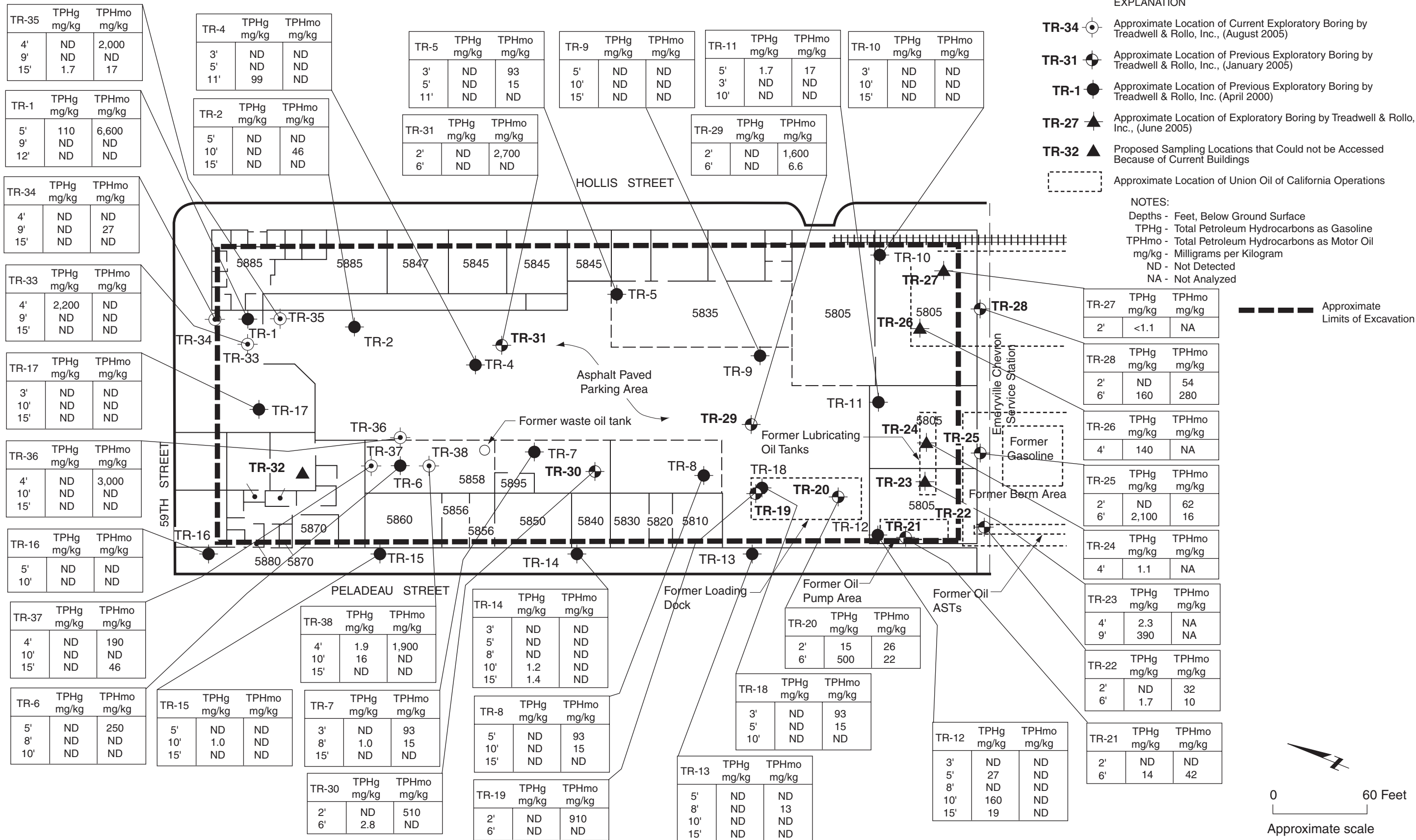
Glenn M. Leong, R.E.A.  
Principal Scientist



Carol Yamane, P.G.  
Consulting Geologist



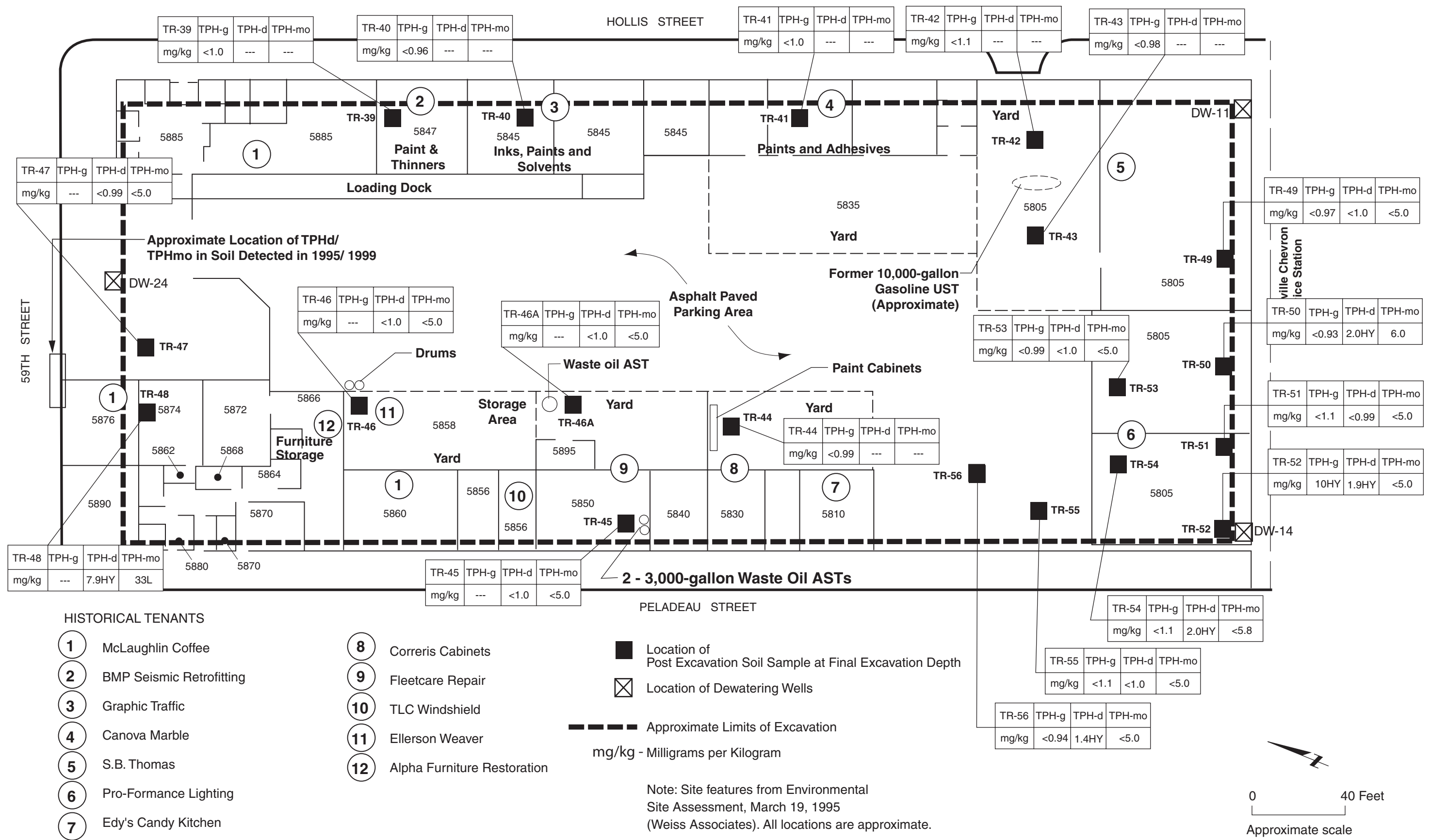
- Attachment: Figure 1 Total Petroleum Hydrocarbons Previously Detected in Soil  
Figure 2 Total Petroleum Hydrocarbons Detected in Post-Excavation Soil Samples  
Figure 3 Cross Section Location  
Figure 4 Idealized Cross Section A-A' and B-B'  
Figure 5 Idealized Cross Section C-C' and D-D'  
Figure 6 Idealized Cross Section E-E' and F-F'  
Figure 7 Soil Sample Locations Analyzed for Chlorinated VOCs  
Figure 8 Groundwater Samples Analyzed for Chlorinated VOCs
- Table 1 Summary of Previous Soil Sample Data - Organics  
Table 2 Soil Analytical Results – Total Petroleum Hydrocarbons in Soil  
Table 3 Soil Analytical Results – Volatile Organic Compounds in Soil  
Table 4 Summary of Previous Groundwater Sample Data - Organics  
Table 5 Groundwater Analytical Results – Post Excavation Grab Groundwater Sample and Excavation Dewatering Samples



**ALDERS PROPERTY**  
**5812 HOLLIS STREET**  
 Emeryville, California

**TOTAL PETROLEUM HYDROCARBONS**  
**PREVIOUSLY DETECTED IN SOIL**





**ALDERS PROPERTY**  
**5812 HOLLIS STREET**  
 Emeryville, California

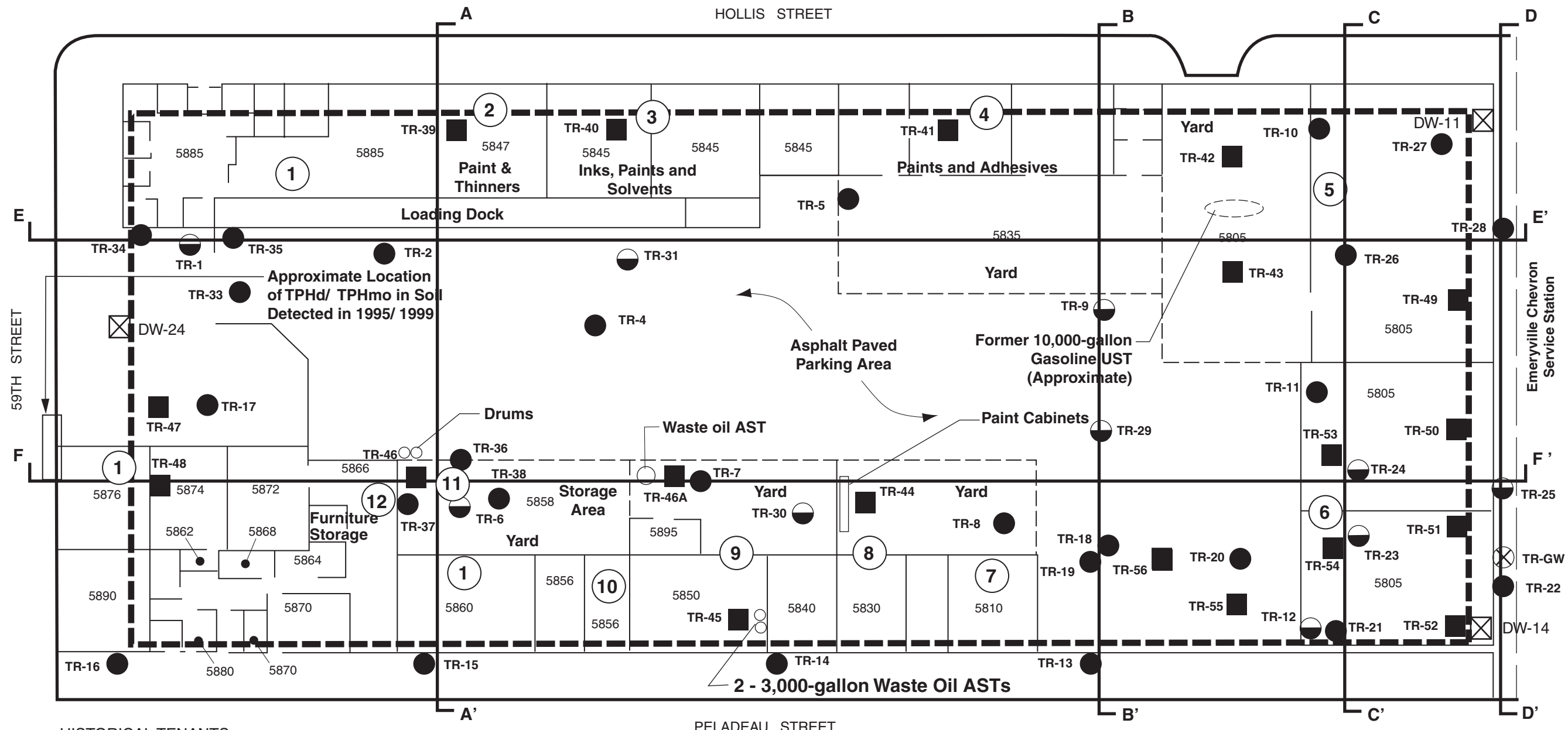
**TOTAL PETROLEUM HYDROCARBONS DETECTED IN  
 POST-EXCAVATION SOIL SAMPLES**

**Leong Environmental, Inc.**

Date 12/13/08

Project No. 103.001

Figure 2



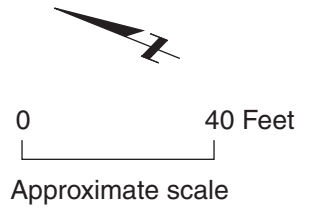
**HISTORICAL TENANTS**

- |                            |                               |
|----------------------------|-------------------------------|
| ① McLaughlin Coffee        | ⑧ Correris Cabinets           |
| ② BMP Seismic Retrofitting | ⑨ Fleetcare Repair            |
| ③ Graphic Traffic          | ⑩ TLC Windshield              |
| ④ Canova Marble            | ⑪ Ellerson Weaver             |
| ⑤ S.B. Thomas              | ⑫ Alpha Furniture Restoration |
| ⑥ Pro-Formance Lighting    |                               |
| ⑦ Edy's Candy Kitchen      |                               |

- Location of Post Excavation Soil Sample at Final Excavation Depth
- ⊗ Location of Dewatering Wells
- Previous Soil Sample Location
- ◐ Previous Soil and Groundwater Samples
- ⊗ Groundwater Sample

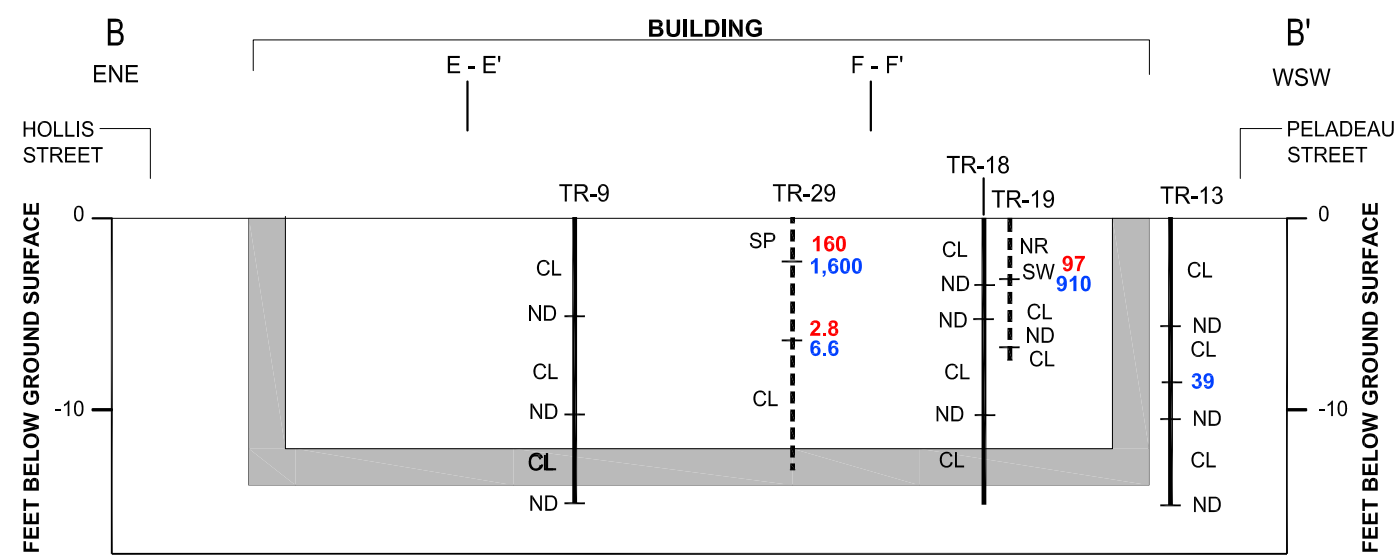
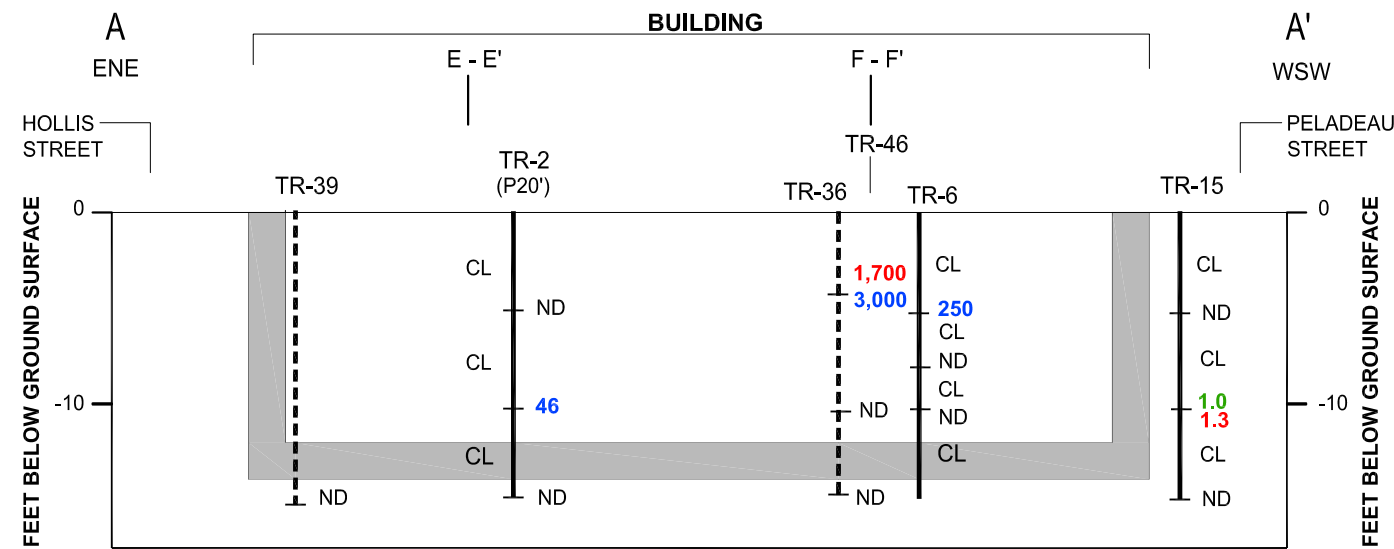
- Approximate Limits of Excavation
- A A' Cross-Section Location

Note: Site features from Environmental Site Assessment, March 19, 1995 (Weiss Associates). All locations are approximate.

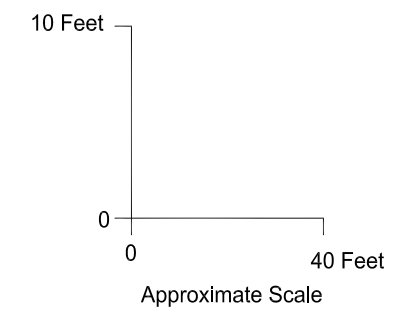


**ALDERS PROPERTY**  
**5812 HOLLIS STREET**  
 Emeryville, California

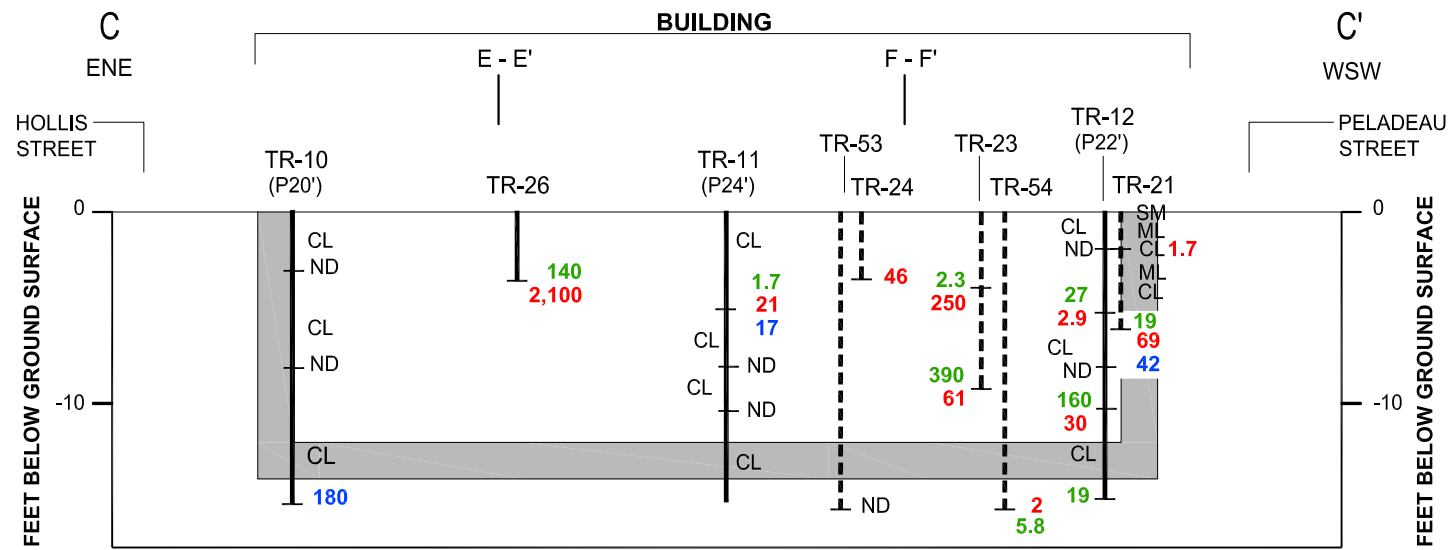
**CROSS-SECTION LOCATION**



- EXPLANATION**
- Not Logged; Direct Push or Excavation Confirmation Sample
  - CL - Clay
  - SP - Poorly-Graded Sands or Gravelly Sands
  - SW - Well-Graded Sands or Gravelly Sands
  - NR - No Recovery
  - TPH - Total Petroleum Hydrocarbons
  - mg/kg - Milligrams per Kilogram
  - (P20') - Boring Projected 20 Feet
  - Soil Sample Analyzed for TPH
  - Approximate Excavation Limits-Depth Range Between 12 and 15 Feet Below Ground Surface
- Note: upper foot below ground surface typically logged as baserock or sandy material
- Only detected concentrations are posted for samples that are not ND for all TPH ranges. Refer to tables for laboratory qualifiers.
- 1.7 - TPH Reported as Gasoline, mg/kg
  - 21 - TPH Reported as Diesel, mg/kg
  - 2 - TPH Reported as Motor oil, mg/kg
  - ND - TPH not Detected in Sample

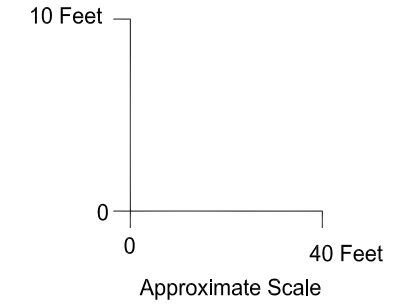
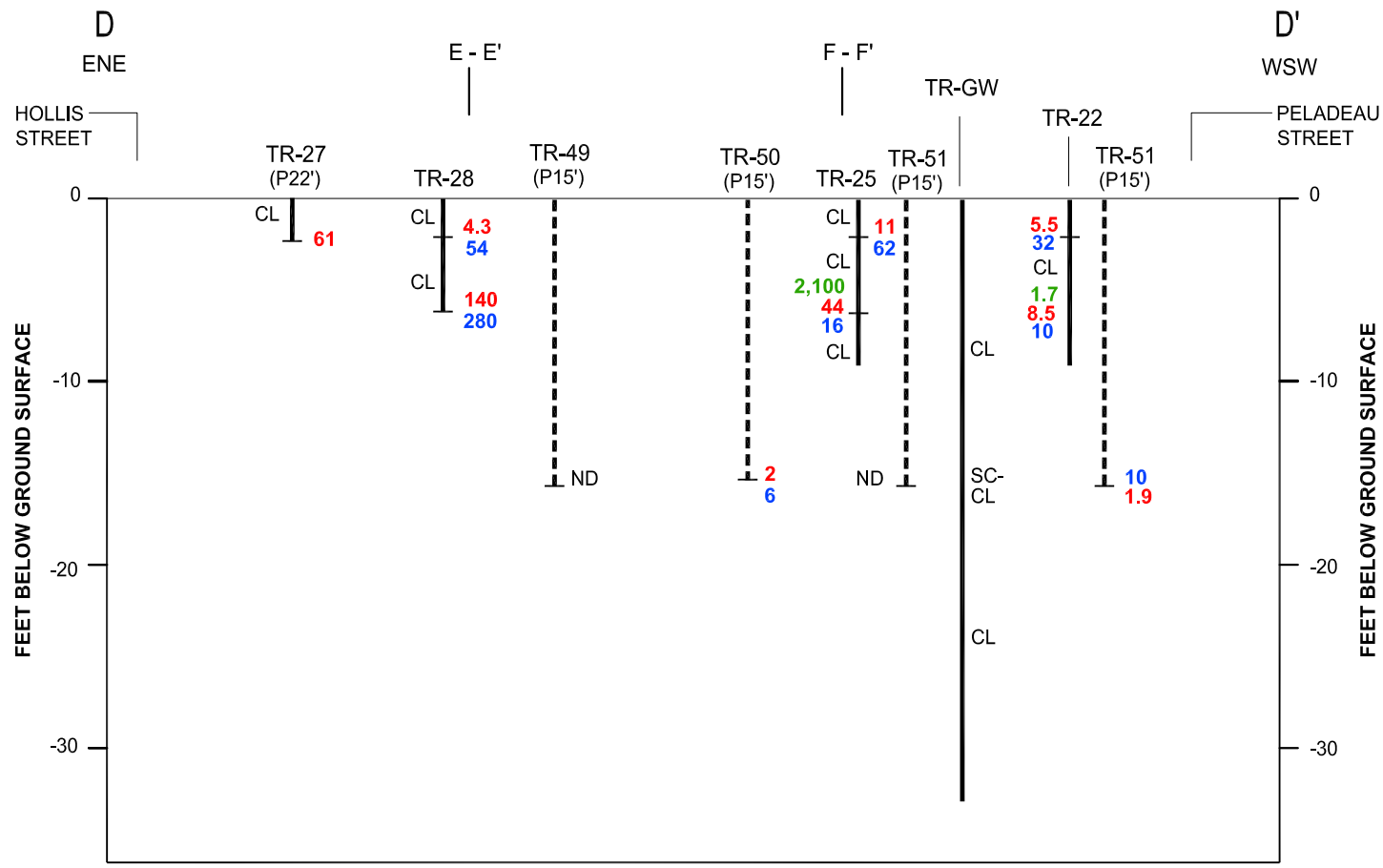






- EXPLANATION**
- Not Logged; Direct Push or Excavation Confirmation Sample
  - CL - Clay
  - ML - Silt
  - SC - Logged as "Sandy Gravelly Clay"
  - SM - Silty Sand
  - TPH - Total Petroleum Hydrocarbons
  - mg/kg - Milligrams per Kilogram
  - (P22') - Boring Projected 22 Feet
  - Soil Sample Analyzed for TPH
  - Approximate Excavation Limits-Depth Range Between 12 and 15 Feet Below Ground Surface
- Note: upper foot below ground surface typically logged as baserock or sandy material

- 1.7 - TPH Reported as Gasoline, mg/kg
- 21 - TPH Reported as Diesel, mg/kg
- 2 - TPH Reported as Motor Oil, mg/kg
- ND - TPH Not Detected in Sample



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**5812 HOLLIS STREET**  
 Emeryville, California

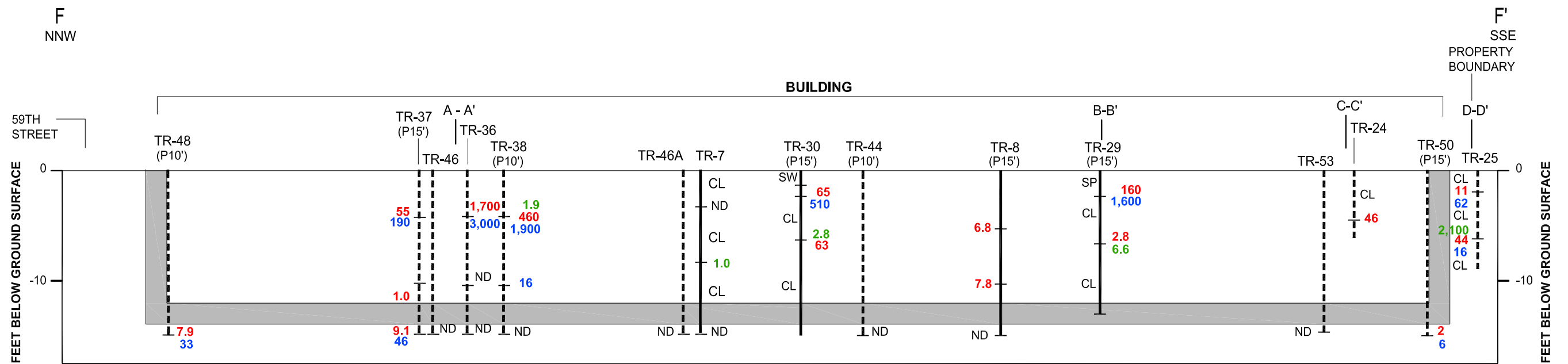
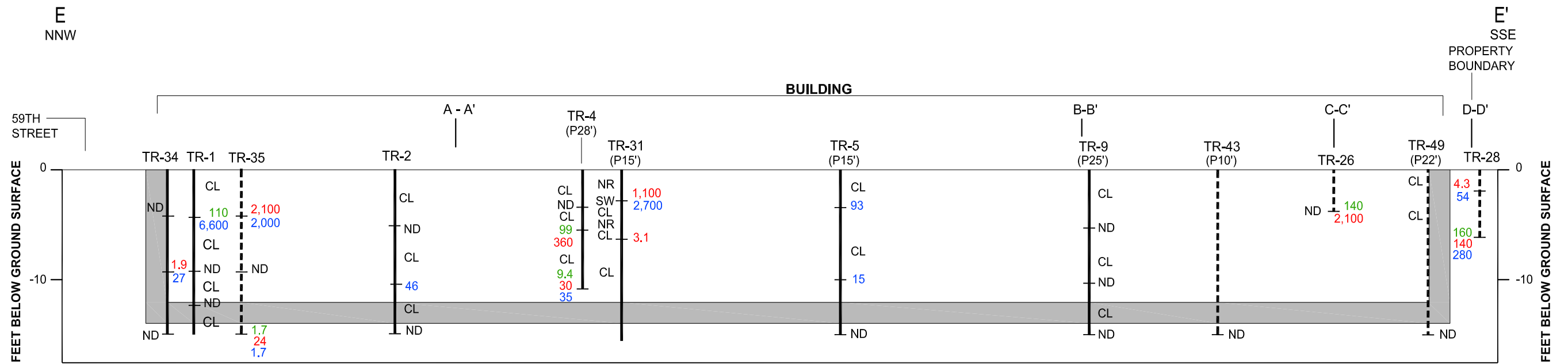
**IDEALIZED CROSS SECTION C-C' AND D-D'**

**Leong Environmental, Inc.**

Date 12/16/08

Project No. 103.001

Figure 5



**EXPLANATION**

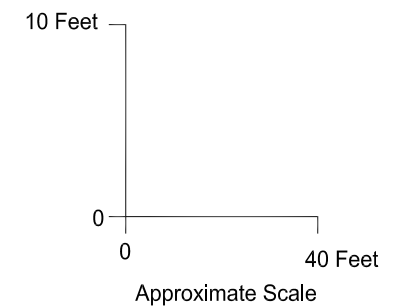
- Not Logged; Direct Push or Excavation Confirmation Sample
- CL - Clay
- SP - Poorly Graded Sand or Gravelly Sands
- SW - Well Graded Sands or Gravelly Sands
- NR - No Recovery

- TPH - Total Petroleum Hydrocarbons
- mg/kg - Milligrams Per Kilogram
- (P10') - Boring Projected 10 Feet
- Soil Sample Analyzed for TPH
- Approximate Excavation Limits-Depth Range Between 12 and 15 Feet Below Ground Surface

Note: upper foot below ground surface typically logged as baserock or sandy material

Only detected concentrations are posted for samples that are not ND for all TPH ranges. Refer to tables for laboratory qualifiers.

- 1.7 - TPH Reported as Gasoline, mg/kg
- 21 - TPH Reported as Diesel, mg/kg
- 2 - TPH Reported as Motor Oil, mg/kg
- ND - TPH Not Detected in Sample



**ALDERS PROPERTY**  
**5812 HOLLIS STREET**  
 Emeryville, California

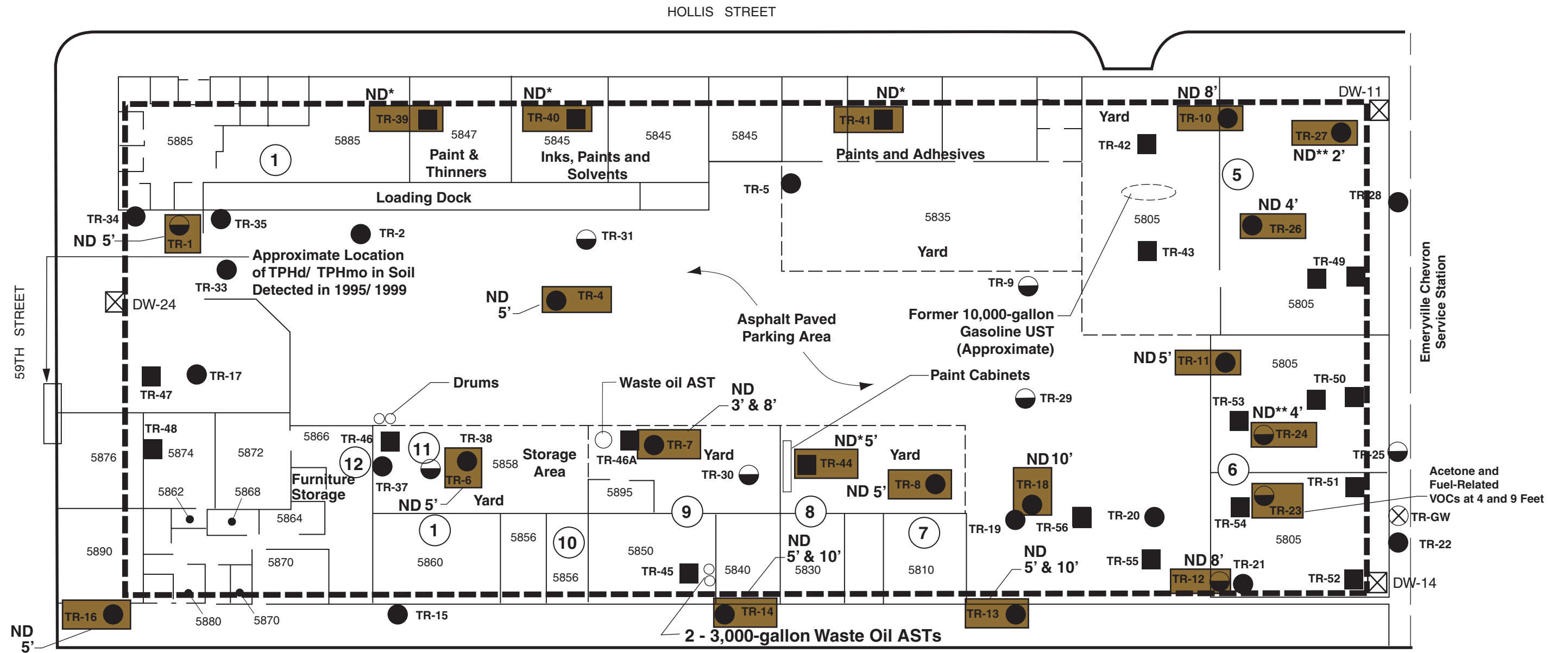
**Leong Environmental, Inc.**

**IDEALIZED CROSS SECTION E-E' AND F-F'**

Date 12/16/08

Project No. 103.001

Figure 6



**HISTORICAL TENANTS**

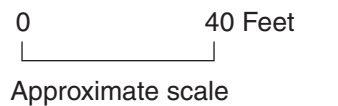
- |                            |                               |
|----------------------------|-------------------------------|
| ① McLaughlin Coffee        | ⑧ Correris Cabinets           |
| ② BMP Seismic Retrofitting | ⑨ Fleetcare Repair            |
| ③ Graphic Traffic          | ⑩ TLC Windshield              |
| ④ Canova Marble            | ⑪ Ellerson Weaver             |
| ⑤ S.B. Thomas              | ⑫ Alpha Furniture Restoration |
| ⑥ Pro-Formance Lighting    |                               |
| ⑦ Edy's Candy Kitchen      |                               |

**PELADEAU STREET**

- Location of Post Excavation Soil Sample at Final Excavation Depth (Approximately 15 Feet Below Ground Surface)
- ⊗ Location of Dewatering Wells
- Previous Soil Sample Location
- ◐ Previous Soil and Groundwater Samples
- ⊗ Groundwater Sample
- Soil Analyzed for Chlorinated VOCs
- Approximate Limits of Excavation

- ND\*** - Nondetect Except for Methylene Chloride
- ND\*\*** - Nondetect Except for Acetone
- VOC** - Volatile Organic Compound
- 5'** - Sample Depth Analyzed

Notes:  
 1. Site features from Environmental Site Assessment, March 19, 1995 (Weiss Associates). All locations are approximate.  
 2. See data tables for specific results.



**ALDERS PROPERTY**  
 5812 HOLLIS STREET  
 Emeryville, California

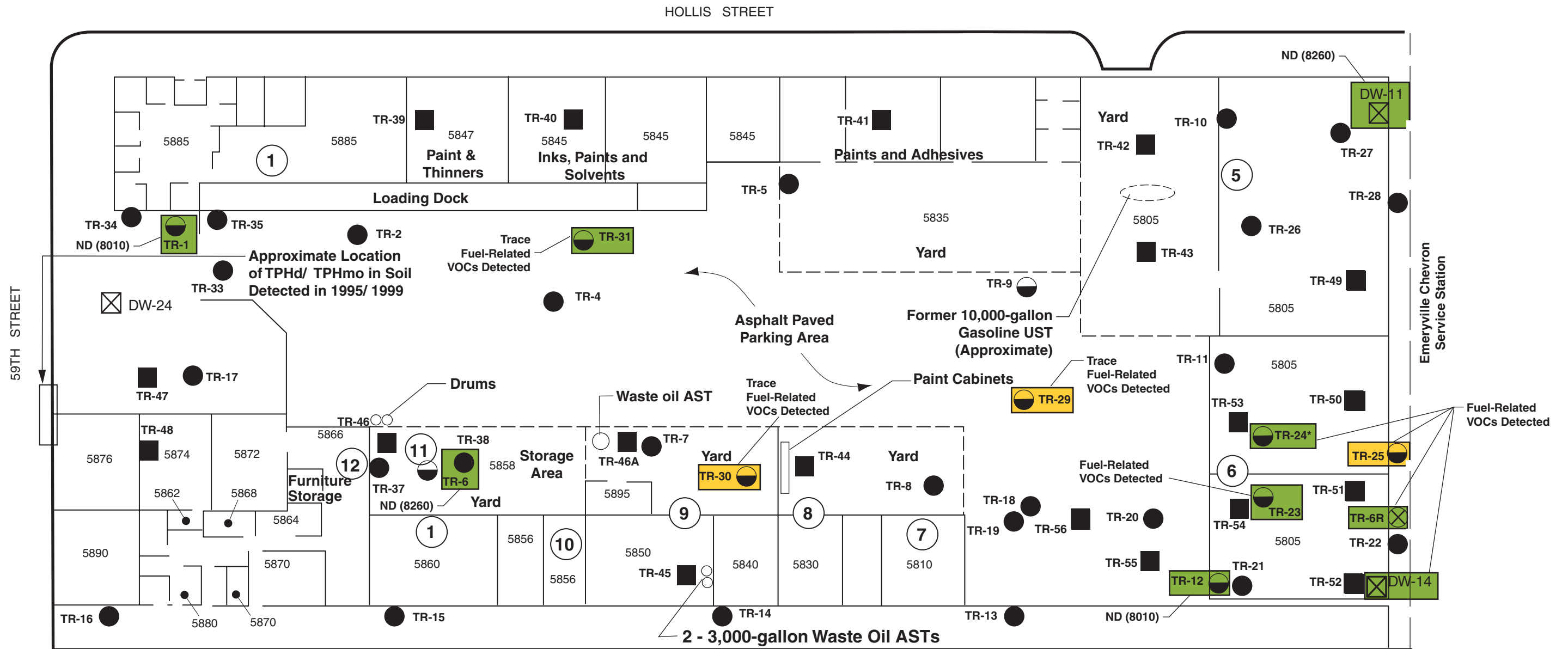
**SOIL SAMPLE LOCATIONS ANALYZED FOR CHLORINATED VOCs**

**Leong Environmental, Inc.**

Date 12/16/08

Project No. 103.001

Figure 7



**HISTORICAL TENANTS**

- |                            |                               |
|----------------------------|-------------------------------|
| ① McLaughlin Coffee        | ⑧ Correris Cabinets           |
| ② BMP Seismic Retrofitting | ⑨ Fleetcare Repair            |
| ③ Graphic Traffic          | ⑩ TLC Windshield              |
| ④ Canova Marble            | ⑪ Ellerson Weaver             |
| ⑤ S.B. Thomas              | ⑫ Alpha Furniture Restoration |
| ⑥ Pro-Formance Lighting    |                               |
| ⑦ Edy's Candy Kitchen      |                               |

**PELADEAU STREET**

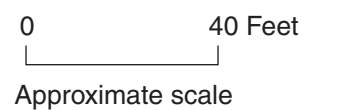
- Location of Post Excavation Soil Sample at Final Excavation Depth
- ⊗ Location of Dewatering Wells
- Previous Soil Sample Location
- ◐ Previous Soil and Groundwater Samples
- ⊗ Groundwater Sample
- Groundwater Analyzed for Chlorinated VOCs
- Groundwater Analyzed for Selected Fuel-Related VOCs

**ND** - Nondetect for 8010 and/ 8260 Analytes

**VOC** - Volatile Organic Compound

\* - Acetone

Notes:  
 1. Site features from Environmental Site Assessment, March 19, 1995 (Weiss Associates). All locations are approximate.  
 2. See data tables for specific results.



**ALDERS PROPERTY**  
 5812 HOLLIS STREET  
 Emeryville, California

**GROUNDWATER SAMPLES ANALYZED FOR CHLORINATED VOCs**

**Leong Environmental, Inc.**

Date 12/16/08

Project No. 103.001

Figure 8







**Table 2**  
**SOIL ANALYTICAL RESULTS**  
**Total Petroleum Hydrocarbons in Soil**  
**5885 Hollis Street**  
**Emeryville, California**

Sample ID	Date	TPH-g	TPH-d	TPH-mo
TR-39	5/4/2006	<1.0	--	--
TR-40	5/4/2006	<0.96	--	--
TR-41	5/4/2006	<1.0	--	--
TR-42	5/4/2006	<1.1	--	--
TR-43	5/4/2006	<0.98	--	--
TR-44	5/10/2006	<0.99	--	--
TR-45	5/10/2006	--	<1.0	<5.0
TR-46	5/12/2006	--	<1.0	<5.0
TR-46A	5/10/2006	--	<1.0	<5.0
TR-47	5/12/2006	--	<0.99	<5.0
TR-48	5/12/2006	--	<b>7.9 H Y</b>	<b>33 L</b>
TR-49	5/4/2006	<0.97	<1.0	<5.0
TR-50	5/4/2006	<0.93	<b>2.0 H Y</b>	<b>6.0</b>
TR-51	5/4/2006	<1.1	<0.99	<5.0
TR-52	5/4/2006	<b>10 H Y</b>	<b>1.9 H Y</b>	<5.0
TR-53	5/4/2006	<0.99	<1.0	<5.0
TR-54	5/4/2006	<1.1	<b>2.0 H Y</b>	<b>5.8</b>
TR-55	5/4/2006	<1.1	<1.0	<5.0
TR-56	5/4/2006	<0.94	<b>1.4 H Y</b>	<5.0
ESLs		400	500	1,000

Notes

All soil samples were collected from the completed grade, approximately 15 feet below sidewalk grade.

All results reported in milligrams per kilogram (mg/kg). Results shown in bold are detected concentrations.

Total Petroleum Hydrocarbons (TPH) quantified as gasoline (TPH-g), diesel fuel (TPH-d), and motor oil (TPH-mo) analyzed by EPA Method 8015. TPH-d and TPH-mo analyzed with silica gel cleanup.

<1.0 = Compound not detected above laboratory reporting limit.

H = Heavier hydrocarbons contributed to the quantitation

Y = Sample exhibits chromatographic pattern which does not resemble standard.

-- = Not Analyzed

ESLs = Environmental Screening Levels, California Regional Water Quality Control Board, San Francisco Bay Region, February 2005. ESL criteria based on deep soil (> 3 meters below ground surface) where water is not a current or potential source of drinking water for commercial land-use (Table D)

**Table 3**  
**SOIL ANALYTICAL RESULTS**  
**Volatile Organic Compounds in Soil**  
**5885 Hollis Street**  
**Emeryville, California**

Sample ID	Sample Date	Fuel Oxygenates						BTEX				Lead Scavengers		Methylene Chloride	Other VOCs
		TBA	MTBE	DIPE	ETBE	TAME	Ethanol	Benzene	Toluene	Ethyl-benzene	Total Xylenes	EDB	EDC		
TR-39	5/4/2006	<98	<4.9	<4.9	<4.9	<4.9	<980	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	180	All ND
TR-40	5/4/2006	<96	<4.8	<4.8	<4.8	<4.8	<960	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	220	All ND
TR-41	5/4/2006	<94	<4.7	<4.7	<4.7	<4.7	<940	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	170	All ND
TR-42	5/4/2006	<100	<5.0	<5.0	<5.0	<5.0	<1,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	--
TR-43	5/4/2006	<91	<4.5	<4.5	<4.5	<4.5	<910	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	--	--
TR-44	5/10/2006	<94	<4.7	<4.7	<4.7	<4.7	<940	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	94	All ND
TR-45	5/10/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TR-46	5/12/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TR-46A	5/10/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TR-47	5/12/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TR-48	5/12/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TR-49	5/4/2006	<96	<4.8	<4.8	<4.8	<4.8	960	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	--	--
TR-50	5/4/2006	<96	<4.8	<4.8	<4.8	<4.8	<960	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	--	--
TR-51	5/4/2006	<b>400</b>	<5.0	<5.0	<5.0	<5.0	<1,000	<b>8.2</b>	<5.0	<5.0	<5.0	<5.0	<5.0	--	--
TR-52	5/4/2006	<100	<5.0	<5.0	<5.0	<5.0	<1,000	<5.0	<5.0	<b>7.6</b>	<b>7.1</b>	<5.0	<5.0	--	--
TR-53	5/4/2006	<89	<4.5	<4.5	<4.5	<4.5	<890	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	--	--
TR-54	5/4/2006	<93	<4.6	<4.6	<4.6	<4.6	<930	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	--	--
TR-55	5/4/2006	<98	<4.9	<4.9	<4.9	<4.9	<980	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	--	--
TR-56	5/4/2006	<93	<4.6	<4.6	<4.6	<4.6	<930	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	--	--
ESLs		110,000	5,600	NE	NE	NE	45,000	510	9,300	32,000	11,000	20	70	1,500	NE

Notes

All soil samples were collected from the completed grade, approximately 15 feet below sidewalk grade.

All results reported in micrograms per kilogram (µg/kg). Results shown in **bold** are detected concentrations

volatile organic compounds (VOCs) analyzed by EPA Method 8260B.

Fuel oxygenates include tert-Butyl Alcohol (TBA), Methyl tert-Butyl ether (MTBE), Isopropyl Ether (DIPE), Ethyl tert-Butyl Ether (ETBE), and Methyl tert-Amyl Ether (TAME)

Lead scavengers include 1,2 dibromoethane (EDB) and 1,2 dichloroethane (EDC)

Other VOCs = Other volatile organic compounds described in the laboratory analytical report

-- = Not Analyzed

NE = Not Established

<5.0 = Compound not detected above laboratory reporting limit.

ND = Not detected above laboratory detection limits. Detection limits vary for each constituent.

ESLs = Environmental Screening Levels, California Regional Water Quality Control Board, San Francisco Bay Region, February 2005. ESL criteria based on deep soil

(> 3 meters below ground surface) where water is not a current or potential source of drinking water for commercial land-use (Table D)



**TABLE 4**  
**SUMMARY OF PREVIOUS GROUNDWATER SAMPLE DATA - ORGANICS**  
**5885 Hollis Street**  
**Emeryville, California**

Sample ID	Sample Date	TPHd ug/l	TPHmo ug/l	TPHg ug/l	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	m,p-Xylene ug/l	o-Xylene ug/l	Isopropylbenzene ug/l	Propylbenzene ug/l	1,3,5-Trimethylbenzene ug/l	1,2,4-Trimethylbenzene ug/l	sec-Butylbenzene ug/l	Naphthalene ug/l	Acetone ug/l	Other VOCs ug/l
TR-1	4/6/2000	130	ND	98	--	--	--	--	--	--	--	--	--	--	--	--	ND (8010)
TR-6	4/5/2000	ND	1,400	ND	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 100	ND (8260)
TR-9	4/6/2000	ND	420	ND	--	--	--	--	--	--	--	--	--	--	--	--	--
TR-12	4/6/2000	700	ND	3,300	--	--	--	--	--	--	--	--	--	--	--	--	ND (8010)
TR-23 (GW)	6/20/2005	8,400 L Y	--	28,000	4,300	< 25	990	300	< 25	120	240	45	160	< 25	380	< 500	ND (8260)
TR-24 (GW)	6/15/2005	6800 L	--	91000 Y	2500	31	950	380	380	210	110	290	43	70	710	35	**
TR-25 (GW)	1/20/05	NA	NA	150,000 Y	2,500	< 10	3,600	1,100	620	--	--	--	--	--	--	--	--
TR-29 (GW)	1/20/05	280 H Y	340 L	< 50	< 0.5	0.61 C	< 0.5	0.60 C	< 0.5	--	--	--	--	--	--	--	--
TR-30 (GW)	1/20/05	640 H Y	960	< 50	< 0.5	0.85 C	< 0.5	0.85 C	< 0.5	--	--	--	--	--	--	--	--
TR-31 (GW)	1/20/05	270 H Y	1,500	< 50	< 0.5	0.56 C	< 0.5	0.57 C	< 0.5	--	--	--	--	--	--	--	ND
<b>Maximum</b>		8400	1500	150000	4300	31	3600	1100	620	210	240	290	160	70	710	35	ND
<b>ESL (Table E-1a) Residential - high permeability*</b>		500	640	500	540	380,000	170,000	160,000	160,000	NA	NA	NA	NA	NA	3,200	53,000,000	NA
<b>ESL (Table E-1a) Commercial - high permeability*</b>		640	640	500	1,800	380,000	170,000	160,000	160,000	NA	NA	NA	NA	NA	11,000	150,000,000	NA
<b>Maximum vs. Residential ESL</b>		<b>Exceeds ESL</b>	<b>Exceeds ESL</b>	<b>Exceeds ESL</b>	<b>Exceeds ESL</b>	Less than ESL	Less than ESL	Less than ESL	Less than ESL	NA	NA	NA	NA	NA	Less than ESL	Less than ESL	ND
<b>Maximum vs. Commercial ESL</b>		<b>Exceeds ESL</b>	<b>Exceeds ESL</b>	<b>Exceeds ESL</b>	<b>Exceeds ESL</b>	Less than ESL	Less than ESL	Less than ESL	Less than ESL	NA	NA	NA	NA	NA	Less than ESL	Less than ESL	ND

**Notes:**

Results presented in units indicated at top of table.  
ug/l = micrograms per liter (parts per billion)  
TPHg = Total Petroleum Hydrocarbons quantified as gasoline  
TPHd = Total Petroleum Hydrocarbons quantified as diesel fuel  
TPHmo = Total Petroleum Hydrocarbons quantified as motor oil  
VOCs = Volatile Organic Compounds (see laboratory data sheets for complete list of VOCs analyzed)  
< 1 = indicates not detected at the indicated laboratory detection limit  
ND = Not detected at or greater than the laboratory detection limit which varies, see laboratory report  
C = Presence confirmed, but RPD (Relative Percent Difference) between columns exceeds 40%  
Y = Laboratory flag indicating sample exhibits chromatographic pattern which does not resemble standard  
H = Laboratory flag indicating heavier hydrocarbons contributed to quantitation  
L = Laboratory flag indicating lighter hydrocarbons contributed to quantitation  
Z = Sample exhibits unknown single peak or peaks  
NA = not analyzed

**Table 5**  
**GROUNDWATER ANALYTICAL RESULTS**  
**Post Excavation Grab Groundwater Sample and Excavation Dewatering Samples**  
**5885 Hollis Street**  
**Emeryville, California**

Sample ID	Sample Date	TPH			VOCs												Other VOCs
		Gasoline	Diesel Fuel	Motor Oil	TBA	MTBE	DIPE	ETBE	TAME	Ethanol	B	T	E	X	EDB	EDC	
DW-11	4/13/2006	<50	<50	<300	<10	<0.5	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5	--	--	--
DW-11	4/18/2006	<50	<50	<300	<10	<0.5	<0.5	<0.5	<0.5	<1,000	<0.5	<b>0.6</b>	<0.5	<0.5	<0.5	<0.5	All ND
DW-11	4/26/2006	<50	<50	<300	<10	<0.5	<0.5	<0.5	<0.5	<1,000	<0.5	<b>9.8</b>	<0.5	<0.5	<5.0	<5.0	--
DW-11	5/3/2006	<50	<b>130 Y</b>	<300	<10	<0.5	<0.5	<0.5	<0.5	<1,000	<0.5	<b>2.3</b>	<0.5	<0.5	<5.0	<5.0	--
DW-11	5/10/2006	<50	<50	<300	<10	<0.5	<0.5	<0.5	<0.5	<1,000	<0.5	<b>0.9</b>	<0.5	<0.5	<5.0	<5.0	--
DW-11	5/17/2006	<50	<b>100 Y</b>	<300	<10	<0.5	<0.5	<0.5	<0.5	<1,000	<0.5	<b>0.6</b>	<0.5	<0.5	<5.0	<5.0	--
DW-11	5/23/2006	<50	<50	<300	<10	<0.5	<0.5	<0.5	<0.5	<1,000	<0.5	<b>0.5</b>	<0.5	<0.5	<5.0	<5.0	--
DW-11	6/1/2006	<50	<50	<300	<10	<0.5	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5	<5.0	<5.0	--
DW-11	6/8/2006	<50	<50	<300	<10	<0.5	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5	<5.0	<5.0	--
DW-11	6/16/2006	<50	<50	<300	<10	<0.5	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5	<5.0	<5.0	--
DW-11	6/22/2006	<50	<50	<300	<10	<0.5	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5	<5.0	<5.0	--
DW-11	6/30/2006	<50	<50	<300	<10	<0.5	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5	<5.0	<5.0	--
DW-11	7/5/2006	<50	<50	<300	<10	<0.5	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5	<5.0	<5.0	--
DW-11	7/12/2006	<50	<b>78 Y</b>	<300	<10	<0.5	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5	<5.0	<5.0	--
DW-11	7/18/2006	<50	<50	<300	<10	<0.5	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5	<5.0	<5.0	--
DW-11	7/27/2006	<50	<50	<300	<10	<0.5	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5	<5.0	<5.0	--
DW-14	4/13/2006	<b>77 L Y</b>	<50	<300	<b>72</b>	<0.5	<0.5	<0.5	<0.5	<1,000	<b>10</b>	<b>0.8</b>	<0.5	<b>0.6</b>	--	--	--
DW-14	4/18/2006	<b>250</b>	<b>110Y</b>	<300	<b>72</b>	<0.5	<0.5	<0.5	<0.5	<1,000	<b>22</b>	<b>1.3</b>	<b>6.4</b>	<b>5.7</b>	<0.5	<b>19</b>	Isopropyl Benzene = 1.9 Propyl Benzene = 1.7 1,3,5 Trimethylbenzene = 1.9 1,2,4 Trimethylbenzene = 0.8 para-Isopropyl Toluene = 1.3 n-Butylbenzene = 0.6 All Others ND
DW-14	4/26/2006	<b>630</b>	<b>440 L</b>	<300	<b>76</b>	<0.5	<0.5	<0.5	<0.5	<1,000	<b>42</b>	<b>4.9</b>	<b>14</b>	<b>6.8</b>	<5.0	<b>16</b>	--
DW-14	5/3/2006	<b>620</b>	<b>370 L Y</b>	<300	<b>64</b>	<0.5	<0.5	<0.5	<0.5	<1,000	<b>39</b>	<b>1.8</b>	<b>21</b>	<b>10</b>	<5.0	<b>18</b>	--
DW-14	5/10/2006	<b>450</b>	<b>250 L Y</b>	<300	<b>83</b>	<0.5	<0.5	<0.5	<0.5	<1,000	<b>11</b>	<b>2.4</b>	<b>8.6</b>	<b>4.9</b>	<5.0	<b>15</b>	--
DW-14	5/17/2006	<b>450</b>	<b>340 Y</b>	<300	<b>44</b>	<0.5	<0.5	<0.5	<0.5	<1,000	<b>37</b>	<b>0.6</b>	<b>9.1</b>	<b>6.2</b>	<5.0	<b>16</b>	--
DW-14	5/23/2006	<b>390</b>	<b>110 L Y</b>	<300	<b>30</b>	<0.5	<0.5	<0.5	<0.5	<1,000	<b>28</b>	<0.5	<b>4.9</b>	<b>3.3</b>	<5.0	<b>15</b>	--
DW-14	6/1/2006	<b>1,800</b>	<b>360 L Y</b>	<300	<b>58</b>	<0.5	<0.5	<0.5	<0.5	<1,000	<b>55</b>	<b>1.2</b>	<b>41</b>	<b>28</b>	<5.0	<b>16</b>	--
DW-14	6/8/2006	<b>520</b>	<b>130 L Y</b>	<300	<b>40</b>	<0.5	<0.5	<0.5	<0.5	<1,000	<b>37</b>	<0.5	<b>6.0</b>	<b>4.7</b>	<5.0	<b>16</b>	--
DW-14	6/16/2006	<b>580</b>	<b>150 L Y</b>	<300	<b>34</b>	<0.5	<0.5	<0.5	<0.5	<1,000	<b>35</b>	<0.5	<b>6.4</b>	<b>5.4</b>	<5.0	<b>15</b>	--
DW-14	6/22/2006	<b>1,200</b>	<b>320 L Y</b>	<300	<b>47</b>	<0.5	<0.5	<0.5	<0.5	<1,000	<b>34</b>	<b>0.5</b>	<b>7.6</b>	<b>9.7</b>	<5.0	<b>14</b>	--
DW-14	6/30/2006	<b>970</b>	<b>270 L Y</b>	<300	<b>35</b>	<0.5	<0.5	<0.5	<0.5	<1,000	<b>30</b>	<0.5	<b>6.7</b>	<b>5.6</b>	<5.0	<b>15</b>	--
DW-14	7/5/2006	<b>950</b>	<b>230 L Y</b>	<300	<b>37</b>	<0.5	<0.5	<0.5	<0.5	<1,000	<b>38</b>	<0.5	<b>6.1</b>	<b>5.2</b>	<5.0	<b>16</b>	--
DW-14	7/12/2006	<b>850 Y</b>	<50	<300	<b>24</b>	<0.5	<0.5	<0.5	<0.5	<1,000	<b>26</b>	<0.5	<b>6.9</b>	<b>4.6</b>	<5.0	<b>14</b>	--
DW-14	7/18/2006	<b>980</b>	<b>220 L Y</b>	<300	<b>57</b>	<0.5	<0.5	<0.5	<0.5	<1,000	<b>39</b>	<0.5	<b>6.5</b>	<b>4.8</b>	<5.0	<b>14</b>	--
DW-14	7/27/2006	<b>670</b>	<b>170 L Y</b>	<300	<b>51</b>	<0.5	<0.5	<0.5	<0.5	<1,000	<b>38</b>	<b>0.5</b>	<b>3.2</b>	<b>5.3</b>	<5.0	<b>15</b>	--
DW-24	4/13/2006	--	<50	<300	--	--	--	--	--	--	--	--	--	--	--	--	--
DW-24	4/18/2006	--	<50	<300	--	--	--	--	--	--	--	--	--	--	--	--	--
DW-24	4/26/2006	--	<50	<300	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table 5**  
**GROUNDWATER ANALYTICAL RESULTS**  
**Post Excavation Grab Groundwater Sample and Excavation Dewatering Samples**  
**5885 Hollis Street**  
**Emeryville, California**

Sample ID	Sample Date	TPH			VOCs												Other VOCs
		Gasoline	Diesel Fuel	Motor Oil	TBA	MTBE	DIPE	ETBE	TAME	Ethanol	B	T	E	X	EDB	EDC	
DW-24	5/3/2006	--	<b>63 Y</b>	<300	--	--	--	--	--	--	--	--	--	--	--	--	--
DW-24	5/10/2006	--	<50	<300	--	--	--	--	--	--	--	--	--	--	--	--	--
DW-24	5/17/2006	--	<50	<300	--	--	--	--	--	--	--	--	--	--	--	--	--
DW-24	5/23/2006	--	<50	<300	--	--	--	--	--	--	--	--	--	--	--	--	--
DW-24	6/1/2006	--	<50	<300	--	--	--	--	--	--	--	--	--	--	--	--	--
DW-24	6/8/2006	--	<50	<300	--	--	--	--	--	--	--	--	--	--	--	--	--
DW-24	6/16/2006	--	<50	<300	--	--	--	--	--	--	--	--	--	--	--	--	--
DW-24	6/22/2006	--	<50	<300	--	--	--	--	--	--	--	--	--	--	--	--	--
DW-24	6/30/2006	--	<50	<300	--	--	--	--	--	--	--	--	--	--	--	--	--
DW-24	7/5/2006	--	<50	<300	--	--	--	--	--	--	--	--	--	--	--	--	--
DW-24	7/12/2006	--	<50	<300	--	--	--	--	--	--	--	--	--	--	--	--	--
DW-24	7/18/2006	--	<50	<300	--	--	--	--	--	--	--	--	--	--	--	--	--
DW-24	7/27/2006	--	<50	<300	--	--	--	--	--	--	--	--	--	--	--	--	--
TR-GW	7/22/2008	<b>430</b>	<b>560 Y</b>	<300	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<b>3.8</b>	<0.5	<b>3.5</b>	<b>0.6</b>	<5.0	<b>13</b>	Isopropyl Benzene = 2.5 Propyl Benzene = 3.3 sec-Butylbenzene = 1.0 para-Isopropyl Toluene = 0.9 n-Butylbenzene = 1.3 All Others ND
ESLs - Gross Contamination		5,000	2,500	2,500	50,000	1,800	NE	NE	NE	NE	20,000	400	300	5,300	50,000	50,000	Varies
ESLs - Vapor Intrusion		NE	NE	NE	NE	NE	NE	NE	NE	NE	1,800	530,000	170,000	160,000	510	690	Varies

Notes

All water results reported in micrograms per liter (µg/L). Detected concentrations shown **inbold**.

L = Lighter hydrocarbons contributed to the quantitation

Y = Sample exhibits chromatographic pattern which does not resemble standard.

Total petroleum hydrocarbons analyzed by EPA Method 8015M. Volatile organic compounds (VOCs) analyzed by EPA Method 8260B.

Fuel oxygenates include tert-Butyl Alcohol (TBA), Methyl tert-Butyl ether (MTBE), Isopropyl Ether (DIPE), Ethyl tert-Butyl Ether (ETBE), and Methyl tert-Amyl Ether (TAME)

B = Benzene, T = Toluene, E = Ethylbenzene, X = Total Xylenes

Lead scavengers include 1,2 dibromoethane (EDB) and 1,2 dichloroethane (EDC)

Other VOCs = Other volatile organic compounds described in the laboratory analytical report

<0.5 = Compound not detected above laboratory reporting limit.

-- = Not Analyzed

NE = Not Established

ND = Not detected above laboratory detection limits. Detection limits vary for each constituent.

ESLs = Environmental Screening Levels, California Regional Water Quality Control Board, San Francisco Bay Region, November 2007 (revised May 2008). Based on criteria where water is not a current or potential source of drinking water (Table I-2 Groundwater Gross Contamination Ceiling Levels) and vapor intrusion concerns under commercial land use (Table E-1)

Shaded results indicate that results exceeded ESL criteria for their respective constituent.